OCP Sustainability Integrated Report

2021



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Message from our CEO



It is often in the most difficult situations that we see the best of each other – a willingness to work together for a greater good. In 2021, we continued to see this over and over. The pandemic put agriculture and international supply chains under real pressure - a situation that has become so much harder this year! And yet, in the face of these unwelcome challenges, people, communities, organizations and countries are actively choosing to rise to the challenge, together.

2021 was defined by Covid. It impacted everyone – whether directly or indirectly, interrupting the plans of developed nations and making bad situations worse in some of the poorest communities. Countries and people alike were separated from each other. But they also chose to support each other, which is a cause of hope for the challenges we will all face ahead.

For OCP, our priorities were ensuring an uninterrupted supply of phosphate rock and fertilizers to farmers around the world while making sure we protected our employees and communities.

But we used 2021's interruption to our plans to think deeply about our business, our aims and our impact. Being intimately involved in global food production, we are aware just how important it is to wellbeing, security and sustainability. Nurturing strategic partnerships will be a key element of how we develop. We will invite suppliers, associations, researchers, clients and farmers to work with us to help us maximize our impact.

This process also gave us the opportunity to reflect on our sustainability programs. The data we have collected for our GRI reports has profoundly changed our view of not just our impacts, but also our potential. We have been able to verify absolute changes, but also the quantum and speed of these changes. With our growing understanding, we also better mapped the second-order effects of investment and improvements. Given the difficult context last year, this gave us the decision-making platform to aim higher. As a result, we concluded that we must move faster, we must do more with less by better combining our Environmental, Social and Governance (ESG) platform with our industrial development plans.

The path we have chosen is the path of inclusion and cooperation. Within the UN's Food Systems Summit, there is a new initiative for a Decade of Action in the food and agriculture sector to accelerate progress toward the Sustainable Development Goals (SDGs) by 2030. We accept this challenge and will proactively collaborate with our peers and clients to share and learn best practices.

OUR LICENSE TO OPERATE INCLUDES SUSTAINABLE INNOVATION

Reinforcing an ethical license to operate is core to our vision. It neatly marries mission, culture and operations. We are actively supporting entrepreneurs and innovators to develop new technologies, systems and processes linked to our operations or farming more generally. We are also committed to building skills and sustainable livelihoods in our local communities.

Whether through our Act4Community programs around our operational sites, across Africa and Asia with the OCP Foundation or in the southern regions of Morocco with the Phosboucraa Foundation, we invested $595 million in these efforts in 2021. Over the past two years, we invested more than $ 1billion in the service of communities. And we consider these investments as having the strongest returns as we see them as the cornerstone of our growth.

Our ethical and sustainable license to operate also includes the way we look after our colleagues. Across our offices, mines and plants, including our joint ventures, we invested in improving health, safety and wellbeing. I am also proud to mention that our inclusivity action have been rewarded with the EDGE certification from the International Finance Corporation (IFC). This certification confirms that our workplace reflects diversity and best practices in representation, pay equity, effectiveness of policies and processes to ensure equitable career flows as well as culture inclusiveness. We provide our employees a safe and sound workplace environment where they can achieve their full potential to innovate.

SUPPORTING AFRICA TO FEED THE PLANET

While OCP's impact is global, our roots are in Africa. Africa holds 60% of the world's arable land and it will play a larger and vital role in feeding a growing world population. Global food security is a chronic problem that has become even more urgent in recent months due to the war in Ukraine and climate change.

We have an incredible opportunity to transform global food systems and ensure they have the resilience to weather future shocks. A crucial aspect of achieving sustainability in this regard must be ensuring economic and social inclusion for all food system actors – for the vital role they have to play in sustaining human life – as this is clearly broken. And never more so than in rural Africa.

More than 700 million people, or 10 per cent of the world population, live in extreme poverty today. The majority of people living on less than $1.90 a day are in sub-Saharan Africa and against this already challenging backdrop, the region is being disproportionately disadvantaged by the war in Europe. Additionally, the worldwide poverty rate in rural areas is 17.2 percent – more than three times higher than in urban areas.

> "It is often in the most difficult situations that we see the best of each other – a willingness to work together for a greater good.

That's why we are passionate about our support for farmers, big and small, across Africa. Our entire business model is built to be farmer-centric, sharing knowledge, systems and tools to increase their yields, incomes and livelihoods. Our farmer-centric programs such as Agribooster and Al-Moutmir are recognized as leading best practices reflecting social inclusion, nature-positive solutions and nutritional enhancement. We reached more than 1.3 million farmers across Africa and as a result, helped them achieve a threefold increase of their yield, making their livelihoods much more secure.

Finding a balance between maximizing production and yield while minimizing environmental impacts is a challenge we are committed to meeting. Everything stems from understanding the soil. With 30 million hectares of soil mapped in Africa, we were able to expand our products offering to provide customized fertilizers and digitalized solutions for farmers. Our approach has

> We are committed to Carbon Neutrality by 2040 and we are tuning our decarbonization trajectory using science-based targets to align ourselves with the Paris Agreement's long-term goal.

delivered impressive results - reduced fertilizer use while increasing yields. Across Africa we have seen 40% higher agricultural yield for maize and potatoes and 14% greater profitability for farmers through customization.

THE FUTURE OF OCP CAN ONLY BE THROUGH SUSTAINABILITY

Our industrial development continues to be increasingly sustainable: we merged the industrial development and the sustainability platform to create our Sustainability and Green Industrial Development department. It combines our ESG related mission and plans with our project team that is implementing our multi-billion development plan industrial development plan. Sustainability is quite literally now a foundation of our investment strategy for our future.

Our net zero pathway is mapped in granular detail. Our clean energy program is delivering major reductions in our carbon footprint. Our water program – alternative sources and reduction of use – is being accelerated. I have never been more confident about the capabilities of OCP to overcome future challenges and achieve our ambitions for the planet, people, prosperity and food security.

I would like to thank our strong ecosystem of researchers, academicians, engineers, entrepreneurs and peers with whom we are, systematically, building our sustainable industrial capacities.

ACCELERATING ACTIONS FOR CLIMATE CHANGE

We are committed to Carbon Neutrality by 2040 and we are tuning our decarbonization trajectory using science-based targets to align ourselves with the Paris Agreement's long-term goal. For our climate strategy to be even more accurate, we conducted an exhaustive calculation of our Scope 3 Greenhouse Gas (GHG) emissions across our full value chain.

We launched carbon certification projects in Brazil and Africa and invested in innovative MRV (Monitoring Reporting Verification) technologies to make certification and carbon markets more easily accessible to farmers and bring value to communities, while also seeking more GHG sequestration in soil and biomass.
We remain committed to working with our peers, including the International Fertilizer Association (IFA) working group on the emissions mitigation of fertilizer use, the Fertilizers 1.5° with Science Based Targets initiative (SBTi) and the World Business Council for Sustainable Development to develop a new Sectoral Decarbonization Approach for the fertilizer industry.

We are working to address the impacts of ammonia production, which currently accounts for more than 1% of global CO_2 emissions. Along with our partners, we are developing viable and practical green ammonia solutions based on green hydrogen production and leveraging the tremendous solar resources in Morocco.

PROGRESS TOWARDS CLEAN ENERGY TRANSITION

The world faces an energy shortage exacerbated by the Russian/Ukraine war at exactly the time when we need a fast transition to clean energy. Extreme weather is at risk of becoming a catastrophe to many farmers.

We are making fast progress towards our target of 100% green energy by 2030 and are already at 87%. In 2021, the equivalent of 48% of Morocco's clean electricity was produced by OCP. Reducing our emissions is a meaningful step in the national effort to decarbonize. Mining and processing phosphate is an energy-hungry process. Reducing the amount of power we consume is crucial to our clean energy strategy. We are refining and developing technologies across the group to make our processes more efficient.

Meanwhile increasing our production of clean energy is a vital step in reducing GHG emissions to keep temperature changes to a minimum. The Atlantic winds provide coastal regions with huge opportunities for wind turbines and Morocco's high levels of sunshine provides great potential for solar power. Indeed, we are constructing 1.2 GW of photovoltaic solar farms, and by 2024 the first phase will be in service. In total, we are investing $2.3 billion in clean energy production.

Another key part of our energy plan is the adoption of energy storage. By storing clean power, we can make the most of windy and sunny periods and store power for nights or times when conditions are not as favorable. We are also able to reuse our waste products to provide clean co-generation. Furthermore, we are exploring innovation projects in the field of clean energy and new energies. In partnership with the Fraunhofer Institute and Mohammed VI Polytechnic University, we are developing the use of green hydrogen and green ammonia as raw materials and have created a lab dedicated to the research of sustainable solutions.

BUILDING RESILIENCE TO WATER STRESS

FRESH WATER SCARCITY IS A GROWING CONCERN

While proportionately OCP uses very little of Morocco's total freshwater, in a nation with increasing drought prevalence, we must do everything we can to minimize our use. To meet the growing need for our fertilizers, we expect that our water consumption will triple by 2028. By 2026, 100% of water use will be met by non-traditional sources.

Through our Water Program, we invest significantly in initiatives to reduce our water use, recycle wastewater and desalinate seawater at scale. This careful water management also presents economic opportunities, with research and construction creating new jobs, increasing efficiency and improving profitability. Sustainable water isn't just good for the planet, it's good business.

Currently, we are producing 36 million cubic meters of water through desalination and municipal wastewater treatment, which represents 30% of our needs. Given the increasing regularity of droughts in Morocco, we decided to make further investment to supply water to our local communities

While reviewing 2021, I need to acknowledge the spirit with which my colleagues operated. They adapted with unfailing positivity, creativity and commitment to ensure we met the promises we had made to our clients and communities.

As I said, our world faces massive challenges, but we can do more to meet them if we fearlessly cooperate and do not rest on our progress to date.

Mostafa Terrab
Chairman and Chief Executive Officer

Stakeholder inclusiveness

ABOUT THIS REPORT

We believe that to achieve long-term profitability, there must be a paradigm shift from shareholders profit maximization to stakeholders inclusiveness. OCP Group creates value for all its stakeholders, from its employees, suppliers, farmers, local communities to society at large, including vulnerable groups.

The 2021 sustainability report describes how OCP Group S.A (including activities and entities) addresses corporate sustainability and contributions to positive impacts for a sustainable future for all. There have been no significant changes to the Group's size, structure or ownership during the reporting period.

OCP Group maintains an annual reporting cycle to disclose the performances, achievements of the year as well as ambitious targets for the future. The present report covers the period from January 1 to December 31, 2021, corresponding to the company's fiscal year.

This Report has been prepared in accordance with the Global Reporting Initiative (GRI) Standards 2021, and the AA1000 Standards 2018. References have been made to Sustainability Accounting Standards Board (SASB), Task Force on Climate Related Financial Disclosures (TCFD) recommendations and United Nations Global Compact (UNGC) Principles. Principles of International Integrated Reporting Council (IIRC) have been applied wherever possible.

All our publications are available on our website: www.ocpgroup.ma. OCP Group is at your disposal to provide any other information on our sustainability approach. To this end, we are providing an email address dedicated to our stakeholders that we encourage to give feedback on their expectations and concerns: sustainability@ocpgroup.ma.

PRIORITY MATERIAL TOPICS

In preparing this Report, we focused on aspects on which OCP Group has material impact on the economy, the environment and society at large, as well as relevant for all stakeholders, according to the content principles of the GRI Standards 2021 and AA1000 Standards 2018.

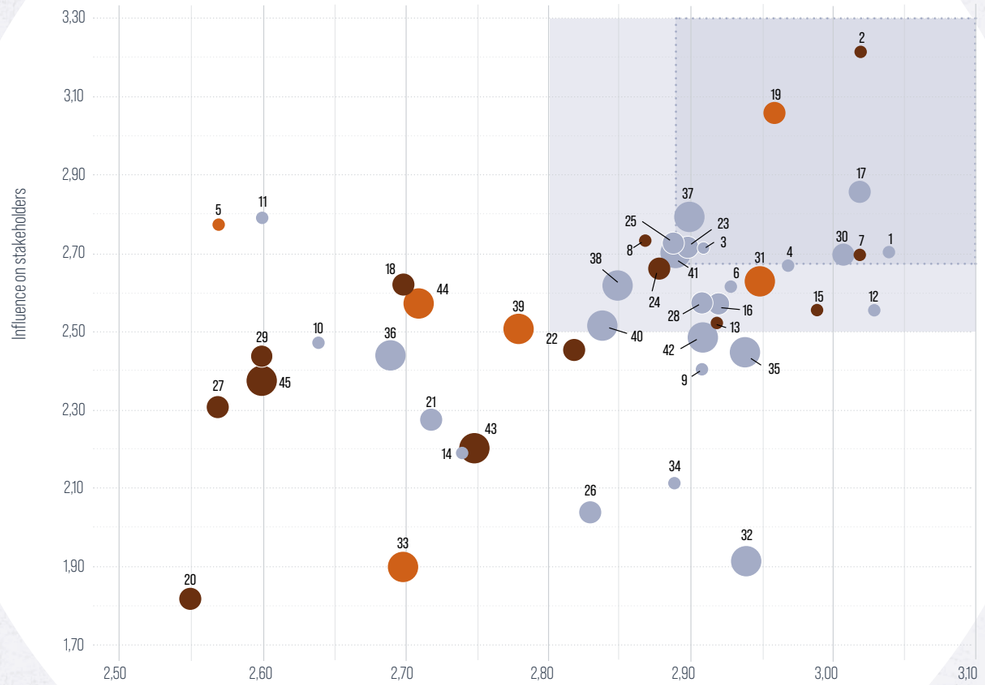
Steps of defining material topics

IDENTIFY AND ASSESS IMPACTS ON AN ONGOING BASIS

- Engage with relevant stakeholders and experts
- Consultation of more than 50 stakeholders or their representatives (2019 and 2020).

1 Understand the organization's context	2 Identify actual and potential impacts	3 Assess the significance of the impacts	4 Prioritize the most significant impacts for reporting	5 Monitor, measure and be accountable for how our actions affect our broader ecosystems
• ESG scores analysis (rating agencies) • ESG frameworks and regulations (GRI 2021, SASB, TCFD,CDP, SDGs, CSRD, EU Taxonomy, SFDR) • Comparative sectoral study across food, agriculture and mining industries • Global megatrends analysis	Quantitative evaluation questionnaire on a list of ESG-related questions and SDGs priorities completed by internal OCP experts in the company's sustainability network (2020).		Materiality matrix, having the final matrix of material topics approved by the Senior Management.	Disclosures of performances, Assurance on material data, Sustainability roadmap, Net zero trajectory towards 2040

MATERIALITY MATRIX



Responsible management · Sustainable production · Shared value creation

LEVEL OF PROFICIENCY

Good level of proficiency · Moderate proficiency · Proficiency to be improved

1. Occupational Health and Safety
2. Economic growth
3. Operational excellence
4. Water management
5. Infrastructure development
6. Management of raw materials
7. Fertilizer market development
8. Job creation & retention
9. Supply chain efficiency
10. Energy management
11. Industrial partnership development
12. Customer satisfaction
13. Employee development
14. Information on products and services
15. Transparent and ethical governance
16. Cybersecurity
17. Food security
18. Human Rights
19. Community engagement
20. Political contributions and lobbying
21. South-South partnership & collaboration
22. Innovative governance
23. Environmental compliance of activities
24. Research & Development, innovation
25. Waste and hazardous products management
26. GHGs and other emissions
27. Freedom of association
28. Promotion of a sustainable agriculture
29. Diversity and non-discrimination
30. Renewable energy development
31. Indirect economic impacts
32. Mine site rehabilitation
33. Preservation of mining heritage
34. Farmer profitability
35. Digitalization and Industry 4.0
36. Future talent development (STEM)
37. Circular economy model
38. Sustainable agricultural productivity
39. Talent development in the creative and innovative fields
40. Climate change
41. Soil and biodiversity management
42. Synergies and local supplier network
43. Social assessment of suppliers
44. Local entrepreneurship
45. Environmental assessment of suppliers

Stakeholder engagement

OCP included internal and external stakeholders consultation in its materiality analysis. The main objective was to identify priority issues in the value chain.

OCP's sustainable development strategy is based on continuous dialogue and joint development with internal and external stakeholders using an inclusive business approach. In 2021, OCP strengthened its stakeholder's engagement plan based on a robust methodology. OCP was able to prioritize its stakeholders considering the criteria of influence, dependance, vulnerability and capacity of dialogue. An inclusive trajectory for 2030 for all group of stakeholders has been developed altogether with an action plan that will be deployed in 2022.
The illustration below shows the stakeholders with whom OCP interacts at various levels throughout its sphere of influence and commitments areas.

1. INNOVATIVE, AGILE AND COMMITTED GOVERNANCE

- Employee
- Senior Management
- Trade Unions
- Institutions, authorities and regulators
- Rating agencies
- Investors
- Experts & Advisors

2. RESPONSIBLE AND INCLUSIVE MANAGEMENT

- Employee
- Senior Management
- Professional associations
- Trade Unions
- Suppliers

3. SUSTAINABLE PRODUCTION

- Farmers
- Nearby communities
- Suppliers
- Local entrepreneurs & Project partners
- Competitors
- Schools, universities and training centers

4. SUSTAINABLE FOOD SYSTEMS

- Farmers
- Customers
- Food industry

5. SHARED VALUE CREATION

- Associations and NGOs
- Nearby communities
- Influencers: media & rating agencies
- Citizens
- Schools, universities and training centers

INTERACTIONS WITH OUR STAKEHOLDER'S ECOSYSTEM IN 2021

Employee

Methods of engagement

- Workshops
- Surveys
- Situations and movements (Act4Community, diversity, Happy@OCP, etc.)
- Hackathons
- Training, peer-to-peer knowledge transfer (OCP Professors) and skills assessment programs
- Group intranet
- 1 Pacte
- Digital applications and workplace, performance evaluation, etc.

Issues and concerns

- Professional development
- Engagement through the sponsorship of employee skills (community service)
- Equal opportunity, social benefits (access to property, medical coverage, retirement, etc.)
- Training and skills development
- Working conditions
- Access to information and transparency

Senior Management

Methods of engagement

- Board of Directors
- Audit and Risk Committee: risk assessment integrating sustainable development
- Strategic Committee: Global Strategic Review (activities integrating sustainable development criteria through a Top-Down/ bottom-up process)
- Management Committee (Executive Vice Presidents): advisory process (on environmental and social issues) and thematic focus groups
- Operational Committee using, in their decision making, input from site management committees (right place, time, rate, source)
- Contracts with local authorities, publicprivate partnership
- Specialized committees (health, safety, environment, technical

Issues and concerns

- Regulations
- Environment
- Social
- Economy

Trade Unions

Methods of engagement

- Social Charter
- CSP (Staff Status Commission)
- CAS (Social Action Commission)
- CHS (Health and Safety Committee)
- CNC (Collective Bargaining Committee)
- Training academy

Issues and concerns

- Social
- Environment
- Medical
- Safety
- Administrative management (payroll, scheduling, etc.)

Farmers

Methods of engagement

- 4R Program (customized agriculture)
- Development of a soil fertility map
- OCP Foundation / Phosboucraa Foundation
- Al Moutmir caravan and agronomic advice
- Development of a farmer-friendly business ecosystem (local production and distribution infrastructure)

Issues and concerns

- Joint venture and local partnerships
- Product efficiency (features, quality)
- Use of products
- Custom and smart fertilizers
- Societal commitments
- Fertilizer use training and transfer of expertise
- Agricultural service offerings

Customers

Methods of engagement

- Feedback in various forms (written, by phone, etc.)
- Meetings, site visits, road shows, client events (trade fairs, exhibitions, etc.)
- Quality and risk management processes

Issues and concerns

- Custom fertilizers
- Smart fertilizers
- Societal commitments
- Fertilizer use training and transfer of expertise
- Agricultural service offer (fertility map, demonstration platforms, adapted training and support, etc.)
- Co-investments

Average frequency of engagement in sustainable development topics — Continual — Frequent — Occasional

Suppliers

Methods of engagement

- Progress pact (training and support for improving social, environmental, and safety compliance, and in other areas)
- Act4Community
- OCP purchasing platform (e-purchase)
- Programs for suppliers
- Forums and conferences on the emergence of an industrial ecosystem
- Meetings and dialogue with local stakeholders at the operational site level
- Industrial Expertise Centres, digital schools and startup incubators for local small businesses

Issues and concerns

- Direct and indirect local economic impacts
- Social, environmental, and safety compliance, and in other areas
- Skills development
- Development of a qualified local economic fabric
- Innovation
- Development of a local industrial ecosystem.

Nearby communities

Methods of engagement

- Public survey for industrial projects (development, modification, and expansion projects)
- Complaint management system at the corporate level and at operational sites
- Association forums
- Meetings with residents
- Thematic forums on entrepreneurship (micro-business, local business, etc.)

Issues and concerns

- Societal projects developed with local contributors (access to basic infrastructure: health, culture, education, etc.)
- Environment (management of soil, resources, etc.)
- Local employment creation and value sharing (direct and indirect employment, capacity building, etc.)

Food industry

Methods of engagement

- BCSD and other institutions
- UN Food Systems Summit 2021
- Dialogue with processors, retailers & consumer-oriented companies

Issues and concerns

- Agricultural transformation
- Equitable rural livelihood
- Healthy & sustainable diets

Associations and NGOs

Methods of engagement

- Skills development programs
- Dialogue and joint development: Act4Community
- Subsidies for projects
- Association forums
- Thematic forums on entrepreneurship (micro-business, local business, etc.)

Issues and concerns

Social and inclusive entrepreneurship

- Joint development of societal projects (access to basic infrastructure: health, culture, education, etc.)
- Respect for the environment, development of rehabilitated land, soil management, etc.
- Local employment creation and value sharing (direct and indirect employment, capacity building, etc.)

Influencers: media & rating agencies

Methods of engagement

- Discussions with local, national, and international media
- Site tours
- Websites (corporate, foundations) and social media (Facebook, Twitter, LinkedIn)
- Presentation of the sustainable development program to local and national media
- Forums, conferences, national and international events

Issues and concerns

- Access to the Group's economic, social, and environmental information

Institutions, authorities and regulators

Methods of engagement

- Global issue advocacy
- Board of Directors · Program contracts
- Various discussions (local meetings, informal meetings, written correspondence with institutions, etc.)

Issues and concerns

- Regulations
- Environment
- Company
- Economy
- Regional development
- Civil society

KEY HIGHLIGHTS 2021

PEOPLE

Launch of
"THE NEXT SEEDS" CONTEST
calling for startups to revolutionize Industry 4.0 to co create solutions for sustainable agriculture and mining
the next seed

29%
women in top management

Two of our staff members shined at the WBCSD's "2021 Leading Women Awards" by winning the Award of Excellence and the Exemplary Leadership Award during COVID-19, out of 59 total nominations.



Hanane Mourchid
Excellence Award



Hassina Moukhariq
Exemplary Leadership (in the context of COVID-19) Award

LEADING WOMEN AWARDS 2021
wbcsd

$595 million
community investments

CERTIFIED EDGE
"Assess" level, the first level of EDGE (Economic Dividends for Gender Equality) Certification.

2nd edition of the Well-Being Summit which brought together 36 experts around talks for well-being-related issues





Award of the Best Employer Brand on LinkedIn, showing the engagement of our workforce

Building of the third University in Rabat, the Rabat Campus of Mohammed VI Polytechnic University
for new education opportunities

KEY HIGHLIGHTS 2021

PLANET

Sustainable industrial development strategy by OCP :

$2,3 Billion
investment for our Clean Tech development and Green Energy Program

INTENSITY DECLINES :
- ✓ Carbon (P205 and $)
- ✓ Freshwater Consumption

87%
of OCP needs covered by clean energy, 100% by 2030

30%
of our water needs covered by non-conventional sources, 100% by 2026

Official supporter of the FSB Task Force on Climate-related Financial Disclosures (TCFD).
OCP SA is working on aligning towards the recommendations of the TCFD.

TCFD | TASK FORCE ON CLIMATE-RELATED FINANCIAL DISCLOSURES
OCP

Participation to the
4th Mediterranean Water forum

KEY HIGHLIGHTS 2021

FOOD SYSTEMS





> “Our young engineers on the field work hand in hand with our farmers who are real agent of change by carrying the development of agriculture in Morocco.”

Fatiha Charradi
Vice President - Local Market - Farming Development at OCP Group

Signature of the Business Declaration for Food Systems Transformation

on behalf of its CEO & Chairman the Business Declaration which was submitted to the United Nations



Signature of a financing agreement with International Finance Corporation (IFC)

This agreement aims to support OCP in the expand of its value chain in Africa to contribute to the development of the continent and to set up sustainable food systems in the region.



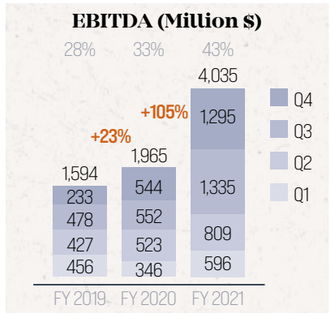
Membership to the European Sustainable Phosphorus Platform (ESPP).

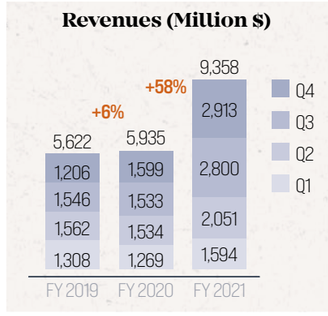
OCP will exchange knowledge and best practices with the ESPP’s 40+ members and a wide network of scientists and companies to keep discovering new innovative ways to optimize phosphorus management.

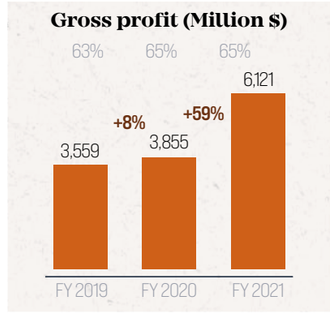
Through the Al Moutmir program, OCP SA has supported more than 50,000 farmers and realized 58,000 soil analysis since its launch in 2018.

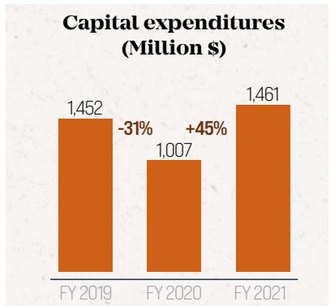
KEY HIGHLIGHTS 2021

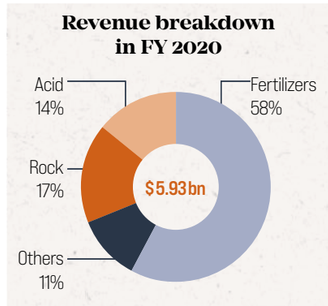
PROSPERITY

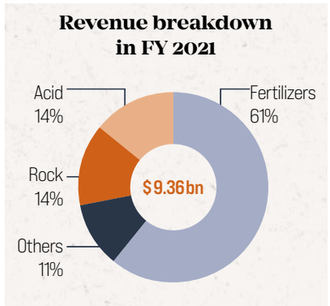


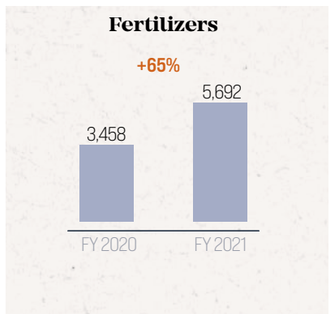


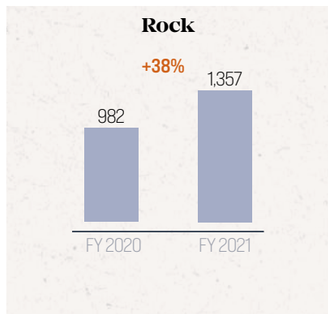


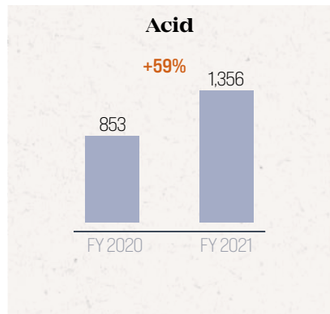








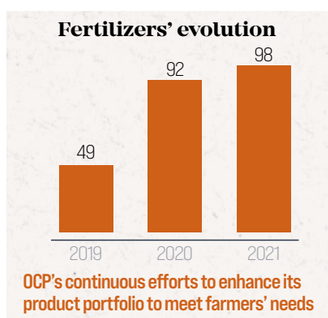




Exploi

$184,23 million

saving costs through operational excellence



OCP’s continuous efforts to enhance its product portfolio to meet farmers’ needs

Agreement with Koch Ag & Energy Solutions under which Koch acquire a 50% interest in Jorf fertilizers Company III (JFC III) from OCP, establishing a 50/50 joint venture. It is a key strategy partner to best serve farmers and agriculture.

KOCH AG & ENERGY SOLUTIONS | OCP

01

OCP group at a glance

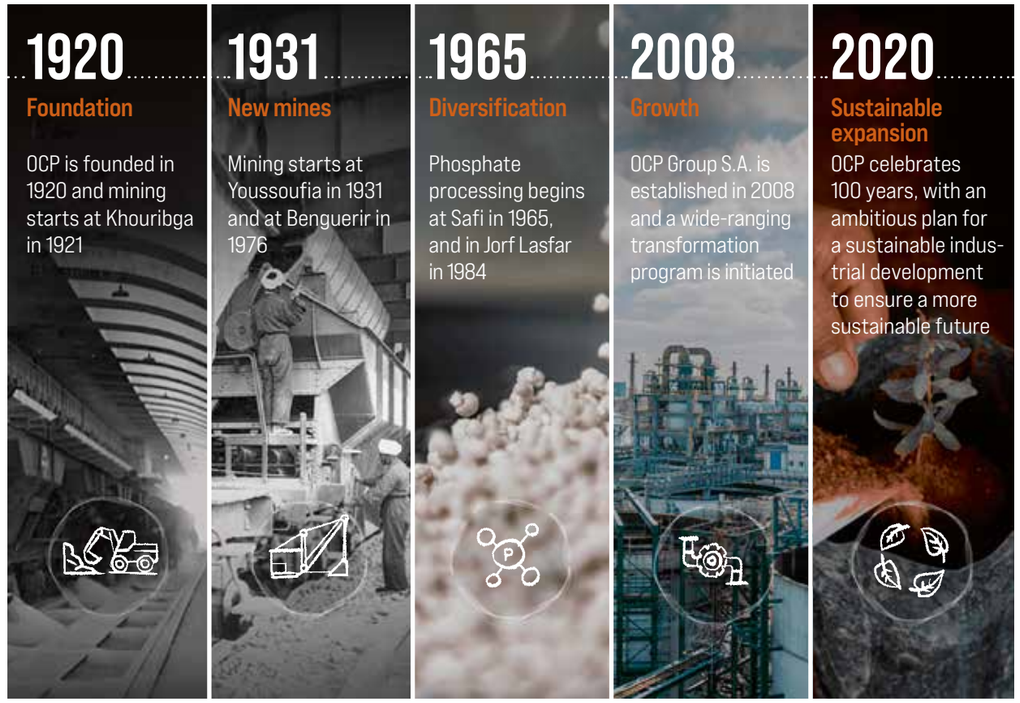


1.1 How OCP creates value

OCP is a leading producer of phosphate rock and phosphatic fertilizers, employing 17,961 people. Moroccan company headquartered in Casablanca, OCP was originally founded in 1920 as Office Chérifien des Phosphates, a Moroccan entity established to manage the country's phosphate reserves—which OCP continues to do today. In 2008, OCP ("OCP S.A") became a joint stock company, independently managed by a Board of Directors. Building on nearly 100 years of cumulative agricultural knowledge and expertise, OCP is committed to being a globally responsible company, focusing on sustainable agriculture solutions that help farmers around the world feed a growing population. Today, OCP represents around five percent of the Moroccan GDP and is the country's largest company.

Our ongoing success is based on relationships with our community, a commitment to reduce our impact on our precious environment, and the opportunity to partner with innovative local businesses.

A JOURNEY OF POSITIVE IMPACT



Our activities and products

EXTRACTION & WASHING

Phosphate is extracted from three surface mining sites. Different steps are necessary: exploration and feasibility studies, mine development and construction, mining, closure, and reclamation. The extraction phase includes two main operations: drilling and blasting. Phosphate rock is then transported by a conveyor belt system to washing facilities to be enriched and then transported via slurry pipeline or rail to processing platforms. Phosphate rock can be exported directly or converted to phosphoric acid or phosphate-based fertilizers.

Phosphate rock

Phosphate rock is primarily used in agriculture by either applying it directly or through the use of phosphate-based fertilizers. Phosphate rock is also used to produce animal feed supplements and for other industrial uses.

PROCESSING

At the two processing platforms in Jorf Lasfar and Safi, phosphate rock is combined with sulfuric acid to produce phosphoric acid, which can then be directly exported or processed - with ammonia – to produce fertilizers. Processing sites have sulfuric acid and phosphoric acid production lines, as well as integrated granulation lines.

Phosphoric acid

Two types of phosphoric acid are produced: purified acid, mainly used in the food industry (oils, lemonades, cheeses, preserves, yeasts, sugar, drinking water, etc.) and other sectors (pharmaceuticals, detergents, animal feed, metal processing, textiles, pigments, etc.), and merchant phosphoric acid, used for fertilizer production and fertigation, a technique giving nutrients together with irrigation. Key raw materials: phosphate rock and sulfuric acid either produced by the processing platforms or purchased from local suppliers.

Fertilizer

Fertilizer can be applied directly or used to produce compound fertilizers.
Key raw materials for complex fertilizers: phosphate rock, phosphoric acid, ammonia, potash, and micronutrients (zinc, iron, etc.).

TRANSPORTATION & STORAGE

Phosphate Rock is supplied to the Processing Platforms from the extraction sites either via slurry pipeline or rail operated by the ONCF, the national railway operator.

DISTRIBUTION & SALES

Thanks to its well established industrial and commercial presence, OCP is present in all major markets and closer to the needs of producers and other players across the value chain with over 350 clients on 5 continents. Phosphate rock, phosphoric acid, and fertilizers are delivered by sea, by truck, or stored on site. Docks are managed by the National Ports Agency (ANP). Products are delivered to the end customers who use them as end products or process them further for other grades of fertilizers. OCP has deployed, primarily in Africa, a dense distribution network by developing partnerships with local, public, and private players in order to provide the farmers fertilizers at the lowest cost. OCP's supply chain in Africa relies on logistics centers, sales representatives, local subsidiaries, and production plants dedicated to meeting the needs of regional markets.

DEVELOPMENT OF SUSTAINABLE AGRICULTURE

OCP supports, where it's most needed, the end users of its products through sustainable farming practices programs (soil mapping, digital agronomic advice, etc.) as well as customized and smart products having as a first purpose to create value for farmers.



Our mission, vision, values



THE CHALLENGE

GROW ENOUGH FOOD

There will be nearly 10 billion people on the planet by 2050. Feeding everyone will require radical innovation in agriculture – while also reducing the impact on the planet. We know this is achievable, thanks to the essential role that phosphorus plays in nurturing soil and supporting plant growth.

OUR MISSION

FEED THE SOIL TO FEED THE WORLD

As the custodian of 70% of the world's phosphate reserves, we have a vital role to play in helping farmers around the world produce enough food. This role starts with increasing production of phosphate-based products to meet the growing demand, understanding the different soil and crop requirements, and supporting the farmers' sustainable use of fertilizer.

OUR VISION

FOR A SUSTAINABLE FUTURE : TO CREATE SUSTAINABLE GROWTH FOR EVERYONE

Our ambitious plan is to feed the world to meet the global food security challenge. We understand the importance of the connectivity and balance between :

INNOVATION

We are always looking for new ways to meet the challenges of our industry and global agriculture. We encourage innovation across the OCP Group – from employee-led change to extensive R&D, start-up initiatives, partnerships, education and skills development projects. It's a mindset that will open new opportunities and ideas that will propel us towards a sustainable future.

EDUCATION

We're creating an ecosystem of knowledge to make it easier for people to access expertise, learn skills, and bring ideas to life.

CUSTOMIZATION

Customization begins with understanding the specific needs and context of every challenge – whether we're helping farmers improve their soil fertility, reducing waste in our transformation processes, or developing new community initiatives.

Our vision of sustainable growth is responsible and inclusive, with a positive impact, alongside our partners and within an entire ecosystem, by understanding the needs of soils and crops, and by considering the environment as an essential factor in development.

OUR DRIVING VALUES

INTEGRITY, TRANSPARENCY, SUSTAINABILITY

Our values drive our day-to-day operational business and relationships with stakeholders and communities.

INTEGRITY

Business integrity is preserved alongside our activities. OCP Group is committed to uphold the highest ethical standards through standardised policies impacting all the aspects of the organisation, from top management to supply chain.

TRANSPARENCY

Transparency drives everything we do : in our corporate governance, in our sustainable impacts, in our relationships with the workforce, local communities and stakeholders as well as in our supply chain.

SUSTAINABILITY

Sustainability is a central component of our business strategy: We're working to create a more sustainable future for business, community and environment. We have already adapted large areas of our operations, and our strategy for the next two decades will see us continue a program of transformation in everything we do.

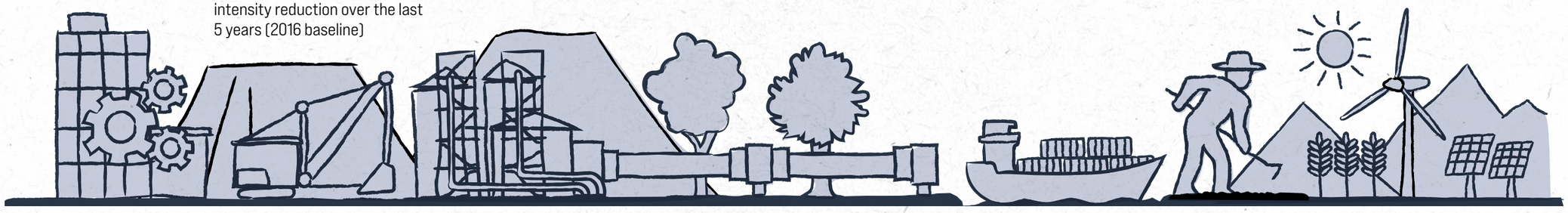
Our value chain

From phosphate rock extraction to phosphoric acid and fertilizer production, OCP is a vertically integrated group which helps us maximize the value of phosphate throughout our operations.

As a global leader in the phosphate-based fertilizer industry, OCP is committed to develop impactful projects that positively effect society, strengthen skills and employability, and improve living conditions in the regions in which it operates. Its value chain is built with a view to creating shared value through its commitments to responsible management and sustainable production.

HOW WE PERFORM

-23% CO_2 intensity
intensity reduction over the last 5 years (2016 baseline)



MANAGEMENT

9.36
billion $ in revenues

4.04
billion $ in EBITDA

17,961
employees (OCP SA & Phosboucraâ)

PRODUCTION : EXTRACTION & WASHING > PROCESSING > TRANSPORT & STORAGE > DISTRIBUTION & SALES > DEVELOPMENT OF SUSTAINABLE AGRICULTURE

PHOSPHATE ROCK

47,1 MT
production capacity

24,5 MT
produced, extracted

FERTILIZER

12,2 MT
production capacity

10,9 MT
produced

171
Research & Innovation projects are being implemented in partnership with UM6P and internationally renowned partners

670,000
metric tons of CO_2 prevented by year through the Slurry Pipeline compared to conventional railway transportation

ISO 50001
energy management system 4 sites out of 5 certified (Safi in 2021, Gantour, Khouribga, Phosboucraa and Jorf and Jorf Lasfar ongoing)

350
wholesale clients and millions of end-users on 5 continents

31%
market share, global leader in exports

98
formulas reached for customized products

23,500 HA
(2021 and 2022) ha covered by no-till farming

CREATING SHARED VALUE

$595 M
community investments

7,655
employees volunteering for local communities

MOST IMPACTFUL SDGs



INDUSTRIAL DEVELOPMENT PROGRAM

SUSTAINABLE AND GREEN INDUSTRIAL DEVELOPMENT

Double mining output and triple processing capacity improve our efficiency, and strengthen our logistics. This project includes physical infrastructure developments and a complete digital transformation across the business. By making it possible for us to produce more fertilizer with fewer resources, this program plays a crucial role in creating a more sustainable future.

We believe that financial success has a strong relationship with ESG performance. That's why we use **Value Reporting Foundation, formerly Integrated Reporting (IR)**, to show how OCP creates value over time.

6 capitals

- **Financial**
- **Human**
- **Intellectual**
- **Manufactured**
- **Natural**
- **Business and society relations**

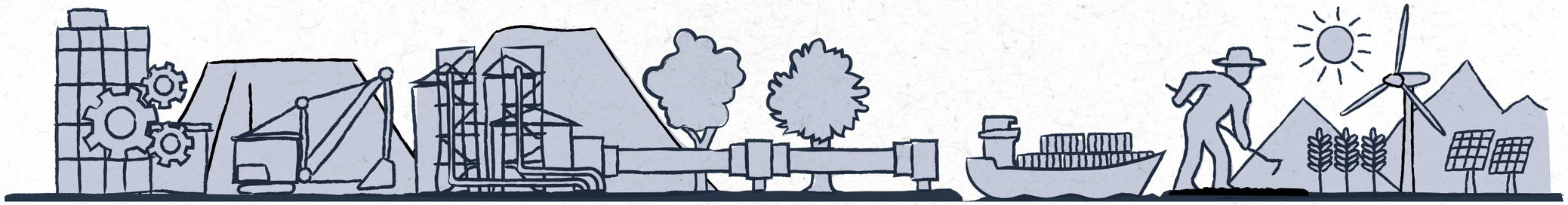
GRI 2-6 |

Our value chain

HOW WE CREATE VALUE

6 capitals

Financial · Intellectual · Natural
Human · Manufactured · Business and society relations



MANAGEMENT

43% in EBITDA margin

20 HOURS
average training hours per employees

$1,7 billion of total suppliers' expenditures 86% of expenditures with Moroccan suppliers +39% of local purchases (around OCP sites)

$12,85 million granted to suppliers through the Fonds Damane Tamayouz

77% of generated value distributed to our suppliers, employees, government, shareholders and communities

$1,46 billion in capital expenditures

PRODUCTION : EXTRACTION & WASHING > PROCESSING > TRANSPORT & STORAGE > DISTRIBUTION & SALES > DEVELOPMENT OF SUSTAINABLE AGRICULTURE

34%
market share in phosphate rock

26%
market share in fertilizers

204 ha
of rehabilitated land

87%
of our needs covered with green energy

$13,8
million investment in R&D for P-Stewarship

36,35
million m3 of non-conventional water produced

99,67%
Waste diverted from disposal

54%
market share in phosphoric acid

4
Million ha of soil mapped in Burkina Faso, Togo, Guinea, Rwanda, Ethiopia, Madagascar

30
million hectares of soil mapped in Africa

20,000
farmers covered and 80.000 soil analyses in Morocco through the Al Moutmir

+30%
of agricultural yield for cereals in 2021 with customized fertilizers compared to the national average in Morocco

CREATING SHARED VALUE

153
microbusinesses supported at OCP sites

17
agricultural cooperative supported by Act4Community

+77,000
People reached by OCP Foundation, for a more equitable future through sustainable innovation

+160 projects supporting SDGs achievement by OCP foundation

3,593
Students receiving scholarships

MOST IMPACTFUL SDGs



1.2 Committed partnerships, memberships and international recognitions

COMMITTED PARTNERSHIPS

Each partnership we create is about more than just providing services: it's an opportunity for knowledge exchange and sharing expertise. This approach helps us maximize the impact of our projects, from education programs to joint ventures.

- **JOINT VENTURES :** Dupont OCP Operations, JESA, Teal Technology Services

In 2021, Koch Ag & Energy Solutions (Koch) and OCP have signed an agreement under which a Koch affiliate will acquire a 50% interest in Jorf Fertilizers Company III (JFC III) from OCP, the world's largest phosphate mining and leading global fertilizer group. When closed, the transaction will establish a 50/50 joint venture.

- **STRATEGIC & RESEARCH :** The Fraunhofer, UM6P, Fertinagro, Forbon, Prayon, Solvay, MIT, HEC

MEMBERSHIPS

OCP is a member of many professional associations:

- **AFA** (Arab Fertilizer Association)
- **AFAP** (African Fertilizer and Agribusiness Partnership)
- **IFA** (International Fertilizer Industry Association)
- **WBCSD** (World Business Council for Sustainable Development)
- **All OCP industrial operations sites are Protect & Sustain certified.** This certification is granted by IFA and covers the quality, environment, health, and worksite safety aspects of ISO 9001 and 14001 certifications, as well as ISO 45001 certification.

INTERNATIONAL RECOGNITIONS

International Fertilizer Aassociation (IFA) Industry Stewardship Champions label is awarded to OCP Group for its participation in all of IFA's most recent Safety Perfomance, Environmental Performance and Energy Efficiency and CO_2 emissions benchmarks and our certfication IFA Protect and Sustain.

ESG RATINGS PROFILE

A range of ESG rating agencies are scoring our environmental, social and governance practices each year. OCP Group recognizes the importance of ESG metrics performance as equal to financial performance. Our best-in-class ESG practices shape our resilience to short, medium and long-term risks. In 2021, OCP had achieved results reflecting its ability to manage ESG risks and be transparent on its sustainability performances and impacts.

TOP Performer in the following ESG ratings

SUSTAINALYTICS

World Benchmarking Alliance

MOODY'S ESG
Former Vigeo Eiris

S&P Global
Former RobecoSAM

Environment-Carbon

CDP
DRIVING SUSTAINABLE ECONOMIES

OCP received a B score by CDP on its environmental stewardship which is in the Management band. This is same as the Africa regional average of B, and same as the Chemicals sector average of B.

TCFD
TASK FORCE ON CLIMATE-RELATED FINANCIAL DISCLOSURES

OCP AMONG THE TRIO

of fertilizer industry supporters in 2021

SCIENCE BASED TARGETS
DRIVING AMBITIOUS CORPORATE CLIMATE ACTION

Science-based targets decarbonation trajectory

OCP has engaged with peer companies and the World Business Council for Sustainable Development (WBCSD) to develop a Sectoral Decarbonization Approach (SDA) within the Science Based Targets initiative (SBTi) specific to the fertilizer sector, in order to help companies in the sector to align their decarbonization objectives with the Paris Agreement.

Social – Diversity

EDGE CERTIFIED

"NOTRE VICTOIRE COLLECTIVE"

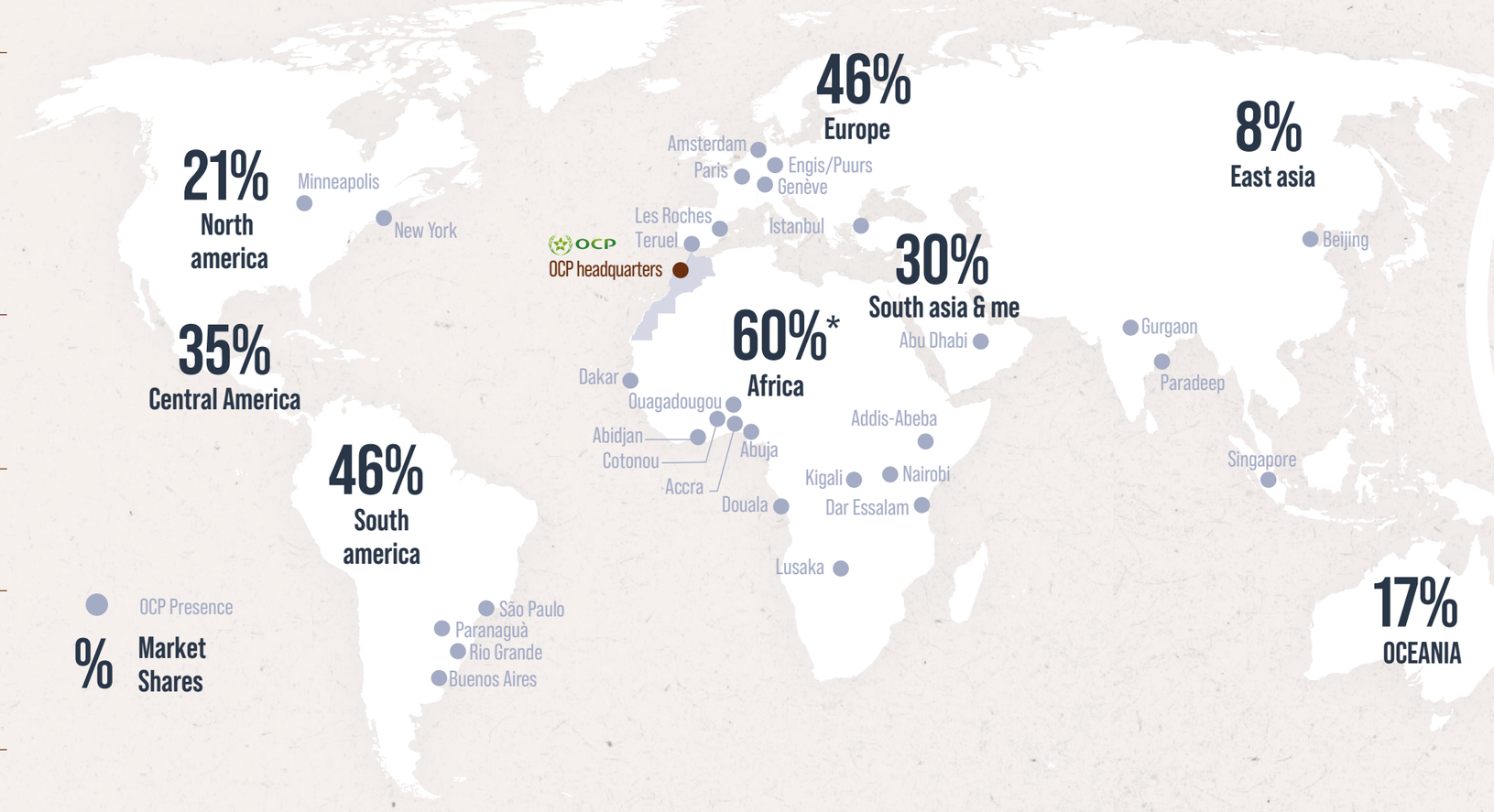
"Assess" level, the first level of EDGE (Economic Dividends for Gender Equality) Certification.

1.3 Local contributor, global leader

OCP has an integrated chain of four phosphate mines, two processing plants, and a network of ports and wharfs. We are always improving how we work – from implementing more efficient processes that use less water and energy, to finding new ways to maximize the value of phosphate. OCP operates processing phosphate into phosphoric acid and phosphate-based fertilizers mainly at the Jorf Lasfar and Safi sites.

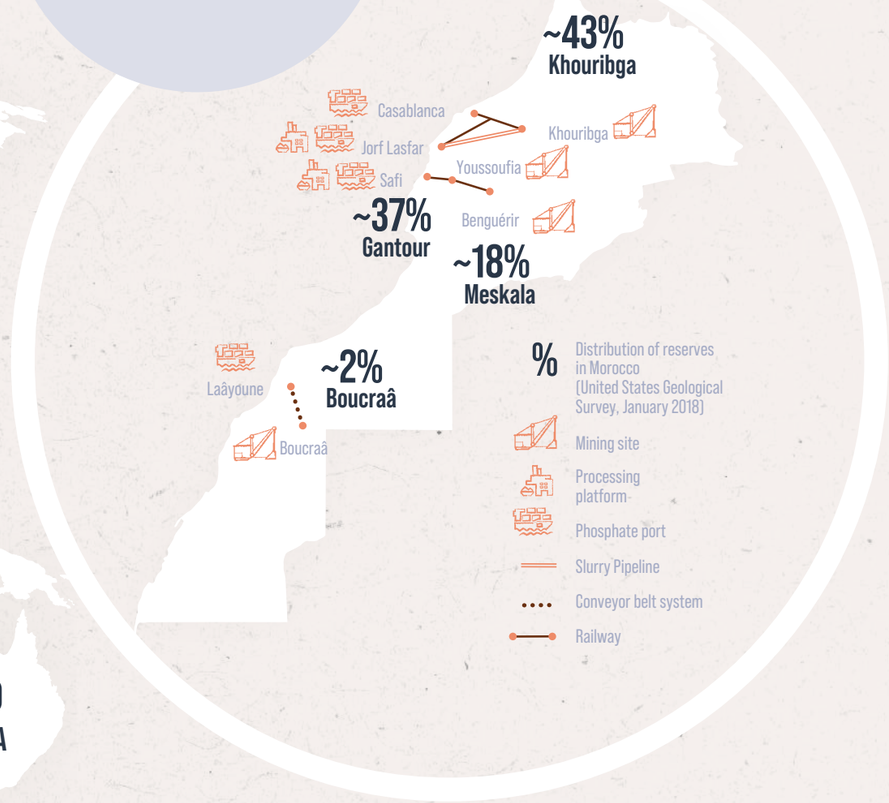
A large industrial development project in Phosboucraâ is also underway and will run from 2014-2022. It aims to improve the industrial activities of the Boucraâ site, diversify the product portfolio, develop the regional business ecosystem and contribute to the socio-economic development of the South regions : Guelmim-Oued Noun, Laâyoune-Sakia El Hamra and Dakhla-Oued Ed Dahab.

The OCP Group is the industry's leading player and spans five continents. Our global subsidiaries and international partners bring us closer to our clients and the farmers they serve. We are present over the globe. Our diversified portfolio reflects OCP Group's industrial and commercial excellence.



Our sites are important to local employers in their regions, providing jobs and re-investing in local infrastructure – all part of our commitment to unlock the value of phosphate to help our communities thrive.

4 mining sites
2 processing platforms
4 phosphate ports



102 km
length of world's longest conveyor linking Boucraa with Laâyoune

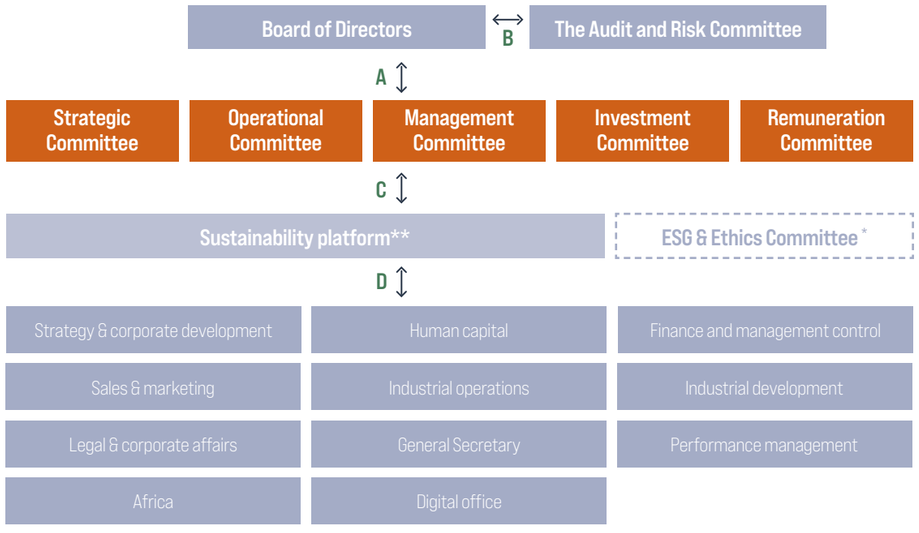
*Fertilizers'market share for Africa is estimated for all the year and includes DAP, MAP, TSP & NPKs reported in metrics tons
Source: IFA 9M 2021 preliminary statistics, excluding China Purified Acid for technical use. PDMs are based on trade volumes in P2O5 limited to Roche, Acid and DAP/MAP/TSP (excluding NPKs)

1.4 Driving sustainability : OCP corporate governance

OCP Group's innovative, agile and committed corporate governance reflects the best business ethics practices. OCP Group's management structure enables it to better grasp complexities, maintain leadership, and ensure sustainable growth.

Our robust corporate governance supports the integration of the sustainability strategy across the organization, including future ambitions for our sustainable industrial development.





MISSION & RESPONSIBILITY:

A. The Board provides strategic direction and ensures monitoring

B. The Audit & Risk committee assists the Board of Directors in controlling operations and reviews financial & extra-financial data

C. The Operational Committee works in close collaboration with the strategic and management committees to determine short, medium- & long-term strategy, and approve targets.

D. The Sustainability platform coordinates and supervises implementation of the sustainability strategy as well as discuss, co-create and initiate new ideas

Find out more

* Underway

** In 2021, Sustainability Platform has merged with the Operational Industrial development delivery teams as to increase synergies and enforce ESG practices. The newly created entity is so called Sustainability and Green Industrial development.

FOUR STEPS SUPPORT AGILITY AND INNOVATION

THE MOVEMENT
Each employee can suggest a new idea, form a team to build the project, propose it, and, if it is deemed relevant, be given the means to achieve the project.

ESTABLISHED "SITUATIONS"
Gathers a working group with resources and governance to carry out its mandate.

1 PACT
Fosters dialogues with all employees and ecosystems aiming to create a strong common sense.

ANCHORING
Transforms the Situation into a regular activity, business line or business unit.

Environmental, social and governance (ESG) issues are managed in a cross-cutting way at all levels through the Movement. This innovative organizational tool enables staff to foresee problems to make a more sustainable future.

Our journey for embedding sustainability opportunities

For several years now, OCP has understood the fundamental importance of embedding sustainability into its business model to turn risks into opportunities. We have been strengthening the way we tackle sustainability across our company; from the creation of agile governance initiatives to ambitious sustainability objectives going through deep impact analysis. A lot has been done so far, and we still continue our journey towards sustainable development. Our continuous improvement process is supported by external and independent sustainability experts to catalyze our transformation.

1. VISION & STRATEGY

In line with the prioritized SDGs 2, 4, 7, 8, 11, 12, 13, OCP Group has identified sub-targets and is still strengthening some of its goals to maximize its contributions.

2. MANAGEMENT SYSTEM & DUE DILIGENCE

OCP has laid strong foundations for a best-in-class company-wide sustainability management system allowing to identify, assess and minimize potential adverse impacts that we may cause or contribute to, through on-going due diligence. Continuous efforts are rolled-out across all functional areas, leveraging on the evolution of our governance. Our impact analysis will be deepened in 2022 by applying a double materiality assessment and engaging with a wide range of stakeholders.

3. REPORTING & DISCLOSURE

OCP Group's sustainability report 2021 is designed in compliance with the Global Reporting Initiative Standards 2021. Beyond the GRI standards, OCP Group's sustainability reports feature key mechanisms of complementary reporting standards such as Integrated Reporting, TCFD (Task Force on Climate-related Financial Disclosures) and SASB (Sustainability Accounting Standards Board). Additional reporting standards will be integrated in the coming years such as CDP (Carbon Disclosure Project) - working towards global alignment on a corporate reporting system.

4. GOVERNANCE

Considering the COVID-19 challenges, the creation of the ethics committee is postponed for 2022. The committee will integrate independent members and monitor the implementation and respect of our code of conduct. Rising environmental (including climate-related) and social risks require a continuous work on optimizing governance to engage across the company and manage them efficiently.

5. POLICY

Having formalized its policies aligned with internationally recognized standards and frameworks in 2019 - available on its website-, OCP Group continues the journey to live up to expectations and implement commitments.

OCP strongly believes that long-term financial performance is only possible through the management and continuous improvement of Environmental, Social and Governance (ESG) performance. Our vision of sustainable development is deeply rooted in our DNA and is an integral part of our raison d'être. Indeed, sustainability is integrated across our support, operational and strategic processes and enables inclusion of our stakeholders and partners of our sustainable development.



02

OCP SUSTAINABILITY STRATEGY
Towards 2040



2.1 Global megatrends

As part of OCP's risk management, we continuously track emerging global economic, environmental and social megatrends that could directly or indirectly affect the agriculture industry and market. Turning evolving transition and physical risks into opportunities is part of our prudential approach to respond to the most challenging sustainability issues. We recognised that all those challenges are interconnected and need a global response through supporting sustainable agriculture, empowering small farmers, promoting gender equality, ending rural poverty, ensuring healthy lifestyles and tackling climate change.

	CLIMATE CHANGE	WATER STRESS	FOOD & NUTRITION SECURITY	INCLUSIVE GROWTH	TECHNOLOGIES & DIGITALISATION	PANDEMIC CRISIS MANAGEMENT
WHAT IS THE MEGATREND?	Observed climate change through increasing temperatures, changing precipitation patterns, and greater frequency of some extreme events (droughts, floods) is affecting agricultural production due to soil erosion, salinization and loss of biodiversity. Agriculture contributes to around 20% of greenhouse gas (GHG) emissions.	Water is crucial for agriculture; both in terms of quantity and quality. Agriculture is huge consumer of water, around 70% of global water used for crops irrigation.	Half the food we eat is produced thanks to mineral fertilizers. With a population expected to grow from 7.9 billion people today, to nearly 10 billion by 2050, the challenge is to increase harvests of nutritious food, while reducing greenhouse gas (GHG) emissions.	The agri-food sector also provides a livelihood for millions of people and is a key driver of economic development. Most of the people living in extreme poverty are in rural areas where food production is often the most important economic activity.	Technology and digitalisation can have profound impacts on the economy, society and people and could lead to a better life for all. Today, technology and digitalization are key success factors and can be a competitive advantage. As a true enabler and accelerator of growth and efficiency, technology can improve processes while enhancing productivity, sustainability and profitability.	Pandemic crisis strongly affect the population worldwide. Alongside the obvious risks to human health, pandemic crisis at the light of the COVID-19, highlight global socioeconomic impacts.
WHAT IS THE RISK?	The sector is facing increasing pressure and expectations from regulators, investors and civil society for net zero trajectory and related climate actions as well as optimization of fertilizer use. Climate change could influence demand for our fertilizer products as natural resources for agriculture will become scarce by 2050.	Water supply restrictions as well as legal constraints will shape fertilizer markets outlooks. According to the World Resources Institute's Water Risk Atlas Tool (Aqueduct) baseline water stress Indicator, the majority of our sites in Morocco are located in high to medium-high water stress. Water scarcity could lead to competition of water resources and degradation of ecosystems. We need to increase production to meet growing global demand, and at the same time reduce and diversify our water use.	Food security will be increasingly affected by projected future climate change and difficulty in managing resources due to increasing population's demand. Global actions need to be taken to ensure that safe and nutritious food is available for all.	Insufficient economic inclusion is a threat to prosperity and makes inequalities rise.	Progress and innovation are the basis for growth and technology and digitalization are sources of comparative advantage. Neglecting these opportunities can reduce economic, environmental and social performance in the short and long term.	COVID-19 has led to greater uncertainty in business landscape and future pandemic crisis. Challenges for businesses are both economic and health : keep the competitive advantage but also deal with potential cyber-attacks, supply chain disruption and social unrest demands workplace and community change.
WHAT IS THE OPPORTUNITY?	We are continuously improving our product and service offers towards a smart agriculture embedding the 4R's nutrient stewardship framework - Right fertilizer, Right rate, Right time, Right place to achieve the "triple wins" of food security, environmental protection, and climate change adaptation and mitigation.	We are increasing production without relying on conventional water sources, improving water preservation for a sustainable future.	To increase the crop yields significantly without damaging soils, OCP Group keeps on working to provide farmers with the smartest fertilizers possible and techniques to ensure sustainable and decent livelihood. As a major contributor to the global fertilizer market, OCP Group needs to participate to the systemic transformation of food systems hinged on the move towards regenerative agriculture, dietary shifts and zero waste.	We can empower farmers for reducing poverty and ensure that they fulfill basic human aspirations for health, security, and the chance to contribute productively and creatively to society. The opportunity lies in the stimulation of economic and social growth.	Digitalization evolves at a rapid path. OCP has directly taken the turn of the digital transformation. Our vision of digital transformation involves local communities and promotes the emergence of a complete digital ecosystem to promote innovation.	The pandemic crisis stress-tests our ability to cooperate, learn and adapt in the face of deep uncertainties and rising risks. It has led OCP to rethink the way it operates to strengthen the resilience of its business model.
HOW DOES OCP RESPOND?	OCP is committed to playing its part in curbing global greenhouse gas (GHG) emissions below 1,5 °C, the goal of the 2015 Paris Agreement in line with the Sustainable Development goals. OCP is committed to the net zero emissions pathway by 2040 to limit global warming.	Our water program is changing where we get our water from, and how much we use. As part of OCP's water program we are using innovative techniques and unconventional water sources to reduce our need for fresh water to zero by 2030. The program is designed to optimize our water use, transform our processes, and invest in the R&D that will find even better ways to reduce our water use. We work on smart products and practices to offer solutions for water-scarce agriculture. We provide water spare capacities for local communities, to respond to the urgent water-stress crisis, and enhance health and prosperity.	OCP is ensuring effective soil management through a robust R&D network and innovation to promote sustainable farming. We design end-to-end solutions to provide farmers with the best knowledge, systems and tools to increase their yields, incomes, and livelihoods.	To deliver meaningful change for farmers and communities, OCP is focusing on four strategic priorities : Innovation, Customization, Education and Vision for Africa. We are committed to getting Africa one step closer to transform its agriculture and make it more effective, more fruitful and more sustainable. The key to that is meeting smallholder farmers' needs.	Digitalization at OCP is spanning over the whole value chain as to deliver operational excellence, new business opportunities, and improve employees experience. Many initiatives are also put in place by OCP to stimulate and energize the national and African territory through education, skill sharing and entrepreneurial innovation. OCP has a key role to play in the digitalization and progress of our society.	OCP was able to ensure the continuity of its operations in its supply chain thanks to a thoughtful management of the health crisis during the COVID-19 pandemic which reflect the resilience of our company. Our robust governance for risks management has enabled rapid response. Maximum effort in terms of infrastructures, investments in RGI, flexible schedules, communication and support has been made to ensure the physical and mental health of employees, suppliers and local communities. We embrace the acceleration of digitalisation to serve operational excellence, contribution in new business opportunities, especially for farmers, and enhancing employee experience and protection.
RELATED OCP'S COMMITMENTS	· Climate change mitigation & adaptation · Prevention & control of pollution · Transition to a circular economy · Protection & restoration of biodiversity & ecosystems	Sustainable use and protection of aquatic and marine resources	· Protection & restoration of biodiversity & ecosystems · Protection & development of good social and societal practices	Protection & development of good social and societal practices	Protection & development of good social and societal practices	Protection & development of good social and societal practices

2.2 Our contribution to the Sustainable Development Goals

All 17 Sustainable Development Goals are important and we aim to contribute to all of them. However, as major player in the fertilizer industry supplying essential crop nutrients to farmers, our purpose is to support global food security and our activities have direct impacts focus on 7 of them, which are integrated in our sustainability strategy:



GOAL 2: ZERO HUNGER

Targets

2.3 By 2030, double the agricultural productivity and incomes of small-scale food producers, in particular women, indigenous people, family farmers, pastoralists and fishers, including through secure and equal access to land, other productive resources and inputs, knowledge, financial services, markets and opportunities for value addition and non-farm employment.

2.4 By 2030, ensure sustainable food production systems and implement resilient agricultural practices that increase productivity and production, that help maintain ecosystems, that strengthen capacity for adaptation to climate change, extreme weather, drought, flooding and other disasters and that progressively improve land and soil quality.

Why is it important?

As leader in the fertilizer industry, food security is at the heart of OCP Group's mission to ensure long-term access – both in volume and quality – to food all over the world. To increase the crop yields significantly without damaging soils, OCP Group keeps on working to provide farmers with the smartest fertilizers possible and techniques to ensure sustainable and decent livelihood.

Actions & progress

- Soil fertility mapping and onsite field trials
- Research & development to develop customized fertilizers in collaboration with UM6P, Agri-Edge and Bio-Agritech business units, and through innovation partnerships such as the one with Fertinagro Biotech – global R&D leader in sustainable agronomic solutions.
- Educational tools such as OCP School labs to increase knowledge and expertise of farmers
- End-to-end solutions such as the Agribooster program and Al Moutmir that bring together different stakeholders of the agriculture value chain to provide farmers with the best conditions to increase their yield, incomes and livelihood.
- Additional agricultural community investment programs through OCP Foundation, Phosboucraa Foundation & Act4Community

Key goals

- Doubling the R&D budget - including Farmer solutions - by 2025 compared to 2020 level
- Develop customized fertilizers and tailor- made formulas reaching farmers
- Increase the geographical area and number of beneficiaries covered by agricultural support programs & end-to-end solutions

Where we stand in 2021

6
new fertilizer formulas launched in 2021 to better respond to African soils needs

252,295
farmers benefiting our flagship School Labs, Agribooster and Al Moutmir program compared to 351,329 in 2020



GOAL 4: QUALITY EDUCATION

Targets

4.1 By 2030, ensure that all girls and boys complete free, equitable and quality primary and secondary education leading to relevant and Goal-4 effective learning outcomes

4.4 By 2030, substantially increase the number of youth and adults who have relevant skills, including technical and vocational skills, for employment, decent jobs and entrepreneurship

4.B By 2020, substantially expand globally the number of scholarships available to developing countries, in particular least developed countries, small island developing States and African countries, for enrolment in higher education, including vocational training and information and communications technology, technical, engineering and scientific programs, in developed countries and other developing countries

Why is it important?

Education is one of the most important investments a country can make in its future. Nurturing smart, ethical and well-rounded successful individuals who will become responsible and resourceful citizens able to sustainably develop our society – and our companies.

Actions & progress

- UM6P (Mohammed VI Polytechnic University), institution dedicated to research and innovation featuring a comprehensive entrepreneurship program
- Digital schools (1337 & Youcode)
- Schools of excellence preparing for higher
- education, community colleges to improve soft skills, Mahir center to meet the challenges of human development in Morocco, etc.
- Rehabilitation, mobility solutions, school supplies, training of the educator teams, summer camps
- Equal opportunity leverages: financial sponsorship, private tutoring, medical and social centres targeting people with disabilities, skills centers to support youth's professional development
- Incubators of small businesses and specific access to OCP's procurement, training, pro bono and financial support to local cooperatives and associations
- Farmers' training programs
- OCP employees & suppliers' training
- Business Progress Pact to improve suppliers HSE performances

Key goals

- Increase the capacity (course offer evolution and beneficiaries) of our educational entities
- 5 digital schools covering our 5 production sites aiming at training 1000 young programmers per year by 2023

Where we stand in 2021

3,328
students in UM6P, compared to 867 in 2019 and 2,182 students in 2020

1,337
students in the digital schools on 4 campuses: Benguérir, Youssoufia, Khouribga, Safi, compared to 410 in 2018 and 848 in 2019



AFFORDABLE AND CLEAN ENERGY

Targets

7.2 By 2030, increase substantially the share of renewable energy in the global energy mix

7.3 By 2030, double the global rate of improvement in energy efficiency

Why is it important?

Decoupling our production capacity increase from our environmental footprint is at the heart of our industrial development strategy to meet the exponential needs for fertilizers in the decades to come. At OCP, we believe a fair balance between better crop productivity and environmental objectives is a prerequisite for a lasting response to global demand. To achieve this sustainable growth strategy, we have implemented a responsible and innovative energy program to reduce our carbon footprint and diversify our energy mix. Our Energy Program is based on two pillars : Clean energy and energy efficiency.

Actions & progress

- Solar energy studies: Solar mapping of the OCP group sites, Solar smart and development of prediction Model, Solar desalination
- Micro-grids study
- Development of co-generation capacities
- Wind energy (Power Purchase Agreement)
- Solar power plants program
- Clean drying
- Hydro energy
- Green mobility
- Renewable energy storage

Key goals

- 100% clean energy by 2030
- 10% energy efficiency by 2030 compared to a 2019 baseline (in terms of energy intensity per tons of products)

Where we stand in 2021

87%
of OCP's needs are covered by clean energy (co-generation and wind energy)

2,5 MT
MT CO_2 avoided thanks to clean energy

48%
of the Moroccan clean energy is produced by OCP

Energy intensity (GJ/t P205)



$2,3 billion investment for our Energy Program



DECENT WORK AND ECONOMIC GROWTH

Targets

8.2 Achieve higher levels of economic productivity through diversification, technological upgrading and innovation, including through a focus on high- value added and labour-intensive sectors

8.3 Promote development-oriented policies that support productive activities, decent job creation, entrepreneurship, creativity and innovation, and encourage the formalization and growth of micro-, small- and medium-sized enterprises, including through access to financial services

Why is it important?

OCP Group's success is driven by the people who work for us and the ones we collaborate with. Facing an ever-changing market and sustainability challenges, we need a strong culture of learning and innovation to forge a company and a whole ecosystem of critical-thinking and agile entrepreneurs who will lead us to a sustained, inclusive and sustainable economic growth.

Actions & progress

- UM6P (Mohammed VI Polytechnic University) - institution dedicated to research and innovation featuring a comprehensive entrepreneurship program and partnership with academic leaders such as MIT, HEC, etc. and renowned research institutions such as Fertinagro, Fraunhofer, Forbon, etc.
- Living labs serving as experimental sites open to the scientific community to test solutions on a real scale (Green Energy Park, Advanced Technology Mining Platform, Chemical Hub of Safi, etc.)
- Digital schools (1337 & Youcode), digital centers, etc.
- Learning institutes to support ongoing professional development programs, and provide personalized support for employees throughout their careers
- OCP Professors - mentoring program carried out especially by OCP Group's retirees to transfer the Group's expertise, internally and externally
- Industrial Expertise Centers – open to local SMEs – to train employees in operational activities
- Incubators of small businesses and specific access to OCP's procurement, training, pro bono and financial support to local cooperatives and associations
- Beyond talent development program and innovative approach such as the Movement which provide employees with financial and human resources necessary to work a topic of their choice, as long as it creates sustainable value for the Group. cooperatives and associations

Key goals

- Doubling the R&D budget by 2025 compared to 2020 level
- 100% of learning coverage (all our employees) by 2025
- 47% of women in management by 2030
- Create 5 SMEs incubatorsaround the Group production sites by 2022
- Increase OCP Group's commitments to local suppliers to 25% by 2021 and 30% by 2022

Where we stand in 2021

51%
learning coverage for TAMCA/ OE (workers & employees, technicians and supervisors) and 82% for Middle & Senior Management

$32,7
millions dedicated to R&I

33%
of women in management, compared to 32% in 2020

2
incubators created around our production sites

$12,85
million funding granted through the Damane Tamayouz Fund for our suppliers

$213,26 million, that is to say +39% compared to 2020 of commitments of industrial operations with local suppliers (within the regions of OCP sites)



GOAL 11: SUSTAINABLE CITIES AND COMMUNITIES

Targets

11.1 By 2030, ensure access for all to adequate, safe and affordable housing and basic services and upgrade basic housing.

11.3 By 2030, enhance inclusive and sustainable urbanization and capacity for participatory, integrated and sustainable human settlement planning and management in all countries;

Why is it important?

Smart cities make our people and our ecosystem thrive. Education, mobility, health& wellness, housing and economic infrastructures are carefully throughout of in all our urban development projects. Listening to local needs and specifics is what help us to build all that is required to create long-term value for communities while environmental sustainability remains the common thread from South to North.

Actions & progress

- Benguerir Mohammed VI Green City
- Foum El Oued-Laayoune
- Khouribga Green Mine
- Mazagan City Center
- Rabat Campus
- Property ownership plans for OCP Group's employees

Key goals

- Deliver the development projects in a timely manner and maximize sustainable impacts (job creation, land preservation, research ecosystem, etc.)

Where we stand in 2021

$ 200
Million investment in the Technopole Foum El Oued – Laayoune along with 1,200 expected job creation, 2,500 students and researchers, and 600ha of green spaces

$ 500
million investment in the Mazagan urban pole along with 55,000 jobs created by 2023, 134,000 residents by 2034 and 303 ha dedicated to green spaces

80 ha
of green belt in Benguerir Mohammed VI Green City along with 100,000 inhabitants, 20,000 students & researchers, 25,000 residential units by 2045

The Rabat Campus of Mohammed VI Polytechnic University built in 2021, in less than 9 months



GOAL 12: RESPONSIBLE CONSUMPTION & PRODUCTION

Targets

12.2 By 2030, achieve the sustainable management and efficient use of natural resources
12.4 By 2020, achieve the environmentally sound management of chemicals and all wastes throughout their life cycle, in accordance with international frameworks, and significantly reduce their release to air, water and soil in order to minimize their adverse impacts on human health and the environment
12.5 By 2030, substantially reduce waste generation through prevention, reduction, recycling and reuse
12.6 Encourage companies, especially large and transnational companies, to adopt sustainable practices and to integrate sustainability information into their reporting cycle

Why is it important?

Humanity today consumes much more resources the planet earth can offer, and the ecological debt will get worse as a result of population and economic growth. OCP Group's challenge is therefore to meet these growing consumption needs in order to guarantee food security while using a minimum of resources. Circular economy is the answer to optimize our products' life cycle footprint from design to end of life through smart use.

Actions & progress

- Preservation of the phosphate resources :
  - Recovery of low phosphorus content phosphates through the reverse flotation process
  - Phosphorus Life cycle Assessment (LCA)
  - Valorization of byproducts mainly phosphogypsum – programs into roads, agriculture, construction, desertification control, etc.
  - Phosphorus recovery feasibility studies wastewater treatment facilities in our mining sites
  - Research & Development to find new phosphorus recovery routes, including organic fertilizers made of recovered nutrients (N, P, K, ...) from organic waste with Fertinagro
- Sustainable production of fertilizers through energy, emissions, water & effluents, waste reduction programs
- Best-in-class emissions management through best eco-friendly technologies :
  - new mobile station to measure the quality of ambient air and weather conditions in Jorf Lasfar.
- Sustainable consumption of fertilizers through 4 R framework (Right source, Right place, Right time, Right rate):
  - Soil fertility mapping and onsite field trials
  - Research & development to develop customized fertilizers in collaboration with UM6P, Agri-Edge and Bio-Agritech business units, and through innovation partnerships such as the one with Fertinagro Biotech – global R&D reference in sustainable agronomic solutions.
  - Educational tools such as OCP School labs to increase knowledge and expertise of farmers
  - End-to-end solutions such as the Agribooster program and Al Moutmir that bring together different stakeholders of the agriculture value chain to provide farmers with the best conditions to increase their yield, incomes and livelihood.

Key goals

- Maximize valorization and continue investments
- Byproducts on storage as an enabler
- Reduce SO2 polluting load by 50% in 2025 compared to 2018
- 70% of non-mining hazardous waste diverted from disposal by 2025
- 100% water needs covered by non-conventional sources by 2026
- 1000 ha/year rehabilitated land

Where we stand in 2021

0.16
NOx intensity

20%
SO2 intensity reduction compared to 2020

96,7%
waste diverted from disposal

30%
of our water needs covered by non-conventional sources

36,35 million m^3 of produced non-conventional water

204 ha rehabilitated area



GOAL 13: CLIMATE ACTION

Targets

13.1. Strengthen resilience and adaptive capacity to climate-related hazards and natural disasters in all countries

13.3. Improve education, awareness-raising and human and institutional capacity on climate change mitigation, adaptation, impact reduction and early warning

Why is it important?

Climate is changing. The world is experiencing increasing concentrations of greenhouse gases, rising sea levels, and extreme weather conditions. This calls for urgent and accelerated action by countries as they implement their commitments to the Paris Agreement. OCP pursues a cutting-edge strategy to reduce its CO_2 emissions and adapt to actual and future climate.

Actions & progress

- Mitigation measures:
  - Energy efficiency, development of cogeneration, renewable energies (wind & solar power plants)
  - Development of green ammonia production targeting scope 3 CO_2 emissions
  - CO_2 capture emitted by our phosphoric acid chimneys
  - Mine reclamation & carbon farming changing agricultural practices or land use to increase the amount of carbon stored in the soil and vegetation
  - Slurry pipelines transporting phosphate rock to processing sites - allowing significant CO2 savings compared to railway transport
  - Clean drying of fertilizers
- Adaptation measures through an accelerated water program 2021-2026 based on optimized consumption and the use of non-conventional resources, as well as products and services for a sustainable and resilient agriculture.
- Water spare capacities deployment for providing drinking water to local communities
- Decarbonation trajectory using science based targets to be in line with the Paris Agreement
- Scope 3 exhaustive calculation using GHG Protocol, certified Carbon Trust

Key goals

50%
reduction in the carbon footprint by 2030 compared to 2014

Achieve carbon **neutrality** by 2040

Increase resilience facing water stress

Where we stand in 2021

23%
reduction in CO_2 intensity (t CO_2/P2O5) over the last 5 years (since 2016).

87%
of our electricity needs covered with clean energy

50%
increase in clean energy used for production

36,35M
m^3 of non-conventional water produced

Additional spare non conventional water capacities to be developed for communities resilience against water stress (~3M habitant in scope)

2.3 OCP Sustainability strategy

OUR SUSTAINABILITY STRATEGY : TOWARDS 2040

Our sustainability strategy is deployed around five commitments that drive our day-to-day decision-making process and set a vision for a sustainable future of our sector. This ensures that future generations will be able to meet their own needs through support and engagement in economic, environmental and social performance, as well as to monitor and communicate our commitments in these areas.

Our innovative, agile and committed governance combined with responsible and inclusive management practices ensure that we allocate all necessary resources for sustainable production in line with our sustainable industrial development. Our value chain is built with a view to creating shared value through its commitments to responsible governance and management, and sustainable production. All those commitments enable us to achieve our mission to feed the soil to feed the planet for sustainable and secure food systems.

1. INNOVATIVE, AGILE AND COMMITTED GOVERNANCE

OCP's strong, robust and agile governance reflects the company's values (integrity, transparency, sustainability), vision and ambitions. Beyond strict regulatory compliance, OCP upholds the highest ethical standards in its operations and relations with its stakeholders. Through economic performance, OCP creates value for all its stakeholders, from employees and suppliers to government and local communities.

2. RESPONSIBLE AND INCLUSIVE MANAGEMENT

Practices bring our human capital to develop themselves in a culture of diversity, well-being, dialogue and continuous innovation. Occupational Health and Safety management, Diversity program and inclusion ensure employee attraction and retention. Respect for Human rights is deeply rooted in our management practices

3. SUSTAINABLE PRODUCTION

OCP invests significantly in its sustainable industrial development in line with its Sustainability and Green Industrial Development (SGID) Vision. All CAPEX is invested with a view to financing sustainable and inclusive growth as well as the energy transition, carbon neutrality and water stewardship.

4. SUSTAINABLE FOOD SYSTEMS

Ensure access to safe, healthy and nutritious food for global food security through boosting soil health, delivering products which contribute to increasing the production, quality and variety of healthy and nutritious foods. Understand the farmers' needs for social inclusion enables OCP to provide customized solutions and make them thriving through sustainable farming, education and support for innovation.

5. SHARED VALUE CREATION

Empowering people, including women, local communities and vulnerable groups through 4 pillars of actions :

EDUCATION
We invest in education at every stage to create change. That's why we invest in schools, scholarships, training and research to inspire the next generation of problem-solvers.

ENTREPRENEURSHIP
We support people in taking the opportunities of entrepreneurship through innovative ideas.

HEALTH, SPORT AND CULTURE
We support local populations in access to medical health programs. Promoting sport and culture boost the well-being of people.

BUILDING SMART CITIES
We invest in major development projects for Morocco's green and eco-responsible cities driven by innovation.

We built our sustainability strategy based on a materiality analysis that uses an inclusive approach with our internal and external stakeholders. This analysis assessed the significance of the economic, social, and environmental impacts of OCP's activities and their influence on stakeholders.

GRI 2-27 |

OCP'S CONTRIBUTION TO THE EUROPEAN TAXONOMY OBJECTIVES

OCP's sustainability strategy contributes to the achievement of the global objectives for sustainable development (Sustainable Development Goals, Paris Climate Agreement, EU Green Deal). Our commitments to responsible management, sustainable production as well as the creation of shared value for local communities contribute to at least one of six environmental objectives listed in the EU Taxonomy; and do no significant harm to any of the other objectives, while respecting basic human rights and labor standards.

	CLIMATE CHANGE ADAPTATION	CLIMATE CHANGE MITIGATION	SUSTAINABLE USE AND PROTECTION OF AQUATIC AND MARINE RESOURCES	TRANSITION TO A CIRCULAR ECONOMY	PREVENTION & CONTROL OF POLLUTION	PROTECTION & RESTORATION OF BIODIVERSITY & ECOSYSTEMS	PROTECTION & DEVELOPMENT OF GOOD SOCIAL AND SOCIETAL PRACTICES
COMMITMENTS TO RESPONSIBLE AND INCLUSIVE MANAGEMENT							
Human rights							●
Sustainable and innovation-driven growth	●	●	●	●	●	●	●
A responsible and committed employer							●
Responsible procurement practices							●
COMMITMENTS TO SUSTAINABLE PRODUCTION							
Operational excellence, Safety & Well-being	●	●	●	●	●	●	●
Sustainable Industrial Development	●	●	●	●	●	●	
Resource preservation				●			
SUSTAINABLE PRODUCTION							
Greenhouse gas emissions & climate change	●	●					
Emissions management					●		
Developing renewable energy and energy efficiency	●	●					
Water management			●				
Effluents management					●		
Environmental management system	●	●	●	●	●	●	
TRANSFORMATION & RECYCLING							
Soil management & biodiversity						●	
Waste management				●			
COMMITMENTS TO SUSTAINABLE FOOD SYSTEMS	●	●				●	●
COMMITMENTS TO SHARED VALUE CREATION							●

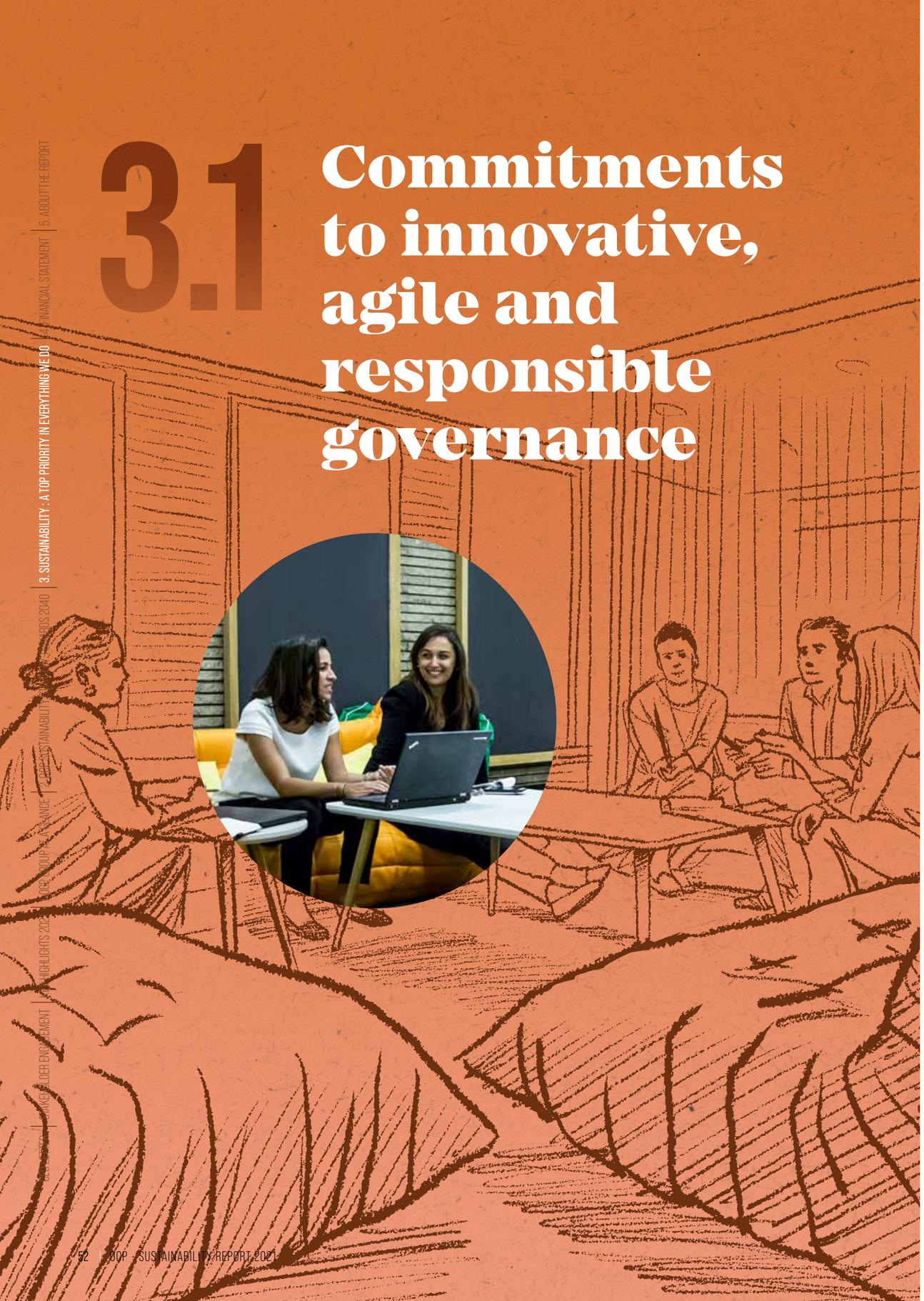
03

Sustainability

A TOP PRIORITY IN EVERYTHING WE DO OUR PERFORMANCES AND ACHIEVEMENTS 2021



3.1 Commitments to innovative, agile and responsible governance



3.1.1 Transparent, innovative and ethical governance

Corporate governance at OCP Group relies upon strong fundamental values aligned with the OECD principles and the recommendations of the International Corporate Governance Network (ICGN) :

Links to our Policies related to responsible business practices and corporate governance, approved by Board of Directors/ Chairman and Chief Executive Officer :

- Principles of Corporate Governance (aligned with the OECD principles and the recommendations of the International Corporate Governance Network (ICGN))
- Anti-corruption Policy

INTEGRITY
In a collegial and individual manner, the board supports the Group in the implementation of its strategy in an honest, fair and transparent manner, in order to preserve its image, reputation and interests.

DIVERSITY
The board is diverse and inclusive. Diversity in its broad sense, including diverse backgrounds, experiences, skills, gender diversity.

ACCOUNTABILITY
Directors' accountability implies that they take ownership of the actions and decisions taken and are able to communicate regularly, transparently and fairly, on the Group's achievements through an objective and intelligible assessment.

TRANSPARENCY
The board is willing to provide management and shareholders with clear information on financial and non-financial matters, and in particular on performance, in order to acquire and maintain the trust.

INDEPENDENCE
Directors shall act with independence of analysis, of judgement of decision making and action, essential to the execution of their duties to serve the interests of the Group and its shareholders.

OCP Group earned the first level of EDGE (Economic Dividends for Gender Equality) certification, the global standard for assessing corporate performance in terms of gender equality and the creation of equal career opportunities for both female and male employees. This certification reflects our good practices towards gender equality, including gender balance within core functions; recruitment and promotion policies; pay equity; and inclusive culture. Diversity is well represented within our corporate governance.

3.1.1.1 INTEGRITY GOVERNANCE

Improving governance as a management tool continues to be a long-term priority at OCP. It requires strengthening procedures, rules, and organizational structures that will ultimately ensure greater transparency across the company's operations. OCP aims to go beyond regulatory compliance and develop an approach to governance that reflects the company's values – integrity, transparency, sustainability – vision and ambitions.

OCP Group promotes the exercise of good practices aimed at detecting and preventing situations of conflict of interest and provides Directors with appropriate assistance and training to support them in this exercise. The framework for mitigating and preventing conflicts of interest is governed by Law 17-95 related to the SA and Law 69-00 related to financial control, under which OCP is strictly subjected.

OCP BOARD OF DIRECTORS

OCP has a Board of Directors that determines the general directions of the company's activities and oversees their implementation, subject to powers that are expressly reserved to the shareholders and in accordance with OCP Group's corporate purpose.

BOARD MEMBER (31/12/21)	GENDER	PRIMARY OCCUPATION	STATUS	SINCE	RENEWAL OF MANDATE
Mostafa TERRAB	M	OCP Chairman and Chief Executive Officer	E - NI	2008	2017
Nadia FETTAH (*)	F	Minister of Economy and Finance	NE-NI	2021	2021
Abdelouafi LAFTIT	M	Minister of the Interior	NE-NI	2018	2018
Nasser BOURITA	M	Minister of Foreign Affairs, African Cooperation and Moroccans Abroad	NE-NI	2018	2018
Ryad MEZZOUR (*)	M	Minister of Industry and Trade	NE-NI	2021	2021
Leila BENALI (*)	F	Minister of Energy Transition and Sustainable Development	NE-NI	2021	2021
Mohamed SADIKI	M	Minister of Agriculture, Fisheries, Rural Development and Water and Forests	NE-NI	2015	2017
Banque Centrale Populaire	CE	Represented by its President and CEO Mohamed Karim Mounir	NE-NI	2009	2021

Mustapha Ouhadi Secretary of the Board

E: Executive (linked to the management of the company) **I NE**: Non-Executive **I**: Independent **I NI**: Non-Independent **M**: Male **F**: Female **CE**: Corporate Entity

*Co-optation of new directors by the Board of Directors on 25/11/2021. These co-optations will be submitted for ratification at the next AGM to approve the 2021 accounts (expected date June 2022).

Group's specific Board selection & nomination criteria

OCP SA is a public company subject to company law and to the provisions of SA (Société Anonyme, limited company) law. The choice of the members of the board of directors was made since the transformation of the office into a limited company (SA) by the main shareholder (the Moroccan state). Defined by the main shareholder, members are several ministries represented by the person of the Minister and whose appointment is made in line with the SA law. The representative of each Ministry may have to change with each Ministerial change.

Remuneration

The terms of the remuneration of our Board of Directors are aligned with the SA law.

BOARD COMMITTEE

Audit & Risk Committee

The Audit and Risk Committee oversees the Board of Directors in its control operations and reviewing half-year and year-end results.
The Committee's main functions are:

- Assessing the adequacy of the Group's internal control operations and coordinating internal and external audit operations;
- Approving the annual internal audit program;
- Evaluating accounting principles and methods;
- Examining risks and evaluating the significance of such risks;
- Monitoring compliance with the recommendations made at previous Audit and Risk Committee meetings;
- Helping the Board of Directors improve internal control, risk management, and network and information security.



Remuneration Committee

The Board of Directors has set up a Compensation Committee composed of the following members:

- Mr. Mostafa TERRAB ;
- The representative of the Ministry of Economy and Finance;
- The representative of the Ministry of Energy and Mines (currently the Ministry of Energy Transition and Sustainable Development);

The Compensation Committee makes proposals or recommendations to the Board of Directors concerning the terms and conditions of the employment contracts of the corporate officers, i.e. the Chairman of the company and the Chairmen of the subsidiaries.

Strategy & Investment Committee

The Strategy and Investment Committee is responsible for preparing the Board of Directors' deliberations on the Group's strategy, in particular its development policy and financing.
It is composed of three to five members. Currently, it is composed of the following members:

- Mr Mostafa TERRAB ;
- The representative of the Ministry of Economy and Finance;
- The Banque Centrale Populaire, represented by Mohamed Karim MOUNIR.

The committee can also be seized by the Board of Directors of all strategic questions, even if they do not call for immediate deliberation of the Board.

SUPPORTING COMMITTEES

Strategic Committee

The committee oversees strategic thinking, medium and long-term decision making and steering (Strategy, Business Plan and Investment Plan, M&A, Business Development, ...). The committee is chaired by OCP Chairman & CEO and composed of the Chief Operating Officer, the Chief Growth Office, the Chief Human Capital & Services officer and the Chief Financial Officer.

Management Committee

The committee oversees OCP short and long-term decision-making within guidance provided by the Strategic Committee (budgeting, HR, CAPEX, etc.). The committee is chaired by the OCP Chairman & CEO and composed of the Chief Operating Officer, the Chief Growth Office, the Chief Human Capital & Services officer, the Chief Financial Officer and the Executive Vice Presidents.

Operational Committee

The Operational Committee oversees short-term decision-making and operational coordination (Production & Sales Plan, Pricing, Business Review, ...). The committee is composed of the Chief Operating Officer, the Chief Growth Office, the Chief Human Capital & Services officer, the Chief Financial Officer and the Executive Vice Presidents with a rotating presidency.

ESG & Ethics Committee

ongoing

The Ethics Committee, will be a body dependent on the OCP Board of Directors. The Committee has among its tasks to guide, supervise and control the Compliance Models implemented in OCP. Its main objective is to promote ethical conduct, as well as to ensure the proper functioning of the controls established by the Company for the prevention, monitoring and response to eventual irregularities and / or unethical behaviors

In the exercise of their functions, the members of the Committee will act under the strictest standards of autonomy, independence, professionalism, experience, dedication and integrity, ensuring in any case compliance with the provisions of Laws and Regulations and, in general, the rest of procedures and internal regulations for the Company's actions.

- Due control in ethics and compliance
- Definition and oversight of the rules of conduct. Conflicts of interest.
- Oversight of the hotline and whistle-blowing procedure
- Oversight of publicly communicated policies and procedures on anti-bribery and corruption
- Definition and oversight of the compliance and ethics model
- Oversight of the ESG risks –including ethics related and their reputational consequences

TRANSVERSAL RISK MANAGEMENT & INTERNAL AUDIT

The OCP Group deploys a risk management system, integrated into its overall management system, which aims to create and preserve value, help the Group achieve its strategic objectives, improve its performance, strengthen its resilience and foster innovation. Under the leadership of the Risk Management entity, the risk management and business continuity processes are conducted in line with international standards (ISO 31000, ISO 22301) and best practices.

Risk assessment processes ensure the assessment of identified risks (including climate-related) through economic, environmental, social, reputational impacts as well as regulatory compliance.

The Risk Management entity reports to the General Management of the company. It reports on its work to relevant governance bodies, including the Audit and Risks Committee.

The Internal Audit Group Department operates its engagements in accordance with International Standards for the Professional Practice of Internal Auditing and its activities are certified by IFACI (French branch of the Institute of Internal Auditors - IIA), since 2013. To accomplish its purpose and activity each year, the Internal Audit Group Department designs and implements an annual audit plan based on the orientations of the CEO of OCP SA and the Audit and Risk Committee of OCP SA, the risk mapping of OCP Group, the proposals of missions of the various entities and the proposals of the internal auditors.

	2018	2019	2020	2021
Audit engagements carried out in several areas, including industrial operations and project development, product quality management, safety, sustainable development, cybersecurity, data management, sales, logistics, purchasing and ecosystems, finance, human resources, governance and subsidiaries.	20	23	15	20
Recommendations implemented within the prescribed time limits as defined in the annual internal audit plan related to the industrial, digitalization, information system, support and commercial areas, and subsidiaries.	74%	76%	71%	73%

In 2021, OCP's contributed to the National Strategy for Natural Disaster Risk Management 2020-2030, plan which aims to protect and strengthen the capacity of citizens and material goods to adapt and counter the effects of climate change.

MONITORING EMERGING RISKS

Our risk mapping has been updated and strengthen in 2021. Two risks have been particularly emerging from our risk analysis :

Water stress: Water is essential for our fertilizing production process while Morocco still suffers water stress. We are working to reduce our water intensity while tapping into unconventional sources of water to remediate this risk.

Find out more on how we manage those risks

Fertilizers market resilience: Changing climate, from warming temperatures to changes in precipitation, is increasingly impacting the way plants grow all around the world. This influences demand for fertilizers as land becomes unproductive while regulations tend to reduce fertilizer use.

Find out more on how we manage those risks

OUR GOALS

	Where we stand in 2021
Implement an ethics committee composed of members that are independent from operations	Ongoing
Extend training programs on ethical governance to our employees and subcontractors	Ongoing

3.2 Commitments to responsible and inclusive management



3.2.1 Due diligence

3.2.1.1 HUMAN RIGHTS

Our mission of feeding a growing world population and creating shared value for our stakeholders puts human rights at the center of everything we do. Respecting and supporting the protection of human rights and building our firm commitment to the International Bill of Human Rights is a strategic purpose of OCP Group as an employer, investor, partner, neighbor and fertilizer provider.

In line with the regulatory requirements for due diligence, OCP aims to identify, assess, prevent, monitor, minimize and remediate its potential adverse human rights impacts that arise from its activity and may affect the rights holders, stakeholders and identified vulnerable groups, through on-going due diligence processes, robust governance and appropriate management of salient human rights issues as recommended by the UN Guiding Principles on Business and Human Rights and the OECD Guidelines for Multinational Enterprises.

In line with the UN Declaration of Human Rights, OCP is committed to eliminate all forms of forced and compulsory labor, prevent child labor, ensure decent labor conditions and social dialogue, treat workers and vulnerable groups with dignity and respect, prevent discrimination and any form of violence in the workplace, protect health and safety, respect and adhere to rights of privacy, support the development of employees and the ecosystem, enhance diversity, inclusiveness and gender balance across the Group's workforce.

Links to our Policies for Human Rights in line with the UN Declaration of Human Rights, approved by Board of Directors/ Chairman and Chief Executive Officer :

- Code of Conduct
- General Human Rights Policy
- Responsible Procurement Policy
- Responsible local communities relations Policy
- Responsible human resources management Policy

SASB: EM-MM-210.a.3
UNGC : Principles 1, 2, 4

OUR APPROACH FOR EMBEDDING RESPECT FOR HUMAN RIGHTS

Our approach to human rights is cross-functional, integrated in our existing risk management processes and grievance mechanisms in place and in alignment with the approach of the international Council on Mining and Metals (ICMM).

Grievance mechanisms

In order to identify potential human rights violations and remediate to them, OCP provides strong grievance mechanisms. OCP is currently working on harmonizing those grievance mechanisms.

1 **Operational sites** (for oral and written complaints from residents)

2 **The Ombudsman Office** (all types of complaints) : an independent complaint management platform that addresses the complaints of all external stakeholders, including OCP's clients and suppliers, NGOs, and all other parties interacting with OCP's entities. Acting independently and in compliance with international standards and best practices, the Ombudsman Office manages:

- ✓ Processing and examining claims, and recommending fair solutions to parties ;
- ✓ Acting to reduce disputes between OCP and its partners;
- ✓ Providing mediation when required;
- ✓ Identifying interaction opportunities between the OCP Group and its ecosystem and advancing cooperative development projects.

3 **The General and Institutional Affairs office** (all types of complaints)

4 **Whistleblowing channel** (for employee's complaints) : Employees have at their disposal a whistleblowing channel to immediately report any suspected or actual violation of human rights and OCP Group's code of ethics. They may have access to it by sending an email to whistleblowing@ocpgroup.ma 24 hours a day, 7 days a week.

Due diligence program and action plan

Over the recent years, OCP had worked, beyond its policy commitments, to embed respect for human rights across business activities in principle and practice. Here are some key milestones of our journey in embedding human rights.

2016
- Creation of an agile, innovation and inclusive governance system called the 'Mouvement' to encourage employees to think outside the box around rising and future economic, social and environmental challenges.

2018
- Implementation of a purchasing policy with a focus – but not limited to – on the development of responsible procurement practices and a local industrial ecosystem as well as the promotion of sustainability best practices among suppliers.
- Co-creation of the Progress Pact introduced to 250 Moroccan suppliers to enable a new long-term collaboration model and to offer incentives for capacity development.
- Roll-out of the "Act4Community" network to foster the creation of shared value in a decentralized way. Volunteer OCP Group's employee work- at industrial site level – with local communities to identify common challenges and develop entrepreneurship, education, health, culture, and regional infrastructure development initiatives fitting with their needs, as well as to create local ecosystems.
- Development of a 'Sustainability task force' to transversally manage challenges related to sustainable development.

2019
- Human Rights impact Assessment: Identification and assessment of significant potential salient human rights issues through an internal and external engagement across regions and functions and with human rights experts in order to build upon an action program to prevent, mitigate and remediate to human rights issues across the value chain.
- Training on human rights to build capabilities and common understanding for both managers and key staff members from the main business units.
- Formalization of the human rights policy together with specific human rights operational policy, global and equally applicable to all our supply chain, for our five major functional areas (procurement, investment, marketing & sales, human resources, local communities' relations)

2020
- Governance processes reinforcement related to human rights
- Definition and implementation of our action plan for 2025 to prevent negative impacts on human rights and trigger opportunities

2021
- Launch of a due diligence process throughout OCP's value chain, including OCP Group and OCP Africa. The main objectives were:
  1. Identifying and assessing actual or potential adverse human rights impacts
  2. Tracking the effectiveness of measures and processes
  3. Communicating on how impacts are being addressed
  4. Taking appropriate actions
- Strengthening of the stakeholder engagement plan, building of an inclusive trajectory for 2030, considering levels of influence, dependence, vulnerability and capacity of dialogue of each group of stakeholders.

100%

of Top managers trained on corporate social responsibility, Compliance & Corruption, RGPD, Anti-competitive practices in 2021

OCP's due diligence program within its operations and its supply chain is built around the following pillars :

1. Integrating human rights into new and existing policies
2. Training senior management, employees and suppliers on human rights
3. Engaging with stakeholders on a wide range of human rights issues
4. Assessing risks across its activities
5. Assessing human rights impacts in high-risk operations
6. Coordinating human rights activities through sustainability sponsors and on a Human Rights working Group
7. Preparing with leading organizations to implement human rights activities
8. Providing appropriate, efficient, transparent and fair grievance mechanisms
9. Monitoring and reporting on its performance

OCP is continuously working on improving its due diligence program.

GRI 2-17, GRI 18
SASB: EM-MM-210.a.3
UNGC: Principles 1,2



Due diligence program and action plan

1. **OPERATIONAL SITES :** All complaints are received by operational site departments and processed according to the complaint type.

	COMPLAINTS RECEIVED		COMPLAINTS TYPE		COMPLAINTS CLOSED	
	2020	2021	2020	2021	2020	2021
Khouribga	129	251	· 64%: compensation · 1%: environment · 6%: royalties & various acts · 14%: society · 16%: social	· 49%: compensation · 8%: environment · 2%: royalties & various acts · 20%: society · 21%: social	97%	96%
Youssoufia & Benguérir	268	401	· 42% job request & applications from residents, subcontractors, retirees' families & skill centers beneficiaries · 35% COVID-19 impacts and 6% social compliance from suppliers · 7% OCP Group's support from associations & cooperatives and residents · 5% green plots from employees · 2% Act4Community's support · Others: 3%	· 6%: Institutions · 20%: Associations · 52%: Local communities · 4%: Education · 18%: Suppliers	97%	98%
Phosboucraa	2	1	· 50%: Seniority · 50%: Promotion	· 100%: Local communities	100%	100%
Jorf Lasfar	6	4	· 67%: land acquisition process · 17%: environment · 17%: employment	Local communities · 75%: land acquisition process · 25%: employment	66%	75%
Safi	2	5	· 50%: integration of young people in the OCP Skills program · 50%: impacts of the industrial activities	· 25%: Land acquisition · 50%: Employment · 25%: Suppliers and sub-contractors	50%	60%

Each site also ensures that dialogue occurs to reach consensus prior and during any significant operational changes related to its activities such as restructuring, closures, expansions, settling in new areas, openings, etc.

Our community program Act4Community has also dedicated teams for each operational site to proactively engage local communities, regularly carry out community impact assessment, and prevent or remediate complaints.

THE OMBUDSMAN OFFICE :

KEY FIGURES	2018	2019	2020	2021
Complaints received	32 including 8 not eligible	33 including 5 not eligible	42 including 2 not eligible	17
Complaints type	40%: Overdue contracts, receipts and invoices 20%: Subcontracting 40% : Others*	40%: Overdue contracts, receipts and invoices 20%: Subcontracting 40% : Others*	60%: Overdue contracts, receipts and invoices 10%: Subcontracting 30%: Others*	53%: Overdue contracts, receipts and invoices 23%: Subcontracting 24%: Others*
% of complaints closed	100%	82%	60%	50%

*grievances related to purchasing procedures, social issues, employment, etc.

3. **THE GENERAL AND INSTITUTIONAL AFFAIRS :**

KEY FIGURES	2018	2019	2020	2021
Complaints received	247	224	153	114
Complaints type	60%: Employees, former employees & retirees rights (pension, social benefits, medical coverage, etc.) 40%: Other (non-integration after internship, land acquisition, OCP's operations impacts, incl. environmental)	52%: Employees, former employees & retirees (pension, social benefits, medical coverage, etc.) 20%: nearby communities (land acquisition, OCP's operations impacts, incl. environmental) 14%: supplier (payment process & disputes over project execution)	56%: Employees, former employees & retirees (pension, social benefits, medical coverage, etc.) 10%: nearby communities (land acquisition, OCP's operations impacts, incl. environmental) 21%: supplier (payment process & disputes over project execution	· 11%: Neighbourhood : · 32%: Suppliers · 46%: Agents (or ex agents) · 11%: Others
% of complaints closed	86%	50%	59%	66%

0

Reserves/production in countries that have the 20 lowest rankings in Transparency International's Corruption Perception Index

Free, Prior and Informed Consent (FPIC) : Systematic Projects Acceptability

Prior to all OCP's industrial development projects, OCP engages and consults relevant stakeholders which allows them to give or withhold consent to a project that may affect them or their territories. This ensures social and environmental acceptability in compliance with applicable national laws.

OUR GOALS

Our goals	Where we stand in 2021
Deploy trainings on Human rights for all employees by 2022	Ongoing
Complete the due diligence process by 2022 and implement the guidelines and recommendations by 2023	Ongoing
Formalisation of the ESG & Ethics Committee	Ongoing

OCP action plan for Human Rights 2025

In 2021, several actions have been taken across all functional area in order to prevent, mitigate and remediate impacts on human rights we may be linked to, which could potentially affect rights holders, stakeholders or other vulnerable groups. Our action plan for 2025 includes the following initiatives :



Formalise a Suppliers Code of conduct and require compliance with it by suppliers. OCP Group's contracts with its business partners will require that they shall respect internationally recognized human rights.

Train suppliers in business ethics – including human rights.

Define and implement a land acquisition standard in alignment with international best practices, including International Finance Corporation (IFC) Performance Standard 5 regarding land acquisition and resettlement; and complementary tools necessary for its implementation.

Train relevant internal stakeholders on responsible financial partnerships and investments and raise awareness among investees, joint-ventures or financial partners.

Develop adapted grievance mechanisms.

Integrate early environmental, social and governance issues that may have a significant impact on the existing and planned investment/financial partnership over the next decades; and define selection criteria (common ones and sectorial weighting).

Strengthen internal training on products' lifecycle environmental impacts, including transport.

Encourage synergies between sales, marketing, researchers, engineers, and procurement teams to work on products' environmental impacts, including transport.

Encourage synergies between sales, OCP Group foundations, and other relevant internal stakeholders to improve farmers' working conditions and increase education on the environmental, social and economic impacts of their consumption choice and practices

Improve training on sustainable development and provide training to senior management, staff and suppliers, as appropriate to their needs and specific to each functional area of human rights challenges to ensure that respect for human rights is consistent and integrated throughout the company and embedded in the company's culture.

Strengthen the health and safety (H&S) roadmap to reach the «interdependent stage» on the Bradley Curve - that allows everyone to understand the changes in mentality and behavior necessary to gradually develop a well-established safety culture

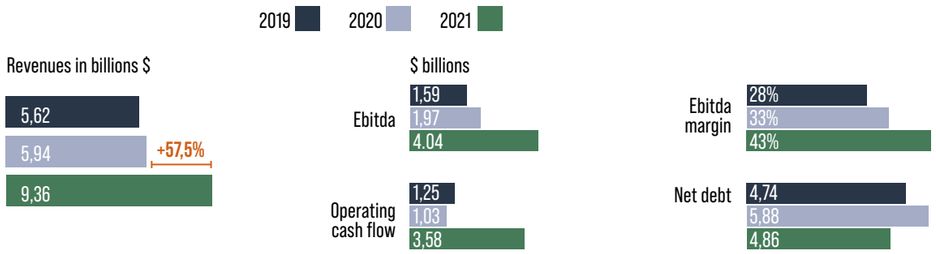
Improve the environmental management of our industrial sites, including R&D and innovation leverages, and align with the best available international practices and standards

Strengthen our community investment strategy (governance, objectives and performance measurement).

Extend and adapt the grievance mechanisms systems as well as communication channels

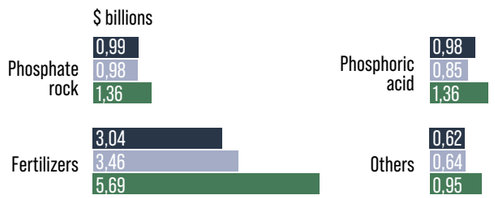
3.2.2 Sustainable and innovation-driven growth

2021 was a successful year at OCP Group, full of significant achievements.



$1,46 billion
CAPEX, compared to $1,45 billion and $1,0 billion in 2019 and 2020 respectively

REVENUS REPARTITION BY BUSINESS LINE

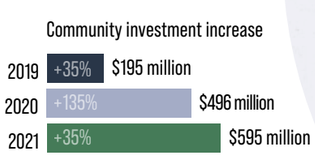


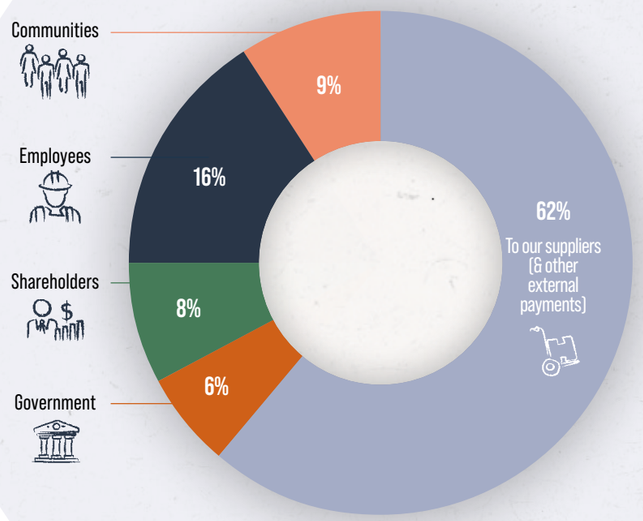
We do believe that our company can only grow within a thriving society. Our growth is meant to be inclusive : we adopted an approach based on creating value for all our stakeholders, from employees and suppliers to government and local communities. We also made progress on environmental and social programs, through significative investments and strong partnerships for R&D and innovation, that sustain our leadership and ensures our positive impact on the world's food security.

OUR ECONOMIC VALUE GENERATED AND DISTRIBUTED TO OUR ECOSYSTEM OF STAKEHOLDERS

$9,36 BILLION
In revenues in 2021

77%
distributed value in 2021 to our suppliers, employees, government, shareholders and communities







A STRONG CULTURE OF R&D AND INNOVATION

Innovation runs through everything at OCP: it's how we'll make the steep changes needed to bring our vision for a sustainable future to life. Innovation is at the center of our operations and informs our approach to business, engineering, tech and education. We are always looking for new ways to meet the challenges of our industry and global agriculture. We encourage innovation across the OCP Group – from employee-led change through to extensive R&D, start-up initiatives, partnerships, education and skills development projects. It's a mindset that will open up new opportunities and ideas that will propel us towards a sustainable future.

SYNERGIES WITH MOHAMMED VI POLYTECHNIC UNIVERSITY:

An institution dedicated to research and innovation, UM6P is our privileged partner to foster a sustainable development for Africa through sustainable industrialization, rational management of natural resources, human capital development and agile public policies. Its research areas are especially tackling OCP Group's significant strategic growth levers:

- ✓ Product innovation (special fertilizers, bacteria, biostimulants, etc.)
- ✓ Valorization of cadmium and heavy metals in phosphates
- ✓ Valorization of phosphate by-products (uranium, fluorine, phosphogypsum, batteries)
- ✓ Sustainable development (energy, water, environment)

$32,7 million
(equivalent 319 million MAD) investment in Research & Innovation in 2021

MOHAMMED VI POLYTECHNIC UNIVERSITY

171
Research & Innovation projects are being implemented in partnership with UM6P and internationally renowned partners in 2021

Our R&I programs are deployed around two main pillars, applied and participative structured in streams to respond effectively to the strategic orientations of the group :

KEY HIGHLIGHTS 2021

APPLIED INNOVATION

FARMERS SOLUTIONS

We have worked closely with farmers, big and small, to provide them with customized solutions to increase their yields while using less fertilizers. Customized fertilizers :

3 projects launched in 2021

- ✓ **Organic agriculture :** Several agronomic field trials to evaluate the performance of new formulations of organic fertilizers on different crops.
- ✓ **Precision agriculture :** Several agronomic field trials to evaluate the impact of fertilization levels on crop yields and develop organic and conventional agriculture.
- ✓ **Sustainable agriculture :** Projects developed to promote crop fertilization in a logic of sustainability, soil health and food security.

OPERATIONS EFFICIENCY

We put innovation at the center of our operational excellence, to meet exponential needs while preserving natural resources and ensure food security.

12 ongoing and launched projects among which :

- ✓ Conclusive pilot scale tests for the drying of phosphate using by microwave technology
- ✓ Realization of pilot scale tests for recycling sulfur from phosphogypsum.

Find out more on our operational excellence in the section 3.3.1 Operational excellence.

HACKING PHOSPHATE

We develop smart and combined fertilizers, but also examine best application of fertilizers to the soil, to ensure no over-use or mis-application. We support balanced soil fertilization based on the 4R principles.

7 ongoing projects among which :

- ✓ Conceptual study of the process of purification
- ✓ Launch of the pilot prototype phase of the project concerning the development of phosphate-based materials for thermal energy storage (STEMPHOS)

SUSTAINABILITY & CIRCULAR ECONOMY

Several innovation projects linked to the circular economy and sustainable development continued or were launched in 2021, the main ones being mentioned in the section 3.3. Sustainable production of this report.

PARTICIPATIVE INNOVATION (IP) & OPEN INNOVATION

Main objectives :

1. Promote the culture of innovation within OCP Group and its ecosystem
2. Provide relevant & customized support
3. Ensure the industrialization of successful innovative projects

PRODUCTION SITES' DYNAMICS & CULTURE

Innov'OCP is an interactive and collaborative platform promoting the culture of innovation and supporting innovative initiatives and projects.

+ 6000 employees registered in the platform, and 800 whose awareness has been raised to participative innovation
32 supported projects, 19 Proof of Concepts, 11 prototypes and 2 launched projects
1392 ideas submitted and 15 innovation campaigns launched

BLOOMLAB +

BloomLab provides carriers of innovative situations and projects with co-working spaces, the mine and experimental farm, as well as training and support sessions, provided by coaches, mentors, internal and / or external experts. In addition, each project leader can benefit, during the various stages of development of the project, from the appropriate means of financing.

BloomLab's mandate focuses on business growth and support of intrapreneurship from the "Movement" - relies on a network of providers to deliver the support program.

OPEN INNOVATION

Oriented towards external start-ups, the Open innovation mechanism aims to:

- ✓ Open to the world of start-ups allowing the OCP group to be at the forefront of innovation and benefit from new solutions on the market
- ✓ Foster innovation through co-creation between OCP and start-ups
- ✓ Becoming a global player in open innovation will allow it to have an image of openness to the outside world and thus attract innovation talents

- ✓ Launch of the « Net zero Carbon » campaign
- ✓ Launch of the Platform « The Next Seeds », which promotes collaboration opportunities between the Group and the most innovative Moroccan, African, and international players on the market. They will gain access to the challenges shared by the Group's businesses and its ecosystem.

MOHAMMED VI POLYTECHNIC UNIVERSITY'S RESEARCH LABORATORIES

UM6P is engaged in economic and human development and puts research and innovation at the forefront of African development. Its research laboratories include, but are not limited to :

Center of Excellence in Soil and Fertilizer Research in Africa :

CESFRA is designed to support the African continent in its efforts to transform agriculture through the analysis of technologies and innovations linked to personalized fertilizer formulations likely to boost the productivity of tropical agriculture driven by core expertise, namely soil science, fertilizer science and land use. African Center for Applied Economics and Agricultural Development is intended to be a platform for research, incubation of teams of young future researchers and networking of researchers, academics and qualified national and international experts working in the field of economics applied to agriculture, natural resources and the environment. The center is also interested in fostering in general and African development related to soil, water, energy, and climate change.

WEF Nexus & Climate Center:

The WEF Nexus & Climate Center aims to be the beacon of research in the MENA and Africa region in the sectors of the Water-Energy-Agriculture-Climate Nexus. Its objective is twofold: to produce projects likely to have an application in real life, and to contribute to the reflection on WEF and Climate through its scientific productions.

Chemical & Biochemical Sciences. Green Process Engineering:

CBS-GPE aims to gain a deep understanding of the molecular mechanisms to offer new original alternatives that are more efficient, sustainable and environmentally friendly. One of the major objectives of CBS-GPE is the integration of new clean technological innovations at each stage of the extraction and transformation processes of phosphoric acid, from phosphate rock to finalized fertilizers in order to achieve better environmental performance at a minimum cost.

LIVING LABS: REAL-SCALE EXPERIMENTATION PLATFORMS FOR APPLIED RESEARCH

UM6P's living labs are open to the scientific community and allow researchers to test full-scale solutions in key sustainable development areas such as resource management, food security, agriculture, etc. UM6P works with committed universities and institutes to optimize ongoing studies and share knowledge.

Economic operators are involved in the projects. Beneficiaries test the proposed technological solutions and researchers are introduced to entrepreneurship to facilitate the transition to action and bring concepts to life. Living labs are central to OCP Group's R&D :

✓ Experimental farms: Many Agri-Tech platforms have been put in place in Morocco and will eventually be in other African countries. These platforms are experimental farms where researchers are developing crop rotation models and techniques as well as the use of innovative fertilizers. Researchers also carry out planting tests in various mineral and biological media. ESAFE (School of Agriculture, Fertilizers & Environmental Sciences) students do part of their learning within the framework of "learning by Farming."

✓ Experimental mines: OCP mines are made available to researchers and entrepreneurs for experimental purposes.

✓ Chemistry and industrial agriculture: In Mazagan - El Jadida region - this innovative, environmentally friendly urban center will host research projects in the fields of chemistry, biochemistry and industrial agriculture.

✓ Chemical hub: This hub located in Safi includes plants for the production of sulfuric acid, phosphoric acid, fertilizers, and phosphate salts, as well as water treatment facilities and gas. It also houses maintenance workshops, a power plant and various chemical engineering facilities.

✓ Green energy park: The Benguerir Green Energy Park (GEP) is a platform

which allows engineers and researchers to experiment with various technologies and contribute to Morocco's strategy for development of renewable energies.

✓ Water management & Saline environment: In Laâyoune, in the Foum el Oued technopolis, a center dedicated to research has been designed to develop sustainable activities on land characteristics of the region. UM6P has set up its ASARI "African Sustainable Agriculture Research Institute" to meet challenges related to agricultural issues on the continent: management of soil salinity, proper use of water resources, suitability of plants, animal husbandry, market studies and needed skills. The research outcomes will lead to sustainable livelihoods in a saline environment and the improvement of food security.



OUR GOALS

Our goals	Where we stand in 2021
Promote sustainable agriculture supporting balanced soil fertilization based on the 4R principles and developing customized products	10 customized products for African soils (26 in total since 2018) Partnerships with CESFRA (Center of Excellence in Soil and Fertilizer Research in Africa), IFA (International Fertilizer Association), WBCSD (World Business Council for Sustainable Development)
Leading technical innovation in the phosphate industry developing a multistakeholder ecosystem around phosphates & supporting open innovation within the organization	13 research laboratories in UM6P 6 living labs for applied research open to the scientific community & students
Doubling the R&I budget by 2025 compared to 2020 level, taking into account the Covid-19 context, which has had a significant impact on project implementation and R&I investment	$32,7 million (equivalent 319 million MAD) investment in Research & Innovation in 2021

3.2.3 A responsible and committed employer

3.2.3.1 RESPONSIBLE EMPLOYEE MANAGEMENT

People at the heart of OCP community are the main actors of our development. Our goal is to build a workplace with an open culture that fosters leaders and allows every person to thrive, contribute and grow. We guide our people to bring their best through training, attractive remuneration, good working conditions, succession planning and retirement and health packages. Creating a safe, diverse and inclusive environment where every employee feels valued is our priority in every decision we make for our human capital management.

Links to our Policies related to Employment management, approved by Board of Directors/ Chairman and Chief Executive Officer :

- General Human Capital Policy
- Working conditions Policy

OCP Group is committed to respect, promote and fulfil the four fundamental rights in the eight International Labur Organization (ILO) core conventions as set out in the Declaration on Fundamental Principles and Rights at Work.

OUR APPROACH TO EMPLOYEE MANAGEMENT

Attract :
- Communication campaigns
- Programs to strengthen links between companies and students

Retain :
- Training & development
- Health & well-being
- Equal opportunity
- Social dialogue
- Retirement

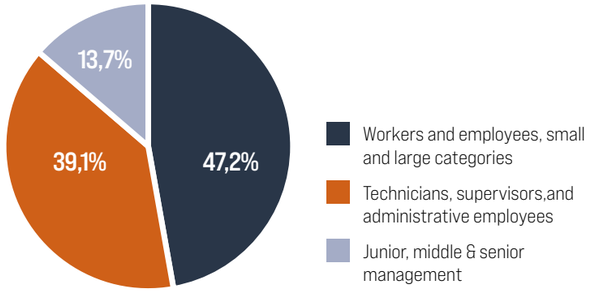
KEY HIGHLIGHTS 2021

A 2% decrease in the number of employees compared to 2020. This change is mainly due to the retirement of 279 employees.

OCP Human Capital



17,961 EMPLOYEES



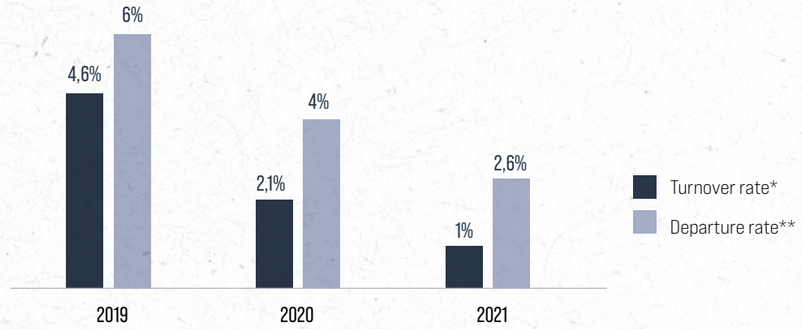
	Men	Women
Permanent contract	16,200	1,656
Temporary contract	103	2

	Men	Women
Full time	16,303	1,658
Part time	0	0

	Casablanca - head office & other locations	Safi	Jorf Lasfar	Benguerir	Youssoufia	Khouribga*	Boucraa	Laayoune	Rabat	Others
Permanent contract	1132	2230	4075	1141	1310	5948	426	1528	2	64
Temporary contract	1	1	103	0	0	0	0	0	0	0

*Including the Casablanca port

Turnover and departure rates



* (Number of new employees on 31 December of year N + Number of employees having left the enterprise on 31 Decemberof year N)/2)/ Total number of employees on December of year N)*100

** All reasons for departures and all types of contracts combined

	Number of new employees	Number of departures
Under 30 years old	2	21
30-50 years old	6	78
Over 50 years old	57	363
Men	59	416
Women	6	46
Total	**130**	**924**

BECAUSE WE CARE

We provide a whole range of benefits to all our employees to support them in every moment of their life:

Housing & social benefits

Property ownership plans were among the earliest social measures offered to OCP employees through mortgage assistance, financial donation, home & land sales in order to become a homeowner.

3,849 employees supported to access property in 2021

Child education

The Institute for Social Advancement and Education (IPSE) is an OCP institution providing highquality education to children using new technologies, development of language skills, introduction to the experimental approach, and the promotion of science. OCP also offers scholarships in order to support the academic sector and ensure equal opportunity.

21,901 children attending IPSE in 2021

Collective bargaining

The Group and its social partners have a solid contractual framework, through the Social Charter, which defines the principles, rules, and obligations related to social dialogue. The charter puts in place the strong standards for trade union rights. The Group signed the Social Charter with the trade unions in recognition of the importance of effective consultation, participation and engagement with employees and workers' representatives to ensure social peace. The Group engages in annual negotiations with employee representatives. At the end of the negotiations, an agreement protocol is signed consolidating the socio-professional achievements of employees in terms of compensation, skills and career development, social welfare and benefits.

0 Employee strikes

85,7% Employees covered by collective bargaining Agreements

GIVING OUR EMPLOYEES THE CHANCE TO VOLUNTEER

Always providing new opportunities to thrive, OCP offers community leave of one to four weeks, outside annual leave, so that employees can join Act4community and volunteer in their community.

People with disabilities inclusion

We aim to build a more disability-friendly workplace and community by developing a formal policy on disability and offering employment opportunities for people with disabilities, matching their skills and professional qualifications directly or indirectly.

- Ensure OCP employees with disabilities not only have accessible workplaces, but also the support they need to achieve high performance in their career at OCP through education, collaboration, and other engagement.
- Ensure that hiring people with disabilities is part of the company's overall hiring plan.
- Contribute to the training of disabled : internships, local partnerships, sponsorship.
- Aim to launch a project to set up a local and inclusive socio-educational offer for disabled children of associates.
- The Group has a proactive policy for promoting equal opportunities and keeping disabled associates in employment.

OUR INCLUSION COMMITMENTS 2030 :

Proactive recruiting policy of people with disabilities: 2% of our annual recruitment will be dedicated for qualified candidates with disabilities.

Internships and work experience to people with disabilities: our internships are offered for qualified interns with disabilities.

- OCP provides a monthly assistance allowance to meet specific medical needs and special care expenses. 1,000 Allowances have been provided in 2021.
- OCP supports medical and social centers with financial and human resources in order to provide better care to people with disabilities. In 2021, OCP opened pilots EBS Centers (children with specific needs) to set up a local and inclusive socio-educational offer for disabled children of associates and communities.

3.2.3.2 DIVERSITY AND EQUAL OPPORTUNITY

OCP Group is committed to creating an inclusive work environment that allows all its employees to express their full potential, regardless of their differences, without discrimination of any kind, including gender, pregnancy, disability, age, academic profile, culture, religion, nationality and all other characteristics protected by applicable national and international laws and regulations. OCP Group's ambition and vision are to consolidate its position as a responsible corporate citizen.

Links to our Policies related to Diversity and equal opportunity , approved by Board of Directors/ Chairman and Chief Executive Officer :

Diversity and Inclusion Policy

OCP Group is committed to creating this inclusive environment by:

- Respecting the principle of non-discrimination in all stages of the employee's career path;
- Implementing measures in favor of diversity and inclusion;
- Raising awareness among managers and employees of the challenges of diversity and inclusion;
- Communicating its commitment to non-discrimination and diversity to its employees and its ecosystem.

Based on this conviction, the "Diversity" vision has been developed around 3 main axes:

- **Exemplarity**: OCP aims to be the most inclusive mining company by creating role models within OCP and by inspiring women within OCP and outside. We are committed to providing equal opportunities to all by fostering an inclusive culture that values the potential of women employees.
- **Education**: OCP aims to promote education for all, beyond the Group, to ensure inclusion and equal opportunities from the earliest age. We are committed to promoting the education of young girls/women at all levels: pre-school, primary and secondary, universities and continuing education.
- **Entrepreneurship**: OCP aims to invest in entrepreneurship to unleash the potential of individuals beyond the Group. We are committed to supporting all women with promising potential through coaching, mentoring, networking and incubation programs in Morocco, Africa and worldwide.

KEY HIGHLIGHTS 2021

Edge Certification

The Group has achieved the "Assess" level, the first level of EDGE (Economic Dividends for Gender Equality) Certification. This is the world's leading standard for assessing corporate performance in gender equality and creating equal career opportunities for women and men.



This certification supports the Group's commitment to the evolution of practices and the promotion of equality and diversity for the benefit of its employees and its ecosystem. Our Group is positioned at the forefront of gender diversity, inclusion and equal career opportunities.

OCP Group aims to reach the highest level of certification by 2024 and has committed to an ambitious action plan for an ever more inclusive work environment.

Leading Women Awards

The Leading Women Awards highlight the leadership of women in WBCSD member companies who are working to contribute to a net zero, sustainable and equitable future.



Hanane Mourchid
Excellence Award

Hassina Moukhariq
Exemplary Leadership Award
(in the context of COVID-19)

		2019	2020	2021
Governance body N-2 CEO + Audit Committee	Male	83%	77%	73%
	Female	17%	23%	27%
	Under 30 years old	0%	0%	0%
	30 - 50 years old	67%	65%	60%
	Over 50 years old	33%	35%	40%
Workers and employees, small and large categories	Male	98%	98%	98%
	Female	2%	2%	2%
	Under 30 years old	3%	2%	1%
	30 - 50 years old	85%	86%	85%
	Over 50 years old	12%	13%	14%
Technicians, supervisors, and administrative employees	Male	89%	88%	90%
	Female	11%	12%	10%
	Under 30 years old	7%	5%	3%
	30 - 50 years old	81%	86%	88%
	Over 50 years old	12%	9%	9%
Junior, middle & senior management (including governance body, excluding CEO)	Male	68%	68%	67%
	Female	32%	32%	33%
	Under 30 years old	29%	23%	17%
	30 - 50 years old	61%	66%	72%
	Over 50 years old	10%	10%	11%

	2021
Female in junior management positions, i.e. maximum two levels away from the CEO or comparable positions	39%
Female in top management positions, i.e. maximum two levels away from the CEO or comparable positions	27%

The vision of the Group regarding the promotion of women is not limited to its workforce. It goes beyond, within its ecosystem, and undertakes several initiatives for the benefit of communities living around its sites. To name but a few :

- The Moroccan coding schools of 1337 and Youcode, founded by OCP Group and located in Khouribga, Benguerir, Youssoufia and Safi, welcomed a female cohort of 10% and 38%, respectively, in their first year. Moreover, young girls attended – around half of the class size – preparatory classes for the Grandes Écoles (engineering schools in France), thanks to another school launched by the Group: the Lycée d'Excellence (LYDEX) of Benguerir.
- UM6P welcomed 54% of female students.
- IMPULSE program – launched by the University Mohammed VI Polytechnic University – has enabled and encouraged young women to launch start-ups in fields such as agritech, biotech and mining technologies.
- The Group's 'ElleMoutmir' and 'Women in Agribooster' initiatives aims to support, in particular, smallholder women farmers towards economically viable and sustainable, innovative agriculture.
- OCP Fondation supports the empowerment of African women in order to reduce gender inequalities in the continent through "Mujeres Por Africa " in collaboration with UM6P.
- Act4Community "Lala Moutaouina" Program in collaboration with ODCO (Cooperation Development Office) has also empowered 16 women's cooperatives, as well as "Al JIL LMOUTADAMIN" program that promote the innovation of cooperative projects by Moroccan and African youth. (12 Cooperatives).

KEY HIGHLIGHTS 2021

Several initiatives around the Diversity dynamic have been organized for the benefit of OCP employees:

- Diversity Week with a series of events (webinar, workshops, 1Pact dialogues, round tables) aimed at raising awareness and training employees, both in Morocco and internationally, on the issues of diversity, inclusion and female leadership
- Women Mentoring Program for the benefit of our young female talents within our industrial sites
- Training sessions on Inclusive Management

OUR GOALS

Our goals	Where we stand in 2021
47% of women in management by 2030	33% of women in management
30% of women in senior management positions by 2030	26% of women in Senior management positions (*)

*We define management positions as Chief officers, Directors, Senior Vice presidents, Vice presidents, as well as Directors.

3.2.3.3 PROFESSIONAL DEVELOPMENT AND ENGAGEMENT

In a fast changing environment, OCP bets on a strong culture of learning, continuous development of skills and knowledge to forge a company of critical-thinking and agile entrepreneurs, OCP provides valuable learning opportunities and professional growth programs sized to each employee to meet its learning expectations and knowhow appetite. At the intersection of both OCP's business strategy and employees' aspirations, we want our learning and talent management approach to be grounded, personalized, fair, agile and inclusive. Beyond the ongoing on-the-job training provided to all our employees, the following tools are available to meet each employee's training needs:

Links to our Policies related to Professional development and engagement, approved by Board of Directors/ Chairman and Chief Executive Officer :

Training & development Policy

Experience
through the Movement allowing to develop her/ his idea

Career evolution
through sharp development management tools and teams

Transmission
of knowledge through OCP Professors and Act4Community

Empowerment
through world class training sessions

Average training hours per employee

2019	2020	2021
83	77	73

Executives	39
Junior, middle & senior management	49
TAMCA & OE	15

3,616
Man Training Days benefiting 738 employees in 2021

KEY HIGHLIGHTS 2021

The Group has launched the @OCP Collective Intelligence Days

OCP's working methods have evolved dramatically over the past two years. The students of the Executive Master in Collective Intelligence, in collaboration with Senior Management, conducted a groundbreaking scientific study on OCP's collective intelligence, to find out how teamwork can work in a telecommuting context. The study aims to give OCP practical guidance on how to organize its work in this challenging environment. A first in OCP's history, this study is designed and conducted by OCP employees themselves: 25 students from the Executive Master in Collective Intelligence.

The learning institute: to adjust skills in order to adapt to changes in business lines and roles, support ongoing professional development programs, and provide personalized support for employees throughout their careers starting when they begin working for OCP Group. Programs are developed in close collaboration with OCP Group's business lines and in partnership with recognized institutions (MIT, HEC, CBS, etc.) while Mohammed VI Polytechnic University is our preferred training partner.
UM6P: at the heart of our knowledge ecosystem, it offers wide opportunities over academics, research, executive education and entrepreneurship geared towards the human and economic development of Africa. The university is committed to an innovative pedagogical approach which places learning by experimentation and practice at the heart of training and research. The Living Labs - serving as experimental sites open to the scientific community to test solutions on a real scale (Green Energy Park, Advanced Technology Mining Platform, Chemical Hub of Safi, etc.) – is one of the many examples. Committed to train the future leadership of the continent, UM6P is connected to a global network of universities, institutions, and industrial actors such as the Massachusetts Institute of Technology, HEC Paris, Ecole Polytechnique Fédérale de Lausanne, etc. Partnerships and synergies have been strengthened in 2021 with the launch of new impactful initiatives.

The Coaching School within the Africa Business School (ABS) has been created to allow the dissemination and incarnation of a new mindset by managers and employees, creating the conditions to unleash their full individual and collective potential. It aims to develop a capacity to generate collective intelligence and behaviors of creativity, subsidiarity, empowerment and initiative-taking.

120
Participants in 2021

OCP Professors: mentoring program to capitalize, share, transfer and promote the Group's expertise, internally and externally. It is a pool of resources open to any OCP employee and retiree wishing to transmit their knowledge, know-how or expertise for the benefit of the OCP Group, the Mohammed VI Polytechnic University and our ecosystem.



Talent Plan 2030

- Implementation of an Operational Workforce Planning and Dynamic Strategic Workforce Planning system for the Group's critical businesses by 2030, integrated into strategic and financial planning exercises \ Identification of Declining, Rising and Neutral businesses by 2030.
- Construction of business reskilling and upskilling plans to better meet the Group's future needs.

New Talent Development Cycle & Talent Review

Reinforcement of the digitization of the Development cycle through Mydev, a digital one stop shop employee development platform with the Job Market Place, the Career Center, the e-Library of Career Journals, etc. for a rich and targeted development conversation between employee and manager with a direct connection to the Learning Universe for the definition of Individual Development Plans.

Career Universe Creation of a new space dedicated to the careers of Group employees to support them on a daily basis and offer them the means to develop within the group. This platform offers many functionalities through 4 areas:

1. **Explore the Group's roles:** Discovery of the Group's roles through Career Journals, offering possibilities for employees to broaden their field of expertise by focusing on other roles in line with their career projections
2. **Internal exposure:** Offering an opportunity for the employees to communicate their skills and areas of interests through their personal Wall. By enriching their profiles, employees will be able to increase their exposure and visibility within the Group and develop their professional network.
3. **Internal job exchange:** Offering a search functionality for wide career opportunities that may interest employees and informing in real time of internal job openings by recording alerts
4. **Talent Search:** Allowing HR teams and Top Management to identify employee profiles

Expertise focus

Definition and implementation of an operating model and all associated HR processes to identify, develop and recognize the expertise and experts within the Group with a focus on industrial operations. The recognition of expertise offers alternatives evolution journeys to employees with highly recognized skills and preserve, develop and transmit internally rare skills, essential for sustainability and the development of the Group's activities.

Engagement

OCP adopts a qualitative and quantitative approach to measure employee engagement based on key HR KPIs. Furthermore, HR Business partners' and managers' employees exchange insights on a regular basis through a continuous feed-back platform. In addition to that, OCP implements periodic pulse survey series, which are quick check-ins, surveys covering topics such as employee satisfaction, employee mood, ways of working, managerial relationships ... The pulse surveys aim to collect feedback from employees on a regular basis in order to be as close as possible to the teams and act in an agile manner by setting up rapid action plans.

OUR GOALS

Our goals	Where we stand in 2021
100% of learning coverage by 2025	Junior, middle & senior management 82%, TAMCA/OE 51%

3.2.3.4 DIALOGUE, JOINT DEVELOPMENT AND ENGAGEMENT

We are continuously working to build a workplace culture that fosters leaders and allows every person to thrive, contribute and grow. And we think this culture relies on fundamental values of trust, mutual respect, dialogue and open feedbacks. Therefore OCP implements a comprehensive and proactive labor relations process that generates consensus and builds sustainable relationships.

Links to our Policies related to Social dialogue, approved by Board of Directors/ Chairman and Chief Executive Officer :

Social Dialogue Policy

ENGAGING OUR EMPLOYEES

Different engagement methods allow us to listen, understand, and find relevant solutions to employees' short, medium and long term expectations:

- **The 'Movement':** provide employees with financial and human resources necessary to work a topic of their choice, if it creates sustainable value for the Group. Employees are enabled to fuel their career path through lateral professional development and cross functional teams to acquire additional skills, enrich job content and work for topics they care about as well as widen accountability
- **1Pact** is a sense-making and communication dynamic created in November 2019 as part of the Movement, whose aim is to bring out a common sense and a shared vision integrating our Mission, our Ambitions, our Values, our managerial principles and our strategic priorities, through a series of dialogues including all employees as well as the Group's ecosystem.

This dynamic of sense-making and communication with a progressive approach is also characterized by its modeling vocation through the experimentation of new ways of communicating and collaborating. The Covid context has also led us to reinvent ourselves by adopting a new mode of 100% digital dialogue with the introduction of several concepts such as 3D Talk Shows, Vlogs, Discovery programs, Interviews, Best-Ofs, ...

2021 was the year of co-construction around the transformation dynamics as well as other themes (e.g. Sustainability, Diversity, QWL, ...) through the organization of several dialogues at the level of all OCP Sites and in the presence of the members of the OCP TOP Management.

The objective is always to : Discuss, Get feedback and Make Impact.

- Participative HR mechanisms: through the annual assessment of the employees performance and co-construction of their development plan. It also goes through continuous exchange and regular feedback survey on employees' expectations.
- Communication channels: intranet, internal magazine, video and posters campaign, events, etc. to share information in a transparent and accessible manner

ENGAGING OUR EMPLOYEES' REPRESENTATIVES

- **Solid social dialogue institutions:** the Staff Representatives, the Union Representatives, the Health and Safety Delegates and the Union Delegates are members of the national offices of the most representative Trade Unions at OCP. Our social partners sit with management representatives in local and national dialogue bodies, in particular: The Employees Status Commission (CSP), Social Action Commission (CAS), Health, Safety and Environment Committee (CHSE), the Collective Bargaining Committee (CNC), the Work Council (CE) and the national thematic Commissions (social, emergency funds, etc.)
- **Proactive Social dialogue charter** – adopted by all our social partners – which defines: the principles, rules and obligations related to social dialogue; mutual commitments relating to employee relations management; procedures for setting up and operating employee representative institutions; mechanisms and procedures for managing complaints and negotiations and settling collective disputes, as well as remedy relating to social dialogue; measures to support employee relations and promote internal social dialogue.

3.2.4 Responsible procurement practices

Links to our Policies related to responsible procurement practices, approved by Board of Directors/ Chairman and Chief Executive Officer :

- Supplier Code of Conduct
- Purchasing Policy

From phosphate rock extraction to phosphoric acid and fertilizer production, OCP is a vertically integrated group. Our value chain relies on a rich supply chain featuring around 5,200 suppliers for essential procurement categories related to raw materials, energy, industrial infrastructures development and transportation. Considering this complexity, we are continuously improving our risk management approach to identify, assess and minimize potential adverse economic, environmental and social impacts that we may cause or contribute to. To go beyond regulatory compliance, we have developed a purchasing policy setting our commitments to strengthen due diligence and optimize existing processes spanning over quality, cost, transparency, stability, relationships with suppliers, and the development of a local industrial ecosystem and sustainability excellence.

Our local industrial ecosystem strategy still aims to:

1. Increase OCP Group local suppliers' competitiveness and industrial performance at regional and national levels
2. Encourage co-development of products and equipments for import substitution
3. Maximize local content and local integration around OCP Group sites
4. Encourage socioeconomic development around the areas where OCP Group operates

$1,7 BILLION (equivalent 16,97 billion MAD)

of commitments realized for our suppliers in 2021, of which 86% were Moroccan

	2019	2020	2021
Suppliers assessed using environmental criteria	290	397	600
Percentage of new suppliers assessed using environmental criteria	60%	79%	85%
Percentage of new suppliers assessed using social criteria	100%	100%	100%

BUSINESS ECOSYSTEM PROGRESS PACT

We have developed a strong community of suppliers through our collaboration model, the 'Business ecosystem Progress Pact'. Co-built with our suppliers, this is a mutual commitment between OCP and its suppliers, to encourage them to develop their capacity and enhance the development of a local industrial ecosystem.

On one hand, our strategic procurement program provides to suppliers business opportunities, visibility, allocation system, local content system, digitalized processes, incubation/ acceleration of local micro businesses. On the other hand, the suppliers commit to develop their professionalization, operational excellence and HSE, and boost the ecosystem.

SUPPORTING OUR LOCAL SUPPLIERS TO THRIVE

Our main following procurement mechanisms:

- Direct tendering for local microbusinesses with competition only between local microbusinesses located in the regions of OCP sites for dedicated business opportunities and purchases up to 300,000 MAD.
- Local subcontracting development through a requirement for contractors to subcontract locally up to 30% of the market's amount to catalyze local development
- Local procurement preference to value local players located in the regions of OCP sites up to 5% while respecting the competition rules

OUR SUPPORTING & EMPOWERMENT MEASURES : KEY HIGHLIGHTS 2021

1. Financing support

The fund "Fonds Damane Tamayouz », offering preferential financing solutions to the most committed suppliers to the progress pact without presenting additional guarantees, has been operationalized in 2021. This allows our suppliers better access to financing their contracts with the OCP Group. The Damane Tamayouz Fund is the first securitization fund in Morocco in the form of an FPCT (Securitization collective investment funds) which aims to guarantee the financing by Finéa (a financing body subsidiary of the CDG, Morocco Depository and Management Fund) of the markets to the suppliers of the OCP ecosystem.With a size of 125 million dirhams, the fund could guarantee up to 950 million dirhams in loans. The fund will initially target markets in the civil engineering, metal construction and electrical sectors.

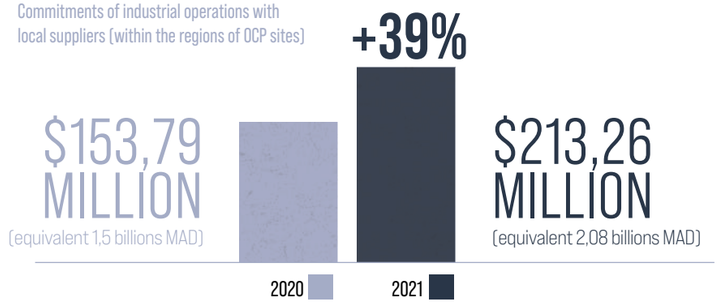
$12,85 MILLION (equivalent 125 million MAD)

of funding granted in 2021 through the Damane Tamayouz Fund for our suppliers

2. Integrating suppliers into the Ecosystem

› Local preference for supporting local microbusinesses

Commitments of industrial operations with local suppliers (within the regions of OCP sites)



100 New qualified microbusinesses in 2021 (though Act4Community)

› Co-development with national suppliers for import substitution :

$28,87 MILLION (equivalent 275 million MAD

import substitution amount in 2021, + 37,5% compared to 2020, achieved through several co-development projects and the location of actors, particularly in the auxiliary materials sectors, including the manufacture of converter grids for sulfuric acid units Meehanite certified.

5 Microbusinesses supported in the prototyping of new solutions and products to substitute imports in 2021 (through Act4Community)

2 New groups of microbusinesses in Safi and Jorf in 2021 (though Act4Community)

› Digitalisation of purchasing processes :

- Launch of the Supply chain Finance Platform (to be deployed in early 2022) of high-added value for OCP and its ecosystem, including a reduction of 1 on the supplier financing rate compared to traditional factoring, the of exchanges between banks, OCP and suppliers and visibility of all the invoices to be financed and flexibility on the choice of invoices to be financed by the supplier.
- Digitization of the process for managing bank guarantees of suppliers (in progress) providing more transparency for suppliers.
- Launch of the general deployment of the transactional platform (SAP FieldGlass) for the management of service contract execution and attachment processing

+ 714 service contracts created, 931 external resources managed, and 541 attachments created and processed via this platform in 2021

3. Enhancing suppliers' perfomance, progress and competitiveness

› Performance assessment and development :

Anchoring of the supplier rating system deployed in strategic sectors to encourage the professionalization of suppliers in OCP's ecosystem and promote the development of their capacities through :

- Monitoring and follow-up of the suppliers' performance through field audits and the resulting progress plans
- HSE qualification of suppliers

This rating is taken into consideration in the allocation of contracts for the Civil Engineering sector.

+250 suppliers from Civil Engineering, Metal Construction and Electrical Engineering sectors have been assessed according to a financial and capabilities rating based on the supplier assessment system carried out by the purchasing department of OCP Group and supported by a multi-disciplinary team.

› Implementation of the HSE management system development program for external companies, developed in partnership with DOOC.

2 Companies have benefited from this Program in its pilot phase and have shown significant improvements in their HSE management system.
A pre-generalization phase will be launched in 2022.

› Incubation :

- Scaling up available local suppliers through incubator programs in each industrial site. Those programs provide microbusinesses with equipped industrial infrastructures and offering them a technical and entrepreneurial training program to develop their businesses and create local employment. The program also involves developing partnerships with OCP Group and other potential customers, supporting microbusinesses in accessing finance and the market and post-incubation support.
- Act4Community and UM6p, among others, are major actors involved in incubating start-ups.

› Skills development systems:

23 Microbusinesses supported (technical assistance, learn program, mentoring, coaching and HSE management system) in collaboration with national partners in 2021

- Deployment of the device of operators and subcontractors' capabilities development at the level of the centers of CCI Industrial Competence Centers, pilot on the Jorf site, through a world class certification program, level 1 in "Mechanical and Electrical "Mechanical and Electrical Maintenance".

202 operators trained in 2021

Beyond our local industrial ecosystem empowerment strategy, we are working on sustaining our whole supply chain. We already partly integrate suppliers' environmental, social and governance performance into our procurement approach through:

- Tendering criteria on Health, Safety and Environment (HSE) requirements as well as social regulatory obligations under the Moroccan Labor legislation;
- Contractual social and environmental obligation;
- Audits – in line with our HSE management of external companies standard – to control HSE risks and prevent accidents and incidents when external companies intervene at OCP sites as well as to ensure compliance with the Caisse Nationale de Sécurité Sociale (CNSS).

This approach covers the most important procurement categories.

OUR GOALS

Our goals	Where we stand in 2021
Increase OCP Group's commitments to local suppliers to 25% by 2021 and 30% by 2022	16%
Accelerate 800 existing small businesses in the panel of potential local suppliers with 3200 jobs to be created	Ongoing



3.3 Commitments to sustainable production



3.3.1 Operational excellence

At OCP, we strongly believe that operational excellence goes hand in hand with high-level of safety of employees and sub-contractors, bringing strong business performance while reducing exposures to legal, financial and reputational risks. We place great emphasis on the safety of our employees and sub-contractors. We provide them all the necessary capabilities to achieve safe operations and to produce at the right cost and in the right quantity.
Meeting exponential needs while preserving natural resources is at the heart of our industrial development plan hinged on operational excellence.
At OCP, we put our operational excellence at the service of food security. Indeed, being a major actor of the food supply chain and having access to more than 70% of the world's phosphate reserves, our operational excellence allows us to produce more while respecting the limits of our planet, and thus ensure the stability of the entire supply chain to guarantee global food security.

$184,23 MILLION
(equivalent 1,8 billion MAD)

savings on planned scope cost perimeters and multi-site and crossfunctional projects focused on P&L lines compared to the 2019 baseline (excluding personnel costs and raw materials)

Type of products	2019	2020	2021
Rock extraction MTSM	41	40,7	24,5
Phosphoric acid production Mt P205	6,8	7,2	7,1
Fertilizer production Mt produced	10	11,3	10,9

GAIN IN PRODUCTION :

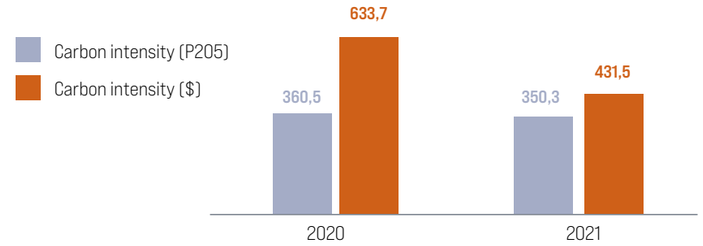
Mining production
3,9 MTSM

Beneficiation
2,7 MTSM

Phosphoric acid production
0,76 MT P02

Fertilizer loading
4,7 MT

-10,3% freshwater water consumption

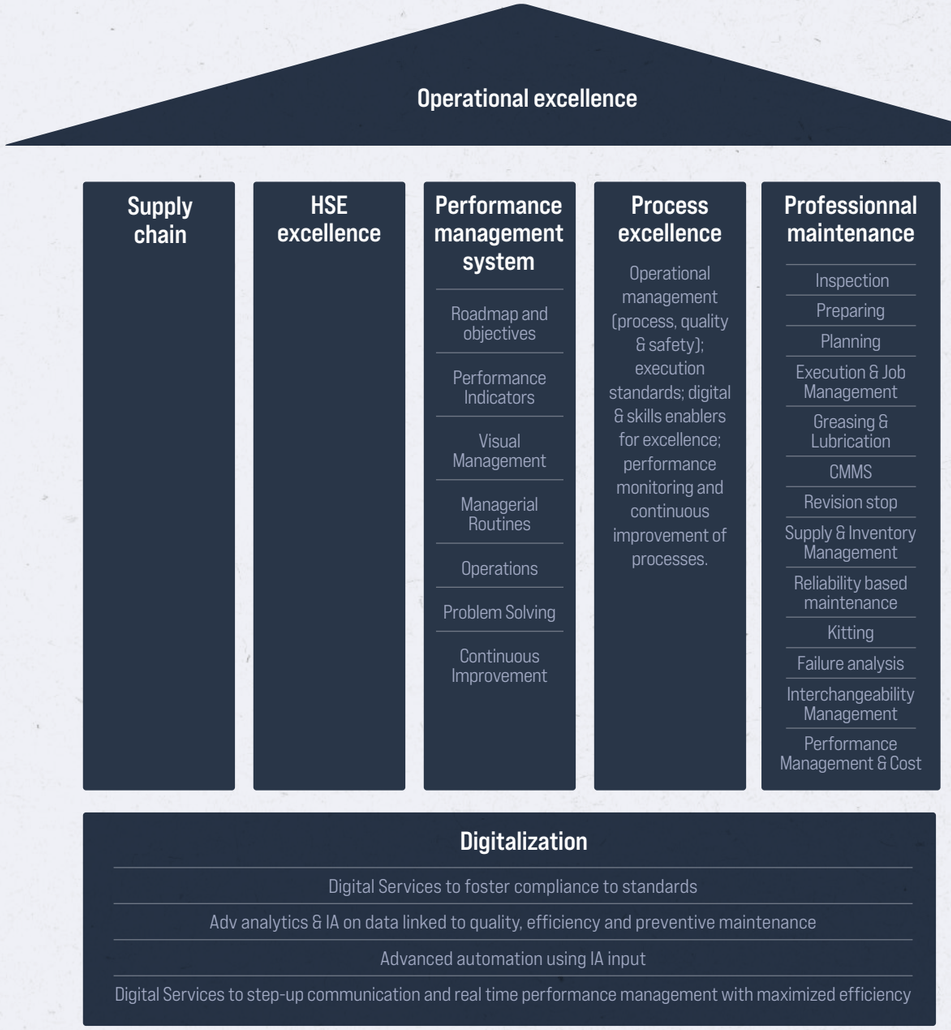


Putting people at the center of our concerns, we boost their capabilities to deliver operational excellence with safety as a pillar of our industry.

WALKING THE TALK TO BUILD CAPABILITIES

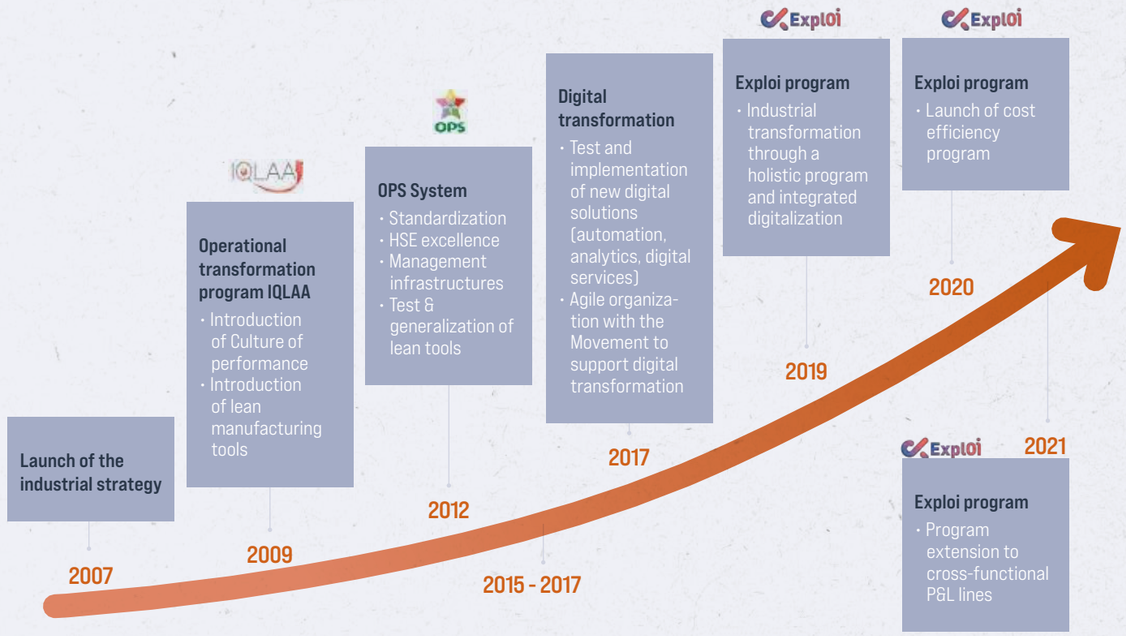
Our learning strategy aims to be "future proof", covering and anticipating the training needs associated with key skills. We want our employees to be lifelong learners and mobilized to build together an enterprise of learners. This starts with our operational excellence team whose mission is to:

- Support the deployment of operational transformation projects (performance management, maintenance, process, etc.);
- Structure and animate the OCP production system;
- Develop and implement processes, standards and methods of industrial operation activities in collaboration with industrial sites;
- Identify and generalize best practices, promote the capitalization of the Group's expertise and industrial know-how, and promote the culture of operational excellence.



TRANSFORMATION TO BOOST COMPETITIVE EDGE

Different cycles of transformation have been successfully completed over the last years.



OCP has started a new wave of growth with the third S-Curve and calls for the launch of a new round of transformation. This path will fully contribute to the acceleration of its new development curve. Driven by operational excellence, the diversification and customization of our product portfolio, this new wave involves new priorities to be identified, new issues to be determined and new expectations and implications now required of the industrial machine. To this end, in 2019 the Group launched EXPLOI, an ambitious program to transform industrial facilities, to consolidate its leadership by 2022 and make the OCP Group an undisputed global benchmark in terms of cost and performance in the industry. All the group's industrial sites are part of this dynamic: Khouribga, Jorf Lasfar, Gantour, Safi and Boucraa. The program brings together a community of EXPLOI employees to increase production capacity by unlocking key stages, optimizing production costs and improving energy efficiency and water consumption.

Ambitious industrial performance objectives by leveraging digital technology, operational excellence and innovation

18
Multi-site and cross-functional projects
to monitor cost optimization by P&L line launched in 2021

+120
Multidisciplinary actors
mobilized in support

+40
Agents of change

+1620
Actors involved in the transformation within the entities

HEALTH, SAFETY & WELL-BEING

Links to our Policies related to Diversity and equal opportunity , approved by Board of Directors/ Chairman and Chief Executive Officer :

Occupational Health and Safety Policy

Beyond direct positive impacts on productivity, costs and reliability, we do believe safe, healthy, and well-rounded workers sustain our business model. Aware that there is significant safety risk inherent in mining and industrial operations, OCP implements a preventive approach in line with international standards fostering a mature safety culture to reach the zero-sustainable accident level.

OUR MANAGEMENT SYSTEM FOR HEALTH AND SAFETY MANAGEMENT

Health and Safety Management System (HSMS) represents a major and sustainable challenge for OCP Group.

Our management system has been implemented based on the ISO 45001 standards and covers our employees and workers who are not employees but whose work and/or workplace is controlled by OCP Group. A corporate team is dedicated to health and safety management for all OCP sites and defines overarching guidelines based on feedback from the field. Each site implements a program to identify, assess and mitigate specific safety risks – driven by a safety manager who coordinates a network of safety correspondents assigned to different areas of the site. Health & Safety committees – composed of employees' representatives – are regularly held to ensure the co-construction and the efficiency of the performance cascading and feedback culture. The DOOC (DUPONT OCP Operations Consulting) joint venture – dedicated to health, safety and environment challenges – transversally supports the OHS management system.

Our Health and Safety Management System (HSMS) is based on three main pillars :

Policy & Organisation:

- Definition of HSE policy and principles;
- Organization of the HSE sector and clarification of the R&R of the management line;
- HSE training and skills development for OCP employees;
- Elaboration of the Health & Safety Management System referential;
- Elaboration of KPI's and HSE Dashbaord.

Governance:

- Visible commitment and exemplarity of the hierarchical line;
- Governance Committees and HSE Rituals;
- HSE Performance Management;
- Safety and Environmental Visits and Observations;
- Incident Management and Safety and Environmental Accidents;
- HSE audit.

Risk Management:

Health, Professional and Industrial. These risks are explained in the operational standards, PSM standards and Health and Well Being standards.

Ambition

ZERO

repetitive accident to become a World Class reference in OHS performance

KEY PERFORMANCES 2021

$28,87 MILLION

of operating expenses allocated for safety in 2021

$6,2 MILLION

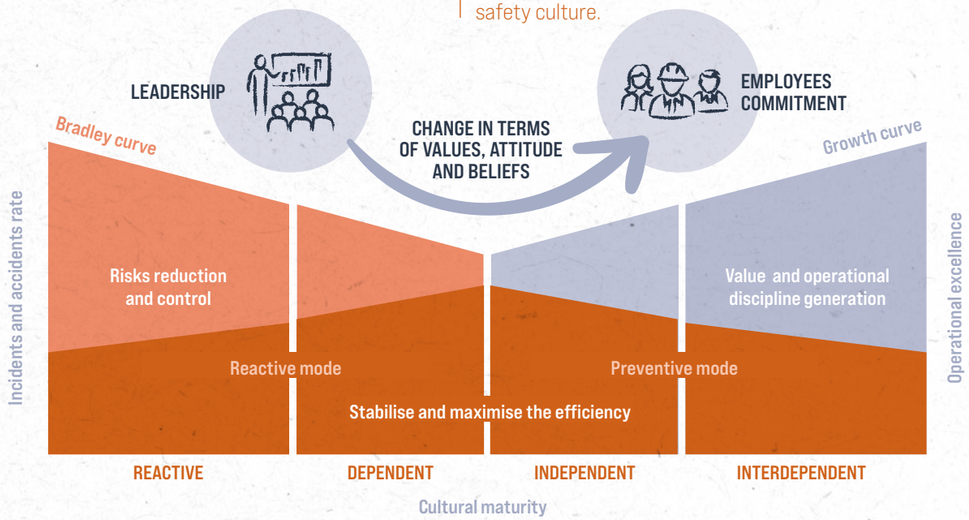
CAPEX investment for Health & Safety improvement in 2021

Our safety approach is continuously improved through regular feedback survey and grievance mechanisms available to employees and people who work on our sites.

RISK IDENTIFICATION, ASSESSMENT & MITIGATION

Our HSMS consists in positioning ourselves on the Bradly curve in preventive mode (independent and interdependent) and avoiding reactive mode (reactive, dependent), to anchor a safety culture among our OCP employees and partners, in line with our values and our standards. The latter are put in place to control the risks identified on the health, professional and industrial levels:

The Bradley Curve makes it easy for everyone to understand the changes in mentality and behavior necessary to gradually develop a well-established safety culture.



Roadmap towards interdependant level by 2025

2023	2025
0 fatalities	0 fatalities
0 repetitive work accident	0 repetitive work accident
Lost-Time injury frequency < 0.5 for the Industrial Department with objectives to be set by site	-50% in overall Lost-Time injury frequency
Overall Health and safety management system evaluation > 75%	Overall Health and safety management system evaluation > 95%

DIGITAL HSE : AN ESSENTIAL TOOL FOR SUPPORTING THE HSE AND WELL-BEING TRANSFORMATION

Digitalization has been further optimized in 2021 to facilitate access to all information in real time and therefore increasing efficiency as well as monitoring. Two digital applications – mobile and web – features all information our employees need to know from HSE policy to reporting & audits:

- Consultation of HSE policy and principles
- Consulting Life Saving Rules (LSRs)
- Consultation of HSE Standards
- Visualization of HSE Expert emissions
- Monthly HSE reportings
- Access to the MYOPS platform and newly mobile app: editing, recording and monitoring of actions including:
  - DA (Detection Action): Reporting of dangerous situations and violations and follow-up of actions
  - VOSE (Safety and Environment Visits and Observation)
  - GIASE (Incident Accident Safety Environment Management)
  - GEEX (HSE Management of External Companies)
  - Audit standard
  - Best practices sharing from all sites

AUDIT

100 %
Industrial sites audited for HSE

Main objectives :

- Identification and control of industrial risks
- Control of the PSM system
- Application of standards / Procedures
- Realization of regulatory controls
- Training / qualification of personnel on Industrial risks and MOs (Operational Modes) for critical tasks, etc.

In addition, units/sites carry out their own audits based on self-assessment and implement the related recommendations.

162
HSE Audit missions conducted at the site level in 2021

As part of the assessment of the effectiveness of our Health and safety management system, a level 2 audit program, supporting the continuous improvement of our system, has been set up. The audit topics scheduled for the year 2021 have been selected based on the strategic orientations of the 2021 OHS roadmap.

19
Audit missions conducted cross-referenced between OCP Sites in 2021

TRAINING & COMMUNICATION

To build a mature safety culture, training consists of both technical and soft skills training. On one hand, employees acquire knowledge and know-how in accordance with safety standards, job exposure and specific work-related hazards and hazardous activities or situations. On the other hand, employees are trained to strengthen behavioral skills to feel ownership, responsibility and believe zero injuries is an attainable goal. OCP suppliers and subcontractors also receive safety training and procedures when it comes to intervention on industrial sites. Training mainly goes through our Industrial Expertise Centers (IECs) that provide site-specific trainings as well as UM6P and OCP professors. Communication campaigns are organized regularly to raise awareness on challenges faced by the OHS management system.

KEY HIGHLIGHTS 2021

10 921 MAN DAYS

Of training including the following topics :
- HSE policy and principle;
- Risk perception ;
- Prevention of occupational and chemical risks;
- Fire protection (evacuation techniques, etc.);
- Regulations and standards (ISO 45001, PPE, etc.);
- Lifeguard and first aid at work;
- Governance standards ;
- Operational standards;
- PSM standards

25% Of employee's annual performance evaluation is linked with Safety objectives

A communication program has been set up for employees and subcontractors to remind them of the rules to respect and the best practices to adopt on the field. Several means of raising awareness are made available to them, including posters, leaflets and motion design videos,..
Examples of campaigns include :
- National road traffic day
- Ramadan campaign
- Travel risk



SUPPORTING OUR SUPPLIERS FOR HSE EXCELLENCE

Assessing the HSE performance of our suppliers is essential to roll out sustainable procurement. Our GEEX standard governing the HSE management of external companies has been further strengthened in 2021 along with the assessment program.



Prequalification matrix	HSE performance levels			
	Excellent	Good	Average	Low
Level A	Accepted	Dismissed - Except derogation (*)	Dismissed	Dismissed
Level B	Accepted	Accepted	Dismissed - Except derogation (*)	Dismissed
Level C	Accepted	Accepted	Accepted	Dismissed - Except derogation (*)

Level of HSE requirements	Nature of work
Level A	Intervention on storage areas and circuit handling a dangerous product (ammonia, acids, bases, sulfur, flammable products, etc.), circuit working under vapor or gas pressure, EIPS (Important Safety Equipment), dragline, truck over 70T, wharf, High Voltage electrical station, ATEX Zone Work involving explosives, cranes over 50 T, non-standard scaffolding or requiring calculation notes
Level B	Other than levels A & C
Level C	Gardening, non-industrial cleaning, security, office work, work that does not require special technical skills

Topics assessed span over the whole HSE management system of suppliers: from policy to KPIs going through organizational resources & governance, planning, skills and accreditation, continuous improvements, and assessment results from past experience with OCP Group.

Results are considered in the tendering phase as well.

Find out more about “Progress Pact”, OCP’s Program to enhance suppliers’ HSE performances and reach higher level of performance.

Employees

		2019	2020	2021
Fatalities as a result of work-related injuries	Number	0	0	3
	Rate	0	0	0,11
High-consequence work-related injuries (excluding fatalities)	Number	78	47	29
	Rate	2.11	1.58	1,03
Recordable work-related injuries	Number	227	116	84
	Rate	6.13	3.90	2,99
Lost Time Injury Frequency	Rate	2.11	1.58	1,14

Sub-contractors

		2019	2020	2021
Fatalities as a result of work-related injuries	Number	1	1	1
	Rate	0.02	0.04	0,02
High-consequence work-related injuries (excluding fatalities)	Number	30	25	27
	Rate	0.73	1.00	0,63
Recordable work-related injuries	Number	205	123	125
	Rate	5	4.94	2,89
Lost Time Injury Frequency	Rate	0.76	1.04	0,65

		2018	2019	2020	2021
Recordable work-related injuries	Number	533	432	239	209
Lost Time Injury Frequency	Rate	1.95	1.4	1.34	0,84

(calculated per 1 million man hours worked)

The pandemic was one of the causes that reduced vigilance and risk perception. OCP is implementing an appropriate management and response systems to ensure that these accidents do not recur.

OUR GOALS

Our goals	Where we stand in 2021
Reach the "Independent stage" on the Bradley Curve by 2023; and reach the interdependent stage by 2025	Ongoing
Lost-Time Injury Frequency (for employees & subcontractors) rate below 0,5 by 2022 and a 50% reduction by 2024 compared to 2020	0,84
Improve working conditions by implementing the OCP standard ""GEEX"" for external companies & subcontractors management	GEEX standard reinforced and external companies audited & ranked in the prequalification stage

WELL-BEING

We define well-being at work as the satisfaction that employees feel from their work, the emotional reactions that result from their daily experiences there and the feeling that they are doing things that are meaningful. Well-being at work is a proactive approach at OCP, which we consider to be one of our company values.

The Occupational Health Department, HSE Departments and Site Safety Managers are working together to prevent any negative health effects on workers. OCP deployed occupational physicians, nurses and occupational health clinics located in our operations to provide the health expertise and facilities needed to support this responsibility. Developed in line with the World Health Organization standards to cover all our activities, our preventive approach is structured on three dimensions:

1

HEALTHY BODY

Early identification of occupational disease, medical insurance, promotion of balanced diet and physical activities.



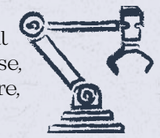
KEY HIGHLIGHTS 2021

- Continuation of health protocols and vaccination awareness waves.
- Launch of the first class of OCP doctors for obtaining an Executive Master in Therapeutic and Preventive Nutrition at UM6P Benguerir
- Several events including but not limited to Prevention of breast and cervical cancer.

2

HEALTHY WORKPLACE

Chemical and biological exposure, radiation, noise, ergonomics, temperature, illumination, best-in-class technologies,etc. Professional reclassification



- **FLEXWORK & O'WORK**
  Covid-19 pandemic symbolized a period of multiple challenges for the Group and all its employees : ensuring the health and safety of all employees was a priority, but so was the challenge of adapting to new ways of working, particularly remote working for all functions for which it was relevant. The Group has launched new pilot Flex-Office spaces that allow work in person for part of the time, and thus reconnect social bonds with colleagues. O'Work is a platform that has been launched to book Flex-Offices and Co-working spaces.

3

HEALTHY MINDS

Prevention of psychosocial risks, promotion of a friendly and respectful workplace

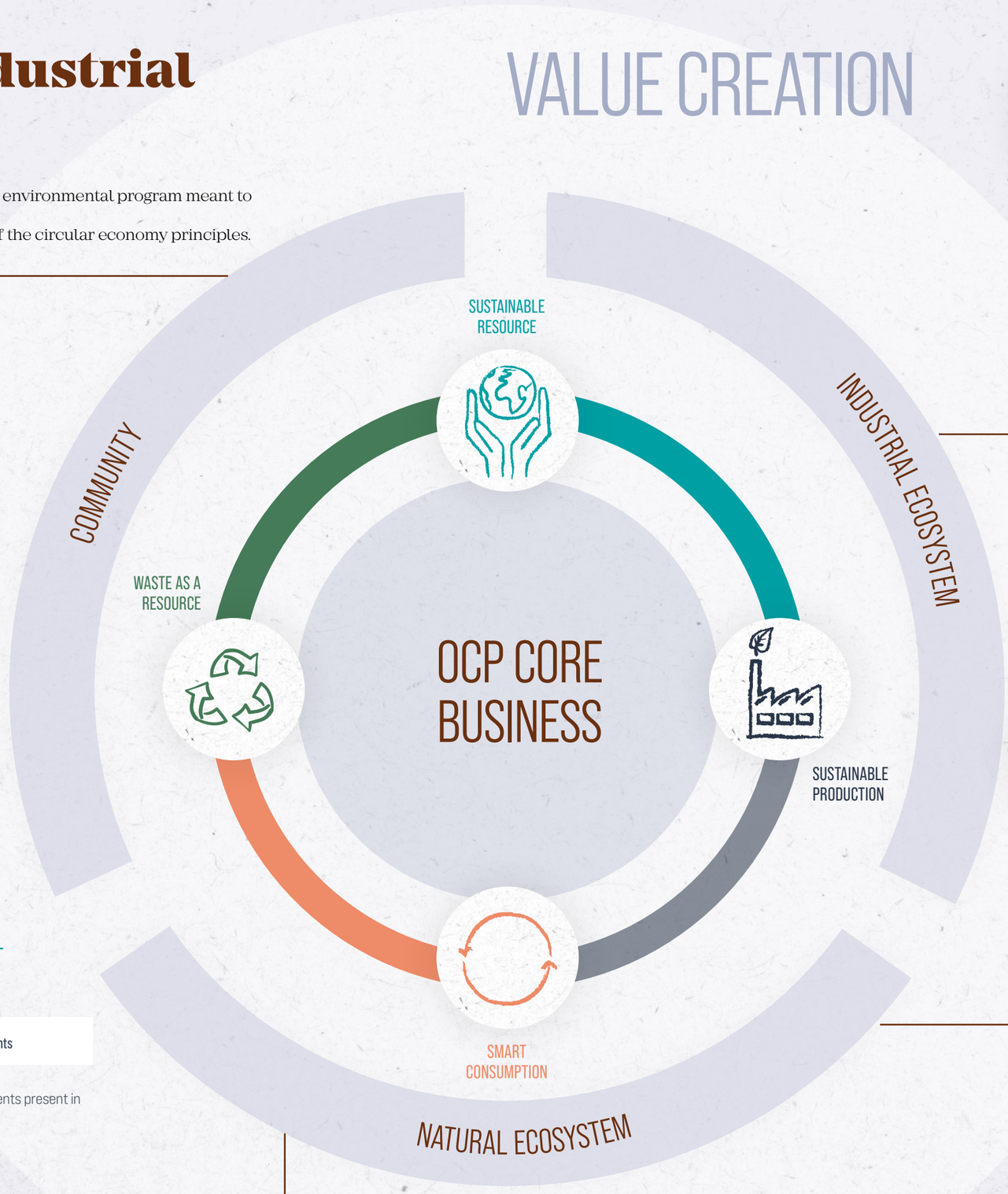


- Continuation of the psychological support unit in charge of offering a first point of contact and psychological assistance.
- Several workshops and events such as the "Well-being Week", Well-being for the HSE Community, Celebration of the World Mental Health Day,...
- **SOCIAL LINK**
  More than 650 Capsules distributed to more than 2,710 subscribers on the "Socialink Tv" – a digital initiative launched during the COVID 19 pandemic to maintain links with employees and their families, by providing virtual sport sessions, yoga classes, Socialink Podcasts, Discovery, Partnership, Challenges and more.
- The **QVT ("Qualité de Vie au Travail") Summit** is an annual event since 2020 organized by the Quality of Life at Work program to build a shared vision. It offers insights and concrete actions to demystify the concepts related to the quality of life at work and identify courses of action to improve employee fulfillment in the workplace. Nearly 2,000 employees participated live and nearly 5,000 offline. As part of the Summit, an OCPeople first hashtag was launched to show the commitment of management and employees to quality of life at work.



3.3.2 Sustainable Industrial Development

Four pillars constitute the foundations of OCP Group's environmental program meant to drive positive impacts.
Our framework is based on our deep understanding of the circular economy principles.



SUSTAINABLE PRODUCTION

Optimizing the production process for the sake of the environment and ecosystems

Our commitments for	Our ambitious roadmap to achieve our commitments
· Water resources preservation · Efficiency & green Energy · Effluents Management · Operational Excellence · Sustainable Sourcing · Carbon neutrality	**100% non-conventional water by 2026** Total consumption of water from seawater desalination or wastewater treatment **100% clean energy by 2030** Cover 2.3 TWh needed for our industrial development plan by clean electricity **"Best-in-class" Emissions and effluent management** Exploit all available technological advances to reduce emissions and discharges **Carbon neutrality** Setting our roadmap to reach 50% reduction in carbon footprint by 2030 and carbon neutrality by 2040

USING RESOURCE CONSCIENTIOUSLY

Minimize the need for natural resources at the source

Our commitments for	Our ambitious roadmap to achieve our commitments
· Phosphate stewardship · Phosphogypsum as a byproduct (storage & valorization) · Other Byproducts Valorization	**Hacking phosphate to create value** Full recovery of phosphate and other elements present in the rock **Maximize phosphogypsum valorization** while using safe storage

RECYCLING & TRANSFORMING WASTE TO RESOURCE

Transforming the waste generated into maximum value resources

Our commitments for

· Waste
· Mines rehabilitation

Our ambitious roadmap to achieve our commitments

Make our waste a new source of value

Mines rehabilitation for the communities' benefits
Reclaim twice the exploited lands each year to create value for nature and communities

FEEDING THE PLANT FAIRLY

To give the best, and the right amount to the plant and the soil

Our commitments for

· Smart Agriculture
· Customized products

Our ambitious roadmap to achieve our commitments

Implement smart agriculture
Develop the 'customized fertilizers' and innovative solutions for sustainable agricutlure.

Develop green fertilizers (low carbon footprint, organo-mineral, organic,..)

3.3.2.1 RESOURCE PRESERVATION

Fertilizers play an important role for soil health. As a responsible custodian of the world's largest phosphate reserves (around 70%), OCP Group considers efficient management of resources and product stewardship as being key components for achieving its ultimate mission of "feeding the planet".

Links to our Policies for Resource preservation, approved by Board of Directors/ Chairman and Chief Executive Officer :

- General environmental management Policy
- Phosphate stewardship Policy

OUR APPROACH TO RESOURCE PRESERVATION

OCP Group is committed to managing its phosphate reserves and the use of phosphate in its fertilizers. We are acutely aware of our environmental impact on the planet and have put in place a circular economy based on 4 principles: the preservation of our phosphate resource, sustainable production, smart consumption and the creation of value through processing and recycling.

KEY PERFORMANCES 2021

Non-renewable materials consumed (expressed in millions of metric tons)

	2018	2019	2020	2021
Solid sulfur	5.93	6.56	7.24	6,87
Ammonia	1.42	1.587	1.90	1,83
KCl potash	0.27	0.24	0.25	0,34

Top critical raw materials - phosphate not included

Phosphate management is applicable across all tiers of our business and supply chain. This covers:

PRESERVING THE PHOSPHATE RESOURCE

1. Better recovery of phosphorus at phosphate rock level

OCP has developed a reverse flotation process to enrich its phosphates, primarily for low-content deposits in Youssoufia and Khouribga region. This process is currently being rolled out at other sites such as Boucraâ and Benguerir. Thanks to this process, 33% of Moroccan phosphates, considered to have a very low phosphorus content, have become economically viable and exploitable.

The Group is constantly seeking to improve its operational performance. Through its Innovation department, several research actions are being carried out to improve the performance of these reverse flotation processes such as the development of new reagents or flocculants. In addition, several tests are underway for the use of new processes for the production of phosphoric acid from poor phosphates.

$13,8M
(equivalent 123 MDH) investment in R&D for P-Stewarship

33%
of Moroccan phosphates,considered to have a very low phosphorus content, became economically viable and exploitable through the reverse flotation process

2. By-products valorization linked to phosphorus

One of OCP's research axes for the preservation of Phosphate resources is on valorizing by-products, which are generated during the various stages of production. The most significant are waste rock and phosphogypsum: the first being derived from post-wash extraction and drying processes while the second is a by-product resulting from processing phosphate into phosphoric acid. Among the most important initiatives are:

The reintroduction of waste rock, containing low concentrations of phosphorus, in the process enables the recovery of a fraction of this material and extends the reserve life.
The use of phosphogypsum: as an amendment to saline / sodic soils and as a low-cost fertilizer, it is used in road construction, in building materials and in producing sulfuric acid and cement by thermal decomposition.

3. Phosphorus Life cycle Assessment (LCA)

Fully in line with our ambition to be a world class leader in sustainability within its industry, OCP surrounds itself with partners to carry out the life cycle analysis of its products. OCP Group is implementing the Life cycle assessment (LCA) approach within the Group.

Life cycle assessment (LCA) is a standardized evaluation method (ISO 14040 and 14044) allowing to carry out a multi-criteria and multi-stage environmental assessment of a system (product, service, company or process) over its entire life cycle. Its purpose is to know and compare the environmental impacts of a system throughout its life cycle, from the extraction of raw materials necessary for its manufacture to its treatment at the end of its life (landfill, recycling...), through its phases of use, maintenance and transport.

LCA ENABLES TO :

- Provide a global view of the **environmental impacts of the mining industry** and their **integration into the life cycle of the mine**
- **Quantify environmental effects** such as overall energy consumption, natural resource extraction and atmospheric emissions in order to **identify eco-design opportunities or improve the environmental balance** of the system
- **Identify grey areas** in the value chain that need improvement for sustainable and environmentally friendly production throughout the life cycle of a mine
- **Compare the environmental performance** of systems that perform the same function, with the same amount of service provided
- **Reduce overall environmental impact and production costs**

Mining Environment and Circular Economy (EMEC)

OCP Group leans on the research undertaken by the Mining Environment and Circular Economy (EMEC) entity of the UM6P on Life cycle Assessment (LCA).

In the context of the fight against climate change, the depletion of non-renewable mineral resources and the transition to a circular economy, the EMEC entity of UM6P is developing high-level expertise to link science with strategic decision-making in terms of sustainable development. This includes conducting life cycle analysis studies related to the phosphate life cycle from exploration, mineral extraction, enrichment and processing and the management of generated by-products/waste.

EMEC, supporting by strategic partnerships with national and international academic and industrial institutions, aims to instill a new approach to the mining cycle based on sustainable mining, the integration of more circular economy and the optimization of the different operations of the mine life cycle. EMEC takes advantage of its proximity to OCP Group's experimental mine to implement innovative research ideas and promote new start-ups in the local ecosystem.

Several research topics are currently under development and will enable us to better respond to the challenges that the phosphate sector may face in the near future, including:

- Sustainable extraction of phosphates
- Chemical transformation
- Renewable energies
- Sustainable fertilizers and agriculture

Chair on Life Cycle (ICV) of the International Reference Center on the Life Cycle of Products, Processes and Services (CIRAIG)

The International Reference Center for the Life Cycle of Products, Processes and Services (CIRAIG), established in 2001, is a research group and center of expertise on sustainability and life cycle thinking. Through cutting-edge research, expert services and education, the CIRAIG aims to define and implement sustainability metrics. OCP joins this international centre to be supported on specific studies using the life cycle management tools or the development of tools and software. This will allow us to support our strategic decision making for a circular and sustainable transition.

RECOVERING PHOSPHORUS

Nutrient recovery feasibility study

In coordination with JESA, OCP has designed and launched a feasibility study for integrating phosphorus and nitrogen nutrient recovery systems into three existing wastewater treatment facilities developed by OCP in Khouribga, Benguerir and Youssoufia. Research is also being carried out to assess the recovery of phosphorus from our liquid effluents in recoverable forms. Moreover, OCP launched a study for the production of organic and organo mineral fertilizers from organic waste.

Innovations and research in phosphorus recycling

Through its participation in Fertinagro, OCP is committed to provide farmers with new products that consist of integrating macro and micronutrients into organic fertilizers, commonly known as “Organic Fertilizers”. These new products are derived from the recovery of nutrients (N, P, K, ...) from organic waste and are incorporated into new formulas that have not undergone the conventional value chain of fertilizer production. In addition, UM6P has initiated a preliminary study on phosphorus recycling in the academic realm and anticipates further collaboration with international universities. The Group’s Innovation Department is developing new recycling processes for waste rock and phosphate washing sludge for the recovery of residual phosphate and other valuable elements other than P.

FERTILIZERS PRODUCTS & TECHNOLOGIES

Phosphate management extends to the very fertilizers themselves. We develop smart and combined fertilizers, but also examine best application of fertilizers to the soil to ensure no over-use or mis-application.

1. Customized and smart fertilizers for better phosphorus efficiency

In less than ten years, OCP Group has developed more than forty custom fertilizer formulas, including NPK, enriched liquid fertilizers, TSP enriched in nitrogen, Phosfeeds and TSP coated to be mixed with urea. Ongoing agronomic tests are also carried out to validate the performance of new fertilizer formulas, such as high sulfur fertilizers, polymers for the bioavailability of phosphorus, stimulating silicon, biopesticides, etc.

A new range of bio-stimulants, meanwhile, has been developed. These products result in better absorption of nutrients, greater resistance to various climatic stressors (heat, precipitation, etc.), and fruits and vegetables with higher nutritional value.

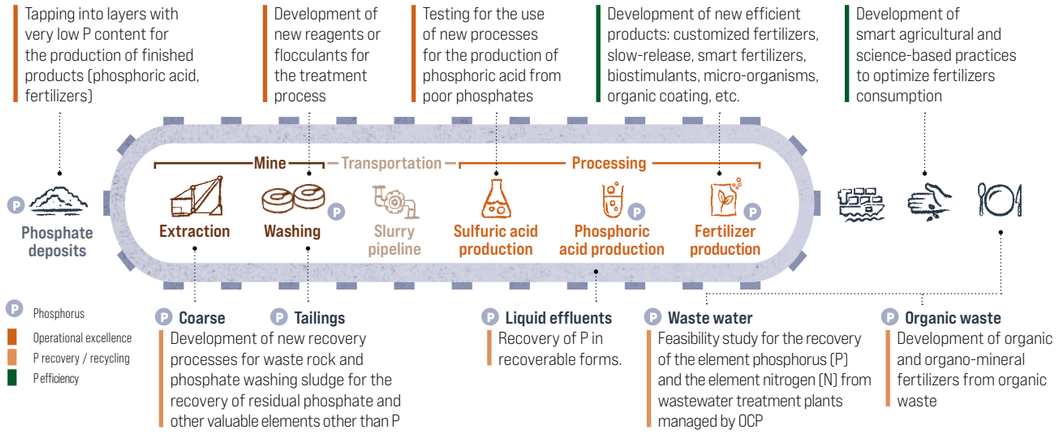
2. Customized application

OCP Group’s customization program ensures that rational phosphate management is front and center to our fertilizer use wherever it may occur in the world. This approach began to make the best use of OCP’s phosphate reserves and help farmers use only as much as they need. We help farmers understand exactly what their soil needs, then we produce customized fertilizer to deliver exactly the right nutrients.

Innovation, R&D and a partnership approach towards sustainable management of phosphorus

Through its phosphate stewardship policy, the OCP Group is committed to supporting innovation, developing and deploying partnerships and R&D solutions to add value to the products exploited and the co-products generated, maximizing returns and minimizing the consumption of resources. The Group has several innovation and research and development projects aimed at the sustainable management of P that can be summed up in the improvement of operational performance, the recovery and recycling of P, and the development of efficient products allowing eco-friendly consumption while feeding the earth correctly.

OCP’s vision regarding P-stewardship



OCP implemented the customer driven 4R framework, a smart consumption framework to ensure long term food security

- **Right Rate:** To match demand of the crop
- **Right Source:** The right nutrient for the right crop
- **Right Place:** To match the spacial pattern of the crop
- **Right Time:** To match demand of the crop

Find out more on OCP’s 4R framework on our commitment for sustainable food systems

Fertinagro Biotech

OCP has a 20% stake in Fertinagro Biotech, a Spanish company specializing in the production and marketing of fertilizers (NPK, enriched NPK, biostimulants, etc.). It aims to promote innovation and the development of products adapted to the specific needs of soils and crops throughout the world. It also strengthens the Group’s expertise thanks to the technical capacities and the range of innovative products of Fertinagro Biotech. A joint venture was created in 2019 and an industrial unit is being launched for the production of high added value fertilizers (improved NPK, biostimulants, etc.) at the Jorf Lasfar site with an initial production capacity of 250,000 tons per year.

Hubei Forbon Technology Co., Ltd

OCP Group and Hubei Forbon Technology Co., Ltd, a Chinese operator specializing in the research, development and supply of global fertilizer additive solutions and also active in the field of Smart Agriculture, signed in 2020 an agreement for the creation of a joint-venture operating in the field of research and development (R&D) for the development of sustainable agricultural solutions aimed at providing farmers with tailor-made fertilizer formulas, responsible agricultural practices and digital services that meet their needs.

Founding member of The Sustainable Phosphorus Alliance (SPA)

SPA is North America’s central forum for the sustainable use, recovery, and recycling of phosphorus in the food system. SPA collaborates with members and supporters to innovate and implement evidence-based solutions to the phosphorus sustainability challenge. Members range from mining and processing companies, biosolids and manure companies, wastewater treatment plants, startups, innovators, academic leaders and others.

ENHANCING OTHER HIGH ADDED VALUE ELEMENTS

The Group is committed to exploiting and enhancing all the high value-added resources contained in phosphate rock - other than phosphorus - as well as in by-products. Several actions are being carried out:

- Development of a pilot test for fluorine production and launch of a second pilot test using Fluorsid technology.
- Carrying out elimination and reduction management tests for Cadmium contained in phosphate and its derivatives.
- Launch of innovation and R&D initiatives to develop phosphate-based materials for batteries in collaboration with the UM6P (LFP for lithium-ion batteries, NVPF for sodium-ion batteries).
- In partnership with Prayon and the École des Mines in Albi, the development, in test mode, of phosphate-based materials for thermal energy storage.
- Development of ways to use elements with high added value such as rare earth elements.

From phosphogypsum to resource

Phosphogypsum is our main by-product resulting from processing phosphate into phosphoric acid. OCP has initiated a strategy to study all possible ways of valorisation and taking them from the laboratory to the field.

ROAD: Mixtures incorporating phosphogypsum (PG) have been studied to comply with both the mechanical characteristics of road construction and national and international environmental requirements. Phosphogypsum-cement-sand / mining tailings mixtures were used for the construction of various sections of pilot roads at the Safi and Jorf Lasfar sites. Studies to optimize the amount of cement used have also been carried out. In 2021, we launched discussions with the Ministry of Equipment and Water as well as the Moroccan Agency for Nuclear and Radiological Safety and Security (AMSSNuR) for the construction of 3 pilot road sections on the national network. We also carried out an economic model for the valuation of phosphogypsum in road construction in Morocco.

AGRICULTURE: using phosphogypsum as an amendment to saline soils and low-cost fertilizer to improve soil fertility. Agricultural productivity is impacted by salinization in an increasing number of countries. PG brings calcium and sulphur as well as acidity which allows a better nutrient uptake compared to natural gypsum. Pilot tests are running on different types of soils and crops. In 2020, new tests have been initiated with UM6P for the evaluation of the effects of the quantity and frequency of PG amendment, the quality of PG and irrigation water on crops and the quality of the soils affected by salinity. We have been monitoring the pilot demonstration area at Jorf Lasfar for the evaluation of PG amendment trials in saline soils: yield increase up to 5 times while impacts on health are still being assessed. We have also launched a project to develop a model for the valuation of PG in agriculture and for the fight against desertification which will study the cost of inaction, target schemes and economic models. Finally trials have been set up for the evaluation of PG as a low-cost fertilizer for field tests at the UM6P experimental farm.

CONSTRUCTION: valuing phosphogypsum in construction materials. Launched by OCP in partnership with the Public Laboratory for Tests and Studies (LPEE), the first phase of the research and development mission for the valorization of PG in bricks, agglos and pavers, which aims to define the application products to be tested, was completed in 2021. The second phase, which aims to build small houses and roadways with optimized bricks, agglos and pavers, is launched. Also, discussions with Lafarge-Holcim for recovery in cement are underway.

THERMAL DECOMPOSITION of phosphogypsum is still being investigated. CaO and SO2 resulting from its thermal decomposition could be used to produce clinker/cement and recyclable sulfuric acid in our industrial activity.

OUR GOALS

Our goals	Where we stand in 2021
Maximize valorization and continue investments on storage as an enabler. Focus on the valorization for soil amendment to reach the potential of 40tons per hectare.	**Ongoing**
First Phosphogypsum Moroccan Road by 2022	**Ongoing**
Additional tests intiated with UM6P to assess the effects of the quantity and frequency of PG amendment, the quality of PG and irrigation water on differents salins soils & crops.	**Ongoing** Tests to date have shown positive results
Phosphogypsum thermal decomposition	**Ongoing**
Conduct Life Cycle Assessments (LCAs) to assess environmental impacts along the products lifespan.	**Ongoing**
Valorization of PG in construction materials	**Ongoing**



3.3.2.2 CLIMATE CHANGE ADAPTATION & MITIGATION

GREENHOUSE GAS EMISSIONS & CLIMATE CHANGE

Links to our Policies related to climate change, approved by Board of Directors/ Chairman and Chief Executive Officer:

- General climate change Policy
- Air emission Policy

Climate change is a global challenge that we face as our sector is one of most sensitive to potential climate risks affecting fertilizers and agricultural productivity. As a major player in Morocco and worldwide, OCP is committed to stay in line with goals at the national level (45.5% greenhouse gas emissions cut by 2030 and the contribution of the phosphate sector amounts to 11% in 2030), and at the international level with the Paris Agreement's limit of global warming to well below 2°C. To achieve those goals, OCP pursues a cutting-edge strategy to reduce its CO2 emissions - being the only GHG significantly generated by its activity. Being carbon neutral by 2040 on the three scopes is our ambition, which trajectory is shaped by innovative projects and high-level targets for our industrial development.

Governance around climate-related risks & opportunities

BOARD AND AUDIT AND RISK COMMITTEE

Oversees Risk Management Team in understanding the principal risks to our business, including environmental and climate-related risks

RISK MANAGEMENT TEAM

- Examinates risks and evaluates the significance of such risks
- Helps the Board of Directors improve internal control, risk management, and network and information security.
- Assesses the adequacy of the Group's internal control operations

CHIEF OPERATIONAL OFFICER (COO)

- Strengthens OCP's sustainability management
- Manages the Sustainability platform works in close collaboration with the strategic and management committees to determine short, medium- & long-term strategy, and approve targets

SUSTAINABILITY PLATFORM

ESG COMMITTEE

- Coordinates our sustainability management, including climate-related issues.
- ESG Committee manages specific-related issues. This Committee will be built in 2022.
- Coordinates and supervises implementation of the sustainability strategy as well as discuss, co-create and initiate new ideas

OCP'S FUNCTIONAL AREAS

Responsibility and accountability for risk management is embedded in all levels of our organization, and we are working to further integrate risk management into key decision-making processes and strategy.

Our approach to climate management

OCP aims to strengthen resilience and adaptive capacity to climate-related hazards and natural disasters in all countries in addition to improve education, awareness-raising, human, and institutional capacity on climate change mitigation, adaptation, impact reduction and early warning.

Climate Action & Decarbonisation Program

In line with our Sustainability and Green industrial Development (SGID), our climate action & decarbonisation program represents our roadmap to ensure our industrial development while reducing by 50% our carbon footprint for 2030 and become carbon neutral for 2040.

Check our carbon neutral roadmap.

OCP collaborates with strategic institutional and economic partners to achieve its ambitious environmental objectives.

-50%
Carbon footprint by **2030** (baseline 2014)

CARBON NEUTRALITY BY 2040

Monitoring, reporting & verification

OCP has been rigorously monitoring its carbon footprint since 2007. A calculation tool has been implemented in accordance with ISO 14064-1, the standard specifying requirements for organizations to quantify and report on greenhouse gas emissions. Since 2014, the carbon footprint of OCP Group (scope Morrocco) is certified annually according to ISO 14.064 by an approved certification body GUTcert, subsidiary of the AFNOR Group.





GRI 2-4, GRI 3-3, GRI 305-1, GRI 305-2, GRI 305-3, GRI 305-4
SASB : RT-CH-110a.1, EM-MM-110a.1
TCFD : Metrics & target b)
UNGC : Principles 7, 8, 9

KEY PERFORMANCES 2021

OCP has joined several organizations for transparency, measurement and progress action on environmental (greenhouse gas) impacts.

SCORE B
(management level for climate risks) from the 1st submission

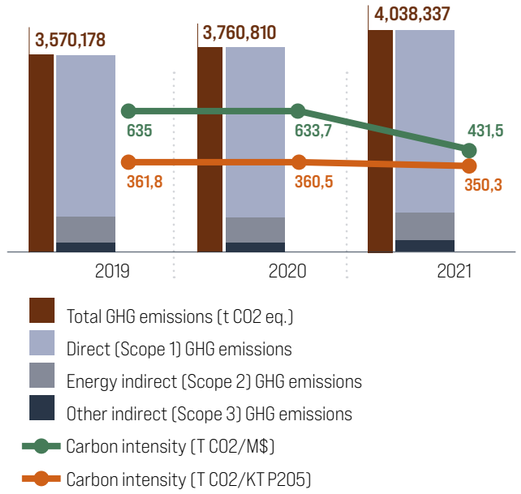
OCP AMONG THE TRIO
of fertilizer industry supporters in 2021

CALCULATION OF SCOPE 3 WORLDWIDE
Aware of the criticality of an urgent response to climate change and of the importance of a full transparency on current footprint as a basis for a robust decarbonisation roadmap, OCP discloses its full scope 3 which has been exhaustively and thoroughly calculated following GHG Protocol and other international and sectoral guidances, and certified Carbon Trust.

SCIENCE-BA TARGETS DECARBONIZATION TRAJECTORY
OCP has engaged with peer companies and the World Business Council for Sustainable Development (WBCSD) to develop a Sectoral Decarbonization Approach (SDA) within the Science Based Targets initiative (SBTi) specific to the fertilizer sector, in order to help companies in the sector to align their decarbonization objectives with the Paris Agreement.

Initial calculation

Intensity per unit P2O5 produced while increasing its production.



GHG emissions 2019 and 2020 data have been certified by the external certification body Afnor.

-23% CO_2
intensity reduction over the last 5 years (P2O5)

Exhaustive scope 3 calculation

OCP is working relentlessly on research and innovation of its products portfolio and is committed to delivering product mix with low CO2 emissions (upstream, downstream and operational emissions)and high soil productivity performance.

World's first phosphates specific methodology enabling Moroccan carbon market development

- Partnership with the Secretary of State for Sustainable Development to establish carbon market mechanisms adapted to the Moroccan context
- Development of a methodology enabling baseline calculation and assessment of the mitigation potential for the phosphate sector in Morocco

MITIGATION : HOW DO WE REDUCE OR PREVENT GREENHOUSE GAS EMISSIONS?

OPPORTUNITIES IN CLEAN TECH

Find out more on opportunities in clean tech related to water

Business & Climate opportunities
Climate opportunties

Green Mobility
300,000 tCO_2 eq reducing potential

Planned

Decarbonizing the extraction and transportation of phosphates (IPCC "In-Pit Crushing and Conveying, hydraulic transport, green mobility,...)

Mine reclamation
Rehabilitation of 204 Ha in 2021, including 89 Ha developed and planted

- Ambition to accelerate the rate of rehabilitation in the coming years to cover most of the land exploited in the past
- Several innovative projects will be launched in order to choose the most suitable crops for the disturbed soils, tolerant to drought and of high added value in parallel with the development of agroforestry and valorization of organic waste.

Carbon farming
3,000 tCO_2 eq offsetting potential

Planned

Carbon farming is the process of changing agricultural practices or land use to increase the amount of carbon stored in the soil and vegetation (bio-sequestration). Developed in Benguérir, our main experiment consists of growing 7 tree species using 3 irrigation levels, 2 types of soil amendments and in 2 locations. In 2021, OCP has launched Carbon Farming projects with partners in Brazil and Africa, to help farmers sequester carbon through regenerative farming practices (direct seeding, cover crops, ...), and monetize this through the certification and sale of the carbon credits generated.

Other carbon farming projects are planned in Africa and Brazil.

Wind power plants
295,260 tCO_2 eq avoided

Achieved

Power Purchase Agreements (PPAs) – energy supply contracts – are implemented to supply wind power to OCP's mining sites of Youssoufia and Khouribga. For 2021, 444 GWh were provided via PPA wind contracts while some of our production sites already benefit from 190% renewable energy supply.

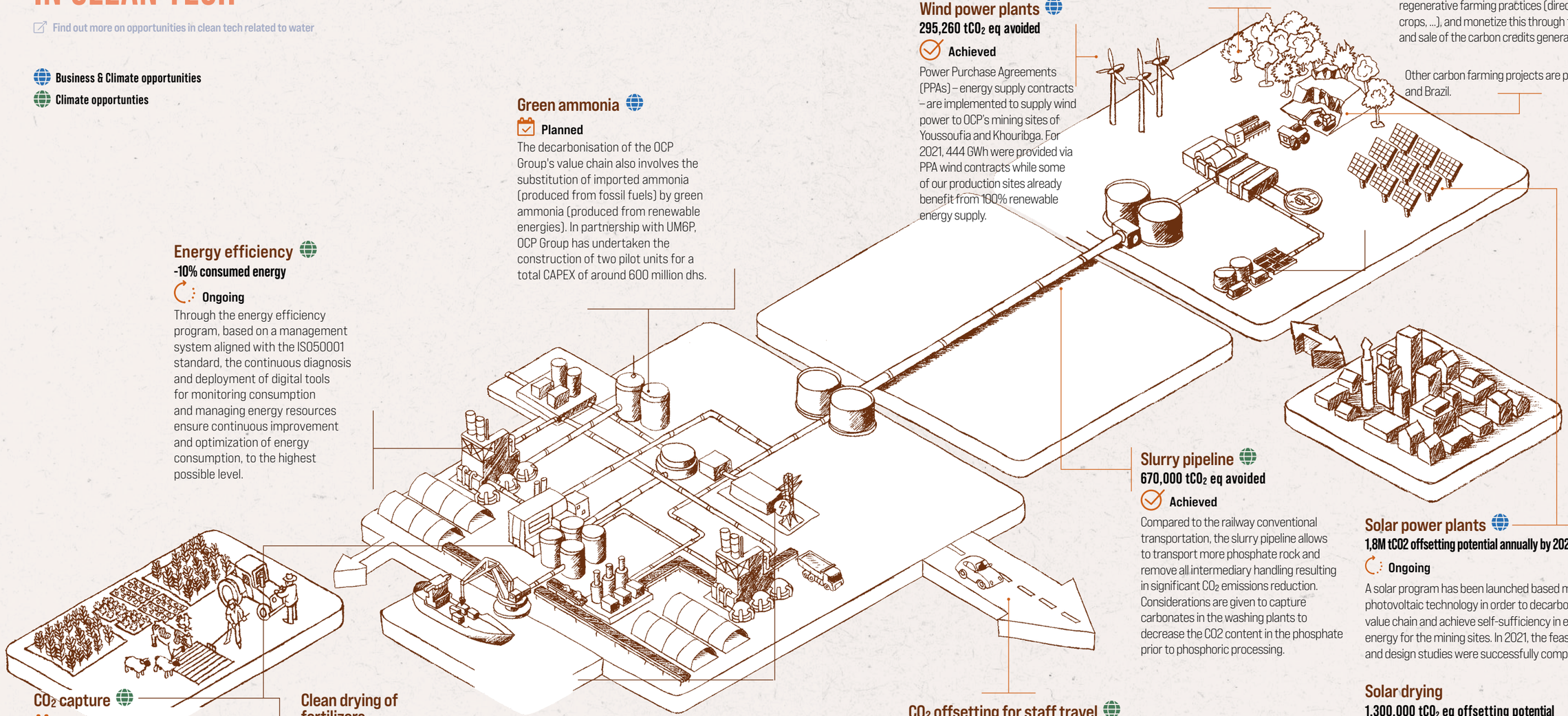
Energy efficiency
-10% consumed energy

Ongoing

Through the energy efficiency program, based on a management system aligned with the ISO50001 standard, the continuous diagnosis and deployment of digital tools for monitoring consumption and managing energy resources ensure continuous improvement and optimization of energy consumption, to the highest possible level.

Green ammonia
Planned

The decarbonisation of the OCP Group's value chain also involves the substitution of imported ammonia (produced from fossil fuels) by green ammonia (produced from renewable energies). In partnership with UM6P, OCP Group has undertaken the construction of two pilot units for a total CAPEX of around 600 million dhs.



Slurry pipeline
670,000 tCO_2 eq avoided

Achieved

Compared to the railway conventional transportation, the slurry pipeline allows to transport more phosphate rock and remove all intermediary handling resulting in significant CO_2 emissions reduction. Considerations are given to capture carbonates in the washing plants to decrease the CO2 content in the phosphate prior to phosphoric processing.

Solar power plants
1,8M tCO2 offsetting potential annually by 2026

Ongoing

A solar program has been launched based mainly on photovoltaic technology in order to decarbonize the value chain and achieve self-sufficiency in electrical energy for the mining sites. In 2021, the feasibility and design studies were successfully completed.

Solar drying
1,300,000 tCO_2 eq offsetting potential

Planned

Drying of phosphate rock using solar energy instead of Industrial Fuel or Natural Gaz.

CO_2 capture
Planned

We plan to capture CO_2 emitted by our phosphoric acid chimneys. Considerations are given to capture carbonates in the washing plants to decrease the CO2 content in the phosphate prior to phosphoric processing.

Clean drying of fertilizers
500,000 tCO_2 eq offsetting potential

Planned

Use of clean technologie for drying fertilizers.

Cogeneration
2,179,014.17 tCO_2 eq avoided

Achieved

Cogeneration consists in recovering waste heat released during the sulfuric acid production within our processing sites to produce electrical energy. Capacity was reinforced with the commissioning of the integrated JFC4 unit at Jorf Lasfar, a unit equipped with a thermoelectric power station with a capacity of 65MW and a heat recovery system (HRS) which allows saving an equivalent electrical power of 10MW. The cumulative installed capacity of HRS is approximately 75MW equivalent.

CO_2 offsetting for staff travel
2,300 tCO2 eq compensated

Achieved

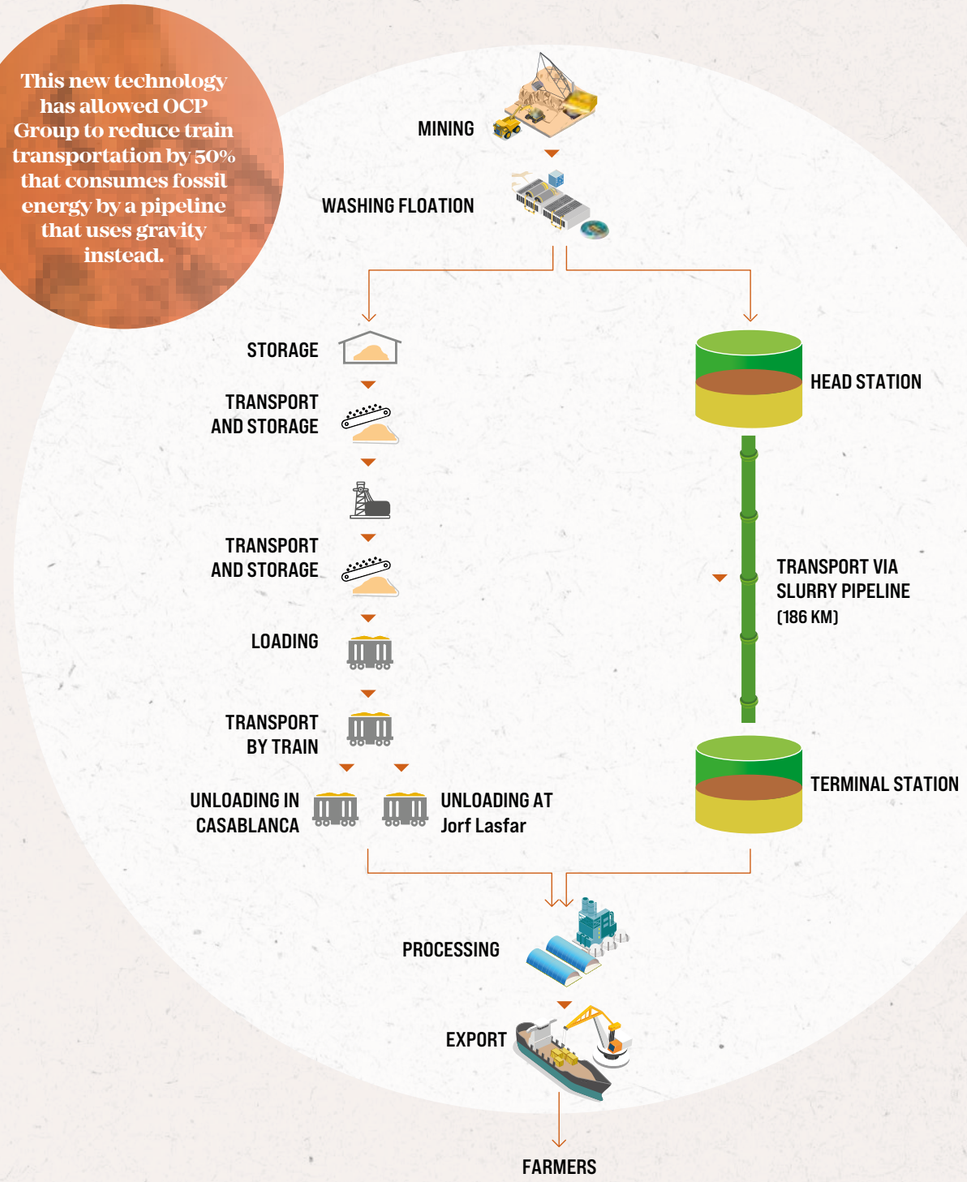
We adhere to the "Voluntary carbon offsetting" program implemented by the Mohammed VI Foundation for Environmental Protection (FM6E). OCP's financial contribution to the program is intended to offset the CO_2 emissions due to plane and car travel for all its executives and staff in the context of missions related to their functions, based on estimated CO_2 emitted annually, on the price of DH 200 per ton carbon and using the available emission factors adapted to the Moroccan context. The FM6E is mainly committed to carrying out or having carried out projects in the fields of energy saving or energy efficiency, renewable energy or carbon sequestration.

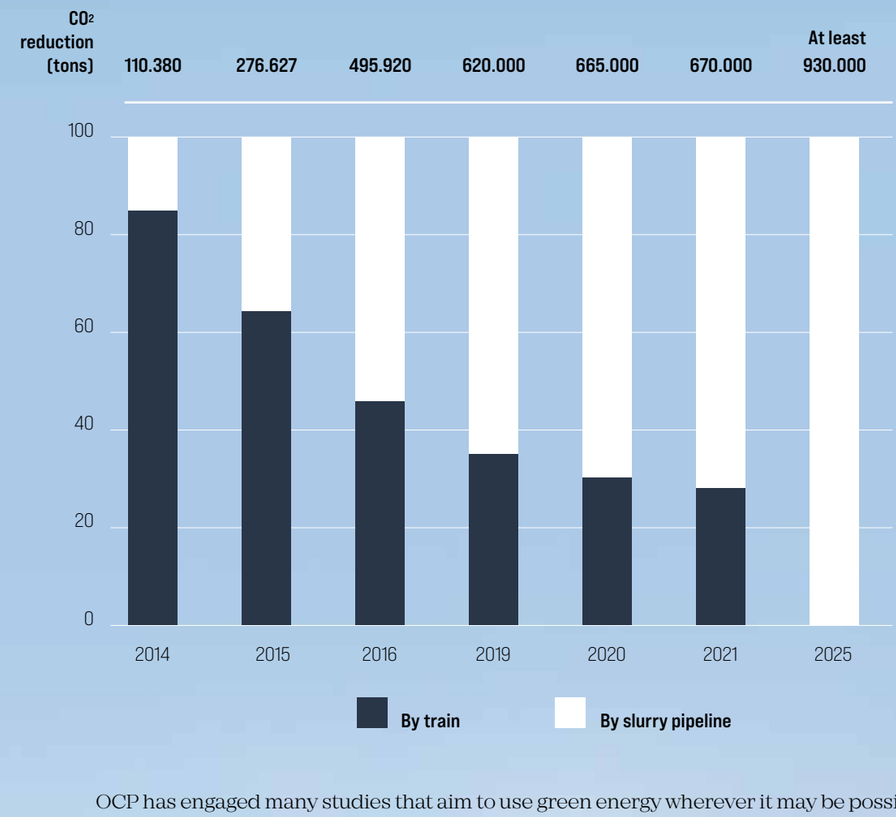
Note: annual estimation compared to business as usual

ZOOM INTO GREEN LOGISTICS

OCP Group's supply chain includes a complex web of different transportation systems. Internally, the Group uses heavy mining trucks to carry out phosphate ore from mining areas to washing plants. Once enriched, the phosphate is transported to chemical facilities or to ports for export purposes by train or by pipeline. Externally, OCP group uses bulk carriers and tankers to export its fertilizers to its clients and to import raw materials such as sulfur and ammonia. OCP Group's commitment toward sustainable logistics is ongoing, and the first step was the implementation of a slurry pipeline between its biggest mine (Khouribga) and its biggest chemical hub (Jorf Lasfar). The slurry pipeline enables the transport of more phosphate rock and removes all intermediary handling.

This new technology has allowed OCP Group to reduce train transportation by 50% that consumes fossil energy by a pipeline that uses gravity instead.





OCP has engaged many studies that aim to use green energy wherever it may be possible. The Group is studying the use of electric or hydrogen mining trucks to replace the diesel ones, and also powering trains by renewable electricity from solar farms. Finally, in order to serve its clients, OCP Group is paving the way for the use of ammonia as a combustible for shipping (zero CO_2 emitting fuel) by launching technical studies for the feasibility of this substitution.

670,000 CO_2

reduction by slurry pipeline



ADAPTATION: HOW DO WE ADJUST TO ACTUAL AND EXPECTED FUTURE CLIMATE?

Water efficiency

Facing increasing demand for fertilizers and aware of Morocco's water stress, OCP has been running a water program based on the circular economy principles to sustainably ramp up production and ensure food security. The program is based on an integrated and optimized water management and the use of non-conventional resources.

Find out more here

Smart consumption

Aware of the climate change risks on food security, OCP is developing products and services for a sustainable and resilient agriculture.

Find out more here

OCP builds upon its existing metrics and targets from its main commitments for the environment - more specifically commitments to sustainable production and commitments to sustainable food systems – to assess and manage relevant climate-related risks and opportunities. OCP is continually working on enhancing data collection and emissions measures by working with internationally-recognized standards such as SBTi.



CLIMATE-RELATED RISKS

As the biggest company in Morocco and custodian of the world's largest reserves of phosphate, OCP takes the risks of climate change very seriously. Climate-related risks could financially affect our business and stakeholders in several ways. Droughts, floods among others threaten production and operations, while decisions of regulators, governments and technologies influence management processes (strategic, regulatory, financial, reputational).

Turning risk into opportunity allows us to transition to a low-carbon economy, ensuring our long-term resilience and competitive advantage.

We are progressively aligning our sustainability report with the recommendations of the Task Force on Climate-related Financial Disclosures (TCFD) framework to remain transparent on our path to carbon neutrality by 2040.

Among the climate-related risks that we are facing, we assessed the following ones :

Physical risks

To our customers

Agriculture and food security

As average temperatures increased over the past century, the frequency, duration and severity of droughts and floods increased, due to higher water evaporation, earlier snowmelt and precipitations falling more as rain than snow. Climate change is also occurring as floods, where periods of extreme rainfall alternate with periods of extreme heat or dryness, affecting agriculture and increasing environmental problems.

Farmers' yield

In extreme weather conditions, farmers' productivity and economies are heavily affected, as average yields of most crops decline beyond certain maximum temperature thresholds under both irrigated and dryland production.

Fertilizer market

Farmers' exposure to increased risks on their economies, impacts fertilizers and other crop inputs demand and can put pressure to the supply chain through higher inventories at the wholesaler and retailer levels or increased difficulties in accessing farmers, such as disruptions in US waterways levels in the last two years. OCP is monitoring factors affecting agriculture in each region through its local representations, agronomist's teams and close relationships with its customers to understand the challenges they face and adjust its production capabilities to address farmers' needs.

To our sites

We manage weather-related risks like any other risk at both corporate and site levels mainly through risk dashboards and business continuity plans including prevention, emergency and recovery plans which are updated every year. We assess acute and chronic weather changes for physical risks to our sites:

Flood

Gantour mining sites – i.e. Youssoufia and Benguérir – are located near rivers which might threaten specific areas during extreme rainfalls. Beyond our emergency and recovery measures, the main preventive answers we provide are the continuous monitoring of the pumping system efficiency and the coordination with local authorities and potential support for the building of dams to manage rivers water levels in collaboration with communities.

Water scarcity

Higher average temperatures and more extreme, less predictable, weather conditions – i.e. heat waves, droughts, rainfalls – are increasingly impacting the availability, the distribution and the quality of water in Morocco, considered as a freshwater scarcity country. OCP's mining and processing sites both rely on water; that is why we have developed a water management program hinged on water efficiency measures and non-conventional water sources – i.e. treated wastewater and desalinated seawater – that will cover 100% of our needs by 2030. As water is mainly used for irrigation in Morocco, OCP is also designing products and services to support farmers.

We screened our site using the World Resources Institute's ("WRI") Aqueduct Water Risks Atlas, a water risk mapping tool, to understand where and how water risks and opportunities affect our operations.

3,8%

Freshwater withdrawal from regions with High or Extremely water scarcity

Find out more on our investments on opportunities on clean tech

Coastal erosion

It is continually reshaping shorelines through ocean currents, tidal movements, wind and wave action. The average global sea level rise (SLR) predicted by the IPCC (up to 59 cm by 2100) will also exacerbate erosion. Among our coastal sites, our processing site of Safi – located on the cliff – is under specific scrutiny. We therefore monitor the evolution of the cliff every six months and implement a reinforcement program mainly through dikes.

To our supply chain

Emergency plans have been developed by our procurement team for our main production inputs if our key suppliers face weather-related disruptions. We are also working to geographically diversify our suppliers and increase our storage capacity. We are also developing local production capacities as close as possible to farmers to minimize supply chain disruptions.

Transition risks

Policy and legal changes, technology costs, and potential changes in consumer behavior are potential risks we track during the transition toward a low carbon economy. We are considering the main following transitional risks:

Carbon market

Our industry plays a significant role for emissions reduction regarding its potential for mitigation, experience with Monitoring, Reporting, and Verification (MRV), and environmental impacts. OCP proactively participates to the development of a mitigation framework and carbon market mechanisms for Morocco through the following steps:

1. Analysis of different GHG mitigation instruments in Morocco.
2. Design of a digitalized MRV system for guidance. The Ministry of Energy, Mines and Environment is deploying a platform hosting the MRV system.
3. Development of a regulatory and institutional framework for implementing mitigation measures based on carbon market mechanisms.
4. Establishment of baseline data and evaluation of the mitigation potential. A methodology for defining baselines and evaluating attenuation scenarios based on different carbon prices has been developed.

In 2021, OCP conducted an impact assessment on its exports of the Carbon Border Adjustement Mechanism (CBAM).

Regulatory and global commitments

In order to honor its commitments under the Paris Agreement, Morocco submitted its first NDC (Nationally Determined Contributions) in September 2016. It includes a list of mitigation actions that should contribute to the achievement by 2030 of the national target of 42% GHG reductions compared to the business-as-usual reference scenario. These actions only concerned the energy sector.
Following the royal speech addressed to the last Climate Action Summit on September 2019, Morocco committed to enhancing its GHG reduction ambition by 2030.

In this context, the Department of the Environment of the Ministry of Energy, Mines and the Environment launched a consultation aimed, among other things, at the revision of the national commitments expressed in the NDC by integrating the mitigation actions of the sectors which were not involved in the first version, in particular the phosphate sector.

The updated NDC presents an overall mitigation target of 45.5% (unconditional and conditional measures) by 2030 compared to the baseline scenario.
For the unconditional target, the industry sector accounts for half of the national mitigation effort by 2030, boosted by the phosphate sector alone accounting for 27.5% of Morocco's 2030 targets.

OCP voluntarily complies with European regulations in favor of the transition to a low-carbon economy, including the EU Taxonomy and Corporate Sustainability Reporting Directive (CSRD). The Sustainability Platform supported by external independent sustainability experts ensures a regulatory watch.

Regional regulatory intelligence committees are held regularly to identify further regulatory local developments and define compliance action plans accordingly. We also monitor normative and regulatory trends through our participation in international standardization bodies.

Technology

Achieving carbon neutrality by 2040 is a goal we are working on. It requires significant capital expenditures to increase our Research & Development capacities as well as to purchase and roll out best-in-class technologies.

Find out more on our investments on opportunities on clean tech

CLIMATE-RELATED OPPORTUNITIES

Efforts to mitigate and adapt to climate change also produce opportunities for us from resource efficiency and cost savings to the development of new products and services and access to new markets.

Reduce operating costs

Resource efficiency: Our challenge is to meet growing consumption needs while using a minimum of resources to preserve our reserves and optimize costs to guarantee food security. That is why we developed a circular economy framework to optimize the products life cycle footprint - from their design to their end of life.

Energy sources: OCP has developed an Energy Program with the goal of diversifying its energy mix, achieving self-sufficiency and reducing annual energy costs. The program is based on energy efficiency measures, development of cogeneration capacity and increased use of renewable energy.

Develop climate smart products & services

The changing climate, from warming temperatures to changes in precipitation, is increasingly impacting the way plants grow all around the world. Agriculture contributes to around 20% of greenhouse gas (GHG) emissions – through intensive farming leading to soil erosion & loss of biodiversity, expansion of arable lands leading to deforestation. To provide farmers with sustainable answers to natural resources depletion and increasing regulations, we are continuously improving our product and service offers towards a smart agriculture embedding the 4R's nutrient stewardship framework - Right fertilizer, Right rate, Right time, Right place - which is structured around:

1. Providing farmers with local infrastructures such as blending and storage facilities and minimize supply chain disruption due to weather.

2. Developing customized products adapted to the evolution of the soil-crop-environment system to seize opportunities for climate-smart products.

3. Designing digital tools to enable farmers to make the right decisions.

4. Supporting farmers with customized financing solutions and insurance (i.e. rainfall deficit) acting as a facilitator and providing banks and insurers with yield and payback guarantee through smart inputs and training for farmers as well as access to market.



GRI 3-3 |

OCP'S CARBON NEUTRAL ROADMAP TOWARDS 2040

In line with the Paris Agreement goals

OCP has launched a vast project to develop a detailed multidimensional decarbonization roadmap, which covers its entire value chain and emission sources. OCP has launched the calculation of the SBT (Science Based Targets) decarbonation trajectory, with the ambition to align its emission reduction targets with those of the Paris Agreement.

PHASE 1 : REDUCE CARBON FOOTPRINT BY 50%

PHASE 2 : ACHIEVE CARBON NEUTRALITY

INNOVATION AND TECHNOLOGICAL ROADMAP

- Carbon certification projects
- Development of an MRV system dedicated to Africa
- Project to deploy a new carbon capture assessment technology in Brazil
- Project to use biomass for rock drying

DISCLOSURE ROADMAP

- Join the Taskforce on Nature-related Financial Disclosures (TNFD)
- Develop Science Based Target initiative (SBTi) : development of SDA fertilizers
- CDP and TCFD disclosures

INDUSTRIAL ROADMAP

CARBON DECREASE SCOPE 1 AND 2

By 2030, decrease of more than 2 Mt CO_2 from our scopes 1 and 2

- *Energy efficiency :* optimization and lean management to reduce electricity consumption (ONEE) by 10%
- *Renewable and clean energy:* plan to cover 100% of OCP needs of electricity from solar power plants, wind farms and cogeneration (- 0.6 MT scope 2)*
- *Solar drying technologies* to abate CO_2 from phosphate drying and calcination (-0.45 Mt CO_2)*
- *Steam dyring* of fertilizers to replace drying with fuel energy (-0.3 Mt CO_2)*
- *Green mining :* decarbonisation of diesel mining engines by moving to electricity and hydraulic transport (-0.3Mt CO_2)*

CARBON DECREASE SCOPE 3

By 2030, decrease of more than 2 Mt CO_2 from our scope 3 through intensive innovation on clean tech, sequestration initiatives and carbon credits mechanism

- *Green ammonia production :* plan to invest in production of green ammonia
- *Production of sulphuric acid* from sulphur through new sulphuric acid plants to replace importation (-220,000t CO_2)*
- *Water efficiency :* reduction of water consumption by 10%, resilience improvement, replacement of water from ONEE by water from waste water treatment stations and desalination plants (-100,000t CO_2)*
- *Afforestation :* ongoing initiative of planting 10 millions trees by 2040 (5 millions trees by 2030) on rehabilitated mining lands (-200,000t CO_2)*
- *Carbon farming :* deployment at the farmer level of carbon farming practices (cover crop, nitrogen use optimization, reduced tillage...).
- *Carbon credits :* neutralize hard to abate emissions to carbon removal credits.

- Carbon Capture Use and Storage (CCUS)

CARBON NEUTRALITY

By 2025, 90% of OCP's electricity needs will be covered with clean energy

By 2030, 100% of OCP's energy needs will be covered with clean energy (both cogeneration & wind energy)

2018 | 2021 | 2025 | 2030 | 2040

is the end of the capacity increase for our industrial plan

* By 2030

EMISSIONS MANAGEMENT

It constitutes a major priority for OCP to cut its atmospheric emissions to enhance air quality, reduce nuisance and health risks for local communities. OCP's best-in-class emissions management seeks beyond compliance to national regulation, to use best eco-friendly technologies as to respect most constraining thresholds defined by international organisation such as the World Health Organisation and the World Bank.

Links to our Policies related to Emissions management, approved by Board of Directors/ Chairman and Chief Executive Officer :

- General climate change Policy
- Air emission Policy

OUR APPROACH TO EMISSIONS MANAGEMENT

OCP has been committed to reducing its air emissions for many years to reduce environmental and human health impacts on the one hand, and to optimize production costs on the other hand. Facing significant emissions such as sulfur dioxide emissions, fluorine, ammoniac, hydrogen sulfur, and particulate matters (dust), our management approach is structured around prevention and mitigation leverages:

- **Technological improvements:** Such as the implementation of the fluorinated gases abatement process and its generalization at the level of the phosphoric acid production units of the Jorf Lasfar and Safi sites, which has allowed to reduce significantly the level of emissions.
- **Continuous monitoring coupled with atmospheric dispersion models** allowing immediate or preventive corrective measures and in particular trade-offs depending on the level of production.
- **Performing studies to evaluate the environmental and health impact:** For example, in 2021, we launched studies to assess the health impact of parameters (fluoride, sulfur dioxyde, ...) resulting from industrial activity in the phosphate sector. The objective is to ensure the absence of health risks related to OCP's operational activity and to define an improvement program aimed at zero impact.

ISO 14001

14001: 2015

OCP implements high-performance Environment Management Systems in accordance with the international ISO 14001:2015, enabling the continuous assessment of all aspects related to atmospheric emissions while guaranteeing a continuous improvement of the related performance

Best-in-class

for emissions management OCP applies the best eco-friendly available technologies (BAT) at the conception of project phase for atmospheric emissions limitations

Air quality

OCP is continually monitoring compliance with national and World Health Organization threshold values for air quality around OCP Group's facilities.

KEY PERFORMANCES 2021

NOx, SOx, and other significant air emissions (T/year)

	2019	2020	2021
SO2	49280	46451	54662
HF	649	151	109
Dust	34012	22572	25740
NH3	976	390	216
NOx	1016	873	1318

SO3 is very low in our air emissions.
OCP Group doesn't emit VOC (Volatile organic compounds) & Chemical Oxygen Demand

Intensity (T/M$)

	2019	2020	2021
SO2	9.11	8.27	6.48
HF	0.12	0.03	0.01
Dust	6.29	4.02	3.05
NH3	0.18	0.07	0.03
NOx	0.19	0.16	0.16

Sulfur dioxide emissions

Activities: sulfuric acid production
Industrial sites: Jorf Lasfar and Safi processing platforms

Air quality monitoring stations

Air quality continuous monitoring stations are operational. The sulfuric acid units are controlled by operating scenarios depending on weather conditions. These scenarios can vary from production reduction to shut down.

Plum'air solution

Plum'air is a real-time and forecast atmospheric emissions dispersion modelling system operational in all processing sites. This system is equipped with the latest technologies in terms of emission control and air quality (automatic notifications, reporting, scenario simulation, monitoring of accidental events, etc.). The solution also allows the Jorf Lasfar site to model the dispersion of emissions in the workplace (3D).

Ongoing
Industrial tests for further solutions to reduce SO2 emissions

Ongoing
Construction of the new sulphuric acid production unit "PS4" with a daily production capacity of 2300 tons which is characterized using a double absorption process. This technology will allow the improvement of the air quality of the OCP site in Safi by replacing 2 sulphuric acid production lines with simple absorption. The commissioning of the new unit is scheduled for the end of 2022.

$21 million
investment in SO2 reduction ($156 million to invest)

OUR COMMITMENT

-50%
SO2 polluting load in 2025 compared to 2018

GRI 305-7
SASB : RT-CH-120a.1, EM-MM-120a.1
UNGC : Principles 7,8,9

6

air monitoring stations 2 in Safi and 4 in Jorf Lasfar

100%

of chimneys have online SO2 analyzers

Acquisition and commissioning of a new mobile station to measure the **quality of ambient air** and weather conditions in Jorf Lasfar. The site is now equipped with a total of 4 stations to continuously monitor the air quality around the site and to verify the reliability of data provides by the PLUMAIR control solution.

Production lines aligned with the World Bank threshold (< 450 mg/Nm3):



100% aligned with Moroccan law

OUR COMMITMENT

2028

Achieve 100% compliance with the World Bank's value limit threshold on all its smokestacks

OUR GOALS

Our goals	Where we stand in 2021
Reduce its global SO2 polluting load by 50% in 2025 compared to 2018	· 20% SO2 intensity (TSO2/M$) compared to 2020
Align 100% of the production lines with the World Bank threshold by 2028	38% aligned in Safi & 50% aligned in Jorf Lasfar

12 RESPONSIBLE CONSUMPTION AND PRODUCTION

GRI 3-3, GRI 305-7
SASB : RT-CH-120a.1, EM-MM-120a.1
UNGC : Principles 7, 8, 9

Fluoride gas

Activities: phosphoric acid and fertilizer production
Industrial sites: Jorf Lasfar and Safi processing platforms

Emissions monitoring system through measurement campaign led by third parties, online analyzers on each chimney

Successful operational commissioning of the 8 fluorinated gas scrubbing units at the Safi site with the fluorinated gas washing system with Hydrogen fluoride emissions falling below 5 mg / Nm3, enabling all HF emissions from phosphoric acid production units to comply with national and international thresholds

Achievement of the fluorine-related health impact study (Fluorosis phenomenon) on all OCP operational sites. Based on available data and following an internationally recognized methodology, the study allowed to determine the level of sanitary risk associated with the presence of fluorine in the environment on the receivers (workers on site, local populations, namely adults and children), and to propose a sanitary action plan. The level of risk directly attributed to the industrial activity is globally acceptable.

Order for the industrial pilot test of a new technology to eliminate the odor of fluorinated gases at the Safi site (on a phosphoric acid production line).

28%

Reduction of fluoride gas annual pollutant load reduction in 2021 compared to 2020 mainly due to the generalization of the fluorinated gas scrubbing system on all phosphoric acid production lines in Safi

100%

production lines aligned with the World Bank threshold (<5mg/Nm³) and the Moroccan law

OUR GOALS

Our goals	Where we stand in 2021
80% reduction compared to 2018 of fluoride gas emissions by 2021	· 90% HF (Tons/year) compared to 2018 · 28% HF (tons/year) compared to 2020 · 52% HF intensity (TSO2/M$) compared to 2020

12 RESPONSIBLE CONSUMPTION AND PRODUCTION

Ammonia

Activities: nitrogen-based fertilizer production
Industrial sites: Jorf Lasfar processing platform

Emissions monitoring system through online analyzers on each chimney; and a network of online NH3 sensors at the workplace level.

Plum'air solution

Ongoing
In order to improve the visual aspect, a project to study elimination of the water vapour plume at the exit of the chimney of the fertilizer production units has been launched in 2021 and will be achieved by 2022.

-45%

Annual pollutant load reduction in 2021 compared to 2020 mainly the operational control of emissions at the level of the fertilizer units in Jorf Lasfar

100%

chimneys below 50 mg/Nm³ aligned with the World Bank threshold

OUR GOALS

Our goals	Where we stand in 2021
Align the 3 new production lines planned with the World Bank threshold	**Ongoing**

12 RESPONSIBLE CONSUMPTION AND PRODUCTION

Hydrogen sulfur

Activities: sulfur melting and phosphoric acid pre-treatment
Industrial sites: Safi & Jorf Lasfar processing platforms

- Hydrogen sulfide gas washing unit for new sulfur melting in Jorf Lasfar
- Hydrogen sulfide gas washing system for all phosphoric acid pre-treatment units
- Plum'air solution

Commissioning of the new washing unit of the sulfur fusion in Safi. This unit will allow to respect the national and international limit values for H2S emissions (<5mg/Nm3).
Expected to be completed Q1 2023 for Jorf Lasfar Site



GRI 305-7
SASB : RT-CH-120a.1, EM-MM-120a.1
UNGC : Principles 7,8,9

Particulate matter (dust)

Activities: phosphate drying and calcination units, dry phosphate grinding units, fertilizer production units, MCP / DCP units.
Industrial sites: all sites

- Monitoring measures through stations, measurement campaign led by third parties, and online analyzers on each chimney
- Plum'air solution
- Progressive shutdown of old phosphate drying units
- Filters equipment for all dry phosphate grinding units
- Electrofilters at the calcination unit and bag filters at the phosphate drying units

-24%
PM intensity (T/M$) compared to 2020 mainly due to operational control of emissions at the fertilizer unit level

OUR GOALS

Our goals	Where we stand in 2021
100% of our lines aligned with the World Bank threshold by 2025	· 24% PM intensity (T/M$) compared to 2020 Note : More than 90% of the dust emissions are due to the drying process in Laayoune. This unit is under study for an upgrade or permanent shutdown by 2025.

12 RESPONSIBLE CONSUMPTION AND PRODUCTION



GRI 2-23, GRI 2-24, GRI 3-3

DEVELOPING RENEWABLE ENERGY AND ENERGY EFFICIENCY

With the worldwide increase in fertilizer demand and the corresponding growth of OCP's industrial capacities, there is also an increasing need for electricity.

Links to our Policies related to Emissions management, approved by Board of Directors/ Chairman and Chief Executive Officer :

- General climate change Policy
- Energy policy

Our approach to energy management

Decoupling our production capacity increase from our environmental footprint is the heart of our industrial development strategy to meet the exponential needs of fertilizers in the decades to come. At OCP, we believe a fair balance between better crop productivity and environmental objectives is a prerequisite for a lasting response to global demand. To achieve this sustainable growth strategy, we have implemented a responsible and innovative energy program to reduce our carbon footprint and diversify our energy mix.

The Energy program is based on the following strategic pillars:

ENERGY EFFICIENCY
Reducing our consumption

CLEAN ENERGY
Increasing renewable energies & cogeneration

100% CLEAN ENERGY by 2030

This will significantly reduce our carbon footprint and it will make the cost of the electricity cheaper for more industrial competitiveness. This ambition is powered by the tremendous renewable energy capacities of the country and the very high potential on solar and wind energy.

87%
of OCP's needs are covered by clean energy (co-generation and wind energy)

48% of the Moroccan clean energy produced by OCP



GRI 3-3, GRI 302-1
SASB : RT-CH-130a.1 | EM-MM-130a.1
UNGC : Principles 7, 8, 9

ENERGY CRISIS MANAGEMENT

The war in Ukraine has led to an unprecedented energy crisis, for which OCP has studied all the potential risks, including the risks of supply, rising market and food prices. Nevertheless, the energy crisis caused by this war may play in favor of accelerating the OCP Group's energy transition and reducing its dependence on fossil fuels. In a context of market volatility, OCP has adopted an ambitious energy program for its industrial development that capitalizes on renewable and sustainable energies in order to reduce its carbon footprint, guarantee price stability and competitiveness, as well as maintain global nutrition.

		2018	2019	2020	2021
Total Energy consumption within the organization from non-renewable sources	Industrial fuel 2	**9 963,68**	**10584,24**	**9631,32**	**10213,32**
	Diesel	**2 575,29**	**2726,35**	**2360,75**	**2038,66**
	Natural gas	**1 215,25**	**1200,53**	**1197,30**	**1120,04**
	Purchased electricity from National Grid	**4 518,93**	**2615,70**	**2626,27**	**2898,68**
	Total (TJ)	**18273,15**	**17126,82**	**15815,63**	**16270,70**
Total energy consumption within the organization from clean sources	Wind From PPA	**846,04**	**2022,30**	**1705,78**	**1598,47**
	Self-generated clean electricity	**7 471,80**	**9 556,75**	**10 144,30**	**10895,07**
	Total (TJ)	**8 317,84**	**11 579,05**	**11 850,08**	**12493,54**
Total energy consumption	**Total (TJ)**	**26590,99**	**28705,86**	**27665,71**	**28764,24**

Total energy production	Electricity auto consumed	**7 471,80**	**9 556,75**	**10 144,30**	**10 895,07**
	Electricity sold	**182,95**	**624,05**	**1011,54**	**840,84**
	Total (TJ)	**7654,75**	**10180,80**	**11155,85**	**11735,91**



52,7% **47,3%**

Consumption from Processing

Consumption from Extraction



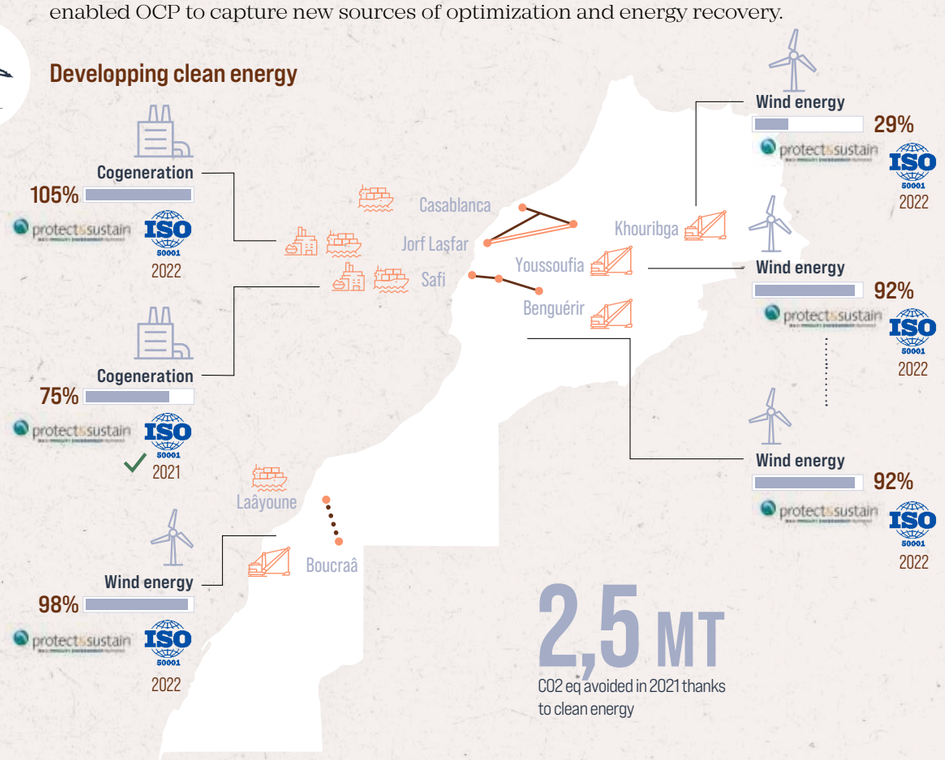
Increasing our energy efficiency

Real-time energy management and smart energy automation ensure the continuous improvement of our energy consumption. Energy efficiency is also considered at the early stages of each industrial project aligned with the eco-design spirit we have in everything we do.

The strengthening of the Energy Management System in the industrial sites of the OCP Group, has brought a net improvement of the energy performance and its operational control during the year 2021.

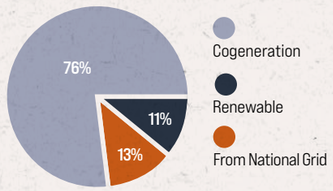
Conducting energy performance audits on the steam, seawater and drying circuits has enabled OCP to capture new sources of optimization and energy recovery.

Developping clean energy

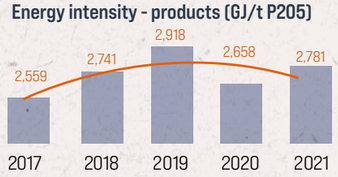


2,5 MT
CO2 eq avoided in 2021 thanks to clean energy

Electricity mix 2021:

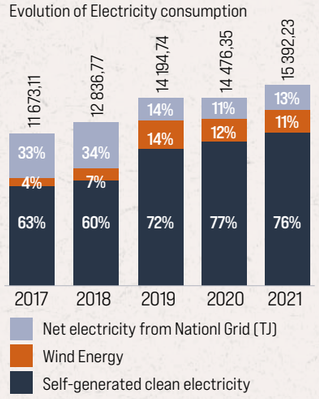


Energy intensity - products (GJ/t P205)

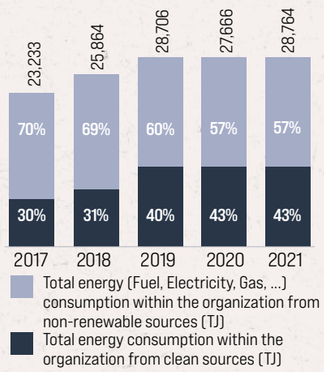


87% of electricity consumption from clean sources

Evolution of Electricity consumption



43% of energy consumption from clean sources



Carbon footprint decrease

Business opportunities

$2,3 BILLION
investment in OCP's energy program (solar, clean drying, green ammonia, green mining) to be achieved by 2028

Development of cogeneration capacity

Recovering waste heat released during the sulfuric acid production within our processing sites to produce electrical energy.

463 M$
to be invested over the next 10 years to develop its cogeneration capacities

Wind energy

Power Purchase Agreements (PPAs) are still being implemented in 2021 to supply wind power to our sites.

444 GWH
Supplied in 2021 by PPA

Solar energy

- **Solar mapping of the OCP group sites:** high resolution solar mapping development for OCP sites - mainly Safi, Jorf lasfar and Phosboucraa. Calibrated by measurement data on the ground at site level, the study will make it possible to rationally and quantitatively determine the potential of the sites' solar deposits (annual yield), suitable locations for the installation of solar power plants, or to thoroughly assess their profitability. This data-driven project will boost the promotion of OCP Group's solar roadmap.
- **Solar smart and development of prediction Model:** Solar monitoring to develop a proactive and predictive advanced anomaly detection system based on artificial intelligence to implement it within the future Benguerir solar power plant. This solution will increase the efficiency and availability of the solar power plant as well as the reduction of operation and maintenance cost, therefore minimizing the cost per kWh of solar energy produced. From an environmental point of view, increasing the availability of the power plant through the rapid detection of breakdowns makes it possible to minimize access to conventional energy sources as much as possible and therefore reduce our carbon footprint.
- **Solar desalination:** study and installation of two solar desalination systems for brackish water in Phosboucraa. The objective is to validate the potential of solar desalination as an alternative solution with low cost and environmental impact, to cope with water stress in landlocked regions with brackish underground resources. The outcome of this work can possibly be exploited at different scales for industrial, agricultural or domestic applications.

1 M$
investment in 2021 for those energy studies

2021 HIGHLIGHT

Solar plants program:

As part of its energy & sustainability strategy aiming at reaching 100% of clean energy by 2030, OCP Group wishes to launch an ambitious program of development and construction of solar power plants at its mining sites. This solar program, based mainly on photovoltaic technology, will support the industrial growth of OCP Group in order to decarbonize its value chain and achieve autonomy of the mining sites in electrical energy. In 2021, the feasibility and design studies were successfully completed.

THE GREEN ENERGY PARK (GEP) is one of the pillars of innovation and R&D of the OCP Group for the development of new green energy solutions.

Clean drying

The OCP Group consumes large quantities of industrial fuel for drying phosphates and fertilizers. This fuel is among the most polluting hydrocarbon energies and the most carbon dioxide emitting. The CO2 emissions resulting from the drying of phosphates using industrial fuel and natural gas represent about 14% of the OCP Group's carbon balance, which represents a major challenge in achieving the objectives of carbon neutrality by 2040 and in the Green Vision that the OCP Group aims to reach.

To this end, OCP Group is working on several initiatives to find and implement clean alternatives to fossil fuels for the drying process. In 2021 and in this context of "Green mining" transformation, the Sustainability & Green Industrial Development have launched the feasibility studies of Green drying of phosphates and fertilizers. The aim of this initiative is to examine the best green solutions for drying phosphates and fertilizers and their feasibility in our industrial processes.

In addition, the Group is also working on another initiative with its R&D partners such as GEP and UM6P to measure the potential of solar thermal energy and its integration into the existing drying process.

Hydro energy

Recovery from raw water supplies involves carrying out studies and simulations on the potential of hydraulic energy to be recovered from the deposits present in the OCP sites. The project will focus on the raw water supply lines of the dam supplying the two mining sites Gantour and Khouribga, in order to exploit the potential energy deposit as well as the various simulations on the potential technologies to be deployed in the field of hydraulics and hydromechanics. The installations targeted are the Central Morocco adduction in Khouribga and the Al Massira adduction in Gantour – both featuring hydraulic energy potential to be studied and simulated to seize the opportunity to exploit their energy deposit.

Green ammonia

The decarbonation of the OCP Group's value chain also involves the substitution of imported ammonia (produced from fossil fuels) by green ammonia (produced from renewable energies). In partnership with UM6P, OCP Group has undertaken the construction of two pilot units for a total CAPEX of around 61,11 million dollars.

The first unit, "Platform Green H2A" located in Jorf Lasfar, aims at research and development on topics related to green hydrogen (green ammonia, methanol, energy storage, production optimization, etc.). The second pilot unit concerns the exclusive production of green ammonia with the objective of scaling up to large capacities that can supply the OCP Group's fertilizer facilities.

The construction of the pilots will take about 3 years with commissioning scheduled for 2025, followed by periods of testing and implementation of different green hydrogen production conditions.

Estimated Scale-up CAPEX:

$5 billion
per million tons of ammonia

2-3 million tons
of CO_2 per million tons of ammonia will be avoided

Green mining

The Green mining project, part of the Group's Sustainability strategy, is mainly aimed at decarbonizing the extraction and transportation of phosphates. It involves the following main initiatives:

A. The IPCC "In-Pit Crushing and Conveying" integrated system used inside the extraction mines will replace the stripping of primary overburden by loading and transport. This revolutionary semi-mobile system will lower the operating cost of mining and its carbon footprint.

B. Hydraulic transport of phosphates within mining sites
In addition to reducing carbon dioxide emissions, hydraulic transport will make it possible to lower the cost of transporting phosphates by replacing diesel trucks and reducing our energy consumption.

C. The transformation of the engines that cannot be replaced by IPCC and Hydraulic transport into green mobility such as electric or hydrogen fueled engines.

This study will determine the appropriate mix of solutions for each mine in order to decarbonize OCP's mining mobility. It will also define the expected final impact on the reduction of greenhouse gas emissions.
Also, OCP is launching studies and a pilot to replace the personnel transport buses with green mobility.

$700K
(equivalent 7 MMAD) investment in 2021

Tackling the renewable energy storage challenge

Intermittency is increasingly becoming a key subject to address rising renewable energy input in order to allow stability and continuity of the electrical energy supply. In this context, the study will focus on the characterization of electrochemical storage solutions with the different solutions that exist on the market and their compatibility with the different scenarios for the case of the OCP Group sites as well as the development of a basis for sizing battery storage.

Stemphos project: We have further worked in 2021 with Prayon - a world leader in the phosphate sector which manufactures an extensive range of phosphate and fluorine products that are used in food applications, industrial applications, fertilizers and other applications such as pharmaceuticals to develop phosphate-based materials with UM6P to improve and scale up thermal energy storage solution. A pilot for thermal storage will soon be launched with Prayon in order to test the developed products in a bigger scale.

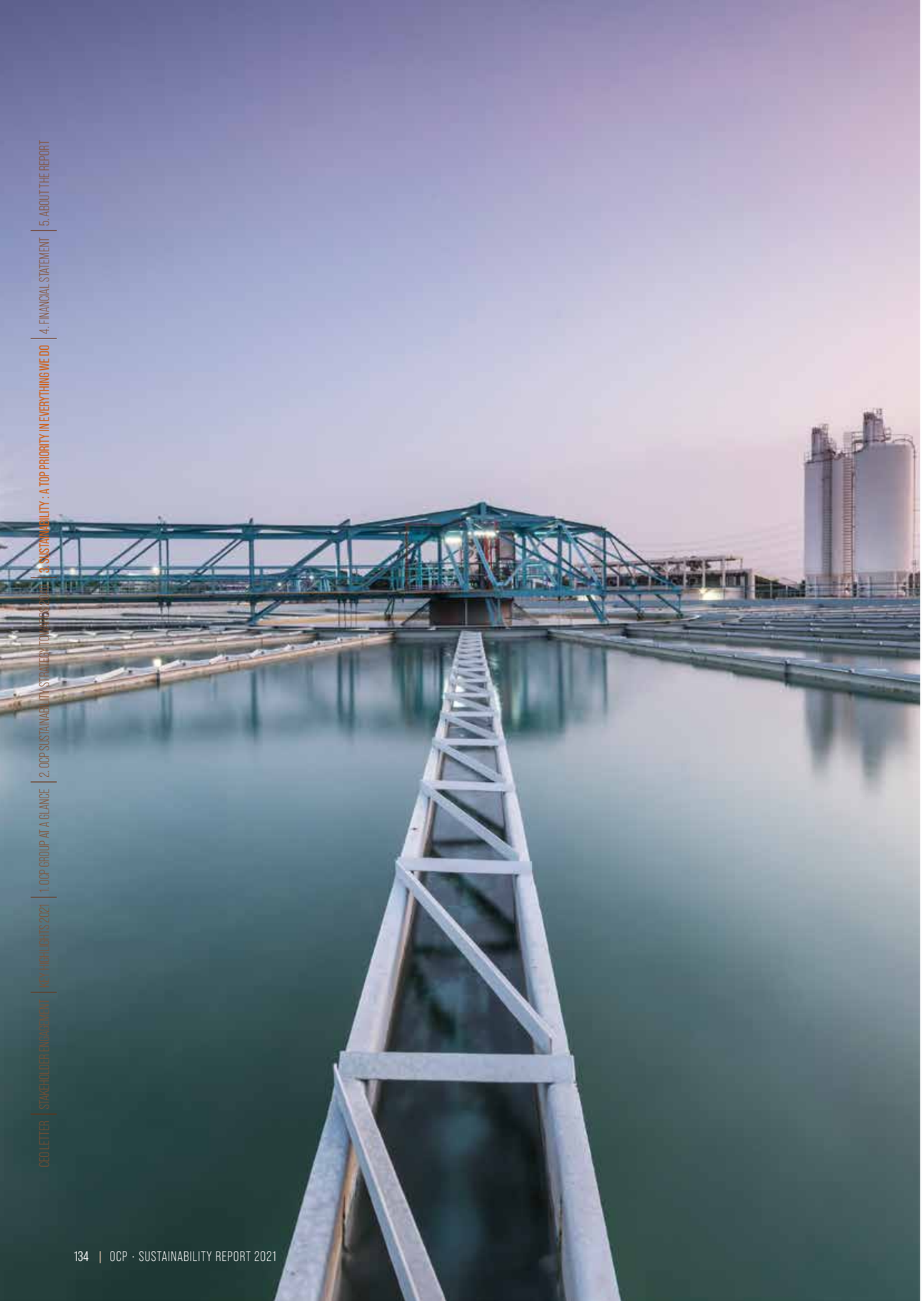
Micro-Grids Study

Study on micro-grids for application in isolated agglomerations. Indeed, more than 600 million people in Africa do not have access to electricity and the situation is more critical in rural areas where electrification and connection to networks present several constraints. The objective is to study micro-grids as a solution to strengthen electrification in isolated areas by relying on hybrid solutions (photovoltaic and diesel group for example) and on the storage of electricity in batteries.

$200K
Will be invested

OUR GOALS

Long term	Interim	Where we stand in 2021
10% energy efficiency by 2030 compared to a 2019 baseline (in terms of energy intensity per tons of products)	100% of our processing sites certified ISO 50001	Safi certified in 2021, processes for qualification of 100% of processing sites have been made in 2021, certifications extend until Q1 2023
	Real time monitoring by 2022 of our energy consumption through dedicated digital control room	Ongoing
100% OCP's energy needs covered with clean energy by 2030	90 % of electricity need will be covered by clean energy by 2025	87% of electricity need covered
	Launch first pilot installation for solar drying avoiding Carbon emissions - PoC	In 2021, no investment performed. In 2022, we will invest 0,25M$ for the feasibility study related to the pilot for solar drying.
	Boost the energy research ecosystem with GEP – Green energy park	4 projects launched & $1M investment
	100% of the OCP fleet in green (mining equipment & personal transport) by 2030	$ 700 k investment
	Pilot unit for green ammonia pro-duction using renewable energy by 2022	$1M investment to boost energy research ecosystem with GEP (Green Energy Park)



WATER MANAGEMENT

Links to our Policies related to water management, approved by Board of Directors/ Chairman and Chief Executive Officer :

- General environmental Policy
- Water management Policy

Water is essential for human health, fertilizing production process and agriculture ; both in terms of quantity and quality. Climate change involves global water risks, intensifying drought, shifting precipitation patterns and water shortage supply for local communities. OCP Group is aware of the urgent nature of the water crisis, especially in Morocco, an area of intense water stress. That's why the Group has decided to accelerate its Water program to remediate those risks.

We are working to reduce our water intensity while tapping into unconventional sources of water to improve water preservation for a sustainable future for all.

Water risk assessment

Considering Morocco's water stress and increasing demand for fertilizers, OCP has developed a Water program based on the circular economy principles to sustainably ramp up production with one objective: food security. This program hinges on a thorough water scarcity risk assessment that is regularly reviewed and reinforced. This assessment is structured around the main following steps:

- Identify water supply risks using the Aqueduct Water Risk Atlas, which maps and analyzes current and future water risks across locations ;
- Assess the impact of risks and control measures ;
- Define a mitigation plan for the most critical risks.

We are refining our analysis by geographical zone - north, central and south axis of the country – and integrate the national water policy to create sustainable ecosystem.

Water risk management : OCP's water sustainability program

Our water program is changing where we get our water from, and how much we use. We are using innovative techniques and unconventional water sources to reduce our need for fresh water to zero by 2026. The program is designed to optimize our water use, transform our processes, and invest in the R&D that will find even better ways to reduce our water use. We have accelerated our Water program in 2021 with exceptional measures deployed for the year 2022 to address the water stress that Morocco is experiencing this year and to support local communities in this crisis.

Leveraging our continuous risk assessment process, we are working on a two-pronged water mitigation program :

NON-CONVENTIONAL WATER
Using treated wastewater and desalinated seawater

WATER EFFICIENCY
Reducing our consumption

Commitment

100% Sustainable (non conventional) water by 2026

Performance 2021

30% OCP's water needs covered by non-conventional water in 2021

GRI 303-1
SASB : RT-CH-140a.3
UNGC : Principles 7, 8, 9

NON-CONVENTIONAL WATER

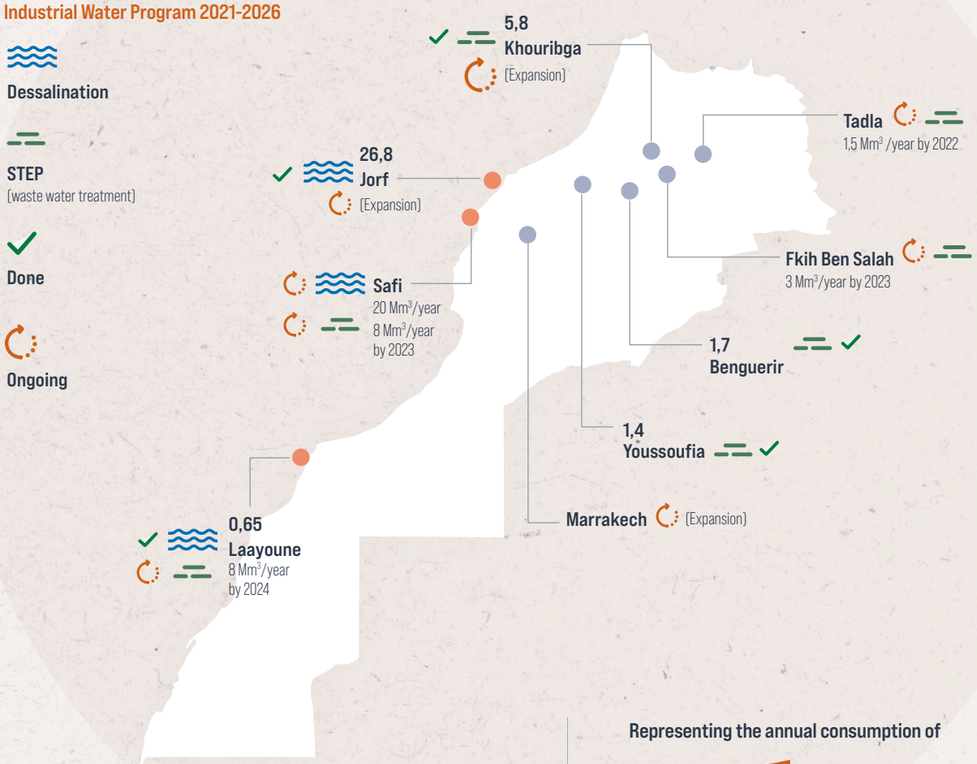
Building resilience for climate change for our industry

During 2021, OCP has launched a major transformation stream to leverage on water consumption reduction on all sites and accelerated the execution of its Water program to reach the objective of 100% from non-conventional resources, to mitigate the risk of water shortage in the region and to let the conventional resources for local communities.

Our Industrial Water Program is based on 3 pillars :
INVESTMENTS : $611 million by 2027
INNOVATION : International Water Research Institute (IWRI), UM6P

TECHNOLOGIES : We leverage on national and international expertise for the best-in-class water-related technologies.

Industrial Water Program 2021-2026

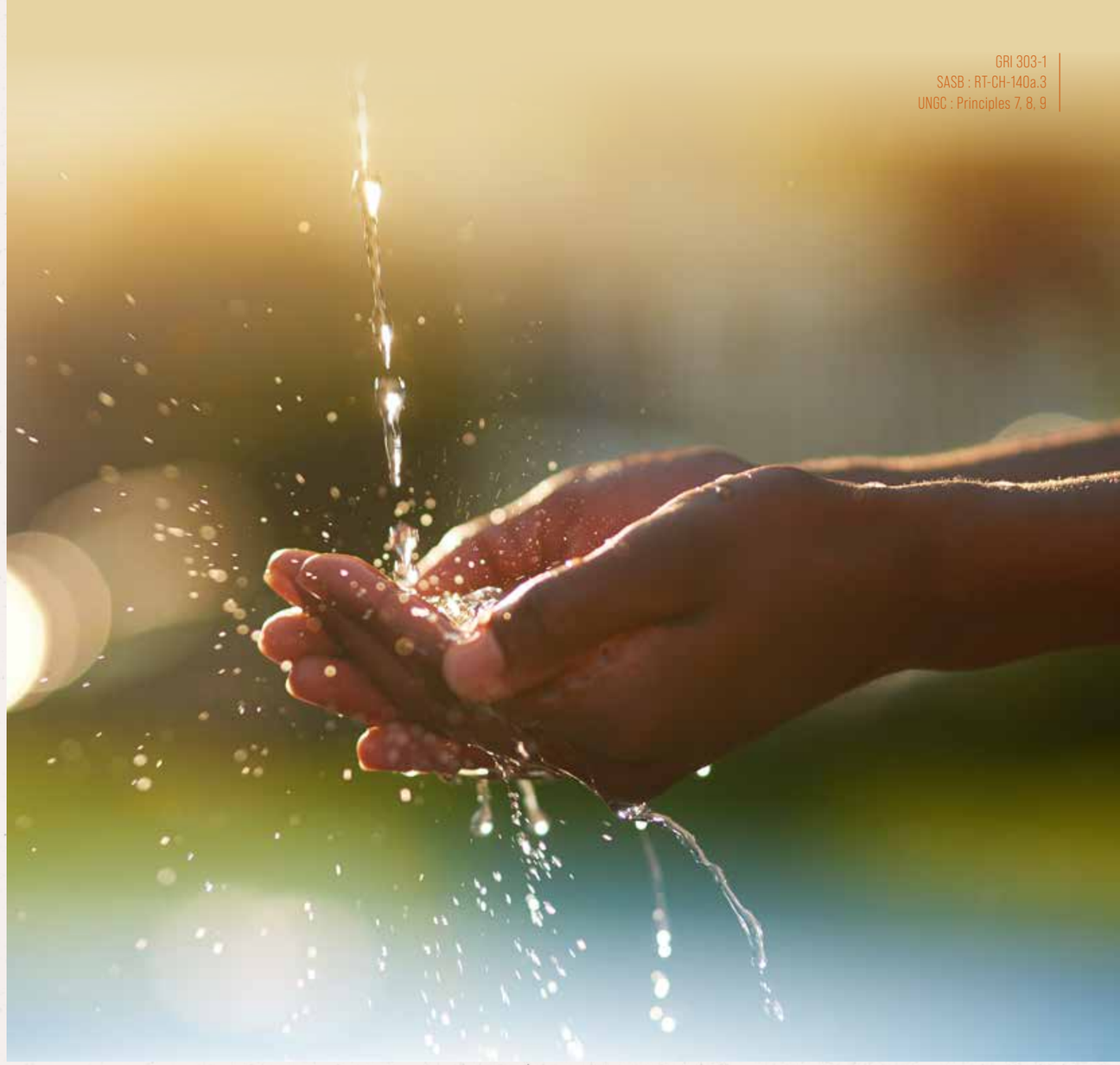


36,35 million m³ of produced non-conventional water in 2021

Representing the annual consumption of

≈1 million Morrocan inhabitants

GRI 303-1
SASB : RT-CH-140a.3
UNGC : Principles 7, 8, 9



Building resilience for climate change for local communities

In order to respond to the climate urgency and water stress that faces Morrocco currently, the Group will put in place spare water capacities to provide water to local communities and ensure good health and prosperity.

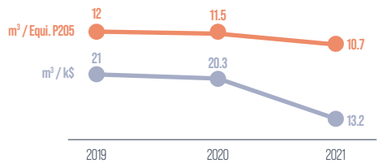
The Group will no longer use natural freshwater resources in its fertilizer production sites, pursuing a target of 100% non-conventional water by 2026, so the freed-up water allocations can be redirected to strengthen local water use in the Oum Er-Rbia basin.

We will put in place spare unconventional water capacities as to supply surrounding regions of El Jadida and Safi.

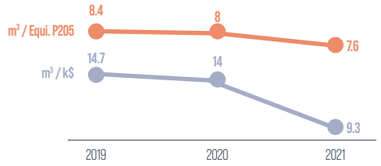
WATER EFFICIENCY

OCP Group has continued innovation and R&D projects and improved its management system to reduce the consumption volume. By 2021 the OCP Group reached 10.3% reduction of specific water consumption, compared to 2019 and intent to continue the effort to reach 15% by 2024.

Water intensity (Total freshwater)



Conventional water intensity (surface and ground freshwater)



			2019	2020	2021
Water withdrawal	Water withdrawal from all areas	Total megaliters (ml)	1 573 090	1 608 826	1 731 262
	Surface water	Freshwater	80 807	82 827	87 340
		Other water	-	-	-
		Total (ml)	80 807	82 827	87 340
	Groundwater	Freshwater	2 023	301	151
		Other water	-	-	-
		Total (ml)	2 023	301	151
	Seawater	Freshwater	27 550	28 266	27 406
		Other water	1 454 880	1 488 356	1 607 423
		Total (ml)	1 482 430	1 516 622	1 634 829
	Third-party water	Freshwater	-	-	-
		Other water	7 830	9 076	8942
		Total (ml)	7 830	9 076	8942
	Water withdrawal from areas with water stress	Total megaliters (ml)	71 153	69 843	70376
	Surface water	Freshwater	61 300	60 467	61282
		Other water	-	-	-
		Total (ml)	61 300	60 467	61282
	Groundwater	Freshwater	2023	301	151
		Other water	-	-	-
		Total (ml)	2023	301	151
	Third-party water	Freshwater	-	-	-
		Other water	7 830	9 076	8942
		Total (ml)	7 830	9 076	8942

We use the WRI (World Resources Institute) Aqueduct risk atlas tool to define areas of high or extremely high baseline water stress. Freshwater: ≤1,000 mg/L Total Dissolved Solids

Mining

33,3%

Consumption mainly through our phosphate washing plants – 18% covered by treated wastewater:
Khouribga : 28.5%
Gantour : 3.7%
Phosboucraa : 0.5%

Transport

0%

Consumption - slurry pipeline allows to save 1,5 Mm³ compared to conventional railway transportation - and will be completed in Safi by 2030

Processing

67,3%

Consumption mainly through our industrial processing plants (Phosphoric Acid Plants, Sulfuric Acid Plants, and fertilizers). 37% are covered by desalinated water.
Jorf Lasfar : 48.6%
Safi : 18.7%

INNOVATION FOR WATER

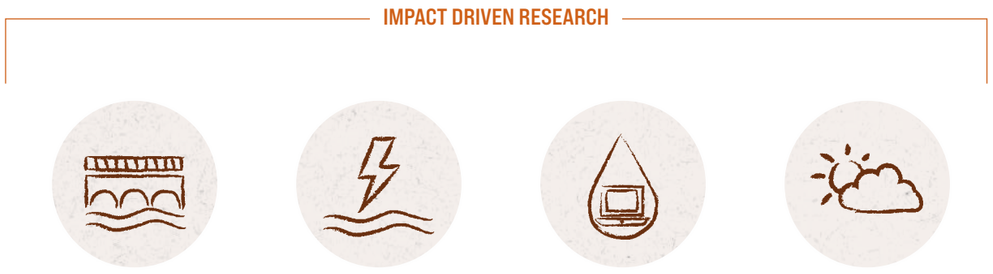
WATER-SECURE THE WORLD

OCP Groups partners with the International Water Research Institute (IWRI) to overcome the water challenge.

International Water Research Institute (IWRI) aims to :

- ✓ Create forward-thinking pathways to address water issues in systemic manner in Africa: Water Science and Technology Research, Innovation, Infrastructure, Education and Capacity building in and for Africa
- ✓ Development of low-cost innovative water and energy technologies & solutions to address water stress, to better manage water use (agriculture, industrial…), and to foster water saving solutions through cutting edge technologies
- ✓ Climate change & adaptation emphasis : Drought, flooding, increased water needs for agriculture, sustainable food systems
- ✓ Dissemination of water culture, citizen's awareness, capitalization of water management know how
- ✓ Acting as an African Water Hub through strategic cooperation and partnerships

IMPACT DRIVEN RESEARCH



Education

Master Water Science & Technology
Executive master of Integrated Water Management
Master Soil and Water
MOOCS and E-Learning
Advance Workshops for African

Innovation

Adaptation Metrics & Techniques Cluster
Water & Climate Observatory & IoT
Cluster and Best Practices
Startups Development

OUR PARTICIPATION IN MULTI-STAKEHOLDERS & INDUSTRY INITIATIVES

Solutions for water stress need collective mobilization and synergies; that is why we are part of national and international dialogues.

Key highlights 2021

- OCP Group has participated in the ministerial water committee responsible for defining the National Water Plan on which is based the national water policy for the next 30 years from 2020 to 2050. As a major industrial actor, we participate in this committee to share and adapt our water program to fit the needs of our country.
- OCP was part of the national committee in charge of the participation in the 9th Word Water Forum held by March 2022.
- OCP has participated to the 4th Mediterranean Water forum held in December 2021 in Malta, and shared the experience of the group on water management, and Municipal wastewater reuse in the phosphate industry.
- As part of COALMA, OCP's team has organized a webinar regarding " The place of non-conventional waters in OCP's sustainable development strategy", held in June 2021, allowing OCP to share the experience on water desalination and wastewater reuse that has been a successful strategy that pushes the company to rise its objectives to reach 100% non-conventional water in 2026.

IMPROVING ACCESS TO WATER FOR LOCAL COMMUNITIES

We are continuously working to provide local communities with access to drinking water:

1. Identification of village groups and local associations to encourage local ownership
2. Identification of the digging point in partnership with local authorities and douars' residents
3. Commitment of the association on the management and maintenance of wells
4. Local excavation and business equipment
5. Training of local associations and young people to manage and maintain wells

Key highlights 2021

The Jorf Lasfar site supplies drinking water to the population of **5** neighbouring douars which includes **800** households

100 Households in 2 neighbouring douars supported to connect them to the ONEP (drinking water network)

Work in progress for the installation of **12 km** of drinking water supply pipe and the construction of a 500 m³ reservoir for **+8,000** inhabitants in Fquih Ben Salah

Daily supply of drinking water to neighboring villages in Khouribga by 3 tanker trucks with a capacity of 20 m³ each for more than **15,200** inhabitants

Renewal, construction and supply of **23** water fountains for more than **5,000** inhabitants in Khouribga

Installation of **26 km** of drinking water supply pipe for **+2,200** inhabitants in Fquih Ben Salah

OUR GOALS

Our goals	Where we stand in 2021
Implement 2 Wastewater treatment plants at Safi & Fkih Ben Salah towns by 2022 (additional capacity of 10 Million m3/year recovered from urban wastewater)	The two projects have been launched into construction. Two other additional wastewater treatment plants are also under construction to maximize reuse of treated municipal wastewater.
Recover 90% of Water used in Phosphate Washing Plants	Equipment provider selected, start of implementation of the project at the MEA (Mrah El Ahrach) washing plant, other plants are planed for 2022.
90% reduction of water used for watering mine runways leveraging on cutting edge runways treatment technology and saving 2 Million m3	**Ongoing**
• 15% water specific consumption* reduction on mining by 2024 compared to 2019 level • 5% water specific consumption reduction on processing by 2024 compared to 2019 level	We are on track regarding the reduction of water consumption objective. Overall water specific consumption has been reduced by 10.3% compared to 2019
100% water needs covered by non-conventional sources by 2030	30% water need covered by unconventional water, several desalination and waste water treatment plant projects are under construction to reach the target of 100% non-conventional water by 2026



EFFLUENTS MANAGEMENT

Links to our Policies related to Effluents management, approved by Board of Directors/ Chairman and Chief Executive Officer

- General environmental Policy
- Liquid effluents Policy

The most significant effluents we are responsible for are located on the maritime coast (Safi, Jorf Lasfar and Laâyoune) and discharged into the Atlantic Ocean. The other sites (Khouribga & Gantour), representing about 98% of the OCP's total production of phosphate, do not have industrial liquid effluents. OCP's industrial liquid effluents mainly consist of:

- Cooling seawater
- Sea water for phosphogypsum discharge
- Water from the phosphate laundromat (only in Laâyoune)

OCP Group, as a major producer in the fertilizer sector, generates significant quantities of effluents, particularly phosphogypsum (PG). PG is a safe, reusable resource for which there are many beneficial uses, such as a multi-nutrient sulfur-rich fertilizer, sulfur-rich fertilizer, saline soil amendment, substitute material for raw construction materials used in building construction, source of sulfur for the production of SO2, etc.

Find out more about phosphogypsum valorization

Our approach to liquid effluents management

OCP is aware of the importance of the oceans on a global level and that it is a major issue for sustainable development. In order to be aligned to international standards and regulatory requirements, OCP Group's strategy is focused on finding new modes of recovery and alternative storage options; as well as a focus on submarine outfalls. OCP is committed to carrying out actions aimed in the medium term at reducing and controlling the impact of its liquid effluents on the marine environment.
Below is a non-exhaustive list of the actions deployed in its liquid effluent management program:

- Effluent quality monitoring by internal and external resources. All internal liquid effluent measurement laboratories are accredited according to the international standard ISO 17025.
- Third-party monitoring, carried out annually to ensure the quality of receiving environments such as seawater and groundwater.
- Periodic performance of studies to assess the impacts of liquid effluents on the marine environment;
- Prevention of accidental spills thanks to retention ponds for all stocks of chemical products, allowing the collection and recycling of these products.
- Permanent watch and benchmark on the legislative and regulatory level;
- The development and launch of the implementation of its vision relating to the storage and recovery of phosphogypsum on all its chemical transformation sites;
- Environmental assessment studies focused on the impact on fauna and flora, periodically renewed by specialized and leading international organizations.

100%

compliant to national and international (World Bank) stringent requirements by 2028

BEST-IN-CLASS

liquid effluents management by exploiting all available technological advances to reduce discharges and environmental footprint

KEY PERFORMANCES 2021

80%

of the wastewater from phosphate enrichment is recycled

30 MILLION m³

of recycled water used either internally or sent to a third-party organization representing

Mining

Khouribga:
0% water discharge
Supplied by wastewater treatment plants

Gantour:
0% water discharge
Supplied by wastewater treatment plants

Phosboucraa:
100% water discharge to seawater
Supplied by desalinated water

Processing

Jorf Lasfar:
100% water discharge to seawater
Supplied by desalinated water

Safi:
100% water discharge to seawater

In order to achieve our commitments, 2021 has been punctuated by a series of strong diagnoses :

- Monthly monitoring of effluents by internal means.
- Completion of a study on the compliance of marine fauna and flora on the coasts of Safi, Oualidia and Jorf Lasfar.
- Realization by third party of a large campaign of sampling and analysis of liquid discharges from sites located on the marine coast (Safi, Jorf Lasfar and Laâyoune).
- Realization of a benchmark on international regulations relating to liquid discharges and quality of the marine environment.
- Health risk assessment study related to Fluorine by examining all the relevant scenarios of the conceptual models, including those related to liquid effluents.
- Launch preparations for the realization of mathematical modeling of the dispersion of liquid effluents in the marine environment.

ZERO

effluents coming from any form of freshwater at all mining sites

OUR GOALS

Our goals	Where we stand in 2021
Conduct development plans as to ensure 100% compliance in dispersion of liquid effluents as outlined by national and international regulations (IFC-WB for discharges and WHO for the quality of natural environments)	Complete characterization of all the effluents at the outlet of all the units is made. Reflection on solutions is launched **On target**
Transition from phosphogypsum (PG) dispersion into the marine environment to storage, in order to develop PG as a coproduct : start of storage (JFC II, JFC IV and Line F) in 2025	**On target**
Enhanced monitoring of the impact on the marine environment by setting up online measurement means, continuous dispersion supervision models, forecasting systems according to sea conditions and periodic studies of environmental assessment, based on a field diagnosis.	Find our achievements on page 87. **Achieved**
Reach zero effluents coming from any form of freshwater by 2028 on all OCP S.A Group sites.	Target reached at mining sites
100% compliance of its liquid effluents with national and international regulations	ongoing studies on chemical sites **On target**
Gradual abandonment of the discharge of phosphogypsum (PG) into the marine environment, towards dumping (storage), with a view to recovering this co-product	**On target**

ENVIRONMENTAL MANAGEMENT SYSTEM

All existing and under development OCP Group sites are subject to environmental impact assessments carried out by the Moroccan authorities. Sites respect the regulations governing extraction authorizations. In addition, OCP has initiated a process to certify its operational sites according to best-in-class international standards.

Links to our Policies related to environmental management system, approved by Board of Directors/ Chairman and Chief Executive Officer :

- General environmental management Policy
- Quality Management Policy

ENVIRONMENTAL CERTIFICATIONS

	JORF LASFAR	SAFI	KHOURIBGA	GANTOUR	BOUCRAA
IFA's product stewardship initiative covers the main quality, environment, health, and occupational safety aspects of ISO 14001, 50001, 9001 and 45001 certifications protect&sustain	●	●	●	●	●
ISO 14001	●	●	●	Certification forecast Q3/2022	Certification forecast Q1/2023

Best-in-class certifications rewarding the quality of our activities and products are regularly renewed and expanded to relevant processing and industrial sites, including but not limited to ISO 45001:2018 / OHSAS 18001:2007 on Occupational Health & Safety, ISO 14064-1 :2018 – Corporate Carbon Footprint, ISO 9001:2015 – Quality management, ISO 17025:2005 – Laboratory requirements, ISO 22000:2005 – Food safety, GMP+ - Good Manufacturing Practices, Food hygiene – HACCP

We rely on a sharp environmental policy and management system, clear definition of roles and responsibilities, measurable goals and deadlines, performance reporting, audits, and corrective and preventive actions. Environmental issues are factored into the global performance management system at various levels of governance. Bimonthly senior management HSE committees meet in order to review environmental performance. At each site, HSE committees hold monthly meetings with industrial operation site managers. Environmental correspondents (assigned per area) ensure an optimized top-down and bottom-up risks and opportunities process. HSE performance reviews are regularly held at all sites and levels, including with the HSE Management Committee led by the Executive Vice President of Industrial Operations. A complaint management mechanism also bolsters our environmental governance. An automated compliance monitoring and evaluation system is also available through dedicated computer platforms.

0 monetary & nonmonetary fine – similar to 2018, 2019 and 2020

OUR GOALS

Our goals	Where we stand in 2021
100% of processing sites certified ISO 50001 by 2021	Processes for qualification of 100% of processing sites have been made in 2021, certifications extend until Q1 2023
100% of industrial sites certified ISO 14001 by 2021	Ongoing

Standards have been developed together with the Dupont OCP Operations Consulting joint venture and adopted internally while being a continuous source of improvement:

CATEGORY	NAME	DESCRIPTION & GOAL
OPERATIONAL	Environmental Measurement and Reporting	Standardizing environmental performance testing and using it for OCP's industrial performance, while considering environmental regulations and international best practices in positioning the company.
OPERATIONAL	Waste Management Standard	Determining OCP's prevention and waste management requirements based mainly on applicable regulations and best practices. This standard ensured that reduction principles are applied at the source and that OCP waste is managed in an environmentally friendly and safe manner throughout the entire waste disposal life cycle (pre-collection, collection, storage, sorting, transport, disposal, beneficiation, and elimination).
OPERATIONAL	Secondary Product Management	Developing and implementing management principles for the safe and eco-friendly use of secondary products (SP) while protecting employees from risk exposure and preventing uncontrolled leakage or loss of these products.
MANAGEMENT & GOVERNANCE	Visible Commitment, Exemplarity & HSE Performance Control	This standard defines the HSE (Health, Safety and Environment) actions that managers are to follow at OCP sites and entities in order to demonstrate visible and exemplary commitment, control performance and promote HSE culture.
MANAGEMENT & GOVERNANCE	Incident Accident Safety Environment Management	Tool for achieving and maintaining the Zero Incident and Accident goal that makes it possible to identify, record, communicate, and analyze incidents and ensure that the associated preventive and corrective actions are taken. The standard includes incidents as well as dangerous product emanations and accidents involving people or property.
OPERATIONAL	Workstation Risk Analysis	As part of the Zero Accident goal, the ADRPT standard defines the method for controlling workstation risks by identifying, evaluating, and mitigating them. It provides input data for establishing and/or updating work directives and operating methods.
OPERATIONAL	HSE Management of External Companies	Controls HSE risks and prevents accidents and incidents when external companies intervene at OCP sites.
OPERATIONAL	Safety and Environment Visits and Observation	• Observe employees at their workstations, working conditions and practices, and safe or unsafe behaviors; • Start interactive and positive dialogue about safety and the environment based on the observations; • Take immediate action to stop any dangerous situations or actions; • Ensure that employees are committed to working in a safe and environmentally friendly manner; • Provide immediate feedback on the observations and recommendations to the person directly responsible for the visited sector in order to define additional action.
MANAGEMENT & GOVERNANCE	Health, Safety, & Environment Audit Standard	Standard aimed at measuring and attaining objectives and steering HSE performance through structured and systematic audits.

Recurring training campaigns guarantee that target populations learn HSE/environmental standards.

3.3.2.3 TRANSFORMING & RECYCLING

SOIL MANAGEMENT

Striving for a circular economy, eco-design and local development is at the heart of our approach, based on two pillars deployed in several commitments :

Links to our Policies related to Biodiversity, approved by Board of Directors/ Chairman and Chief Executive Officer :

- General environmental Policy
- Biodiversity Policy
- Land use Policy

1. SUSTAINABLE AGRICULTURE

Soils rehabilitation
- Biosaline agriculture in El Jadida and Khouribga
- Agroforestry
- Composting from the waste of the sites

Climate-smart agriculture
- Smart Irrigation / green energy
- Carbon farming
- Innovations in the valorization of existing crops

Biodiversity preservation
- Marine Protected Area in Safi
- Forgotten crops
- Sustainable livestock farming

2. MINE REHABILITATION

Agricultural projects

To make mining land available to partner farmers (agricultural cooperatives) and to support them along the entire value chain in order to obtain finished, valued, certified products that can be easily inserted into the market, using the best agro-ecological practices, in Gantour and Khouribga.

Non agricultural projects
- Develop energy projects (solar farms, agri-voltaic...)
- Develop projects around sustainable tourism (eco-tourism)
- Other types of projects

1. SUSTAINABLE AGRICULTURE

Soil management

	2018	2019	2020	2021
Hectares of rehabilitated land	707	864	305	204

*Rehabilitation includes reclamation and planting.

Improving agricultural productivity and resilience to salinity in the Sidi Abed-Oulad Ghanem area through the introduction of new production systems and best cropping practices

Salinity is a major problem that threatens agricultural activity as well as farmers' income in several regions of Morocco. Sidi Abed/Oulad Ghanem is one of the regions affected by salinity. Overexploitation of the aquifer has caused a significant drop in the piezometric level, which has led to marine intrusion and consequently an increase in groundwater salinity. Among the practical solutions to the salinity problem is the use of salinity tolerant crops and varieties and the application of soil amendments.

The project responds to a pressing need of the local community of Sidi Abed/Oulad Ghanem and aims to improve the productivity of salinity-affected land and increase the income of farmers in the Sidi Abed/Oulad Ghanem area.

The specific objectives of this 3-year project are to remedy the salinity problem by introducing new adapted production systems and good soil, water and crop management practices, to enhance the value of phosphogypsum by using them as soil amendment affected by salinity and to strengthen the technical capacity of farmers, women's cooperatives and extension agents.

5 crop species to be tested

14 varieties tested in 2021

50 beneficiaries to be trained

2000 days of employment created

3 training sessions organized in 2021

25% increase of organic matter in the soil

50% Enhancing of productivity

30K-40K DH/ha Targeted turnover

25% increase in yield for farmers

15 Good practices introduced

2 Plateforms installed

30% Water savings

0,5T/ha CO_2 carbon sequestration per year

Valuing cultural heritage

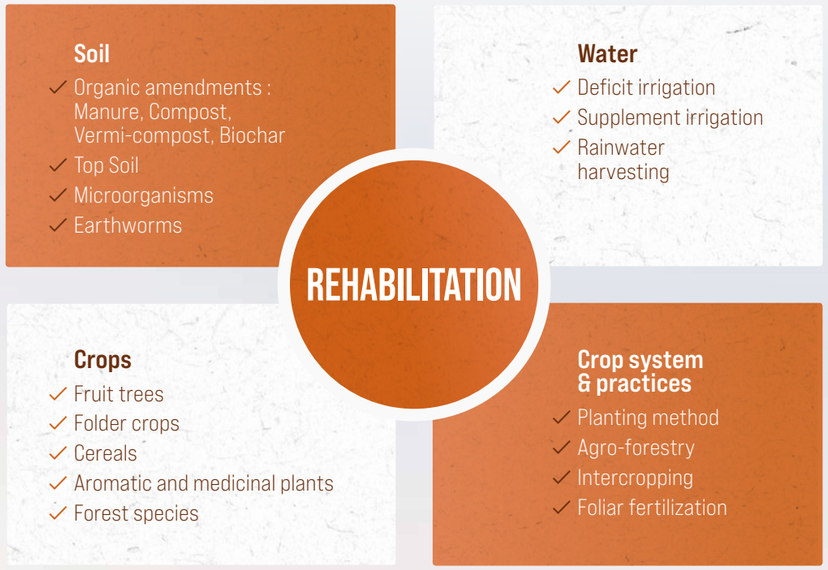
An important component of the mine planning process is respecting cultural heritage and artifacts. All industrial development projects undergo acceptability studies before being authorized – including cultural considerations and respect for protected areas. If, when operating the mine, OCP discovers locations with cultural value for the local population, such as places of worship or sacred sites, project plans are revised, and the sites are preserved. Over the past ten years, our industrial development implied modifications to construction plans in order to preserve cultural property including fossils and other geological objects. In such cases, OCP calls on relevant authorities to initiate the assessment and conservation process.

Rehabilitation of exploited phosphate mining lands in Khouribga using adapted cropping systems and the set-up of a model farm

As part of its approach to develop resilient agriculture adapted to OCP's mining lands, the Sustainability Platform is conducting a pilot action with the Khouribga site to develop agricultural value from the land exploited in the mines being discovered.

In order to better evaluate the types of crops to be developed on these lands, which are drought tolerant, adapted to the disturbed soils and with high added value, while opting for appropriate water and soil management techniques and agricultural inputs, we wish to set up a demonstration farm of 15 ha. This farm will be the first experiment carried out on disturbed land and will help to redress the low survival rate of fruit trees recorded especially on exploited land. It will also constitute a scientific support to test new crops and varieties of fruit trees, fodder, aromatic and medicinal plants tolerant to drought and also agricultural practices that are compatible with the climatic conditions of the area and adapted to the nature of these soils.

The project will also train local agricultural technicians and farmers on sustainable production systems, including irrigation and management of fragile lands, and the improvement of agricultural production.



12 crop species to be tested

24 varieties tested in 2021

5300 days of employment created

2 training sessions organized in 2021

25% of organic matter increase in the soil

30% enhancing of productivity

12K-15K DH/ha targeted turnover

> 90% rate of establishment of trees crops

10 good practices introduced

100% renewable energy used

30% water savings

1,25T/ha CO_2 carbon sequestration per year

Biosaline agriculture: fitting the soil specifics in Sahara

The African Agricultural Research Institute (ASARI) of Mohammed VI Polytechnic University in Laâyoune-Technopole Foum El Oued has launched in 2020 three research projects in partnership with ICBA (International Center for Biosaline Agriculture). These research projects deal with Saharan issues concerning:

- the large-scale adoption of new alternative crops for farms affected by salinity,
- designing a map of endangered native plant species,
- adopting innovative integrated agriculture models based on fish farming and the cultivation of Salicornia and other halophytes.

10 RESEARCH PROJECTS

have been launched in total by the African Sustainable Agriculture Research Institute dedicated to Saharan agriculture in 2020 to tackle specific challenges such as soil salinity and rational use of water in collaboration with world class partners including Fertinagro, FAO (UN Food and Agriculture Organization), ICBA (International Center for Biosaline Agriculture), etc. – hinged on more than 30 researchers specialized in Saharan regions and 15 ha dedicated to the experimental farm located at the Boucraâ mine. The research program was preceded by several consultation workshops with the scientific community and the local community including farmers and institutions.

Climate-smart agriculture

Smart irrigation

A precision irrigation project has been launched in 2020 with AgriEdge - OCP Group's business unit incubated by UM6P – which aims to optimize agricultural practices in rehabilitated mining lands thanks to the introduction of digitalization, bringing the right quantity of water for crops using sensors, irrigation model and a mobile application. The pilot is being carried out at the Benguerir mine on 50 ha (olive, argan and carob trees) while outcomes will be scaled up to all our mining sites in the coming years. In 2021, we implemented the operating infrastructure of the solution composed of 3 transmitter nodes and 6 sensor nodes. First users had the chance to benefit from the Agriedge application on their smartphones. A monthly steering body has been composed in order to make this pilot project a success.



Hydroponics

Following a successful test in 2019, an ecosystem has been structured around hydroponics in 2020. Hydroponics is about growing plants without soil, using nutrient-rich water. The technique allows growers to produce food anywhere, at any time of the year, at higher yields with fewer resources. The objective is to produce 300kg of fodder per day while saving 399 l/kg and 1,1 Dhs/kg. Two hydroponics units have been installed in Youssoufia at two cooperatives and 900 breeders, which allows fodder availability throughout the year. Led by 10 volunteers in Youssoufia, prototyping of hydroponics units is also in progress while others have been trained to hydroponics to support the expansion of the technique in the Province. A specialized SME has been set up in the industrial zone of Youssoufia aiming to create 40 jobs and 7 sub-contracting microbusinesses. An agreement with INRA (National Institute for Agronomic Research) was also signed to look deeper on the nutritional quality of barley, corn, triticale and hydroponic beans.



39 hydroponics units for 2,000 breeders will be created by 2022

Carbon farming

Planting arid, semi-arid and former mining sites areas could provide an important CO_2 sink. The 'Carbon Farming' project in tripartite partnership with the UM6P University, OCP Group and St1, a Finnish energy company has been designed to create a climate change mitigation tool via the rehabilitation of old mining sites as well as the afforestation of marginal lands in dry and semi-dry environments. The project will be implemented in three phases: a pilot project, a demonstration and a large-scale project.

Funded by St1, led by the UM6P with the assistance of the Natural Resources Institute Finland (LUKE) and the Regional Center for Forest Research (CRRF), the 3-year pilot project is still ongoing in 2021, with additional trees planted in our mining lands. The pilot project aims to identify local and exotic fast growing plant species and optimize their growth in arid and semi-arid areas, using different irrigation techniques and soil improvement mixes to reduce water evaporation and increase the soil's water holding capacity and nutrient availability. The pilot project's outcomes will allow to successfully roll out the demonstration project on a larger scale – from 500 to 5000 ha of mining and marginal non-agricultural land rehabilitated – and scale up the approach on all our mining sites. Beyond the environmental value, small farmers exploiting the planted areas will benefit from the socio-economic value created, which could include selling carbon units. Trials and estimations have been continued in 2021 to show preliminary positive results of the viability of irrigated carbon sequestration in dry areas.
7 tree species being experimented using 3 irrigation technics, 2 types of soil amendments and in 2 locations.

Target

10T /HA CO_2



Results after two years

8KG /PLANT CO_2EQ

after two years in drip-irrigated eucalyptus, which constitutes a sequestration level of 3 kg of C02eq in 2020-2021 compared to 5 kg of C02eq in 2019-2020, which is mainly due to increasing water needs of the bigger plants.

3KG /PLANT CO_2EQ

sequestrated carbon by acacia and carob trees showing the potential of local tree species.

Nourishing African soils & transforming agriculture

The Center of excellence in soil and fertilizer research in Africa (CESFRA) created in 2019 within the UM6P launched research programs in 2020-2021. It aims to be a knowledge center, technology and innovation incubator and soil reference archive of the African continent to bolster human welfare, economic growth and environmental sustainability. The continent of Africa covers 30 million km2 and straddles the sub-tropical and tropical belts from the Mediterranean to the Cape of Good Hope. Its enormous size and variations in relief give a wide variety of climates, soils and agricultural systems. The soils of Africa range from stony shallow ones with meagre life-sustaining capabilities to deeply weathered profiles which recycle and support a large biomass. In many parts of Africa, inappropriate land use, poor management and lack of inputs have led to a decline in productivity, soil erosion, salinization and loss of vegetation. African soils are widely at risk, they are commonly undergoing severe degradation since the traditional methods used by farmers cannot cope with the increasing needs of the ever-expanding human and livestock populations. CESFRA is tailored to render research and development services, share scientific knowledge and emerging technologies to assist Africa in tapping into its soil resources potential. The Center aims:

- To provide soil testing services,
- To prepare digital soil fertility maps of Africa for judicious and sustainable fertilizer use,
- To conduct research for customized uses of various forms of mineral fertilizers for boosting crop productivity,
- To improve the soil health of Africa through the use of phosphogypsum and other phosphate derivatives,
- To provide long term and customized training and education in soil science for all \ To participate in local community development activities.

Using the power of joint-ventures to enhance soil

In the framework of our agreement with Fertinagro, several Research & Development subjects have been identified in 2020 in collaboration with UM6P around salinity, soil monitoring, etc. As part of the joint venture created with Hubei Forbon Technology Co., Ltd, a Chinese player specializing in smart agriculture, a study has been launched on the production of FMP (fused magnesium phosphate) fertilizers from low P layers (waste rock, washing sludge, etc.). Rock potential has already been confirmed based on the analysis provided to Forbon while the testing phase is in progress.



BIODIVERSITY MANAGEMENT & PRESERVATION

Protection, conservation and responsible use of biologically diverse ecosystems and habitats is a key factor for OCP Group.

> Managing and preserving the natural heritage, apart from being an ethical commitment, generates public benefits, contributes to social well-being and creates the necessary conditions for performing a sustainable activity at OCP Group.

Hanane Mourchid, Sustainability & Green Industrial Development Director.

Our approach to biodiversity

OCP Group, as an industrial actor, and as a major player of the food value chains is fully engaged in biodiversity preservation. The Group is committed to:

- ✓ Incorporate biodiversity conservation into its strategy, as a relevant consideration in making decisions in the stages of planning, implementing, operating and dismantling of its facilities.
- ✓ Preserve world heritage sites and areas designated to conserve natural and cultural heritage, and not support deep-sea mining.
- ✓ Measure and control the impacts on biodiversity that OCP Group projects have or may have on their specific ecosystems.
- ✓ Preserve rivers and lakes and do not use tailing disposal in it.
- ✓ Minimize and ameliorate the negative impacts on biodiversity that OCP Group activities may have.
- ✓ Protect and preserve habitats and ecosystems of high ecological value where OCP Group operates.

OCP shows clear intention to go beyond reactive attitude of compensating any potentially negative effects of its activities on the biodiversity, but rather positively promote the wildlife in the different regions where it operates.

Planning, implementing, operating and dismantling of facilities, we are working to integrate them in every decision we make. We are committed to define specific objectives, supervising and assessing impacts that OCP Group's projects and facilities are having at every stage, performing risk assessment to control main direct and indirect risks and implement specific training programs for our employees and contractors. Each industrial site we operate underwent a biodiversity analysis during the permit process from the national authorities. No activity site owned, rented, or managed by OCP Group in 2021 was located in or beside protected areas or areas rich in biodiversity. In addition, each site has a management plan for its green spaces and areas surrounding the site while several projects are ongoing to rehabilitate and plant former mining lands, and beyond. To keep on improving the way we manage biodiversity, we have partnered with JESA (Jacobs Engineering) to deliver a pilot study in the Boucraa mine and develop a best-in-class framework which was spread across all our sites in 2020. It consists in strengthening the mapping of the existing flora and fauna, list endemic, rare, endangered species; assessing the natural regeneration of biodiversity of exploited land; and the potential impact of mining activity on biological diversity.

A strong biodiversity roadmap

In order to meet our commitments regarding biodiversity protection and conservation, OCP Group is developing a strong roadmap.

Study of the biodiversity of OCP's operational sites

One of the major actions of OCP's biodiversity roadmap is the development of its operational sites' biodiversity study. It is within this framework that OCP commissioned a team of World-renowned consultants to carry out the study for the preservation of biodiversity and continental, terrestrial and marine ecosystems within operational sites of the group according to international standards and strong analysis approach.

- ✓ Collection and analysis of biodiversity data at OCP's operational sites and its areas of influence;
- ✓ Establishment of inventories of biodiversity's different categories and elements in these areas and identification of threatened species as well as the types and degrees of those threats;
- ✓ Significant contribution to the implementation of the strategy and the national action plan for the conservation of Moroccan biological diversity and its regeneration;
- ✓ Creation of a "biodiversity" database and bio-assessment of biodiversity at OCP's operational sites;
- ✓ Identification of the elements of an integrated strategy and action plan for biodiversity's preservation and improvement.

The Roadmap action plans targeted by this ongoing project will be organized around three framework objectives:

1 Recognition of OCP Group's ecological approach

2 Integration of measurement and decision support tools to manage the ecological footprint of OCP Group's activities

3 Improvement of practices and management of OCP operational sites, with a view to preserving and even improving biodiversity. The objective is to achieve "zero net loss", or even "net gain" of biodiversity in accordance with the best practices and environmental standards of the main development banks.



Next steps in the ambitious biodiversity program

Having finished the diagnosis and inventory of the different faunistic and floristic species, our teams have designed a rigorous intellectual approach in order to assess the impact that OCP's activities may have on biodiversity. In the medium term, our teams integrate biodiversity management in their daily practices by reflecting on how to make biodiversity a goal in daily operations.

In addition, OCP shows clear intentions to go beyond a reactive attitude, that consists of compensating the effects of its activities on the biodiversity, by positively promoting the wildlife in the different regions where the group operates.

Picking & scaling up the right crops

We have been following over the last years an integrated approach to rehabilitate former mining lands which aims to deliver both environmental and economic value for the local communities :

1. Soil analysis to adapt our planting approach to soil's properties and local available natural resources
2. Diagnostic among local communities to understand their needs
3. Crop testing
4. Training of farmers
5. Creation of new and/or support to existing cooperatives

Adapted crops are now growing on dedicated sites such as Quinoa, Argan & Olive trees, etc. Quinoa has turned out to be one of the most relevant and scalable crops across our country. The crop has been the focus of a 3-year research including the International Development Research Centre (IDRC), ICBA and UM6P leading to strengthening the Quinoa value chain to improve food and nutrition security in rural communities of Rhamna, where a significant part of the population lives below the poverty line. In 2020, the Quinoa ecosystem has been expanded to other regions such as Gantour, and consolidated with go-to-market measures from product design, packaging to cooperatives' branding

7

Quinoa cooperatives and their farmers supported for the culture of 189 ha of Quinoa, 2 agricultural very small businesses supported in the sales of quinoa in 2021

Experimentation: going further with Goji & rosemary

OCP wants its rehabilitation approach to be a continuous source of learning and improvement. That's why we introduced in 2020 Goji in the Gantour area as a new alternative crop with very high added value as well as rosemary on the rehabilitated lands of Khouribga. We support farmers through capacity building and technology transfer in agriculture for crops with high potential in the area, in particular fodder, cereals, olive trees, cumin and mint as part of the Al Moutmir program.

37030
Planted plants in 2021

13 ha
of planted surface in 2021

OUR GOALS

Our goals	Where we stand in 2021
1000 ha/year rehabilitated land (equivalent to twice the land exploited)	204 ha rehabilitated area
Soil plantation to create economic value for local community	Ongoing



GRI 2-23, GRI 2-24, GRI 3-3, GRI 306-1, GRI 306-2
UNGC : Principles 7,8,9

WASTE MANAGEMENT

Managing waste is essential as we grow circular. OCP's efforts continue in the area of waste recovery, focusing on the development of a recovery ecosystem with our partners.

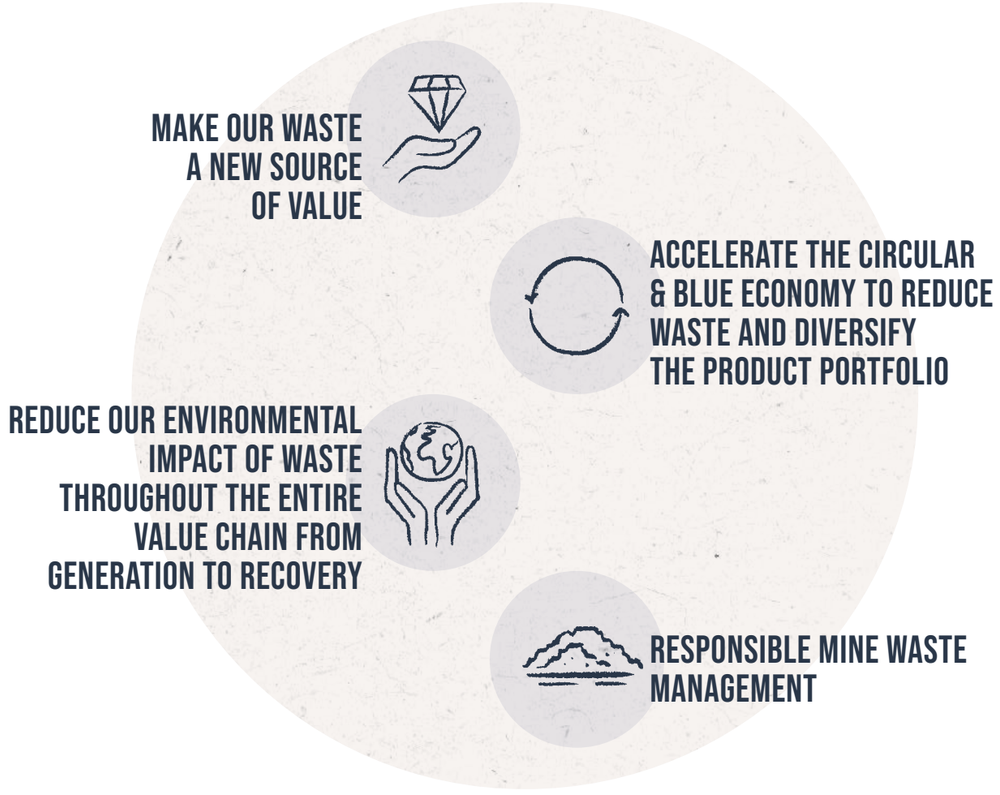
Links to our Policies related to Waste management, approved by Board of Directors/ Chairman and Chief Executive Officer :

- General environmental Policy
- Waste management Policy

Our approach to waste management

The OCP Group's Waste Management standard has been developed in accordance with international good practices to identify, classify and treat waste according to their type. The standard governs the identification and classification of waste, collection, sorting and recovery phases, infrastructure and resources as well as the audit and training process. Waste recovery is encouraged to tap into intrinsic environmental and economic value of waste to provide added value for both OCP Group and its ecosystem. Incineration and filling are used when the valuation paths are not yet mature. Subcontractors and service providers are rigorously selected and must have government approvals to be awarded contracts collection and sorting. OCP Group also requires receipt of recovery and treatment of all waste removed to ensure traceability.
In 2021, a second version of the OCP standard relating to waste management and recovery was established and deployed to each entity of the Group. This second version emphasizes :

1. The reduction of waste at the source
2. The recovery of waste in a circular economy approach
3. The compliance with the current regulations and international best practices at all stages of the waste management process.



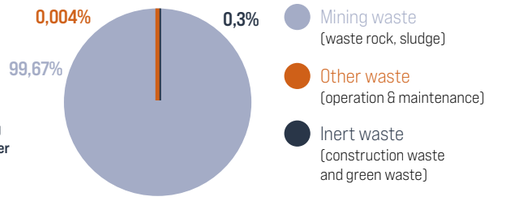
GRI : 306-3, GRI 306-4, GRI 306-5
SASB : RT-CH-150a.1, EM-MM-150a.1 EM-MM-150a.2
UNGC : Principles 7, 8, 9

				2019	2020	2021
WASTE GENERATED	Weight of waste generated	**Total Metric tons (t)**		**163,409,199**	**169,264,593**	**154,313,874**
		Mining waste (waste rock + sludge)		163,053,471	168,882,746	153,792,648
		Other waste (operation & maintenance)		69,331	45,910	69,126
		Inert waste (construction and green waste)		286,396	335,937	452,100
WASTE DIVERTED FROM DISPOSAL	Waste diverted from disposal	**Total Metric tons (t)**		**163,069,972**	**168,887,981**	**153,804,535**
		Mining waste (waste rock + sludge)		163,053,471	168,882,746	153,792,648
		Other waste (operation & maintenance)		16,019	5,008	11,714
		Inert waste (construction and green waste)		481	227	173
	Hazardous waste diverted from disposal	**Total Metric tons (t)**		**2,589**	**1,115**	**3,006**
		Preparation for reuse	Onsite	74	68	63
			Offsite	155	134	26
		Recycling	Onsite	1	-	450
			Offsite	2,311	810	2,466
		Other recovery operations	Onsite	3	1	1
			Offsite	45	102	0
	Non-hazardous waste diverted from disposal	**Total Metric tons (t)**		**163,067,383**	**168,886,866**	**153,801,647**
		Preparation for reuse	Onsite	163,053,638	168,882,869	153,792,792
			Offsite	-	60	15
		Recycling	Offsite	13,745	3,146	8,262
		Other recovery operations	Onsite	-	791	578
WASTE DIRECTED TO DISPOSAL	Waste directed to disposal	**Total Metric tons (t)**		**339,227**	**376,612**	**509,339**
		Mining waste (waste rock & sludge)		-	-	-
		Other waste (operation & maintenance)		53,312	40,902	57,412
		Inert waste (construction and green waste)		285,915	335,710	451,927
	Hazardous waste directed to disposal	**Total Metric tons (t)**		**48,323**	**29,080**	**51,283**
		Incineration (with energy recovery)	Offsite	354	16	18
		Incineration (without energy recovery)	Offsite	47	8,217	2
		Landfilling	Offsite	3	-	0
		Other disposal operations (t)	Onsite	47,845	20,847	51,153
			Offsite	74	-	110
	Non-hazardous waste directed to disposal	**Total Metric tons (t)**		**290,904**	**347,532**	**457,936**
		Incineration (with energy recovery)	Offsite	997	716	1390
		Incineration (without energy recovery)	Offsite	261	105	115
		Landfilling (inert waste)	Onsite	2,268	3,322	0
			Offsite	18,068	11,402	152,992
		Other disposal operations	Onsite	269,310	331,987	300,319
			Offsite	-	-	3,120

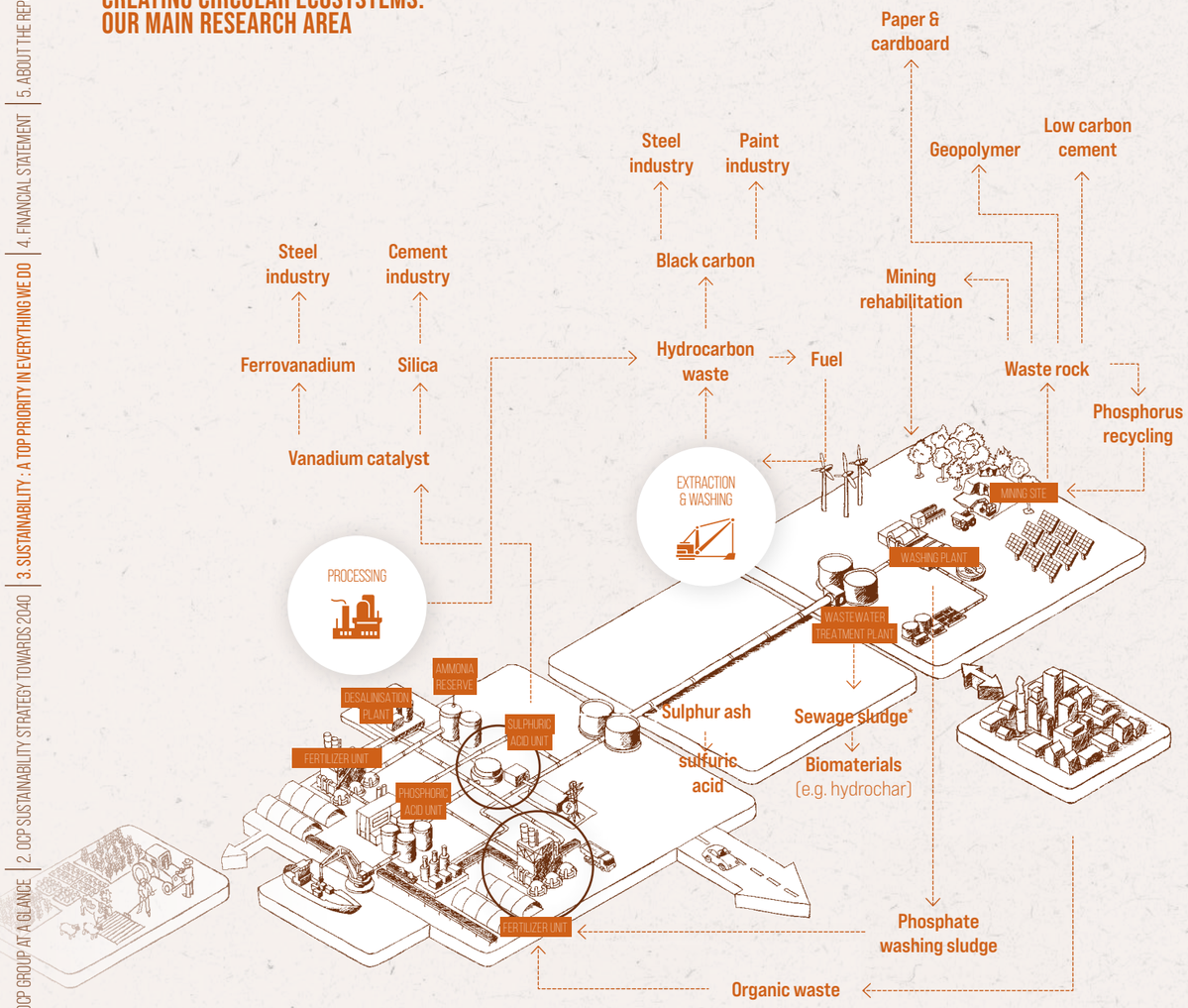
Mining waste (tonnes)	2018	2019	2020	2021	Disposal method
Waste rock (sterile)	167,973,520	153,691,917	159,839,210	142,001,930	Stored and used for reclamation
Sludge	9,604,849	9,361,554	9,043,536	11,790,718	Stored in sludge dams

99,67%
Waste diverted from disposal

0,03%
Hazardous waste (mainly waste oils, catalysts removed and replaced during shutdowns, chemical residues and other wastes from maintenance activities)



CREATING CIRCULAR ECOSYSTEMS: OUR MAIN RESEARCH AREA



* Find out more on mining rehabilitation here

Reinforcement of solid partnerships with companies highly specialized in recycling and waste treatment :
specifications were standardized between all the sites, integrating the requirements for the choice of companies specializing in recycling and waste treatment and the requirements for strict compliance with regulations. The first orders were granted in 2021.

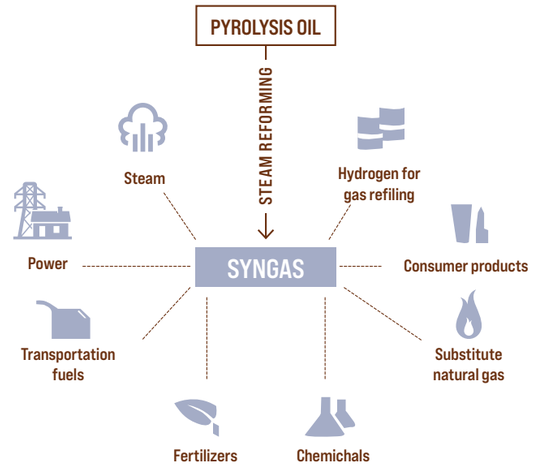
MORE THAN 90% OF EMPLOYEES INVOLVED IN WASTE MANAGEMENT TRAINED
on the 3Rs (Reduce, Reuse, Recycle)

MAKE OUR WASTE A NEW SOURCE OF VALUE

From sulphur ash to high value-added input:
Sulphur ash results from the sulphur smelting and filtering facilities in our processing sites. Solutions have been found to turn ashes - by hydro-metallurgy – into sulphuric acid that can be used at Safi and Jorf Lasfar processing sites. Tests have been launched since 2020 to implement this solution with a Moroccan industrial firm. Beyond the environmental value, this new ecosystem project will have economic benefits for our local stakeholders.

Tapping into our old used vanadium catalyst:
Over the last years, we have been working with a Moroccan SME to close the loop when it comes to vanadium oxide. Contained in our catalyst, used vanadium pentoxide is a hazardous waste which features precious materials we can value economically and environmentally. Technologies for the recovery of vanadium resources locally would allow Morocco to reduce its dependence on imports of ferro-vanadium. It could also enable local companies to position themselves in the by-product processing market with the potential for direct and indirect job creation as well as for the development of the local ecosystem since vanadium waste is generated by other industries. In 2021, 1200 m3 of used vanadium catalyst waste recovered while progress is still ongoing to scale up the solution.

FROM ORGANIC WASTE TO ORGANIC AND ORGANOMINERAL FERTILIZERS
Find out more



$2,2 MILLION
investment for a controlled industrial landfill for storage in preparation of recovery

From waste to power :
As part of our circular economy program, preparations are still ongoing to build the first pyrolysis unit in Morocco. This technology would allow OCP to treat more than 2,000 tons per year of hydrocarbon waste, including some hazardous waste like used oil and transform it into fuel, diesel, black carbon, and electricity. Expected to be commissioned in 2023, we have been working to get this pilot unit ready at the Khouribga site and deployed on all operating sites. This project has been developed within an Ecosystem purchasing framework allowing the support of a Moroccan supplier to access an innovative technology using Pyrolysis, job creation in the region of the Khouribga site and the training and development of technicians and specialized labor in waste recovery trades.

The technology will allow compliance with national regulations concerning recovered waste while ensuring the creation of added value for OCP and its ecosystem in addition to the development of a new industry in Morocco based on the circularity and green technologies in the treatment and recovery of waste.

From generation to recovery :

Reducing our environmental impact of waste throughout our value chain includes both recoverable waste and waste for which recovery methods have been launched under study or in an implementation project. For this waste, in particular gypsum waste from phosphoric acid storage tanks, waste from cleaning sulfur tanks and cleaning sulfur filters and waste from demolition and backfill, OCP started in 2021 at the SAFI site a controlled landfill for temporary storage of this waste in preparation for recovery.

It is a controlled industrial landfill built according to national regulations using the best international practices.

This controlled industrial landfill, which has a storage capacity of 22,000 tons/year, will:

- Store industrial waste from the SAFI site in accordance with regulations;
- Preserve the soil, water resources and air quality from the pollution that can be generated by depositing this waste directly on the ground;
- Temporarily store this waste in preparation for recovery;
- Avoid the reuse of this waste outside the recovery circuit validated by OCP to avoid any damage to the ecosystem.

Eradication of PCB from our sites

The program "Making the management and elimination of polychlorinated biphenyls (PCBs) sustainable in Morocco" – phase 2 has been set up in 2020 with the project team of the United Nations Industrial Development Organization (UNIDO) and the Ministry of Energy, Mines and the Environment - Environment Department.

In 2021, a major PCB analysis operation was carried out on 70 OCP transformers and preparations for the elimination of transformers heavily contaminated with PCB were launched at all OCP sites.

Mine tailings management constraints and opportunities for the OCP group

Aware of the great importance of the eco-responsible management of resources from extraction to use, including everything related to by-product, rejection and waste, OCP is currently acquiring the necessary means for the responsible management of mining waste.

The year 2021 saw participation in the RMI Responsible Mining Index and OCP responded to the questionnaires proposed to assess its responsible management of phosphate mines. In this context and to launch internal improvements in terms of mine tailings management, an assessment of the management of mine tailings at OCP's mining sites was carried out by DOOC teams during December 2021 and early 2022.

The objective of these initiatives is to set up a solid mining residue management and recovery system capable of ensuring the responsible management of mining residues in terms of safety, resource conservation and waste recovery in a circular economy approach and in application of the best international practices in terms of tailing management.

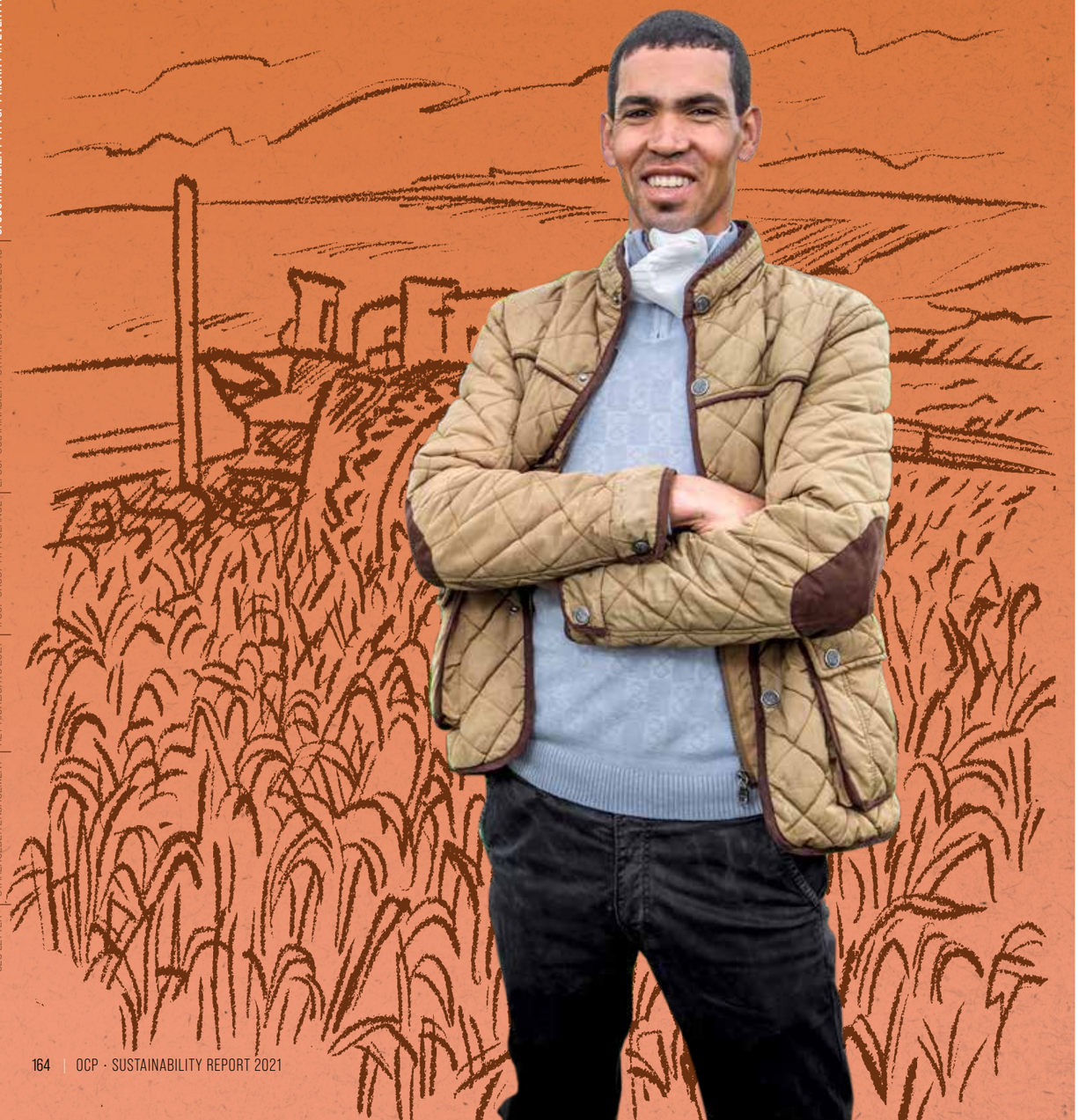
The system will also bring together and coordinate all the actions carried out to date in terms of thickening phosphate washing sludge and concretize R&D projects aimed at the recovery of waste rock and interlayers from OCP mines.

OUR GOALS

Our goals	Where we stand in 2021
70% of non-mining hazardous waste diverted from disposal by 2025 80% of non-mining non-hazardous waste diverted from disposal by 2025	17% of waste are diverted from disposal (6% hazardous waste and 61% non-hazardous waste)(excluding mining and inert waste)
Reinforcing solid partnerships with companies highly specialized in recycling and waste treatment by 2021	Carried out as the project for each site progresses. In 2021, specifications were standardized between all the sites, integrating the requirements for the choice of companies specializing in recycling and waste treatment and the requirements for strict compliance with regulations. The first orders were granted in 2021.
Sulfur ashes waste converted into commercial grade sulfuric acid by the end of 2021	Industrial test ongoing with a revision of the test protocol and test quantities from 120 to 400t
More than 2000 t per year of used vanadium catalyst waste recovered in higher added value products by the end of 2021	Around 900 t of used vanadium catalyst waste recovered while progress is still ongoing to scale up the solution.
Setting up training programs for OCP employees to further explain and promote the 3Rs by 2021	Training material on the 3Rs has been produced, the first training sessions have been held, the wide range of training is in progress
2,000 tons per year of hydrocarbon waste transformed into fuel, electricity, black carbon and steel using clean pyrolysis technology by 2021	Project contracting with modification of the contractual form and negotiations
Recovery of organic waste by 2023 to turn it into organic and organomineral fertilizers	Phase 1 of the project: technology assessment & market study have been completed, phase 2 of the project (pilot unit) is scheduled for 2022



3.4 Commitments to sustainable food systems



2 ZERO HUNGER

This year the Food System Summit has been called as part of the Decade of Action for the food and agriculture sector to accelerate progress to the SDG 2030 Agenda. OCP's mission of feeding the soil to feed the world and its commitment to feed the planet respecting its boundaries is today, more than ever, a responsibility for achieving SDG 2 : end hunger, achieve food security and improve nutrition and promote sustainable agriculture.

Links to our Policies related to sustainable food systems, approved by Board of Directors/ Chairman and Chief Executive Officer :

- General environmental Policy
- Community engagement Policy

Social Transformation Benchmark

OCP Group is well ranked among its peers for its responsibility to demonstrate socially responsible conduct by respecting human rights, providing decent work, and acting ethically.

World Benchmarking Alliance

4 /350

OCP Group ranks fourth in the Food and Agriculture Benchmark, demonstrating strength across our sustainability strategy and governance, environmental practices, actions for food security and nutrition as well as our effort for social inclusion. Some of our actions have been assessed as leading practices among the industry.

Our ecosystem

In order to advance existing and new efforts to transform the food system, OCP generates multi-stakeholder partnerships.*

In 2021, in addition to its events, working groups, CEO roundtables interventions, WBSCD representations, contributions to policies making and position papers, OCP contributed, to the development of the Food and Agriculture Roadmap which sets out transformational targets, key action areas and solutions urgently required to transform food systems to achieve environmental sustainability, equitable livelihoods, and healthy and sustainable diets for all.

*This list is non exhaustive

UNITED NATIONS FOOD SYSTEMS SUMMIT 2021

OCP Group was heavily involved throughout the preparatory process for the first United Nations Food Systems Summit (UNFSS) and the Summit itself, implementing its various programs to support farmers in adopting sustainable agricultural practices and the rational use of custom fertilizers, and raising awareness of their essential role in carbon sequestration.

OCP Group is signatory of the World Business Council for Sustainable Development (WBSCD).

As a key player in the food value chain and a committed company in driving the food systems transformation, the Group signed, on behalf of its CEO & Chairman the Business Declaration which was submitted to the United Nations, demonstrating, once again, the Group's deep engagement in transforming the food system. Following this, a video call to action was broadcasted during the same Summit which, as a reminder, was held on the sidelines of the opening session of the UN General Assembly. The business declaration sets out the ambition of business in accelerating the transformation of food systems through: Scaling science-based solutions to achieve net zero, nature positive food systems; providing investments in research and innovation; contributing to improve livelihoods and wellbeing; incentivizing consumers as agents of change; creating transparency; and ensuring the transformation includes a just transition.



"OCP has been a committed partner as we drive forward collective work in food systems transformation. This became evident in OCP's continuous engagement in Science-to-Policy Dialogues that WBCSD led towards the UN Food Systems Summit in 2021, providing business insight and expertise on key challenges farmers, communities and SMEs are facing as they work to create a more sustainable future. Ranging from research to make fertilizers more precise to driving collective work to be carbon net zero by 2040, it is exciting to see the company stand firm on its sustainability commitments and support collective business leadership through WBCSD."

Clea Kaske-Kuck
Director, Policy, Advocacy and Member Mobilization at WBCSD

wbcsd

Aware of the Food & Climate Nexus, OCP Group aspires to a fair transition of food systems towards the adoption of sustainable, regenerative agriculture that contributes on a large scale to fight against climate change. A fair transition also means leaving no one behind. OCP strongly supports smallholder farmers by ensuring them decent living wages, incomes and empowerment to ensure resilient and inclusive growth. To ensure this just transition, OCP develops several programs in favor of regenerative agriculture and farmer livelihoods, using the best-in-class technologies.

World Benchmarking Alliance

Leading practices according to the World Benchmarking Alliance (WBA) Food and Agriculture Benchmark

CONSUMPTION

- Turning household organic waste into organic fertilizers
- Tapping into domestic wastewater to recover phosphorus and nitrogen nutrient – precious inputs for fertilizers
- Integrating macro and micronutrients recovered from organic waste into new formulas
- APNI (African Plant Nutrition Institute) – Promotion of 4R Stewardship as an efficient framework for Nutrient Management

- E-commerce & digital platforms promoting local food products from cooperatives and support in branding and advertising local food products
- Waste management advice to household through Agribooster's Farm & Fortune TV and radio channels

ENVIRONMENT

Boost nature positive solutions at sufficient scale

INPUT & CROP PRODUCTION

- GHG emission reduction
- Energy efficiency & clean mix
- Water efficiency & non-conventional water sources
- Land rehabilitation (afforestation, planting)
- Soil mapping and customized fertilizers formulas bridging any nutrient gaps for optimal plant growth while maximizing environmental benefits
- Waste & effluent circular management to turn our waste into valuable inputs

- Preservation of phosphate reserves through phosphorus recovery and untapped resources
- Waste & effluent circular management to turn our waste into valuable inputs
- Community development programs empowering citizens

NUTRITION

Ensure access to nutritious food for all

SOCIAL INCLUSION

Advance equitable livelihoods and value distribution

- Farming spaces in the smart cities we build to boost urban & peri-urban agriculture
- Creation & training of local food cooperatives shortening supply chain

- Entrepreneurship programs aiming to improve food distribution such as ColdHubs, a start-up manufacturing 100% solar-powered cold-rooms, allowing merchants and farmers to store perishable goods 24hours a day, 7 days a week

RETAIL

FARMING

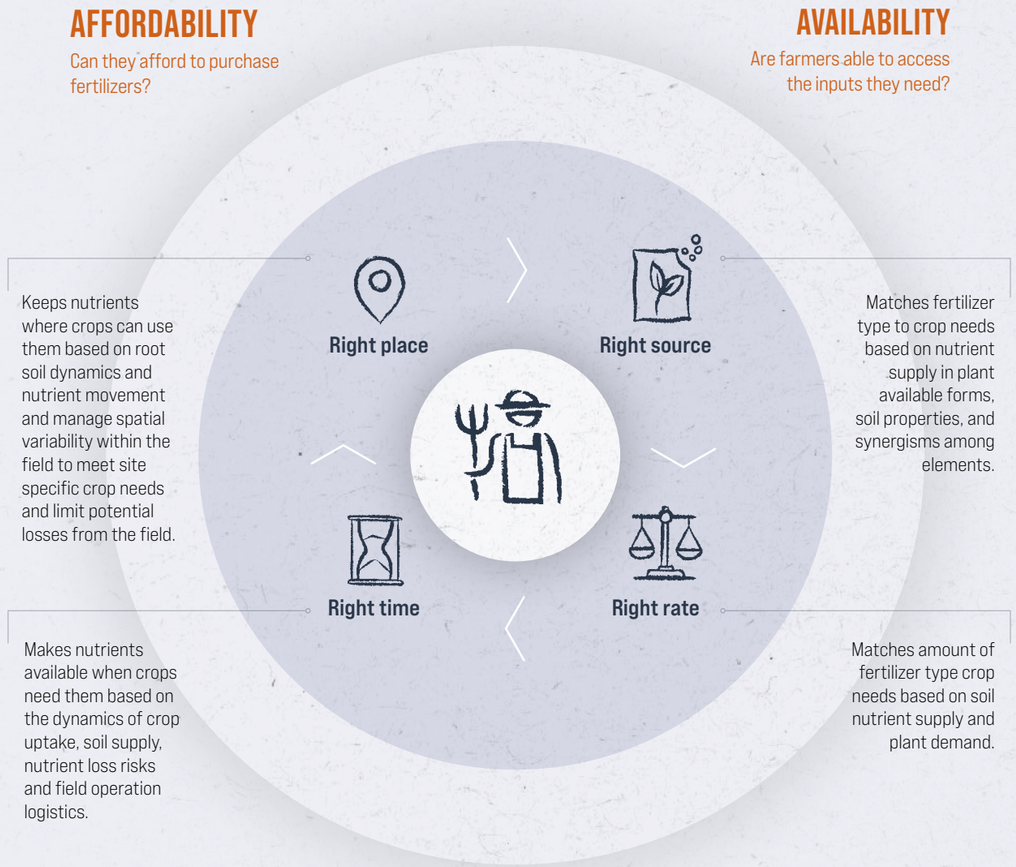
- R&D to fit crops to soils' specificities
- Carbon sequestration:
  - Carbon credits
  - Farmer guidance and rewards
  - Certified low-carbon crops
- Adjustement of planting dates
- Local production of adapted fertilizers
- Last-mile delivery system
- Precision fertilizers management
- Climate early warning system
- Improved water management
- Disease identification
- Crop insurance in case of weather events

- Entrepreneurship program for sustainable agriculture
- End-to end solutions including financing and market linkages to sell crops : Agribooster, Al Moutmir
- Women empowerment activities : ElleMoutmir, Women in Agribooster

Climate response Non-climate response

As a leader in the fertilizer industry, our primary responsibility lies in providing sustainable input products as well as transforming the way farmers use them to ensure long term food security. This is done to produce more with less resources and environmental impacts. Our strategy is geared towards Africa: the continent features 60% of the world's available arable land but also the largest stock of underdeveloped arable land while 60% of the labor force is employed in agriculture.

Through the 4R's framework of Nutrient Stewardship, we deploy our action tracks related to nutrition, environment and social inclusion.



SUSTAINABLE PRODUCTS & SERVICES

OCP is constantly seeking to improve the environmental and nutritive benefits of its products and services by ensuring sustainable food production systems, implementing resilient and regenerative agricultural practices that increase productivity and production of nutritious food, help maintain ecosystems, strengthen capacity for adaptation to climate change, and that improve land and soil quality, while creating an enabling environment for rural communities to thrive.

Products :

34 Rock

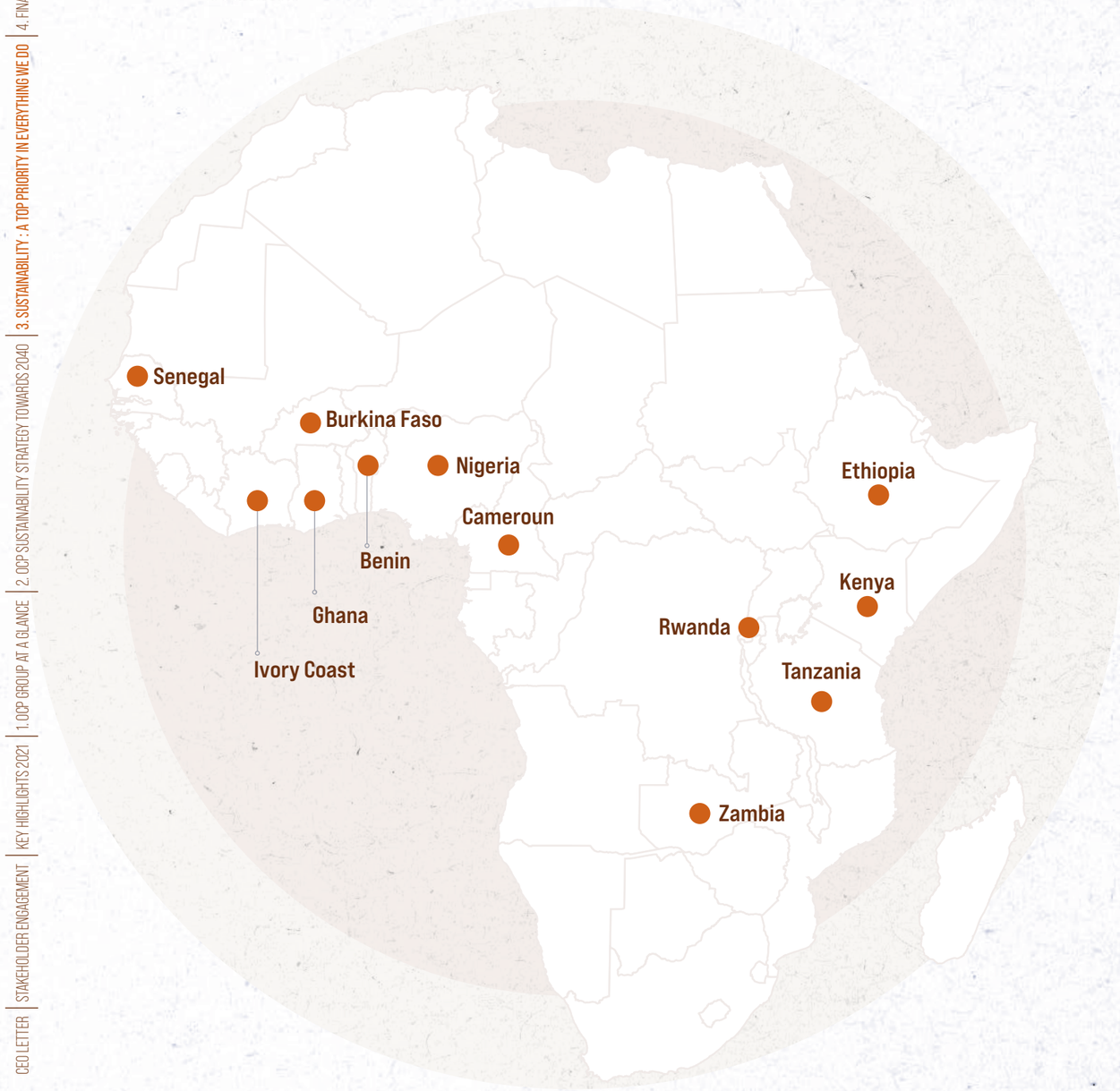
12 Phosphoric acid

98 Fertilizer

		Environmental benefits			Nutrition benefits	Social benefits
		Water-efficiency	Soil-health reinforcement	Air emissions reduction	Nutrient loss reduction	Social inclusion
Products	Fortified fertilizers (NPK, NP+) enriched with micronutrients: zinc, boron, silicon	✖	✖		✖	
	Slow-release fertilizer		✖		✖	
	Nutridrop (soluble fertilizer)	✖	✖		✖	
	High Phosphorus and Sulphur fertilizers		✖		✖	
	Fertilizers fighting against eutrophication with inhibition additives		✖		✖	
	NP-S nitrogen fertilizers allowing nitrogen stabilization		✖	✖	✖	
	Fertilizers' specific formula for drought	✖	✖			
	New P, NP & NPK formulas for organic farming		✖	✖	✖	
	Premium fertilizer combining nutrients and technology	✖	✖	✖	✖	
Services	Soil analysis, mapping & field trials	✖	✖	✖	✖	✖
	Capacity building programs (OCP School Lab, Agribooster, Al Moutmir) & demonstration platforms	✖	✖	✖	✖	✖
	Digital tools allowing farmers to make smart decisions from financing to market linkage through plot monitoring.: Nutrient Expert, Udongo, Atmar, Agriedge, etc.	✖	✖	✖	✖	✖
	Agricultural ecosystem reinforcement leverages		✖		✖	✖
	Entrepreneurship programs to boost agritech and biotech solutions in Africa	✖	✖	✖	✖	✖
	Staple crop diversification				✖	

AVAILABILITY

Beyond its Moroccan production capacities, OCP heavily invests in production and logistics in many other African countries, including fertilizer blending and storage facilities. These projects are important because they allow us to reduce costs for farmers and be more agile and responsive to local needs. So far we are present in 16 African countries:



CUSTOMIZATION

An innovative approach for precision and efficiency

Our customized fertilizers are fine-tuned to the needs of specific soils, helping farmers follow the 4Rs of nutrient stewardship – right fertilizer, right rate, right time, right place – with more precision than ever.

Customized fertilizers are better for the soil, they reduce waste and are more cost-effective. They are also helping to unlock the potential of African agriculture. We're working with organizations across the continent to increase the availability of these fertilizers, through a network of stakeholders, local governments and local manufacturers.

Map the soil
Our mobile labs map local soil quality, to assess the nutrient levels and see what the soil needs

Develop the formula
We create a specific fertilizer for the soil, with finely-balanced nutrients for optimum plant growth

Produce it locally
We work with local manufacturers to produce the customized fertilizer

Teach sustainable methods
We share our knowledge of optimal fertilizer use to prevent pollution and encourage sustainable farming

Map the soil

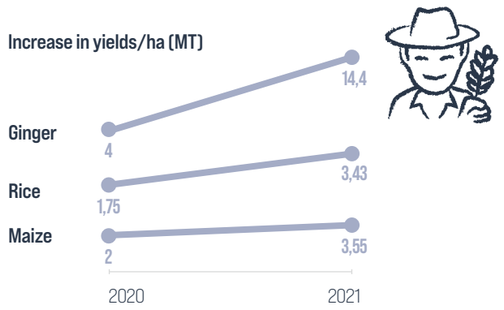
Developing customized products requires a deep understanding of the soil-crop-environment system and the farmers' practices. Our approach is based on 3 levels of information:

1. **In-depth assessment of soil and crops response:**
   - ✓ Soil analysis to get soil fertility data of targeted regions
   - ✓ Onsite field trials testing the crop response to recommended fertilizers
   - ✓ Partnerships with local & international research and agronomy institutes to facilitate the dissemination of our results
2. **In-depth assessment of current agronomic practices:**
   - ✓ Partnerships to collect macro information on farmers and their environment
   - ✓ Conduct surveys to collect data on current agronomic practices and farmers' behaviors towards new products/solutions. Our goal is to develop adapted, affordable and scalable solutions for farmers
3. **Geospatial technologies for developing nutrient management platforms:**
   We frequently use satellite imagery and geospatial data (climatic, pedologic, agroecologic, vegetal index, land use, etc.) as a third layer of information, in order to match it with onsite information, thus enhancing the quality of our results and helping make decisions about new formula developments. The geospatial tools are important for developing DSM (digital soil mapping) related to soil fertility and yield forecasts. Some works have been engaged in this field to create thematic maps of nutrient deficiencies and contribute to develop a complete nutrient management platform dedicated to sub-Saharan countries..

4,000,000 HA
of soils mapped in Togo, Madagascar, Burkina Faso, Guinea, Rwanda

30
millions hectares mapped in total

1 MILLION
farmers working with OCP for bespoke fertilizers by 2022

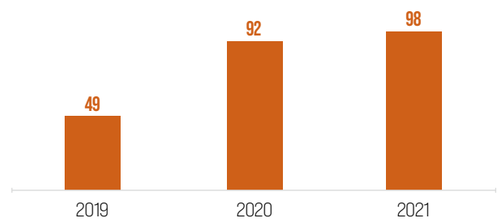




Soil health

OCP is diversifying its product portfolio to deliver premium products that enhance crops and soil health. By maximizing the plant growth through high-value products, it enables carbon sequestration and optimal resource usage.

Evolution of our fertilizer formulas that respond to soil needs :



Focus on customized products in 2021

Focus on TerraTek : customized solutions

TerraTek provides farmers with the optimal balance of phosphorus, nitrogen, sulfur and micronutrients, meeting the real nutrient needs of crops more efficiently.

- ✓ Highly concentrated in P, N and S
- ✓ Sulfur availability maximized by the combination of sulfate and micronized elemental sulfur, to increase uptake of both macro and micronutrients
- ✓ Incorporation of micronutrients for crops and soils with specific needs

Focus on PHOSACTIV : organic solution

Phosactiv, (rock phosphate for direct application in soil) has received IBD CERTIFICATIONS “inputs approval program” for the use in organic production as an important process for ensuring the visibility and credibility of approved inputs and providing security to customers interested in producing organic products and healthy foods. Approval by IBD not only ensures organic market access for products, but also provides a differential compared to other inputs in the market, adding quality, safety, sustainability, social and environmental responsibility to the company and product image.

Agribiotech business unit for better nutrient absorption, higher resistance to different climatic stressors (heat, rainfall, etc.), and higher nutritional value for fruits and vegetables. Biostimulants are fertilizers that stimulate the process of plant nutrition independently of the nutrients they contain, to improve the characteristics of plants or their rhizosphere such as the efficiency of the use of nutrients, the tolerance to abiotic stress, qualitative characteristics and the availability of nutrients confined in the soil of the rhizosphere. They also allow an improvement in yield of at least 10%:

- Improving the absorption by the plant of macro and micronutrients (N, P, K, Ca, Mg, Mn ...) present in the environment or provided via fertilizers
- Improving the bioavailability of nutrient compounds in the soil (macro and microelements) allowing better absorption and use within the plant
- Increasing tolerance and resilience of plants to abiotic stresses (drought, excess water, frost, salt, etc.)
- Improving the quality criteria of harvested products
- Improving the microbial activity of soils allowing soil humification
- Improving certain physicochemical properties of the soil allowing better degradability of organic compounds.



OCP AL-MOUTMIR : THE FARMER AS THE REAL AGENT OF CHANGE

Find out more

Al Moutmir is a multiservice offer including innovative and customized solutions to better serve farmers and especially the small ones. This initiative focuses on promoting the best agricultural, technical and governance practices and in particular balanced fertilization as a real lever for improving productivity while preserving natural resources. Al Moutmir includes best in class products and solutions, agricultural extension services (soil testing, training sessions, demonstration platforms, monitoring and support, etc.), user-friendly technological solutions as well as a capacity building program for farmers, rural women, cooperatives and young leaders. It aims to provide farmers with the tools they need to move from a subsistence to a profitable and a sustainable business. The scientific approach is at the heart of Al Moutmir offers to guarantee the sustainability of the initiative. It relies upon robust digital technologies as a key lever to multiply the impact and serve a maximum of farmers across the country: the Smart Blender technology, the demonstration platform program, the no-till farming program and the free mobile application @tmar for all.

OCP AL Moutmir is based on a participatory and inclusive approach. Teams of more than 100 agronomist engineers are permanently in the field, they connect with the communities, they learn from this close relationships with the ecosystem, which then allows them to develop and implement customized solutions with and for the ecosystem. They thus continuously stimulate the innovation loop with the various stakeholders to respond with agility to the challenges of the ecosystem and bring out new solutions, adapted and affordable to all.

Scientific approach
to ensure the sustainability of the offer

Partnership approach
to develop co-built solutions with and for the ecosystem

Farmer as the real agent of change
to support him/her to become a leader

43
Morrocan provinces - covered by OCP-Al Moutmir in 2021

20,000
farmers - covered by OCP-Al Moutmir in 2021

80,000
soil analysis (for free in the mobile laboratories & UM6P)

+20,000
Demonstration platforms covering different crops to demonstrate scientific recommendations and agricultural innovations

108,000
Beneficiary farmers in remote areas are reached via OCP-Al Moutmir souks & moussems programs: mobile trucks visiting weekly rural markets and festivals to assist them before the launch of each crop cycle in 2020 and 2021

365,000
Atmar app users (end-to-end support for free, everywhere)

60,343
trainings on agricultural, managerial and soft skills for farmers, rural women cooperatives & young leaders

+30%
of agricultural yield for cereals in 2021 with customized fertilizers compared to the national average in Morocco

50
Dedicated Smart Blenders points of Blending and Sale (manufacturing Blend NPK formulas for each agricultural plot based on its own soil testing results)

80,000
individual feedbacks session on soil testing results in addition to meetings with our fertilizer manufacturer, distributors and retailers

The right formula for the right soil

Everything starts with understanding the soil needs

OCP Group through the Al Moutmir Initiative and the Mohammed VI Polytechnic University of Benguerir has further deployed an integrated offer of soil analysis through the mobilization of an additional fleet of mobile laboratories. Based on the scientific approach, the OCP-Al Moutmir offer of mobile soil analysis laboratories is made possible thanks to the mobilization of various national partners, including scientific institutions (INRA, IAV, ENA and UM6P), agricultural experts, OCP-Al Moutmir engineers agronomists, Local Authorities, farmers and OCP volunteers working within the framework of Act4Community. Aware that soil analysis is the first step for reasoned fertilization, and as a good soil analysis can only be guaranteed if the sampling process is carried out correctly, our teams enable farmers to carry out sampling on scientific grounds. Several explanatory and demonstration sessions are organized at field level. Educational tools are also distributed to farmers (flyers, demonstration videos, etc.) to enable them to be autonomous and to carry out sampling on a scientific basis. Soil analysis feedback sessions are also planned, one to one, to allow each farmer to better understand the nutrient needs of his soil. The soil analysis carried out at these laboratories are monitored by a scientific committee of experts from UM6P and the national scientific consortium (INRA, IAV and ENA) with the assistance of agricultural engineers OCP-Al Moutmir and a team of experienced laboratory technicians. The results of soil analysis are thus certified by the scientific committee, that regularly carries out quality controls in addition to the methodical calibration operations of the equipment mobilized.

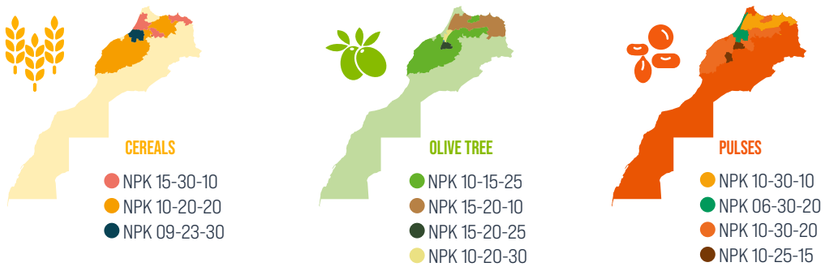
200,000 HA
soil mapped

+80,000
soil analysis carried out since the launch of OCP-Al Moutmir in September 2018

100%
digital to ensure the reliability of data and facilitate its sharing with the ecosystem. Soil sampling > soil analysis > fertilizers recommendations > presentation of results > Moroccan soil referential >

To create regional formulas and plot specific formulas

Regional formulas: Thanks to the Soil Fertility Map of Morocco, fertilizer formulas adapted by crop and by region are manufactured by our manufacturer-distributor partners equipped with technological equipment for mixing Bulk- Blending. These fertilizers are transported to the different regions and marketed through a national network of retailers bringing fertilizers closer to farmers.



Looking deeper into plots: To go further towards optimizing natural resources and using adequate N, P and K nutrients, the Smart Blender technology has been developed in 2018. The solution aims to produce customized NPK formulas to each agricultural plot based on its soil analysis and its potential yield. Aiming to optimize plant nutrition through the best adjustment of the supply of fertilizers, the OCP-Al Moutmir program has set up Smart Blenders to further develop a proximity offer, while encouraging the use of custom NPK blends. This technical approach makes it possible to adjust fertilizers to the needs of the crop, which contributes to balanced soil nutrition in addition to better yields and environmental protection. Smart Blender technology is deployed today through our national fertilizer distributors and aggregator partners at proximity units located as close as possible to farmers.

5,000
tons annual production capacity per smart blender and up to 10,000 ha covered

45
Blending & Sale points of the Smart Blenders in 2021

Enhancing Climate Change Resilience

We are working on territorial agro-ecological transition models that can scale up varied and complementary measures to fight climate change. No-till farming or zero tillage is an agricultural production system that consists of sowing without prior tillage. One of the three fundamental pillars of conservation agriculture, no-till farming preserves the soil and its microbial life as well as water stocks. The Al Moutmir no-till program aims at accelerating the adoption of this practice nationwide as a key lever of the agriculture new agro-ecological transition model in our country. OCP's objective is to significantly support this momentum to increase the resilience of agriculture to climate change.

Environmental benefits

- Avoid CO_2 release during tilling
- Preserve soil's water stocks
- Protect soil's microbial life

Economic benefits

- Less production costs saving labor and inputs costs
- Better physical and chemical soil's properties for better yield

45
Seeders made available for farmers

+23,500
Ha cultivated (2021 and 2022)

51
Beneficiary cooperatives

+8,530
beneficiary farmers

+896
Dedicated demonstration platforms (2021 and 2022)

Proving results to scale up adoption

OCP Group has set up more than 10,000 demonstration platforms in different provinces of the Kingdom and covering several crops (Cereals and Legumes, Arboriculture, market gardening. The platforms are indeed a powerful extension tool for demonstrating scientific recommendations and agricultural innovations. Co-constructed and produced in partnership with the agricultural ecosystem and in particular the scientific ecosystem (INRA, IAV, ENA UM6P), these platforms are installed in the fields of volunteer farmers and make it possible to demonstrate the considerable impact of adopting best agricultural practices on the yield and quality of agricultural production, the income generated and also on the rational consumption of fertilizers. Each platform focuses on the application of the best agricultural inputs, operations and techniques, from tillage to harvest. As the culture cycle progresses, it is possible to compare the impact of good practices versus average practices in localities or even regions. The objective is to create an effect of emulation and induction carried by the farmers who hosted these demonstration platforms, true ambassadors of good practices.

100% funded by OCP Group, the demonstration platforms benefit from close scientific monitoring provided by agricultural engineers OCP-Al Moutmir and experts mobilized from various national scientific institutions. An Integrated Crop Management Program (ICP) is deployed for each platform and covers the different stages of cultivation.

Enhancing smart decisions through digitalisation

AGRIPEDIA
Scientific reference web platform to facilitate decision-making and available for free to agronomists, farmers, students to enhance and share agricultural knowledge through diverse educational materials adapted to the user needs and targeted crops

AGRIAGENT
An integrated management solution for OCP-Al Moutmir team activities: farm advice, crop operations and farm cost accounting, yield management and monitoring. Objective: real-time monitoring of field activities - from demonstration platforms to follow-up visits - and performance evaluation.

@TMAR
A mobile application to facilitate access to extension services to all farmers, everywhere in Morocco for free – from request for financing to market infos going through plot monitoring.

AGRIDISTRIBUTORS : An integrated solution dedicated to our fertilizer manufacturer-distributor partners that allows the digitalisation of the entire business and development process with OCP Group. Two distinct components: modelling the operational process with manufacturerdistributor to automate decision-making; educational & technical tools for distributors to carry out their daily activities (regulatory aspects & core blending)

CORE BLENDING : A fast and powerful simulator to help our fertilizer manufacturerdistributor partners find the most cost-effective combination to make a given NPK formula. This model takes into account the chemical and physical compatibility between the different inputs and their availability in stocks but also offers the possibility to expand the list of inputs.

AGRITRIAL : Digital solution allowing efficient follow-up of the demonstration platform as well as the capitalization on the agronomic and economic knowledge gathered from each demonstration platform – which is shared with the scientific, academic and business ecosystem and used to customize our products & services offer.

Women: essential drivers for a sustainable rural development

Through the ElleMoutmir program, we actively support women in rural areas to become agents of change. The objective is to develop their individual and collective agricultural and entrepreneurial capacities and encourage their networking for the achievement of common and impactful actions.



ElleMOUTMIR



WOMEN FARMERS PROGRAM :
This program includes close agronomic support for women farmers in different provinces of the Kingdom, training and promotion of peer-to-peer outreach as well as networking support and common actions implementation.

WOMEN COOPERATIVES PROGRAM :
This program targets cooperatives and professional women organizations working on the valorization of agricultural and local land products. The objective is to support them in building a resilient and sustainable business. The services offered include local agronomic support, equipment and mechanization in addition to capacity building trainings (technical, business and soft skills).

WOMEN AGRI-RETAILERS PROGRAM :
This program brings to women retailers working in the fertilizer sector. It is a capacity building offer based on technical support, equipment, networking, business meetings coordination with Al Moutmir partners and support in the diversification of products and services (Smart Blender, extension services, inputs and more).

YOUNG WOMEN PROGRAM :
Tailored programs are provided to meet the need of each identified group. These programs help young leader women in the identification of entrepreneurship opportunities, capacity building as well as technical and administrative support for the creation of small businesses or cooperatives.

CAPACITY BUILDING

Smallholder farmers are at the center of OCP's business in Africa informing investments by the Group to ensure that producers have the necessary resources to optimize their output. For this reason, we have dedicated resources to train farmers across Africa on the importance of modern and improved agricultural inputs, as a factor of increased agricultural production. Beyond the trainings, field demonstration plots show to farmers how to practically use and manage the recommended inputs for a transformation in their yields.

Among our educational tools, OCP School Lab (OSL) aims at increasing the yields of smallholder's farmers on strategic crops by offering:

1. **School :** A mobile school that offers interactive training sessions with live demos and videos on good agricultural practices
2. **Lab :** A mobile laboratory that offers soil-testing using latest innovations (X-rays, big data and machine learning) and live information on soil needs and fertilizer recommendations

533,537

farmers reached by OSL program since its launch in 2016, including more than 87,695 in 2021

9

Covered Ivory Coast, Guinea, Nigeria, Ghana, Kenya, Burkina Faso, Tanzania, Senegal and Togo

Digitalization at the service of regenerative and sustainable agriculture practices

- **Using Popular Media to Educate Farmers :** With the Covid-19 pandemic complicating the interactions between people by requiring social distancing and limitation of movements, the Farm & Fortune TV and radio show bridged the gap in the availability of information on good agronomic practices. This was as the School Lab initiative, which also plays a role in educating farmers and farming communities, was limited by lockdowns. Filmed and recorded in Nigeria, the Farm & Fortune show is a variety TV and radio program that is focused on promoting agricultural best practices.

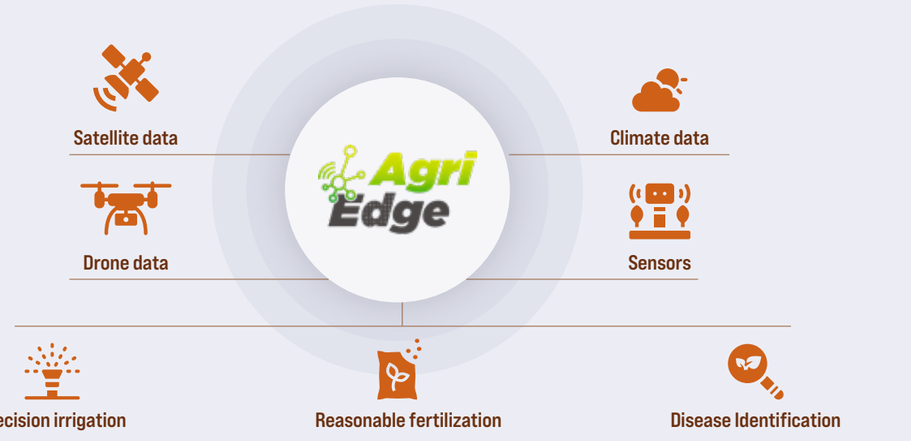
Join here

- **Nutrient Expert** is a digital platform in partnership with the African Plant Nutrition Institute (APNI) to help farmers in their decision-making process. The tool enables farmers to make more informed decisions based on their soil needs, expected yields and cost & profit analysis.

- **Udongo : Digital platform Farmer Centric**

Udongo is a digital platform promoting the agricultural value chain through various services while putting the farmer at the heart of the ecosystem. The digital solution offers farmers the possibility of accessing the agricultural input market, along with recommendations and agronomy contents but also local support through the Agri Extension Agents Network. Beyond Nigeria, this initiative has been expanded in parts of Ghana, and will potentially be developed in strategic countries while integrating new services in the coming years.

77 Input Providers, 154 Wholesalers, 59 retailers, 347 Extension Agents and over 200,000 onboarded farmer operators.

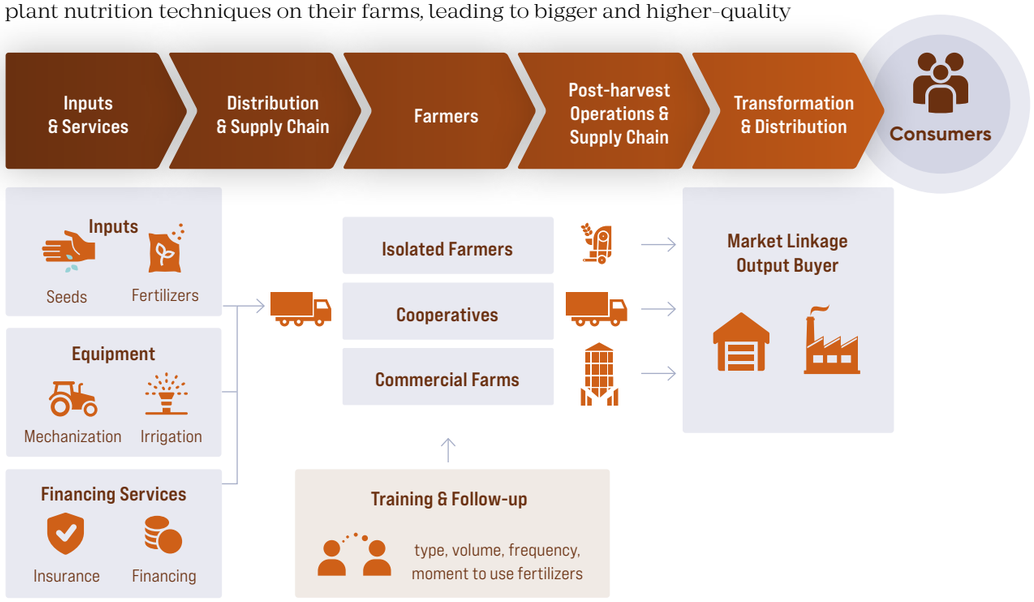






End-to-end programs : Agribooster

Agribooster is a unique initiative for food crops that provides farmers with support for every aspect of the agricultural value chain. Through Agribooster, we are connecting farmers to financing and insurance, working with local extension agents to train them on proper fertilizer use, collaborating with other providers to ensure they have the right fertilizer and other inputs. Our involvement has enabled over one million farmers to gain the capacity to implement sustainable plant nutrition techniques on their farms, leading to bigger and higher-quality



213
Agripromoters in 2021

Agri-Promoters
Agripromoters are OCP Africa's extension workers attached to Farmer Houses. They provide agricultural inputs as well as training, extension, and demonstration activities. To reach small rural farmers in their communities, each Agripromoter is equipped with a tricycle and tablet.

13,000
women farmers reached by Agribooster since 2020 (200% of target)

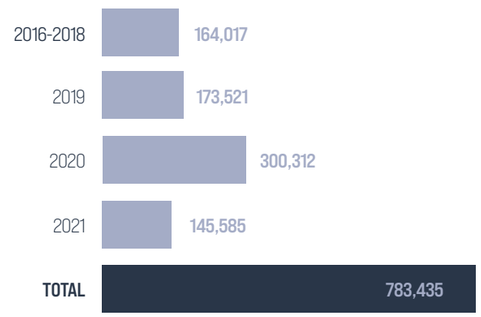
16
field demonstrations on maize and rice cropping systems were implemented in three regions with over 10 districts

4 Countries covered by Agribooster: Ivory Coast, Nigeria, Ghana, and Senegal

3,6MT
of NPK given to each farmer through 7 aggregators

4,5T/HA
Yield increases for maize and rice farmers

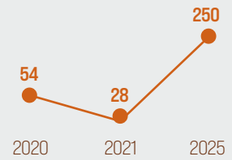
Farmers covered by Agribooster :



Farmer houses

A well-functioning last mile delivery system is an integral part to an integrated agricultural value chain that ensures food security. In Nigeria, farming input and product last mile delivery is underdeveloped especially in rural farming communities. As a result of this underdeveloped delivery system in the undeserved communities, farmers travel long distances to access quality farm inputs and market linkage for produce at a profitable value, and such distances not only add cost to food but also create a psychological barrier to food security. The challenge faced by smallholder farmers - who produce 85% of total food - required the development of an integrated last mile delivery & support solution to improve access to farm inputs, training and market linkage that ensures profitability, hence increasing food production. Farmers House, developed in underserved communities, are aiming at adressing farming inputs availability and accessibility by providing required farm inputs, trainings, soil testing, extension services, storage & market linkage needed to ensure sustainable yield increase through an integrated initiative. It also bring response for the specific needs of Youth and Women in agriculture by providing training, specific assistance and tools like Digital lab (soil testing), Tricycles (last mile delivery), Tablets (information gathering). Agripromoters are agents who act as an extension of OCP and are attached to the Farmer Houses to provide farm inputs, farmer training, and demo plot activities, amongst other services. More than 256,000 farmers have been trained on good agricultural practices. By 2024, these initiatives aim to reach 5 million farmers and to generate 40,000 jobs by leveraging partnerships with public and private players, as well as universities and cooperatives.

Farmer houses in Nigeria



80 FFH outlets

20 states states in Nigeria with Farm & Fortune Hubs

256,865
farmers trained through Farm and Fortune Hubs since 2019

80 communities given access to clean water

1,069
jobs created across 65 outlets in 2021

Empowering African Youth (EMAY)
Launched in 2020, Empowering African Youth (EMAY) is a program that addresses the issue of youth unemployment and their participation in the agricultural sector. EMAY enables young Africans to become agents of positive change, powerful relays for technology transfer and advice in the agricultural sector. Young leaders are trained by a higher education institute to become an expert and ambassador in the agricultural field, allowing them at the same time to secure their livelihood. Young Leaders are equipped with several tools, such as digital labs, tricycles, tablets and other mobile tools that allow them to bring their know-how to farmers in order to increase their yield and profitability. In 2021, the ramp-up was accelerated by contracting the training program to create jobs faster and thus quickly solidify the ecosystem. The program trained more than 20 young leaders in 2021.



OCP Africa women in Agribooster program to empower women farmers

Because no agricultural transformation in Africa will take place without the participation of women and youth, investing in the economic empowerment of these populations is a high return on investment, that will have multiple effects on the continent's productivity, efficiency, and inclusive growth of the continent.
OCP Africa is committed to these strategic populations that are important for African agriculture and deploys innovative programs adapted to their challenges.

Historically, women farmers have been neglected or marginalised during the disbursement of facilities like credit and other logistics.

This project aims at empowering exclusively the women farmers by assisting them to have access to quality inputs and markets, coupled with tailored training.

The program also helped mitigating the negative impact of COVID-19 on women in agriculture and ensuring that they continue to produce food crops for their communities.

To increase productivity and livelihood, the program gives Women in Agribooster access to quality inputs and finance, training on good agricultural practices and extension services as well as access to market for sales of farm produce. These has also raised their yield from 1.9MT/Hectare to 4MT/Hectare. In Ghana, TROTRO TRACTOR and SAYeTECH, two Ghanaian startups, winners of the first IMPULSE cohort, respectively supported women farmers in mechanization via a powerful on-demand mobile platform that connects farmers to tractor operators and harvesting activities via smart machines. Women aggregators were selected to serve as channel for inputs and produce markets for the women farmers that cultivate maize and rice.

They have also recruited 2 women field officers each that have been trained in the main flagship program Agribooster ToT and will in turn train the women farmers both on the field and the classroom setting.
The women aggregators were linked to the importers for the fertilizer supply.

Through this program, OCP Africa is creating innovative links between the startups it supports and vulnerable feminine populations.

13,000

Women reached by the Women in Agribooster initiative, using the Agribooster platform in Ghana and Nigeria since 2020



QUALITY MANAGEMENT

At OCP Group, we have a relentless commitment to delivering outstanding quality solutions and services — on time, every time – placing our customers' definition of quality first throughout the product development and delivery process. We are especially committed to guarantee that fertilizers and raw materials, additives and intermediate products are manufactured, handled, stored, delivered and used in a safe way when it comes to occupational and public health & safety and the environment aligning with all relevant legislation and respecting best practice industry guidelines.

Marketing & sales	Application & use
• Safety data sheets • Chemical compliance & due diligence • Voice of the Customer program • Sharing of knowledge through local resellers, agronomists, agripromoters • Smart blenders	• Safety data sheets • Soil analysis, demonstration platform • Capacity building programs • Precision farming & nutrient management programs • Digital & analytical tools

Product development	Storage
• R&D & on-site tests • HESQ assessments • Chemical compliance & due diligence • New product evaluation (NPE) & New product introduction (NPI) processes	• Safety data sheets • Online process monitoring • Traceability tools • HSE audits for subcontractors • Emergency response plans

Transportation	Packaging
• Safety data sheets • Online process monitoring • Traceability tools • HSE audits for subcontractors • Emergency response plans • Innovative last-mile delivery systems	• Bulk material assessment • Product safety & labelling compliance • Customization options

Manufacturing	Sourcing
• HSE programs • Process safety programs • Circular economy programs • Security programs • Business Continuity Plan • Audits & continuous improvement plans	• Suppliers code of conduct • Quality & HSE criteria • Chemical compliance • Audits & continuous improvement plans

The QMS-LCP OCP (Quality Management System Life Cycle Product) ensures the constant implementation of quality excellence along the whole product life cycle and is based on 6 pillars:

- Leadership & engagement
- Effective listening to the client's voice
- Anticipation of market needs and developments
- Development of capabilities
- Efficiency of quality across the entire value chain
- Rituals of quality performance & continuous improvement

Stemming from these L.E.A.D.E.R pillars, 15 product lifecycle oriented work axes are developed in 227 elements. Each element is described in a maturity matrix at five levels thus constituting the QMS-LCP OCP reference system.

SASB : RT-CH-410b.2

Commitment at all levels

Quality touches every single OCP Group employee. In 2020, we reaped the benefits of a global organization with built-in operational synergies among rock, phosphoric acid, fertilizers product development teams. Our new product evaluation (NPE) and new product introduction (NPI) processes are now production proven and delivering world-class results. Our quality team is a worldwide organization that leads customer-critical functions within OCP Group. Their responsibilities include:

Customer quality	External quality	Failure analysis lab
• Finding the root cause of quality issues • Working on product quality improvements through preventive and corrective actions	• Working with final manufacturing subcontractors on quality-related tasks, audits and incidents Being the main quality point of contact for outsourced products	• Chemical and physical product analysis for new product development, customer issue resolution and manufacturing effectiveness improvements • Providing an expert voice in new product development teams

Manufacturing quality	New product introduction (npi) quality	Quality standards and bodies
• Acting as customer advocate for internal manufacturing sites regarding change management, discrepant material and product qualifications • Overseeing and performing quality audit activities • Giving expert knowledge, with the help of quality tools and methods, to help ensure quality of manufactured products	• Driving quality into product development activities • Helping ensure that new product releases meet customer and standards requirements	• Voicing Our position and interests within industry standard bodies such as ISO, IFA and AOAC (Association of Official Analytical Chemists) • Communicating internally, industry standard trends and changes (planned or actual)

Quality systems	Reliability lab	Business continuity management
• Managing our quality rules, process structure and documents • Coordinating internal and certification audits • Leading continuous improvement activities • Making sure that customer-specific and market-specific requirements are available and understood	• Operating life and environmental stress labs to validate long-term reliability of our products Supplier Quality • Working with suppliers on quality related tasks, audits and incidents • Driving supplier quality improvements	• Identify critical processes that may interrupt business operations and implement strategies to minimize the impact

Regulatory intelligence
• Maintain the regulatory compliance of all OCP products.



Quality information systems

We developed online quality tools and processes to support operational and customer needs, which can be found on our internal quality portal website. The quality portal is our hub for critical business functions, such as QMS LCP OCP, Regulatory Intelligence platform, and the Master data Product. These systems have many reporting and data mining capabilities.

QMS LCP OCP is an in-house built quality management system that shows the way. It features a digital platform requiring a self assessment plan for each entity. All users are required to disclose scores and maturity according to the QMS-LCP OCP standard, as well as objectives and action plan. The user can also share best practices with the other users while we teach our team members to be good problem solvers and our managers to be good mentors and coaches.

Regulatory Intelligence platform: The supply of fertilizers and chemicals is regulated by national and international chemical and product-related codes. OCP Group is committed to monitoring and ensuring compliance with such regulations while meeting local market requirements. The Regulatory intelligence platform allows to screen our products' compliance – including chemical safety – with domestic regulations worldwide and share knowledge across the company. Regional regulatory intelligence committees are held regularly to identify further regulatory local developments and define compliance action plans accordingly. We also monitor normative and regulatory trends through our participation in international standardization bodies.

The Master Data Product is a common products referential to describe and share quality standards across the company for all products from rock, to acid, to fertilizers, to feeds throughout their lifecycle. The online platform allows to improve knowledge of the OCP Group product portfolio, reduce non-conformities, time-to-market for new products, customer satisfaction and control of regulatory non-compliance risks such as chemical safety. The platform features all specifications, chemical properties and components, physical properties (particle size, colors, hardness), trace elements but also analytical methods (e.g. gravimetry, etc.). All data included in this platform is integrated into each trade management system, including procurement, occupational health & safety, etc.
All data from this platform finally fuels product catalogues and sheets – including their correct uses and safe handling.

Customer-driven Quality : Customers are the starting point for a closed-loop process that ensures exceptional interaction and accountability.

Customer satisfaction
achieved score in 2019 for the customer satisfaction survey

3,4/5

PRODUCT & CHEMICAL SAFETY

OCP Group has independent bodies conduct regular safety audits to verify the compliance of each unit and site with our HSE policy, our safety standards and regulations requirements. Each audit follows a defined protocol and schedule; and conclusions are sent to the management of both the unit/site and corporate to adapt action plan.

Process safety management audits strengthening chemical safety

- Process Safety Management (PSM) aims to identify, evaluate and control the hazards associated with the highly hazardous chemicals used in our processes. OCP Group has developed an effective PSM program involving:
- Process Safety Information: written safety information to conducting a PHA.
- Process Hazard Analysis: to identify, evaluate, and control hazardous processes.
- Procedures and Performance Standards: written operating procedures to be implemented.
- Incident Investigation: thorough investigations must be completed after all incidents related to the process.
- Change management: changes to a process must be evaluated to determine if there will be any impacts on the health and safety of employees.
- Mechanical integrity: process equipment must be designed and set up correctly.
- Employee participation: workers must be involved in PSM programs.
- Compliance Audits: conducted and reported at reasonable intervals.
- Training: Employees must be trained on hazards and procedures.
- Contractors: all contractors working on or near highly hazardous chemicals must be trained on emergency procedures and other relevant aspects of the PSM program.
- Pre-Startup Safety Review: for new and modified facilities, PSSR must be conducted before operations can begin.
- Emergency Planning and Response: employees must be trained on emergency planning and response procedures.

OUR GOALS

Our goals	Where we stand in 2021
Develop external partnerships and end-to-end ecosystems as to maximize synergies and allow cost effective, farmer centric supply chain	Additional extension services provided through our end-to-end solutions OCP Al-Moutmir and Agribooster
Increase the geographical area and the number of beneficiaries covered by rational agricultural practice support programs	20,000 farmers covered by OCP-Al Moutmir in Morocco 144,600 farmers covered by Agribooster in 4 African countries 87,695 farmers covered by OCP school labs

GRI 3-3, GRI 203-1, GRI 413-1
SASB :RT-CH-210a.1
EM-MM-210b.1
UNGC : Principle 1

3.5 Commitments to shared value creation

FROM INVESTING IN MINES TO INVESTING IN PEOPLE

At OCP, we do believe business can only thrive in a flourishing society where development meets the needs of the present, without compromising the ability of future generations to meet their own. Breathe, eat, work, learn are very basic needs we – as employees, investors, parents, political leaders, citizens, etc. – all depend on; but whose satisfaction is still being threatened. As a responsible company, we aim to thoroughly understand every impact we have and take actions to create shared value for all our stakeholders. We focus especially on making capacity development and job creation sustainable as we think these are fundamental pillars for empowerment.

Our action is deployed in Morocco, throughout Africa, and worldwide, bringing customized approaches to better answer to local populations' and vulnerable communities' needs in order to build together an inclusive growth.

$595 million
Community Investments in 2021

35%
Increase in community investments in 2021 compared to 2020

OCP Foundation :
Education, Social Innovation, Nutrition & Food security, Fight against climate change & Biodiversity preservation

Africa :
- ✓ Guinea
- ✓ Togo
- ✓ Burkina Faso
- ✓ Madagascar
- ✓ Cameroun
- ✓ Ghana
- ✓ Rwanda
- ✓ Senegal
- ✓ Morocco

Asia :
- ✓ India (Rajasthan)
- ✓ Bangladesh

Act4Community :
Education, Local socioeconomic development
- ✓ Khouribga
- ✓ Gantour
- ✓ Safi
- ✓ Jorf
- ✓ Laâyoune

Phosboucraa Foundation :
Research & development, Innovative entrepreneurship, urban development around tech project of a city of knowledge and innovation : the Foum El Oued Technopole Education, Local socioeconomic development, Enhancement and promotion of local natural and cultural heritage

South Moroccan regions
- ✓ Guelmim-Oued Noun,
- ✓ Laâyoune-Sakia El Hamra,
- ✓ Dakhla-Oued Ed-Dahab.

Act4Community

Find out more

Act4Community is fueled by dedicated teams for each operational site and backed by OCP's resources. To carry out community impact assessment and maximise sustainable impacts, it relies on key engagement levers such as :

- ✓ Thematic workshops;
- ✓ Door-to-door;
- ✓ Trade forum;
- ✓ Meetings with targeted stakeholders (local associations, communities, local authorities, project owners, etc.);

To better respond to the challenges raised by these dialogues, Act4community relies on the Group's potential to provide capacity building to the local ecosystem and to develop competitive businesses, stable jobs and qualified workers in the sites where the Group operates. Stimulating the growth of micro, small and medium-sized enterprises.

Act4Com is acting on several areas among which:

- ✓ Stimulate the growth of micro, small and medium enterprises and facilitate their integration into local content and access to financing.
- ✓ Develop the creative and entrepreneurial spirit of young people in the fields of sports, culture, communication, digital....
- ✓ To ensure the inclusive urbanization of the neighboring populations

7,655 employees volunteered for actions since 2018*

27,612 volunteer days since 2018*

*Those figures do not include teams as fulltime occupation

Key areas of actions and positive impacts 2021

Development of the local economic ecosystem

Social and solidarity economy in the local supply OCP (textile, carpet and catering industries)

45 Cooperatives supported

677 Jobs

Support of local Very Small Business (VSB) at OCP sites

153 VSB supported

Support of solidary agriculture at OCP sites

17 Agricultural cooperatives supported

107 Members

564 Farmers

Development of the youth competences

Development of youth entrepreneurship

460 Young people trained

112 Very small business newly created

Support for youth education at OCP sites

+6000 Students

2 startups incubators (in partnerships with UM6P) :
112 environmental projects under incubation

Social innovation

101 Assocations supported

22 Cultural entrepreneurs, trained and supported

136 Trained and certified first aider, deployement of the Progam Community Health also for 7 primary schools, with 1800 students



OCP Foundation

Find out more

Aware of changing development paradigms around the world and fueled by the Group's agile dynamics, OCP Foundation is capitalizing on a decade rich in achievements and learning to embark on a transformational movement of its mission and its contribution to the OCP Group's value chain.

In 2021, with its extraordinary knowledge ecosystem, the OCP Foundation has made a calm strategic shift to maximize its impact and bring sustainable added value to its partners and target communities. It aims to :

- Consolidate its solid expertise and proven know-how in the fields of education in Morocco and support to agriculture in sub-Saharan Africa and Asia;
- To open up to new fields that are of major importance for the reputation and competitiveness of OCP Group;
- Strengthen its governance and operational models.

In this sense, the OCP Foundation aims to be a social actor committed in Morocco and internationally to the promotion of sustainable development values carried by the Group through the following strategic axes:

- Promoting excellent and inclusive education
- Supporting R&D and disseminating social innovation
- Supporting food and nutritional security
- Fighting against climate change and preserving biodiversity

+160

Projects in 2021 contributing to SDGs

+77,000

People reached by the Foundation, for a more equitable future through sustainable innovation

Sustainable and integrated agriculture

8,200 farmers whose awareness has been raised about sustainable soils management, ¼ of which are women

29 new schools sponsored for a total of 60 schools and 30,000 students

4,000,000 ha

Soil fertility mapped in Africa

Education

+3,600 Scholarships funded through FIRSI

29 new schools sponsored for a total of 60 schools and 30,000 students

9,400 students benefiting of the project to equip the 27 public CPGEs

Fighting against COVID-19

+9000 protection kits in India

+7500 Beneficiaries of awareness raising campaigns and 120 people trained to sanitation work in sub-Saharan Africa

Social & solidary economy

600 cooperatives supported through the Cooplab UM6P

+400 Women trained and creation of 3 schools for women

30 projects received for the call for projects of the Sustainable Development Fund

Reinforcing excellent and inclusive education

- Support learners who are accessing excellent programs
- Develop public schools through the sponsorship of educational institutions
- Foster education for children and people with special needs in vulnerable situations

Supporting R&D and disseminating social innovation

- Boost the Moroccan research and development ecosystem by supporting research projects and setting up multi-thematic research funds
- Impulse social innovation by rethinking conventional development models and integrating social and environmental considerations at the heart of economic issues
- Encourage the emergence of the Social and Solidarity Economy through the reinforcement of national and African cooperatives

Improving food and nutrition security

- Implement integrated community agriculture projects with African cooperatives and associations and setting up agri-businesses
- Disseminate good agricultural practices

Building resilience against climate change and protecting biodiversity

- Support rural and agricultural communities to better adapt to climate change thanks to equipment, training and capacity building
- Preserve biodiversity (reforestation, rehabilitation of degraded sites, etc.)



Phosboucraa Foundation

Find out more

Working for the development of the southern regions of Morocco, the Phosboucraâ Foundation has learned to adapt and reinvent itself in the face of changes that have affected the world. The transformational dynamics of OCP Group and years of experience in the field have enabled the Phosboucraâ Foundation to naturally turn to innovation as a driver of value creation, which strengthens its programs and allows it to create more impact. This approach is reflected in the 4 strategic axes that it carries:

- Supporting R&D with high added value for local communities
- Promoting excellence in education
- Encouraging innovative entrepreneurship
- Innovative urban development through the Technopole of Foum El Oued

Education

27,745 young people and women beneficiaries of the foundation's Learning Center training programs, including 1399 trained in 2021

Entrepreneurship

673 micro businesses and cooperatives supported in 2021

+ 32,500 young people introduced to entrepreneurship in 2021 to build a more equitable world

Gender equality

+ 500

women financially empowered in 2021 for a more inclusive world

Urban development

10 HECTARES

hectares developed and dedicated to research and development (6 buildings, 1 agricultural greenhouse, experimentation areas)

Research and development

+ 600

farmers benefiting from research projects aimed at improving their production in arid and saline lands.





The way we promote education

Education is one of the most important investments a country can make in its future. Breeding confident, well-rounded successful individuals who will become responsible and resourceful citizens to sustainably develop Africa and our companies as well as international talents.

DEVELOP EXCELLENCE & INNOVATION

Mohammed VI polytechnic university (UM6P)

Working together with OCP Group, Mohammed VI Polytechnic University (UM6P) is a center of excellence that is training a new generation of committed leaders, builders of tomorrow's Africa. Its ambitions are :

- ✓ Develop skills and knowledge
- ✓ Promote research
- ✓ Develop sustainable and international partnerships
- ✓ Create a new generation of competent leaders,
- ✓ Share the values of social responsibility and sustainable development

To pursue its ambitions, UM6P is divided into four interdependent poles:



395 Doctoral students

15 Executive Master's programs

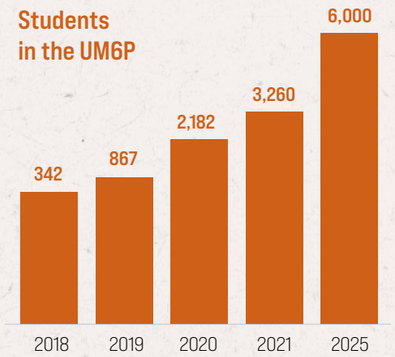
10 Of international students and 25% by 2025

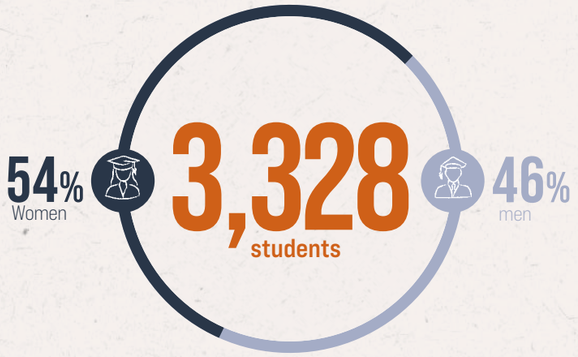
24 Nationalities

13 Undergraduate programs

110 ha Experimental farms

14 Master programs







Campuses across the country adapted to specific regional needs

In the service of the common good, merit and excellence, the Mohammed VI Polytechnic University (UM6P) is expanding its presence in the territories according to a logic of thematic campuses to respond to the economic realities of the regions and to the the Kingdom's development challenges while embedding sustainability as a common pillar of its developement.

Rabat: International relations, political science, economics, and behavioral social sciences within the Faculty of Governance, Economic and Social Sciences (FGSES)

Casablanca: Business administration, collective intelligence and coaching within the Africa Business School (ABS)

El Jadida: Chemistry and biochemistry

Benguérir: Fundamental sciences, applied research and coding

Laayoune : Biosaline agriculture and management of arid lands – especially through the African Sustainable Agriculture Research Institute (ASARI)

...Geared towards local youth:

Lycee d'excellence : Prepares students for higher education and preparatory classes for the Grandes Ecoles.

Mahir Center : Training, practices and innovation to meet the challenges of human development in Morocco

BCC Benguerir : Community College provides an educational offer for the Rhamna region that allows the improvement of "soft skills"

100%
academic departments with sustainability course offerings

948
Students enrolled at the Schools of Excellence

100%
of preparatory classes accepted in the Grandes Ecoles

9,760
beneficiaries of 1,561 capsules produced for UM6P digital platform available for public preparatory classes

Our ecosystem of partners

More than **200** Partners worldwide

MENFPESRS
Agronomy in arid climates

MECVN
Maroccan Retail Tech Builder

MCA
Digital platform for employment based on big data increased by AI

ADN
Four projects of R&D

ACT4C
Training and assistance

OFPPT
Training, deployment and support in 3 regions

ODCO
Training and coopératives assistance

NARSA
Digitalisation of driving tests

CRDI
Quinoa culture

MS
Accelareted research centre for prototyping in Metallurgy

TANGER MED
Detection of fraud in the Tanger Med port

ST1
Carbon Farming & Afforestation in arid zones

CNRST
Machine learning and AI

AGRIEDGE
Fertilizers advertising

CAM
Networking and innovation in rural areas

ACADEMICS & EXCECUTIVE EDUCATION

Digitalisation, innovation and Learning by doing

Digital schools:

- ✓ 1337 and Youcode are Morocco's flagship IT training schools. They are completely free and accessible to all. No diploma or computer knowledge is required as a prerequisite. Their pedagogy is based on peer-learning, a participative approach that allows students to express their creativity by learning through working on projects. To train tomorrow's coders, rethinking the learning process and transforming IT into a fun and exciting discipline was necessary. Campuses are in Benguérir, Youssoufia, Khouribga, and Safi.

Students in the digital schools : 2018 : 410, 2019 : 900, 2020/2021 : 1337 (Benguerir : 334 Khouribga : 422), Youcode (Youssoufia 201, Safi 163), 2021/2022 : 1337 (Benguerir : 520 Khouribga : 734), Youssoufia 165, Safi : 148

The Solicode coding school in Tangier has been set up in 2020 in collaboration with the Mohammed V Foundation and the LEET Initiative.

- ✓ **Digital learning lab:** production studios and MOOC (Massive Open Online Course).
- ✓ **Gamification:** International Digital Center to develop technologies augmented/mixed reality to become familiar with industrial installations, training and education.
- ✓ **Living labs** breaking the codes of traditional education to learn through experimentation in full-scale work platforms where researchers can concretely track their paths of research.

Several actions have been launched to support distance education through UM6P, LYDEX, 1337, YouCode and IPSE, and amongst them:

<u>National Center for Digitalization and online Education (CNDE)</u>

In order to strengthen the actions deployed for an effective online education in Morocco, the Ministry of National Education, Vocational Training, Higher Education and Scientific Research, Mohamed University VI Polytechnique (UM6P) and the OCP Foundation have signed a partnership to create the "National Center for Digitalization and online Education". This center will be based at UM6P Benguerir campus, in order to capitalize on the know-how of UM6P about digital tools for the promotion of innovation and excellence in scientific research ad its expertise in the digitization of education and e-learning. This partnership aims, among other things, to define a Moroccan vision and strategy for online higher education by capitalizing on the experience carried out within the framework of the educational continuity plan following the state of health emergency of COVID-19;

14 studios set up in the public universities

70+ digital experts and technical experts trained over the course of 3 days

+1100
Videos produced between 2020 and 2021

+6000
Students reached

CLIMATE CHANGE
MOOC
- 40 videos
- 10+ learning activities
- 4 professors

ENTREPRENEUSHIPS & INNOVATION PROGRAM
- eLearning platform
- 3 learning modules created
- 40+ videos produced - launch 2022

EXAF PROGRAM (TRAINERS TRAINING, INSTRUCTIONAL DESIGNERS TRAINING)
- 4 Workshops (7 day webinars each) over the course of 4-5 months
- 2/4 SPOCs produced
- ±100 professors and digital learnings experts trained
- From 12 universities

UM6P Sustainable Development Ambassadors Program 2020 - 2021

- Promote and implement sustainability at the UM6P Campus
- Promote and disseminate sustainability concepts throughout the campus with the students' communities of practices.
- Deepen their understanding of sustainability while developing their outreach and activism skills.

+50
Ambassadors

+5
Startup projects since the creation

+1000
Engaged students

+3000
Hours invested

+60 actions
(e.g. sustainable agriculture forum, Green Summit simulation, UM6P food bank, mugs & water bottles, etc.)



Community engagement for diversity, gender equality, tolerance and prevention of sexual harassment

As part of the community engagement strategy of UM6P and the awareness raising around the unifying values of our community, an annual awareness campaign was launched since August 2021, that we named "UM6P S'engage".

5
Launched initiatives

10
Engaged students

+311
Volunteers

15
Awareness totems



Research

Among our research for sustainable mining and agriculture, as well as for sustainable food system and nutrition, the research areas include, but are not limited to, the following topics : Climate change, Industrial economics, Soil health and fertilizers in Africa, Geology & Sustainable Mining, Water, Sustainable management, Innovation,...

In 2021, six Chairs have been created on: Sustainable Energy, African Chair in Sustainable Management, Soil Science, Cybersecurity for Africa, Multiphysics and HPC, Digital Science.

To know more about our research laboratories, please refer to our commitment "Sustainable and innovation-driven growth".

Development of the « Excellence in Africa » initiative

Launched in 2020, the « Excellence in Africa » initiative, partnering with Ecole Polytechnique Fédérale de Lausanne (EPFL), was developped in 2021. It is built around 3 axes :

1. (1) Junior Faculty Development: Talented young African professors collaborate with an EPFL laboratory to jointly develop a research project.
   182 Submitted applications | 6 selected projects | 19 tandems with EPFL Professors
2. (2) 100 PhDs for Africa: 100 doctoral students benefit from thesis funding and close collaboration between the African university in which they are registered and an EPFL laboratory.
   854 submitted applications | 10 selected PhD students | 70 Morocco applicants
3. (3) Center of Competence in Digital Education: The objective is to provide students enrolled in master's and doctoral programs throughout Africa with access to quality educational materials and tools. To achieve this, several Digital Education Competence Centers will be created.
   12 participating universities | 20 submitted applications | 6 selected projects

+700
Scientific publication in 2021

+350
Scientific publication in 2021 related to the achivement of the Sustainable Develoment Goals (SDGs) : 2, 6, 7, 11, 13, 14

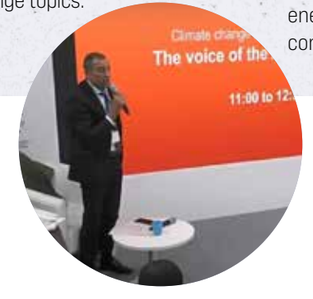
8
patents

1 BILLION MAD
(equivalent 103044 US $) investment in 2021 for scientific research on the following sustainability topics :
11% on sustainable agriculture
13% on Materials & Energy
18% Digitalisation

Fighting climate change at the COP 26 and COY16

Participation at the COP26 at Glasgow

UM6P has the chance to present its initiative with CESE and UCESA on its approach adopted on climate action – "Climate action for Africa "voice of African people", to understand the perception of African decision-makers about climate change topics.



UM6P is recognized as a CLIMATE HERO in the United Nations Climate Change Conference of Youth 16

Led by UM6P's Sustainable Development department, COY16 Youth statement of UM6P represents youth's vision of national and local emerging issues and englobes their demands and contribution. It tackles 6 main themes, namely, climate change, clean energy, sustainable cities and communities, eco-mobility, social inclusion, and gender equality. It was drafted by youth representatives of UM6P and the local region of Rhamna as the COY16 Youth Consultative Committee.



STARS Accreditation, Positioning UM6P at the top-tier universities

> "This exceptional achievement positions UM6P at the forefront of the list of pioneering universities working to advance sustainability internationally, and above all to be the first and unique African university and the youngest worldwide to obtain the STARS accreditation."

HICHAM EL HABTI,
President of UM6P



PROVIDE EQUAL OPPORTUNITY

Ensuring meritocracy

To allow each and every one to reach their full potential wherever they come from, OCP Group provides scholarships to enable all students to access prestigious schools as well as private tutoring.

	2019	2020	2021
Students receiving scholarships	3,028	3,107	**3,593**
Students having received scholarships enrolled in the French Grandes Écoles, the Benguerir School of Excellence and UM6P	90%	100%	**92,15%**

The percentage of sub-Saharan students at UM6P for the current academic year (21/22) is 6% of the enrollment (24 nationalities). The goal is to target 20% of sub-Saharan students by 2025.

12 scholarship holders out of a total of 751 from the Southern Provinces enrolled in French Grandes Ecoles.

The granting of scholarships is managed in partnership with Fondation Ibn Rochd Pour les Sciences et L'Innovation (FIRSI), which promotes excellence, innovation and sustainability.

Developing entrepreneurship

UM6P INNOVATION AND ENTREPRENEURSHIP PLATFORM "STARTGATE"

Created in 2020, the StartGate platform will host different incubation and acceleration programs to create a full fledge start-up environment within the ecosystem of UM6P, its living labs and the Green City Mohammed VI of Benguerir to boost the African development.

Our start-up campus

Startgate

+254 project holders & startups supported

20% feminist projects

+15 Countries in Africa (outside Morocco) touched

+10 programs

Plug & Play

Plug and Play Morocco is the first external project to integrate the platform in 2021. Global innovation platform headquartered in Silicon Valley, Plug & play. It will focus on key areas that will shape the future in Africa – targeting especially the challenges around smart cities.

+5 investments in Morrocan Startups - $ 220,000 in total

+35 international Mentors invited to StartGate with strong expertises



1st EDITION OF THE HACKATHON "AGRICHALLENGE"

Organized in partnership with the *Institut Agronomique et Vétérinaire Hassan II* (IAV), the first edition of the hackathon « AgriChallenge » has welcomed students from diverse Moroccan universities to find innovative solutions to the challenges faced by the agicultural sector in Morroco based on mentoring sessions to structure their projects. The prize was awarded to HySol: A solution aimed at helping Moroccan agricultural cooperatives to overcome problems related to energy consumption, by offering solar energy as an alternative.

Ecosystem of innovation and entrepreneurship

P-Curiosity Lab

P Curiosity Lab, is an Innovation Lab focused on the rural development of Morocco and African Rural communities, running more than 19 programs with a mission to create innovative solutions in order to overcome the 44 identified challenges of rural communities, going from access to education, health, clean energy, transportation to financial inclusion.

Entrepreneur Academy

Its Mission is designing and delivering customized and tailored programs to meet the specific needs of its national and international partners.The Program Offers of Entrepreneur Academy aims to develop the entrepreneurial mindset and practical skills by giving the most adequate tools and fundamentals to identify, valuate and execute an entrepreneurial opportunity. EA helped + 1300 persons to develop the entrepreneurial awareness and build upon the entrepreneurial skills. It also launched The Futurpreneur, its innovative program of entrepreneurship for +520 high school students in different Moroccan regions. Moreover, EA delivered the entrepreneurship module for +140 UM6P students from 4 UM6P departments and schools.

Fillaha Innovation Lab

Filaha Innovation Lab is a program that supports African idea-holders in the field of AgriTech to transform their project ideas into Startups. It is a program that is organized thanks to the collaboration of AgriEdge & UM6P to offer support to the selected teams in two phases : technical supervision of projects in order to ensure their adaptation to the needs of the agricultural ecosystem and the reliability and feasibility of their solutions, business support to ensure their penetration of the market. To date, the program was organized in 2 editions where we received over 180 applications from 24 African countries, and mobilized 16 partners, to offer the best support to 27 teams to bring their ideas to the AgriTech market.

African Youth Climate Hub (AYCH)

AYCH Incubation Program is a business development program for early-stage green startup companies. It promotes and support the creation of eco-friendly startups where respect for the Triple Bottom Line is the backbone of their business models, carbon removal and sequestration technologies are at the core of their solutions. AYCH incubation program offers a tailored curriculum mainly articulated around the targets of the Sustainable Development Goal number 13 (i.e. Climate Action). AYCH incubation program has received 287 application forms from all over Africa, and has mobilized over 30 experts from different industries. 10 startups will benefit from 6 months of hybrid incubation.

U-Founders

UM6P launched in 2020 the startup support program "U-Founders" to promote a global community of visionary researchers and entrepreneurs, who are engaged in the development of the African continent. U-Founders deploys incubation, pre-incubation and entrepreneurship awareness programs for students, researchers and entrepreneurs belonging to the university's ecosystem. The U-Founders programs shapes its people from project developers to business leaders around two themes: "Deep Tech", bringing together projects and breakthrough innovations in sectors related to the research agenda of the UM6P; and "Shallow Tech", grouping projects whose economic model is based on widely available technologies.

+65 startups supported in 2 cohorts

+10 Sectors covered by our startups

+30 Sectors covered by our startups

+200 Applications received

+20 Workshops realized for the benefit of the entrepreneurship ecosystem

EXPLORER

Venture Explorer is a program in collaboration with MIT Sandbox Innovation Fund that provides a very personalized educational and business experience for innovators and entrepreneurs from the UM6P, GEP, MASCIR, 1337, YouCode, Cadi Ayyad, Hassan II, Mohammed V and Al Akhawayn community (students, researchers and postdocs) sowing the seeds for a real venture. The Explorer program provides initial funding from 10.000 MAD to 250.000 MAD for each team in addition to matching them with globally and locally experienced mentors to help usher the ventures through their various stages including business plans, customer discovery, early product definition, technology development, intellectual property and legal structure.

IMPULSE

IMPULSE is a 12-week acceleration program dedicated to innovative startups in the fields of Agritech, BioTech, Mining Tech and Materials Science & Nano Engineering.

1 Cohort

4 Bootcamps

4 Intrapreneurial startups

+350 Applications received

16 startups selected

SOCIAL INNOVATION LAB : Led by the OCP Foundation and the Mohamed VI Polytechnic University, the lab is a continuous accelerator of innovative initiatives to answer the needs of diverse communities from different regions within our Group's ecosystem. In 2020, the Seed Fund Research has been launched and 11 projects selected on social challenges. Find more about the Cooplab and the Sookoa platform in the next section.

CoopLAB, Spin Off SOCIAL INNOVATION LAB
Created in April 2020 through a partnership between the OCP Foundation and the Mohamed VI Polytechnic University, the CoopLab is a spin-off of the Social Innovation Lab. CoopLab aims to be a model of social innovation at the service of the Social and Solidarity Economy sector by promoting a culture of excellence that reconcile economic efficiency and social impact.

HOW ARE WE ENCOURAGING SOCIAL ECONOMY

Mourafaka Program: Born from a partnership between the Ministry of Tourism, Handicrafts, Social and Solidarity Economy, the Office for the Development of Cooperation, the OCP Foundation and the UM6P, Mourafaka is a post-creation support program for cooperatives focused on supporting and building the technical and managerial capacities of newly created cooperatives. CoopLab targets through the 4th phase of the program more than 600 beneficiary cooperatives in the 12 regions of Morocco by providing them with support and advisory services for a period of three years: Strategic diagnostic, Group Training, Technical assistance, Individualized support and funding for the best projects.

By 2023, the positive impacts of the program are excpected to be :

- ✓ 600 cooperatives selected in the 12 regions of Morocco ;
- ✓ 600 Cooperatives diagnosed, trained, and supported ;
- ✓ 100 high-potential projects financed ;
- ✓ 1200 managers trained ;
- ✓ 1,800 cooperators supported and coached ;
- ✓ More than 3000 cooperators impacted by the program ;
- ✓ 20 executives trained and supported.

Women's cooperatives and youth cooperatives: Over 2020 and 2021, CoopLab has supported, trained, mentored 28 cooperatives that have won competition prizes organized by the Cooperation Development Office:

- ✓ "LALLA LMOUTAOUINA" which celebrates female leadership by the cooperatives. (16 Cooperatives)
- ✓ "Al JIL LMOUTADAMIN" that promote the innovation of cooperative projects by Moroccan and African youth. (12 Cooperatives)

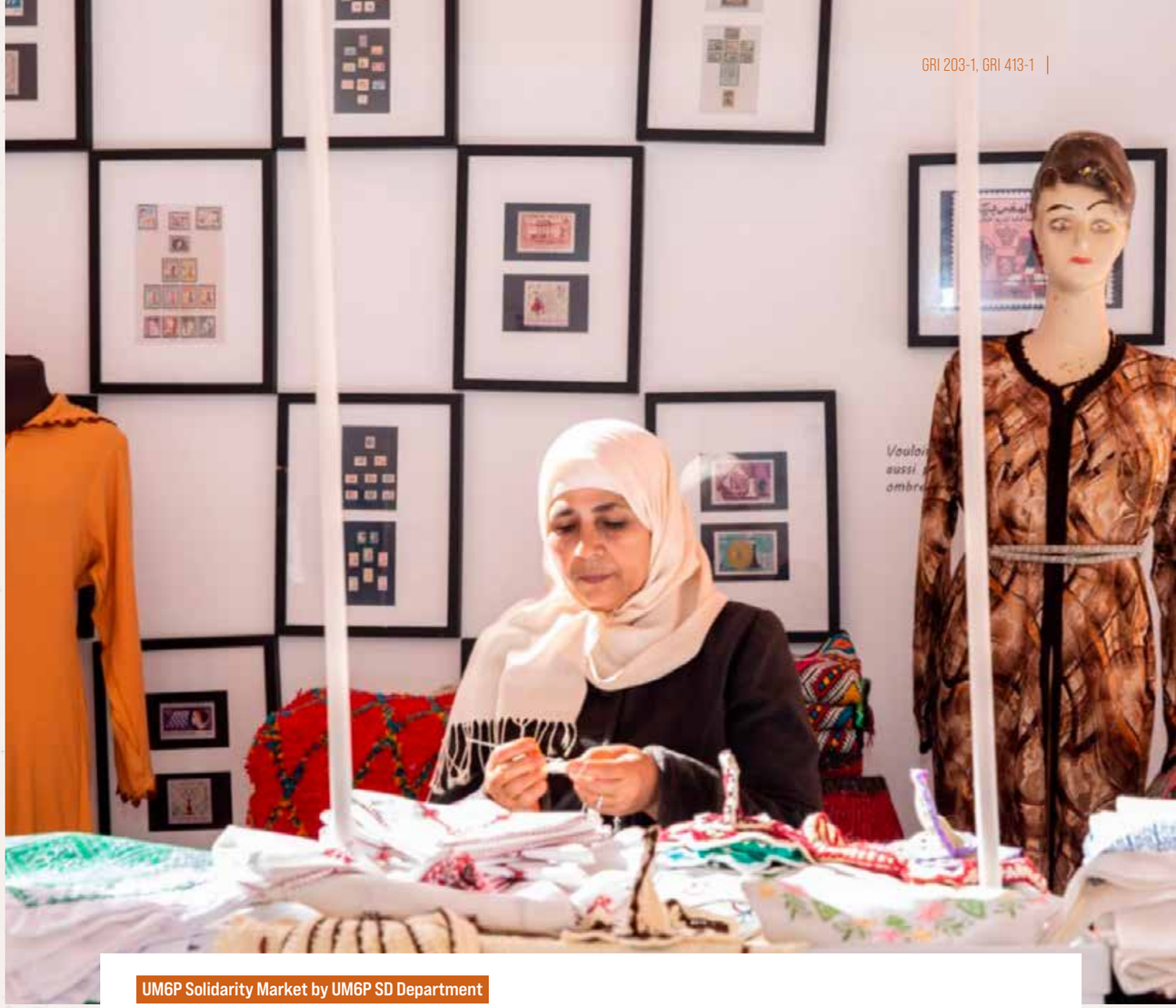
Market place Sookoa: Sookoa is a Moroccan e-commerce platform devoted to cooperatives and specialized in local products, cosmetics, and crafts. The marketplace allows clients to discover local and African riches. The centuries of knowledge about traditional making or craft techniques merged with innovation ideas in each product enhances the value of our historical heritage. Sookoa's model is founded on fair trade principles, which aims to give small producers the necessary means to position themselves properly, gain wider access to international markets and move up the value chain to achieve sustainable development and inclusive growth, contributing to the improvement of cooperatives living conditions. In 2021, the first Version of Sookoa platform endorses more than 78 Cooperatives and 606 products.

Collaborative exchange platform: "RAWABITE" is a cooperative ecosystem networking program to facilitate networking, exchange, and development of business opportunities. In 2021 the "JIC RAWABIT" enabled to connect and network cooperatives on the international day of cooperatives.

20
Moroccan cooperatives

+44
teams participation

7
Concrete collaborations



UM6P Solidarity Market by UM6P SD Department

As part of the promotion of the social and solidarity economy and the support of its components, the UM6P organized for UM6P community regularly every Thursday the Solidarity Market at UM6P, the first exhibition of its kind dedicated to local cooperatives in Rhamna. This market has allowed them to exhibit their products and expand their network. Diverse students' startups have emerged to suggest a digital solution for the cooperatives.

54 Active cooperatives – 108 mobilized local artisans – 17 editions – 2 collaborations (CoopLab-Agriedge-Social Experience Program-PCL)

In collaboration with Act4Community, 5 reflexivity groups have been set up to capitalize on OCP Group's experience in community development projects. We have also structured our training offer targeting our ecosystem, involving the MIT D-LAB (designing for a more equitable world).

FUTURE LABS IN AFRICA: As part of the 'Imagine the future in Africa' social innovation project in partnership with OCP Foundation, UM6P and UNESCO, a call for projects has been launched in Ivory coast and Kenya labs. Beyond these two Future labs, conference, webinar, master class, training and academic research programs have been implemented to make the African future bright.

The way we promote culture

MAHIR

Presentation of the book Heritage by its author Taha Balafrej, November 10, 2021 at Mohammed VI Polytechnic University. A rich exchange in the presence of the president of the UM6P Mr. Hicham El Habti, the participants of the Connect Institute ecosystem, the students and some members of the staff of the UM6P Benguerir around the cultural heritage, the book, the importance of reading and writing.



NABNI #2 : An odyssey of knowledge on campus

With more than 250 hours of preparation where creativity is the main engine animating the 115 participants involved in a project for the future of Morocco, NABNI #2 has been launched on February the 16th.

The theme of this year's edition is Reading and Writing. It's an odyssey through the history of writing, with a focus on the Mediterranean region, which leads to today's rediscovery of the power of reading.

MAHIR participants collaborated with youth from the MAHIR and Connect Institute network, in Youssoufia and Agadir. At MAHIR Center, participants are trained in fields such as reading, writing, debate, language, theater, visual arts, history, philosophy, manual work, and technology. Participants apply their learning through creative projects such as magazines, documentaries, plays, songs, podcasts, and NABNI.

All creative content at NABNI #2 is produced by the participants themselves, with the help of visual artist Khalid Assalami.

Intercultural Gate at Radio UM6P

This program aims to showcase the cultural diversity of the university by interviewing students from various nationalities about their cultural heritage.

7 Engaged students – 7 Interviews – 7 nationalities







The way we provide health and sport care

With the support of the OCP Group and its Foundation, the Mohammed VI Polytechnic University (UM6P) and the Institut Pasteur du Maroc (IPM) have signed an agreement in 2020 to contribute to the development of the national virology research capacity by pooling their resources and means. The agreement covers several areas such as the establishment of a medical virology center for highly pathogenic germs for detection, alert, virological monitoring and the development of new techniques diagnostic.

The agreement also includes the creation of a P3 category laboratory able to house research in virology within the UM6P. The future medical virology center and P3 laboratory will also aim to support the emergence of an entrepreneurial ecosystem for cutting-edge research, for the promotion of research results and the strengthening of the national biomedical industry.

A call for projects in R&D dedicated to virology will be launched on the one hand to promote the development of R&D in virology by capitalizing on the joint capacities of the UM6P and the IPM, and on the other hand to provide researchers with a specific platform to conduct their research.

$M5
3-year budget

$M3
3-year budget

$M1
4-year budget



GRI 203-1, GRI 413-1 |

GRI 203-1, GRI 413-1 |

The way we create smart living environment

Over the last century, OCP has been building cities to house workers. Strengthened by this historic experience, we are now developing sound ecosystems able to create long-term value for communities. This goes through a holistic urban design to enable each one of us to learn, work, share in a sustainable manner. All our urban development projects are inspired by the following pillars of smart cities:

- ✓ Smart economy to improve the overall business climate and attractiveness of start-ups, investors, businesses, etc. – providing opportunity, productivity as well as local and global interconnectedness.
- ✓ Smart environment to manage the built and natural environment through smart buildings, resource management and urban planning limiting emissions, water consumption, waste generation and encouraging the energy transition.
- ✓ Smart mobility to increase the efficiency and service quality of urban transportation to enhance the use and adoption of new mobility solutions as well as to increase people mobility through mixed modal access, clean & non-motorized mobility and integrated ICT.
- ✓ Smart people to encourage education to facilitate career choices, labor market opportunities vocational training as well as lifelong learning for all age groups and demographics but also talent development; inclusion and creativity.
- ✓ Smart government to strengthen connections & interactions between public authorities and all stakeholders.
- ✓ Smart living to increase the quality of life for residents and visitors through health, safety, culture and happiness infrastructures. We consider smart collaboration and innovation between public authorities, businesses, academia and civil society as essential for success. That is why we engage with our stakeholders in all our projects to better target specific local needs and challenges.

11 SUSTAINABLE CITIES AND COMMUNITIES

OCP strongly supports the achievement of the Sustainable Development Goal 11 by creating safe, affordable and resilient cities with green and culturally inspiring living conditions.

Rabat Campus

The Rabat Campus of Mohammed VI Polytechnic University has been built in 2021, in less than 9 months. It is partly dedicated to Economics and Social Sciences, hosting three entites: the Faculty of Governance Economics and Social Sciences (FGSES), the Africa Institute for Research in Economics and Social Sciences (AIRESS) and the Public Policy School (PPS). It is a research-based ecosystem with focus on public policy analysis and related challenges facing the African Continent. The perspective of the Global South stands at the heart of course offering. This allows future leaders to make well informed contributions to the development of the African continent.

The Faculty of Governance, Economics and Social Sciences is home to about 500 students and around 100 professors representing no fewer than 20 nationalities. It offers undergraduate and graduate as well as Ph.D. programs in four major disciplinary areas: Economics, Political science, Global affairs, and Behavioral & Social Sciences for public policy.

Built in

2021

in less than 9 months



Two other entities are part and parcel of the wider ecosystem of Economics and Social Sciences. First, The Africa Institute for Research in Economics and Social Sciences (Commonly Known as AIRESS) is a single entity that houses all research projects in economics and social sciences. Second, there is the Public Policy School which offers executive training programs for professionals.

The Rabat Campus also hosts the School of Hosiptality, Business and Management (SHBM), a hospitality-oriented business school. The Bachelor's degree in Hospitality Business & Management prepares future managers for an international career in the sectors of tourism, hotels, events, marketing, and other industries where customer satisfaction is at the heart of their business model.

The Faculty of Governance, Economics and Social Sciences is home to about

500 STUDENTS

100 PROFESSORS

Benguerir Mohammed VI Green City

Local needs shaping the city

The Green City of Benguerir continues its development and aspires, today, to extend beyond the perimeter of the first programmed phase in order to offer its ecosystem more infrastructures, more housing and more quality services. In collaboration with the UM6P (Mohamed VI Polytechnic University), the SADV (Société d'Aménagement et de Développement Vert) is launching a programming study that will aim to define the vision, connectivity and program of a new phase of the Green City, considering the achievements, the progress of phase 1 as well as the integration of the town of Benguerir.

In the spirit of social inclusion and citizen participation, SADV conducts meetings and workshops with stakeholders to provide intelligent solutions to its services.

Main features

Built around the Mohammed VI Polytechnic University and aiming to offer an attractive living environment, this urban pole is designed as a living laboratory to experiment all the drivers of the urban planning of tomorrow which replaces nature, human and knowledge at the heart of the city. The approach is structured around three pillars:

1. Academic excellence & research: a value chain of education excellence and comprehensive applied research with state-of-the-art equipment and living laboratories. Among the key infrastructures: the world class Mohammed VI Polytechnic University (UM6P), Lycée d'Excellence (LYDEX), the coding school (1337), Industrial Expertise Centers and living labs open to the scientific community to test full-scale solutions in key areas - Green energy park, Green & Smart Building Park.

2. Economic development: an economic activity zone dedicated to innovation players with a range of specific services and support. The city will feature business centers, start-ups incubator, teleport, data centers and all the innovation ecosystems necessary – laboratories, academic & training institutions, etc.

3. Urban attractiveness & sustainability: a city with quality, sustainable and smart urban amenities and living spaces, combined with a real estate offer and attractive services. It will feature:

- ✓ Green belt: backbone of the urban center, it will structure all the soft routes and will schedule the network of roads with all the districts and the site. Nature is also enhanced before starting any new urbanization project through pre-planting adapted to local soil and reintroducing native species.
- ✓ Autonomous districts to guarantee residents close access to shops and services, and helps reduce movement and CO_2 emissions
- ✓ Soft mobility routes (pedestrian & biking paths)
- ✓ Responsible water management (double circuit drinking & grey water, rainwater retention, recycling of wastewater)
- ✓ Recovery of waste
- ✓ Bioclimatic architecture and energy efficiency of buildings: urban shapes are designed to optimize the natural circulation of winds and sunshine.
- ✓ Quality urban services

The green corridor: planting in 2021

The green corridor is beginning to take shape. Starting from the urban park, which represents an entry point for pedestrians and cyclists into the green city, one can follow the tree-lined paths of the green corridor to access the city's districts. Playgrounds and street furniture are being built to provide a walk with stops and to make the corridor more attractive for all ages.

70,000 plantings

All strata combined

Green energy park : scaling up to boost South-South collaboration

The Green energy park is an international testing, research, and training platform in the renewable-energy sector, jointly developed by OCP and the Institut de Recherche en Énergie Solaire et en Énergies Nouvelles (IRESEN). The ecosystem model created in Benguerir is being duplicated outside our country in African countries such as in Côte d'Ivoire where the construction of a local Green Energy Park is being finalized. The new platform will allow Ivorian students and Ivorian companies to develop expertise as well as use and be inspired from Moroccan technologies.

Africa's most powerful SuperCalculator for scientific research and innovation

The most powerful SuperComputer in Africa has been integrated in 2020 in our data-centers. The power of the African Supercomputing Center - with a capacity of 3.15 petaflops at a rate of three million billion operations per second - gives Morocco and more broadly the African continent the opportunity to breakthrough in scientific research and innovation in all areas, including :

- ✓ Modelling the genome of African plants to be protected
- ✓ Modelling of the microbiome genome, which covers all microorganisms living on the surface and inside soils, for a better understanding of fertility.
- ✓ Modelling satellite data for better agricultural land management
- ✓ Modelling of meteorological data for a better integration of renewable energies in the network

Developed in partnership with the prestigious University of Cambridge, the African Supercomputing Center is ranked precisely 98th among the world's most powerful super-computers, and has raised Morocco to 26th place worldwide, and to 1st place in Africa, in terms of computing power, ahead of Austria and Hong Kong.



KEY FIGURES 2021

80 ha
of green belt along 4 km with 5 oases

15 ha
of farming space

30 ha
of talwegs

20m²
of green space per inhabitant

	2045
Ha	1,300
Inhabitants	100,000
Residential units	25,000
m² green space per inhabitant	20
Students & researchers	20,000
m² of shops	200,000

The Green City project is the opportunity to implement sustainable development to urban planning. The city's design is aligned with LEED ND (Neighborhood Development), a certification of sustainable planning and real estate development projects recognized worldwide. The new city is organized around 2 overlapping grids: one grid is assigned to vehicle service routes, the other to soft mobility: pedestrians and bicycles. This grid structuring the built volumes, the positioning of the buildings and the urban fabric was designed according to an orientation featuring the best bioclimatic trade-off.

BENGUERIR UNIVERSITY CAMPUS

In order to accommodate more UM6P students, a campus with 1800 beds will be built on an 11-hectare site. Eventually, facilities will be added to the program: restaurant, gymnasium, agora, swimming pool, etc.

PROJECT PHASES

Phase 1 : 2011-2025
Achieved : UM6P, Green Energy Park, Lycée d'Excellence, Industrial Expertise center, Villas, Green & Smart Building Park, 1337 school, Data centers, 1st start-ups incubator, American school and administration building

Ongoing 2nd start-ups incubator, Student campus, business center, Health & Care Smart City; 3 hotels and a football training centre

Phase 2 & 3 : 2025-2045

TECHNOPOLE FOUM EL OUED - LAAYOUNE

Local needs shaping the city

Centered on the University Mohammed VI Polytechnic Laâyoune, the Technopole Foum El Oued is becoming increasingly concrete, first with the start in February 2020 of the research and innovation pole of the UM6P in Laâyoune, then by the launch in 2021 of the health pole of the UM6P which has welcomed its first cohort of students enrolled in nursing license. The development of this city of knowledge and innovation continues thanks to the permanent efforts of the Phosboucraâ Foundation not only to build this ambitious project but also to include and prepare the ecosystem. In 2021, the Phosboucraâ Foundation in partnership with the research center of UM6P Laâyoune has organized several meetings, workshops, and trainings for the benefit of the local ecosystem. Other trainings and partnerships are to come to reinforce this territorial development project.

Characteristics :

The Technopole foum el Oued aims at the socio-economic development of the southern regions. It is based on 3 key components:

- The pole of knowledge and research whose heart is the Mohammed VI Polytechnic University and its research institute dedicated to themes related to the Saharan and saline context (ASARI).
- The Business cluster which will host an incubator to support project leaders and boost start-ups.
- The Life Pole which includes social, cultural and environmental infrastructure for the well-being of communities.

1st city in Africa certified in 2019 HQE TM development :

The Foum el Oued Technopole is certified HQE™ Aménagement (High Quality Environment). This certification is a recognition of the quality of the Foum El Oued Technopole project and the efforts made to integrate the project into its physical context, the reasoned management of natural resources, and the inclusion of the local population according to a participatory approach.

KEY NUMBERS

In operation phase

1200 jobs

Students

2500 in the long term for UM6P Laayoune

Budget

200 million USD

85% of the technopole's service providers are local

UM6P Laayoune, Valuing Saharan Soils

African Sustainable Agriculture Research Institute (ASARI)

Since February 2020, the Mohammed VI Polytechnic University in Laayoune is operational with its research center, named African Sustainable Agriculture Research Institute (ASARI). Dedicated to issues related to the Saharan and saline context, the research center of UM6P Laayoune has 3 research units devoted to biotechnology, water and environment, and renewable energy. The research team is working on research projects covering different topics including the introduction of alternative crops tolerant to salinity, the development of the value chain of the Cactus, the development of algae, aquaculture, preservation of native plant species threatened in the region of Laayoune ... Their work benefits from several advantages including the existence of an experimental farm of 2HA at the level of the ASARI center, a farm of 15ha being developed in partnership with Phosboucraa SA at the level of the Boucraa mine, and various partnerships at the national and international level concluded with renowned partners specialized in the 3 fields of research of the ASARI center, such as INRA, ICBA, Fertinagro, Salt Doctors, Bahir Dar University, Queensland University... And to ensure a socio-economic impact of R&D projects, the research center of UM6P Laâyoune relies on its partnership with the Phosboucraâ Foundation to disseminate knowledge to communities and develop their skills. The approach is to find innovative solutions that meet the needs of the communities.

Biotechnologies

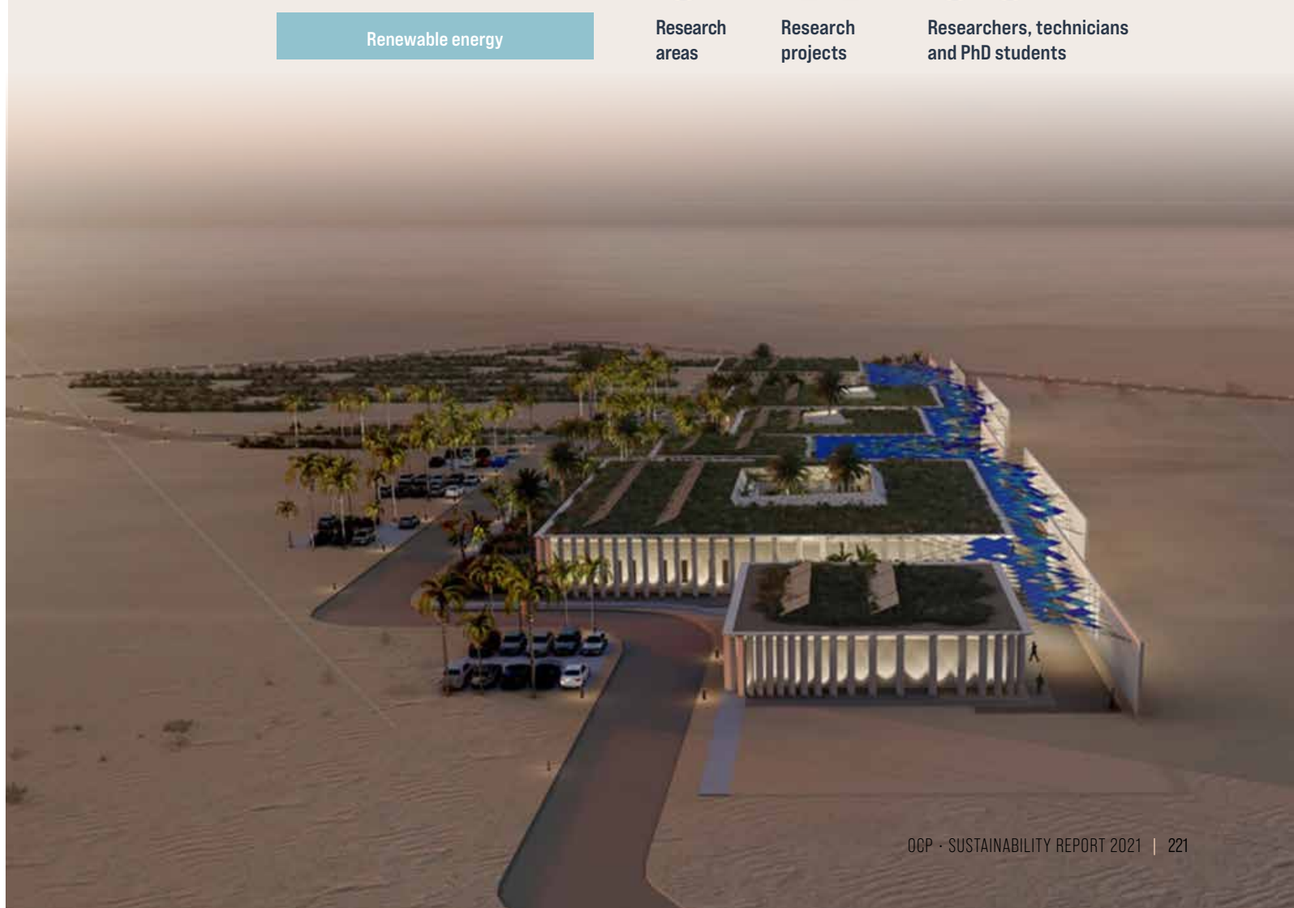
Water Management

Renewable energy

3 Research areas

11 Research projects

30 Researchers, technicians and PhD students



Mazagan urban pole

Local needs shaping the city

The project development is based on a diagnostic approach that began with observation and understanding of the land characteristics as well as identifying key factors – economic, social, environmental and cultural – that impact territorial dynamics. The objective is to encourage the development of a national urban area composed of El Jadida and Azemmour, and to promote the economic and social development of the regions where OCP Group operates, particularly by supporting the dynamics of the Jorf Lasfar industrial platform.

This pole will increase El Jadida's appeal - a historic port city – and value the uniqueness of Azemmour, a river city built on the banks of the Oum Rabia River which was once based on shad fishing. Held by OCP Group and the Department of State Property, the Société d'Aménagement et de Développement de Mazagan Ltd. (SAEDM) was created to deliver the Mazagan Urban Pole project.

Main features

The Mazagan urban pole is built around three main principles:

Modernity: a connected city, a pioneer in new technologies in Morocco perfectly integrated into an urban and sustainable territory

- ✓ Quality of life: an exceptional living environment, between ocean and forest, offering quality services and infrastructure - embedding environmental standards, conserving forests/green spaces, and encouraging social mix and workplace diversity
- ✓ Knowledge & innovation: recognized academic center allowing for the development of research, knowledge and innovation – including the expansion of Chouaib Doukkali University (the main local university), creation of new departments, etc.

The objectives are to :

- ✓ Create a quality residential offer to meet the growing need for housing
- ✓ Train and develop the skills necessary for the region's economic development
- ✓ Participate in the region's influence and its attractiveness at national and international level

USD 500
million investment

134,000
residents by 2035

The Mazagan urban pole is being built to be certified Green Star Communities – sustainable urban certification launched by the Green Building Council Australia.

	2045
Ha	1,300
ha hosting residential area, academic center, research and innovation area, touristic and cultural amenities, zone for tertiary activities, etc	622
ha dedicated to green spaces	303
ha for land reserve	180

PROJECT PHASES

Mazagan urban pole consists of a collection of four urban villages in the form of green neighborhoods centered on active cores - each has its own purpose:
Core A: Zone located in the Southern part of the project, devoted to research, innovation, and academic infrastructure.
Core B: Central area focused on a retail center.
Core C: Area dedicated to health and well-being
Core D: Zone that includes an exhibition area and hotels

Phase 1 :
2017-2026 – Core A & D

Phase 2:
2026-2030 – Core B

Phase 3:
2030-2035 – Core C

Khouribga Green Mine

The Khouribga Green Mine is an urban area under development as part of the reclamation of former mining sites. This 300-ha area is home to a Green Mine park, a Central Mall (business services, commercial spaces, office spaces), facilities for the population, including a multiplex and media library, hotels and real estate, and training centers for improving employability. The media library and Central Mall are already operational.

OUR GOALS

Our goals	Where we stand in 2021
Set up 5 SMEs incubators/accelerators around OCP Group's production sites with the objective of creating 500 new subcontracting SMEs by 2022	Ongoing
Extend coding schools to the 5 production sites aiming at training 1000 young programmers per year; and build 2 Digital Business Incubators to develop 50startup in the digital sector by 2023	4 coding schools covering 1337 students
Set up 2 rural agricultural schools in OCP mining sites with the aim of training 1000 small farmers and supporting 100 women's cooperatives valorizing local products by 2023	Ongoing
Reach 30% of the volunteer employees involved in the OCP Community Service program by 2021	Achieved



04

Financial statements



KEY FIGURES

(In millions of dirhams)	Note	FY 2021	FY 2020
Revenue	4.1.1.2	**84,300**	**56,182**
Profit (loss) from joint ventures	6.1	1,185	342
EBITDA		**36,269**	**18,657**
Profit (loss) before exceptional items		27,254	10,461
Cost of net financial debt	10.1.5	(2,223)	(2,170)
Net profit (loss) – Group share		**16,326**	**3,231**
Consolidated equity – Group share		86,200	76,143
Net financial debt		45,076	52,324
Net operating investments		(13,135)	(9,566)
Basic and diluted earnings per share (in dirhams)	12.3	**193.96**	**34.34**
Dividend per share (in dirhams)		**61.85**	**54.30**

CONSOLIDATED STATEMENT OF PROFIT AND LOSS

(In millions of dirhams)	Note	FY 2021	FY 2020
Revenue	4.1.1.2	84,300	56,182
Production held as inventory		278	(1,633)
Purchases consumed	4.2.2	(29,360)	(18,123)
External expenses	4.2.2	(9,969)	(8,224)
Personnel expenses	5.1	(10,550)	(9,099)
Taxes		(278)	(306)
Profit (loss) from joint ventures	6.1	1,185	342
Exchange gains and losses on operating receivables and payables		620	(435)
Other operating income and expenses		44	(48)
EBITDA		**36,269**	**18,657**
Amortization, depreciation and operating provisions	84.92	(9,016)	(8,196)
Operating profit (loss) before exceptional items		**27,254**	**10, 461**
Other non-recurring operating income and expenses	7.2	(1,454)	(4,199)
Operating profit (loss)		**25,799**	**6,262**
Cost of gross financial debt		(2,384)	(2,436)
Financial income from cash investments		161	266
Cost of net financial debt	10.1.5	**(2,223)**	**(2,170)**
Exchange gains and losses on financial receivables and payables	10.2.3	(899)	654
Other financial income and expenses	10.2.3	(2,178)	(449)
Financial profit (loss)		**(5,299)**	**(1,966)**
Profit (loss) before tax		**20,500**	**4,295**
Corporate Income Tax	11.2 – 11.3	(4,164)	(904)
Net profit (loss) for the period		**16,336**	**3,391**
Net profit (loss) – Group share		16,326	3,231
Net profit (loss) Non-controlling interests		10	160
Basic and diluted earnings per share in dirhams		**193,96**	**34,34**

CONSOLIDATED STATEMENT OF COMPREHENSIVE INCOME

(In millions of dirhams)	Note	FY 2021	FY 2020
Net profit (loss) for the period		**16,336**	**3,391**
Actuarial gains or losses	5.3.3	(552)	(301)
Taxes		109	61
Items that will not be reclassified to profit or loss		**(443)**	**(239)**
Translation of differences		(25)	(128)
Share of gains and losses recognized in equity for equity-accounted (CFH variation)*	4.1.3	(464)	1,474
Taxes		103	(336)
Items that may be reclassified to profit or loss		**(387)**	**1,010**
Income and expenses for the period, recognized directly in equity		**(830)**	**771**
Consolidated comprehensive income		**15,506**	**34.34**
Including Group shareIncluding non-controlling interests' share		15,496	4,002
		10	160

CONSOLIDATED STATEMENT OF FINANCIAL POSITION

(In millions of dirhams)	Note	31 December 2021	31 December 2020
ASSETS			
Current assets			
Cash and cash equivalents	10.1.3.1	8,001	6,428
Cash financial assets		2,538	71
Inventories	4.2.4	14,804	3,552
Trade receivables	4.1.2.2	13,184	8,657
Other current assets	7.3	15,765	17,689
Total current assets		**54, 293**	**46,333**
Non-current assets			
Non current financial assets	10.2.2	708	1,118
Investments in equity-accounted companies	6.1	5,518	5,286
Deffered tax assets	11.4	156	620
Property, plant and equipment	8.2	116,938	109,493
Intangible assets	8.3	4,385	2,476
Total non-current assets		**127,705**	**118,994**
Total Assets		**181,998**	**165,326**

(*) The effective portion of the hedge, which corresponded to the portions of the bonds redeemed, i.e. 41.36% of the bond maturing in 2024 and 44.44% of the bond maturing in 2025, was fixed among the recyclable reserves at MAD 496 million. On the other hand, changes in the fair value of cash flow hedges for the remaining shares not yet redeemed continue to be recognized in equity for the effective portion of the hedge.
The share of fixed reserves and the gains and losses accumulated in equity for the rest of the loans not yet repaid will be reported in the income statement when the future revenue is achieved starting from April 2024.

(In millions of dirhams)	Note	31 December 2021	31 December 2020
LIABILITIES			
Current liabilities			
Current loans and financial debts	10.1.2.1- 10.1.2.2	4,662	11,795
Current provisions	9.2	556	448
Trade payables	45.5	18,141	15,332
Other current liabilities	7.4	10,104	5,661
Total current liabilities		**33,463**	**33,236**
Non-current liabilities			
Non current financial assets	10.1.2.1- 10.1.2.2	50,954	46,964
Investments in equity-accounted companies	9.2	6,964	5,646
Deffered tax assets	9.2	1,131	591
Property, plant and equipment	11.4	1,633	1,295
Intangible assets		**59,681**	3
Total non-current liabilities			**54,500**
Equity – Group share			
Issued capital	12.1	8,288	8,288
Paid-in capital		18,698	18,698
Consolidated reserves – Group Share		42,888	45,927
Net profit (loss) – Group share		16,326	3,231
Equity – Group share		**86,200**	**76,143**
Non-controlling interests		2,654	1,447
Total equity		**88,854**	**77,591**
Total liabilities and equity		**181,998**	**165,326**

CONSOLIDATED STATEMENT OF CASH FLOWS

(In millions of dirhams)	Note	FY 2021	FY 2020
EBITDA		**36,269**	**18,657**
Subsidies and donations	7.1	(997)	(3,963)
Other non-current operating income and expenses		(16)	(68)
Other non-current operating income and expenses- prior period		(65)	(23)
Profit or loss of associates and joint ventures		(1,185)	(342)
Actuarial gains and losses		(552)	(301)
Other movements		(1,722)	(594)
Funds from operations		**31,732**	**13,366**
Impact of the change in WRC		**2,091**	**(2,287)**
Inventories		(1,206)	1,324
Trade receivables		(4,476)	(546)
Trade payables		1,894	(38)
Other current assets and liabilities (1)		5,880	(3,027)
Taxes paid		(1,656)	(1,288)
Total net cash flows related to operating activities		**32,167**	**9,791**
Acquisitions of PPE and intangible assets	8.2.8.3	(13,135)	(9,566)
Disposals of PPE and intangible assets		156	174
Net financial investments		(2,663)	(58)
Impact of changes in scope		(54)	(947)
Acquisitions of financial assets		(69)	(32)
Disposal of financial assets			3
Dividends received		106	158
Total net cash flows related to investing activities		**(15,658)**	**(10,269)**
Loan issue (2)	10.1.4	17,500	7,750
Loan repayement (2)	10.1.4	(22,980)	(6,689)
Hybrid securities coupons		(393)	(410)
Net financial interest payments		(3,815)	(2,550)
Dividends paid to Group shareholders	12.2	(5,081)	(4,461)
Dividend paid to minority shareholders		(173)	(170)
Total net cash flows related to financing activities		**(14,941)**	**(6,530)**
Impact of changes in exchange rates on cash and cash equivalents		10	(44)
Net increase/(decrease) in cash and cash equivalents		**1,577**	**(7,051)**
Opening cash and cash equivalents	10.1.3.1	6,425	13,477
Closing cash and cash equivalents	10.1.3.1	8,003	6,425
Changes in net cash		**1,577**	**(7,051)**

(1) Including mainly the reimbursement of the VAT credit for MAD 6.26 billion following the implementation of a new non-recourse factoring agreement.
(2) Including the issue of a new bond loan in June 2021 for MAD 13.3 billion having enabled the partial repayment of the bond loans maturing in 2024 and 2025 for MAD 8.6 billion.

CONSOLIDATED STATEMENT OF CHANGES IN EQUITY

(In millions of dirhams)	Issued capital	Paid-in capital	Actuarial gains or losses [1]	Hybrid securities [2]	Other consolidated reserves	Translation difference	Financial assets at fair value by OCI [3]	Share of gains and losses recognized in equity (CFH variation) [4]	Net profit (loss)	Total equity – Group share	Non-controlling interests [5]	Total equity
Equity as at 1st January 2020	**8,288**	**(18,698)**	**(3,244)**	**9,075**	**42,618**	**(273)**	**(521)**	**(293)**	**2,843**	**77,191**	**1,436**	**78,627**
Allocation of profit (loss) for FY 2020					2,843				(2,843)			
Consolidated comprehensive income for FY 2020			**(239)**			**(128)**		**1,139**	**3,231**	**4,002**	**160**	**4,162**
Subordinated debt's coupons				(410)						(410)		(410)
Change in scope												
Dividends paid					(4,461)					(4,461)	(170)	(4631)
Others					(180)					(180)	22	158
Equity as at 31 December 2020	**8,288**	**18,698**	**(3,484)**	**8,665**	**40,820**	**(401)**	**(521)**	**846**	**3,231**	**76,143**	**1,447**	**77,591**
Equity as at 1st January 2021	**8,288**	**18,698**	**(3,484)**	**8,665**	**40,820**	**(401)**	**(521)**	**846**	**3,231**	**76,143**	**1,447**	**77,591**
Allocation of profit (loss) for FY 2021					3,231				(3,231)			
Consolidated comprehensive income for FY 2021			**(443)**			**(25)**		**(362)**	**16,326**	15,496	**10**	**15,506**
Subordinated debt's coupons				(393)						(393)		(393)
Change in scope											1,372	1,372
Dividends paid					(5,081)					(5,081)	(173)	(5,254)
Others					35					35	(2)	33
Equity as at 31 December 2021	**2,288**	**18,698**	**(3,926)**	**8,272**	**39,005**	**(426)**	**(521)**	**484**	**16,326**	**86,200**	**2,654**	**88,854**

(1) Defined benefit plans are subject to a provision, determined on the basis of an actuarial valuation of the commitment using the projected unit credit method and taking into account demographic and financial assumptions. Actuarial assumptions are reviewed on an annual basis. Differences related to changes in actuarial assumptions and experience-related adjustments are actuarial gains and losses recorded in non-recyclable equity in accordance with the provisions of IAS 19R.
(2) OCP SA closed two perpetual subordinated bond issue with early repayment and deferred payment options for a total amount of MAD 10 billion issued in five tranches. Given the characteristics of this hybrid issue, the financing is recognized in equity according to IFRS 9.
(3) It represents the depreciation of the Group's investment in Heringer.
(4) The Group sets up a foreign currency cash-flow hedge. This strategy results in the recognition for the effective part, of the currency effect on the debt until maturity, as OCI (Other Comprehensive Income).
(5) This represents non-controlling interests in JFCV, Maghrib Hospitality Company and Société La Mamounia.

Find out more in our Consolidated financial statements

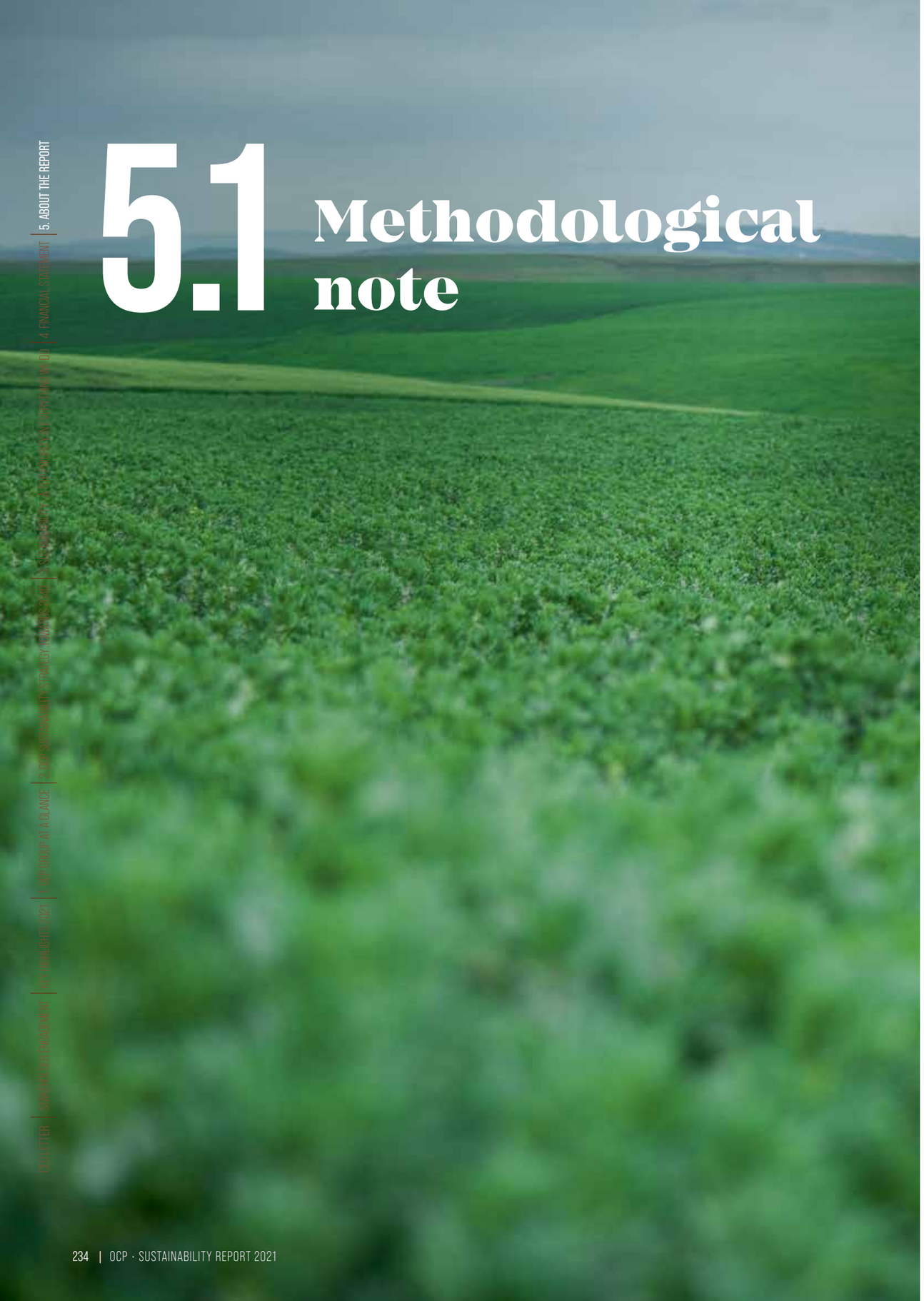
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About the report



This report is the official publication of OCP Group's sustainable development achievements and performance for 2021. It covers all OCP Group S.A. activities and entities OCP has reported in accordance with the GRI Standards for the period January 1st, December 31, 2021, corresponding to the company's fiscal year. The reporting cycle is annual. The next publication will be released in 2023 and will cover OCP Group's sustainable development achievements and performance for 2022. This report was supported by the sustainability advisory firm Forethix, which provided the methodology for the materiality analysis shown in section 4.1.

All of our publications are available on our website: www.ocpgroup.ma. OCP Group is at your disposal to provide any other information on our sustainability approach. To this end, we are providing an email address dedicated to our stakeholders that we encourage to give feedback on their expectations and concerns: sustainability@ocpgroup.ma



5.1 Methodological note

In preparation for this report, OCP Group conducted a materiality analysis early 2019 to identify the priority topics to report on according to the Stakeholder Inclusiveness and Materiality principles, with the support of the sustainability advisory firm Forethix. Aligned with the OCP Group's continuous improvement approach, this materiality analysis was strengthened early 2020 through the engagement of additional stakeholders groups.

The purpose of this document is to describe the methodology followed by OCP to prepare its report using the GRI standards 2021 and the AA1000 Standards 2018.

The materiality analysis process used to prepare this report is grounded on both internal and external stakeholder engagement program, which consists of the following steps:

A. UNDERSTAND THE ORGANIZATION'S CONTEXT

In order to create a list of sustainability topics In order to create a list of sustainability topics to consider in the stakeholder consultations, we based our methodology on:

1. A documentary analysis encompassing OCP's previous Annual Reports and Sustainable Development Reports as well as the Global Reporting Initiative's standards and mining sector supplement. The documentary analysis has been strengthened to take into account the evolution of the requirements of the rating agencies (MSCI, Sustainalytics, WBCSD, Viego Eiris, RobecoSam, World Benchmarking Alliance, Responsible Mining Index) and the main sustainable Standards: Task force on climate disclosure (TCFD), Sustainability Accounting Standards Board (SASB), Carbon Disclosure Project (CDP) in a context of sustainable development in continuous evolution.
2. A comparative sectoral study of fertilizer, mining, agriculture and food industries companies based on their Sustainable Development reports.
3. A tracking of the key environmental and social global megatrends that could directly or indirectly affect the fertilizer, mining, agriculture and food industries.
4. A legal and regulatory review has voluntary been made to meet the needs of investors' information in line with the EU Green Deal including Corporate Sustainability Reporting Directive (CSRD), the EU Taxonomy and Sustainable Finance Disclosures Regulation (SFDR).

45 topics were identified and subsequently underwent an impact analysis and a stakeholder assessment.

B. IDENTIFY ACTUAL AND POTENTIAL IMPACTS AND ASSESS THE SIGNIFICANCE OF THE IMPACTS

OCP had identified its actual and potential impacts on the economy, environment, and people, including impacts on their human rights, across the organization's activities and business relationships.

The significance of the economic, social, and environmental impacts of OCP's activities was assessed through a quantitative evaluation questionnaire completed in 2019 by internal OCP experts in the company's sustainability network. A quantitative survey was used in order to collect the maximum number of responses. Out of the 80 invited participants, 28 responded, bringing the participation rate to 35%. Three assessment criteria were taken into account:

1. **The impact level** (from 1 - not significant to 4 – very significant);
2. **The impact frequency** (from 1 – not frequent to 4 – very frequent);
3. **The expertise level** (from 1 – very high expertise to 4 – low expertise).

A rating scale of 1 to 4 was used to avoid averaging. The criteria were weighted identically (without a multiplier), giving each participant the same weight. The position of the areas on the matrix's X axis corresponds to the average results for the three criteria.

In 2021 and beginning 2022, OCP Group is assessing its impacts based on the concept of double materiality: topics that both have a material impact on OCP Group's business and value creation and OCP's impacts on the economy, environment and society, confronted with the expectations and interests of priority stakeholders. The results of this assessment and the double materiality matrix will be disclosed in the 2022 report.

Assessment of the impacts on the SDGs

In order to refine the impact analysis carried out as part of developing the materiality matrix, a risk and opportunity analysis throughout the value chain was organized with members of OCP's internal sustainability network. The analysis was structured according to the UNGC and GRI recommendations (Integrating the SDGs into corporate reporting: a practical guide, 2018) in order to identify strategic contributions to the SDGs. An assessment scale from 1 (low) to 4 (very significant) was used to assess the positive and negative impacts throughout the value chain. In 2019, OCP prioritized 6 SDGs representing the most significant impacts, risks and opportunities regarding its activities, products and services.

C. ENGAGE WITH RELEVANT STAKEHOLDERS AND EXPERTS

The internal and external stakeholder groups were first mapped by the sustainability committee in charge of producing the report. Stakeholders were positioned in OCP's sphere of influence based on their influence in the organization and how their interactions relate to the company's management, production, and shared value creation commitments.

2019 :

A questionnaire was sent to 40 stakeholder representatives based on the duration of their relationship with OCP and their sustainability maturity. The participation rate was 70%, with feedback received from 29 representatives from the stakeholder groups disclosed in the mapping below. Only one rating criterion - the level of influence – was considered. A rating scale of 1 to 4 was used to avoid averaging.

2020 :

New stakeholders groups were engaged to sharpen OCP's materiality analysis: the ESG rating agencies – representing investors' voice – and OCP's sales office – representing customers' voice. Two major ESG rating agencies' issues scores were converted and integrated to the corresponding OCP's topics in the materiality matrix. A questionnaire was sent to 10 OCP's sales offices around the world. The participation rate was 40%. Only one rating criterion - the level of influence on the customers' assessment and decisions - was considered. A rating scale of 1 to 4 was used to avoid averaging. All stakeholders were weighted identically (without a multiplier) to give each participant equal importance.

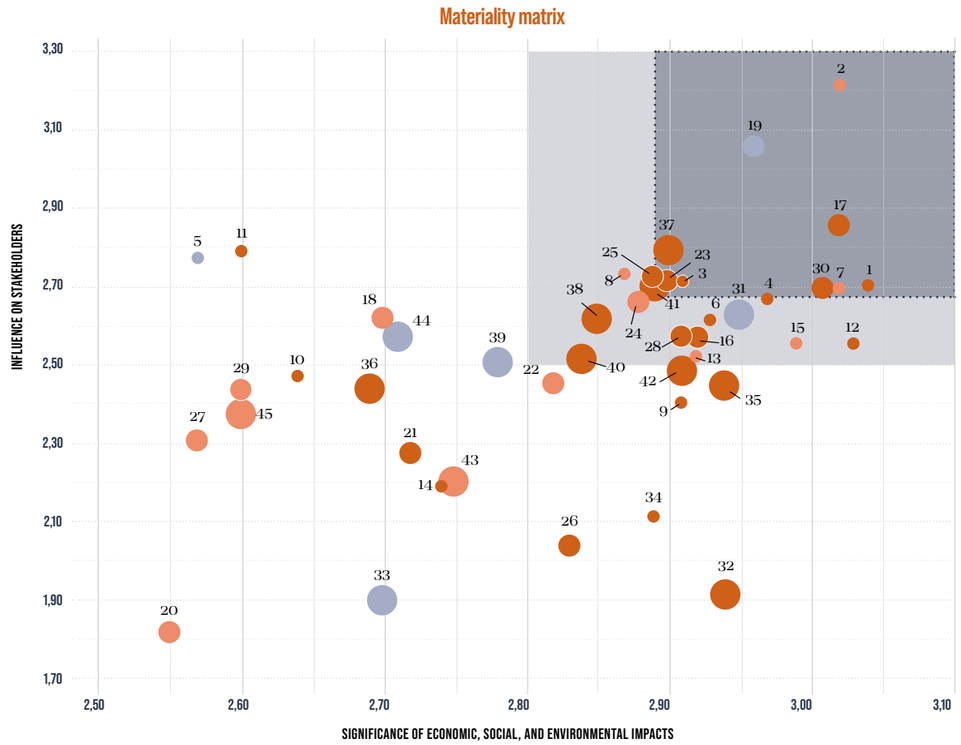
2021 :

Changes in the expectations of the ESG rating agencies were integrated into corresponding OCP's topics in the materiality matrix based on a documentary analysis and given ESG scores. Normative and regulatory requirements - representing the voice of Institutions, authorities & regulators - in line with the EU Green Deal including Corporate Sustainability Reporting Directive (CSRD), the EU Taxonomy and Sustainable Finance Disclosures Regulation (SFDR) were also added to the list of relevant topics in the OCP matrix.

At the end of 2021, OCP had established a new stakeholder engagement plan that will be launched in early 2022 to update the materiality matrix. The results will be disclosed in the 2022 report.

D. PRIORITIZE THE MOST SIGNIFICANT IMPACTS FOR REPORTING

Through analyzing the activities' economic, social, and environmental impacts and consulting both internal and external stakeholders, the following materiality matrix was created:



Responsible amanagement Sustainable production Shared value creation

LEVEL OF PROFICIENCY

Good level of proficiency Moderate proficiency Proficiency to be improved

1. **Occupational Health and Safety (Employment, Labor/ management relations, Training and education, Diversity and equal opportunity)**
2. **Economic growth (Economic performance)**
3. **Operational excellence (Economic performance, Emissions, Water and effluents)**
4. **Water management (Water and effluents)**
5. Infrastructure development
6. Management of raw materials
7. **Fertilizer market development (Economic performance)**
8. Job creation & retention
9. Supply chain efficiency
10. Energy management
11. Industrial partnership development
12. Customer satisfaction
13. Employee development
14. Information on products and services
15. Transparent and ethical governance
16. Cybersecurity
17. **Food security (Indirect economic impacts)**
18. Human Rights
19. **Community engagement (Indirect economic impacts, Local communities)**
20. Political contributions and lobbying
21. South-South partnership & collaboration
22. Innovative governance
23. **Environmental compliance of activities (Energy, Emissions)**
24. Research & Development, innovation
25. **Waste and hazardous products management (Waste)**
26. GHGs and other emissions
27. Freedom of association
28. Promotion of a sustainable agriculture
29. Diversity and non-discrimination
30. **Renewable energy development (Energy, Emissions)**
31. Indirect economic impacts
32. Mine site rehabilitation
33. Preservation of mining heritage
34. Farmer profitability
35. Digitalization and Industry 4.0
36. Future talent development (STEM)
37. **Circular economy model (Materials, Procurement practices, Supplier environmental assessment, Supplier social assessment)**
38. Sustainable agricultural productivity
39. Talent development in the creative and innovative fields
40. Climate change
41. **Soil and biodiversity management (Biodiversity)**
42. Synergies and local supplier network
43. Social assessment of suppliers
44. Local entrepreneurship
45. Environmental assessment of suppliers

OCP's sustainability material topics correspond to the ones equal or above the threshold (2,89 ; 2,67), in bold within the list.

Primary and secondary topics were established using a materiality threshold determined collectively by the OCP internal experts and validated by senior management.

1. Materiality threshold defining the primary material topics (dark blue area) corresponds to coordinates greater than or equal to (2.89, 2.67)
2. Materiality threshold defining with secondary material topics (light blue area) corresponds to coordinates greater than or equal to (2.85; 2.47)
3. The topics in white are defined as tertiary and are the least important.

E. MONITOR, MEASURE AND BE ACCOUNTABLE FOR HOW OUR ACTIONS AFFECT OUR BROADER ECOSYSTEMS

Following the qualitative, quantitative or monetised measurement of its performance on material issues, OCP monitors on an ongoing basis the indicators to ensure proper management processes and progress towards the targets.

F. NEXT STEPS

OCP's sustainability approach is based on a process of continuous improvement and dialogue with stakeholders through a progressive stakeholder engagement program. This program will be further developed and periodically renewed to continually involve new categories of stakeholders as part of the reporting process.

5.2 GRI content Index

For the Content Index - Advanced Service, GRI Services reviewed that the GRI content index is clearly presented, in a manner consistent with the Standards, and that the references for all disclosures are included correctly and aligned with the appropriate sections in the body of the report.

GRI CONTENT INDEX ADVANCED SERVICE 2022

Statement of use	OCP Group has reported in accordance with the GRI Standards for the period 1st January to 31st December 2021.
GRI 1 used	GRI 1: Foundation 2021
Applicable GRI Sector Standard(s)	NA

GRI STANDARD/ OTHER SOURCE	DISCLOSURE	LOCATION	OMISSION	GRI SECTOR STANDARD REF. NO.
GENERAL DISCLOSURES				
GRI 2: General Disclosures 2021	2-1 Organizational details	18, 28-29		
	2-2 Entities included in the organization's sustainability reporting	224, 232		
	2-3 Reporting period, frequency and contact point	6		
	2-4 Restatements of information	109		
	2-5 External assurance	255-257		
	2-6 Activities, value chain and other business relationships	18-19, 22-26, 28-29		
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	2-19 Remuneration policies	55-56		
	2-20 Process to determine remuneration	55-56		
	2-21 Annual total compensation ratio		Not disclosed owing to the confidential nature of this information.	
	2-22 Statement on sustainable development strategy	2-5		
	2-23 Policy commitments	53, 59, 72, 75, 78, 81-82, 90, 100, 106, 122, 128, 135, 142, 146, 148, 158, 165		
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GRI 3: Material Topics 2021	3-3 Management of material topics	66, 114-118		

GRI 201: Economic Performance 2016	201-1 Direct economic value generated and distributed	66
	201-2 Financial implications and other risks and opportunities due to climate change	115-118
Indirect economic impacts		
GRI 3: Material Topics 2021	3-3 Management of material topics	165,168,170,177, 182,183,192,200, 202,204,206,212, 220,222
GRI 203: Indirect Economic Impacts 2016	203-1 Infrastructure investments and services supported	165, 172-173, 177-187, 192-202, 210-222
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GRI 3: Material Topics 2021	3-3 Management of material topics	100-105
GRI 301: Materials 2016	301-1 Materials used by weight or volume	100
Energy		
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Water and effluents		
GRI 3: Material Topics 2021	3-3 Management of material topics	135,140,142
GRI 303: Water and Effluents 2018	303-1 Interactions with water as a shared resource	135-137, 140
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GRI 304: Biodiversity 2016	304-1 Operational sites owned, leased, managed in, or adjacent to, protected areas and areas of high biodiversity value outside protected areas	149, 154
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GRI 305: Emissions 2016	305-1 Direct (Scope 1) GHG emissions	109
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	305-4 GHG emissions intensity	109
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GRI 306: Waste 2020	306-1 Waste generation and significant waste-related impacts	158
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	306-4 Waste diverted from disposal	159
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Supplier environmental assessment		
GRI 3: Material Topics 2021	3-3 Management of material topics	82
GRI 308: Supplier Environmental Assessment 2016	308-1 New suppliers that were screened using environmental criteria	82, 94

Employment		
GRI 3: Material Topics 2021	3-3 Management of material topics	72
GRI 401: Employment 2016	401-1 New employee hires and employee turnover	73
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GRI 3: Material Topics 2021	3-3 Management of material topics	72
GRI 402: Labor/ Management Relations 2016	402-1 Minimum notice periods regarding operational changes	74
Occupational health and safety		
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GRI 403: Occupational Health and Safety 2018	403-1 Occupational health and safety management system	90-92, 191
	403-2 Hazard identification, risk assessment, and incident investigation	90-92, 191
	403-3 Occupational health services	90, 92, 94
	403-4 Worker participation, consultation, and communication on occupational health and safety	92
	403-5 Worker training on occupational health and safety	92-93
	403-6 Promotion of worker health	92-93
	403-7 Prevention and mitigation of occupational health and safety impacts directly linked by business relationships	91
	403-9 Work-related injuries	95
Training and education		
GRI 3: Material Topics 2021	3-3 Management of material topics	78
GRI 404: Training and Education 2016	404-1 Average hours of training per year per employee	78
Diversity and equal opportunity		
GRI 3: Material Topics 2021	3-3 Management of material topics	75
GRI 405: Diversity and Equal Opportunity 2016	405-1 Diversity of governance bodies and employees	76
Local communities		
GRI 3: Material Topics 2021	3-3 Management of material topics	192, 202, 204, 206, 212, 220, 222
GRI 413: Local Communities 2016	413-1 Operations with local community engagement, impact assessments, and development programs	192-199, 210-216
Supplier social assessment		
GRI 3: Material Topics 2021	3-3 Management of material topics	82
GRI 414: Supplier Social Assessment 2016	414-1 New suppliers that were screened using social criteria	82, 84

5.3 Correspondence tables

TCFD RECOMMENDATIONS

Climate change is a strategic risk with potential financial implications for our company and all our stakeholders. That is why we are working to align this report with the recommendations of the TCFD (Task force on Climate related Financial Disclosures).

DISCLOSURE	LOCATION
GOVERNANCE	
a) Describe the board's oversight of climate-related risks and opportunities.	106
b) Describe management's role in assessing and managing climate-related risks and opportunities.	106
STRATEGY	
a) Describe the climate-related risks and opportunities the organization has identified over the short, medium, and long term.	107, 115-118
b) Describe the impact of climate-related risks and opportunities on the organization's business, strategy, and financial planning.	115-118
c) Describe the resilience of the organization's strategy, taking into consideration different climate-related scenarios, including a 2°C or lower scenario.	-
RISK MANAGEMENT	
a) Describe the organization's processes for identifying and assessing climate-related risks.	115-119
b) Describe the organization's processes for managing climate-related risks.	115-119
c) Describe how processes for identifying, assessing, and managing climate-related risks are integrated into the organization's overall risk management.	115-119
METRICS & TARGETS	
a) Disclose the metrics used by the organization to assess climate-related risks and opportunities in line with its strategy and risk management process.	114
b) Disclose Scope 1, Scope 2, and if appropriate, Scope 3 greenhouse gas (GHG) emissions, and the related risks.	109
c) Describe the targets used by the organization to manage climate-related risks and opportunities and performance against targets.	–

UNGC PRINCIPLES

UNGC PRINCIPLES	GRI STANDARDS	LOCATION
HUMAN RIGHTS		
Principle 1 : Businesses should support and respect the protection of internationally proclaimed Human Rights	GRI 412 - Human Rights assessment	59-63
	GRI 413 - Local communities	192-199, 210-216
Principle 2 : Businesses should make sure that they are not complicit in Human Rights abuses	GRI 412 - Human Rights assessment	59-63
	GRI 414 - Supplier social assessment	82, 84
LABOUR		
Principle 3 : Businesses should uphold the freedom of association and the effective recognition of the right to collective bargaining	GRI 2-30 - Collective bargaining agreement	74
	GRI 402 - Labor management relations	74
Principle 4 : Businesses should uphold the elimination of all forms of forced and compulsory labour	GRI 412 - Human Rights assessment	60
Principle 5 : Businesses should uphold the effective abolition of child labour	GRI 414 - Supplier social assessment	82, 84
Principle 6 : Businesses should uphold the elimination of discrimination in respect of employment and occupation	GRI 2-8 - Information on employees and other workers	73
	GRI 401- Employment	73
	GRI 404 - Training & education	78
	GRI 405 - Diversity & equal opportunity	76
ENVIRONMENT		
Principle 7 : Businesses should support a precautionary approach to environmental challenges	GRI 301 - Materials GRI 302 - Energy GRI 303 - Water GRI 304 - Biodiversity GRI 305 - Emissions GRI 306 - Effluents & waste GRI 307 - Environmental compliance GRI 308 - Supplier environmental assesment	100
		129-130, 132
		135-138, 140, 142-143
Principle 8 : Businesses should undertake initiatives to promote greater environmental responsibility		148-157
		109, 123-127
Principle 9 : Businesses should encourage the development and diffusion of environmentally friendly technologies.		158-162
		146-147
		82, 94
ANTI-CORRUPTION		
Principle 10 : Businesses should work against corruption in all its forms, including extortion and bribery	GRI 2-22 : Statement on sustainable development strategy	30

SASB STANDARDS

SASB REFERENCE	METRIC	LOCATION
ENVIRONMENT		
GHG emissions		
RT-CH-110a.1 EM-MM-110a.1	Gross global Scope 1 emissions, percentage covered under emissions-limiting regulations	109
RT-CH-110a.2 EM-MM-110a.2	Discussion of long-term and short-term strategy or plan to manage Scope 1 emissions, emissions reduction targets, and an analysis of performance against those targets	107, 110-111, 114
Air quality		
RT-CH-120a.1	Air emissions of the following pollutants: (1) NOx (excluding N20), (2) SOx, (3) volatile organic compounds (VOCs), and (4) hazardous air pollutants (HAPs)	123-127
EM-MM-120a.1	Air emissions of the following pollutants: (1) CO, (2) NOx (excluding N20), (3) SOx, (4) particulate matter (PM10), (5) mercury (Hg), (6) lead (Pb), and (7) volatile organic compounds (VOCs)	123-127
Energy Management		
RT-CH-130a.1 EM-MM-130a.1	(1) Total energy consumed, (2) percentage grid electricity, (3) percentage renewable, (4) total self-generated energy	129-130, 132, 148
Water Management		
RT-CH-140a.1 EM-MM-140a.1	1) Total water withdrawn, (2) total water consumed, percentage of each in regions with High or Extremely High Baseline Water Stress	
RT-CH-140a.3	Description of water management risks and discussion of strategies and practices to mitigate those risks	136, 137, 140
Hazardous Waste Management		
RT-CH-150a.1	Amount of hazardous waste generated, percentage recycled	159
EM-MM-150a.1	Total weight of tailings waste, percentage recycled	159
EM-MM-150a.2	Total weight of mineral processing waste, percentage recycled	159
Biodiversity Impacts		
EM-MM-160a.1	Description of environmental management policies and practices for active sites	147, 154
EM-MM-160a.3	Percentage of (1) proved and (2) probable reserves in or near sites with protected conservation status or endangered species habitat	154

SOCIAL		
Safety & Environmental Stewardship of Chemicals		
RT-CH-410b.2	Discussion of strategy to (1) manage chemicals of concern and (2) develop alternatives with reduced human and/or environmental impact	188-191
Workforce Health & Safety		
RT-CH-320a.1	(1) Total recordable incident rate (TRIR) and (2) fatality rate for (a) direct employees and (b) contract employees	
Community Relations		
RT-CH-210a.1 EM-MM-210b.1	Discussion of engagement processes to manage risks and opportunities associated with community interests	192
Labor Relations		
EM-MM-310a.1	Percentage of active workforce covered under collective bargaining agreements, broken down by US and foreign employees	74
EM-MM-310a.2	Number and duration of strikes and lockouts	74
Security, Human Rights & Rights of Indigenous Peoples		
EM-MM-210a.3	Discussion of engagement processes and due diligence practices with respect to human rights, indigenous rights, and operation in areas of conflict	
GOVERNANCE		
Management of the Legal & Regulatory Environment		
RT-CH-530a.1	Discussion of corporate positions related to government regulations and/or policy proposals that address environmental and social factors affecting the industry	
Business Ethics & Transparency		
EM-MM-510a.2	Production in countries that have the 20 lowest rankings in Transparency International's Corruption Perception Index	

MSCI REFERENCES

ESG TOPICS	LOCATION
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Opportunities in clean tech	110-111, 131-133
Carrbon Emissions	106-121
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Social	
Health & Safety	90-95
Community Relations	192-223
Governance	
Corporate Behaviour	30-31, 54-57
Corporate Governance	30-31, 54-57
Controversies	**122-127, 188-191, 129, 135-137**

SUSTAINALYTICS REFERENCES

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Social - Preparedness	
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Governance - Preparedness	
Bribery & Corruption Policy	53
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Global Compact Signatory	NA
Animal Testing Programme	The company does not conduct animal testing
Policy on Emerging Technologies	The company does not use stem cell, nanotechnology or genetic engineering
ESG Governance	30, 53-57
ESG Performance Targets	55

5.4 Third party assurance



Verification

The Corporate Carbon Footprint of the organisation

OCP S.A.

2-4 Rue Al Abtal, Hay Erraha
20200, Casablanca, Morocco

The mine sites of Khouribga and Gantour (Benguerir & Youssoufia), the industrial platforms of Jorf Lasfar and Safi, Phosboucraâ (Boucraâ & Laâyoune) and the headquarters in Casablanca

between the 01/01/2017 to the 31/12/2018 has been verified according to the requirements of the standard

ISO 14064-1

The verification has been performed according to the ISO 14064-3 requirements. The greenhouse gas inventory includes the scopes 1, 2 and 3, as defined by ISO 14064-1.

The total emissions come to

3.675.488 t CO_{2eq} ± 1,93% (in 2017) and 4.005.687 t CO_{2eq} ± 1,69% (in 2018).

The goal of the verification was to guarantee a reasonable assurance. The necessary information was made clear in the greenhouse gas declaration "Synthèse de l'inventaire des émissions de GES - Groupe OCP" of January 2020 and has been reproduced with reasonable assurance and accuracy on the basis of historical and hypothetical data and relevant system boundaries.

Based on the process and procedures conducted, the GHG assertion

- is materially correct and is a fair representation of the GHG data and information, and
- is prepared in accordance with the related International Standard on GHG quantification, monitoring and reporting, or to relevant national standards or practices.

The basis of this certificate is the audit report C-19-11563.

Berlin, 11/02/2020

Prof. Dr.-Ing. Jan Uwe
Director

Andreas Lemke
Head of Certification Office

Nr. C-19-11563



Verification

The Corporate Carbon Footprint of the organisation

OCP S.A.

2-4 Rue Al Abtal, Hay Erraha
20200, Casablanca, Morocco

The mine sites of Khouribga and Gantour (Benguerir & Youssoufia), the industrial platforms of Jorf Lasfar and Safi, Phosboucraâ (Boucraâ & Laâyoune) and the headquarters in Casablanca

between the 01/01/2019 to the 31/12/2019 has been verified according to the requirements of the standard

ISO 14064-1

The verification has been performed according to the ISO 14064-3 requirements. The greenhouse gas inventory includes the scopes 1, 2 and 3, as defined by ISO 14064-1.

The total emissions come to 3 570 178 t CO_{2eq} ± 1,98%.

The goal of the verification was to guarantee a reasonable assurance. The necessary information was made clear in the greenhouse gas declaration "Synthèse de l'inventaire des émissions de gaz à effet de serre" of November 2020 and has been reproduced with reasonable assurance and accuracy on the basis of historical and hypothetical data and relevant system boundaries.

Based on the process and procedures conducted, the GHG assertion

- is materially correct and is a fair representation of the GHG data and information, and
- is prepared in accordance with the related International Standard on GHG quantification, monitoring and reporting, or to relevant national standards or practices.

The basis of this certificate is the audit report C-20-11563.

Berlin, 21/12/2020

Prof. Dr.-Ing. Jan Uwe
Director

Andreas Lemke
Head of Certification Office

Nr. C-20-11563

Confirmation

For the organisation

OCP S.A.

2-4 Rue Al Abtal, Hay Erraha
20200, Casablanca, Morocco

at the mine sites of Khouribga and Gantour (Benguerir & Youssoufia), the industrial platforms of Jorf Lasfar and Safi, Phosboucraâ (Boucraâ & Laâyoune) and the headquarters in Casablanca

the following ratio could be verified based on balance data from 01/01/2021 to the 31/12/2021

"clean electricity use ratio": 85.90 %

The verification has been performed according to the ISO 14064-3 requirements.

The goal of the verification was to guarantee a reasonable assurance. The necessary information was made clear in the report "Water & Energy Ratios Réalisé 2021.xlsx" from July 2022 and has been reproduced with reasonable assurance and accuracy on the basis relevant system boundaries.

Based on the process and procedures conducted, the assertions

- are materially correct and are a fair representation of the data and information, and
- are prepared in accordance with relevant national standards or practices.

The basis of this certificate is the audit report C-22-11563.

Berlin, 07/14/2022

Prof. Dr.-Ing. Jan Uwe
Director

Andreas Lemke
Head of Certification Office

No. C-22-11563

Verification

The Corporate Carbon Footprint of the organisation

OCP S.A.

2-4 Rue Al Abtal, Hay Erraha
20200, Casablanca, Morocco

The mine sites of Khouribga and Gantour (Benguerir & Youssoufia), the industrial platforms of Jorf Lasfar and Safi, Phosboucraâ (Boucraâ & Laâyoune) and the headquarters in Casablanca

between the 01/01/2021 to the 31/12/2021 has been verified according to the requirements of

ISO 14064-1 (2018)

The verification has been performed according to the ISO 14064-3 requirements. The greenhouse gas inventory includes direct and energy-related indirect greenhouse gas emissions as well as other indirect greenhouse gas emissions (Scope 3), as defined by ISO 14064-1 and GHG Protocol Corporate Standard (see annex). **The emissions (in t CO_2eq ± 2.40 %) come to:**

	2021	% of total
Scope 1	3.151.701	16%
Scope 2	646.694	3%
Scope 3	16.072.431	81%
total	19.870.827	100%

The goal of the verification was to guarantee a reasonable assurance. The necessary information was made clear in the greenhouse gas declaration "Synthèse de l'inventaire des émissions de Gaz à Effet de Serre" from June 2021 and has been reproduced with reasonable assurance and accuracy on the basis of historical and hypothetical data and relevant system boundaries.

Based on the process and procedures conducted, the GHG assertion is materially correct and is a fair representation of the GHG data and information and is prepared in accordance with the related International Standard on GHG quantification, monitoring and reporting, or to relevant national standards or practices.

The basis of this certificate is the audit report C-22-11563.

Berlin, 07/11/2022

Prof. Dr.-Ing. Jan Uwe
Director

Andreas Lemke
Head of Certification Office

No. C-22-11563

Confirmation

For the organisation

OCP S.A.

2-4 Rue Al Abtal, Hay Erraha
20200, Casablanca, Morocco

at the mine sites of Khouribga and Gantour (Benguerir & Youssoufia), the industrial platforms of Jorf Lasfar and Safi, Phosboucraâ (Boucraâ & Laâyoune) and the headquarters in Casablanca

the following waste management ratios could be verified based on balance data from 01/01/2021 to the 31/12/2021

„Global waste diverted from disposal": 99.66 %

„Waste recovery operation & maintenance": 19.00 %

The verification has been performed according to the ISO 14064-3 requirements.

The goal of the verification was to guarantee a reasonable assurance. The necessary information was made clear in the report "Data GRI 2021_Waste Management Ratios.xlsx" from July 2022 and has been reproduced with reasonable assurance and accuracy on the basis relevant system boundaries.

Based on the process and procedures conducted, the assertions

- are materially correct and are a fair representation of the data and information, and
- are prepared in accordance with relevant national standards or practices.

The basis of this certificate is the audit report C-22-11563.

Berlin, 07/14/2022

Prof. Dr.-Ing. Jan Uwe
Director

Andreas Lemke
Head of Certification Office

No. C-22-11563

Verification statement

It is hereby confirmed that the company

OCP S.A.

with its head office at

2-4, rue Al Abtal, Hay Erraha, 20200 Casablanca, Morocco

and the production facilities:

- Khouribga: mining, production and port (Casablanca)
- Jorf Lasfar: production and port
- Safi: production and port
- Gantour: mining and production
- Phosboucrâa: mining and production

has been determining its corporate carbon footprint on an annual basis since 2014 and has had this verified by the GUT Certifizierungsgesellschaft für Managementsysteme mbH Umweltgutachter in accordance with ISO 14064-1 in conjunction with ISO 14064-3.

Furthermore, it is confirmed that GUTcert has been commissioned to verify OCP S.A. for the reporting years 2022 and 2023.

According to its accreditation according to ISO 14064-3 in conjunction with ISO 14065, GUTcert is subject to annual office audits by the German Accreditation Body DAkkS.

Berlin, 13.07.2021

Frank Blume
Product Manager

David Kroll
Head of Carbon Footprint

5.5 Glossary

EBITDA: earnings before interest, taxes, depreciation and amortization
LTIFR: Lost-time injury frequency rate
CAPEX: Capital expenditures
SA: Société Anonyme, Limited company
SDGs: Sustainable Development Goals
UN: United Nations
UM6P: Mohammed VI Polytechnic University
NGOs: Non-governmental organizations
ANP: National Ports Agency
ONCF: Office national des chemins de fer, national railway operator
ONEP: Office national de l'électricité et de l'eau potable, National operator of electricity and drinking water
USGS: United States Geological **Survey**
AFA: Arab Fertilizer Association
AFAP: African Fertilizer and Agribusiness Partnership
IFA: International Fertilizer Industry Association
WBCSD: World Business Council for Sustainable Development
TCFD: Task Force on Climate-related Financial Disclosures
M&A: Merger & Acquisition
R&D: Research & Development
DAP: Di-Ammonium Phosphate - most commonly used binary fertilizer
TSP: Triple Super Phosphate - phosphate fertilizer
MAP: Mono-Ammonium Phosphate - a binary fertilizer consisting of two fertilizing agents – phosphorus and nitrogen
NPK: compound fertilizers composed of three elements – phosphorus, nitrogen, and potassium
PPP : Performance Phosphate Products - the latest generation of fertilizers developed with a view to sustainable and efficient agriculture
NP+: nitrogen and phosphate based fertilizers enriched with secondary and micronutrients to improve agricultural yields, protect soil from degradation, and offer highly concentrated solutions to improve fertility
Soluble fertilizers: fertilizers for high-value added and irrigated crops adapted to limited water resources and new micro-irrigation and watering systems;
DCP/MDCP: Di-calcium Phosphate/ Mono Di-calcium Phosphate - phosphate and calcium based animal feed supplements used to manufacture mixed feed for farm animals. Feed phosphates strengthen bones and accelerate farm animal growth (cattle, sheep, poultry, goats, etc.).
TSP-S: Triple Super Phosphate - Sulfur: phosphate fertilizer
NaCaP: fertilizer featuring chlorine, calcium, and phosphate
MgP: fertilizer featuring magnesium and phosphate
R&I: Research & Innovation
CEA: Commissariat à l'énergie atomique et aux énergies alternatives, Atomic Energy and Alternative Energy Commission
GEP: Green Energy Park
JFC: Jorf lasfar Fertilizer Complex
COSO: Committee of Sponsoring Organizations of the Treadway Commission
IFACI: French branch of the Institute of Internal Auditors - IIA
HSE: Health, Safety & Environment
PG: Phosphogypsum
JESA: Jacobs Engineering SA
EMS: Environment Managament System
IFC-WB: International Finance Corporation – World Bank
WHO: World Health Organisation
3Rs: Reduce, Reuse, Recycle
INRA: Institut national de la recherche agronomique, National Institute for agronomic research
IAV: Institut agronomique et vétérinaire, Agronomic and veterinary institute
ENA: Ecole National d'Agriculture, National school of Agriculture
FAO: Food and Agriculture Organisation – United Nations institutions
CSP: Employees Status Commission
CAS: Social Action Commission
CHSE: Health, Safety and Environment Committee
CNC: the Collective Bargaining Committee
CE: Work Council
CNSS: Caisse Nationale de Sécurité Sociale
TAMCA-OE: Technicians, supervisors, and administrative employees as well as Workers and Employees
IECs: Industrial Expertise Centers
CATOX: Catalytic Recuperative Oxidizer
HRS: Heat recovery system
DNSSI: National Directive on Information System Security
IMWS: Fraunhofer Institute for Microstructure of Materials and Systems
FM6E: Mohammed VI Foundation for Environmental Protection
PPAs: Power Purchase Agreements
MRV: Monitoring, Reporting, and Verification
SLR: sea level rise
4R: Right fertilizer, Right rate, Right time, Right place
PPM: Parties par million, parts per million
IRESEN: Institute of Research in Solar Energy and New Energies
LCOE: Levelized Cost of Energy
COALMA: Moroccan Coalition for Water
STEP: Waste water treatment plant
CGEM: Confederation of Moroccan Companies
BDS: Bordereau de suivi des déchets, waste tracking slip
DSM: digital soil mapping
OSL: OCP School Lab
LYDEX: Lycée d'Excellence, School of excellence
SADV: Société d'Aménagement et de Développement Vert, Green urban development agency
HQE: Haute qualité environnementale, high environmental quality - urban development certification
SMEs: Small and medium enterprises
ICBA: International Center for Biosaline Agriculture

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