

Where energies make tomorrow ●

Technip Energies in Africa

More than 60 years of successful
engineering, project delivery
and capacity building



TECHNIP
ENERGIES

A unique offering

Technip Energies is a leading engineering and technology company serving the energy industry and its transition. Through our extensive portfolio of technologies, products and services, we break boundaries, bringing our clients' innovative projects to life while accelerating the energy transition for a better tomorrow.

A PRESENCE ACROSS THE ENTIRE VALUE CHAIN

PROJECT DELIVERY

- Project management
- Engineering, Procurement and Construction
- Technology integration on complex projects
- Digital applications for project execution and safe and cost-effective operations and maintenance
- Project financing

TECHNOLOGY, PRODUCTS AND SERVICES

- Process technologies and licensing
- Proprietary products: Loading Systems and Cybernetix
- Concept, feasibility, FEED studies
- Advisory Genesis
- Project Management Consultancy

FULL COVERAGE OF DIVERSE MARKETS

- LNG & gas monetization
- Sustainable chemistry
- Hydrogen
- CO₂ management
- Offshore
- Refining
- Ethylene
- Petrochemicals
- Fertilizers
- Mining & metals
- Nuclear
- Life sciences
- Agritech




Your partner in Africa


As a leading engineering and technology company for the energy transition, Technip Energies has delivered more than 100 successful projects in Africa during the past six plus decades. We offer technological solutions, products and services as well as turnkey contracting and construction expertise in downstream, particularly LNG, Gas-to-Power, mining & metals and offshore businesses, including floating and fixed facilities.

Accelerating the energy transition for a better tomorrow


- Skilled workforce based in regional offices
- On average 80% local employees
- The world's largest FPSOs
- Africa's largest LNG plants
- Africa's first new-built FLNG



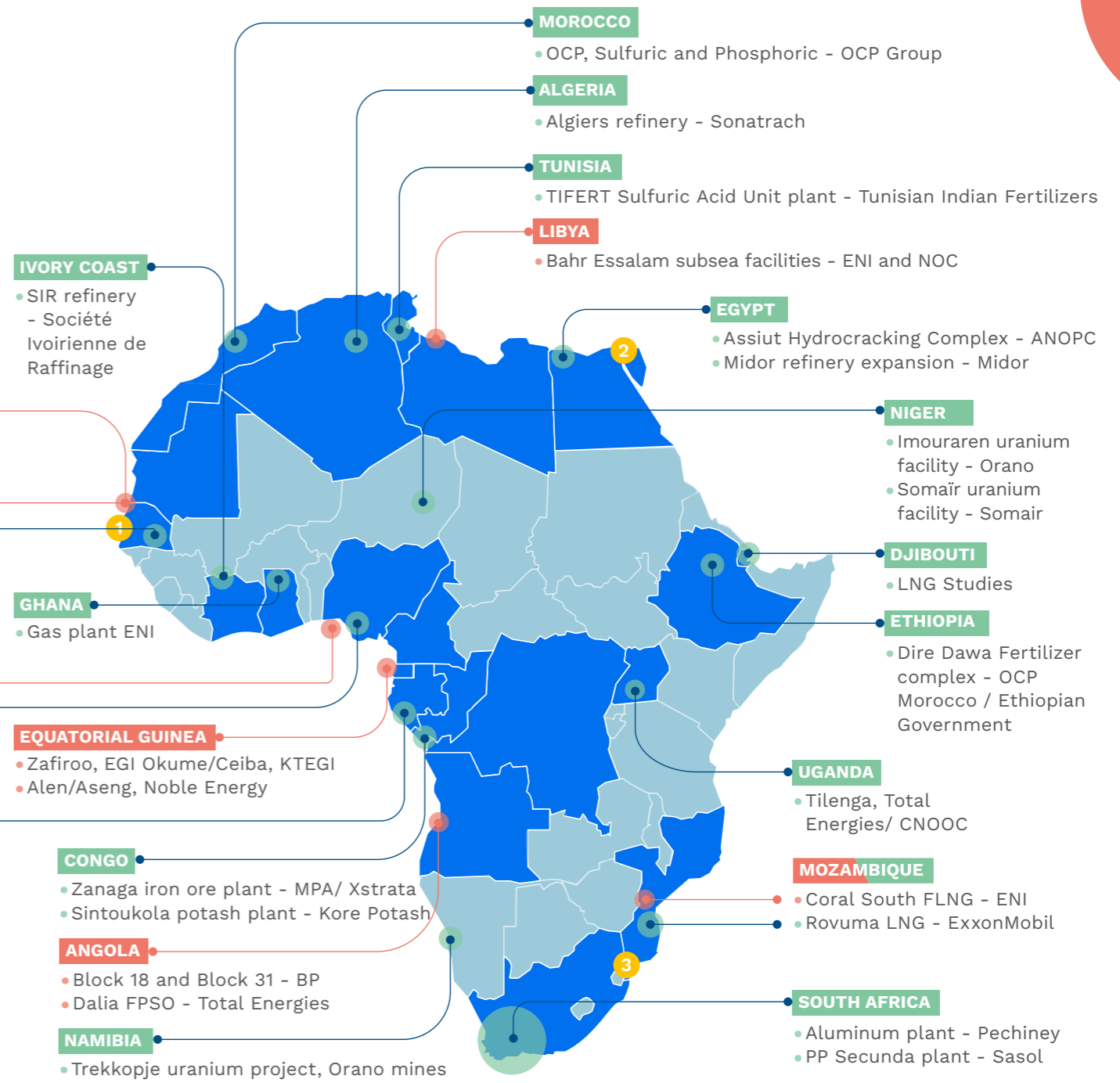
60+
YEARS IN AFRICA



100+
PROJECTS



80%
LOCAL EMPLOYEES



MAURITANIA
• BP Tortue/ Ahmeyim FPSO

SENEGAL
• BP Tortue/ Ahmeyim FPSO
• SAR Refinery Upgrade - Société Africaine de Raffinage
• ICS fertilizer plant, Industries Chimiques du Sénégal

NIGERIA
• Akpo FPSO - Total Energies
• Bonny Island LNG Plant - Nigeria LNG Limited

GABON
• Olam ammonia urea fertilizer plant - Gabon Fertilizer

GHANA
• Gas plant ENI

EQUATORIAL GUINEA
• Zafiroo, EGI Okume/Ceiba, KTEGI
• Alen/Aseng, Noble Energy

CONGO
• Zanaga iron ore plant - MPA/ Xstrata
• Sintoukola potash plant - Kore Potash

ANGOLA
• Block 18 and Block 31 - BP
• Dalia FPSO - Total Energies

NAMIBIA
• Trekkopje uranium project, Orano mines

MOROCCO
• OCP, Sulfuric and Phosphoric - OCP Group

ALGERIA
• Algiers refinery - Sonatrach

TUNISIA
• TIFERT Sulfuric Acid Unit plant - Tunisian Indian Fertilizers

LIBYA
• Bahr Essalam subsea facilities - ENI and NOC

EGYPT
• Assiut Hydrocracking Complex - ANOPC
• Midor refinery expansion - Midor

NIGER
• Imouraren uranium facility - Orano
• Somair uranium facility - Somair

DJIBOUTI
• LNG Studies

ETHIOPIA
• Dire Dawa Fertilizer complex - OCP Morocco / Ethiopian Government

UGANDA
• Tilenga, Total Energies/ CNOOC

MOZAMBIQUE
• Coral South FLNG - ENI
• Rovuma LNG - ExxonMobil

SOUTH AFRICA
• Aluminum plant - Pechiney
• PP Secunda plant - Sasol

TECHNIP ENERGIES REGIONAL OFFICES:

- 1 DAKAR, SENEGAL
- 2 CAIRO, EGYPT
- 3 MAPUTO, MOZAMBIQUE

ONSHORE PROJECTS

OFFSHORE PROJECTS

Accelerating the energy transition for a better tomorrow

Through extensive experience, technologies, project management, integrated expertise and EPC capabilities, we continue to break boundaries and accelerate the journey to a low-carbon society.

We have defined 4 main pillars through which we are addressing the energy transition:

Strategic flexibility

We provide architect mindset meeting our customers needs from energy source to end-use

- Feedstock agnostic - outstanding energy molecule transformations capabilities
- Technology-driven - integrate complex technologies, including proprietary, to meet project specificities and economic hurdles

Exceptional execution

We offer proven operating model, highly applicable to sustainable energy solutions

“Applying our core capabilities to today and tomorrow’s key energy challenges”



LNG

Onshore and offshore liquefaction



Sustainable Chemistry

Biofuels, biochemicals, circular economy



Carbon-Free Energy Solutions

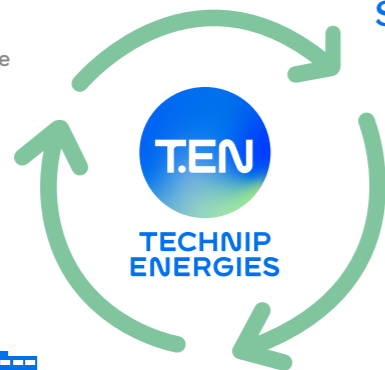
Green hydrogen, offshore wind, nuclear



Decarbonization

Energy efficiency, blue hydrogen, CCUS*

*CCUS: Carbon Capture, Utilization and Storage



From feasibility studies to project delivery and beyond

Project Phase	Scope	
Genesis Conceptual Studies	<ul style="list-style-type: none"> • Master plan development • Feasibility studies • Concept screening and select stage studies • Field development studies 	<ul style="list-style-type: none"> • Master plan development • Screening and assess stage studies • RAM studies • Flow assurance • Rigorous blowdown modeling
Project Definition	<ul style="list-style-type: none"> • Basic engineering 	<ul style="list-style-type: none"> • Front-end engineering design
Project Execution	<ul style="list-style-type: none"> • Project management • Detailed engineering • Procurement • Inspection, expediting • Yard fabrication 	<ul style="list-style-type: none"> • Logistics and transport • Construction, installation, hook-up, commissioning and startup; Performance testing • O&M support
Technology Selection	<ul style="list-style-type: none"> • LNG & Gas • Hydrogen • Decarbonization • Sustainable Chemistry • Floating Wind 	<ul style="list-style-type: none"> • Mining & metals • Ethylene • Refining • Petrochemicals and Polymers • Fertilizers
All Project Phases PMC	<ul style="list-style-type: none"> • Specialist consultancy services • Owner’s engineer 	<ul style="list-style-type: none"> • Project management consultancy



A long-standing commitment to Africa

Since 1958, Technip Energies has demonstrated an enduring commitment to Africa by maintaining local engineering offices in key countries across the continent.

Maputo Office, Mozambique

Since 2014, we have consolidated our presence in Mozambique with our first major award, the Coral South FLNG Project. We have also created the first engineering company in Mozambique through a joint venture with the Empresa Nacional de Hydrocarbonetos Logísticos. The majority of our workforce is Mozambicans.



New Cairo Office, Egypt

Our involvement in Egypt dates from the mid-1970s where we have completed more than 30 projects in offshore, refining, petrochemicals and diversified industries. Our office facilities in New Cairo offer operational, logistic, security and financial support to all our projects and entities in the country. Our permanent staff provides clients with full-service offerings and technologies in all segments of operations from feasibility studies and FEED to lump sum EPC and project management consultancy.



Dakar Office, Senegal

In Senegal, we have built a sustainable and diversified presence with major projects involving acid plants, fertilizer plants and refinery upgrades. In 2017, we have opened an office in Dakar to support the local energy industry and offer a solid, reliable and long-term partnership and expert capabilities. Our ambition is to invest in education, to build and strengthen partnerships with universities and institutes like INPG, develop technology transfer with Petrosen & COS Petrogaz, provide training and recruitment of local talents as well as promoting industrial investment.



Developing human capital & engineering expertise in Africa

Relying on local resources is part of Technip Energies' strategy to contribute to long-term business development and economic growth in Africa. The communities we work with are key stakeholders for projects we deliver. Our efforts include employing a national workforce, providing training to local talent and working with local suppliers.

People

- Employing a national workforce at an average rate of 80 percent
- Training and developing local talent



Capabilities and facilities

- Partnering with NOCs to transfer technology
- Supporting local operations by investing in world-class facilities and equipment

Academia and CSR projects

- Partnering with local universities to advance the next generation of engineers through lectures, scholarships, internships, material support such as equipment.
- Promoting education by building schools and providing school supplies
- Supporting health care by helping to prevent infectious diseases such as malaria, building nurseries and other facilities
- Protecting the environment by providing sustainable equipments such as solar panels and implementing tree planting initiatives
- Supporting CSR initiatives to contribute to the sustainable development of the communities



Supply chain

- Developing local suppliers in domains / disciplines linked with energies sector, such as logistics, machining, welding and fabrication.



Effective and sustainable financing solutions

We offer clients global industrial solutions focused on their project performance. We have strong connections with ECAs and capabilities to support project funding. We are committed to leading our clients through all study phases until plant construction and commissioning.

Technip Energies provides tailor-made and effective support solutions to facilitate the implementation of financing.

IMPLEMENTATION OF SELECTED FINANCING STRUCTURE UNTIL FINANCIAL CLOSURE

- Strong negotiating position with banks, owing to Technip Energies' use of a wide range of banking products and services
- Privileged relation with ECAs including BPI France, Sace (Italy) and Euler-Hermes (Germany) and detailed knowledge of process and expectations
- Hands-on experience with financial advisors and other key players such as ECA agent banks
- Project management track record and in-depth credit risk analysis of key players.

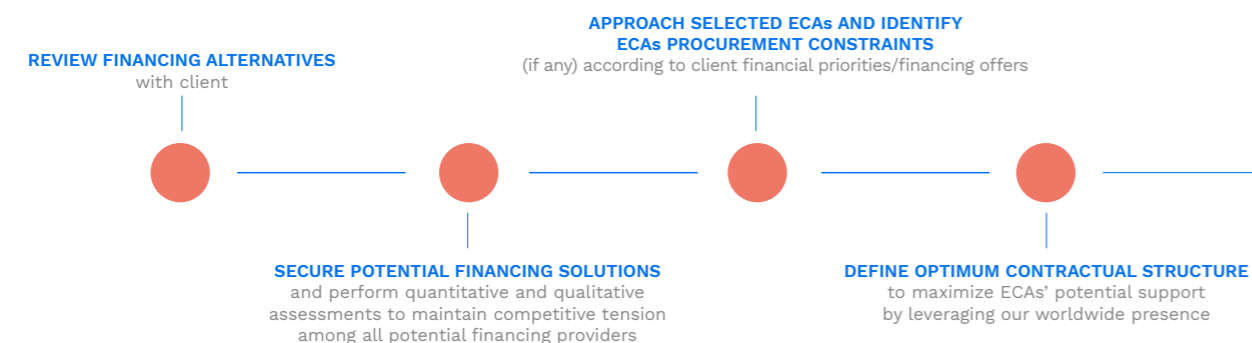
SUPPORT FOR SECURING FINANCING SOLUTIONS BY LEVERAGING OUR WORLDWIDE NETWORK OF FINANCE SPECIALISTS

- Getting involved at the early-stage to assess a project's bankability
- Providing an indicative view of potential financing sources' appetite and capacity
- Assessing possible financing structures
- Leveraging our global procurement to access reliable and favorable financing sources
- Reviewing alternative contractual structures to combine optimization of attractive financing sources and operationally efficient project management strategy
- Introducing and negotiating with financing partners to obtain best competitive offers

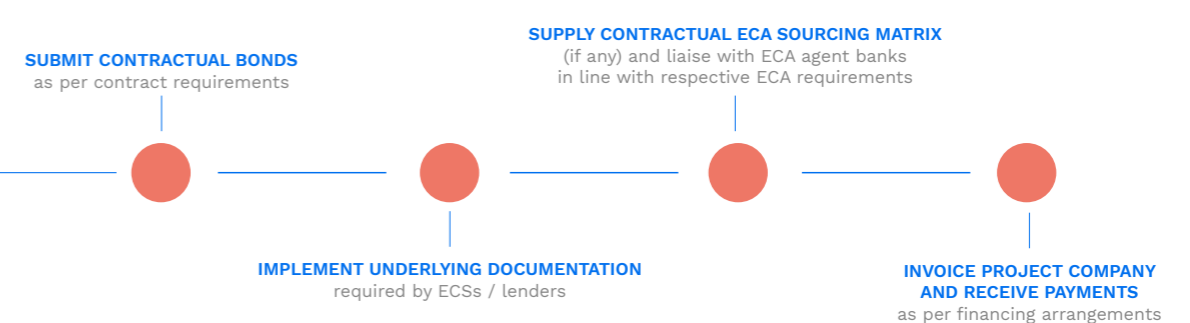
KEY PROJECT FINANCING REFERENCES

2015	2016 / 2017	2022
LUKOIL NEFTOKHIM BURGAS HEAVY RESIDUE PROCESS COMPLEX Corporate Finance with PCG from OAO Lukoil - SACE	YAMAL LNG Project Finance : BPI France / SACE / JBIC / China Exim / EXIAR / Euler Hermes	BAPCO MODERNIZATION PROJECT Project Finance: SACE / KEXIM / K-SURE / UKEF
DOFTECH DA - SKANDI ARTIC Corporate Finance: Eksporfinans	SKANDI AÇU Structured Corporate Finance	MIDOR REFINERY EXPANSION PROJECT Export Credit: SACE
TP-NPV SINGAPORE LTD DEEP ENERGY Corporate Finance with Multisource export credits: Finnvera / COFACE	ZAPSIB 2 / SIBUR PETROCHEMICAL COMPLEX (POLYETHYLENE) Export Credit: COFACE	
	CORAL FLNG Project Finance: BPI France / SACE / KEXIM / K-SURE / China Exim	

PRE-CONTACT AWARD



EXECUTION PHASE



A proven track record of successful projects

WE ARE A DIVERSIFIED PROVIDER OF PROJECTS, TECHNOLOGIES, PRODUCTS AND SERVICES. WE ARE A LEADER IN PROJECT DELIVERY WITH A STRONG HISTORY IN AFRICA. OUR ENGINEERING AND TECHNICAL EXPERTISE SUPPORTS A RENOWNED PROJECT MANAGEMENT MODEL.

- Feasibility studies
- Project management
- Financing
- Engineering
- Procurement
- Construction
- Commissioning
- Operations
- Plant expansion and debottlenecking
- Plant decommissioning

Technip Energies has successfully executed major projects in Africa from engineering studies to construction and commissioning. Our recent project awards are examples of our diversified capabilities, technological innovation and ability to respond to our clients' needs.



Our key references

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CORAL SUL FLNG

- **Contract:** EPCiC
- **Award:** 2017
- **Delivery:** 2023
- **Client:** Coral FLNG SA
- **Location:** Mozambique

Technip Energies' work on Coral South FLNG covered engineering, procurement, construction, installation, commissioning (EPCiC) and FLNG, as well as risers, umbilicals and subsea flowlines and equipment. This first newbuild FLNG reinforces the leadership of Technip Energies in FLNG.



BP TORTUE/ AHMEYIM FPSO

- **Contract:** FEED and EPCiC
- **Award:** 2017 & 2019
- **Client:** BP
- **Location:** Senegal / Mauritania

Technip Energies has been awarded a contract for an FPSO unit for the Tortue/Ahmeyim Field Development, a major LNG project located offshore on the maritime border of Mauritania and Senegal.



MIDOR

- **Contract:** EPC
- **Award:** 1997 and 2018
- **Delivery:** 2001 and 2021
- **Client:** Middle East Oil Refinery
- **Location:** Egypt

Technip Energies' long-standing relationship with Midor began in 2001 with the delivery of the Egyptian company's grassroots refinery. Over the years, we have worked on several expansions for Midor. In 2015, we finalized a joint agreement with SACE to ensure an export credit facility to support a major expansion and modernization project while carrying out early works services including FEED and open-book estimate.

BLOCK 18 AND BLOCK 31

- **Contract:** EPC
- **Delivery:** 2017
- **Location:** Angola
- **Award:** 2012
- **Client:** BP

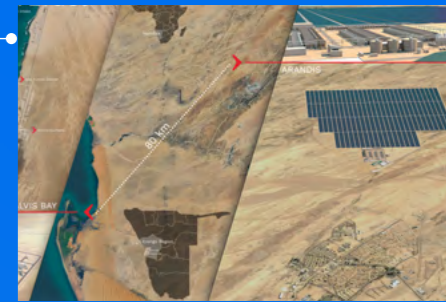
Technip Energies received a five-year frame agreement for engineering and modification services for FPSOs in Blocks 18 and 31, including procurement and management of offshore and onshore construction activities.



PV2FUEL

- **Contract:** Concept/PreFEED
- **Delivery:** Ongoing
- **Location:** Walvis Bay, Namibia
- **Award:** 2022
- **Client:** CMB Tech

PV2Fuel Project is a large integrated project to develop 1GW of renewable energy (Wind and Solar), 500 MW of water electrolyzers for the green hydrogen production and the production of 850 tpd Green Ammonia project. Technip Energies is leading the concept study and PreFEED of the PV2Fuel Project.



TREKKOPJE

- **Contract:** BFS to EP Services
- **Delivery:** 2011
- **Water depth:** Up to 1,200 m.
- **Location:** Namibia
- **Award:** 2008
- **Client:** Orano Mines

Technip Energies was awarded a contract for an uranium ore treatment plant to produce "yellow cake". The facility is located in western Namibia at approximately 65km north-east of Swakopmund.



BONNY ISLAND LNG TRAINS 1 - 6

- **Contract:** FEED and EPC for Trains 1 to 6
- **Delivery:** 1999 to 2007
- **Location:** Nigeria
- **Award:** 1995 to 2004
- **Client:** Nigeria LNG Limited

Bonny Island is the largest LNG complex in Nigeria. The FEED contracts awarded to Technip Energies for the first six LNG trains were followed by an EPC. The overall production capacity of the six LNG trains reaches 22 mtpa of LNG and 4 mtpa of LPG and condensate.



ONSHORE RECEIVING FACILITIES (ORF)

- **Contract:** EPC
- **Award:** 2016
- **Delivery:** 2018
- **Client:** ENI Ghana E&P Limited
- **Location:** Ghana

Technip Energies was awarded a contract for the onshore part of the OCTP development of the Sankofa field offshore Ghana. We were set to perform project management and EPC for the onshore receiving facilities in Sanzule.

ICS2

- **Contract:** EPC
- **Award:** 1998
- **Delivery:** 2001
- **Client:** Industries Chimiques du Sénégal (ICS)
- **Location:** Senegal

Technip Energies was awarded the expansion of a fertilizer plant comprising a phosphoric acid unit with a production capacity of 1,015 tons per day and a sulfuric acid unit with a production capacity of 3,000 tons per day, plus utilities and storage.



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