# SINERCIA

GRUPO MOTAENGIL • 57 • SEPTEMBER 2020

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# TREN MAYA: THE LARGEST ONGOING RAIL PROJECT IN LATIN AMERICA

MOTA-ENGIL IN THE EUROPEAN TOP 25 STANDING OUT AT THE INTERNATIONAL LEVEL **GAS PROJECT IN MOZAMBIQUE**ONE OF THE BIGGEST INVESTMENTS
IN AFRICA FOR THE COMING YEARS

SOYO NAVAL BASE SERVING THE DEVELOPMENT OF ANGOLA

## MOTAENGIL

A World of Inspiration

Founded by Manuel António da Mota on 29 June 1946, in the past 74 years, the Mota-Engil Group has carved a path of constant growth, diversification of activities and international expansion, marked by a culture of entrepreneurship and innovation in the permanent search for new horizons.

A journey that makes us proud and that motivates for a future that challenges us.



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### **TOP 30 IN EUROPE**

#24 in the Top Global Contractors



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CEO MESSAGE

# THE NEW NORMAL AND RECOGNITION FOR THOSE WHO HAVE NOT STOPPED IN THE NAME OF PUBLIC SERVICE



In spite of the difficult period we are all going through, we have successfully overcome some of the biggest challenges facing us.



e are living through new times, radically new times.

The pandemic has transformed routines and forms of interaction all over the world and has thrown up unexpected challenges that call for a high sense of collective responsibility, but above all individual responsibility.

The business world, governments, companies and families have had to draw up and implement contingency plans that until then did not exist, and take measures that were then adapted as we learnt more about the virus and how we should deal with what is now called "the new normal".

At Mota-Engil it has been no different.

Operating in 23 markets and with over 37,000 employees, we have mobilised the entire structure to ensure the provision of priority services that are recognised as a public service. Moreover, we have done so in a committed and conscientious manner, by safeguarding our employees and the general public.

As described in this edition of SINERGIA, and in spite of the difficult period we are all going through, we have successfully overcome some of the biggest challenges facing us.

In Mexico, we won the tender for the first section of the Tren Maya, the largest railway project currently ongoing in Latin America, and which will boost the development of some of the country's poorest states. In Mozambique, we were selected to carry out the first major contract in Area 1 of the Liquefied Natural Gas project, which will put the country among the top gas producers in the world. In Portugal, we were selected to carry out the expansion of Lisbon Metro after presenting the proposal that obtained the best technical classification and was deemed the most competitive in the tender.

As for production, we continue to undertake projects such as the Freixo–Alandroal railway section in southern Portugal, the Soyo Naval Base in Angola, among other large-scale projects in which we guarantee quality and timely completion for our clients.



#### **GONÇALO MOURA MARTINS**

Chief Executive Officer

In recent months, we have also maintained the commitment to implement quality and safety policies. Especially noteworthy is the triple quality certification that Mota-Engil Africa obtained for its subsidiaries in the region, which was a landmark for the Organisation.

This year also witnessed Mota-Engil retaining its position among the 25 largest constructors in Europe, a distinction made possible by the capacity of our employees and partners, and the trust placed in us by our clients, which we strive to justify every day. We would like to deeply thank everyone.

Looking to the future, we believe the swift and effective implementation of National Plans will be crucial, given that they serve as leverage for development, based on financial support mechanisms for companies as essential pillars in the creation of jobs and in the social well-being of society.

Europe seems to be giving strong signs of this collective commitment, and it is important to ensure effective support for those who are seriously committed towards the development of society. The Economy cannot grind to a halt, which is why at Mota-Engil we have faced up to the "new normal" certain in that knowledge that we will overcome the difficulties and lay the foundations for a new future, an opportunity for reconstruction based on the fundamental values of sharing and solidarity.  $\odot$ 



Especially noteworthy is the triple quality certification that Mota-Engil Africa obtained for its subsidiaries in the region, which was a landmark for the Organisation.





# RECORD ORDER BOOK IN THE FIRST HALF OF 2020

OPERATING PROFIT WAS, AS EXPECTED, IMPACTED BY THE PANDEMIC.

n the first half of 2020, a period markedly affected by the pandemic resulting from the covid-19 outbreak around the world, the economic activity and the companies were not immune to the resulting global effect.

Therefore, Mota-Engil presented its results for the first half of 2020 with a 14% decrease in turnover, reaching 1,157 million euros, with an EBITDA of 144 million euros (12% margin).

It should be noted that despite the highly adverse context, which the Group quantifies as having hindered its operating performance by 280 million euros in turnover and 45 million euros in EBITDA, the period was positive from a commercial perspective, with evidence that the Group reached the

highest order book volume in its history, with 5,491 million euros, which was due in large part to the awarding contracts of very relevant projects in their dimension in Mexico (Tren Maya), Mozambique (LNG), Poland, Colombia and Angola, among others, as detailed in this edition of SINERGIA.

Despite the experienced constraints, the capability to successfully complete such important contracts allows the Group to prepare for the future, strengthened by the motivation stemming from the customers' continued trust in Mota-Engil for the timely delivery of projects with the quality that was promised.

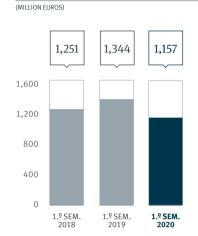
However, following the impact caused by the pandemic, the Group recorded a net loss of 5 million euros, negatively influenced by a significant increase in provisions and impairment losses (16 million euros) to mitigate the possible negative effects caused by the covid-19 pandemic.

#### **ANALYSIS BY REGION**

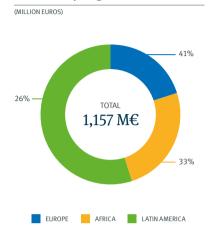
An effect that denotes the strong influence of the pandemic on the Group's performance results from an analysis of the activity recorded by regions, in which the asymmetric behaviour should be highlighted, with Europe contributing with an increase of around 12% (with Poland growing 62%) and Africa and Latin America recording 15% and 33% reductions in turnover, respectively.

Regarding EBITDA, the result of lower productivity and dilution of fixed costs resulting from the negative effects of the pandemic led the Group to record

#### Turnover



#### Turnover by Region



Despite the context, the Mota-Engil Group continued its Investment Plan for 2020, investing around 94 million euros. 65% of this amount is considered to be Expansion and Long-term Investment. a decrease to 144 million euros, positively influenced by Europe's performance (growth of 16%), but which did not offset the reduction in Africa and Latin America, where there were greater logistical constraints on operations and some more significant reductions in production in a few markets.

Notwithstanding, regarding the cash flow resulting from operations, its value was practically identical year on year (126 million euros vs. 127 million euros in the first half of 2019).

#### **RESULTS OF THE FIRST HALF OF 2020**

**5,491** M€

million euros ORDER BOOK







#### PREPARING THE FUTURE

Despite the context, the Mota-Engil Group continued its Investment Plan for 2020, investing around 94 million euros. 65% of this amount is considered to be Expansion and Long-term Investment, of which around 26 million euros are allocated to a new medium and long-term mining contract in Guinea-Conakry, around 26 million euros to the implementation of the investment plan defined for EGF's concession companies (2019–2021 period) and around 5 million euros to the implementation of an environmental project in Côte d'Ivoire.

Nevertheless, the Group noted in the presentation of results the possibility of reducing the level of the initially forecast investment (between 200 and 250 million euros) to under 200 million euros.

## REFINANCING CAPACITY AND DEBT CONTROL

The Group's debt increased by 34 million euros due to the investment made in the period, with the Group continuing to refinance operations through its financial partners in multiple geographies.

Finally, regarding the Group's refinancing during the period in question, the increase in the maturity of the debt from 2.5 to 2.6 years and the reduction in the average cost of debt to 5.1% in June should be noted. 

●

#### **MOTA-ENGIL**

# INTERNATIONAL RECOGNITION

DELOITTE CONSULTING AND *ENR* MAGAZINE PLACE MOTA-ENGIL AMONG THE WORLD'S LARGEST CONSTRUCTION COMPANIES.

#### **TOP 100 IN THE WORLD**

#76 Global Powers of Construction 2020

#### Deloitte.

#### TOP 30 IN EUROPE

#24 in the Top Global Contractors



### TOP 10 IN LATIN AMERICA

#5 in the region



#### **LEADER IN PORTUGAL**

#1 Portuguese Company in the Top Global Contractors



In its annual study "Global Powers of Construction", Deloitte ranked Mota-Engil as the 76<sup>th</sup> largest construction company in the world with regard to turnover.

Analysing the industry's evolution at an international level, the consulting company highlights the presence of Chinese construction companies, which represent 44% of the total revenues of the companies included in the 2019 ranking, taking advantage of the opportunity to update its forecast about the pandemic's impact this year, expecting the recovery in the sector to happen as soon as 2021, in a document that forecasts and analyses the industry.

As for the sector's prestigious North American magazine Engineering News-Record (ENR), which publishes its Annual Ranking with the 250 largest companies in the world, it is worth mentioning that Mota-Engil is the 24<sup>th</sup> largest European construction company,

thus remaining in the European Top 25, where it first appeared last year.

## SEVENTH LARGEST IN LATIN AMERICA

Regarding the level of internationalisation of the companies in the industry, Mota-Engil is in the

Top 50 of the most internationalised construction companies, maintaining its 46<sup>th</sup> position from the previous year, with emphasis on its position as the 7<sup>th</sup> largest construction company in Latin America, after having been in the region's Top 10 for the first time last year. **⊙** 

2020	2019	RANKING LATIN AMERICA/CARIBBEAN
1	1	ACS, Actividades de Construcción y Servicios SA
2	7	China Communications Construction Group LTD.
3	2	SACYR
4	3	VINCI
4	10	TECHNIPFMC
6	**	China Railway Construction Corporation LTD.
7	5	Mota-Engil
8	**	BECHTEL
9	9	Power Construction Corporation of China
10	6	Acciona Infraestructuras

**MOTA-ENGIL** 

# JB CAPITAL MARKETS BEGINS COVERING MOTA-ENGIL

SPANISH COMPANY PUBLISHES FIRST RESEARCH WITH PURCHASE RECOMMENDATION RECOGNISING THE COMPANY'S HIGH POTENTIAL.



Under the title "Chasing the African dream", in its evaluation methodology JBCM identifies that 47% of the value is attributed to the African division, 23% to Europe and 22% to Latin America.

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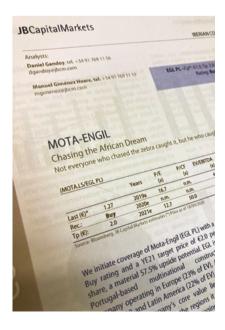
JB Capital Markets (JBCM), a Madrid-based financial services company founded

in 2008 by Javier Botín, began covering Mota-Engil S.G.P.S., S.A. on 21 September, with the release of the first published research on the company, to which it attributed a purchase recommendation and a price target of 2.00 per share, equivalent to an appreciation potential of 57.5% over the price in the session prior to the publication.

Under the title "Chasing the African dream", in its evaluation methodology, JBCM identifies that 47% of the value is attributed to the African division, 23% to Europe and 22% to Latin America, acknowledging the company's potential due to the record value of its portfolio and to a long and successful international history started in Africa in 1946.

For Mota-Engil, and according to Pedro Arrais, Head of Investor Relations, "the start of coverage by a relevant entity based in Madrid and with implementation in Europe, as is the case of JB Capital Markets, reinforces the company's visibility by providing increased information to the financial market. In association with the very

significant growth in share liquidity in 2020, this attests the growing interest in Mota-Engil, which in June reached an all-time high for its order book, a key barometer in this industry, enabling us to face the future with optimism, combined with a sense of responsibility and with the demands the current context places on companies in general."





**MOTA-ENGIL** 

# **GLOBAL CERTIFICATION**OF THE AFRICA REGION

## RECOGNITION INVOLVES ALL THE SUBSIDIARIES IN THE CONSTRUCTION, ENVIRONMENT AND MINING SECTORS.

strategy of inculcating a culture of health and safety among its workforce, environmental protection, promotion of more sustainable solutions and, above all, efficiency and quality in its services, Mota-Engil is pleased to announce that the first phase of the Certification of the Mota-Engil Group has been successfully completed, with the attribution of the global certification of the Africa Region.

ith the goal of reinforcing its

This Regional Certification includes Global Certification for the whole of the Africa region, encompassing the 15 companies/branches and respective operations in the Construction, Environment (including Vista Waste, Ecolife, Eco Eburnie and Clean Eburnie) and Mining sectors. This relevant landmark in the history of Mota-Engil Africa ensures the company's commercial recognition by its clients and Partners through three international standards:

- ISO 9001:2015 Quality management systems
- ISO 14001:2015 Environmental management systems
- ISO 45001: 2018 Occupational health and safety management systems

It should be noted that each of the companies/branches have an individual certificate, where only the commercial name of the company/branch is mentioned, ensuring stakeholders that each company will implement the best

market practices at local level, boosting the unification of the methods used in a single and integrated strategy for the various markets, using the best Mota-Engil practices.

In line with the preplanned work and the success obtained through this important recognition, SINERGIA cannot fail to emphasise the endeavour and dedication shown in the certification process of the African markets, especially by the respective SHEQ teams, and just as importantly by the SHEQ Europe-Africa team, which defined a single integrated management system and coordinated the entire operation and involvement of all the parties, making the Mota-Engil Group increasingly cohesive and efficient.



# SHEQ

# CERTIFICATION COMPLETED. MOTA-ENGIL AFRICA CERTIFIED









# REHABILITATION OF TUA LINE COMPLETED

WORKS ALLOW A CENTENARY RAIL LINE TO GO BACK INTO OPERATION IN PORTUGAL.

As part of the Tua Mobility Plan, seeking to rehabilitate the Tua Line and establish the conditions necessary for its operation to restart, the rehabilitation works of the Tua Line between the Mirandela and Brunheda stations, in the region of Trás-os-Montes, in northern Portugal, were concluded last 31 July.







he project was awarded to Mota-Engil Railway Engineering S.A. by the Tua Valley Regional Development Agency (ADRVT), which includes the municipalities of Alijó, Carrazeda de Ansiães, Mirandela, Murça and Vila Flor, and EDP, the power company. The project is part of the compensation resulting from the construction of the Foz Tua Dam.

The operation of the railway section has been granted to Mystic Tua, of the Douro Azul Group, one of the most important tourism companies operating in Portugal, and will have a tourism component as well as a daily mobility component. Operations are expected to start in 2021 for a line that had its first section completed in 1887 and which, at one point, had 134 kilometres between the mouth of the Tua river and Bragança. Now, with this investment, and after having been closed, it will

once again provide the opportunity for travel to take place in one of the most emblematic railway lines in the country, with places that deserve the visit of those who travel to this region.

#### THE REHABILITATION OF TUA LINE

The Tua Line rehabilitation project includes the rehabilitation of the railway and the slope stabilisation.

As to the railway, taking into account the length of the section to be worked on, a combined approach was chosen, between the complete renovation of sections and works to reinforce and maintain the existing infrastructure.

Given the unique character of this track (metric gauge and a rather winding route), access to the work fronts was one of the main challenges to be overcome. To this end, specific equipment has been mobilised to enable safe access to the work fronts and to achieve



The institutional relationship and operational collaboration that was established allowed the objectives to be achieved, with the company and its employees showing qualities that were relevant to the contract's fulfilment.



MANUEL MIRANDA ADRVT General Secretary



#### TRACK INFRASTRUCTURE

(executed by Mota-Engil Railway)

- Preparation of the track project in the 33 km of the route (in order to adapt the infrastructure to the vehicles);
- Complete renovation of 2,700 running metres of track;
- Replacement of 8,650 wooden sleepers;
- Heavy mechanical strike with ballast discharge on 27,381 running metres of track;
- Execution of 150 units of aluminothermic welds:
- Regularisation of rail joints on 42,072 running metres of rail;
- Supply of materials:

300 18-metre RN45 rail bars;

5,500 metric tons of ballast;

13,533 un of wooden sleepers for metric track and railroad switches;

9,000 fastening sets (1 baseplate / 2 lag screws / 2 claws / 1 shim);

 $150 \ aluminothermic \ welding \ kits.$ 



the necessary efficiency to meet the deadlines. The work went according to plan and was concluded on 31 July 2020.

At the end of the work, ADRVT, through its General Secretary, Mr. Manuel Miranda, expressed its satisfaction for the way in which the work was carried out: "This was the first time that, as the owner of the project, we had the opportunity to work with Mota-Engil Railway Engineering S.A., and the institutional relationship and operational collaboration that was established allowed the objectives to be achieved, with the company and its employees showing qualities that were relevant to the contract's fulfilment,

namely regarding deadlines, assistance to the work and quality of the work, maintaining a good relationship with the project's supervision."

For Mota-Engil Railway, this was an opportunity to contribute to seeing an emblematic line reappear in Portugal, in a project that, due to its uniqueness, combined the technical expertise of Engineering with the passion of those who dedicate their lives to the Railway. 

•







#### **SLOPE STABILISATION**

executed by Mota-Engil Engenharia – Special Foundations Division

- Mechanical or manual cleaning and clearing of vegetation of the slopes over an area of 20.856 m<sup>2</sup>;
- Sanitation of material deposited due to slipping;
- Clearing of vegetation and general clearance of 2,655 m of longitudinal drainage;
- Execution of 301 m of ditches in half-round;
- Placing of 2,685 m<sup>2</sup> of geomeshes;
- Placement of 11,090 m<sup>2</sup> of protection systems with nets;
- Execution of 9,133 m of rockbolting with diameter of 25 mm;
- Execution of 1,052 m of rockbolting with diameter of 32 mm;
- Application of 698 m<sup>2</sup> of mortared placed stone;
- Execution of 1,568 m of geodrains.



Railroad section on the banks of the river Tua



Rehabilitation of railway and slope



## PORTO OFFICE PARK COMPLETED

MEEC FINISHES THE CONSTRUCTION OF THE NEW OFFICE BUILDING IN PORTO.



he construction of the most recent office project in the city of Porto – the Porto Office Park (POP) building – , by Mota-Engil, Engenharia e Construção (MEEC), was completed.

With an area of over 30,000 square metres, the work includes two towers with nine floors above ground and three basement levels, which are common to both towers. The structural solutions for the slabs were based on the use of solid fungiform slabs with capitals in the basements, whereas pre-fabricated alveolar slabs were used in the towers.

POP is exclusively for offices and has a floor area of 1,850 square metres.

The cladding of the façades was carried out by means of modular panels (modules in aluminium frames with a height of 8,500 metres and a width of 1,500 metres), composed of a glazed panel with double glass and vertical shading.

The project was awarded the BREEAM International Certificate and Class A energy certification, in a perfect symbiosis of architecture, engineering and care in promoting sustainability.

Developed by the Violas Ferreira Group, this is undoubtedly an emblematic project of modernity, with the Mota-Engil quality seal. **●** 









#### Earth moving:

3,820 m<sup>3</sup>

#### Reinforced steel:

2,991 metric tons

#### **Concrete:**

21,135 m<sup>3</sup>

#### Formwork:

77,027 m<sup>2</sup>

#### Metal framework:

6 metric tons

#### Alveolar slabs:

17,118 m<sup>2</sup>

**Masonry:** 2,960 m<sup>2</sup>

#### Façades:

16,357 m<sup>2</sup>

(executed by Martifer)

The project was awarded the BREEAM **International Certificate** and Class A energy certification, in a perfect symbiosis of architecture, engineering and care in promoting sustainability.



**POLAND** 

# BALTEA APARTMENTS NEW CONTRACT IN GDANSK

#### EXPECTED TO BE COMPLETED BY THE END OF 2022.





#### **RELEVANT DATA**

Footprint area: 2,169 m<sup>2</sup>

Total gross area:  $31,282 \text{ m}^2$ 

Net floor area of the apartments:  $15,039 \text{ m}^2$ 

Commercial area: 173 m<sup>2</sup>

Mota-Engil Central Europe is starting the construction of a new project in Gdańsk for Develia – the Baltea Apartments.

The contract involves the construction of 238 apartments overlooking the Gulf of Gdańsk – on Prezydent Lech Kaczyński Street. The building will consist of 13 floors above ground and two underground, also including a commercial area, 224 underground and 21 outdoor parking spaces.

Expected to be completed by the end of 2022, the new housing complex offers many benefits and amenities: apartments with functional layouts, large galleries and glass balconies overlooking the Gulf of Gdańsk. Additionally, the technologies used during construction will translate not only into the apartment's comfort, but also into reduced electricity and heating consumption. 

Output

Description:



The reinforcement of Mota-Engil's portfolio of contracts in Europe, obtained by this contract award, will contribute to the increase of activity in the region.

**POLAND** 

### MECE WITH NEW CONTRACT IN POLAND

#### The contract is worth around 217 million euros.

The consortium formed by Mota-Engil Central Europe and by PORR (leader) has signed a contract with the Polish General Directorate of National Roads and Motorways for the design and construction of a 15 kilometre section of the S1 motorway between Oświęcim and Dankowice. With a contract value of 989.7 million zloty (about 217 million euros), this is the longest of three sections planned for construction as part of the new S1 section between Mysłowice and Bielsko-Biała.

This contract includes the construction of a dual carriageway on asphalt pavement with two lanes in each direction and an area reserved for a third lane (in the central reserve); three new road junctions – Oświęcim, Wola, Brzeszcze; and the construction of roads parallel to the motorway and the provision of services in adjacent areas. The new road

will be equipped with rest and service areas (MPO), traffic safety devices, environmental protection and drainage and lighting systems.

With an estimated duration of 33 months (excluding winter periods) the project is expected to be completed in the third quarter of 2023.

S1 will enable a fast connection between the state border at Zwardoń, the Pyrzowice airport and the A1 motorway, also becoming an important international connection.

The reinforcement of Mota-Engil's portfolio of contracts in Europe, obtained by this contract award, will contribute to the increase of activity in the region, as expected, and to the balance between the three regions in which the Group operates. **⊙** 

**POLAND** 

# **MECE COMPLETES**RYVU'S NEW FACILITIES

#### Building will house the R&D areas.

Mota-Engil Central Europe recently completed the construction of an office and laboratory building in Krakow for Ryvu Therapeutics (formerly Selvita).

The six-floor development, with five floors above ground and an underground garage, will house the research and development areas of the bio-pharmaceutical company. The main façades are fully glazed with vertical divisions in the form of aluminium blades, which project beyond the glass plane to the full height of the building, creating a uniform arrangement and division of the entire façade. A suspended open rooftop terrace area was created on the north side of the top floor.  $\odot$ 





# #PREVENTCOVID19 TEACHES PEOPLE TO CORRECTLY HANDLE WASTE DURING THE PANDEMIC

EGF LAUNCHES A PIONEERING PROJECT IN THE WASTE SECTOR AT THE BEGINNING OF THE PANDEMIC.

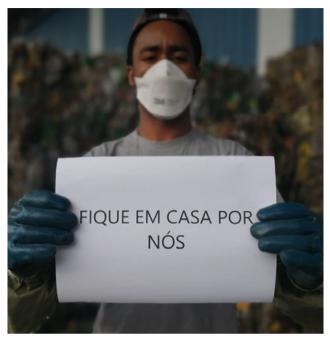


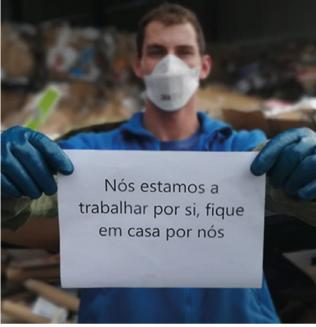
People are recycling better because of the information provided, and are not putting potentially contaminated objects, such as masks and gloves, in the recycling banks. he #PREVENTCOVID19 is a pioneering campaign by EGF, launched in March 2020, and it seeks to raise awareness and caution citizens about how to handle their waste during the covid-19 pandemic.

EGF created this campaign with three main objectives: informing the population in a simplified manner about the new measures related to waste management and treatment issued by the Portuguese Environment Agency (APA), the Directorate-General of Health (DGS) and the Water and Waste Services Regulation Authority (ERSAR); clarifying doubts related to the disposal

of packaging, measures and protective equipment, as well as any concerns associated with the procedures taken by the company; and raising awareness towards professions that are of the utmost importance but do not have sufficient visibility in the media (such as waste collection and sorting operators).

The project consists of an information platform with FAQs, press releases, posters and illustrative content; a digital prevention campaign in which workers who deal directly with waste hold a poster with the heading "We're working for you, stay home for us"; awareness on social networks of all the





concessionaires and presence in news and television shows, in order for the message to be disseminated massively.

We can already see the results – people are recycling better because of the information provided, and are not

putting potentially contaminated objects, such as masks and gloves, in the recycling banks.

The platform can be accessed at www.egf.pt/covid19 and is available in Portuguese, English and Spanish. ⊙

The platform can be accessed at www.egf.pt/covid19 and is available in Portuguese, English and Spanish.

**PORTUGAL** 

# INTERNATIONAL AWARD #PREVENIRCOVID19 DISTINGUISHED



International Solid Waste Association Communication Award.

EGF won the second prize in the ISWA (International Solid Waste Association) Communication Award with the campaign #PREVENIRCOVID19, developed in March 2020, during the confinement period in Portugal. This award acknowledged the efficacy of this

action, which was replicated by several entities in several countries. This was the first time a Portuguese communication campaign was distinguished by ISWA. The first prize was awarded to a Finnish campaign. A campaign from Scotland made the third place.





**AMARSUL RECYCLING BANK**An increase in selective collection

The excellent performance of Amarsul, ERSUC, Suldouro, Resinorte and Valorlis stood out, with year-on-year increases of over 16%.

**PORTUGAL** 

## **RECYCLING GROWS,**EVEN DURING THE PANDEMIC

*EGF* records values above the Portuguese national average.

EGF is the company responsible for the urban waste treatment and recovery in 174 municipalities in Portugal. In 2019, EGF recorded an increase in selective collection of 13%, when compared to 2018, which is above the Portuguese national average of 10%.

The excellent performance of Amarsul, ERSUC, Suldouro, Resinorte and Valorlis stood out, with year-on-year increases of over 16%. Almost all EGF companies grew by more than 10%, which, given their positive performance, should also be noted.

In 2020, the figures for the first half of the year are marked by the pandemic – in the first two months of the year, companies recorded very significant increases of around 19% in selective collection. With

the pandemic and stay-at-home order, the figures for the first half of the year show that the reception of undifferentiated waste decreased by 3%, but that selective collection still increased by 7%.

These increases, which, before the pandemic, were expected to be higher, are the result of a high investment programme carried out, integrated in applications from the concessionaires, co-financed by the Operational Programme for Sustainability and Efficiency in the Use of Resources (POSEUR), and the priority given to the selective collection of packaging waste, remodelling and modernisation of infrastructures and awareness campaigns for the population, which have resulted in the effective and growing participation of citizens in the habit of recycling. ●

**PORTUGAL** 

### **RECYCLE BINGO 2 IS HERE!**

The game that awards prizes to those who recycle the most has reinvented itself with many technological innovations.

World Environment Day, 5 June, was celebrated with the new version of the Recycle BinGo game. After the success of the first version of the game that is the planet's best friend, now comes version 2.0, improved and with more features. Recycle BinGo 2 brings new graphics, a new user experience, new pets, a new content area with augmented reality, and a new game area available soon.

The main mission of the game is to visit our usual recycling bank. By using geolocation, our smartphone knows that we are close to it and every time we use it, we win EcoCoins, which can be exchanged for prizes.

With the game's technological development, we can monitor in real time the days and hours on which users recycle the most and which recycling banks they use more. The Recycle BinGo 2 is accessible



in all concession areas of the EGF Group and is available on the App Store and on Google Play.

The app was recently nominated for the European Business Awards for the Environment of the European Commission in the "Products and Services" category. •

## RESULIMA BUILDS URBAN WASTE PROCESSING COMPLEX

THE URBAN WASTE CONTAINMENT, PREPARATION AND TREATMENT UNIT OF PARADELA (BARCELOS) IS EXPECTED TO BE COMPLETED IN JULY 2021.



The works, financed by the Operational Programme for Sustainability and Efficient Use of Resources (POSEUR), has a global contract value of around 25 million euros.

Resulima, EGF's concessionaire in the north of Portugal, responsible for the selective collection, sorting, treatment and recovery of municipal solid waste from Vale do Lima and Baixo Cávado, which includes the municipalities of Arcos de Valdevez, Barcelos, Esposende, Ponte da Barca, Ponte de Lima and Viana do Castelo, has in progress a construction work with many infrastructures.



The 42 hectare complex will house the Automated Sorting Plant, the Mechanical and Biological Treatment, the Leachate Treatment Plant, the Ecocentre and several support buildings.

The works, financed by the Operational Programme for Sustainability and Efficient Use of Resources (POSEUR), has a global contract value of around 25 million euros.

Electromechanical assemblies, outdoor infrastructure, pathways and external work are ongoing. To date, no delays in meeting the contractual deadline are expected, with earthworks, reinforced concrete work, roofing and interior flooring almost completed.

The project is expected to be completed in July 2021.  $\odot$ 



## ALGAR CELEBRATES 25 YEARS AND WINS COMMUNICATION AWARD

EGF'S CONCESSIONAIRE IN THE ALGARVE CELEBRATES 25 YEARS AND LAUNCHES A DIGITAL CAMPAIGN TO THANK ALL WHO MAKE THE ALGARVE ONE OF THE REGIONS THAT RECYCLES THE MOST IN PORTUGAL.



lgar, EGF's concessionaire in the Algarve region, turned 25. A quarter of a century filled with positive results that place the Algarve above the Portuguese national average with regard to waste treatment and recovery.

To celebrate, Algar decided to promote an online campaign with the topic: "Algar: 25 years transforming the Algarve", seeking to convey the importance of the company's work in transforming the Algarve since 1995, and the importance of the people of the Algarve in this transformation,

congratulating: the families, the municipalities and the commerce of the Algarve, as well as its workers.

In these 25 years the company has closed the 22 garbage dumps existing in the region, started its activity of selective collection, recovery and treatment of urban waste, stimulated the creation of jobs (direct and indirect) and the local economy, managed to establish bonds of trust and collaboration with the population and consolidated a new paradigm in the operational management of this activity, with obvious benefits for the resident

population and especially for tourism, achieving its significant objective, based on the improvement of the environmental conditions of the main Portuguese tourist region.

## WASTE MANAGEMENT IN THE ALGARVE, BEFORE ALGAR, THAT IS UNTIL 1995:

• The waste was disposed of in an anarchic manner in 22 dumps, on open pits of land scattered throughout the region, without any control or environmental protection measures.





- The leached waters from the decomposition of the waste flowed through the untreated land, contaminating the groundwater, the water catchment wells and the agricultural soils. Dumps, as a rule, were always in self-combustion, with fumes and toxins emanating, promoting serious environmental problems and high risks to public health, causing numerous diseases in the population.
- Methane and sulphide gas, resulting from the decomposition of waste, were released into the atmosphere, polluting the air, increasing the greenhouse effect and causing bad smells and risks to public health, including serious respiratory diseases.
- Urban waste was not recycled nor recovered.
- Hazardous waste was disposed of in dumps, without any kind of control.

## WASTE MANAGEMENT IN THE ALGARVE, AFTER ALGAR:

- In a two-year period, Algar closed, rehabilitated and environmentally requalified all 22 open-pit dumps in the region.
- It has streamlined and implemented the Multi-municipal System for the Recovery and Treatment of Municipal Solid Waste, integrating the entire geographical universe of the 16 municipalities in the Algarve.
- For the development of its activity, Algar has defined a technical and economic model for the adequate management of urban waste in the Algarve, building the necessary infrastructures for selective collection, sorting of recyclable packaging, multimaterial recovery (e.g., electrical and electronic equipment, tyres, among others), transfer infrastructures and environmentally adequate facilities for treatment, energy and organic recovery, composting of greens and adequate final destination of urban waste. •

# **ALGAR WINS**APCE GRAND PRIZE



*In the year of his 25<sup>th</sup> birthday, Algar wins a communication award.* 

Algar was one of the winning companies of the 2020 APCE Grand Prize. The Grand Prize of the Portuguese Association of Corporate Communication (APCE) seeks to reward the best in communication in Portugal every year, through an independent jury.

EGF was a finalist in two categories: External Campaign – Services in the Tertiary Sector, with the Algar campaign "In the Algarve, be Algarvian: separate waste!" and Internal Event up to 500 Employees, with EGF Group's event, "Challenges of the Triennium". We won in the category of External Campaign with Algar.

The winning project "In the Algarve, be Algarvian: separate waste!" took place in two phases, the first in the summer period, and the second in the 2019 Christmas period, and was based on the Algarvian pride in preserving the land, endemic landscapes, gastronomy and, above all, the Algarve being one of the regions that recycles the most in Portugal. The campaign encouraged and educated the population on the importance of correct waste separation, especially during holidays and festive seasons, when recycling tends to be forgotten. 

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# REINFORCEMENT IN THE OPERATIONALISATION OF VEHICLES BENEFITS SELECTIVE COLLECTION

VEHICLE AND WEIGHING PROCESS OVERHAUL ENABLES IMPROVEMENTS IN SELECTIVE COLLECTION.







lgar acquired six new vehicles for the selective collection of plastic/metal and paper/

cardboard packaging waste, in an investment of one million euros.

The equipment collects from the back, which enables easy access to deposit materials that are collected in the areas surrounding the recycling banks.

These vehicles combine a series of features that substantially improve the

drivers' daily working conditions with regard to comfort and safety.

The vehicles also enable greater savings and a reduced environmental impact. The combination of a powerful and especially quiet engine with the comfortable Allison six-speed automatic transmission (FuelSense® technology) provides the right performance in any driving and work situation, even at low speeds, and creates better conditions for a smooth and confident ride.

Algar's selective collection activity has a fleet of 31 vehicles that ensure the collection of about 3,800 recycling banks, distributed across the region's 16 municipalities.

## VALORLIS IMPLEMENTS NEW WEIGHING SYSTEM

Valorlis, EGF's concessionaire for the Leiria region, has implemented a new vehicle weighing system using RFID (radiofrequency identification) technology in all the existing weighbridges in the



Leiria production units, and is studying the possibility of adopting self-service in the remaining weighbridges in the company's transfer stations.

The vehicles are self-service weighed at the Valorlis weighbridges using an ID card that provides advanced data and print management.

This weighing system not only enables greater speed and reliability of data, but also makes it possible to reduce the environmental impact associated with weighing vehicles, since the paper weighing slip is replaced by a small ticket. 

Output

Description:



Algar's Selective Collection activity has a fleet of 31 vehicles that ensure the collection of about 3,800 recycling banks, distributed across the region's 16 municipalities.



## SUMA REINFORCES PROTECTION MEASURES

NEW METHODS AND EQUIPMENT ARE IN USE.



ursuing the policy of adopting best practices, SUMA has been ensuring new methods and personal protective equipment (PPE) that provide effective solutions for its employees on the ground, in the name of public health and safety.

Thus, in addition to mandatory helmet use for all workers who perform roles on vehicle stirrups, in response to the growing number of disinfection services for containers, urban furniture and areas close to places of wider affluence of passers-by, in more than a dozen

municipalities, 100 sets of isolation suits, half-masks with replaceable filters, galoshes, half sleeve PVC gloves and goggles were acquired and distributed.

Several protective visors, which in addition to being adjustable and comfortable, have to meet the requirements of adequacy to the other PPE used in the various activities to be developed, are still being tested. A thousand washable and reusable cloth masks were also delivered to support service workers, continuing a project of environmental sustainability and



social responsibility that SUMA began with Gaiurb, in 2015, and which has contributed to the development of skills and employability of residents of Gaia, through social action institutions and microenterprises.

In the service centres, complementary prevention measures have also been put in place, namely the passage of work shoes by a disinfectant at the end of each shift, reducing the possibility of transporting objects susceptible to contamination. •



**PORTUGAL** 

### **SUMA** REAFFIRMS "TRUST"



#### The award is already in its $4^{th}$ consecutive year.

For the fourth consecutive year, SUMA was acknowledged as a "Trusted Brand", earning first place as a "Waste Treatment Company", with the best rating ever: 50% of the votes in this category.

Seeking to evaluate the level of safety that Portuguese consumers place on brands in 40 areas of activity, and as an award voted directly by a significant sample of the Portuguese national population, the incidence and continuity of the award of this title is indicative of the stance of proximity and trust established in the partnerships that SUMA integrates, which is reflected

in the populations that, throughout 26 years of activity, have had access to the services provided. In the current context, the recognition of the importance of professionals who work in the area of urban hygiene and waste collection, who, even during stay-athome orders and despite the risks, have not ceased their activities – and in some cases even seen their responsibilities increased – is also a significant event, which SUMA acknowledges as a reinforcement and incentive for its daily obligations, which are, after all, an essential public service. •

For the fourth consecutive year, SUMA was acknowledged as a "Trusted Brand", earning first place as a "Waste Treatment Company", with the best rating ever: 50% of the votes in this category.



The satisfaction expressed by the townspeople involved to date and the remarkable profitability of corporate resources point towards replicating this methodology in other contexts.

**PORTUGAL** 

### **ENVIRONMENTAL EDUCATION** TESTS NEW METHODOLOGY

Physical distancing requires new forms of contact with the population.

At a time when the imperatives of physical distancing and the continuity of SUMA operations coexist, the environmental education and awareness department has responded adaptively by reinventing the methodologies of direct contact with the population.

Seeking the continuity of contracted environmental awareness operations and compliance with the guidelines of the Portuguese Directorate-General of Health (DGS) to mitigate the spread of covid-19, SUMA launched the telephoneto-telephone (TTT) contact methodology - replacing the traditional door-to-door contact (DTD). Implemented in the municipality of São João da Madeira,

as part of the "Dou Valor" (I Give Value) campaign to raise awareness of doorto-door multi-material waste collection, the TTT methodology contemplates two moments: first, the empathetic, informative and motivational telephone contact; followed by the delivery of containers and information materials, in strict compliance with a health safety protocol, developed in close liaison with the health authorities.

The satisfaction expressed by the townspeople involved to date and the remarkable profitability of corporate resources point towards replicating this methodology in other contexts. •

**BRAZIL** 

### **SUMA BRAZIL ESTABLISHED**





The company is already serving 6.5 million inhabitants.

After five years of consolidation, SUMA's subsidiary for the Brazilian market has recently assumed the designation of SUMA Brazil, aligning itself with the parent company, whose management model it successfully follows.

The company has 12 contracts in execution, in three states - Minas Gerais, São Paulo and Paraná - as well as in the

federal district of Brasília, serving a total of 6.5 million inhabitants. In 2019, the organisation employed 2,500 workers, responsible for the collection of 430 thousand metric tonnes of undifferentiated waste, and 640 thousand kilometres were swept in the manual facet alone.

SUMA Brazil is currently undergoing a process of image transition, which



includes all of its aspects, from office supplies to uniforms and vehicle decoration, and plans to launch a new commercial catalogue and corporate website at the beginning of the third quarter of 2020, to cement the new image and its growth ambitions. •

### SUMA HEAD OFFICE WITH ADDED PROTECTION

## Additional measures have been implemented to ensure safety conditions.

As a result of the measures to end stayat-home orders and return to offices, the safety and protection conditions of SUMA's administrative area workers are being strengthened.

In addition to the mandatory measurement of body temperature for everyone accessing buildings and the distribution of reusable social masks – produced as part of the RIMARTE project, through waste from the textile and footwear industry –, the company's head office in Linda-a-Velha includes specific measures to ensure hand washing, respiratory etiquette and the maintenance of safety distances.

For this purpose, several exclusive signage materials have been implemented, for

application both on the floor of common areas, at the accesses to the work "islands" and to shared computer equipment, and at the entrances to the toilets or at the work stations not to be occupied. •











# VIBEIRAS INVOLVED IN THE URBAN RENEWAL OF LISBON

THE URBAN RENEWAL OF EMBLEMATIC SPACES SUCH AS PRAÇA DE ESPANHA,
PARQUE RIBEIRINHO OR BELÉM PLACES THE COMPANY AS A REFERENCE
IN THIS SEGMENT OF ACTIVITY.



ontinuing the project to create new green areas in the city, the new Parque Ribeirinho Oriente joins the dock of Poço do Bispo to the marina of Parque das Nações, in the eastern area of Lisbon.

Being a construction project divided into two phases, Parque Ribeirinho will give the city an additional eight hectares of green areas, but right now it is four hectares for the enjoyment of citizens, extending along almost 650 metres of river front.

Inaugurated by the Mayor of Lisbon, Fernando Medina, this area was once an industrial strip and fits in the context of the European Green Capital, providing new areas for circulation and making an area of tourist affluence more beautiful in one of the most visited cities in Europe.

## COMPLETION OF RUA BARTOLOMEU DIAS

Still in Lisbon, and in the parish of Belém, Vibeiras concluded the rehabilitation of Rua Bartolomeu Dias, with its work improving the pedestrian passageways and road circulation,

generating afforestation along the road and promoting noise reduction, in a predominantly residential area, with an intervention area of 8,620 square metres.

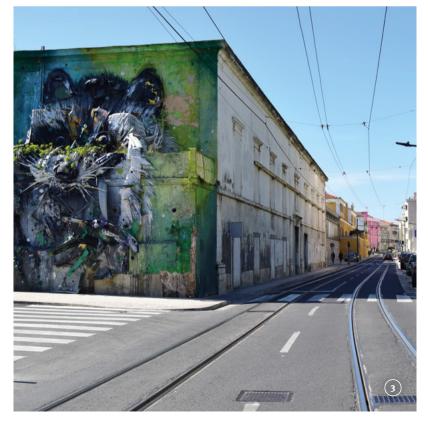
Favouring the rehabilitation and greater safety and comfort for the citizens, the work also promoted the reorganisation of the profile of the road, pavements and parking.

With the materialisation of these projects, Vibeiras is contributing to the rehabilitation and renewal of the territory in the city of Lisbon, establishing itself as



a partner with the capacity to respond to the challenge of making the Portuguese capital an increasingly sustainable space, in an ambition with which the company and the Mota-Engil Group are fully aligned.  $\odot$ 







#### **IMPROVED AREAS**

#### **Parque Ribeirinho Oriente:**

4 hectares

#### Rua Bartolomeu Dias:

 $8,620 \text{ m}^2$ 



New Parque Ribeirinho Oriente park, connecting the Poço do Bispo docks to the Parque das Nações marina



Official opening of Parque Ribeirinho Oriente, by the mayor of Lisbon, Fernando Medina



Rua Bartolomeu Dias.

# VIBEIRAS CARRIED OUT A SUCCESSFUL INTERVENTION IN A RIVER BEACH IN BEJA

INAUGURATION WAS ATTENDED BY THE MINISTER OF AGRICULTURE AND BY THE MAYOR OF THE MUNICIPALITY.

ibeiras met the deadline and completed the work in Parque Fluvial de Cinco Reis, in Beja. The new development was inaugurated by the minister of Agriculture, Maria do Céu Albuquerque, and by the mayor of Beja, Paulo Arsénio.

In the words of the director of the work, Tiago Ferreira, "this project was a little different from what Vibeiras has done so far, because it was our first river beach, and we believe it will contribute to local tourism development. This is a project that took about 15,000 metric tonnes of sand in a very ambitious execution period of around six months and, although the weather conditions did not help, especially with the rains in April and May, it went very well." It should be noted that the work included the implementation of an innovative geotube solution, still seldom used in this type of

work, which will promote the retention of the sand.

The project was promoted by the Municipal Council and makes use of the Cinco Reis dam, thanks to a protocol of concession with Alqueva's infrastructure development company (Empresa de Desenvolvimento de Infraestruturas de Alqueva – EDIA), in an area that includes the river beach with 1.4 million cubic metres of water, as well as platforms for nautical activities, a picnic park, pedestrian walkways and shelters for bird watching.

For Vibeiras, this was another challenge completed successfully, and it will be "an added value" for the municipality of Beja, enabling the population and visitors to enjoy a water mirror located near the city that will be lovely throughout the year and especially inviting in the summer. •







This project was a little different from what Vibeiras has done so far, because it was our first river beach, and we believe it will contribute to local tourism development.



TIAGO FERREIRA Work site director

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Portuguese minister for Agriculture, Maria do Céu Antunes, during the opening.



Cinco Reis beach, in Beja.





### VIBEIRAS SPONSORS EXHIBITION BY ARTIST YOKO ONO

The exhibition "Yoko Ono: The Learning Garden of Freedom" took place at Serralves, in Porto.



Finding the tree specimens with the characteristics defined by the artist's office required an exacting search.

"Yoko Ono: The Learning Garden of Freedom" is a vast exhibition dedicated to the work of the iconic Japanese artist that brings together objects, works on paper, installations, performances, audio and film recordings, as well as rarely seen archival materials. This is the first major retrospective exhibition of the artist in Portugal and was sponsored by Vibeiras, which was responsible for supplying the exhibition's trees.

Standing out in this joint work are the works WISH TREE, installed on century-old olive trees, which invites the visitor to write their personal wishes for peace and to tie them to the branch of one of the multiple trees spread out over the Park's various locations, and EX IT, created in the 1990s, which consists of one hundred coffins of various sizes –

man, woman, child – and one hundred trees that emerge from them, being a metaphor built by the association to life (tree) and death.

Finding the tree specimens with the characteristics defined by the artist's office required an exacting search and only with close collaboration between the Serralves Foundation and the Procurement Department of Vibeiras was it possible to achieve the success everyone expected.

In a project whose final result led to Vibeiras being praised by the management of the Museum and by the artist's studio, the company was elated to have been involved in such a relevant exhibition held in Portugal. 

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**PORTUGAL** 

# **VIBEIRAS** AT LISBON AIRPORT

# Implementation of a platform promoting water saving.

Following the contract for the maintenance of green spaces at Lisbon Airport, and taking into account the imperative need to save water as a social responsibility of each entity and/or company, Vibeiras proposed to the concessionaire ANA the implementation of a platform with "Trigger Sistems" technology.

Connected to the "Smart Cities", and regardless of the type and brand of the irrigation systems installed in the field, it enables its integration in a global management platform, which in turn allows control of all automatic irrigation systems.

With multiple functionalities, it performs automatic control based on evapotranspiration and water balance, has weather forecast models, groups sectors based on pumping group capacity, detects breakdowns and malfunctions in the irrigation network, uses alarms associated via notification, e-mail, chatbot or text message, has security mechanisms in local usage, records usage history per manager, and integrates with flow, pressure and air quality sensors.

This platform was implemented in the arrivals area, and this year it will



be extended to the entire airport in a project promoting sustainability in the management of a resource as relevant as water. •

Vibeiras proposed to the concessionaire ANA the implementation of a platform with "Trigger Sistems" technology.



CÔTE D'IVOIRE

# **VIBEIRAS** IN CÔTE D'IVOIRE

*Project under development for the Africa Cup of Nations (CAN 2021).* 

In a project that perfectly integrated Mota-Engil Group's technical skills, Vibeiras was challenged by Mota-Engil Africa to rebuild 13 football fields in Côte d'Ivoire within the scope of CAN Côte D'Ivoire 2021, the Africa Cup of Nations.

The design/construction contract has a 12-month term and naturally includes the project with international quality requirements (FIFA & IAAF class) as

well as the construction of the drainage networks (both internal and surface) for the automatic and manual irrigation (including booster pump groups), athletic tracks, equipment for sport competitions and lawns.

Given that this is the most important competition on the African continent, it is with pride and a sense of responsibility that Vibeiras will execute this project in the stadium of La Paix de Bouaké, as well as in twelve other training pitches (eight located in the country's capital, Abidjan, and four others in Bouaké). 

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**ANGOLA** 

# MOTA-ENGIL ANGOLA WITH NEW MUAMUSSANDA-TO-SAURIMO CONTRACT



A CHALLENGING PROJECT WITH 306 KILOMETRES AND 17 BRIDGES IN AN 18-MONTH EXECUTION PERIOD.

Mota-Engil Angola, in a 50/50 partnership with the Omatapalo company, signed a new contract for the rehabilitation of National Road 230 between the towns of Muamussanda in Lunda Norte province and Saurimo in Lunda Sul province.





ota-Engil Angola, in a 50/50 partnership with the Omatapalo company, signed a new contract for the rehabilitation of National Road 230 between the towns of Muamussanda in Lunda Norte province and Saurimo in Lunda Sul province over an extension of 267 kilometres. The construction of the new Saurimo Circular bypass with an extension of 39.5 kilometres, resulting in the project having 306.5 kilometres, is also part of the contract, as is the development of Engineering Structures, among which are the route's 17 bridges.

It should be noted that National Road 230 is one of the main road axes in the country, connecting the capital – Luanda – to the city of Saurimo, crossing the provinces of Bengo, Cuanza Norte, Malange, Lunda Norte and Lunda Sul, and with a subsequent connection to the Democratic Republic of Congo, taking on major importance in supporting the development of economic activity

in the country, with a special focus on agricultural and mining activities, as a logistical corridor facilitating and accelerating the flow of supplies and production of these two sectors of activity.

The work will start immediately, with a contract value of around 335 million dolars and lasting for 18 months. The project is in line with Mota-Engil's dimension in Angola, a market where we are proud to have started the Group's activity, in 1946, with no interruptions to date, and in which we have shown our confidence with the permanent investment made in the country and in its people, thus believing in the future of Angola.

This project further strengthens our order book in the road infrastructure segment, an activity in which Mota-Engil has developed relevant projects over the course of its history in Angola. ●

The project is in line with Mota-Engil's dimension in Angola, a market where we are proud to have started the Group's activity, in 1946, with no interruptions to date, and in which we have shown our confidence with the permanent investment made in the country and in its people, thus believing in the future of Angola.



ANGOLA

# SOYO NAVAL BASE REHABILITATION

INVESTMENT OF 270 MILLION EUROS FOR THE MODERNISATION OF MARITIME INFRASTRUCTURE.



This project includes three major operating areas: the construction of the entire infrastructure necessary for the operation of the complex, dredging of an access channel and a manoeuvring area to enable access and circulation of ships.

he Soyo Naval Base rehabilitation work is located in the city of Soyo, north of Angola, Zaire province, more specifically at the mouth of the Zaire river, where important economic interests for the country are found, namely oil exploration and production, guaranteed by domestic and international companies, as well as gas production and manufacturing, through the ALNG company.

Given its strategic location, from the perspective of security and geopolitical balance in the region, the Angolan

government decided to provide the region with a modern infrastructure and high levels of quality in accordance with the international standards of the defence and maritime security sector, which, after its completion, creates a considerable number of jobs, thus contributing to the development of the region.

This project includes three major operating areas: the construction of the entire infrastructure necessary for the operation of the complex, logistically supporting the Naval Base; the construction of a quay and wharves;



and, finally, the dredging of an access channel and a manoeuvring area to enable access and circulation of ships.

The construction of the Naval Base infrastructure includes not only the rehabilitation of existing buildings, but also the construction of new buildings and urban infrastructure, divided into four major groups of constructions:

- 12 residential buildings;
- 4 administrative buildings;
- 9 buildings to support the operation of the complex;
- remaining infrastructure necessary for this kind of undertaking.











# RELEVANT FIGURES

**Construction area:** 26,000 m<sup>2</sup>

Area of streets and green spaces:  $17,000 \ m^2$ 



Finally, the dredging seeks to establish the outer access channel, the establishment of the manoeuvre basin and the construction of the retaining margins. It is estimated that the volume of sediments to be dredged is around 6,120,000 cubic metres, of which 4,630,000 cubic metres will be removed from the access channel and 1,490,000 cubic metres from the manoeuvre basin.

From this dredging volume, around 220,000 cubic metres will be used in the execution of the retaining margin, with the remaining volume being taken to a submerged deposit, more than two nautical miles from the Pululu channel, at depths of more than 200 metres, in the Congo river submarine canyon.

With a 24-month execution period, the total value of the contract is

270 million euros (financed by COSEC), with the construction of buildings and infrastructure representing around 25% of the total value, the construction of the pier representing 49% and the rest being the dredging works.

During its execution period, the work promoted the creation of 299 jobs, including Mota-Engil Angola's and the subcontractors' direct workers, 91% of whom are Angolan. At its peak, the work is expected to have around 450/500 workers.

This work is under the management and coordination of Fernando Jorge, one of the most senior engineers in the company, with great experience in works of this size, ensuring, with his team, the development of another remarkable work in the course of almost 75 years in Angola. ●



# WITH A TOTAL CONSTRUCTION AREA OF 68,500 M<sup>2</sup>, THE PIER COMPRISES FIVE MAJOR GROUPS OF ACTIVITIES:

- retaining margins and embankments;
- construction of the docking platform superstructure (which includes the quay, bridge piers 1, 2 and 3, travel lift, beaching ramp, floating pontoon and walkways);
- maritime signage;
- port earthwork and paving – crowning layer of embankments and rigid surfaces for ports; and
- networks and technical facilities, including the drinking water supply network, fire-fighting network, rainwater drainage network, electricity network and fuel infrastructure.

During its execution period, the work promoted the creation of 299 jobs, including Mota-Engil Angola's and the subcontractors' direct workers.



**ANGOLA** 

# **COVID-19 – THE FIGHT** AGAINST THE PANDEMIC

# MOTA-ENGIL SUPPORTED THE ANGOLAN GOVERNMENT IN THE FIGHT AGAINST THE PANDEMIC THAT HAS SPREAD AROUND THE WORLD.



The company delivered to the Ministry of Health three thousand disposable protective suits, one thousand masks and fifty face shields produced in the province of Cabinda using 3D printing.

M

ota-Engil supported the Government of Angola in the fight against the covid-19

pandemic, namely in the provinces of Luanda and Cabinda, where hospitals that will ensure greater and better access to healthcare in the country are currently under construction.

To that effect, the company delivered to the Ministry of Health three thousand disposable protective suits, one thousand masks and fifty face shields produced in the province of Cabinda using 3D printing, thus seeking to contribute to the protection of the valiant health professionals who provide healthcare to the citizens in the country's multiple hospitals every day.

In addition to the donation of equipment, the company has rehabilitated, as part of its social responsibility policy, the building of Block C of the Psychiatric Hospital of Luanda, for the diagnosis and treatment of the covid-19 pandemic. The work had a six-week execution period, half of which took place during the

emergency period. The area covered by the intervention was 550 square metres, with 60 workers who went beyond their professional duty with their speed of execution, with direct benefits to the local community.

Also within the framework of the contingency plan to combat covid-19 carried out by the Angolan Government, priority was given to the supply of drinking water to social institutions and to the population in general.

Three water tank vehicles and their corresponding drivers were, therefore, made available to supply the districts of Cazenga, Molevos, Benfica, Kapalanga and Futungo.

The recognition and gratitude of the population for this important Mota-Engil support initiative should be noted. Once again, Mota-Engil joins the fight against the pandemic, by contributing with the daily distribution of 80 to 100 thousand litres of water per vehicle, should be noted.



Mota-Engil Angola has also been developing a set of efforts to prevent and minimise the spread of the coronavirus, by prioritising the health of its employees, customers, partners and communities where it operates. Among these, the following stand out:

- preventive measures at the individual level, from awareness raising on respiratory labelling and strengthening of personal care, to advice on how to avoid interpersonal contact and presence in areas of large gatherings;
- preventive measures at the corporate level, ranging from supplying prevention kits, reinforcing the cleaning of all buildings and supplying antiseptic products, to the cancellation of business trips and face-to-face meetings, replaced by videoconferences or other remote contacts.

Mota-Engil also defined isolation areas in the various establishments and the procedures dedicated to monitoring employees in the event of contagion, and invested in internal information and training, based on internal corporate communications for guidance and awareness, strengthening the toolbox and awareness actions for all employees in all domestic and international projects.

The list of measures also includes the cross-cutting suspension of all travel between countries where Mota-Engil operates, in order to prevent contagion to employees, their families and the surrounding community.

With these measures, Mota-Engil reinforced prevention and reduced the impact associated with the transmission of the virus on the lives of its employees



and their families, as well as on its partners and the surrounding community. **⊙** 



**ANGOLA** 

# MOTA-ENGIL ANGOLA COMPLETES THE 1<sup>ST</sup> PHASE OF THE INDUSTRIAL UNIT FOR GMA

A 50 MILLION DOLLAR INVESTIMENT GIVES A SIGNIFICANT BOOST TO THE DEVELOPMENT OF ANGOLA'S CENTRAL-SOUTH REGION.



Mota-Engil Angola has finished the construction of the 1<sup>st</sup> phase of a wheat-milling industrial unit for GMA – Grandes Moagens de Angola, with capacity for 600 tonnes per day, and is prepared for expansion up to 1,200.

he 1<sup>st</sup> phase included the construction of 16 concrete bases and respective galleries under the indirect foundations through moulded piles, to assemble 12 circular metal silos, and preparation for expansion to 16 silos; recuperation of a former concrete silo structure; and replacement of the existing equipment with more modern and suitable facilities.

The 2<sup>nd</sup> construction phase, also supervised by Mota-Engil Angola, includes the construction of offices, a canteen with a fully equipped industrial kitchen, changing rooms and shower rooms, water tanks with capacity for

500 cubic metres, a water treatment plant, gatehouse with a weighbridge, technical area, workshops, conveyors/pipe racks, wheat mill, bran mill, flour warehouse, wheat silos, bran silos, storage silos, end-product silos, generator room (substation), transformation substations, facility for all the equipment, hydraulic and electric installations, HVAC, compressed air, metal structures, fire-prevention security, external work,

With an overall contracted value of 50 million dollars (around 42 million euros), this design/construction project has a deadline of 24 months.





The GMA Lobito industrial unit is in the central-south region of Angola, in the city of Lobito, more specifically in Lobito Port, in Benguela province.

The site has direct maritime access, which is essential for the project, to receive raw materials competitively and despatch the subproducts by road, serving a vast hinterland by railway into Africa. The installation of this project in Lobito Port will help increase operations in the port, boosting its profitability, and take advantage of the investment recently made in this infrastructure.

The raw material – wheat – is stored in already existing and to-be-built vertical silos, after a pre-cleaning operation to remove impurities and/or other waste, and will subsequently be mixed to attain the intended quality standards depending on the type of flour produced. The final



# **CIVIL CONSTRUCTION DATA:**

# Pile ø 600 running metres – 1,500 running metres:

12,141 running metres

# Area of buildings:

5.,431 m<sup>2</sup>

# External work:

10.692 m<sup>2</sup>

## **Construction steel:**

1,100 tonnes

## **Hydraulic concrete:**

20.000 m<sup>3</sup>

### **ELECTROMECHANICAL DATA:**

# **Installed power:**

1,230 kVA

# **Electric cabling installed:**

16,500 running metres

# **Electrical panels:**

28 units

## **Lighting frames:**

308 units

# **Energy sockets:**

164 units

# **Fire-detection equipment:**

238 units

# **Equipment and metal silos:**

648 tonnes

# STORAGE CAPACITY:

- Metal silos = 12 units (49,200 tonnes)
- Concrete silos = 53 units (20,000 tonnes)
- Total = 69,200 tonnes

# JOBS CREATED (INCLUDING SUBCONTRACTORS):

180 units



**ANGOLA** 

# **DULCERIA NACIONAL**

# INDUSTRIAL PLANT IN THE FOOD TRADE RUN BY MEA.



he construction of Dulceria
Nacional, an Angolan company
established in consortium
between Webcor and the Argentinian
company Arcor, is moving forward at a
rapid pace. It is an industrial unit in the
food trade, which will produce a broad
range of sweet products (biscuits,
chocolate and jellies, among others).

As part of an investment project totalling 90 million dollars (around 75 million euros), the project involves building an industrial plant from scratch in a plot measuring 10,000 square metres, located in the Viana Industrial Park (PIV) on the outskirts of Luanda, with a contract value of 19.7 million dollars (approximately 16.6 million euros).

The project consists of building the large-scale industrial unit for the installation of different production lines, located between two storage areas - one for the raw materials and one for the finished products - as well as all the equipment and facilities needed for a factory to operate in this sector.

It is a complex project, which includes numerous engineering specialities to meet the owner's development expectations and ensure a rosy future outlook as regards the business. It involves the specialised areas of civil construction and architecture, metal structures and electromechanical installations, covering a wide range of solutions – water and waste treatment, manufacturing water, steam, iced water, hot and cold water, food manufacturing, gas, fuel oil and electricity.

The contract with the client is a project type that includes the design of all the specialities, based on the initial model of the project owner that underpinned the bargaining process.

Given the technical characteristics of the project, with a predominance of technical installations, the overall management of the project was assigned to the Electromechanics area.

Other departments and autonomous areas of Mota-Engil Angola (MEA) also took part, namely in the building of civil construction infrastructures and metal-mechanical structures. This last area played a decisive role in the outcome of the project, as it was in charge of the original design of the metal framework, which was a difference-maker in the commercial negotiation and to clinch the contract.

The project currently employs around 110 employees, most of whom are Mota-Engil staff, in Angola and Portugal, and a small core group of subcontractor staff. The factory corresponding to the  $1^{\rm st}$  phase will employ around 150 people.  $\odot$ 



Given the technical characteristics of the project, with a predominance of technical installations, the overall management of the project was assigned to the Electromechanics area.







**ANGOLA** 

# VISTA WASTE WITH NEW INDUSTRIAL WASTE TREATMENT PLANT

# UNIT WILL SUPPORT THE ENTIRE INDUSTRIAL WASTE OPERATION IN ANGOLA.



The new Vista Waste Industrial Waste Treatment Plant, located in the industrial area of Viana, was designed to support the entire operation of industrial waste in Angola. he new Vista Waste Industrial
Waste Treatment Plant, located
in the industrial area of Viana,
was designed to support the entire
operation of industrial waste in Angola,
and to treat and reuse the waste from this
activity.

This business area, started in 2014, already has a wide range of services provided, ranging from environmental consultancy (technical advice, preparation of waste management plans and environmental impact studies), cleaning

of outer spaces, collection of MSW, collection and reuse of used lubricating oil, collection of hospital waste or collection of contaminated soil, among others.

With an area of 30,000 square metres, the new facilities are equipped to treat industrial and domestic wastewater, sort and pre-process recyclable waste such as paper, cardboard, aluminium, steel, PET; HDPE, LDPE, PP, PVC, tires and woodwork. An incinerator is still planned to be installed by the end of 2021. 

Output

Description:





# THIS PROJECT BRINGS SEVERAL ECONOMIC AND ENVIRONMENTAL CONTRIBUTIONS TO COMPANIES AND LOCAL COMMUNITIES:

- creation of jobs, both direct (50 new employees, increasing to 180 by the end of the second half of 2021) and indirect (250);
- diversification of the local economy;
- cost reduction in waste treatment and reduction of landfilling;
- environmentally correct treatment of waste; and
- introduction of the concept of the circular economy in the market, with the transformation of waste into raw material for the industry, thus reducing imports.







**ANGOLA** 

# MOTA-ENGIL REHABILITATES EMERGENCY ROOM OF PAEDIATRIC HOSPITAL IN LUANDA

João Lourenço, the President of Angola, inaugurated the space.

Last June, the inauguration of the Emergency Room of the Paediatric Hospital, located in the province of Luanda, took place in a ceremony attended by the President of the Republic of Angola, João Lourenço, who was accompanied by the first lady, Ana Dias Lourenço, and by other distinguished figures of the Angolan Government, as well as Francisco Franca, CEO of Mota-Engil Angola (MEA), representing the Group.

The works to rehabilitate the building and provide it with equipment were carried out by MEA, at zero cost, as part of the company's social responsibility policy. The new structure, called Paulo Adão de Campos, was a tribute to the Angolan gynaecologist with over 40 years of service, and has short-stay emergency services, outpatient consultations and a day hospital.

This action is another important step in resolving the health problems of the population, especially Angolan children. •



The works to rehabilitate the building and provide it with equipment were carried out by MEA, at zero cost, as part of the company's social responsibility policy.





**MOZAMBIQUE** 

# MOTA-ENGIL INVOLVED AS MOZAMBIQUE'S GAS PROJECT GETS UNDERWAY

*Investment will make the country one of the top five producers worldwide.* 

Mota-Engil has been increasing its investment in Mozambique since first working in the country in 1991, following a strategy based on firm and lasting confidence in the country and its institutions. This has led to the company carrying out some of the most important infrastructure projects, as well as making efforts to diversify its activity over the years.

The investment for the next two years has been announced in the two liquefied natural gas (LNG) concessionaire areas in the north of the country, in the Cabo Delgado province, for the Total consortium (Area 1 – Mozambique LNG) and the Exxon/Eni/Galp consortium (Area 4 – Rovuma LNG), and Mota-Engil has worked hard for over a year to prepare technically solid and financially competitive proposals for its potential clients, to carry out some of the initial work in this project, in one of the most demanding fields of the infrastructure industry.

Therefore, and seeking to supply the best solution, using its vast local knowledge of the market, Mota-Engil Africa has formalised a partnership with BESIX, a Belgian company specialised in maritime work, to study in detail some of the work that will be carried out within the scope of the LNG project in Mozambique.

After completing all the technical, financial and contractual structuring phases of the project, the consortium was commissioned by CCS JV to build a wharf and unloading platform, for a total amount of approximately



365 million dollars (approximately 337 million euros).

Work is set to start in 2020, and the project will last 32 months. This is the first large-scale project commissioned by CCS JV within the scope of the exploration of Area 1 of the LNG project. Winning the tender is a proud moment and brings with it a sense of responsibility and a firm commitment to the client who has placed their trust in the consortium based on the competence of the two companies' technical staff, as this big challenge for Mozambique gets underway.

## THE LNG PROJECT IN MOZAMBIQUE

According to international agencies, the LNG project will involve an overall investment of the two consortiums of around 50 billion dollars, and will be one of the biggest investments made in Africa in the coming years, making Mozambique one of the top five gas producers in the world.

In a project of enormous magnitude and requiring technical expertise in several fields of engineering, the coming years will bring several opportunities to carry out projects related to civil construction, earthwork, the building of worksites, the building and improvement of roads, as well as of new quays and platforms. This project will without doubt bring about a transformation in the development of Mozambique and allow this extraordinary country to fulfil its potential. 

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CÔTE D'IVOIRE

# **MOTA-ENGIL** HAS A NEW PROJECT IN CÔTE D'IVOIRE

The Grand Marché de Bouaké will be the largest indoor market in Western Africa.





Bouaké Municipal Council launched an international tender for the construction of Lot B of the "Grand Marché de Bouaké", in Côte d'Ivoire.

The project includes the construction of shopping areas and service and support zones. The market will have five lots covering a total area of around 86,000 square metres, in a contract worth 43.8 million euros and a completion deadline of 24 months. When the two lots are finished, it will be the largest indoor market in Western Africa, built on almost 9 hectares and accommodating more than 8,000 points of sale.

In the ceremony to sign the contract, Alexandre Bernardo, the head of Mota-Engil Africa, promised the authorities and the Bouaké communities that the market will be endowed with modern infrastructure of the highest standards. "I would like to emphasise that Mota-Engil will continue to work together with the local authorities in order to contribute to a prosperous and modern Bouaké that meets the highest safety and quality standards," he said.



I would like to emphasise that Mota-Engil will continue to work together with the local authorities in order to contribute to a prosperous and modern Bouaké that meets the highest safety and quality standards



**ALEXANDRE BERNARDO** Head of Mota-Engil Africa **GUINEA** 

# MOTA-ENGIL ÁFRICA SAFETY FIRST

Mota-Engil Africa has recently enjoyed several success stories with regard to SHEQ, which speak to the endeavour shown by the whole team, consolidating the highest standards in this field.

In Mozambique, the Vale Mining Moatize project team reached 4,500,000 working hours with no lost time to injury, which corresponds to an impressive 1000 days with no lost time to injury. In Guinea-Bissau, 3,000,000 hours with no accidents were reached in the Siguiri Mining Project.

In Malawi, the recently started Nkula Dredging project completed 60 days with no lost time to injury, and the Railway Maintenance project reached 230,000 hours with no lost time to injury.

This is the way forward for Mota-Engil to enhance its performance and achieve its goals, with the commitment and engagement of everyone, in a special year in which Mota-Engil was awarded the ISO Certification for the Africa region. 

●

This is the way forward for Mota-Engil to enhance its performance and achieve its goals, with the commitment and engagement of everyone.





**MEXICO** 

# MAYAN TRAIN THE ENGINE OF SOUTHEAST MEXICO

MOTA-ENGIL MÉXICO WINS THE CONTRACT FOR THE FIRST SECTION OF THE MAYAN TRAIN, LATIN AMERICA'S LARGEST RAIL PROJECT.



1500 kilometres of railway tracks will accompany you on a journey of discovery and revitalisation of the Mayans' past and present. This megaproject thus seeks to boost tourism in southeast Mexico by linking the main archaeological sites on the Yucatan peninsula to Chiapas.



magine leaving the Gulf of Mexico for Cancún and the turquoise waters of the Caribbean and stopping in strategic areas rich in Mayan history and culture. This route will soon no longer be a utopia, as construction work has already begun on the Mayan Train, where Mota-Engil Mexico leads section 1.

The Mayan Train is the most emblematic tourism and infrastructure project of President López Obrador's government, seeking to foster the development of the



southeast of the country by boosting tourism and employment on the Yucatán peninsula.

The Mayan Train project is divided into seven sections, enabling accelerating the provision of services and the technical feasibility. Last 23 April, the National Fund for the Promotion of Tourism (Fonatur) announced the decision of the international public tender for the construction of Section 1 of the Mayan Train Project, with the consortium headed by Mota-Engil México, in an alliance with

China Communications Construction Company and three Mexican companies (Eyasa, Cosh Group and Gavil Ingeniería), coming out as the winner.

The train – with a maximum speed of 160 km/hour – will cross the states of Chiapas, Tabasco, Campeche, Yucatán and Quintana Roo, offering not only a true travel experience but also an improvement in people's quality of life, by integrating the population into the dynamics of economic growth. With 30 stations strategically distributed along

With 30 stations strategically distributed along the railway network, the Mayan Train represents the start of a new tourism model.





"

We will be working with full respect for the communities and the environment.



JOAO PARREIRA CEO of Mota-Engil America Latina

the railway network, the Mayan Train represents the start of a new tourism model focused on the preservation of ecosystems, tourist places and local cultures, as well as encouraging respect and recognition for the original settlements and for the area's ecology. In this context, this project will respect high environmental and social standards, as well as a high level of professionalism and experience in urban infrastructure. Therefore, during the tender process, the 14 proposals were evaluated by the United Nations Office for Project Services (UNOPS), which found that the winning consortium presented the best option in cost and benefit, fully complying with the technical requirements, thus awarding the contract for a value of 15,538.1 million pesos.

For this reason, on 4 June, during the beginning of the works of Section 1, João Parreira, CEO of LATAM, emphasised the three principles of the consortium's social vision:

"(...) **Respect** – we will be working with full respect for the communities and the environment.

**Commitment** – we will encourage local job creation and the hiring of local companies.

And **growth** – we will establish and benefit from the Youth Building the Future programme, a training platform that will enable the talent of this region's inhabitants to become the engine of this great Mayan Train in the coming years."





This region is crucial for the Mayan Train, which is why it is so important that it be in good hands, and thus, João Parreira, director of Mota-Engil, I thank you very much for your participation, as it is an international reference in the construction of infrastructure.



ANDRÉS MANUEL LÓPEZ OBRADOR
President of United Mexican States

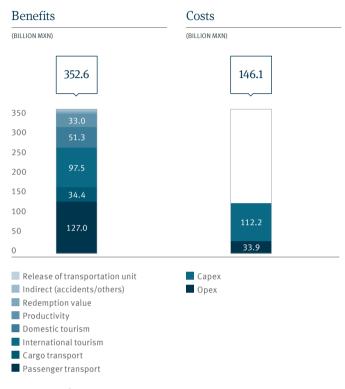
# A PROJECT THAT DRIVES THE MEXICAN ECONOMY AND IS INCLUSIVE

# THE MAYAN TRAIN UNITES US

Under the motto "The Mayan Train unites us", this project is a true promoter of the nation's sustainable development,

a mission which Mota-Engil joins by having a diversified performance throughout the country in areas such as Engineering and Construction, Concessions, Environment and Energy – enabling us to contribute to the development of the Mexican economy, the territory's infrastructure and the training of Mexican colleagues – thus reinforcing our presence in Mexico as the local company we proudly are since 2007. 

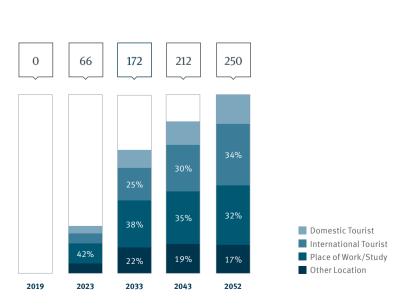
①



**Source:** Own work <sup>1</sup>General Guide for the Presentation of Cost and Benefit Assessments of Investment Programmes and Projects, CEPEP, 2018

# Growth in the demand captured by the train during the period under evaluation

(THOUSAND PASSENGERS/DAY)



Source: Mayan Train: Cost-Benefit Analysis (Public Version)



Regarding Section 1, the works to be carried out range from the beginning of the Palenque station, located in the Municipality of Palenque, in the state of Chiapas, to the end of the Escárcega station, located in the Municipality of Escárcega, in the state of Campeche, covering a total distance of the main line of 228.00 kilometres, from kilometre 0+000 to kilometre 228+000, according to the section defined in the basic engineering. In this context, section 1 - Palenque-Escárcega - includes the development of the executive project, the construction of the railway over a period of 28 months (including three months for the executive project), and the maintenance of the new railway for a period of five years, after the construction of the new track has been completed. Thus, the planning of the work includes the installation and operation of a total of nine main

<sup>&</sup>lt;sup>1</sup> Secretariat of Tourism and Fonatur, 2020 in https://www.trenmaya.gob.mx/



and secondary base camps (where the main site will occupy a planned area of 50,000 square metres); the assembly of industrial facilities such as the sleeper manufacturing plant, in the Triunfo area (capacity of 1,600 pieces/day), prefabricated plants (caissons, beams), crushing plants and hydraulic concrete plants; maritime transport of railway equipment planned for the execution of the work; creation of pathways for vehicles and pathways for large mammalian fauna, among others.

As for the direct and indirect benefits of the Mayan Train which will serve as a passenger and cargo transport, it is worth mentioning the savings of 46% of travel time for people who change their mode of transport, while users who stay on the roads will save on average 12.5%; an increase in the stay of tourists in the region generating 8%

more tourist nights in the area in the first year and 17.5% for 2030; and the transported cargo increasing from 2.4 to 10 million metric tonnes per year.

Additionally, the project will change the mode of passenger transport in the area, capturing 16% of demand in 2023 (first year of operation) and 27% of the total in 2052. Over half of these will be Mexicans, whether tourists or locals.

The Mayan Train is aligned with the National Development Plan for 2019–2024 (NDP) and, overall, plans to generate around 80,000 jobs in the remainder of the year, and 150,000 in the second year of work, with a special emphasis on the regions so far less developed, enabling a balanced domestic development. 

⊙

The Mayan Train represents the start of a new tourism model focused on the preservation of ecosystems, tourist places and local cultures.



**PERU** 

# SUCCESSFUL COMPLETION OF THE WORKS ON THE UCRO II SNOW DAM

DAM LEVEL INCREASED TO AN ALTITUDE OF 4,593 METRES.



Mota-Engil Peru finished the construction of the 4<sup>th</sup> phase of the Ucro II snow dam, for Raura S.A., a mining company.

he work consisted of increasing the level of the dam from an altitude of 4,589 metres to an altitude of 4,593 metres and was carried out in two distinct phases.

Also included were the foundation works for the infrastructure, a drainage system within the dam, a reservoir lining system, and a growth of the dam with structural filling.

Once completed, the project should store an approximate volume of 475,381 cubic metres of tailings. 

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# FOUNDATIONS (AND EARTHMOVING)

 Simple cutting and removal of inappropriate material (variable depth), D = 5.8 km: 90,233 cubic metres

# **GEOSYNTHETICS:**

- Placement of sandbags in rocky areas: 10,660 square metres
- Installation of GCL: 25,088m<sup>2</sup>
- Installation of 1.5 mm smooth HDPE geomembrane: 25,264.35 square metres







**PERU** 

# MOTA-ENGIL PERU CONCLUDES PORT CONSTRUCTION PROJECTS

PORT OF SAN MARTÍN AND PORT MARINE PROJECT COMPLETED ON SCHEDULE.



n recent years, Mota-Engil Peru has successfully participated in several port works, meeting the deadlines set by the country's National Port Authority. Among the most recent are the first stage of construction of the Port of San Martín (moorings 3 and 4) and the Port Marine project.

### PORT OF SAN MARTÍN

The works of this first stage included the demolition of the existing port and the construction of 350 metres of reinforced concrete quays (beams, capitals, slabs, among others) with a width of 39.5 metres,

supported by 360 steel piles with a diameter of 914 millimetres and a width of 21 millimetres.

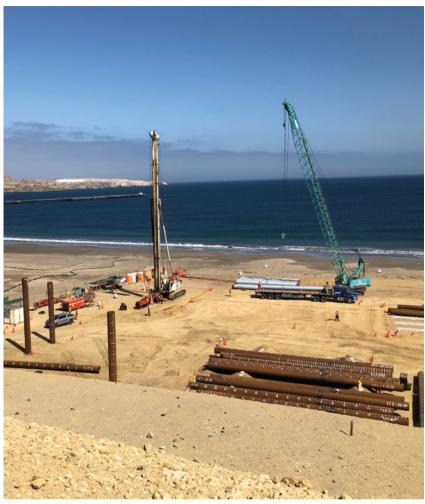
Additionally, it has 20 side defences and 20 boat moorings (bollards) for the berthing and mooring of ships, six metallic emergency stairs and 400 metres of protective breakwater.

For the construction of the breakwater, 28,340 square metres of Colchacreto was used, in an innovative process that consisted of the installation of a Fortex 40 geotextile blanket with industrial

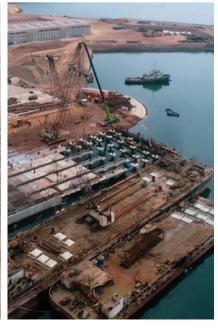
seams for the unloading of concrete that, soaked in the blanket, will provide protection to the submerged slope.

### PORT MARINE

The project for Marcobre S.A. in San Juan Bay includes several infrastructures to support the mine's operation, namely the construction of a multi-buoy terminal for the reception of sulphuric acid, terrestrial and maritime infrastructures associated with the seawater collection system, as well as the installation of fixed piping for the pumping of acid. ●









# PORTO DE SAN MARTÍN:

- 360 steel piles
- construction of 350 metres of reinforced concrete quays
- 400 metres of protective breakwater
- 28,340 m<sup>2</sup> of Colchacreto

# PORT MARINE:

- 69 piles
- 3 caisson-type intubated perforations
- 500 metric tons of metal structures for the quay
- 420 running metres of stainless steel piping for acid transport
- 620 running metres of HDPE piping for seawater transport to the storage tanks



**PERU** 

# MOTA-ENGIL PERU IN THE REHABILITATION OF THE DAMS OF TOQUEPALA

COMPANY RETURNS TO THE SOUTHERN PERU COPPER CORPORATION PROJECT.



our years after completion of the work on the anchored wall of Toquepala, Southern Peru Copper Corporation awarded Mota-Engil Peru (MEP) the rehabilitation of the dams in the same project.

The works include several activities among, which the clearance and rehabilitation of two dams located in the ravines of Santallana (DC-1, DC-2, DC-3) and Huacanane (PF-5), in order to increase their containment capacity and minimise the risk of overflow resulting from potential natural phenomena.

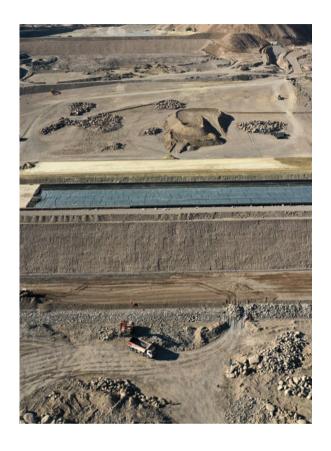


The project also includes the design and construction of an additional dam (DC-4) as a contingency plan for the possibility of future occurrences.

This new contract award reinforces the business relationship with this important client from the mining sector and enables MEP to continue participating in this sector's main infrastructure projects in the country.

# RELEVANT QUANTITIES (IN M3):

	Rehabilitation	Construction	Total
Clearance	2,377,292	-	2,377,292.00
Embankment	499,036	679,472	1,178,508.00
Excavation	385,471	230,514	615,985.00
Concrete	15,123	8,837	23,960.00
Geosynthetics	210,084	192,331	402,415.00



PERU

# **CORPORATE VOLUNTEERING**IN PERU

In partnership with Crea+.



Mota-Engil Peru and the Manuel António da Mota Foundation (FMAM) carried out the annual volunteer action "Construyendo Sonrisas" with the support of Crea +. The 30 volunteers from MEP joined with members of this association to support students at Ollantay State School No. 6038 in San Juan de Miraflores in multidisciplinary workshops.

With this programme, MEP and the FMAM help to stimulate the children's creativity, to enhance talent and to strengthen their personal safety. •



**BRAZIL** 

# **ECB BUILDS**THE TORTO DAM

ANOTHER IMPORTANT JOB FOR VALE.





he construction work of the Torto Dam for Vale in Brazil is moving forward at a good pace.

Taking place since September 2018, and with a contract value of around 186 million reais (approximately 29 million euros), the contract includes the execution of a foundation block on soils with a volume of around 1.8 million cubic metres.

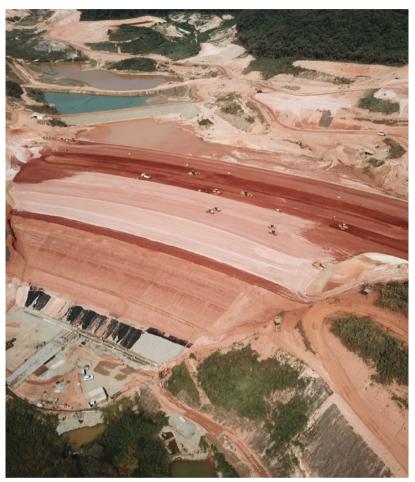
The work is being carried out on a 16-hour-day shift schedule, with a team of 800 employees and using equipment such as 15 crawler tractors, 16 hydraulic

excavators, 4 wheel loaders, 10 motor graders, 9 roller compactors, 13 wheel tractors with disc harrows, 3 drills, 174 dump trucks, 2 platforms and 9 water tanker trucks, in addition to other auxiliary equipment such as water pumps and lighting towers, among others.

This dam is located near the Laranjeiras Dam, the current structure used by Vale to store part of the waste generated by iron ore mining at the Brucutu mine in São Gonçalo do Rio Abaixo, in the state of Minas Gerais. The Torto Dam, and later the Tamanduá Dam, will also contain the tailings generated by the mine.

With a height of 55 metres, the Torto Dam will have a storage capacity of 16.4 million cubic metres, which will give it a service life of 18 months, since the average production of tailings in the mine is around 10.8 million cubic metres/year.

The work is scheduled for completion in January 2021.  $\odot$ 





# RELEVANT FIGURES

# **Contract value:**

29 million euros

# Volume (soils):

1.8 milion cubic metres

Height: 55 m

Storage capacity:

116.4 million cubic metres







COLOMBIA

# **CAMBAO**MANIZALES PROJECT

# CONNECTIVITY FOR COLOMBIA.





# THE PROJECT IS SPLIT INTO FIVE FUNCTIONAL STRETCHES:

Functional Unit 1 Ibagué - Armero: 76.7 km

Functional Unit 2 Cambao - Honda: 68.8 km

Functional Unit 3
Armero - Murillo: 55.7 km

**Functional Unit 6** 

Functional Unit 5

Murillo - Alto Ventanas: 24.7 km

Alto Ventanas - Hope: 29.9 km



ota-Engil is proud to be taking part in the Cambao-Manizales project, and is contributing

with its experience and endeavour to carry out a project that will have a major impact on inter-district connectivity in Colombia.

Implemented in the districts of Tolima (90%) and Caldas (10%), the project will connect Cundinamarca and Eje Cafetero, between the north and south of Tolima, and will encompass other national concessions, such as the connection from Bogotá (via Calle 80 towards Ruta del Sol 1) to Honda, and the Pan-americana Concession from Funza, Mosquera, Albán to Cambao.

Mota-Engil Colombia will restore and improve the existing corridor,

guaranteeing the highest quality standards for projects of this magnitude.

A major contribution to reducing the environmental impact of the project is to use cutting-edge technology, whereby 60% of the quarry material in one of the asphalt layers is replaced with recycled material from the existing asphalt.

# THE MAIN BENEFITS OF THE PROJECT ARE AS FOLLOWS:

- provides an alternative road route between the capital of the country and Eje Cafetero;
- cut travel time between the capital of the country and Manizales by approximately 1.5 hours;



- increase the agricultural productivity in northern Tolima, mainly from the municipalities of Líbano and Murillo to the rest of the country; and
- boost tourism, taking advantage of the natural beauty of the Parque de los Nevados.

The impact of this project will not only become apparent upon its completion, given that Mota-Engil will use local workers for the most part, thus generating added value from the social and economic point of view for the surrounding population. 

●

This project will have a major impact on inter-district connectivity in Colombia.





**PORTUGAL** 

# MANUEL ANTÓNIO DA MOTA AWARD 11<sup>TH</sup> EDITION

# 10 FINALISTS CHOSEN.



This will be followed by the evaluation of the applications by the selection jury and the process of choosing the winning application which, in accordance with the Regulations of the Award, involves the assessment of the competing projects on site. he selection committee composed of representatives of the Manuel António da Mota

Foundation and TSF – Rádio Notícias (an all-news radio station), decided to promote the following 10 institutions to the 2<sup>nd</sup> Phase:

- Associação de Recolha de Excedentes Alimentares (AREA)
- Associação de Socorros Mútuos Mutualista Covilhanense

- Associação para o Desenvolvimento do Centro Académico de Investigação e Formação Biomédica do Algarve, AD-ABC
- Associação Protetora dos Diabéticos de Portugal (APDP)
- Associação Tempos Brilhantes
- Centro Social 6 de Maio
- Crescer na Maior Associação de intervenção comunitária





















- Pista Mágica Associação
- Santa Casa da Misericórdia de Ovar
- Universidade de Trás-os-Montes e Alto Douro (UTAD)

This will be followed by the evaluation of the applications by the selection jury and the process of choosing the winning application which, in accordance with the Regulations of the Award, involves the assessment of the competing projects on site, an action that is part of the set of stories that TSF – Radio Notícias will carry out with each of the finalist institutions.

Our congratulations to the finalist candidates, and a very special greeting to all the institutions that honoured us with their application and to whom we would like to express our deepest gratitude. •

# **PORTUGAL**

# AJUDA-ME

# Foundation and Mota-Engil create platform.

The Foundation and Mota-Engil created the "AJUDA-ME" (HELP ME) computer platform to respond to the epidemic outbreak that we are experiencing, thinking of all Mota-Engil employees, especially those around the world.

In a very simple way, it enables an employee or someone in their family to ask for help, and for another employee to provide that help. The requests can be as diverse as, for example, support for a distant relative or a computer loaned

to a child who is in remote learning, among several others.

Support can be given in Portugal, but also in another country where the family of an employee needs help and another employee from that country can provide it. 

Output

Description:



PLATAFORMA "AJUDA-ME"
To respond to the epidemic outbreak that we are experiencing





# **PORTUGAL**

# COVID-19

# Foundation in solidarity with the institutions.

The epidemic crisis that hit Portugal from March onwards caused profound changes in the lives of all Portuguese people and severely affected a large number of social economy institutions, especially the IPSS (private social solidarity institutions). Faced with numerous requests for support, the Foundation helped a wide

range of institutions to purchase personal protective equipment for their workers and beneficiaries, also mobilising efforts to support the provision of emergency food aid to many people and families who have seen their situation of economic and social vulnerability worsened. 

•

**MEXICO** 

# **FUNDO 1+2**

# Supports Mexican children.

Fundo 1+2 was created by the Foundation and Mota-Engil to support employees anywhere in the world in social emergencies.

Recently, the Fund supported the purchase of a special wheelchair for a Mexican child, the daughter of an employee serving in that country. •





### CENTRAL AFRICAN REPUBLIC

# BANGUI PAEDIATRIC HOSPITAL

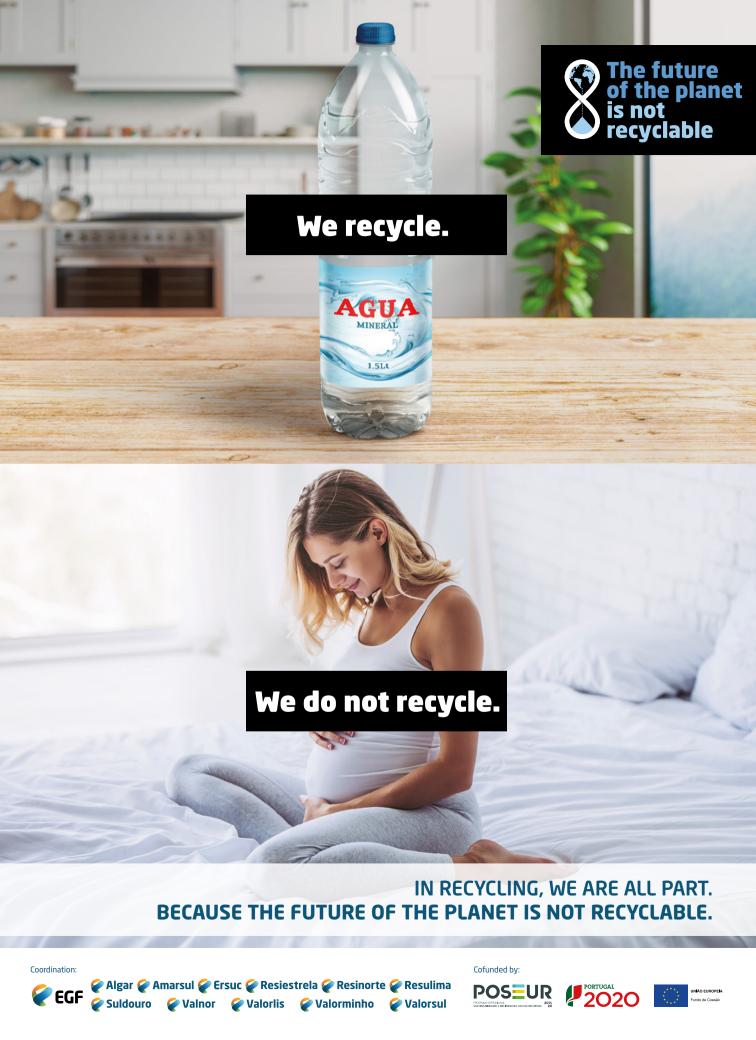
# Foundation in support of health in the Central African Republic.

Last July, the Portuguese servicemen of the 7<sup>th</sup> National Deployed Force in the Central African Republic carried out a solidarity action, in which they distributed assorted hospital and sports material and toys to the Paediatric Hospital and University Centre of Bangui.

According to a note from the General Staff of the Portuguese Armed Forces, "the collection of these goods took place during the period of preparation of the Force and had the collaboration of several entities, namely the Portuguese Handball Federation, Associação Pró-Infância Nuno Álvares (a pro-infancy association), Centro Social São José de Cluny (a social centre) and Colégio Nossa Senhora da Assunção (Our Lady of the Assumption Catholic School of the Society of St. Joseph of Cluny).

The Manuel António da Mota Foundation also joined the Portuguese Army's solidarity effort through the donation of the products required for the maintenance of the hospital's infrastructure. •

The Manuel António da Mota Foundation also joined the Portuguese Army's solidarity effort.



# A World of Inspiration



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