

# THE SUB SAHARAN AFRICA INTERNATIONAL PETROLEUM EXHIBITION AND CONFERENCE (SAIPEC)

"THE NEXT STEPS: ACCELERATING AFRICAN CONTENT"

### **COUNTRY SHOWCASES**

**REGULATORS AND GOVERNMENTS** 

# OPPORTUNITIES, LOCAL CONTENT POLICY AND INVESTMENT FRAMEWORKS

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**LAGOS, 13-15 February 2024** 













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# INTRODUCTION TO MOZAMBIQUE



☐ Southern Afria

☐ Area: ~ 800,000 Km<sup>2</sup>

 $\Box$  Coastline:  $\sim 2,700 \text{ km}$ 

☐ Sedimentar Area

☐ Onshore: 290,122 Km<sup>2</sup>

☐ Offshore: 282,227 Km<sup>2</sup>

☐ Climate: Sub-tropical - tropical

☐ +60 Rios e Lagos

☐ Exports: LNG, NG, Electricity, Minerals



☐ Capital: Maputo

**□ Population:** ~34.000

☐ Languagem: Portuguese

# **ABOUT INP**



### MISSION & VISION

□ INP is the regulatory authority for the Petroleum Operations (UP STREAM) in Mozambique.

Develop natural gas resources in a manner that maximizes benefits to Mozambique society and in compliance with the legislation.

# **ABOUT INP**



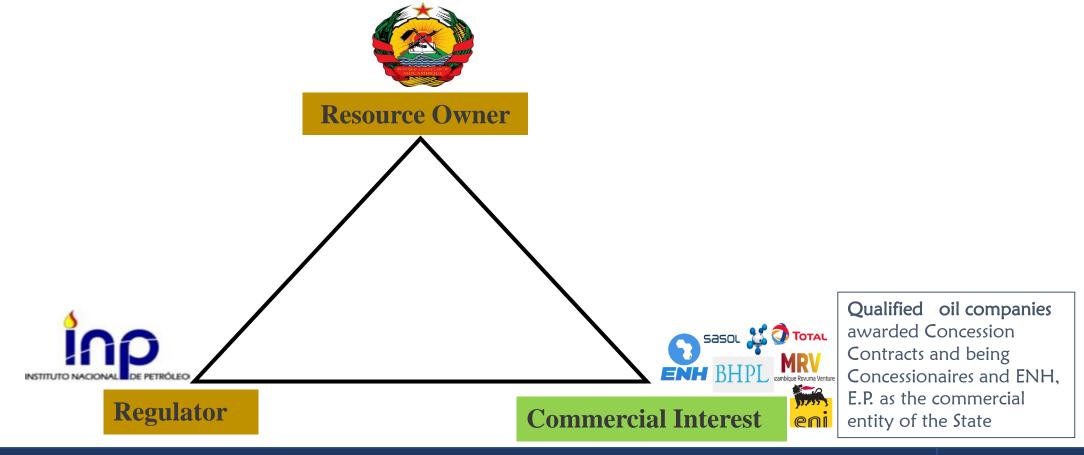


- ☐ Upstream Regulator overseen by MIREME (Ministry of Mineral Resources and Energy);
  - ☐ Created in 2004 (Decree No. 25/2004, of August 20<sup>th</sup>);
  - Later confirmed through the Petroleum Law, Law No. 21/2014, of August 18, as the Upstream regulator.
- □ Scope: administration, supervision and regulation of the Petroleum industry;

# INSTITUTIONAL FRAMEWORK - OIL & GAS SECTOR (UPSTREAM) INP



The Petroleum Law form the legal and regulatory foundation for granting rights to commercial entities allowing Petroleum Operations and establishing the governance structure clarifying roles and interests:



### LEGAL FRAMEWORK CONDITIONS





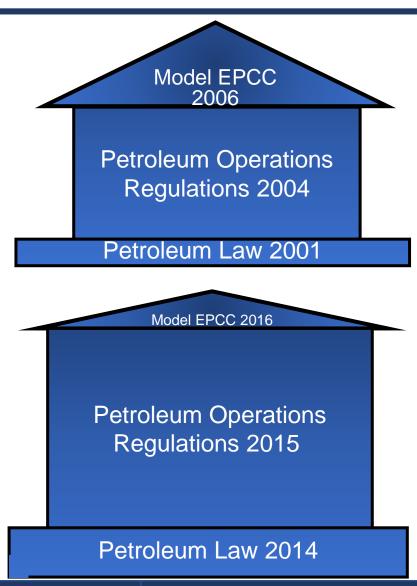
Petroleum Operations Regulations 2015

Model Exploration and Production
Concession Contract
2016

- ☐ Petroleum Law (PL) 21/2014, of 18 August, rules:
  - Disclosure of extraterritorial collaboration arrangements
  - Publication of EPCC's
  - Natural Gas offtake
  - Domestic market requirement: 25% of the oil and gas produced must be allocated to the national market
  - Role and content of ENH participation and activities
  - Local content & local communities requirements
- □ Petroleum Operation Regulations, Decree n.º 34/2015, of 31 December.
- ☐ Model Exploration and Production Concession Contract 2016

### MOZAMBIQUE REGULATORY SYSTEM





### Core Elements of the Petroleum Legal and Regulatory structure:

- Concession Strategy for Petroleum Operations Areas: Resolution 2009/16;
- □ Natural Gas Master Plan Strategy: 2010;
- ☐ Fiscal Law no. 27/2014, from 23 of September on Petroleum Operations;
- Specific Taxation and Fiscal Benefits Scheme for Petroleum Operations: Law 14/2017;
- Regulation of the Specific Taxation and Fiscal Benefits System of Petroleum Operations: Decree 32/2015;
- Mega Project Law (Law n.15/2011, of 10 of August);
- Legislative Authorization for the Liquefaction Projects of Natural Gas of Areas 1 and 4 of the Rovuma Basin: Law 25/2014

### FISCAL REGIME



### Production Tax (royalty)

• Oil: 10%

• Gas: 6%

### Income Tax

32% of contractor's gross revenue

# Back in rights

Government can participate in all projects undertaken









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# LOCAL CONTENT (LC) POLICY



### Absence of LC Law – Mozambique

☐ Issues related to LC matters are covered in different legal instruments: ☐ Comercial Code (Law nr. 1/2022, May 25th) — Article nr. 66; ☐ Mega Projects Law (Law nr. 15/2011, August 10th) — Articles nrs. 33 e 34; Petroleum Law (Law nr. 21/2014, August 18th) – Article 12. nr. 1 article 13, al. b) of Article 15 e Article 41; ☐ EPCC – Article 18 (Area 1 and 4) & Article 14 (Pande & Temane); ☐ JOA; Local Content Plans Decree Law nr. 2/2014, December 2nd—Article nrs. 10, 18, 19 e 20 — Special Regime for Area 1 and 4 Projects, Rovuma Basin; Petroleum Operations Regulation (Decree nr. 34/2015, December 31st) – Articles nrs. 49,50,51 e 55; Regulation for Contracting of Foreign Citizens in the Petroleum and Mining Sectors (Decree nr. 63/2011, 7th December.

### LOCAL CONTENT



### □ Added Value

### □Local Content:

- Local suppliers of goods and services;
- Jobs/Employment and Training.

## ☐ Local Participation:

- > Participation of National Oil Companies (NOC);
- National Shares (capital markets);
- Intern market.



Government Investments/Expenses.



### LOCAL CONTENT



# ☐ Main objectives of Local Content policies:

- ☐ Goods and services:
  - ☐ Increase the participation of national suppliers in a competitive manner; and
  - ☐ Promote development of technology.
- ☐ Human Resources:
  - ☐ Job; and
  - ☐ Training.
- "The Legacy" i.e. investments that last long:
  - ☐ Beyond the project; and,
  - ☐ Beyond the resource (Oil and Gas). e.g. infrastructure and human resources.



# LOCAL CONTENT – THE LEGACY



# HOW CAN WE ADD VALUE?

- □ Who / What is National?
  - □ Society Rule property criteria: assets and services provided by nationals. (GNP) Who?
  - □ Economic Rule country/territoriality criteria: goods and services provided within the country. (GDP) What?

... We are now busy stablishing Procedures/Mechanisms for Local Content in Mozambique

- Human Resources
- Infrastructures
- Finance
- Technology











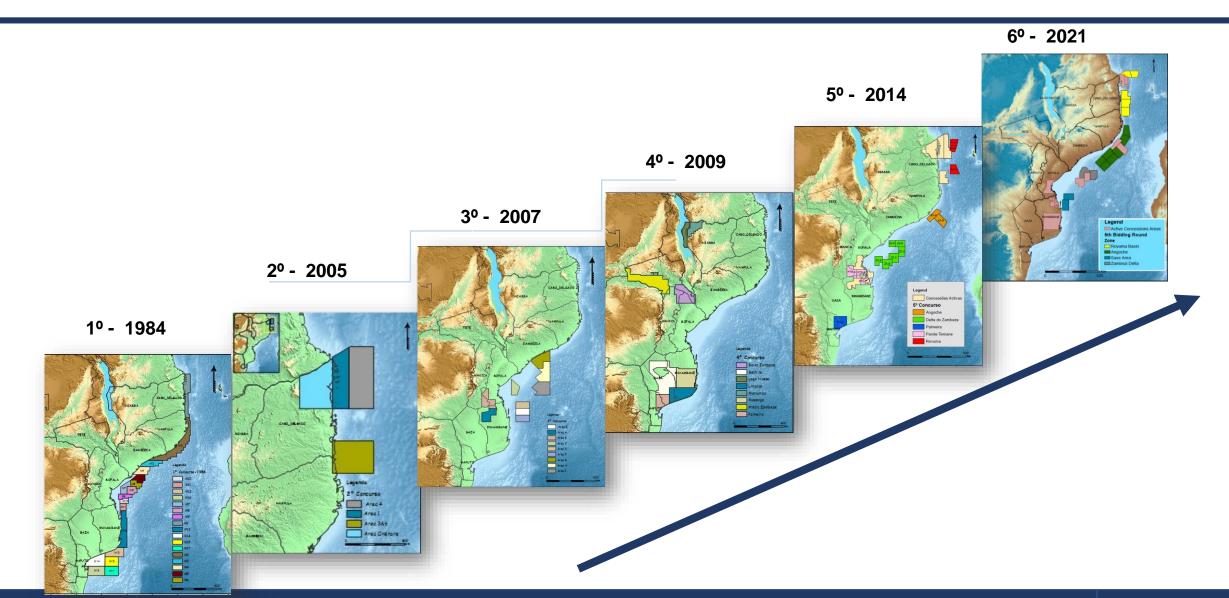
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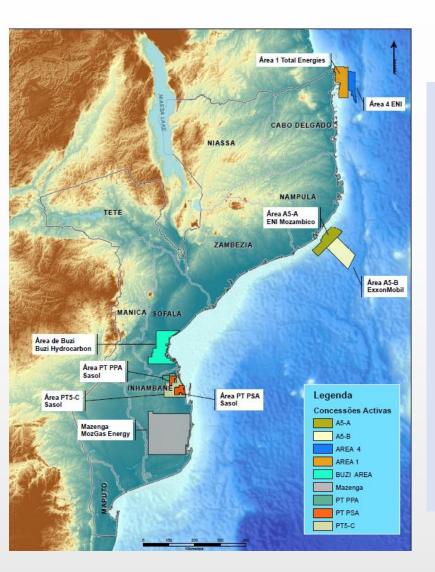
# BIDDING ROUNDS





# PROJECTS IN PROGRESS (EXPLORATION AND PRODUCTION)





پ Mozambique **PPA** 2º Mozambique **PSA** sasou من Pande/Temane Area PT5-C Sasou **O** ENH Mozambique Mazenga BUZ Mozambique Buzi



## PROJECTS OVERVIEW













#### PPA (Pande/Temane)

• **Signed**: 2000

• Development Plan: 2001

Production started: 2004

• **CPF Capacity:** 197 MGJ/a

 Average annual production: 190 MGJ/a

#### **Area-4 (Coral South FLNG)**

• Signed: 2000

• Development Plan: 2016

• **FID**: 2017

• Production started: 2022

• GIIP: 15.67 TCF

• Production: 3,4 MTPA

• Production Wells: 6

#### PSA (Inhassoro, Temane fields)

• **Signed**: 2000

• Development Plan: 2016

• Resources: 1884 BSCF of Natural Gas

• Production Expected to Start: 2024

- Light Oil: 4 000 bbl/d

- Natural Gas: Power Generation

- LPG: 30 000 ton/a (Domestic Market)

• CPF – Processing Facility Capacity: 197 MGJ/a

#### Area-1 (Golfinho/Atum field)

• **Signed**: 2006

• Development Plan: 2018

• **FID**: June 18<sup>th</sup> 2019

GIIP (Recourses): 31.3 TCF

• Production Wells: 18

• **Production**: 2 trains (6,56 MTPA, each)

• Status: Force Major from May 2021

#### Area 4 EPCC – Mamba Field

• **Signed**: 2006

• Development Plan: 2019

• Pre - FID: October 2019

**GIIP (Resources):** 53,1 TCF

• Production Wells: 24

• **Production**: 2 Trains (7,6MTPA each)

Instituto Nacional de Petróleo

# PROJECTS IN PROGRESS (EXPLORATION AND PRODUCTION) INP



Basin Mozambique

#### **Projects**

#### **Exploration**

#### **Appraisal**

#### Development

#### **Production**

#### **Decommissioning**

Pande & Temane (Sasol)

Inhassoro/Temane (Sasol)





PoD approved in 2001 **Production Start: 2004** 

PoD approved in Jan 2016 PoD Amendment in 2020 FID in Feb 2021 Plant construction start 2nd semester



- ✓ CPF: 197 MGJ/a;
- Fields currently on production.
- 4000 bbl/d of light oil;
- 23 PJ of natural gas to feed CTT project;
- 30 000 Ton/a of LPG;
- Investment: 1.8 B. USD and 2.4 B.USD of State Revenues.

Area 1: Gofinho/Atum

(TotalEnergies)



PoD approved in Mar 2018 FID in Jun 2019 PoD Amendment in Mar 2021



- Onshore liquefaction plant;
- Two (2) Trains (13.12 MTPA);
- 18 Production Wells and 03 underwater gas pipelines;
- 2.5 M. USD for Local Content;
- 20 B. USD Investment and 32.6 B.USD of State Revenues;
- Suspended due to Force Majeure.

Area 4: Coral FLNG (ERB)



PoD approved in Fev 2016, FID in Jun 2017 FLNG construction start in Mar 2018 Six (6) wells drilled



- Floating LNG Platform;
- Capacity: 3.37 MTPA;
- Production start 2nd semester of 2022
- 7 B. USD investment and 19.3 B.USD of State Revenues.

Area 4: Mamba + Oligoceno 385 E (MRV)



PoD approved in May 2019 Pre-FID in 2019



Separate and Coordinated Development (Unified Fields)

- Total Production (25 years): 19.1 TCF;
- Onshore liquefaction plant;
- Two (2) Trains (~15.2 MTPA);
- 23 B.USD Investment and 46 B.USD of State Revenues;
- Awaiting the Final Investment Decision.

Area 1: Prosperidade (TotalEnergies)





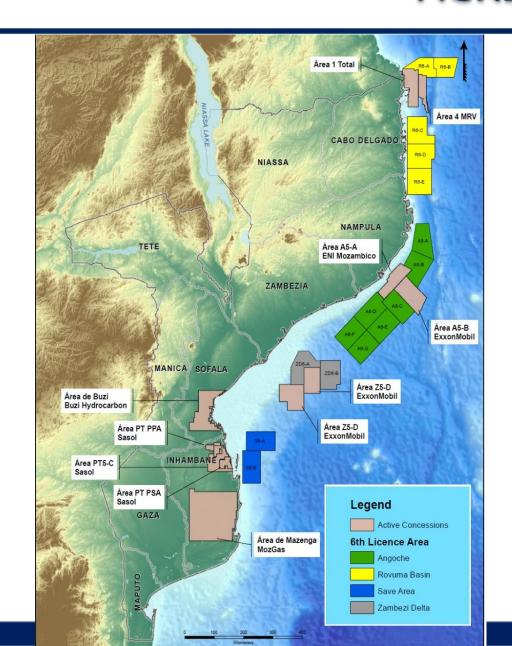
Separate and Coordinated Development (Unified Fields)

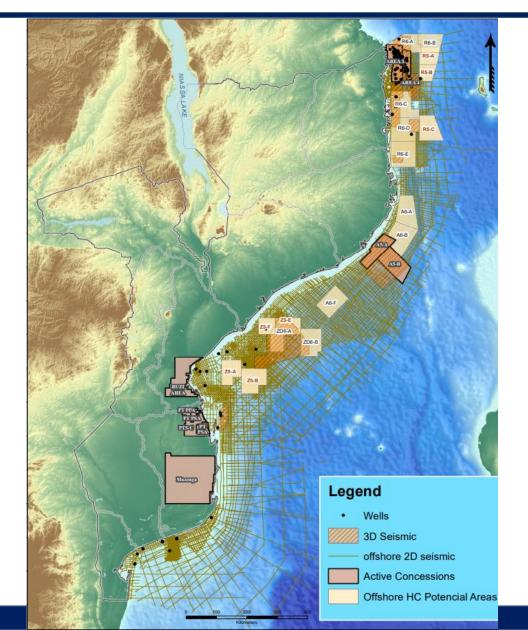
- ✓ Unitization agreement approved in May 2019;
- ✓ Submitted the declaration of commerciality of the Prosperidade field.

Rovuma Basin

# **ACREAGES MAP**

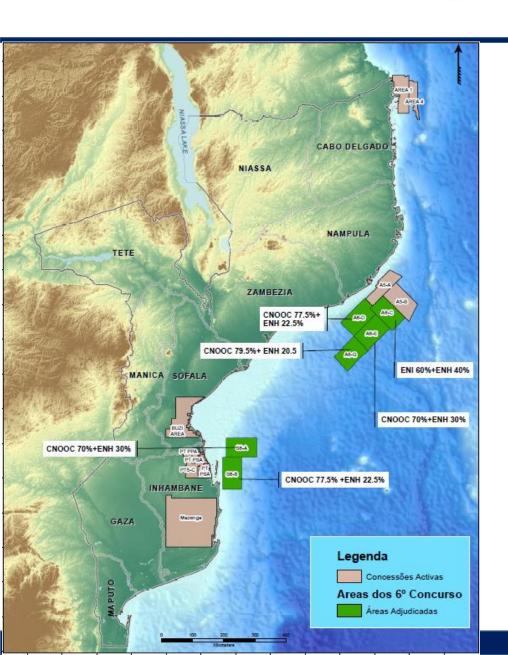






# 6th BIDDING ROUND





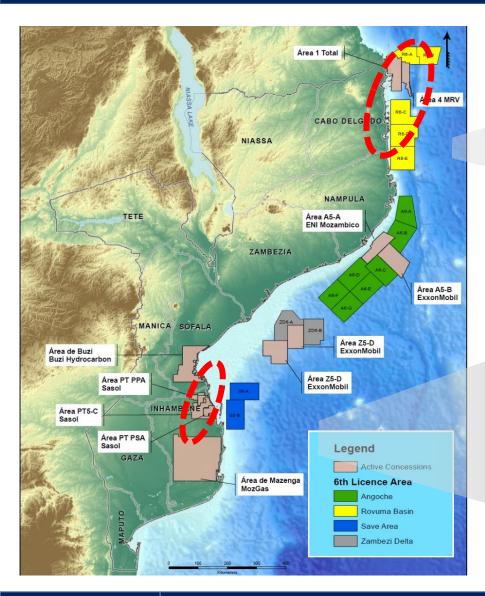
EPCC to be approved shortly; Ongoing clarifications meetings

- > CNOOC Hong Kong Holding LTD:
  - ☐ Areas A6-D, A6-E, A6-G, S6-A e S6-B
- > EMO SPA:
  - ☐ Area A6-C

Áreas		Dimensão
Áreas do Rovuma (R6-)	5 Áreas	28241.01 Km <sup>2</sup>
Áreas do Angoche (A6-)	7 Áreas	40420.79 Km <sup>2</sup>
Áreas do Delta Zambeze (ZD6-)	2 Áreas	11474.6 Km <sup>2</sup>
Áreas do Save (S6-)	2 Áreas	11479.35 Km <sup>2</sup>
TOTAL	16 Áreas	91615.75 Km <sup>2</sup>

### PETROLEUM POTENTIAL AND DISCOVERIES





ROVUMA BASIN

MOZAMBIQUE BASIN

#### **ROVUMA BASIN – GNL PROJECTS**

3 PROJECTOS GNL 39,3 TCF







US\$50 BILIÕES Esperados DFI

**+/- 30 MTPA**De produção de GNL

900 MMSCFD

Domestic Gas

#### **MOZAMBIQUE BASIN - PSA**

PRODUCTION 53MGJ/A

Power Generation 450 MW

GPL 30′000 TON/A

#### MOZAMBIQUE BASIN - PANDE & TEMANE (PPA)

PRODUÇÃO 197MGJ/A **Domestic Market** 

09MGJ/A – R. Gás 27MGJ/A – Gás Dom

Transmission
Pipline
MPCO 864km

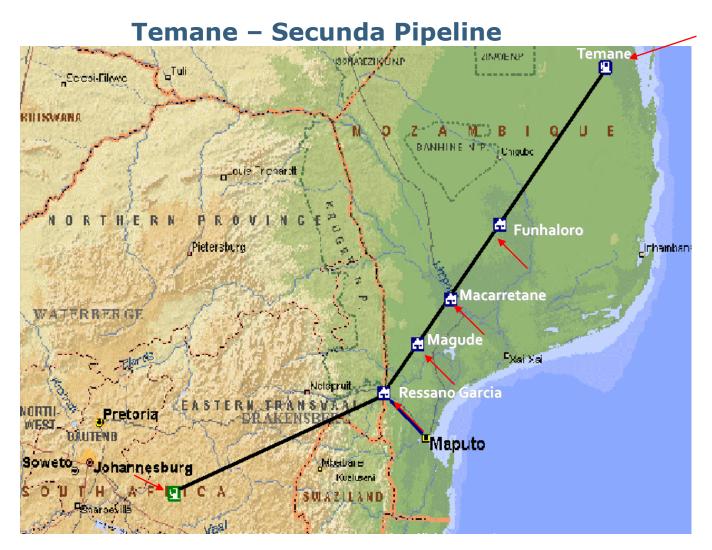
**EXPORTATION** 159 MGJ/ano

ROMPCO 864km Moçambique-Secunda

22

# NATURAL GAS PRODUCTION IN MOZAMBIQUE





Production started in 2004 from Pande/Temane Fields

#### Capacity

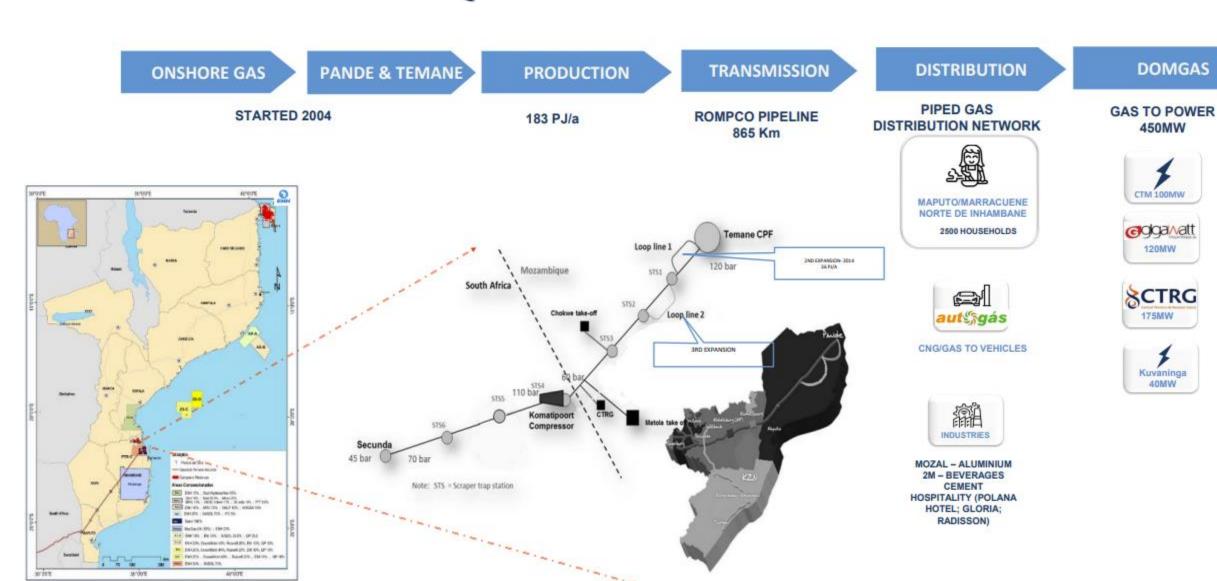
• CPF: 197 MGJ/a

ROMPCO: 212 MGJ/a @ 26"

MGC: 22 MGJ/a @ 8"

- Use of Natural gas in Mozambique:
  - Power generation
  - Fuel to industries (Mozal, cement plant, etc)
  - Fuels to vehicles (CNG -Compressed natural gas)
  - Commercial and domestic use -Gas distribution Project

# MOZAMBIQUE BASIN GAS PRODUCTION



# NATURAL GAS USE IN MOZAMBIQUE



#### **Power Generation**







#### **Industrial Use**







#### Commercial Use





Compressed Natural Gas (CNG) Virtual Pipe Line

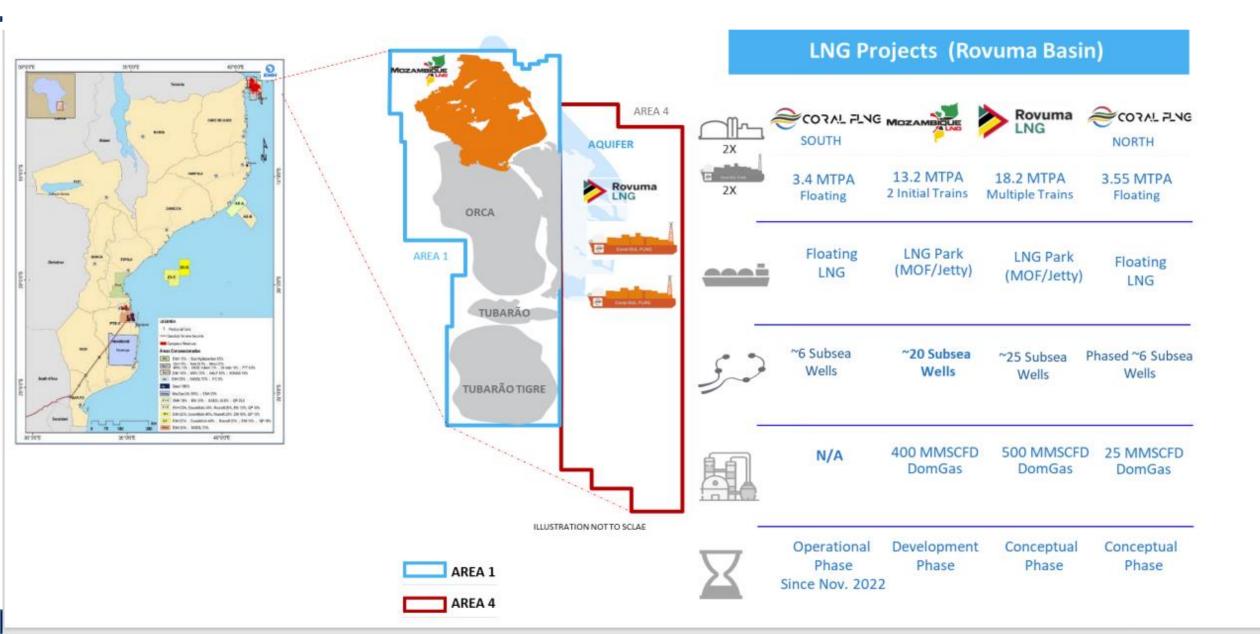
#### Domestic Use



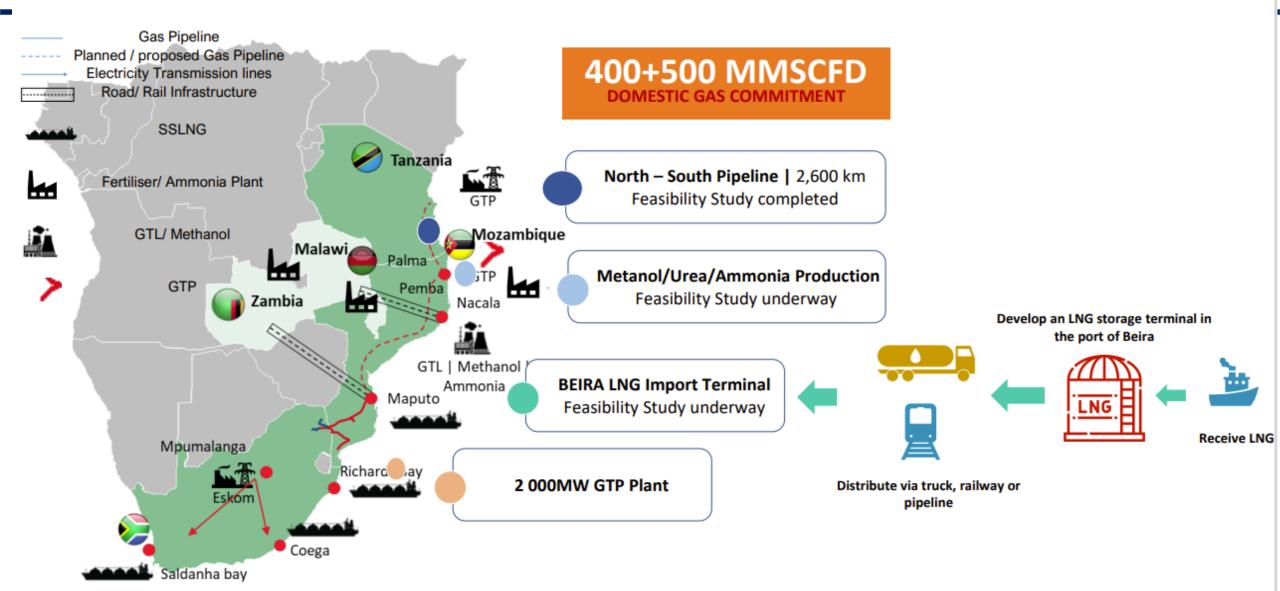


Gas Network
(Maputo, Marracuene & Inhambane)

# LNG POTENTIAL – ROVUMA BASIN



### **GAS MASTERPLAN – DOMESTIC GAS/LNG OPPORTUNITIES**



### GAS MASTER PLAM: PRIORITY INVESTMENT AREAS



			INSTITUTO NACIONAL DE PETRÓLEO
Industrial Sector	Project	Product	Reasoning '
Fuels sector	GTL	Diesel /LPG/Nafta	<ul> <li>Reduces Mozambique's dependence on imported refined petroleum products;</li> <li>Potential for regional export of products derived for GTL.</li> </ul>
Base Chemicals Sector	Ammonia /Urea and other projects	Ammonia /Urea and other products	<ul> <li>It is Government strategy for the development of agriculture and agro-industry;</li> <li>Will provide a reduction in fertilizer imports;</li> <li>The fertilizer plant in Mozambique can be the distribution center for Africa.</li> </ul>
Energy	Power Plant	Electricity	<ul> <li>Contributes to the implementation of the Strategy for industrialization and rural electrification;</li> <li>Increases efficiency and flexibility in electricity distribution;</li> <li>Increase in energy availability in the country and region;</li> <li>Contributes to the diversification of the energy matrix.</li> </ul>
Raw Materials	Cement, Carbon Black and Glass Production Project	Cement, Carbon Black and Glass	

# **CHALLANGES**



- Human Resources Capacity building
- Infrastructures
- Finance
- Technology

### FINAL REMARKS



- Mozambique offers countless opportunities for investment throughout the value chain (upstream, midstream e downstream), which will be available trough:
  - Its competitive fiscal regime,
  - Implamentation of Development Plans in view of Force Majoure lifting will boost investment opportunities;
  - Further Exploration as a result of the 6<sup>th</sup> Bidding Round contracts signing of EPCC;
  - Huge potential for exploration
  - Gas demand growth due to Energy Transition;
  - Its strategic location in relation to LNG markets;

# FINAL REMARKS



# MOZAMBIQUE & AFRICA

DO IT!

BECAUSE...

YOU & I, TOGETHER

WE CAN DO IT!

WE MUST DO IT!

# THANK YOU VERY MUCH FOR YOUR ATTENTION MUITO OBRIGADA PELA ATTENÇÃO DISPENSADA



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