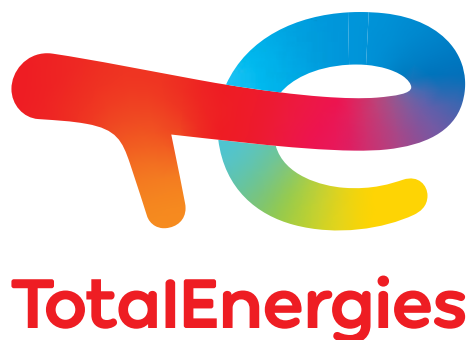


# Factbook 2023



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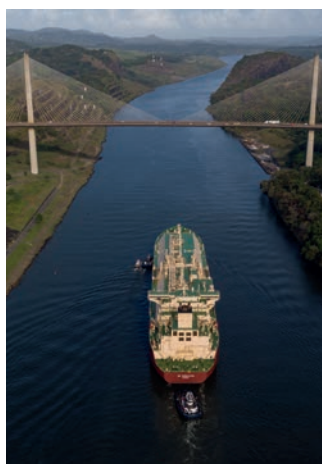
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### NEED FURTHER INFORMATION?

Log on to [www.totalenergies.com](http://www.totalenergies.com)

You can consult the Factbook online, download it in PDF and the tables are also available in Excel format.



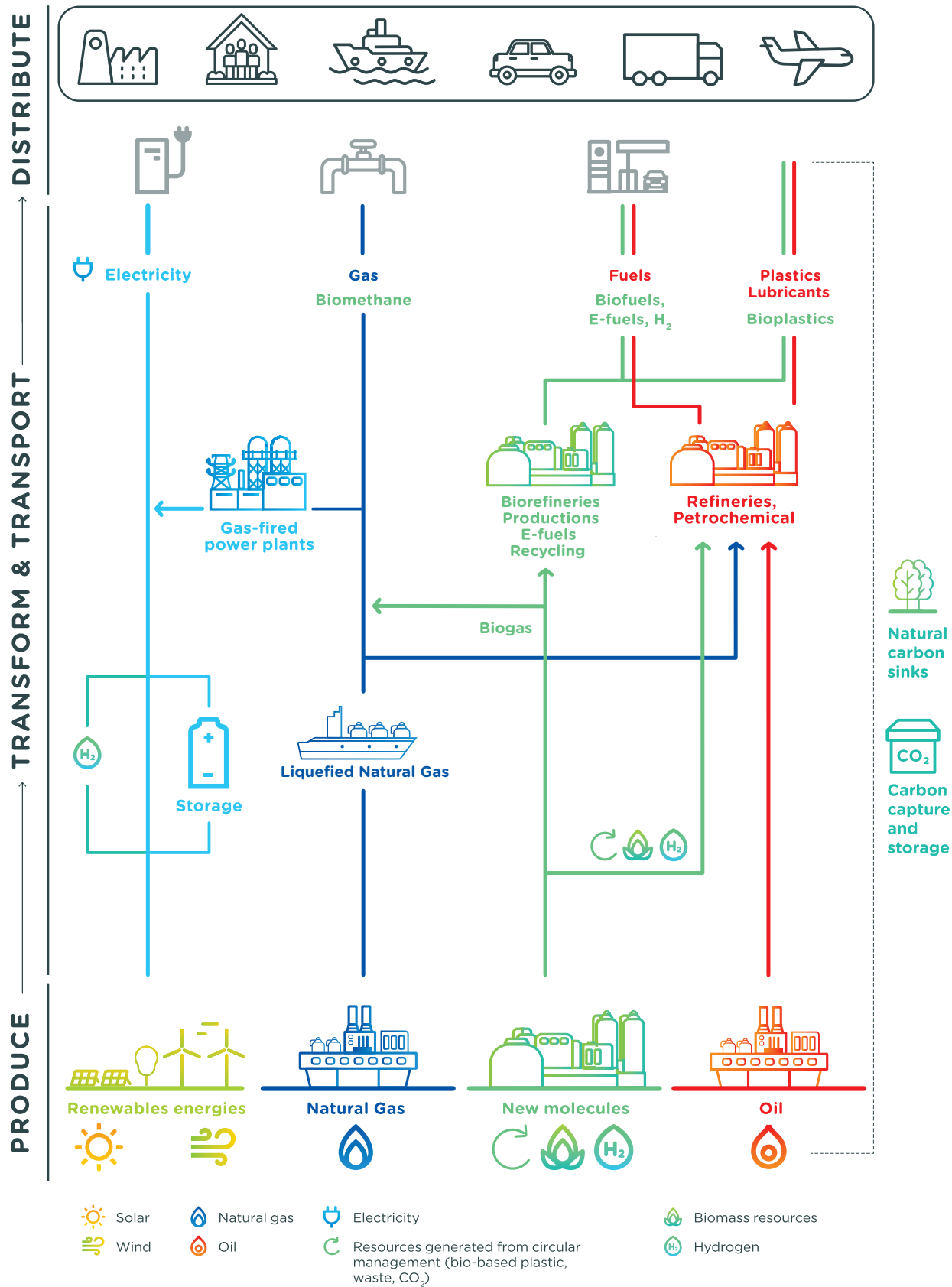
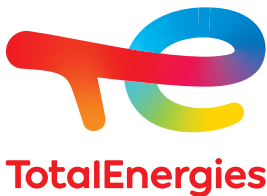
### UNITS OF MEASUREMENT AND ABBREVIATIONS

/d:	per day
/y:	per year
bn:	billion
b:	barrel
boe:	barrel of oil equivalent
Btu:	British thermal unit
cf:	cubic feet
\$ and/or dollar:	U.S. dollar
€:	euro
GW:	Gigawatt
GWh:	Gigawatt hour
k:	thousand
km:	kilometer
kboe/d:	thousand boe per day
kb/d:	thousand barrels per day
M:	Million
m:	meter
m <sup>3</sup> or cm <sup>3</sup> :	cubic meter
MW:	Megawatt
t:	metric ton
TWh:	Terawatt hour
ADR:	American Depositary Receipt
API:	American Petroleum Institute
ASC:	Accounting Standards Codification
BtB:	Business to Business
BtC:	Business to Consumer
CCGT:	Combined-Cycle Gas Turbine
CCS:	Carbon Capture and Storage
CO <sub>2</sub> :	Carbon Dioxide
ECB:	European Central Bank
EV:	Electric Vehicle
FEED:	Front-End Engineering and Design
FID:	Final Investment Decision
FPSO:	Floating Production Storage and Offloading
FSRU:	Floating Storage and Regasification Unit
GHG:	GreenHouse Gas
IAS:	International Accounting Standards
IFRS:	International Financial Reporting Standards
JV:	Joint Venture
LNG:	Liquefied Natural Gas
LPG:	Liquefied Petroleum Gas
MoU:	Memorandum of Understanding
NBS:	Nature Based Solutions
NGL:	Natural Gas Liquids
NGV:	Natural Gas Vehicle
NGO:	Non-Governmental Organisation
OPEC:	Organisation of the Petroleum Exporting Countries
PLA:	Poly Lactic Acid
PPA:	Power Purchase Agreement
ROE:	Return on Equity
ROACE:	Return on Average Capital Employed
SEC:	United States Securities and Exchange Commission
VCM:	Variable Cost Margin - Refining Europe

### CONVERSION TABLE

1 acre = approx. 0.405 hectares  
 1 km = approx. 0.62 miles  
 1 b = 42 U.S. gallons = approx. 159 liters  
 1 boe = 1 b of crude oil = 5,388 cf of gas in 2023  
 1 b/d of crude oil = approx. 50 t/y of crude oil  
 1 t of oil = approx. 7.5 b of oil  
 (assuming a specific gravity of 37° API)  
 1 m<sup>3</sup> = approx. 35.3 cf  
 1 Bm<sup>3</sup>/y (1 Bcm) = approx. 0.1 Bcf/d  
 1 Mt of LNG = approx. 48 Bcf of gas  
 1 Mt/y of LNG = approx. 131 Mcf/d of gas

# Our activities





## AN INTEGRATED ENERGY COMPANY

TotalEnergies is a global integrated energy company that produces and markets energies: oil and biofuels, natural gas and green gases, renewables and electricity. Our more than 100,000 employees are committed to provide as many people as possible with energy that is more reliable, more affordable and more sustainable. Active in about 120 countries, TotalEnergies places sustainability at the heart of its strategy, its projects and its operations.

## A BALANCED TRANSITION STRATEGY

TotalEnergies reaffirms the relevance of its balanced integrated multi-energy strategy considering the developments in the oil, gas and electricity markets. Anchored on two pillars, Oil & Gas, notably LNG, and electricity, the energy at the heart of the energy transition, the Company is in a very favorable position to take advantage of energy prices evolution. Thanks to the refocusing of the Oil & Gas portfolio on assets and projects with low cost, low breakeven and low GHG emissions, and to the diversification into electricity, notably renewables, through an integrated strategy from production to customer, the Company is implementing its transition strategy while ensuring an attractive shareholder return policy.

## RESPONSIBLY PRODUCING LOW COST, LOW EMISSION OIL & GAS

While drastically lowering the emissions from its operations, TotalEnergies plans to grow its Oil & Gas production by 2-3% per year over the next five years, predominantly from LNG, thanks to its rich low cost low emission Upstream portfolio. The Company plans notably to develop a top-tier pipeline of LNG projects (Qatar North Field Expansion, Energia Costa Azul LNG and Rio Grande in the US, Papua LNG, Mozambique LNG) while leveraging its leading LNG exporter position in the United States. TotalEnergies plans to launch the production of its portfolio of high-return oil projects (Brazil, Gulf of Mexico, Iraq, Uganda) recently enriched with exploration successes in Suriname and Namibia.

## DEVELOPING A PROFITABLE AND DIFFERENTIATED INTEGRATED POWER MODEL TO CREATE A FUTURE CASH ENGINE OF THE COMPANY

TotalEnergies is replicating its successful integrated Oil & Gas business model into the electricity value chain to achieve a profitability (ROACE<sup>(1)</sup>) of ~12% for the Integrated Power segment, equivalent to Upstream Oil & Gas ROACE at 60 \$/b, above the returns of the traditional Utilities model. The Company is building 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. In particular, TotalEnergies is leveraging its scale effect in equipment purchase to optimize its capital investment costs and industrialize its renewable assets through digital to lower operating costs. TotalEnergies also uses the strength of its balance sheet to keep merchant exposure, allowing it to capture additional margins

in a market exposure. The Company aims to grow its power generation to more than 100 TWh by 2030, investing around \$4 billion per year; the generated cash flow of this segment was \$2.2 billion in 2023 and will be more than \$4 billion in 2028, becoming net cash-flow positive at that time. Additionally, TotalEnergies invests in low-carbon molecules (biofuels, mainly SAF, and biogas, as well as hydrogen and its derivatives: e-fuels).

## GAS: A TRANSITION FUEL

In the gas markets, TotalEnergies focuses on Liquefied Natural Gas (LNG), which can be shipped everywhere in the world and thus contributes to energy security, as it has been the case in Europe since 2022 with the sharp reduction of Russian pipeline gas deliveries. The growth of renewable electricity, intermittent and seasonal by nature, will require an increase in flexible power generation resources. The flexible production of gas-fired power plants, which emits half as much GHG as coal-fired power plants for the same amount of electricity produced<sup>(2)</sup>, enables to secure electricity generation which does not depends on weather conditions contrary to renewable energy, and to face demand fluctuations. In addition, natural gas plays an essential role in reducing emissions from power generation as a replacement of coal. With diversified positions, and in particular its leading position of exporter in the United States – over 10 Mt in 2023 – TotalEnergies is the 3<sup>rd</sup> world's largest LNG player, with 44 Mt sold in 2023. The Company intends to consolidate its position as an integrated player by developing a first-class portfolio that will enable it to achieve 50% growth in volumes between 2023 and 2030.

## ELECTRICITY: THE ENERGY OF DECARBONATION

Electricity demand, which is vital to the success of the energy transition, is expected to grow sharply, as decarbonization is at the heart of the roadmaps of countries committed to carbon neutrality by 2050.

TotalEnergies net electricity production target is to produce more than 100 TWh by 2030, thanks to a 4 to 5-fold increase in renewable production (19 TWh in 2023) and a 2-fold increase in flexible assets production (15 TWh in 2023). As part of its ambition to achieve carbon neutrality by 2050, TotalEnergies is building a competitive portfolio of renewable (solar, onshore and offshore wind) and flexible (CCGT, storage) assets to provide its customers with less and less carbon intensive electricity available 24/7. The Company's levers to grow with a return on average capital employed of ~12% are selectivity in its choices of projects; integration across the entire electricity value chain; cost control using our project management and offshore development skills; mobilizing external financing at competitive rates and making partial divestments to accelerate cash flow generation and diversify our portfolio's exposure.

## NEW LOW-CARBON ENERGY

The energy transition also requires the development of low-carbon energy based

**Company targets to grow its Oil & Gas production by 2-3% per year over the next five years, predominantly from LNG**

**3<sup>RD</sup>**  
**largest LNG player worldwide in 2023**

**44.3 Mt**  
**LNG volumes sold in 2023 including 15.2 Mt coming from equity production**

**Company aims to grow its power generation to more than 100 TWh by 2030**

**Company targets a 12% ROACE in 2028 and positive net cash flow for its Integrated Power segment**

**10 TWh**  
**target of biogas production by 2030**

**Company aims to produce 1.5 Mt of SAF in 2030**

on the conversion of biomass and waste or the production of e-fuels combining hydrogen with CO<sub>2</sub> used as a raw material. TotalEnergies is thus developing these new energies:

Among biofuels, biogas, hydrogen and e-fuels, TotalEnergies favors the production of Sustainable Aviation Fuel (SAF) to decarbonize the aviation industry. To avoid land use conflicts, TotalEnergies is developing solutions based on primarily food industry waste and residues (used oils, animal fats). Our aim is to increase the share of circular feedstocks to more than 75% as from 2024 in its production of biofuels.

Biogas, produced from the decomposition of organic waste, is a renewable gas. Injected into gas networks in the form of biomethane, it contributes to the decarbonization of natural gas uses. TotalEnergies' gross production capacity of 1.1 TWh/year eq. biomethane has almost doubled compared with 2022. The Company now intends to pursue its development through growth, mainly in Europe and the United States, with a 2030 target of 10 TWh of net production.

The production of green hydrogen will require the massive deployment of renewable electricity production capacities, to which TotalEnergies is contributing through its investments and the development of the Integrated Power segment.

(1) ROACE: Return on average capital employed.

(2) IEA 2023, Life Cycle Upstream Emission Factors (Pilot Edition).



## → A net zero company by 2050 together with society

TotalEnergies reaffirms its ambition to be a major player in the energy transition and shares a vision of what its activities could be to achieve carbon neutrality by 2050, together with society.

By 2050, TotalEnergies would produce:

- about 50% of its energy in the form of electricity, including the corresponding storage capacity, totaling around 500 TWh/year, on the premise that TotalEnergies would develop about 400 GW of gross renewable capacity;
- about 25% of its energy, equivalent to 50 Mt/year of low-carbon energy molecules in the form of biogas, hydrogen, or synthetic liquid fuels from the circular reaction:  $H_2 + CO_2$  e-fuels;
- around 1 Mboe/d of Oil & Gas (about a quarter of the production in 2030, consistent with the decline envisaged by the IEA's Net Zero scenario), primarily liquefied natural gas (about 0.7 Mboe/d, or 25-30 Mt/year) with very low-cost oil accounting for the rest. Most of that oil would be used in the petrochemicals industry

to produce about 10 Mt/year of polymers, of which two thirds would come from the circular economy.

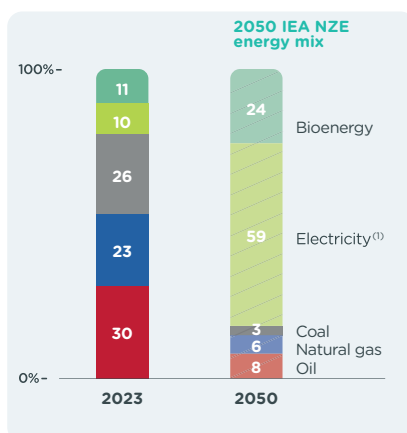
That Oil and Gas would represent:

- about 10 Mt  $CO_2e$ /year of Scope 1 residual emissions, with methane emissions aiming towards zero (below 0.1 Mt  $CO_2e$ /year); those emissions would be offset in full by projects using nature-based solutions (natural carbon sinks).
- Scope 3 emissions totaling about 100 Mt  $CO_2e$ /year. To get to net zero together with society, TotalEnergies would contribute to "eliminate" the equivalent of 100 Mt/year of  $CO_2$  generated by its customers by developing carbon utilization (CCU) and carbon capture and storage (CCS) solutions of approximately 100 Mt  $CO_2e$ /year.

In 2050, our trading portfolio would be aligned with our productions and sales portfolio.

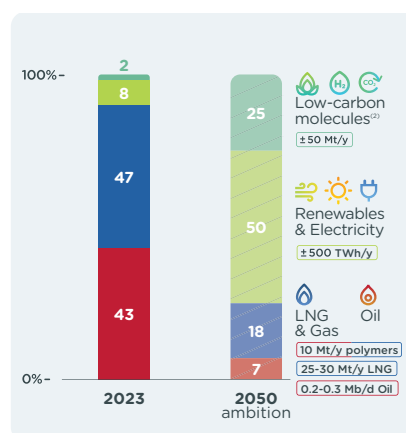
### GLOBAL ENERGY SYSTEM

Total primary energy demand mix – Worldwide



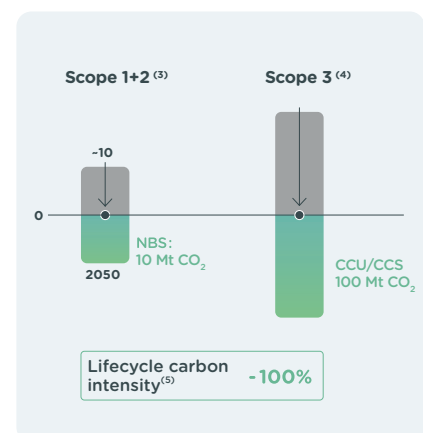
### TOTALENERGIES SALES

TotalEnergies' sales mix



### TOTALENERGIES NET ZERO VISION 2050

(Mt $CO_2e$ )



(1) Hydro, solar, wind and nuclear.

(2) Biofuels, biogas, hydrogen and e-fuels/e-gas.

(3) From operated facilities.

(4) GHG Protocol - Category 11.

(5) Lifecycle carbon intensity of energy products sold.



## → 2030: Our objectives for more energy and less emissions

Over the decade 2020-2030, TotalEnergies' energy transition strategy based on two pillars is reflected in the production and sales targets shown below.

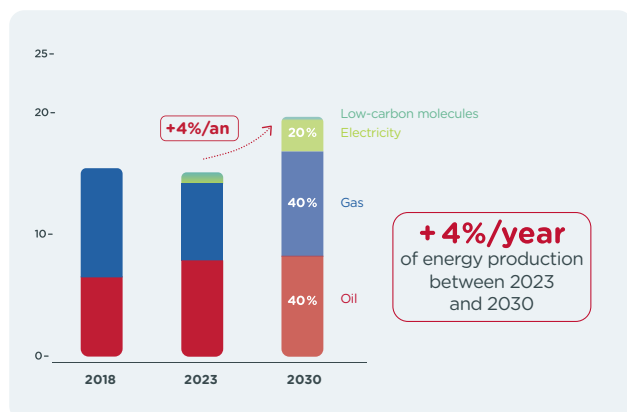
- **Production:** We plan to increase our energy production (oil, gas and electricity) by 4% per year between 2023 and 2030, while

reducing emissions (Scope 1+2 and methane) from our operated facilities.

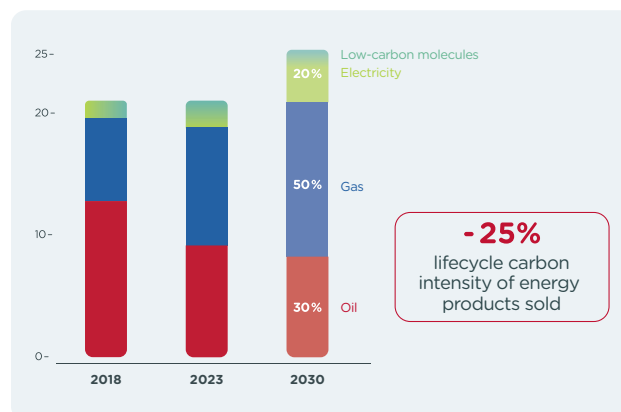
- **Sales:** We are aiming to reduce the carbon intensity of our sales by 25% by 2030 compared to 2015. Taking these factors into account, we are developing our sales mix to reach 20% electricity by 2030, with a higher proportion of gas sales than oil sales.

### ENERGY PRODUCTION AND SALES

#### ENERGY PRODUCTION (in PJ/d)



#### ENERGY SALES (in PJ/d)



## → Our 2023 Progress and 2025-2030 Objectives

			Objectives			
			2022	2023	2025	2030
Scope 1+2 Emissions on Operated Activities Net Zero in 2050	Scope 1+2 emissions	Mt CO <sub>2</sub> e vs 46 Mt in 2015	40 -13%	35 -24%	< 38	25-30 <sup>(1)</sup> > -40% <sup>(1)</sup>
	Methane emissions	kt CH <sub>4</sub> vs 64 kt in 2020	42 -34%	34 -47%	-50%	-80%
Indirect Emissions Net Zero in 2050, together with society	Lifecycle Carbon intensity of energy products sold <sup>(2)</sup> Scope 1+2+3	100 in 2015	-12%	-13%	-15%	-25%
	Scope 3 Worldwide <sup>(3)</sup>	Mt CO <sub>2</sub> e 410 Mt in 2015 out of which Scope 3 Oil 350 Mt in 2015	389 <sup>(4)</sup> 254 <sup>(4)</sup> -27%	355 227 -34%	< 400	< 400 -40%

(1) Net emissions, including nature-based carbon sinks from 2030.

(2) See Sustainability & Climate 2024 Progress Report for further details.

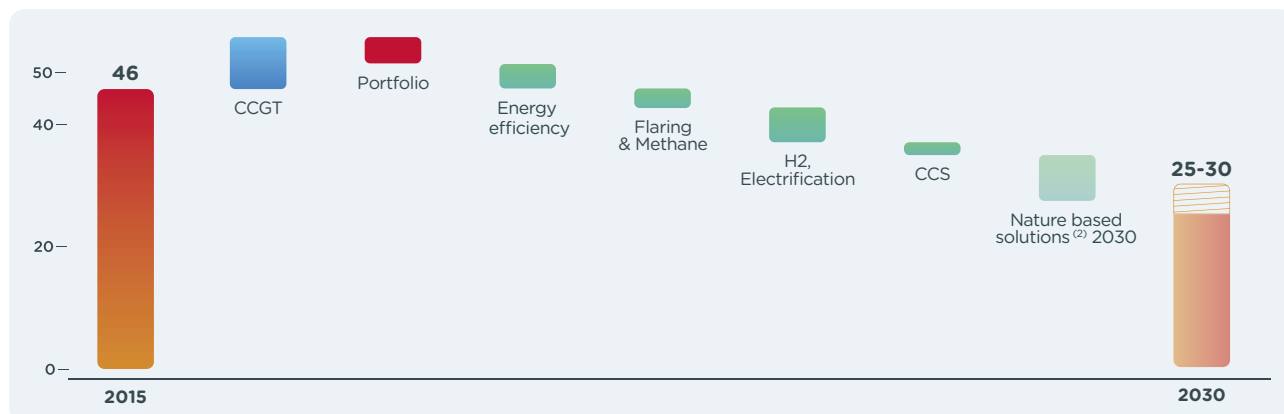
(3) GHG Protocol – Category 11. See Sustainability & Climate 2024 Progress Report for further details.

(4) Excluding Covid impact for first half 2022.

## → Our decarbonization levers

### SCOPE 1+2 FROM OPERATED FACILITIES: LEVERS TO REACH OUR -40% TARGET IN 2030<sup>(1)</sup>

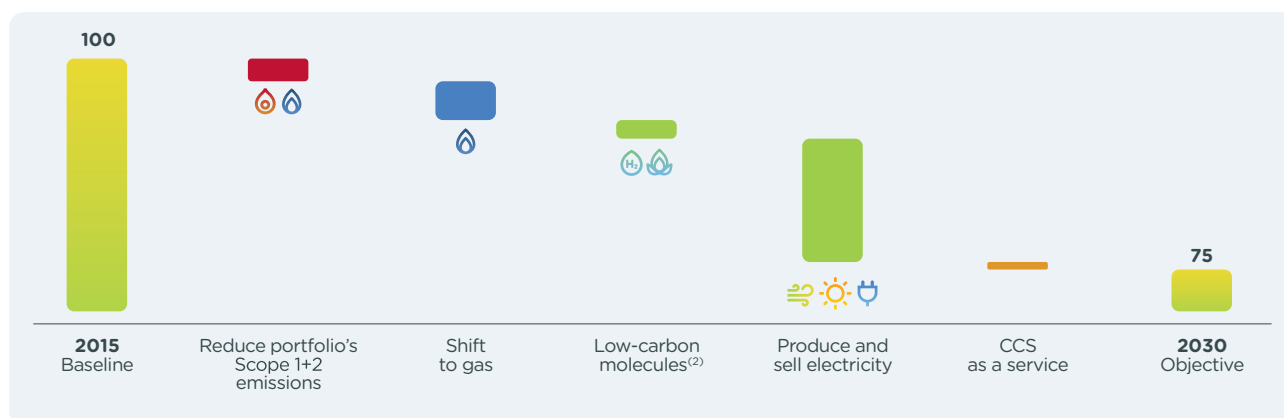
(Mt CO<sub>2</sub>e)



(1) Net of nature-based carbon sinks.

(2) NBS credits will be used from 2030, from 5 to 10 Mt/y.

### LEVERS TO THE REDUCTION OF THE LIFECYCLE CARBON INTENSITY<sup>(1)</sup> OF ENERGY PRODUCTS SOLD (2015 - 2030)



(1) See Sustainability & Climate 2024 Progress Report for further details.

(2) Biofuels, biogas, hydrogen and e-fuels/e-gas.

#### Scope 1+2 emissions reduction objectives

TotalEnergies reaffirms its decarbonization objective, which aims to reduce its Scope 1+2 net emissions by -40% to 2030 compared to 2015, net of 5-10 Mt of natural carbon sinks. Our objectives include emissions generated by the growth strategy in electricity we have pursued since 2015, which has prompted us to create a flexible power generation portfolio of plants (CCGT).

To achieve our 2030 target, we are mobilizing every tool at our disposal to avoid and reduce emissions from our operations. Compensation from natural carbon sinks will only begin from 2030 onwards, to offset residual emissions in pursuit of our objective, on the basis of a consumption of about 10% of our stock of carbon credit units per year.

#### A strategy to reduce our clients emissions

By 2030, we intend to reduce the emissions linked to the energy we supply to our customers by 25% compared to 2015. In other words, we intend to decrease by 25% the carbon intensity<sup>(1)</sup> of energy products sold, which accounts for the lifecycle emissions (Scope 1+2+3) of our energy products per unit of energy sold (g CO<sub>2</sub>e/MJ).

Indeed, by offering our clients an increasingly decarbonized portfolio, we contribute to the energy transition and help our clients reduce their emissions.

Growth in electricity will drive more than half the reduction in our lifecycle carbon intensity<sup>(1)</sup> between 2015 and 2030. The other factors will be the reduction in sales of petroleum products coupled with an increase in gas production (particularly LNG) and sales of products derived from biomass. Lastly, lower emissions from our facilities will contribute to 10% of the intensity<sup>(1)</sup> reduction.

(1) Lifecycle carbon intensity of energy products sold.



## → Aiming for zero methane

TotalEnergies believes that it is the industry's responsibility to aim for zero methane emissions by 2030 and wants to set an example for the industry. Our plan is based on three actions: eliminating routine flaring, eliminating vents and repairing leaks as soon as they are detected:

- TotalEnergies targets cover all of the Company's operated assets and go beyond the 75% reduction in methane emissions from Oil & Gas by 2030 (vs 2020) as recommended by the IEA when creating the NZE scenario. TotalEnergies now aims to reach its 2025 target of -50%, one year ahead of schedule, in 2024.
- TotalEnergies is a signatory of the Oil & Gas Decarbonization Charter launched at COP28, which includes the ambition "*Aiming for near-zero Upstream methane emissions by 2030*". In line with this collective ambition, TotalEnergies is strengthening its

methane intensity<sup>(1)</sup> target of less than 0.1% by 2030 on its gas facilities, by extending it to all its operated Upstream Oil & Gas facilities.

- At the same time, TotalEnergies is fully assuming its leadership role in the fight to collectively reduce methane emissions.
- TotalEnergies works alongside its partners to implement best practices on its non-operated assets. The Company is a pioneer in the detection and quantification of emissions in real-life conditions. After deploying its AUSEA (Airborn Ultralight Spectrometer for Environmental Application) drones at all its upstream operated sites worldwide, TotalEnergies has performed in 2023 the first AUSEA flights on non-operated assets during four campaigns in: Qatar, Brazil, Azerbaijan and the United Arab Emirates.

(1) Methane emissions intensity in relation to commercial gas produced.



## 2023 Highlights

### JANUARY

#### France – iLNG

Start-up of BioBéarn, the largest biogas production unit in France with a capacity of 160 GWh.

#### Germany – iLNG

Commissioning of the floating LNG regasification terminal in Lubmin.

#### Brazil – Upstream 1

Launch of the Lapa South-West project.

#### Oman – iLNG

Production start-up on Block 10, and signed a long-term LNG contract for 0.8 Mt/y.

#### Brazil – iPower 2

Closing of the acquisition of a 34% interest in Casa dos Ventos, leading renewable developer in Brazil.

### FEBRUARY

#### Europe – Hydrogen 3

Creation of a joint venture with Air Liquide to develop a network of more than 100 hydrogen stations for trucks in Europe.

#### Denmark – CCS

Entry on two permits for the storage of CO<sub>2</sub> in the North Sea.

#### Taiwan – iPower

Acquisition from Corio Generation of a c.50% interest in the 600 MW Formosa 3 offshore wind project.

### MARCH

#### United Arab Emirates – Upstream

Acquisition of CEPESA's upstream assets, representing a production share of 50 kboe/d.

#### Poland – iLNG

Acquisition of PGB, Poland's leading biogas producer.

#### Papua New Guinea – iLNG 4

Launch of Papua LNG integrated engineering studies.

#### France – Circular Economy

Agreement with waste recycling company Paprec to develop chemical plastic recycling projects.

#### Europe – Downstream

Sale to Alimentation Couche-Tard of retail networks in Germany and the Netherlands and 40%/60% partnership in Belgium and Luxembourg.

#### Sustainability & Climate

Publication of the *Sustainability & Climate – 2023 Progress Report* presenting the progress made on TotalEnergies' transformation strategy and the update of its climate ambition.

### MAY

#### Brazil – Upstream

Signature of the production sharing contract for the Agua Marinha block.

### JUNE

#### Kazakhstan – iPower

25-year Power Purchase Agreement for 1 GW onshore wind farm with battery storage.

#### Nigeria – Upstream 5

Oil and gas discovery on the Ntokon well, located on OML102.

#### United States – iLNG

Launch of the RGLNG project, in Texas: acquisition of a 16.67% stake in the JV in charge of developing the 17.5 Mt/y project, acquisition of a 17.5% stake in Next Decade, and signature of a 5.4 Mt/y offtake agreement for 20 years.

#### France – Sustainable aviation fuels

Doubling SAF production capacity to 285 kt/y at Grandpuits.

#### Saudi Arabia – Downstream

Award of \$11 billion EPC contracts for the Amiral project.

#### Asia Pacific – iPower

Strategic collaboration agreement with Petronas to develop renewable energy projects in Asia Pacific region. Agreement to develop the 100 MW Pleasant Hills solar project in Australia.

#### Germany – Hydrogen

Agreement with VNG to initiate the future supply of green hydrogen to the Leuna refinery.

#### France – Biomethane

Construction in Grandpuits of a production unit with annual capacity of 80 GWh.

### JULY

#### Germany – iPower

Award of two maritime leases to develop two offshore wind farms for a total capacity of 3 GW.

#### Total Eren full acquisition 6

Acquisition at 100% of Total Eren, a leading renewable electricity producer.

#### Algeria – Multi-energy strategy

Partnership with Sonatrach to increase the production of the Tin Fouyé Tabankort fields, extend to 2024 the 2Mt/y of LNG deliveries in France, and develop renewable energy projects.

### AUGUST

#### Azerbaijan – Upstream

Production start-up of Absheron gas and condensate field, and sale to ADNOC of a 15% interest.

#### Australia – Upstream

Acquisition of an interest in the Cash-Maple gas discoveries to ensure long-term supply of Ichthys LNG.

#### Iraq – Multi-energy strategy

Launch of GGIP: major multi-energy project (access to low-cost, low-emission oil from the Ratawi field, gas gathering and treatment for electricity generation, 1 GW solar farm and sea water treatment) in favor of the sustainable development of natural resources in Basrah area.





## SEPTEMBER

### India – iPower

Investment with AGEL in a joint venture in India with more than 1,400 MW of renewable assets.

### Angola – Upstream

Sale to Petronas of a 40% interest in Block 20.

### Suriname – Upstream

Launch of development studies of a 200 kb/d oil project in Block 58 with targeted FID at the end of 2024.

### Germany – iPower

Award of a contract for the installation and operation of 1,100 EV HPC points in Germany.

### France – Hydrogen

Agreement with Air Liquide for the supply of green and low carbon hydrogen to the Normandy platform.

### Europe – Hydrogen

Call for tenders launch for the supply of 500,000 t/y of green hydrogen to decarbonize TotalEnergies' European refining.

## OCTOBER

### United States – Downstream

Start-up of a new polyethylene unit on the Baystar plant.

### United States – iPower

Commissioning of Myrtle Solar, first large solar farm including battery storage.

### United States – iPower

Partial farm downs to Corio Generation and Rise Light & Power in a 3 GW wind project offshore New York and New Jersey.

### France – iLNG 7

Commissioning of an LNG floating regasification terminal in the port of Le Havre.

### Germany – iPower

Acquisition of Quadra Energy, a German renewable energy aggregator.

### Qatar – iLNG

Signature of 27-year LNG offtake contracts with QatarEnergy LNG for 3.5 Mtpa.

## NOVEMBER

### Oman – iLNG

Extension of partnership with Oman LNG by 10 years and with Qalhat LNG by 5 years.

### United States – iPower

Acquisition of 1.5 GW of flexible power generation capacity in Texas.

### Canada – Upstream

Closing of the sale of Surmont to ConocoPhillips for up to \$3.3 billion and other Canadian assets to Suncor for around \$1.3 billion.

## DECEMBER

### South Africa – Downstream

Sale to Prax Group of a minority stake in Natref refinery.

### COP28 – Global flaring and methane reduction trust fund

Support from TotalEnergies to the objectives of tripling the amount of renewable energies production capacity and doubling energy efficiency by 2030, as well as slashing methane emissions within that time frame.

### United States – iPower 8

Signature with LyondellBasell of a 15 year Power Purchase Agreement.

### Scotland – iPower

Partial farm down to PTTEP of 25.5% of the Seagreen offshore wind farm for \$689 million, in the UK.



## 2024 Highlights

### JANUARY

#### Brazil – Upstream

Production start-up of the second phase of the Mero field.

#### Brazil – Innovative subsea technology

Launch of an innovative subsea technology to separate and reinject CO<sub>2</sub> rich gas at the Mero field.

#### Namibia – Upstream

Acquisition of additional interest in Namibia block 2913B and block 2912.

#### Germany – iPower <sup>9</sup>

Acquisition of Kyon Energy, a leading German battery storage developer.

#### Spain – iPower <sup>10</sup>

Acquisition of 200 high power charging sites from Wenea in Spain.

#### Human Rights Briefing Paper

Release of the third edition of the Human Rights Briefing Paper.

### FEBRUARY

#### India – Methane emissions reduction <sup>11</sup>

Following the COP 28, a cooperation agreement was signed with ONGC to carry out methane emissions detection and measurement campaigns using TotalEnergies' pioneer AUSEA technology.

#### Nigeria – Upstream

Production start-up from the Akpo West field.

#### Cyprus – Upstream

Positive appraisal of the Cronos gas discovery in Block 6.

#### Sustainable aviation fuels

Strategic partnership with Airbus in Sustainable Aviation Fuels (SAF).

#### Drillship – Upstream

Creation of a joint venture with Vantage (75%/25%) to acquire the Tungsten Explorer drillship.

### MARCH

#### United States – iPower

Acquisition of a carbon storage projects from Talos Low Carbon Solutions.

#### Worldwide

100th anniversary of TotalEnergies and Launch of the operation "100 for 100": 100 TotalEnergies free shares allocation plan to the 100,000 employees of the Company.

#### China – Sustainable Aviation Fuel <sup>12</sup>

Partnership with SINOPEC to jointly develop a SAF production unit at SINOPEC's refinery.

#### Sustainability & Climate

Publication of the *Sustainability & Climate – 2024 Progress Report* presenting the progress made by the Company in 2023 in the implementation of its strategy and its climate ambition.

#### Care Together

Launch of *Care Together by TotalEnergies* program, reflecting the Company's commitment to social responsibility towards its employees.

#### Denmark – Upstream

Gas production restart at the Tyra offshore hub after a major redevelopment.

### APRIL

#### United States – iLNG

Acquisition of the 20% interest held by Lewis Energy Group in the Dorado leases in the Eagle Ford shale gas play.

#### Belgium – iPower

Launch of a new 75 MWh battery storage project.

#### Malaysia – Upstream

Agreements with OMV and Sapura Upstream Assets to acquire 100% of SapuraOMV shares, an independent gas producer and operator.

#### Oman – iLNG

Launch of the 1 Mt/y Marsa LNG project, which is a fully electrified and very low emissions (3kg CO<sub>2</sub>/boe) LNG plant in Oman, supplied by a 300 MW solar farm.

#### Algeria – iLNG

Extension of the 2 Mt/y LNG supply contract with Sonatrach until 2025.

#### United States – Biomethane

Creation of a joint venture with Vanguard Renewables (50%/50%), a BlackRock subsidiary, to produce biomethane.







TotalEnergies

# 1

## Corporate

**\$35.9 bn**

Cash flow from operations excluding working capital (CFFO) in 2023

**\$23.2 bn**

Adjusted net income (TotalEnergies share) in 2023

**18.9%**

Return on average capital employed (ROACE) in 2023

**€3.01**

Ordinary dividend per share for the fiscal year 2023





## NOTE ON FINANCIAL STATEMENTS

Since January, 1, 2023, TotalEnergies has been structured around these five business segments: Exploration & Production, Integrated LNG, Integrated Power, Refining & Chemicals and Marketing & Services. In addition, the Corporate Segment includes operating and financial activities. Certain figures for years 2022 and 2021 have been restated in order to reflect this new organization, 2019 and 2020 business segments data have not been restated.

## FINANCIAL HIGHLIGHTS

<i>(in million dollars, except percent and per share amounts)</i>	2023	2022	2021	2020	2019
<b>Sales</b>	<b>237,128</b>	<b>280,999</b>	<b>205,863</b>	<b>140,685</b>	<b>200,316</b>
<b>Adjusted net operating income from business segments<sup>(1)</sup></b>	<b>25,107</b>	<b>38,475</b>	<b>20,209</b>	<b>6,404</b>	<b>14,554</b>
Net income (TotalEnergies share)	21,384	20,526	16,032	(7,242)	11,267
<b>Adjusted net income (TotalEnergies share)<sup>(1)</sup></b>	<b>23,176</b>	<b>36,197</b>	<b>18,060</b>	<b>4,059</b>	<b>11,828</b>
<b>Adjusted fully-diluted earnings per share (\$)<sup>(1) (2)</sup></b>	<b>9.40</b>	<b>13.94</b>	<b>6.68</b>	<b>1.43</b>	<b>4.38</b>
<b>Dividend per share (€)</b>	<b>3.01</b>	<b>3.81<sup>(3)</sup></b>	<b>2.64</b>	<b>2.64</b>	<b>2.68</b>
<b>Dividend per ADR<sup>(4)</sup> (\$)</b>	<b>3.23<sup>(5)</sup></b>	<b>4.03<sup>(3)</sup></b>	<b>2.93</b>	<b>3.12</b>	<b>2.97</b>
Net-debt-to-equity ratio (as of December 31) <sup>(6)</sup>	5.0%	7.0%	15.3%	21.7%	16.7%
Return on average capital employed (ROACE) <sup>(7)</sup>	18.9%	28.2%	13.9%	4.0%	9.8%
Return on equity (ROE)	20.4%	32.5%	16.9%	3.7%	10.4%
<b>Cash flow from operating activities</b>	<b>40,679</b>	<b>47,367</b>	<b>30,410</b>	<b>14,803</b>	<b>24,685</b>
Cash flow from operations excluding working capital (CFFO) <sup>(8) (12)</sup>	35,946	45,729	29,140	15,697	26,111
Debt Adjusted Cash Flow (DACF) <sup>(9) (12)</sup>	36,451	47,025	30,660	17,635	28,180
Gross investments <sup>(10)</sup>	24,860	19,802	16,589	15,534	19,237
Organic investments <sup>(11)</sup>	18,126	11,852	12,675	10,339	13,397
Divestments	8,406	4,686	2,933	2,455	2,060

(1) Adjusted results are defined as income using replacement cost, adjusted for special items, excluding the impact of fair value changes.

(2) Based on the fully-diluted weighted-average number of common shares outstanding during the period.

(3) Including the special dividend of €1/share approved at the Annual General Meeting on May 26, 2023.

(4) 2022, 2021, 2020 and 2019 gross dividend amount per ADR as stated by depositary receipts issuer JP Morgan.

(5) 2023 estimated dividend in dollars includes the first interim ADR dividend of \$0.78 paid in October 2023, the second interim ADR dividend of \$0.81 paid in January 2024 and the third interim ADR dividend of \$0.80 paid in April 2024, as well as the proposed final ADR dividend of \$0.84 payable in July 2024. The proposed final ADR dividend was converted at a rate of \$1.0656/€, based on the exchange rate of the European Central Bank as of April 15, 2024.

(6) Excluding leases. Net-debt-to-equity ratio including leases impact was 10.9% at the end of 2023.

(7) Based on adjusted net operating income and average capital employed using replacement cost.

(8) Cash Flow From Operations excluding working capital (CFFO) is a non-GAAP financial measure and its most directly comparable IFRS measure is Cash Flow from operating activities. Cash Flow From Operations excluding working capital is defined as cash flow from operating activities before changes in working capital at replacement cost, excluding the mark-to-market effect of Integrated LNG and Integrated Power contracts, including capital gain from renewable projects sales and including organic loan repayments from equity affiliates.

(9) Debt adjusted cash flow (DACF) is a non-GAAP financial measure and its most directly comparable IFRS measure is Cash Flow from operating activities. DACF is defined as Cash Flow From Operations excluding working capital (CFFO) without financial charges.

(10) Including acquisitions and increases in non-current loans.

(11) Organic investments = net investments, excluding acquisitions, asset sales and other operations with non-controlling interests.

(12) 2019 datas restated.

## MARKET ENVIRONMENT

	2023	2022	2021	2020	2019
Year-end euro/dollar (€/€)	1.11	1.07	1.13	1.23	1.12
Average euro/dollar (€/€)	1.08	1.05	1.18	1.14	1.12
Year-end Brent price (\$/b)	77.1	86.0	77.0	51.7	66.0
Average Brent price (\$/b)	82.6	101.3	70.9	41.8	64.2
Variable Cost Margin-Refining Europe, VCM (\$/t)	69.3	94.1	10.5	11.5	34.9

## OPERATIONAL HIGHLIGHTS BY QUARTER

	2023	Quarters			
	Full Year	1 <sup>st</sup>	2 <sup>nd</sup>	3 <sup>rd</sup>	4 <sup>th</sup>
(in million dollars)					
<b>Adjusted net operating income from business segments<sup>(1)</sup></b>	<b>25,107</b>	<b>6,993</b>	<b>5,582</b>	<b>6,808</b>	<b>5,724</b>
Exploration & Production	10,942	2,653	2,349	3,138	2,802
Integrated LNG	6,200	2,072	1,330	1,342	1,456
Integrated Power	1,853	370	450	506	527
Total Integrated Gas, Renewables & Power					
Refining & Chemicals	4,654	1,618	1,004	1,399	633
Marketing & Services	1,458	280	449	423	306

(1) Adjusted results are defined as income using replacement cost, adjusted for special items, excluding the impact of fair value changes.

## FINANCIAL HIGHLIGHTS BY QUARTER

As of December 31,	2023	Quarters			
(in million dollars, except percent, per share amounts and share buybacks)	Full Year	1 <sup>st</sup>	2 <sup>nd</sup>	3 <sup>rd</sup>	4 <sup>th</sup>
<b>Adjusted net income (TotalEnergies share)<sup>(1)</sup></b>	<b>23,176</b>	<b>6,541</b>	<b>4,956</b>	<b>6,453</b>	<b>5,226</b>
Adjusted fully diluted earnings per share (\$) <sup>(1)</sup>	9.40	2.61	1.99	2.63	2.16
<b>Net income (TotalEnergies share)</b>	<b>21,384</b>	<b>5,557</b>	<b>4,088</b>	<b>6,676</b>	<b>5,063</b>
Shares outstanding (as of end of period)	2,412,251,835	2,490,262,024	2,498,264,179	2,412,251,835	2,412,251,835
Fully-diluted weighted-average number of shares	2,433,767,578	2,479,332,202	2,447,891,705	2,423,072,350	2,387,461,279
Number of shares bought back during the period	144,700,577	33,842,858	32,804,994	33,863,931	44,188,794
Share buybacks (\$ bn)	9.2	2.7	2.0	2.3	2.1

	2020	Quarters			
(in million dollars, except percent, per share amounts and share buybacks)	Full Year	1 <sup>st</sup>	2 <sup>nd</sup>	3 <sup>rd</sup>	4 <sup>th</sup>
<b>Adjusted net income (TotalEnergies share)<sup>(1)</sup></b>	<b>4,059</b>	<b>1,781</b>	<b>126</b>	<b>848</b>	<b>1,304</b>
Adjusted fully diluted earnings per share (\$) <sup>(1)</sup>	1.43	0.66	0.02	0.29	0.46
<b>Net income (TotalEnergies share)</b>	<b>(7,242)</b>	<b>34</b>	<b>(8,369)</b>	<b>202</b>	<b>891</b>
Shares outstanding (as of end of period)	2,653,124,025	2,601,881,075	2,615,060,337	2,653,124,025	2,653,124,025
Fully-diluted weighted-average number of shares <sup>(2)</sup>	2,602,026,749	2,600,575,965	2,577,573,424	2,636,710,836	2,645,292,533
Number of shares bought back during the period	13,236,044	13,236,044	-	-	-
Share buybacks (\$ bn)	0.6	0.6	-	-	-

(1) Adjusted results are defined as income using replacement cost, adjusted for special items, excluding the impact of fair value changes.

(2) In 2020, the effect generated by the grant of TotalEnergies performance shares and by the capital increase reserved for employees (19,007,836 shares) is anti-dilutive. In accordance with IAS 33, the weighted-average number of diluted shares is therefore equal to the weighted-average number of shares.

## MARKET ENVIRONMENT AND PRICE REALIZATIONS

	2023	Quarters				2022	Quarters			
	Full Year	1 <sup>st</sup>	2 <sup>nd</sup>	3 <sup>rd</sup>	4 <sup>th</sup>	Full Year	1 <sup>st</sup>	2 <sup>nd</sup>	3 <sup>rd</sup>	4 <sup>th</sup>
<b>Market environment</b>										
Average euro-dollar (\$/€)	1.08	1.07	1.09	1.09	1.08	1.05	1.12	1.06	1.01	1.02
Brent price (\$/b)	82.6	81.2	78.1	86.7	84.3	101.3	102.2	113.9	100.8	88.8
Variable Cost Margin-Refining Europe, VCM (\$/t) <sup>(1)(2)</sup>	69.3	87.8	42.7	95.1	50.1	94.1	46.3	145.7	99.2	73.6
<b>TOTAL AVERAGE LIQUIDS PRICE (\$/b)<sup>(3)</sup></b>	<b>76.2</b>	<b>73.4</b>	<b>72.0</b>	<b>78.9</b>	<b>80.2</b>	<b>91.3</b>	<b>90.1</b>	<b>102.9</b>	<b>93.6</b>	<b>80.6</b>
<b>TOTAL AVERAGE GAS PRICE (\$/MBtu)</b>	<b>6.64</b>	<b>8.89</b>	<b>5.98</b>	<b>5.47</b>	<b>6.17</b>	<b>13.15</b>	<b>12.27</b>	<b>11.01</b>	<b>16.83</b>	<b>12.74</b>

(1) Does not include oil, gas and LNG trading activities.

(2) This indicator represents the average margin on variable costs realized by TotalEnergies' European refining business (equal to the difference between the sales of refined products realized by TotalEnergies' European refining and the crude purchases as well as associated variable costs, divided by refinery throughput in tons).

(3) Crude oil and natural gas liquids.

2022					2021				
Full Year	Quarters				Full Year	Quarters			
	1 <sup>st</sup>	2 <sup>nd</sup>	3 <sup>rd</sup>	4 <sup>th</sup>		1 <sup>st</sup>	2 <sup>nd</sup>	3 <sup>rd</sup>	4 <sup>th</sup>
<b>38,475</b>	<b>9,458</b>	<b>10,500</b>	<b>10,279</b>	<b>8,238</b>	<b>20,209</b>	<b>3,487</b>	<b>4,032</b>	<b>5,374</b>	<b>7,316</b>
17,479	5,015	4,719	4,217	3,528	10,439	1,975	2,213	2,726	3,525
11,169	3,133	2,215	3,413	2,408	5,591				
975	(82)	340	236	481	652				
12,144	3,051	2,555	3,649	2,889	6,243	985	891	1,608	2,759
7,302	1,120	2,760	1,935	1,487	1,909	243	511	602	553
1,550	272	466	478	334	1,618	284	417	438	479

2022					2021				
Full Year	Quarters				Full Year	Quarters			
	1 <sup>st</sup>	2 <sup>nd</sup>	3 <sup>rd</sup>	4 <sup>th</sup>		1 <sup>st</sup>	2 <sup>nd</sup>	3 <sup>rd</sup>	4 <sup>th</sup>
<b>36,197</b>	<b>8,977</b>	<b>9,796</b>	<b>9,863</b>	<b>7,561</b>	<b>18,060</b>	<b>3,003</b>	<b>3,463</b>	<b>4,769</b>	<b>6,825</b>
13.94	3.40	3.75	3.83	2.97	6.68	1.10	1.27	1.76	2.55
<b>20,526</b>	<b>4,944</b>	<b>5,692</b>	<b>6,626</b>	<b>3,264</b>	<b>16,032</b>	<b>3,344</b>	<b>2,206</b>	<b>4,645</b>	<b>5,837</b>
2,619,131,285	2,609,763,803	2,619,131,285	2,619,131,285	2,619,131,285	2,640,429,329	2,629,839,616	2,640,429,329	2,640,429,329	2,640,429,329
2,572,182,025	2,614,440,867	2,591,697,268	2,559,519,056	2,522,008,626	2,647,468,245	2,644,782,122	2,646,366,666	2,655,428,201	2,643,609,445
140,207,743	22,378,128	36,080,408	38,917,588	42,831,619	37,306,005	3,636,351	-	-	33,669,654
7.7	1.2	2.0	2.0	2.6	1.8	0.2	-	-	1.6

2019				
Full Year	Quarters			
	1 <sup>st</sup>	2 <sup>nd</sup>	3 <sup>rd</sup>	4 <sup>th</sup>
<b>11,828</b>	<b>2,759</b>	<b>2,887</b>	<b>3,017</b>	<b>3,165</b>
4.38	1.02	1.05	1.13	1.19
<b>11,267</b>	<b>3,111</b>	<b>2,756</b>	<b>2,800</b>	<b>2,600</b>
2,601,881,075	2,641,874,274	2,666,883,760	2,666,990,510	2,601,881,075
2,618,007,888	2,620,344,617	2,625,380,839	2,613,558,611	2,607,260,234
52,389,336	8,675,188	23,656,258	8,539,761	11,518,129
2.8	0.5	1.3	0.4	0.6

2021					2020					2019				
Full Year	Quarters				Full Year	Quarters				Full Year	Quarters			
	1 <sup>st</sup>	2 <sup>nd</sup>	3 <sup>rd</sup>	4 <sup>th</sup>		1 <sup>st</sup>	2 <sup>nd</sup>	3 <sup>rd</sup>	4 <sup>th</sup>		1 <sup>st</sup>	2 <sup>nd</sup>	3 <sup>rd</sup>	4 <sup>th</sup>
1.18	1.20	1.21	1.18	1.14	1.14	1.10	1.10	1.17	1.19	1.12	1.14	1.12	1.11	1.11
70.9	61.1	69.0	73.5	79.8	41.8	50.1	29.6	42.9	44.2	64.2	63.1	68.9	62.0	63.1
10.5	5.3	10.2	8.8	16.7	11.5	26.3	14.3	(2.7)	4.6	34.9	33.0	27.6	47.4	30.2
<b>65.0</b>	<b>56.4</b>	<b>62.9</b>	<b>67.1</b>	<b>72.6</b>	<b>37.0</b>	<b>44.4</b>	<b>23.4</b>	<b>39.9</b>	<b>41.0</b>	<b>59.8</b>	<b>58.7</b>	<b>63.7</b>	<b>58.0</b>	<b>59.1</b>
<b>6.6</b>	<b>4.06</b>	<b>4.43</b>	<b>6.33</b>	<b>11.38</b>	<b>2.96</b>	<b>3.35</b>	<b>2.61</b>	<b>2.52</b>	<b>3.31</b>	<b>3.88</b>	<b>4.51</b>	<b>3.82</b>	<b>3.48</b>	<b>3.76</b>

## CONSOLIDATED STATEMENT OF INCOME

As of December 31,  
(in million dollars)

	2023	2022	2021	2020	2019
<b>Sales</b>	<b>237,128</b>	<b>280,999</b>	<b>205,863</b>	<b>140,685</b>	<b>200,316</b>
Excise taxes	(18,183)	(17,689)	(21,229)	(20,981)	(24,067)
Revenues from sales	218,945	263,310	184,634	119,704	176,249
Purchases, net of inventory variation	(143,041)	(169,448)	(118,622)	(77,486)	(116,221)
Other operating expenses	(30,419)	(29,789)	(26,894)	(25,538)	(27,255)
Exploration costs	(573)	(1,299)	(740)	(731)	(785)
Depreciation, depletion and impairment of tangible assets and mineral interests	(12,762)	(12,221)	(13,556)	(22,264)	(15,731)
Other income	3,677	2,849	1,312	2,237	1,163
Other expense	(2,396)	(7,344)	(2,317)	(1,506)	(1,192)
Financial interest on debt	(2,820)	(2,386)	(1,904)	(2,147)	(2,333)
Financial income and expense from cash and cash equivalents	1,801	1,143	379	37	(19)
Cost of net debt	(1,019)	(1,243)	(1,525)	(2,110)	(2,352)
Other financial income	1,285	896	762	914	792
Other financial expense	(731)	(533)	(539)	(690)	(764)
Equity in income (loss) of affiliates	1,845	(1,892)	3,438	452	3,406
Income taxes	(13,301)	(22,242)	(9,587)	(318)	(5,872)
<b>Consolidated net income</b>	<b>21,510</b>	<b>21,044</b>	<b>16,366</b>	<b>(7,336)</b>	<b>11,438</b>
TotalEnergies share	21,384	20,526	16,032	(7,242)	11,267
Non-controlling interests	126	518	334	(94)	171
Earnings per share (\$)	8.72	7.91	5.95	(2.90)	4.20
Fully-diluted earnings per share (\$)	8.67	7.85	5.92	(2.90)	4.17
<b>Adjusted net income TotalEnergies share <sup>(1)</sup></b>	<b>23,176</b>	<b>36,197</b>	<b>18,060</b>	<b>4,059</b>	<b>11,828</b>
<b>Adjusted fully-diluted earnings per share (\$) <sup>(1) (2)</sup></b>	<b>9.40</b>	<b>13.94</b>	<b>6.68</b>	<b>1.43</b>	<b>4.38</b>

(1) Adjusted results are defined as income using replacement cost, adjusted for special items, excluding the impact of changes in fair value.

(2) Based on the fully-diluted weighted-average number of common shares outstanding during the period.



## SALES

(in million dollars)

	2023	2022	2021	2020	2019
<b>By business segment excluding inter-segment sales</b>					
Exploration & Production	6,561	9,942	7,246	4,973	7,261
Integrated LNG	12,086	21,300	14,903		
Integrated Power	27,337	27,453	15,801		
Total Integrated Gas, Renewables & Power		48,753	30,704	15,629	18,167
Refining & Chemicals	101,203	121,618	87,600	56,615	87,598
Marketing & Services	89,909	100,661	80,288	63,451	87,280
Corporate	32	25	25	17	10
<b>TOTAL</b>	<b>237,128</b>	<b>280,999</b>	<b>205,863</b>	<b>140,685</b>	<b>200,316</b>
<b>By business segment including inter-segment sales</b>					
Exploration & Production	49,156	65,132	42,142	23,456	38,590
Integrated LNG	26,875				
Integrated Power	31,463				
Total Integrated Gas, Renewables & Power		55,753	34,964	17,632	20,992
Refining & Chemicals	136,943	166,738	114,129	71,588	119,988
Marketing & Services	73,198	85,142	60,618	45,232	87,939
Corporate	238	273	279	240	135
Inter-segment sales	(98,928)	(109,728)	(67,498)	(38,444)	(67,328)
<b>TOTAL</b>	<b>218,945</b>	<b>263,310</b>	<b>184,634</b>	<b>119,704</b>	<b>200,316</b>
<b>By geographic area excluding inter-segment sales</b>					
France	55,610	58,411	43,316	32,748	43,877
Rest of Europe	97,662	122,641	85,072	67,292	99,176
North America	22,219	33,188	22,998	13,258	19,946
Africa	21,709	24,582	19,520	16,011	21,303
Rest of world	39,928	42,177	34,957	11,376	16,014
<b>TOTAL</b>	<b>237,128</b>	<b>280,999</b>	<b>205,863</b>	<b>140,685</b>	<b>200,316</b>

## DEPRECIATION, DEPLETION & IMPAIRMENT OF TANGIBLE ASSETS AND MINERAL INTERESTS BY BUSINESS SEGMENT

(in million dollars)

	2023	2022	2021	2020	2019
Exploration & Production	(8,493)	(8,115)	(9,110)	(16,998)	(11,659)
Integrated LNG	(1,288)	(1,208)	(1,446)		
Integrated Power	(281)	(194)	(204)		
Total Integrated Gas, Renewables & Power		(1,402)	(1,650)	(2,312)	(1,492)
Refining & Chemicals	(1,685)	(1,533)	(1,583)	(1,878)	(1,527)
Marketing & Services	(905)	(1,033)	(1,100)	(984)	(980)
Corporate	(110)	(138)	(113)	(92)	(73)
<b>TOTAL</b>	<b>(12,762)</b>	<b>(12,221)</b>	<b>(13,556)</b>	<b>(22,264)</b>	<b>(15,731)</b>

## EQUITY IN INCOME/(LOSS) OF AFFILIATES BY BUSINESS SEGMENT

(in million dollars)

	2023	2022	2021	2020	2019
Exploration & Production	31	(6,610)	(273)	997	996
Integrated Power	2,041	3,465	3,187	-	-
Integrated LNG	(350)	135	25	-	-
Total Integrated Gas, Renewables & Power		3,600	3,212	(473)	2,132
Refining & Chemicals	127	1,106	485	(100)	218
Marketing & Services	(4)	12	14	28	60
Corporate	-	-	-	-	-
<b>TOTAL</b>	<b>1,845</b>	<b>(1,892)</b>	<b>3,438</b>	<b>452</b>	<b>3,406</b>

## INCOME TAXES

(in million dollars)

	2023	2022	2021	2020	2019
Current income taxes	(12,745)	(19,825)	(8,158)	(2,450)	(5,469)
Deferred income taxes	(556)	(2,417)	(1,429)	2,132	(403)
Income taxes	(13,301)	(22,242)	(9,587)	(318)	(5,872)

## ADJUSTMENT ITEMS TO NET OPERATING INCOME BY BUSINESS SEGMENT

(in million dollars)

	Exploration & Production	Integrated LNG	Integrated Power	Refining & Chemicals	Marketing & Services	Corporate	Total
<b>Year 2023</b>							
Inventory valuation effect	-	-	-	(586)	(108)	-	(694)
Effect of changes in fair value	-	(547)	559	-	-	-	12
Restructuring charges	-	-	(5)	(51)	-	-	(56)
Asset impairment of charges	(926)	(124)	(773)	(359)	(115)	-	(2,297)
Gains (losses) on asset sales	431	-	-	-	1,616	-	2,047
Other <sup>(1)</sup>	(541)	(127)	46	(279)	(93)	(84)	(1,078)
<b>TOTAL</b>	<b>(1,036)</b>	<b>(798)</b>	<b>(173)</b>	<b>(1,275)</b>	<b>1,300</b>	<b>(84)</b>	<b>(2,066)</b>
<b>Year 2022</b>							
Inventory valuation effect	-	-	-	337	194	-	531
Effect of changes in fair value	-	340	798	-	-	-	1,138
Restructuring charges	-	-	(41)	-	(14)	-	(55)
Asset impairment of charges	(11,157)	(4,460)	(21)	-	(112)	(9)	(15,759)
Gains (losses) on asset sales	-	-	1,450	-	-	-	1,450
Other <sup>(2)</sup>	(1,214)	(460)	(116)	(990)	(62)	(353)	(3,195)
<b>TOTAL</b>	<b>(12,371)</b>	<b>(4,580)</b>	<b>2,070</b>	<b>(653)</b>	<b>6</b>	<b>(362)</b>	<b>(15,890)</b>
<b>Year 2021</b>							
Inventory valuation effect	-	-	-	1,296	236	-	1,532
Effect of changes in fair value	-	254	(448)	-	-	-	(194)
Restructuring charges	(75)	(8)	(16)	(118)	(44)	(54)	(315)
Asset impairment of charges	(518)	(291)	(41)	(42)	(40)	-	(932)
Gains (losses) on asset sales	(1,726)	-	-	-	-	-	(1,726)
Other	(76)	(8)	(192)	(31)	(41)	(67)	(415)
<b>TOTAL</b>	<b>(2,395)</b>	<b>(53)</b>	<b>(697)</b>	<b>1,105</b>	<b>111</b>	<b>(121)</b>	<b>(2,050)</b>

(1) Other adjustment items include \$388 million of revaluation of the previously held share of Total Eren and \$(1,466) million mainly consisting of the impacts of the European solidarity contribution, the contribution on inframarginal annuity in France and the devaluation of the Argentine peso.

(2) Other items represented \$(3.2) billion in 2022, consisting of \$(1.7) billion related to windfall taxes levied by governments (European Solidarity Contribution, French Electricity Generation Infra-Marginal Income Contribution, effect on deferred tax of Energy Profits Levy in the United Kingdom). \$(1) billion as a consequence of the conflict in Ukraine (grant of fuel discounts to French customers in the context of price increase, foreign exchange losses due to volatility in Russian ruble-U.S. dollar and euro exchange rates), and \$(0.5) billion mainly related to provisions for onerous contracts.

## CONSOLIDATED BALANCE SHEET

As of December 31,  
(in million dollars)

	2023	2022	2021	2020	2019
<b>ASSETS</b>					
<b>Non-current assets</b>					
Intangible assets, net	33,083	31,931	32,484	33,528	33,178
Property, plant and equipment, net	108,916	107,101	106,559	108,335	116,408
Equity affiliates: investments and loans	30,457	27,889	31,053	27,976	27,122
Other investments	1,543	1,051	1,625	2,007	1,778
Non-current financial assets	2,395	2,731	2,404	4,781	912
Deferred income taxes	3,418	5,049	5,400	7,016	6,216
Other non-current assets	4,313	2,388	2,797	2,810	2,415
<b>TOTAL NON-CURRENT ASSETS</b>	<b>184,125</b>	<b>178,140</b>	<b>182,322</b>	<b>186,453</b>	<b>188,029</b>
<b>Current assets</b>					
Inventories, net	19,317	22,936	19,952	14,730	17,132
Accounts receivable, net	23,442	24,378	21,983	14,068	18,488
Other current assets	20,821	36,070	35,144	13,428	17,013
Current financial instruments	6,585	8,746	12,315	4,630	3,992
Cash and cash equivalents	27,263	33,026	21,342	31,268	27,352
Assets classified as held for sale	2,101 <sup>(1)</sup>	568 <sup>(3)</sup>	400 <sup>(5)</sup>	1,555 <sup>(7)</sup>	1,288 <sup>(9)</sup>
<b>TOTAL CURRENT ASSETS</b>	<b>99,529</b>	<b>125,724</b>	<b>111,136</b>	<b>79,679</b>	<b>85,265</b>
<b>TOTAL ASSETS</b>	<b>283,654</b>	<b>303,864</b>	<b>293,458</b>	<b>266,132</b>	<b>273,294</b>
<b>LIABILITIES AND SHAREHOLDERS' EQUITY</b>					
<b>Shareholders' equity</b>					
Common shares	7,616	8,163	8,224	8,267	8,123
Paid-in surplus and retained earnings	126,857	123,951	117,849	107,078	121,170
Currency translation adjustment	(13,701)	(12,836)	(12,671)	(10,256)	(11,503)
Treasury shares	(4,019)	(7,554)	(1,666)	(1,387)	(1,012)
<b>TOTAL SHAREHOLDER'S EQUITY – TOTALENERGIES SHARE</b>	<b>116,753</b>	<b>111,724</b>	<b>111,736</b>	<b>103,702</b>	<b>116,778</b>
Non-controlling interests	2,700	2,846	3,263	2,383	2,527
<b>TOTAL SHAREHOLDER'S EQUITY</b>	<b>119,453</b>	<b>114,570</b>	<b>114,999</b>	<b>106,085</b>	<b>119,305</b>
<b>Non-current liabilities</b>					
Deferred income taxes	11,688	11,021	10,904	10,326	11,858
Employee benefits	1,993	1,829	2,672	3,917	3,501
Provisions and other non-current liabilities	21,257	21,402	20,269	20,925	20,613
Non-current financial debt	40,478	45,264	49,512	60,203	47,773
<b>TOTAL NON-CURRENT LIABILITIES</b>	<b>75,416</b>	<b>79,516</b>	<b>83,357</b>	<b>95,371</b>	<b>83,745</b>
<b>Current liabilities</b>					
Accounts payable	41,335	41,346	36,837	23,574	28,394
Other creditors and accrued liabilities	36,727	52,275	42,800	22,465	25,749
Current borrowings	9,590	15,502	15,035	17,099	14,819
Other current financial liabilities	446	488	372	203	487
Liabilities directly associated with the assets classified as held for sale	687 <sup>(2)</sup>	167 <sup>(4)</sup>	58 <sup>(6)</sup>	1,335 <sup>(8)</sup>	795 <sup>(10)</sup>
<b>TOTAL CURRENT LIABILITIES</b>	<b>88,785</b>	<b>109,778</b>	<b>95,102</b>	<b>64,676</b>	<b>70,244</b>
<b>TOTAL LIABILITIES</b>	<b>283,654</b>	<b>303,864</b>	<b>293,458</b>	<b>266,132</b>	<b>273,294</b>

(1) \$1 153 million of TotalEnergies Marketing Belgium (\$M 581), TotalEnergies Marketing Luxembourg (\$M 162) and TotalEnergies Marketing Nederland (\$M 410) has been classified as "Assets classified as held for sale" in link with the sale of service station networks in these countries to Alimentation Couche Tard. \$314 million of TotalEnergies EP Absheron BV has been classified as "Assets classified as held for sale" to divest 15% its interests in operationship in the Absheron gas field in Azerbaijan.

(2) \$580 million of TotalEnergies Marketing Belgium (\$M 321), TotalEnergies Marketing Luxembourg (\$M 83) and TotalEnergies Marketing Nederland (\$M 176) has been classified as "Liabilities directly associated with the assets classified as held for sale".

(3) \$413 million of Total E&P Dunga GmbH has been classified as "Assets classified as held for sale" to divest its interests in operationship in the onshore Dunga oil field in Kazakhstan.

(4) \$167 million of Total E&P Dunga GmbH has been classified as "Liabilities directly associated with the assets classified as held for sale".

(5) There is no material divestment project recorded in "assets held for sale".

(6) There is no material divestment project recorded in "Liabilities directly associated with the assets classified as held for sale".

(7) \$391 million of Total Gabon has been classified as "Assets classified as held for sale" to divest its interests in operationship in the Cap Lopez oil terminal. \$154 million of the Lindsey refinery and its associated logistic assets has been classified as "Assets classified as held for sale".

(8) \$150 million of Total Gabon has been classified as "Liabilities directly associated with the assets classified as held for sale". \$238 million the Lindsey refinery and its associated logistic has been classified as "Liabilities directly associated with the assets classified as held for sale".

(9) \$449 million of several UK non-core assets has been classified as "Assets classified as held for sale". \$433 million of Total E&P Deep Offshore Borneo BV which holds an 85,95% interest in Block CA1 has been classified as "Assets classified as held for sale". \$88 million of Fosmax LNG, operator of the Fos Cavaou LNG terminal. \$318 million of TotalEnergies Renouvelables France has been classified as "Assets classified as held for sale".

(10) \$349 million of several UK non-core assets has been classified as "Liabilities directly associated with the assets classified as held for sale". \$180 million of Total E&P Deep Offshore Borneo BV which holds an 85,95% interest in Block CA1 has been classified as "Liabilities directly associated with the assets classified as held for sale". \$266 million of TotalEnergies Renouvelables France has been classified as "Liabilities directly associated with the assets classified as held for sale".

## NET TANGIBLE & INTANGIBLE ASSETS BY BUSINESS SEGMENT

As of December 31,  
(in million dollars)

	2023	2022	2021	2020	2019
<b>Exploration &amp; Production</b>	<b>84,876</b>	<b>87,833</b>	<b>86,418</b>	<b>89,207</b>	<b>98,894</b>
Tangibles	67,670	70,039	68,158	70,010	79,382
Intangibles	17,206	17,794	18,260	19,197	19,512
<b>Integrated LNG</b>	<b>24,936</b>	<b>24,189</b>	<b>24,901</b>		
Tangibles	16,372	15,586	16,140		
Intangibles	8,564	8,603	8,761		
<b>Integrated Power</b>	<b>12,526</b>	<b>6,696</b>	<b>6,624</b>		
Tangibles	7,068	3,258	3,230		
Intangibles	5,458	3,438	3,394		
<b>Total Integrated Gas, Renewables &amp; Power</b>		<b>30,885</b>	<b>31,525</b>	<b>30,704</b>	<b>29,597</b>
Tangibles		18,844	19,370	18,446	17,945
Intangibles		12,041	12,155	12,258	11,652
<b>Refining &amp; Chemicals</b>	<b>12,287</b>	<b>11,525</b>	<b>11,884</b>	<b>12,486</b>	<b>12,196</b>
Tangibles	11,358	10,653	11,004	11,570	11,335
Intangibles	929	872	880	916	861
<b>Marketing &amp; Services</b>	<b>6,696</b>	<b>8,120</b>	<b>8,578</b>	<b>8,734</b>	<b>8,316</b>
Tangibles	5,878	7,003	7,506	7,706	7,289
Intangibles	818	1,117	1,072	1,028	1,027
<b>Corporate</b>	<b>678</b>	<b>669</b>	<b>638</b>	<b>732</b>	<b>583</b>
Tangibles	570	562	521	603	457
Intangibles	108	107	117	129	126
<b>TOTAL</b>	<b>141,999</b>	<b>139,032</b>	<b>139,043</b>	<b>141,863</b>	<b>149,586</b>

## PROPERTY, PLANT & EQUIPMENT

As of December 31,  
(in million dollars)

	2023	2022	2021	2020	2019
Proved properties	57,879	63,508	63,043	67,978	79,937
Unproved properties	1,187	755	1,367	2,710	1,872
Work in progress	23,286	19,606	17,632	13,012	11,487
<b>TOTAL EXPLORATION &amp; PRODUCTION PROPERTIES</b>	<b>82,352</b>	<b>83,869</b>	<b>82,042</b>	<b>83,700</b>	<b>93,296</b>
Land	1,829	2,050	2,172	2,094	2,034
Machinery plant and equipment (including transportation equipment)	11,547	10,923	11,860	12,125	11,199
Buildings	3,424	3,603	3,912	4,326	4,487
Construction in progress	5,239	3,937	3,617	3,062	2,499
Other	4,525	2,719	2,956	3,028	2,893
<b>OTHER</b>	<b>26,564</b>	<b>23,232</b>	<b>24,517</b>	<b>24,635</b>	<b>23,112</b>
<b>TOTAL <sup>(1)</sup></b>	<b>108,916</b>	<b>107,101</b>	<b>106,559</b>	<b>108,335</b>	<b>116,408</b>

(1) As of December 31, 2023 accumulated depreciation, depletion and amortization amounted to 186,970 M\$.



## NON-CURRENT ASSETS BY BUSINESS SEGMENT<sup>(1)</sup>

As of December 31,  
(in million dollars)

	2023	2022	2021	2020	2019
Exploration & Production	90,956	93,039	97,195	101,628	111,008
Integrated LNG	41,560	39,594	43,297		
Integrated Power	22,755	15,830	12,088		
Total Integrated Gas, Renewables & Power		55,424	55,386	50,807	47,862
Refining & Chemicals	17,133	16,526	16,221	16,915	16,727
Marketing & Services	8,509	9,620	10,170	10,549	9,929
Corporate	817	800	946	1,773	1,591
<b>TOTAL</b>	<b>181,730</b>	<b>175,409</b>	<b>179,918</b>	<b>181,672</b>	<b>187,117</b>

(1) Non-current financial assets are not included.

## NON-CURRENT DEBT ANALYSIS

As of December 31,  
(in million dollars, except percent)

	2023	%	2022	%	2021	%	2020	%	2019	%
<b>Loan repayment schedule<sup>(1)</sup></b>										
2017										
2018										
2019										
2020										
2021									5,615	12%
2022							9,790	18%	6,078	13%
2023					6,032	13%	5,720	10%	5,163	11%
2024			6,352	15%	6,287	13%	5,945	11%	5,798	12%
2025	4,947	13%	4,442	10%	4,382	9%	4,275	8%	24,207 <sup>(2)</sup>	52%
2026	3,709	10%	3,271	8%	3,277	7%	29,692 <sup>(3)</sup>	53%		
2027	3,371	9%	3,418	8%	27,130 <sup>(4)</sup>	58%				
2028	4,256	11%	25,050 <sup>(5)</sup>	59%						
2028 and beyond	21,800	57%								
<b>TOTAL</b>	<b>38,083</b>	<b>100%</b>	<b>42,533</b>	<b>100%</b>	<b>47,108</b>	<b>100%</b>	<b>55,422</b>	<b>100%</b>	<b>46,861</b>	<b>100%</b>

(in million dollars, except percent)

	2023	%	2022	%	2021	%	2020	%	2019	%
<b>Analysis by currency<sup>(1)</sup></b>										
U.S. dollar	34,789	91%	38,896	91%	44,387	94%	48,609	88%	43,276	92%
Euro	2,322	6%	2,083	5%	1,708	4%	3,144	6%	2,639	6%
Norwegian Kroner	40	0%	47	0%	67	0%	72	0%	81	0%
Other currencies	932	3%	1,507	4%	946	2%	3,597	6%	865	2%
<b>TOTAL</b>	<b>38,083</b>	<b>100%</b>	<b>42,533</b>	<b>100%</b>	<b>47,108</b>	<b>100%</b>	<b>55,422</b>	<b>100%</b>	<b>46,861</b>	<b>100%</b>

(in million dollars, except percent)

	2023	%	2022	%	2021	%	2020	%	2019	%
<b>Analysis by interest rate<sup>(1)</sup></b>										
Fixed rate	30,311	80%	33,533	79%	34,353	73%	34,870	63%	26,985	58%
Floating rates	7,772	20%	9,000	21%	12,755	27%	20,552	37%	19,876	42%
<b>TOTAL</b>	<b>38,083</b>	<b>100%</b>	<b>42,533</b>	<b>100%</b>	<b>47,108</b>	<b>100%</b>	<b>55,422</b>	<b>100%</b>	<b>46,861</b>	<b>100%</b>

(1) These analyses are presented after the impact of interest rate and currency swaps.

(2) 2025 and after.

(3) 2026 and after.

(4) 2027 and after.

(5) 2028 and after.

## CONSOLIDATED STATEMENT OF CHANGES IN SHAREHOLDERS' EQUITY – GROUP SHARE

	Common shares issued		Paid-in surplus and retained earnings	Cumulative translation adjustments	Treasury shares		Shareholders' equity TotalEnergies share
	Number	Amount			Number	Amount	
<i>(in million dollars)</i>							
<b>AS OF DECEMBER 31, 2018</b>	<b>2,640,602,007</b>	<b>8,227</b>	<b>120,569</b>	<b>(11,313)</b>	<b>(32,473,281)</b>	<b>(1,843)</b>	<b>115,640</b>
Dividend	-	-	(7,730)	-	-	-	(7,730)
Net income 2019	-	-	11,267	-	-	-	11,267
Other comprehensive income	-	-	(659)	(190)	-	-	(849)
Issuance of common shares	26,388,503	74	1,265	-	-	-	1,339
Purchase of treasury shares	-	-	-	-	(52,389,336)	(2,810)	(2,810)
Sales of treasury shares <sup>(1)</sup>	-	-	(219)	-	4,278,948	219	-
Share-based payments	-	-	207	-	-	-	207
Share cancellation	(65,109,435)	(178)	(3,244)	-	65,109,435	3,422	-
Issuance of perpetual subordinated notes	-	-	(4)	-	-	-	(4)
Payments on perpetual subordinated notes	-	-	(353)	-	-	-	(353)
Other operations with minority interests	-	-	55	-	-	-	55
Other items	-	-	16	-	-	-	16
<b>AS OF DECEMBER 31, 2019</b>	<b>2,601,881,075</b>	<b>8,123</b>	<b>121,170</b>	<b>(11,503)</b>	<b>(15,474,234)</b>	<b>(1,012)</b>	<b>116,778</b>
Dividend	-	-	(7,899)	-	-	-	(7,899)
Net income 2020	-	-	(7,242)	-	-	-	(7,242)
Other comprehensive income	-	-	(321)	1,251	-	-	930
Issuance of common shares	51,242,950	144	1,470	-	-	-	1,614
Purchase of treasury shares	-	-	-	-	(13,236,044)	(611)	(611)
Sales of treasury shares <sup>(1)</sup>	-	-	(236)	-	4,317,575	236	-
Share-based payments	-	-	188	-	-	-	188
Share cancellation	-	-	-	-	-	-	-
Issuance of perpetual subordinated notes	-	-	331	-	-	-	331
Payments on perpetual subordinated notes	-	-	(308)	-	-	-	(308)
Other operations with minority interests	-	-	(61)	(4)	-	-	(65)
Other items	-	-	(14)	-	-	-	(14)
<b>AS OF DECEMBER 31, 2020</b>	<b>2,653,124,025</b>	<b>8,267</b>	<b>107,078</b>	<b>(10,256)</b>	<b>(24,392,703)</b>	<b>(1,387)</b>	<b>103,702</b>
Dividend	-	-	(8,200)	-	-	-	(8,200)
Net income 2021	-	-	16,032	-	-	-	16,032
Other comprehensive income	-	-	991	(2,407)	-	-	(1,416)
Issuance of common shares	10,589,713	31	350	-	-	-	381
Purchase of treasury shares	-	-	-	-	(37,306,005)	(1,823)	(1,823)
Sales of treasury shares <sup>(1)</sup>	-	-	(216)	-	4,573,195	216	-
Share-based payments	-	-	143	-	-	-	143
Share cancellation	(23,284,409)	(74)	(1,254)	-	23,284,409	1,328	-
Issuance of perpetual subordinated notes	-	-	3,254	-	-	-	3,254
Payments on perpetual subordinated notes	-	-	(368)	-	-	-	(368)
Other operations with minority interests	-	-	30	(6)	-	-	24
Other items	-	-	9	(2)	-	-	7
<b>AS OF DECEMBER 31, 2021</b>	<b>2,640,429,329</b>	<b>8,224</b>	<b>117,849</b>	<b>(12,671)</b>	<b>(33,841,104)</b>	<b>(1,666)</b>	<b>111,736</b>
Dividend	-	-	(9,989)	-	-	-	(9,989)
Net income 2022	-	-	20,526	-	-	-	20,526
Other comprehensive income	-	-	(2,933)	(174)	-	-	(3,107)
Issuance of common shares	9,367,482	26	344	-	-	-	370
Purchase of treasury shares	-	-	-	-	(140,207,743)	(7,711)	(7,711)
Sales of treasury shares <sup>(1)</sup>	-	-	(318)	-	6,195,654	318	-
Share-based payments	-	-	229	-	-	-	229
Share cancellation	(30,665,526)	(87)	(1,418)	-	30,665,526	1,505	-
Issuance of perpetual subordinated notes	-	-	(44)	-	-	-	(44)
Payments on perpetual subordinated notes	-	-	(331)	-	-	-	(331)
Other operations with minority interests	-	-	45	9	-	-	54
Other items	-	-	(9)	-	-	-	(9)

	Common shares issued		Paid-in surplus and retained earnings	Cumulative translation adjustments	Treasury shares		Shareholders' equity TotalEnergies share
	Number	Amount			Number	Amount	
(in million dollars)							
<b>AS OF DECEMBER 31, 2022</b>	<b>2,619,131,285</b>	<b>8,163</b>	<b>123,951</b>	<b>(12,836)</b>	<b>(137,187,667)</b>	<b>(7,554)</b>	<b>111,724</b>
Dividend	-	-	(7,611)	-	-	-	(7,611)
Net income 2023	-	-	21,384	-	-	-	21,384
Other comprehensive income	-	-	1,987	(837)	-	-	1,150
Issuance of common shares	8,002,155	22	361	-	-	-	383
Purchase of treasury shares	-	-	-	-	(144,700,577)	(9,167)	(9,167)
Sales of treasury shares <sup>(1)</sup>	-	-	(396)	-	6,463,426	396	-
Share-based payments	-	-	291	-	-	-	291
Share cancellation	(214,881,605)	(569)	(11,737)	-	214,881,605	12,306	-
Issuance of perpetual subordinated notes	-	-	(1,107)	-	-	-	(1,107)
Payments on perpetual subordinated notes	-	-	(294)	-	-	-	(294)
Other operations with minority interests	-	-	30	(28)	-	-	2
Other items	-	-	(2)	-	-	-	(2)
<b>AS OF DECEMBER 31, 2023</b>	<b>2,412,251,835</b>	<b>7,616</b>	<b>126,857</b>	<b>(13,701)</b>	<b>(60,543,213)</b>	<b>(4,019)</b>	<b>116,753</b>

(1) Treasury shares related to the performance share grants.

## NET-DEBT-TO- EQUITY RATIO EXCLUDING LEASES

<b>As of December 31,</b>					
(in million dollars except percent)					
	<b>2023</b>	<b>2022</b>	<b>2021</b>	<b>2020</b>	<b>2019</b>
Net financial debt <sup>(1)</sup>	6,306	8,617	20,799	29,327	23,968
Shareholder's equity	119,453	114,570	114,999	106,085	119,305
<b>NET-DEBT-TO-EQUITY RATIO EXCLUDING LEASES<sup>(1)</sup></b>	<b>5.0%</b>	<b>7.0%</b>	<b>15.3%</b>	<b>21.7%</b>	<b>16.7%</b>
Leases	8,275	8,096	8,055	7,812	7,156
Net-debt-to-equity ratio including leases	10.9%	12.7%	20.1%	25.9%	20.7%

(1) Excluding leases receivables and leases debts.

## CAPITAL EMPLOYED BASED ON REPLACEMENT COST BY BUSINESS SEGMENT

<b>As of December 31,</b>					
(in million dollars)					
	<b>2023</b>	<b>2022</b>	<b>2021</b>	<b>2020</b>	<b>2019</b>
Exploration & Production	63,870	65,784	71,675	78,928	88,844
Integrated LNG	36,048	33,671	46,654		
Integrated Power	21,511	16,225	9,324		
Total Integrated Gas, Renewables & Power		49,896	55,978	45,611	41,549
Refining & Chemicals	6,043	7,438	8,069	11,375	12,228
Marketing & Services	7,674	7,593	8,783	8,793	8,371
Corporate	(2,924)	(1,900)	(2,692)	(2,090)	(2,164)
<b>TOTAL</b>	<b>132,222</b>	<b>128,811</b>	<b>141,813</b>	<b>142,617</b>	<b>148,828</b>

## CAPITAL EMPLOYED

<b>As of December 31,</b>					
(in million dollars)					
	<b>2023</b>	<b>2022</b>	<b>2021</b>	<b>2020</b>	<b>2019</b>
Non-current assets	181,730	175,409	179,918	181,672	187,117
Assets and liabilities classified as held for sale	1,724	363	338	533	794
Working capital	(14,482)	(10,237)	(2,558)	(3,813)	(1,510)
Long-term liabilities	(34,938)	(34,252)	(33,845)	(35,168)	(35,972)
<b>TOTAL CAPITAL EMPLOYED</b>	<b>134,034</b>	<b>131,283</b>	<b>143,853</b>	<b>143,224</b>	<b>150,429</b>

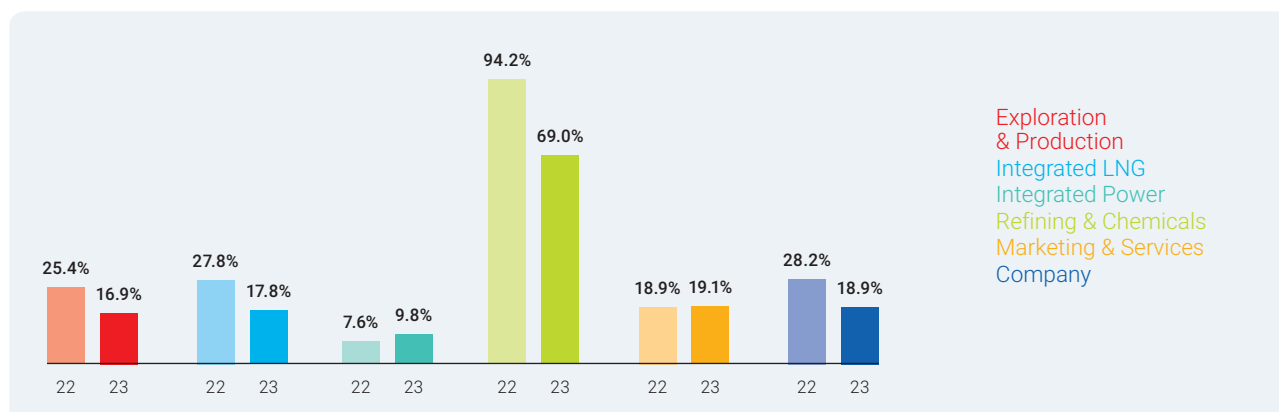
## ROACE BY BUSINESS SEGMENT

(in millions of dollars, except percent)

	2023	2022	2021	2020	2019
<b>Exploration &amp; Production</b>					
Adjusted net operating income	10,942	17,479	10,439	2,363	7,509
Average capital employed <sup>(1)</sup>	64,827	68,730	75,302	83,886	89,122
<b>ROACE</b>	<b>16.9%</b>	<b>25.4%</b>	<b>13.9%</b>	<b>2.8%</b>	<b>8.4%</b>
<b>Integrated LNG</b>					
Adjusted net operating income	6,200	11,169	5,591		
Average capital employed <sup>(1)</sup>	34,860	40,163	41,264		
<b>ROACE</b>	<b>17.8%</b>	<b>27.8%</b>	<b>13.5%</b>		
<b>Integrated Power</b>					
Adjusted net operating income	1,853	975	652		
Average capital employed <sup>(1)</sup>	18,868	12,774	9,531		
<b>ROACE</b>	<b>9.8%</b>	<b>7.6%</b>	<b>6.8%</b>		
<b>Total Integrated Gas, Renewables &amp; Power</b>					
Adjusted net operating income		12,144	6,243	1,778	2,389
Average capital employed <sup>(1)</sup>		52,937	50,795	43,580	38,148
<b>ROACE</b>		<b>22.9%</b>	<b>12.3%</b>	<b>4.1%</b>	<b>6.3%</b>
<b>Refining &amp; Chemicals</b>					
Adjusted net operating income	4,654	7,302	1,909	1,039	3,003
Average capital employed <sup>(1)</sup>	6,741	7,754	9,722	11,802	11,414
<b>ROACE</b>	<b>69.0%</b>	<b>94.2%</b>	<b>19.6%</b>	<b>8.8%</b>	<b>26.3%</b>
<b>Marketing &amp; Services</b>					
Adjusted net operating income	1,458	1,550	1,618	1,224	1,653
Average capital employed <sup>(1)</sup>	7,634	8,188	8,788	8,582	7,407
<b>ROACE</b>	<b>19.1%</b>	<b>18.9%</b>	<b>18.4%</b>	<b>14.3%</b>	<b>22.3%</b>
<b>Corporate</b>					
Adjusted net operating income	(423)	(263)	(443)	(598)	(481)
Average capital employed <sup>(1)</sup>	(2,412)	(2,296)	(2,391)	(2,127)	(2,417)
<b>TotalEnergies</b>					
Adjusted net operating income	24,684	38,212	19,766	5,806	14,073
Average capital employed <sup>(1)</sup>	130,518	135,312	142,215	145,723	143,674
<b>ROACE</b>	<b>18.9%</b>	<b>28.2%</b>	<b>13.9%</b>	<b>4.0%</b>	<b>9.8%</b>

(1) At replacement cost (excluding after-tax inventory effect). Average Capital Employed = (Capital Employed beginning of the year + Capital Employed end of the year)/2.

## ROACE BY BUSINESS SEGMENT (%)





## CONSOLIDATED STATEMENT OF CASH FLOW

(in million dollars)

	2023	2022	2021	2020	2019
<b>Cash flow from operating activities</b>					
Consolidated net income	21,510	21,044	16,366	(7,336)	11,438
Depreciation, depletion, amortization and impairment	13,818	13,680	14,343	22,861	16,401
Non-current liabilities, valuation allowances, and deferred taxes	813	4,594	962	(1,782)	(58)
(Gains) losses on sales of assets	(3,452)	369	(454)	(909)	(614)
Undistributed affiliates' equity earnings	649	6,057	(667)	948	(1,083)
(Increase) decrease in working capital	6,091	1,191	(616)	1,869	(1,718)
Other changes, net	1,250	432	476	(848)	319
<b>CASH FLOW FROM OPERATING ACTIVITIES</b>	<b>40,679</b>	<b>47,367</b>	<b>30,410</b>	<b>14,803</b>	<b>24,685</b>
<b>Cash flow used in investing activities</b>					
Intangible assets and property, plant, and equipment additions	(17,722)	(15,690)	(12,343)	(10,764)	(11,810)
Acquisition of subsidiaries, net of cash acquired	(1,772)	(94)	(321)	(966)	(4,748)
Investments in equity affiliates and other securities	(3,477)	(3,042)	(2,678)	(2,120)	(1,618)
Increase in non-current loans	(1,889)	(976)	(1,247)	(1,684)	(1,061)
<b>TOTAL EXPENDITURES</b>	<b>(24,860)</b>	<b>(19,802)</b>	<b>(16,589)</b>	<b>(15,534)</b>	<b>(19,237)</b>
Proceeds from disposal of intangible assets, and property, plant and equipment	3,789	540	770	740	527
Proceeds from disposal of subsidiaries, net of cash sold	3,561	835	269	282	158
Proceeds from disposal of non-current investments	490	577	722	578	349
Repayment of non-current loans	566	2,734	1,172	855	1,026
<b>TOTAL DIVESTMENTS</b>	<b>8,406</b>	<b>4,686</b>	<b>2,933</b>	<b>2,455</b>	<b>2,060</b>
<b>CASH FLOW USED IN INVESTING ACTIVITIES</b>	<b>(16,454)</b>	<b>(15,116)</b>	<b>(13,656)</b>	<b>(13,079)</b>	<b>(17,177)</b>
<b>Cash flow (from)/used financing activities</b>					
Issuance (repayment) of shares:					
– Parent company shareholders	383	370	381	374	452
– Treasury shares	(9,167)	(7,711)	(1,823)	(611)	(2,810)
Cash dividend paid:					
– Parent company's shareholders	(7,517)	(9,986)	(8,228)	(6,688)	(6,641)
– Minority shareholders	(311)	(536)	(124)	(184)	(115)
Issuance of perpetual subordinated notes	(1,081)	-	3,248	331	-
Payments on perpetual subordinated notes	(314)	(339)	(313)	(315)	(371)
Other transactions with non controlling interest	(126)	(49)	652	(204)	10
Net issuance (repayment) of non-current debt	130	1,108	(359)	15,800	8,131
(Increase) decrease in current borrowings	(14,289)	(6,073)	(10,856)	(6,501)	(5,829)
(Increase) decrease in current financial assets and liabilities	2,562	3,944	(8,075)	(604)	(536)
<b>CASH FLOW USED IN FINANCING ACTIVITIES</b>	<b>(29,730)</b>	<b>(19,272)</b>	<b>(25,497)</b>	<b>1,398</b>	<b>(7,709)</b>
<b>NET INCREASE (DECREASE) IN CASH AND CASH EQUIVALENTS</b>	<b>(5,505)</b>	<b>12,979</b>	<b>(8,743)</b>	<b>3,122</b>	<b>(201)</b>
Effect of exchange rates	(258)	(1,295)	(1,183)	794	(354)
Cash and cash equivalents at the beginning of the period	33,026	21,342	31,268	27,352	27,907
<b>CASH AND CASH EQUIVALENTS AT THE END OF THE PERIOD</b>	<b>27,263</b>	<b>33,026</b>	<b>21,342</b>	<b>31,268</b>	<b>27,352</b>

## CASH FLOW FROM OPERATING ACTIVITIES

(in million dollars)

	2023	2022	2021	2020	2019
<b>By business segment</b>					
Exploration & Production	18,531	27,654	22,009	9,922	16,917
Integrated LNG	8,442	9,604	(2,765)		
Integrated Power	3,573	66	3,592		
Total Integrated Gas, Renewables & Power		9,670	827	2,129	3,461
Refining & Chemicals	7,957	8,663	6,473	2,438	3,837
Marketing & Services	1,957	3,124	2,333	2,101	2,604
Corporate	219	(1,744)	(1,232)	(1,787)	(2,134)
<b>TOTAL</b>	<b>40,679</b>	<b>47,367</b>	<b>30,410</b>	<b>14,803</b>	<b>24,685</b>

## GROSS INVESTMENTS<sup>(1)</sup>

(in million dollars)

	2023	2022	2021	2020	2019
<b>By business segment</b>					
Exploration & Production	12,378	10,646	7,276	6,782	8,992
Integrated LNG	3,410	1,249	2,351		
Integrated Power	5,497	5,226	3,990		
Total Integrated Gas, Renewables & Power		6,475	6,341	6,230	7,053
Refining & Chemicals	2,149	1,391	1,638	1,325	1,698
Marketing & Services	1,273	1,186	1,242	1,052	1,374
Corporate	153	104	92	145	120
<b>TOTAL</b>	<b>24,860</b>	<b>19,802</b>	<b>16,589</b>	<b>15,534</b>	<b>19,237</b>
<b>By geographic area</b>					
France	4,166	1,632	2,157	2,044	1,979
Rest of Europe	3,757	2,743	3,027	3,165	3,201
North America	3,153	5,304	1,680	899	1,748
Africa	4,877	3,253	3,696	3,816	7,663
Rest of world	8,907	6,870	6,029	5,610	4,646
<b>TOTAL</b>	<b>24,860</b>	<b>19,802</b>	<b>16,589</b>	<b>15,534</b>	<b>19,237</b>

(1) Including acquisitions and increases in non-current loans.

## ORGANIC INVESTMENTS<sup>(1)</sup> BY BUSINESS SEGMENT

(in million dollars)

	2023	2022	2021	2020	2019
Exploration & Production	10,232	7,507	6,690	5,519	8,635
Integrated LNG	2,063	519	2,061		
Integrated Power	2,582	1,385	1,280		
Total Integrated Gas, Renewables & Power		1,904	3,341	2,720	2,259
Refining & Chemicals	2,040	1,319	1,502	1,209	1,426
Marketing & Services	1,065	1,035	1,074	814	969
Corporate	144	87	68	77	108
<b>TOTAL</b>	<b>18,126</b>	<b>11,852</b>	<b>12,675</b>	<b>10,339</b>	<b>13,397</b>

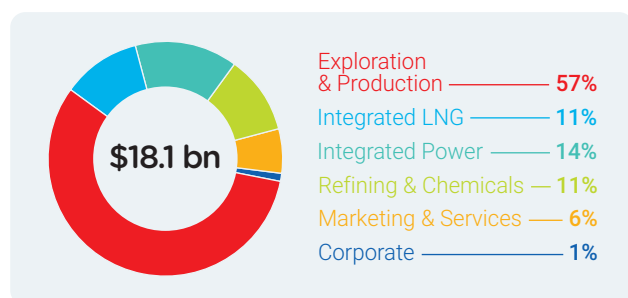
(1) Organic investments = net investments, excluding acquisitions, divestments and other operations with non-controlling interests.

## DIVESTMENTS BY BUSINESS SEGMENT

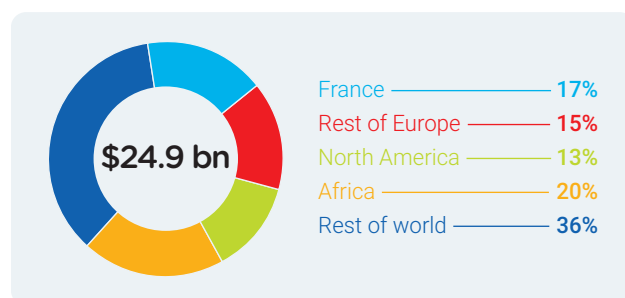
(in million dollars)

	2023	2022	2021	2020	2019
Exploration & Production	5,118	807	894	819	368
Integrated LNG	290	2,301	1,059		
Integrated Power	661	1,126	291		
Total Integrated Gas, Renewables & Power		3,427	1,350	1,152	1,108
Refining & Chemicals	196	214	348	149	322
Marketing & Services	2,132	222	319	158	249
Corporate	9	16	22	177	13
<b>TOTAL</b>	<b>8,406</b>	<b>4,686</b>	<b>2,933</b>	<b>2,455</b>	<b>2,060</b>

## 2023 ORGANIC INVESTMENTS BY BUSINESS SEGMENT



## 2023 GROSS INVESTMENTS BY GEOGRAPHIC AREA



## SHARE PERFORMANCE

### TOTALENERGIES ADR PRICE (IN DOLLARS) IN NEW YORK <sup>(1)</sup> VERSUS PEERS <sup>(2)</sup>



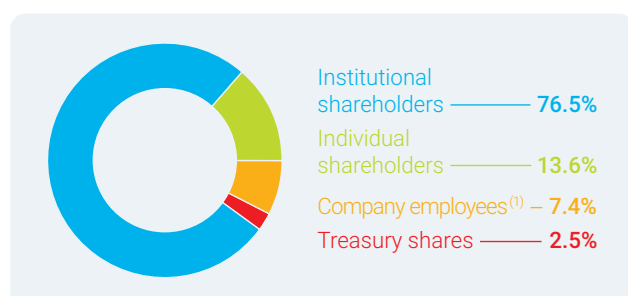
Source: Bloomberg

(1) Rebased to 100 on 31/12/2018.

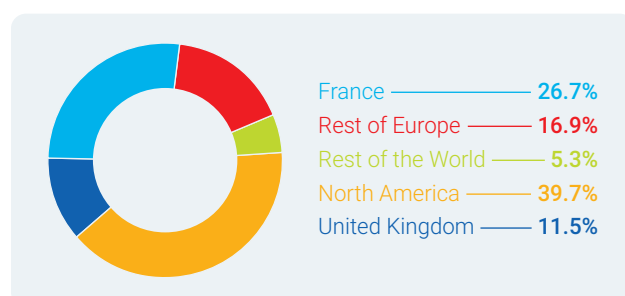
(2) BP, Chevron, ExxonMobil, Shell.

## SHAREHOLDING STRUCTURE ESTIMATE AS OF DECEMBER 31, 2023

### DISTRIBUTION BY TYPE



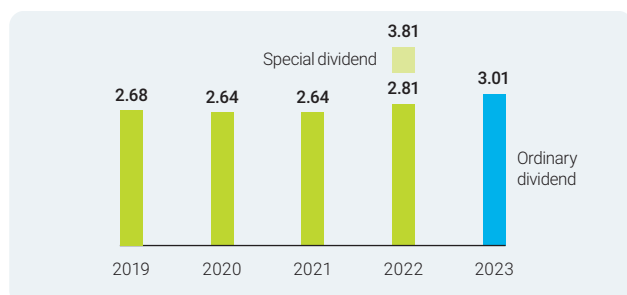
### DISTRIBUTION BY GEOGRAPHIC AREA



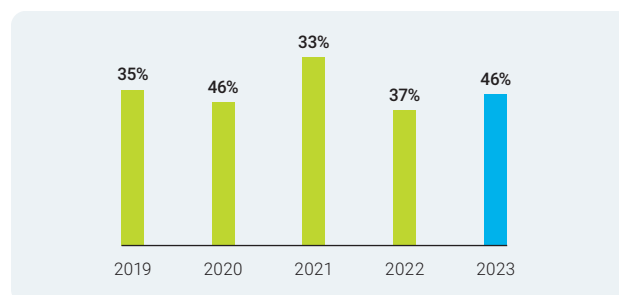
(1) Based on the definition of employee shareholding set forth in Article L. 225-102 of the French Commercial Code and Article 11 paragraph 6 of the Corporation's Articles of Association.

## DIVIDEND

### DIVIDEND PER SHARE (IN EUROS)



### SHAREHOLDER RETURN RATIO (%)



## SHARE INFORMATION

	2023	2022	2021	2020	2019
Shares outstanding (as of December 31)	2,412,251,835	2,619,131,285	2,640,429,329	2,653,124,025	2,601,881,075
Fully-diluted weighted-average number of shares <sup>(1)</sup>	2,433,767,578	2,572,182,025	2,647,468,245	2,602,026,749	2,618,007,888
Fully-diluted number of shares (as of December 31) <sup>(1)</sup>	2,373,251,546	2,502,330,135	2,626,432,417	2,646,916,172	2,603,292,172
Treasury shares	60,543,213	137,187,667	33,841,104	24,392,703	15,474,234
<b>Price per share (€)</b>					
High	64.80	60.44	45.55	50.93	52.27
Low	50.55	43.6	33.91	21.12	42.65
Year-end	61.60	58.65	44.63	35.30	49.20
<b>Price per ADR (\$)</b>					
High	69.63	64.02	52.565	56.911	58.82
Low	54.94	44.61	40.33	22.13	47.70
Year-end	67.38	62.08	49.46	41.91	55.30
<b>Market capitalization at year-end, computed on shares outstanding</b>					
Billion €	148.6	153.6	117.8	93.7	128.0
Billion \$	162.5	162.6	130.6	111.2	143.9
<b>Trading volume (daily average)</b>					
Euronext Paris	4,719,338	6,952,567	6,716,595	8,528,721	5,655,301
New York Stock Exchange (number of ADRs)	1,435,870	2,426,647	2,155,119	2,965,225	1,771,550
Adjusted fully-diluted earnings per share (\$) <sup>(2)</sup>	9.40	13.94	6.68	1.43	4.38
Dividend per share (€) <sup>(3)</sup>	3.01	3.81 <sup>(4)</sup>	2.64	2.64	2.68
Dividend per ADR <sup>(5)</sup> (\$)	3.23 <sup>(3)</sup> <sup>(6)</sup>	4.03 <sup>(4)</sup>	2.93	3.12	2.97
Rate of return to shareholders <sup>(7)</sup>	46%	37%	33%	46%	35%
Price-to-earning ratio <sup>(8)</sup>	7.2	4.5	7.4	29.3	12.6
Yield <sup>(9)</sup>	4.89%	6.50%	5.92%	7.48%	5.45%

(1) Excluding treasury shares, cancelled in the consolidated equity pursuant to IFRS rules.

(2) Adjusted results are defined as income using replacement cost, adjusted for special items, excluding the impact of changes for fair value.

(3) subject to approval of the Annual General Meeting on May 24, 2024.

(4) including the special dividend of €1/share.

(5) 2022, 2021, 2020 and 2019 gross dividend amount per ADR as stated by depositary receipts issuer JP Morgan.

(6) 2023 estimated dividend in dollars includes the first interim ADR dividend of \$0.78 paid in October 2023, the second interim ADR dividend of \$0.81 paid in January 2024 and the third interim ADR dividend of \$0.80 paid in April 2024, as well as the proposed final ADR dividend of \$0.84 payable in July 2024. The proposed final ADR dividend was converted at a rate of \$1.0656/€, based on the exchange rate of the European Central Bank as of April 15, 2024.

(7) The rate of return to shareholders is calculated on the basis of the amount of dividends paid in cash during the year plus the amount of TotalEnergies share buybacks carried out by the Corporation during the year (for the purpose of canceling shares issued in connection with the payment of the dividend in shares or under its share buyback program), as a percentage of cash flow from operating activities for the year in question. The operating cash flow before working capital changes is defined as cash flow from operating activities before changes in working capital at replacement cost, excluding the mark to market effect of iLNG and iPOWER contracts and including capital gain from renewable projects sale (effective first quarter 2020). Based on an amount of \$16,517 million, consisting of dividends paid in cash plus TotalEnergies share buybacks during 2023 and an operating cash flow before working capital changes of \$35,945 million in 2023.

(8) Share price at year-end (\$)/adjusted fully-diluted earnings per share (\$).

(9) Dividend (€)/share price at year-end (€).

## PAYROLL<sup>(1)</sup>

As of December 31,  
(in million dollars)

	2023	2022	2021	2020	2019
Wages and salaries (including social charges)	9,210	9,002	9,207	8,908	8,922

(1) Personnel expenses of fully-consolidated subsidiaries.

## NUMBER OF EMPLOYEES<sup>(1)</sup>

As of December 31,	2023	2022	2021	2020	2019
Number of employees					
<b>TOTAL</b>	<b>102,579</b>	<b>101,279</b>	<b>101,309</b>	<b>105,476</b>	<b>107,776</b>

As of December 31,	2023	2022	2021	2020	2019
Number of employees by region (in %)					
France	34.6%	34.5%	34.7%	34.0%	34.1%
Rest of Europe	28.5%	28.8%	28.5%	28.8%	27.4%
Rest of world	36.8%	36.7%	36.8%	37.2%	38.6%
<b>TOTAL</b>	<b>102,579</b>	<b>101,279</b>	<b>101,309</b>	<b>105,476</b>	<b>107,776</b>

As of December 31,	2023	2022	2021	2020	2019
Number of employees by business segment (in %)					
Exploration & Production	8.4%	8.6%	11.8%	12.1%	12.3%
Integrated Gas, Renewables & Power	9.5%	8.5%	11.0%	9.1%	13.7%
<b>Total Upstream</b>	<b>17.9%</b>	<b>17.1%</b>	<b>22.8%</b>	<b>21.2%</b>	<b>26.0%</b>
Refining & Chemicals	50.4%	50.6%	49.5%	50.2%	47.7%
Marketing & Services	24.3%	24.9%	24.9%	26.0%	23.5%
One Tech	3.5%	3.5%	-	-	-
Corporate	3.9%	3.9%	2.8%	2.6%	2.8%
<b>TOTAL</b>	<b>102,579</b>	<b>101,279</b>	<b>101,309</b>	<b>105,476</b>	<b>107,776</b>

(1) Number of employees of fully-consolidated subsidiaries.





# 2

## Exploration & Production

The Exploration & Production segment encompasses the oil and natural gas exploration and production activities, in approximately 50 countries, as well as the carbon neutrality activities.

**2.0**  
**Mboe/d**

Hydrocarbons  
produced in 2023

**\$19.1 bn**

CFFO in 2023

**\$10.2 bn**

of organic investments  
in 2023





## Safety, a core value

### MORE ENERGY

- Deliver profitable projects to grow production by 2-3%/y between 2023-28
- High-grade portfolio through exploration, acquisitions & divestments

### LESS EMISSIONS

- Slash GHG emissions
- Eliminate routine flaring and aim for zero methane emissions
- Capture and store residual emissions

### GROWING CASH FLOW

- Maximize value through operational excellence
- Maintain strict investment criteria for new projects

### MORE SUSTAINABLE

- Care for the environment
- Support & develop our people
- Share value with stakeholders

## FINANCIAL HIGHLIGHTS

(in million dollars)

	2023	2022	2021
Adjusted net operating income <sup>(1)</sup>	10,942	17,479	10,439
Gross investments <sup>(2)</sup>	12,738	10,646	7,276
Organic investments <sup>(3)</sup>	10,232	7,507	6,690
Divestments	5,118	807	894
Operating cash flow before working capital changes <sup>(4)</sup>	19,126	26,080	18,717
Operating cash flow <sup>(5)</sup>	18,531	27,654	22,009

(1) Adjusted results are defined as income using replacement cost, adjusted for special items, excluding the impact of changes in fair value.

(2) Including acquisitions and increases in non currents-loans.

(3) Organic investments = net investments, excluding acquisitions, divestments and other operations with non-controlling interests.

(4) Excluding financial charges, except those related to lease contracts, excluding the impact of contracts recognized at fair value for the sector.

(5) Excluding financial charges, except those related to leases.

## PRODUCTION

Hydrocarbon production	2023	2022	2021
<b>E&amp;P (kboe/d)</b>	<b>2,034</b>	<b>2,296</b>	<b>2,290</b>
Liquids (kboe/d) <sup>(1)</sup>	1,492	1,466	1,437
Gas (Mcf/d)	2,900	4,492	4,662

(1) Including condensate and NGLs, associated to the gas production.



## E&P activities by geographical area

The information below describes the Exploration & Production segment's main activities by geographical area, without giving details of all of the assets held by TotalEnergies. The capacities referred to herein are expressed on a 100% basis, regardless of TotalEnergies' interest in the asset.

### → AFRICA (EXCLUDING NORTH AFRICA)

#### NIGERIA

In **Nigeria**, the Company's production is mainly offshore. It operates eight licenses out of the 34 permits in which TotalEnergies holds interests<sup>(1)</sup>.

TotalEnergies is present offshore in particular:

- in PML 2/3/4 ❶ (formerly OML 130, 24%, operator), with the Akpo and Egina fields in production as well as the Preowei field where development studies continued in 2023. In May 2023, the production licenses were renewed for 20 years until 2043;
- in OML 99 ❷ (40%, operator), with the Amenam-Kpono fields (30.4%) in production as well as the Ikike field, where production started in July 2022 and reached its plateau at the end of 2022;
- in OML 102 ❸ (40%, operator), with the Ofon field in production and where the Ntokon oil and gas discovery in June 2023 provides perspectives for a new tie-back development to existing facilities. A second discovery was made by the Ntokon North-East well, also drilled and tested in 2023;
- in OML 138 (20%), with the Usan field in production. The license was renewed in August 2022 for a period of 20 years. Development studies on the Owowo discovery in OML 139 ❹ (18%) located near OML 138, continued in 2023;
- in OML 118 ❺ (12.5%), with the Bonga field in production as well as the Bonga North field on which development studies continued in 2023.

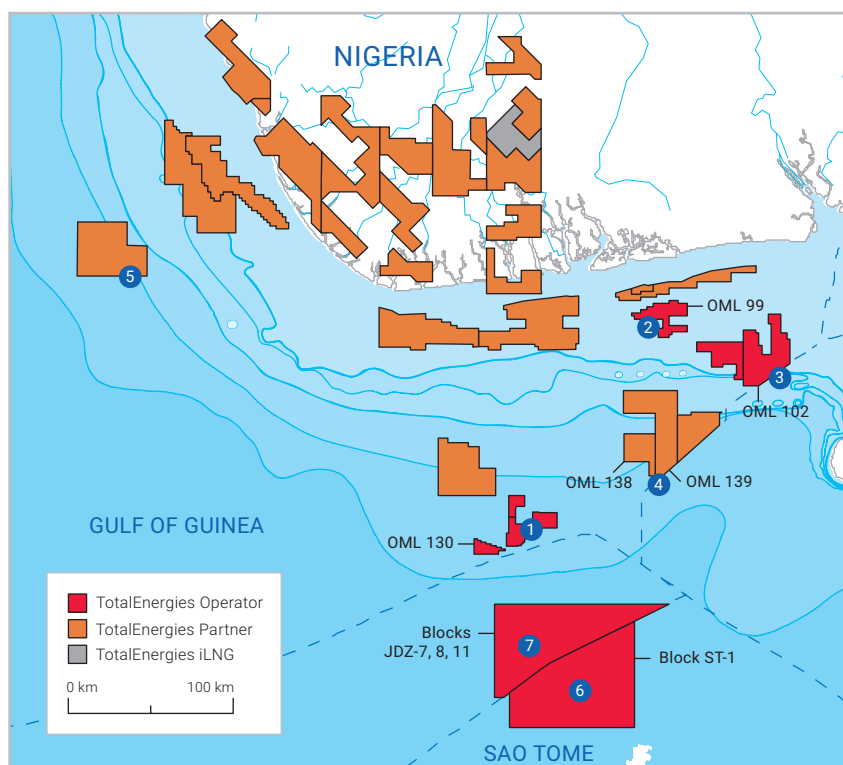
TotalEnergies is also present via the SPDC joint-venture (10%) which holds 18 production licenses, including 3 offshore licenses. In 2022, TotalEnergies announced its intention of selling its interest in the SPDC oil licenses.

transport crude oil to a storage and offloading terminal in Tanga, Tanzania.

After taking into consideration the societal and environmental challenges, the project was approved by the Board of Directors in December 2020. The production capacity is planned to be 230 kb/d and will include the joint development of the resources in Blocks CA-1 and LA-2 (the Tilenga project operated by TotalEnergies) and Block CA-3A (the Kingfisher project, operated by

CNOOC). It plans the drilling of approximately 450 onshore wells and the construction of two crude oil processing facilities. The final investment decision was announced in February 2022. Drilling started in 2023, and production could start in 2025.

Firmly committed to transparency, the guiding principle for all its actions, TotalEnergies publishes on its website detailed information on the social, environmental and societal issues related to this project.

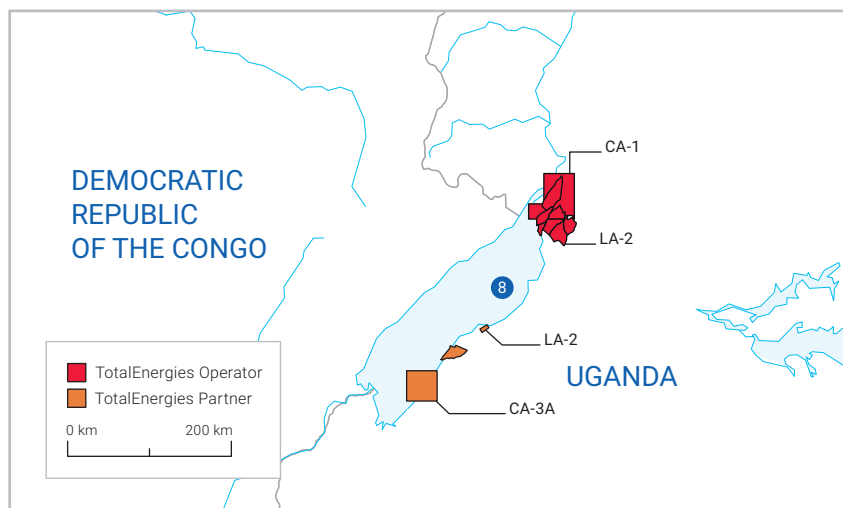


#### SÃO TOMÉ AND PRÍNCIPE

In **São Tomé and Príncipe**, TotalEnergies holds two exploration licenses, one on Block ST-1 ❸ and the other on Blocks JDZ-7, 8, and 11 ❹ in the joint development area between São Tomé and Príncipe and Nigeria. Two 3D seismic surveys were carried out in 2021 on these blocks and their interpretation is under way.

#### UGANDA

In **Uganda**, TotalEnergies is a partner, with a 56.67% interest, in the project to develop the Lake Albert oil resources located in Blocks CA-1, LA-2 and CA-3A ❸. TotalEnergies is also a 62% shareholder, in East African Crude Oil Pipeline (EACOP) Ltd, the company responsible for developing and operating a pipeline of close to 1,450 km that will



(1) Including through its stake in the SPDC joint venture.

## ANGOLA

In **Angola**, the Company's production comes from Blocks 17, 32, and 0:

- on Block 17 <sup>(1)</sup> (38%, operator), the Company's main asset in the country, located in deep offshore, four major hubs are in production: Girassol, Dalia, Pazflor and CLOV. Various infill drilling projects are being carried out;
- on Block 17/06 (30%, operator), the development of the Begonia field was approved in July 2022. The start-up of production is planned for the end of 2024 with a tie-back to the Pazflor FPSO;
- on Block 32 <sup>(2)</sup> (30%, operator), located in deep offshore, production comes from the Kaombo Norte and Kaombo Sul FPSOs. Drilling of development wells are expected to continue until mid-2025 and to be followed by the drilling of 3 infill wells, approved in 2023 under the name Kari Phase1. Discoveries in the central and northern areas of the block (outside Kaombo) offer additional potential currently being assessed;
- on Block 0 <sup>(3)</sup> (10%), in May 2023 the Angolan authorities approved the extension of the license until 2045 as well as new fiscal terms;
- on Block 20/11 <sup>(2)</sup> <sup>(4)</sup> (40%, operator), in the Kwanza basin, TotalEnergies is continuing development studies on the Cameia and Golfinho oil discoveries, with a view to an investment decision in 2024. In September 2023, TotalEnergies sold a 40% stake in the block to Petronas.

In December 2022, the company Angola Block 14 B.V., in which TotalEnergies held a 50.01% stake, was sold to the Angolan company Somoil. TotalEnergies held interests in Blocks 14 and 14K through this participation.

TotalEnergies has held exploration licenses on Block 16/21 <sup>(5)</sup> since August 2023 and on Block 29 <sup>(6)</sup> since August 2021. The exploration license on Block 48 (40%, operator) expired in May 2023.

## KENYA

In **Kenya**, TotalEnergies initiated a procedure in November 2022 to exit offshore licenses L11A, L11B and L12. Likewise, in May 2023, TotalEnergies initiated an exit procedure from onshore Blocks 10BA, 10BB and 13T. These procedures are subject to approval by the authorities.

## REPUBLIC OF THE CONGO

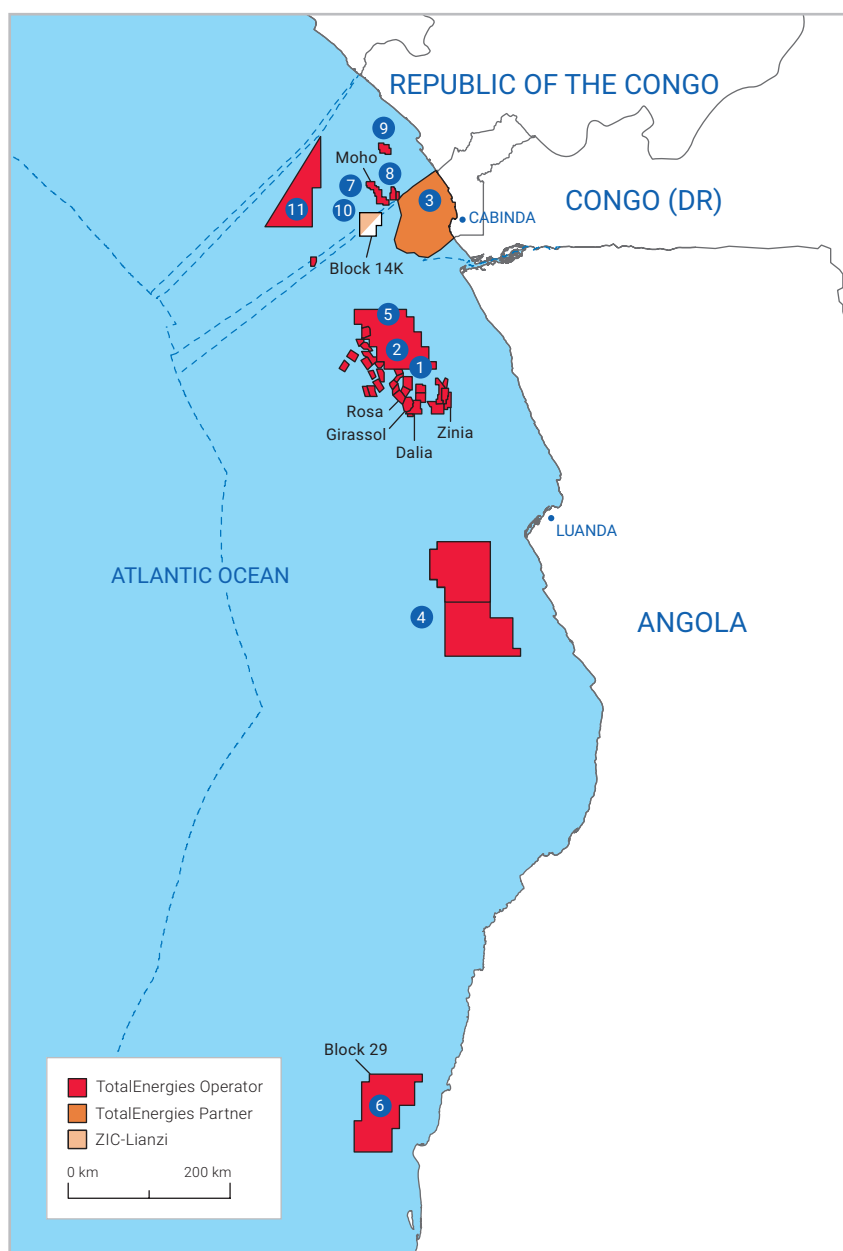
In the **Republic of the Congo** (Congo Brazzaville), the Company's production comes from the TotalEnergies EP Congo subsidiary, owned by TotalEnergies (85%) and QatarEnergy (15%). The production operated by TotalEnergies EP Congo comes mainly from the Haute Mer permit (53.5%) which includes the Moho Bilondo asset composed of two fields: Moho Bilondo and Moho North <sup>(7)</sup>.

TotalEnergies EP Congo also operates the Nkossa field (53.5%) <sup>(8)</sup> and the Yanga and Sendji fields (55.25%) <sup>(9)</sup> and holds 26.75% of the Lianzi field <sup>(10)</sup> located within the offshore unitization area between Angola (Block 14K) and the Republic of Congo (Haute Mer license).

TotalEnergies EP Congo withdrew from the Loango II and Zatchi II licenses (also known as "Madingo"), in September 2021.

The concession for the operation of the country's only oil terminal, in Djeno, expired in November 2020 and approval for the new operating concession is in the process of being validated by the Congolese authorities. In the meantime, TotalEnergies EP Congo continues to operate the oil terminal under an interim agreement.

Three exploration licenses were awarded by the Republic of Congo to TotalEnergies EP Congo in February 2020: Marine XX <sup>(11)</sup> in the deep offshore, as well as Nanga and Mokelembembe. An exploration well is planned on the Marine XX license in 2024. TotalEnergies EP Congo renounced its participatory rights and interests in the Mokelembembe license on December 31, 2021 and transferred to SNPC its rights and interests in the Nanga license on December 11, 2023.



(1) TotalEnergies interest shall be 36% in 2036.

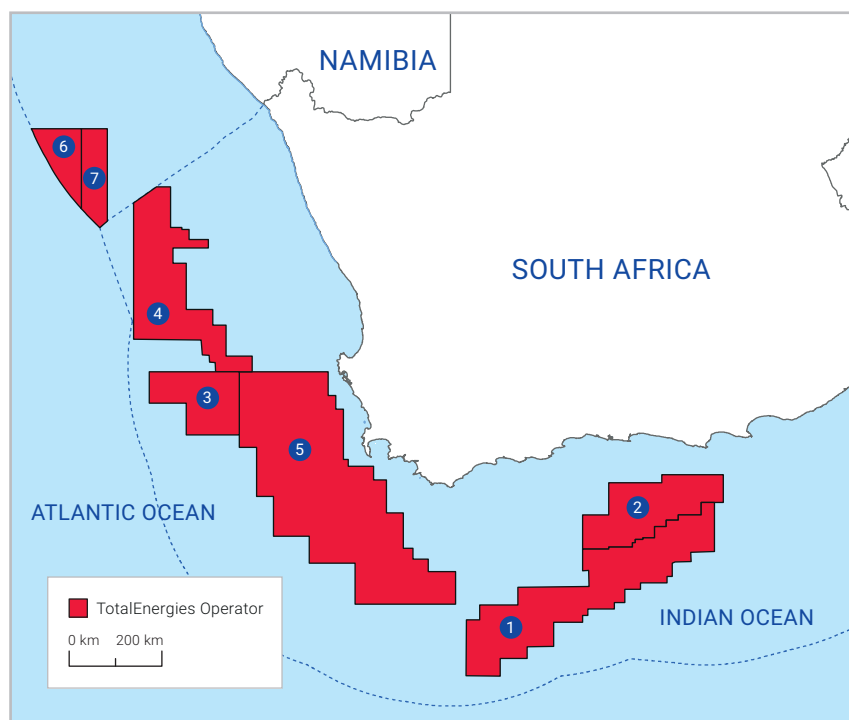
(2) In 2023, Blocks 20/15 and 21/09 were merged into a single Block 20/11.



## GABON

In **Gabon**, since the sale, completed in December 2021, of its interest in seven non-operated offshore licenses to Perenco Oil & Gas Gabon, TotalEnergies EP Gabon<sup>(1)</sup> has refocused on its operated assets governed by the Anguille-Torpille concession agreement 12 (100%, operator) and by the Baudroie-Mérou production sharing agreement (90%, operator). In 2022, the fiscal terms of the Baudroie-

Mérou production sharing contract as well as those of the Torpille/Anguille concession agreement were revised and extended respectively until 2047 and 2042. In December 2022, The Republic of Gabon acquired a 10% interest in the Baudroie-Mérou production sharing agreement. In 2023, TotalEnergies EP Gabon started a campaign on the Anguille-Torpille wells aimed at maintaining the production plateau using the first pulling unit or workover rig acquired by the Company in 2022.



## SOUTH AFRICA

In **South Africa**, TotalEnergies operates five deep offshore exploration licenses: the South Outeniqua Block 1 (100%), Block 11B/12B 2 (45%), the ODB Block 3 (48.6%, following the sale of a 29.2% interest to QatarEnergy in 2021), the DWOB Block 4 (50%, following the sale of a 30% interest to QatarEnergy in 2021), as well as Block 5/6/7 5 (40%). TotalEnergies sold its interest in the East Algoa license (30%) in 2020. This transaction was approved by governmental authorities in December 2021. A multi-client 3D seismic survey started in January 2024 on DWOB.

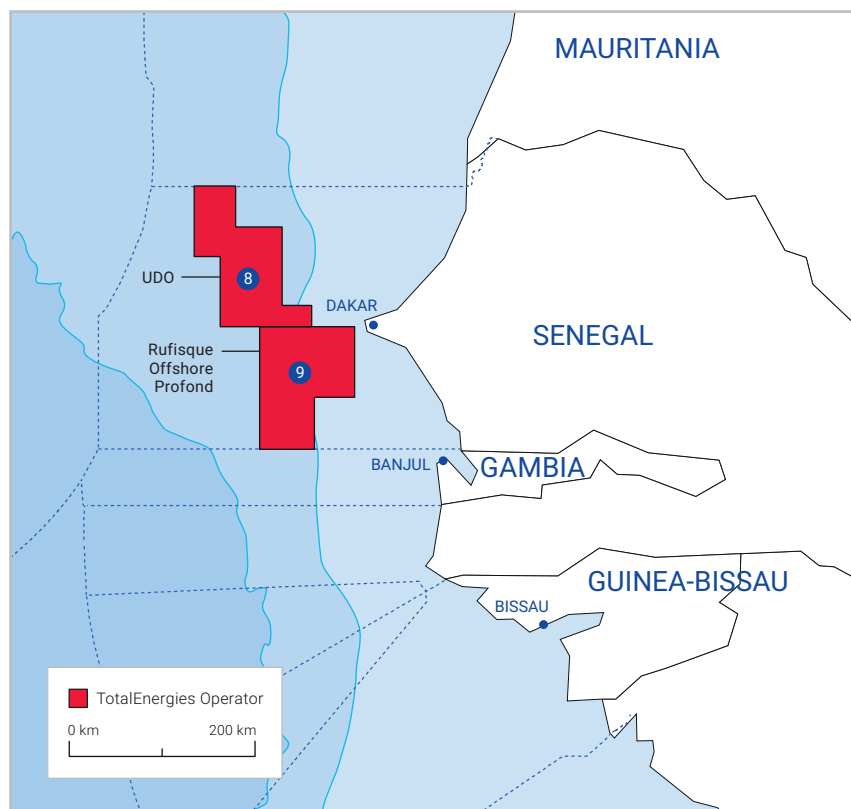
On offshore Block 11B/12B, following the discoveries of gas condensates on the Brulpadda (2019) and Luiperd (2020) fields, TotalEnergies filed, in September 2022, an operating license application and initiated discussions with the South African authorities to define the conditions for marketing gas and condensates to enable these discoveries to be developed.

## NAMIBIA

In **Namibia**, TotalEnergies operates two deep offshore exploration licenses in the Orange basin: Blocks 2912 6 (38%) and 2913B 7 (40%). Following the drilling of an exploration well on Block 2913B, TotalEnergies announced a significant discovery of light oil and associated gas on the Venus prospect (the Venus-1X well) in February 2022.

In 2023, two rigs were mobilized to evaluate the area's potential, with positive results from the Venus-1A appraisal well and production tests from the Venus-1X and Venus-1A wells and a negative result for the Nara-1X exploration well, targeting a prospect west of the Venus discovery on Block 2912. The drilling campaign continues in 2024, with in particular the drilling of an exploration well on a prospect located in the north of Venus (Mangetti) and an additional appraisal well on the Venus field. In addition, a 3D seismic acquisition campaign started at the end of 2023 to increase knowledge of the two blocks. In January 2024, TotalEnergies announced the signing of an agreement to acquire additional interests in Blocks 2912 and 2913B. Following finalization of these transactions, which are still subject to approval by the competent authorities, the Company's interest in these two licenses would be 42.48% (Block 2912) and 45.25% (Block 2913B).

(1) TotalEnergies EP Gabon is a company incorporated under Gabonese law. Its shares are listed on Euronext Paris and as at December 31, 2023 were owned by TotalEnergies (58.28%), the Republic of Gabon (25%) and the public (16.72%).



## SENEGAL

In **Senegal**, A 3D seismic survey was carried out on the Ultra Deep Offshore block 8 (70%, operator) in early 2021 and its interpretation is continuing. TotalEnergies also holds interests in the Rufisque Offshore Profond exploration license 9 (90%, operator).

## MAURITANIA

In **Mauritania**, in August 2023 TotalEnergies returned Block C-15, the last exploration block held.

## CÔTE D'IVOIRE

In **Côte d'Ivoire**, TotalEnergies no longer holds any licenses, having exited offshore Blocks CI-605 (90%) in August 2021, CI-706 (45%) in December 2021 and CI-705 (45%) in June 2022 following the negative results of the Barracuda-1 exploration well in August 2021.

## → AMERICAS

## UNITED-STATES

In the **United States**, TotalEnergies' oil and gas production in the Gulf of Mexico comes from its interests in the Tahiti ① (17%) and Jack ② (25%) deep offshore fields.

In addition, TotalEnergies holds interests in two deep water projects, Anchor ③ (37.14%) and Ballymore ④ (40%). The development of Anchor, with a production capacity of 75 kboe/d, is continuing, with production scheduled to begin in 2024. The investment decision for the Ballymore project was made in May 2022 and its start-up is scheduled for 2025.

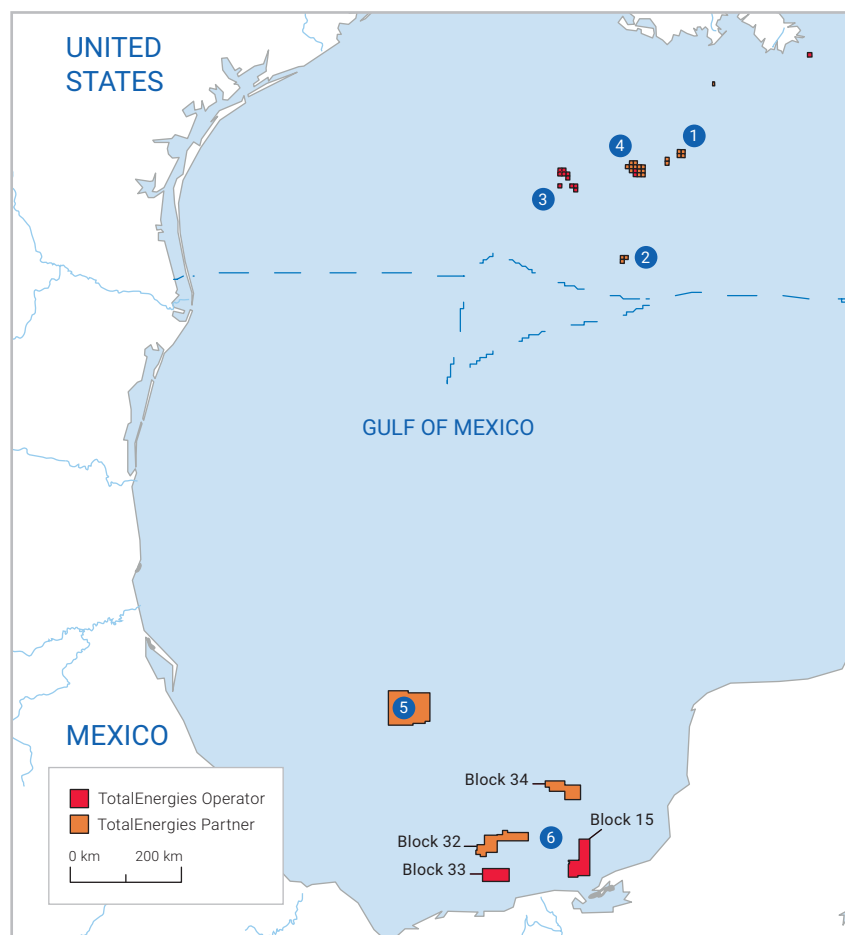
In exploration, in 2022 TotalEnergies sold its remaining interests in seven deep offshore licenses, initially owned 100%.

## MEXICO

In **Mexico**, TotalEnergies holds licenses in five offshore exploration blocks in the Gulf of Mexico: Block 1 ⑤ (33.3%) in the Salina Basin and Blocks 15 (35%, operator), 32 (50%), 33 (35%, operator) and 34 (27.5%) located in the shallow waters of the Campeche Basin ⑥. Following studies which concluded that prospectivity was limited, the operators of Blocks 1, 32 and 34 have launched the relinquishment processes for these blocks and exits are in the final stages. Relinquishments of Block 3 in the Salina basin and Block 2 in the Perdido basin were finalized in April and May 2023 respectively. Drilling of an exploration well in Block 33 began in November 2023 and will be followed by an exploration well on Block 15.

## CANADA

In **Canada**, with effect from November 2023, TotalEnergies no longer holds any interest in the oil sands. TotalEnergies held a 50% interest in the Surmont in-situ production project, and a 31.23% interest in the Fort Hills mining project (after increasing its stake by 6.65% in February 2023 through the exercise of its pre-emption right when Suncor acquired Teck's interest), both located in the province of Alberta. On October 4, 2023, TotalEnergies finalized the sale to ConocoPhillips of its stake in Surmont as well as certain associated logistics obligations. On November 20, 2023, TotalEnergies finalized the sale to Suncor of its subsidiary TotalEnergies EP Canada, including in particular its interest in the Fort Hills asset and associated logistics obligations.





## BRAZIL

In **Brazil**, the Company's production comes from the Libra (19.3%), Lapa (45%, operator), Iara (22.5%), Atapu (22.5%), Atapu ToR Surplus (22.5%) and S  pia ToR Surplus (28%) Blocks in the Santos Basin ①.

On the Libra Block, situated approximately 170 km offshore Rio de Janeiro, production began in 2017 on Mero field with the Pioneiro de Libra FPSO (capacity of 50 kb/d).

At year-end 2023, the Mero development project comprised four FPSOs, each with a liquid processing capacity of 180 kb/d:

- Mero 1, approved in 2017, started up in April 2022;
- Mero 2, approved in 2019, started up in December 2023;
- Mero 3, Mero 4 respectively approved in 2020 and 2021, planned to start by 2025.

On Iara, the P-68 FPSO is dedicated to production of the Berbig  o and Sururu-Ouest fields, reached its nominal production capacity in 2022. The P-70 FPSO is dedicated to production of the Atapu field and has been producing at capacity (150 kb/d) since July 2021.

Two production sharing contracts (ToR-Surplus) on the Atapu (22.5%) and S  pia (28%) fields were awarded to TotalEnergies in December 2021. These contracts are effective since May 2022. The P-70 FPSO for the Atapu field and the FPSO Carioca for the S  pia field, are both producing at their nominal capacities of 150 kb/d and 180 kb/d respectively. Development plans for an additional FPSO on each field were finalized in October 2022 and the results of the call for tenders launched for two FPSOs of 250 kb/d each are currently being analyzed. In the S  pia area, an additional oil accumulation was discovered with the drilling of the Pedunculo well in 2022.

The Lapa field is producing through the MV-27 FPSO (capacity of 100 kb/d). The Lapa South-West project was approved in January 2023. First production is scheduled for 2025, providing additional production of 25 kb/d, bringing total production to 60 kb/d.

TotalEnergies holds an interest in the Gato do Mato field (20%), discovered in 2012. The field's resources were confirmed with the GDM#4 well, drilled in 2020. After the postponement of the development project announced at the end of 2022 by the operator, development studies continued in 2023 in order to adapt the project to reduce costs.

After having sold its 28.6% interest in the BM-C-30 Block in 2021, TotalEnergies sold its 40% interest in the Itaipu field located in the BM-C-32 Block in the Campos Basin.

In exploration, the drilling of the first exploration well on the C-M-541 Block ② (40%, operator), Marolo-1, ended in July 2022. The drilling of the second well, Ubaia-1, started in 2022 and was completed in October 2023.

TotalEnergies also holds two operated exploration blocks (with a 50% working interest after the sale of 50% in early 2023) in the SM-1711 and SM-1815 Blocks ③ in the South Santos basin. A production sharing contract for the   gua Marinha (30%) exploration block ④, in the Campos basin was signed in May 2023. An exploration well is planned to be drilled on this block in 2024.

In addition, TotalEnergies holds an interest in an exploration license currently suspended, located in the Barreirinhas basin (50%).

As part of their strategic alliance, TotalEnergies and Petrobras renewed their agreement in 2023 to promote technical cooperation between the two companies in areas of common interest, notably for the development of new technologies, particularly in deep offshore. As part of this agreement, a pilot unit using a pioneer high-pressure subsea technology to separate oil from CO<sub>2</sub>-rich gas (HISEP<sup>®</sup>) and reinject the CO<sub>2</sub>-rich gas into the Mero 3 reservoir, was approved in December 2023.



## ARGENTINA

In **Argentina**, TotalEnergies operates the Ara and Cañadón Alfa Complex, on the CMA-1 concession in Tierra del Fuego ❶, onshore fields as well as the Hidra, Carina, Aries and Vega Pleyade offshore fields (37.5%). In September 2022, the Company approved the final investment decision for the Fenix offshore gas project (37.5%, operator) with a capacity of 10 Mm3/d of natural gas, which is expected to commence production at the end of 2024.

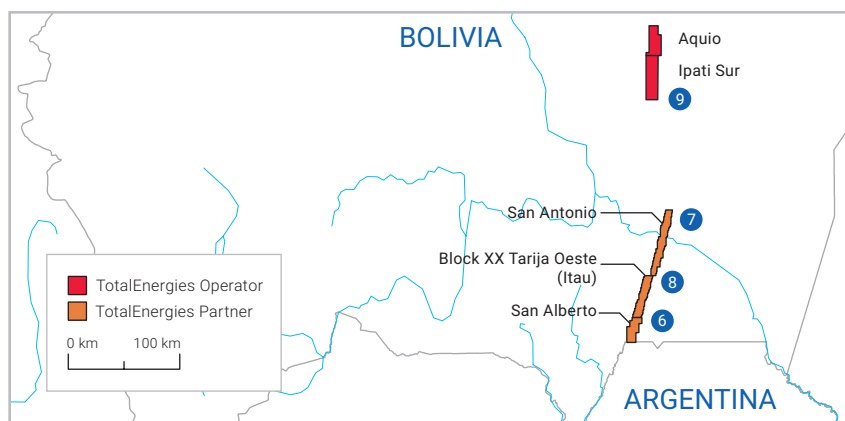
In the onshore Neuquén Basin ❷, TotalEnergies holds interests in seven licenses, of which six are operated. In addition to conventional projects, TotalEnergies operates four shale gas and shale oil projects in the basin, the first located in the Aguada Pichana Este Block in the gas window of the Vaca Muerta, the second and third located in the Rincón la Ceniza Block (45%) and la Escalonada (45%) in the gas and condensate window of the Vaca Muerta, and the fourth located in the Aguada San Roque Block (24.71%) in the oil window of the Vaca Muerta.

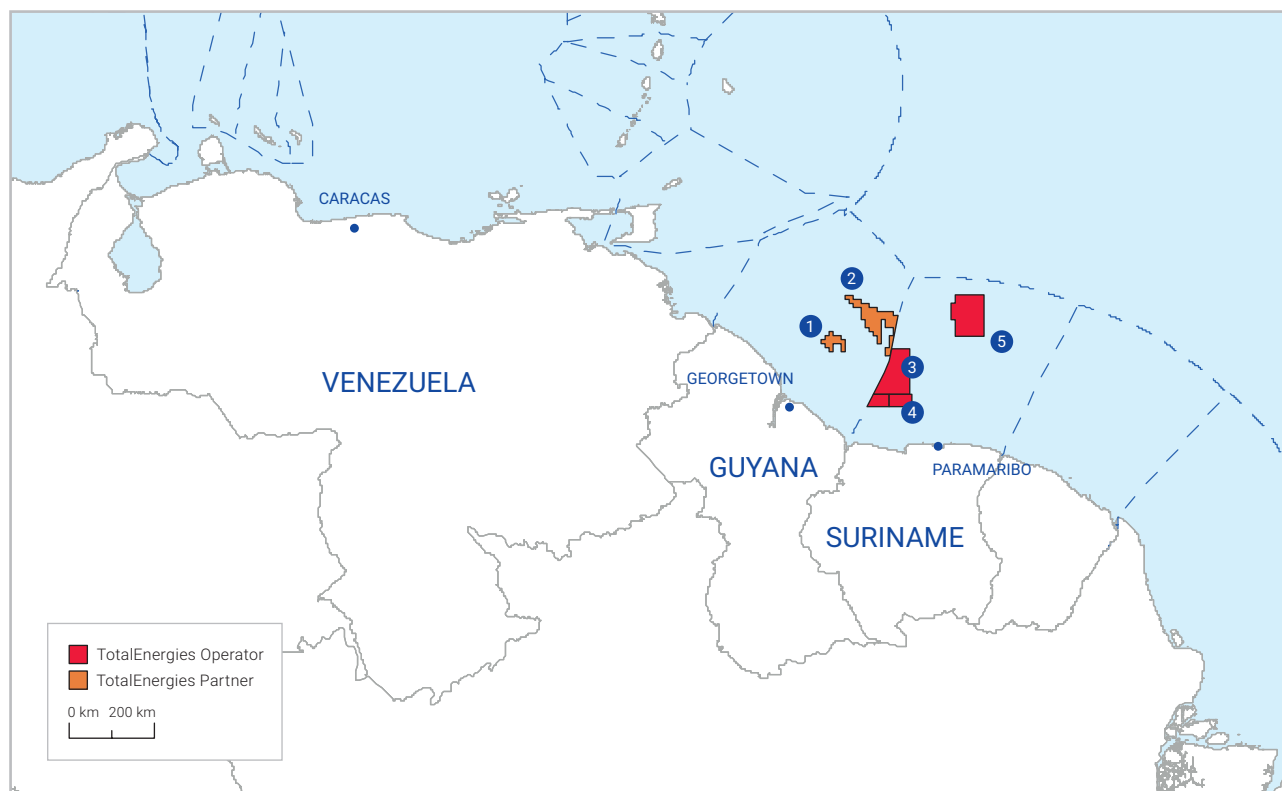
In 2023, TotalEnergies swapped with PanAmerican Energy and YPF its 25% stake in the non-operated Aguada Pichana Oeste and Aguada de Castro blocks for an additional 14% in its operated block Aguada Pichana Este (55%), in the Vaca Muerta. TotalEnergies also sold its interest in the Rincon de Aranda Block (45%) to Pampa Energia. TotalEnergies has initiated the process of withdrawing from the non-operated Veta Escondida Block (45%).

In exploration, TotalEnergies has operated three offshore licenses since 2019: CAN 111 ❸ and CAN 113 ❹ (50%), which are in the process of restitution, as well as MLO 123 ❺ (37.5%).

## BOLIVIA

In **Bolivia**, TotalEnergies has interests in five producing licenses: San Alberto ❻ (15%), San Antonio ❼ (15%), Block XX Tarija Oeste ❸ (Itau, 41%), Aquio and Ipati ❹ (50%, operator) which include the Incahuasi field.





### VENEZUELA

In **Venezuela**, TotalEnergies transferred in July 2021 its non-operated minority participation of 30.32% in Petrocedeno S.A. to Corporación Venezolana del Petróleo, S.A, a subsidiary of PdVSA. In July 2022, TotalEnergies sold its 69.50% stake in the Yucal Placer field to a subsidiary of Sucre Energy Group. Together with the operator, TotalEnergies returned the license for Plataforma Deltana Block 4 (49%) in August 2022. Since this return, TotalEnergies no longer holds assets in Venezuela (refer to point 3.2.1 of chapter 3). A process of dissolution of its subsidiaries registered in the country is being finalized.

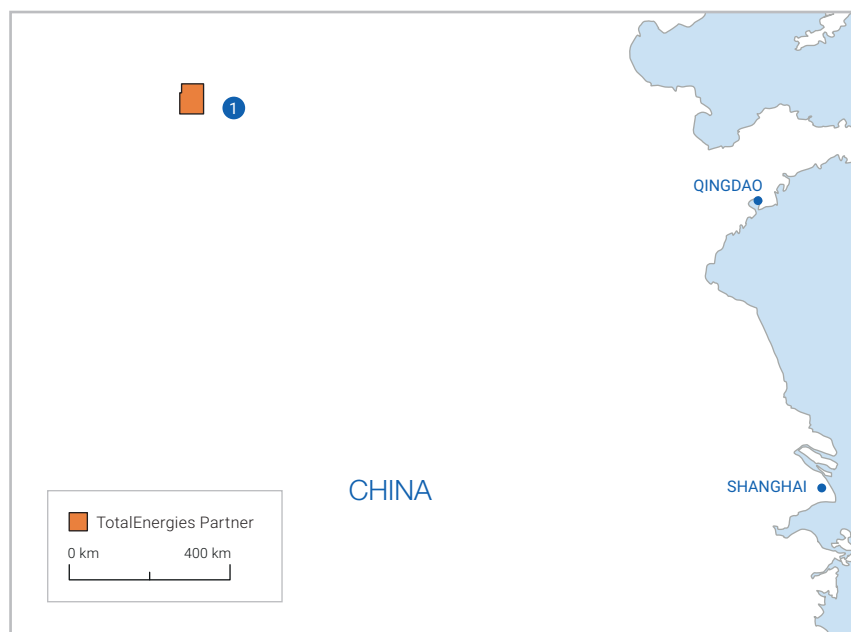
### GUYANA

In **Guyana**, TotalEnergies (60%) and QatarEnergy (40%) jointly hold 25% interests in the Kanuku and Orinduik ❶ Blocks. In May 2023, TotalEnergies and QatarEnergy exited the Kanuku Block on which an exploration well (Beebei) was drilled in 2022. TotalEnergies also holds a stake in the Canje Block ❷ (35%), the second three-year exploration period of which started in March 2022. On October 26, 2023, TotalEnergies was awarded the exploration rights of S4 Block (40% Operator).

### SURINAME

In **Suriname**, TotalEnergies, operator of Block 58 ❸ (50%), successfully completed the appraisal of two main oil discoveries, Sapakara South and Krabdagu, with the drilling and testing of three wells (Sapakara South 2 drilled in 2022, Krabdagu-2 and Krabdagu-3 drilled in 2023) confirming significant resources of oil and associated gas. The Front End Engineering Design (FEED) studies has begun with a view to a final investment decision expected at the end of 2024 and production start-up in 2028 via an FPSO with a capacity of 200 kb/d. In May and December 2023, TotalEnergies signed respectively explorations licenses for Blocks 6 and 8 ❹ (40%, operator), in shallow waters, located South of Block 58, and on Block 64 ❺ (40%, Operator) in deep water.

## → ASIA-PACIFIC

**CHINA**

In **China**, production comes from the South Sulige Block ① (49%), located in the Ordos basin in Inner Mongolia. Drilling of tight gas development wells continues. Production increased to 4 Gm<sup>3</sup>/y, following the approval in 2022 of a new development plan.

**KAZAKHSTAN**

In **Kazakhstan**, TotalEnergies' oil and gas production comes mainly from the Kashagan field, operated by the North Caspian Operating Company (NCOC) located in the North Caspian license ② (16.81%). The oil production capacity of the first phase of this field and the associated processing plant was increased from 400 kb/d to 430 kb/d, thanks in particular to the upgrade of the gas injection compressors completed in 2022.

On the Dunga field (60%, operator), phase 3 development continued in 2023. The subsidiary Total E&P Dunga GmbH was sold in November 2023.



## PAPUA NEW GUINEA

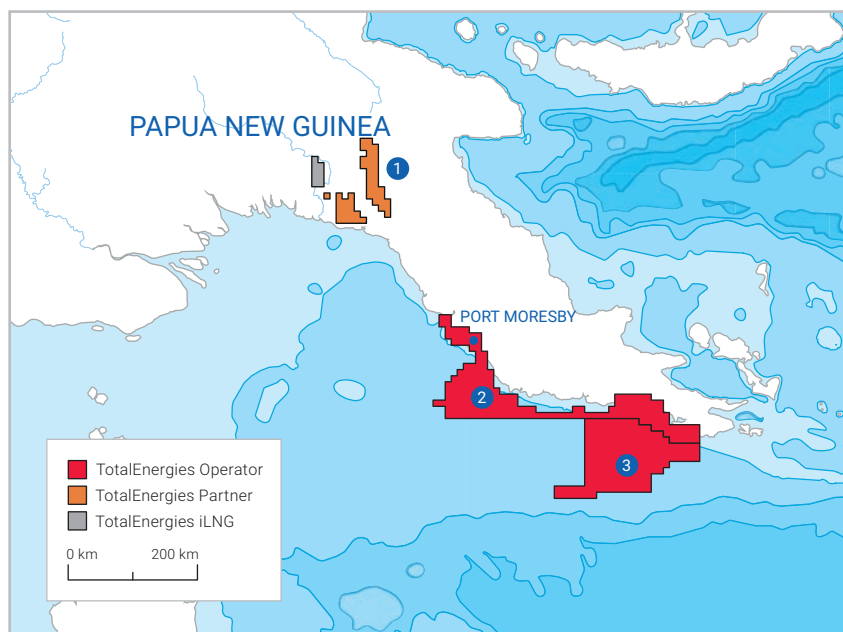
In **Papua New Guinea**, TotalEnergies holds interests in the PPL339 ① (35%), PPL589 ② (100%) and PPL576 ③ (100%) exploration licenses and in the PRL-15 Block (37,5%).

## THAILAND

In **Thailand**, the main Bongkot licenses expired in April 2022 and March 2023. The company still benefits from residual production from a block whose transfer to PTTEP is currently being approved by the competent authorities.

## MYANMAR

In **Myanmar**, the Company no longer has any activities, having definitively withdrawn on July 20, 2022.



## REST OF THE ASIA-PACIFIC ZONE

### MALAYSIA

In **Malaysia**, TotalEnergies holds interests in offshore exploration licenses, where the Tepat-2, an exploration well was drilled in the state of Sabah in 2022.

TotalEnergies has signed an agreement with OMV to acquire its 50% interest in Malaysian independent gas producer and operator SapuraOMV Upstream, in January 2024. The transaction is subject to regulatory approvals. SapuraOMV's main assets are its 40% operated interest in block SK408 and 30% operated interest in block SK310, both located offshore Sarawak in Malaysia.

### BRUNEI

In **Brunei**, production comes from the Maharaja Lela Jamalulalam offshore gas and condensate field located on Block B (37,5%, operator); where the gas is delivered to the Brunei LNG liquefaction plant.

### INDONESIA

In **Indonesia**, production comes from the Ruby gas field located on the Sebuk license (15%).

### TAJIKISTAN

In **Tajikistan**, TotalEnergies withdrew from the exploration license in which it held a 50% stake in May 2023.



## → EUROPE

## UNITED KINGDOM

In the **United Kingdom**, production comes from:

- the Alwyn North (100%) and Dunbar (100%) fields in the Northern North Sea ①, as well as from satellites fields linked to them;
- the Elgin/Franklin complex (46.17%) which includes the West Franklin (46.17%) and Glenelg (58.73%) fields in the Central Graben zone ②. TotalEnergies also operates the Culzean gas and condensate field (49.99%), where production capacity was increased by approximately 10% in March 2022. In addition, TotalEnergies announced in March 2020 an oil and gas discovery on the Isabella prospect (30%, operator), located close to existing operated infrastructures. An appraisal well on this structure was drilled in January 2023, the results of which are currently being analyzed;
- the West of the Shetlands ③, the Laggan, Tormore, Edradour and Glenlivet fields. In July 2022, TotalEnergies finalized the sale of 20% of its stake in these fields, thus reducing its stake to 40%;
- in the Quad 9 area ④, in the Eastern North Sea, the Gryphon (86.5%), Maclure (38.19%), South Gryphon (89.88%) and Tullich (100%) fields.

## NORWAY

In **Norway**, production comes from many fields:

- Ekofisk ⑤ (39.9%), Eldfisk (39.9%), Embla (39.9%), Tor (48.2%) and Flyndre (6.26%). In 2021, the redevelopment of the Tommeliten Alpha field (20.14%), a satellite of the Ekofisk field, was approved. The production of Tommeliten Alpha started in October 2023;
- Johann Sverdrup ⑥ (8.44%), where production of Phase 1 started in October 2019 and phase 2 came on stream in December 2022. Production facilities in this field are powered from shore resulting in very low GHG emissions, of only 0.67 kg of CO<sub>2</sub>e/boe;
- Oseberg (14.7%), whose facilities also treat, among other fields, the production from Tune (10%). Electrification of the Oseberg installations with power supply from shore was approved by the authorities in 2022;
- Islay (5.51%) located in the boundary with the UK sector in the northern North Sea and operated by TotalEnergies in the UK;

- Troll ⑦ (3.69%), one of the largest oil producing fields on the Norwegian Continental Shelf and with very large quantities of gas, and Kvitebjørn (5%);
- Åsgard (7.81%), Tyrihans (23.15%) and Kristin (6%) ⑧ located in the Haltenbanken region;
- Skirne (40%) and Atla (40%) fields, operated by TotalEnergies. On these mature fields, abandonment of wells and decommissioning of flowlines to the Heimdal (16.76%) platform operated by Equinor, are expected to be completed by the end of 2028.

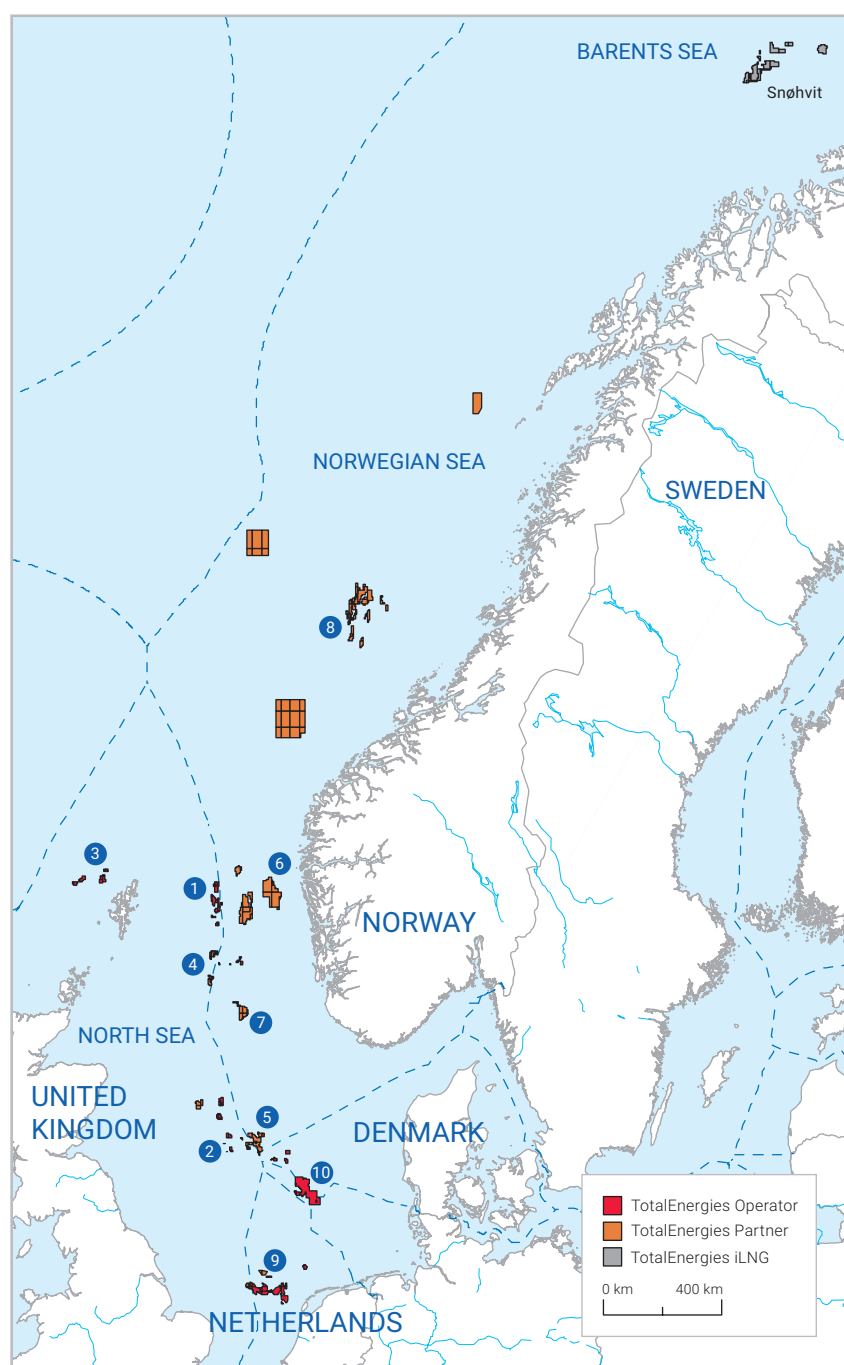
As part of the continuous optimization of its portfolio, TotalEnergies sold its interests in Gimle (4.9%), Sindre (4.95%) and Nokken (5%) in May 2021.

## NETHERLANDS

In the **Netherlands**, production originates from the assets held in 18 offshore production licenses ⑨, of which 14 are operated.

## DENMARK

In **Denmark**, TotalEnergies operates the Danish Underground Consortium ⑩ (DUC, 43.2%). Production comes from DUC's four main fields: Dan, Gorm, Halfdan, and Tyra. Dan, Gorm and Halfdan production is mainly oil, while Tyra's production is mainly gas and condensates. Production of the Tyra field stopped in September 2019 as part of a redevelopment project and restarted in March 2024. An exploration well is planned to be drilled in 2024 from the Harald satellite platform.





### azerbaijan

In **Azerbaijan**, the Absheron gas and condensate field ① (50%), located in the Caspian Sea, and operated by JOCAP (Joint Operating Company of Absheron Petroleum, a company jointly held by TotalEnergies and SOCAR, the state oil company), started production in July 2023 and is currently producing 1.5 Gm³/y. The second phase of development is expected to make it possible to increase the field's production to 5.5 Gm³/y. TotalEnergies and SOCAR finalized, in February 2024, the transfer of a 15% stake each to ADNOC (Abu Dhabi National Oil Company), thereby reducing TotalEnergies' stake in Absheron to 35%.



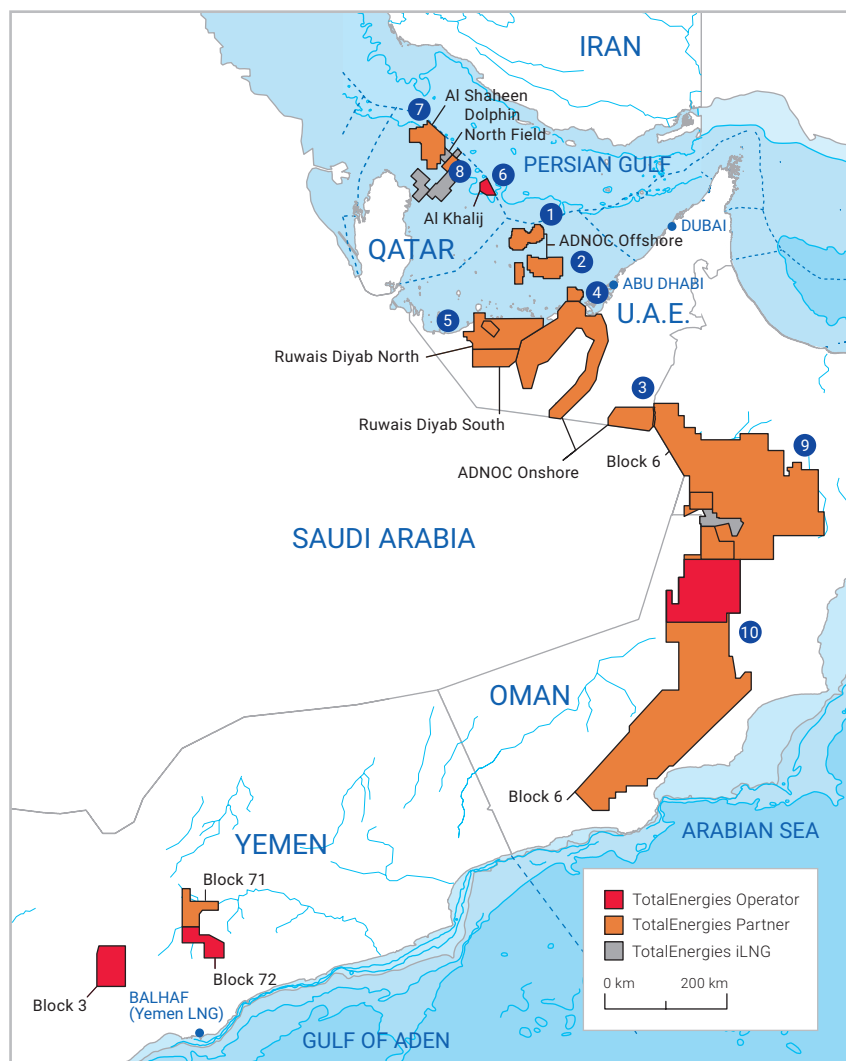
### italy

In **Italy**, TotalEnergies operates the Tempa Rossa field ② (50%), located in the Gorgoglione concession in Basilicata region, main asset of TotalEnergies EP Italia. The new facilities being built in Taranto with ENI and partners, are expected to allow Tempa Rossa to increase crude oil export and production by the end of 2024.

### BULGARIA

In **Bulgaria**, TotalEnergies withdrew in November 2023 from the deep offshore exploration Block Han Asparuh in which it held a 57.14% stake.

## → MIDDLE EAST AND NORTH AFRICA



### QATAR

In **Qatar**, production comes mainly from TotalEnergies' stakes in the offshore fields of Al Khalij ⑥ (40%, operator), Al Shaheen ⑦ (30%) and Dolphin ⑧ (24.5%). Developments continued in 2023 on the Al Shaheen field, operated by North Oil Company, which is owned by TotalEnergies (30%) and QatarEnergy (70%), with a duration of 25 years starting from 2017.

### OMAN

In **Oman**, TotalEnergies' oil production comes from Block 6 ⑨ (4%). On the onshore Block 12 ⑩ (50%, operator, following the transfer of 30% of the Company's stake to Petronas in October 2023), the drilling of two exploration wells is planned for 2024. On the onshore Block 11 (22.5%), following a 3D seismic survey in 2022, a positive appraisal well (Jaleel 3) was drilled in 2023 and an accelerated appraisal campaign is planned for 2024.

### YEMEN

In **Yemen**, after the sale in November 2022 of its stake in onshore Block 5 (Marib Basin, Jannah license, 15%), TotalEnergies relinquished its stake in Block 70 to the Government in May 2023. TotalEnergies retains interests in three onshore exploration licenses, which have been in *force majeure* since 2015.

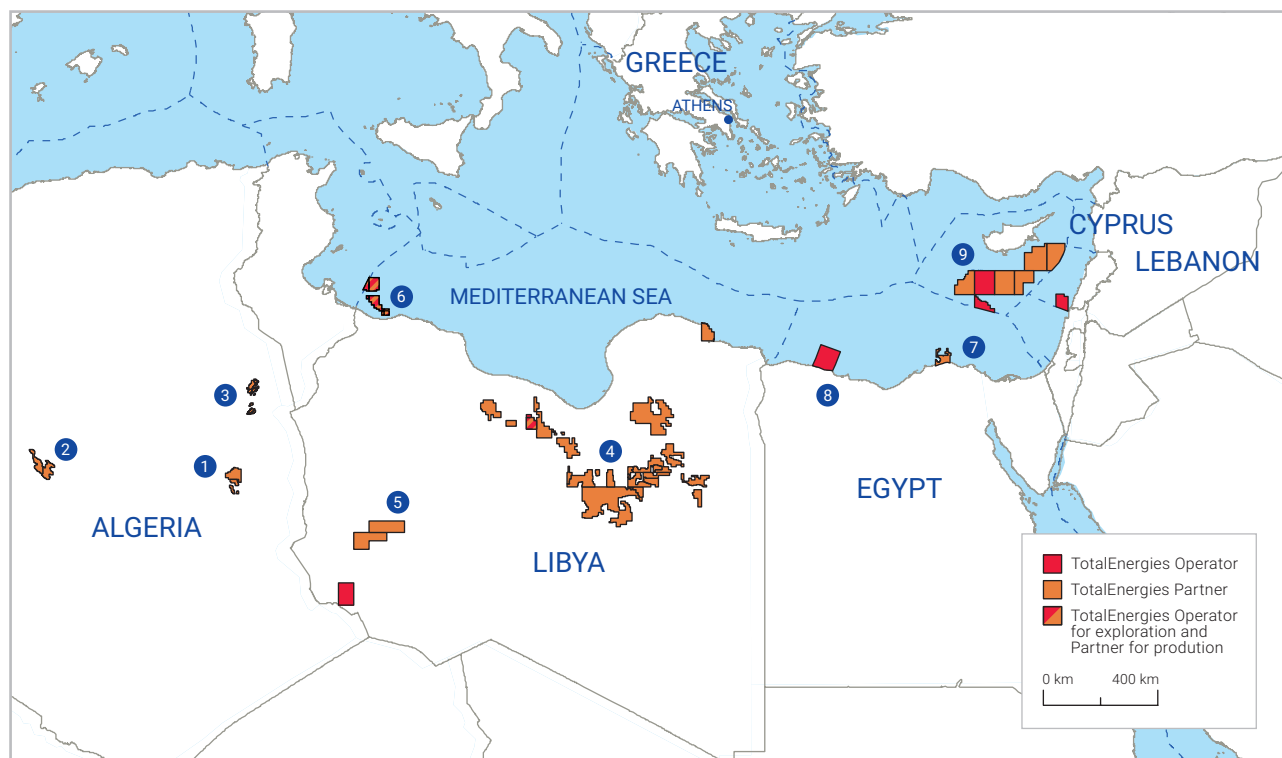
### UNITED ARAB EMIRATES

In the **United Arab Emirates**, TotalEnergies' production, mainly comes from the following stakes:

- 20% interest in the Umm Shaif/Nasr offshore concession ① and a 5% interest in the Lower Zakum offshore concession ②, both operated by ADNOC (Abu Dhabi National Oil Company). These two concessions have been awarded for 40 years, following the expiry of previous concession of Abu Dhabi Marine Areas Ltd (ADMA);
- 10% interest in the ADNOC Onshore concession ③, which includes Abu Dhabi's 15 major onshore fields; the license was extended for 40 years in 2015. Development activities on the Bab and Bu Hasa fields continued in 2022;
- 15% interest in ADNOC Gas Processing, a company that produces liquefied natural gas (LNG) and condensates from the associated gas produced by ADNOC Onshore;
- 20% interest in the Satah Al Razboot (SARB), Umm Lulu ④ offshore concession since March 2023. This concession covers two major offshore fields and is operated by ADNOC Offshore with a license period ending in 2058;
- 10% interest in the Ruwais Diyah ⑤ Unconventional Gas Concession, operated by ADNOC and awarded until 2063. TotalEnergies (40%) entered into this venture in 2018 through an agreement signed with ADNOC and became the operator in 2019. An exploration and appraisal campaign was conducted in 2020-2021. In 2023, TotalEnergies reduced its holding to 10% and transferred the role of operator to ADNOC.

In addition, TotalEnergies holds a stake of 24.5% interest in Dolphin Energy Ltd., which sells gas produced on Dolphin Block in Qatar to the United Arab Emirates and Oman.

The license for the Abu Al Bukoosh offshore field, which TotalEnergies has operated since 1972, expired in March 2021 and the facilities are now operated by ADNOC Offshore.



## ALGERIA

In **Algeria**, production comes from TotalEnergies' interests in the TFT II ① and Timimoun gas fields ② and the oil fields in the Berkine basin located in Blocks 404a and 208 ③. Under the terms of the comprehensive partnership agreement signed with the authorities in 2017, two new concession agreements and corresponding gas sales agreements came into effect for TFT II (26.4%) in 2018 and for TFT SUD (49%) in 2019. In June 2021, the acquisition of Repsol's shares was finalized and TotalEnergies' interest in TFT II was consequently increased to 49%. In July 2023, TotalEnergies and Sonatrach agreed to convert the production contracts of TFT II and TFT SUD within the framework of the new Algerian oil law promulgated in December 2019, allowing the continuation of the investment program aimed at increasing the combined production of the two fields to over 100 kboe/d by 2026. The Council of Ministers validated the conversion of those contracts on October 15<sup>th</sup>, 2023.

On Timimoun (37.75%), production continues under the gas concession and marketing contracts which entered into force in 2018.

In the Berkine basin, TotalEnergies owns a 12.25% interest in Blocks 404a and 208, with the producing onshore oil fields of the Ourhoud and El Merk onshore. TotalEnergies, its partners and Sonatrach, signed a new 25-year oil contract in July 2022.

## LIBYA

In **Libya**, production comes from the Waha ④ (20.41%) and El Sharara onshore fields located in Blocks 129-130 (15%) and 130-131 ⑤ (12%) and the Al Jurf offshore field located in Blocks 15, 16 and 32 ⑥ (37.5%). The Mabruk field (37.5%), located in onshore Blocks 70 and 87, has been shut down since the end of 2014. Following the installation of an early production facility, its production could restart early 2025.

In November 2021, TotalEnergies signed various agreements for the sustainable development of the country's natural resources, in particular the construction and operation of a 500 MW photovoltaic power plant, and an increase in its interest in the Waha concession from 16.33% to 20.41%. This increase in interests was finalized in November 2022.

The production from Libyan assets has been frequently disrupted since 2022, notably due to security and social issues.

## EGYPT

In **Egypt**, TotalEnergies owns a 25% interest in the North El-Hammad offshore block ⑦, on which part of the Bashrush offshore field is located, with the other part located on the Baltim Block. A unitization agreement signed in 2022 gives the Company rights to natural gas and condensate production since June 2022. In addition, TotalEnergies is operator of the offshore exploration Block 3 ⑧ (35%).

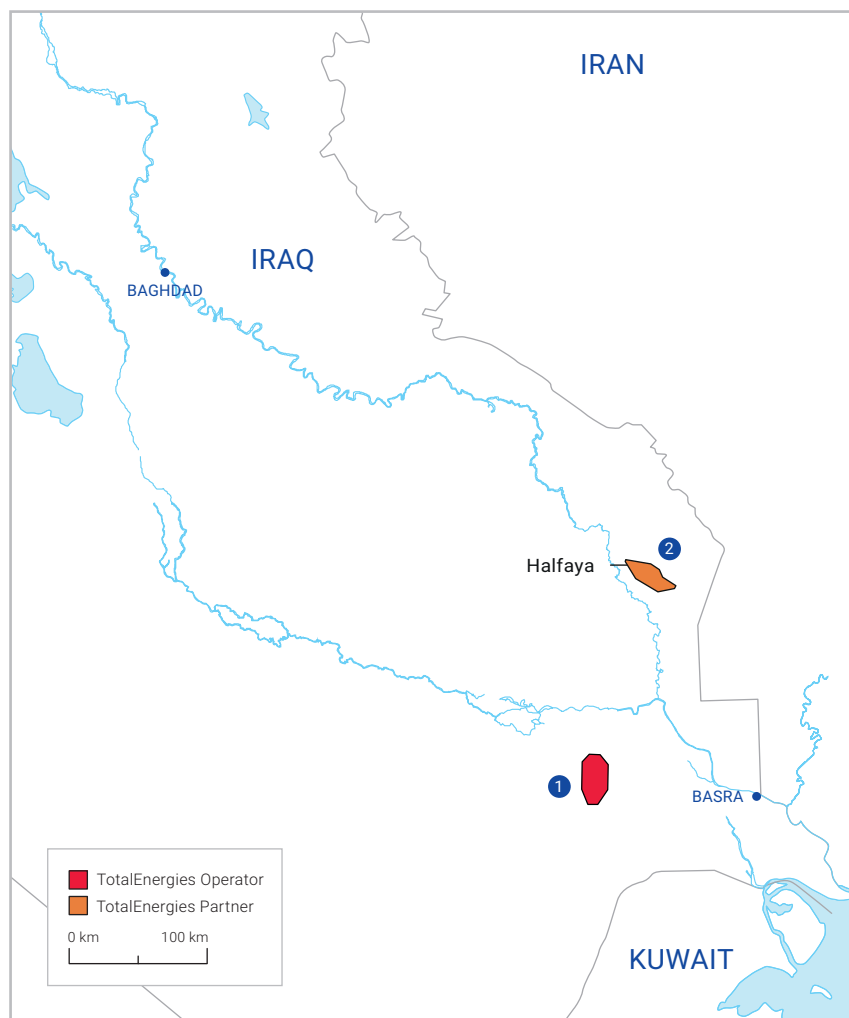
The sale of the Company's 18% interest in the Sarsang field, located in the Kurdistan region of Iraq, was finalized in September 2022.

## LEBANON

In **Lebanon**, TotalEnergies has operated since February 2018 explorations of the offshore Blocks 9 (35%) on which an exploration well was drilled in 2023 with negative results. TotalEnergies was also the operator of Block 4, on which a well was drilled in 2020 with negative results and was returned to the Government in October 2023.

## CYPRUS

In **Cyprus** ⑨, TotalEnergies is present in offshore exploration Blocks 7 (50%, operator), 11 (50%, operator), 2 (20%), 3 (30%), 6 (50%), 8 (40%) and 9 (20%). Two exploration wells, Cronos-1 and Zeus-1, drilled on Block 6 in 2022, resulted in two natural gas discoveries. Drilling of the Cronos-2 appraisal well on Block 6 started in November 2023, the drilling and production test on this well were successfully completed in February 2024.



## IRAQ

In **Iraq**, TotalEnergies' production comes from its 45% interest in the Ratawi field ① and its 22.5% stake in the risk service contract for the Halfaya field ②, located in the province of Missan.

On the Halfaya field, the plant that will treat associated gas and enable the recovery of LPGs and condensates, approved in 2019, is scheduled to start operations in 2024. In the first half of 2023, production continued to be affected by OPEC+ production quotas.

In July 2023, TotalEnergies confirmed with the Iraqi authorities, the terms of the agreements announced in September 2021 for the GGIP project (Gas Growth Integrated Project) of sustainable development of natural resources in the Basra region: This major multi-energy project combines the redevelopment of the Ratawi field, the recovery of gas now flared on three oil fields, including Ratawi, in order to power power plants, a 1 GW solar farm and the construction of a seawater treatment plant for injection and to maintain the pressure of the region's oil fields. These agreements became effective in August 2023 and TotalEnergies has been operating the Ratawi field since November 2023.

On this field, the AGUP Phase 1 project (Associated Gas Upgrade Project), sanctioned in September 2023, will restore the integrity and operability of the existing facilities to secure current production (around 60 kb/d) and then increase it to 120 kb/d. In a second phase, the AGUP Phase 2 project will build new processing units to increase oil production to 210 kb/d and gas production to 160 Mcf/d. The gas produced on Ratawi as well as that currently flared on two other fields will be sent to the gas treatment unit.



## Management of GHG emissions at E&P

TotalEnergies aims to achieve carbon neutrality (net zero emissions) by 2050, together with society, and EP contributes to this ambition by working to avoid and reduce emissions on its facilities and developing natural carbon sinks.

The goals of EP in this area, in line with those of the Company, are based on three key elements:

- avoid GHG emission by prioritizing the production of resources with the lowest impact in terms of carbon footprint and by designing low carbon infrastructures and operating procedures;

### REDUCTION OF THE CARBON FOOTPRINT

At TotalEnergies, the Carbon Footprint Reduction (CFR) entity manages the reduction of GHG emissions from oil & gas assets, both operated and non-operated, and consolidates the efforts made by all EP's subsidiaries in this area to improve energy efficiency, eliminate routine flaring and move towards the elimination of methane emissions on its operated installations by 2030, reduce fuel gas consumption, capture and store emissions on its existing sites.

On operated assets, the CFR entity assists the subsidiaries in implementing projects aimed to:

- reduce GHG emissions (Scope 1+2) from facilities and contribute to the Company's target of reducing GHG emissions 100% operated to 38 Mt CO<sub>2</sub>e by 2025 and 25-30 Mt CO<sub>2</sub>e by 2030;

- reduce GHG emissions by developing and implementing a systematic approach in EP to identify and implement the best available technologies for reducing GHG emissions (Scope 1+2) and, if necessary, storing captured CO<sub>2</sub> underground;
- develop natural carbon sinks (nature-based solutions).

- reduce routine flaring to less than 0.1 Mm<sup>3</sup>/d by 2025, in order to eliminate it by 2030;
- reduce methane emissions by 50% between 2020 and 2025, and by 80% between 2020 and 2030 and maintain the intensity of methane emissions below 0.1% of commercial gas produced on oil and gas facilities.

At the same time, as part of the Company's overall program to improve the energy efficiency of its facilities (budget of \$1 billion for 2023-2024), EP has identified more than 345 initiatives to be carried out across the entire operated and non-operated scope for a total budget of \$400 million.

### CO<sub>2</sub> CAPTURE, STORAGE AND UTILIZATION

TotalEnergies believes that carbon capture and storage (CCS) is one of the necessary levers for combating climate change and is developing new businesses that will enable its industrial, residential and power generating customers to capture, store and re-use/recycle their CO<sub>2</sub> emissions, by studying new industrial solutions tested on its own facilities. Thus, the Company aims to develop CO<sub>2</sub> storage capacity of 10 Mt/y from 2030, for its own facilities and those of its customers. TotalEnergies is developing new businesses and industrial models associated with this value chain.



In Norway, in May 2020, TotalEnergies and its partners launched the development of the Northern Lights project <sup>1</sup> (33%), the world's first commercial CO<sub>2</sub> transportation and storage project, with a capacity of 1.5 Mt CO<sub>2</sub>/y for Phase 1. This project, supported by the Norwegian government, is expected to store emissions from two industrial sites located in the Oslo region (a Norcem Cement plant for 0.4 Mt CO<sub>2</sub>/y and a Celsio waste incinerator for 0.4 Mt CO<sub>2</sub>/y), as well as a Yara ammonia and fertilizer plant located in the Netherlands

(0.7 Mt CO<sub>2</sub>/y). Studies are under way for a capacity expansion of up to 5 Mt CO<sub>2</sub>/y. The Danish company Orsted has already expressed its interest in storing 0.4 Mt/y of biogenic CO<sub>2</sub> from two of its power plants powered by wood chips, in Phase 2 capacities. In 2023, TotalEnergies acquired a 40% interest in the ExL004 CO<sub>2</sub> storage exploration license located 120 kilometers off the coast of Bergen, in 200 meters water depth (the "Luna" project) <sup>2</sup>.

In the Netherlands, TotalEnergies participates in the Aramis project <sup>3</sup> (60%) which aims to store CO<sub>2</sub> permanently in depleted offshore gas fields, at a depth of approximately four kilometers below the seabed, thanks to new CO<sub>2</sub> transportation infrastructure connecting Rotterdam to these offshore fields. The Front End Engineering & Design studies (FEED) for phase 1 of the project started at the end of 2023 with an objective of starting the storage of 2.5 Mt CO<sub>2</sub>/y in TotalEnergies operated fields. This storage capacity could be further expanded up to 5.5 Mt CO<sub>2</sub>/y in later phases.

In Denmark, TotalEnergies holds two storage exploration licenses (80%). These two blocks cover an area including the Harald gas fields, currently operated by TotalEnergies and for which the Company is already assessing the CO<sub>2</sub> storage potential as part of the Bifrost project <sup>4</sup>, as well as a saline aquifer that could increase stored volumes. A 3D seismic survey was carried out in the summer of 2023. Subject to evaluation and assessment work, this project could ultimately be able to provide the storage for more than 5 Mt CO<sub>2</sub>/y.

In the United Kingdom, the Company is part of the Northern Endurance Partnership (10%) <sup>5</sup>. This partnership was created to develop a project which includes collecting CO<sub>2</sub> in the industrial regions of Teesside and Humberside, transporting it offshore and storing it in a saline aquifer at respectively 85 km and 145 km from shore. The final investment decision for Phase 1 of the project (4 Mt CO<sub>2</sub>/y) is scheduled for 2024 and the project aims to reach 10 Mt CO<sub>2</sub>/y. In 2023 a third exploration block was obtained and assessment work launched, in addition to the two blocks obtained in 2022. These blocks will help to prepare the expansion phases for the project.

In Australia, TotalEnergies has a 26% interest in a joint venture that was awarded a CO<sub>2</sub> storage assessment license off the northwest coast in August 2022. This project could complement existing solutions to reduce greenhouse gas emissions from Ichthys LNG.

In Malaysia, TotalEnergies partnered with Petronas and Mitsui in 2023 to create a CO<sub>2</sub> storage hub in Southeast Asia. This partnership aims to develop a commercial CO<sub>2</sub> storage service to decarbonize industrial customers in Asia.





# 3

## Integrated LNG

Encompasses upstream LNG and natural gas production, midstream, and trading as well as biogas and hydrogen activities. TotalEnergies aims to take full advantage of its position as the world's third-largest player in LNG<sup>(1)</sup> (the second-largest private player) and intends to continue to develop integrated positions all along the value chain. Helping to achieve TotalEnergies' ambition to reach carbon neutrality (net zero emissions) by 2050 together with society.

**\$7.3 bn**

Cash flow from operations  
excluding working  
capital (CFFO) in 2023

**15 Mt**

Volumes from equity  
production of LNG  
sold in 2023

**44 Mt**

Volumes of LNG  
sold in 2023

(1) Second largest private player, third player including QatarEnergy; Company data.





## Driving profits and transition

### LEVERAGING OUR UNIQUE AND GLOBAL INTEGRATED LNG POSITION

1<sup>st</sup> US LNG exporter  
and 1<sup>st</sup> Europe regas position

### STRONGEST SHORT-TERM DECARBONIZATION LEVER

- LNG phasing out coal for power generation
- Tending towards zero methane emissions in 2030

Equity production

Trading & shipping

Regasification  
& supply of gas

Development  
of new markets

## FINANCIAL HIGHLIGHTS

(in million dollars)

	2023	2022
Adjusted net operating income <sup>(1)</sup>	6,200	11,169
Organic investments <sup>(2)</sup>	2,063	519
Net acquisitions <sup>(3)</sup>	1,096	(47)
Net investments <sup>(4)</sup>	3,159	472
Operating cash flow before working capital changes <sup>(5)</sup>	7,293	9,784
Cash flow from operations <sup>(6)</sup>	8,442	9,604

(1) Adjusted results are defined as income using replacement cost, adjusted for special items, excluding the impact of changes in fair value.

(2) Organic investments = net investments excluding acquisitions, asset sales and other operations with non-controlling interests.

(3) Net acquisitions = acquisitions - assets sales - other transactions with non-controlling interests.

(4) Net investments = organic investments + net acquisitions.

(5) Excluding financial charges, except those related to lease contracts, excluding the impact of contracts recognized at fair value for the sector.

(6) Excluding financial charges, except those related to leases.

## HYDROCARBON PRODUCTION AND LNG SALES

Hydrocarbon production	2023	2022	2021	2020	2019
<b>iLNG (kboe/d)</b>	<b>449</b>	<b>469</b>	<b>529</b>	<b>530</b>	<b>560</b>
Liquids (kb/d) <sup>(1)</sup>	58	53	63	69	71
Gas (Mcf/d)	2,128	2,267	2,541	2,519	2,656
<b>iLNG excluding Novatek (kboe/d)</b>	<b>449</b>	<b>413</b>	<b>483</b>		

LNG sales	2023	2022	2021	2020	2019
<b>Overall LNG sales (Mt)</b>	<b>44.3</b>	<b>48.1</b>	<b>42.0</b>	<b>38.3</b>	<b>34.3</b>
Including sales from equity production <sup>(2)</sup>	15.2	17.0	17.4	17.6	16.3
Including sales by TotalEnergies from equity production and third party purchases	40.1	42.8	35.1	31.1	27.9

(1) Including condensate and NGLs, associated to the gas production.

(2) The Company's equity production may be sold by TotalEnergies or by the joint-ventures.



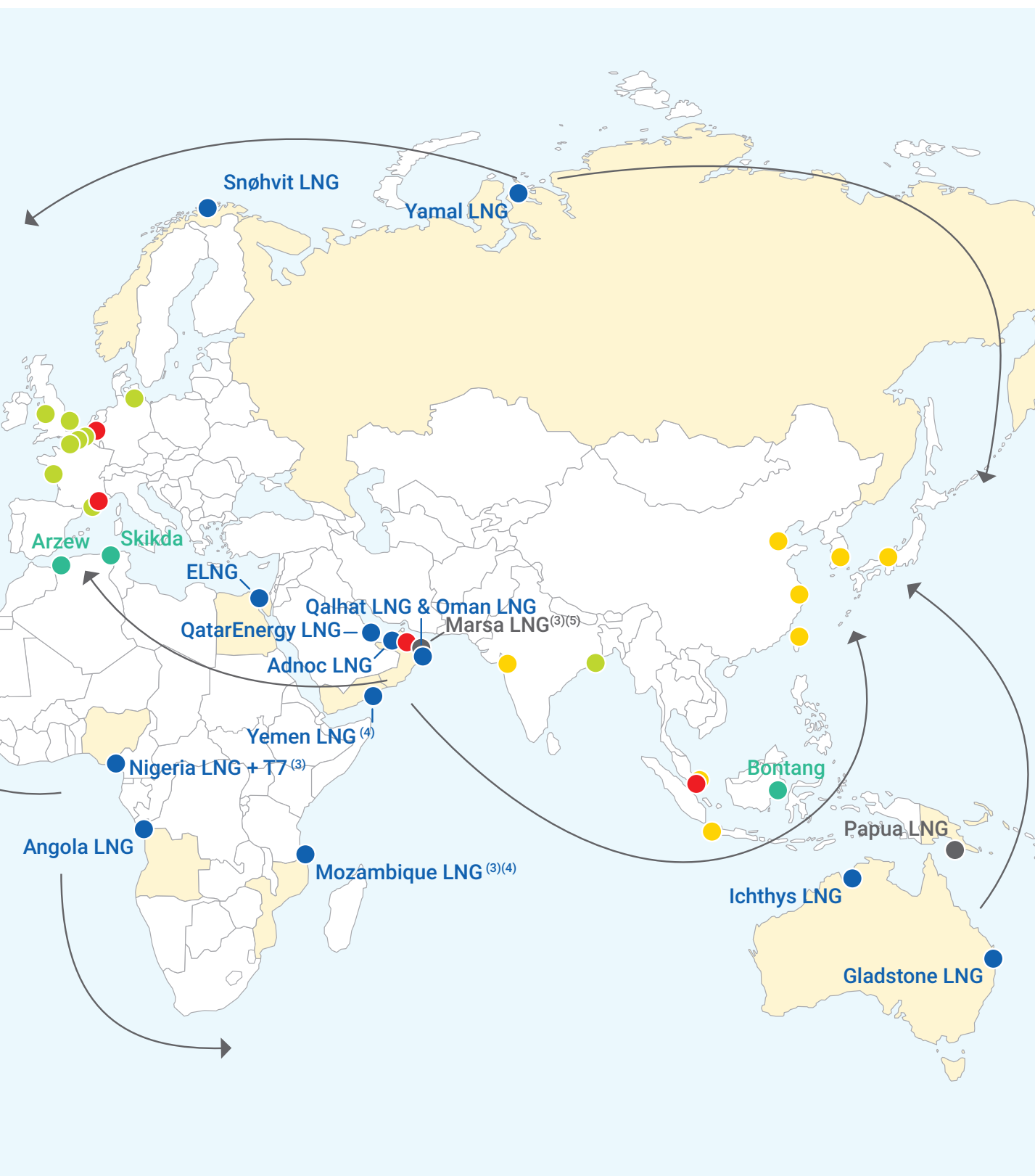
# Liquefied natural gas (LNG)

As a pioneer in the LNG industry and thanks to its solid, diversified positions, TotalEnergies has become the world's third-largest player<sup>(1)</sup> in LNG (the second-largest private player), with a global portfolio of 44 Mt/y and a global market share<sup>(2)</sup> of about 11% in 2023. TotalEnergies plans to continue its development of an integrated value chain in LNG, which is a key component of its strategy.



(1) Second largest private player, third player including QatarEnergy; Company data.  
(2) Source: based on a global market size of 400 Mt in 2022 reported by IHS Markit.  
(3) In construction.  
(4) Force Majeure.  
(5) FID taken in April 2024.

TotalEnergies is strengthening its presence across that entire chain, from upstream activities, thanks mainly to its interests in liquefaction plants located in the major production areas, to midstream activities, such as transport, regasification, and trading culminating in distribution to end customers.



## Production and liquefaction of LNG by TotalEnergies

The LNG sold by TotalEnergies on worldwide markets comes in part from equity LNG production in natural gas fields and condensates or in liquefaction plants of which the subsidiaries are shareholders. It also comes from contracts concluded with third parties.

TotalEnergies' equity share of LNG production stood at 15.2 Mt in 2023 compared to 17.0 Mt in 2022 and 17.4 Mt in 2021. LNG production declined by 11% over the year. This decline was mainly due to Yamal LNG.

### LNG SALES FROM EQUITY PRODUCTION<sup>(1)</sup>

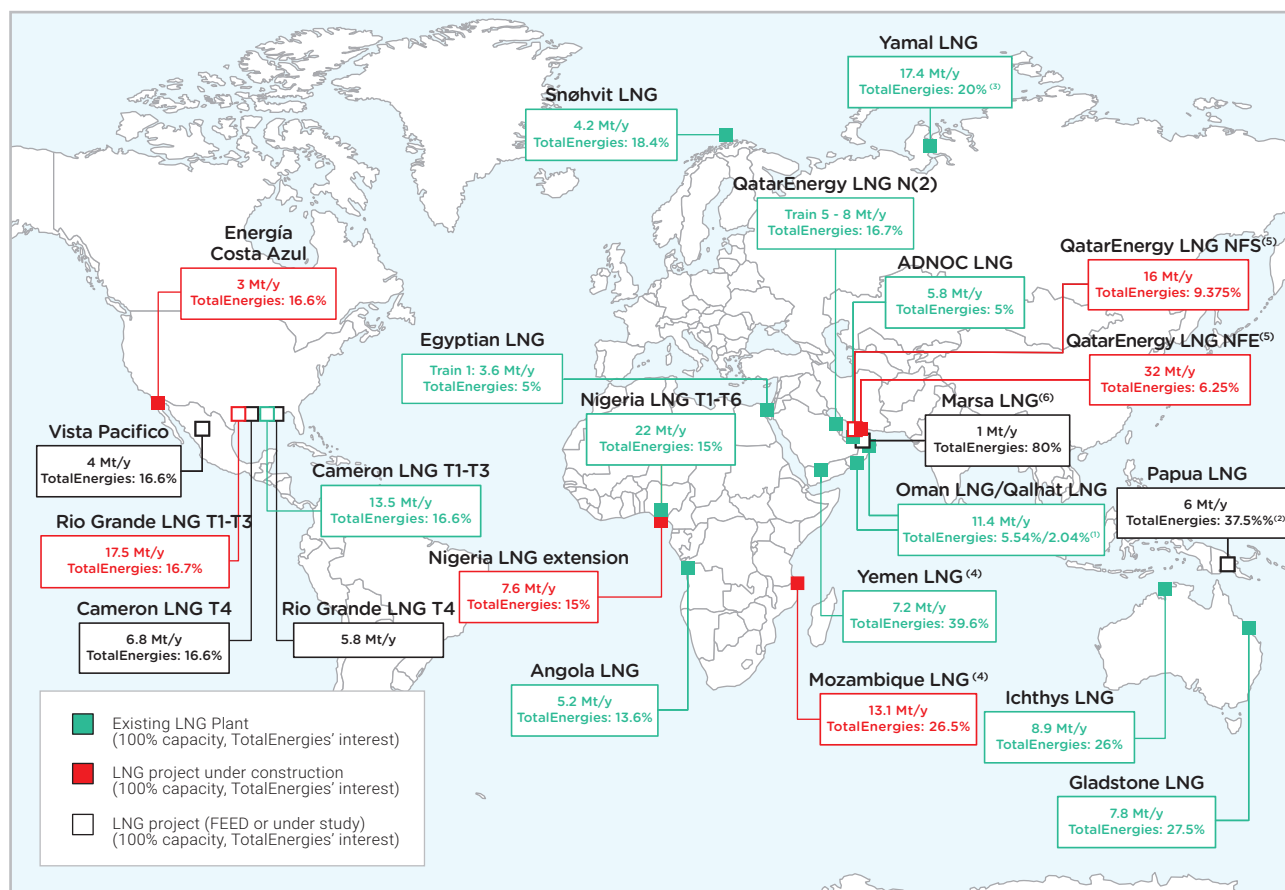
(Mt/y)	2023	2022	2021	2020
Nigeria (NLNG)	2.0	2.1	2.5	3.1
Gladstone LNG	1.6	1.7	1.8	1.7
Qatar (Qatargas 2 T5)	1.3	1.3	1.3	1.3
Qatar (Qatargas 1)		-	0.9	0.9
Norway (Snøhvit)	0.8	0.4	-	0.5
Angola LNG	0.5	0.5	0.5	0.6
Oman <sup>(2)</sup>	0.5	0.5	0.5	0.5
Abu Dhabi (ADNOC LNG)	0.3	0.3	0.3	0.3
Yamal LNG <sup>(3)</sup>	3.7	5.8	5.4	5.3
Egyptian LNG T1	0.0	0.1	0.1	-
Ichthys LNG	2.3	2.1	2.1	2.1
Cameron LNG	2.2	2.2	2.0	1.3
<b>TOTAL</b>	<b>15.2</b>	<b>17.0</b>	<b>17.4</b>	<b>17.6</b>

(1) Company share, excluding trading. The Company's equity production may be sold by TotalEnergies or by the joint-ventures.

(2) Includes both Oman LNG & Qalhat LNG.

(3) Including TotalEnergies' stake in Novatek.

## LNG LIQUEFACTION PLANTS AS OF DECEMBER 31, 2023



(1) TotalEnergies has an indirect stake via Oman LNG's stake in Qalhat LNG.

(2) The State of Papua New Guinea may exercise a back-in right of up to 22.5% interest (when the final investment decision is made), reducing TotalEnergies' interest to 29.1%.

(3) Direct stake in the project. Aggregated participation (including indirect interest in Novatek) is 29.73%.

(4) In force majeure.

(5) QatarEnergy LNG NFE and NFS are in the post-FID stage.

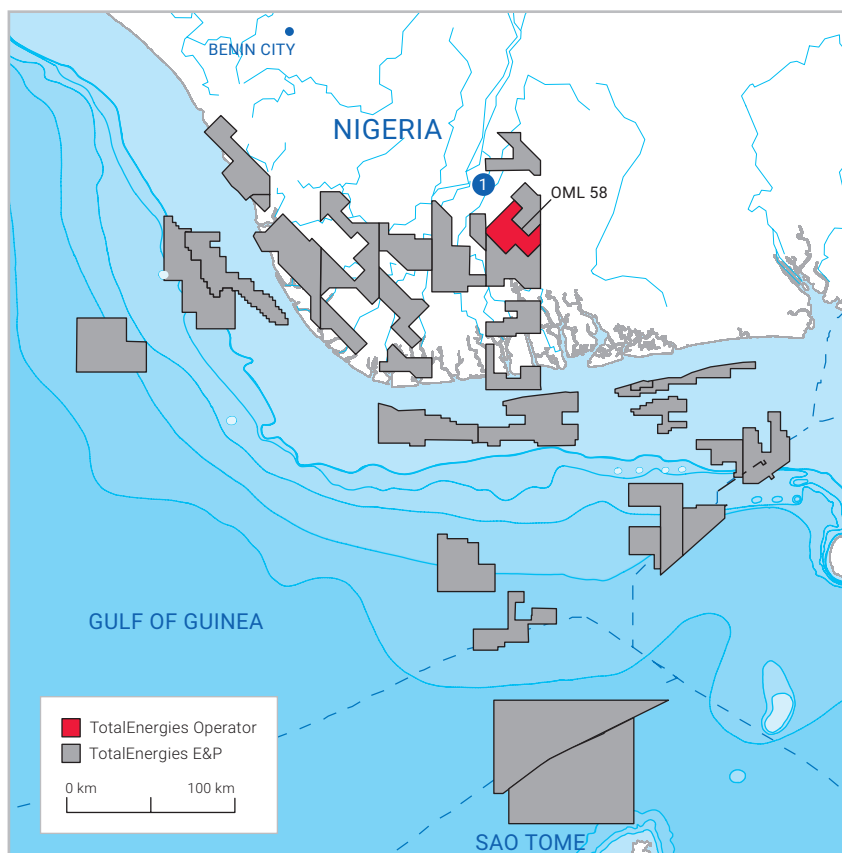
(6) FID taken in April 2024.

The information below describes the main development, production and liquefaction activities of the Integrated LNG segment, presented by geographical area. The capacities are expressed on a 100% basis, regardless of TotalEnergies' interest in the asset.

## → AFRICA (EXCLUDING NORTH AFRICA)

### NIGERIA

In **Nigeria**, TotalEnergies holds a 15% interest in Nigeria LNG (NLNG), whose main asset is a liquefaction plant with a total capacity of 22 Mt/y. The project to install an additional 7.6 Mt/y of capacity is in process. TotalEnergies is also present in the onshore fields of the OML 58 block (40%, operator) ❶ in the context of its joint venture with Nigerian National Petroleum Corporation (NNPC), which has been supplying gas to NLNG for about twenty years. The OML 58 onshore fields also supply gas to the Nigerian domestic market.



### ANGOLA

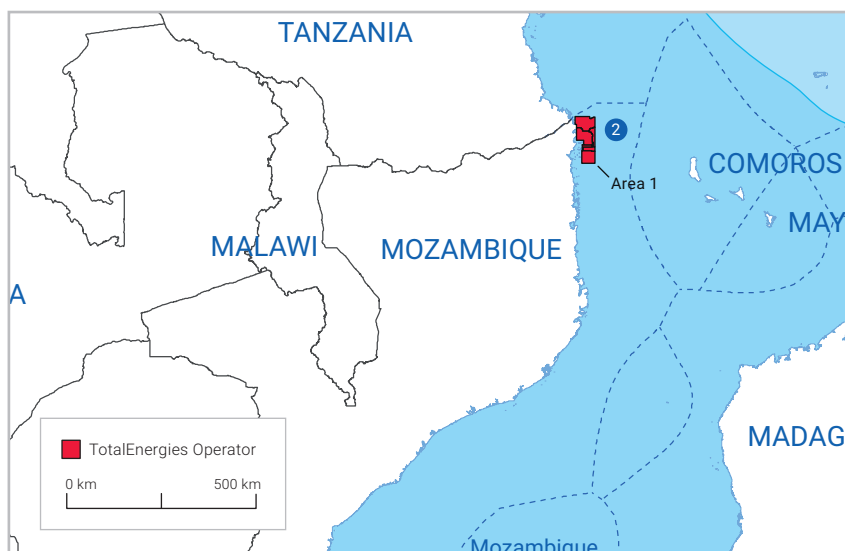
In **Angola**, TotalEnergies holds a 13.6% interest in Angola LNG (ALNG), which owns a gas liquefaction plant of 5.2 Mt/y capacity, located near Soyo, that is supplied by associated gas to production from Blocks 0, 14, 15, 17, 18, 31 and 32. In July 2022, TotalEnergies, partner of the New Gas Consortium (NGC, 11.8%), announced the final investment decision for the Quiluma and Maboqueiro gas field development project. This project is the first non-associated natural gas project developed in Angola. The gas produced from the two offshore fields Quiluma and Maboqueiro will supply the Angola LNG plant, thereby increasing Angola's LNG production as well as the availability of domestic gas for the country's industrial development. Production is scheduled to start in mid-2026.

### MOZAMBIQUE

In **Mozambique**, TotalEnergies EP Mozambique Area 1 (TEPMA1) holds a 26.5% interest in the Mozambique LNG project (acquisition in September 2019 from Occidental Petroleum Corporation), for which the final investment decision was taken in June 2019. The project includes the construction of two onshore liquefaction trains with a total capacity of 13.1 Mt/y to liquefy the gas produced by the Golfinho and Atum fields in Offshore Area 1 ❷.

In light of the developments of the security situation in the north of the Cabo Delgado province in Mozambique, on April 26, 2021, TotalEnergies confirmed the withdrawal of all Mozambique LNG project personnel from the Afungi site. This situation led Mozambique LNG project, to declare *force majeure*.

In December 2022, on behalf of Mozambique LNG, the Company entrusted Mr. Jean-Christophe Ruffin<sup>(1)</sup>, to assess the humanitarian situation in the Cabo Delgado province, in northern Mozambique, where the Mozambique LNG project is located, and the socio-economic development programs undertaken by Mozambique



LNG. In May 2023, TotalEnergies made public Mr. Jean-Christophe Ruffin's report, as well as the actions plan adopted by the Mozambique LNG partners based on the report's recommendations.

The sale of nearly 90% of Mozambique LNG future production has been secured

through long-term contracts for delivery to customers in Asia and Europe. In addition, part of the gas from the Golfinho and the Atum fields is intended for the domestic market in order to contribute to the country's economic development.

(1) Mr. Jean-Christophe Ruffin is one of the co-founders of Médecins sans frontières and honorary President of the NGO Action Against Hunger.



## → AMERICAS

### UNITED STATES

In the **United States**, TotalEnergies is active in liquefaction through its 16.60% stake in the Cameron LNG plant in Louisiana. The production of the three phase 1 trains with a capacity of 4.5 Mt/y each, began in 2019 (train 1) and 2020 (trains 2 and 3). The study to expand the plant beyond its initial capacity of 13.5 Mt/y is ongoing. In May 2022 TotalEnergies has signed an agreement with Semptra Infrastructure, Mitsui & Co., Ltd. and Mitsubishi Corporation for the development of the Hackberry Carbon Sequestration (HCS), a project for the capture, transportation and storage of 2 MtCO<sub>2</sub>/y from Cameron LNG, in order to significantly reduce GHG emissions.

In June 2023, TotalEnergies acquired from the U.S. company NextDecade<sup>(1)</sup> a 16.7% stake in the first phase of the Rio Grande LNG (RGLNG) project, a natural gas liquefaction plant, in South Texas. This first phase composed of three liquefaction trains for a total capacity of 17.5 Mt/y, which is scheduled to start production in 2027. The terms

of the agreement provide for TotalEnergies to offtake 5.4 Mt/y of LNG from this first phase for 20 years. TotalEnergies has held a 17.5% stake in NextDecade since September 2023 and will have the right to participate in subsequent phases of the project as well as a carbon capture and storage (CCS) project planned by NextDecade to reduce emissions generated by the LNG project.

In April 2024, TotalEnergies acquired 20% interest in the Dorado field operated by EOG Resources, in the Eagle Ford shale play. The Dorado field will allow TotalEnergies US natural gas production to increase by 50 Mcf/d in 2024.

TotalEnergies operates assets (held 95% on average) in the Barnett Shale basin, with 1,460 active wells and an interest in 333 non-operated wells. An investment program including drilling and well maintenance activities is being implemented to maintain the production. TotalEnergies is implementing the physical measurement of its greenhouse gas emissions, particularly methane, through the deployment of portable sensors, infrared

cameras with quantification algorithms and continuously operating fixed detectors. The reduction of these emissions is ensured via a set of initiatives including the replacement of gas instrumentation with compressed air. At the end of 2023, 361 production sites had been converted out of a target of 400, which is expected to be reached at end of the first quarter 2024.

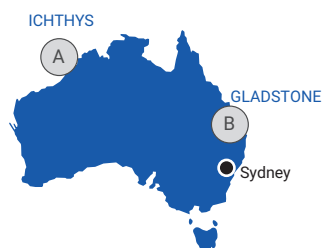
In 2021, the agreements between TotalEnergies and Tellurian Inc. for the development of the Driftwood LNG liquefaction project in Louisiana came to an end and TotalEnergies sold its interest in Tellurian Inc.

### MEXICO

In **Mexico**, TotalEnergies holds a 16.6% stake in the Energia Costa Azul (ECA) gas liquefaction project (nominal capacity of 3 Mt/y) currently under construction with start-up scheduled for 2026. The Company has agreed to offtake approximately 1.7 Mt/y.

## → ASIA-PACIFIC

### AUSTRALIA



In **Australia**, LNG production comes from the Ichthys LNG (26%) and Gladstone LNG (GLNG, 27.5%) projects.

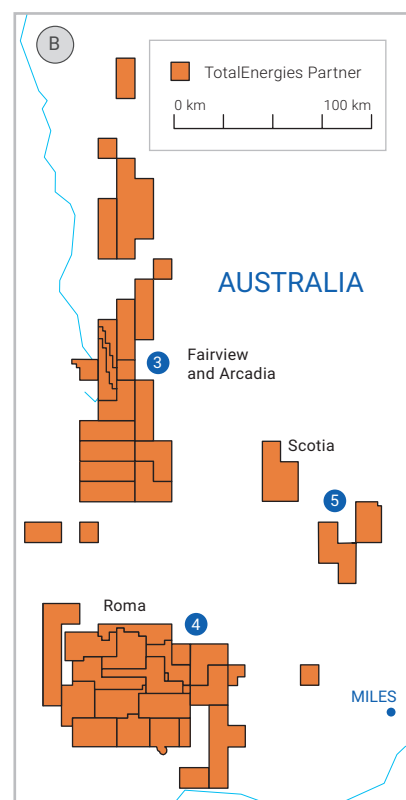
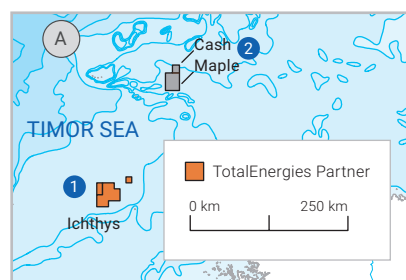
The Ichthys LNG project involves the development of a gas and condensate field located in the Browse Basin ①. This development includes subsea wells connected to a platform for gas production, processing and export, an FPSO for condensate processing and export, an 889 km gas pipeline and an onshore liquefaction plant at Darwin, comprising two trains with a total nominal capacity of 8.9 Mt/y of LNG. Ichthys LNG has reached its production plateau and various adjustments have allowed it to reach 110% of nameplate capacity. A compression project was approved in 2021, thus making it possible for the plateau to be extended. In addition to LNG, the facilities produce approximately 110 kboe/d of condensates and LPG.

In August 2023, TotalEnergies and INPEX (operator of the Ichthys LNG project) signed an agreement for the acquisition of PTTEP's 100% interest in the AC-RL7 permit ②. Under the terms of the agreement with PTTEP, TotalEnergies acquired a 26% stake in the permit, corresponding to its share in Ichthys LNG. INPEX acquired the remaining 74% while assuming operatorship. The permit, located approximately 250 kilometers northeast of the Ichthys offshore facilities, includes the

Cash and Maple gas and condensate fields. Their development is expected to contribute to the long-term supply of the Ichthys LNG liquefaction plant.

In August 2022, the Bonaparte CCS Assessment partners namely TotalEnergies (26%), together with INPEX and Woodside were awarded a CO<sub>2</sub> storage assessment permit on the G-7-AP license off the northwest coast of Australia, to carry out evaluation and appraisal the geological sequestration of CO<sub>2</sub> in order to reduce greenhouse gas emissions from Ichthys LNG. Appraisal work began in 2023.

GLNG is an integrated project with production from the Fairview ③, Roma ④, Scotia ⑤ and Arcadia ⑥ fields transported to a liquefaction plant on Curtis Island, Queensland with a capacity of 7.8 Mt/y and whose two trains are in production. TotalEnergies entered into a tolling agreement with GIP Australia (GIP) effective since January 1, 2021, which provides that GIP will receive a tolling revenue for 15 years based on gas volumes (TotalEnergies' share) passing through the downstream treatment facilities. In June 2023, TotalEnergies signed an agreement with Gentari for the joint development of the Pleasant Hills solar project to provide low-carbon electricity to the Roma field's gas facilities.



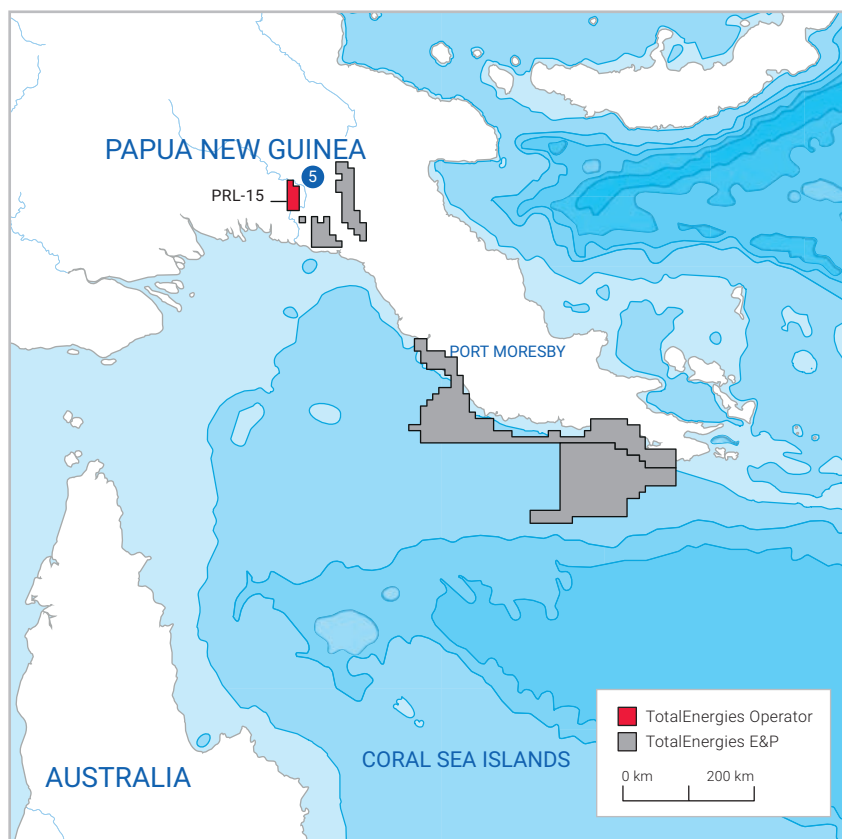
(1) Company listed on NASDAQ.

## PAPUA NEW GUINEA

In **Papua New Guinea**, TotalEnergies holds a 37.5% (operator) stake in block PRL-15 <sup>5</sup> of following the sale of a 2.6% stake to JX Nippon in 2023. The State of Papua New Guinea may exercise a back-in right of up to 22.5% interest (when the final investment decision is made), reducing TotalEnergies' interest to 29.1%.

Block PRL-15 includes the two fields Elk and Antelope. Front End Engineering and Design (FEED) (including downstream) was launched early March 2023. The gas produced from these fields is planned to be transported through a 320 km onshore/offshore pipeline to the Caution Bay site. The project includes 2 Mt/y of liquefaction capacity to be secured in a facility operated by a partner and the construction of three additional electrical LNG trains with a total capacity of 4 Mt/y, on the same site.

In April 2019, TotalEnergies and its partners signed an agreement with the authorities of Papua New Guinea defining the fiscal framework for the development of the Papua LNG project. This agreement has been supplemented by a Fiscal Stability Act agreement, signed with the State in February 2021, and an agreement allowing the extension of the PRL-15 license by 5 years until 2026.



## → EUROPE

### NORWAY

In **Norway**, TotalEnergies holds an 18.40% interest in the Snøhvit ① gas liquefaction plant (nameplate capacity of 4.2 Mt/y). Following a 20-month shutdown, due to a fire, production resumed in June 2022.

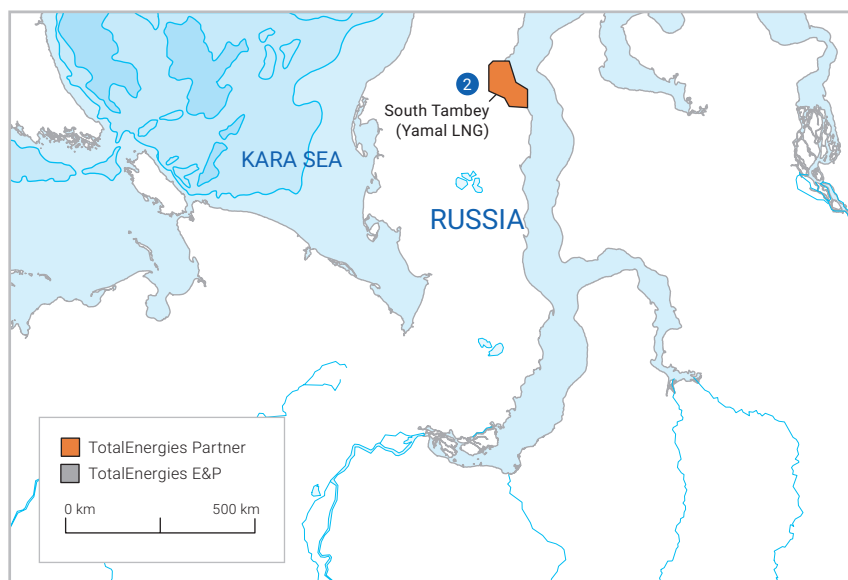
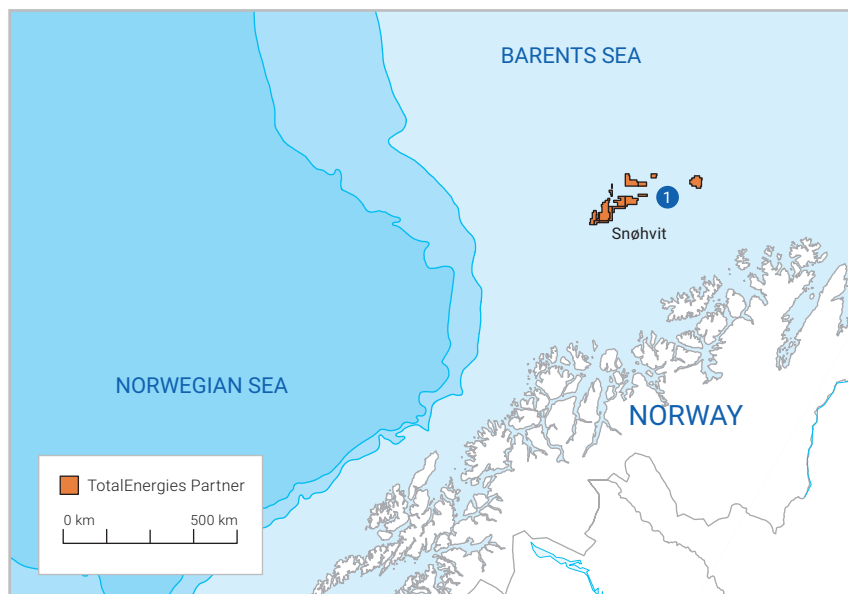
### RUSSIA

In **Russia**, TotalEnergies holds a 20.02% direct interest in the Yamal LNG gas liquefaction plant (nameplate capacity of 17.4 Mt/y) ②. In addition, TotalEnergies holds a 10% direct interest in the Arctic LNG 2 project (19.8 Mt/y, under construction).

Since July 2021, TotalEnergies has also held a direct interest of 10% via TotalEnergies EP Transshipment in Arctic Transshipment<sup>(1)</sup>, which was established on behalf of Arctic LNG 2 in order to enable the transfer of LNG cargoes from Arctic LNG carriers (icebreakers) to conventional LNG carriers at transshipment terminals in Murmansk and Kamchatka.

Given the uncertainties that technological and financial sanctions pose on the ability to complete the Arctic LNG 2 project, TotalEnergies has ceased to recognize as proved reserves the resources associated with the Arctic LNG 2 project since December 31, 2021, and has provisioned in its accounts the value of its investments as of March 31, 2022. TotalEnergies no longer recorded reserves from its interest in Novatek.

The American Office of Foreign Assets Control (OFAC) designated, on September 14, 2023 and November 2, 2023, respectively, Arctic Transshipment and Arctic LNG 2 as Specially Designated Nationals with immediate effect subject to temporary exceptions under licenses issued by the OFAC. As a consequence of these designations, US persons are prohibited to deal with those two entities. All non-US persons are exposed to the risk of US secondary sanctions if they provide material support to these entities. Since April 18, 2023, TotalEnergies EP Transshipment has not participated in any governance body and has not paid any cash calls to Arctic Transshipment. The Company is party to an LNG purchase contract with Arctic LNG 2, for which the Company had indicated that it could not terminate it early without exposing itself financially to significant consequences in the absence of economic sanctions, and that it would exercise the *force majeure* clauses provided for in the contract to interrupt it if sanctions were imposed. On November 2, 2023, Arctic LNG 2 was placed under sanctions by the US authorities. As a result, in accordance with what it announced, on November 7, 2023, TotalEnergies initiated the contractual suspension procedure provided for in the Arctic LNG2 shareholders' agreement and the *force majeure* procedure for the LNG purchase contract with Arctic LNG 2. Upon notification of these procedures, TotalEnergies' rights and obligations under these contracts were suspended.



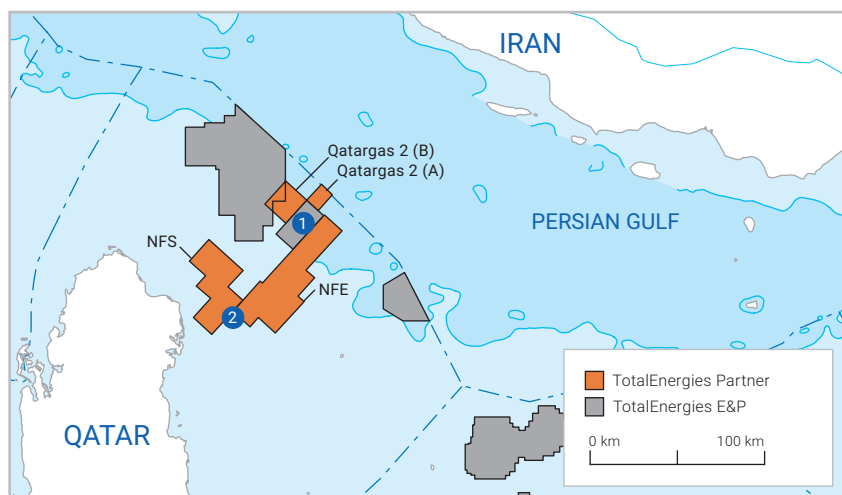
(1) Arctic Transshipment is a Russian company jointly owned by Novatek (90%) and TotalEnergies EP Transshipment (10%) at December 31, 2023.

## → MIDDLE EAST AND NORTH AFRICA

## QATAR

In **Qatar**, TotalEnergies participates in the production, processing and liquefaction of gas from the North Field through its interest in:

- QatarEnergy LNG N(2) (formerly Qatargas 2) ①: TotalEnergies holds a 16.7% interest in train 5, which has an LNG production capacity of 8 Mt/y;
- North Field East (NFE) and North Field South (NFS) ②: TotalEnergies announced in June and September 2022 its entry in the projects NFE (6.25%) and NFS (9.375%) projects. These projects which are under construction, include four trains with a total planned capacity of 32 Mt/y for NFE and two trains with a total planned capacity of 16 Mt/y for NFS by 2028, these interests are expected to add 3.5 Mt/y of production (Company share) to the Company's global LNG portfolio;
- QatarEnergy LNG N(1) (formerly Qatargas 1): TotalEnergies held a 20% interest in the North Field-Qatargas 1 Upstream field and a 10% interest in the LNG plant (three trains with a total capacity of 10 Mt/y), for which the upstream license and LNG plant partner agreement expired on December 31, 2021. The transfer of shares in the QatarEnergy LNG N(1) LNG plant is pending final approval of competent authorities.



## OMAN

In **Oman**, since December 2021, TotalEnergies has held a stake of 26.55% in onshore gas block 10, located in the Greater Barik area, where production started in January 2023 on the north east of the Mabrouk field, with gas sold to the government of Oman. In addition, since December 2021 TotalEnergies has been a shareholder (80%, operator) of Marsa LNG, which was formed with a view to developing a low emissions LNG plant in the port of Sohar.

The FID on Marsa LNG was taken in April 2024. The LNG liquefaction plant will have a 1Mt/y capacity and will be supplied by natural gas from Mabrouk field on onshore block 10.

TotalEnergies also produces LNG through its investments in the Oman LNG (5.54%)/Qalhat LNG (2.04% via Oman LNG) liquefaction complex, with an overall capacity of 10.5 Mt/y, increased to 11.4 Mt/y in 2023 as a result of debottlenecking operations. In November 2023, TotalEnergies signed an agreement allowing it to extend these shareholdings beyond 2024, by 10 years for Oman LNG and by 5 years for Qalhat LNG. The agreement also provides for investments to reduce the site's GHG emissions.

## UNITED ARAB EMIRATES

In the **United Arab Emirates**, TotalEnergies holds a 5% interest in ADNOC LNG (capacity of 5.8 Mt/y), which processes the gas produced by ADNOC Offshore in order to produce LNG, LPG and condensates, as well as a 5% interest in National Gas Shipping Company (NGSCO), which is in charge of chartering the ships and supplying the logistical resources for the needs of ADNOC LNG.

## EGYPT

In **Egypt**, TotalEnergies holds a 5% interest in the first train (capacity of 3.6 Mt/y) of Egyptian LNG Idku liquefaction plant.

## YEMEN

In **Yemen**, the deterioration of security conditions in the vicinity of the Balhaf site caused the company Yemen LNG, in which TotalEnergies holds a 39.62% interest, to cease its commercial production and export of LNG and to declare *force majeure* to its various stakeholders in 2015. The plant has been placed in preservation mode.

## Purchase, sale, trading and transport of LNG

### → PURCHASE, SALE AND TRADING OF LNG

In 2023, LNG trading activities represented a volume of 40.1 Mt, compared with 42.8 Mt in 2022 and 35.1 Mt in 2021. These volumes represent sales by TotalEnergies stemming from equity production and purchases from third parties.

TotalEnergies, with trading teams located in Geneva, Houston, Paris, and Singapore, develops its activities with the management and optimization of a portfolio of long-term contracts coupled with a strong presence on spot markets.

TotalEnergies purchases long-term volumes of LNG, in many cases from liquefaction projects in which the Company holds an interest. New sources of LNG from assets already in operation (Oman LNG – 0.8Mt/y for 10 years from 2025, ADNOC Gas in the UAE for 3 years), projects under construction (Rio Grande LNG in the United States – 5.4Mt/y for 20 years from 2027, NFE and NFS in Qatar – 3.5Mt/y for 27 years from 2026, ECA in Mexico, NLNG T7 in Nigeria, Mozambique LNG in Mozambique) or under study, are expected to ensure the growth of the LNG portfolio in the coming years.

In 2023, TotalEnergies purchased 398 shipments under long term contracts from Algeria, Australia, Egypt, the United States, Nigeria, Norway, Qatar, and Russia and 223 spot or medium-term shipments, compared with 385 and 289 shipments in 2022 and 306 and 242 in 2021 respectively. Deliveries from Yemen LNG have been halted since 2015.

In addition, TotalEnergies holds several long-term LNG sales contracts, mainly in Asia (China, South Korea, India, Indonesia, Japan, Singapore, and Taiwan), but also in Brazil, Chile, Panama and the Dominican Republic.

In May 2022, TotalEnergies announced the signing of an agreement with the Korean company Hanwha Energy Corporation to supply 0.7Mtpa of LNG for 15 years from 2024-2025. The LNG is expected to come from TotalEnergies' global portfolio and be delivered to the Tongyeong regasification terminal in South Korea to power the new 1 GW Hanwha and HDC power plant, currently under construction next to the terminal.

In July 2023, TotalEnergies announced a sales contract to IOCL in India for 10 years.

In February 2024, TotalEnergies concluded a deal with Sembcorp for the supply of 0.8 Mtpa LNG during 16 years from 2027. This new agreement comes on top of the existing contract which lasts until 2029.

Additionally, TotalEnergies is developing LNG retail sales (by barge and tanker trucks) for industrial use or mobility (LNG for shipping or road mobility) in Europe, in the Caribbean in partnership with AES and in China via the joint venture created in March 2021 with Shenergy Group.

### → LNG SHIPPING

In the frame of its LNG transportation activities, TotalEnergies Gas & Power Limited (TEGPL) operates a chartered fleet of 19 LNG carriers at year-end 2023 (compared to 18 at year-end 2022). In 2023, TEGPL sold its last co-owned LNG carrier (50%, with the Japanese shipowner NYK). This fleet is regularly renewed to benefit from best performing and lowest environment impacting vessels. It also includes 2 regasification vessels (FSRU) set up in Germany and France. In addition to the long-term fleet, each year TEGPL

charters spot and short-term ships to serve trading needs and to adapt transportation capacity to seasonal demand.

The subsidiary TotalEnergies EP Norge charters two LNG carriers directly from the ship owners, in addition to the 19 long term chartered LNG carriers by TEGPL.

Finally, LNG carriers are chartered through the Company's interests in LNG production and export projects that control their own fleet, such as Nigeria LNG, Angola LNG and QatarEnergy.

## LNG regasification

TotalEnergies holds interests in regasification assets and has signed agreements that provide long-term access to LNG regasification capacity worldwide, through existing assets in Europe (France, Germany, the Netherlands, and the U.K.), in Asia (India) and the Americas (United States and Panama). Consequently, TotalEnergies has at year-end 2023 a European long-term LNG regasification capacity of 28.1 bcm/y (equivalent to 20.8 Mt/y). In 2023, TotalEnergies finalized two regasification projects in Germany and France to contribute to Europe's security of supply in the context of the invasion of Ukraine by Russia. These projects involved the redeployment of two FSRUs previously operating in Asia and the Middle East. In France, the FSRU is based in Le Havre, while in Germany, it is located in Lubmin in partnership with Deutsche ReGas.

### FRANCE

In **France**, TotalEnergies has a regasification capacity of 7.7 bcm/y in the Fosmax LNG terminal, 7 bcm/y in the Montoir de Bretagne terminal, 2.1 bcm/y in the Dunkirk LNG terminal. Since October 2023, the Company holds a 2.2 bcm/y regasification capacity in the Le Havre floating terminal. The authorization to operate was granted by the French authorities for a period of five years, in response to the emergency caused by the interruption of gas supplies by pipeline from Russia.

### UNITED KINGDOM

In the **United Kingdom**, as part of its stake in the Qatargas 2 project, TotalEnergies holds an 8.35% interest in the South Hook LNG regasification terminal which has a total capacity of 21 Bcm/y and has an access to 2.0 Bcm/y of regasification capacity. TotalEnergies has also booked regasification capacity of 3.3 Bcm/y at the Isle of Grain terminal.

### BELGIUM

In **Belgium**, TotalEnergies held a regasification capacity of 2.0 bcm/y in the Zeebrugge terminal, the contract for which expired at the end of September 2023.

### NETHERLANDS

In the **Netherlands**, TotalEnergies holds a regasification capacity of 1.2 Bcm/y at the Gate terminal that is booked until 2029.

### GERMANY

In Germany, TotalEnergies chartered a FSRU to Deutsche Regas, which commissioned at the beginning of 2023 the Deutsche Ostsee terminal with a regasification capacity of 5 Bcm/y in the port of Lubmin. In addition, TotalEnergies has a regasification capacity of 2.6 Bcm/y in this terminal.



## UNITED STATES

In the **United States**, TotalEnergies has a regasification capacity of 5.0 Bcm/y at the Sabine Pass terminal in Louisiana until 2029.

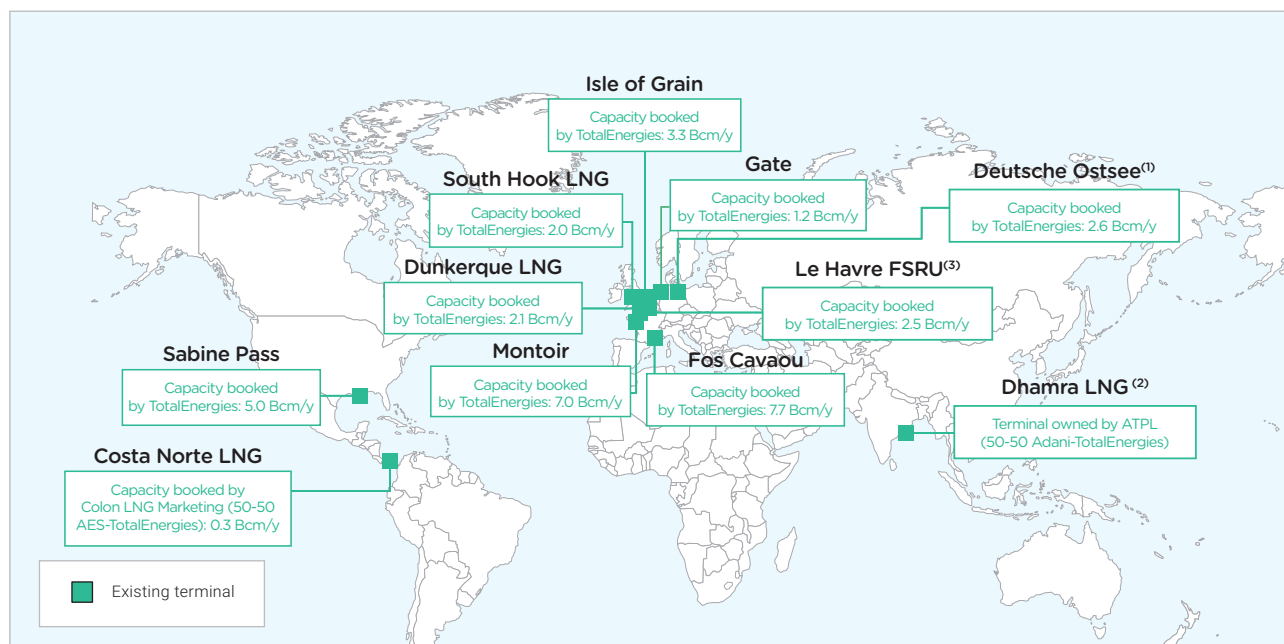
## PANAMA

In Panama, the Colón LNG Marketing joint venture with AES (TotalEnergies, 50%) holds a capacity of 0.3 bcm/y until 2028.

## INDIA

In India, the partnerships between TotalEnergies and the Adani Group include several assets in the gas value chain, from LNG import facilities to gas distribution to domestic households. The Dhamra terminal, with a capacity of 6.8 bcm/y, started in May 2023.

## REGASIFICATION TERMINALS AS OF DECEMBER 31, 2023



(1) Started-up in January 2023.

(2) Started-up in May 2023.

(3) Started-up in October 2023.

## Biogas

TotalEnergies is engaged in the development and operation of biogas production units, mainly from organic agricultural and agro-industrial waste (feedstocks), in the production of electricity and heat (co-generation) and biomethane. Biogas, once purified, in particular of carbon dioxide, becomes biomethane, which has the same characteristics as natural gas and in the marketing of biomethane.

Consisting of the same methane molecule as natural gas, biomethane is renewable due to the way it is produced, and it emits very low carbon over its entire life cycle. When it is injected into the natural gas transmission or distribution network, it allows the same uses such as heating fuel for industry and fuel for land and sea transportation. At the same time, the anaerobic digestion process generates a co-product, digestate, a natural fertilizer with high agronomic value.

This digestate is used by farmers to replace synthetic fertilizers, according to a virtuous circular economy plan.

At year-end 2023, TotalEnergies' total annual gross production capacity amounts to 1.1 TWh biomethane equivalent (compared to 500 GWh in 2022). This represents the treatment of approximately 1.25 Mt/y of organic waste in order to provide renewable gas to the equivalent of 220,000 inhabitants, making it possible to avoid the emission of around 220 kt of CO<sub>2</sub>. With the digestate, close to 30 kt/y of chemical fertilizers are replaced by a natural fertilizer. The Company aims to be a major player in the sector, in France, in Europe and in other key markets.

## FRANCE

TotalEnergies has seven biomethane production units in France at the end of 2023, six of which have obtained ISCC EU sustainability certification, and also 11 biogas units.

The Company's combined biomethane and biogas gross production capacity in France stands at nearly 700 GWh/y. Since the acquisition of Fonroche Biogaz in 2021, this subsidiary, renamed TotalEnergies Biogaz France, commissioned in January 2023 BioBéarn (Pyrénées-Atlantiques) which holds the largest anaerobic digestion capacity in France, i.e. 160 GWh/y. It is the first TotalEnergies Biogaz France facility and one of the first in France to have obtained ISCC EU certification in March 2023. In 2023, TotalEnergies made the decision to invest in two new biomethane production units, BioNorrois (160 GWh/y), in Seine-Maritime, and MéthAdour (32 GWh/y), in the Landes department.

Downstream in the chain, TotalEnergies signed its first "Biomethane Purchase Agreement – BPA" with the Saint-Gobain group in June 2023. This biomethane sales agreement represents 100 GWh over a period of three years starting in 2024. The biomethane will be produced by TotalEnergies on its BioBéarn site. By acquiring the Guarantees of Origin linked to this production, and due to its ISCC EU certification, Saint-Gobain will thus be able to certify, within the framework of the European Union's Emissions Trading System, the decarbonization of associated energy consumption. This contract also constitutes an example of the sale of biomethane on a purely commercial basis, not supported by subsidies.

## EUROPE

In **Poland**, TotalEnergies confirmed its growth dynamic in the sector by acquiring Polska Grupa Biogazowa (PGB), Poland's main producer of biogas in March 2023, whose main field of activity is the production of renewable electricity and heat from biogas from organic waste. With the commissioning of Gołoszyce in July 2023, PGB owns and operates 18 units in production at the end of 2023, representing installed electrical capacity of 19 MW, i.e. an electricity production capacity of 166 GWh/year (approximately 400 GWh/y in biomethane equivalent<sup>(1)</sup>). Two biogas plants of 1 MW installed capacity each are currently under construction in Poland.

The acquisition of PGB gives the Company a leading position on the promising Polish market, which has the fourth greatest potential in Europe for biogas and biomethane production, estimated at nearly 100 TWh/y.

## Hydrogen

TotalEnergies is working primarily on decarbonizing the hydrogen consumed in its European refineries by 2030. TotalEnergies has already launched projects to decarbonize its refineries by supplying hydrogen produced with renewable electricity. TotalEnergies and Air Liquide signed an agreement in November 2022 to build an innovative and circular system at the Grandpuits biorefinery in order to produce and take advantage of renewable and low-carbon hydrogen, and signed an agreement in September 2023 for the long-term supply of green and low carbon hydrogen to the Normandy refining-petrochemical platform. On the La Mède site, the Masshyla project, which ambition is to produce green hydrogen in partnership with Engie, is underway. TotalEnergies signed an agreement with VNG in June 2023 for the future supply of green hydrogen to the Leuna refinery in Germany.

The hydrogen production capacity from renewable electricity currently under development or under study are expected to contribute to achieving TotalEnergies' ambition to increase low-carbon molecules – biofuels, biogas, hydrogen, and e-fuels – to 25% of its energy production by 2050.

## UNITED STATES

TotalEnergies is developing biomethane production as part of the joint venture with Clean Energy Fuels Corp., a United States company listed on NASDAQ, that stands amongst one of the leaders in the United States market for the distribution of renewable gas for vehicles, its share of which was 19.10% on December 31, 2023. The Del Rio anaerobic digestion unit in Texas, with a capacity of 40 GWh/y, was commissioned in March 2023.

In addition, in May 2023, TotalEnergies took a 20% stake in the capital of Ductor, a Finnish start-up that has developed an innovative technology for treating organic waste with a high nitrogen content, such as poultry manure, which is usually difficult to use as a feedstock for anaerobic digestion. By enabling the processing of new types of feedstock, this technology directly contributes to accelerating the development of the biogas value chain.

TotalEnergies has entered into a partnership with Ductor to develop and invest in several biomethane production projects, mainly in the United States and Europe. The partners notably aim to develop a first unit in Ohio, in the United States. Under the terms of this joint venture, TotalEnergies will market the production of biomethane, and Ductor the production of sustainable biofertilizers.

## INDIA

The Adani Total Gas Limited joint venture (TotalEnergies, 37.4%) is implementing a first biomethane plant project in Barsana in the state of Uttar Pradesh, the first tranche of which provides for a capacity of 55 GWh/y.

In May 2023, TotalEnergies joined forces with Tree Energy Solutions to study and develop a project in the United States to produce synthetic natural gas from renewable hydrogen and CO<sub>2</sub> of biogenic origin. This project, with a capacity of 100 to 200 kt/y, plans to produce synthetic natural gas that can be transported and/or liquefied and then marketed using existing natural gas infrastructure, and used by end customers without modifying their facilities.

Following the acquisition of the entire capital of Total Eren concluded in July 2023, development activities for renewable hydrogen projects are continuing as part of a new partnership through the TEH2 joint venture (80% owned by TotalEnergies and 20% by the EREN group). TEH2 is developing pioneering renewable hydrogen production projects in different regions, such as North Africa, South America, and Australia.

In the hydrogen mobility segment, TotalEnergies and Air Liquide have associated in the TEAL mobility joint-venture.

(1) If the same installations produced biomethane, with the same inputs, and based on 1 MW = 20.5 GWh/y of biomethane equivalent.







# 4

## Integrated Power

Encompasses electricity production, storage, trading and gas-electricity marketing activities to BtB and BtC customers. Transition to carbon neutrality (net zero emissions) by 2050, together with society, involves a massive electrification of energy uses combined with a strong growth in renewable energies to meet this demand for electricity. TotalEnergies is developing a profitable and differentiated integrated business model, which it aims to make one of the drivers of the Company's cash flow (CFFO), alongside oil and gas. TotalEnergies plans to increase its net power production to more than 100 TWh, mainly from renewable sources by 2030.

### 33 TWh

Net production of electricity in 2023 including 19 TWh from renewable sources

### \$5 bn

Net investments in 2023

### \$2.2 bn

Operating cash flow (CFFO) in 2023

### 28 GW

Gross installed power generation capacities end 2023, of which 22.4 from renewable sources



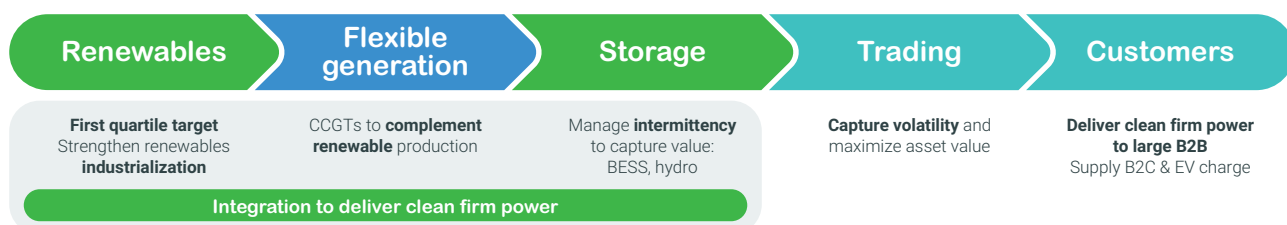
## Profitably building the pillar of the future energy system

### DRIVING VALUE FROM INTEGRATION

- Low-cost renewable & flexible production, storage, trading, supply
- ROACE objective 12% and positive net cash flow by 2028

### LEVERAGING ON CORE CAPABILITIES

- Capturing value from volatility in electricity markets through a strong balance sheet
- Using global footprint, project management and offshore expertise



**> 100 TWh production by 2030**



## FINANCIAL HIGHLIGHTS

(in million dollars)

	2023	2022
Adjusted net operating income <sup>(1)</sup>	1,853	975
Organic investments <sup>(2)</sup>	2,582	1,385
Net acquisitions <sup>(3)</sup>	2,363	2,136
Net investments <sup>(4)</sup>	4,945	3,521
Operating cash flow before working capital changes <sup>(5)</sup>	2,152	970
Cash flow from operations <sup>(6)</sup>	3,573	66

(1) Adjusted results are defined as income using replacement cost, adjusted for special items, excluding the impact of changes in fair value.

(2) Organic investments = net investments excluding acquisitions, asset sales and other operations with non-controlling interests.

(3) Net acquisitions = acquisitions – assets sales – other transactions with non-controlling interests.

(4) Net investments = organic investments + net acquisitions.

(5) Excluding financial charges, except those related to lease contracts, excluding the impact of contracts recognized at fair value for the sector and including capital gains on the sale of renewable projects.

(6) Excluding financial charges, except those related to leases.

## RENEWABLES & ELECTRICITY

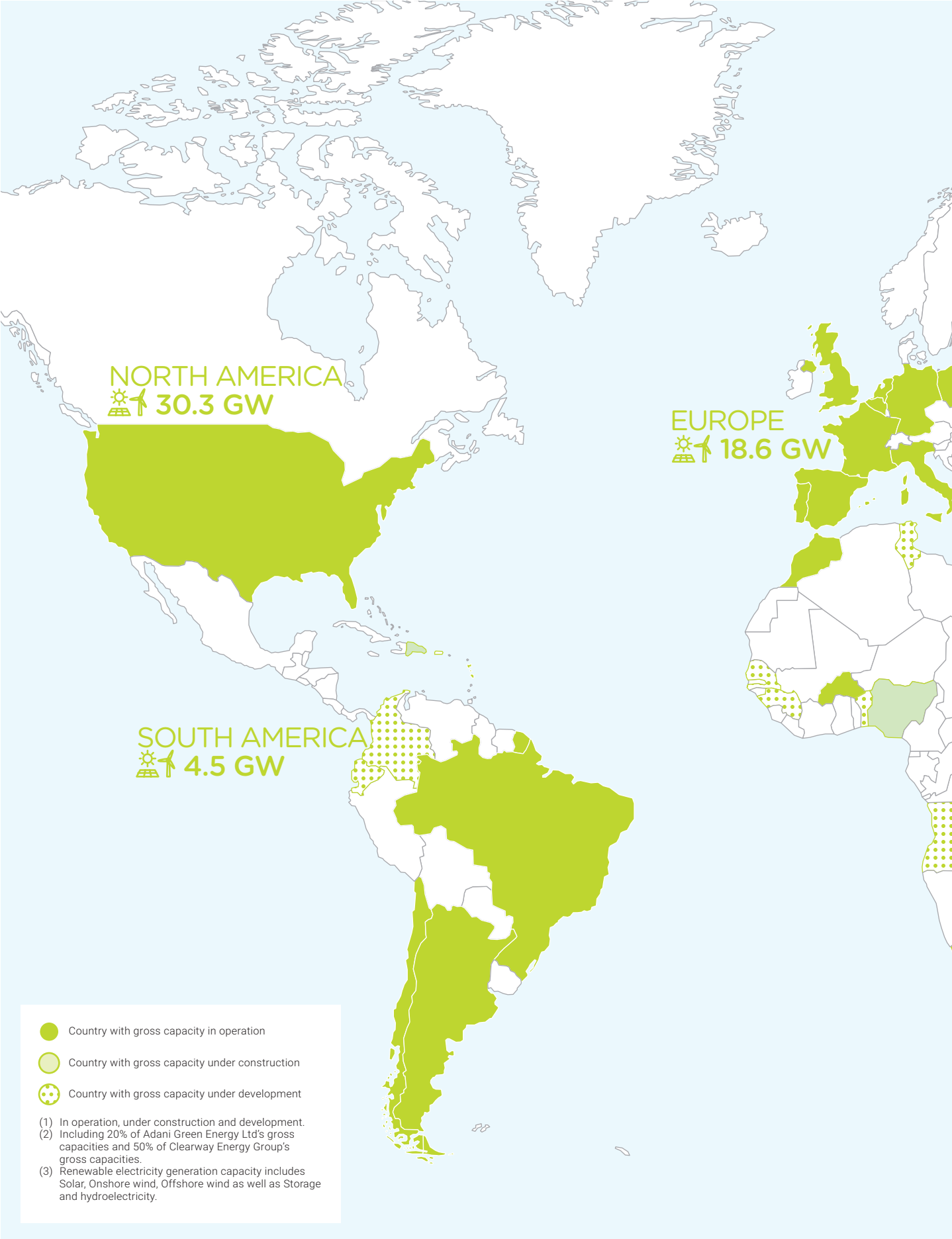
	2023	2022	2021
<b>NET POWER PRODUCTION (TWh)<sup>(1)</sup></b>	<b>33.4</b>	<b>33.2</b>	<b>21.2</b>
of which production from renewables	18.9	10.4	6.8
of which production from gas flexible capacities	14.5	22.8	14.4
<b>PORTFOLIO OF POWER GENERATION NET INSTALLED CAPACITIES (GW)<sup>(2)</sup></b>	<b>17.3</b>	<b>12.0</b>	<b>9.2</b>
of which renewables	13.0	7.7	5.1
of which gas flexible capacities	4.3	4.3	4.1
<b>PORTFOLIO OF RENEWABLE POWER GENERATION GROSS CAPACITIES (GW)<sup>(2) (3)</sup></b>	<b>80.1</b>	<b>69.0</b>	<b>43.0</b>
of which installed capacity	22.4	16.8	10.3
<b>CLIENTS POWER – BTB AND BTC (millions)<sup>(2)</sup></b>	<b>5.9</b>	<b>6.1</b>	<b>6.1</b>
<b>CLIENTS GAS – BTB AND BTC (millions)<sup>(2)</sup></b>	<b>2.8</b>	<b>2.7</b>	<b>2.7</b>
<b>SALES POWER – BTB AND BTC (TWh)</b>	<b>52.1</b>	<b>55.3</b>	<b>56.6</b>
<b>SALES GAS – BTB AND BTC (TWh)</b>	<b>100.9</b>	<b>96.3</b>	<b>101.2</b>

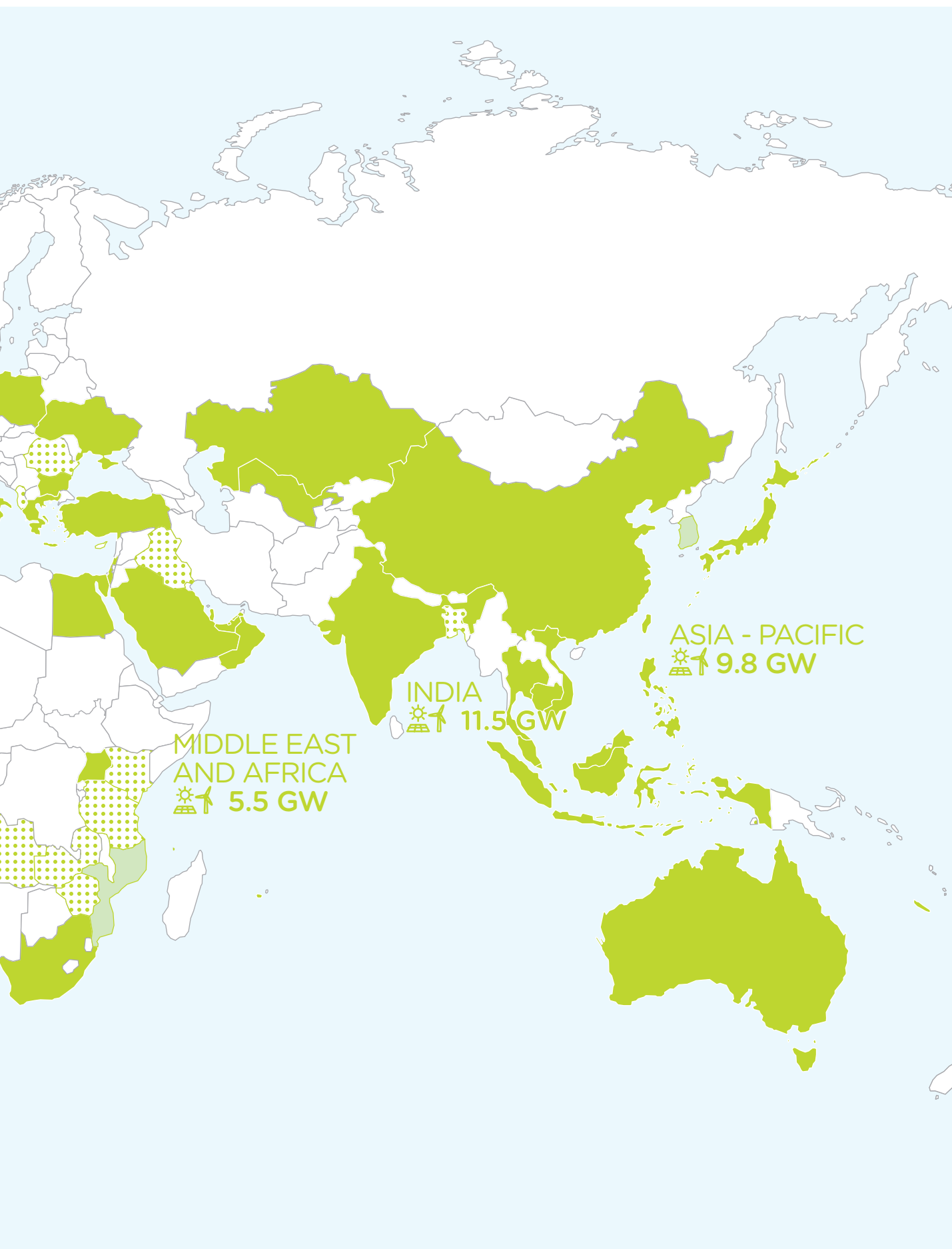
(1) Solar, wind, hydroelectric and gas flexible capacities.

(2) End of period data.

(3) Includes 20% of Adani Green Energy Ltd's gross capacity effective first quarter 2021, 50% of Clearway Energy Group's gross capacity effective third quarter 2022, and 49% of Casa dos Ventos' gross capacity effective first quarter 2023.

RENEWABLE ELECTRICITY GENERATION CAPACITY PORTFOLIO (GW AS OF END 2023)<sup>(1)(2)(3)</sup>





## → POWER GENERATION FROM NATURAL GAS

TotalEnergies is building a portfolio of CCGT as part of its strategy to create an integrated gas and electricity value chain in Europe, from production to marketing, the gas constituting an ideal complement to renewable power generation from inherently intermittent sources. Thanks to the flexible production from those power plants, TotalEnergies can optimize its customers' electricity procurement

costs. v In Europe, at year-end 2023, TotalEnergies had 9 CCGT plants (unchanged from year-end 2022 and compared with eight at year-end 2021) with a gross power generation capacity of 3.9 GW and two co-generation units (0.3 GW capacity). Total net electricity production from natural gas was 14.5 TWh in 2023, as against 22.8 TWh in 2022 and 14.4 TWh in 2021.

### PORTFOLIO OF ELECTRICITY GENERATION FROM CCGT IN EUROPE AT END-2023

Country	(MW)	2023
France	CCGT Bayet	442
	CCGT Pont-sud-Sambre	445
	CCGT Toul	445
	2 X CCGT Saint-Avoid	892
	CCGT Landvisiau	446
Belgium	CCGT Marchienne	416
Spain	2 X CCGT Castejon	856

#### FRANCE

In France, on December 31, 2023 (as in 2022), TotalEnergies owned six CCGT plants compared with five in 2021, including one with a capacity of 0.4 GW, which was commissioned in March 2022 in Landvisiau (50% of which was sold in 2022 to Asterion Industrial Partners, a Spanish investment fund) and one co-generation unit (Normandy refinery). Their gross gas-based power generation capacity stood at 2.7 GW at year-end 2023 for the CCGT plants and 0.2 GW for the Normandy co-generation unit.

#### BELGIUM

TotalEnergies owns the Marchienne CCGT plant, with a capacity of 0.4 GW. In addition, TotalEnergies has access to Antwerp's co-generation power generation (0.1 GW).

#### SPAIN

In Spain, TotalEnergies acquired two CCGT plants from Energías de Portugal in 2020 with a total gross capacity of 0.9 GW at year-end 2023 (stable since 2020).

#### ABU DHABI

In Abu Dhabi, the Taweelah A1 gas-fired power plant, owned by the Gulf Total Tractebel Power Company (TotalEnergies, 20%), combines electricity generation and seawater desalination. The plant has a gross power generation capacity of 1.6 GW and a seawater desalination capacity of 385 km<sup>3</sup>/day. The plant's production is sold to Emirat Water and Electricity Company (EWEC) under a long-term agreement.

#### UNITED STATES

In the United States, TotalEnergies signed an agreement in November 2023 with the U.S. company TexGen for the acquisition of three gas-fired power plants representing 1.5 GW of electricity generation capacity in Texas. Connected to the ERCOT (Electric Reliability Council of Texas) grid, the plants concerned are respectively located near Dallas and Houston. They are expected to respond to the growing energy demand of these cities and to make it possible to compensate for the intermittence of renewable energy production. Their importance was recently highlighted during weather events that impacted Texas' renewable electricity production or caused a high seasonal demand peak. These 1.5 GW of additional flexible production capacity acquired by TotalEnergies complement its renewable production capacities in Texas, which at year-end 2023 amounted to 5.5 GW gross installed and under construction and more than 3 GW in development. These gas plants will strengthen TotalEnergies' trading capabilities in the electricity and gas markets.

## → POWER GENERATION FROM RENEWABLES

To develop its renewable power generation capacities, TotalEnergies is pursuing organic growth and targeted acquisitions. In July 2023 TotalEnergies finalized the increase from 30% to 100% of its shareholding in Total Eren. At this date, Total Eren had a net installed capacity of 3.5 GW worldwide, and a diversified portfolio of solar, wind, hydroelectric and storage projects of more than 10 GW in 30 countries. These assets are now fully integrated into TotalEnergies' portfolio of renewable power production assets. In 2022, TotalEnergies had finalized the acquisition of a 50% stake in Clearway Energy Group in the United States and a 34% interest in Casa dos Ventos in Brazil and, in 2021, a 20% stake in Adani Green Energy Ltd. in India.

Net renewable power production reached 18.9 TWh in 2023, compared to 10.4 TWh in 2022 and 6.8 TWh in 2021.

TotalEnergies is developing a portfolio of solar (including decentralized), wind (onshore and offshore) and hydroelectric renewable power generation, for a renewable power generation net installed capacity of 13 GW at year-end 2023 as against 7.7 GW at year-end 2022 and 5.1 GW at year-end 2021.

The installed renewable power generation gross capacity amounted to 22.4 GW at year-end 2023 compared to 16.8 GW at year-end 2022 and 10.3 GW at year-end 2021. At year-end 2023, TotalEnergies had a portfolio of renewable power generation gross capacities of close to approximately 80 GW (installed, under construction and in development).

## SOLAR AND ONSHORE WIND

### FRANCE

The subsidiary, TotalEnergies Renouvelables France, develops, builds and operates renewable electricity generation projects in mainland and overseas France.

In mainland France, it operated more than 620 onshore wind, solar, battery and hydroelectric assets for an installed gross capacity of 1.6 GW at year-end 2023 compared to 1.5 GW at year-end 2022 and 1.2 GW at year-end 2021.

In 2023, among others, TotalEnergies inaugurated a solar power plant in the Greater Paris region (Grandpuits site, Île-de-France) together with a battery-powered energy storage facility, two wind farms with a combined gross capacity of more than 20 MW in Loir-et-Cher, an 8.7 MW solar power plant in Tarn, and the Torrent de Gavet hydroelectric power plant producing approximately 9.5 GWh per year.

In addition, the Company develops agrivoltaic projects that respond to the challenges of the agricultural world, as illustrated by the conclusion in March 2022 of an innovative partnership agreement with the National Federation of Farmers' Unions (FNSEA) with the aim of promoting the emergence of circular economic networks, the acceptability of projects and the sharing of value with farmers. In 2023, the Company acquired Ombrea, a leader in agrivoltaics in France. This acquisition will notably enable TotalEnergies to accelerate the development of its 1.5 GW portfolio of agrivoltaic projects.

Also, in line with its portfolio optimization strategy, at year-end 2022 TotalEnergies sold to Crédit Agricole Assurances 50% of a 234 MW portfolio of renewable projects in France, including 23 solar plants with a capacity of 168 MW and six wind plants with a capacity of 67 MW. In 2021, TotalEnergies had already sold to Crédit Agricole Assurances and Banque des Territoires two 50% interests in solar and wind asset portfolios in France with a total capacity of 279 MW.

### REST OF EUROPE AND CIS

In **Spain**, TotalEnergies is developing a portfolio of solar projects of more than 4 GW, of which 3 GW received environmental authorizations from local public authorities in 2023. La Asomada (5 MW) started its production in 2022. Construction of the Los Valientes (14 MW, 65%) and La Isla (5 MW, 65%) solar power plants began in 2022. In 2023, construction of the Guillena solar project (263 MW) also began.

In **the United Kingdom**, the portfolio of solar projects acquired by TotalEnergies from Bluestone (330 MW at year-end 2022) reached 512 MW in 2023.

In **Romania**, TotalEnergies acquired in July 2023 a portfolio of five solar farms in the northwest of the country from its partner PNE, a German developer. With a total capacity of 210 MW, these projects are expected to enable TotalEnergies to provide its BtB customers with locally produced renewable power through power purchase agreements (PPAs) from 2025.

In **the rest of Europe**, TotalEnergies' continue to expand its portfolio. For example:

- in **Bulgaria**, with two operational solar projects: Dabovo (10 MW, 100%) and the Vinogradets project (4 MW, 100%);
- in **Greece**, 154 MW of solar, and 265 MW of wind installed capacity. The Xirokambi solar project (70 MW, 100%) is expected to start operation in 2024;
- in **Italy**, 44 MW of solar, and 41 MW of wind installed capacity;
- in **Poland**, with 20 MW Gluchow I wind farm and its extension with 20 MW Gluchow II project (98%) scheduled for 2024. In addition, in this country, TotalEnergies announced in March 2023 the acquisition of a portfolio of 6 solar projects under development with an overall production capacity of 175 MW, the first of which are expected to come on stream by 2025;
- in **Portugal**, 46 MW of installed solar capacity, 526 MW of wind capacity and 33 MW of hydroelectric capacity spread among nine assets.

In **Turkey**, TotalEnergies finalized in October 2023 the acquisition of 50% interest in Rönesans Enerji. Following the signature of the agreement with Rönesans Holding in July 2023 to develop renewable projects in the country through this joint-venture, Rönesans Enerji aims to produce 2 GW of renewable energy by 2028. The power generated by these sites will be marketed in particular through direct sales on the electricity market or by concluding PPAs with end buyers.

In **Kazakhstan**, by signing a PPA for the totality of the electricity produced with a public purchaser in June 2023, the Company also formalized the launch of the Mirny project, providing for the construction of a 1 GW onshore wind farm associated with a 600 MWh battery energy storage system.

The Company is also pursuing the development of its renewable activities in the region, notably in **Uzbekistan**, with the signature in November 2023 of a memorandum of understanding (MoU) formalizing the development of two solar power plants with a total gross capacity of around 1.3 GW.

Furthermore, opportunities in other European countries are currently being studied by TotalEnergies and European Energy, who agreed, in September 2023, to develop, build and operate, in a joint venture (TotalEnergies, 65%), at least 4 GW of onshore renewable energy projects in several geographic zones.

In addition, TotalEnergies, Baker Hughes, Technip Energies, Azimut and other investors signed a preliminary agreement in August 2023 to invest in Zhero Europe to develop large-scale renewable energy projects in Europe and Africa, covering the production of renewable energy, electrical interconnectors, and low-carbon molecules.

### NORTH AMERICA

In **the United States**, following the agreements signed in May 2022 with Global Infrastructure Partners (GIP), TotalEnergies acquired in September 2022 50% of Clearway Energy Group (CEG), one of the largest U.S. renewable energy players. CEG, through its NYSE-listed subsidiary Clearway Energy Inc. owned nearly 10 GW of operating wind and solar renewable assets at year-end 2023 and had a portfolio of 24 GW of renewable and storage projects, 7.5 GW of which are in an advanced stage of development. In this transaction, in addition to \$1.6 billion in cash, GIP received 50% minus one share of TotalEnergies' interest in SunPower Corporation. Through this acquisition, TotalEnergies has established a strong position in the U.S. renewables and storage market.

In April 2022, TotalEnergies acquired Core Solar and its identified 4 GW pipeline of projects. Of this portfolio, the Hill solar project (525 MW) was launched in late 2022 with a view to commission it in late 2024. In 2023, the Clinton (65 MW) and Brazoria (325 MW) solar projects were launched with commissioning scheduled in 2025.

In 2021, TotalEnergies acquired 2.2 GW of solar projects from SunChase Power. The Myrtle (380 MW) and Danish (720 MW) photovoltaic sites were reinforced with storage projects in 2022 (Myrtle (150 MW/225 MWh) and Danish (150 MW/225 MWh)). The Cottonwood solar project (455 MW) located in Brazoria County, Texas, construction of which began in 2022, is expected to be commissioned in 2024. The Myrtle photovoltaic site was commissioned in the second half of 2023 and the Danish site is expected to start up during 2024. These two projects, as well as the Hill 1 project, are expected to contribute to the reduction of Scope 2 GHG emissions of the industrial sites operated by TotalEnergies in the U.S., by providing part of their electric consumption, including the Port Arthur refining-petrochemicals platform and the La Porte and Carville petrochemicals sites. These Texan solar projects should also enable to supply renewable electricity to customers via Corporate PPAs signed in 2021, 2022 and 2023.

The joint-venture (50/50) created in 2020 by TotalEnergies and 174 Power Global, a subsidiary of the Hanwha group, is developing eight industrial-scale solar and energy storage projects, with a cumulative capacity of 1.2 GW, from the 174 Power Global development portfolio. These projects, located in six U.S. states, are expected to be developed in 2024. The portfolio also includes the Oberon solar plant in Texas (194 MW, 50%), commissioned in 2021 and Rayos del Sol (242 MW, 50%), commissioned in 2022. The Ellis and Skysol projects started during 2023.



## SunPower Corporation and Maxeon Solar Technologies, Ltd.

TotalEnergies has been a shareholder (25.07% at December 31, 2023) in SunPower Corporation, a U.S. company listed on NASDAQ and based in California, since 2011. Since the spin-off of the company in August 2020 and the creation of Singapore-based Maxeon Solar Technologies, Ltd. (15.2%), which is also listed on the NASDAQ, SunPower has focused on developing and marketing energy services combining photovoltaic systems, energy storage and services in the residential segments of the U.S. market. In October 2021, SunPower acquired Blue Raven Solar, one of the fast-growing solar providers in the U.S. for the residential market. At December 31, 2023, SunPower had signed over 99,000 contracts with individual clients, for a total installed capacity of 755 MW.

Maxeon Solar Technologies, Ltd. now includes activities ranging from the design through manufacture to the international sale of cells.

## ASIA PACIFIC

In **Cambodia**, TotalEnergies operates the Battambang solar power plant (74 MW). To develop new renewable energy projects and other decarbonization initiatives, TotalEnergies signed a memorandum of understanding with Royal Group in October 2023 to study potential partnerships for the development of solar and wind projects.

In **Indonesia**, in 2023, under the leadership of its subsidiary Total Eren, TotalEnergies, together with its partners Adaro Power and PJB, signed a PPA with the public operator PLN for a hybrid wind project (with storage) in the country with a planned capacity of 70 MW/10 MWh.

In the **Philippines**, TotalEnergies entered into a co-development agreement in February 2023 with its local partner Nextnorth for the development of a 440 MW solar project.

In **India**, TotalEnergies is present through its partnership with Adani Green Energy Limited (AGEL) and the EDEN joint-venture (50/50) with EDF. Through these two partnerships, TotalEnergies has a solar and wind portfolio with a gross installed capacity of 5.9 GW of which 5.2 GW with AGEL. As of December 31, 2023, 56.3% of AGEL is owned by the Adani family, 19.7% by TotalEnergies and 24.0% by public and institutional investors. In January 2021, TotalEnergies had acquired 20% of the capital of AGEL. In September 2023, TotalEnergies and AGEL announced that they had entered into a binding agreement to create a new joint-venture (50/50) with a portfolio of 1.5 GW. This portfolio, both solar and wind, include assets in operation (0.5 GW), and in development (1 GW).

In **Japan**, TotalEnergies holds interests in 4 solar plants: Nanao (27 MW, 50%), Miyako (25 MW, 50%) and Osato (52 MW, 45%). The fourth solar plant, Haze (51 MW, 45%), was commissioned at the beginning of 2023.

In 2023, TotalEnergies also partnered with Gentari Renewables Sdn Bhd, the Petronas subsidiary dedicated to sustainable energy solutions, to develop renewable energy projects in the Asia-Pacific region. It is within this framework that the 100 MW Pleasant Hills solar project is expected to be developed in Queensland, Australia, with the aim of supplying low-carbon electricity to the gas production and processing facilities of the Roma field.

In **Australia**, TotalEnergies has one solar asset in operation, Kiamal (256 MW, 100%).

## LATIN AMERICA

In **Brazil**, TotalEnergies has a portfolio of 0.9 GW of installed onshore wind capacity, 0.4 GW of onshore wind capacity under construction, as well as 0.9 GW of onshore wind and 1 GW of solar projects, development of which is at an advanced stage.

This portfolio includes the capacities of the joint-venture created in October 2022 between TotalEnergies (34%) and Casa dos Ventos (66%) (Brazil's 1<sup>st</sup> renewables developer<sup>(1)</sup>) which also has a right of first offer on all projects developed by Casa dos Ventos. It also includes 300 MW of solar and wind projects in operation.

In addition, to further strengthen its presence in **Brazil**, TotalEnergies announced in September 2023 the signature of a memorandum of understanding with Casa dos Ventos and Petrobras to evaluate the prospects for joint projects in the field of renewable energies and low-carbon hydrogen in the country.

In **Chile**, TotalEnergies holds interests in the Santa Isabel (190 MW, 50%) and PMGD (23 MW, 100%) solar power plants.

## MIDDLE EAST/AFRICA

In the Middle East, TotalEnergies and its partners commissioned the Al Kharsaah solar power plant (800 MW, 19.6%) in **Qatar** in October 2022. The plant is 40% owned by the consortium formed by TotalEnergies (49%) and Marubeni (51%) the remaining 60% being owned by QatarEnergy Renewables Solutions. Located 80 km west of Doha, Al Kharsaah is the first large-scale solar power plant in Qatar. It can supply 10% of the country's peak consumption and is expected to avoid the emission of 26 Mt CO<sub>2</sub><sup>(2)</sup> over its reserve life. As part of a multi-energy agreement with **Iraq** signed in September 2021, TotalEnergies plans to develop a 1.2 GW solar power plant to supply the Basra region's grid. TotalEnergies is also developing a solar project in **Saudi Arabia** (Wadi Ad Dawasir, 120 MW, 40%) and has a stake in the Shams solar power plant in **Abu Dhabi** (110 MW, 20%).

In **Morocco**, TotalEnergies has invested £20 million to acquire a minority stake in Xlinks First Limited, with the aim of developing a giant renewable project, combining wind and solar coupled with large battery storage to supply renewable electricity to the UK.

In the **rest of the continent**, in **South Africa**, TotalEnergies won a tender in 2022 launched by Sasol and Air Liquide for an onshore wind project (140 MW, 35%) and a solar project (100 MW, 35%). These two projects are expected to enable TotalEnergies to decarbonize the energy supplying Sasol and Air Liquide's industrial sites, in accordance with the Corporate PPA signed between the parties in February 2023 covering the supply of 260 MW of renewable electricity over a period of 20 years. In December 2023, TotalEnergies also announced with its partners the launch of the construction of a hybrid renewable project comprising a 216 MW solar power plant (35%) as well as a 500 MWh battery storage system (35%) to supply renewable electricity via a sales agreement (PPA) for 20 years to the national grid. The Company won the tender for this project in 2021, as well as a second tender for the development of an 87 MW solar project (36%). TotalEnergies also owns a stake in the Prieska solar power plant (86 MW, 27%).

TotalEnergies is also developing solar projects in **Angola** (Quilemba, 35 MW, 51%) and **Mozambique** (Dondo, 40 MW, 90%), where the consortium consisting of EDF (40%), TotalEnergies (30%) and Sumitomo Corporation (30%) was selected as a strategic partner by the Government of Mozambique in December 2023 to develop the Mphanda Nkuwa hydroelectric project with a capacity of 1500 MW.

## OFFSHORE WIND POWER

As part of its long-term strategy to develop renewable energy sources, TotalEnergies has been developing a strong presence in the fixed and floating offshore wind industry since 2020, drawing on its experience and know-how in the offshore oil segment as well as its ability to manage large projects and mobilize the necessary financing. At year-end 2023, TotalEnergies had around 15 GW gross capacity of offshore wind projects under construction and in development, of which approximately 10% is floating.

In **Germany**, the Company won two maritime concessions in July 2023, one in the North Sea, the other in the Baltic Sea, to develop two wind farms with a combined capacity of 3 GW.

The production generated by these German sites will be marketed by TotalEnergies, either through direct sales on the electricity market, or by entering into PPAs with end buyers, thus allowing them to reduce their carbon footprint. These projects, with competitive costs considering the quality of the sites, illustrate the Company's strategy of becoming an integrated player in the electricity markets taking advantage of price volatility and will contribute to achieving the profitability objectives of the Integrated Power activity.

(1) Source: Casa dos ventos.

(2) Source: Enerdata.

In **England**, a 50/50 joint-venture between TotalEnergies and Corio Generation, a MacQuarie affiliate, won a concession in the British part of the North Sea in February 2021 to develop the fixed 1.5 GW Outer Dowsing Offshore Wind project. In March 2023, Gulf Energy Development Public Company Limited (GULF) announced that it had acquired half of Corio Generation's stake. GULF owns 24.99% of the Outer Dowsing Offshore Wind project, alongside Corio Generation (25.01%) and TotalEnergies (50%).

In **Scotland**, in 2020, TotalEnergies acquired a majority stake (51%) in the Seagreen project, an offshore wind farm with a capacity of 1.1 GW, located off the Angus coast in the North Sea, alongside SSE Renewables. Upon start-up in October 2023, the farm became the largest wind farm in Scotland and one of the deepest in the world<sup>(1)</sup> on a fixed foundation. It is operating at its maximum rated capacity and is therefore expected to generate approximately 5 TWh of renewable electricity per year. In December 2023, TotalEnergies sold a 25.5% stake in the Seagreen project to PTTEP. Following the transaction, pending the approval of the competent authorities, TotalEnergies will own 25.5% of Seagreen alongside PTTEP (25.5%) and SSE Renewables (49%).

In January 2022, following ScotWind's call for tenders, the joint-venture between TotalEnergies (38.25%), Corio Generation (46.75%) and RIDG (15%), a Scottish developer in offshore wind, obtained the N1 zone concession to develop a 2 GW offshore windfarm. This project, called the West of Orkney Windfarm, will be located 30 kilometers off the Orkney archipelago in Scotland.

In the **United States**, after having obtained, in February 2022, 100% of the maritime concession OCS-A 0538 off the coasts of New York and New Jersey, TotalEnergies joined forces in October 2023 with Corio Generation and Rise Light & Power (Rise) to develop the "Attentive Energy" project, with a capacity of more than 3 GW. Corio Generation and Rise have taken respective stakes of 27.7% and 16.3% in this project, with TotalEnergies retaining the remaining 56%. Under the agreement, Rise will interconnect the offshore wind project at its Ravenswood production site, enabling the shutdown of its natural gas-fired power generators. This emblematic site, a pillar of the New York energy system, will thus be transformed into a green energy hub, where Attentive Energy will base its operation and maintenance activities. In December 2023, the Attentive Energy project received approval for its first federal permit (Site Assessment Plan) for the total 3 GW capacity of the site.

In parallel, in October 2023 the Attentive Energy One project, owned by TotalEnergies (40%), Rise (35%) and Corio Generation (25%), won the call for tenders for ORECs (offshore renewable energy credits) organized by the New York State Energy and Research Development Agency (NYSERDA). Attentive Energy One was thus selected for a 25-year contract for the supply of 1.4 GW of renewable electricity and received approval of its first federal Site Assessment Plan in December 2023. The consortium's goal is to commission this project in 2029.

Finally, the Attentive Energy Two project, owned by TotalEnergies (70%) and Corio Generation (30%), won the New Jersey State tender for OREC in January 2024. Attentive Energy Two has been selected for a 20-year contract for the supply of 1.34 GW of renewable electricity. The consortium's goal is to commission this project in 2031.

In November 2023 in North Carolina, TotalEnergies filed the first Site Assessment Plan for its Carolina Long Bay project (1 to 2 GW, 100%, a concession won in May 2022).

In **France**, in 2020, TotalEnergies became a 20% shareholder in the Eolmed pilot project for a 30 MW floating wind farm located in the Mediterranean off the coast of Gruissan and Port-La Nouvelle, construction of which started in May 2022, with commissioning scheduled to take place during 2024.

In **South Korea**, TotalEnergies is developing a portfolio of more than 2 GW of bottom fixed and floating wind power with the Bada project in partnership with Corio Generation. In November 2022, the SK Ecoplant group purchased a minority interest in the project.

In **Taiwan**, the Yunlin project, with a capacity of 640 MW, in which TotalEnergies acquired a 23% stake in May 2021 from wpd, is currently under construction. The project started to inject electricity into the grid in November 2021.

In February 2023, TotalEnergies and Corio Generation announced the creation of a joint-venture to develop the "Formosa 3" wind farms off the coast of Taiwan. The Formosa 3 project comprises three wind farms, Haiding 1, 2 and 3, located offshore Changhua County in western Taiwan. Formosa 3's Haiding 2 wind farm was awarded a grid capacity of 600 MW in December 2022 by the Taiwan Energy Bureau, in a third round of auctions.

## DISTRIBUTED GENERATION

In the fast-expanding **decentralized power generation** segment, TotalEnergies is dedicated to developing and building photovoltaic systems, that may be combined with batteries or other means of generation installed at industrial or commercial sites for own consumption. Depending on each country's regulations, TotalEnergies can operate those systems or lease them to local players. TotalEnergies enters into private PPAs as part of its activities. In addition, it helps to roll out TotalEnergies' program for solarizing its own sites.

TotalEnergies has operational activities in more than 30 countries at year-end 2023, with clients in Asia, the Middle East, Africa, Europe and the United States. At the end of 2023, its portfolio amounts to more than 900 MW of gross installed capacity spread over more than 480 sites and 620 additional MW of secured projects.

In the **United States**, following the acquisition in 2022 of SunPower's industrial and commercial solar activities, TotalEnergies continues to develop decentralized projects, with the signing of more than 140 MW of solar and battery capacity in 2023. TotalEnergies notably concluded in 2023 with the Holcim group a solar project of more than 33 MW associated with a 19 MW BESS (battery energy storage system) on the Portland cement production site in Colorado. The project will cover more than 40% of the site's consumption. Holcim will receive approximately 71 GWh of renewable energy from the project annually under a Power Purchase and Storage Services Agreement ("PPSSA") with a minimum duration of 15 years.

In **China**, at year-end 2023 the 50/50 joint-venture formed in 2019 between TotalEnergies and Envision Group, one of the world leaders<sup>(2)</sup> in smart energy systems, was operating almost 500 MW of decentralized solar capacity on behalf of its BtB customers.

In **South-East Asia**, in April 2022, TotalEnergies and ENEOS announced the creation of a joint-venture to develop decentralized solar power production for their BtB customers in several Asian countries. This joint-venture (50/50) between two major players in the segment aims to develop 2 GW of decentralized solar capacity over the next five years.

In the **Middle East**, TotalEnergies joined forces with Veolia to construct a photovoltaic project in Oman to power a seawater desalination plant and provide drinking water to more than 600,000 people<sup>(3)</sup>. This 17 MW project, commissioned in 2023, is the first of its kind in the Middle East; it produces more than 30 GWh/y of renewable electricity and should avoid nearly 300 kt of CO<sub>2</sub> emissions.

(1) Source: The Energy Institute.

(2) Source: Envision Energy.

(3) TotalEnergies data.

## RENEWABLE ELECTRICITY GENERATION CAPACITY AS OF DECEMBER 31, 2023<sup>(1)</sup>

Solar	In operation	In construction	In development
France	0.9	0.2	0.7
Rest of Europe	0.2	0.4	4.6
Africa	0.1	0.0	1.1
Middle East	1.2	0.1	1.5
North America	4.9	1.4	8.2
South America	0.4	0.0	1.4
India	5.4	0.6	4.7
Asia-Pacific	1.5	0.0	2.9
<b>TOTAL SOLAR GROSS CAPACITY (GW)</b>	<b>14.6</b>	<b>2.8</b>	<b>25.3</b>

Onshore wind	In operation	In construction	In development
France	0.6	0.0	0.4
Rest of Europe	1.1	0.0	0.3
Africa	0.0	0.0	0.3
Middle East	0.0	0.0	0.7
North America	2.1	0.1	3.4
South America	1.2	0.4	0.8
India	0.5	0.0	0.2
Asia-Pacific	0.0	0.0	0.4
<b>TOTAL ONSHORE WIND GROSS CAPACITY (GW)</b>	<b>5.5</b>	<b>0.6</b>	<b>6.5</b>

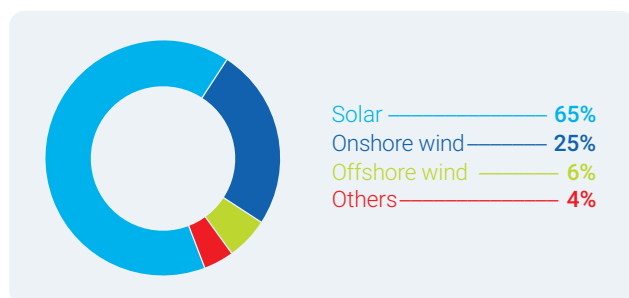
Offshore wind	In operation	In construction	In development
France	0.0	0.0	0.0
Rest of Europe	1.1	0.0	7.4
Africa	0.0	0.0	0.0
Middle East	0.0	0.0	0.0
North America	0.0	0.0	4.1
South America	0.0	0.0	0.0
India	0.0	0.0	0.0
Asia-Pacific	0.3	0.4	2.9
<b>TOTAL OFFSHORE WIND GROSS CAPACITY (GW)</b>	<b>1.4</b>	<b>0.4</b>	<b>14.4</b>

Storage and hydroelectricity	In operation	In construction	In development
France	0.1	0.0	0.0
Rest of Europe	0.2	0.1	0.1
Africa	0.0	0.0	0.3
Middle East	0.0	0.0	0.0
North America	0.5	0.2	5.4
South America	0.0	0.0	0.4
India	0.0	0.0	0.0
Asia-Pacific	0.0	0.0	1.3
<b>TOTAL STORAGE AND HYDROELECTRICITY GROSS CAPACITY (GW)</b>	<b>0.8</b>	<b>0.3</b>	<b>7.5</b>

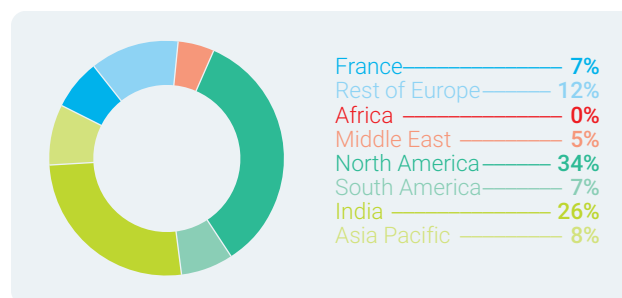
(1) Including 20% of Adani Green Energy Ltd's gross capacities and 50% of Clearway Energy Group's gross capacities.

## RENEWABLE ELECTRICITY GENERATION CAPACITY IN OPERATION AS OF DECEMBER 31, 2023

### BY TECHNOLOGY (GW GROSS)

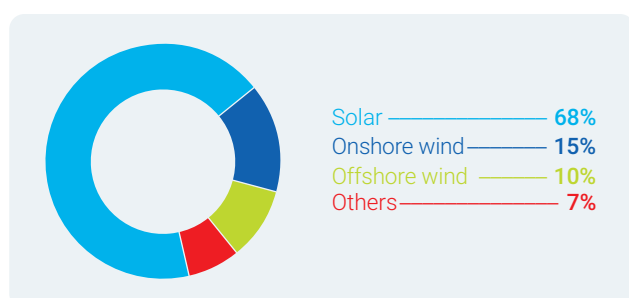


### BY GEOGRAPHY (GW GROSS)

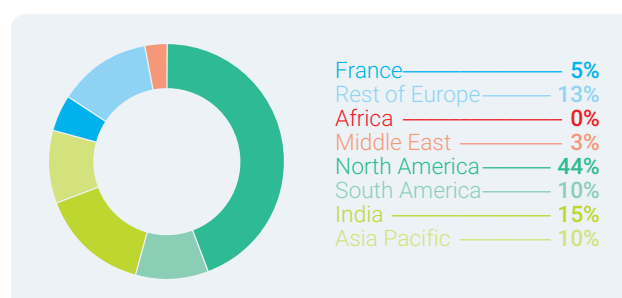


## RENEWABLE ELECTRICITY GENERATION CAPACITY IN CONSTRUCTION AS OF DECEMBER 31, 2023

### BY TECHNOLOGY (GW GROSS)

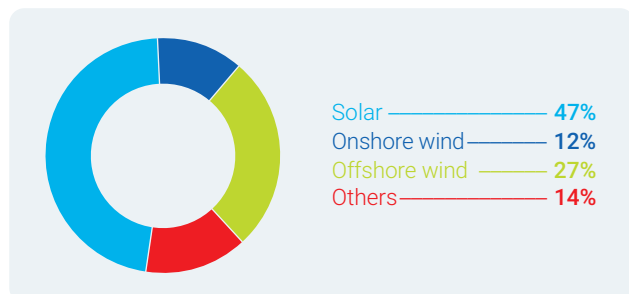


### BY GEOGRAPHY (GW GROSS)

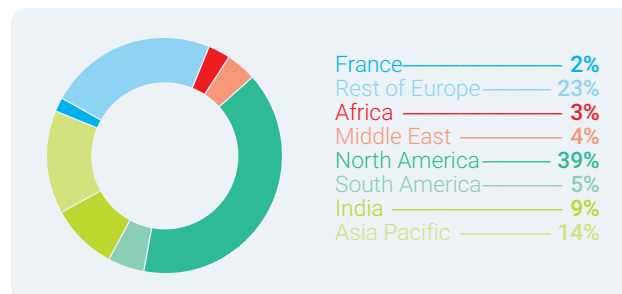


## RENEWABLE ELECTRICITY GENERATION CAPACITY IN DEVELOPMENT AS OF DECEMBER 31, 2023

### BY TECHNOLOGY (GW GROSS)

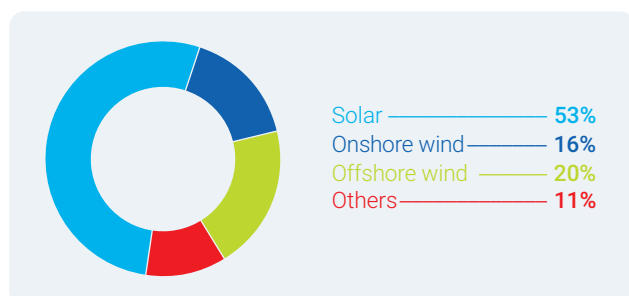


### BY GEOGRAPHY (GW GROSS)

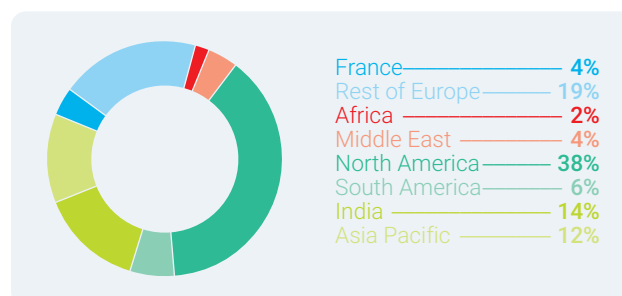


## RENEWABLE ELECTRICITY GENERATION CAPACITY IN OPERATION, IN CONSTRUCTION & IN DEVELOPMENT AS OF DECEMBER 31, 2023

### BY TECHNOLOGY (GW GROSS)



### BY GEOGRAPHY (GW GROSS)



## → ELECTRICITY STORAGE

Electricity storage is a major challenge for the future of power grids and a vital add-on to renewables, which are intermittent by nature. Large-scale electricity storage is essential to promote the growth of renewables and help them capture a significant share of the electricity mix.

TotalEnergies develops stationary **electricity storage** via its subsidiary Saft Groupe, (Saft). At the end of 2023, Saft is present in 19 countries mainly in Europe, the United States and Asia and benefits from the expertise and experience of its 4,000 employees.

Saft is a century-old French company that specializes in the design, manufacture, and sale of high-tech batteries for industry. Saft develops batteries based on nickel, lithium-ion and primary lithium technologies. The company is active in transportation (aeronautics, rail and off-road electric mobility), industrial infrastructure, meters and the Internet of things, aerospace, defense and energy storage. Building on the strength of its technological know-how, and through its energy storage activities, Saft is well placed to benefit from the growth in renewables beyond its current activities, by offering massive storage capacities, combined with the generation of electricity from renewables. This is one of Saft's main sources of growth.

In 2023, Saft continued to develop its business, particularly in energy storage and mobility, with:

- the commissioning of battery energy storage equipment with a total capacity of 150 MW/225 MWh, i.e. 114 high-tech containers designed and assembled by Saft, for the TotalEnergies Myrtle Solar power plant in Houston (Texas);
- the start, on the Grandpuits site, of a battery energy storage park with a capacity of 43 MW/43 MWh;
- the commissioning of an energy storage site on TotalEnergies' Carling platform, with a storage capacity of 25 MW/25 MWh. This site is made up of 11 lithium-ion battery containers, designed and assembled by Saft;
- the launch on the TotalEnergies refinery site in Antwerp (Belgium) of a new storage site with a capacity of 25 MW/75 MWh. This project constitutes the largest European battery installation for TotalEnergies. This installation, which is expected to be operational by the end of 2024, will contribute 24/7 to the needs of the European and Belgian high-voltage transport network by ensuring daily smoothing of electricity on the national grid, particularly during tense winter periods, ensuring the security of the network by actively participating in the balancing reserves of the national grid and by allowing more renewable electricity to be integrated into the network;
- the signing of a contract with Meridian Energy, to deliver the first large-scale BESS, connected to the New Zealand network. Saft lithium-ion technology will provide 100 MW of power and 200 MWh of storage capacity to support grid stability as intermittent wind and solar power expand in the country;
- the delivery of a BESS to replace diesel backup power in a sustainable Microsoft data center in Sweden;
- the first delivery to Siemens Mobility of two 100 kWh lithium-ion batteries per train for its cutting-edge hydrogen train, Mireo Plus H in Germany. In addition, the strong growth of renewables is changing the balance of grid operators. Consequently, TotalEnergies offers them services to manage the flexibility required to balance production and consumption.

TotalEnergies won a major lot in the long-term call for tenders launched by RTE in 2019 to strengthen the security of supply of the French electricity system, and thus started up a battery-based electricity storage facility in France in 2021. The seven-year contract provides a stable revenue base for energy storage projects. TotalEnergies won 129 MW/129 MWh, which are connected to the grid at three of the Company's sites: Dunkirk (61 MW), Carling (25 MW) and Grandpuits (43 MW). 86 MW have been operational since 2022 (Dunkirk and Carling). An additional 43 MW (Grandpuits) came on stream in April 2023. These facilities are composed of 60 2.5 MWh containers designed and assembled by Saft. This roll-out is in addition to installations combining photovoltaics and storage in French overseas territories (26 MW/76 MWh) the end of 2024, will contribute 24/7 to the needs of the European and Belgian high-voltage transport network by ensuring daily smoothing of electricity on the national grid, particularly during tense winter periods, ensuring the security of the network by actively participating in the balancing reserves of the national grid and by allowing more renewable electricity to be integrated into the network;

Saft conducts research to develop ever safer and more powerful batteries, particularly for mobility applications and renewable energy storage, using artificial intelligence and big data. Today, Saft's R&D teams are based around two epicenters, one located in Bordeaux (France) and the other in Cockeysville (Maryland, United States). These two centers house the Upstream Research teams, the Incubator and the *Tout Solide* solid-state battery program. In 2023, Saft unveiled IBIS (Intelligent Battery Integrated System), a smart battery that is more efficient for stationary storage and electric vehicles.

In 2023 Saft took the lead in the ELIAS project (Solid-state Advanced Lithium Elements), structured around a consortium bringing together six major players including the Atomic Energy Commission and the National Research Center. ELIAS aims to develop and implement an industrial demonstrator for the production of high-performance fourth-generation batteries. These solutions target several market segments: energy applications (e.g. space, underwater applications, stationary battery storage) and power applications (e.g. e-VTOL, industrial backup).

In addition, TotalEnergies also develops other electrical energy storage projects through partnerships. In September 2021, Stellantis, Saft and Mercedes-Benz entered into an agreement to welcome Mercedes-Benz to ACC (Automotive Cells Company), the joint-venture created in 2020 to design and manufacture batteries for electric vehicles. With an R&D center already operational since 2020 and a state-of-the-art pilot plant in the Nouvelle Aquitaine region in France, ACC inaugurated its first Gigafactory in Hauts-de-France in 2023, with a first production line with a capacity of more than 13 GWh to reach a capacity of 40 GWh in 2030.



## Natural Gas and electricity marketing and trading

### → CORPORATE PPA

On deregulated electricity markets, it is possible to sign long-term sales contracts, called Corporate PPA, for the output from solar or wind assets with corporate customers. Unlike in the distributed generation business, these assets are not located on the customer's property, but elsewhere on the electricity grid. The electricity generated by these assets is then injected into the electricity grid.

These contracts are usually signed on a long-term basis with fixed prices or with limited price variations. They enable customers to buy low-carbon electricity directly from the producer, while at the same time benefiting from a stable electricity price over the long term with access to the cost advantages offered by large-scale plants. These contracts enable TotalEnergies to secure long-term electricity sales and to promote the launch of new production assets.

Corporate PPAs exist in a growing number of countries. Today, the most dynamic markets are United States, Western Europe, Brazil and Australia. TotalEnergies is positioning itself locally in these different markets to offer its customers global solutions and thus support them in their decarbonization objectives. In 2023, several corporate PPA were signed, including a new 15-year 100 MW electricity sales contract with Saint-Gobain in the United States and a renewable energy supply contract with Air Liquide/SASOL for a total capacity of 260 MW in South Africa.

At the end of 2023, TotalEnergies has a portfolio of Corporate PPA in these markets of close to 4.2 TWh, equivalent to more than 1.7 GW of installed capacity. In addition to the companies mentioned above, these Corporate PPA involve clients such as Amazon Web Services, Kilroy, LyondellBasel, Microsoft and Merck.

### → ELECTRICITY AGGREGATION AND TRADING

TotalEnergies is active in electricity trading in Europe and North America. It sells its output to third parties and supplies its subsidiaries. To support its development in the field of renewable electricity, the Company has developed specific expertise in trading on short-term markets (intra-day, physical delivery), in the structured PPA-type products, aggregation, and flexibility management segments.

In **Europe** TotalEnergies delivered 95 TWh of electricity in 2023, compared to 122 TWh in 2022 and 111 TWh in 2021, mainly from external sources. European electricity trading is mainly carried out from offices in Geneva, Paris, Madrid and Liège.

In Germany, TotalEnergies signed an agreement to acquire Quadra Energy in October 2023. Founded in 2012 and with a 9 GW virtual power plant, Quadra Energy is one of the three leading aggregators of renewable electricity generation in Germany. Specializing in the aggregation of renewable electricity, Quadra Energy purchased the production of approximately 5,000 wind and solar farms in 2022 and resold 14 TWh on wholesale markets and to German resellers and customers.

This acquisition, which is subject to authorization from the competent authorities, is expected to allow TotalEnergies to strengthen its Integrated Power activities in Germany. The Company intends to leverage the recognized expertise of the 40 Quadra Energy employees who join it, as well as its innovative weather forecasting platform. These assets are also expected to allow the Company to strengthen its trading capabilities on intra-day markets, and to expand its marketing activities in order to offer its German customers competitive contracts for the sale of low-carbon electricity available 24 hours a day.

In **Switzerland**, TotalEnergies announced the acquisition of Predictive Layer in December 2023. The latter's activity is to improve the performance of electricity trading operations, thanks to the internalization of machine learning and artificial intelligence solutions. In particular, they make it possible to make projections on energy prices, whether on physical markets or derivatives markets.

In **North America**, TotalEnergies delivered 29.7 TWh of electricity in 2023 compared to 38.8 TWh in 2022 and 41.4 TWh in 2021. TotalEnergies plans to develop its trading activities on the US PJM and CAISO markets.

### → NATURAL GAS AND ELECTRICITY MARKETING

#### EUROPE

With a portfolio of 5.5 million BtB and BtC customer sites (gas and electricity) in **France**, 8.7 million BtB and BtC client sites in **Europe** and 52 TWh of electricity and 101 TWh of gas supplied in 2023, TotalEnergies has become a leading player in the sale of natural gas and electricity to both the residential and professional markets (commercial and industrial segments).

In a context of rising electricity prices, since November 2022, TotalEnergies has committed to support its customers by encouraging them to save energy, through the development of new offers and the broadcasting of voltage alerts on the electricity grid.

For individual customers in France, TotalEnergies has implemented:

- a new "Heures Eco" offer incentivizing consumers to reduce their electricity bills through cheaper tariffs during off-peak hours;
- a "BonusConso" program during the 2022-2023 winter, and renewed for the 2023-2024 winter, aimed at rewarding customers who reduce their electricity consumption over the winter period, in the form of bonuses applied directly to customers' invoices;
- in the winter of 2023-2024, the reactivation of the #TousAuCourant program, which gives suggestions for good practices to save electricity and issues alerts on days of pressure on the grid.

For professional clients and local authorities, TotalEnergies has implemented:

- options to reward flexible electricity consumption during peak times, – the roll-out of an awareness-raising campaign for all BtB customers.

TotalEnergies contributed to supporting very small enterprise (VSE) and small and medium enterprise (SME) by reducing, over the year of 2023, the prices of their electricity contracts signed in the second half of 2022 to €280/MWh excluding taxes. TotalEnergies has also committed to updating the twelve-month Horizon electricity tariff schedule at an average annual price of €280/MWh excluding taxes for new VSE and SME customers.

TotalEnergies markets natural gas and electricity in the residential and professional segments in **France** through its subsidiary TotalEnergies Electricité et Gaz France (a merger of the TotalEnergies Énergie Gaz, TotalEnergies Spring France and Direct Énergie entities), in **Belgium**, through TotalEnergies Power & Gas Belgium subsidiary (formerly Lampiris SA), and in **Spain**, where it serves both professional and residential customers following its acquisition of EDP's operations in Spain in 2020.

TotalEnergies also markets natural gas and electricity on the professional segment in the **United Kingdom** and the **Netherlands**.

## BREAKDOWN OF GAS AND ELECTRICITY SALES IN EUROPE

(in millions of BtB and BtC sites)

	2023	2022	2021	2020
<b>Europe</b>	<b>8.7</b>	<b>8.9</b>	<b>8.8</b>	<b>8.3</b>
France	5.5	5.6	5.4	4.8
Belgium	0.9	0.9	1.0	1.0
United Kingdom	0.3	0.3	0.3	0.2
Germany	0.0	0.0	0.0	0.1
The Netherlands	0.0	0.0	0.1	0.1
Spain	2.0	2.0	2.1	2.1

(in TWh of delivered electricity)

	2023	2022	2021	2020
<b>Europe</b>	<b>52.1</b>	<b>56.0</b>	<b>56.6</b>	<b>47.3</b>
France	29.2	32.1	33.4	26.7
Belgium	3.5	3.9	4.5	4.2
United Kingdom	13.8	13.4	12.6	9.3
Germany	0.0	0.0	0.0	3.9
The Netherlands	0.0	0.7	0.8	0.5
Spain	5.7	5.9	5.2	2.8

(in TWh of gas supplied)

	2023	2022	2021	2020
<b>Europe</b>	<b>100.9</b>	<b>99.2</b>	<b>101.2</b>	<b>95.8</b>
France	29.2	29.9	31.5	27.1
Belgium	7.1	7.6	10.3	9.1
United Kingdom	57.5	53.7	50.2	43.1
Germany	0.0	0.0	0.0	12.1
The Netherlands	0.0	2.9	3.9	3.6
Spain	7.7	5.1	5.3	0.8







# 5

## Upstream oil and gas activities

TotalEnergies' Upstream oil and gas activities encompass the oil and gas exploration and production activities of the Exploration & Production (E&P) and Integrated LNG segments. They are conducted in about 50 countries.

**2.5 Mboe/d**

of hydrocarbons  
produced in 2023

**10.6 Gboe**

of proved reserves  
of hydrocarbons  
as of December 31, 2023

**18 kg/boe**

Intensity of GHG emissions of  
Upstream oil & gas activities  
based on equity share in 2023

**\$5.5 /boe**

Production costs  
(ASC932) in 2023





#### SUSTAINABLE DEVELOPMENT

- Safety, a core value
- Actively reducing scope 1&2 GHG direct emissions
- Leveraging low-cost competitive advantage

#### FOCUSING ON VALUE BY PLAYING TO TOTALENERGIES' STRENGTHS

- Value over volume: profitable growth driven by LNG
- Technical expertise in deepwater and LNG
- Core geographical areas

#### HIGHGRADING PORTFOLIO, RENEWING RESERVES AND INTEGRATING IN CLIMATE AMBITION

- Exploration targeting low-cost development projects
- Dynamic portfolio management aiming at maintaining low breakeven
- Ensuring consistency with TotalEnergies Climate ambition (low costs and minimized carbon intensity)

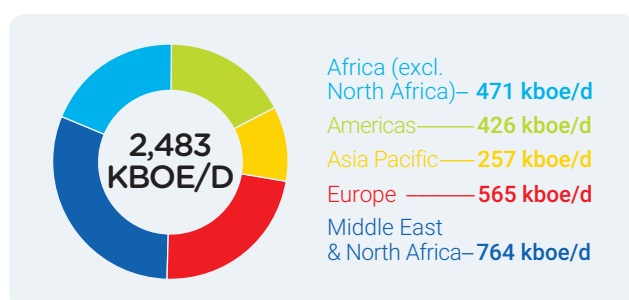
## PRODUCTION

Hydrocarbon production	2023	2022	2021	2020	2019
Oil (including bitumen) (kb/d)	1,388	1,307	1,274	1,298	1,431
Gas (including Condensates and associated NGL) (kboe/d)	1,095	1,458	1,545	1,573	1,583
<b>COMBINED PRODUCTION (kboe/d)</b>	<b>2,483</b>	<b>2,765</b>	<b>2,819</b>	<b>2,871</b>	<b>3,014</b>

Hydrocarbon production	2023	2022	2021	2020	2019
Liquids (Kb/d)	1,550	1,519	1,500	1,543	1,672
Gas (Mcf/d)	5,028	6,759	7,203	7,246	7,309 <sup>(1)</sup>
<b>COMBINED PRODUCTION (kboe/d)</b>	<b>2,483</b>	<b>2,765</b>	<b>2,819</b>	<b>2,871</b>	<b>3,014</b>

(1) Data restated.

### 2023 TOTALENERGIES HYDROCARBON PRODUCTION BY GEOGRAPHICAL ZONE (in kboe/d)



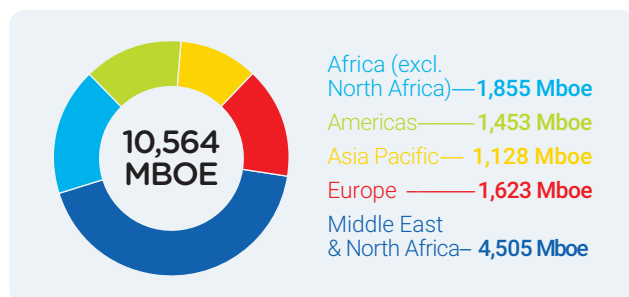
## PROVED RESERVES<sup>(1)</sup>

As of December 31,	2023	2022	2021	2020	2019
Oil (including bitumen) (Mb)	4,731	5,183	5,050	5,003	5,167
Gas (including Condensates and associated NGL) (Mboe)	5,833	5,007	7,012	7,325	7,514
<b>HYDROCARBON RESERVES (Mboe)</b>	<b>10,564</b>	<b>10,190</b>	<b>12,062</b>	<b>12,328</b>	<b>12,681</b>

As of December 31,	2023	2022	2021	2020	2019
Liquids (Mb)	5,487	5,716	5,843	5,804	6,006
Gas (Bcf)	27,517	24,093	33,450	35,220	36,015
<b>HYDROCARBON RESERVES (Mboe)</b>	<b>10,564</b>	<b>10,190</b>	<b>12,062</b>	<b>12,328</b>	<b>12,681</b>

(1) Proved reserves are calculated in accordance with the United States Securities and Exchange Commission regulations.

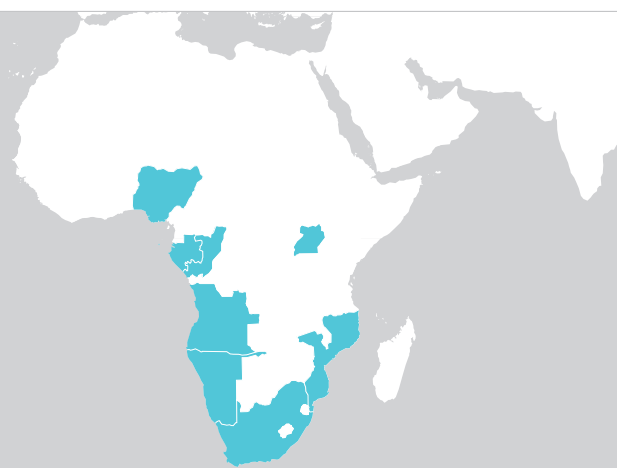
### 2023 TOTALENERGIES HYDROCARBON PROVED RESERVES BY GEOGRAPHICAL ZONE (in Mboe)



## Africa (excl. North Africa)

In 2023, TotalEnergies' production in Africa (excl. North Africa) was **471 kboe/d**

Representing **17%** of TotalEnergies' overall production



## AFRICA (EXCL. NORTH AFRICA) PRODUCTION

	2023	2022	2021	2020	2019
Liquids production (kb/d)	348	358	398	488	558
Gas production (Mcf/d)	614	584	681	717	737 <sup>(1)</sup>
<b>COMBINED PRODUCTION (kboe/d)</b>	<b>471</b>	<b>474</b>	<b>532</b>	<b>629</b>	<b>705</b>

(1) Data restated.

## MAJOR START-UPS

Start-up	Project	Field type	Hydrocarbon type	Capacity (kboe/d)	Share	op.	Country
2021	ZINIA PH2	Deep offshore	Oil	40	38%	X	Angola
	CLOV PH2	Deep offshore	Oil	40	38%	X	Angola
2022	IKIKE	Offshore	Oil	50	40%	X	Nigeria

## TOTALENERGIES' PRODUCING ASSETS AS OF DECEMBER 31, 2023<sup>(1)</sup>

Africa (excluding North Africa)	Exploration & Production segment	Integrated LNG segment
<b>Angola (1953)</b>	<b>Operated:</b> Girassol, Dalia, Pazflor, CLOV (Block 17) (38.00%), Kaombo (Block 32) (30.00%) <b>Non-operated:</b> Cabinda Block 0 (10.00%)	<b>Non-operated:</b> Angola LNG (13.60%)
<b>Gabon (1928)</b>	<b>Operated:</b> Baudroie Marine G5-143 (90.00%), Pointe Clairette Cap Lopez G6-5 (100.00%), Grand Anguille Marine G6-16 (100.00%), N'Tchengué G6-9 (100.00%), N'Tchengué Océan G6-14 (100.00%), Port Gentil Océan G6-15 (100.00%), Torpille G6-17 (100.00%)	
<b>Nigeria (1962)</b>	<b>Operated:</b> OML 99 Amenam-Kpono (30.40%), OML 99 Ikike (40.00%), OML 100 (40.00%), OML 102 Ofon (40.00%), PML 2/3 (ex OML 130), Akpo/Egina (24.00%) <b>Non-operated:</b> Shell Petroleum Development Company (SPDC) (10.00%), OML 118 Bonga (12.50%), OML 138 (20.00%)	<b>Operated:</b> OML 58 (40.00%) <b>Non-operated:</b> Nigeria LNG (15.00%)
<b>Republic of the Congo (1968)</b>	<b>Operated:</b> Moho Bilondo (53.50%), Moho Nord (53.50%), Nkossa (53.50%), Nsoko (53.50%), Sendji (55.25%), Yanga (55.25%) <b>Non-operated:</b> Lianzi (26.75%)	

(1) The table below shows TotalEnergies' producing assets at December 31, 2023 in Africa. TotalEnergies' interest in the local entity is approximately 100% in all cases except for TotalEnergies EP Gabon (58.28%) and TotalEnergies EP Congo (85.00%).

## Americas

In 2023, TotalEnergies' production in Americas was **426 kboe/d**

Representing **15%** of TotalEnergies' overall production



## AMERICAS PRODUCTION

	2023	2022	2021	2020	2019
Liquids production (kb/d)	251	238	179	158	168
Gas production (Mcf/d)	975	1,048	1,086	1,095	1,111
<b>COMBINED PRODUCTION (kboe/d)</b>	<b>426</b>	<b>425</b>	<b>372</b>	<b>353</b>	<b>365</b>

## MAJOR START-UPS

Start-up	Project	Field type	Hydrocarbon type	Capacity (kboe/d)	Share	op.	Country
2022	MERO 1	Deep offshore	Oil	180	19%		Brazil
2023	MERO 2	Deep offshore	Oil	180	19%		Brazil

## TOTALENERGIES' PRODUCING ASSETS AS OF DECEMBER 31, 2023

Americas	Exploration & Production segment	Integrated LNG segment
<b>Argentina</b> (1978)	<b>Operated:</b> Aguada Pichana Este – Mulichinco (27.27%), Aguada Pichana Este – Vaca Muerta (55.00%), Aguada San Roque (24.71%), Rincon La Ceniza (45.00%), La Escalonada (45.00%), Aries (37.50%), Cañadon Alfa Complex (37.50%), Carina (37.50%), Hidra (37.50%), Kaus (37.50%), Vega Pleyade (37.50%)	
<b>Bolivia</b> (1995)	<b>Operated:</b> Incahuasi (50.00%) <b>Non-operated:</b> San Alberto (15.00%), San Antonio (15.00%), Itaú (41.00%)	
<b>Brazil</b> (1975)	<b>Operated:</b> Lapa (45.00%) <b>Non-operated:</b> Libra (19.30%), Iara (22.50%), Atapu ToR Surplus (22.50%), Sepia ToR Surplus (28.00%)	
<b>United States</b> (1957)	<b>Non-operated:</b> Tahiti (17.00%), Jack (25.00%)	<b>Operated:</b> several assets in the Barnett basin (95% on average)



## Asia-Pacific

In 2023, TotalEnergies' production in Asia-Pacific was **257 kboe/d**

Representing **9%** of TotalEnergies' overall production



### ASIA-PACIFIC PRODUCTION

	2023	2022	2021	2020	2019
Liquids production (kb/d)	107	91	107	105	103
Gas production (Mcf/d)	805	960	1,145	1,121	1,077
<b>COMBINED PRODUCTION (kboe/d)</b>	<b>257</b>	<b>262</b>	<b>307</b>	<b>302</b>	<b>293</b>

### TOTALENERGIES' PRODUCING ASSETS AS OF DECEMBER 31, 2023

Asia-Pacific	Exploration & Production segment	Integrated LNG segment
Australia (2006)		<b>Not operated:</b> GLNG (27.50%) <sup>(1)</sup> , Ichthys (26.00%)
Brunei (1986)	<b>Operated:</b> Maharaja Lela Jamalulalam (37.50%)	
China (2006)	<b>Non-operated:</b> South Sulige (49.00%)	
Indonesia (1968)	<b>Non-operated:</b> Sebuiku (15.00%)	
Kazakhstan (1992)	<b>Non-operated:</b> Kashagan (16.81%)	

(1) TotalEnergies' interest in the unincorporated joint venture.



## Europe

In 2023, TotalEnergies' production in Europe was **565 kboe/d**

Representing **20%** of TotalEnergies' overall production



## EUROPE PRODUCTION

	2023	2022	2021	2020	2019
Liquids production (kb/d)	232	280	300	318	295
Gas production (Mcf/d)	1,801	3,427	3,453	3,478	3,528
<b>COMBINED PRODUCTION (kboe/d)</b>	<b>565</b>	<b>918</b>	<b>941</b>	<b>963</b>	<b>949</b>

## MAJOR START-UPS

Start-up	Project	Field type	Hydrocarbon type	Capacity (Kboe/d)	Share	op.	Country
2022	Johan Sverdrup 2	Offshore	Oil	220	8%		Norway
2023	Absheron PH1	Offshore	Gas	35	50%		Azerbaijan

## TOTALENERGIES' PRODUCING ASSETS AS OF DECEMBER 31, 2023

Europe	Exploration & Production segment	Integrated LNG segment
<b>Azerbaijan (2009)</b>	<b>Non-operated:</b> Absheron (50.00%)	
<b>Denmark (2018)</b>	<b>Operated:</b> Danish Underground Consortium (DUC) zone (43.20%), comprising the Dan/Halfdan, Gorm and Tyra fields, and all their satellites	
<b>Italy (1960)</b>	<b>Operated:</b> Tempa Rossa (50.00%)	
<b>Norway (1965)</b>	<b>Operated:</b> Skirne (40.00%), Atla (40.00%) <b>Non-operated:</b> Johan Sverdrup (8.44%), Åsgard (7.81%), Ekofisk (39.90%), Eldfisk (39.90%), Embla (39.90%), Tor (48.20%), Flyndre (6.26%), Islay (5.51%) <sup>(1)</sup> , Kristin (6.00%), Kvitebjørn (5.00%), Oseberg (14.70%), Oseberg East (14.70%), Oseberg South (14.70%), Troll (3.69%), Tune (10.00%), Tyrihans (23.15%), Tommeliten Alpha (20.14%)	<b>Non-operated:</b> Snøhvit (18.40%)
<b>Netherlands (1964)</b>	<b>Operated:</b> F15a (38.20%), J3a (30.00%), K1a (40.10%), K2c (60.00%), K3b (56.16%), K4a (50.00%), K4b/K5a (36.31%), K5b (50.00%), K6 (56.16%), L1a (60.00%), L1d (60.00%), L1e (55.66%), L1f (55.66%), L4a (55.66%) <b>Non-operated:</b> E16a (16.92%), E17a/E17b (14.10%), J3b/J6 (25.00%), Q16a (6.49%)	
<b>United Kingdom (1962)</b>	<b>Operated:</b> Alwyn North (100.00%), Dunbar (100.00%), Ellon (100.00%), Forvie North (100.00%), Grant (100.00%), Jura (100.00%), Nuggets (100.00%), Islay (94.49%), Elgin-Franklin (46.17%), West Franklin (46.17%), Glenelg (58.73%), Culzean (49.99%), Laggan Tormore, Edradour and Glenlivet (all 40.00%), Gryphon (86.50%), Maclure (38.19%), South Gryphon (89.88%), Tullich (100.00%), Ballindalloch (91.80%) <b>Non-operated:</b> Bruce (1.00%), Markham unitized field (7.35%), Harding (30.00%)	
<b>Russia (1991)</b>	None <sup>(2)</sup>	<b>Non-operated:</b> Yamal LNG (20.02%) <sup>(3)</sup>

(1) The Islay field extends partially into Norway. TotalEnergies EP UK holds a 94.49% interest and TotalEnergies EP Norge 5.51%.

(2) TotalEnergies no longer equity account for its 19.4% stake in Novatek as of December 31, 2022.

(3) TotalEnergies' direct interest of 20.02% in Yamal LNG.

## Middle East and North Africa

In 2023, TotalEnergies' production in Middle East and North Africa was **764 kboe/d**

Representing **28%** of TotalEnergies' overall production



### MIDDLE EAST AND NORTH AFRICA PRODUCTION

	2023	2022	2021	2020	2019
Liquids production (kb/d)	612	552	516	474	548
Gas production (Mcf/d)	833	740	838	835	857
<b>COMBINED PRODUCTION (kboe/d)</b>	<b>764</b>	<b>686</b>	<b>667</b>	<b>624</b>	<b>702</b>

### MAJOR START-UPS

Start-up	Project	Field type	Hydrocarbon type	Capacity (Kboe/d)	Share	op.	Country
2022	Al Shaheen Phase 2 Batch 2	Offshore	Oil	30	30%		Qatar
	Al Shaheen Phase 2 Batch 3	Offshore	Oil	48	30%		Qatar
2023	Block 10	Onshore	Gas	123	27% <sup>(1)</sup>		Oman

(1) After royalty in kind.

### TOTALENERGIES' PRODUCING ASSETS AS OF DECEMBER 31, 2023<sup>(1)</sup>

Middle East and North Africa	Exploration & Production segment	Integrated LNG segment
<b>Algeria</b> (1952)	<b>Non-operated:</b> TFT II (49.00%), Timimoun (37.75%), 404a & 208 (12.25%)	
<b>Egypt</b> (2010)	<b>Non-operated:</b> NEHO (25.00%)	
<b>United Arab Emirates</b> (1939)	<b>Non-operated:</b> ADNOC Onshore (10.00%), ADNOC Offshore: Umm Shaif/Nasr (20.00%), Lower Zakum (5.00%), SARB/Umm Lulu (20.00%), ADNOC Gas Processing (15.00%)	<b>Non-operated:</b> ADNOC LNG (5.00%)
<b>Iraq</b> (1924)	<b>Operated:</b> Ratawi (GGIP) (45%) <b>Non-operated:</b> Halfaya (22.50%)	
<b>Libya</b> (1959)	<b>Non-operated:</b> zones 15, 16 & 32 (37.50%) <sup>(2)</sup> , zones 129 & 130 (15.00%), zones 130 & 131 (12.00%), zones 70 & 87 (37.50%), Waha (20.41%)	
<b>Oman</b> (1937)	<b>Non operated:</b> Block 6 (4.00%) <sup>(3)</sup>	<b>Non-operated:</b> Oman LNG (5.54%), Qalhat LNG (2.04% through Oman LNG), Block 10 (26.55%)
<b>Qatar</b> (1936)	<b>Operated:</b> Al Khalij (40.00%) <b>Non-operated:</b> North Field-Block NF Dolphin (24.50%), Al Shaheen (30.00%)	<b>Non-operated:</b> North Field-QatarEnergy LNGN <sup>(2)</sup> (ex Qatargas 2) Train 5 (16.70%)

(1) The table below shows TotalEnergies' producing assets at December 31, 2023 in MENA. TotalEnergies' interest in the local entity is approximately 100% in all cases except for Oman.

(2) The interest in these assets is now reported according to the TotalEnergies interest in these assets, and no longer according to the interest in the foreign consortium as in previous years.

(3) TotalEnergies' indirect interest (4.00%) in the concession through its 10.00% stake in Private Oil Holdings Oman Ltd.

## COMBINED LIQUIDS AND GAS PRODUCTION<sup>(1) (2) (3)</sup>

(in thousands of barrels of oil equivalent per day)

	2023	2022	2021	2020	2019
<b>AFRICA (EXCL. NORTH AFRICA)</b>	<b>471</b>	<b>474</b>	<b>532</b>	<b>629</b>	<b>705</b>
Angola	166	178	175	212	232
Republic of the Congo	69	75	94	117	134
Gabon	17	17	24	27	33
Nigeria	219	204	239	273	306
<b>AMERICAS</b>	<b>426</b>	<b>425</b>	<b>372</b>	<b>353</b>	<b>365</b>
Argentina	87	85	81	84	86
Bolivia	35	45	49	45	39
Brazil	135	104	49	35	16
Canada	86	101	91	81	98
Colombia	-	-	-	-	< 1
United States	83	85	92	101	111
Venezuela	-	5	10	7	15
<b>ASIA PACIFIC</b>	<b>257</b>	<b>262</b>	<b>307</b>	<b>302</b>	<b>293</b>
Australia	120	113	116	118	106
Brunei	9	10	11	15	21
China	31	27	24	23	19
Indonesia	1	1	2	2	2
Kazakhstan	90	64	81	76	74
Myanmar	-	8	16	16	16
Thailand	6	39	57	52	55
<b>EUROPE</b>	<b>565</b>	<b>918</b>	<b>941</b>	<b>963</b>	<b>949</b>
Azerbaijan	14				
Denmark	32	34	34	36	56
Italy	18	15	19	16	< 1
Norway	239	218	220	217	204
Netherlands	9	12	13	15	16
United Kingdom	142	171	159	201	189
Russia	111	468	496	478	484
<b>MIDDLE EAST AND NORTH AFRICA</b>	<b>764</b>	<b>686</b>	<b>667</b>	<b>624</b>	<b>702</b>
Algeria	51	61	51	45	59
Egypt	7	3	-	-	-
United Arab Emirates	353	318	280	270	295
Iraq	18	12	14	24	20
Libya	96	79	84	43	80
Oman	55	40	39	39	38
Qatar	184	173	199	203	210
Yemen	-	< 1	-	-	-
<b>TOTAL PRODUCTION</b>	<b>2,483</b>	<b>2,765</b>	<b>2,819</b>	<b>2,871</b>	<b>3,014</b>
<b>Including share of equity affiliates</b>	<b>335</b>	<b>682</b>	<b>732</b>	<b>712</b>	<b>731</b>
Angola	19	17	19	23	22
United Arab Emirates	30	31	31	29	32
Oman	40	40	39	38	37
Qatar	135	127	149	148	155
Russia	111	466	492	473	479
Venezuela	-	-	2	1	6

(1) Liquids include crude oil, bitumen, condensates, and natural gas liquids (NGL).

(2) Including fuel gas (394 Mcf/d in 2023, 490 Mcf/d in 2022, 490 Mcf/d in 2021, 500 Mcf/d in 2020, 531 Mcf/d in 2019).

(3) Gas conversion ratio: 1 boe = 1 b of crude oil = 5,388 cf of gas in 2023 (5,422 cf of gas in 2022, 5,458 cf of gas in 2021, 5,453 cf of gas in 2020, 5,454 cf of gas in 2019).

## LIQUIDS PRODUCTION<sup>(1)</sup>

(in thousands of barrels per day)

	2023	2022	2021	2020	2019
<b>AFRICA (EXCL. NORTH AFRICA)</b>	<b>348</b>	<b>358</b>	<b>398</b>	<b>488</b>	<b>558</b>
Angola	143	155	150	184	205
Republic of the Congo	65	70	88	111	128
Gabon	16	16	23	26	31
Nigeria	124	117	137	167	194
<b>AMERICAS</b>	<b>251</b>	<b>238</b>	<b>179</b>	<b>158</b>	<b>168</b>
Argentina	7	6	7	7	7
Bolivia	4	5	6	6	5
Brazil	132	102	48	34	16
Canada	86	101	91	81	98
Colombia	-	-	-	-	< 1
United States	22	24	25	29	36
Venezuela	-	-	2	1	6
<b>ASIA PACIFIC</b>	<b>107</b>	<b>91</b>	<b>107</b>	<b>105</b>	<b>103</b>
Australia	31	30	31	33	29
Brunei	1	1	1	3	7
China	< 1	< 1	< 1	< 1	< 1
Indonesia	-	-	< 1	< 1	< 1
Kazakhstan	74	54	67	62	59
Thailand	1	6	8	7	8
<b>EUROPE</b>	<b>232</b>	<b>280</b>	<b>300</b>	<b>318</b>	<b>295</b>
Azerbaijan	5				
Denmark	22	24	24	26	34
Italy	18	15	18	15	< 1
Norway	138	123	135	130	104
Netherlands	< 1	< 1	< 1	< 1	< 1
United Kingdom	44	53	48	70	79
Russia	5	65	75	77	78
<b>MIDDLE EAST AND NORTH AFRICA</b>	<b>612</b>	<b>552</b>	<b>516</b>	<b>474</b>	<b>548</b>
Algeria	24	31	28	26	35
Egypt	< 1	< 1	-	-	-
United Arab Emirates	347	311	272	261	286
Iraq	17	11	13	23	19
Libya	88	73	80	41	78
Oman	28	26	25	25	26
Qatar	108	100	98	98	104
Yemen	-	< 1	-	-	-
<b>TOTAL PRODUCTION</b>	<b>1,550</b>	<b>1,519</b>	<b>1,500</b>	<b>1,543</b>	<b>1,672</b>
<b>Including share of equity affiliates</b>	<b>150</b>	<b>203</b>	<b>206</b>	<b>202</b>	<b>216</b>
Angola	4	4	4	5	5
United Arab Emirates	24	25	24	22	24
Oman	26	26	25	24	25
Qatar	91	84	80	78	83
Russia	5	64	71	72	73
Venezuela	-	-	2	1	6

(1) Liquids consist of crude oil, bitumen, condensates and natural gas liquids (NGL). With respect to bitumen, TotalEnergies' production in Canada consists of bitumen only, and all of TotalEnergies' bitumen production is in Canada. With respect to NGL, the table above does not set forth separate figures for NGL because they represented less than 7.5% of TotalEnergies liquids production in each of the years 2019, 2020, 2021, 2022, 2023.

## GAS PRODUCTION<sup>(1) (2)</sup>

(in millions of cubic feet per day)

	2023	2022	2021	2020	2019
<b>AFRICA (EXCL. NORTH AFRICA)</b>	<b>614</b>	<b>584</b>	<b>681</b>	<b>717</b>	<b>737<sup>(3)</sup></b>
Angola	122	120	128	146	140 <sup>(3)</sup>
Republic of the Congo	20	26	32	29	32
Gabon	5	5	4	7	7
Nigeria	467	433	517	535	558
<b>AMERICAS</b>	<b>975</b>	<b>1,048</b>	<b>1,086</b>	<b>1,095</b>	<b>1,111</b>
Argentina	442	438	413	427	438
Bolivia	175	223	238	220	193
Brazil	17	10	3	4	2
United States	341	347	377	404	423
Venezuela	-	30	55	40	55
<b>ASIA PACIFIC</b>	<b>805</b>	<b>960</b>	<b>1,145</b>	<b>1,121</b>	<b>1,077</b>
Australia	482	447	459	459	415
Brunei	42	45	50	61	72
China	170	147	129	126	106
Indonesia	5	8	11	10	10
Kazakhstan	76	49	71	69	68
Myanmar	-	64	125	126	126
Thailand	30	200	300	270	280
<b>EUROPE</b>	<b>1,801</b>	<b>3,427</b>	<b>3,453</b>	<b>3,478</b>	<b>3,528</b>
Azerbaijan	53	0	0	0	0
Denmark	50	51	52	54	114
Italy	2	2	3	2	-
Norway	546	514	462	470	539
Netherlands	52	69	73	87	90
United Kingdom	521	626	594	710	598
Russia	577	2,165	2,269	2,155	2,187
<b>MIDDLE EAST AND NORTH AFRICA</b>	<b>833</b>	<b>740</b>	<b>838</b>	<b>835</b>	<b>857</b>
Algeria	151	169	132	108	132
Egypt	37	19	-	-	-
United Arab Emirates	34	35	42	47	51
Iraq	4	4	3	3	3
Libya	42	32	23	10	15
Oman	145	74	72	78	65
Qatar	420	407	566	589	591
<b>TOTAL PRODUCTION</b>	<b>5,028</b>	<b>6,759</b>	<b>7,203</b>	<b>7,246</b>	<b>7,310<sup>(3)</sup></b>
<b>Including share of equity affiliates</b>	<b>1,004</b>	<b>2,581</b>	<b>2,842</b>	<b>2,748</b>	<b>2,781<sup>(3)</sup></b>
Angola	77	69	78	94	90 <sup>(3)</sup>
United Arab Emirates	34	34	40	36	39
Oman	73	74	72	78	66
Qatar	243	240	385	386	400
Russia	577	2,164	2,267	2,154	2,185
Venezuela	-	-	< 1	< 1	1

(1) Including fuel gas (394 Mcf/d in 2023, 490 Mcf/d in 2022, 490 Mcf/d in 2021, 500 Mcf/d in 2020, 531 Mcf/d in 2019).

(2) Gas conversion ratio: 1 boe = 1 b of crude oil = 5,388 cf of gas in 2023 (5,422 cf of gas in 2022, 5,458 cf of gas in 2021, 5,453 cf of gas in 2020, 5,454 cf of gas in 2019).

(3) Data restated.



## KEY OPERATING RATIOS ON PROVED RESERVES – TOTALENERGIES

<i>(three-year average)</i>	2021-2023 <sup>(1)</sup>	2020-2022 <sup>(1)</sup>	2019-2021	2018-2020	2017-2019
Finding costs (\$/boe) <sup>(2)</sup>	2.3	2.6	3.0	3.5	3.0
Reserve replacement costs (\$/boe) <sup>(3)</sup>	8.9	12.1	10.9	11.5	11.4
Reserve replacement rate (%) <sup>(4) (5)</sup>	106	79	100	127	138
Organic reserve replacement rate (%) <sup>(5) (6)</sup>	82	73	81	95	113

<i>(in years)</i>	2023 <sup>(1)</sup>	2022 <sup>(1)</sup>	2021	2020	2019
Reserve life <sup>(7)</sup>	11.7	11.5	11.7	11.7	11.5

(1) Data excluding Novatek.

(2) (Exploration costs + unproved property acquisition)/(revisions + extensions and discoveries).

(3) Total costs incurred/(revisions + extensions, discoveries + acquisitions).

(4) (Revisions + extensions, discoveries + acquisitions – sales of reserves)/production for the period.

(5) Including the mechanical effect of changes in oil prices at year-end.

(6) (Revisions + extensions, discoveries)/production for the period; excluding acquisitions and sales of reserves.

(7) Reserves at year-end/production of the year.

## KEY OPERATING RATIOS ON PROVED RESERVES – CONSOLIDATED SUBSIDIARIES

<i>(in dollars per barrel of oil equivalent)</i>	2021-2023	2020-2022	2019-2021	2018-2020	2017-2019
Finding costs <sup>(1)</sup>	2.4	2.8	2.9	4.4	3.5
Reserve replacement costs <sup>(2)</sup>	11.7	12.3	11.6	14.2	14

<i>(in dollars per barrel of oil equivalent)</i>	2023	2022	2021	2020	2019
Operating expenses	5.5	5.5	5.3	5.1	5.4
Exploration costs	0.7	0.7	0.9	1.0	1.0
DD&A	10.2	11.1	11.5	11.9	12.9
Technical costs <sup>(3) (4)</sup>	16.4	17.3	17.7	18.0	19.3

(1) (Exploration costs + unproved property acquisition)/(revisions + extensions, discoveries).

(2) Total costs incurred/(revisions + extensions, discoveries + acquisitions).

(3) Excluding non-recurring items.

(4) (Production costs + exploration costs + DD&A)/production of the year.

## CHANGES IN OIL, BITUMEN AND GAS RESERVES

### Oil, bitumen and gas reserves – Consolidated subsidiaries

(in million barrels of oil equivalent)

Proved developed and undeveloped reserves	Africa (excluding North Africa)	Americas	Asia Pacific	Europe <sup>(1)</sup>	Russia	Middle East & North Africa	Total
<b>BALANCE AS OF DECEMBER 31, 2018 – BRENT AT 71.43 \$/B</b>	<b>1,613</b>	<b>1,799</b>	<b>1,358</b>	<b>1,381</b>	<b>10</b>	<b>1,962</b>	<b>8,123</b>
Revisions of previous estimates	113	76	40	52	2	211	494
Extensions, discoveries and other	1	76	41	-	-	1	119
Acquisitions of minerals in place	421	-	-	40	-	17	478
Sales of minerals in place	-	(1)	-	(3)	-	-	(4)
Production for the year	(249)	(131)	(106)	(170)	(2)	(175)	(833)
<b>BALANCE AS OF DECEMBER 31, 2019 – BRENT AT 62.74 \$/B</b>	<b>1,899</b>	<b>1,819</b>	<b>1,333</b>	<b>1,300</b>	<b>10</b>	<b>2,016</b>	<b>8,377</b>
Revisions of previous estimates	61	(131)	61	106	4	175	276
Extensions, discoveries and other	19	13	25	-	-	<1	57
Acquisitions of minerals in place	-	-	-	-	-	206	206
Sales of minerals in place	-	-	(8)	(10)	-	(3)	(21)
Production for the year	(222)	(129)	(111)	(177)	(2)	(149)	(790)
<b>BALANCE AS OF DECEMBER 31, 2020 – BRENT AT 41.32 \$/B</b>	<b>1,757</b>	<b>1,572</b>	<b>1,300</b>	<b>1,219</b>	<b>12</b>	<b>2,245</b>	<b>8,105</b>
Revisions of previous estimates	134	132	33	231	(3)	51	578
Extensions, discoveries and other	285	24	7	17	<1	100	433
Acquisitions of minerals in place	-	12	-	-	-	41	53
Sales of minerals in place	(16)	-	-	-	-	-	(16)
Production for the year	(187)	(135)	(113)	(162)	(1)	(164)	(762)
<b>BALANCE AS OF DECEMBER 31, 2021 – BRENT AT 69.23 \$/B</b>	<b>1,973</b>	<b>1,605</b>	<b>1,227</b>	<b>1,305</b>	<b>8</b>	<b>2,273</b>	<b>8,391</b>
Revisions of previous estimates	(27)	294	14	97	-	95	473
Extensions, discoveries and other	15	153	16	4	-	15	203
Acquisitions of minerals in place	-	182	-	-	-	42	224
Sales of minerals in place	(9)	(21)	-	(11)	-	(9)	(50)
Production for the year	(166)	(155)	(96)	(164)	-	(178)	(759)
<b>BALANCE AS OF DECEMBER 31, 2022 – BRENT AT 101.24 \$/B</b>	<b>1,786</b>	<b>2,058</b>	<b>1,161</b>	<b>1,239</b>	-	<b>2,238</b>	<b>8,842</b>
Revisions of previous estimates	144	89	68	56	-	108	465
Extensions, discoveries and other	18	38	13	-	-	1	70
Acquisitions of minerals in place	-	12	-	-	-	346	358
Sales of minerals in place	-	(589)	(20)	-	-	-	(609)
Production for the year	(165)	(155)	(94)	(166)	-	(204)	(784)
<b>BALANCE AS OF DECEMBER 31, 2023 – BRENT AT 83.27 \$/B</b>	<b>1,783</b>	<b>1,453</b>	<b>1,128</b>	<b>1,129</b>	-	<b>2,489</b>	<b>7,982</b>
<b>Minority interest in proved developed and undeveloped reserves as of</b>							
December 31, 2019 – Brent at 62.74 \$/b	86	-	-	-	-	-	86
December 31, 2020 – Brent at 41.32 \$/b	52	-	-	-	-	-	52
December 31, 2021 – Brent at 69.23 \$/b	61	-	-	-	-	-	61
December 31, 2022 – Brent at 101.24 \$/b	53	-	-	-	-	-	53
<b>DECEMBER 31, 2023 – BRENT AT 83.27 \$/B</b>	<b>51</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>51</b>

(1) As from January 1, 2022, the Europe column includes the Russia data.

## Oil, bitumen and gas reserves – Equity affiliates

(in million barrels of oil equivalent)

Proved developed and undeveloped reserves	Africa (excluding North Africa)	Americas	Asia Pacific	Europe <sup>(1)</sup>	Middle East & Russia	North Africa	Total	Total excl. Novatek <sup>(2)</sup>
<b>BALANCE AS OF DECEMBER 31, 2018</b>								
<b>– BRENT AT 71.43 \$/B</b>	<b>55</b>	<b>138</b>	<b>-</b>	<b>-</b>	<b>2,525</b>	<b>1,209</b>	<b>3,927</b>	<b>2,299</b>
Revisions of previous estimates	-	(38)	-	-	85	41	88	7
Extensions, discoveries and other	-	-	-	-	538	18	556	247
Acquisitions of minerals in place	-	-	-	-	-	-	-	-
Sales of minerals in place	-	-	-	-	-	-	-	-
Production for the year	(8)	(2)	-	-	(175)	(82)	(267)	(164)
<b>BALANCE AS OF DECEMBER 31, 2019</b>								
<b>– BRENT AT 62.74 \$/B</b>	<b>47</b>	<b>98</b>	<b>-</b>	<b>-</b>	<b>2,973</b>	<b>1,186</b>	<b>4,304</b>	<b>2,389</b>
Revisions of previous estimates	(41)	(19)	-	-	54	10	86	50
Extensions, discoveries and other	-	-	-	-	89	5	94	5
Acquisitions of minerals in place	-	-	-	-	-	-	-	-
Sales of minerals in place	-	-	-	-	-	-	-	-
Production for the year	(9)	(< 1)	-	-	(173)	(79)	(261)	(147)
<b>BALANCE AS OF DECEMBER 31, 2020</b>								
<b>– BRENT AT 41.32 \$/B</b>	<b>79</b>	<b>79</b>	<b>-</b>	<b>-</b>	<b>2,943</b>	<b>1,122</b>	<b>4,223</b>	<b>2,297</b>
Revisions of previous estimates	(3)	(< 1)	-	-	(473)	82	(394)	(144)
Extensions, discoveries and other	-	-	-	-	187	-	187	8
Acquisitions of minerals in place	-	-	-	-	-	-	-	-
Sales of minerals in place	-	(78)	-	-	-	-	(78)	(78)
Production for the year	(7)	(1)	-	-	(180)	(79)	(267)	(154)
<b>BALANCE AS OF DECEMBER 31, 2021</b>								
<b>– BRENT AT 69.23 \$/B</b>	<b>69</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>2,477</b>	<b>1,125</b>	<b>3,671</b>	<b>1,929</b>
Revisions of previous estimates	8	-	-	(1,621)	-	50	(1,563)	59
Extensions, discoveries and other	2	-	-	-	-	-	2	2
Acquisitions of minerals in place	-	-	-	-	-	-	-	-
Sales of minerals in place	-	-	-	(152)	-	-	(152)	(152)
Production for the year	(6)	-	-	(170)	-	(74)	(250)	(130)
<b>BALANCE AS OF DECEMBER 31, 2022</b>								
<b>– BRENT AT 101.24 \$/B</b>	<b>73</b>	<b>-</b>	<b>-</b>	<b>534</b>		<b>1,101</b>	<b>1,708</b>	<b>1,708</b>
Revisions of previous estimates	6	-	-	-	-	67	73	73
Extensions, discoveries and other	-	-	-	-	-	-	-	-
Acquisitions of minerals in place	-	-	-	-	-	923	923	923
Sales of minerals in place	-	-	-	-	-	-	-	-
Production for the year	(7)	-	-	(40)	-	(75)	(122)	(122)
<b>BALANCE AS OF DECEMBER 31, 2023</b>								
<b>– BRENT AT 83.27 \$/B</b>	<b>72</b>	<b>-</b>	<b>-</b>	<b>494</b>		<b>2,016</b>	<b>2,582</b>	<b>2,582</b>

(1) As from January 1, 2022, the Europe column includes the Russia data.

(2) Given the material nature of the deconsolidation in 2022 of the reserves relating to the Company's share in Novatek, this column displays, for information, the Company's proven reserves in 2019, 2020 and 2021, excluding Novatek.

# Oil, bitumen and gas reserves – Consolidated subsidiaries and equity affiliates

(in million barrels of oil equivalent)

Proved developed and undeveloped reserves	Africa (excluding North Africa)	Americas	Asia Pacific	Europe <sup>(1)</sup>	Russia	Middle East & North Africa	Total	Total excl. Novatek <sup>(2)</sup>
<b>AS OF DECEMBER 31, 2019</b>								
<b>– BRENT AT 62.74 \$/B</b>								
<b>PROVED DEVELOPED AND UNDEVELOPED RESERVES</b>	<b>1,946</b>	<b>1,917</b>	<b>1,333</b>	<b>1,300</b>	<b>2,983</b>	<b>3,202</b>	<b>12,681</b>	<b>10,766</b>
Consolidated subsidiaries	1,899	1,819	1,333	1,300	10	2,016	8,377	8,377
Equity affiliates	47	98	-	-	2,973	1,186	4,304	2,389
<b>PROVED DEVELOPED RESERVES</b>	<b>1,217</b>	<b>1,225</b>	<b>1,005</b>	<b>951</b>	<b>1,506</b>	<b>2,628</b>	<b>8,532</b>	<b>7,494</b>
Consolidated subsidiaries	1,211	1,181	1,005	951	8	1,604	5,960	5,960
Equity affiliates	6	44	-	-	1,498	1,024	2,572	1,534
<b>PROVED UNDEVELOPED RESERVES</b>	<b>729</b>	<b>692</b>	<b>328</b>	<b>349</b>	<b>1,477</b>	<b>574</b>	<b>4,149</b>	<b>3,272</b>
Consolidated subsidiaries	688	638	328	349	2	412	2,417	2,417
Equity affiliates	41	54	-	-	1,475	162	1,732	855
<b>AS OF DECEMBER 31, 2020</b>								
<b>– BRENT AT 41.32 \$/B</b>								
<b>PROVED DEVELOPED AND UNDEVELOPED RESERVES</b>	<b>1,836</b>	<b>1,651</b>	<b>1,300</b>	<b>1,219</b>	<b>2,955</b>	<b>3,367</b>	<b>12,328</b>	<b>10,402</b>
Consolidated subsidiaries	1,757	1,572	1,300	1,219	12	2,245	8,105	8,105
Equity affiliates	79	79	-	-	2,943	1,122	4,223	2,297
<b>PROVED DEVELOPED RESERVES</b>	<b>1,083</b>	<b>859</b>	<b>994</b>	<b>816</b>	<b>1,470</b>	<b>2,763</b>	<b>7,985</b>	<b>6,954</b>
Consolidated subsidiaries	1,070	816	994	816	8	1,803	5,507	5,507
Equity affiliates	13	43	-	-	1,462	960	2,478	1,447
<b>PROVED UNDEVELOPED RESERVES</b>	<b>753</b>	<b>792</b>	<b>306</b>	<b>403</b>	<b>1,485</b>	<b>604</b>	<b>4,343</b>	<b>3,448</b>
Consolidated subsidiaries	687	756	306	403	4	442	2,598	2,598
Equity affiliates	66	36	-	-	1,481	162	1,745	850
<b>AS OF DECEMBER 31, 2021</b>								
<b>– BRENT AT 69.23 \$/B</b>								
<b>PROVED DEVELOPED AND UNDEVELOPED RESERVES</b>	<b>2,042</b>	<b>1,605</b>	<b>1,227</b>	<b>1,305</b>	<b>2,485</b>	<b>3,398</b>	<b>12,062</b>	<b>10,320</b>
Consolidated subsidiaries	1,973	1,605	1,227	1,305	8	2,273	8,391	8,391
Equity affiliates	69	-	-	-	2,477	1,125	3,671	1,929
<b>PROVED DEVELOPED RESERVES</b>	<b>1,010</b>	<b>823</b>	<b>957</b>	<b>907</b>	<b>1,543</b>	<b>2,740</b>	<b>7,980</b>	<b>6,891</b>
Consolidated subsidiaries	1,005	823	957	907	7	1,789	5,488	5,488
Equity affiliates	5	-	-	-	1,536	951	2,492	1,403
<b>PROVED UNDEVELOPED RESERVES</b>	<b>1,032</b>	<b>782</b>	<b>270</b>	<b>398</b>	<b>942</b>	<b>658</b>	<b>4,082</b>	<b>3,429</b>
Consolidated subsidiaries	968	782	270	398	1	484	2,903	2,903
Equity affiliates	64	-	-	-	941	174	1,179	526

Oil, bitumen and gas reserves – Consolidated subsidiaries and equity affiliates

(in million barrels of oil equivalent)

Proved developed and undeveloped reserves	Africa (excluding North Africa)	Americas	Asia Pacific	Europe <sup>(1)</sup>	Middle East & Russia North Africa	Total	Total excl. Novatek <sup>(2)</sup>
<b>AS OF DECEMBER 31, 2022</b>							
<b>– BRENT AT 101.24 \$/B</b>							
<b>PROVED DEVELOPED AND UNDEVELOPED RESERVES</b>	<b>1,859</b>	<b>2,058</b>	<b>1,161</b>	<b>1,773</b>	<b>3,339</b>	<b>10,190</b>	<b>10,190</b>
Consolidated subsidiaries	1,786	2,058	1,161	1,239	2,238	8,482	8,482
Equity affiliates	73	-	-	534	1,101	1,708	1,708
<b>PROVED DEVELOPED RESERVES</b>	<b>919</b>	<b>1,243</b>	<b>920</b>	<b>1,173</b>	<b>2,735</b>	<b>6,990</b>	<b>6,990</b>
Consolidated subsidiaries	914	1,243	920	842	1,785	5,704	5,704
Equity affiliates	5	-	-	331	950	1,286	1,286
<b>PROVED UNDEVELOPED RESERVES</b>	<b>940</b>	<b>815</b>	<b>241</b>	<b>600</b>	<b>604</b>	<b>3,200</b>	<b>3,200</b>
Consolidated subsidiaries	872	815	241	397	453	2,778	2,778
Equity affiliates	68	-	-	203	151	422	422
<b>AS OF DECEMBER 31, 2023</b>							
<b>– BRENT AT 83.27 \$/B</b>							
<b>PROVED DEVELOPED AND UNDEVELOPED RESERVES</b>	<b>1,855</b>	<b>1,453</b>	<b>1,128</b>	<b>1,624</b>	<b>4,504</b>	<b>10,564</b>	<b>10,564</b>
Consolidated subsidiaries	1,783	1,453	1,128	1,130	2,488	7,982	7,982
Equity affiliates	72	-	-	494	2,016	2,582	2,582
<b>PROVED DEVELOPED RESERVES</b>	<b>871</b>	<b>919</b>	<b>912</b>	<b>1,185</b>	<b>2,948</b>	<b>6,835</b>	<b>6,835</b>
Consolidated subsidiaries	865	919	912	882	1,972	5,550	5,550
Equity affiliates	6	-	-	303	976	1,285	1,285
<b>PROVED UNDEVELOPED RESERVES</b>	<b>984</b>	<b>534</b>	<b>216</b>	<b>439</b>	<b>1,556</b>	<b>3,729</b>	<b>3,729</b>
Consolidated subsidiaries	918	534	216	248	516	2,432	2,432
Equity affiliates	66	-	-	191	1,040	1,297	1,297

(1) As from January 1, 2022, the Europe column includes the Russia data.

(2) Given the material nature of the deconsolidation in 2022 of the reserves relating to the Company's share in Novatek, this column displays, for information, the Company's proven reserves in 2019, 2020 and 2021, excluding Novatek.



## CHANGES IN OIL AND BITUMEN RESERVES

Oil reserves include crude oil, condensates and natural gas liquids reserves.

(in millions of barrels) Proved developed and undeveloped reserves	Consolidated subsidiaries							Americas
	Oil						Bitumen	
	Africa (excluding North Africa)	Americas	Asia Pacific	Europe <sup>(1)</sup>	Russia	Middle East & North Africa	Total	
<b>BALANCE AS OF DECEMBER 31, 2018 – BRENT AT 71.43 \$/B</b>	<b>1,129</b>	<b>280</b>	<b>580</b>	<b>654</b>	<b>8</b>	<b>1,687</b>	<b>4,338</b>	<b>843</b>
Revisions of previous estimates	97	51	14	40	2	206	410	(1)
Extensions, discoveries and other	1	62	9	-	-	1	73	-
Acquisitions of minerals in place	7	-	-	20	-	16	43	-
Sales of minerals in place	-	-	-	(2)	-	-	(2)	-
Production for the year	(202)	(23)	(38)	(79)	(2)	(152)	(496)	(36)
<b>BALANCE AS OF DECEMBER 31, 2019 – BRENT AT 62.74 \$/B</b>	<b>1,032</b>	<b>370</b>	<b>565</b>	<b>633</b>	<b>8</b>	<b>1,758</b>	<b>4,366</b>	<b>806</b>
Revisions of previous estimates	50	169	56	34	4	164	477	(309) <sup>(2)</sup>
Extensions, discoveries and other	1	4	<1	-	-	1	6	-
Acquisitions of minerals in place	-	-	-	-	-	169	169	-
Sales of minerals in place	-	-	(8)	(10)	-	(3)	(21)	-
Production for the year	(177)	(28)	(38)	(88)	(2)	(128)	(461)	(30)
<b>BALANCE AS OF DECEMBER 31, 2020 – BRENT AT 41.32 \$/B</b>	<b>906</b>	<b>515</b>	<b>575</b>	<b>569</b>	<b>10</b>	<b>1,961</b>	<b>4,536</b>	<b>467</b>
Revisions of previous estimates	89	45	22	104	(2)	39	297	(17)
Extensions, discoveries and other	272	5	<1	6	<1	8	291	-
Acquisitions of minerals in place	-	12	-	-	-	11	23	-
Sales of minerals in place	(14)	-	-	-	-	-	(14)	-
Production for the year	(144)	(31)	(40)	(82)	(1)	(141)	(439)	(33)
<b>BALANCE AS OF DECEMBER 31, 2021 – BRENT AT 69.23 \$/B</b>	<b>1,109</b>	<b>546</b>	<b>557</b>	<b>597</b>	<b>7</b>	<b>1,878</b>	<b>4,694</b>	<b>417</b>
Revisions of previous estimates	(4)	39	3	55	-	62	155	240 <sup>(2)</sup>
Extensions, discoveries and other	15	54	-	2	-	1	72	-
Acquisitions of minerals in place	-	173	-	-	-	34	207	-
Sales of minerals in place	(8)	-	-	(7)	-	(9)	(24)	-
Production for the year	(129)	(50)	(33)	(79)	-	(152)	(443)	(37)
<b>BALANCE AS OF DECEMBER 31, 2022 – BRENT AT 101.24 \$/B</b>	<b>983</b>	<b>762</b>	<b>527</b>	<b>575</b>	-	<b>1,814</b>	<b>4,661</b>	<b>620</b>
Revisions of previous estimates	81	116	36	33	-	84	350	-
Extensions, discoveries and other	4	2	-	-	-	1	7	-
Acquisitions of minerals in place	-	-	-	-	-	334	334	-
Sales of minerals in place	-	-	(18)	-	-	-	(18)	(589)
Production for the year	(125)	(61)	(39)	(83)	-	(172)	(480)	(31)
<b>BALANCE AS OF DECEMBER 31, 2023 – BRENT AT 83.27 \$/B</b>	<b>943</b>	<b>819</b>	<b>506</b>	<b>525</b>	-	<b>2,061</b>	<b>4,854</b>	<b>-</b>
<b>Minority interest in proved developed and undeveloped reserves as of</b>								
December 31, 2019 – Brent at 62.74 \$/b	77	-	-	-	-	-	77	-
December 31, 2020 – Brent at 41.32 \$/b	46	-	-	-	-	-	46	-
December 31, 2021 – Brent at 69.23 \$/b	54	-	-	-	-	-	54	-
December 31, 2022 – Brent at 101.24 \$/b	48	-	-	-	-	-	48	-
<b>DECEMBER 31, 2023 – BRENT AT 83.27 \$/B</b>	<b>44</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>44</b>	<b>-</b>

(1) As from January 1, 2022, the Europe column includes the Russia data.

(2) The significant revisions in 2020 and 2022 are mainly due to changes in economical conditions impacting Fort Hills mine project.

(in millions of barrels)

Proved developed  
and undeveloped reserves

	Oil						Total	Total excl. Novatek <sup>(3)</sup>
	Africa (excluding North Africa)	Americas	Asia Pacific	Europe <sup>(2)</sup>	Russia	Middle East & North Africa		
<b>BALANCE AS OF DECEMBER 31, 2018</b> <b>– BRENT AT 71.43 \$/B</b>	<b>9</b>	<b>129</b>	<b>-</b>	<b>-</b>	<b>317</b>	<b>413</b>	<b>868</b>	<b>636</b>
Revisions of previous estimates	-	(35)	-	-	6	32	3	(9)
Extensions, discoveries and other	-	-	-	-	24	18	42	27
Acquisitions of minerals in place	-	-	-	-	-	-	-	-
Sales of minerals in place	-	-	-	-	-	-	-	-
Production for the year	(2)	(2)	-	-	(27)	(48)	(79)	(61)
<b>BALANCE AS OF DECEMBER 31, 2019</b> <b>– BRENT AT 62.74 \$/B</b>	<b>7</b>	<b>92</b>	<b>-</b>	<b>-</b>	<b>320</b>	<b>415</b>	<b>834</b>	<b>593</b>
Revisions of previous estimates	6	(16)	-	-	24	9	23	4
Extensions, discoveries and other	-	-	-	-	13	5	18	5
Acquisitions of minerals in place	-	-	-	-	-	-	-	-
Sales of minerals in place	-	-	-	-	-	-	-	-
Production for the year	(2)	-	-	-	(27)	(45)	(74)	(54)
<b>BALANCE AS OF DECEMBER 31, 2020</b> <b>– BRENT AT 41.32 \$/B</b>	<b>11</b>	<b>76</b>	<b>-</b>	<b>-</b>	<b>330</b>	<b>384</b>	<b>801</b>	<b>548</b>
Revisions of previous estimates	1	(1)	-	-	(24)	71	47	61
Extensions, discoveries and other	-	-	-	-	34	-	34	1
Acquisitions of minerals in place	-	-	-	-	-	-	-	-
Sales of minerals in place	-	(75)	-	-	-	-	(75)	(75)
Production for the year	(2)	(< 1)	-	-	(26)	(47)	(75)	(56)
<b>BALANCE AS OF DECEMBER 31, 2021</b> <b>– BRENT AT 69.23 \$/B</b>	<b>10</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>314</b>	<b>408</b>	<b>732</b>	<b>479</b>
Revisions of previous estimates	4	-	-	(234)	-	47	(183)	50
Extensions, discoveries and other	-	-	-	-	-	-	-	-
Acquisitions of minerals in place	-	-	-	-	-	-	-	-
Sales of minerals in place	-	-	-	(40)	-	-	(40)	(40)
Production for the year	(2)	-	-	(23)	-	(49)	(74)	(54)
<b>BALANCE AS OF DECEMBER 31, 2022</b> <b>– BRENT AT 101.24 \$/B</b>	<b>12</b>	<b>-</b>	<b>-</b>	<b>17</b>	<b>-</b>	<b>406</b>	<b>435</b>	<b>435</b>
Revisions of previous estimates	1	-	-	-	-	19	20	20
Extensions, discoveries and other	< 1	-	-	-	-	-	< 1	< 1
Acquisitions of minerals in place	-	-	-	-	-	233	233	233
Sales of minerals in place	-	-	-	-	-	-	-	-
Production for the year	(2)	-	-	(2)	-	(51)	(55)	(55)
<b>BALANCE AS OF DECEMBER 31, 2023</b> <b>– BRENT AT 83.27 \$/B</b>	<b>11</b>	<b>-</b>	<b>-</b>	<b>15</b>	<b>-</b>	<b>607</b>	<b>633</b>	<b>633</b>

(1) There are no bitumen reserves for equity affiliates.

(2) As from January 1, 2022, the Europe column includes the Russia data.

(3) Given the material nature of the deconsolidation in 2022 of the reserves relating to the Company's share in Novatek, this column displays, for information, the Company's proven reserves in 2019, 2020 and 2021, excluding Novatek.

Consolidated subsidiaries and equity affiliates\*

(in millions of barrels of oil equivalent)

Proved developed and undeveloped reserves	Oil							Bitumen	
	Africa (excluding North Africa)	Americas	Asia Pacific	Europe <sup>(1)</sup>	Russia	Middle East & North Africa	Total	Total excl. Novatek <sup>(2)</sup>	Americas
<b>AS OF DECEMBER 31, 2019</b>									
<b>– BRENT AT 64.74 \$/B</b>									
<b>PROVED DEVELOPED AND UNDEVELOPED RESERVES <sup>(3)</sup></b>	<b>1,039</b>	<b>462</b>	<b>564</b>	<b>634</b>	<b>328</b>	<b>2,173</b>	<b>5,200</b>	<b>4,959</b>	<b>806</b>
Consolidated subsidiaries	1,032	370	564	634	8	1,758	4,366	4,366	806
Equity affiliates	7	92	-	-	320	415	834	593	-
<b>PROVED DEVELOPED RESERVES</b>	<b>900</b>	<b>155</b>	<b>503</b>	<b>470</b>	<b>199</b>	<b>1,718</b>	<b>3,945</b>	<b>3,803</b>	<b>497</b>
Consolidated subsidiaries	899	113	503	470	7	1,402	3,394	3,394	497
Equity affiliates	1	42	-	-	192	316	551	409	-
<b>PROVED UNDEVELOPED RESERVES</b>	<b>139</b>	<b>307</b>	<b>61</b>	<b>164</b>	<b>129</b>	<b>455</b>	<b>1,255</b>	<b>1,156</b>	<b>309</b>
Consolidated subsidiaries	133	257	61	164	1	356	972	972	309
Equity affiliates	6	50	-	-	128	99	283	184	-
<b>AS OF DECEMBER 31, 2020</b>									
<b>– BRENT AT 41.32 \$/B</b>									
<b>PROVED DEVELOPED AND UNDEVELOPED RESERVES <sup>(3)</sup></b>	<b>917</b>	<b>591</b>	<b>575</b>	<b>569</b>	<b>340</b>	<b>2,345</b>	<b>5,337</b>	<b>5,084</b>	<b>467</b>
Consolidated subsidiaries	906	515	575	569	10	1,961	4,536	4,536	467
Equity affiliates	11	76	-	-	330	384	801	548	-
<b>PROVED DEVELOPED RESERVES</b>	<b>781</b>	<b>205</b>	<b>488</b>	<b>427</b>	<b>195</b>	<b>1,882</b>	<b>3,978</b>	<b>3,836</b>	<b>136</b>
Consolidated subsidiaries	779	162	488	427	8	1,589	3,453	3,453	136
Equity affiliates	2	43	-	-	187	293	525	383	-
<b>PROVED UNDEVELOPED RESERVES</b>	<b>136</b>	<b>386</b>	<b>87</b>	<b>142</b>	<b>145</b>	<b>463</b>	<b>1,359</b>	<b>1,248</b>	<b>331</b>
Consolidated subsidiaries	127	353	87	142	2	372	1,083	1,083	331
Equity affiliates	9	33	-	-	143	91	276	165	-
<b>AS OF DECEMBER 31, 2021</b>									
<b>– BRENT AT 69.23 \$/B</b>									
<b>PROVED DEVELOPED AND UNDEVELOPED RESERVES <sup>(3)</sup></b>	<b>1,119</b>	<b>546</b>	<b>557</b>	<b>597</b>	<b>321</b>	<b>2,286</b>	<b>5,426</b>	<b>5,173</b>	<b>417</b>
Consolidated subsidiaries	1,109	546	557	597	7	1,878	4,694	4,694	417
Equity affiliates	10	-	-	-	314	408	732	479	-
<b>PROVED DEVELOPED RESERVES</b>	<b>731</b>	<b>183</b>	<b>479</b>	<b>438</b>	<b>189</b>	<b>1,885</b>	<b>3,905</b>	<b>3,763</b>	<b>136</b>
Consolidated subsidiaries	730	183	479	438	6	1,582	3,418	3,418	136
Equity affiliates	1	-	-	-	183	303	487	345	-
<b>PROVED UNDEVELOPED RESERVES</b>	<b>388</b>	<b>363</b>	<b>78</b>	<b>159</b>	<b>132</b>	<b>401</b>	<b>1,521</b>	<b>1,410</b>	<b>281</b>
Consolidated subsidiaries	379	363	78	159	1	296	1,276	1,276	281
Equity affiliates	9	-	-	-	131	105	245	134	-

\* There are no bitumen reserves for equity affiliates.

(1) As from January 1, 2022, the Europe column includes the Russia data.

(2) Given the material nature of the deregistration in 2022 of the reserves relating to the Company's share in Novatek, this column displays, for information, the Company's proven reserves in 2018, 2019, 2020 and 2021, excluding Novatek.

(3) The tables do not include separate figures for NGL reserves because they represented less than 8.5% of the Company's proved developed and undeveloped oil reserves in each of the years 2018, 2019, 2020, 2021 and 2022.

	Consolidated subsidiaries and equity affiliates*								
	Oil							Bitumen	
(in millions of barrels of oil equivalent)	Africa (excluding North Africa)	Americas	Asia Pacific	Europe <sup>(1)</sup>	Russia	Middle East & North Africa	Total	Total excl. Novatek <sup>(2)</sup>	Americas
Proved developed and undeveloped reserves									
AS OF DECEMBER 31, 2022 – BRENT AT 101.24 \$/B									
PROVED DEVELOPED AND UNDEVELOPED RESERVES <sup>(3)</sup>	995	762	527	592		2,220	5,096	5,096	620
Consolidated subsidiaries	983	762	527	575		1,814	4,661	4,661	620
Equity affiliates	12	-	-	17		406	435	435	-
PROVED DEVELOPED RESERVES	657	382	477	437		1,874	3,827	3,827	385
Consolidated subsidiaries	656	382	477	425		1,566	3,506	3,506	385
Equity affiliates	1	-	-	12		308	321	321	-
PROVED UNDEVELOPED RESERVES	338	380	50	155		346	1,269	1,269	235
Consolidated subsidiaries	327	380	50	150		248	1,155	1,155	235
Equity affiliates	11	-	-	5		98	114	114	-
AS OF DECEMBER 31, 2023 – BRENT AT 83.27 \$/B									
PROVED DEVELOPED AND UNDEVELOPED RESERVES <sup>(3)</sup>	954	819	506	540		2,667	5,486	5,486	-
Consolidated subsidiaries	943	819	506	525		2,061	4,854	4,854	-
Equity affiliates	11	-	-	15		606	632	632	-
PROVED DEVELOPED RESERVES	610	459	441	451		2,048	4,009	4,009	-
Consolidated subsidiaries	608	459	441	442		1,742	3,692	3,692	-
Equity affiliates	2	-	-	9		306	317	317	-
PROVED UNDEVELOPED RESERVES	344	360	65	89		619	1,477	1,477	-
Consolidated subsidiaries	335	360	65	83		319	1,162	1,162	-
Equity affiliates	9	-	-	6		300	315	315	-

\* There are no bitumen reserves for equity affiliates.

(1) As from January 1, 2022, the Europe column includes the Russia data.

(2) Given the material nature of the deconsolidation in 2022 of the reserves relating to the Company's share in Novatek, this column displays, for information, the Company's proven reserves in 2019, 2020 and 2021, excluding Novatek.

(3) The tables do not include separate figures for NGL reserves because they represented less than 8.5% of the Company's proved developed and undeveloped oil reserves in each of the years 2019, 2020, 2021, 2022 and 2023.

## CHANGES IN GAS RESERVES

### Gas reserves – Consolidated subsidiaries

(in billion cubic feet) Proved developed and undeveloped reserves	Africa (excluding North Africa)	Americas	Asia Pacific	Europe <sup>(1)</sup>	Russia	Middle East & North Africa	Total
<b>BALANCE AS OF DECEMBER 31, 2018 – BRENT AT 71.43 \$/B</b>	<b>2,399</b>	<b>3,824</b>	<b>4,141</b>	<b>3,919</b>	<b>8</b>	<b>1,503</b>	<b>15,794</b>
Revisions of previous estimates	76	142	160	69	-	40	487
Extensions, discoveries and other	-	79	182	-	-	-	261
Acquisitions of reserves in place	2,272	-	-	104	-	5	2,381
Sales of reserves in place	-	(2)	-	(10)	-	-	(12)
Production for the year	(236)	(405)	(393)	(489)	(1)	(129)	(1,653)
<b>BALANCE AS OF DECEMBER 31, 2019 – BRENT AT 62.74 \$/B</b>	<b>4,511</b>	<b>3,638</b>	<b>4,090</b>	<b>3,593</b>	<b>7</b>	<b>1,419</b>	<b>17,258</b>
Revisions of previous estimates	59	10	72	381	1	63	586
Extensions, discoveries and other	92	50	142	-	-	-	284
Acquisitions of reserves in place	-	-	-	-	-	216	216
Sales of reserves in place	-	-	(2)	(3)	-	-	(5)
Production for the year	(227)	(401)	(410)	(484)	(1)	(123)	(1,646)
<b>BALANCE AS OF DECEMBER 31, 2020 – BRENT AT 41.32 \$/B</b>	<b>4,435</b>	<b>3,297</b>	<b>3,892</b>	<b>3,487</b>	<b>7</b>	<b>1,575</b>	<b>16,693</b>
Revisions of previous estimates	235	582	27	691	(2)	46	1,579
Extensions, discoveries and other	69	106	37	60	-	499	771
Acquisitions of reserves in place	-	-	-	-	-	156	156
Sales of reserves in place	(8)	-	-	-	-	-	(8)
Production for the year	(219)	(396)	(418)	(432)	(< 1)	(126)	(1,591)
<b>AS OF DECEMBER 31, 2021 – BRENT AT 69.23 \$/B</b>	<b>4,512</b>	<b>3,589</b>	<b>3,538</b>	<b>3,806</b>	<b>5</b>	<b>2,150</b>	<b>17,600</b>
Revisions of previous estimates	(123)	77	74	234	-	175	437
Extensions, discoveries and other	1	542	91	8	-	76	718
Acquisitions of reserves in place	-	43	-	-	-	43	86
Sales of reserves in place	(9)	(129)	-	(24)	-	-	(162)
Production for the year	(188)	(383)	(350)	(461)	-	(143)	(1,525)
<b>AS OF DECEMBER 31, 2022 – BRENT AT 101.24 \$/B</b>	<b>4,193</b>	<b>3,739</b>	<b>3,353</b>	<b>3,568</b>	-	<b>2,301</b>	<b>17,154</b>
Revisions of previous estimates	362	(146)	166	128	-	118	628
Extensions, discoveries and other	66	203	70	-	-	-	339
Acquisitions of reserves in place	-	63	-	-	-	61	124
Sales of reserves in place	-	-	(8)	(1)	-	-	(9)
Production for the year	(196)	(356)	(294)	(446)	-	(177)	(1,469)
<b>AS OF DECEMBER 31, 2023 – BRENT AT 83.27 \$/B</b>	<b>4,425</b>	<b>3,503</b>	<b>3,287</b>	<b>3,249</b>	-	<b>2,303</b>	<b>16,767</b>
<b>Minority interest in proved developed and undeveloped reserves as of</b>							
December 31, 2019 – Brent at 62.74 \$/b	44	-	-	-	-	-	44
December 31, 2020 – Brent at 41.32 \$/b	25	-	-	-	-	-	25
December 31, 2021 – Brent at 69.23 \$/b	33	-	-	-	-	-	33
December 31, 2022 – Brent at 101.24 \$/b	27	-	-	-	-	-	27
<b>December 31, 2023 – Brent at 83.27 \$/b</b>	<b>34</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>34</b>

(1) As from January 1, 2022, the Europe column includes the Russia data.



## Gas reserves – Equity affiliates

(in billions of cubic feet)

Proved developed and undeveloped reserves	Africa (excluding North Africa)	Americas	Asia Pacific	Europe <sup>(1)</sup>	Russia	Middle East & North Africa	Total	Total excl. Novatek <sup>(2)</sup>
<b>BALANCE AS OF DECEMBER 31, 2018</b>								
<b>– BRENT AT 71.43 \$/B</b>	<b>237</b>	<b>51</b>	<b>-</b>	<b>-</b>	<b>11,886</b>	<b>4,357</b>	<b>16,531</b>	<b>9,080</b>
Revisions of previous estimates	(1) <sup>(3)</sup>	(14)	-	-	425	45	455 <sup>(3)</sup>	86
Extensions, discoveries and other	-	-	-	-	2,786	-	2,786	1,195
Acquisitions of reserves in place	-	-	-	-	-	-	-	-
Sales of reserves in place	-	-	-	-	-	-	-	-
Production for the year	(33) <sup>(3)</sup>	-	-	-	(798)	(184)	(1,015) <sup>(3)</sup>	(563)
<b>BALANCE AS OF DECEMBER 31, 2019</b>								
<b>– BRENT AT 62.74 \$/B</b>	<b>203</b>	<b>37</b>	<b>-</b>	<b>-</b>	<b>14,299</b>	<b>4,218</b>	<b>18,757</b>	<b>9,798</b>
Revisions of previous estimates	186	(16)	-	-	202	3	375	267
Extensions, discoveries and other	-	-	-	-	401	-	401	-
Acquisitions of reserves in place	-	-	-	-	-	-	-	-
Sales of reserves in place	-	-	-	-	-	-	-	-
Production for the year	(35)	-	-	-	(788)	(183)	(1,006)	(502)
<b>BALANCE AS OF DECEMBER 31, 2020</b>								
<b>– BRENT AT 41.32 \$/B</b>	<b>354</b>	<b>21</b>	<b>-</b>	<b>-</b>	<b>14,114</b>	<b>4,038</b>	<b>18,527</b>	<b>9,563</b>
Revisions of previous estimates	(9)	< 1	-	-	(2,473)	53	(2,429)	(1,139)
Extensions, discoveries and other	-	-	-	-	810	-	810	34
Acquisitions of reserves in place	-	-	-	-	-	-	-	-
Sales of reserves in place	-	(21)	-	-	-	-	(21)	(21)
Production for the year	(29)	(< 1)	-	-	(828)	(180)	(1,037)	(536)
<b>BALANCE AS OF DECEMBER 31, 2021</b>								
<b>– BRENT AT 69.23 \$/B</b>	<b>316</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>11,623</b>	<b>3,911</b>	<b>15,850</b>	<b>7,901</b>
Revisions of previous estimates	25	-	-	(7,403)	-	7	(7,371)	43
Extensions, discoveries and other	10	-	-	-	-	-	10	10
Acquisitions of reserves in place	-	-	-	-	-	-	-	-
Sales of reserves in place	-	-	-	(608)	-	-	(608)	(608)
Production for the year	(25)	-	-	(790)	-	(127)	(942)	(407)
<b>BALANCE AS OF DECEMBER 31, 2022</b>								
<b>– BRENT AT 101.24 \$/B</b>	<b>326</b>	<b>-</b>	<b>-</b>	<b>2,822</b>	<b>-</b>	<b>3,791</b>	<b>6,939</b>	<b>6,939</b>
Revisions of previous estimates	29	-	-	-	-	226	255	255
Extensions, discoveries and other	-	-	-	-	-	-	-	-
Acquisitions of reserves in place	-	-	-	-	-	3,922	3,922	3,922
Sales of reserves in place	-	-	-	-	-	-	-	-
Production for the year	(28)	-	-	(211)	-	(127)	(366)	(366)
<b>BALANCE AS OF DECEMBER 31, 2023</b>								
<b>– BRENT AT 83.27 \$/B</b>	<b>327</b>	<b>-</b>	<b>-</b>	<b>2,611</b>	<b>-</b>	<b>7,812</b>	<b>10,750</b>	<b>10,750</b>

(1) As from January 1, 2022, the Europe column includes the Russia data.

(2) Given the material nature of the deconsolidation in 2022 of the reserves relating to the Company's share in Novatek, this column displays, for information, the Company's proven reserves in 2019, 2020 and 2021, excluding Novatek.

(3) Data restated.

Gas reserves – Consolidated subsidiaries and equity affiliates

(in billion of cubic feet)

Proved developed and undeveloped reserves	Africa (excluding North Africa)	Americas	Asia Pacific	Europe <sup>(1)</sup>	Russia	Middle East & North Africa	Total	Total excl. Novatek <sup>(2)</sup>
<b>AS OF DECEMBER 31, 2019</b>								
<b>– BRENT AT 62.74 \$/B</b>								
<b>Proved developed and undeveloped reserves</b>	<b>4,714</b>	<b>3,675</b>	<b>4,091</b>	<b>3,592</b>	<b>14,306</b>	<b>5,637</b>	<b>36,015</b>	<b>27,056</b>
Consolidated subsidiaries	4,511	3,638	4,091	3,592	7	1,419	17,258	17,258
Equity affiliates	203	37	-	-	14,299	4,218	18,757	9,798
<b>PROVED DEVELOPED RESERVES</b>	<b>1,547</b>	<b>3,237</b>	<b>2,683</b>	<b>2,606</b>	<b>7,018</b>	<b>5,009</b>	<b>22,100</b>	<b>17,323</b>
Consolidated subsidiaries	1,526	3,219	2,683	2,606	4	1,141	11,179	11,179
Equity affiliates	21	18	-	-	7,014	3,868	10,921	6,144
<b>PROVED UNDEVELOPED RESERVES</b>	<b>3,167</b>	<b>438</b>	<b>1,408</b>	<b>986</b>	<b>7,288</b>	<b>628</b>	<b>13,915</b>	<b>9,733</b>
Consolidated subsidiaries	2,985	419	1,408	986	3	278	6,079	6,079
Equity affiliates	182	19	-	-	7,285	350	7,836	3,654
<b>AS OF DECEMBER 31, 2020</b>								
<b>– BRENT AT 41.32 \$/B</b>								
<b>Proved developed and undeveloped reserves</b>	<b>4,789</b>	<b>3,319</b>	<b>3,891</b>	<b>3,487</b>	<b>14,121</b>	<b>5,613</b>	<b>35,220</b>	<b>26,256</b>
Consolidated subsidiaries	4,435	3,298	3,891	3,487	7	1,575	16,693	16,693
Equity affiliates	354	21	-	-	14,114	4,038	18,527	9,563
<b>PROVED DEVELOPED RESERVES</b>	<b>1,470</b>	<b>2,915</b>	<b>2,731</b>	<b>2,083</b>	<b>6,864</b>	<b>4,862</b>	<b>20,925</b>	<b>16,179</b>
Consolidated subsidiaries	1,429	2,908	2,731	2,083	5	1,224	10,380	10,380
Equity affiliates	41	7	-	-	6,859	3,638	10,545	5,799
<b>PROVED UNDEVELOPED RESERVES</b>	<b>3,319</b>	<b>404</b>	<b>1,160</b>	<b>1,404</b>	<b>7,257</b>	<b>751</b>	<b>14,295</b>	<b>10,077</b>
Consolidated subsidiaries	3,006	390	1,160	1,404	2	351	6,313	6,313
Equity affiliates	313	14	-	-	7,255	400	7,982	3,764
<b>AS OF DECEMBER 31, 2021</b>								
<b>– BRENT AT 69.23 \$/B</b>								
<b>Proved developed and undeveloped reserves</b>	<b>4,828</b>	<b>3,589</b>	<b>3,538</b>	<b>3,806</b>	<b>11,628</b>	<b>6,061</b>	<b>33,450</b>	<b>25,501</b>
Consolidated subsidiaries	4,512	3,589	3,538	3,806	5	2,150	17,600	17,600
Equity affiliates	316	-	-	-	11,623	3,911	15,850	7,901
<b>PROVED DEVELOPED RESERVES</b>	<b>1,366</b>	<b>2,833</b>	<b>2,517</b>	<b>2,523</b>	<b>7,272</b>	<b>4,682</b>	<b>21,193</b>	<b>16,141</b>
Consolidated subsidiaries	1,349	2,833	2,517	2,523	4	1,150	10,376	10,376
Equity affiliates	17	-	-	-	7,268	3,532	10,817	5,765
<b>PROVED UNDEVELOPED RESERVES</b>	<b>3,462</b>	<b>756</b>	<b>1,021</b>	<b>1,283</b>	<b>4,356</b>	<b>1,379</b>	<b>12,257</b>	<b>9,360</b>
Consolidated subsidiaries	3,163	756	1,021	1,283	1	1,000	7,224	7,224
Equity affiliates	299	-	-	-	4,355	379	5,033	2,136

Gas reserves – Consolidated subsidiaries and equity affiliates

(in billion of cubic feet)

Proved developed and undeveloped reserves	Africa (excluding North Africa)	Americas	Asia Pacific	Europe <sup>(1)</sup>	Middle East & Russia North Africa	Total	Total excl. Novatek <sup>(2)</sup>
<b>AS OF DECEMBER 31, 2022</b>							
<b>– BRENT AT 101.24 \$/B</b>							
<b>Proved developed and undeveloped reserves</b>	<b>4,519</b>	<b>3,739</b>	<b>3,353</b>	<b>6,390</b>	<b>6,092</b>	<b>24,093</b>	<b>24,093</b>
Consolidated subsidiaries	4,193	3,739	3,353	3,568	2,301	17,154	17,154
Equity affiliates	326	-	-	2,822	3,791	6,939	6,939
<b>PROVED DEVELOPED RESERVES</b>	<b>1,281</b>	<b>2,651</b>	<b>2,339</b>	<b>3,985</b>	<b>4,704</b>	<b>14,960</b>	<b>14,960</b>
Consolidated subsidiaries	1,259	2,651	2,339	2,243	1,206	9,698	9,698
Equity affiliates	22	-	-	1,742	3,498	5,262	5,262
<b>PROVED UNDEVELOPED RESERVES</b>	<b>3,238</b>	<b>1,088</b>	<b>1,014</b>	<b>2,405</b>	<b>1,388</b>	<b>9,133</b>	<b>9,133</b>
Consolidated subsidiaries	2,934	1,088	1,014	1,325	1,095	7,456	7,456
Equity affiliates	304	-	-	1,080	293	1,677	1,677
<b>AS OF DECEMBER 31, 2023</b>							
<b>– BRENT AT 83.27 \$/B</b>							
<b>Proved developed and undeveloped reserves</b>	<b>4,751</b>	<b>3,503</b>	<b>3,287</b>	<b>5,861</b>	<b>10,115</b>	<b>27,517</b>	<b>27,517</b>
Consolidated subsidiaries	4,424	3,503	3,287	3,250	2,303	16,767	16,767
Equity affiliates	327	-	-	2,611	7,812	10,750	10,750
<b>PROVED DEVELOPED RESERVES</b>	<b>1,285</b>	<b>2,562</b>	<b>2,488</b>	<b>3,970</b>	<b>4,880</b>	<b>15,185</b>	<b>15,185</b>
Consolidated subsidiaries	1,262	2,562	2,488	2,369	1,259	9,940	9,940
Equity affiliates	23	-	-	1,601	3,621	5,245	5,245
<b>PROVED UNDEVELOPED RESERVES</b>	<b>3,466</b>	<b>941</b>	<b>799</b>	<b>1,891</b>	<b>5,235</b>	<b>12,332</b>	<b>12,332</b>
Consolidated subsidiaries	3,162	941	799	881	1,044	6,827	6,827
Equity affiliates	304	-	-	1,010	4,191	5,505	5,505

(1) As from January 1, 2022, the Europe column includes the Russia data.

(2) Given the material nature of the deregistration in 2022 of the reserves relating to the Company's share in Novatek, this column displays, for information, the Company's proven reserves in 2018, 2019, 2020 and 2021, excluding Novatek.

## RESULTS OF OPERATIONS FOR OIL AND GAS PRODUCING ACTIVITIES

The following tables do not include revenues and expenses related to oil and gas transportation activities and LNG liquefaction and transportation.

	Consolidated subsidiaries						
	Africa (excluding North Africa)	Americas	Asia Pacific	Europe <sup>(1)</sup>	Russia	Middle East & North Africa	Total
(in million dollars)							
2019							
Revenues Non-company sales	1,260	972	2,199	983	-	1,686	7,100
Revenues company sales	11,286	2,110	1,487	5,286	83	7,369	27,621
TOTAL REVENUES	12,546	3,082	3,686	6,269	83	9,055	34,721
Production costs	(1,249)	(873)	(422)	(1,338)	(12)	(639)	(4,533)
Exploration expenses	(65)	(392)	(72)	(230)	(2)	(24)	(785)
Depreciation, depletion and amortization and valuation allowances	(5,556)	(1,924)	(1,538)	(1,719)	(100)	(798)	(11,635)
Other expenses <sup>(2)</sup>	(918)	(392)	(219)	(410)	(12)	(5,560)	(7,511)
PRE-TAX INCOME FROM PRODUCING ACTIVITIES <sup>(4)</sup>	4,758	(499)	1,435	2,572	(43)	2,034	10,257
Income tax	(2,004)	309	(245)	(1,427)	13	(814)	(4,168)
RESULTS OF OIL AND GAS PRODUCING ACTIVITIES <sup>(4)</sup>	2,754	(190)	1,190	1,145	(30)	1,220	6,089
2020							
Revenues Non-company sales	677	708	1,805	608	-	981	4,779
Revenues company sales	5,540	1,068	935	3,268	24	4,229	15,064
TOTAL REVENUES	6,217	1,776	2,740	3,876	24	5,210	19,843
Production costs	(1,097)	(774)	(373)	(1,185)	(11)	(624)	(4,064)
Exploration expenses	(159)	(305)	(56)	(157)	(1)	(53)	(731)
Depreciation, depletion and amortization and valuation allowances	(4,565)	(7,950)	(2,135)	(1,933)	(51)	(697)	(17,331)
Other expenses <sup>(2)</sup>	(614)	(339)	(133)	(357)	(8)	(2,778)	(4,229)
PRE-TAX INCOME FROM PRODUCING ACTIVITIES <sup>(5)</sup>	(218)	(7,592)	43	244	(47)	1,058	(6,512)
Income tax	270	384	(111)	(144)	2	(269)	132
RESULTS OF OIL AND GAS PRODUCING ACTIVITIES <sup>(5)</sup>	52	(7,208)	(68)	100	(45)	789	(6,380)

(1) As from January 1, 2022, the Europe column includes the Russia data.

(2) Included production taxes and accretion expense as provided by IAS 37 (\$515 million in 2018, \$615 million in 2019, \$548 million in 2020, \$434 million in 2021 and \$420 million in 2022).

(3) Including adjustment items applicable to ASC 932 perimeter, amounting to a net charge of \$1,238 million before tax and \$703 million after tax, essentially related to asset impairments.

(4) Including adjustment items applicable to ASC 932 perimeter, amounting to a net charge of \$899 million before tax and \$392 million after tax, essentially related to asset impairments.

(5) Including adjustment items applicable to ASC 932 perimeter, amounting to a net charge of \$7,911 million before tax and \$7,450 million after tax, essentially related to asset impairments.

## Consolidated subsidiaries

(in million dollars)

	Africa (excluding North Africa)	Americas	Asia Pacific	Europe <sup>(1)</sup>	Russia	Middle East & North Africa	Total
<b>2021</b>							
Revenues Non-company sales	809	896	2,089	1,368	-	1,676	6,838
Revenues company sales	8,881	3,133	1,834	9,420	53	7,995	31,316
<b>TOTAL REVENUES</b>	<b>9,690</b>	<b>4,029</b>	<b>3,923</b>	<b>10,788</b>	<b>53</b>	<b>9,671</b>	<b>38,154</b>
Production costs	(1,076)	(856)	(353)	(1,156)	(11)	(620)	(4,072)
Exploration expenses	(170)	(250)	(128)	(161)	(1)	(30)	(740)
Depreciation, depletion and amortization and valuation allowances	(3,457)	(1,533)	(1,309)	(2,371)	(21)	(771)	(9,462)
Other expenses <sup>(2)</sup>	(722)	(494)	(204)	(370)	(14)	(6,076)	(7,880)
<b>PRE-TAX INCOME FROM PRODUCING ACTIVITIES<sup>(3)</sup></b>	<b>4,265</b>	<b>896</b>	<b>1,929</b>	<b>6,730</b>	<b>6</b>	<b>2,174</b>	<b>16,000</b>
Income tax	(1,537)	(183)	(822)	(3,953)	(14)	(795)	(7,304)
<b>RESULTS OF OIL AND GAS PRODUCING ACTIVITIES<sup>(3)</sup></b>	<b>2,728</b>	<b>713</b>	<b>1,107</b>	<b>2,777</b>	<b>(8)</b>	<b>1,379</b>	<b>8,696</b>
<b>2022</b>							
Revenues Non-company sales	1,407	980	2,059	2,650		2,110	9,207
Revenues company sales	11,257	6,512	2,052	18,077		12,755	50,653
<b>TOTAL REVENUES</b>	<b>12,664</b>	<b>7,492</b>	<b>4,111</b>	<b>20,727</b>		<b>14,865</b>	<b>59,859</b>
Production costs	(1,037)	(1,037)	(425)	(1,130)		(638)	(4,267)
Exploration expenses	(185)	(900)	(27)	(130)		(56)	(1,299)
Depreciation, depletion and amortization and valuation allowances	(3,459)	(823)	(1,015)	(1,875)		(1,055)	(8,227)
Other expenses <sup>(2)</sup>	(1,007)	(919)	(262)	(466)		(10,506)	(13,160)
<b>PRE-TAX INCOME FROM PRODUCING ACTIVITIES<sup>(4)</sup></b>	<b>6,976</b>	<b>3,813</b>	<b>2,382</b>	<b>17,126</b>		<b>2,609</b>	<b>32,907</b>
Income tax	(3,278)	(910)	(837)	(12,288)		(952)	(18,265)
<b>RESULTS OF OIL AND GAS PRODUCING ACTIVITIES<sup>(4)</sup></b>	<b>3,698</b>	<b>2,903</b>	<b>1,545</b>	<b>4,838</b>		<b>1,657</b>	<b>14,641</b>
<b>2023</b>							
Revenues Non-company sales	1,049	884	1,402	1,240		1,930	6,505
Revenues company sales	8,766	5,561	2,213	10,128		12,480	39,148
<b>TOTAL REVENUES</b>	<b>9,815</b>	<b>6,445</b>	<b>3,615</b>	<b>11,369</b>		<b>14,410</b>	<b>45,654</b>
Production costs	(1,006)	(1,051)	(342)	(1,178)		(740)	(4,317)
Exploration expenses	(118)	(149)	(6)	(226)		(74)	(573)
Depreciation, depletion and amortization and valuation allowances	(3,453)	(1,181)	(1,125)	(1,661)		(1,044)	(8,465)
Other expenses <sup>(2)</sup>	(711)	(1,047)	(227)	(417)		(9,673)	(12,075)
<b>PRE-TAX INCOME FROM PRODUCING ACTIVITIES<sup>(5)</sup></b>	<b>4,527</b>	<b>3,017</b>	<b>1,915</b>	<b>7,886</b>		<b>2,879</b>	<b>20,224</b>
Income tax	(1,756)	(739)	(559)	(6,194)		(930)	(10,178)
<b>RESULTS OF OIL AND GAS PRODUCING ACTIVITIES<sup>(5)</sup></b>	<b>2,771</b>	<b>2,278</b>	<b>1,356</b>	<b>1,692</b>		<b>1,949</b>	<b>10,046</b>

(1) As from January 1, 2022, the Europe column includes the Russia data.

(2) Included production taxes and accretion expense as provided by IAS 37 (\$615 million in 2019, \$548 million in 2020, \$434 million in 2021, \$420 million in 2022 and \$576 million in 2023).

(3) Including adjustment items applicable to ASC 932 perimeter, amounting to a net charge of \$771 million before tax and \$763 million after tax, essentially related to asset impairments.

(4) Including adjustment items applicable to ASC932 perimeter, amounting to a net charge of \$631 million before tax, related to production cost (\$84 million), net asset impairment reversal (\$178 million) and exploration charges (\$725 million). Adjustment after tax is a charge of \$1,379 million, including non-recurrent tax charge (\$725 million).

(5) Including adjustment items applicable to ASC932 perimeter, amounting to a net charge of \$481 million before tax and \$436 million after tax, related to asset impairments.



Equity affiliates

(in million dollars)

Company's share of results of oil and gas producing activities	Africa (excluding North Africa)	Americas	Asia Pacific	Europe <sup>(1)</sup>	Russia	Middle East & North Africa	Total
2019	58	(27)	-	-	1,399	641	2,071
2020	(20)	-	-	-	843	404	1,227
2021	174	(1,025)			2,497	903	2,549
2022	688	-	-	(2,814)	-	1,282	(844)
<b>2023</b>							
Revenues Non-company sales	276	-	-	1,203		3,473	4,951
Revenues company sales	1	-	-	373		1,299	1,673
<b>TOTAL REVENUES</b>	<b>277</b>	<b>-</b>	<b>-</b>	<b>1,576</b>		<b>4,771</b>	<b>6,625</b>
Production costs	(8)	-	-	(23)		(300)	(331)
Exploration expenses		-	-	0		0	0
Depreciation, depletion and amortization and valuation allowances		-	-	(81)		(792)	(873)
Other expenses	(64)	-	-	(1)		(2,799)	(2,864)
<b>PRE-TAX INCOME FROM PRODUCING ACTIVITIES</b>	<b>205</b>	<b>-</b>	<b>-</b>	<b>1,472</b>		<b>880</b>	<b>2,557</b>
Income tax		-	-	(397)		(501)	(898)
<b>RESULTS OF OIL AND GAS PRODUCING ACTIVITIES</b>	<b>205</b>	<b>-</b>	<b>-</b>	<b>1,075</b>		<b>379</b>	<b>1,659</b>

(1) As from January 1, 2022, the Europe column includes the Russia data.

## COST INCURRED

The following tables set forth the costs incurred in the Company's oil and gas property acquisition, exploration and development activities, including both capitalized and expensed amounts. They do not include costs incurred related to oil and gas transportation and LNG liquefaction and transportation activities.

	Consolidated subsidiaries						
	Africa (excluding North Africa)	Americas	Asia Pacific	Europe <sup>(1)</sup>	Russia	Middle East & North Africa	Total
(in million dollars)							
2019 <sup>(3)</sup>							
Proved property acquisition	244	14	16	-	-	10	284
Unproved property acquisition	3,124	509	3	7	-	42	3,685
Exploration costs	198	469	84	262	2	78	1,093
Development costs <sup>(2)</sup>	2,724	1,547	701	2,170	28	1,074	8,244
TOTAL COST INCURRED	6,290	2,539	804	2,439	30	1,204	13,306
2020 <sup>(4)</sup>							
Proved property acquisition	3	-	15	-	-	3	21
Unproved property acquisition	1,016	15	-	-	-	13	1,044
Exploration costs	312	485	58	182	1	118	1,156
Development costs <sup>(2)</sup>	1,215	1,042	369	2,279	31	1,024	5,960
TOTAL COST INCURRED	2,546	1,542	442	2,461	32	1,158	8,181
2021							
Proved property acquisition	94	39	10	-	-	50	193
Unproved property acquisition	142	124	-	-	-	66	332
Exploration costs	302	523	19	215	1	62	1,122
Development costs <sup>(2)</sup>	1,508	1,591	603	1,836	30	991	6,559
TOTAL COST INCURRED	2,046	2,277	632	2,051	31	1,169	8,206
2022							
Proved property acquisition <sup>(5)</sup>	96	4,227	6	5		102	4,436
Unproved property acquisition	3	438	4	-		48	493
Exploration costs	158	493	44	172		154	1,021
Development costs <sup>(2)</sup>	1,609	1,671	719	979		1,085	6,063
TOTAL COST INCURRED	1,866	6,829	773	1,156		1,389	12,013
2023							
Proved property acquisition <sup>(6)</sup>	97	309	5	21		1,243	1,675
Unproved property acquisition	24	255	56	0		273	608
Exploration costs	528	367	12	204		140	1,250
Development costs <sup>(2)</sup>	2,259	2,059	835	1,014		1,698	7,865
TOTAL COST INCURRED	2,908	2,989	908	1,239		3,354	11,398

Equity affiliates

(in million dollars)

Company's share of costs of property acquisition exploration and development	Africa (excluding North Africa)	Americas	Asia Pacific	Europe <sup>(1)</sup>	Russia	Middle East & North Africa	Total
2019	-	4	-	-	2,063	405	2,472
2020	-	-	-	-	575	484	1,059
2021	-	1	-	-	362	529	892
2022	-	-	-	693 <sup>(7)</sup>	-	637	1,330
<b>2023</b>							
Proved property acquisition	-	-	-	-	-	225	225
Unproved property acquisition	-	-	-	-	-	0	0
Exploration costs	-	-	-	-	-	5	5
Development costs <sup>(2)</sup>	-	-	-	-	-	899	899
<b>TOTAL COST INCURRED</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>1,129</b>	<b>1,129</b>

(1) As from January 1, 2022, the Europe column includes the Russia data.

(2) Including asset retirement costs capitalized during the year and any gains or losses recognized upon settlement of asset retirement obligation during the year.

(3) Including costs incurred relating to acquisitions Anadarko in Mozambique.

(4) Including cost incurred relating to acquisitions of Anadarko in South Africa, Blocks 20/11 and 21/09 in Angola and Tulow's interests in Uganda.

(5) Including cost incurred relating to acquisition of Atapu and Sépia assets in Brazil.

(6) Including cost incurred relating to acquisition of Umm Lulu SARB assets in Abu Dhabi.

(7) Including mainly the Novatek incurred costs.

## CAPITALIZED COST RELATED TO OIL AND GAS PRODUCING ACTIVITIES

Capitalized costs represent the amount of capitalized proved and unproved property costs, including support equipment and facilities, along with the related accumulated depreciation, depletion and amortization. The following tables do not include capitalized costs related to oil and gas transportation and LNG liquefaction and transportation activities.

	Consolidated subsidiaries						
(in million dollars)	Africa (excluding North Africa)	Americas	Asia Pacific	Europe <sup>(1)</sup>	Russia	Middle East & North Africa	Total
As of December 31, 2019							
Proved properties	84,170	29,580	37,772	49,489	669	16,773	218,453
Unproved properties	8,253	8,987	1,856	2,656	4	2,998	24,754
Total capitalized costs	92,423	38,567	39,628	52,145	673	19,771	243,207
Accumulated depreciation, depletion and amortization	(55,686)	(15,414)	(19,215)	(35,245)	(551)	(10,720)	(136,831)
NET CAPITALIZED COSTS	36,737	23,153	20,413	16,900	122	9,051	106,376
As of December 31, 2020							
Proved properties	84,556	31,235	37,840	53,752	700	17,913	225,996
Unproved properties	10,253	8,758	1,760	2,594	4	2,762	26,131
Total capitalized costs	94,809	39,993	39,600	56,346	704	20,675	252,127
Accumulated depreciation, depletion and amortization	(60,270)	(23,525)	(22,050)	(38,653)	(602)	(11,260)	(156,360)
NET CAPITALIZED COSTS	34,539	16,468	17,550	17,693	102	9,415	95,767
As of December 31, 2021							
Proved properties	86,489	32,124	38,289	54,294	730	18,618	230,544
Unproved properties	8,248	6,523	1,699	2,321	4	2,641	21,436
Total capitalized costs	94,737	38,647	39,988	56,615	734	21,259	251,980
Accumulated depreciation, depletion and amortization	(62,223)	(21,686)	(22,249)	(39,805)	(623)	(11,645)	(158,231)
NET CAPITALIZED COSTS	32,514	16,691	17,739	16,810	111	9,614	93,479
As of December 31, 2022							
Proved properties	84,613	38,635	38,051	48,414		18,646	228,359
Unproved properties	8,240	5,673	1,761	1,820		2,484	19,978
Total capitalized costs	92,853	44,308	39,812	50,234		21,130	248,337
Accumulated depreciation, depletion and amortization	(61,898)	(21,433)	(22,366)	(35,464)		(10,882)	(152,043)
NET CAPITALIZED COSTS	30,955	22,875	17,446	14,770		10,248	96,294
As of December 31, 2023							
Proved properties	86,930	27,654	36,066	49,825		21,266	221,741
Unproved properties	8,184	5,373	1,827	1,672		2,734	19,790
Total capitalized costs	95,114	33,027	37,893	51,497		24,000	241,531
Accumulated depreciation, depletion and amortization	(65,070)	(12,632)	(21,160)	(37,838)		(11,423)	(148,122)
NET CAPITALIZED COSTS	30,044	20,395	16,733	13,659		12,578	93,409

(1) As from January 1, 2022, the Europe column includes the Russia data.

Equity affiliates

(in million dollars)

Company's share of net capitalized costs	Africa (excluding North Africa)	Americas	Asia Pacific	Europe <sup>(1)</sup>	Russia	Middle East & North Africa	Total
As of December 31, 2019	-	1,018	-	-	7,119	1,755	9,892
As of December 31, 2020	-	1,013	-	-	6,777	2,033	9,823
As of December 31, 2021	-	-	-	-	6,740	2,494	9,234
As of December 31, 2022	-	-	-	973		2,763	3,737
<b>AS OF DECEMBER 31, 2023</b>							
Proved properties	-	-	-	1,445		6,658	8,103
Unproved properties	-	-	-	0		0	0
<b>Total capitalized costs</b>	-	-	-	<b>1,445</b>		<b>6,658</b>	<b>8,103</b>
Accumulated depreciation, depletion and amortization	-	-	-	(552)		(3,523)	(4,075)
<b>NET CAPITALIZED COSTS</b>	-	-	-	<b>892</b>		<b>3,135</b>	<b>4,028</b>

(1) As from January 1, 2022, the Europe column includes the Russia data.



## STANDARDIZED MEASURE OF DISCOUNTED FUTURE NET CASH FLOWS (EXCLUDING TRANSPORTATION)

The standardized measure of discounted future net cash flows relating to proved oil and gas reserve quantities was developed as follows:

1. estimates of proved reserves and the corresponding production profiles are based on current technical and economic conditions;
2. the estimated future cash flows are determined based on prices used in estimating the Group's proved oil and gas reserves;
3. the future cash flows incorporate estimated production costs (including production taxes), future development costs and asset retirement costs. All cost estimates are based on year-end technical and economic conditions;

4. future income taxes are computed by applying the year-end statutory tax rate to future net cash flows after consideration of permanent differences and future income tax credits; and
5. future net cash flows are discounted at a standard discount rate of 10 percent.

These principles applied are those required by ASC 932 and do not reflect the expectations of real revenues from these reserves, nor their present value; hence, they do not constitute criteria for investment decisions. An estimate of the fair value of reserves should also take into account, among other things, the recovery of reserves not presently classified as proved, anticipated future changes in prices and costs and a discount factor more representative of the time value of money and the risks inherent in reserve estimates.

	Consolidated subsidiaries						
(in million dollars)	Africa (excluding North Africa)	Americas	Asia Pacific	Europe <sup>(1)</sup>	Russia	Middle East & North Africa	Total
<b>AS OF DECEMBER 31, 2019</b>							
Future cash inflows	70,854	50,810	43,142	47,679	436	110,796	323,717
Future production costs	(18,940)	(20,843)	(9,618)	(14,526)	(224)	(85,511)	(149,662)
Future development costs	(14,942)	(9,171)	(3,948)	(14,734)	(107)	(7,865)	(50,767)
Future income taxes	(12,341)	(1,790)	(3,953)	(10,846)	(46)	(4,887)	(33,863)
<b>FUTURE NET CASH FLOWS, AFTER INCOME TAXES</b>	<b>24,631</b>	<b>19,006</b>	<b>25,623</b>	<b>7,573</b>	<b>59</b>	<b>12,533</b>	<b>89,425</b>
Discount at 10%	(10,004)	(10,061)	(12,276)	(1,341)	(11)	(5,143)	(38,836)
<b>STANDARDIZED MEASURE OF DISCOUNTED FUTURE NET CASH FLOWS</b>	<b>14,627</b>	<b>8,945</b>	<b>13,347</b>	<b>6,232</b>	<b>48</b>	<b>7,390</b>	<b>50,589</b>
<b>AS OF DECEMBER 31, 2020</b>							
Future cash inflows	39,525	32,649	28,961	27,290	341	85,550	214,316
Future production costs	(13,333)	(14,028)	(7,303)	(10,264)	(208)	(65,377)	(110,513)
Future development costs	(13,150)	(8,873)	(4,268)	(11,924)	(110)	(7,948)	(46,273)
Future income taxes	(4,682)	(859)	(985)	(2,912)	(16)	(2,741)	(12,195)
<b>FUTURE NET CASH FLOWS, AFTER INCOME TAXES</b>	<b>8,360</b>	<b>8,889</b>	<b>16,405</b>	<b>2,190</b>	<b>7</b>	<b>9,484</b>	<b>45,335</b>
Discount at 10%	(4,124)	(4,885)	(7,690)	(506)	7	(3,705)	(20,903)
<b>STANDARDIZED MEASURE OF DISCOUNTED FUTURE NET CASH FLOWS</b>	<b>4,236</b>	<b>4,004</b>	<b>8,715</b>	<b>1,684</b>	<b>14</b>	<b>5,779</b>	<b>24,432</b>
<b>AS OF DECEMBER 31, 2021</b>							
Future cash inflows	88,082	58,716	47,667	81,227	400	132,166	408,258
Future production costs	(24,040)	(20,512)	(8,397)	(16,328)	(202)	(103,307)	(172,786)
Future development costs	(15,412)	(9,542)	(4,118)	(14,541)	(86)	(9,191)	(52,890)
Future income taxes	(14,474)	(3,415)	(5,520)	(30,532)	(50)	(5,116)	(59,107)
<b>FUTURE NET CASH FLOWS, AFTER INCOME TAXES</b>	<b>34,156</b>	<b>25,247</b>	<b>29,632</b>	<b>19,826</b>	<b>62</b>	<b>14,552</b>	<b>123,475</b>
Discount at 10%	(16,610)	(12,913)	(14,259)	(6,941)	(10)	(6,331)	(57,064)
<b>STANDARDIZED MEASURE OF DISCOUNTED FUTURE NET CASH FLOWS</b>	<b>17,546</b>	<b>12,334</b>	<b>15,373</b>	<b>12,885</b>	<b>52</b>	<b>8,221</b>	<b>66,411</b>
<b>AS OF DECEMBER 31, 2022</b>							
Future cash inflows	125,701	117,978	61,701	165,523		181,680	652,583
Future production costs	(27,589)	(34,944)	(9,358)	(20,919)		(148,030)	(240,840)
Future development costs	(15,040)	(12,470)	(4,024)	(13,695)		(8,923)	(54,153)
Future income taxes	(30,512)	(12,121)	(9,502)	(92,432)		(7,562)	(152,130)

# Consolidated subsidiaries

(in million dollars)

	Africa (excluding North Africa)	Americas	Asia Pacific	Europe <sup>(1)</sup>	Russia	Middle East & North Africa	Total
<b>FUTURE NET CASH FLOWS, AFTER INCOME TAXES</b>	<b>52,560</b>	<b>58,442</b>	<b>38,817</b>	<b>38,476</b>		<b>17,165</b>	<b>205,461</b>
Discount at 10%	(24,939)	(28,526)	(19,929)	(15,412)		(7,255)	(96,061)
<b>STANDARDIZED MEASURE OF DISCOUNTED FUTURE NET CASH FLOWS</b>	<b>27,621</b>	<b>29,916</b>	<b>18,887</b>	<b>23,064</b>		<b>9,911</b>	<b>109,399</b>
<b>AS OF DECEMBER 31, 2023</b>							
Future cash inflows	93,472	68,658	47,109	73,259		170,685	453,183
Future production costs	(23,152)	(19,026)	(8,443)	(16,464)		(132,755)	(199,840)
Future development costs	(13,816)	(7,018)	(3,270)	(11,634)		(11,745)	(47,484)
Future income taxes	(16,536)	(9,055)	(7,461)	(31,320)		(6,846)	(71,218)
<b>FUTURE NET CASH FLOWS, AFTER INCOME TAXES</b>	<b>39,968</b>	<b>33,559</b>	<b>27,934</b>	<b>13,841</b>		<b>19,339</b>	<b>134,641</b>
Discount at 10%	(19,230)	(15,698)	(13,809)	(5,290)		(8,047)	(62,074)
<b>STANDARDIZED MEASURE OF DISCOUNTED FUTURE NET CASH FLOWS</b>	<b>20,738</b>	<b>17,861</b>	<b>14,125</b>	<b>8,552</b>		<b>11,292</b>	<b>72,567</b>
<b>Minority interests in future net cash flows as of</b>							
December 31, 2019	968	-	-	-	-	-	968
December 31, 2020	61	-	-	-	-	-	61
December 31, 2021	740	-	-	-	-	-	740
December 31, 2022	1,148	-	-	-	-	-	1,148
<b>DECEMBER 31, 2023</b>	<b>720</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>720</b>

(1) As of January 1, 2022, the Europe column includes the Russia data.

# Equity affiliates

(in million dollars)

Company's share of equity affiliates' future net cash flows as of	Africa (excluding North Africa)	Americas	Asia Pacific	Europe <sup>(1)</sup>	Russia	Middle East & North Africa	Total
December 31, 2019	82	264	-	-	11,155	4,371	15,872
December 31, 2020	20	(33)	-	-	6,993	1,612	8,592
December 31, 2021	1,180	-	-	-	13,800	5,867	20,847
December 31, 2022	3,999	-	-	9,969		9,323	23,291
<b>DECEMBER 31, 2023</b>							
Future cash inflows	3,818			20,141		103,518	127,477
Future production costs	(955)			(3,322)		(62,997)	(67,274)
Future development costs				(70)		(4,081)	(4,151)
Future income taxes	(542)			(4,517)		(13,907)	(18,966)
<b>FUTURE NET CASH FLOWS, AFTER INCOME TAXES</b>	<b>2,321</b>			<b>12,232</b>		<b>22,533</b>	<b>37,086</b>
Discount at 10%	(1,008)			(5,900)		(14,523)	(21,431)
<b>STANDARDIZED MEASURE OF DISCOUNTED FUTURE NET CASH FLOWS</b>	<b>1,313</b>			<b>6,332</b>		<b>8,010</b>	<b>15,655</b>

(1) As of January 1, 2022, the Europe column includes the Russia data.

## CHANGES IN THE STANDARDIZED MEASURE OF DISCOUNTED FUTURE NET CASH FLOWS

### CONSOLIDATED SUBSIDIARIES

<i>(in million dollars)</i>	2023	2022	2021	2020	2019
<b>Discounted future net cash flows at January 1</b>	<b>109,399</b>	<b>66,411</b>	<b>24,432</b>	<b>50,589</b>	<b>57,805</b>
Sales and transfers, net of production costs	(29,837)	(42,852)	(26,636)	(12,095)	(23,292)
Net change in sales and transfer prices and in production costs and other expenses	(81,604)	107,114	86,421	(55,732)	(15,484)
Extensions, discoveries and improved recovery	887	5,367	5,128	335	558
Changes in estimated future development costs	(1,122)	(2,986)	(2,057)	(1,000)	(1,735)
Previously estimated development costs incurred during the year	8,458	7,656	6,367	7,419	6,755
Revisions of previous quantity estimates	5,669	5,516	(5,189)	13,635	7,845
Accretion of 10% discount	10,940	6,637	2,443	5,059	5,780
Net change in income taxes	54,260	(49,265)	(24,718)	15,919	12,146
Purchases of minerals in place	2,047	6,248	218	329	266
Sales of minerals in place	(6,530)	(448)	2	(26)	(55)
<b>END OF YEAR</b>	<b>72,567</b>	<b>109,399</b>	<b>66,411</b>	<b>24,432</b>	<b>50,589</b>

### EQUITY AFFILIATES

<i>(in million dollars)</i>	2023	2022	2021	2020	2019
<b>Discounted future net cash flows at January 1</b>	<b>23,291</b>	<b>20,847</b>	<b>8,592</b>	<b>15,872</b>	<b>18,752</b>
Sales and transfers, net of production costs	(3,442)	(7,676)	(5,154)	(2,133)	(3,160)
Net change in sales and transfer prices and in production costs and other expenses	(12,731)	17,470	18,084	(12,705)	(8,191)
Extensions, discoveries and improved recovery	487	172	1,365	234	4,386
Changes in estimated future development costs	25	(209)	(525)	(172)	(736)
Previously estimated development costs incurred during the year	743	1,016	880	851	845
Revisions of previous quantity estimates	250	(7,675)	(574)	(1,868)	(104)
Accretion of 10% discount	2,329	2,084	859	1,587	1,875
Net change in income taxes	900	(2,318)	(2,343)	6,926	2,205
Purchases of minerals in place	3,803	-	-	-	-
Sales of minerals in place	-	(420)	(337)	-	-
<b>END OF YEAR</b>	<b>15,655</b>	<b>23,291</b>	<b>20,847</b>	<b>8,592</b>	<b>15,872</b>

## OIL AND GAS ACREAGE

As of December 31, (in thousands of acres)		2023		2022		2021	
		Undeveloped acreage <sup>(1)</sup>	Developed acreage	Undeveloped acreage <sup>(1)</sup>	Developed acreage	Undeveloped acreage <sup>(1)</sup>	Developed acreage
Africa (excluding North Africa)	Gross	67,007	882	81,599	883	86,711	955
	Net	35,313	201	42,598	202	44,739	214
Americas	Gross	14,598	798	14,830	741	16,265	922
	Net	5,957	368	6,077	328	6,738	460
Asia Pacific	Gross	13,821	1,039	23,518	923	38,168	902
	Net	9,302	317	14,027	292	19,886	280
Europe <sup>(2)</sup>	Gross	7,818	910	7,150	960	19,401	805
	Net	3,218	221	3,074	226	8,299	202
Middle East & North Africa	Gross	54,027	3,653	54,340	3,423	53,232	3,454
	Net	10,951	650	12,636	599	11,704	590
Russia	Gross					63,074	769
	Net					8,696	157
<b>TOTAL</b>	<b>GROSS</b>	<b>157,271</b>	<b>7,282</b>	<b>181,437</b>	<b>6,930</b>	<b>276,851</b>	<b>7,807</b>
	<b>NET<sup>(3)</sup></b>	<b>64,741</b>	<b>1,757</b>	<b>78,412</b>	<b>1,647</b>	<b>100,062</b>	<b>1,903</b>

As of December 31, (in thousands of acres)		2020		2019	
		Undeveloped acreage <sup>(1)</sup>	Developed acreage	Undeveloped acreage <sup>(1)</sup>	Developed acreage
Africa (excluding North Africa)	Gross	97,001	800	75,322	803
	Net	56,918	210	48,101	218
Americas	Gross	20,156	1,135	21,052	1,040
	Net	8,387	495	8,505	477
Asia Pacific	Gross	34,990	881	40,527	821
	Net	18,933	270	22,476	256
Europe	Gross	28,294	815	28,338	809
	Net	11,326	205	11,472	204
Middle East & North Africa	Gross	53,237	3,489	50,515	3,389
	Net	11,717	519	9,660	496
Russia	Gross	23,689	718	23,697	709
	Net	4,278	148	4,280	146
<b>TOTAL</b>	<b>GROSS</b>	<b>257,367</b>	<b>7,838</b>	<b>239,451</b>	<b>7,571</b>
	<b>NET<sup>(3)</sup></b>	<b>111,559</b>	<b>1,847</b>	<b>104,494</b>	<b>1,797</b>

(1) Undeveloped acreage includes leases and concessions.

(2) As from January 1, 2022, the Europe line includes the Russia data.

(3) Net acreage equals the sum of TotalEnergies' equity interests in gross acreage.

## NUMBER OF PRODUCTIVE WELLS

As of December 31, (number of wells)		2023		2022		2021	
		Gross productive wells	Net productive wells <sup>(1)</sup>	Gross productive wells	Net productive wells <sup>(1)</sup>	Gross productive wells	Net productive wells <sup>(1)</sup>
Africa (excluding North Africa)	Oil	1,301	354	1,288	351	1,381	371
	Gas	70	14	70	14	82	16
Americas	Oil	136	30	327	124	309	121
	Gas	2,334	1,609	2,562	1,719	2,748	1,876
Asia Pacific	Oil	136	67	132	66	129	65
	Gas	4,363	1,352	3,728	1,172	3,494	1,094
Europe <sup>(2)</sup>	Oil	611	197	595	196	615	207
	Gas	465	119	439	119	254	84
Middle East & North Africa	Oil	13,036	985	11,803	873	11,483	812
	Gas	194	66	189	65	176	60
Russia	Oil					389	65
	Gas					903	166
<b>TOTAL</b>	<b>OIL</b>	<b>15,220</b>	<b>1,633</b>	<b>14,145</b>	<b>1,610</b>	<b>14,306</b>	<b>1,641</b>
	<b>GAS</b>	<b>7,426</b>	<b>3,160</b>	<b>6,988</b>	<b>3,089</b>	<b>7,657</b>	<b>3,296</b>

As of December 31, (number of wells)		2020		2019	
		Gross productive wells	Net productive wells <sup>(1)</sup>	Gross productive wells	Net productive wells <sup>(1)</sup>
Africa (excluding North Africa)	Oil	1,526	416	1,531	429
	Gas	86	18	83	19
Americas	Oil	1,079	354	1,085	357
	Gas	3,601	2,177	3,500	2,246
Asia Pacific	Oil	130	65	129	70
	Gas	3,336	1,040	2,917	920
Europe	Oil	602	198	659	218
	Gas	250	83	281	96
Middle East & North Africa	Oil	11,041	837	12,391	829
	Gas	200	48	197	48
Russia	Oil	350	57	418	71
	Gas	823	151	766	141
<b>TOTAL</b>	<b>OIL</b>	<b>14,728</b>	<b>1,927</b>	<b>16,213</b>	<b>1,974</b>
	<b>GAS</b>	<b>8,296</b>	<b>3,517</b>	<b>7,744</b>	<b>3,470</b>

(1) Net productive wells corresponds to the sum of TotalEnergies' equity interests in gross productive wells.

(2) As from January 1, 2022, the Europe line includes the Russia data.



## NUMBER OF NET PRODUCTIVE AND DRY WELLS DRILLED

	2023			2022			2021		
As of December 31, (number of wells)	Net productive wells drilled <sup>(1) (2)</sup>	Net dry wells drilled <sup>(1) (3)</sup>	Total net wells drilled <sup>(1) (3)</sup>	Net productive wells drilled <sup>(1) (2)</sup>	Net dry wells drilled <sup>(1) (3)</sup>	Total net wells drilled <sup>(1) (3)</sup>	Net productive wells drilled <sup>(1) (2)</sup>	Net dry wells drilled <sup>(1) (3)</sup>	Total net wells drilled <sup>(1) (3)</sup>
Exploration									
Africa (excluding North Africa)	2.4	0.4	2.8	0.4	0.9	1.3	1.1	0.8	1.9
Americas	1.6	-	1.6	1.4	1.1	2.5	2.0	1.8	3.8
Asia Pacific	-	-	-	0.3	-	0.3	-	-	-
Europe <sup>(5)</sup>	1.3	1.0	2.3	0.2	0.1	0.3	0.2	1.2	1.4
Middle East & North Africa	0.7	0.6	1.3	0.5	0.5	1.0	0.8	-	0.8
Russia							-	-	-
SUBTOTAL	6.0	2.0	8.0	2.8	2.6	5.4	4.1	3.8	7.9
Development <sup>(5)</sup>									
Africa (excluding North Africa)	10.5	-	10.5	6.9	0.1	7.0	4.8	-	4.8
Americas <sup>(4)</sup>	22.8	-	22.8	22.4	-	22.4	14.7	-	14.7
Asia Pacific	138.8	-	138.8	130.8	-	130.8	127.3	-	127.3
Europe <sup>(5)</sup>	16.5	0.4	16.9	25.9	-	25.9	13.8	-	13.8
Middle East & North Africa	93.5	-	93.5	55.4	0.7	56.1	54.6	0.2	54.8
Russia							28.7	-	28.7
SUBTOTAL	282.1	0.4	282.5	241.4	0.8	242.2	243.9	0.2	244.1
TOTAL	288.1	2.4	290.5	244.2	3.4	247.6	248.0	4.0	252.0
				2020			2019		
As of December 31, (number of wells)				Net productive wells drilled <sup>(1) (2)</sup>	Net dry wells drilled <sup>(1) (3)</sup>	Net total wells drilled <sup>(1) (3)</sup>	Net productive wells drilled <sup>(1) (2)</sup>	Net dry wells drilled <sup>(1) (3)</sup>	Net total wells drilled <sup>(1) (3)</sup>
Exploration									
Africa (excluding North Africa)				0.4	-	0.4	1.1	0.6	1.7
Americas				2.6	0.5	3.1	1.4	2.2	3.6
Asia Pacific				-	0.7	0.7	-	-	-
Europe				0.3	0.5	0.8	1.3	0.6	1.9
Middle East & North Africa				0.3	0.4	0.7	1.0	1.4	2.4
Russia				-	-	-	-	-	-
SUBTOTAL				3.6	2.1	5.7	4.8	4.8	9.6
Development									
Africa (excluding North Africa)				8.0	-	8.0	17.4	-	17.4
Americas <sup>(4)</sup>				5.4	-	5.4	19.2	-	19.2
Asia Pacific				114.9	-	114.9	170.1	-	170.1
Europe				7.7	-	7.7	9.1	-	9.1
Middle East & North Africa				56.4	-	56.4	69.6	-	69.6
Russia				21.6	-	21.6	26.2	-	26.2
SUBTOTAL				214.0	-	214.0	311.6	-	311.6
TOTAL				217.6	2.1	219.7	316.4	4.8	321.2

(1) Net wells equal the sum of the TotalEnergies' equity interests in gross wells.

(2) Includes certain exploratory wells that were abandoned, but which would have been capable of producing oil in sufficient quantities to justify completion.

(3) For information: service wells and stratigraphic wells are not reported in this table.

(4) The recompletion activities in Barnett are no longer reported. The 2021 (123.3), 2020 (256.3), 2019 (64.3) and 2018 (38.8) data were restated.

(5) As from January 1, 2022, the Europe lines include the Russia data.

## WELLS IN THE PROCESS OF BEING DRILLED (INCLUDING WELLS TEMPORARILY SUSPENDED)

As of December 31, (number of wells)	2023		2022		2021	
	Gross	Net <sup>(1)</sup>	Gross	Net <sup>(1)</sup>	Gross	Net <sup>(1)</sup>
<b>Exploration</b>						
Africa (excluding North Africa)	2	0.8	-	-	2	0.7
Americas	1	0.4	2	0.7	2	0.9
Asia Pacific	-	-	-	-	-	-
Europe <sup>(2)</sup>	1	0.1	1	0.3	-	-
Middle East & North Africa	2	0.7	1	0.2	-	-
Russia					-	-
<b>SUBTOTAL</b>	<b>6</b>	<b>2.0</b>	<b>4</b>	<b>1.2</b>	<b>4</b>	<b>1.6</b>
<b>Other wells<sup>(3)</sup></b>						
Africa (excluding North Africa)	85	23.1	91	16.2	53	8.1
Americas	50	15.7	42	18.1	49	19.4
Asia Pacific	273	89.2	431	124.1	528	159.9
Europe <sup>(2)</sup>	32	10.0	104	14.6	20	8.4
Middle East & North Africa	414	54.0	417	55.4	264	37.2
Russia					65	14.0
<b>SUBTOTAL</b>	<b>854</b>	<b>191.9</b>	<b>1,085</b>	<b>228.4</b>	<b>979</b>	<b>247.0</b>
<b>TOTAL</b>	<b>860</b>	<b>193.9</b>	<b>1,089</b>	<b>229.6</b>	<b>983</b>	<b>248.6</b>

As of December 31, (number of wells)	2020		2019	
	Gross	Net <sup>(1)</sup>	Gross	Net <sup>(1)</sup>
<b>Exploration</b>				
Africa (excluding North Africa)	-	-	-	-
Americas	1	0.4	2	0.8
Asia Pacific	-	-	-	-
Europe	-	-	1	0.3
Russia	2	0.8	-	-
Middle East & North Africa	-	-	2	0.7
<b>SUBTOTAL</b>	<b>3</b>	<b>1.2</b>	<b>5</b>	<b>1.8</b>
<b>Other wells<sup>(2)</sup></b>				
Africa (excluding North Africa)	55	8.2	61	10.7
Americas	22	7.6	27	6.9
Asia Pacific	439	114.3	537	136
Europe	99	56.6	122	67.3
Russia	522	65.7	25	6.3
Middle East & North Africa	35	7.3	250	29.8
<b>SUBTOTAL</b>	<b>1,172</b>	<b>259.7</b>	<b>1,022</b>	<b>257.0</b>
<b>TOTAL</b>	<b>1,175</b>	<b>260.9</b>	<b>1,027</b>	<b>258.8</b>

(1) Net wells equal the sum of the TotalEnergies' equity interests in gross wells. Includes wells for which surface facilities permitting production have not yet been constructed. Such wells are also reported in the table "Number of net productive and dry wells drilled," above, for the year in which they were drilled.

(2) As from January 1, 2022, the Europe lines include the Russia data.

(3) Other wells are development wells, service wells, stratigraphic wells and extension wells.

## INTERESTS IN PIPELINES

The table below shows the main interests held by TotalEnergies entities<sup>(1)</sup> in pipelines, as of December 31, 2023.

Pipeline(s)	Origin	Destination	(%) interest	Operator	Liquids	Gas
<b>AFRICA (EXCLUDING NORTH AFRICA)</b>						
<b>Nigeria</b>						
O.U.R	Obite	Rumuji	40.00	X		X
NOPL	Rumuji	Owaza	40.00	X		X
<b>AMERICAS</b>						
<b>Argentina</b>						
TGM	Aldea Brasileira (Entre Rios)	Paso de Los Libres (Argentina-Brazil border)	32.68			X
<b>Brazil</b>						
TSB	Paso de Los Libres (Argentina-Brazil border)	Uruguayana (Brazil)	25.00			X
	Porto Alegre	Canoas	25.00			X
<b>ASIA-PACIFIC</b>						
<b>Australia</b>						
GLNG	Fairview, Roma, Scotia, Arcadia	GLNG (Curtis Island)	27.50			X
<b>EUROPE</b>						
<b>Azerbaijan</b>						
BTC	Baku (Azerbaijan)	Ceyhan (Turkey, Mediterranean)	5.00		X	
<b>Norway</b>						
Frostpipe (inhibited)	Lille-Frigg, Froy	Oseberg	36.25		X	
Heimdal to Brae Condensate Line	Heimdal	Brae	16.76		X	
Kvitebjorn Pipeline	Kvitebjorn	Mongstad	5.00		X	
Norpipe Oil	Ekofisk Treatment Center	Teesside (United Kingdom)	34.93		X	
Oseberg Transport System	Oseberg, Brage and Veslefrikk	Sture	12.98		X	
Troll Oil Pipeline I and II	Troll B and C	Vestprosess (Mongstad refinery)	3.71		X	
<b>Netherlands</b>						
WGT K13-Den Helder	K13A	Den Helder	4.66			X
WGT K13-Extension	Markham	K13 (via K4/K5)	23.00			X
<b>United Kingdom</b>						
Alwyn Liquid Export Line	Alwyn North	Cormorant	100.00	X	X	
Bruce Liquid Export Line	Bruce	Forties (Unity)	1.00		X	
Graben Area Export Line (GAEL) Northern ETAP Spur		Forties (Unity)	9.58		X	
Graben Area Export Line (GAEL) Southern Spur	Elgin-Franklin	ETAP	32.09		X	
Ninian Pipeline System	Ninian	Sullom Voe	16.36		X	
Shearwater Elgin Area Line (SEAL)	Elgin-Franklin, Shearwater	Bacton	25.73			X
SEAL to Interconnector Link (SILK)	Bacton	Interconnector	54.66	X		X
<b>MIDDLE EAST AND NORTH AFRICA</b>						
<b>United Arab Emirates</b>						
Dolphin	North Field (Qatar)	Taweelah-Fujairah-Al Ain (United Arab Emirates)	24.50			X

(1) Excluding equity affiliates other than the Dolphin pipeline.

## PIPELINE GAS SALES AS OF DECEMBER 31 <sup>(1)</sup>

(Mcf/d)	2023	2022	2021	2020	2019
Africa	64	49	113	21	15
Algeria	137	157	122	94	119
Argentina	427	421	397	411	412
Australia	440	412	420	401	463
Azerbaijan	53	-	-	-	-
Bolivia	171	217	232	216	188
Brazil	2	-	-	-	-
Brunei	42	45	50	62	72
China	174	150	131	125	105
Denmark	36	37	38	40	95
Egypt	34	17	-	-	-
Indonesia	-	-	11	10	10
Kazakhstan	64	42	59	57	56
Lybia	34	25	15	7	-
Myanmar	-	61	120	120	121
Netherlands	47	63	70	82	86
Norway	399	433	435	370	427
Oman	69	-	-	-	-
Qatar	157	147	165	187	175
Thailand	29	192	289	260	270
United Kingdom	505	596	570	671	558
United States	328	337	363	388	412
Venezuela	-	29	55	40	54
<b>TOTAL</b>	<b>3,211</b>	<b>3,430</b>	<b>3,655</b>	<b>3,562</b>	<b>3,638</b>

(1) Consolidated entities.







# 6

## Refining & Chemicals

Refining & Chemicals' activities include refining, base petrochemicals (olefins and aromatics), polymer derivatives (polyethylene, polypropylene, polystyrene and hydrocarbon resins), including biopolymers and recycled polymers obtained from chemical or mechanical recycling, as well as the production of biofuels from the transformation of biomass. The Refining & Chemicals activities also include the processing of elastomers by Hutchinson and the Trading & Shipping activities.

Among the world's

### 10

largest integrated producers <sup>(1)</sup>

### 1.8 Mb/d

refining capacity at year-end 2023

One of the leading traders of oil and refined products worldwide

### -1.1 Mt CO<sub>2</sub>e

decrease of the CO<sub>2</sub> emissions (Scope 1 + 2) during 2023

### \$2.0 bn

Organic investments in 2023 for refining & chemicals activities

### 1.5 Mt/y

Production of SAF by 2030

Ambition to produce

### 1 Mt/y

of polymers from recycled or renewable material by 2030

(1) Based on publicly available information, refining and petrochemical production capacities at year end 2022.





## A focused strategy

### REINFORCING OUR INDUSTRIAL COMPETITIVENESS

- Operate at the best level: availability, energy, cost, digital
- Capitalize on our major integrated platforms
- Transitioning profitably our European refining to lead in Sustainable Aviation Fuel
- Reducing CO<sub>2</sub> emissions

### GROWING PETROCHEMICALS

- Building on low-cost feedstock
- Target growing markets
- Develop integrated projects up to polymers

### INVESTING IN LOW CARBON SOLUTIONS

- Accelerate in the circular economy: recycling, biopolymers
- Develop synthetic fuels production

## FINANCIAL HIGHLIGHTS

(in million dollars)

	2023	2022	2021
Adjusted net operating income <sup>(1)</sup>	4,654	7,302	1,909
Gross investments <sup>(2)</sup>	2,149	1,391	1,638
Organic investments <sup>(3)</sup>	2,040	1,319	1,502
Divestments	196	214	348
Operating cash flow before working capital changes <sup>(4)</sup>	5,853	7,704	2,946
Operating cash flow <sup>(5)</sup>	7,957	8,663	6,473

(1) Adjusted results are defined as income at replacement cost, excluding non-recurring items, and excluding the impact of changes for fair value.

(2) Including acquisitions and increases in non current-loans.

(3) Organic investments = net investments, excluding acquisitions, divestments and other operations with non-controlling interests.

(4) Excluding financial charges, except those related to lease contracts, excluding the impact of contracts recognized at fair value for the sector.

(5) Excluding financial charges, except those related to leases.

## OPERATIONAL HIGHLIGHTS <sup>(1) (2)</sup>

(in kb/d)

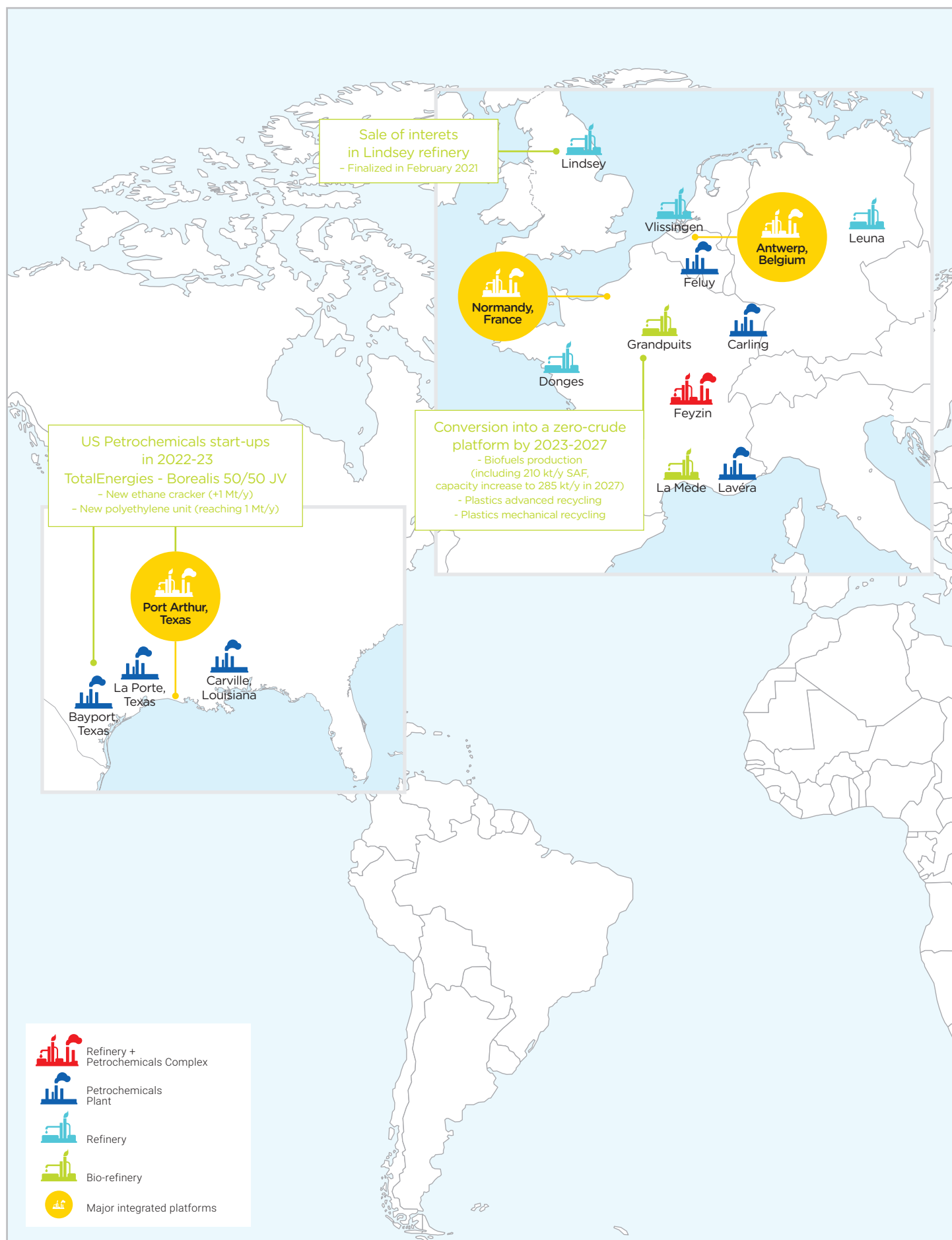
	2023	2022	2021
Distillation capacity (TotalEnergies share) at year-end <sup>(3)</sup>	1,792	1,792	1,793
Refinery throughput	1,436	1,472	1,180

(1) Includes refineries in Africa that are reported in the Marketing & Services segment.

(2) Condensates throughputs of BTP and HTC are included in refining throughputs and capacities.

(3) Capacity data based on crude distillation unit stream-day capacities under normal operating conditions, less the average of shutdown for regular repair and maintenance activities.

## MAIN REFINING & CHEMICALS PLANTS AS OF DECEMBER 31, 2023





# 1.8 Mb/d of refining capacity at year-end 2023

**SATORP,  
Saudi Arabia**

Ras Laffan

RLOC

**Qatar**

Qapco

Qatofin

**Growing Petrochemicals  
in Middle East**  
JV with Saudi Aramco (37.5%)  
- Amiral in Saudi Arabia World-class  
petrochemical integrated complex  
- Award EPC contracts in 2023

**Expanding worldclass  
Daesan platform**

- Ethylene production capacity:  
+10% in 2021  
(following 30% increase in 2019)
- Polyethylene production capacity:  
+50% in 2020
- Polypropylene production capacity:  
+60% in 2021

**Daesan,  
South Korea**

And worldwide chemicals positions through

 **HUTCHINSON®**

## REFINERY CAPACITY (TOTALENERGIES SHARE)

As of December 31, 2023 (kb/d)	Major upgrading plant capacity at 100% <sup>(1)</sup>											
	Total Distillation Capacity	TotalEnergies Interest	TotalEnergies Capacity	Cat Crack	Cat Reform	Hydro-Cracking	Resid. Hydro-Treat	Dist. Hydro-Treat	Alky	Isom	Vis	Coker
<b>France</b>												
Normandy, Gonfreville	253	100%	253	-	37	64	-	220	-	-	22	-
Provence, La Mède	-	100%	-	-	-	-	-	-	-	-	-	-
Donges	219	100%	219	51	23	-	-	126	7	-	26	-
Feyzin	109	100%	109	29	11	-	-	72	5	-	-	-
Grandpuits	-	100%	-	-	-	-	-	-	-	-	-	-
<b>TOTAL FRANCE</b>	<b>581</b>		<b>581</b>	<b>80</b>	<b>71</b>	<b>64</b>	<b>0</b>	<b>418</b>	<b>12</b>	<b>0</b>	<b>48</b>	<b>0</b>
<b>Rest of Europe</b>												
Netherlands, Vlissingen	147	55%	81	-	26	74	-	65	-	-	-	-
Belgium, Antwerp	338	100%	338	95	56	51	50	253	9	-	-	-
Germany, Leuna	227	100%	227	59	25	-	-	238	10	-	25	-
<b>TOTAL REST OF EUROPE</b>	<b>712</b>		<b>646</b>	<b>154</b>	<b>107</b>	<b>125</b>	<b>50</b>	<b>556</b>	<b>19</b>	<b>0</b>	<b>25</b>	<b>0</b>
<b>United States</b>												
Texas, Port Arthur (Refinery & Condensate Splitter)	238	100%	238	78	40	-	-	254	7	8	-	56
<b>TOTAL UNITED STATES</b>	<b>238</b>		<b>238</b>	<b>78</b>	<b>40</b>	<b>0</b>	<b>0</b>	<b>254</b>	<b>7</b>	<b>8</b>	<b>0</b>	<b>56</b>
<b>Africa</b>												
Cameroon, Limbe	39	4%	2	-	8	-	-	27	-	-	-	-
Côte d'Ivoire, Abidjan	76	15%	11	-	14	17	-	33	-	-	-	-
Senegal, Dakar	24	0%	0	-	3	-	-	5	-	-	-	-
South Africa, Sasolburg	104	18%	19	25	18	13	15	44	5	-	-	-
<b>TOTAL AFRICA</b>	<b>243</b>		<b>32</b>	<b>25</b>	<b>43</b>	<b>30</b>	<b>15</b>	<b>109</b>	<b>5</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>Asia &amp; Middle East</b>												
Korea, Daesan	186	50%	93	-	-	-	-	-	-	-	-	-
Qatar, Ras Laffan	300	10%	30	-	-	-	-	308	-	-	-	-
Saudi Arabia Jubail	460	38%	173	39	70	142	-	224	15	-	-	124
<b>TOTAL ASIA</b>	<b>946</b>		<b>296</b>	<b>39</b>	<b>70</b>	<b>142</b>	<b>0</b>	<b>532</b>	<b>15</b>	<b>0</b>	<b>0</b>	<b>124</b>
<b>WORLDWIDE CRUDE DISTILLATION</b>	<b>2,720</b>		<b>1,792</b>	<b>376</b>	<b>331</b>	<b>361</b>	<b>65</b>	<b>1,869</b>	<b>58</b>	<b>8</b>	<b>73</b>	<b>180</b>

(1) Cat Crack: Catalytic Cracking; Cat Reform: Catalytic Reforming; Resid Hydrotreat: Residual Hydrotreating; Dist Hydrotreat: Distillate Hydrotreating; Alky: Alkylation; Isom: C5/C6 Isomerization; Vis: Visbreaker.

## DISTILLATION CAPACITY (TOTALENERGIES SHARE)<sup>(1)</sup>

Capacity, throughput and production data include equity share of refineries in which the Company holds a direct or indirect interest:

As of December 31, (kb/d)	2023	2022	2021	2020	2019
France	581	581	581	682	682
Rest of Europe	646	646	646	755	755
United States <sup>(2)</sup>	238	238	238	202	202
Asia & Middle East <sup>(3)</sup>	296	296	296	296	287
Africa	32	32	33	33	33
<b>TOTAL</b>	<b>1,792</b>	<b>1,792</b>	<b>1,793</b>	<b>1,967</b>	<b>1,959</b>

(1) Capacity at the end of the year. Share of TotalErg until January 2018 and of Wepec until June 2019. Results for refineries in Africa and Italy (until January 2018) are reported in the Marketing & Services segment.

(2) Including TotalEnergies share in BTP Condensate Splitter (100% in 2021 vs 40% in 2020 and before).

(3) Including TotalEnergies share (50%) in HTC Condensate Splitter in Korea from December 31, 2015.

## REFINERY THROUGHPUT (TOTALENERGIES SHARE)

Capacity, throughput and production data include equity share of refineries in which the Company holds a direct or indirect interest:

(kb/d)	2023	2022	2021	2020	2019
France	414	348	190	244	456
Rest of Europe	592	623	568	618	754
United States <sup>(1)</sup>	158	197	149	156	173
Asia & Middle East <sup>(2)</sup>	248	282	249	254	254
Africa	25	22	25	21	35
<b>TOTAL</b>	<b>1,436</b>	<b>1,472</b>	<b>1,180</b>	<b>1,292</b>	<b>1,671</b>

(1) Including TotalEnergies share in BTP Condensate Splitter (100% since 2021) in United States.

(2) Including TotalEnergies share (50%) in HTC Condensate Splitter in Korea.

## UTILIZATION RATE (BASED ON CRUDE AND OTHER FEEDSTOCKS)<sup>(1) (2)</sup>

(%)	2023	2022	2021	2020	2019
France	71	60	33	36	67
Rest of Europe <sup>(3)</sup>	92	96	84	82	100
Americas <sup>(4)</sup>	66	83	74	77	86
Asia & Middle East <sup>(5)</sup>	84	95	84	89	75
Africa	78	67	76	64	78
<b>AVERAGE</b>	<b>80</b>	<b>82</b>	<b>66</b>	<b>66</b>	<b>83</b>

(1) Including equity share of refineries in which TotalEnergies has an interest.

(2) (Crude + crackers' feedstock)/distillation capacity at the beginning of the year.

(3) Including capacity of TotalErg as of December 31, 2017. TotalErg was sold in 2018.

(4) Including TotalEnergies share in BTP Condensate Splitter (100% since 2021) in United States.

(5) Including TotalEnergies share (50%) in HTC Condensate Splitter in Korea. Including share (22%) in Wepec until June 2019.

## UTILIZATION RATE (BASED ON CRUDE ONLY)<sup>(1) (2)</sup>

(%)	2023	2022	2021	2020	2019
<b>AVERAGE</b>	<b>81</b>	<b>82</b>	<b>64</b>	<b>61</b>	<b>80</b>

(1) Including equity share of refineries in which the Company has a stake.

(2) Crude/distillation capacity at the beginning of the year.

## REFINERY AND BIOREFINERY PRODUCTION (TOTALENERGIES SHARE)<sup>(1) (2)</sup>

The table below sets forth by product category TotalEnergies' net share of refined quantities produced at the Company's refineries <sup>(1) (2)</sup>

(kb/d)	2023	2022	2021	2020	2019
LPG	39	34	35	38	46
Motor gasoline	252	259	228	252	286
Avgas, jet fuel and kerosene	140	122	67	78	187
Diesel fuel and heating oils	620	644	524	549	670
Fuel oils	70	68	44	53	82
Lubricants	9	8	6	8	15
Bitumen	21	18	19	21	30
Renewable diesel and ETBE	7	5	9	6	5
Other products <sup>(3)</sup>	245	266	205	203	286
<b>TOTAL</b>	<b>1,403</b>	<b>1,424</b>	<b>1,137</b>	<b>1,208</b>	<b>1,606</b>

(1) For refineries not 100% owned by TotalEnergies, the production shown is TotalEnergies' equity share of the site's overall production.

(2) Condensates productions of BTP and HTC are included in refining production as from 2015.

(3) Mainly refining bases, petcoke, naphtha, refinery propylene and other petrochemical bases.

## MAIN PETROCHEMICAL PRODUCT GROUPS AND THEIR MAJOR APPLICATIONS

Main product groups	Major applications
<b>Base Petrochemicals</b>	
Olefins	
Ethylene	Production of polyethylene, vinyl chloride monomer, styrene, functional polymers and copolymers, ethylene oxide, glycols and vinyl acetate monomer.
Propylene	Production of polypropylene, acrylic acid, oxo-alcohols, propylene oxide, glycols, cumene and acrylonitrile.
Butadiene	Production of rubber, polybutadiene, elastomers, latex and ABS.
Aromatics	
Benzene	Production of styrene, cyclohexane, chlorobenzenes, cumene, aniline, alkylbenzenes and maleic anhydride.
Styrene Toluene	Production of polystyrene, expanded polystyrene, ABS, emulsions, resins, latex and rubbers. Production of chemical intermediates and solvents.
Xylenes	Production of phthalic anhydride, terephthalic acid (PTA) and solvents.
<b>Polymers</b>	
Polyethylene	Flexible and rigid packaging, cables, pipes and tubes, molded bottles, fuel tanks artificial grass and caps and closures.
Polypropylene	Flexible and rigid packaging, containers, automotive parts, household and sanitary goods, fibers, medical, pipes and caps and closures.
Polystyrene	Food packaging, refrigeration appliances, insulation boards and television sets.

## PETROCHEMICALS MAIN PRODUCTION CAPACITIES AT YEAR-END

	2023				2022				2021	2020	2019
	North America <sup>(1)</sup>		Asia and Middle East <sup>(2)</sup>	World	North America <sup>(1)</sup>		Asia and Middle East <sup>(2)</sup>	World	World	World	World
<i>(in thousands of tons)</i>	Europe				Europe						
Olefins <sup>(3)</sup>	4,176	2,040	1,958	8,174	4,176	2,040	1,958	8,174	7,689	7,864	7,863
Aromatics <sup>(4)</sup>	2,976	1,512	2,581	7,069	2,971	1,512	2,581	7,064	7,045	7,018	6,995
Polyethylene	1,140	535	1,065	2,740	1,120	223	1,095	2,438	2,438	2,438	2,223
Polypropylene	1,245	1,200	605	3,050	1,250	1,200	620	3,070	3,070	2,840	2,990
Polystyrene	409	608	-	1,017	414	610	-	1,024	1,024	1,024	1,013
Others <sup>(5)</sup>	-	-	116	116	-	-	116	116	116	116	116
<b>TOTAL</b>	<b>9,946</b>	<b>5,895</b>	<b>6,325</b>	<b>22,165</b>	<b>9,931</b>	<b>5,585</b>	<b>6,370</b>	<b>21,885</b>	<b>21,381</b>	<b>21,299</b>	<b>21,200</b>

(1) Including 50% of Baystar in the United States.

(2) Including interests in Qatar, 50% of Hanwha Total Petrochemicals Co. Ltd and 37.5% of SATORP in Saudi Arabia.

(3) Ethylene + Propylene + Butadiene.

(4) Including monomer styrene.

(5) Mainly Monoethylene Glycol (MEG), Polyactic acid (PLA) and Cyclohexane.

## PETROCHEMICALS PRODUCTION AND UTILIZATION RATE

	2023	2022	2021
Monomers <sup>(1)</sup> (kt)	4,896	5,005	5,775
Polymers (kt)	4,130	4,549	4,938
Steam cracker utilization rate <sup>(2)</sup>	69%	76%	90%

(1) Olefins.

(2) Based on olefins production from steamcrackers and their treatment capacity at the start of the year.

## SALES BY GEOGRAPHIC AREA – CHEMICALS<sup>(1)</sup>

(%)	2023	2022	2021	2020	2019
France	11%	10%	11%	10%	10%
Rest of Europe	36%	38%	40%	40%	40%
North America	31%	33%	29%	31%	26%
Rest of world	23%	19%	21%	19%	24%
<b>TOTAL</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>

(1) Excluding inter-segment sales and sales by equity affiliates and including fertilizers sales.

## MAIN SPECIALTY CHEMICAL PRODUCT GROUPS AND THEIR MAJOR APPLICATIONS

Main product groups	Major applications
Elastomer processing	Elastomer parts for the automotive, transportation and aerospace industries: transmission systems, antivibration systems, fluid transfer parts, body sealings, precision sealing (Hutchinson).

## SALES BY ACTIVITY – SPECIALITY CHEMICAL PRODUCTS

(in million dollars)	2023	2022	2021	2020	2019
Hutchinson	5,211	4,687	4,588	4,337	4,828

## SALES BY GEOGRAPHIC AREA – SPECIALITY CHEMICAL PRODUCTS<sup>(1)</sup>

(%)	2023	2022	2021	2020	2019
France	15%	15%	15%	15%	18%
Rest of Europe	41%	39%	42%	44%	41%
North America	27%	27%	25%	26%	28%
Rest of world	18%	19%	18%	16%	14%
<b>TOTAL</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>

(1) Excluding inter-segment sales.



# TotalEnergies

1



43 km/h 50 km/h  
175 km/h



bonne route  
à bientôt chez



# 7

## Marketing & Services

Marketing & Services includes the worldwide supply and marketing of petroleum products and services, low-carbon fuels and new energies for mobility. It contributes to the transition strategy of TotalEnergies and proactively supports its customers in their own transition towards more sustainable energy and mobility.

Marketing & Services (M&S), with a direct presence in 100 countries, caters to customers with various needs for energy, mobility and associated services. M&S also caters to a wide range of professional customers in terms of size and industry (transportation, manufacturing, agriculture, etc.), and individual customers, through its retail network of close to 14,600 service stations and over 60,000 charging points for electric vehicles <sup>(1)</sup>.

### Main indicators

**2<sup>nd</sup>**

largest retail distribution among majors outside of North America <sup>(2)</sup>

**4<sup>th</sup>**

worldwide distributor of inland lubricants <sup>(3)</sup>

Close to

**14,600**

branded service stations <sup>(4)</sup> as of December 31, 2023

More than

**60,000**

charging points as of December 31, 2023 <sup>(1)</sup>

### Our objectives

**150,000**

charging points worldwide by 2026 <sup>(1)</sup>

**1,000**

sites equipped with high-power charging in Europe by 2028

**100**

operated hydrogen stations <sup>(5)</sup> in Europe by 2030

(1) Operated and supervised charging points.

(2) *Global Retail Company Data Manager (2023)*, S&P Global, based on the number of service stations TotalEnergies, BP, Chevron, ExxonMobil and Shell in 2022.

(3) *Global Lubricants – Company Positioning Overview (2023)*, S&P Global, based on 2021 market shares.

(4) TotalEnergies (including TotalEnergies Contact), Access, Elf, Elan and AS24. Including service stations owned by third parties under the Company's brands. Third-party service stations with only terminals accepting the AS24 card are not counted.

(5) Directly or through shareholdings.





Delivering  
non-cyclical  
cash flow  
while growing  
EV in Europe

BEING SELECTIVE ON OIL  
PRODUCT SALES

SUPPORTING OUR CUSTOMERS  
IN THEIR ENERGY  
TRANSITION, IN PARTICULAR  
IN ELECTROMOBILITY

DEVELOPING  
LOW-CARBON ENERGIES  
FOR MOBILITY

- EV
- Hydrogen
- LNG, bio-LNG and other biofuels

## FINANCIAL HIGHLIGHTS

(in million dollars)

	2023	2022	2021	2020
Adjusted net operating income <sup>(1)</sup>	1,458	1,550	1,618	1,224
Gross investments <sup>(2)</sup>	1,273	1,186	1,242	1,052
Organic investments <sup>(3)</sup>	1,065	1,035	1,074	814
Divestments	2,132	222	319	158
Operating cash flow before working capital changes <sup>(4)</sup>	2,318	2,365	2,556	2,180
Operating cash flow <sup>(5)</sup>	1,957	3,124	2,333	2,101

(1) Adjusted results are defined as income using replacement cost, adjusted for special items, excluding the impact of changes in fair value.

(2) Including acquisitions and increases in non current-loans.

(3) Organic investments = net investments excluding acquisitions, asset sales and other operations with non-controlling interests.

(4) Excluding financial charges, except those related to lease contracts, excluding the impact of contracts recognized at fair value for the sector.

(5) Excluding financial charges, except those related to leases.

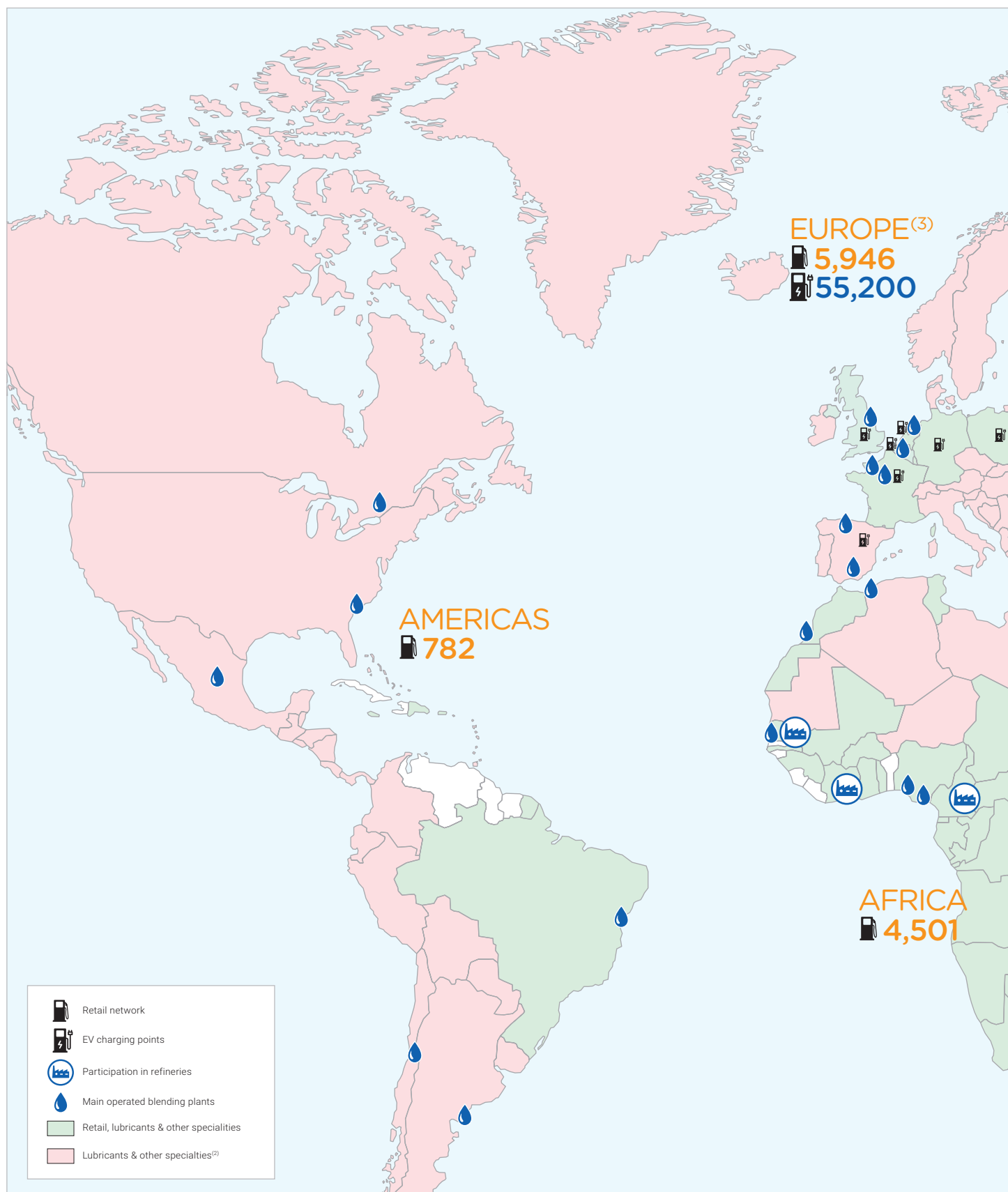
## OPERATIONAL HIGHLIGHTS

(in kb/d)

	2023	2022	2021	2020	2019
<b>REFINED PRODUCT SALES EXCLUDING TRADING AND BULK SALES <sup>(1)</sup></b>	<b>1,375</b>	<b>1,468</b>	<b>1,503</b>	<b>1,477</b>	<b>1,845</b>
Trading sales	2,173	2,012	1,696	1,498	1,730
Bulk sales	405	411	383	434	536
<b>REFINED PRODUCT SALES INCLUDING TRADING AND BULK SALES</b>	<b>3,953</b>	<b>3,891</b>	<b>3,581</b>	<b>3,410</b>	<b>4,110</b>

(1) Excludes trading and bulk Refining sales.

TotalEnergies' GLOBAL PRESENCE IN MARKETING & SERVICES AS OF 31 DECEMBRE 2023 <sup>(1)</sup>



(1) TotalEnergies, Access, Elf, Elan and AS24, including service stations owned by third parties and those currently being converted. Turkey is included in the Middle East.

(2) Lubricants-LPG-Jet Fuel-Special-fluids-bitumen-heavy fuels-marine fuels-additives and special fuels.

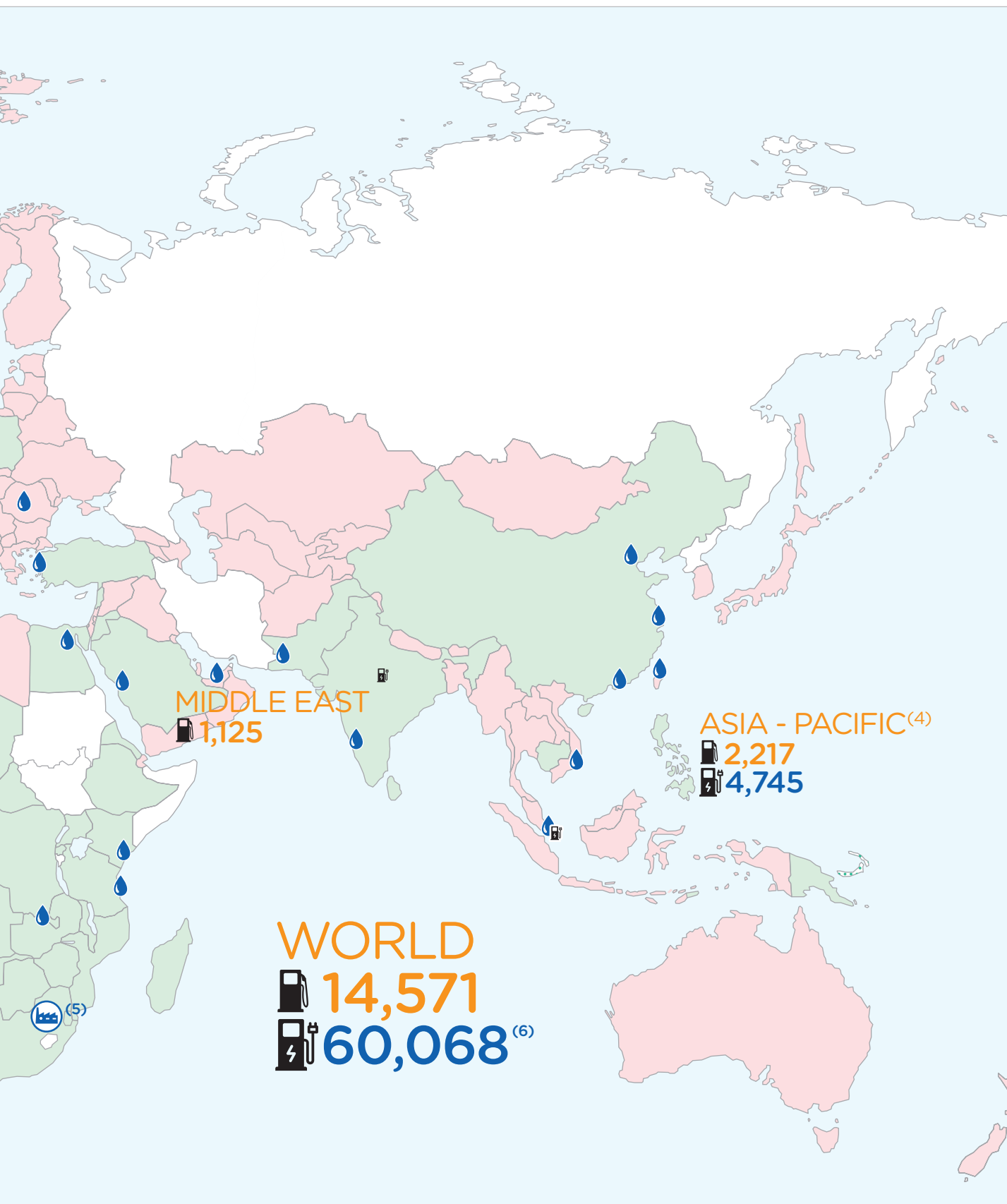
(3) Including the AS 24 Network.

(4) Including the Indian Ocean islands.

(5) The Natref refinery is in the process of disposal since, on December 1, 2023, TotalEnergies announced the signing, with the Prax Group, of an agreement to divest its 36.36% minority stake.

(6) including 123 charge points in Americas and Africa





## PETROLEUM PRODUCT SALES (EXCLUDING TRADING AND BULK SALES)

By geographic area  
(kb/d)

	2023	2022	2021	2020	2019
<b>Europe</b>					
France	410	439	440	418	512
United Kingdom	11	10	10	12	25
Benelux	169	175	172	173	216
Germany	140	152	163	177	197
Italy	11	11	7	7	22
Spain	1	1	2	2	1
Rest of Europe	33	36	32	34	48
<b>TOTAL EUROPE</b>	<b>776</b>	<b>824</b>	<b>826</b>	<b>823</b>	<b>1,021</b>
<b>Africa</b>					
Northern Africa	89	114	114	105	123
Western Africa	68	73	78	70	73
Eastern Africa	75	79	81	82	94
Southern Africa	101	97	107	93	117
Central Africa	18	20	22	18	27
Other <sup>(1)</sup>	6	5	3	9	10
<b>TOTAL AFRICA</b>	<b>356</b>	<b>388</b>	<b>405</b>	<b>377</b>	<b>444</b>
<b>Americas</b>					
United States	27	23	31	31	76
Caribbean Islands	40	39	37	32	40
Latin America	18	27	31	31	33
<b>TOTAL AMERICAS</b>	<b>85</b>	<b>88</b>	<b>99</b>	<b>95</b>	<b>149</b>
<b>Middle East</b>					
Jordan, Lebanon, Saudi Arabia, Turkey and others	46	45	42	47	34
<b>TOTAL MIDDLE EAST</b>	<b>46</b>	<b>45</b>	<b>42</b>	<b>47</b>	<b>34</b>
<b>Asia-Pacific</b>					
East Asia	89	102	112	115	173
Pacific	6	6	5	5	5
Indian Ocean islands	16	15	14	15	19
<b>TOTAL ASIA-PACIFIC</b>	<b>111</b>	<b>123</b>	<b>131</b>	<b>135</b>	<b>197</b>
<b>TOTAL WORLDWIDE</b>	<b>1,375</b>	<b>1,468</b>	<b>1,503</b>	<b>1,477</b>	<b>1,845</b>

(1) Represents supply to African non consolidated group companies and third parties.

## PETROLEUM PRODUCT SALES (EXCLUDING TRADING AND BULK SALES)

By main products and for Network and Lubricants activities

(kb/d)

	2023	2022	2021	2020	2019
LPG	55	56	55	55	59
Motor gasoline	354	350	353	328	361
Avgas and jet fuel	176	161	135	133	292
Diesel fuel and heating oils	667	764	790	780	879
Fuel oils	31	46	55	64	127
Lubricants	34	35	37	34	37
Solvents	2	3	18	15	15
Bitumen	34	32	36	35	43
Other products	23	22	23	33	33
<b>TOTAL</b>	<b>1,375</b>	<b>1,468</b>	<b>1,503</b>	<b>1,477</b>	<b>1,845<sup>(1)</sup></b>

(1) Split products restarted due to a regularization on Special fluids US and Distillates Deutschland.

## SERVICE-STATIONS<sup>(1)</sup>

As of December 31,	2023	2022	2021	2020	2019
<b>Europe</b>					
France	3,319	3,360	3,479	3,418	3,480
Benelux	990	998	1,011	978	925
Germany	1,190	1,195	1,198	1,198	1,189
United Kingdom	59	41	19	12	-
Italy	-	-	-	-	-
Eastern Europe (Poland)	10	23	34	43	38
AS 24 network (for heavy-duty vehicles) <sup>(2)</sup>	378	408	405	389	390
<b>TOTAL EUROPE</b>	<b>5,946</b>	<b>6,025</b>	<b>6,146</b>	<b>6,038</b>	<b>6,022</b>
<b>Africa</b>					
Northern Africa	792	786	771	750	728
Western Africa	1,597	1,677	1,640	1,749	1,716
Eastern Africa	1,100	1,086	1,055	1,058	1,032
Southern Africa	683	684	676	676	619
Central Africa	329	374	444	450	448
<b>TOTAL AFRICA</b>	<b>4,501</b>	<b>4,607</b>	<b>4,586</b>	<b>4,683</b>	<b>4,543</b>
<b>Americas</b>					
Mexico	-	-	235	230	205
Brazil	239	239	236	247	287
Caribbean Islands	543	545	493	487	476
<b>TOTAL AMERICAS</b>	<b>782</b>	<b>784</b>	<b>964</b>	<b>964</b>	<b>968</b>
<b>Middle East</b>					
Jordan, Lebanon, Turkey and Saudi Arabia	1,125	1,058	1,061	1,017	889
<b>TOTAL MIDDLE EAST</b>	<b>1,125</b>	<b>1,058</b>	<b>1,061</b>	<b>1,017</b>	<b>889</b>
<b>Asia-Pacific</b>					
East Asia	1,934	1,897	1,863	1,766	1,770
Pacific	109	105	104	105	104
Indian Ocean islands	174	171	168	166	168
<b>TOTAL ASIA-PACIFIC</b>	<b>2,217</b>	<b>2,173</b>	<b>2,135</b>	<b>2,037</b>	<b>2,042</b>
<b>TOTAL WORLDWIDE</b>	<b>14,571</b>	<b>14,647</b>	<b>14,892</b>	<b>14,739</b>	<b>14,464</b>

(1) Company-branded service-stations: TotalEnergies, Access, Elan and AS 24, including service-stations owned by third-parties and those currently being converted. Turkey is reported under the Middle East region.

(2) 2020 and 2021 data restated to exclude third-parties accepting the AS 24 card, previously reported in this figures.

## EV CHARGE POINTS

As of December 31,	2023	2022	2021	2020
France	21,361	17,285	9,918	10,560
Benelux	25,575	16,089	10,271	6,710
Germany	5,210	3,902	3,164	2,493
United Kingdom	2,478	2,112	1,797	1,642
Rest of Europe	576	219	584	249
Asia-Pacific	4,745	2,912	108	24
Rest of the world	123	-	-	-
<b>TOTAL WORLDWIDE<sup>(1)</sup></b>	<b>60,068</b>	<b>42,519</b>	<b>25,842</b>	<b>21,678</b>

(1) 2020 and 2021 data restated to include the number of charging stations of the Asia-Pacific region not previously reported.

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You can also download the following documents from [www.totalenergies.com](http://www.totalenergies.com)

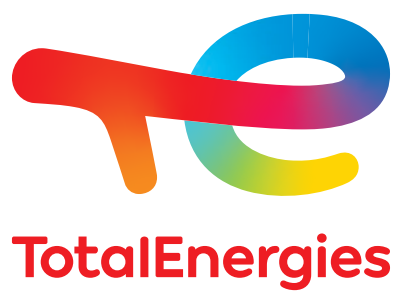


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