



# Key Account Intelligence Report



11 April 2025

# Executive Summary



**Aligning to Business Strategy:** Each site within the TotalEnergies portfolio follows two levels of strategic growth plans, and **Centrafert**’s messaging for bids need to align with these:

- a. **Group Strategy:** *Built on two pillars: responsible, low-cost and low emission production of oil and gas; and developing a profitable business model for integrated power.*
- b. **Segment-level strategy:** *Each of the five segments have its own strategy aligned to the group strategy, and investments are made in line with it.*



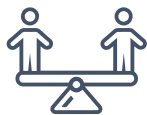
**Site-wise Transformation and Modernization:** In line with its 2030 net zero strategy, each site has gone through transformations, which includes building new production units or adding new production lines. Each strategic shift in the site’s core businesses demands a shift in how **Centrafert** positions itself in comparison to other bidding contractors. For e.g.

- **Biogas and Biomethane units:** *Modular and scalable access, in case of semi-industrial settings*
- **Green Hydrogen:** *Positioning as experts in high-risk industrial projects*
- **Sustainable Fuel Production (Bio-refining):** *Positioning as safety-first provider*



**Maintenance Shutdowns:** Each industrial site follows a structured schedule for its major maintenance activities, which involve pre-planning (years in advance), multi-week timelines, and a complex contractor ecosystem. Apart from going through prequalification and bidding process, contractors like **Centrafert** need to monitor shutdown schedules and differentiate themselves through:

- *Scalable workforce mobilization*
- *Partnership with other major EPC contractors*
- *Safety & Performance Positioning*











**Competitor Strengths:** Several competitors maintain a strong position with TotalEnergies due to their longstanding strategic relationships, local infrastructure, and deep operational alignment. Their strengths include global maintenance experience, offshore expertise, and a well-established understanding of TotalEnergies’ operational and strategic frameworks—*giving them a clear advantage in securing recurring contracts.*










**Operational Structure:** TotalEnergies’ business is structured into five operational segments, however, each site within these segments have their own organizational structure. Three key departments that are directly or indirectly related to site maintenance, and relevant to **Centrafert** are:

- **Projects team,** *that coordinates shutdowns and maintenance*
- **Economics team,** *that coordinates performance control, management control and scheduling*
- **Health, Safety, Environment, Quality, and Inspection team,** *that is responsible for inspection and quality control*

# Opportunities for   – Competitor Analysis [1/2]

Competitor	Engagement with TotalEnergies	Competitor Strength	Opportunities for <span style="background-color: #e0e0e0; padding: 2px 10px;"> </span>
	PSG and E&C scope to support the offshore operation at the Danish North Sea site in partnership with SubC	<i>Historic strategic relationship with TotalEnergies</i>	For differentiating with competitors that have historic relationship with TotalEnergies <span style="background-color: #e0e0e0; padding: 2px 10px;"> </span> can position themselves in <b>terms of innovation, service delivery, and their safety-first approach to industrial complexes.</b>
	GMC contract at Normandy platform	<i>Combination of local resources and facilities</i>	<span style="background-color: #e0e0e0; padding: 2px 10px;"> </span> can align themselves with TotalEnergies' local anchoring ecosystem and <b>partner with local EPC players while submitting bids.</b>
	Providing fabric maintenance, scaffolding and rope access personnel for TotalEnergies' Elgin and Franklin platforms	<i>Depth of expertise in offshore maintenance</i>	<span style="background-color: #e0e0e0; padding: 2px 10px;"> </span> has experience in offshore projects (even with TotalEnergies), hence it can complement this key USP <b>by promoting its experience in equally demanding high-risk industrial sites</b> - for e.g. hydrogen, and other renewable energy segments.
	Providing fabric maintenance, scaffolding and rope access personnel for TotalEnergies' Elgin and Franklin platforms	<i>Deep understanding of TotalEnergies Operational requirements and challenges</i>	The dedicated TotalEnergies client team <b>can create a client playbook and a competitor playbook that is custom to Total's site-specific protocols, systems, strategies, and operational details of the sites it is looking to expand into.</b>
	GMC Contracts for the North Sea sites	<i>Experience in delivering maintenance contracts across the globe</i>	<span style="background-color: #e0e0e0; padding: 2px 10px;"> </span> can deliver <b>messaging emphasizing its global and regional strengths</b> including how its practices have evolved across the globe.
	Scaffolding contract for Donges site	<i>Local anchoring and strength of the infrastructure</i>	<span style="background-color: #e0e0e0; padding: 2px 10px;"> </span> <b>can highlight its work on local anchoring activities on its existing sites</b> , and share success stories of its partnership with clients in their rapid-deployment hubs.
	Scaffolding contract for Carling site	<i>Immediate response and swift deployment during emergency shutdowns</i>	<span style="background-color: #e0e0e0; padding: 2px 10px;"> </span> <b>can highlight its immediate response frameworks</b> - e.g. readiness teams, proactive maintenance capabilities in times of emergency shutdowns and how it manages its KPI's around it.
	Total tank maintenance contract at Antwerp, Belgium site	<i>All maintenance contractors work under one contractor - "giving the key" minimizes lost time</i>	<span style="background-color: #e0e0e0; padding: 2px 10px;"> </span> <b>can highlight its JV with Ponticelli</b> , i.e. PBS, and its approach towards high-value projects through consortiums - under the "one contract" mechanism.

# Opportunities for [REDACTED] – Competitor Analysis [2/2]

Competitor	Engagement with TotalEnergies	Competitor Strength	Opportunities for [REDACTED]
	Provided <b>insulation services</b> in the POX methanol plant, which were part of the most complex plant shutdown at TOTAL refinery in Leuna	Executing projects under extreme operational and environmental conditions	<b>Position as a premium solution provider for complex turnarounds;</b> offer combined access and insulation packages to reduce subcontractor interfaces
	Provided <b>safety scaffolds</b> for DOMO Chemicals Gas Flare Tower in Leuna	Strong foothold in the German formwork and scaffolding industry	Leverage global experience in <b>refinery access services (especially Europe)</b> and highlight rapid mobilization capabilities and deployment hubs
	<b>Extensive maintenance contract</b> for the Brunsbüttel Bitumen plant in Germany	Expertise in maintaining and repairing complex electro-mechanical systems and maintenance of pipeline networks	<b>Highlight pitch scaffolding as a critical support function</b> to integrated maintenance contracts; propose bundling with insulation and digital site management
	Responsible for performing the <b>maintenance and troubleshooting of 20" severe service isolation lift plug valves</b> on the Delayed Coker Unit (DCU) of the TotalEnergies' Antwerp Integrated Platform site	Prompt and high-value onsite support for valve care globally, through a network of engineers and technicians	<b>Offer complementary support during valve maintenance windows</b> through safe access solutions for confined and elevated spaces
	In 2020, Cestaro Rossi participated in the Zeeland Refinery Preparation Phase TAR 2020 for its <b>maintenance activities</b>	Extensive experience in Industrial plant engineering and construction	<b>Highlight access and insulation experience</b> during complex mechanical and piping scopes
	Worked for <b>scaffolding and insulation activities</b> at Zeeland refinery for its Turnaround 2020/2021 project	Executing projects under extreme operational and environmental conditions	Differentiate via <b>modular scaffolding designs</b> , turnaround planning software, and multi-discipline bundling
	In August 2023, ALTRAD installed <b>free-standing scaffolding</b> in and around a 55-metre tall tower at Zeeland.	Strong foothold in the Dutch formwork and scaffolding industry	<b>Position [REDACTED] as a safer, faster,</b> and digitally supported alternative using Layher/Systems scaffolding with engineered design

# Opportunities for [redacted] – Site Strategy Analysis [1/2]

Site	Key Activities Planned/Under Development	Opportunities for [redacted]
Normandy	<b><i>Development of Sustainable Fuel</i></b>	Highlight QHSE-approach towards high-risk flammable sites, and its refinery-grade safety framework.
	<b><i>Biogas Production</i></b>	[redacted] can stress on its ability to mobilize small scale deployments, and leverage its alignment towards circular energy (Because of the site's possible association with regional farms)
	<b><i>Supply of Green, Low-carbon Hydrogen</i></b>	Position itself as experts in high-risk industrial projects and leverage its ESG experience to align with Total's net zero strategy.
Grandpuits	<b><i>Production of renewable diesel mainly for the aviation industry</i></b>	Leverage historic experience of working with refinery units, especially in high-compliance environments.
	<b><i>Production of bioplastics</i></b>	Position as experts in leading the contracts for clean/controlled zones.
	<b><i>Plastics recycling</i></b>	Highlight sustainability credentials, and fast turnaround and maintenance support as plastics recycling would be an equipment-intensive environment.
	<b><i>Operation of two photovoltaic solar power plants</i></b>	Highlight safety expertise in high-voltage environments.
Donges	<b><i>Desulfurization unit for intermediate feedstock</i></b>	Highlight safety culture due to ATEX (explosive) zones.
	<b><i>Steam methane reformer (SMR) to produce hydrogen</i></b>	
Carling	<b><i>Plant restructuring to polymer production</i></b>	Emphasize precision, safety, and minimal disruption in high-value production environments
	<b><i>Two combined cycle gas turbine power plants</i></b>	Showcase experience with thermal power projects (especially CCGTs and HRSGs).
	<b><i>Electricity storage through the commissioning of the storage site</i></b>	Promote fire-rated and environmentally resistant coating systems and rapidly deployed temporary scaffolding systems.
Leuna	<b><i>Supply of Green Hydrogen &amp; Industrial Transformation</i></b>	Position itself as experts in high-risk industrial projects and leverage expertise in supporting complex site turnaround projects.

# Opportunities for   – Site Strategy Analysis [2/2]

Site	Key Activities Planned/Under Development	Opportunities for <span style="background-color: #d9e1f2; padding: 2px 10px; border-radius: 10px;"> </span>
Brunsbüttel Bitumen Plant	<ul style="list-style-type: none"> <li>• <i>Product Innovation for Low-Carbon Infrastructure</i></li> <li>• <i>Transition to Renewable and Circular Energy</i></li> <li>• <i>Operational Excellence and Climate Performance</i></li> </ul>	Align with TotalEnergies' strategy by contributing to lower-energy maintenance and turnaround setups that complement long-life and low-temperature bitumen manufacturing. It can also embed itself in the plant's climate performance and renewable energy upgrade projects by supporting key interventions that ensure safe, efficient, and low-emission execution.
Polish Baltic Sea Projects	<ul style="list-style-type: none"> <li>• <i>Strengthening Polish Energy Transition</i></li> <li>• <i>Partnership as a Strategic Business Model</i></li> <li>• <i>Strengthening Cooperation between Baltic Countries</i></li> </ul>	Positioning itself as the boots-on-the-ground expertise in Polish oil and gas sector, and as a reliable partner for execution phase readiness
Antwerp Integrated Platform	<ul style="list-style-type: none"> <li>• <i>Ethane-Based Petrochemical Production</i></li> <li>• <i>Battery-Based Energy Storage</i></li> <li>• <i>Supply of Green, Low-carbon Hydrogen</i></li> </ul>	Highlight <span style="background-color: #d9e1f2; padding: 2px 10px; border-radius: 10px;"> </span> 's role in high-risk petrochemical zones where precision and reliability are critical, and its capability to deploy engineered scaffolding systems, containment enclosures, and QHSE-certified access solutions
Zeeland Refinery	<ul style="list-style-type: none"> <li>• <i>Green Hydrogen : EnergHys Project</i></li> <li>• <i>CO2 reduction and CSS : Azur Project</i></li> <li>• <i>Energy Efficiency : Sloewarmte Project</i></li> </ul>	Positioning as safety-first execution partner for energy transition projects and experts in process efficiencies in thermal energy conservation activities
TEP NL	<ul style="list-style-type: none"> <li>• <i>Aramis Project</i></li> <li>• <i>CCS (Carbon Capture and Storage) Project</i></li> <li>• <i>Supplying TotalEnergies' Antwerp platform with green hydrogen</i></li> <li>• <i>TotalEnergies acquires a stake in RWE</i></li> </ul>	Position itself as a technical enabler for CO <sub>2</sub> infrastructure readiness, especially during high-safety offshore and industrial transitions, and adaptability across hydrogen project execution environments—onshore, offshore, and port-linked.

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# Section 1

## Company Overview

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- Operational Structure
- Global Management Structure
- Group Financial Performance
- Group Strategy



# Company Overview



## HEADQUARTERS



France

## YEAR FOUNDED



1924

## KEY METRICS

Revenue	\$214.6 billion (2024)
Employee Count	102,887
No. of Countries	120
Exploration & Production	50+ countries

TotalEnergies is a global integrated energy company that produces and markets energies: *oil and biofuels, natural gas and green gases, renewables and electricity.*

## Industrial and Commercial Assets

Gross installed renewable power generation capacities	Proved reserves	Hydrocarbon production
26 GW	11.1 Bboe	2,434 kboe/d

## Customers

2.8 million	6.1 million
Number of BtB and BtC clients sites to whom 100.9 TWh of gas was delivered	Number of BtB and BtC clients sites to whom 52.1 TWh of power was delivered

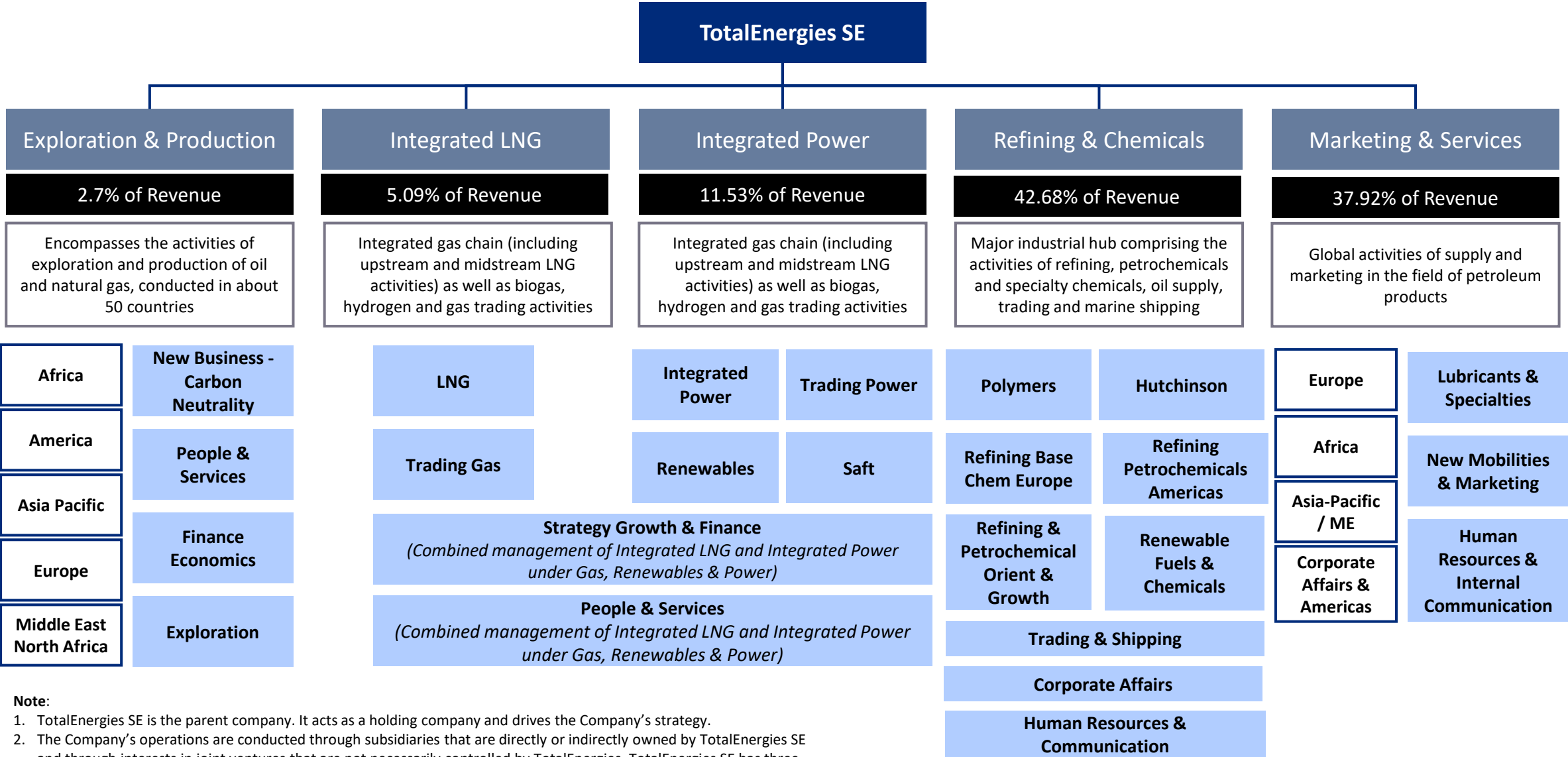
## Refinery Assets

Refineries	Petrochemical Sites	Specialty chemicals production sites	Production sites operated (lubricants and greases)
14 (including 1 biorefinery (La Mède) & 1 biorefinery currently being converted (Grandpuits))	26 (including 6 integrated platforms (refining-petrochemicals))	84	38

## Suppliers

\$31 billion worth of purchases of goods and services, from a network of more than 100,000 suppliers, supporting hundreds of thousands of direct and indirect jobs worldwide

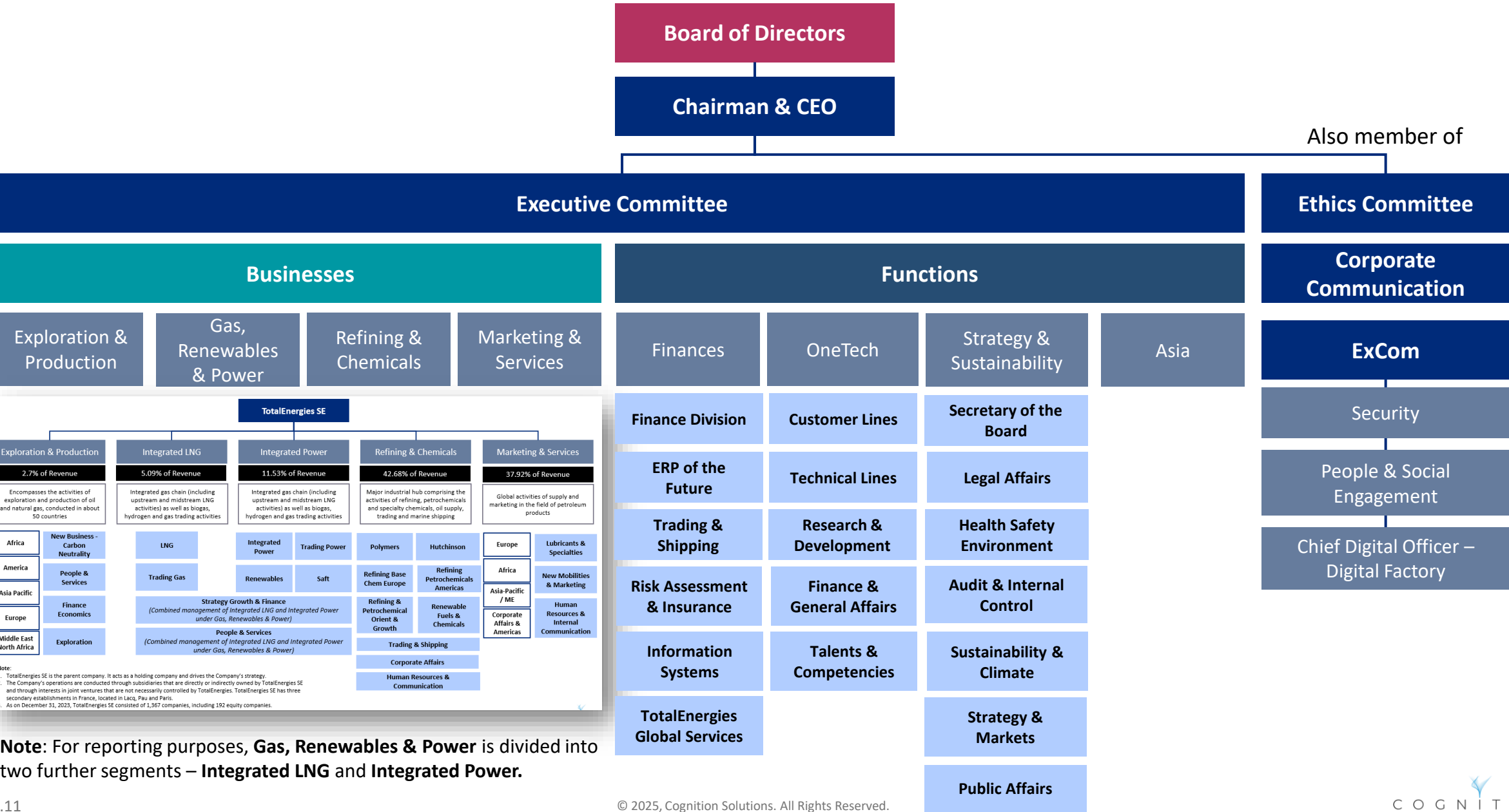
# Operational Structure (Reportable Business Segments)



**Note:**

- 1. TotalEnergies SE is the parent company. It acts as a holding company and drives the Company's strategy.
- 2. The Company's operations are conducted through subsidiaries that are directly or indirectly owned by TotalEnergies SE and through interests in joint ventures that are not necessarily controlled by TotalEnergies. TotalEnergies SE has three secondary establishments in France, located in Lacq, Pau and Paris.
- 3. As on December 31, 2023, TotalEnergies SE consisted of 1,367 companies, including 192 equity companies.

# Global Management Structure

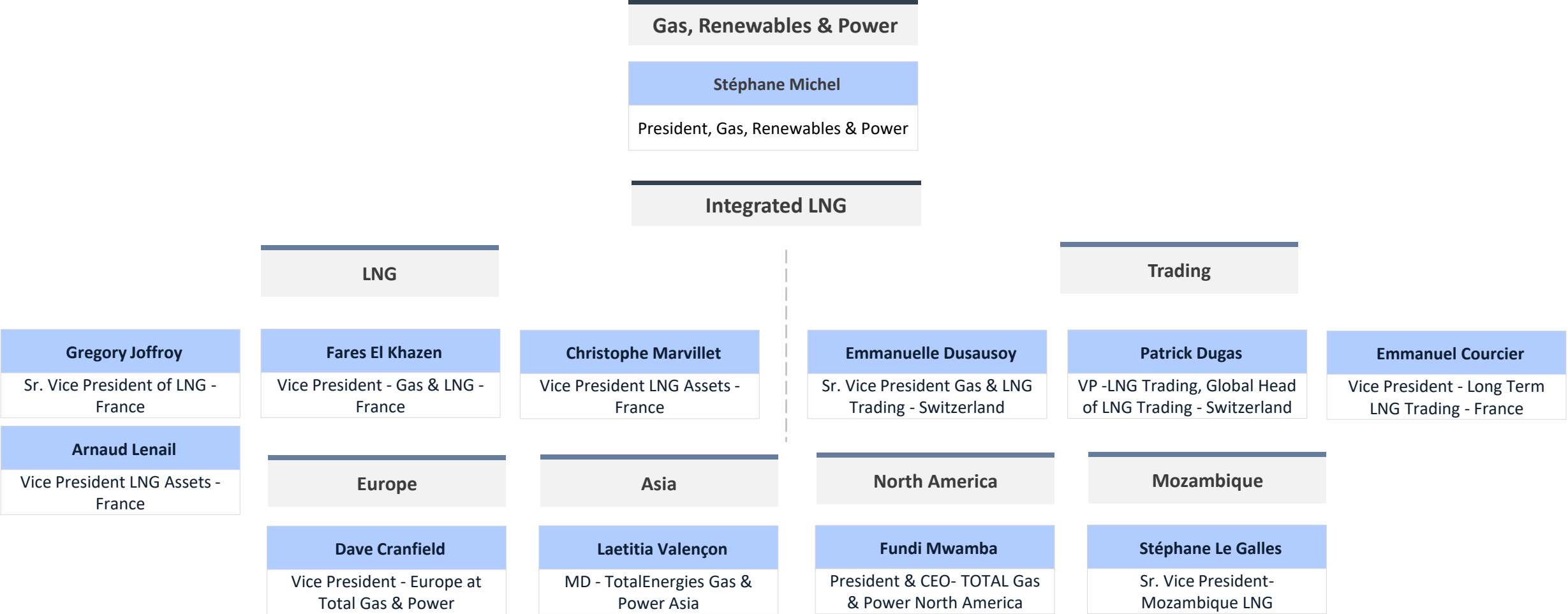


# Segment Leadership Team - Exploration and Production

<div>Exploration &amp; Production</div> <div>Nicolas Terraz</div> <div>President, Exploration &amp; Production</div>				
<div>Americas</div> <div>Javier Rielo</div> <div>Sr. Vice President, Americas</div>	<div>Africa</div> <div>Mike Sangster</div> <div>Sr. Vice President, Africa</div>	<div>Asia Pacific</div> <div>Charles Fernandes</div> <div>Sr. Vice President, Asia Pacific</div>	<div>New Business, Carbon Neutrality</div> <div>Arnaud Foll</div> <div>Sr. VP New Business, Carbon Neutrality</div>	<div>Exploration</div> <div>Enzo Insalaco</div> <div>VP Exploration Americas</div>
<div>Europe</div> <div>Jean-Luc Guiziou</div> <div>Sr. Vice President, Europe</div>	<div>Middle-East &amp; North Africa</div> <div>Julien Pouget</div> <div>President, Middle-East &amp; North Africa</div>		<div>Finance &amp; Economics</div> <div>Francoise Clemenceau</div> <div>Sr. VP Finance &amp; Economics</div>	<div>Emmanuelle Garinet</div> <div>VP Exploration Africa</div>
				<div>Mohamed Soudani</div> <div>VP Exploration Europe-MENA-Asia</div>

1. The overview presents key executives within the Exploration & Production division. Titles and roles are based on the latest available information and may not reflect recent organizational changes. This visualization does not depict reporting relationships

# Segment Leadership Team - Integrated LNG



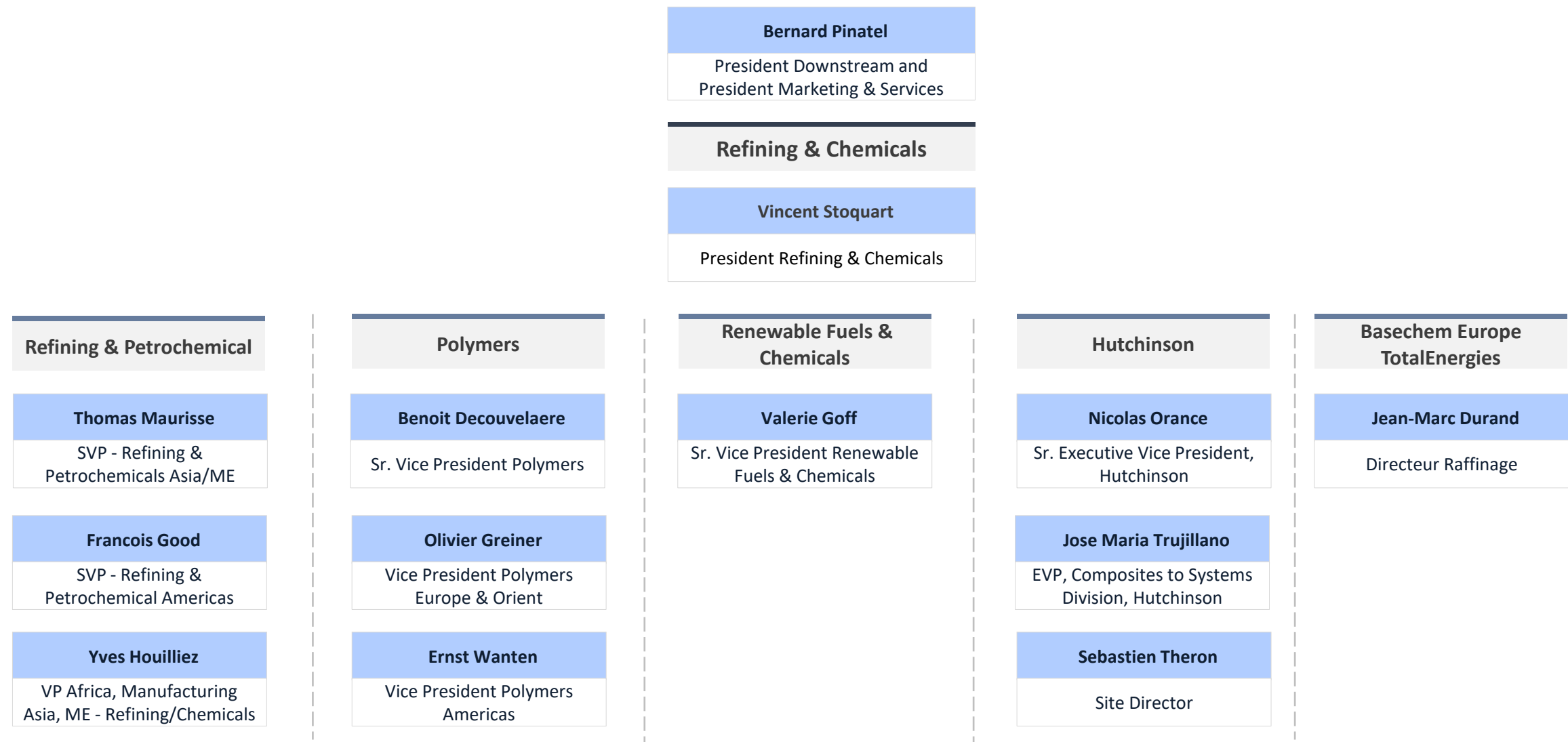
1. The overview highlights key operational and trading roles within the Integrated LNG segment. Shared functions (e.g., Strategy, Growth & Finance, People & Services) are excluded due to limited public data availability. This visualization does not depict reporting relationships

# Segment Leadership Team - Integrated Power

Integrated Power			
Stéphane Michel			
President, Gas, Renewables & Power			
Renewables	Trading Power	Saft	Integrated Power
Olivier Jouny	Dimitri Lobadowsky	Cedric Duclos	Jean-Baptiste Dubreuil
Sr. Vice President Renewables	CFO / VP Finance, Trading Power & Trading Gas	Chief Executive Officer Saft	Head of Strategy, Integrated Power business
Geoffroy Mallet	Michel Kolly	Thierry Comte	Claire Müller
VP Corporate & Project Finance, Gas Renewables, Power	Executive VP Power Trading & Origination	Purchasing and Supply Chain Director at Saft	Chief Operations Officer, Integrated Power, Belgium
Layla El Hares	Laurent Vivier	Hervé Amossé	Caroline Jamin
VP Electrical & Renewables	Sr. Vice President - Global Electricity Trading	EVP, Energy Storage Solutions	VP Innovation, Sustainability & Digital- Integrated Power
Marc-Antoine Pignon	Frédéric Contie		José Ignacio Sanz Saiz
Managing Director - Renewables USA	Head of Power Integration & Markets US		MD, Integrated Power, Belgium & Netherlands

1. The overview focuses on core business lines and trading roles within the Integrated Power segment. Shared functions (e.g., Strategy, Growth & Finance, People & Services) are excluded due to limited public data availability. This visualization does not depict reporting relationships

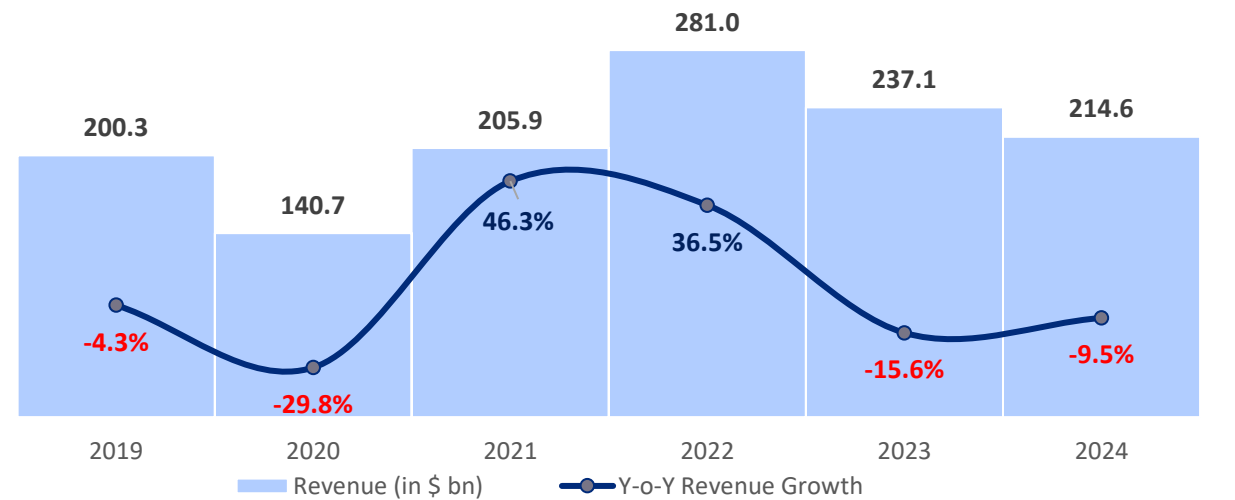
# Segment Leadership Team - Refining and Chemicals



1. The Regional refining & petrochemical segments are grouped for clarity. All six operational areas are represented, and contacts shown reflect available leadership information. This visualization does not depict reporting relationships

# Group Financial Performance

Annual Group Revenue and Y-o-Y Growth (2019-2023)



- In 2023 and 2024, TotalEnergies reported a sharp decline in its revenues (-17% in 2023 and -9.5% in 2024) due to lower oil prices, weakened European refining margins, and reduced natural gas prices and production.
- In 2022, TotalEnergies capitalized on the Russia-Ukraine conflict, which pushed global energy prices. It had leveraged its integrated model and its global LNG position to deliver strong performance across all five segments.

Key Segment-wise Forecast for 2025

Key Segments	Forecast
Integrated LNG	Gas markets should remain in tension in 2025 due to very limited expected capacity additions related to delays in some projects.
Refining & Chemicals	In 2025, Hydrocarbon production will grow more than 3%, benefiting from the ramp-up of 2024 start-ups and production start-ups, notably Ballymore in the Gulf of Mexico, and Mero-4 in Brazil.
Integrated Power	The segment is expected to expand in 2025 supported by electricity production growth greater than 20% to reach an annual net electricity generation of more than 50TWh.

***By combining hydrocarbon and electricity production growth, the Company expects to increase energy production by 5% in 2025***

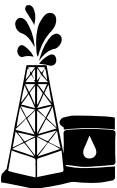
2025 Group Outlook

- For 2025, TotalEnergies **expects net investments of \$17 to \$17.5 billion**, of which \$4.5 billion is dedicated to low carbon energies, mostly integrated Power.
- **Organic investments should amount to approximately \$17 billion, focused on core growth projects** to achieve 2030 production targets, down from the \$18 billion guidance presented during the Strategy & Outlook in October 2024.



# Strategic Framework – Group Strategy

TotalEnergies’ integrated multi-energy strategy is built on two pillars: Oil & Gas – in particular liquefied natural gas (LNG) – and Electricity (Integrated Power), the energy at the focus of the transition.



## Oil & Gas Production

**Strategy:** Responsible, low-cost, low-emission production  
**Objective:** Reducing the Scope 1+2 net emissions by 40% till 2030, compared to 2015



## Integrated Power

**Strategy:** Developing a profitable business model  
**Objective:** Net electricity production of 100 TWh/year by 2030

2024 Achievement: -34% reduction in Overall Scope 1+2 emissions

2024 Achievement: Net electricity production reached 41 TWh

### 2024: Progress towards the multi-energy two-pillar strategy

Oil	Gas	Integrated Power
<ul style="list-style-type: none"><li>Start-up of five major oil and gas projects</li><li>Final Investment Decision (FID) of four major oil projects (Suriname, Brazil and Angola)</li><li>Namibia: progressing towards first development</li></ul>	<ul style="list-style-type: none"><li>Signature of &gt; 6 Mtpa LNG LT sales contracts</li><li>Marsa LNG FID (Oman)</li><li>Acquisition of interests in upstream gas assets in the Eagle Ford, Texas (US) and of SapuraOMV (Malaysia)</li></ul>	<ul style="list-style-type: none"><li>Acquiring flexible assets (Texas, UK) to provide Clean Firm Power to customers</li><li>Building Integrated Power value chain in Germany</li><li>Acquisition of Kyon, a major player in the BESS market in Germany</li><li>Acquisition of Quadra, a renewable aggregator in Germany (10 TWh in 2024)</li><li>Acquisition of VSB in Germany: a renewable developer with a pipeline of 18 GW</li></ul>

### 2025: Tighter Market Expected

Colder winter 2024/25 and low end-of-season storage expected in 2025

End of Russia-Ukraine transit agreement

Tightness in Europe leading to more competition between Europe and Asia with more opportunities for arbitrage on Atlantic flexible cargoes

# Business Strategy – Reportable Segment-wise Strategy

TotalEnergies' strategy to transition to carbon neutrality (net zero emissions) by 2030 is followed by its targeted growth strategy in all its five segments

## Exploration & Production

- **Put in production more than ten major projects**, most of which are currently under construction, and to increase its production by 3% per year between now and 2030.
- **Reduce GHG emissions** to reduce the intensity of scope 1+2 emissions of its activities.

## Integrated LNG

**Consolidate its integrated position throughout the LNG value chain** and its position as third largest global LNG player by **developing a portfolio of leading projects** (such as North Field East and North Field South in Qatar, Marsa LNG in Oman, Rio Grande LNG in the United States, Energía Costa Azul in Mexico, Mozambique LNG in Mozambique and Papua LNG in Papua New Guinea).

## Integrated Power

- In oil and gas producing countries - Support their energy transition by **relying on the Company's local presence and its historical activities** to develop multi-energy projects, particularly renewable ones.
- In the rest of the world - **Selectively develop projects, particularly via strategic partnerships** with local players.

## Refining & Chemicals

- **Continuously improve the competitiveness of refining and petrochemicals activities** by making optimal use of production assets, concentrating investments on its large, integrated platforms and reducing CO2 emissions linked to its operations.
- **Grow petrochemicals**, mainly in the United States and the Middle East, by exploiting the proximity of cost-effective oil and gas resources in order to supply growing markets, particularly in Asia.
- **Develop low carbon activities**, on the one hand in biofuels (in particular more Sustainable Aviation Fuel (SAF)), synthetic fuels produced from CO2 and green hydrogen (e-fuels), biopolymers and plastic recycling solutions, and on the other hand in materials that help enhance the energy efficiency of TotalEnergies' customers, particularly in the automotive market.

# Business Strategy – Selected Emerging Energy Segments (1/2)

While TotalEnergies' key strategy is based on two pillars – Oil& Gas, and Integrated Power, its investments have included other renewable energy sources as well

### Wind – Offshore & Onshore

**Strategy:** Build a world class cost-competitive portfolio combining renewable (solar, onshore wind, offshore wind) and flexible assets (CCGT, storage) to deliver low-carbon electricity available 24/7

**Objective:** Reach 35 GW in 2025 and 100 GW in 2030, a level that should make it one of the world's top five producers of renewable electricity (wind and solar) producers set aside.

### 2024 Achievement: 26 GW of renewable electricity

- The Company intends to pursue its investment efforts, notably in solar and wind power projects in the United States, wind power projects in Brazil in partnership with Casa dos Ventos, and plans to finalize the acquisition of German renewable projects developer VSB Group in 2025.
- The Power R&D Center has been conducting research on next generation wind technologies and floating wind power.
- TotalEnergies is developing a renewable power generation portfolio of solar (including decentralized), wind (onshore and offshore), hydroelectricity and battery storage, for a net installed capacity of 15.1 GW at year-end 2024 compared to 13 GW at year-end 2023 and 7.7 GW at year-end 2022.

### Green Hydrogen

**Strategy:** Use of low-carbon hydrogen to decarbonize Total's European refineries and thus reduce the carbon footprint associated with the production, transformation and supply of energy

**Objective:** No central objective, however, each refinery and site have their own targets and projects are being initiated to help them achieve carbon neutrality.

- TotalEnergies has been actively developing its low carbon hydrogen market by long-term third-party purchases of green hydrogen from local electrolyzers or via green hydrogen imports. Some examples are:
- Partnership with Engie to produce green hydrogen at the La Mede refinery, France.
  - Agreement with Air Liquide to develop projects in Netherlands, France, and Belgium, to produce and deliver green hydrogen, using renewable power generated by the OranjeWind offshore windfarm.
  - Development activities for renewable hydrogen projects as part of new partnership through the TEH2 joint-venture.
  - Agreement with Air Products to supply green hydrogen in Europe for 15 years from 2030.

# Business Strategy – Selected Emerging Energy Segments (1/2)

While TotalEnergies' key strategy is based on two pillars – Oil & Gas, and Integrated Power, its investments have included other renewable energy sources as well.

## Carbon Capture & Storage (CCS)

*TotalEnergies' CCS strategy gives priority to reducing emissions of its activities, to reduce Scope 1+2 emissions from upstream Oil & Gas assets, as well as refining and LNG plants.*

**Objective:** No central objective, however, TotalEnergies is investing **around \$100 million per year in this business**, with models that enables them to benefit from leverage. This investment will be sustained in order to contribute to a gross storage capacity of 10 Mt CO2 per year by 2030

TotalEnergies has been investing in Carbon Storage projects across its active geographies, with the following markets as the most promising:

### Europe:

- Europe is at the heart of this CCS strategy. The United Kingdom, Norway and the European Union have set objectives and regulations and have provided significant financial support to promote a cross-border deployment of CCS.
- TotalEnergies is currently developing four projects in the North Sea that will provide CO2 storage solutions for its own assets and those of its customers.

### North America:

- TotalEnergies has entered the United States CCS market in 2024, with a 25% stake in the Bayou Bend project in Texas.
- It is currently studying an industrial-scale production unit for "synthetic methane", produced from renewable hydrogen and biogenic CO2, to be transported and marketed using existing natural gas infrastructures

### Asia Pacific:

- TotalEnergies is studying the development of CO2 storages in Malaysia, for local and regional markets, with its partners Petronas and Mitsui.

## Section 1.A

### Geographic Focus: France

- France: At a Glance
- Active Businesses
- Normandy Integrated Platform
- Grandpuits Complex
- Donges Complex
- Carling Complex
- France: Business Strategy
- Financial Performance



# TotalEnergies France – At a Glance

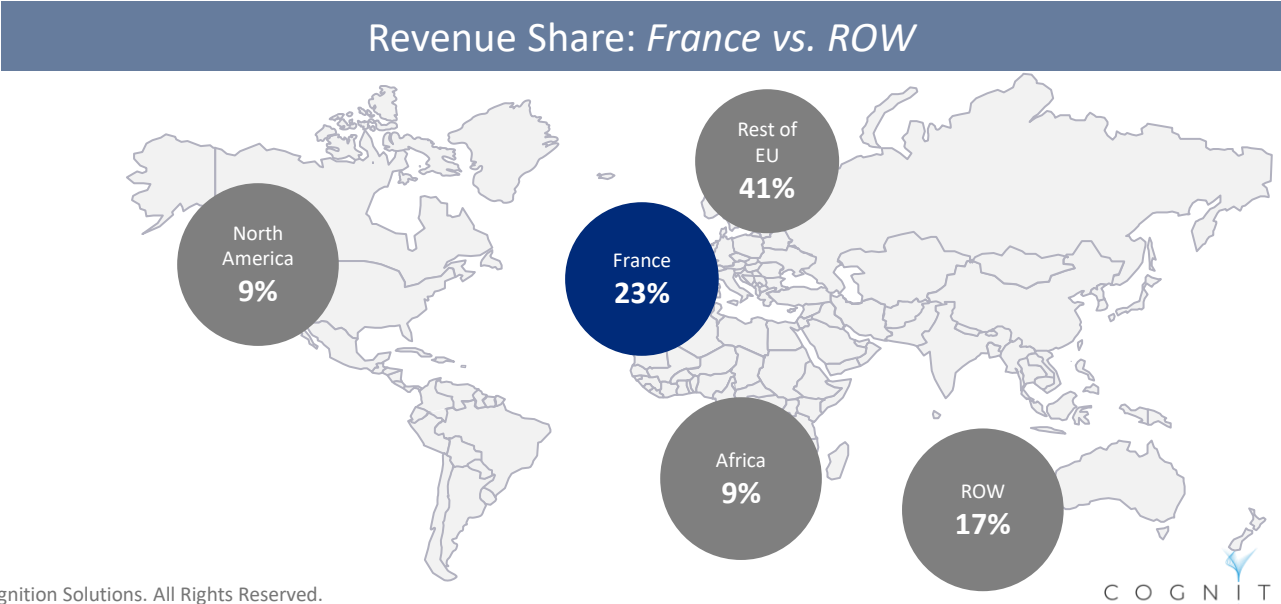
## Overview

TotalEnergies SE, headquartered in France, is the **holding company that drives the Company’s strategy**. The Company’s operations are conducted through 1,367 subsidiaries (including 192 equity companies) that are directly or indirectly owned by TotalEnergies SE and through interests in joint ventures that are not necessarily controlled by TotalEnergies. TotalEnergies SE has **three secondary establishments in France**, located in Lacq, Pau and Paris.

Key Financial & Operational Metrics	
Employees	35,492
Revenue (2023)	USD 55.6 billion
Revenue Growth (2022 vs. 2023)	-4.8%

High-level Site Data					
Industrial Batteries Manufacturing Sites	Biomethane & Biogas production sites	CCGT Plants	Refineries	Plastic Recycling Units	Elastomer Processing Sites
3	7	5	6	3	26

Key Subsidiaries	
	Acquired in 2016, <b>Saft</b> is a global leader in <b>industrial batteries</b> for critical applications in <b>transportation, aerospace, defense, telecom, grid storage, and renewable energy</b> .
	Acquired in 1999, <b>Hutchinson</b> is a global leader in <b>vibration control, sealing systems, and fluid management technologies</b> , primarily serving <b>aerospace, automotive, rail, and defense</b> sectors.



# TotalEnergies – France – Active Businesses



## Integrated Power

Total’s affiliate **Saft**, which specializes in manufacturing industrial batteries, **operates three plants in France.**

It also operates **several battery-based energy storage (BESS) units in France**, comprising lithium-ion battery containers designed and assembled by Saft.



## Integrated LNG

In France, Total produces biomethane and biogas **through seven production units.**

It also has **regasification capacity** at the Fos Cavaou, Dunkirk and Montoir-de-Bretagne terminals, as well as at the Cape Ann floating storage and regasification unit (FSRU) in Le Havre.



## Refining & Chemicals

Total operates three of the six refineries in France: ***the Normandy complex, the Donges refinery and the Feyzin complex.***

As a producer of road and aviation biofuels, it operates the ***La Mède biorefinery*** and are currently transforming their ***Grandpuits site*** into a zero-crude platform. It also operates a **special fluids plant in Oudalle.**

As part of its mechanical plastics recycling activities, its affiliate **Synova operates two sites in France.**

Finally, their affiliate **Hutchinson operates 26 production sites in France.**



## Energy efficiency

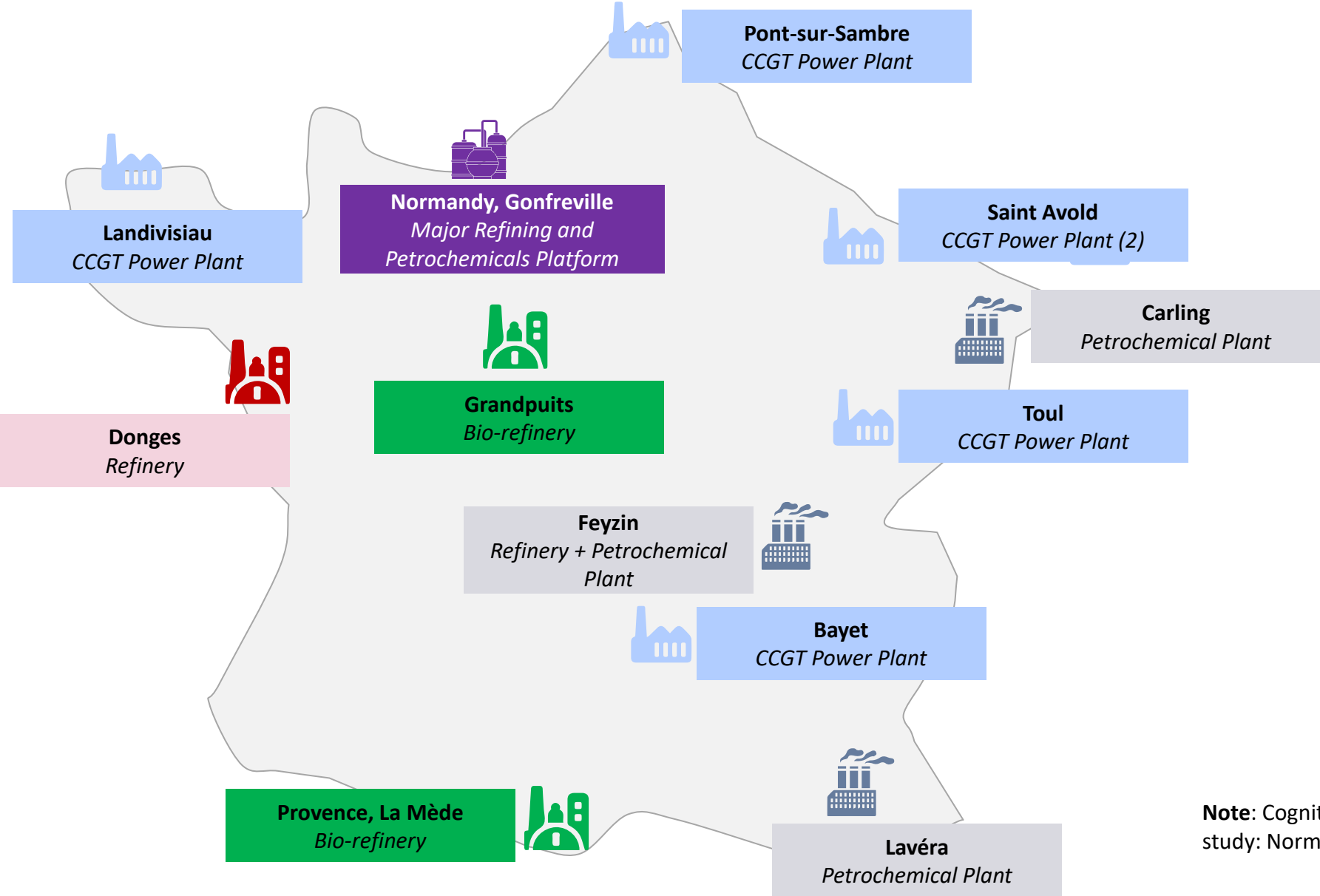
In France, Total’s affiliate GreenFlex provides customers with a range of energy performance services, from designing their strategies through to delivering operational support.



## Marketing & Services

Total has a network of more than 3,000 service stations (including AS24 stations for heavy duty vehicles), some of which are solarized and/or equipped with fast and ultra-fast electric charge points, particularly across the freeway network; we also operate a network of natural gas vehicle (NGV) stations

# Selected Active sites: Refining, Chemicals & CCGTs



## Refining & Chemicals - Capacity

Refinery	Total Distillation Capacity (as of end of 2023)
Normandy	253
Provence, La Mède	-
Donges	219
Feyzin	109
Grandpuits	-
<b>TOTAL</b>	<b>581</b>

## CCGT plants - Capacity

Plant	Installed Capacity (MW)
Landivisiau	446
Pont-sur-Sambre	445
Saint Avoild	870
Toul	434
Bayet	420

**Note:** Cognition has focused on these four sites for the study: Normandy, Grandpuits, Donges, and Carling



# TotalEnergies – France – Site/Platform Wise Stakeholder Overview

France				
Isabelle Patrier				
Directrice France (Country Director)				
Normandy	Carling Saint-Avoid	Donges	Grandpuits	Feyzin Refinery
David Marion	Corinne Loigerot	Vincent Demargne	Jérôme Plana	Ludovic Fafin
General Manager Normandy Refining-Petrochemical Complex	Director - Carling Saint-Avoid Platform	Director - Donges Platform	Directeur Adjoint Plateforme Grandpuits-Gargenville	HSE Platform Manager Feyzin - Head of HSSEIQ Department
Guillaume Alliot	Georges Joris	Lionel Mazaud	*Pedro da Silva	Jerome Maitre
Deputy General Manager, Normandy Platform	Platform Director	Deputy General Manager in Charge of Operations	Directeur Adjoint Plateforme Grandpuits-Gargenville	Head of the Mechanical Department of the Feyzin Platform
La Mède	Oudalle Plant	Dunkirk		
Guillaume Eveno	Dominique Mallia	Joris Haelterman		
General Manager Platform La Mède	Managing Director -TotalEnergies Special Fluids Plant - Oudalle	Industrial Coordinator Zeeland Refinery and Dunkirk		
Partrick G.				
Head of the MEDE - TotalEnergies Oil Depot Operations Department				

1. The slide covers all major TotalEnergies sites in France along with key professionals, based on publicly available information. Some sites or senior roles may not be included due to limited data availability. This visualization does not depict reporting relationships

2. The view is intended as a functional site summary; hierarchy mapping and reporting visuals are excluded by design

\*Marked as low confidence profile due to limited professional media presence and unverifiable contact details

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# Normandy Integrated Platform – Overview

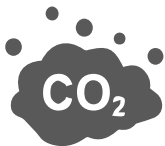
At a Glance	
Established	1933
Area	~500 hectares
Location	Gonfreville-L'Orcher near Le Havre
Annual Conversion Capacity	12 million metric tonnes of crude oil

Normandy Platform: Brief Overview
<ul style="list-style-type: none"><li>The Normandy platform is <b>TotalEnergies Integrated Platform</b>, combining refining, petrochemicals, polymers, and hydrogen production units.</li><li>It is one of Totalenergies flagship industrial platforms globally, and <b>is its largest refinery and petrochemical sites in France</b>.</li><li>The refinery's output represents <b>12% of France's total refining capacity</b> and the petrochemicals plant accounts for <b>11% of plastics produced in France</b>. Products from the Normandy platform are sent to <b>60 countries worldwide</b>.</li></ul>

## Production Units



Refinery Unit	Petrochemicals Facility	Polymer Production Site	Hydrogen Production Unit
<ul style="list-style-type: none"><li>Processes ~12 million tons of crude oil annually</li><li>Produces ~200 products: fuels, lubricants, jet fuel, petrochemical feedstocks</li><li>Began producing <b>Sustainable Aviation Fuel (SAF)</b> in 2022</li></ul>	<ul style="list-style-type: none"><li>Produces olefins and aromatics for plastics and chemicals</li></ul>	<ul style="list-style-type: none"><li>Specializes in <b>polypropylene</b> and <b>recycled polymers</b></li><li>Expanded in 2021 to <b>double capacity</b> of <b>recycled plastic</b> for automotive/construction industries</li></ul>	<ul style="list-style-type: none"><li>Operated in partnership with <b>Air Liquide</b></li><li>Will supply <b>low-carbon hydrogen</b> to reduce emissions by <b>150,000 tons/year</b></li><li>Part of a broader <b>green hydrogen ecosystem</b> development</li></ul>



*Between 2000 and 2010, €1 billion has been invested to make the facility more energy efficient and align its production with changing demand. Subsequent upgrades have lowered energy and water use at both sites and limited air emissions, thereby reducing the platform's environmental impact.*

# Normandy Integrated Platform: Shutdowns for Maintenance



## Planned Shutdowns

Normandy platform undergoes **regular minor and major (controlled) shutdowns** in parts or all of its production units to perform essential maintenance, inspections, upgrades, or regulatory checks.

### Planned: Minor Shutdowns

- Minor shutdowns last for 2 days (weekends) or for a couple of days and are carried out as a regular part of its spring or autumn maintenance.
- **Example:** On 3<sup>rd</sup> October 2024, Normandy shut down one of its production units to carry out autumn maintenance activity.

### Planned: Major Shutdowns

#### Overview:

- Major shutdowns at Normandy are **planned every seven years, lasts for 12 weeks**, and is **planned 2 years in advance**.
- For this shutdown, **a village is set up to accommodate contractor companies**, including many local and regional subcontractors.
- During such shutdowns, normally, 2,000 people work on the site every day and carry out around 1 million hours of work.

#### Current Schedule:

- **A major shutdown of six petrochemical units is planned to begin on April 9, 2025.**
- Facilities will be opened, cleaned, and inspected, and the following units will be impacted: *Stream cracker, Butadine, Aromatics, Styrene, Linear Polyethylene, and Energy logistics unit.*
- 2,000 workers from 50 contractor companies are planned to work at the site and are set up at the Grand Arret village next to the site.



## Unplanned Shutdowns

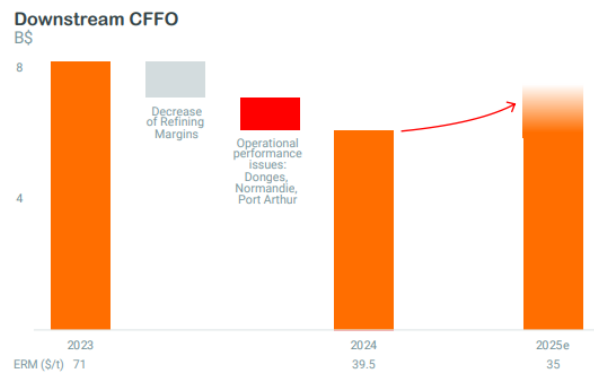
Normandy platform has **undergone sudden, unscheduled stop in its operations**, either due to geopolitical factors or due to safety incidents.

### Unplanned: Strike-Induced Shutdowns

- **September 28, 2022:** TotalEnergies began shutting down the Normandy refinery due to a strike initiated by the General Confederation of Labour (CGT) over purchasing power concerns.
- **March 17, 2023:** The refinery commenced shutdown procedures as part of nationwide protests against pension reforms.

### Unplanned: Safety Incidents Related Shutdowns

- In March and June 2024, the Normandy platform faced multiple unplanned shutdowns for some of its units for maintenance activities.



#### Focusing on operational excellence in Refining & Chemicals

- Discipline on costs
- Deliver energy efficiency savings programs: 100 M\$/y savings from 2025
- Focus on plant availability (target > 85% utilization)

- *The impact of shutdown of the Normandy platform in 2024 was seen on the CFFO (Cashflow from Operations) and European Refining Margin (in dollars per ton), which reduced in 2024.*

- *A key part of the 2025 objectives of TotalEnergies is to focus on plant availability, with a target of greater than 85% plant utilisation*

# Normandy Integrated Platform: Business Strategy

As the biggest refining and petrochemical platforms in the world for TotalEnergies, the Normandy platform has undergone significant developments to align itself with TotalEnergies 2050 energy transition goals



## Development of Sustainable Fuel

- On March 3, 2022, TotalEnergies' Normandy platform **started production of sustainable aviation fuel (SAF)**.
- This new site complements the biojet fuel production capacities of La Mède biorefinery (Bouches-du-Rhône) and the Oudalle plant (Seine-Maritime).



## Biogas Production

- On February 28, 2025, TotalEnergies commissioned BioNorrois, its second-largest biogas production unit in France.
- Located in Fontaine-le-Dun, Normandy, **the facility will inject 153 GWh of biomethane annually into the renewable gas network**, a volume sufficient to meet the energy needs of more than 30,000 residents.



## Supply of Green, Low-carbon Hydrogen

- On September 14, 2023, TotalEnergies and Air Liquide signed an agreement for the long-term supply of green, low-carbon hydrogen to TotalEnergies' refining and petrochemical platform in Normandy.
- This project contributes to the decarbonisation of the Gonfreville platform and **will reduce the site's annual CO2 emissions by up to 150,000 tonnes per year**. Air Liquide will invest over €400m to develop its Normand'Hy electrolyser.

## Impact

*This move enables **TotalEnergies to meet demand from its customers and respond to French legislation**, which calls for aircraft to use at least 1% SAF effective January 1, 2022.*

*BioNorrois marks a **major milestone in the company's efforts to scale renewable gas networks**. By leveraging biomethane production, TotalEnergies is not only reducing greenhouse gas emissions but also fostering energy independence.*

*This partnership with Air Liquide is a new step in **TotalEnergies' ambition to decarbonize the hydrogen used by its refineries in Europe by 2030**. By supplying the electrolyzer with renewable electricity from solar and wind projects, TotalEnergies is making the most of its positioning as an integrated power supplier.*

# Normandy Integrated Platform: Competitor Activities

- Ponticelli Frères is an **independent and family-owned group** providing industrial services mainly to companies in the oil and gas, energy, chemical, pharmaceutical and steelworks sectors.
- **For over thirty years**, Ponticelli Group has been responsible for **general and mechanical maintenance** at the Normandy site.
- A **40-strong team organizes and performs the work** from plating, de-plating, jointing and assembly to industrial pipework and mechanical work.



## Ponticelli’s Maintenance Procedure at Normandy



### 1. Defining the work

- Before any maintenance work is undertaken, the **customer and Ponticelli Group area coordinators visit the site to define the work** to be done and identify any risks (burns, falls, bruising, etc.).
- This is an opportunity to **draft the operating procedure** including the work phasing, hazards and related preventive measures (scaffolding, breathing apparatus, etc.), which is systematically read and explained to everyone involved.



### 2. Securing Work Permits

- Personal protective equipment (PPE) and the customer’s lockout procedures are then checked: pump isolated, valve closed, motor disconnected, etc.
- **TotalEnergies issues a specific work permit for each operation.** It is completed with a “Safety Green Light”, which, by means of a safety checklist signed by the operator and affixed to the back of the work permit validation form, ensures that the conditions are met for work to be done safely.



### 3. Final Check

- This is followed by the **Ponticelli Minute**, which complements the TotalEnergies “Safety Green Light” and is **designed to carry out a final check before work begins.**
- During operations, the customer may carry out unannounced audits to check the safety conditions.
- In 2022, Ponticelli Group achieved a compliance rate of 99%

# Normandy Integrated Platform: Stakeholders

## Normandy Site / Platform

- Legends**    **Level of Influence**
- Decision-Maker (Primary)
  - Influencer (Strategic)
  - Operational Role (Executor)

●

**David Marion**  
General Manager Normandy  
Refining-Petrochemical complex

## Supply Chain & Logistics

●

**Frédéric Loisel**  
Logistics Director


●

**\*Nicolas Faure-Gignoux**  
Chef de Service Maintenance  
IA

**Olivier Molza**  
Industrial Buyer

## Procurement

●

**Philippe Durand**   
Purchasing Manager,  
Normandy Platform

●

**Anne Bazinette**  
Global Procurement - Lead  
Buyer

●

**Laure Dochler**  
Buyer - Expediting Grand Stop  
& Projects

## Operations

●

**Christian Fremion**  
Maintenance and Projects  
Director

●

**Stephane Leplat**  
Head of HSE Division

●

**Delphine Bellivier**  
Production Manager

●

**Guillaume Alliot**  
Deputy General Manager,  
Normandy Platform

●

**Céline Majorel**  
Head of Process Central Team

●

**Adrien Dufour**  
Head of Scheduling -  
Normandy Refinery

●

**Marilyn Chaubo**  
Chef de Service Process  
Control

## Site Management

●

**Cyril Revault**  
Head of Steamcracker  
Butadiene & Aromatics Dept.

●

**François Gerald**  
Motorway Site Director (76)  
Seine Maritime


●

**Stephane Bohaer**  
Sector Head

●

**\*Riheb Ben Amor**  
Sector Manager

1. The organogram highlights key functions at the TotalEnergies Normandy platform. Decision-making roles are inferred from public data and role context. \*Some contacts are included for coverage despite unclear business unit links. This visualization does not depict reporting relationships.

2. Click (  ) to view detailed SOI map

\* Marked as low confidence profile due to limited professional media presence and unverifiable contact details

# Grandpuits Refinery: Overview & Business Strategy

At a Glance		Brief Overview
Established	1966	<ul style="list-style-type: none"><li>The Grandpuits-Gargenville site comprises the Grandpuits refinery (Seine-et-Marne), commissioned in 1966, and the Gargenville oil depot (Yvelines). During its commissioning it was a 3.6 million tonnes per annum (Mtpa) distillation unit, a reformer unit, a hydro Desulphurisation unit (HDS), and a hydrotreatment unit (HDT).</li><li>Prior to its decommissioning in 2021, the main activities of the refinery involved <b>biofuel production and plastic recycling</b>, along with other activities such as renewable hydrogen, biomethane, solar energy and electricity storage.</li><li>The site is managed by TotalEnergies Raffinage France (TERF), the wholly owned subsidiary of TotalEnergies SE.</li></ul>
Area	~155 Hectares	
Location	Grandpuits-Bailly-Carrois, Seine-et-Marne	
Production Capacity	Not under production yet (scheduled to come on stream in 2026)	

Business Strategy: <i>Converting the site to a Zero-crude Platform</i>	
<ul style="list-style-type: none"><li>As part of its carbon neutrality strategy, <b>TotalEnergies plans to transform its Grandpuits platform into a zero-oil platform</b>. The crude oil refining ceased in the first quarter of 2021 and the storage of petroleum products ceased at the end of 2023.</li><li><b>With an investment of more than €500 million</b>, the complex will focus on four new industrial activities:<ul style="list-style-type: none"><li><i>production of renewable diesel mainly for the aviation industry</i></li><li><i>production of bioplastics</i></li><li><i>plastics recycling</i></li><li><i>operation of two photovoltaic solar power plants.</i></li></ul></li></ul>	

Projects Planned (as part of the strategy)			
BIO-JET SMR Project (Investment: EUR 285 million)	Project PLA (Investment: EUR 200 million)	PYROLYSE Project (Investment: EUR 57 million)	Photovoltaic Solar plants (Investment: Not disclosed)
Total will construct a renewable diesel unit, primarily producing for the aviation industry. This initiative will contribute to France's roadmap for deploying sustainable aviation fuel, which calls for an incorporation target into aviation fuel of 2% by 2025 and 5% by 2030.	Total Corbion PLA, a 50/50 joint venture between Total and Corbion, will be constructing Europe's first PLA manufacturing plant.	Total will be constructing France's first chemical recycling plant with Plastic Energy (Total 60%, Plastic Energy 40%). The site will also include a mechanical recycling unit for plastic waste, scheduled for commissioning in 2026.	Total will be building two photovoltaic solar plants, one with capacity of 28 MWp (at the Grandpuits site) and the other with capacity of 24 MWp (at the Gargenville site), which will contribute to Total's ambition to provide green electricity to all its industrial sites in Europe.

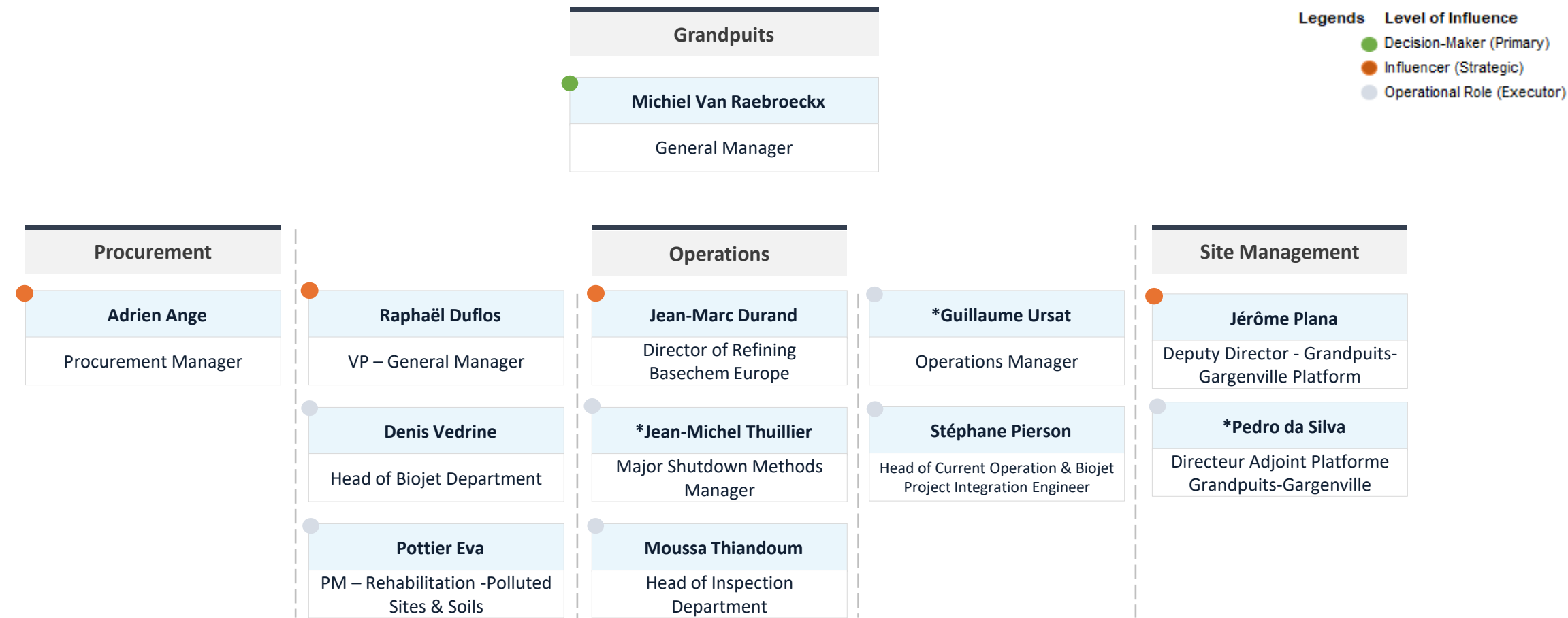
# Grandpuits – Maintenance Shutdowns & Contractors on site

As of 2021, Grandpuits refinery had ceased its crude oil refining as it was undergoing restructuring as part of its business strategy and hence all major turnaround and maintenance activities will be undertaken once its refinery comes on stream in early 2026 (extended from its original date of mid 2025).

Sub-contractor	Key Activities
Actemium	New construction and industrial maintenance in electricity, instrumentation, analysis, and automation.
Apave	Inspection and Technical Support, Training, Testing and Measurement, QSSE Management, Building Civil Engineering and Certification.
Asymptote	Engineering, technical studies and Project management.
EIFFAGE Energie Systemes	Engineering in piping, framework, metalwork, and metal structures. Design/Production/Installation projects in the fields of metalwork, metal structures, piping, boilermaking, and tanks.
EGI	Engineering design office specializing in general installations in various fields, operating in the oil & gas, chemistry, energy, life sciences, and industrial sectors.
Ekium	Specializing in engineering and automation
Engie Solutions	Maintenance in climate engineering and works
HTP EST	Earthworks, VRD, Civil Engineering, Road Networks
ISS	Logistics and Production
MISTRAS Group Inc	Provision of traditional and advanced on-site Non-Destructive Testing services; Rope Access Work (NDT, inspection, and maintenance); Design and marketing of Non-Destructive Testing, Acoustic Emission, and Ultrasonic instrumentation; Mechanical Testing; Expertise, technical assistance, and training
Secauto	Industrial analysis, Instrumentation, Electricity, Networks - Fiber Optics.
Securalliance	Private Security
SIEMO	<b>Scaffolding, insulation, fireproofing, thermal insulation, electrical tracing</b>
SNEF	Electrical Engineering/Low Currents/Industrial Processes/HVAC Engineering.
SODI	Industrial maintenance and cleaning.



# Grandpuits: Stakeholders



1. The organogram provides a functional overview of key personnel at the Grandpuits Site/ Platform, compiled from publicly available information. Due to limited data availability into site-level disclosures, certain roles—particularly in site management—may be underrepresented. This visualization does not depict reporting relationships.  
\*Marked as low confidence profile due to limited professional media presence and unverifiable contact details

# Donges Refinery: Overview and Site Structure

At a Glance		Brief Overview
Established	1933	<ul style="list-style-type: none"><li>• <b>Donges is Total Group's second largest refinery in France.</b> On this site, three oil tanker berths are used exclusively to import crude oil and four other berths are used to export refined petroleum products.</li><li>• The Donges refinery, which had been shut down since the end of 2020 (economic shutdown in a context of sharp deterioration in refining margins as a result of the COVID-19 pandemic, followed by a major planned shutdown) <b>restarted in May 2022</b>, returning to its original level of activity.</li><li>• 650 employees work on site and 4,000 contractors from external companies work there daily.</li></ul>
Area	~350 Hectares	
Location	Loire-Atlantique	
Annual Processing Capacity	11 million tons of crude oil per year	

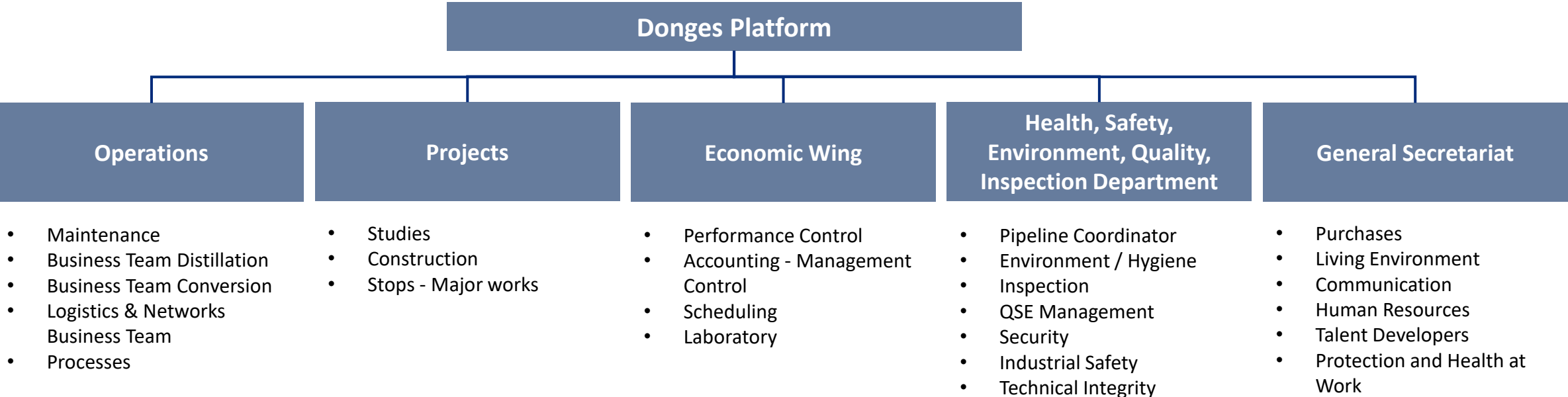
## Business Strategy: *The Horizon Project*

- The Horizon project, **launched in 2015 represents a €400 million investment** to improve the competitiveness of the Donges refinery and improve its position in the Saint-Nazaire region. This project will provide the site with new opportunities through the construction of two new manufacturing units.

Two New Manufacturing Units	Diversion of the Railway Track
<p>The project, currently being deployed, includes two new units, with commissioning scheduled for the first quarter of 2025.</p> <ul style="list-style-type: none"><li>• A new desulfurization unit for intermediate feedstock used to produce low-sulfur fuels that meet the evolutions of E.U. specifications.</li><li>• A steam methane reformer (SMR) to produce hydrogen needed for the desulfurization unit. The SMR will be built by a contractor under a long-term hydrogen supply contract with the refinery.</li></ul>	<ul style="list-style-type: none"><li>• RD100 and Croisic railway line crossed the Donges refinery until October 2022. However, around 60 trains, carrying several thousand passengers and goods, run daily on this route. 14 of them stop at the Donges railway station.</li><li>• The rail bypass project for the Donges industrial sites (Donges refinery + Finagaz Liquefied Petroleum Gas filling site + SFDM fuel storage) consisted of creating a 4km long diversion of the old railway line to the north of the RD100 and moving the existing stop near the town centre of Donges.</li></ul>

# Donges Refinery: Site Structure

## Donges Refinery: Organization Structure



# Donges Refinery: Maintenance and Shutdowns



## Planned Shutdowns

Donges refinery undergoes **regular minor and major (controlled) shutdowns** in parts or all of its production units to perform essential maintenance, inspections, upgrades, or regulatory checks.

### *Planned: Major Shutdowns*

**Overview:**

- **Donges refinery undergoes a major shutdown every three years.**
- A Major Shutdown is prepared 2 years in advance : a dedicated unit is set up, composed of a shutdown manager, two deputies (Logistics / Works), as well as business project managers (Inspection, Electricity-Instrumentation, etc.), i.e. nearly 30 people at the start of the project.
- The staff of this unit then gradually increased to reach around 70 people a few months before the actual work.
- The GA preparation unit carries out pre-diagnostics, defines the scope of the work, determines the schedule, the budget, etc. It also mobilizes TotalEnergies teams as needed and prepares the logistics dedicated to welcoming the participants to the site.

### *Planned: Minor Shutdowns*

- Several units are shutdown each year to allow maintenance and inspection work.
- Outside of these planned periods, refinery teams may decide to preventively shut down a unit if they find that not all the conditions for its optimal operation are met.



## Unplanned Shutdowns

Donges refinery has **undergone sudden, unscheduled stop in its operations**, either due to geopolitical factors or due to safety incidents.

### *Unplanned: Economic Shutdown*

In December 2020, TotalEnergies halted operations at the 222,000 barrels per day (b/d) Donges refinery citing economic reasons. The COVID-19 pandemic led to a sharp decline in oil demand and deteriorated refining margins, making operations financially unviable. It remained unavailable for 17 months.

### *Unplanned: Labor Strikes*

In October 2022, workers at the Donges refinery initiated a strike as part of a broader industrial action across TotalEnergies' French refineries. The strike was primarily over demands for higher wages in response to rising inflation. The strike lasted for 19 days.

### *Unplanned: Technical Shutdown*

On March 1, 2024, TotalEnergies initiated a full shutdown of the Donges refinery to address maintenance issues, including repairing a leak and other technical concerns.

**Each year, more than €55 million is dedicated to routine maintenance work on the manufacturing units and the storage park**

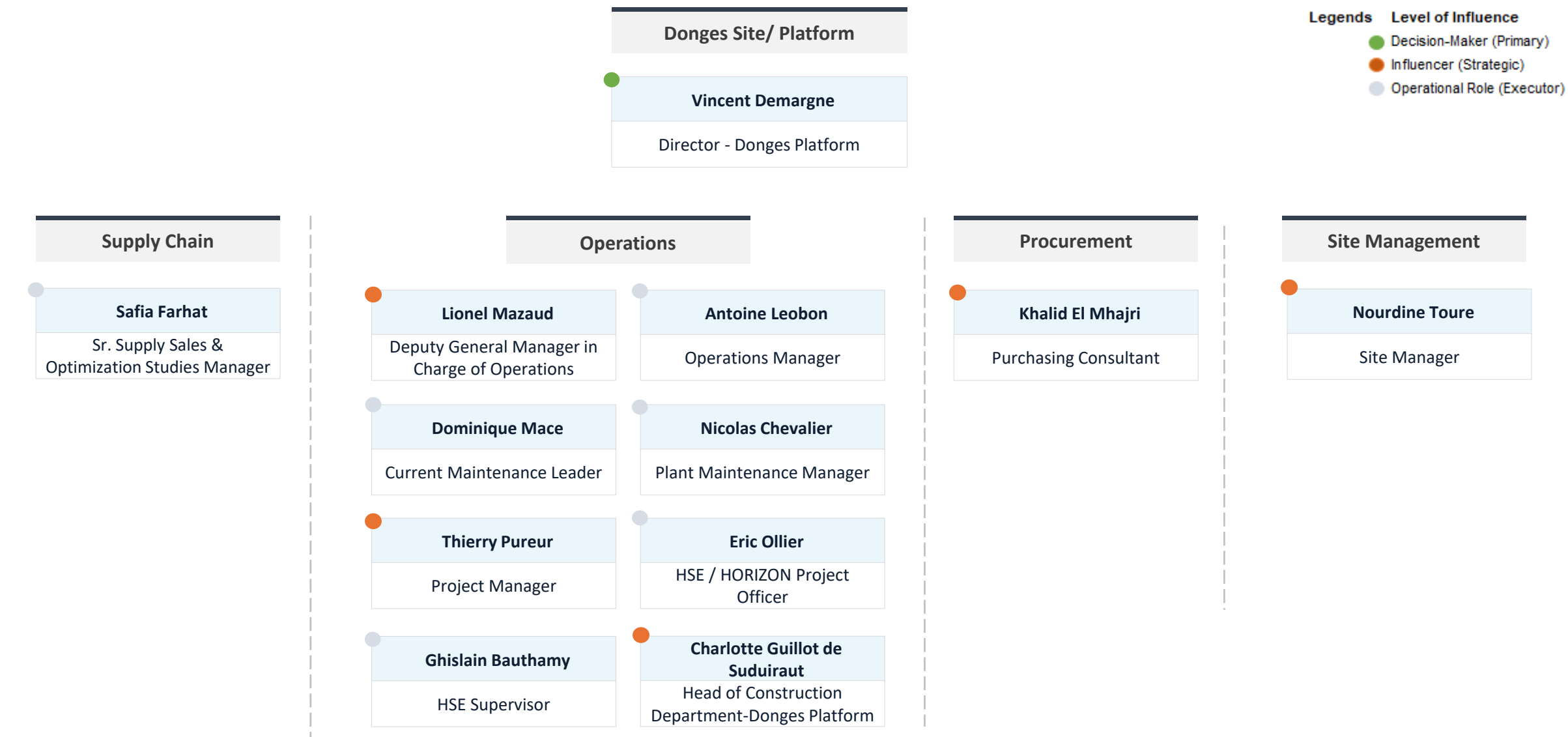
# Donges Refinery: Active Contractors

Company	Award Won	Activity / Type of Contract
SIEMO France	2023-24	Scaffolding for the Alkylation unit
Maire Tecnimont S.p.A.	2020	EPCC contract for hydrotreater unit
Groupe Ponticelli	2017, 2022	Erection and piping - steering of the replacement of an essential compensator that caused the fortuitous FCC 2017 shutdown
Amec Foster Wheeler	2017	Front-End Engineering Design (FEED) contract
Actemium	2023	All installation, instrumentation, and analysis work, covering electrical substations, technical and control rooms, regulatory control and maintenance.
SEGULA Technologies	2022	Renewal of the dock's automated systems and the modernization of its control room.



- This photo shows the scaffolding being erected by the SEIMO teams on column C 1003 of the Alkylation unit.
- The scaffolding weighs 81 tons and is 65 meters high. Approximately 10 employees work on this site.
- This column is used for all non-destructive testing (NDT) work and shutdowns.

# Donges Refinery: Stakeholders



1. The organogram provides a functional overview of key personnel at the Donges Platform, compiled from publicly available information. Due to limited data availability into site-level disclosures, certain roles—particularly in site management—may be underrepresented. This visualization does not depict reporting relationships.

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# Carling Petrochemical Complex - Overview

Carling Refinery – At a Glance	
Established	1954
Area	~600 Hectares
Location	Carling, Saint-Avoid
Annual Processing Capacity	260 KT/year – Polystyrene 150 KT/year Polyethylene 30 KT/year – Polypropylene

Carling Refinery – At a Glance
<ul style="list-style-type: none"><li>The Carling –Saint-Avoid Platform, is TotalEnergies petrochemical complex that <b>specializes in the production of polymers</b>, including polystyrene, polyethylene, and polypropylene compounds used in various applications such as automotive parts and medical devices, and <b>Hydrocarbons</b>, manufactured under the Cray Valley brand.</li><li>In 2013, the management decided to transform the site from a <b>loss-making steam cracker to a polymer production site</b>.</li><li>In 2022, as a key milestone, <b>Carling received ISCC PLUS Certification</b>, which enabled it to produce certified renewable resins, furthering TotalEnergies' sustainability goals.</li></ul>

## Carling – 4 Key Production Units



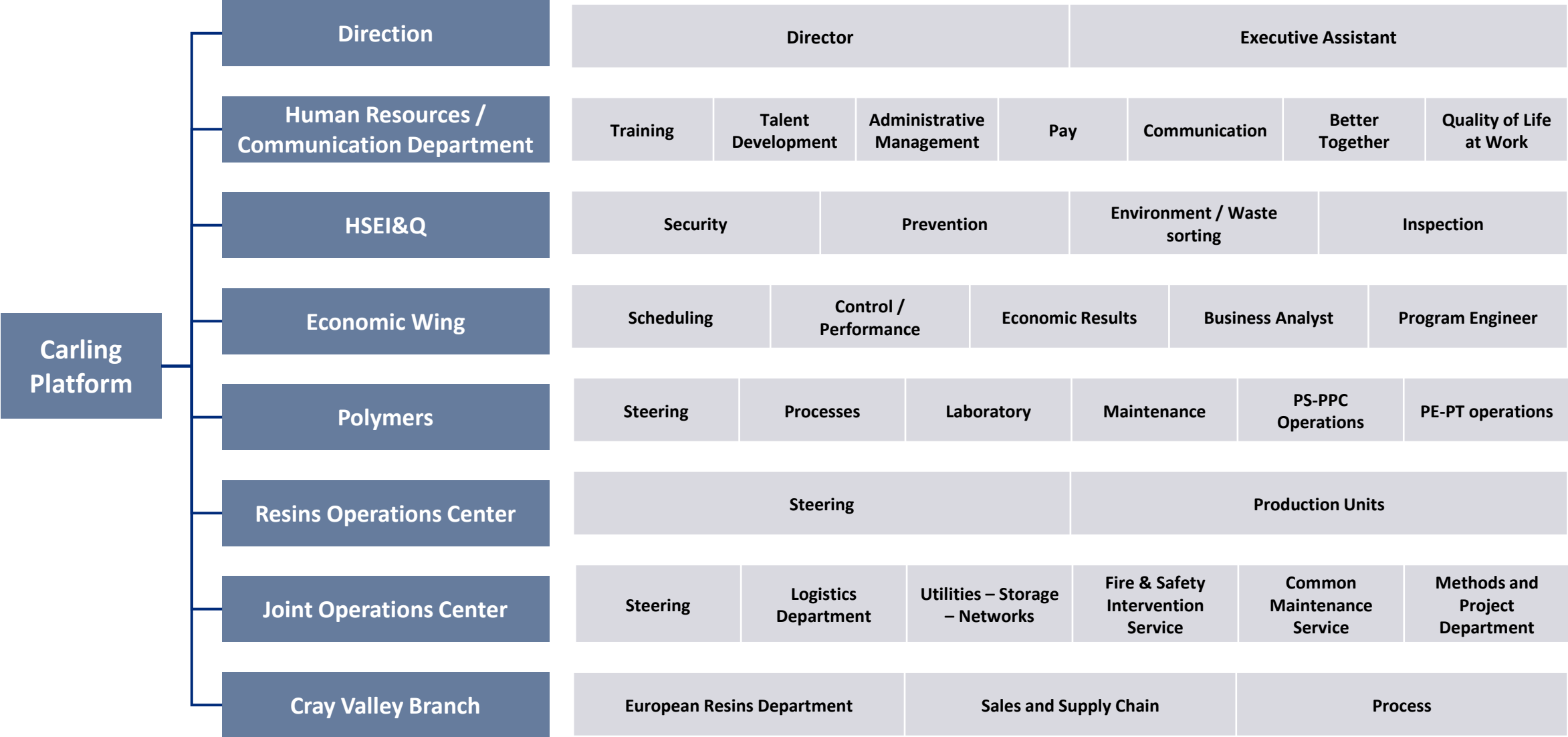
The Polystyrene Unit	The Polyethylene Unit	The Polypropylene Compounds Unit	Resin Units
3 production lines: <ul style="list-style-type: none"><li>PSC1: High Impact Polystyrene</li><li>PSC2: Shock and Crystal Polystyrene</li><li>PSC3: Crystal Polystyrene</li></ul>	2 production lines: <ul style="list-style-type: none"><li>Line 41 (SK Chemicals)</li><li>Line 43 (High Pressure)</li></ul>	The new compounding workshop consists of two production lines. Each of these lines is equipped with an extruder, a granulation unit and its systems for handling raw materials and finished products.	Types of resin produced: C4 Resins: Ricon <sup>®</sup> and Krasol <sup>®</sup> W resins: Cleartack <sup>®</sup>

## Key Competitor

	<ul style="list-style-type: none"><li>SIEMO France worked on the Polystyrene (PS) unit shutdown in Carling in December 2024, and responds to all the urgent needs of TotalEnergies urgent maintenance requirements.</li></ul>
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# Carling Petrochemical Complex: Organization Structure

## Carling Refinery: Organization Structure





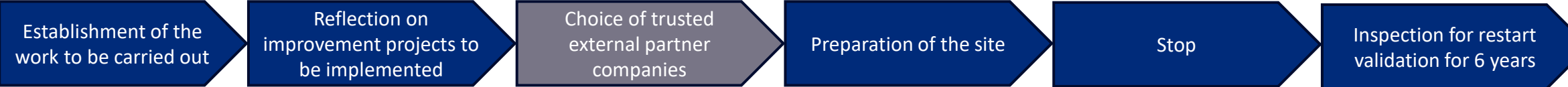
# Carling Petrochemical Complex: Strategy & Maintenance Schedules

Carling Refinery: Strategy		
Plant Restructuring	Contribution towards TotalEnergies' Energy Transition Strategy	Multi-energy Strategy
<p>Between 2013 to 2016, <b>TotalEnergies spent approximately €200 million</b> to revamp the Carling complex for upgrading existing units and constructing new facilities to produce high-value polymers and hydrocarbon resins.</p> <p>In July 2023, <b>TotalEnergies and INEOS signed agreements to further consolidate the integration of its Feyzin and Carling petrochemical sites</b>, with Feyzin becoming Carling's integrated ethylene supplier, in line with their strategy to focus on its integrated platforms.</p> <p>In May 2022, <b>Saft commissioned an energy storage site</b> at Carling platform with a storage capacity of 25MW/25MWh, made up of 11 lithium-ion battery containers, designed and assembled by Saft.</p>	<p>Since 2016, the TotalEnergies Carling – Saint-Avold site has been pursuing a major challenge: <b>improving its energy efficiency</b>.</p> <p>To achieve this, an <b>Energy Management System (EMS) has been deployed</b>, enabling the analysis, support, and implementation of actions to reduce and control consumption.</p> <p>As a result of this development, since 2018, <b>the site has improved its energy performance by more than 12 million kWh/year</b>.</p>	<p>TotalEnergies' multi-energy strategy is illustrated at the Carling platform, <b>where the company is diversifying its activities by producing and storing electricity</b>:</p> <ul style="list-style-type: none"><li>• Two combined cycle gas turbine power plants</li><li>• Electricity storage through the commissioning of the storage site</li></ul> <p>On the Carling platform, TotalEnergies is also striving to develop green chemistry by supporting the establishment of industrial producers active in this segment.</p>

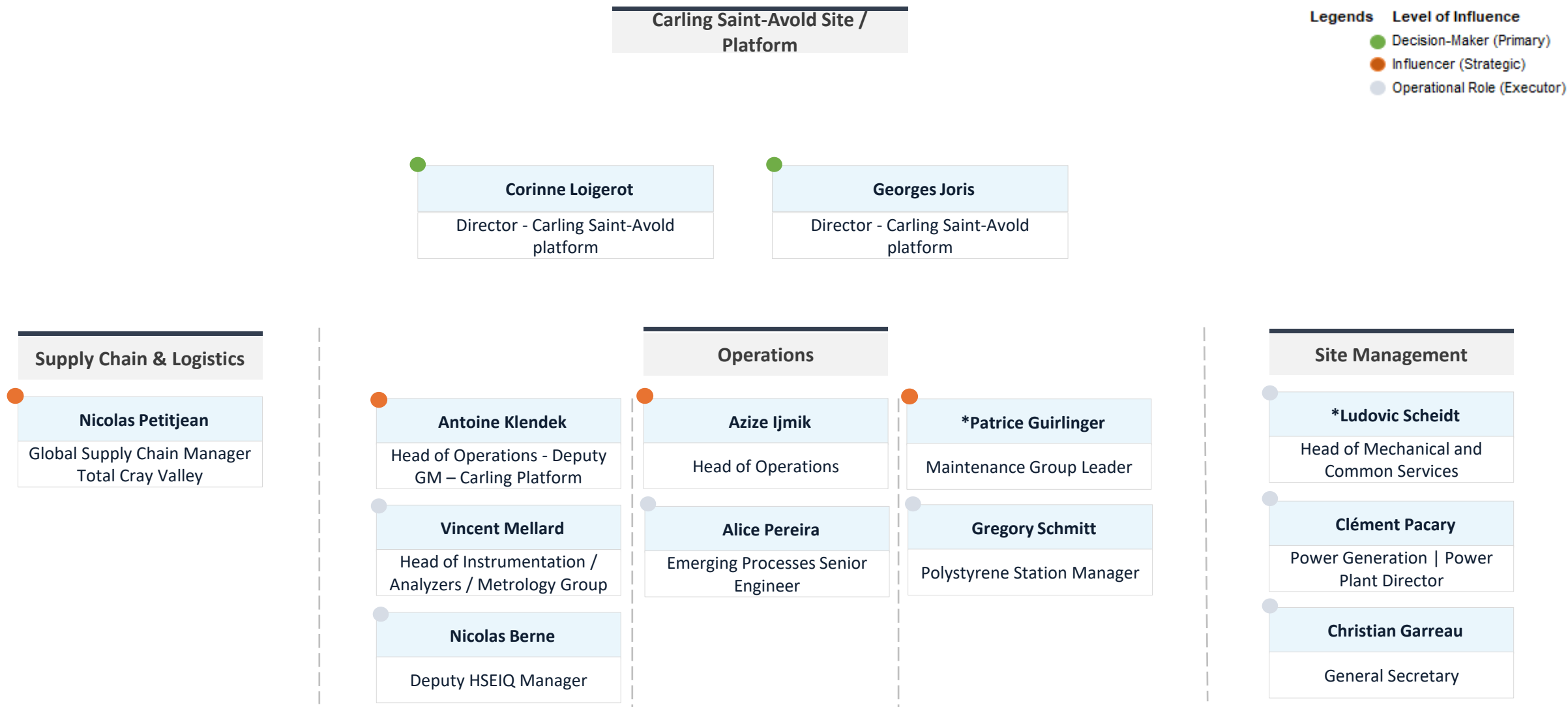
## Carling Refinery: Maintenance Schedules

**Major shutdowns on the site are planned every six years or even four years for some installations.** This involves shutting down a unit in order to inspect its equipment and confirm its restart into operation.

*A major shutdown is thought out and planned nearly two years in advance and is organised in six stages:*



# Carling Petrochemical Complex: Stakeholders



1. The organogram highlights key functions at the TotalEnergies Carling site. Decision-making roles are inferred from public data and contextual assessments. Due to limited data availability, some personnel or business units may not be represented. This visualization does not depict reporting relationships.

\* Marked as low confidence profile due to limited professional media presence and unverifiable contact details

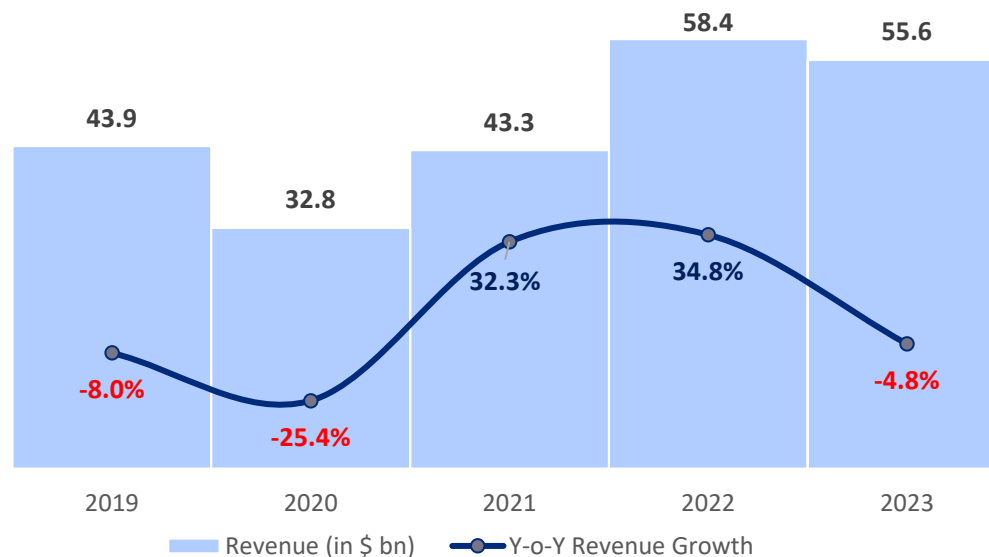
# Strategic Focus Areas (2024-2025) - France

Since 2020, while transforming its energy offering, TotalEnergies has invested more than €8 billion in France, nearly half of which has gone into the energy transition of its sites and their customers.

Key Theme	Overview	Sites
Transforming Industrial Operations	TotalEnergies is repurposing existing facilities to align with sustainable energy goals.	The Grandpuits refinery is undergoing a transformation into a zero-crude platform, focusing on producing biofuels, bioplastics, and implementing advanced plastic recycling technologies.
Energy Security & Supply	By 2024, Total had diversified and secured France's fuel and liquefied natural gas supply, and are now investing to modernize and transform them into biofuel production	<ul style="list-style-type: none"><li>• La Mède (Bouches-du-Rhône)</li><li>• Grandpuits (Île-de-France)</li></ul>
Decarbonization of Customers	In 2024, TotalEnergies entered into a strategic partnership with Airbus and revised upwards its supply agreement with Air France-KLM, and now is one of the world's leading producers of sustainable aviation fuels (SAF) with three production sites in France	Total is the only HVO producer in France due to its La Mède biorefinery. By 2024, it will have more than 600 professional HVO100 customers across France.
Industrial decarbonization	Total has developed a Mede new investment plan to maintain the continuous improvement of the energy efficiency of our industrial sites.	With the aim of decarbonizing the hydrogen used in its French refineries and biorefineries, more than 70,000 tonnes of green hydrogen per year have already been contracted in La Mède , Grandpuits and Normandy .

# Financial Performance

France: Annual Revenue and Y-o-Y Growth  
(2019-2023)



- In 2024, TotalEnergies reported a sharp decline in its revenues (-9.5%) and adjusted net income (-26.17%) due to a sharp 44% decline in European refining margins and reduced operations in certain units.
- TotalEnergies' performance in France followed the global trend, in which profits from oil majors have been down in 2023 by about a third from record levels in 2022, pressured as oil and gas prices retreated after spiking when Russia invaded Ukraine.
- TotalEnergies' hydrocarbon production fell by 10% in 2023, averaging 2,483 thousand barrels of oil equivalent per day (kboe/d). This included a 26% decrease in natural gas production, which significantly impacted overall revenue.
- Liquefied Natural Gas (LNG) sales declined by 8% to 44.3 million tonnes in 2023, primarily due to lower demand in Europe.

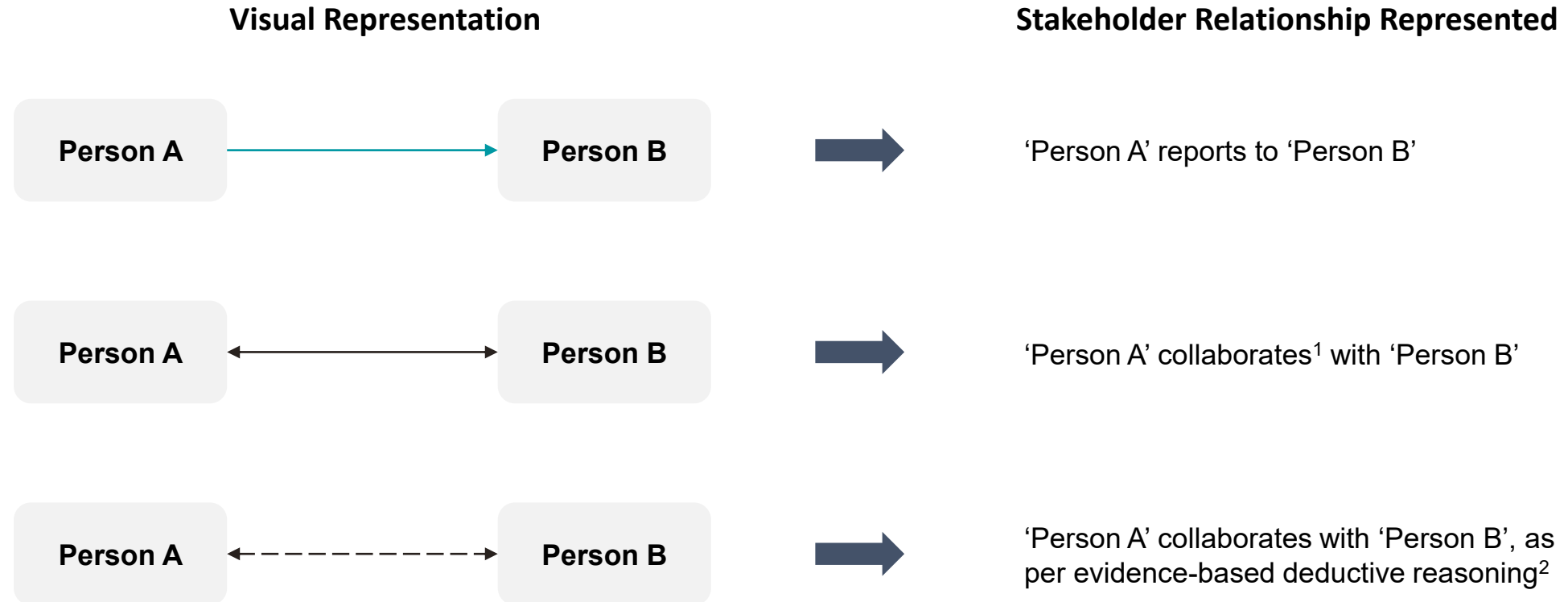
# Sphere of Influence

- Sphere of Influence – How to read
- Sphere of Influence - Map
- Sphere of Influence – Reporting Map
- Sphere of Influence – Collaboration Map
- Sphere of Influence – Business Card

## Understanding Sphere of Influence:

- **Strategic Navigation:** The Sphere of Influence Maps serve as strategic tools, highlighting key functions or senior leadership profiles critical to Total's operations with respect to operational sites.
- **Adaptive Framework:** Designed to adapt to new insights, the maps evolve with contributions from account managers/directors who may want to map out other key personnel based on invaluable ground-level intelligence and firsthand experience from their existing relationships.
- **Interpretive Guide:** A 'How to Read' slide clarifies the maps' interpretation, explaining the representation of reporting lines and collaborative ties.
- **CE & Stakeholder Insights:** We welcome the insights of key account managers for continuous refinement, ensuring the maps' ongoing relevance and precision in alignment with Total's evolving structure.
- **Quarterly Updates:** Committed to maintaining accuracy, the maps are reviewed and updated quarterly, in line with any organizational changes and strategic developments.
- *The Sphere of Influence (SOI) map is based on publicly available information, professional networking insights, and logical deduction of internal reporting/collaboration lines. While every effort has been made to ensure accuracy, reporting relationships and organizational dynamics may evolve. This is a strategic visualization intended to guide engagement planning and should not be interpreted as a formal organizational chart.*

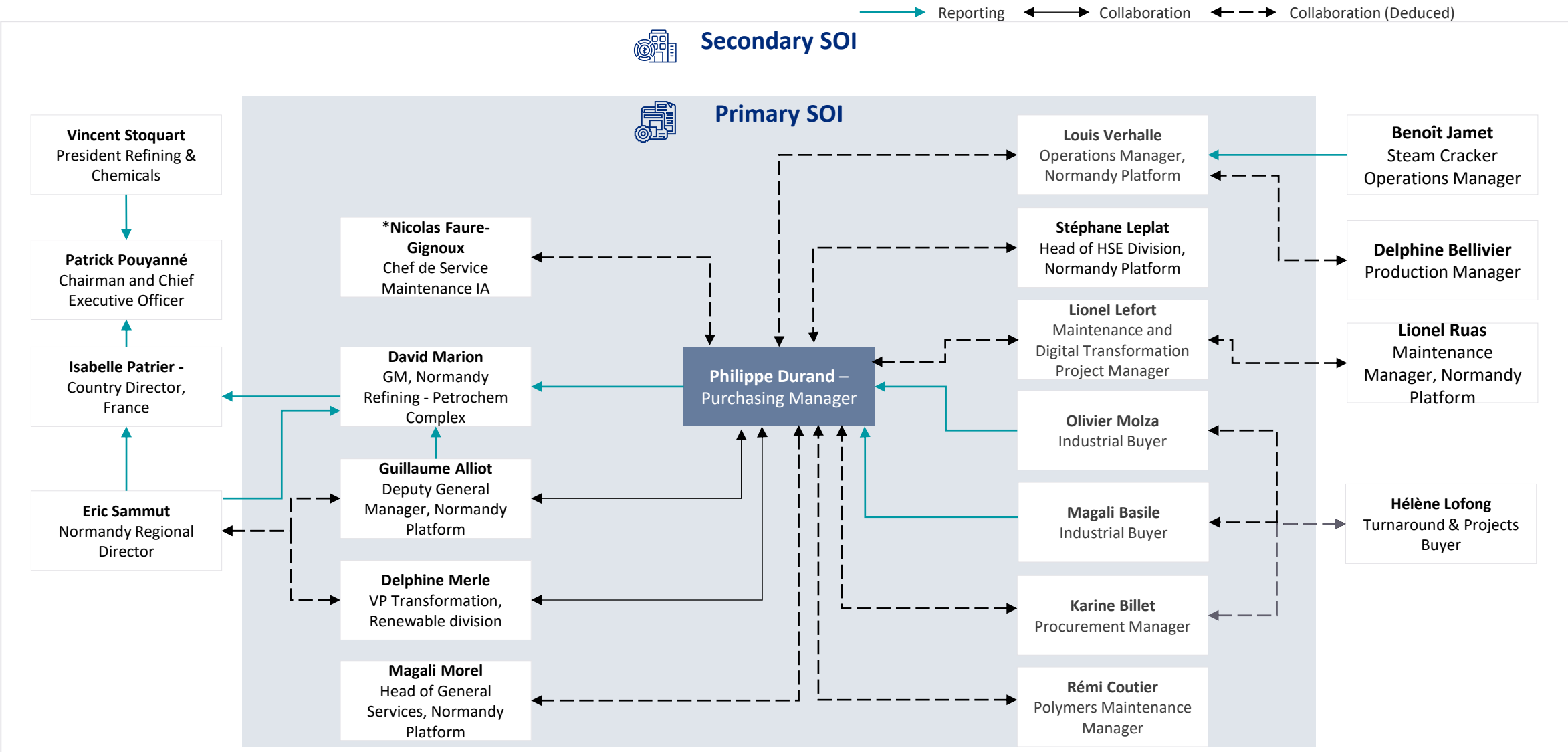
## Sphere of Influence (SOI) – How to Read



Note: <sup>1</sup>Collaboration is established based on organisation/department structure or evidences of working together on same projects or towards same business outcomes; <sup>2</sup>Potential collaboration is deduced based on a combination LinkedIn connection structure and engagement, reporting dynamics, and cross-functional connections (established via participation in same events, featuring in same company videos, part of common business publications or communication, etc.)

# Sphere of Influence – Normandy Site

[Back to Normandy Site Stakeholders](#)



*\*Marked as low confidence profile due to limited professional media presence and unverifiable contact details*

## Section 1.B

### Geographic Focus: Germany

- TotalEnergies – Germany – Active Businesses
- Leuna Refinery
- Germany: Country Strategy



# TotalEnergies – Germany – Active Businesses



## Renewables & electricity

- **3 Wind farms** located on 3 offshore concessions in the North Sea and Baltic Sea
- **50% interest in 2 wind farms** in the North Sea
- **1 Battery electricity storage project** in Dahlem (to begin in 2026)
- Several plants owned by subsidiary Saft in Germany



## Gas & green gas

- **1 LNG import terminal** in Deutsche Ostsee
- Pilot projects for producing green hydrogen since 2011



## Refining & Chemicals

- **1 Crude oil processing refinery (Leuna)**
- **Shareholders in Polyblend** (Plastics compounding process)
- Several plants operated by subsidiary Hutchinson



## Energy efficiency

- Energy efficiency consulting activities through its affiliate TENAG
- Examining plans to build an infrastructure with the capacity to collect 5 Mt of CO2 per year with the main manufacturers near its Leuna refinery.



## Marketing & Services

- Operates a network of approximately 160 AS24 self-service stations, serving long-haul truckers.
- Operates a network of around 5,000 charging points for electric vehicles

# TotalEnergies – Germany – Site Wise Stakeholders

Germany				
Christian Cabrol				
Country Head/CEO - Germany				
Leuna	Brunsbüttel	Osnabrück, Lower Saxony	Munich, Bavaria	Dresden, Saxony
Thomas Behrends	Nils Weber	Tobias Kröger	Klaus Silbernagl	Fabian Zschocke
General Manager	Head of Production & Technical Departments	Commercial Director	Strategic Purchaser	Project Manager
Birgit Block	Alain Drexler	Florent Chauvin	Theodor Martin	
Head of Department	General Manager	Value Manager	Supply Chain Manager	
			Julian Kötschau	
			Team Lead Order Processing & Supply Chain Management	

1. The organogram reflects site-level coverage of TotalEnergies' key operational locations in Germany, based on publicly available information. Based on the latest public data, the major industrial and operational sites relevant to procurement, logistics, and site management - such as Leuna, Brunsbüttel, Osnabrück, Munich, and Dresden have been covered. Coverage may exclude certain site-level positions where data is not disclosed This visualization does not depict reporting relationships

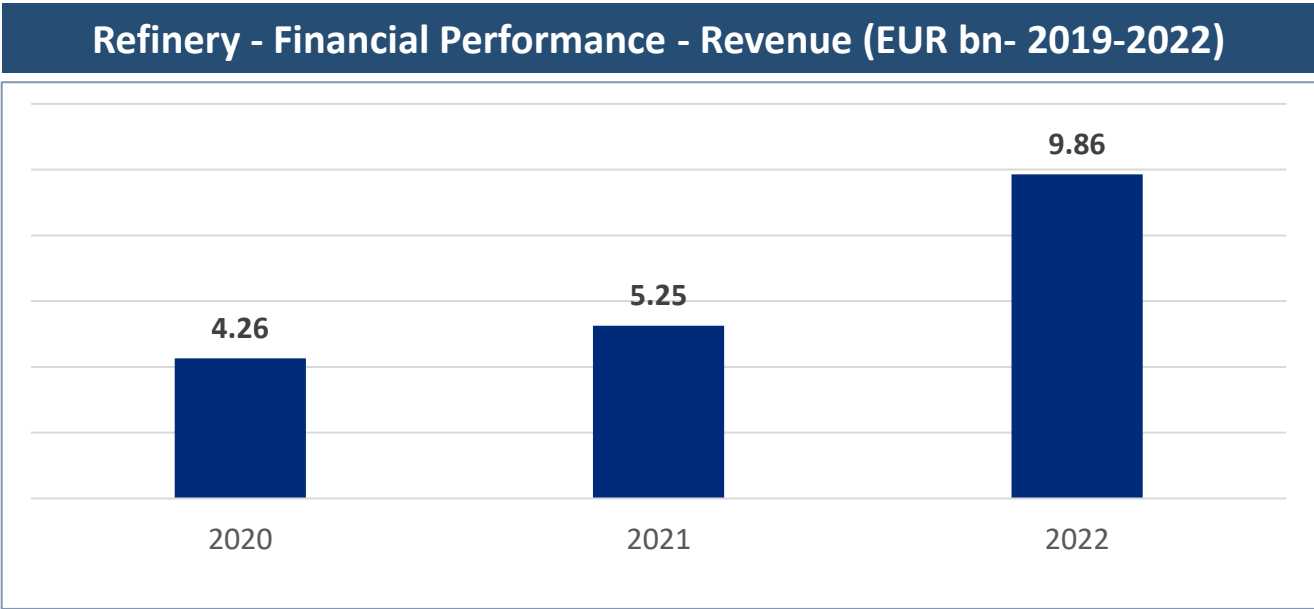
2. The view is intended as a functional site summary; hierarchy mapping and reporting visuals are excluded by design.

# Leuna Refinery - Overview

At a Glance	
Established	1997
Area	~320 Hectares
Location	Saxony-Anhalt, Leuna
Annual Processing Capacity	12 million tonnes of crude oil

Brief Overview
<ul style="list-style-type: none"><li>• <i>TotalEnergies Raffinerie Mitteldeutschland</i>, also called as Leuna Refinery, is <b>Germany’s third-largest refinery</b>, and is located within Europe's largest contiguous chemical park.</li><li>• The refinery <b>processes crude oil into daily essential items</b> such as gasoline, diesel, heating oil, liquefied petroleum gas, aviation fuels, bitumen, methanol, and many other specialty products for the chemical industry.</li><li>• The refinery <b>aims to significantly reduce its carbon footprint by 2030</b> for which comprehensive transformation projects – some in collaboration with regional partners – have been launched to achieve this.</li><li>• The <b>majority of these projects are based on renewable electricity</b>, the decarbonization of the energy used – especially hydrogen – and the efficient use of waste heat.</li></ul>

Production Units	
Refinery Units	Power Generation Units
<ul style="list-style-type: none"><li>• Crude Distillation Unit (CDU)</li><li>• Vacuum Distillation Unit (VDU)</li><li>• Hydrocracking Unit</li><li>• Fluid Catalytic Cracking (FCC) Unit</li><li>• Desulfurization Units</li><li>• Methanol Production Unit</li></ul>	<ul style="list-style-type: none"><li>• Combined Heat and Power (CHP) Plant</li><li>• Gas Turbine Units</li><li>• Steam Turbine Units</li></ul>



**Note:** The Leuna refinery is managed by TOTAL Raffinerie Mitteldeutschland GmbH, which is a subsidiary of TotalEnergies Holdings Deutschland GmbH Berlin. While financials for 2023 has been released, the information on the refinery’s revenues for 2023 hasn’t been published.

# Leuna Refinery – Business Strategy & Maintenance Schedules




The Leuna refinery’s business strategy is aligned with TotalEnergies 2030 ambition to decarbonize the hydrogen used in its European refineries

Supply of Green Hydrogen	Industrial Transformation
<ul style="list-style-type: none"><li>On March 12, 2025, TotalEnergies signed an agreement with the German developer RWE to supply 30,000 tons a year of green hydrogen to the German Leuna refinery for fifteen years, beginning in 2030.</li><li>RWE has been Total’s partner in several offshore wind projects in Germany and Netherlands and this quantity of green hydrogen supplied to Leuna will be the largest ever contracted from an electrolyzer in Germany.</li></ul>	<ul style="list-style-type: none"><li>On October 24, 2024, TotalEnergies completed the modernization of three reactors at the POX/methanol plant in Leuna.</li><li>As part of the modernization of the plant, which has been in operation since the late 1980s, three reactor units – each consisting of a reactor, sub-reactor, and waste heat exchanger – were replaced.</li><li>EDL Anlagenbau Gesellschaft mbH was awarded the FEED contract for this project</li></ul>

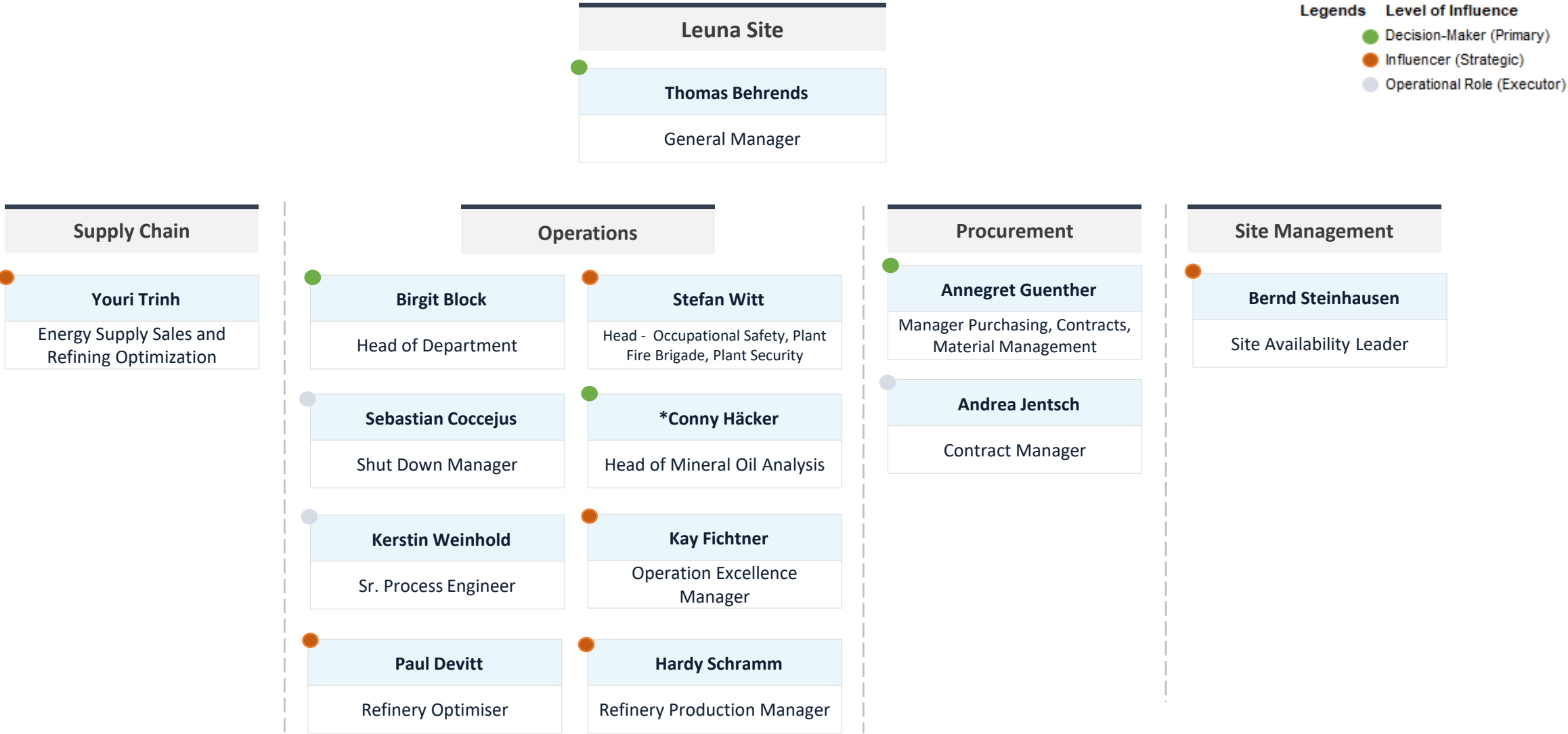
## Planned Maintenance & Shutdowns - *Conducted every three years*

2021	2024	2027
<ul style="list-style-type: none"><li>A major planned shutdown of the refinery was carried out in 2021 to stabilize the plants, and integrate other investment projects and advance their implementation.</li><li>Due to this shutdown, <b>the volume of crude oil processed in 2021 fell short of the previous year's level at 7.8 million tonnes</b> (previous year: 9.7 million tonnes).</li></ul>	<ul style="list-style-type: none"><li>Shutdown of the first units at the POX methanol plant began on September 6, 2024. Successive maintenance and repair work was carried out in September and October.</li><li>The New Process Plants (NPA) were shut down from October 6 to 11, 2024.</li><li>In total, <b>approximately 2,000 workers from various contractors</b> supported the refinery in opening, cleaning, inspecting, and replacing several hundred pieces of major equipment, as well as in the <b>implementation of approximately 50 projects</b>.</li><li>A total of approximately 2,000 individual measures were implemented, totaling over 400,000 man-hours.</li></ul>	<p><i>The next planned maintenance shutdown is expected in 2027, however, no details have been released yet.</i></p>

# Leuna Refinery – Competitors

Competitor	Engagement with TOTAL	Key USP
	<p>Bilfinger Engineering &amp; Maintenance has been responsible for the maintenance of large parts of the TotalEnergies refinery in Central Germany since it was commissioned in 1997. A multidisciplinary team of more than 160 Bilfinger employees is deployed daily in Leuna to ensure the smooth operation of the refinery.</p> <p><b><i>In 2014, Bilfinger signed a 6-year agreement, where the total volume of the extended framework agreement including budgeted turnaround and project services amounted to more than €100 million.</i></b></p> <p><b><i>In 2022, the contract with Leuna refinery was extended for another six years.</i></b></p>	<p>Apart from its historic partnership with Total, Bilfinger also uses digital technologies, such as a Scaffolding app, FingerScan, and the Insulation PrefApp. These digital solutions facilitate, among other things, time recording, the measurement of scaffolding and insulation work, and the creation of work orders.</p>
	<p>As part of the ProTurn2020+ project, <b>KAEFER provided insulation services in the POX methanol plant</b>, which were part of the most complex plant shutdown at TOTAL refinery in Leuna. KAEFER in Germany has been executing dismantling, reassembly and new assembly of heat, cold and acoustic insulation as part of the turnaround and further projects.</p>	<p>Executing projects under extreme operational and environmental conditions</p>
	<p>DOMO Chemicals Gas Flare Tower, Leuna Industrial Park, Leuna, Germany: Working and safety scaffolds were used for extensive corrosion prevention and insulation work. (its not clear if it belongs exclusively to TOTAL, however, TOTAL and DOMO Chemicals have a JV for a benzene production plant)</p>	<p>Strong foothold in the German formwork and scaffolding industry</p>

# Leuna Refinery: Stakeholders



1. The organogram offers a high-level, indicative view of key personnel at TotalEnergies' Leuna site, compiled from publicly available sources. It outlines roles across core functions such as operations, supply chain, procurement, and site management. Coverage may exclude certain site-level positions where data is not disclosed. This visualization does not depict reporting relationships

\*Marked as low confidence profile due to limited professional media presence and unverifiable contact details

# Brunsbüttel Bitument Plant - Overview

At a Glance		Brief Overview	
Established	1914	<ul style="list-style-type: none"><li>The <b>TotalEnergies Bitumen Plant</b> in <b>Brunsbüttel</b>, Germany, is a specialized facility dedicated to the production of high-quality bitumen products.</li><li>TotalEnergies Bitumen Deutschland GmbH <b>operates the plant with 140 employees and 50 service providers.</b></li><li>The plant receives crude oil via a pipeline from the Mittelplate drilling platform in the North Sea Wadden Sea and the transport routes are determined by <b>Brunsbüttel's favorable geographical location</b> at the mouth of the Elbe River to the North Sea.</li><li>The flagship product in the Brunsbüttel Bitumenwerk's product range is STYRELF, and TotalEnergies is currently developing <b>Longlife Bitumen</b> in Brunsbüttel.</li></ul>	
Area	Not disclosed		
Location	Industriegebiet Süd, <b>Brunsbüttel</b>		
Annual Processing Capacity	400,000 tonnes of bitumen per year		

## Business Strategy

Product Innovation for Low-Carbon Infrastructure	Transition to Renewable and Circular Energy	Operational Excellence and Climate Performance
TotalEnergies is developing advanced products like <b>Longlife Bitumen</b> and <b>low-temperature bitumen</b> to help customers reduce their carbon footprint and extend road lifespans. These innovations enhance the <b>sustainability and cost-effectiveness</b> of road construction by minimizing repair frequency and energy use.	The Brunsbüttel plant is adopting <b>CO<sub>2</sub>-neutral energy solutions</b> , including renewable electricity, <b>bio-generated steam</b> , and plans for an on-site <b>solar PV system</b> . This approach supports the company's commitment to a <b>low-emission, self-sustaining energy model</b> for its operations.	Targeting <b>Scope 1 climate neutrality</b> , the plant emphasizes <b>emission reduction through process optimization</b> —such as gas leak prevention, temperature control, and equipment efficiency. As a result, it has achieved record-low emissions per ton of bitumen and maintained an <b>accident-free safety record for nearly four years.</b>

# Brunsbüttel Bitument Plant – Maintenance Schedule & Contractors

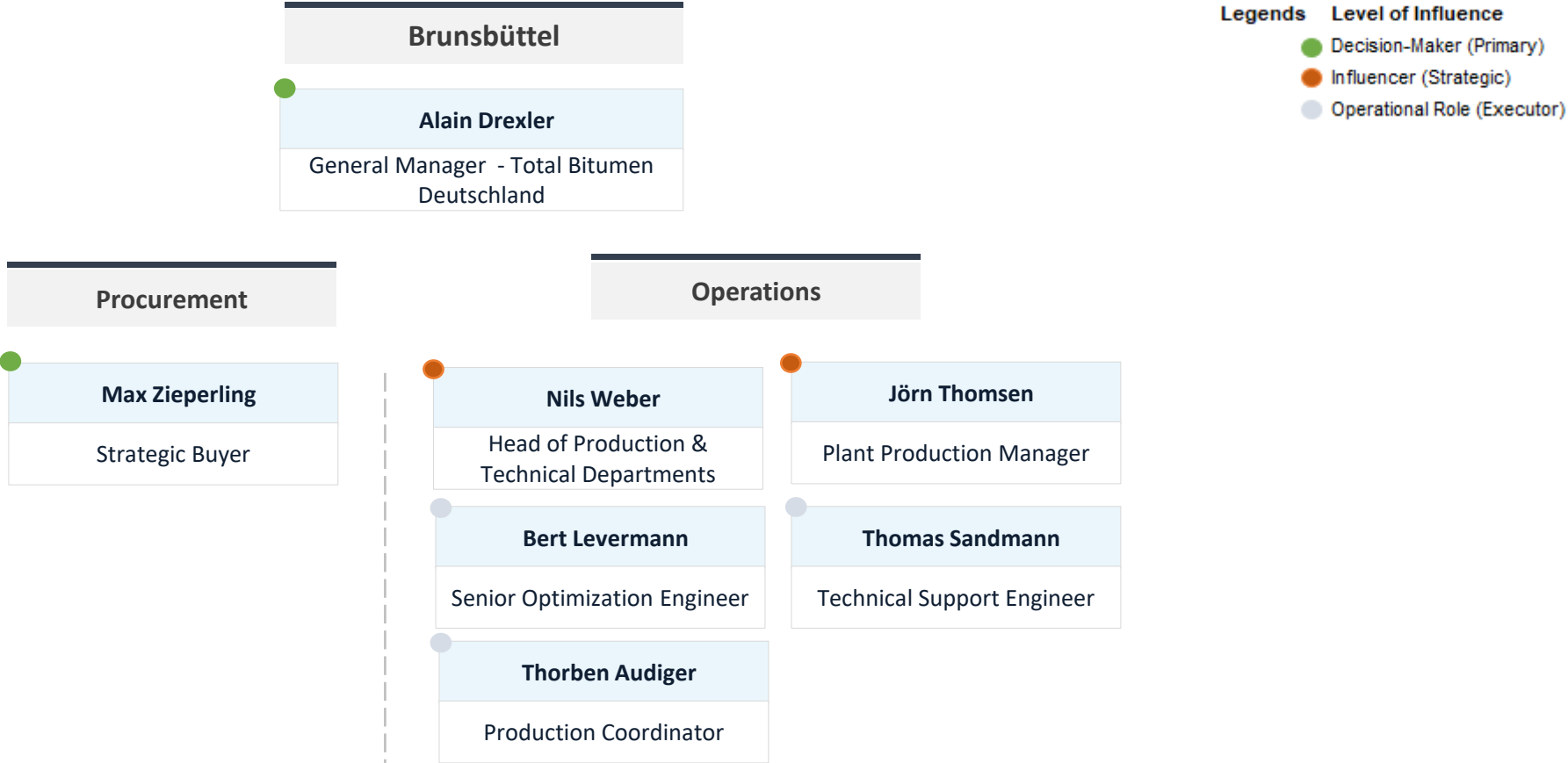


- On 1 April 2022, **ISM Industrie-Instandhaltungs-Service und Montagebau GmbH (ISM)** won a five year extensive maintenance contract from TotalEnergies Bitumen Deutschland GmbH in Brunsbüttel.
- The **contract covers the maintenance of all systems and parts of the TotalEnergies Bitumen plant infrastructure in Brunsbüttel**. ISM's services primarily include scheduled maintenance and repairs in the static and rotating equipment sector and in electrical, instrumentation, and control technology (E&C) technology, as well as spare parts and operating equipment logistics.
- The contract also includes contractor management.

Data on the maintenance schedules and shutdowns for the refinery have not been published yet. However, the operating area of the plant is subject to Major Accident Ordinance and hence is subject to strict maintenance protocols.



# Brunsbüttel Refinery: Stakeholders



1. The organogram provides an indicative overview of key personnel at TotalEnergies' Brunsbüttel site, based on publicly available information. Due to limited data availability and the likely smaller scale of operations, coverage may exclude certain site-level positions where data is not disclosed and functions such as procurement and supply chain are not represented. This visualization does not depict reporting relationships

# Germany – Strategy

TotalEnergies Germany is committed to the group’s strategy of developing a profitable business model for its Integrated Power segment through targeted acquisitions in Germany

Acquisition of Quadra	Acquisition of Kyon Energy	Acquisition of 50% stake in offshore wind projects	Acquisition of VSB
<p>In <b>October 2023</b>, TotalEnergies entered into agreements with the <b>Aloys Wobben Foundation (AWS)</b> to acquire the entire share capital of <b>Quadra Energy</b>, a prominent German renewable electricity aggregator.</p> <p>TotalEnergies has launched the construction of a 100 MW/200 MWh battery electricity storage project in Dahlem, North Rhine-Westphalia, and Quadra will monetarize the flexibility provided by these batteries on the electricity markets.</p>	<p>In <b>January 2024</b>, TotalEnergies announced its agreement to acquire <b>Kyon Energy</b>, a leading German developer of battery storage systems.</p> <p>By incorporating Kyon Energy's assets and expertise, TotalEnergies aims to:</p> <ul style="list-style-type: none"><li>• Enhance Energy Storage Capabilities</li><li>• Support Renewable Integration</li><li>• Achieve Profitability Targets</li></ul>	<p>In 2024, Total signed an agreement with RWE in October 2024 to acquire a 50% stake in two offshore wind projects in the North Sea.</p> <p>These two projects, N-9.1 (2 GW) and N-9.2 (2 GW), awarded in August 2024, have 25-year licenses, extendable to 35 years.</p> <p>These projects illustrate the Company's strategy of becoming an integrated player in the electricity markets taking advantage of price volatility to achieve the profitability objectives of the Integrated Power activity.</p>	<p>In <b>December 2024</b>, TotalEnergies announced the acquisition of <b>VSB Group</b>, a prominent German renewable energy developer, from <b>Partners Group</b> and VSB’s founder. The transaction was valued at <b>€1.57 billion</b> (approximately \$1.65 billion).</p> <p>The integration of VSB Group is expected to:</p> <ul style="list-style-type: none"><li>• Enhance Onshore Wind Capabilities</li><li>• Strengthen European Presence</li><li>• Integrate Renewable Operations</li></ul>

## Section 1.B

### Geographic Focus: Baltic Sea

- TotalEnergies – Baltic Sea – Active Businesses

# TotalEnergies – Baltic Sea – Active Businesses



## Integrated Power

- Offshore Wind Projects:**
- Concession O-2.2 in Germany
  - Offshore wind projects in 11 areas of the Polish Baltic sea (participated in the auction)



## Integrated LNG

- Deutsche Ostsee LNG Import Terminal in Lubmin, Germany



## Refining & Chemicals

- NA



## Energy efficiency

- NA



## Marketing & Services

- NA

# TotalEnergies – Concession O-2.2 (German Baltic Coast)

At a Glance		Brief Overview
Contract Awarded	July 2023	<ul style="list-style-type: none"><li>TotalEnergies' <b>Concession O-2.2</b>, now known as <b>OstSee Energies</b>, is a significant offshore wind project located in the Baltic Sea, approximately 40 kilometers from the German coastline. The concession spans an area of about 100 square kilometers and is designated for the development of a 1-gigawatt (GW) wind farm.</li><li><b>TotalEnergies is set to pay the German Federal Government €582 million for both the O-2.2 and N-12.1 concessions.</b> These funds are earmarked for marine conservation and the promotion of environmentally friendly fishing practices.</li><li>Additionally, an annual contribution will be made to the electricity transmission system operators responsible for connecting the projects, spanning 20 years from the commissioning of the sites. <b>The aim is to make the final investment decision in 2028 and to generate electricity for the first time in 2031.</b></li></ul>
Area	Approximately 100 km <sup>2</sup>	
Location	Baltic Sea, 40 km off the German coast	
Capacity	1 GW	

## Business Strategy

Support the Integrated Power Strategy	Strengthen Presence in Europe	Alignment with German Government's Strategy
TotalEnergies entry into the offshore wind power in Germany, Europe's largest electricity market, is a key step in the implementation of its strategy to become an integrated profitable player in the electricity markets.	The development of the project will strengthen the European presence of Totalenergies, as the concessions will run for a term of 25 years, extendable to 35 years. With capacities of 2 GW and 1 GW respectively, these two wind farms will provide a volume of electricity equivalent to the consumption of over 3,000,000 homes.	These major projects are in line with the German government's objective of deploying 30 GW of offshore wind power in Germany by 2030. The next step for TotalEnergies will be to carry out the studies required to obtain the environmental permits, as well as the technical analyses on these sites, leading to investment decisions in 2027 and commissioning by 2030.

# TotalEnergies – Polish Baltic Sea Projects

In April 2022, TotalEnergies entered into a 50/50 partnership with KGHM, a Polish state-owned mining company, to participate in the Polish government's tender for offshore wind projects. This initiative aimed to leverage the Baltic Sea's favorable conditions for wind power generation. *There have been no announcements that TotalEnergies have won the tender yet.*

## Business Strategy

Strengthening Polish Energy Transition	Partnership as a Strategic Business Model	Strengthening Cooperation between Baltic Countries
<p>2022 was a pivotal year where eight Baltic Sea countries signed a cooperation agreement to increase offshore wind projects developments to almost 20 GW by 2030.</p> <p>Poland has a geographical and local content potential and hence Totalenergies launched competitive bids for 11 new offshore wind sites.</p> <p>TotalEnergies was engaged in that process during the entire last year, cooperating and sustaining valuable dialogue with all counterparts engaged and placing its own bids for seven locations with <b>KGHM Polska Miedź on level of ca. 10 GW in total.</b></p>	<p>TotalEnergies business model in offshore projects has been to assume strategic coopoeration with local partners.</p> <p>The partnership for the Polish project with KGHM Polska is built on the strengths of both companies - where:</p> <p><i>TotalEnergies will leverage its proven expertise in offshore operations, its experience in managing large-scale projects and its ties with the worldwide supply chain and -</i></p> <p><i>KGM will bring its knowledge of the Polish market building strong relations with stakeholders and maximize local content</i></p>	<p>The agreement signed in 2022 shall include not only sharing best practices among Baltic Sea <b>countries but also cooperation with the European Commission and ENTSO-E to build a common Baltic energy grid, and –</b></p> <p>Implement solutions increasing synergies between offshore wind and energy islands in focus on green hydrogen production as well.</p> <p>Poland with Its significant potential of offshore wind power could increase independency of energy supplies to the Polish grid, but also become a major guarantor of security supplies in the region – taking a role of net electricity exporter.</p> <p><b>Total will seek to strengthen its relations with</b> local authorities, universities, market leaders, contractors, and service providers in Poland.</p>

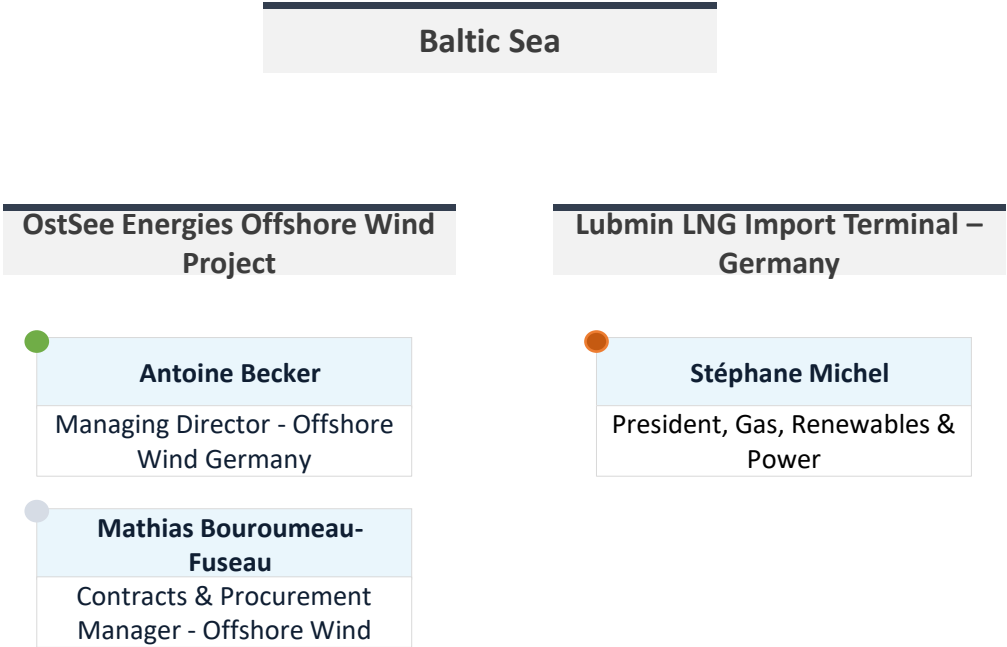
# TotalEnergies – Deutsche Ostsee LNG Import Terminal

At a Glance	
Contract Awarded	January 2023
Operator	Deutsche ReGas
Location	Lubmin, on the German Baltic Sea coast
Capacity	5 billion cubic meters (approx. 5% of Germany's demand)

Brief Overview	
<ul style="list-style-type: none"><li>• In January 2023, TotalEnergies announced the start-up of the Deutsche Ostsee LNG import terminal developed by Deutsche ReGas in Lubmin on the German Baltic Sea coast, for which TotalEnergies is supplying a 5.2 bcm/year floating storage and regasification unit (FSRU) and LNG from its international portfolio. The group has also contracted a regasification capacity of 2.6 bcm/year.</li><li>• Apart from the regasification capacity, Totalenergies also provided the Neptune FSRU for the terminal's operations and began supplying LNG from its global portfolio to the terminal following Deutsche ReGas's open season procedure in October 2022.</li><li>• This project will consolidate TotalEnergies' position as the world's third largest LNG player and Europe's leading regasification player.</li></ul>	

Business Strategy	
<ul style="list-style-type: none"><li>• In response to Europe's historic gas supply crisis driven by the sharp decline in Russian flows, <b>TotalEnergies has implemented a proactive energy security strategy</b> by leveraging its <b>broad, flexible LNG portfolio</b>.</li><li>• The company has prioritized <b>maximizing LNG deliveries to Europe</b>, utilizing its <b>18 Mt/y regasification capacity</b>, and further strengthening supply through the <b>start-up of the Lubmin terminal in Germany</b>.</li><li>• With these combined actions, TotalEnergies now contributes over <b>20 Mt/y of LNG to Europe—representing approximately 15% of the continent's regasification capacity—</b>solidifying its role as a <b>key player in Europe's energy resilience and diversification strategy</b>.</li></ul>	

# Baltic Sea: Stakeholders



1. The organogram captures stakeholders from two of TotalEnergies’ three known projects in the Baltic Sea—OstSee Energies Offshore Wind Project and the Lubmin LNG Import Terminal. The third initiative, an offshore wind venture in the Polish Baltic Sea, is a joint project with KGHM Polska Miedź S.A., and due to its joint ownership, no directly attributable TotalEnergies contacts could be reliably mapped. Other Baltic locations currently lack publicly identified relevant stakeholders. For other Baltic sea location such as Latvia, Lithuania etc, TotalEnergies maintains only retail presence, and these regions have been excluded from the scope. The roles shown are derived from publicly available sources and visualization does not depict reporting relationships



## Section 1.C

### Site Focus

- TotalEnergies – Belgium - Antwerp

# Antwerp Integrated Platform – Overview

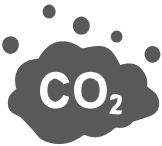
At a Glance	
Established	1951
Area	~300 hectares
Location	Antwerp, Belgium
Annual Conversion Capacity	16 million metric tonnes of crude oil

Antwerp Platform: Brief Overview
<ul style="list-style-type: none"><li>• TotalEnergies' Antwerp platform is its largest integrated refining and petrochemicals complex in Europe, comprising a refinery, a petrochemical plant and a polymer plant.</li><li>• It is strategically located in the Antwerp-Rotterdam-Amsterdam (ARA) hub, and its refinery facility is Europe's 3<sup>rd</sup> largest refinery with a daily capacity of 338,000 barrels of oil.</li><li>• The petrochemical complex produces base chemicals, including olefins, C4 fractions and aromatic hydrocarbons, and polymer plant produces high-density polyethylene.</li><li>• Further, TotalEnergies is also developing battery energy storage systems (BESS) on the site to support the growth of renewable energy production.</li></ul>

## Production Units



Refinery Unit	Petrochemicals Facility	Polymer Production Site	Hydrogen Production Unit
<ul style="list-style-type: none"><li>• Processes <b>~16 million tons of crude oil</b> annually</li><li>• <b>Produces 70 products</b>: Heavy fuel oil, gasoline, LPG, diesel, lubricants, jet fuel and other feedstocks</li><li>• Began producing <b>low-sulphur light products in 2017</b></li></ul>	<ul style="list-style-type: none"><li>• Produces <b>olefins and aromatic hydrocarbons</b>, including ethylene, propylene, toluene, benzene and cyclohexane</li><li>• The facility has a capacity to produce <b>1.1 million tonnes of ethylene</b> per year</li></ul>	<ul style="list-style-type: none"><li>• Specialises in production of <b>high-density polyethylene</b> and <b>recycled polymers</b></li><li>• The Antwerp plant aims to produce <b>1 million tons of circular polymers</b> per year by 2030</li></ul>	<ul style="list-style-type: none"><li>• To be operated in partnership with <b>Air Liquide</b></li><li>• Will supply <b>low-carbon hydrogen</b> to reduce emissions by <b>150,000 tons/year</b></li><li>• Part of a broader <b>green hydrogen ecosystem</b> development</li></ul>



*Between 2013 and 2017, TotalEnergies invested >€1 billion to upgrade its Antwerp refining and petrochemicals platform, with a focus on upgrading the complex, including projects to produce more light products, recover refinery off-gas, and import ethane, to enhance competitiveness and reduce CO2 emissions.*

# Antwerp Integrated Platform: Shutdowns for Maintenance



## Planned Shutdowns

Antwerp platform undergoes **regular minor and major (controlled) shutdowns** in parts or all of its production units to perform essential maintenance, inspections, upgrades or regulatory checks.

### *Planned: Minor Shutdowns*

- Several units are shutdown each year to allow maintenance and inspection work.
- Outside of these planned periods, refinery teams may decide to preventively shut down a unit if they find that not all the conditions for its optimal operation are met.

### *Planned: Major Shutdowns*

#### Overview:

- Major shutdowns at Antwerp are **planned every seven years, lasts for 40-50 days, and is planned 2 years in advance.**
- During the shutdown, the contractors (both local and regional) are accommodated in or near Antwerp, or in the south of the Netherlands.
- During such shutdowns, normally, 2,000 work packages are performed to ensure a smooth and efficient execution, and 1,000 external workers are employed by external contractors to perform specific tasks.

#### Current Schedule:

- **A major shutdown is planned to begin in September 2025, likely to continue till December 2025,** involving work on a crude-processing unit and gasoline-making units.
- During the halt, a new reactor will be installed in one of the two fluid catalytic converters. The shutdown will also include repair and maintenance of furnaces.
- Facilities will be opened, cleaned and inspected, and the planned shutdown will impact the refinery's crude oil processing capabilities and potentially affect the production of various downstream products, including gasoline and other fuels.



## Unplanned Shutdowns

Antwerp platform has **undergone sudden, unscheduled stop in its operations**, either due to geopolitical factors or due to technical concerns.

### *Unplanned: Economic Shutdown*

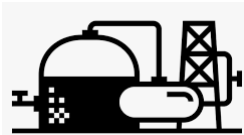
- Although the TotalEnergies' Antwerp refinery didn't experience a complete shutdown due to the COVID-19 pandemic, it witnessed disruptions and cut runs due to lockdown measures and reduced demand during 2020 and 2021.
- The COVID-19 pandemic led to a sharp decline in oil demand and deteriorated refining margins, making operations financially unviable.

### *Unplanned: Technical Shutdown*

- In January 2024, TotalEnergies shut the 74kbpd FCC and 58kbpd hydrotreater, and halted the hydrocracker to address maintenance issues, including repair work and other technical concerns.
- In July 2022, a unit at the Antwerp refinery was halted due to a crude oil leak.

# Antwerp Integrated Platform: Business Strategy

As one of the largest refining and petrochemical platform of TotalEnergies in Europe, the Antwerp platform focuses on upgrading and adapting the site to produce higher-value-added products, focusing on flexibility, and integrating refining and petrochemicals.



## Ethane-Based Petrochemical Production

- In July 2017, TotalEnergies’ refining and chemical platform in Antwerp started the production of ethylene using ethane feedstock – which is extracted from natural gas and is significantly cheaper than oil-derived feedstock.
- The company invested ~€54 million to revamp one of the platform’s 2 steam crackers and to adapt the site’s terminal to enable the import of 200,000 tons of ethane per year by ship from Norway.

## Battery-Based Energy Storage

- In May 2023, TotalEnergies launched its largest European battery-based energy storage project at the Antwerp platform with a capacity of 75 MWh
- Further, the company announced to launch a new battery-based project in Feluy by the end of 2025, with a power rating of 25 MW and capacity of 75 MWh.

## Supply of Green, Low-carbon Hydrogen

- In February 2025, TotalEnergies and Air Liquide signed an agreement for the long-term supply of green, low-carbon hydrogen to TotalEnergies' refining and petrochemical platform in Antwerp.
- This project contributes to the decarbonisation of the Antwerp platform through a 200 MW ELYgator electrolyser project dedicated for the Antwerp site and will reduce the site's annual CO2 emissions by up to 150,000 tonnes per year.



## Impact

*This move **optimises the supply by providing flexibility to use either ethane, butane or naphtha as feedstock**, allowing the complex to use the most cost-advantaged feedstocks to increase profit margins.*

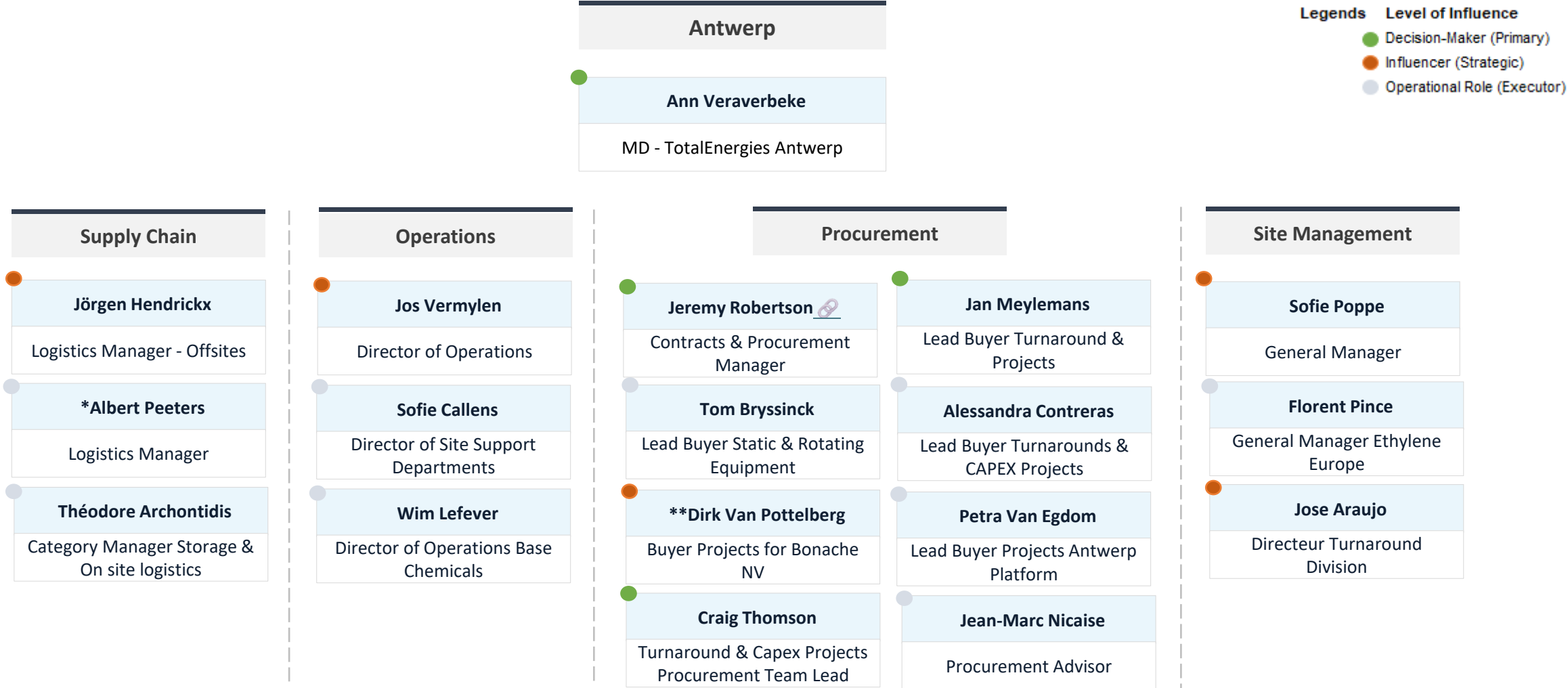
*It will **strengthen the company's presence across the entire electricity value chain in Belgium**, along with enhancing grid stability and supporting its focus on renewable energy growth in the region.*

*This partnership with Air Liquide is a new step in **TotalEnergies' ambition to decarbonise the hydrogen used by its refineries in Europe by 2030**. By supplying the renewable electrons produced by the OranjeWind project to Air Liquide to be transformed into green hydrogen, TotalEnergies is making the most of its positioning as an integrated power supplier.*

# Antwerp Integrated Platform: Key Contractors

Key Contractors	Engagement with TOTAL	Key USP
	AMPO SERVICE technicians have been responsible for performing the maintenance and troubleshooting of 20” severe service isolation lift plug valves on the Delayed Coker Unit (DCU) of the TotalEnergies’ Antwerp Integrated Platform site.	Apart from being a leading provider of highly engineered valves and integrated smart solutions, AMPO provides prompt and high-value onsite support for valve care globally, through a network of engineers and technicians.
	In May 2022, Altrad Services partnered with TotalEnergies for industrial services, including turnarounds at the TotalEnergies Olefins Antwerp facility. The service provider was responsible for providing engineering work for the erection of 7 scaffold towers in the Olefins facility.	Strong foothold in the Belgian formwork and scaffolding industry

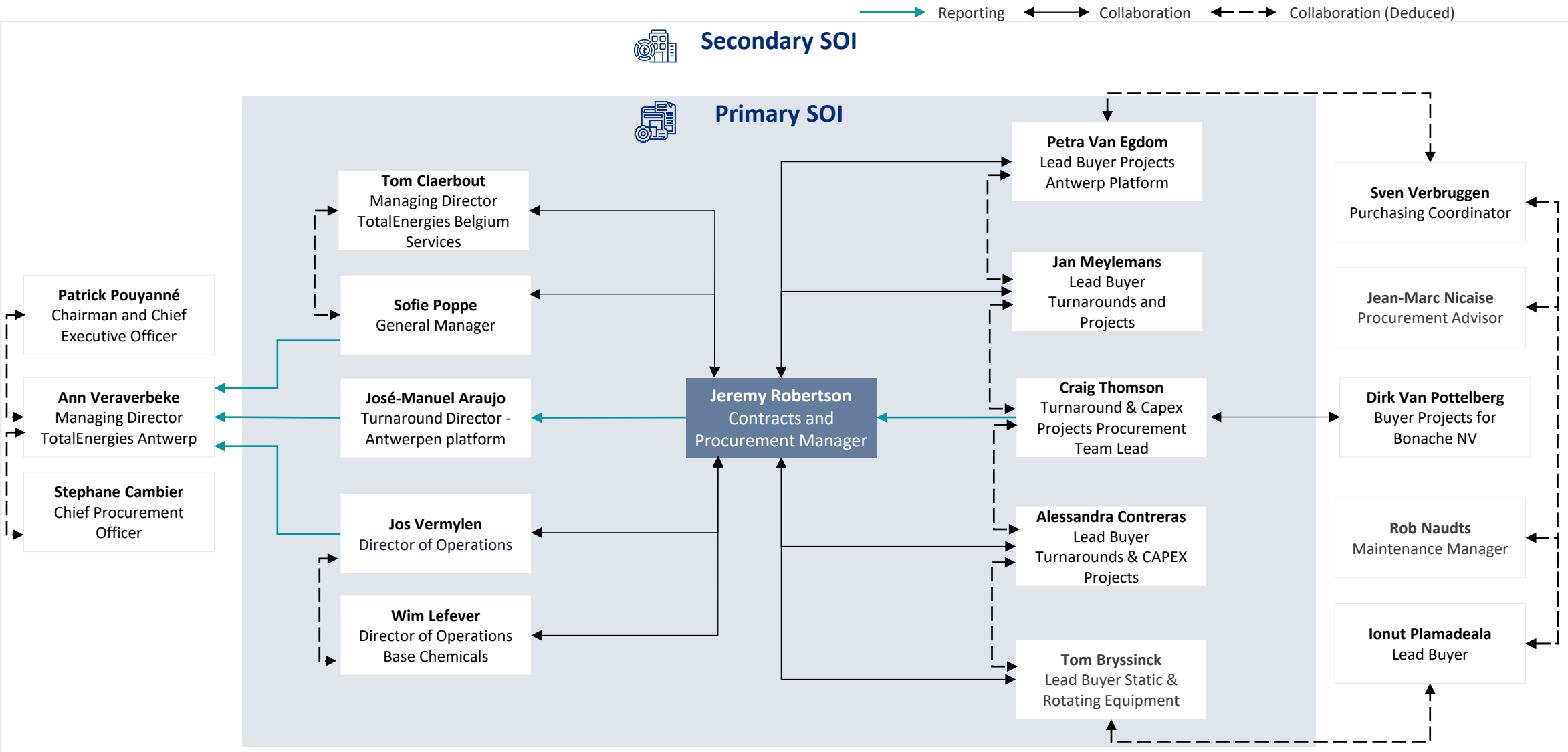
# Antwerp Refinery: Stakeholders



1. The organogram provides an indicative overview of personnel associated with the TotalEnergies Antwerp platform, focusing on targeted segments most relevant to our scope. While efforts were made to ensure comprehensive coverage, the inclusion of certain titles or contacts may vary, and the visualization may not reflect the full organizational structure. This visualization does not depict reporting relationships

\*Marked as low confidence profile due to limited professional media presence and unverifiable contact details

\*\*It may be valuable to engage Dirk Van Pottelberg, as he operates closely with TotalEnergies Antwerp on project sourcing via Bonache NV and could offer early visibility into upcoming tenders



# Zeeland Refinery: Overview & Maintenance Schedules

At a Glance		Brief Overview
Established	1970	<ul style="list-style-type: none"><li>Zeeland Refinery, a joint venture primarily operated by Total Energies and Gunvor Group, is a significant player in the European refining landscape</li><li>Approximately 400 employees work on-site, supported by a substantial number of contractors from external companies, contributing to the daily operations and maintenance of the facility.</li><li>The crude oil is transported to the refinery via a 138 kilometer long underground pipeline from the Maasvlakte Oil Terminal.</li></ul>
Area	140 Hectares	
Location	Vlissingen-Oost	
Annual Processing Capacity	11.5 million tons of crude oil per year	

Production Units		Investment
Refinery Units	Power Generation Units	<ul style="list-style-type: none"><li>Zeeland Refinery invests EUR 50–60 million in the refinery every year with projects for capacity increase, safety, energy conservation and other environmental projects.<ul style="list-style-type: none"><li>2012 : Investments were made in a new control room</li><li>2014 : a new high-voltage switching station.</li><li>2018 : work started on expanding the hydrocracker, one of the refinery’s main units, with a third reactor. With the addition of third reactor, CO2 emissions of about 10,000 tones per year will be avoided.</li></ul></li></ul>
<ul style="list-style-type: none"><li>Crude Distillation Unit (CDU)</li><li>Vacuum Distillation Unit (VDU)</li><li>Hydrocracking Unit</li></ul>	<ul style="list-style-type: none"><li>Twelve Hectares Solar Plant</li><li>Capacity 11 Megawatts</li></ul>	

Planned Maintenance & Shutdowns - <i>Conducted every year</i>		
2023	2024	2025
<ul style="list-style-type: none"><li>Zeeland Refinery carried several factory installations out of service from January 15, 2023 to then carry out various maintenance activities. The maintenance will take approximately three weeks.</li></ul>	<ul style="list-style-type: none"><li>Shutdown of several factory installations out of service were conducted from November 22, 2024 till December 7, 2024. The shutdown will be accompanied by flaring</li><li>Successive maintenance and repair work was carried out in autumn 2024.</li></ul>	<i>The next planned maintenance shutdown is expected in 2025, however, no details have been released yet.</i>






# Zeeland Refinery – Business Strategy

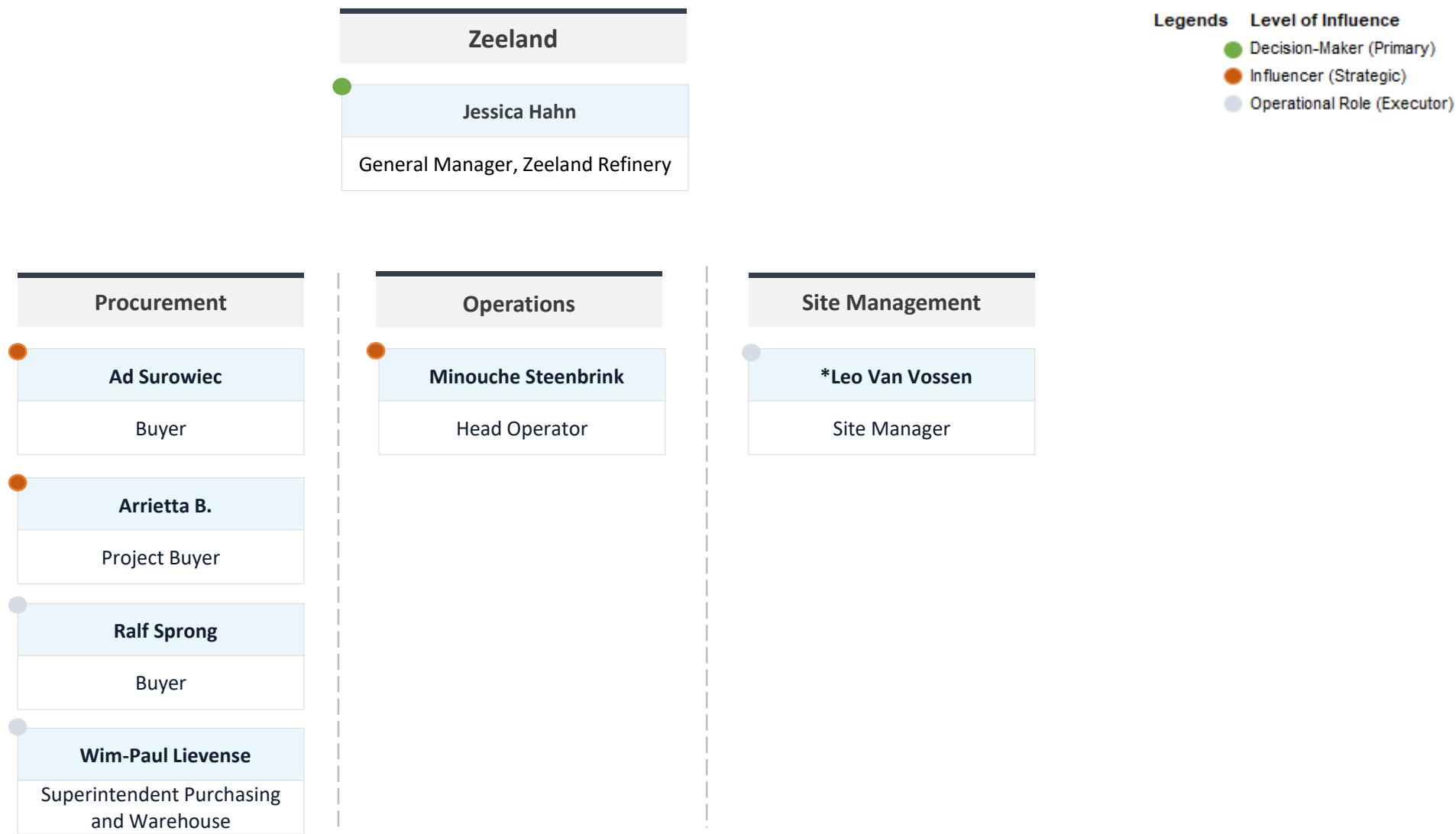
Sustainability Projects	Project Overview	Future prospect
<i>Green Hydrogen : EnergHys Project</i>	<ul style="list-style-type: none"> <li>EnergHys is the project within Zeeland for the development of CO2-free hydrogen. The new hydrogen plant is built to use for the electrolysis of water. As electrolysis uses green electricity (renewable energy that does not release CO2 during production), this newly constructed hydrogen plant will produce truly CO2-free hydrogen, or 'green' hydrogen.</li> </ul>	<ul style="list-style-type: none"> <li>The aim is to put the electrolyser into service in early 2029.</li> </ul>
<i>CO2 reduction and CSS : Azur Project</i>	<ul style="list-style-type: none"> <li>Azur project is aimed to reduce CO2 emissions by more than 50% by capturing CO2 from the flue gases of our existing hydrogen plants. The CO2 is captured and liquefied and then transported by ship to empty gas fields in the Dutch North Sea for permanent storage.</li> <li>ZR cooperates with Carbon Connect Delta within the framework of AZUR. This joint venture with Dow and Yara is to transport and permanently store the CO2 that each captures on its own site. For transport and permanent storage, Zeeland work together with Aramis, a partnership between TotalEnergies, Shell, EBN and Gasunie.</li> </ul>	<ul style="list-style-type: none"> <li>The aim is to start capturing CO2 in the third quarter of 2026.</li> </ul>
<i>Energy Efficiency : Sloewarmte Project</i>	<ul style="list-style-type: none"> <li>Zeeland Refinery has improved its energy efficiency by 24% during the period 2008-2021.</li> <li>The Sloewarmte Project, allows some of the residual heat generated in production process to be used by other companies for various purposes. This not only reduces energy consumption, but also CO2 emissions.</li> </ul>	<ul style="list-style-type: none"> <li>Zeeland Refineries is one of the most energy-efficient refineries in the world and aim to remain the leader so</li> </ul>
<i>Zeeland Solar Park : Energy saving project</i>	<ul style="list-style-type: none"> <li>Zeeland Solar park is one of the largest industrial solar parks in the Netherlands that produces electricity annually as the consumption of 4300 households (half of all households in the municipality of Borsele).</li> </ul>	<ul style="list-style-type: none"> <li>The land around the solar park will be managed in an insect- and bee-friendly way, resulting in a large increase in small mammals, insects and insect- and seed-eating birds.</li> </ul>
<i>Biodiversity</i>	<ul style="list-style-type: none"> <li>As of 2010, Zeeland Refinery has been actively pursuing a nature management policy that focuses on the preservation and stimulation of biodiversity on and around the refinery site.</li> </ul>	<ul style="list-style-type: none"> <li>-</li> </ul>

**Zeeland Refinery invests EUR 50–60 million in the refinery every year with projects for capacity increase, safety, energy conservation and other environmental projects.**

# Zeeland Refinery – Contractors

Competitor	Engagement with TOTAL	Key USP
	<p>Turnaround maintenance activities during the periods of general plant shutdown lasting about a month.</p> <p>In 2020, Cestaro Rossi participated in the Zeeland Refinery Preparation Phase TAR 2020.</p>	<p>Extensive experience in Industrial plant engineering and construction</p>
	<p>During a year with COVID-19, the large, plant-wide turnaround continued. This caused for an adjusted execution in terms of Health &amp; Safety regulations with the same pre-COVID scope of more than 150,000 m<sup>3</sup> of scaffolding as well as insulation and asbestos removal services were achieved by the KAEFER Nederland B.V team for its Zeeland Refinery Turnaround 2020/2021 project</p>	<p>Executing projects under extreme operational and environmental conditions</p>
	<p>In August 2023, ALTRAD installed free-standing scaffolding in and around a 55-metre tall tower at Zeeland. In cooperation with Vogel, drawings and calculations were made which resulted in a large, sturdy scaffolding of around 12000 m3.</p> <p>The freestanding scaffolding is equipped with 205 concrete blocks of 1,000 kg each to ensure stability. Another part of the project included removing the existing insulation on the tower before starting the cui and also re-insulating and plating the tower.</p> <p>The plan is to conserve and then insulate in 4-metre phases according to CINI standards, with the aim of completing the entire project by the end of 2023.</p>	<p>Strong foothold in the Dutch formwork and scaffolding industry</p>

# Zeeland Refinery: Stakeholders



1. The organogram provides an indicative overview of key personnel at TotalEnergies' Zeeland Refinery, based on publicly available information. Due to limited data availability and the site's lean operational structure, certain functions such as supply chain and logistics may not be represented. This visualization does not depict reporting relationships

\*Marked as low confidence profile due to limited professional media presence and unverifiable contact details

# TEP NL : Overview & Maintenance Schedules

At a Glance	
Established	1924
Area	
Location	The Hague
Annual Processing Capacity	1 Billion cubic meters

Brief Overview	
<ul style="list-style-type: none"><li>• TotalEnergies EP Nederland B.V. (TEP NL) is a prominent player in the Dutch energy sector. It is a major gas producer, contributing approximately 1 billion cubic meters annually, which accounts for about 18% of Dutch offshore gas production</li><li>• The company operates 15 offshore platforms and 4 subsea production installations located between 80 and 150 kilometers northwest of Den Helder</li><li>• TEP NL has high potential in Offshore wind, Hydrogen, Circularity, Carbon Capture &amp; Storage and New Mobility solutions.</li></ul>	

## Business in Netherlands



**Exploration & Production**  
20 offshore gas production licenses



**Renewables & Electricity** -  
50% stake in OranjeWind,  
a 795 MW offshore wind farm



**Gas & Green gas**  
Green Hydrogen production of  
40,000 tons per year to decarbonize our  
refineries in Northern Europe.



**Refining & Chemicals**  
TEP NL have interest in  
Vlissingen based Zeeland  
Refinery


## Planned Maintenance of off shore gas production facility

- **Full Intervention Mode (FIM)** - TEP NL operates its offshore platforms predominantly in an unmanned state, with personnel present only during scheduled maintenance campaigns. This strategy enhances efficiency and safety while reducing operational costs
- **Seasonal Maintenance Campaigns** - Regular maintenance is meticulously prepared onshore and executed during specific seasonal campaigns. The use of Walk-to-Work vessels has been instrumental in minimizing helicopter flights, thereby optimizing logistics and ensuring safety during these operations.
- **Decommissioning Activities** - For platforms that have ceased production, such as the L7 field, TEP NL undertakes comprehensive decommissioning projects. The L7 decommissioning, initiated in 2023 and expected to conclude by the end of 2024, involves the complete removal of platforms and subsea structures, adhering to stringent safety and environmental standards
- TEP NL *planned maintenance shutdown details* such as annual schedules or multi-year cycles, are not detailed. However, TEP NL's maintenance strategy emphasizes thorough preparation and execution during designated periods to ensure operational integrity and safety.

# TEP NL – Business Strategy

Projects	Project Overview	Future prospect
<ul style="list-style-type: none"> <li>Aramis Project</li> </ul>	<ul style="list-style-type: none"> <li>The Aramis project, a collaboration between TotalEnergies, Shell, Energie Beheer Nederland (EBN) and Gasunie, aims to make a significant contribution to the energy transition by reducing CO<sub>2</sub> emissions for the hard-to-abate industries..</li> </ul>	<ul style="list-style-type: none"> <li>It offer, a decarbonisation solution for the industrial sectors by enabling the transport of CO<sub>2</sub> to depleted offshore gas fields under the North Sea</li> </ul>
<ul style="list-style-type: none"> <li>CCS (Carbon Capture and Storage) Project</li> </ul>	<ul style="list-style-type: none"> <li>TotalEnergies is building on flagship projects, particularly in the North Sea</li> </ul>	<ul style="list-style-type: none"> <li>The aim is to develop a CO<sub>2</sub> storage capacity of over 10 million tons per year by 2030.</li> </ul>
<ul style="list-style-type: none"> <li><i>Integrated power - Acquisitions of Renewable Portfolios</i></li> </ul>	<ul style="list-style-type: none"> <li>On April 02, 2025 TotalEnergies has closed the acquisition of VSB. This deal strengthens TotalEnergies' integrated electricity business in Germany.</li> <li>Positioning Company's offshore wind business in the country with the recent acquisitions of battery storage developer Kyon Energy and energy manager Quadra Energy</li> </ul>	<ul style="list-style-type: none"> <li>VSB's pipeline of over 15 GW will significantly boost TotalEnergies' renewables footprint in Europe, pushing its total pipeline capacity beyond 40 GW on top of the 7 GW already up and running or being built.</li> <li>As part of a focused strategy to prioritize key European markets, the company has decided to begin the process of selling the Puutionsaari project in Finland, a 440 MW wind and solar development led by VSB.</li> </ul>
<ul style="list-style-type: none"> <li>Supplying TotalEnergies' Antwerp platform with green hydrogen</li> </ul>	<ul style="list-style-type: none"> <li>TotalEnergies has signed a tolling agreement for 130 MW to be dedicated to the production of 15,000 tons per year of green hydrogen for the TotalEnergies platform in Antwerp.</li> <li>Under this agreement, TotalEnergies will supply the renewable electrons produced by the OranjeWind project to Air Liquide to be transformed into green hydrogen.</li> </ul>	<ul style="list-style-type: none"> <li>The project is expected to be operational by the end of 2027 and will reduce CO<sub>2</sub> emissions at the Antwerp site by up to 150,000 tons per year.</li> </ul>
<ul style="list-style-type: none"> <li>TotalEnergies acquires a stake in RWE</li> </ul>	<ul style="list-style-type: none"> <li>July 24, 2024 – TotalEnergies signed agreements with German renewable developer RWE, to acquire a 50% stake in OranjeWind, a 795 MW offshore wind farm under development in the Netherlands.</li> <li>These will produce about 40,000 tons per year of green hydrogen for the decarbonization of TotalEnergies' refineries in Northern Europe.</li> </ul>	<ul style="list-style-type: none"> <li>The project is a new milestone towards TotalEnergies' goal of a 40% reduction in net greenhouse gas emissions linked directly to its oil and gas operations (Scope 1 and 2) by 2030, compared to the 2015 baseline.</li> </ul>

# TEP NL – Contractors

Competitor	Engagement with TOTAL	Key USP
	In October 2022, TotalEnergies EP Nederland and AF Offshore Decom signed a contract for the engineering, preparation, removal, transportation, dismantling and recycling of 10 production platforms from the L7 Field in the Dutch sector of the North Sea.	Experience in Offshore Decommissioning
	In August 2024, Petrofac was awarded a multi-million dollar front-end-engineering design (FEED) for a CO2 injection platform. This follows the award of a FEED to Petrofac earlier this year covering the design of the 32” CO2 trunkline, including onshore, landfall and offshore sections, together with the offshore CO distribution hub platform for the Aramis system	Experience in in managing the challenges and opportunities in delivering CO2 capture, transport, and storage at scale.

# TEP NL Refinery: Stakeholders



1. The organogram provides an indicative overview of personnel associated with TotalEnergies EP Nederland B.V. (TEP NL), based on publicly available sources. Given the limited size of the entity and its low public visibility, only a small number of roles could be identified. This visualization does not depict reporting relationships

# Appendix

## Product & Services Portfolio

### Appendix – Sphere of Influence (SOI): Normandy Platform

- These slides provide an in-depth view of the **key influencers and collaborators** around **Philippe Durand**, Purchasing Manager at the Normandy site.
- They map **formal reporting lines** and **cross-functional collaboration**, helping visualize decision-making and operational interdependencies.
- A dedicated **business card view** summarizes Philippe's experience and background for quick context.
- Useful for refining **stakeholder engagement strategies** and understanding procurement influence at site level.

### Appendix – Sphere of Influence (SOI): Antwerp Platform

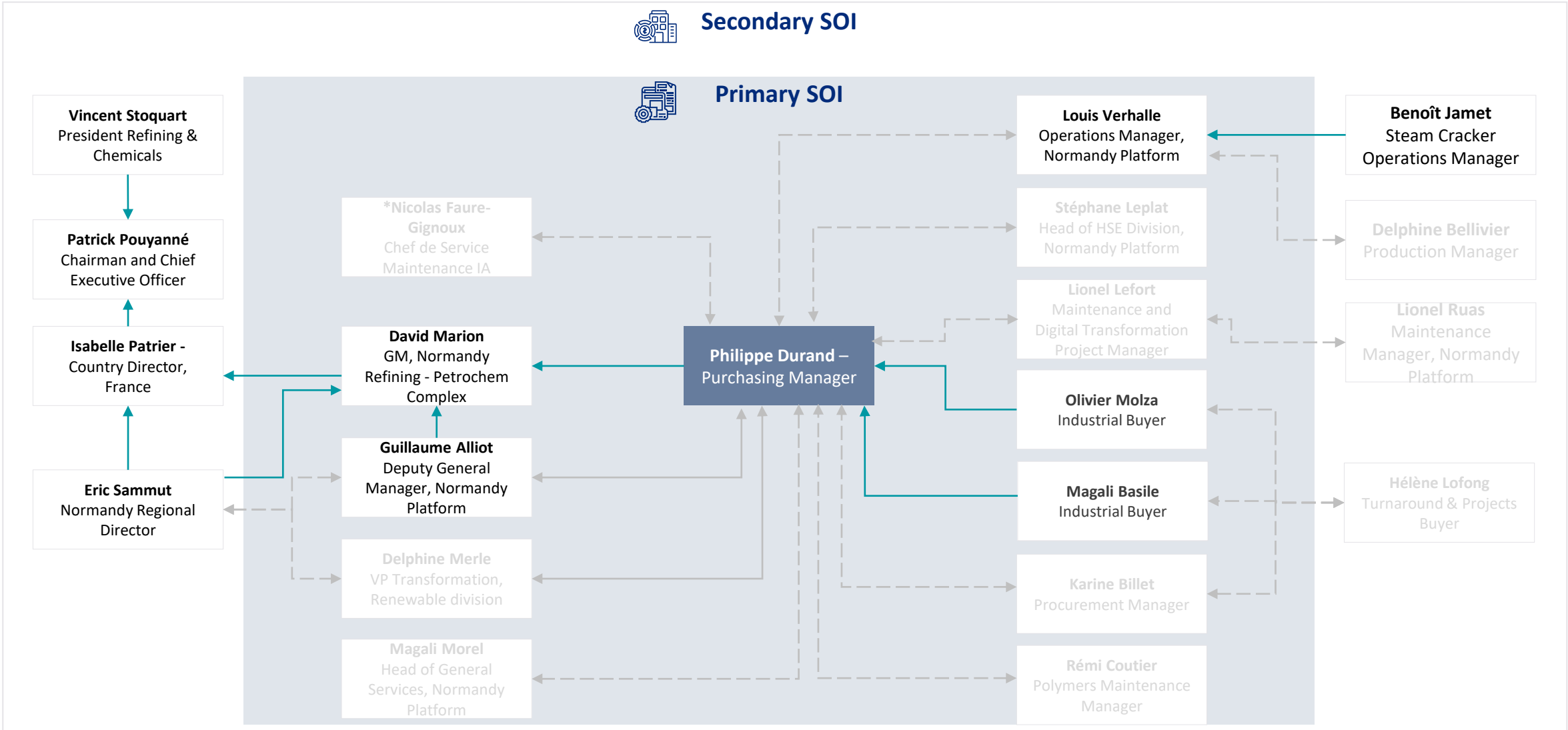
- These slides provide an in-depth view of the **key influencers and collaborators** around **Jeremy Robertson**, Contracts & Procurement Manager at the Antwerp site.
- They map **formal reporting lines** and **cross-functional collaboration**, helping visualize decision-making and operational interdependencies.
- A dedicated **business card view** summarizes Jeremy's experience and background for quick context.
- Useful for refining **stakeholder engagement strategies** and understanding procurement influence at site level.

### Appendix – Stakeholders for following sites as an additional information

- Stakeholders organogram for **Feluy** site for **additional coverage on contacts**
- Stakeholders organogram for **UK TEP** site for **additional coverage on contacts**

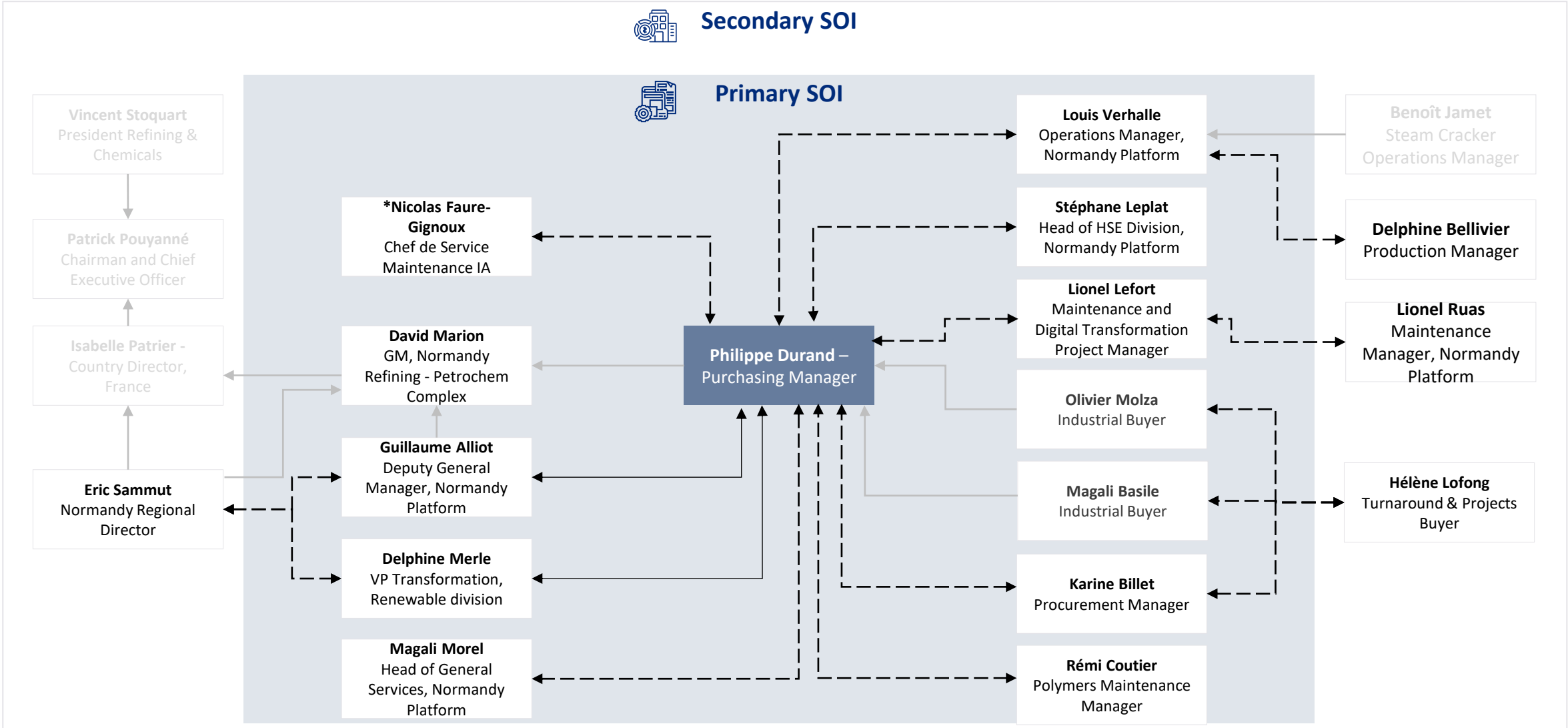


# Sphere of Influence (SOI) - Normandy Site/Platform - Reporting



\* Marked as low confidence profile due to limited professional media presence and unverifiable contact details

# Sphere of Influence (SOI) - Normandy Site/Platform - Collaboration

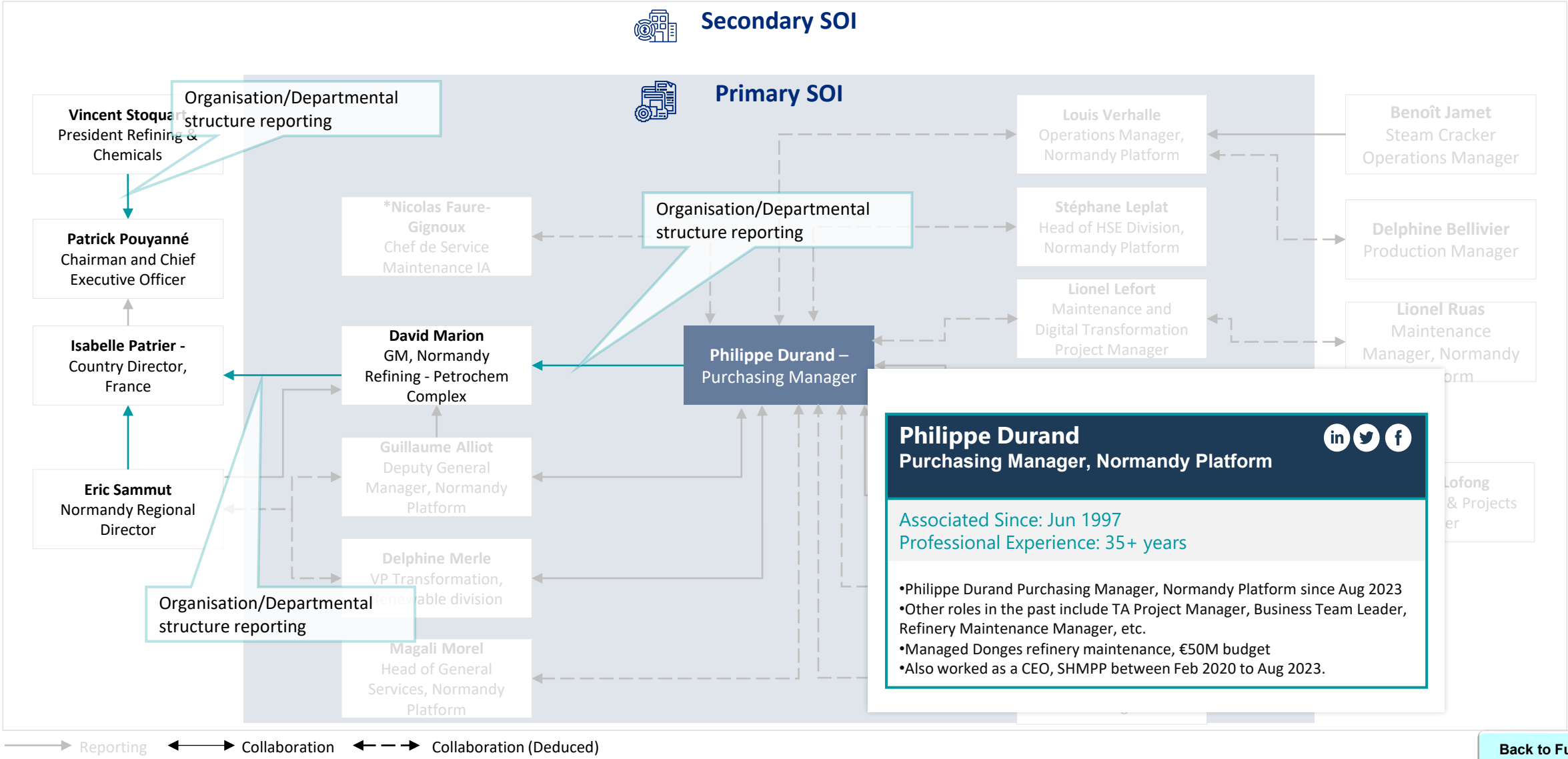


→ Reporting    ↔ Collaboration    - - - Collaboration (Deduced)

[Back to Full SOI](#)    [Reporting Map](#)

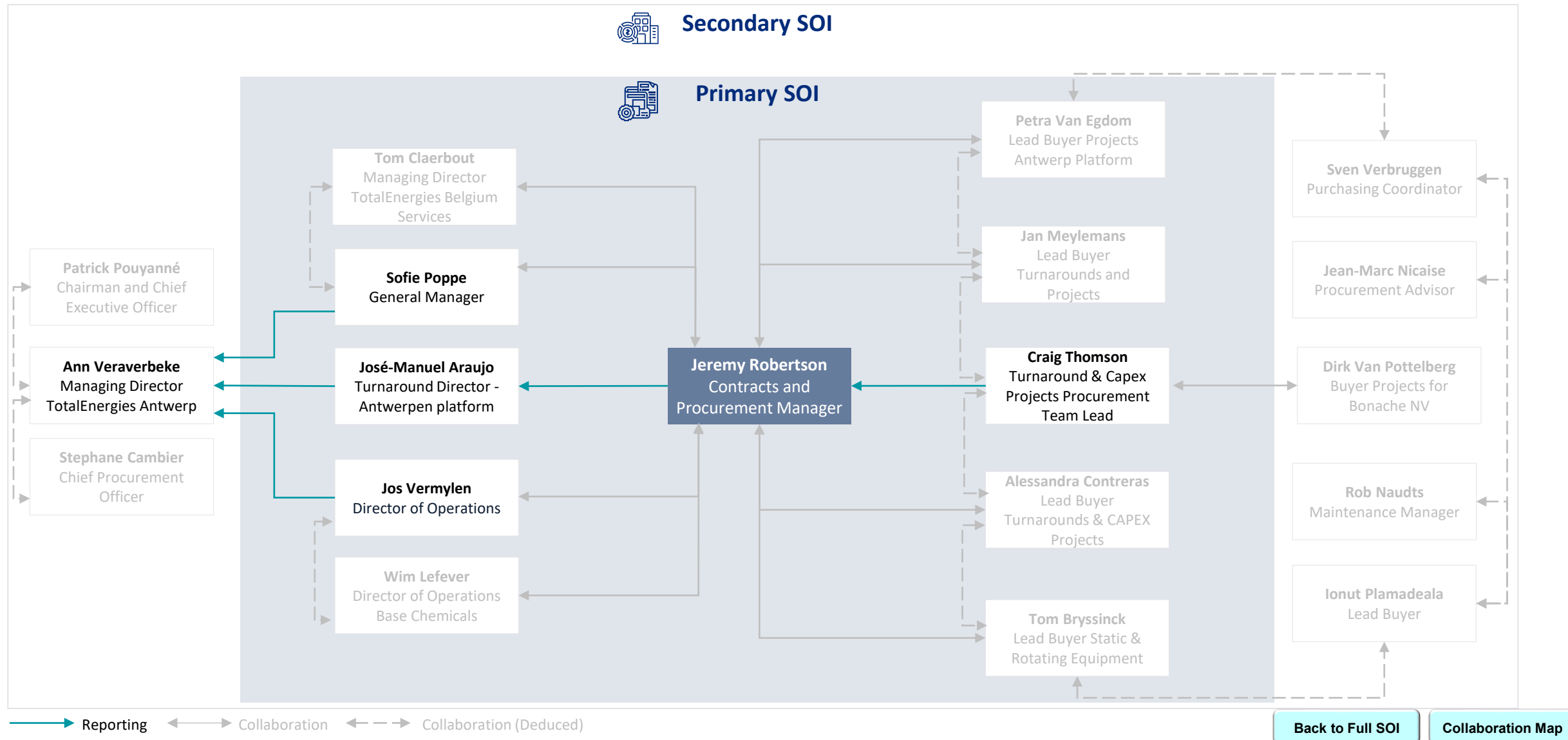
\* Marked as low confidence profile due to limited professional media presence and unverifiable contact details

# Sphere of Influence (SOI) - Normandy Site/Platform - Collaboration

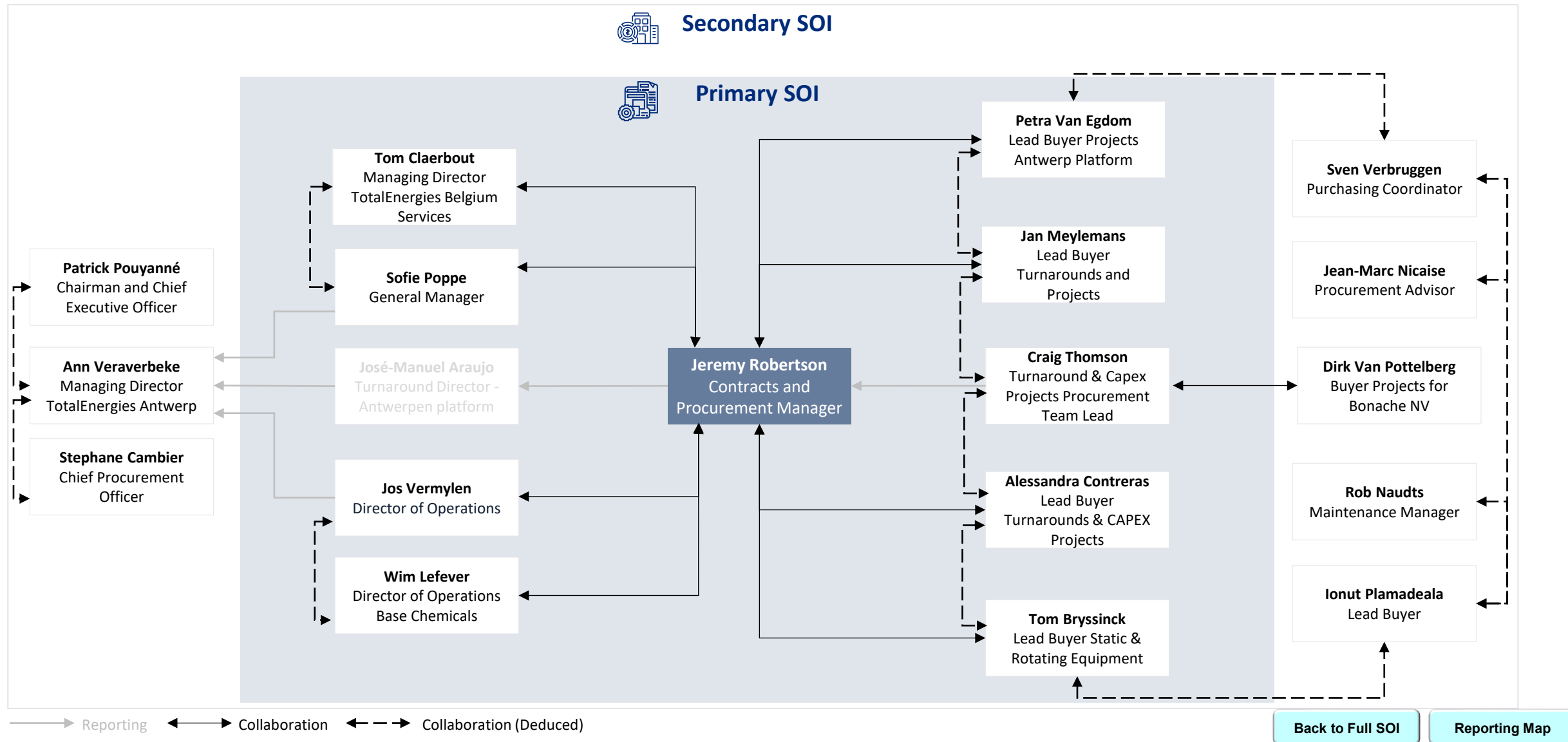


\* Marked as low confidence profile due to limited professional media presence and unverifiable contact details

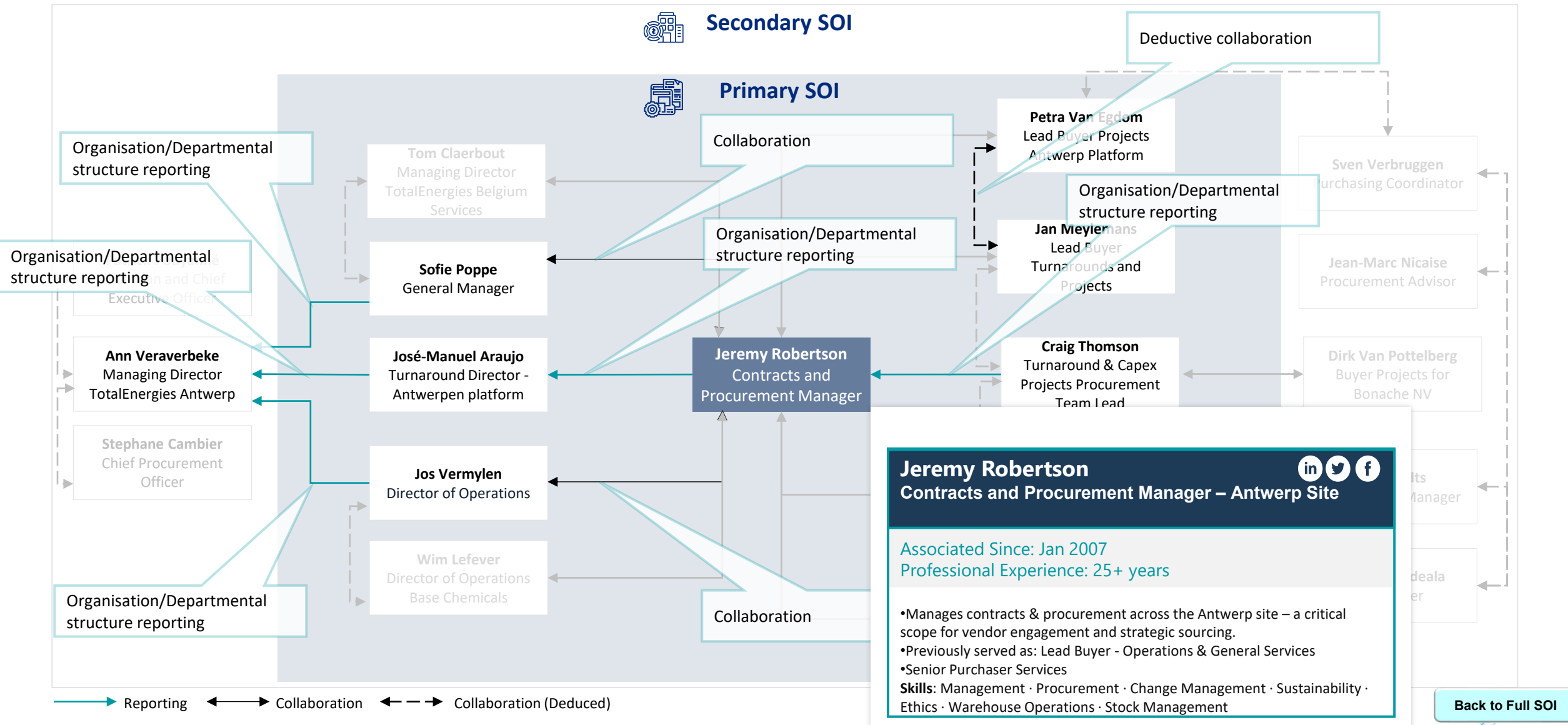
# Sphere of Influence (SOI) - Antwerp Site/Platform - Reporting



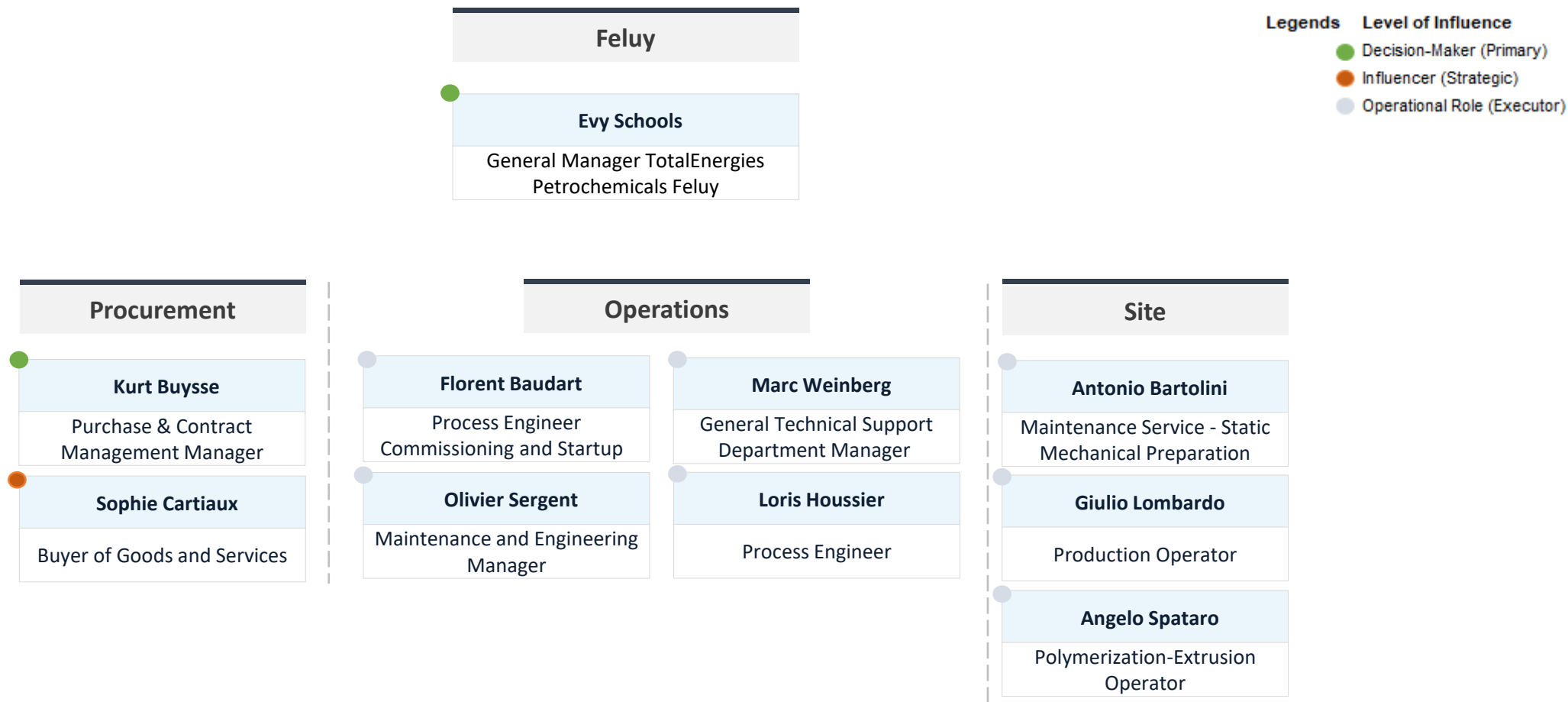
# Sphere of Influence (SOI) - Antwerp Site/Platform - Collaboration



# Sphere of Influence (SOI) - Antwerp Site/Platform - Business Card

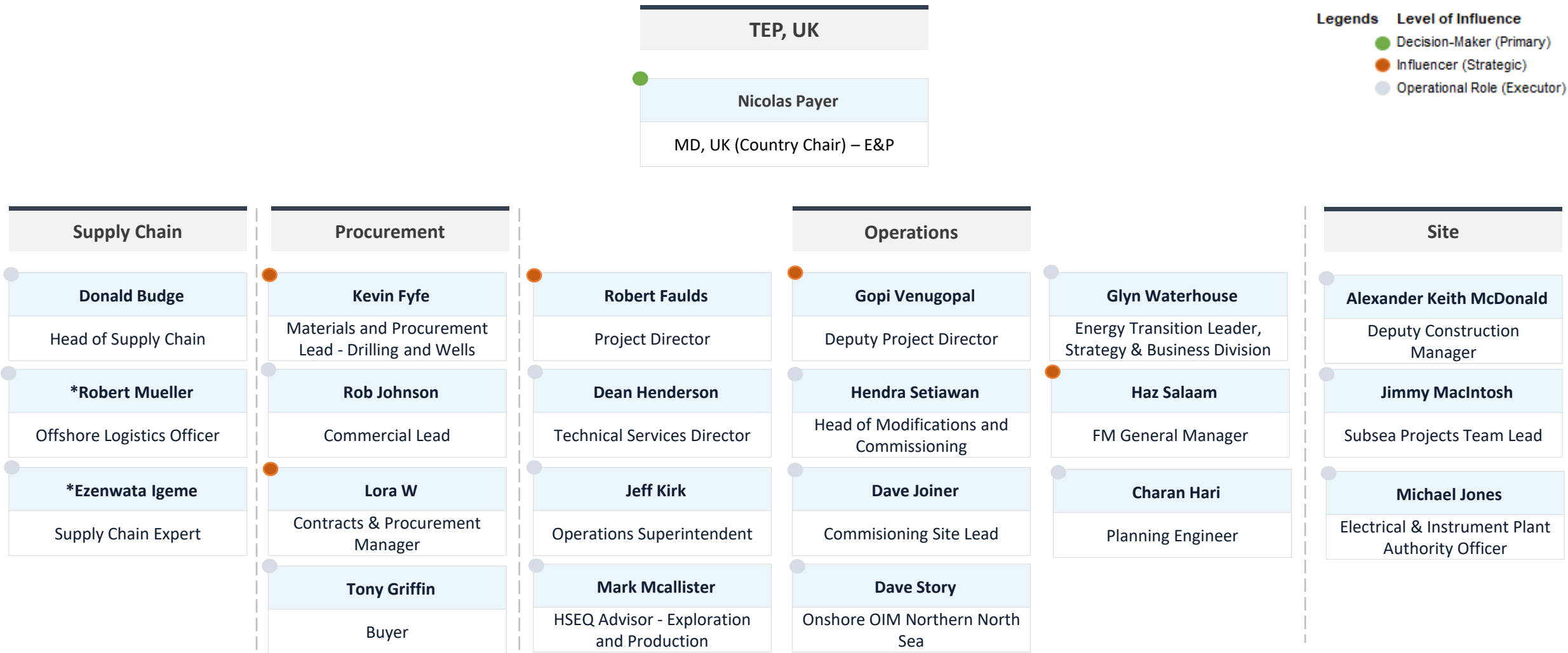


# Feluy Refinery: Stakeholders



1. The organogram offers a representative view of key roles at TotalEnergies Feluy based on public information. It may not capture the full structure and does not reflect reporting relationships. Due to limited data availability and the site's lean operational structure, certain functions such as supply chain and logistics may not be represented

# TEP UK Refinery: Stakeholders



1. The organogram provides a strategic view of key personnel across operations, procurement, supply chain, and site management functions within TotalEnergies EP UK (TEPUK). As the client engages this market via the PBS JV, the mapping identifies high-value contacts involved in commissioning, offshore operations, and materials oversight — aligning with the client’s service footprint. This visualization does not depict reporting relationships.

\*Marked as low confidence profile due to limited professional media presence and unverifiable contact details



# THANK YOU

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