Angola Oil & Gas Conference

1st - 3rd October, 2024

OIL AND GAS SECTOR DEVELOPMENT AND CONSOLIDATION PROGRAM

As a vertically integrated company in the oil and gas value chain, Sonangol's actions are aligned with the objectives of the NDP 2023-2027 for the oil and gas sector, with direct intervention in five specific objectives.

1. **Promote and intensify the replenishment of reserves, aiming to mitigate the sharp decline in hydrocarbon production**
2. **Ensure self-sufficiency in refined products**
3. **Ensure the supply of natural gas to the fertilizer and steel industries and for the production of electricity**
4. **Improve the distribution of fuels and lubricants throughout the country**
5. **Promote industry coordination and operational efficiency initiatives**
6. **Ensure the implementation of the green hydrogen project to guarantee the production of green ammonia (NH3)**
7. **Continue to promote support infrastructures, human capital development and social responsibility actions**

STRATEGIC GUIDELINES & STRATEGIC OUTLOOK | 2024-2030

In the context of the energy transition, Sonangol has adopted a portfolio diversification strategy for the period 2023-2030, with a focus on hydrocarbons as the basis for financing the transition to cleaner energies.

MISSION

- Act on the sustainable development of the energy industry, including hydrocarbons, ensuring more value for shareholders and society.

VISION

- To become the reference integrated energy company on the African continent, sustainable and committed to the environment.

VALUES

- Ethical Conduct;
- Respect for Safety and the Environment;
- Rigor and Discipline;
- Results Orientation;
- Collaboration;
- Innovation.

Oil → Gas → Renewables

I. Increase the share of crude and natural gas operated production 2% → 10%

II. Increase the internal capacity to process Crude Oil, to reduce national dependence on refined products imports and develop petrochemical complexes 65Kbpd → 425Kbpd + 1 Complex

III. Produce electrical energy from renewable sources 2027: 450 MW

IV. Increase storage capacity, optimize and make logistics, distribution and marketing services of refined products profitable +580.000 m^3

V. Control and reduce CO_2 emissions from exploration, production and refining operations 2030: ↓15%

VI. Decrease carbon footprint with the implementation of the Sonangol "Carbono Azul" Project, including mangrove plantations and other initiatives 14,6 MM Ton/CO2e Year

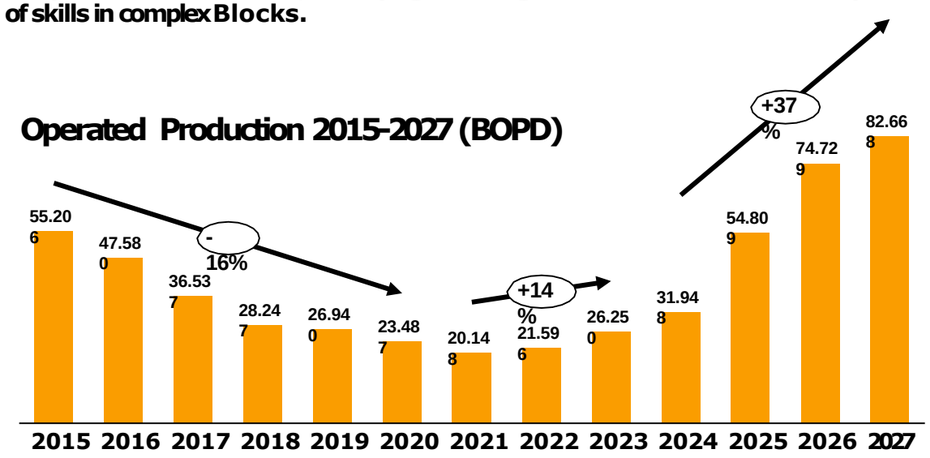
VII. Optimize organisational development and invest in human and technological capital to increase the company's productivity.

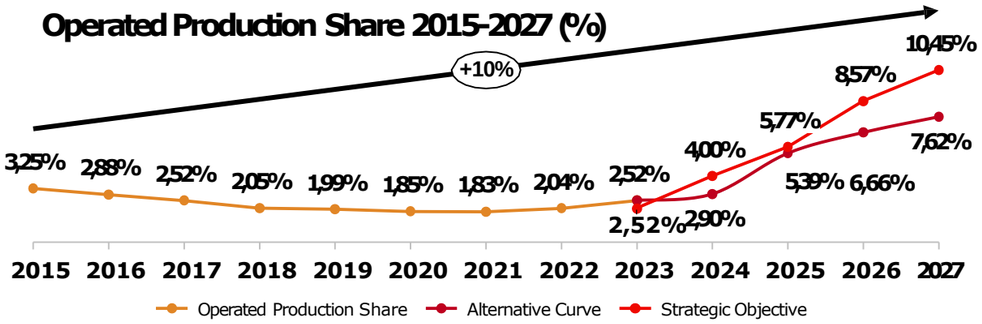
VIII. Disperse the company's share capital on a stock exchange Up to 30%

EXPLORATION & PRODUCTION

PROMOTE AND INTENSIFY RESERVE REPLENISHMENT, MITIGATE THE DECLINE IN HYDROCARBON PRODUCTION (1/2)

Sonangol's Exploration and Production strategy is based on consolidating its position as an operator of mature fields, developing knowledge in onshore and in the development of skills in complex Blocks.





Increasing Operated Production Share

Main Highlights:

- **2019**: Strategy design and goal definition;
- **2020-2021**: COVID-19 Impact
- **2022**: Impact of Workovers and water injection in Block 3/05
- **2023**: Re-launch of **Block 3/05A** production, increased water injection, light interventions
- 30% increase of **Block 3/05** production in 2023: +6 000 BOPD
- April/2024: Average Production: 26 000 BOPD (2,4%)
- **2024**: Interventions planned in 15 wells in Block 3/05 with an impact of +4,000 BOPD
- **2024**: **Caco-Gazela** phase 2
- **2025**: **Pacassa Sudoeste**, **Punja** phase 1, **Búfalo Norte**, UM7
- **2026**: UM6
- **2027**: **Punja** phase 2, **Búfalo Norte** phase 2

With the reduction of the sharp decline in production between 2015 and 2020, the inversion of the production scenario is evident, with gradual increases in operated production having been recorded, the acceleration of which will present its results in the current cycle.

EXPLORATION & PRODUTION | PROMOTE AND INTENSIFY RESERVE REPLENISHMENT, MITIGATE THE DECLINE IN HYDROCARBON PRODUCTION (2/2)

- Advancements in exploration have identified a potential of more **than 1,5 billion Bbls of STOOIP in Block 5/06**.
- **F**ocused on increasing operated production ,supported by investments in improving operational efficiency (through Workover wells and Infill Wells in Block 3/05), we have registered the start of production in Block 3/05A (Caco-Gazela and Punja), and expect the start of production in the UM6/UM7 fields in Block 4/05 and KON 11 and KON 12.
- In terms of Non-Operated Blocks, an increase in production of around 78 million Bbls is expected by 2027, due to the start of production in Blocks 15/06, 17/06 and 20/11.

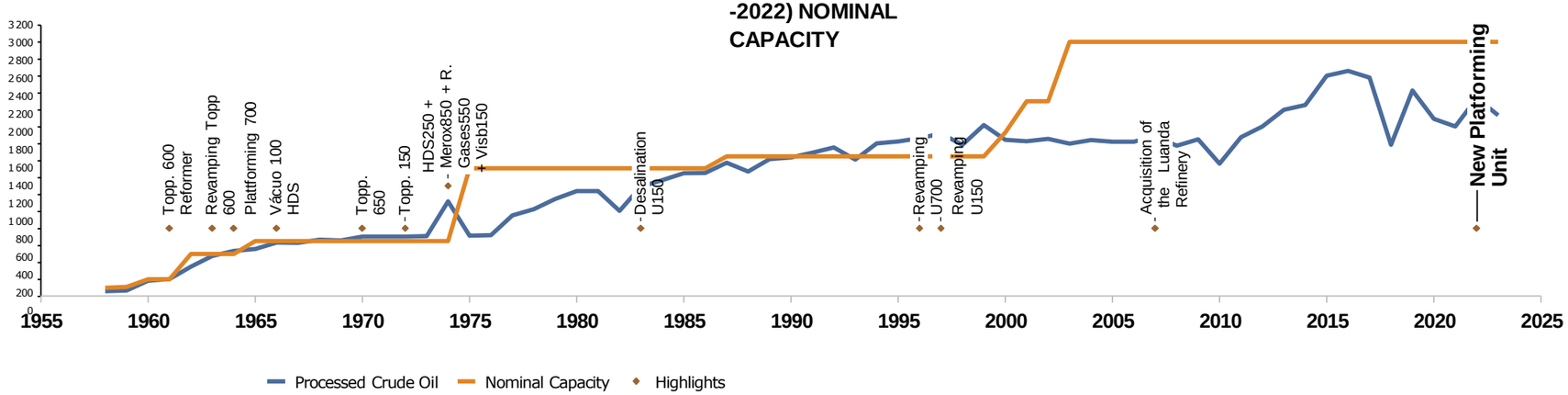
CRITICAL SUCCESS FACTORS

- Exploration success in **Blocks 5/06** and **27**
- Partial sale of the participating interest in the Operated Blocks (**Blocks 5/06 and 27** operated 100% by Sonangol)
- Sanction of development projects in the second quarter of 2024
- Financial availability of the members of the Contracting Groups of the Operated Blocks
- Cooperation in Block **20/11** with TOTAL and in Block **KON-4** with RSK

As part of efforts to boost and intensify reserves, exploration studies in Block 5/06 have identified a potential of more than 1,5 billion Bbls of STOOIP. In terms of production, an increase in production of 78 million barrels in non-operated blocks is expected by 2027

REFINING & PETROCHEMICALS | ENSURING SELF-SUFFICIENCY IN REFINED PRODUCTS (1/2)

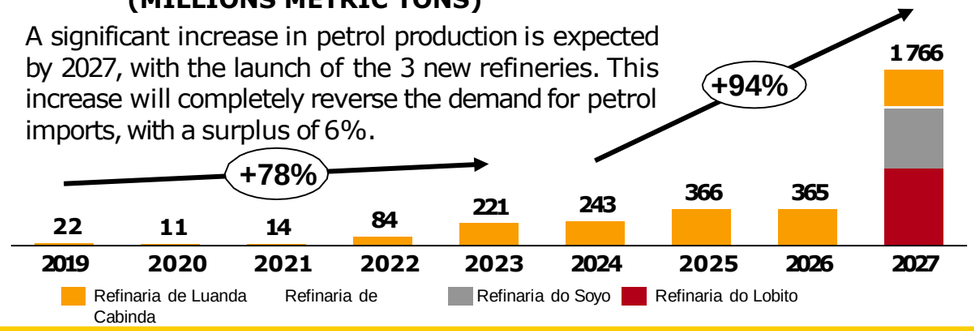
LUANDA REFINERY (1955 -2022) NOMINAL CAPACITY



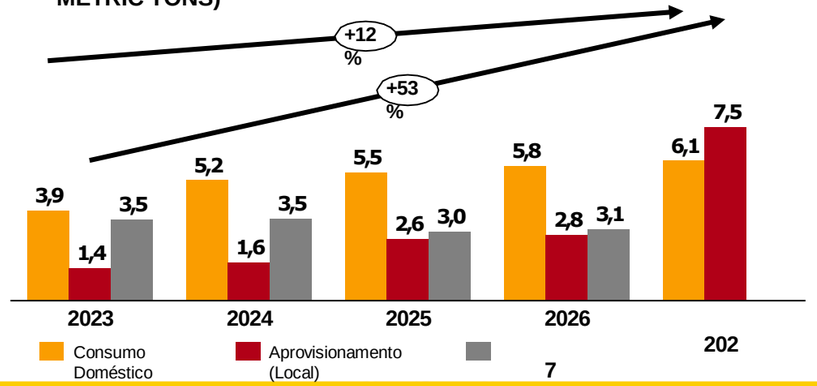
The start of operations of the Platforming Unit at the Luanda Refinery allowed an increase in annual gasoline production by 78% between 2019 - 2023

PETROL PRODUCTION AND OUTLOOK (MILLIONS METRIC TONS)

A significant increase in petrol production is expected by 2027, with the launch of the 3 new refineries. This increase will completely reverse the demand for petrol imports, with a surplus of 6%.



REFINERYPRODUCTIONAND OUTLOOK(MILLIONS OF METRIC TONS)



REFINING & PETROCHEMICALS | ENSURING SELF-SUFFICIENCY IN REFINED PRODUCTS (2/2)

Cabinda Refinery (2024)

60.000 BOPD (2 Phases)
Predicted Capacity

64,8% Completed (EPC 1st Phase – 30.000 BOPD)

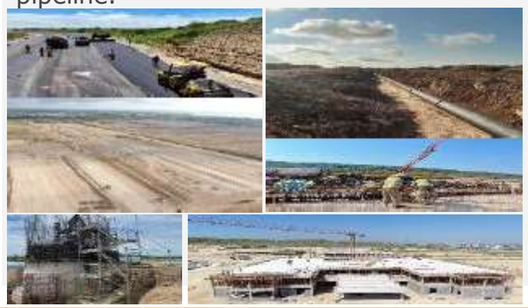
Assembly of the CDU, Installation of the Cathodic Protection System in the Tanks, Assembly of Piperacks 02/03 and Flare, Metalworking Completion of 4 tanks (T-50T-52 and T-79), Construction of the Water Lagoon and Water Wells.

Lobito Refinery (2027)

200.000 BOPD
Predicted Capacity

7,71% Completed

- Earthworks (crude tanks), Installation of water pipelines from Biópio to the Refinery; Approval of changes to the water pipeline route; Concrete structures for administrative buildings (100%);
- Approval of the execution schedule baseline and start of construction of the base;
- Review of the P&IDs as well as the 3D Design of the tanking unit and TEMAR connection pipeline.



Soyo Refinery (2026)

100.000 BOPD
Predicted Capacity

2% Completed (Preliminary Phase)

- Completion of the total demining and clearing of the **712ha** plot of land and the issuing of the demining quality control certificate;
- Completion of the process of compensation for the rural population.

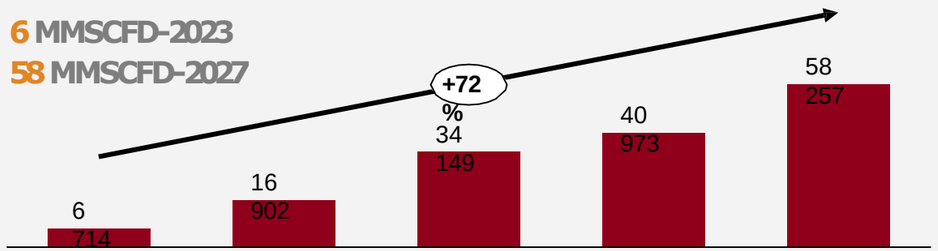
A substantial increase in processing is anticipated, driven by the entry into operation of the Cabinda, Lobito and Soyo refineries. With an expected average combined capacity utilization rate of 85%, a complete reversal of the import situation will be ensured from 2027 onwards.

GAS AND RENEWABLE ENERGIES| ENSURE THE SUPPLY OF NATURAL GAS TO THE FERTILIZER AND STEEL INDUSTRIES AND FOR THE PRODUCTION OF ELECTRIC ENERGY (1/2)

FALCÃO PROJECT

In 2023, Sonangol completed Phase 2 of Falcão Project, having commissioned the Gas Reception and Distribution Unit (GRDU) in Soyo, Zaire province. The completed infrastructure, comprised of Phase 1 (Pipeline) and Phase 2 (GRDU) is now able to transport, receive and distribute natural gas from the Angola LNG plant to the end users.

Natural Gas Sales Forecast 2024-2027 (MMSCFD)



125

Millions standard cubic feet per day of domestic natural gas (MMSCFD)

100%

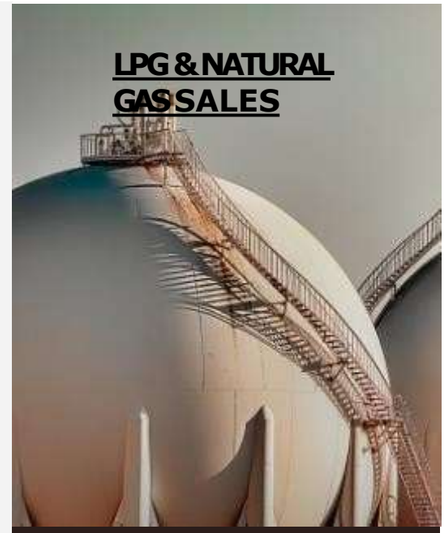
Launched on 14 December 2023

Main Users/Clients:

Soyo Combined Cycle Power Plant – Phase 1 (SCPP1)

AMUFERT Fertilizer Plant

LPG & NATURAL GAS SALES



With an average annual growth of 6%, sales are expected to rise from 501 MTM to 667 MTM between 2024 and 2027, while natural gas sales are expected to rise from 23 MMSCFD to 68 MMSCFD.

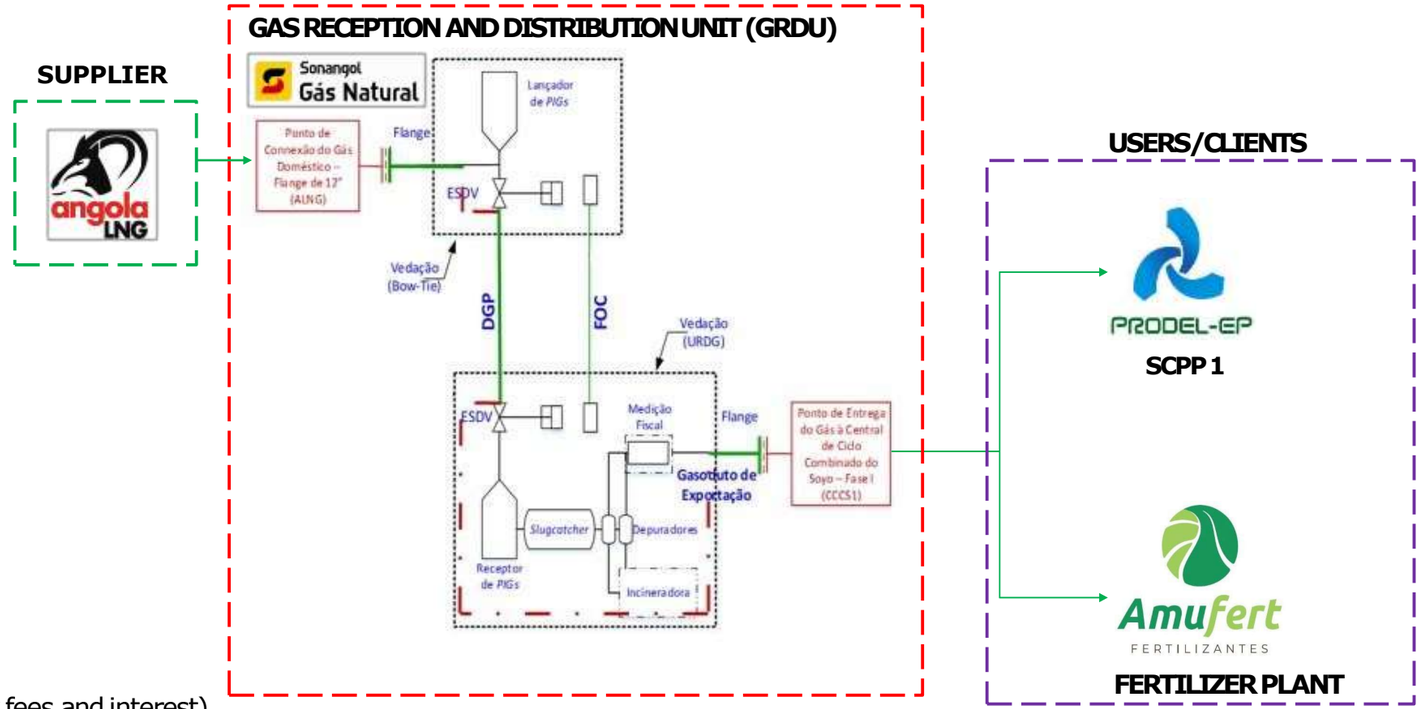
GAS AND RENEWABLE ENERGIES | ENSURE THE SUPPLY OF NATURAL GAS TO THE FERTILIZER AND STEEL INDUSTRIES AND FOR THE PRODUCTION OF ELECTRIC ENERGY (2/2)

AMUFERT FERTILIZER PLANT

Location: Soyo, Zaire, Angola
Total area: 152 hectares
Industrial Complex Area: 40 hectares
Main Consumptions:
- Natural Gas: 25 000 000 MMBTU/year (35 years)
- Electricity: 25 MW
- Water: 2 500 m3/hour

Products:
- Ammonia (Intermediate): 2 200 tonnes/day
- Urea (Final): 3 870 tonnes/day

Estimated Investment Value: $ 1.9 billion (excluding bank fees and interest)
Expected Start of Operations: 4th Quarter 2027
Project Status: Completion of the market study report (ammonia and urea), progress on the EIA study, site works, among other activities.



GAS AND RENEWABLE ENERGIES | ENSURE THE IMPLEMENTATION OF CLEAN ENERGY PROJECT S (1/3)

GREEN HYDROGEN PLAN (2027)

- **June 2022 -** MoU (Sonangol 50% vs Gauff 25% and Conjunta 25%)
- Production of green Hydrogen and Ammonia with expected production capacity of **342.000 MT/Year**
- Boost the national production sector and export to Germany and other European countries.
- Technical and economic feasibility studies and PRE FEED;
- **Março 2023** – MoU Sonangol vs RNT
- Agreed the price of electricity for connection to the Plant

ONGOING ACTIVITIES

- Negotiate the **Energy Supply Contract** (CFE) and **Partners Agreement** (SHA) by the beginning of the 4th Quarter;
- Preparations for the start of the **FEED**;
- Complete the process for the creation of the **SPV** by the beginning of the 3rd Quarter of 2024;
- Initiate the **processes for the licensing** of the company with AIPEX, MINEA, MINAMB, INRH, Government of the Bengo Province.

PROJECT SCHEDULE

CFE: Energy Supply Contract
PPA: power purchase agreement "power purchase agreement"
SPV: *Special purpose vehicle*;
SHA: *Share Holders Agreement*.

Ensure the implementation of the green hydrogen project to guarantee the production of green ammonia (NH_3)

GAS AND RENEWABLE ENERGIES | ENSURE THE IMPLEMENTATION OF CLEAN ENERGY PROJECT S (2/3)

CARACULO PHOTOVOLTAIC PLANT (NAMIBE)

First photovoltaic plant in **Namibe**

25 MW
Capacity (1st Phase)

46 000
Photovoltaic Solar panels

32,7GWh
Production in 1st year (2023)

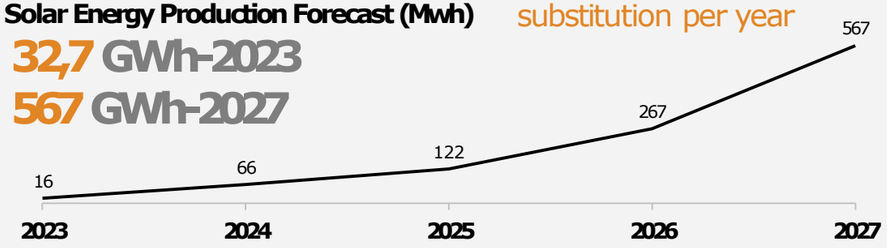
Estimated energy production for **7 000** residences

Lower electricity costs

18 million
liters of diesel substitution per year

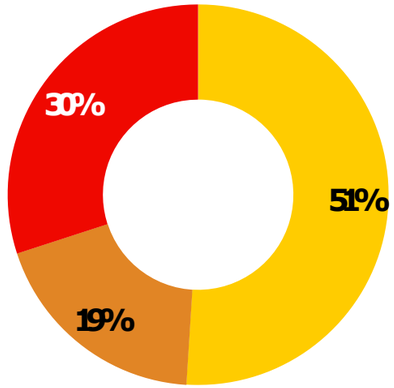
Solar Energy Production Forecast (Mwh)

32,7 GWh-2023
567 GWh-2027



QUILEMBA PHOTOVOLTAIC PLANT (HUÍLA)

The contracting process is underway for the construction of the generation infrastructure for the first **35MW** (Phase 1) and the corresponding interconnection with an extension to **80MW** (Phase 2).



10%
Level of Progress

- **TotalEnergies**
- **Greentech**
- **Sonangol Gás e Energias Renováveis**

During the cycle 2023-2027, with the start of operation of new infrastructures, energy production from renewable sources is expected to increase from 32,7 GWh to 567 GWh.

GAS AND RENEWABLE ENERGIES | ENSURE THE IMPLEMENTATION OF CLEAN ENERGY PROJECT S (3/3)

DECARBONIZATION THROUGHOUT THE OIL AND GAS CHAIN

ANDURI GAS STATION

The first gas station powered by renewable energy

It will result in a reduction in greenhouse gas emissions equivalent to 180 tons of carbon dioxide, a major contribution to improving the environment.

Total capacity - 56,6 KWp

Liters of diesel substitution per year – 50.000

CUBAL GAS FILLING STATION

The first gas filling station powered by renewable energy

Expected to reduce amount 100 tons of carbon dioxide.

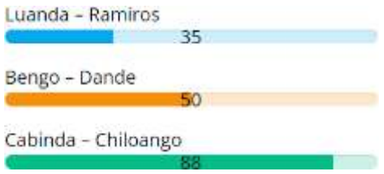
Total capacity - 28,8 KWp

Liters of diesel substitution per year – 17.000

Sonangol carbono azul

OTCHIVA

CARBONO AZUL IMPLEMENTATION



Define and harmonize the measurement methodology and subsequently implement reporting on greenhouse gas emissions

Acceleration and increase in mangrove plantation (Carbono Azul project); Increase in the recycling rate; Electrification of service stations using renewable energy sources; Consolidation and implementation of the actions of the Oil & Gas Decarbonisation Charter (COP28) initiative.

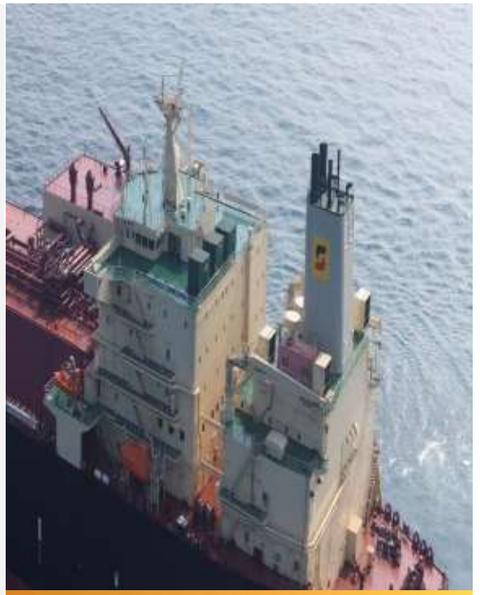
TRADING & SHIPPING | PROMOTE INDUSTRY COORDINATION AND OPERATIONAL EFFICIENCY INITIATIVES (1/2)

SHIP SHARING MODEL

10 Suezmax Vessels

3 LNGC Vessels

19 Cabotage Vessels
5 Owned +14 Third parties



TRADING & SHIPPING | PROMOTE INDUSTRY COORDINATION AND OPERATIONAL EFFICIENCY INITIATIVES (2/2)

DECARBONIZATION THROUGHOUT THE OIL AND GAS CHAIN

≈2,17 MM Ton. CO_2e in 2023

Measuring CO_2 Emissions in Upstream Operations

Kulumbimbi and Nginga Mbande Oil Tankers

Built with the most recent energy saving technology, these ships will contribute towards the process of decarbonizing waterborne transport, demonstrating the company's commitment to reducing the environmental footprint of maritime operations.

Sonangol continues to maintain its absolute commitment to environmental safety: no incidents involving discharged water that exceed the concentration limits for petroleum-derived substances have occurred in the current cycle and achieved a 79% reduction in the number of hydrocarbon spill incidents compared to the previous year, during the current cycle.

DISTRIBUTION & COMMERCIALISATION | ENSURING SELF-SUFFICIENCY IN REFINED PRODUCTS

BARRADODANDEOCEANTERMINAL

Objective: to meet the country's needs for petroleum products, making their reception and distribution process safer, more effcient and less expensive

Progress: 76%

Storage Capacity: 580000m³ of refined products

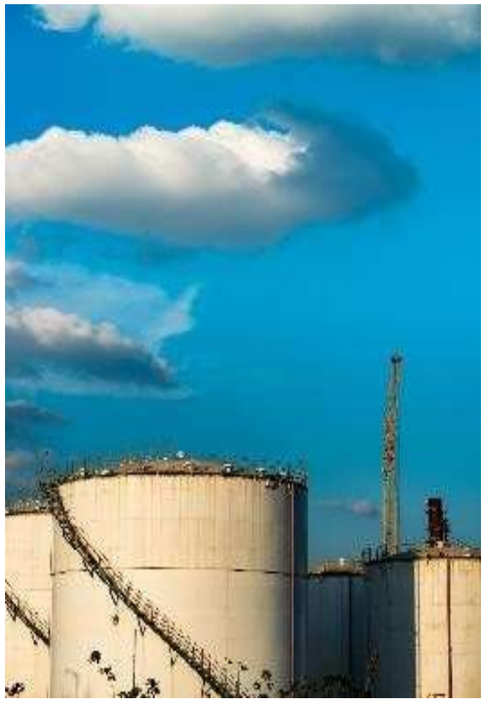
Predicted Conclusion: 2024

CABINDAOCEANTERMINAL(TOC)

Objective: Expand the terminal's storage capacity by 24000 m³ to accommodate the Cabinda Refinery's production, meet local consumption needs and ensure strategic and security reserves.

Progress: 79%

Predicted Conclusion: 2024



OTHER TECHNICAL AND OPERATIONAL IMPROVEMENT PROJECTS:

SOYO TERMINAL (TOS)	95%
LOBITO TERMINAL (TOL)	24%
NAMIBE TERMINAL (TON)	0%

DISTRIBUTION & COMMERCIALISATION | IMPROVE THE DISTRIBUTION OF FUEL AND LUBRICANTS THROUGHOUT THE TERRITORY

9 Ocean Terminals

12 Fuel Facilities

329 Operational Petrol stations

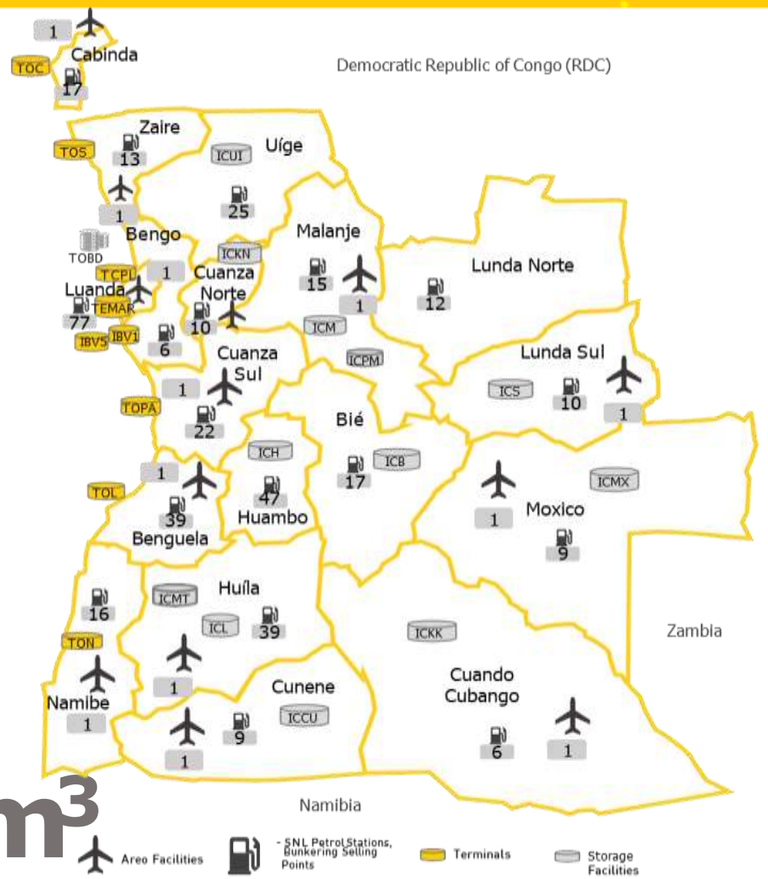
19 Aero Facilities

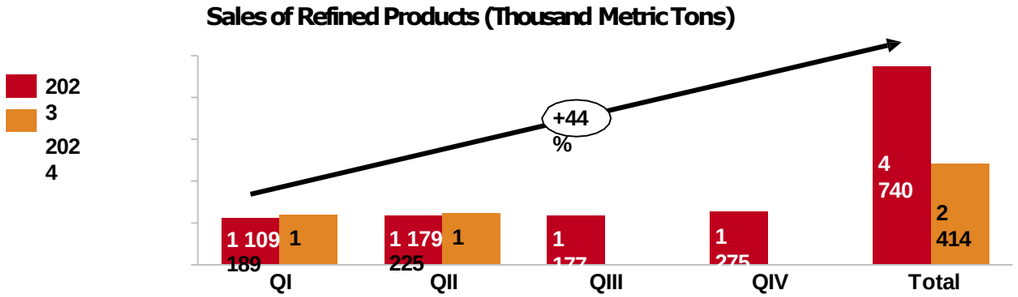
5 Bunkering Sale Points

201 Convenience Stores

1 Lubricant Factory

636K m³ Storage Capacity



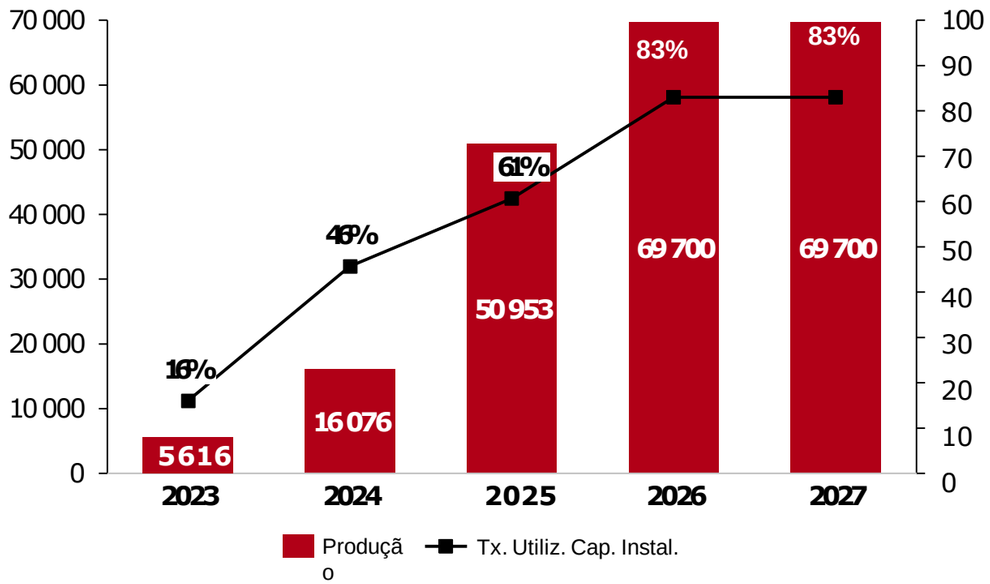


- In 2023, 4.7 million MT of refined products were sold on the domestic market. Up to QII of 2024, 2.4 MT of refined products were sold and represent an increase of 9% compared to QII of 2023. This increase is essentially the result of the recovery of economic activity and increased consumption.
- In line with the increase in refining processing capacity, Sonangol has in its final stage the construction of the largest storage facility (TOBD) that will add 582.000 m³ of storage for Diesel, Gasoline and LPG.

DISTRIBUTION & COMMERCIALISATION | INCREASE

LUBRICANT PRODUCTION CAPACITY

CAPACITY UTILIZATION RATE AND LUBRICANT PRODUCTION 2023-2027 (%;TM)



Lubricant production will gradually increase between 2023 and 2027, with production in 2027 reaching 69,700 MT, for an average installed capacity utilization rate of 83%.

LUBRICANT FACTORY

Benefits of IMUL Revamping

Increase in production capacity from 20,000 tons/year to 84,024 TM/year;

Increase in bulk storage capacity for base oil from 2,420 m³ to 4,280 m³;

Increase in manufacturing tanks from 85 m³ to 130 m³;

Increase in storage capacity for finished product in bulk from 110 m³ to 350 m³.

Main Activities

Preparation of the inspection contract for the new filling lines (OCEM);

Preparation of the manufacturing contract for packaging (1 litre and 4 litres) and caps for the commissioning of the new lines (IPACKCHEM).

Construction of the Research and Development Center (CPD)

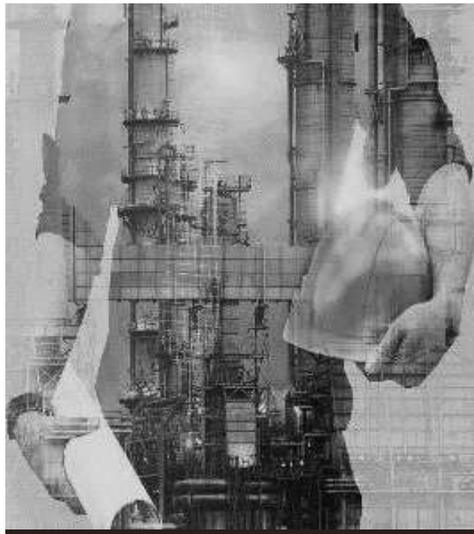
Objectives

- Contribute to the development of the national oil sector;
- Conduct studies in the areas of geosciences and innovation;
- Promote specialized training;
- Lead Sonangol's energy transition.

88 %
Completed Status

Current Status of Infrastructure

- Project in the final stages, acquisition and installation of laboratories;
- Inauguration of the Research and Development Center scheduled for the **last quarter of 2025.**

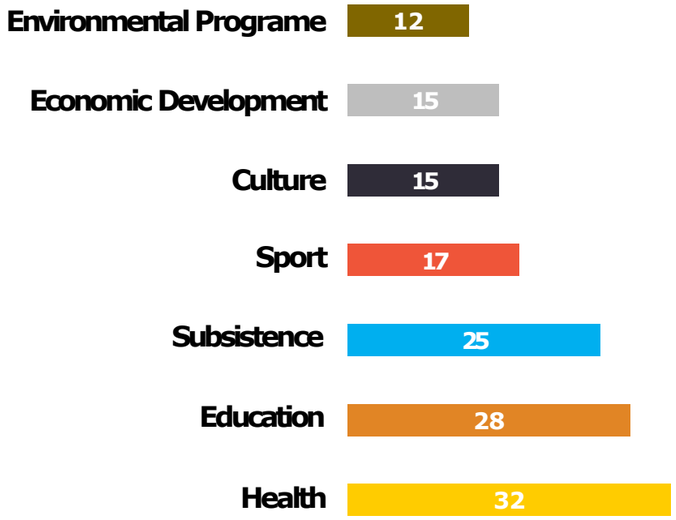


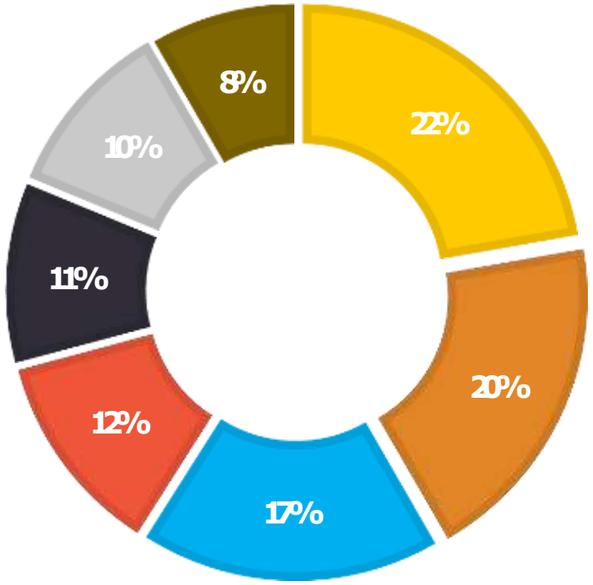
Operationalize Sonangol's Research and Development Center, a leader in innovation and knowledge in the energy industry, covering everything from hydrocarbons to renewable energies and critical minerals for the energy transition

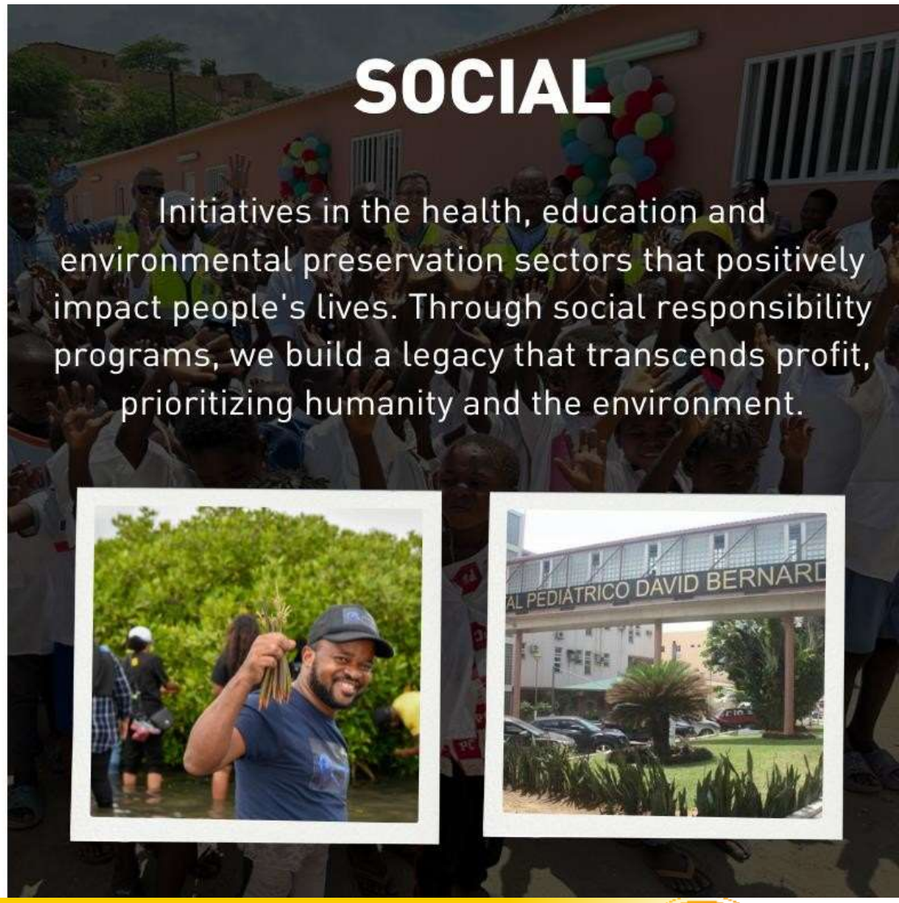
144
Sponsorships

≈45M USD
Financial engagement

+300K Headcount
Impacted (Users, Residents and Professionals)







+30 KBPD

Increased Processing Capacity, with the **completion of the construction of the Cabinda Refinery** first phase.
Forecast of the **General Shutdown of the Luanda Refinery** for maintenance. Placing **orders for Long Lead Items** from the Lobito Refinery

12MW → 66MW

Maximize the use and increase the production capacity of renewable energy.

+582.000 m³

Increase storage capacity, optimize and make logistics, distribution and marketing services for refined products profitable, with the completion of the TOBD.

2% → 4% → 10%

Jan.2024 Dec.2025 Dec.2029

Increase the share of operated production of crude oil and natural gas. Start of production from the onshore blocks of the Kwanza basin, Kon 11 & Kon 12.

2030 → 15%

Control and reduce CO_2 emissions in Exploration and Production and Refining operations.

IPO

Continued preparation for capital dispersion on the stock exchange.

20HHT: 35%FTE

Optimize organizational development and invest in human and technological capital to increase the company's productivity.

14,6 MM Ton. CO_2e / Year.

Increase carbon capture with the implementation of the Sonangol Blue Carbon Project, including the planting of mangroves and other initiatives.

Continue to promote support infrastructures, human capital development and social responsibility actions

Sonangol

PRODUZIR PARA TRANSFORMAR

THANK YOU