



His Majesty King Mohammed VI, may God Glorify Him



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## **ABOUT US**

OUR PRODUCTS

MISSION, VISION AND VALUES

OUR VALUE CHAIN

OUR PRESENCE IN MOROCCO
AND ACROSS THE WORLD



**KEY FACTS** 

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A YEAR IN THE NEWS

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WORKING CLOSELY WITH FARMERS

OCP AFRICA

STRENGTHENING THE CONTINENT'S FOOD SYSTEMS



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## SUSTAINABLE DEVELOPMENT

ON THE PATH TO EXCELLENCE

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COMMUNITY EGAGEMENT AND SOCIAL INCLUSIVITY

QUALITY EDUCATION FOR EVERYONE

SUPPORTING EDUCATION ON OCP SITES

SUPPORT FOR COMMUNITY AGRICULTURE AND BIODIVERSITY CONSERVATION IN AFRICA AND ASIA

OCP FOUNDATION

BETWEEN EXPERIENCE AND A NEW VISION

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**OCP WAS FOUNDED IN 1920** AS THE OFFICE CHÉRIFIEN DES PHOSPHATES. OPERATIONS STARTED WITH THE FIRST MINE AT KHOURIBGA. TODAY, **OCP'S BUSINESS SPREADS** THROUGHOUT THE PHOSPHATE **VALUE CHAIN RANGING FROM** MINING AND INDUSTRIAL TRANSFORMATION TO **EDUCATION AND DEVELOPMENT** OF THE COMMUNITY. OCP GROUP **CONTRIBUTES TO FEEDING A GROWING GLOBAL POPULATION** BY PROVIDING NUTRIENT RICH **FERTILIZERS ESSENTIAL TO** PLANT GROWTH AND HEALTHY **SOILS. WITH 100 YEARS OF EXPERTISE. OCP GROUP IS THE** WORLD LEADER IN THE PLANT

**NUTRITION AND PHOSPHATE-**BASED FERTILIZERS MARKET. **OCP OFFERS A WIDE RANGE OF** ADAPTED PHOSPHATE-BASED **FERTILIZERS TO ENRICH SOILS** AND INCREASE CROP YIELDS IN A COST-EFFECTIVE AND SUSTAINABLE MANNER. BASED IN MOROCCO AND OPERATING ALL OVER THE WORLD, OCP **WORKS WITH OVER 350 CLIENTS WORLDWIDE. COMMITTED** TO FUELING AFRICA'S **ENVIRONMENTAL AND SOCIAL DEVELOPMENT, OCP GROUP PUTS INNOVATION AT THE CORE** OF ITS STRATEGY. PARTICULARLY **PROMOTING SUSTAINABLE AND** PROSPEROUS AGRICULTURE ON THE CONTINENT.



## I OUR PRODUCTS





Phosphate rock is the source of all phosphate products. It is used in fertilizers and animal feed and for industrial purposes.

We mine phosphate rock while optimizing our use of natural resources.



## **PHOSPHORIC ACID**

Phosphoric acid is an intermediary product between phosphate rock and phosphatebased fertilizers. It is produced by a reaction between phosphate rock and sulfuric acid.

OCP phosphoric acid is used by the food and pharmaceutical industries, as well as in phosphate-based fertilizers and other industrial uses.







Phosphate rock and phosphoric acid are used as raw materials to produce fertilizers used by farmers around the world.



## STANDARD FERTILIZERS

OCP produces diammonium phosphate (DAP) and monoammonium phosphate (MAP) binary fertilizers, as well as a complete triple superphosphate (TSP) blend. DAP, MAP and TSP fertilizers can all be used directly or blended to create customized formulas.



## **ENRICHED FERTILIZERS**

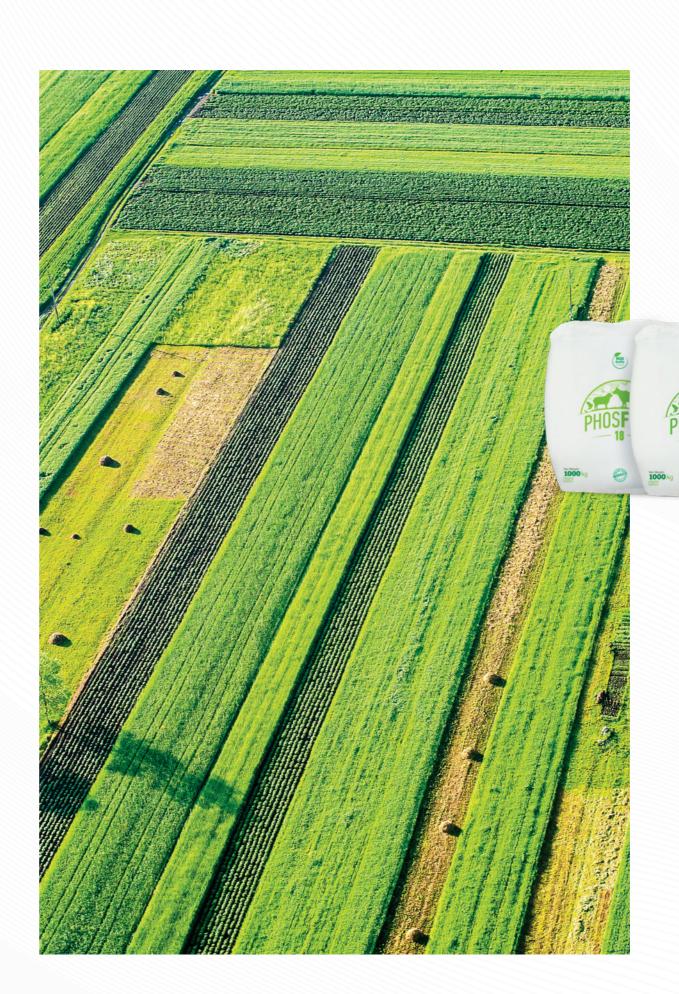
Enriched fertilizers are blends of phosphate-based fertilizers and nitrogen fertilizers with added micronutrients designed to feed degraded soils effectively. These fertilizers increase crop yield by providing the necessary nutrients while preserving the soil. OCP's flexible processes tailor these blends to various soil types.

## **WATER-SOLUBLE FERTILIZERS**

NUTRIDROP® 12.61 is a high-quality water-soluble monoammonium phosphate with high phosphorus and nitrogen concentrations suitable for fertigation and foliar application. This highly water-soluble fertilizer provides crops with optimal nutrient levels throughout their growth cycles.



These fertilizers are adapted to suit the specific needs of different soil types, helping farmers follow the 4Rs of nutrient management - the right fertilizer, at the right dose, at the right time and in the right place - with the highest levels of accuracy.



## PHOSFEED®

## NUTRITIONAL SUPPLEMENTS FOR ANIMALS

The PHOSFEED® product line provides essential nutrients for healthy and well-balanced growth for poultry, sheep, cattle, swine, and aquaculture. It provides a perfect combination of high digestibility, nutritional value, sustainability and costeffectiveness.

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## I MISSION, VISION AND VALUES



By 2050, approximately 10 billion people will live on Earth. Feeding everyone will require radical innovation in agricultural production while ensuring that we reduce our environmental impact and guarantee

**INNOVATION** 

We are always looking for new solutions to tackle the

challenges of our industry

and those of global agriculture.

OCP Group foster innovation on all levels, through employee-

led initiatives, advanced R&D,

startup initiatives, partnerships,

and education and skills development. It is a philosophy

that seeks to open the door

to new opportunities and

initiatives to make our vision

for a sustainable future

a reality.

sustainable livelihoods for farmers. This ambition is achievable thanks to phosphorus and its vital role in plant growth and soil preservation.





As the custodian of 70% of the world's phosphate reserves, we play a vital role in supporting farmers so that they can meet the food needs of the coming decades.

Our role is to supply enough phosphate products to meet the growing global

demand for fertilizers. This entails having a true understanding of soil and crop needs and how to support farmers to wisely and sustainably use our products.



## **OUR VISION**

## SUSTAINABLE GROWTH FOR EVERYONE

Our ambition is to feed the planet to tackle food security issues. We strongly believe in the importance of the connection and balance between:

## **EDUCATION**

We're creating a knowledge ecosystem to enable people to access expertise, build skills and bring ideas to life.

## **CUSTOMIZATION**

Customization starts with understanding the specifics and context of each challenge, whether it's helping farmers improve their soil fertility, reducing the environmental impact of our processing, or developing new community initiatives.

Our vision for sustainable growth is responsible and inclusive, positively impacting our partners and the entire supply ecosystem through understanding the needs of soils and crops and treating the environment as a key factor to socio-economic development.



OUR TWO CORE VALUES GUIDE OUR DAY-TO-DAY OPERATIONS AND OUR RELATIONSHIPS WITH STAKEHOLDERS AND OUR COMMUNITIES.

## NIYA

Sincerity is at our core. It is driven by transparency, trust, openness, care, and togetherness.

## NEFS

It is the creative impulse that drives the essence. This second core value is supported by the principles of commitment, courage, excellence and loyalty.

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OCP Group spans the entire phosphate value chain, from mining to industrial processing and export. It is an integrated chain of four mines, two processing sites and a network of port installations. OCP Group strives to improve its business by optimizing the efficiency

of its processes and lowering energy and resource costs to maximize the value of phosphates.

To build a sustainable future, we have developed better phosphate mining and transportation solutions to reduce

phosphate, water and energy consumption, combining industrial efficiency with emissions reduction.



## MANAGEMENT

## **PRODUCTION**

#### **EXTRACTION & WASHING**

## TRANSPORT & STORAGE > DISTRIBUTION & SALES

## **DEVELOPMENT OF** SUSTAINABLE AGRICULTURE

## SHARED **VALUE CREATION**



MAD 84.3 BILLION consolidated revenue



94% EBITDA increase



value created and passed on to suppliers, employees, government shareholders and communities

phosphate rock production capacity

production from phosphate rock



71 MT P<sub>2</sub>0 phosphoric acid 2 production



market share for phosphate rock



10.9 MT

phosphate-based fertilizer production



market share for phosphatebased fertilizers



electricity needs provided by clean energy



ongoing research & innovation projects in partnership with UM6P and internationally recognized



of CO, saved per year thanks to the Slurry Pipeline



operational excellence in energy efficiency, with 4 out of 5 sites certified



million m<sup>3</sup> of water produced through alternative sources



clients worldwide



global market share for phosphoric acid



million hectares of soils mapped in Africa



farmers physically supported in Morocco by Al Moutmir



soil tests since Al Moutmir launched in September 2018



7,655 employees volunteering to support local communities



153

micro-businesses supported on OCP sites

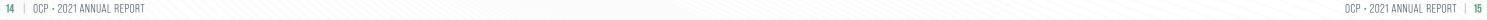


agricultural cooperatives supported by Act4community



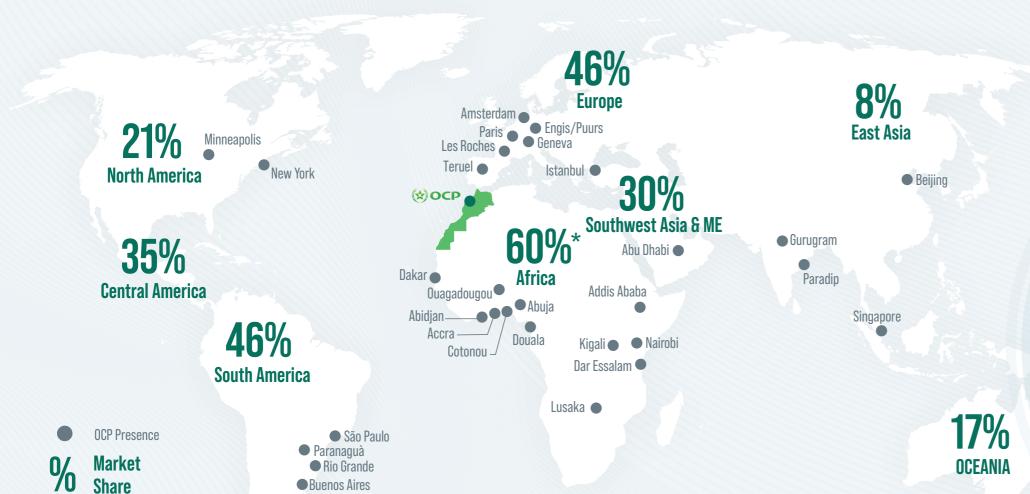
+3.600

scholarships awarded to students



## **OUR PRESENCE IN MOROCCO** AND ACROSS THE WORLD

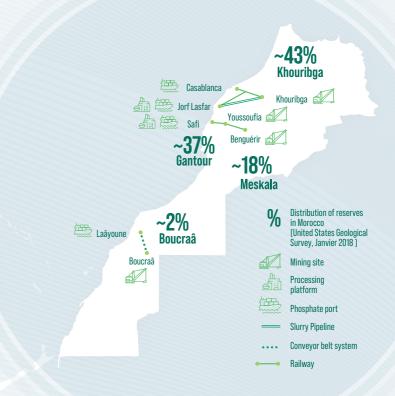
OCP Group has a presence on every continent through its subsidiaries and international partners. This keeps OCP close to its customers and farmers. This diversified portfolio reflects OCP Group's industrial and commercial excellence.



OCP group's mining operations are in Khouribga (Sidi Daoui, Merah El Ahrach, Sidi Chennane and Beni Amir), Gantour (Benguerir, Bouchane and Mzinda) and Boucraâ.

The Jorf Lasfar and Safi sites process phosphate into phosphoric acid and phosphate-based fertilizer. A major industrial development project at

Phosboucraâ spanning from 2014 to 2022 is also nearing completion. Its goals are 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 southern regions: Guelmim-Oued Noun, Laâyoune-Sakia El Hamra and Dakhla-Oued Ed-Dahab.



\* Market share in Africa includes DAP, MAP, TSP and NPKs in tons, estimated over the entire year.

Preliminary IFA2021 statistics, excluding purified acid from China for technical use. Market shares are based on  $P_2O_5$  trade volumes, limited to rock, phosphoric acid and DAP/MAP/TSP (excluding NPKs).



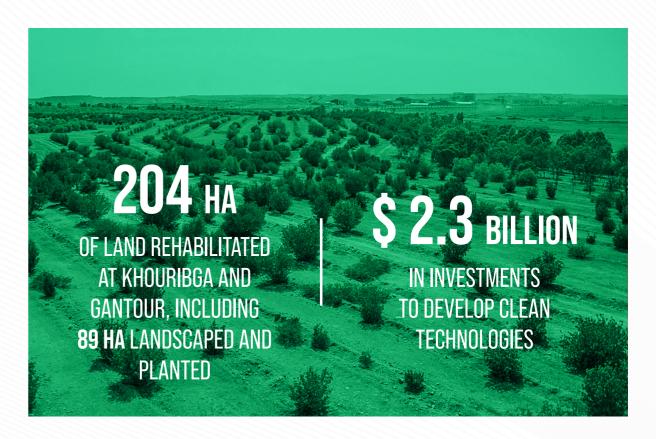
## I KEY FIGURES

## **WORKERS**





## I SUSTAINABLE DEVELOPMENT



## | RATINGS & EVALUATIONS



MAINTAINED 'ADVANCED' LEVEL, MAKING OCP A TOP PERFORMER



OBTAINED A 27.5 OUT OF SCORE WITH AN ESG RISK LEVEL STILL RATED AS MODERATE



OCP RECEIVED A B SCORE ON ITS FIRST CDP QUESTIONNAIRE SUBMISSION. JOINING THE RANKS OF ITS PEERS



OCP IS AN **OFFICIAL TCFD SUPPORTER** RANKING AMONG PIONEERING COMPANIES ON CLIMATE CHANGE RISKS AND OPPORTUNITIES

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## | AGRICULTURE / FOOD SYSTEM













## I COMMUNITY ENGAGEMENT







## I RESEARCH & INNOVATION





# OCP JOINS THE L'ESPP TO PROMOTE SUSTAINABLE PHOSPHORUS

MANAGEMENT

## OCP A FRANZ EDELMAN AWARD FINALIST

REWARDING THE APPLICATION OF OPERATIONS RESEARCH, MANAGEMENT SCIENCE AND ADVANCED ANALYTICS WITHIN THE ORGANIZATION



## OCP MAINTENANCE SOLUTIONS (OCP SUBSIDIARY)

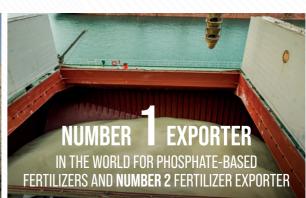
WON **FIRST PLACE** IN THE AFRICA IOT & AI CHALLENGE (AFRICAN COMPETITION FOR INNOVATIVE STARTUPS) WITH ITS I-SENSE SOLUTION (PREDICTIVE MAINTENANCE)





## **I PERFORMANCE**







	Phosphate rock	Phosphoric acid	Phosphate-based fertilizers
Production	24.5 MT DMG	7.1 MT P <sub>2</sub> O <sub>5</sub>	10.9 MT
Exports	9.9 MT	2 MT P <sub>2</sub> O <sub>5</sub> **	10.6 MT
Market share *	33%	54%	26%

- MT · million metric tons
- DMG: quantity of phosphate mined, expressed in dry merchant-grade tonnage.
- P<sub>2</sub>O<sub>s</sub>: anhydrous phosphoric acid. This formula refers to the conventional measurement unit for the phosphorus content in phosphate and its derivatives.

  One ton of phosphate contains an average of 0.32 tons of P<sub>2</sub>O<sub>s</sub>.

\* IFA 2021, preliminary statistics, excluding purified technical grade acid from China. Percentages are based on trade volumes of P<sub>2</sub>O<sub>s</sub> limited to phosphate rock, phosphoric acid, and DAP/MAP/TSP (excluding NPKs).

\*\* Non-consolidated export volume of phosphoric acid (including JV sales).

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## **JANUARY**

- Hubei Forbon Technology (Forbon), a Chinese company specializing in researching, developing, and supplying complete fertilizer additive solutions, also active in the field of smart agriculture, signs an agreement with OCP to create a 50/50 joint venture operating in R&D aimed at developing new generations of fertilizers and promoting smart agriculture.
- OCP Group is named a finalist for the prestigious 2021 Franz Edelman Award. This nomination highlights OCP Group's efficient use of advanced analytics and optimization algorithms to transform its entire production process, its supply chain, and its arbitration procedures.



#### **FEBRUARY**

- UM6P inaugurates its data center containing the African Supercomputing Center, the most powerful supercomputer in Africa. With this center. considered the 98th most powerful supercomputer in the world. Morocco now ranks 26th in the world in terms of computing power. The African Supercomputing Center, developed in partnership with the University of Cambridge, has a capacity of 3.15 petaflops, or three million billion operations per second. It provides Morocco, and more broadly Africa, with opportunities for breakthroughs in scientific research and innovation in every field...
- OCP Africa, created in February 2016 to support OCP's commitment to sustainable agricultural development in Africa, celebrated its 5th anniversary in 2021. Over these five years, it has expanded its efforts and initiatives to help African farmers improve their yields and incomes

and become true drivers of development for the entire continent. It has demonstrated its willingness to contribute to the green revolution in Africa through a comprehensive approach focusing on small farms. Since 2016, over 1 million farmers have benefited from OCP Africa's various programs.



MARCH

· The partnership between OCP and Nigeria is strengthened through several agreements between OCP Group and various Nigerian institutions to support and contribute to the development of Nigerian agriculture. The goal is to provide Nigerian farmers with quality fertilizers adapted to their soil needs and produced locally, at competitive prices. These agreements aim to reinforce the partnership between OCP Group and the

various gas sector institutions in Nigeria to reach the technical milestones required to carry out the industrial complex project. This project is based on the complementarity of natural resources between the two countries: Nigerian gas and Moroccan phosphate.

- OCP bolsters its support system for the very small businesses by launching Damane Tamayouz, a securitization fund facilitating OCP Group's eligible suppliers to finance their operating cycle. This is part of OCP's initiative for a new way of collaborating with its suppliers, called the Progress Pact. This is the first time in Morocco that such a mechanism has been implemented. Funding granted in 2021 estimated nearly MAD 125 million.
- OCP Group's subsidiary **OCP Maintenance Solutions** (OCP MS), specializing in reliability, digitalization and predictive maintenance. partners with Nucléom, a world leader in high-level industrial inspections. Through this collaboration, the two partners intend to pool their skills to meet the market's certification and industrial maintenance needs. This partnership will make it possible to offer the finest industrial expertise and high-level certification training on the market to the Moroccan

business ecosystem and, more widely, to the whole of Africa

 AgriEdge, the business unit incubated at UM6P. specializing in developing digital solutions for agriculture, launches an application that reduces irrigation water consumption and irrigation-related energy bills. Thanks to linked sensors and satellite images, AguaEdge makes it possible to only water the crops when needed. This helps optimize the use of water resources



#### **APRIL**

• To promote gender diversity for the benefit of its employees, OCP partners with the International Finance Corporation, a member of the World Bank Group, to support it in the process of obtaining Economic Dividends for Gender Equality (EDGE) certification, the primary international standard for

assessing company performance on gender equality and creating equal career opportunities for men and women. This certification process is part of the inclusion and diversity environment cultivated by the OCP Group for several years.



OCP Africa launches

its OCP School Lab program in Tanzania to support four African regions. Including a mobile school. mobile labs and digital devices, this program provides farmers with over the years coaching and technological solutions to remain connected with their agricultural advisors. The school provides demonstrations and interactive training sessions based on educational materials to raise awareness of best agricultural practices for the main crops in the regions where the school is currently located. In total, OCP School Lab has trained 41.093 farmers on best agricultural practices in Tanzania, exceeding its initial target of 40,000.



- OCP MS signs a partnership with BCG GAMMA, an artificial intelligence, and data science unit from Boston Consulting Group's Casablanca office. to offer advanced innovative/ transformative solutions on maintenance and industrial digitalization for industrial stakeholders in Africa and worldwide.
- · With the authorization of its Board of Directors and the Board Meeting, OCP Group successfully carries out a bond issue on the international markets for a total amount of USD 1.5 billion. This new issue has two tranches with maturities of 10 and 30 years, with coupons of 3.750% and 5.125%, respectively. OCP plans to use the raised funds to finance the second phase of its investment program and the partial redemption of its existing international bonds maturing in 2024 and 2025 to extend the maturity profile of its debt.



## JULY

- · A major financing agreement is signed between OCP and IFC for \$100 million to support OCP's efforts to strengthen its value chains in Africa, contribute to the continent's economic development and foster emerging sustainable food systems in the region. OCP Africa will leverage this funding to strengthen its supply chain and improve the availability of customized fertilizer for local soils and crops in Côte d'Ivoire, Ethiopia, Ghana, Kenya, Nigeria, Senegal and Tanzania. These funds will also be used to develop new support programs for local farmers
- In Jorf Lasfar, an achievement by OCP teams will help to provide farmers with the most suitable products at all times.

- They are producing NPS, a new fertilizer grade enriched with elemental sulfur. after adapting the DAP unit at the JFC4 plant. This unit has a production capacity of up to one million metric tons annually. This new fertilizer grade will meet the needs of low-sulfur soils.
- OCP joins the European Sustainable Phosphorus Platform (ESPP) promoting sustainable phosphorus management. The Group will share its expertise, best practices and vast network of researchers and industrial stakeholders with over 40 ESPP members spanning the entire phosphate and phosphorus value chain, in order to explore innovative ways to optimize the use of phosphorus.
- · The Jorf Lasfar site acquires a new mobile unit to measure ambient air quality. The unit covers the site and its surroundings and is equipped with the latest meteorological sensors, high-end gas analyzers and an advanced data acquisition and monitoring system.



## **SEPTEMBER**

• OCP achieves ISO 50001 certification for operational excellence in energy efficiency. It is part of the energy efficiency program, which stems from OCP's energy policy and roadmap. This certification attests to OCP Group's operational excellence in managing energy resources, protecting the environment and complying with regulations on energy efficiency.

• OCP signs an agreement

with the Ethiopian government to build a fertilizer complex in Dire Dawa using Ethiopian gas and Moroccan phosphoric acid. The total investment is expected to be \$3.7 billion, split into two phases. The first, which will require \$2.4 billion, is for a fertilizer production unit capable of producing 2.5 million metric tons of urea and NPK/NPS products yearly. In the second phase, the unit's production capacity will be increased to 3.8 million metric tons per year. For the Ethiopian government, this project will significantly contribute to meeting the country's growing demand for fertilizer.

• On the sidelines of the United Nations Food Systems Summit, on the publication of its 2021 Food and Agriculture Benchmark, the World Benchmarking Alliance, an international organization, ranks OCP 4th out of 350 companies. This signals its recognition of OCP's performance in food and agriculture compared to its peers on key issues.



## **OCTOBER**

 OCP becomes one of the member companies of the Task Force on Climaterelated Financial Disclosures (TCFD), and now ranks among pioneering companies on the transparency of climate-related risks and opportunities. By formally supporting the TCFD, OCP Group is expected to improve its reporting capabilities, take further steps toward a low-carbon economy, and guarantee global food security.

• OCP and Israel Chemicals sign a memorandum of understanding to promote applied research and academic excellence. This is expected to result in the funding of programs focused on sustainability run jointly by UM6P and Ben-Gurion University in Negev. This support will be provided to students, faculty and employees of both universities.



#### **NOVEMBER**

 A new step for OCP in promoting the use of green hydrogen. OCP group signs a framework of cooperation agreement with the Institute of Research in Solar Energy and New Energies (IRESEN) and Mohammed VI Polytechnic University (UM6P) to create the Green H2A technological platform. The platform will be focused on R&D and innovation in the green hydrogen sector and its applications. The first of its kind in Africa, this platform will play a major role in this sector's industrial deployment and will be a cornerstone in the green hydrogen ecosystem by

 During the 2021 LinkedIn MENA Talent Awards, OCP wins the Best Employer Brand award by the professional network in the "Between 2,000 and 10,000 employees on LinkedIn" category. This award is a tribute to the actions undertaken by OCP to strengthen its mark as an employer and highlight its employees' being OCP ambassadors, allowing it to continue to establish and strengthen its brand image in Morocco and around the world.



## **DECEMBER**

- For its first submission to the Carbon Disclosure Project (CDP), an international organization that maintains one of the most comprehensive environmental databases in the world. OCP receives a B score, matching its peers. This is a recognition of the efforts made by OCP for its contribution to protecting the environment.
- The Phosboucraâ Foundation continues to support innovative entrepreneurship in the southern regions through its learning centers. Over 140 people with innovative ideas were selected for a program that supports and accelerates highpotential projects. This program provides access to various types of training, including boot camps, brainstorming workshops, pitches and operational coaching. Additional training is also offered to help young people stand out through, personal development or technical training that strengthens their project management skills.



# BUSINESS PERFORMANCE

IN A GLOBAL CONTEXT STILL DISRUPTED BY THE PANDEMIC AND A MARKET FOR PHOSPHATE AND ITS DERIVATIVES AFFECTED BY CONTINUALLY RISING PRICES, OCP HAS RELIED ON ITS INDUSTRIAL FLEXIBILITY TO ADAPT ITS PRODUCTION TO MEET ITS CLIENTS' SPECIFIC NEEDS. ITS BUSINESS AGILITY HELPS OCP GROUP TO BALANCE ITS EXPORTS OF PHOSPHORIC ACID AND FERTILIZERS AND POSITION ITSELF IN OTHER MARKETS, SUCH AS LATIN AMERICA, ASIA AND OCEANIA. DESPITE SLUGGISH DEMAND AND REDUCED IMPORTS IN SOME MARKETS, OCP GROUP LEVERAGED ITS COST LEADERSHIP TO CONTINUE GENERATING STRONG PROFITS.



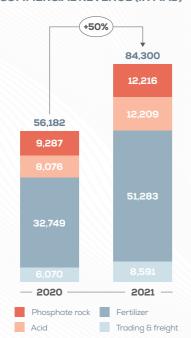
## | PHOSPHATE & DERIVATIVES

WITH A 31% MARKET SHARE IN 2021, OCP IS THE WORLD'S LEADING EXPORTER OF PHOSPHATE IN ALL ITS FORMS.

> In 2021 OCP increased worldwide exports of phosphate in all of its forms. We estimated an increase of 6% over the first three guarters of the year compared to the same period last year. The favorable price momentum also continued in 2021. The global fertilizer market, for example, has been on a sustained upward trend throughout the year, with prices rising sharply starting in Q1 and continuing to rise in Q2.

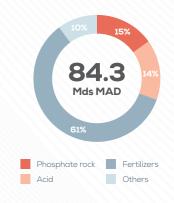
With a 31% market share in 2021, OCP is the world's leading exporter of phosphate in all its forms and the world's leading exporter of acid and phosphate rock. For 2021, OCP Group earned revenues of MAD 84.3 billion (\$9.36 billion), up 50.1% compared to the previous fiscal year. This is a sharp hike due to higher sales prices and sustained increasing demand in the main importing regions. This positive dynamic affected every product category. By product segment, fertilizer accounts for 61% of revenue. Phosphate and phosphoric acid account for 15% and 14%, respectively.

#### COMMERCIAL REVENUE (IN MAD)





#### **BREAKDOWN OF REVENUE**



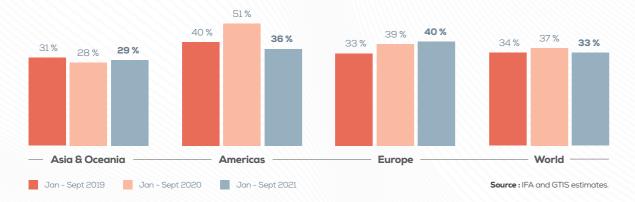
These product achievements reflect the solidity of OCP Group's fundamentals. They are also the result of the efforts made during the previous year - amid the pandemic when OCP Group made the decision to support its clients around the world and, indirectly, farmers, highlighting, once again, its importance to worldwide agricultural development and food security.

Thanks to its industrial flexibility, leading in pricing and business agility, OCP Group leveraged the upward trend in the market for phosphate and its derivatives while minimizing the effect of rising raw material prices. By the end of 2021, OCP improved its export profits, with estimated gains of 50% (\$6.4 billion in 2021 compared to \$4.3 billion in 2020).

## I PHOSPHATE ROCK

# INCREASED MARKET PRICES DROVE PHOSPHATE ROCK REVENUES 32% HIGHER, DESPITE LOWER EXPORT VOLUMES

#### OCP MARKET SHARE BY REGION FOR PHOSPHATE ROCK (%)



Phosphate rock revenue

**12.216**Billion MAD

32% increase

The global phosphate market saw an increase in both sales prices and export volumes of raw phosphate in 2021 (+6.5% between January and September compared to the same period in 2020, contributed to by the rise in American and African exports).

In this context, OCP phosphate rock revenue increased by 32% between 2020 and 2021 to MAD 12.216 billion on account

of better prices and increased exports to Europe and Asia, mainly.

OCP Group was able to capitalize on higher prices to offset the drop in its export volumes. As such, OCP Group stayed in the lead in the global phosphate market with a market share of 33% in 2021.

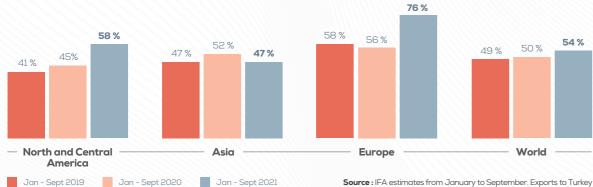


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## I PHOSPHORIC ACID

THANKS TO ITS STRATEGIC INCREASE IN PHOSPHORIC ACID EXPORTS, OCP GROUP WAS ABLE TO BOOST PHOSPHORIC ACID REVENUE BY 51%, INCREASING ITS GLOBAL MARKET SHARE IN THIS SEGMENT.

#### OCP MARKET SHARE BY REGION FOR PHOSPHORIC ACID (%)



**Source:** IFA estimates from January to September. Exports to Turkey are included in Europe.

Phosphoric acid revenue

12.209 **Billion MAD** 

**51%** increase

Prices rose in the phosphoric acid market in 2021, as did prices for raw materials and fertilizers. In terms of volume, global exports of phosphoric acid also increased (5% from January to September 2021) due to an increase in imports to Pakistan, Turkey, Brazil and Mexico.

In a market of rising prices and volumes, OCP increased its phosphoric acid exports by 7% (2 Mt P<sub>2</sub>O<sub>5</sub> compared to 1.8 Mt P205 in 2020). By late December 2021, OCP Group had earned revenue of MAD 12.209 billion

in this segment, up 51% compared to 2020 (MAD 8.076 billion in 2020).

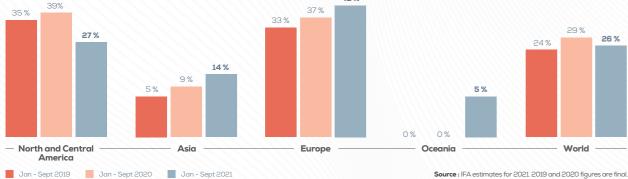
With these results, OCP Group was able to increase its market share in the global phosphoric acid market (54% compared to 50% for January-September 2020). Thus, Morocco remains the world's leading exporter of phosphoric acid, far ahead of Jordan (16%), the United States (16%), Senegal (6%) and Tunisia (6%).



## I FERTILIZER

## OCP GROUP INCREASED ITS REVENUE IN THE FERTILIZER SEGMENT BY 57% COMPARED TO 2020.

#### OCP MARKET SHARE BY REGION FOR FERTILIZERS (%)



Fertilizer revenue

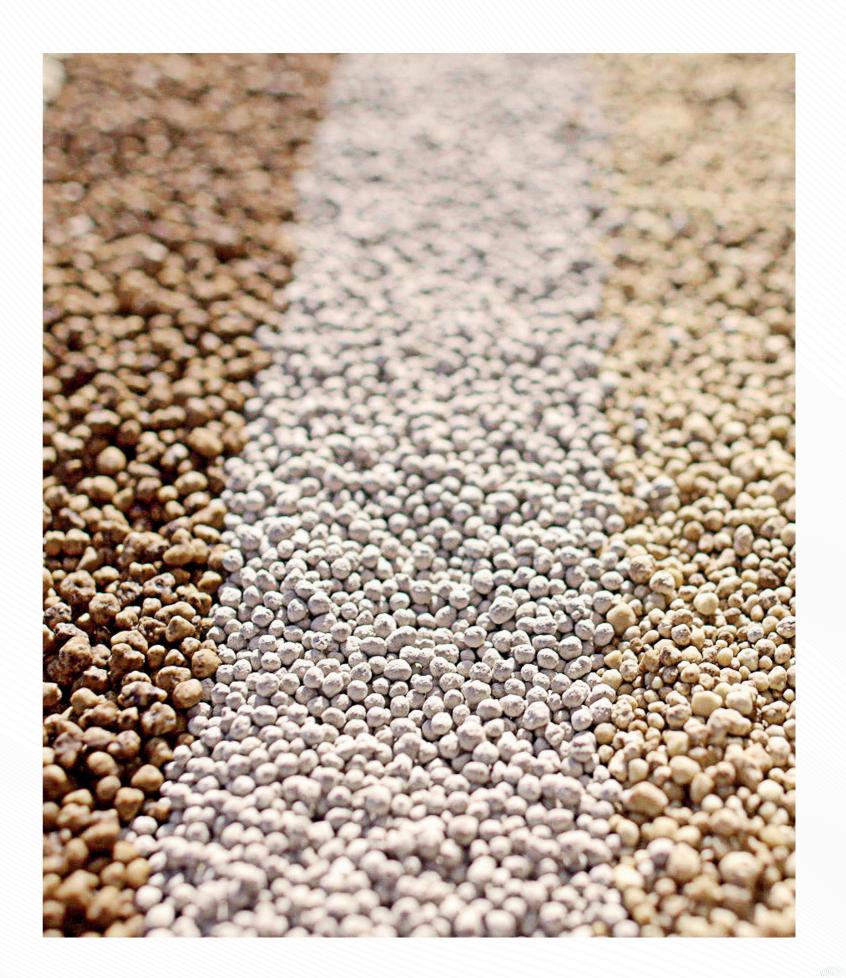
51.283 **Billion MAD** 

**57%** increase

Like the phosphate and phosphoric acid markets, the global fertilizer market was on an upward trend throughout 2021. There were increases in both export volumes and export prices. In the first three quarters of the year, global phosphate fertilizer imports rose by 5% compared to 2020. In the Americas, they increased by 20% over the same period, particularly in Latin America enough to absorb the drop in demand in Europe (due to soaring prices) and in Asia.

In the fertilizer segment, OCP earned revenue of MAD 51.283 billion in 2021, up 57% compared to 2020.

In terms of market share, at 26%, Morocco reaffirmed its position as the world's second largest exporter behind China (37%), which owes its success to its market volume in Latin America. However, Morocco remained the world's leading exporter of phosphate fertilizers, followed by Saudi Arabia (14%), Russia (11%) and the United States (8%). Fertilizer imports dropped by 7% on the African market in 2021, yet OCP managed to maintain its market share on the continent (58%) by strengthening its African strategy.



IN ADDITION TO PHOSPHATE, PHOSPHORIC ACID AND PHOSPHATE FERTILIZERS, OCP PERFORMED WELL IN THE ANIMAL NUTRITION AND SPECIALTY PRODUCTS SEGMENT.





OCP Group broke new ground in the fertilizer segment by marketing NUTRIDROP, its first soluble fertilizer, first marketed in 2020.

Following very positive feedback after its launch on the local market. NUTRIDROP was marketed in Brazil, the United States, Turkey, Mexico, Egypt and Australia. These countries are among the

#### 2020-2021 SALES VOLUMES IN KT FIRST YEAR OF SALES: 2020)



biggest consumers of soluble fertilizers. Beyond that, the product is used in 16 countries around the world. With a 100% market share in Morocco. NUTRIDROP sales represent 33% of this product's total sales.

Co-developed with Moroccan farmers, NUTRIDROP is the first OCP brand targeted at farmers.

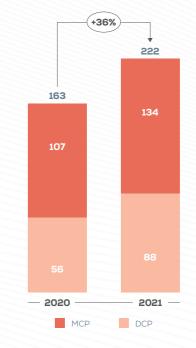


## **PHOSFEED®**

2021 was a record year in animal nutrition, with a 36% increase in sales volumes of two feed products. DCP sales thus increased from 56 Kt in 2020 to 88 Kt in 2021, and MCP sales from 107 Kt to 134 Kt.

OCP produces three types of feed phosphate in Safi: 18% dicalcium phosphate (DCP), 21% monodicalcium phosphate (MDCP) and 22% monocalcium phosphate (MCP). All three are marketed under the PHOSFEED brand. These products were launched in 2013 and since then, OCP Group has been supplying the entire Moroccan market, which accounts for 14% of the feed phosphate

#### MCP & DCP SALES VOLUME (KT)



sales portfolio. On the global market, PHOSFEED has made a name for itself, as it is marketed to the largest producers of compound feeds and meat, such as CG GROUP and BRF (respectively the world's leading producer and seventh largest producer of compound feeds), and JBS, the world's largest meat processing company.

Intended for the nutrition of all livestock (poultry farming, fattening, dairy production, aquaculture, etc.), feed phosphates are ingredients that provide phosphorus and calcium used by compound feed and premix producers.

## **OCP - AL MOUTMIR WORKING CLOSELY** WITH FARMERS

- OCP-AL MOUTMIR CONTINUES TO PROMOTE FERTILIZERS ADAPTED TO MOROCCAN **CROPS AND SOILS.**
- THE PROGRAM IS BOLSTERING ITS SUSTAINABILITY SOLUTIONS, IN PARTICULAR THROUGH THE DIRECT SEEDING PROGRAM AND TAILORED FORMULAS.
- IT ADDS TO ITS OFFERING OF INNOVATIVE **SOLUTIONS FOR FARMERS.**

or the third consecutive year, efforts were made to support farmers, particularly small farmers, as part of the "Al Moutmir" program, despite the restrictions imposed by the pandemic. It therefore bolstered its collaboration with fertilizer manufacturing and distribution partners to provide Moroccan farmers with personalized and tailor-made fertilizer formulas.

Al Moutmir also enhanced its multiservice offering including innovative and personalized solutions. With the direct seeding program, soil analysis, demonstration plots and capacity-building, 2021, like the two previous years, was a year of on-the-ground mobilization for the Al Moutmir teams that physically support more than 50,000 Moroccan farmers.



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## **SUPPORT FOR A SHIFT TO 100% NPK BLEND**

In 2021, Al Moutmir stepped up its efforts to support the shift in local consumption to regional NPK-blend formulas. This began in 2017 when the Moroccan market boldly opted for tailored fertilization based on 11 regional formulas. Since then, OCP Group's fertilizer manufacturing and distribution partners have been designing these formulas based on the recommendations of the Soil Fertility Map of Morocco using bulk blending equipment. By putting phosphate, potassium and nitrogen fertilizers at its partners' disposal, Al Moutmir ensures that each farmer will have access to the fertilizer formula suited to their crop and region. It is a scientific approach that ensures better yields for farmers, preserves natural resources, and optimizes of fertilization costs for the entire agricultural ecosystem.

By late 2021, more than 44 points of sale were operational in different parts of Morocco. These points of sale are equipped with Smart Blender production units, designed to produce NPK fertilizer tailored to each agricultural plot, according to plants' needs for N. P and K nutrients and based on soil analysis and potential yield. In all, 208,000 hectares were covered in 2021 and around 1.455 tailor-made fertilizer formulas were produced, with a total production of 39.335 metric tons

## INTEGRATED AGRICULTURAL **SUPPORT**

As the central service offered by Al Moutmir, soil analysis helps farmers better understand the needs of their soil and crops. Thanks to the mobile soil analysis laboratory system used across all regions of Morocco, 44,000 farmers benefitted from soil analyses in 2021, covering a total of 40 crops, across 153,000 ha in 44 provinces. Three types of crops were analyzed: cereals and pulses, fruit trees and fresh produce. .

As part of the demonstration plot program, 7,602 plots were installed in 2021 in volunteer farmers' fields in different parts of Morocco to demonstrate the major impact that adopting best agricultural practices has on crop quality and yields. 58% of the plots were for cereals and pulses, 30% for tree plantations and 12% for fresh produce. The result: a 21% increase in yield for cereals, 25% for pulses and 20% for olives. Al Moutmir also rolled out Phase 2 of its direct seeding program in 2021. 40 seeds types were made available

to 40 professional cooperatives, bringing the covered area to 18,500 ha., and 3,500 farmers where monitored by the Al Moutmir team in 23 provinces. This year's highlight was the expansion of the program's geographical scope, as the area covered by Phase 1 doubled.

The purpose of the experimental protocol used was to assess the effects of four different fertilization treatments

**IN 2021. EFFORTS TO SUPPORT FARMERS. PARTICULARLY SMALL FARMERS. CONTINUED AS PART OF THE** "AL MOUTMIR" PROGRAM. **DESPITE THE RESTRICTIONS ASSOCIATED WITH** THE PANDEMIC

to determine the most suitable base fertilizer formula for direct seeding.

#### **INNOVATIVE DIGITAL SOLUTIONS**

Al Moutmir offers a wide range of innovative digital solutions. Based on advanced technological models produced by artificial intelligence. satellite imagery and mathematical modeling, these solutions provide farmers with specific scientific recommendations that are tailored. precise, timely, free, and available to all

The digital solutions include AGRIPEDIA, a scientific reference system to facilitate decision-making; the Agriculture Monitoring System, a national agricultural monitoring system based on agronomic methods and geospatial technology; @tmar, a mobile application that provides farmers with free access to agricultural advice; AGRIDISTRIBUTORS, a solution that digitalizes the entire business process of Al Moutmir's fertilizer manufacturing and distribution partners with OCP; CORE BLENDING, a fast simulator to help fertilizer manufacturing and distribution partners find the most cost-effective combination for a given NPK formula: AGRITRIAL, a digital solution for real-time monitoring of demonstration plots; and AGRIAGENT, which helps agronomic engineers manage their activities. The @tmar application distinguished itself in 2021. A new service ("Funding

Request") was added to the application this year to enhance the services offered to its 300,000 users. It was set up in

collaboration with Crédit Agricole to give farmers access to agricultural financing solutions.

## A MULTI-TARGET CAPACITY-**BUILDING PROGRAM**

To successfully transform Moroccan agriculture, Al Moutmir has developed a educational program to benefit farmers, rural women, cooperatives and young leaders. This commitment to target populations has paid off. By the end of 2021, the farmer education program had yielded great results: more than 645,000 beneficiaries and 72,000 interactions involving several requests for support from farmers. Tailored to rural women. initiatives were launched as part of the Elle'Moutmir program with four categories of beneficiaries: female farmers, women's cooperatives, young women and female fertilizer resellers An action plan was put in place to boost cooperatives' skills, which translated into 19 webinars being held, 60 cooperatives benefitin from the e-souk platform and 100 Facebook pages being created for the benefit of cooperatives, with more than 540 beneficiaries in total. Lastly, for young leaders, the education program supported 800 young individuals working in agriculture, entrepreneurship and building their soft skills in 2021

50,000 farmers physically supported

100 agronomists on the Al Moutmir team

300,000 farmers using the **@tmar application** 

18,500 ha covered by direct seeding

7,602 demonstration plots

**44** operational points of sale

44,000 soil analyses

## **OCP AFRICA** STRENGTHENING THE CONTINENT'S FOOD SYSTEMS

- IN 2021, OCP AFRICA CONTINUED ITS **EFFORTS TO SUPPORT SMALL FARMERS.**
- THE AFRICAN SUBSIDIARY ESTABLISHED **NEW PARTNERSHIPS TO SUPPORT THE** CONTINENT'S AGRICULTURAL ECOSYSTEMS.
- GREEN AFRICA, OCP AFRICA'S 2021-2025 STRATEGY, AIMS TO STRENGTHEN AFRICAN **FOOD SYSTEMS.**

n Africa, OCP Africa's strategy is to ensure that small farmer have access to the best agricultural inputs for better crop quality and increased yields. Operating in 12 countries across the continent, the African subsidiary of OCP Group was able, despite the pandemic,

to continue its efforts in 2021 to provide African farmers with inputs, technology and knowledge to improve their productivity and yields. The new Green Africa strategy reflects OCP Group and OCP Africa's goal to transform African agriculture into a seat of sustainable food production.



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#### SUPPORT FOR SMALL FARMERS

In 2021, OCP Africa took a number of actions and initiatives to improve the well-being of the varied farmers and farming communities across Africa..

In late October 2020, the African Development Bank approved the participation of the Africa Fertilizer Financing Mechanism (AFFM) in a \$4 million partial trade credit guarantee. OCP Africa and the AFFM each contributed \$2 million The three-year partnership, which began in 2021, aims to reduce potential risks across the agricultural value chain and improve access to quality inputs, including fertilizers, in Côte d'Ivoire and Ghana. The project will provide support to a total of 430,000 small farmers, including 104,000 women, in both countries by making affordable quality agricultural inputs and access to training in good agricultural practices more accessible. Through OCP Africa's Agribooster program, this support is expected to boost productivity, increasing corn yields in Ghana by 35% and rice yields in Côte d'Ivoire by 30%.

To help farmers benefit from soil testing, which is necessary for proper fertilization of their soils and crops, the OCP School Lab initiative. OCP Africa's mobile laboratory concept, was rolled out in four Tanzanian regions in 2021, covering

more than 400 villages, where 13,915 samples were collected and tested. OCP School Lab trained 41,093 farmers on good agricultural practices, surpassing the initial target of 40,000. As regards the Agribooster program, the initial target of 5.000 women small farmers that had been set in 2021 was ultimately exceeded, as 10,000 women small farmers in five different regions of Ghana took part in the program. 3,600 metric tons of NPK fertilizer will be distributed and 16 demonstration plots for corn and rice will be set up in 10 districts of three of the country's regions. In Côte d'Ivoire, the Agribooster program was extended for the key value chains (rice and corn), covering a total of 8.500 ha (3.500 ha for rice and 5.000 ha for corn).

Moreover, to avoid disrupting communication with farmers given the health restrictions imposed during the COVID-19 pandemic, OCP Africa leveraged the media to raise awareness of good farming practices, following the example of the Farm&Fortune TV show recorded in Nigeria. Using media helped offset the drawbacks of social distancing on

initiatives like OCP School Lab. which aims to provide training and raise awareness of good agricultural practices.

## **PARTNERSHIPS BENEFITING FARMERS**

In addition to supporting African farmers on the ground, OCP Africa

**LAUNCHED IN 2021. THE GREEN AFRICA STRATEGY IS BASED ON FOUR KEY COMPONENTS: CUSTOMIZATION OF KEY AGRICULTURAL** SOLUTIONS. **USE OF DIGITAL FARMING TECHNIQUES, R&D AND DISRUPTIVE INNOVATION. AND SUPPLY CHAIN OPTIMIZATION** 

strives to build partnerships with stakeholders (public and private contributors, development communities, governments, etc.) that have the same objectives as OCP Africa. The shared aims include the development and diversification of agricultural value chains, and the sustainable development of agricultural ecosystems, while improving farmers' well-being.

As a result, a series of agreements were signed in March 2021 at the Mohammed VI Polytechnic University (UM6P) during the visit of a Nigerian delegation in Morocco. The visit was part of OCP Group's efforts to continue to successfully support the first phase of the Presidential Fertilizer Initiative and the project's progress in developing a multi-purpose industrial complex producing ammonia (750,000 t) and fertilizers (1,000,000 t). It will be up and running by 2025. OCP Africa took part in these agreements, binding it to the Fertilizer Producers and Distributors Association of Nigeria and the Nigeria Sovereign Investment Authority. The agreements are aimed at reinforcing OCP Group's support for agricultural development initiatives in Nigeria, the main objective of which is to offer farmers in the country locally produced, affordable quality fertilizers, adapted to the needs of the soil

Throughout 2021, OCP Africa established other partnerships with various leading stakeholders. This was the case with the agreement signed in April in Abidjan with the International Trade Finance Corporation, a member of the Islamic Development Bank, whereby \$107,000 in funding was granted for the Agribooster program

to support 20,000 rice farmers in Côte d'Ivoire. In June, OCP Group signed a financing agreement with the International Finance Corporation. With \$100 million in funding, the partnership is expected to enable OCP to expand and strengthen its supply chain and improve the availability of fertilizers adapted to local soils and crops in Côte d'Ivoire, Ethiopia, Ghana, Kenya, Nigeria, Senegal and Tanzania. These funds will also be used to implement agricultural development programs. In September, OCP Group signed a co-development agreement with the Ethiopian government to build a fertilizer production plant in the gas-rich Dire Dawa region. Costing \$3.7 billion to build, the project will have a production capacity of 3.8 million metric tons per year. The first phase will involve an investment of \$2.4 billion to build a fertilizer production unit combining urea and NPK/NPS products with a capacity of 2.5 million metric tons, which will be expanded in the second phase to reach the target of 3.8 million metric tons.

41,093 farmers trained in Tanzania

320 villages visited in Côte d'Ivoire

specific fertilizer formulas developed in **Nigeria** 

6,000 soil samples analyzed in Kenya

16 demonstration plots set up in 3 regions of Ghana

1 million ha of rice fields mapped in Senegal

## GREEN AFRICA: OCP AFRICA'S 2021-2025 **STRATEGY**

While the creation of OCP Africa in 2016 was prompted by the desire to extend OCP Group's agricultural innovations to Africa's 33 million farmers, the new vision for 2025 is to be a key partner in the continent's food systems, delivering holistic agricultural solutions in partnership with key stakeholders. Launched in 2021, the Green Africa strategy is based on four key components: customization of key agricultural solutions, use of digital agricultural techniques, R&D and disruptive innovation, and supply chain optimization.

# INDUSTRIAL ACHIEVEMENTS

IN TERMS OF MINING PRODUCTION AND PROCESSING, 2021 WAS SYNONYMOUS WITH IMPLEMENTING OCP GROUP'S INDUSTRIAL DEVELOPMENT PROGRAM AND ACHIEVING OPERATIONAL EXCELLENCE. DESPITE THE PARTICULAR CONTEXT OF THE PUBLIC HEALTH CRISIS AND A TOUGH WORLD MARKET, EXCEPTIONAL RESULTS WERE ACHIEVED. PRODUCTION RECORDS ACHIEVED IN 2020 WERE BEATEN IN BOTH THE MINING AND CHEMICAL INDUSTRIES. TO IMPROVE ITS OPERATIONAL PERFORMANCE, OCP GROUP SUCCESSFULLY COMPLETED ITS OPERATIONAL TRANSFORMATION PROGRAM, EXPLOI, WHICH YIELDED EXCEPTIONAL PERFORMANCE RESULTS.

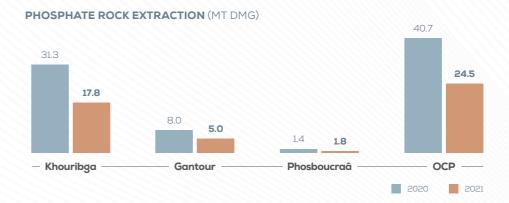


## **PRODUCTION** | OPERATIONAL EXCELLENCE AND FLEXIBILITY

WITH THE IMPLEMENTATION OF THE INDUSTRIAL DEVELOPMENT PROGRAM AND THE INDUSTRIAL TEAMS' COMMITMENT TO OPERATIONAL EXCELLENCE, OCP GROUP **ACHIEVED EXCEPTIONAL PRODUCTION** RESULTS BOTH IN THE MINING AND CHEMICAL INDUSTRIES.



## I MINING ACTIVITIES



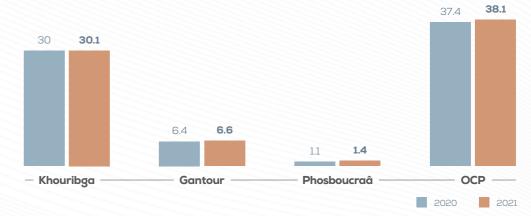
In 2021, 24.5 Mt DMG (dry, merchantgrade) of phosphate rock were extracted at the OCP mining sites, that is, 17.8 Mt DMG in Khouribga, 5 Mt DMG in Gantour and 1.8 Mt DMG in Phosboucraâ.

This mining production reflects OCP Group's strategy to focus on reclaiming stocks in natural soils, a performance

attributable to operational flexibility and the efforts made throughout the year to achieve operational excellence in a rather unique context of having These production figures reflect OCP Group's new strategy, focusing on the recovery of phosphate from natural land. This more sustainable strategy was delivered despite challenges imposed by the COVID-19 pandemic and demand factors.

Extraction volumes exceeded 13.6 Mt DMG given the increase in retrieval volume in the mining sites of Khouribga (12.1 Mt DMG) and Gantour (1.5 Mt DMG), thus contributing up to 37% to phosphate rock shipments (40% of Khouribga shipments and 23% of Gantour shipments).

#### MARKET OUTPUT (MT DMG)



Between 2020 and 2021, market output, meaning the quantity of phosphate processed (screened, washed and/or dried) and ready to be marketed

and used, increased by 2% (from 37.4 Mt in 2020 to 38.1 Mt in 2021), as extraction and washing activities in the Beni Amir and Daoui mines in Khouribga and

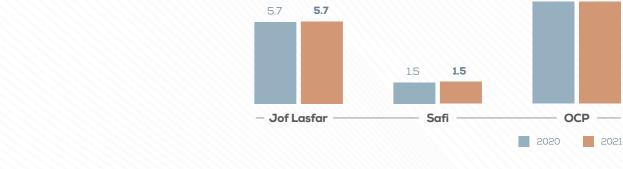
drying and calcination activities in Youssoufia (Gantour) and Phosboucraâ were ramped up.

2020 was a productive year, and 2021 followed suit. Strong results were achieved in all production segments, despite the pandemic, reflecting the effort to adapt to mining stock retrieval.

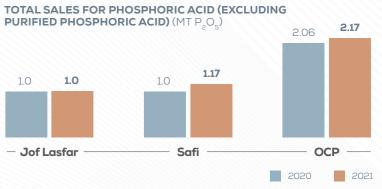
In the phosphoric acid segment, OCP Group capitalized on 2020's record achievements, with phosphoric acid production of 7.1 Mt P<sub>2</sub>O<sub>5</sub> (5.7 Mt P<sub>2</sub>O<sub>2</sub> in Jorf Lasfar and 1.5 Mt  $P_2O_5$  in Safi), that is, the same levels (in total and per site) recorded a year earlier.

This resulted in total phosphoric acid sales (excluding purified phosphoric acid) of 2.17 Mt P<sub>2</sub>O<sub>5</sub>, up 5% from the previous year. Sales totaled 1.17 Mt  $P_2O_5$  in Safi and 1 Mt  $P_2O_5$  in Jorf Lasfar. Production levels in the fertilizer and feed segment remained almost unchanged, with a very slight drop in absolute volume, which can be explained by the higher quality of the fertilizer produced. In other words, the 762,000 t decrease in DAP was offset by the increase in output of the other grades of more than 426,000 t.

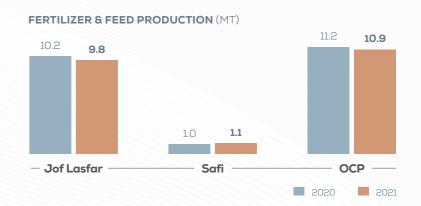
10.9 Mt of fertilizer had been produced by the end of 2021 (9.8 Mt in Jorf Lasfar and 1.1 Mt in Safi). Total fertilizer sales, dropped by 7%, from 11.9 Mt in 2020 to 11.1 Mt in 2021. In terms of grade, MAP and DAP were on top (3.5 Mt each), followed by NPS/APS (1.3 Mt), and NPK and TSP (1.2 Mt each).

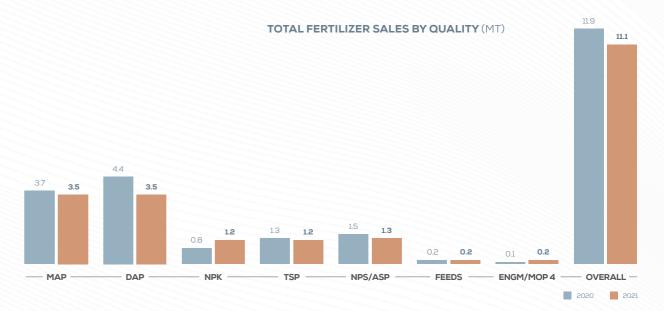


PHOSPHORIC ACID PRODUCTION (MT P<sub>2</sub>O<sub>5</sub>)



7.1





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Phosphoric Acid

**Fertilizers** 

# BUSINESS ECOSYSTEMS FINANCING, INTEGRATING, DIGITALIZING

IN 2021, OCP CONTINUED TO BUILD SOLID PARTNERSHIPS WITH BUSINESSES IN ITS INDUSTRIAL ECOSYSTEM. MANY MEASURES WERE TAKEN FOR NATIONAL PARTNERS, INCLUDING WAYS TO INTEGRATE SUPPLIERS, IMPROVE THEIR PERFORMANCE, FACILITATE ACCESS TO FINANCING AND DIGITALIZE CERTAIN PROCESSES.

Overall, OCP Group's commitments in 2021 amounted to more than MAD 16.97 billion, 86% of which were made with Moroccan suppliers. By late December 2021, the rate of supplier invoices due was 95% compared to 94% a year earlier. The average payment term for suppliers increased from 49 days in late December 2020 to 50 days in 2021. In essence, several actions were taken ranging from integrating suppliers into the OCP ecosystem to improving their competitiveness and performance.



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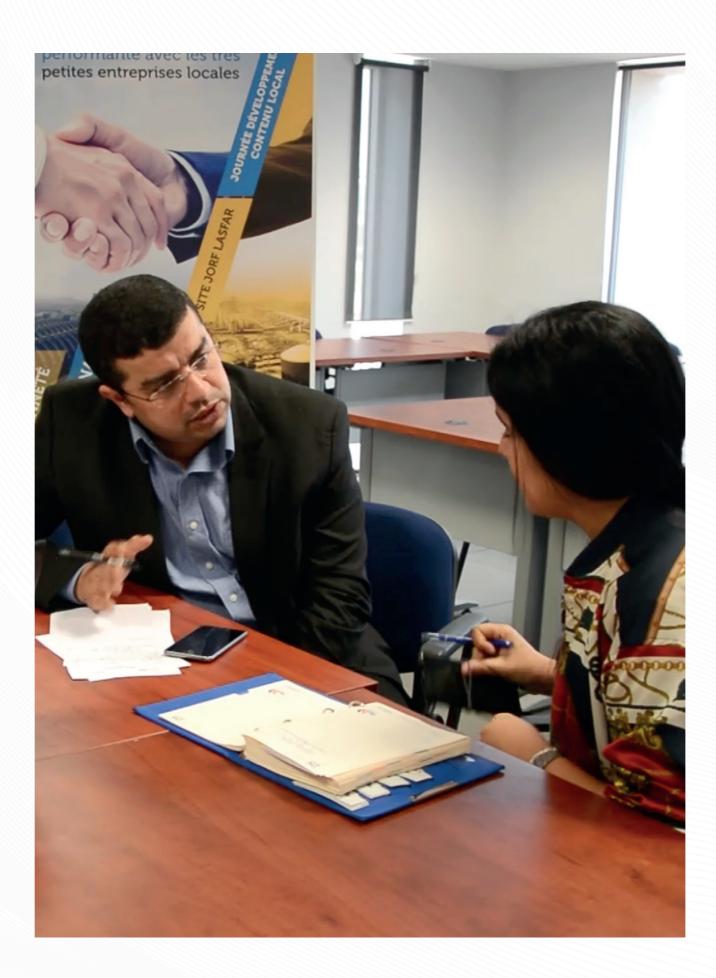
## I FINANCIAL SUPPORT

To support supplier financing, OCP launched an innovative financing program in March 2021. Based on the creation of a guarantee fund called the Damane Tamayouz Fund, this mechanism aims to give eligible OCP suppliers access to financing for their operating cycles. The Damane Tamayouz Fund is part of an ambitious development program in the OCP ecosystem aimed at strengthening partnerships with the most committed national and local suppliers and developing the most efficient ones. Damane Tamayouz takes the form of a collective securitization fund, fully supported by OCP. The first beneficiary of this fund will be the financing organization Finéa.

This is the first securitization transaction in Morocco to guarantee credit risk. Thanks to this mechanism, suppliers will be able to finance their cash flow needs arising from contracts they enter

into as soon as orders are made, for up to 70% of the contract's value. These small businesses will also benefit from advantageous conditions without having to provide additional guarantees.

Initially, the mechanism was aimed at financing contracts in the civil engineering, steel construction and electrical construction industries. Funding granted in 2021 totaled nearly MAD 125 million. The fund guarantees up to MAD 950 of credits. The credits covered are of an amount ranging from MAD 100,000 to MAD 15,000,000 and are granted to OCP's eligible suppliers for the financing of contracts to supply goods or services that have been entered into or are in progress.



## INTEGRATION **EFFORTS**

To prioritize local businesses, over 700 eligible local micro-business were given access to opportunities offered by OCP Group. OCP's commitments in 2021 to industrial operations with local companies in the regions of OCP sites amounted to MAD 2.08 billion, compared to MAD 1.5 billion in 2020. This represented a significant increase of 39%.

To further facilitate the integration of local participants, several co-development and participantscouting projects were carried out for an import substitution amount of MAD 275 million in two sectors in particular, secondary materials and Meehanite-certified converter grids for sulfuric acid units. This represented a 37.5% increase in 2021 compared to 2020.

## **IMPROVED PERFORMANCE**



Convinced that its industrial strategy's success depends on the strengthening of its partners' capacities, OCP Group implemented support mechanisms for suppliers' growth and progress.

For the Industrial Competencies Centers, a skills development program was launched to support subcontractor operators. The Jorf Lasfar site was used for a pilot project whereby a level 1 world class certification program in mechanical and electrical maintenance was offered to 202 students. Another pilot project for the development of the HSE management system of external companies was launched in 2021, in partnership with DuPont OCP Operations Consulting (DOOC). Two companies took part in it ahead of the full roll-out phase, set to be launched in 2022. In collaboration with national partners (technical assistance, Lean program,

mentoring, coaching and HSE management system), other support programs were developed for personalized monitoring of more than 23 SMEs.

Lastly, as part of the awarding of contracts to the best bidders in strategic industries, a rating system was adopted to encourage suppliers in the OCP ecosystem to work on their professionalism and thus promote the development of their capacities. As a result, the ratings of 250 suppliers in the civil, steel and electrical engineering sectors have been updated. This has resulted in field audits, progress plans and HSE qualification of suppliers.

## DIGITALIZING **PURCHASING PROCESSES**

The digitalization of purchasing processes has greatly benefited local suppliers. To ensure their greater integration into the OCP value chain, the company is preparing to launch the Supply Chain Finance platform. This initiative should result in a certain number of advantages for suppliers, including a 1% reduction in the supplier financing rate as compared to traditional factoring, the digitalization of communications between banks, OCP and suppliers, visibility on all invoices that need to be financed, and more flexibility when it comes to selecting which invoices are financed by the supplier.

To improve transparency, OCP is working on the digitalization of the bank surety management process for suppliers. This year also saw the widespread deployment of the SAP FieldGlass transactional platform for the management of service contract performance and work statement processing. In 2021 alone, over 714 service contracts were awarded, 931 external resources were managed. and over 541 work statements were created and processed through this platform.



# | DIGITAL | ACCELERATING | THE TRANSFORMATION

IN ORDER TO ANTICIPATE THE INNOVATION AND TECHNOLOGY CHALLENGES IN ITS INDUSTRY, OCP IS ACCELERATING THE DIGITAL TRANSFORMATION OF ITS INDUSTRIAL OPERATIONS TO IMPROVE OPERATIONAL PERFORMANCE.



OPERATIONAL BACKBONE DESIGN AND	OCP has been building on the implementation of the SAP enterprise resource planning software by establishing a training program covering all industrial operation sites and industrial, supply chain and production processes.  The program is based on harmonized processes, integrated management systems	
DEPLOYMENT READINESS (SAP)	and tools, and site-specific standards and operating procedures.	
	The building of the solution and the preparation of the business line test phase are planned for early 2022.	
PLANNING AND OPTIMIZATION MODELS	These models involve two major components. The first is related to mine planning and involves the design and establishment of the short-term planning system at the three mine sites. The second component has to do with production and the roll-out of the preliminary design planning platform (S&OE process) in all production sites.	
FORECASTING	Several prediction models have been designed and introduced for the managemen of emissions from sulfuric units (generalized use of emission prediction models, mainly at Jorf Lasfar) and for quality control (through the fertilizer line analyzer, which analyzes fertilizer granulometry and coloration at Jorf Lasfar, and through NPK fertilizer molar ratio prediction).	
	Process modeling projects have been carried out for rock washing/desludging at washing plants and pulp thickening (phosphoric acid).	
	Simulators have also been developed, including one for electrical power generation and another for sulfuric acid processes.	
AUTOMATIZATION PILOT TESTS	In 2021, autonomous truck pilot tests were carried out at the Benguerir experimental mine, and the use of the truck was approved on the worksite.  An advanced monitoring system for a phosphoric acid unit at Jorf Lasfar was also developed and established.	
DIGITALIZATION OF ACTIVITY MONITORING AND MANAGEMENT	A prototype online rock and pulp ore analyzer using laser technology has been deployed, and a monitoring platform for seawater pumping facilities has been established.	
CYBERSECURITY	The industrial networks on the five sites were reviewed and the systems strengthened.	

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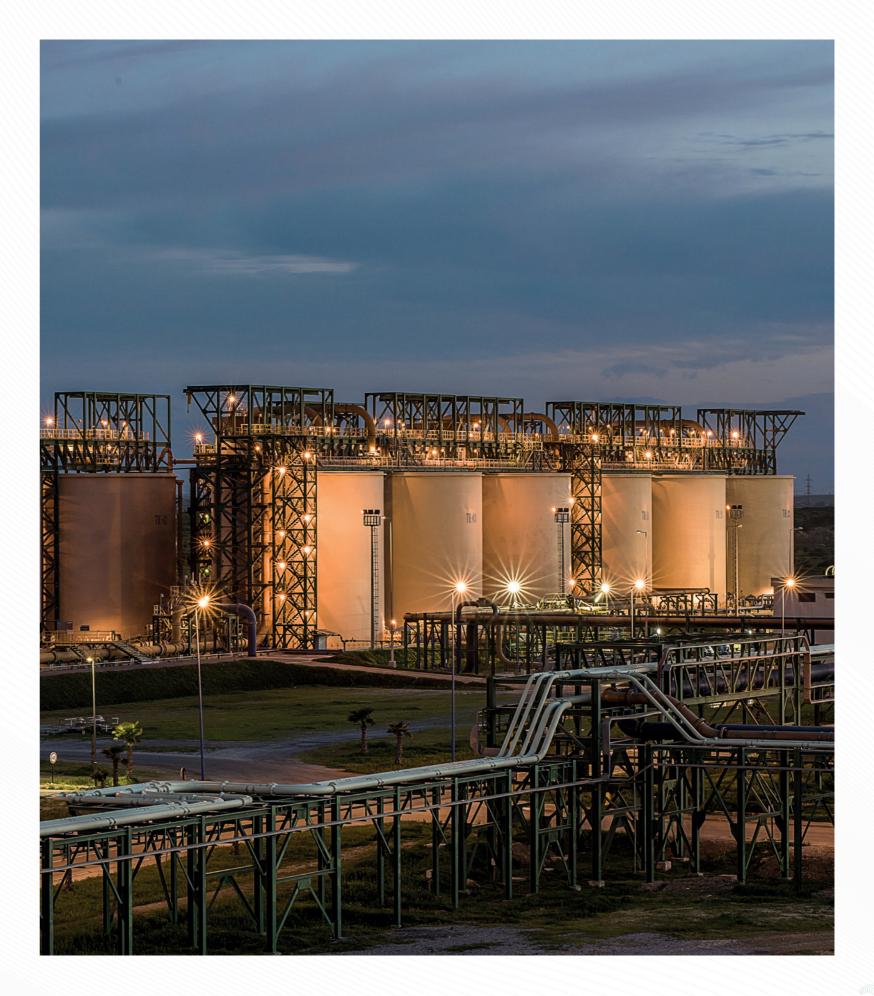
## INDUSTRIAL DEVELOPMENT

IN THE CONTEXT OF THE **DEPLOYMENT OF PROJECTS** IN THE COMPANY'S AMBITIOUS INDUSTRIAL PROGRAM, OCP **GROUP HAS HAD TO DEAL** WITH A NUMBER OF IMPORTANT **ECONOMIC FACTORS IN 2021.** THE COVID-19 PANDEMIC IMPACTED THE PACE OF **ACTIVITY ON THE WORKSITES.** INCREASES IN THE PRICES OF **RAW MATERIALS AND SHIPPING** ALSO AFFECTED PROJECTS. THE OPERATIONAL TEAMS **COMPENSATED FOR THIS** SITUATION BY IMPROVING THEIR OWN PERFORMANCE.

**IN LATE 2021, THEY ACHIEVED** AN AVERAGE RATE OF PROGRESS LASFAR (MAD 2.818 BILLION). OF 70% FOR PROJECTS IN THE CONSTRUCTION PHASE, **COMPARED WITH 53% THE** PREVIOUS YEAR. IN TOTAL, THE VALUE OF THE INDUSTRIAL **COMMITMENTS MADE IN 2021 REACHED MAD 4.942 BILLION.** THIS BRINGS THE TOTAL VALUE OF THESE COMMITMENTS TO

MAD 97.588 BILLION. THE **OVERALL BUDGET FOR** INDUSTRIAL DEVELOPMENT **UNTIL 2030 TOTALS MAD** 227 BILLION. 25% OF THIS **FUNDING IS ALLOCATED TO** NEW PROGRAMS FOR WATER. **ENERGY. NEW & GREEN** PRODUCTS AND PROCESSES. **AND 75% IS DEDICATED TO** TRADITIONAL PROJECTS.

THE MOST SIGNIFICANT COMMITMENTS RECORDED **IN 2021 ARE RELATED** TO THE PROGRAM FOR NEW **FERTILIZER LINES (3 MT)** AND THEIR ASSOCIATED **INFRASTRUCTURE AT JORF** THE BENGUERIR WASHING PLANT (MAD 717 MILLION), THE WATER PROGRAM AT JORF LASFAR (MAD 402 MILLION). THE PS4 SULFURIC LINE AT SAFI (MAD 205 MILLION) AND THE T2 ACID DECADMINATION **UNIT ATJORF LASFAR** (MAD 194 MILLION).



## INDUSTRIAL DEVELOPMENT PROGRAM **OVERVIEW**

# **MINES**

& RENFFICIATION



## TRANSPORT S IITII ITIFS



## **INFRASTRUCTURE**

## **KHOURIBGA JORF LASFAR**

## MINES

- Opening of 2 new mines
- Expansion of existing mines

#### **BENEFICIATION**

- Construction of 3 new washing plants and adaptation of the 2 existing washing plants to the Slurry Pipeline

#### **DOWNSTREAM COMPLEX**

- Filtration/repulping plant and phosphate drying plant

## **PULP TRANSPORTATION**

- Construction of a pipeline (capacity of 38 Mt/ year and 187 km in length) for transporting phosphate pulp between Khouribga and Jorf Lasfar

#### **IITII ITIFS**

- Central Morocco: water supply from the Ait Messaoud dam
- Electricity Station Khouribga
- Water resource optimization units (desalination, wastewater treatment plant and Jorf-Khouribga water pipeline)

#### **PROCESSING**

**PROCESSING** 

& INFRASTRUCTURE

- Four new integrated fertilizer production complexes (capacity of 1 Mt/year DAP equivalent per complex)
- 2 new granulation units with a total capacity of 1.7 Mt/year DAP equivalent
- 2 new phosphoric acid production lines (JFC eq.) with adaptation of the existing lines of the MP 3&4 workshop
- 3 new sulfur lines with power plants
- 3 new fertilizer production units (1 Mt/year DAP equivalent each)

- Completion of Green Mining and renewable energy projects
- New product diversification units (fluorine, custom fertilizers and demetallization/decadmination)

## **PORT**

## PORT OF JORF LASFAR

- New docks 1.5 km in length
- Rehabilitation and deepening of existing
- Installation of new loading/unloading equipment



 Increase of the capacity of the 2 existing mines and opening of a third mine in Gantour

#### BENEFICIATION

- Construction of 2 new washing plants and adaptation of the Youssoufia plant

Construction of new downstream facilities

- Construction of a new drying plant

DOWNSTREAM COMPLEX

## PULP AND ACID TRANSPORTATION

- Construction of a pipeline to transport phosphoric acid between Mzinda and Safi (1.5 Mt P<sub>0</sub>O<sub>c</sub> in Phase 1)
- Construction of a pipeline (capacity of 8 Mt/ year and 65 km in length) for transporting phosphate pulp between Benguerir and
- Construction of a pipeline (capacity of 20 Mt/ year and 75 km in length) for transporting phosphate pulp between Youssoufia and Safi
- Water resource optimization units (desalination, wastewater treatment plant and Safi-Gantour water pipeline)

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New chemical processing platform, which will consist of the following by 2027:

- > Three phosphoric acid production lines with a unit capacity of 500 kT
- > Three sulfuric acid production units with a unit capacity of 1.5 MtMH/year
- > Three power plants with a unit capacity of 65 MW

New fertilizer production lines (5.5 Mt per year)

- Completion of Green Mining and renewable energy projects
- New product diversification units (fluorine, custom fertilizers and demetallization/decadmination)

## **NEW PORT OF SAFI**

- Construction of new docks
- Installation of new loading/unloading equipment



- Construction of new storage and handling facilities

#### BENEFICIATION

- Construction of a new washing plant with integrated flotation unit
- Construction of a new drying unit

## **PROCESSING**

- Construction of a new processing complex (integrated fertilizer production plant with a capacity of 1 Mt/year DAP equivalent)

#### **NEW PORT OF LAAYOUNE**

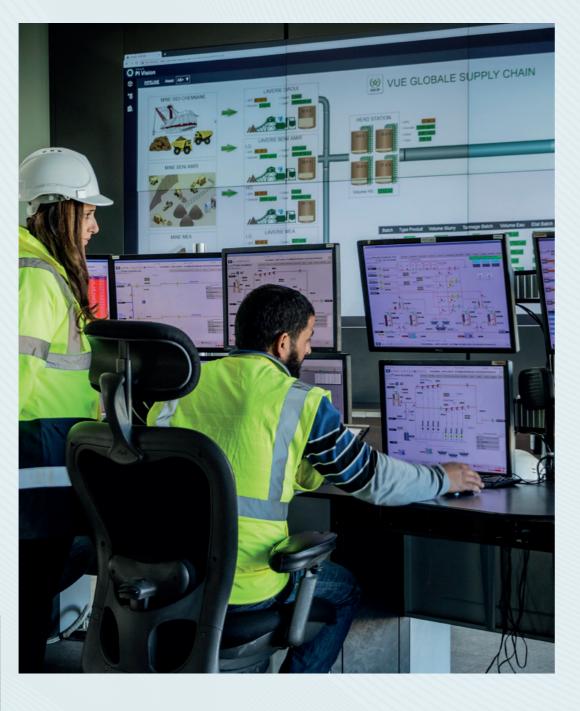
- Construction of a new sheltered wharf (port island) adapted to the conditions of the site and the needs of the new processing activity in Laâyoune





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#### TRANSFORMATION PHASES & CROSS-FUNCTIONAL PROJECTS

A transformation phase covers a targeted scope (one workshop, one entity, etc.), over a fixed period (three to six months) with a group of people, with a skillful organization. Each phase has a theme. Some relate to the capacity of a production workshop, while others relate to specific types of consumption. During the short period of a phase, all the project teams focus their efforts on the topic of their allocated phase, while monitoring performance closely. Topics are most often related to issues

> IN TOTAL, THE **COST PHASES** RESULTED IN GAINS **ESTIMATED AT MAD 624 MILLION, AND MAD 1.846 BILLION FOR** THE CROSS-**FUNCTIONAL PROJECTS**

that block, curtail or stifle production and performance. Ultimately, the approach tends to identify and implement structural ways to improve performance and operational control in terms of safety, production capacity, costs and flows.

To support the phases, cross-functional projects were initiated at OCP's five production sites, with a focus on optimizing costs by product category

across all P&L lines. Beyond reducing consumption, these projects include the achievement of economies of scale through standardization, pooling, massification, the review of purchasing methods, and the application of best practices for contract management. Since the launch of the program in 2019, 37 phases were completed and 18 cross-functional projects implemented. Though the "capacity" and "cost" phases were launched in

## THE PROGRAM SUCCESSFULLY **METITS OBJECTIVES AND ACHIEVED UNPRECEDENTED RESULTS MAINLY THANKS TO EMPLOYEE** INVOLVEMENT

2019 and 2020, respectively, the projects were launched in 2021. Results: mining production gains are estimated at 0.9 Mt (dry, merchant-grade) at Khouribga, fertilizer loading at 2 Mt at Jorf Lasfar and TSP loading at 134 Kt at Safi, to name just a few examples. In addition, costs were improved by MAD 322 million at Khouribga, MAD 77 million at Safi and MAD 134 million at Gantour. In total, the cost phases resulted in gains estimated at MAD 624 million, and MAD 1.846 billion for the cross-functional projects.

#### **OPERATIONAL EMPLOYEE ENGAGEMENT**

The program was able to meet its objectives and achieve unprecedented records mainly thanks to employee involvement. As part of the "Exploi community," they are the backbone of the success of the program. A multidisciplinary core team was set up. Among its key elements were change agents from the 'Beyond

program', whose mission is to provide teams with training and methods related to deadline management, problem solving and so forth, throughout the transformation phase. Typically, project teams consist of a phase leader, a change agent and specialist contributors, who work together under a phase sponsor who serves as a facilitator. Both for phases and cross-functional projects, the core team was supported throughout the program by a crossfunctional team consisting of experts, an operational excellence SPoC and a PMO. In total, 1,600 people were involved in this transformation program within the entities of the various production sites, supported by more than 120 people from various disciplines mobilized in support, in addition to over 40 change agents.

Thanks to the commitment, rigor and flexibility of the various stakeholders, the objective set were achieved, and even surpassed in certain projects and phases. To develop the EXPLOI program, increase operational efficiency and ensure the achievement of objectives, a roadshow was presented at OCP's five industrial sites in 2021. More than 350 EXPLOI workers participated in the twenty or so working sessions organized during this event. The collective discussions led to a series of guidelines on methodology, longterm planning, digital technology and agility that were adopted to continuously improve the program.

1,750 participants in the Exploi program

624

million MAD in cost phase gains

1.846

billion MAD in gains from cross-functional projects

MT (dry, merchant-grade) in mining production gains

MT (dry, merchantgrade) in beneficiation gains

MT in fertilizer loading gains

MT in sulfuric acid production gains

MT in phosphoric acid production gains

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# RESEARCH AND INNOVATION

OCP GROUP PLACES INNOVATION AT THE HEART OF ITS DEVELOPMENT STRATEGY AND INVESTS IN RESEARCH AND DEVELOPMENT TO OFFER INNOVATIVE SOLUTIONS IN PLANT NUTRITION, PROCESS TECHNOLOGY AND ENVIRONMENTAL SOLUTIONS. IT IS SEIZING NEW BUSINESS OPPORTUNITIES THROUGH PRODUCT DIVERSIFICATION. TO DO SO, THE GROUP FAVORS A GROUNDBREAKING MODEL TO IMPLEMENT ITS PROGRAM BY WAY OF A PARTNERSHIP WITH THE MOHAMMED VI POLYTECHNIC UNIVERSITY (UM6P). TOGETHER, THEY ARE DRIVING INNOVATION THROUGH A NUMBER OF COLLABORATIONS. OCP IS THUS ACCELERATING ITS AMBITION TO BECOME THE WORLD LEADER IN INTEGRATED SOLUTIONS FOR AGRICULTURE. THIS APPROACH ALLOWS IT BOTH TO PROVIDE INNOVATIVE SOLUTIONS AND TO EXPEDITE THEIR DEVELOPMENT. OCP BUILDS ACADEMIC AND INDUSTRIAL PARTNERSHIPS AND CONSOLIDATES A DIVERSIFIED ECOSYSTEM OF INNOVATION TO MEET THE KEY CHALLENGES OF GLOBAL AGRICULTURE.



# OCP, UM6P & MAScIR

BUILDING ON AN OPEN INNOVATION
STRATEGY, OCP GROUP, JOINTLY WITH
MOHAMMED VI POLYTECHNIC UNIVERSITY,
HAS ESTABLISHED NEW STRATEGIC R&I
PARTNERSHIPS THROUGH COLLABORATIONS
WITH PRESTIGIOUS PARTNERS IN
AGRICULTURAL DEVELOPMENT.

THE PROJECT PORTFOLIO WITH UM6P
AND MASCIR EXPERIENCED A MAJOR
ADVANCEMENT THROUGH THE EXPLORATION
OF THEIR SYNERGY AND COMPLEMENTARITY,
WITH THE SIGNING OF 24 NEW SPECIFIC
CONTRACTS ON VARIOUS THEMES IN FOUR
MAIN STREAMS: FARMER SOLUTIONS, HACKING
PHOSPHATE, OPERATIONS EFFICIENCY, AND
SUSTAINABILITY & CIRCULAR ECONOMY.

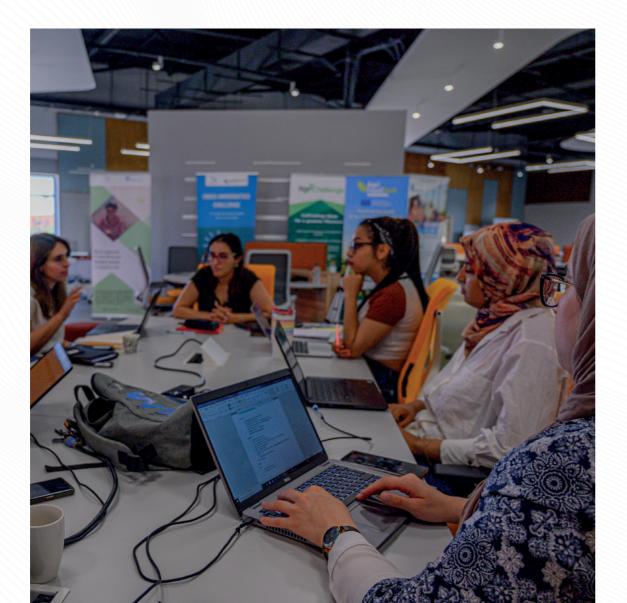
THESE CONTRACTS CONSOLIDATED THE PURSUIT OF STRATEGIC R&I ALLIANCES WITH PARTNERS LIKE FORBON, K-TECHNOLOGIES, FERTINAGRO, ARIZONA STATE UNIVERSITY, AND OTHERS.



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# PARTICIPATIVE INNOVATION & OPEN INNOVATION

PARTICIPATIVE: INNOVATION AND OPEN ARE TWO **ESSENTIAL MECHANISMS OF INNOVATION WITHIN OCP** GROUP. THERE ARE THREE MECHANISMS FOR THEIR **OPERATIONALIZATION: CULTURE & SITE DYNAMICS. BLOOMLAB AND OPEN INNOVATION.** 



# **CULTURE** & SITE DYNAMICS

32 projects were supported, including 19 proofs of concept, 11 prototypes and 2 deployed projects. In total, some 1,392 ideas were examined and 15 innovation campaigns launched. In addition, more than 6,000 OCP employees subscribed to the Innov'OCP open innovation platform. By the end of 2021, 800 employees had been trained through brainstorming sessions and participative innovation awareness workshops.

## I BLOOMLAB

Launched in April 2019 by OCP's participative innovation entity, BloomLab quickly established itself as OCP Group's corporate incubator and accelerator. Since its launch, five major projects and new business units have been supported, the most successful of which remains OCP Maintenance Solutions, the group's subsidiary operating in the areas of digitalization and predictive maintenance. This dynamic of supporting intrapreneurial projects continued in 2021 with the support of the OCP Makers project for market research and the OCP Insect Farming project for prototyping and market research.

# I OPEN INNOVATION

To promote entrepreneurship and the emergence of an innovative entrepreneurial ecosystem while addressing the current and future challenges of OCP Group through disruptive innovations, the 'open innovation' dynamic strives to start up and carry out projects addressing OCP's internal challenges (projects co-developed with national and international startups). With this in mind, the year 2021 ended with

significant initiatives such as the launch of the Net Zero Carbon campaign on the open innovation platform Innov'OCP. Through a call for candidates sent to all OCP Group employees, everyone could submit innovative, feasible ideas. The campaign was then opened externally to add the know-how and creativity of national and international startups to OCP Group's collective intelligence. To further strengthen the culture

of innovation, OCP Group began preparations for the launch of the open innovation platform "The Next Seed," dedicated to startups, innovative SMEs and researchers, to address strategic challenges based on inclusive collaboration in order to foster the development of new innovative services and businesses. The platform is scheduled to launch in early 2022.

# 2021 KEY ACHIEVEMENTS

OCP GROUP HAS A POLICY OF INNOVATION COMBINING APPLIED RESEARCH AND EXPERIMENTATION. IN 2021. IT WAS CENTERED ON FOUR THEMES: FARMER SOLUTIONS. HACKING PHOSPHATE, OPERATIONS **EFFICIENCY, AND SUSTAINABILITY** & CIRCULAR ECONOMY. THESE ARE ALSO RESEARCH AND INNOVATION TOPICS THAT ADDRESS OCP GROUP'S **CHALLENGES AND STRATEGIC** ORIENTATIONS. THE INNOVATION MODEL ADOPTED BY OCP IS CENTERED ON THE PRINCIPLE OF DELIVERY. MEETING A TWO-FOLD OBJECTIVE OF IMPACT AND SPEED TO EXPEDITE THE INDUSTRIALIZATION OF INNOVATIVE PROJECTS.

- Development of a new technique for producing T15 NPK by substituting 50% of the sulfuric acid and a large part of the ammonia with ammonium sulfate:
- Development and characterization of fused magnesium phosphate (FMP)
   fertilizers from different grades of phosphate rock (low grade, very low grade, washing sludge and waste rock), in collaboration with Forbon and Zhengzhou University in China;
- Finalization of preparations for the launch of industrial testing in China to produce a new grade of TSP that can be blended with urea, in collaboration with Forbon.

#### **Organic Farming**

 Completion of field agronomic trials in Spain and England, in collaboration with Fertinagro, to evaluate the performance of new formulations of organic phosphate fertilizers (PLB & PK) on different crops.

#### **Precision Agriculture**

- Completion of several agronomic field trials in Ghana, in collaboration with the International Fertilizer Development Center (IFDC) and OCP Africa, as part of the Ferari program, to evaluate the impact of fertilization levels on crop yields (corn and soybeans);
- Launch of agronomic field trials in the USA, in collaboration with OCP North America, with natural phosphates enriched with phosphate-solubilizing bacteria for organic and conventional agriculture.

#### Sustainable Agriculture

- Creation of a platform in Ghana, in collaboration with the IFDC and OCP Africa, as part of the Ferari program, bringing together the different participants in the fertilizer value chain in the aim of promoting crop fertilization in Ghana for sustainability and food security;
- Development, in collaboration with OCP North America and North Carolina State University, of new NPK formulas that are rich in trace elements, contain natural phosphate, DAP, and polysulfates (Poly4), and are low in chlorides, for efficient and sustainable fertilization of African soils.

**FARMER SOLUTIONS** 

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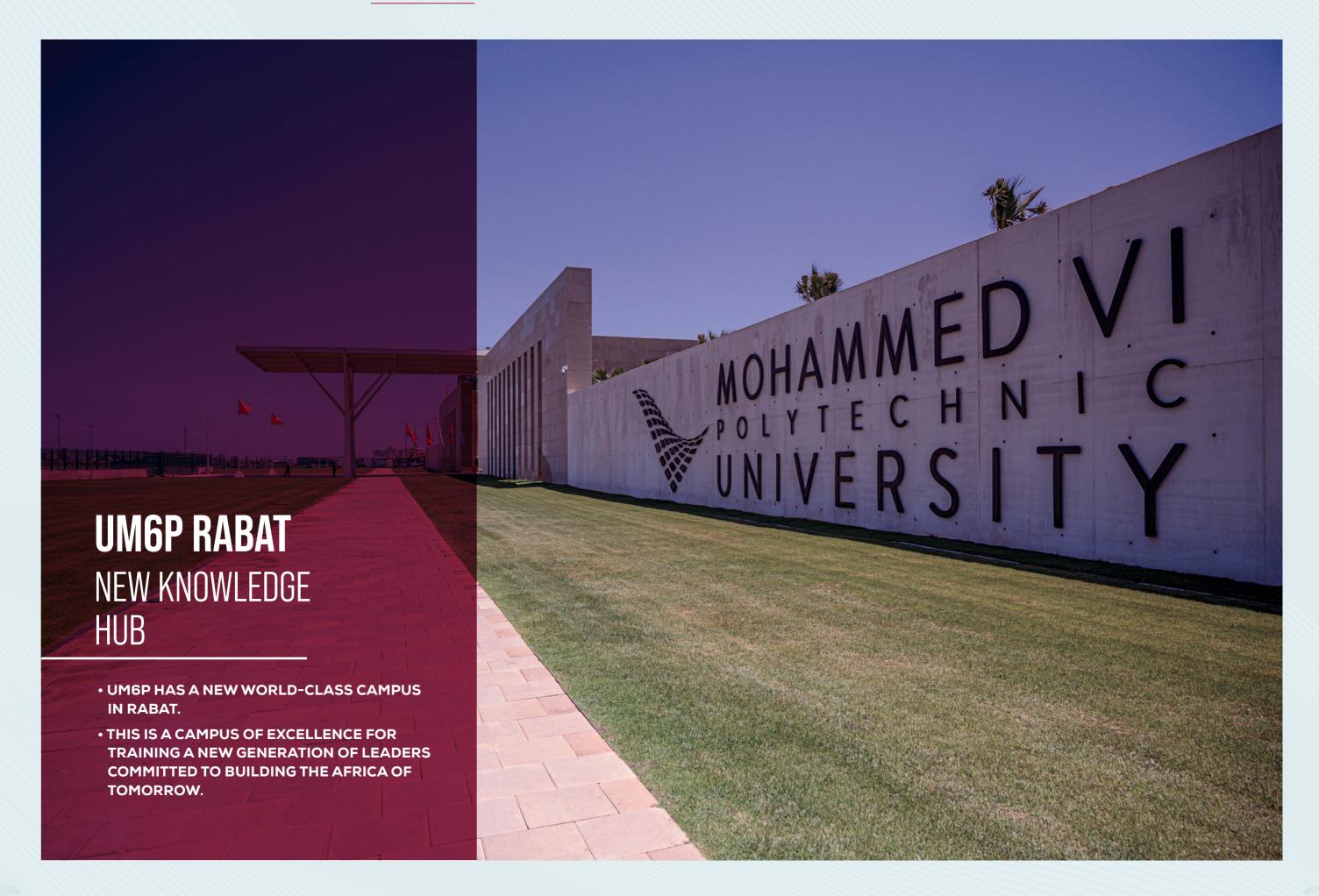
ABOUT US KEY FACTS 1. BUSINESS PERFORMANCE 2. INDUSTRIAL ACHIEVEMENTS 3. RESEARCH AND INNOVATION 4. SUSTAINABLE DEVELOPMENT

## - Industrialization of a new solution to reduce odors (fluorinated gases) in production workshops using an additive, in partnership with KAM Biotechnology; - Industrialization of a solution for thickening sludge from Khouribga and Youssoufia by centrifugal decantation; - Launch of odor and gas management and treatment projects (Olfasense, GreenNovel. etc ): - Launch of CO2 capture, sequestration and processing projects as part of OCP Group's major project aiming for carbon neutrality by 2040; - Launch of waste recovery projects (biomass, used vegetable oils, etc.) for the production of biopesticides and biofuel; - 3D modeling of the waste heaps at Khouribga and Gantour, characterization SUSTAINABILITY & CIRCULAR ECONOMY and recovery trials; - Biochar production trials using sludge from the Khouribga wastewater treatment plant; - Launch of the phosphate drying dust management project for conveyors and dry stock ; - Study on the drying of Laayoune phosphate using solar energy based hot-air drying; - Structuring of a prototyping project, with partners STACE (Canada) and Green EnergyPark (UM6P) for the validation of the flywheel energy storage Development of an innovative biodegradable material made from mining waste for wastewater treatment in wastewater treatment plants. - In partnership with Forbon, launch of the industrial implementation of "glass feeling" technology at JFC2 to produce DAP/MAP of better physical quality, with a guaranteed savings of %25 on the cost of coloring (DAP Brown) and lower specific consumption of other additives (anti-caking, etc.); - Industrialization of a method to thicken fine particles of phosphate at the **OPERATIONS EFFICIENCY** downstream stage by centrifugal decantation; - Conclusive pilot scale trials for the drying of phosphate by microwave technology, in collaboration with an Italian partner; - Development of a tool using video and artificial intelligence for the management of fixed installations;

- Elaboration of a new formulation of a phosphoric ester-based flotation additive in collaboration with MAScIR;
- Successful pilot trials for low phosphate enrichment using column flotation, in collaboration with JESA :
- Development of a new pulp rheology modifier and launch of downstream pilot tests in partnership with KAM Biotechnology;
- Complete screening of sufficiently mature technologies for recycling sulfur from phosphogypsum in collaboration with the Fraunhofer Institute;
- Development of a new process for the production of phosphoric acid by thermal means with the potential of filing two patents;
- Preparation of contracts for pilot trials of breakthrough innovations for the processing of phosphate rock (Novaphos and Prayon);
- Industrial testing of the new fertilizer lines at Jorf Lasfar for the evaluation of the performance of a new anti-caking coating (HISOFT FA 3268) for NPK fertilizers, in collaboration with Forbon;
- Continuation of the work of the OCP/UM6P/EPM International Joint Laboratory (PHOSPHOLAB) on about twenty projects.
- Conceptual study of the membrane phosphoric acid purification process, with a view to making an industrialization decision in 2022;
- Continuation of work for the start-up of the demonstration pilot of the production of CaF2 (fluoride) from fluorosilicic acid using OCP technology;
- Launch of the prototype pilot phase of the project on the development of phosphate-based materials for thermal energy storage (STEMPHOS);
- Launch, in collaboration with UM6P, of projects to explore the potential of using phosphate in medical applications;
- Continuation of the development of zinc phosphate intended for applications as an anti-corrosion pigment, with the help of various stakeholders (UM6P, paint manufacturer, etc.);
- Continuation of the recovery of the rare earth elements contained in various substances (acid, phosphoric sludge and phosphogypsum) in collaboration with several partners: UM6P, Mines Albi, Elemental EarthTech;
- Continuation of work, in partnership with UM6P and MAScIR, within the framework of the New P Applications program, i.e., energy (batteries) and environmental applications, with very promising laboratory results.

#### HACKING PHOSPHATE

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A multi-site university, a catalyst for an active, involved, engaged and ambitious new Africa. With the inauguration of the new campus in Rabat in September 2021, the Mohammed VI Polytechnic University (UM6P) is building on its national, continental and global reputation.

The construction of the UM6P Rabat campus, which began in January 2021, only took eight and a half months - an impressive feat! The inauguration took

## THE CONSTRUCTION OF THE UM6P **RABAT CAMPUS ONLY TOOK EIGHT AND A HALF MONTHS**

place in September of the same year and the campus welcomed its first students at the start of the 2021-2022 academic year.

To accommodate its students. UM6P Rabat has a built area (plus green space) of 46,000 m<sup>2</sup>. Its architecture has a pared-down aesthetic, similar to the campus in Benguerir, except that the buildings are less spaced out: at the UM6P Rabat campus, most university life venues (accommodation, teaching, restaurants, sports, leisure, etc.) are along a central alley.

In all, there are about 50 classrooms. in addition to auditoriums, meeting rooms and faculty offices. The campus houses four types of classrooms (all hybrid, i.e. in-person/remote): an

auditorium with 300 seats, another with 150 seats, traditional classrooms for 15 to 40 people and connected classrooms (rooms with a big screen where professors who are present on-site provide remote learning to their students). These connected rooms were used when the campus closed during the pandemic. Today, they are dedicated to remote learning.

Completely operational since September 2021, the UM6P Rabat campus is to be improved with more capacity and new infrastructure. Phase 2 of the campus is scheduled for delivery in September 2022. This second phase will nearly triple the size of the existing site. It will include the construction of a large administrative building, an artificial intelligence center, a building for the Policy Center of the New South and

another for the computer center.

Added to this, a swimming pool, a new hotel, more gyms, and, most importantly, new accommodations and classrooms will triple the capacity of the university. By the completion of phase 2, the number of UM6P Rabat students will have increased from 500 to 1,500. Ultimately, the Rabat campus will provide high-level education to

46,000 m<sup>2</sup> built area of UM6P Rabat

2,000 students will eventually be welcomed on the campus of UM6P Rabat

2 000 students in the fields of economics, governance, political science, international relations, behavioral and social sciences, hospitality, and management.

#### A DIVERSIFIED AND TAILOR-MADE EDUCATIONAL OFFERING

The academic offering of the UM6P campus in Rabat covers various disciplines and is completely different from that of the Benguerir campus. Educational programs at Rabat focus on international relations, political science, economics, behavioral and social sciences. There are four main disciplines: Political Science, Economics, Behavioral and Social Sciences for Public Policy, and Global Affairs. There are three degrees offered in each discipline: Bachelor's. Master's and Ph.D.

Three schools share the premises: the Faculty of Governance, Economics and Social Sciences (FGSES), the Public Policy School (PPS) and the African Institute for Research in Economics and Social Sciences (AIRESS). Each of the three schools covers different levels of learning. FGSES is responsible for initial education while further education is provided by PPS. The Ph.D.



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programs are the domain of the AIRESS.

The PPS offers executive education for decision-makers, focused on public policy, international relations, economics, governance, behavioral and social sciences, and sustainable development. It offers three types of higher education programs: in partnership, modular and tailor-made. The partnership programs are with major schools such as HEC or SciencesPo and international institutions such as AFD or FERDI. The modular programs are tailor-made courses where participants design their own programs by choosing from sixty modules focused on public policy (central and territorial), behavioral sciences and digital technology for the public sector. Tailor-made programs

are co-developed by the university's experts and stakeholders, based on their needs and expectations.

#### **FGSES: A NEW APPROACH TO PUBLIC POLICY**

The Faculty of Governance, Economics and Social Sciences (FGSES), part of UM6P, is a higher education and research institution with a dual mission: to provide initial and executive training in

humanities and social sciences focused on public policy and the specific issues raised in Morocco and across the African continent, and to conduct cutting-edge research on public policy and these issues.

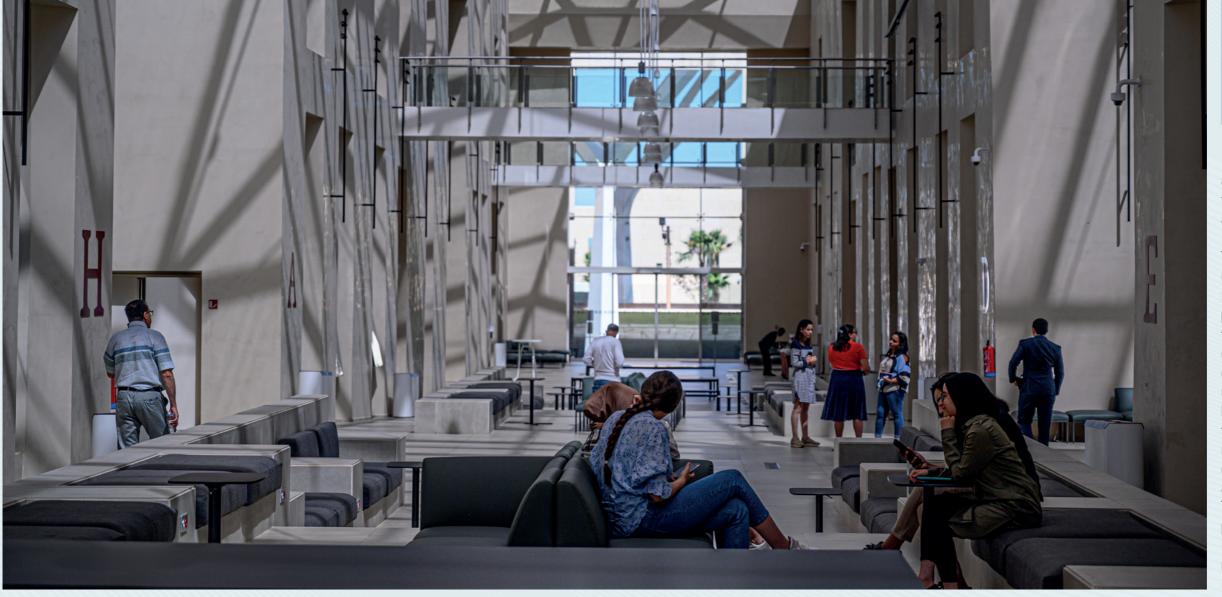
The educational offerings are based on innovative pedagogy and personalized academic programs. They pave the way to top careers in

administration, business, international organizations or research, and meld personal growth with commitment to the common good. The goal is to contribute to the training of and offer support to young talent, giving them a balanced background: well-versed in classical culture but also prompt them to be innovative; able to design/build models while bearing in mind their practicality; inclined to abstraction with

**EDUCATIONAL PROGRAMS AT RABAT FOCUS ON** INTERNATIONAL RELATIONS, **POLITICAL** SCIENCE, **ECONOMICS AND BEHAVIORAL AND SOCIAL SCIENCES** 

a strong sense of the concrete reality that surrounds them; eager to take action, while appreciating reflection.

The FGSES provides an international university experience for students. Several economic and social science programs offer them the chance to take advantage of many international exchange opportunities by spending one or two semesters in foreign universities, allowing each student to have an exceptional experience during their university journey. International mobility shapes their personalities, enabling them to open up to other academic and cultural environments. Through student exchange and partnership agreements and the FGSES's membership in the ERASMUS network, students can access over 60 universities worldwide



# 

# SUSTAINABLE DEVELOPMENT

IT'S ALL ABOUT BALANCE. OUR GREAT AMBITION IS TO FIND A BALANCE BETWEEN MAXIMIZING AN ACTIVITY'S PRODUCTION AND RETURN WHILE MAKING ITS IMPACT SUSTAINABLE. OCP SATISFIES THIS EQUATION EVERY DAY BY PUTTING SUSTAINABILITY AND DURABILITY AT THE HEART OF ALL IT DOES. THESE PRIORITY ISSUES ARE NOT LIMITED TO ENVIRONMENTAL MATTERS; THEY ALSO INVOLVE A STRONG ENGAGEMENT TOWARD LOCAL COMMUNITIES.

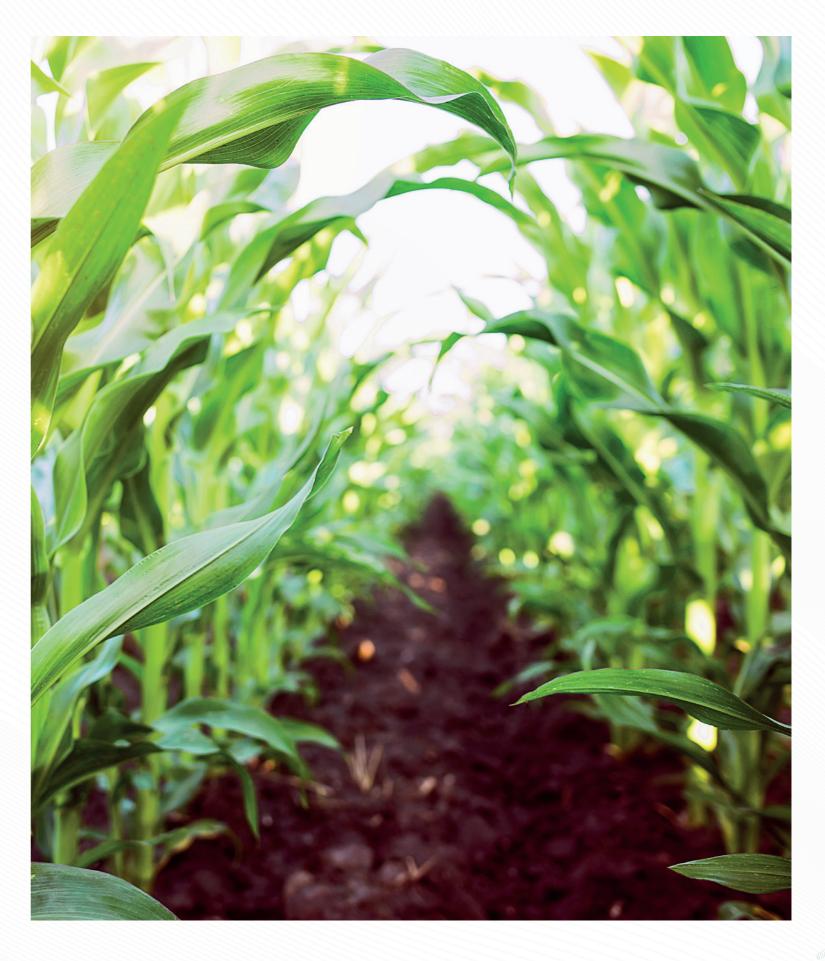


# PATH TOWARDS EXCELLENCE

THE 2021 FISCAL YEAR WAS AN OPPORTUNITY FOR OCP TO FURTHER **ENHANCE ITS COMMITMENT TO SUSTAINABLE DEVELOPMENT. THE ACHIEVEMENTS RECORDED IN THE DIFFERENT AREAS RELATED TO IT CONFIRMS OCP GROUP'S** ABILITY TO REACH ITS AMBITIOUS TARGETS.

2021 was a record fiscal year for all commercial, operational and financial matters. It was also a year in which OCP consolidated and strengthened its commitment to sustainability and sustainable development. For several years now, OCP Group has placed sustainability concerns at the center of its priorities, on the premise that the future of OCP depends on this. 2021 was an opportunity to confirm this commitment and to further progress along this path. This has resulted in several quantifiable achievements. The year was also marked by the introduction of a new implementation framework for achieving OCP's ambitious targets.

OCP Group's organization now includes a "Sustainability & Green Industrial Development" entity covering all the tasks related to this area. It serves to further entrench sustainability in the fundamentals of OCP's investment strategy for the future. This choice grew out of OCP's awareness that it is critically important to accelerate its progress while integrating environmental, social and governance (ESG) requirements into its industrial development. Based on that dynamic, OCP Group will play a greater role in global food security.



# **CLEAN AND RENEWABLE ENERGY**



With this initiative, OCP Group is confident in its ability to achieve the ambitious quantified targets it has set itself in the area of sustainability. The achievements recorded so far reinforce this vision. In the energy sector, for example, 87% of OCP's electrical needs were met by clean energy in 2021. This was made possible by the cogeneration systems installed in the industrial units and the renewable energy sources used by OCP.

#### OTHER HIGHLIGHTS

- > Optimizing energy consumption:
- MAD 205 million in savings on hydrocarbons
- MAD 92 million in electricity bill savings
- > Signing of a framework cooperation agreement between OCP Group, UM6P and IRESEN for the implementation of the **GREEN H2A** technological platform in the field of green hydrogen and its applications.
- > Signing of specific agreements with the Green Energy Park and UM6P for energy studies related to:
- Solar mapping of OCP sites
- Digitalized smart PV plant
- Electrochemical storage
- Solar desalination

To go even further, OCP has embarked on solar power generation.

A number of feasibility and design studies related to the development and construction of solar power plants at mining sites were completed in 2021, providing a positive outlook for these facilities to come to fruition. These studies focused on the development of solar energy generation facilities with an overall capacity of 1.2 gigawatts by 2026. This project is expected to be carried out in two phases. The first will allow the installation of 300 MW of power at the mine sites to cover the needs of the sectors of the mine during the day, starting in 2023, and to cover the shortfall at the Safi site. During this first phase, partial energy storage to test battery technologies is also being explored. The second phase will increase capacities to achieve electrical power self-sufficiency for the sites concerned.

## I ENERGY EFFICIENCY

Alongside these projects, careful consideration is being paid to energy efficiency to further optimize OCP Group's consumption. Capacity-building of the energy management systems at OCP's various industrial sites was integrated within this context. In 2021, this resulted in a significant improvement in energy performance, as well as greater operational control. In line with this, a major energy operational excellence project was carried out. It led to the ISO 50001

certification of the Safi site. This is the first of the OCP sites to achieve this recognition, while qualification work for all other sites has been carried out so that they too can receive it.

All these actions will contribute to the goal of meeting 100% of OCP Group's energy needs from clean sources by 2030. It's an ambitious goal, but it is not the only one that OCP has set its sights on.



# I SUSTAINABLE WATER MANAGEMENT

OCP aims to meet 100% of its water needs from unconventional sources by 2026, even though these needs are expected to triple in view of OCP's operational development. This timeline could even be reduced to 2024, thanks to initiatives undertaken in 2021.

OCP has decided to accelerate its investment program to mobilize unconventional water resources. Two specific projects are drawing great attention: the expansion of the Jorf Lasfar desalination program and the launch of new wastewater treatment plants. On the first project, OCP wants to increase the water production capacity from the desalination process at Jorf Lasfar to 15 million cubic meters by 2022, then to 50 million cubic meters by the end of 2023. With regard to wastewater treatment plants, OCP has begun its program of building two new units in Kasba Tadla and Fquih Ben Salah, as well as the extension of the wastewater treatment plant capacities at Khouribga and Safi, which should allow processing of 20 million cubic meters per year.

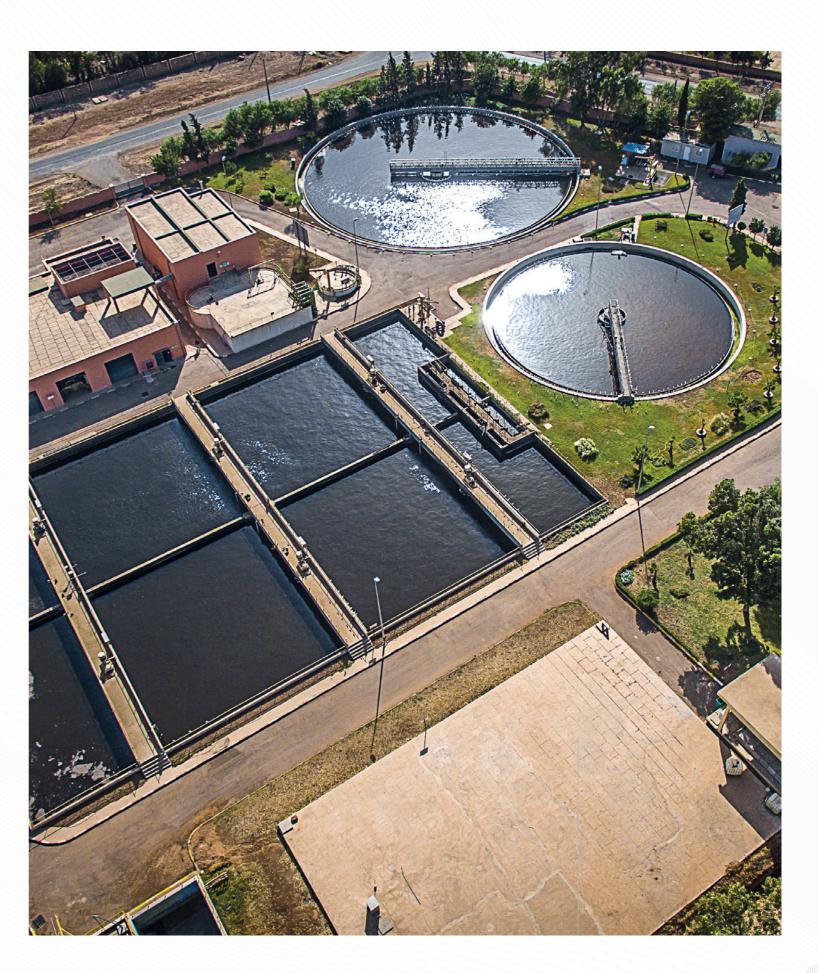
While waiting for these projects to bear fruit, OCP is already relying on desalination and wastewater treatment techniques to achieve remarkable rates of unconventional water use and use of alternative water sources. In 2021, 30% of water needs were met from unconventional resources. The production and treatment of water through seawater desalination at Jorf Lasfar and Laâyoune generated 27.4 million m<sup>3</sup>, while the treatment of wastewater at the Khouribga, Benguerir and Youssoufia produced 9.1 million m<sup>3</sup>. OCP's efforts are not limited to the mobilization of unconventional resources. As a major component is the optimization of consumption, studies have been launched on the reuse of sanitized sewage sludge in agriculture. Other studies were completed on the impact of the use of treated water in the beneficiation of phosphates.



- > Introduction of new systematic measures based on the international benchmark and the rollout of OCP internal best practices.
- Updated environmental standards (EKPI, waste management and secondary product management) for industrial projects and business

In 2021, OCP produced

36.35 million m<sup>3</sup> of water from unconventional sources, meeting 30% of its needs.



# PHOSPHOGYPSUM, REHABILITATION AND SUSTAINABLE AGRICULTURE

In 2021, there were many developments to keep the impact of OCP's water and energy consumption on the environment to a minimum. However, these are not the only two priority areas that consolidate and strengthen OCP's commitment to sustainability. Efforts continued in several areas, including the reclamation of phosphogypsum and mine site rehabilitation. In the first. OCP continues its efforts to identify best practices for its management. In that aim, a basic study on phosphogypsum storage at JFC II and JFC IV was completed. A detailed study has been launched and is 30% complete. Feasibility studies were also launched on the adaptation and transport of phosphogypsum for storage. Beyond these studies, tangible actions have been undertaken to develop the product, including its use in construction, in the amendment of certain soils and even in some fertilization experiments.

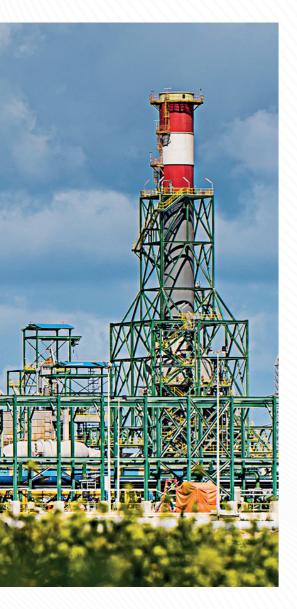
In terms of mine site rehabilitation. 2021 saw the rehabilitation of 204 ha of mined land on the Khouribga and Gantour sites, of which 89 ha were landscaped and planted. A precision irrigation system to optimize water was also installed at the experimental farm. In addition, the launch of an evaluation of sampling results was proposed as part of the Carbon Farming project in partnership with UM6P.

## **GETTING THE MOST OUT OF**

- > Phosphogypsum can **amend** saline soils under controlled conditions when applied at a rate of 45 metric tons per hectare. This boosted yields by nearly 41% depending on the crops and soil salinity, with no transfer of impurities to the plants.
- > Phosphogypsum was used in road construction in optimized mixes that also include cement and aggregates. This reduced material costs by about 20% compared to a conventional structure...
- > Using phosphogypsum as a lowcost source of phosphorus and sulfur and supplementing N and K: at an optimal rate of 4.5 metric tons per hectare, this results in a 35% yield improvement for barley and of 30% for chickpeas. Again, there was no transfer of impurities to the plants.
- > Launch of the pilot experiments and applications phase for the use of phosphogypsum in bricks, concrete blocks and road paving in partnership with LPEE.



## I EMISSIONS AND EFFLUENTS



All of these actions could not have an optimal impact without a pronounced interest in the management of emissions, effluents and waste. OCP Group is committed to developing its operations in the aim of greater climate neutrality. Achievements on the Safi site showcase this commitment. The operational start-up of 8 fluorinated gas scrubbing units made all phosphoric acid production unit stacks compliant with national and international thresholds. Likewise. the commissioning of the new landfill to ensure more efficient waste management demonstrates OCP's ambition. Similarly, in Jorf Lasfar, a new mobile unit was deployed to measure ambient air quality. In 2021, these two sites successfully renewed

their ISO 14001 v2015 certification. like the Port of Casablanca, as part of the rollout of the environmental management system throughout OCP. For the other sites, 2021 ended with a deployment rate of 60% for this compliance effort. This compliance of the OCP sites with the best internationally recognized standards was rewarded by the renewal in 2021 of IFA's Protect & Sustain certification at the Excellence level for the Safi and Gantour sites The certification of the other sites is still valid.

#### **BIOSALINE AGRICULTURE**

> An agreement was reached with the African Institute for Sustainable Agriculture Research at UM6P to design and implement experimentation and demonstration plots. In Khouribga, it will allow for better assessment of the types of crops to be developed on mining lands. The crops must be drought tolerant, adapted to disturbed soils and with high added value. In Sidi Abed, it will improve the productivity of land affected by salinity and increase the income of local farmers

# I CLIMATE CHANGE



#### **FOCUS ON BIODIVERSITY**

- Completion of fieldwork, regulatory frameworks and standards, and the finalization of the international benchmarking of the biodiversity study for all OCP operational sites.
- > Completion of the biodiversity **inventory** of the 5 OCP industrial sites in accordance with international best practices

#### NOTEWORTHY

- > OCP Group is committed to reducing its carbon footprint by **50%** in 2030 against its 2014 baseline
- In addition to Scope 1 (direct greenhouse gas emissions) and Scope 2 (indirect energy-related emissions) calculated annually. in line with the **Greenhouse Gas** Protocol. OCP first calculated its Scope 3 in 2021 (all other indirect emissions).

All of these achievements take OCP to new heights in its continued pursuit of excellence. Its objectives, among which the most important remains achieving carbon neutrality by 2040, are well on their way to being met. Moreover, in 2021, OCP conducted an external audit to verify and certify its current carbon footprint in 2020. It was measured at 3.76 million metric tons of CO2, in line with previous years. Similarly, OCP has increased its contribution to Morocco's new 'Nationally Determined Contribution' to 15% for 2030, from 11% previously. It also launched the calculation of carbon footprints for the main fertilizers marketed in Europe in accordance with the PAS 2050 standard. This concerns the DAP, MAP, NPK, NPS, TSP products at Jorf Lasfar, and the TSP product at Safi.

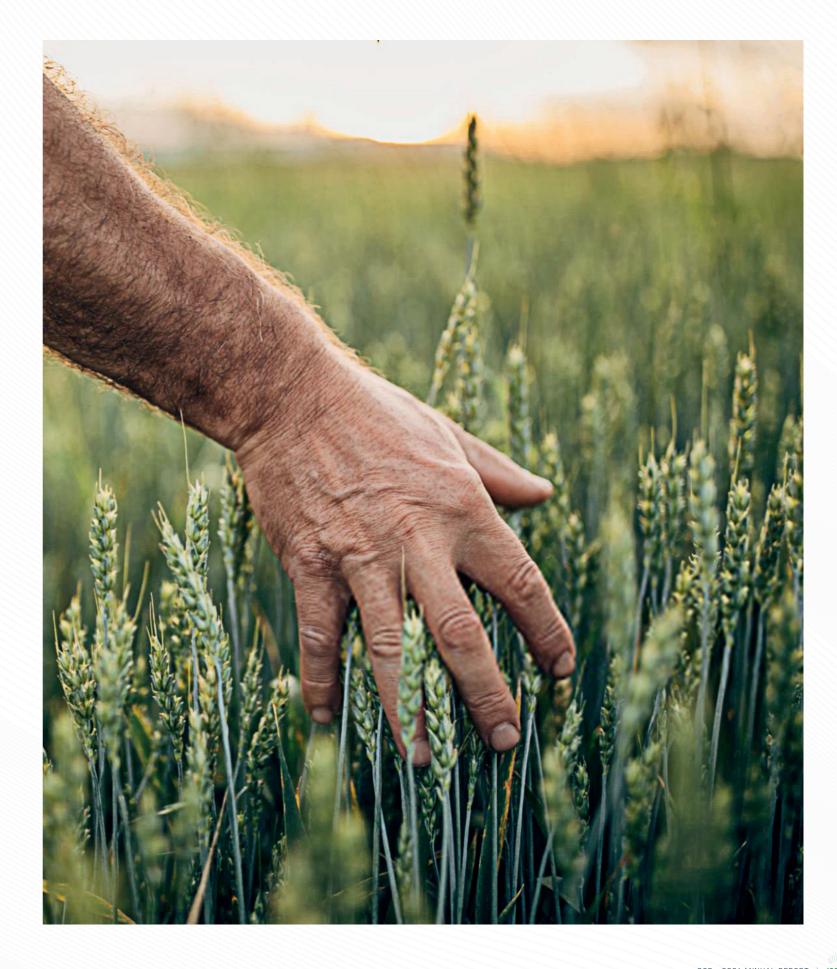
OCP has distinguished itself by earning a B score in its first response to the Carbon Disclosure Project, joining the ranks of its peers who have been submitting for more than 10 years . In 2021, OCP became an official supporter of the Task Force on Climate-related Financial Disclosures, and now ranks among pioneering companies on transparency of climate-related risks and opportunities.

# **COMPLIANCE** | AN EXERCISE IN INFORMATION AND TRANSPARENCY, RICH IN LESSONS

BY PUBLISHING ITS SUSTAINABILITY **REPORTS ACCORDING TO GRI BENCHMARKS AND COMPLYING WITH** THE RATING AND SCORING PRACTICES OF SPECIALIZED AGENCIES, OCP EXPRESSES ITS SUSTAINABLE DEVELOPMENT **COMMITMENTS AND EXPLORES OPTIONS ENABLING IT TO ACHIEVE ITS POTENTIAL** FOR IMPROVEMENT.

Along with its annual reports, financial publications and other communications intended for the public and markets, OCP Group has now made its GRI-certified sustainability report a standard practice to outline its approach and strategy for responsible growth. This communication further establishes its position as a committed contributor to global food security and climaterelated risk management. In 2021, OCP released the third edition of this report. It serves to inform the community and external stakeholders.

This chosen constraint has turned out to be a real learning exercise for OCP itself. By complying with the report's requirement, OCP collects and analyzes data that changes its view on the impacts of its various initiatives and businesses and on all of its potential to keep doing better.



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# I ESG PERFORMANCE

With the release of the third edition of this report, OCP is setting it up as one of its primary communication channels for all those who are interested in OCP Group's sustainability expertise.

OCP complies with the practices of specialized rating agencies. 2021 was a good year in this area. Several ratings, scores and certifications were obtained, confirming the value of the approach adopted by OCP with regard to ESG benchmarks. An example is the improvement in the score awarded by Vigeo Eiris and maintenance of the "Advanced" level.

#### **BON À RAPPELER**

- > OCP's first Sustainability report based on GRI benchmarks was published in 2018. Two more editions have since followed.
- > Sustainalytics: OCP obtained a score of 27.5 in 2021, with an ESG risk rating still rated as "Medium."

With this latest assessment, OCP is now listed as a top performer, ranking 30th out of 4,889 global entities operating in all industries. Based on Vigeo Eiris scores, OCP emerged as top performer this year, among 846 companies from developing countries, and ranked 2<sup>nd</sup> in its industry out of 217 companies.

Another notable distinction in 2021: OCP's ranking in the Food and Agriculture benchmark. It's a new ranking developed by the World Benchmarking Alliance (WBA), in which OCP was invited to participate. This participation allowed it to rank 4th in the world out of 350 companies in the food value chain. OCP also distinguished itself in a second WBA benchmark in the social transformation framework, ranking 55th out of 1,000 companies assessed across all industries.

# I ACTIONS AND PROJECTS

Obtaining these ratings and scores, as well as other globally recognized accolades and certifications, is a source of pride. It is proof that OCP made the right choice to raise awareness of all its efforts in the various areas of sustainability.

But this is by no means an end in itself. OCP Group is aware of the need to keep moving forward and continuously improve. OCP launched various projects in 2021 in the areas in which it is assessed, including governance, ethics, and human rights. Key actions undertaken include the start of work to set up both ethics committees and the Whistleblowing Channel, in collaboration with several internal entities. In the same vein, with its subsidiary OCP Africa, OCP Group launched internal due diligence work specific to human rights.

It is in a spirit of transparency, exchange and sharing of experience that OCP continues opening up to external stakeholders. This is reflected in communications with rating agencies and specialized organizations. This can also be seen through its active participation and representation in the most important international forums. As such, OCP Group's contribution to discussions on food systems transformation at the UN Food Systems Summit highlighted all OCP's efforts throughout its value chain. OCP was also represented at COP26 and participated alongside the World Business Council for Sustainable Development in discussions on business risks and opportunities during a session with the theme "Invest in Nature Positive Land Use."

#### PARTNERSHIPS

- > 2021 saw the signing of a memorandum of understanding between OCP and Israel Chemicals (ICL) to promote sustainability programs. They will be conducted jointly by UM6P and Ben-Gurion University.
- > OCP continues to work with the World Business Council for Sustainable Development (WBCSD), of which it is a member.



# **INCLUSIVE COMMUNITY AND SOCIAL ENGAGEMENT**

**2020 WITNESSED AN UNPRECEDENTED SHOW** OF SOLIDARITY AND COMMITMENT BY OCP TO MITIGATE THE IMPACT OF THE **PUBLIC HEALTH CRISIS ON COMMUNITIES AND SUPPORT** THE NATIONAL EFFORT TO ADDRESS THE PANDEMIC. **2021 WAS AN OPPORTUNITY** FOR OCP TO REMEMBER THAT THIS ENGAGEMENT IS ANYTHING BUT EXCEPTIONAL. IT IS PART OF OCP'S CORE **VALUES AND INVESTING IN** IT IS A CORNERSTONE OF ITS GROWTH. SIGNIFICANT **MEANS HAVE CONTINUED** TO BE DEPLOYED. NEAR THE **GROUP'S OPERATING SITES** THROUGH ACT4COMMUNITY. IN AFRICA AND ASIA THANKS TO THE EFFORTS OF THE OCP FOUNDATION.

AND IN THE SOUTHERN **REGIONS OF MOROCCO** WITH THE PHOSBOUCRAA **FOUNDATION. SUPPORTING ENTREPRENEURS AND SOCIAL** INNOVATION. HELPING **FARMERS, DEVELOPING LOCAL POPULATIONS' SKILLS AND MEANS OF SUSTAINABLE** LIVELIHOOD-OCP EXPRESSES ITS COMMUNITY, SOCIAL AND SOLIDARITY-BASED **ENGAGEMENT IN VARIOUS WAYS. NEARLY 600 MILLION DOLLARS WERE INVESTED IN** 2021 TO FUND THESE EFFORTS. **BRINGING TOTAL INVESTMENTS** OF THIS KIND TO MORE THAN **1 BILLION DOLLARS OVER** THE LAST TWO YEARS. THIS **INVESTMENT WILL NO DOUBT** PROVE INVALUABLE FOR BOTH OCP AND THE COMMUNITIES.



#### THE COOPLAB/UM6P MOBILIZED

- > Signing of an agreement with the Office de Développement de la Coopération and preparation of the launch of the Mourafaka 2.0 Program for the 600 cooperatives.
- > Update and enhancement of the Sookoa platform to turn it into a national e-commerce platform for cooperatives.
- > Financing of 8 cooperatives selected for the Lalla Moutaaouina award. as well as 12 cooperatives of young people of the "solidarity generations".

#### RURAL ENTREPRENEURSHIP: PCL SUPPORTS THE VILLAGE

- > Through the P-Curiosity Lab (PCL), 2 bootcamps were organized for 20 entrepreneurs from the Marrakesh-Safi region.
- > 13 coaches were involved and over 160 hours of training were provided.

#### **RETAIL SUPPORT**

- > Signing of an agreement between UM6P, the OCP Foundation and the Ministry of Industry and Commerce for the support of Moroccan entrepreneurs and retailers
- > Production by UM6P of program support content.

#### **DEVELOPMENT OF A CARPET** INDUSTRY IN YOUSSOUFIA

- > Support for 3 rural cooperatives (50 jobs) in the production of carpets for international sale.
- > Training provided to 40 women by a Maallam expert.
- > Purchase of 8 looms, one of which is modular, for members of the Nouaji women's cooperative in Benguerin

#### PROFESSIONALIZATION OF SEWING COOPERATIVES

- > Support for 16 cooperatives (320 jobs) in partnership with the École Supérieure des Industries du Textile et Habillement (ESITH) -University / College on Textile and Clothing Industries.
- > Support for market access: qualification on the OCP purchasing platform, liaising with OCP suppliers and other customers, etc.
- > Supplying for **16** sewing shops in accordance with safety standards.
- > ESITH training on certified workwear sample prototyping.

#### **ENTREPRENEURSHIP PROGRAM** SUPPORT

> Support for the creation and supply for **60** new local cooperatives and micro-businesses in Youssoufia and 21 micro-businesses in El Jadida in partnership with the National Human Development Initiative (INDH).

#### SUPPORT FOR ECOSYSTEM RESTORATION

- > Identification of **260** products from local cooperatives in Youssoufia and Benguerir and the nutritional and compositional analysis of 70 certified local products.
- > Launch of a support program for product design and packaging.
- > Linking of local producers with mass catering suppliers.
- > Integration of ONSSA certified cooperatives in the subcontracting specifications of catering suppliers and support of 4 cooperatives for certification



#### **PHOSBOUCRAÂ: SUPPORT** FOR ENTREPRENEURSHIP AND COOPERATIVES

- > Support for 12 cooperatives to obtain National Office of Food Safety (ONSSA) and Moroccan Standards Institute (IMANOR) certificates.
- > Development and launch of **31** local produce and poultry cooperatives and green spaces.
- Organization of technical and managerial training, in partnership with UM6P Laayoune and Act4Community, for **27** cooperatives.

#### **E-COMMERCE STARTUP INCUBATION**

- > **50** e-merchants trained, 30 training sessions delivered to candidates, 45 personalized coaching sessions.
- > Creation of 25 sales pages, 22 direct and 12 indirect jobs.

#### **DEVELOPMENT OF ARGAN** AND ROSEMARY ON MINING LAND

- > Consultation with 14 local cooperatives to support and develop skills in the marketing of aromatic and medicinal plants.
- > Support for 2 cooperatives by providing equipment to build production capacity.
- > Support to cooperatives for ONSSA and Department of Medicine and Pharmacy (DMP) certification.

#### **COMMUNITY HEALTH PROGRAM DEPLOYMENT**

- > Community first aid training: 136 trained and certified first aiders.
- > Implementation of the school health program for 7 local schools. representing 1,800 schoolchildren.

#### SUPPORT FOR THE DEVELOPMENT OF AGRICULTURAL COOPERATIVES

- > Signing of 6 agreements with 6 cooperatives, representing 43 farmers, including 26 women, for the funding of 6 agribusiness projects.
- > Training of cooperative members operating in Beldi turkey farming, green silage production, rabbit farming and plant production.

#### **OCP PROCUREMENT SERVING** THE LOCAL ECONOMY

- > 100 new local micro-businesses supported in their integration into the local purchasing system.
- > Support to **5** micro-businesses for the prototyping of new solutions and products as import substitutions.
- > Support to the Amouni cooperative in Safi established by a group of 8 local micro-businesses for a scrap tire recycling project.
- Qualification of a first group of 5 micro-businesses in mechanics, metal construction and mechanical design in Jorf Lasfar, to receive OCP orders.



## THE SOCIAL INNOVATION LAB (SIL) IN ACTION

- > The SIL training offer: 3 webinars (social innovation, territorial resilience and social business) and **50** participants certified in participatory design by MIT D-LAB.
- > Seed Fund Research on social issues: 10 projects launched.

Réalisation de 27 séances de formation avec des associations culturelles pour la réadaptation de leurs projets au contexte actuel.

Contractualisation avec 22 porteurs de projets ayant un statut entreprenariat, dont 12 auto-entrepreneurs, 7 TPE, 3 coopératives.

5 centres socio-culturels publics de Khouribga et villages miniers, ainsi que 20 établissements scolaires publics seront animés.

Une estimation d'environ 1000 bénéficiaires des programmes d'animation dans différentes disciplines artistiques (jeunes, adultes, enfants).

#### UM6P/UNESCO: "IMAGINE AFRICA'S FUTURES"

- > Integration of foresight modules in the teaching curriculum at UM6P and implementation of a Ph.D program in foresight.
- > Development of the online foresight platform in Africa.
- > Launch of the 2<sup>nd</sup> cohort of executive training in "Sub-Saharan Africa" foresight.

#### A NEW MODEL FOR SOCIAL ACTION

- > Participation of **85** volunteers in projects for local communities.
- Capacity-building for 18 local > associations in Jorf Lasfar and 25 in Safi.
- Funding for 10 projects in Safi and 5 community projects in Jorf Lasfar.

#### CREATIVE ENTREPRENEURS **AND COOPERATIVES**

- > 27 training sessions with cultural associations to readjust their projects to the current context.
- > Contracts with 22 leaders of entrepreneurial projects, including 12 self-employed, 7 microbusinesses, and 3 cooperatives.
- > 5 public socio-cultural centers in Khouribga and mining villages, as well as **20** public schools, will host activities.
- > An estimated 1,000 recipients of learning programs in various artistic disciplines (youth, adults, children).

# HIGH-QUALITY EDUCATION **FOR EVERYONE**

**EVERY YEAR. OCP RENEWS ITS COMMITMENT** TO QUALITY EDUCATION ACCESSIBLE TO A BROAD STUDENT TARGET GROUP. IN 2021, THIS RESULTED IN A SERIES OF ACTIONS IMPACTING DIFFERENT POPULATIONS.

Education is undoubtedly one of the most important investments a country can make for its future. At OCP, we believe in education. For many years, we have put considerable effort into supporting the sector in Morocco and elsewhere. With the onset of the pandemic, this commitment to education has a new impetus. Actions serving a large community of students were taken in 2021, primarily focused on fostering excellence and giving young people the opportunity to showcase their talents. The support for grant programs transferred to the Ibn Rochd Foundation for Science and Innovation is in line with this. In 2021, 3,600 scholarship recipients were able to benefit from this program at UM6P and the Lycée d'Excellence de Benauérir (Lvdex). In addition to these were grants from the Excellence program operating in the Southern regions, where 46 graduates, including 10 foreign scholarship holders, received aid.

This support for excellence has proven itself for several years. Lydex's once-again outstanding results in 2021 confirm this. Its 2020/2021 graduates from the preparatory classes for Moroccan and French Grandes Écoles once again had an admission rate of 100%. The list of Lydex students admitted to the prestigious École Polytechnique de Paris has even increased significantly, with the enrollment of 17 applicants. Similarly, the success rate of the first graduating class of the qualifying secondary program (second year of the baccalaureate) reached 100% in 2021, including 66% with high honors and 27% with honors.

The support provided by OCP and its various entities to the education sector was embodied in 2021 by the continued roll-out of the sponsored schools program: a way to reach an even broader target. 29 new schools were



We are continuing our efforts to provide quality education to as many students as possible. These affect several categories of students, including vulnerable youth and young people with special needs. OCP's commitment to them is reflected in its close collaboration with partner associations, including fifteen in 2021, supporting more than 5,000 recipients.

OCP has prioritized the improvement of medical care for populations in vulnerable situations, and the renewal of the sponsorship of 173 children with special needs, in partnership with 7 associations and relying, among other things, on the early care of 150 children with disabilities.

In the same way, OCP supported the development of structuring projects as part of the activities of 3 partner associations. This involves the creation of 10 specialized classes for autistic students and an incomegenerating activity to foster the professional integration of young people with disabilities, as well as the launch of an inclusive education program for children with visual impairment.

On another note, there was a particular focus on supporting training centers for youth and women. As part of this support, OCP Group created 3 training centers for young people and women, in partnership with the National Union of Moroccan Women, in Temara. Khouribga and Tangier. This support helped train 400 young women in nursing, hairdressing, sewing and cooking. In Madagascar, the CAFPA agricultural high school received support for the training of teachers and students as part of a partnership between the OCP Foundation and UM6P. The school also benefited from an endowment for agricultural equipment, remote training and student dormitories

In Senegal, the deployment of the FUERTES project continues thanks to the support of the OCP Foundation. It encourages the education of women researchers and doctoral students.

OTHER INITIATIVES TO PROMOTE EDUCATION

> Support for preparatory courses for Grandes Écoles

Deployment of UM6P's Prépa Digitale via the e-CPGE platform. Program to support the development of projects for the establishment of 27 higher education preparatory programs designed by UM6P.

> Creation of a distance learning

14 set up and furnished studios. 73 managers from 12 Moroccan universities trained on two technical and educational modules

# **SUPPORT FOR EDUCATION ON OCP SITES**

## PROMOTION OF EDUCATION IN THE LOCAL SCHOOLS AT JORF LASFAR AND KHOURIBGA

- > As part of the integrated program to promote education in schools near the Jorf Lasfar and Khouribga sites, 3 primary schools in the El Jadida region have been redeveloped, benefiting over 2,000 students. 7 preschools were also created in nearby douars, welcoming 200 children.
- In addition, school transportation has been set up for the students of the Chkhalba douar, which will benefit 50 schoolchildren.
- > Furthermore, an integrated school project was launched at Imam Ali high school in Hattane, in the Khouribga province. It has trained 20 students on new technologies in agriculture in general, and aquaponics in particular.

#### LAUNCH OF NEW LEARNING **CENTERS IN THE SOUTH**

> The Learning Centers can be exported. Support to launch new platforms launch in Boujdour and Laayoune in 2021 was carried out in partnership with the National Human Development Initiative (INDH). In addition, the teaching kit developed by the Learning Centers for the benefit of educators has been made available.

#### **CONNECTED SCHOOLS IN** KHOURIBGA AND SAFI

- > New technologies were integrated in 2 high schools in Safi with the introduction of coding and robotics training devices for 120 students.
- In Khouribga, 5 rural high schools received training on robotics. 100 students received a hands-on training session while 20 students were selected to receive training on robot programming in preparation for a regional competition.

## DEVELOPMENT OF ACCESS TO SCHOOL INFRASTRUCTURE

- > The school infrastructure access project has led to the creation of 32 green schools in the province of El Jadida.
- > In Khouribga, 2 rural schools were built and 15 school buses and 300 bicycles were purchased to facilitate student transportation.

## STRENGTHENING OF THE INCUBATION PROGRAM

- > 15 volunteers were able to benefit from a training program allowing them to support startups in El Jadida as part of a project led by UM6P in partnership with Choaib Doukkali University. 12 startups originating from that program and the OFPPT were supported as part of a 5-month incubation program.
- In Safi, the third ENSA Hackathon was launched with the selection of 23 project leaders to benefit from an incubation program.



# **SUPPORT FOR COMMUNITY AGRICULTURE AND BIODIVERSITY CONSERVATION IN AFRICA AND ASIA**

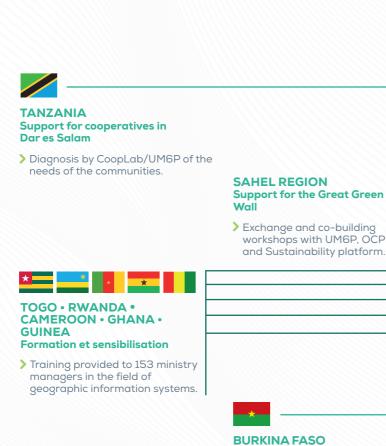
# SENEGAL

Support for Niokolo Koba Park

> Launch of training for agents of the National Parks Department of the Ministry of the Environment and Sustainable Development on water quality control and the establishment of a permanent water quality testing laboratory.

#### Preserving the biodiversity of **Fadiouth Bay**

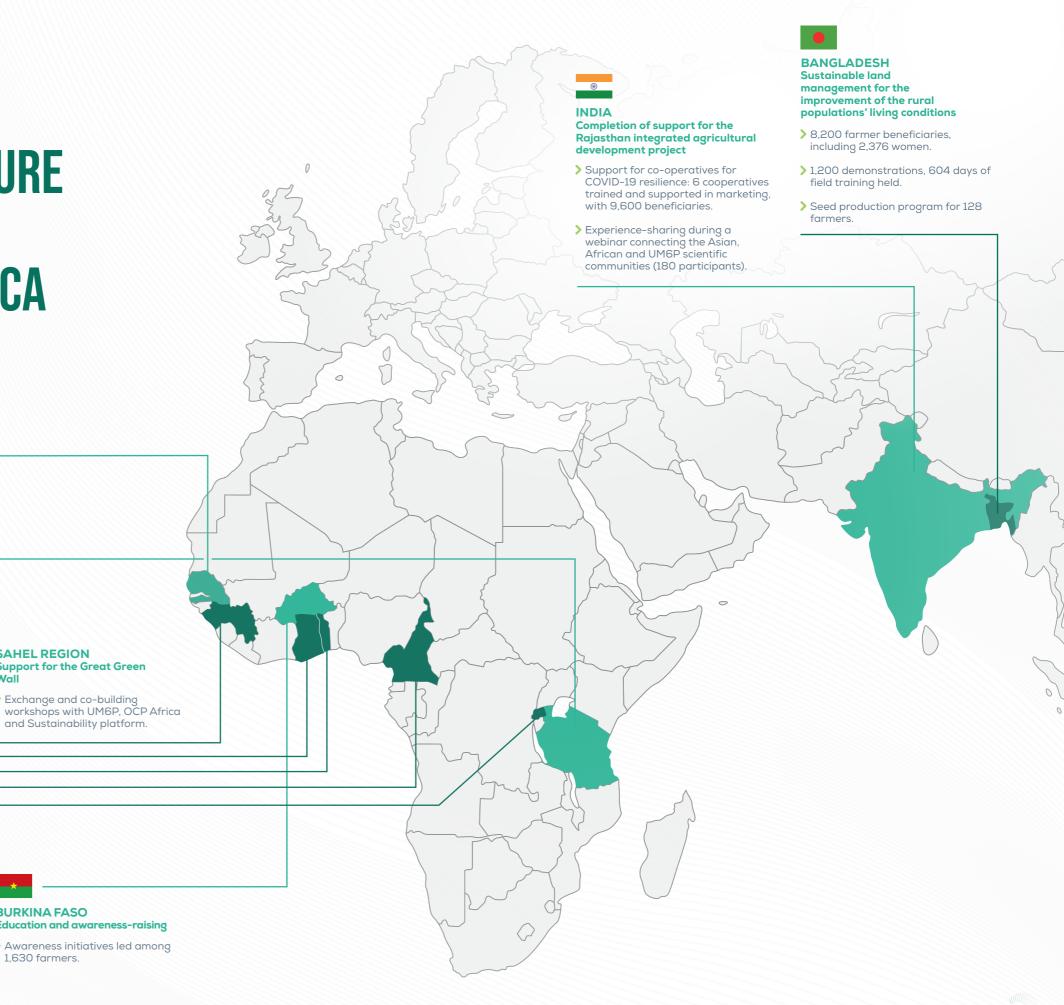
> Training was provided for the benefit of managers and technicians of the Department of Marine Protected Areas on the management of women producer groups in a context of conservation of biodiversity and salinity, and on alternative crops and cereal production.



and Sustainability platform.

**Education and awareness-raising** > Awareness initiatives led among

1,630 farmers.



# **OCP FOUNDATION** BETWEEN EXPERIENCE AND A NEW VISION

- FOR THE OCP FOUNDATION, 2021 WAS A YEAR TO CONSOLIDATE ITS EFFORTS AND ADAPT TO THE LESSONS LEARNED SINCE ITS FOUNDING IN 2007. THE FOUNDATION ENHANCED ITS IMPACT.
- BUILDING ON THE REQUIREMENTS OF MOROCCO'S NEW DEVELOPMENT MODEL AND THE UNITED NATIONS SUSTAINABLE **DEVELOPMENT GOALS, THE OCP** FOUNDATION ADAPTED ITS VISION ON THE BASIS OF FOUR AREAS OF FOCUS THAT INCORPORATE AMBITIOUS COMMITMENTS.
- THE PROJECTS DEPLOYED BY THE OCP **FOUNDATION IN 2021 BENEFITTED A** WIDE TARGET GROUP IN MOROCCO AND ABROAD. A TOTAL OF 160 PROJECTS WERE COMPLETED, IMPACTING 77,000 PEOPLE.

a year to consolidate its efforts and to adapt based on lessons learned. Although the OCP Foundation has achieved outstanding performance over several years of activity, it also wants to capitalize on its learnings to provide lasting added value to its partners and target communities. Accordingly, a strategic shift was made, with well-defined objectives. The first involved consolidating its

or the OCP Foundation, 2021 was proven expertise in the fields of education in Morocco and support to agriculture in sub-Saharan Africa and Asia. The new vision aims to open new areas of major importance for OCP's reputation and competitiveness. Strengthening governance and operational models will add greater value to communities and partners.



Integrating the new development paradigms imposed by recent changes in the world, as well as by the dynamics in which OCP is engaged, the OCP Foundation has put in place a new vision built on four strategic areas of focus. These enable it to leverage the learnings of its years of activity and to adjust its actions to the current context. To set these four areas of focus and make them a driver of sustainable innovation at the service of communities and the environment, the OCP Foundation has relied on both Morocco's new model of development and the United Nation's Sustainable Development Goals, which the entire OCP Group is strongly committed to achieving.



SHIFT WAS MADE, WITH **WELL-DEFINED OBJECTIVES.** THE FIRST **INVOLVED** CONSOLIDATING ITS EXPERTISE IN THE FIELDS OF **EDUCATION IN MOROCCO AND AGRICULTURAL SUPPORT IN SUB-SAHARAN AFRICA AND** 

**ASTRATEGIC** The first area of focus for the OCP Foundation's is education. Priority is given to promoting inclusive education and excellence. In the field, this area of focus is seen in the form of support for learners, enabling them to access quality programs. Next is the development of public schools through the sponsorship of educational institutions. This allows a wide target group to access education delivered according to the highest standards. It is with this same objective that the Foundation pays special attention to children and people with special needs or in vulnerable situations so that they can access the education system. The second area of focus of the OCP Foundation's new vision is to support research and development **ASIA** (R&D) and promote social innovation.

The actions undertaken aim to revitalize the Moroccan R&D ecosystem. through the support of research projects and the establishment of multi-thematic research funds. The Foundation encourages social innovation through conventional development models that place social and environmental considerations at the heart of economic issues. It is the same for the social and solidarity economy, the growth of which the Foundation supports by strengthening national and African cooperatives.

Support for food and nutrition security is the third area of focus in which specific efforts are being made. In addition to raising awareness on good agricultural practices, the aim is the implementation of integrated

community agriculture projects with African cooperatives and associations, and even to create agri-food businesses to achieve this objective.

Lastly, the OCP Foundation devotes the fourth area of focus of its vision to the fight against climate change and the preservation of biodiversity. As such, it is committed to supporting rural and farming communities to better adapt to climate change through facilities, training and capacity-

REGISTERED **AS A PUBLIC** SERVICE **ORGANIZATION** SINCE 2012. THE **OCP FOUNDATION HAS ESTABLISHED A NEW VISION BUILT ON FOUR** STRATEGIC AREAS **THAT ALLOW** IT TO LEVERAGE THE EXPERIENCE **OF ITS 14 YEARS OF ACTIVITY TO MAKE ITS ACTIONS EVEN BETTER SUITED TO TODAY'S** CONTEXT

building. Preserving biodiversity involves supporting the reforestation or rehabilitation of degraded sites.

#### **EVEN MORE BENEFICIARIES** IN 2021

For several years, the OCP Foundation has been committed to meeting the needs of local populations in Morocco. It also works to support the most vulnerable communities on the African and Asian continents. Its ambition is to support innovative and structuring projects. In 2021, the Foundation increased the scope of its work to reach as many communities as possible. These initiatives are in keeping with those already initiated. The new projects have the same intention of driving social innovation and supporting sustainable development.

160 projects were initiated in 2021. They reached 77,000 people. The purpose of these projects has been to ensure a more equitable future for impacted communities, based on sustainable innovation. The projects undertaken spanned across several sectors, including sustainable and integrated agriculture. 8,200 farmers benefited from initiatives on increasing awareness on sustainable soil management. 25% of them were women.

At the same time, the OCP Foundation continued its soil fertility map project to reach 4 million

160 community projects initiated in 2021

600 cooperatives supported through the CoopLab

3,600 scholarships funded by the **OCP Foundation** through the Ibn **Rochd Foundation** for Science and Innovation (FIRSI)

hectares in Africa

In terms of the social and solidarity economy, the projects implemented by the OCP Foundation in 2021 involved 600 cooperatives. They were supported through the CoopLab, the laboratory of expertise and support for Moroccan and African cooperatives created jointly by the Foundation and UM6P. Training courses were also provided to more than 400 women, for whom three training centers were newly created.

Thirty projects were selected as part of the call for projects submitted by the Sustainable Development Fund. In addition, in line with the priority given to the development of the education sector in Morocco, the OCP Foundation has strengthened

classes for the Grandes Écoles.

As the COVID-19 pandemic continued in 2021, the Foundation kept the commitment it had made. 7,500 new people received education from the Foundation. In sub-Saharan Africa, training on sanitation work was provided to 120 people.

In India, the Foundation sent more than 9,000 COVID-19 kits to support local efforts to combat the pandemic.

The scope of the actions taken by the OCP Foundation in 2021 was broad and effective for the focal areas and the target populations.

#### THE OCP FOUNDATION'S UNIFYING ACTIONS





**Promoting excellence** and inclusion in education

















Supporting R&D and spreading social innovation















Supporting food and nutrition security

**Resilience to** 

































