More energy, less carbon
The world needs a Net Zero ambition

More people, with better living standards

Assumptions

- World population: from 7.6 to 9.7 Ghab in 2050
- World GDP to grow +3.3%/yr
- Historical data: +3.6%/yr over the last 20 years, with primary energy up +2.0%/yr

Less carbon

Collective mobilization

- Paris Agreement
- Regulations & mandates at State & Local levels
- Investors push / access to finance
- Industry mobilization
- Consumers
- Technology & Innovation

More energy and less carbon: a challenge for society as a whole
Worldwide emissions
Facts for the climate challenge

Worldwide CO₂ emissions
Gt

2018

Energy suppliers

Energy users

Process emissions

Land-use

Other energy production and transformation

Power and Heat generation

Transport

Buildings

Industry

Net Zero target requires decarbonization of both energy supply and demand
Europe paving the way

Source: Enerdata, TOTAL analysis
Total Energy Outlook
2 scenarios addressing more energy and less carbon

Momentum

Green Deal in Europe
Outside of Europe, actions based on countries targets & 2019 NDCs
Aggressive deployment of proven technologies: EVs, Solar & Wind, biofuels
Primary energy demand up +0.6%/yr

Rupture

All countries committed towards Net Zero with strong shifts in public policies
Technology break-throughs are a prerequisite, with new industries at scale: hydrogen, synthetic fuels, carbon capture, etc.
Primary energy demand up +0.4%/yr

In line with best practices but not enough to meet well-below 2°C targets globally (+2.5 – 3.0°C in 2100)

Scenario consistent with +1.5-1.7°C target
### Key modeling drivers of our scenarios

**Sector based assumptions**

<table>
<thead>
<tr>
<th>Scenario</th>
<th>2018</th>
<th>Momentum 2050</th>
<th>Rupture 2050</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Strong electrification of end-use</strong></td>
<td>~20% of final demand</td>
<td>~30%</td>
<td>~40%</td>
</tr>
<tr>
<td><strong>Deep decarbonization of power supply</strong></td>
<td>solar+wind: ~100 GW/y capacity additions since 2010</td>
<td>Pace x2 (&gt; 200GW/y)</td>
<td>Pace x5 (&gt; 500GW/y)</td>
</tr>
<tr>
<td><strong>Gas getting greener</strong></td>
<td>~0.1% green gases in gas supply</td>
<td>~8%</td>
<td>&gt; 25%</td>
</tr>
<tr>
<td><strong>Sustainable mobility</strong></td>
<td>&lt; 1% EV in light vehicles fleet</td>
<td>~60%</td>
<td>~75%</td>
</tr>
<tr>
<td></td>
<td>~100% kerosene fueling aircrafts</td>
<td>Sust. aviation fuels @ ~15% of demand</td>
<td>SAF @ ~60%</td>
</tr>
<tr>
<td><strong>Optimizing plastics demand</strong></td>
<td>7% recycled</td>
<td>40% recycled</td>
<td>~50% recycled</td>
</tr>
<tr>
<td></td>
<td>SUP* ban EUR &amp; China in 2040</td>
<td>Worldwide SUP* ban in 2040</td>
<td></td>
</tr>
<tr>
<td><strong>CCS to abate remaining emissions</strong></td>
<td>~35Mt (0.1% CO₂ emissions)</td>
<td>2Gt (~6%)</td>
<td>7.5Gt (~50%)</td>
</tr>
<tr>
<td><strong>Energy efficiency acceleration</strong></td>
<td>1.6%/y energy intensity improvement since 2000</td>
<td>+2.6%/y</td>
<td>+2.9%/y</td>
</tr>
</tbody>
</table>

* SUP: single-use plastics
Key drivers for more energy & less carbon
Our forward looking approach

- Energy demand increasing in all scenarios
- Electrification of end-uses is massive and gaining pace – the power sector must be decarbonized
- Oil demand will reach a plateau around 2030 and decline due to transport and petchem accelerated transformation
- Gas will continue to play a key role for decades (power systems, heat, transport)

- Liquids & Gases will become greener: increased penetration of renewable fuels
- Promising potential for H2 to decarbonize industry, heavy duty transport and gases
- Much stronger role of electricity storage
- Carbon sinks are a necessity to reach Net Zero
Total Energy Outlook 2020
Momentum & Rupture scenarios
Momentum scenario overview
A multi-energy transition coupled with high energy efficiency

World primary energy demand
Mboe/d

- Energy demand growth: +25% by 2050
- Renewables & natural gas playing key complementary roles
- Coal gone in Europe but hard to phase out worldwide

World primary energy demand
Mboe/d

- Significant energy efficiency gains worldwide
- Increase in non-OECD energy demand (+1.2%/yr): growing population aiming at higher living standards
- OECD demand down 16 Mboe/d

* Includes traditional biomass, biofuels, biogas...
Rupture scenario overview
Net Zero requires radical transformation of our energy consumption

- Rupture combines a +10% increase in energy demand with a CO₂ trajectory consistent with climate goals (1.5-1.7°C)
- Oil peaks by 2030 and coal almost disappears
- Gas still key to ensure power grid stability & flexibility

- Emissions divided by 4 by 2050, falling from 33 Gt to 8 Gt net of CCS modelled at 7.5 Gt
- Residual emissions to be addressed with nature-based solutions and future technologies (Direct Air Capture, etc.)

* Includes traditional biomass, biofuels, biogas...
Momentum: end-user energy demand
Electricity takes the lead over oil

**Total final consumption**
Mboe/d

2018

- Electricity covering ~75% of energy demand growth
- Gas partially replacing coal & oil

2050

- NDCs decarbonizing strategies relying on electrification deployed on global scale
- Assumes power becomes greener

* Includes traditional biomass, biofuels, biogas...

**Share of electricity in total final consumption**
%

- 20%
- 40%

2000 2010 2020 2030 2040 2050
Rupture: end-user energy demand
Massive electrification key to decarbonization

Total final consumption
Mboe/d

- Power, hydrogen, biogas and biofuels account for > 50% of end-demand
- Oil still needed in some transportation segments

Share of electricity in total final consumption
%

- Rupture assumes even more aggressive electrification of end-user demand
- Need to step up efforts as of now

* Includes traditional biomass, biofuels, biogas...
Momentum: power demand
All sectors electrifying

World power demand by sector
TWh

- ~60% of growth coming from Res. & Com. and Industry due to emerging markets' access to energy and substitution
- Aggressive assumptions for transport electrification in Europe, China & the US, reaching 12% of power demand

Focus on Res. & Com. + Industry demand
TWh

- Power demand growth driven by rising living standards and GDP expansion (especially in emerging markets)
- Energy efficiency gains in various end-user applications limiting overall power demand growth

2018
2050
Momentum

- Population & GDP
- Fuel switch
- Efficiency
Rupture: power demand
Electricity is the energy of the 21st century

World power demand by sector
TWh

- Net Zero policies trigger massive increase in power demand
- Electricity also becomes widely-used to produce green H₂: 12% of power demand in Rupture 2050

Industry final energy mix
Mboe/d

- Some industries (chemicals, cement, steel...) are hard to electrify, therefore requesting alternative fuels (bioenergy, hydrogen...) complementing natural gas and CCS
- In Rupture, ~50% of remaining combusted fossil fuels are CCS-abated
Momentum: power generation
Renewables taking the lion’s share

World power generation by fuel
TWh

- Wind & solar representing ~70% of Power Generation growth
- Gas growing with renewables to manage intermittency and seasonality, and replacing some coal, esp. in OECD countries

World solar & wind capacities
GW

- Doubling pace of annual capacities growth vs last 10 years
- Halving power sector carbon intensity, from 460 gCO₂/kWh in 2018 to 220 gCO₂/kWh in 2050, allows CO₂ savings of ~14 Gt.
Rupture: power generation
Deep decarbonization, through solar & wind

World power generation by fuel
TWh

- Wind and solar represent more than the global net incremental demand by 2050, leading to ~80% of Power from renewables
- Coal disappears in Rupture at worldwide scale

World power generation emission factor
gCO₂/kWh

- Power sector becomes almost carbon neutral
Momentum: gases demand
Natural gas is key in energy transition

Gases demand
Bcm*

- Gas continuing to play a key role in Power Gen, Res. & Com. (buildings) and Industry (heat, feedstock)
- Growing use in transport
- ~8% of green gases penetration in 2050, led by Europe (50% of global world demand in 2050)

* For hydrogen: volumetric equivalence of natural gas in energy terms

Natural gas demand by region

- Natural gas demand driven by Asia (~40% of world growth) with volumes more than doubling in China & India
- The US remains the first gas consumer in 2050 with ~19% of world demand
Rupture: gases demand
Growth and versatility of natural gas

Gases demand
Bcm*

2018
2050

Momentum
Rupture

3,000
6,000

Gas for Blue H₂
Energy Transf.
Transport
Res. & Com.
Industry
Power Gen

World gases supply in Rupture
Bcm*

2010
2020
2030
2040
2050

All gases (incl. H₂)
Methane
Natural gas

Gas playing a central role on the path to carbon neutrality
- Flexible, affordable, reliable
- Available infrastructure
- Multiple uses in all sectors

- Natural gas complemented with biomethane first, then with H₂
- Natural gas peaking by 2040, overall gases on the rise to 2050

* For hydrogen: volumetric equivalence of natural gas in energy terms
Gases supply
Gas going greener

World gases supply by type
Bcm*

- Natural Gas
- Biomethane
- Blue & Green Hydrogen

2018
2050 Momentum
2050 Rupture

World gases decarbonization in Rupture
Bcm*

- Nat. gas w/o CCS
- Nat. gas with CCS
- Blue & Green H₂
- Biomethane
- Low-carbon gases

2018
2050 Rupture

* For hydrogen: volumetric equivalence of natural gas in energy terms
+ Primary natural gas demand excl. the portion used to produce hydrogen through SMR+CCS

- Gases must and will go greener, with biomethane and low-carbon H₂: >25% of total gases in 2050 in Rupture
- Over 50% of gas use at almost zero emissions through Green Gases & CCS
**Momentum: liquids demand**

*Oil will be complemented by biofuels*

**Liquids demand**

<table>
<thead>
<tr>
<th>Mb/d</th>
<th>2018</th>
<th>2050</th>
</tr>
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<tbody>
<tr>
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</tbody>
</table>

- **Industry incl. Petchem**
- **Other sectors (Res. & Com., power)**
- **Biofuels**
- **Transport**

**Liquids and oil demand**

<table>
<thead>
<tr>
<th>Mb/d</th>
<th>2000</th>
<th>2010</th>
<th>2020</th>
<th>2030</th>
<th>2040</th>
<th>2050</th>
</tr>
</thead>
<tbody>
<tr>
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</tbody>
</table>

- Oil demand reaching a plateau by 2030, then declining
- Overall liquids demand goes greener with Biofuels

- Acceleration of innovation to substitute oil use
- Energy efficiency gains and regulation impacting oil demand for both transport & petchems with Europe leading the way
**Rupture: liquids demand**  
**Strong contribution of sustainable liquid fuels**

- Carbon neutrality requires massive adoption of sustainable liquid fuels (biofuels first, then synthetic fuels*), reaching more than 20% of liquids demand in 2050.
- Oil demand still represents ~45 Mb/d in Rupture 2050, mainly in emerging markets’ transportation sector.

*Synthetic fuels = H₂+CO₂*
Momentum: zoom transport
Acceleration of oil substitution

Energy mix in Transport
Mboe/d

<table>
<thead>
<tr>
<th>2018</th>
<th>2050</th>
</tr>
</thead>
<tbody>
<tr>
<td>50</td>
<td></td>
</tr>
</tbody>
</table>

- Biogas
- Natural gas
- Hydrogen
- Electricity
- SLF*

Oil demand in Transport
Mb/d

<table>
<thead>
<tr>
<th>2018</th>
<th>2050</th>
</tr>
</thead>
<tbody>
<tr>
<td>120</td>
<td>80</td>
</tr>
</tbody>
</table>

- Traffic
- Efficiency
- Electricity
- H₂ & Gas
- Bio.

- Decrease by ~25% of carbon intensity by 2050, saving more than 2 GtCO₂/y despite demand growth
- Massive growth of traffic: access to mobility and steady pick up freight transportation
- Impact on oil demand more than offset by engine efficiency and fuel switch to electricity, gas and biofuels

* Sustainable Liquid Fuels
Momentum: zoom transport
Energy mix changes varying across sectors

Transport energy mix by sector
Mboe/d

Light Duty Vehicles

2018  |  2050 Mom.
Light Duty Vehicles

30

Heavy Duty Vehicles

2018  |  2050 Mom.
Heavy Duty Vehicles

30

Aviation

2018  |  2050 Mom.
Aviation

10

Shipping

2018  |  2050 Mom.
Shipping

10

Light Vehicles World fleet
millions

Aggressive assumptions on Electric Vehicles penetration:
60% worldwide, with China & Europe at ~90%

Oil  SLF*  Electricity  H₂  Natural Gas  Biogas

* Sustainable Liquid Fuels
Rupture: zoom transport
Moving towards Net Zero requires a revolution in transport

Transport energy mix
Mboe/d

Most promising energies by Transport categories
% total demand

Radical acceleration in Rupture:

• More autonomy in batteries, allowing for strong electrification of Light Vehicles
• Massive development of H₂ & SLF, fueling Heavy Duty Vehicles and Aviation
• Gas with incorporation of biogas, especially for Shipping and Heavy Duty Vehicles
Low-carbon hydrogen
Emerging as a promising contributor to Net Zero

- Big potential in Transport (gas & H₂-based liquids), Industry (Steel, Petrochemicals, Cement), storage and gas networks
- Costs have to come down in order to support H₂ adoption and industrial scale up
**Zoom Petrochemicals**

*Recycling and single use plastics ban limiting oil demand for plastics*

**Oil demand for petrochemicals**

\( \text{Mb/d} \)

**Impacts on oil demand for petrochemicals**

\( \text{Mb/d} \)

**Rupture scenario:**

- Steady increase in recycling, from 7% to \(~50\%\) of remaining plastics in 2050 (vs 40% in Momentum)
- SUP ban implemented in 2040 worldwide (vs Europe & China only in Momentum)
- Bioplastics likely to remain a niche market

* SUP: Single Use Plastics
Energy supply
Investment required to meet demand trends

**Natural gas supply**
Bcm

**Oil supply**
Mb/d

**Solar & wind capacities**
GW

Significant investments in new O&G projects needed to offset natural decline and in renewables to support low-carbon electrification.
**CO₂ emissions**

A rupture is needed, including CCS & NBS, to abate emissions

**Worldwide energy-related CO₂ emissions**

Gt/y

- Rupture: CCS and NBS necessary to get to Net Zero
- CCS mainly on power generation and industry
- Policy drivers: Carbon pricing, strong regulations and mandates, support to Innovation
## Key modeling drivers of our Green Deal scenario
Carbon neutrality requires a new energy system

<table>
<thead>
<tr>
<th></th>
<th>2018</th>
<th>Green Deal 2050</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Strong electrification of end-use</strong></td>
<td>~20% of final energy demand</td>
<td>Massive electrification, up to ~45%</td>
</tr>
<tr>
<td><strong>Deep decarbonization of power supply</strong></td>
<td>Coal share in generation mix: 20%</td>
<td>Coal completely phased-out</td>
</tr>
<tr>
<td><strong>Gas getting greener</strong></td>
<td>&lt; 1% green gases* in Europe gas supply</td>
<td>~60% of green gases</td>
</tr>
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<td><strong>Sustainable mobility</strong></td>
<td>&lt; 1% EV in light vehicles fleet</td>
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<td>SAF @ ~80%</td>
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<tr>
<td><strong>Optimizing plastics demand</strong></td>
<td>10% recycled</td>
<td>~55% recycled Europe SUP ban in 2040</td>
</tr>
<tr>
<td><strong>CCS to abate remaining emissions</strong></td>
<td>&lt; 10 MtCO₂ captured</td>
<td>0.4 Gt p.a.</td>
</tr>
<tr>
<td><strong>Energy efficiency acceleration</strong></td>
<td>1.6%/y final energy intensity improvement since 2000</td>
<td>Doubling the pace until 2050</td>
</tr>
</tbody>
</table>

* Share of low-carbon hydrogen and biomethane in total gas use
SUP: single-use plastics
Reaching Net Zero requires a combination of regulation, market instruments (incl. CO₂ pricing), technology breakthroughs & scale up (H₂, CCS, storage, SLF) and end user changes.

Cost-efficiency and affordability will be key for citizen acceptance.
Europe Net Zero 2050 – illustrative Green Deal scenario
Carbon neutrality drives major transformations

EU29 primary energy demand
Mboe/d

- Primary energy demand decreases by ~35% with Green Deal by 2050
- Fossil fuels share down from ~70% in 2018 to ~25%
- Residual demand for oil: 0.3 Mbd in transports, 0.8 Mbd for industry (incl. petchems)
- Natural gas keeping a key role in power and for blue H₂

EU29 CO₂ emissions
Gt/y

- CO₂ emissions cut by ~55% in 2030 vs. 1990 and by ~95% in 2050, net of 0.4 GtCO₂/y of CCS

* Includes traditional biomass, biofuels, biogas...
Europe Net Zero - power outlook
Renewables at the heart of Europe’s electrification

**EU29 power generation by fuel**
TWh

- Renewables reach 80% of total generation in 2050
- Gas, batteries and hydrogen key to ensure firm power
- Power demand further increased by green H₂ production: >25% of power generation in 2050

**Europe electricity demand growth in Green Deal**
TWh

- Transport and green H₂ drive electricity demand – accounting for respectively 1/3 and 2/3 of demand growth by 2050
- Energy efficiency offsets industry and Res. & Com. electrification
Europe Net Zero – gases supply & demand
Gas keeps a central role

Europe Gases demand
Bcm*

<table>
<thead>
<tr>
<th>Year</th>
<th>No Green Deal</th>
<th>Green Deal</th>
</tr>
</thead>
<tbody>
<tr>
<td>2018</td>
<td>300</td>
<td>600</td>
</tr>
<tr>
<td>2050</td>
<td>600</td>
<td>300</td>
</tr>
</tbody>
</table>

Europe gases decarbonization in Green Deal
Bcm*

<table>
<thead>
<tr>
<th>Year</th>
<th>Natural gas w/o CCS</th>
<th>Blue &amp; Green H₂</th>
<th>Biomethane</th>
<th>Low-carbon gases</th>
</tr>
</thead>
<tbody>
<tr>
<td>2018</td>
<td>300</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2050</td>
<td>600</td>
<td></td>
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</tr>
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</table>

- All gases combined equivalent to ~35% of Europe primary energy demand in 2050 (24% today, natural gas only)
- Almost 3/4 of European gas is low-carbon through green gases and CCS by 2050

* For hydrogen: volumetric equivalence of natural gas in energy terms
Europe Net Zero - zoom green gases
Green gases support the European deep decarbonization

European hydrogen supply
\[ \text{MtH}_2 \]

European biomethane supply
\[ \text{Bcm} \]

- Blue \( \text{H}_2 \) likely to scale before green \( \text{H}_2 \) - both are required
- Reuse of existing infrastructure is an asset for Europe

Green gases deployment requires large renewable energy resources (biomass, wind & solar, etc.)
Europe Net Zero – oil demand
Green Deal reinventing transport

Europe oil demand
Mb/d

Europe transport energy mix*
Mboe/d

Light vehicles fleet
Millions

- Oil demand becomes marginal. Plastics used selectively (lighter materials,...)
- Transport energy consumption divided by more than 2 owing to energy efficiency gains and electrification
- ~85% decarbonized energy leading to a ~90% reduction in transport CO₂ emissions

* Excluding international aviation & shipping
10 no-regret moves towards decarbonization
Europe paving the way to carbon neutrality

- **Increase** energy efficiency
- **Make** electricity greener
- **Pursue** gases innovation for efficient energy system balancing
- **Promote** sustainable liquids & gases
- **CCS** is mandatory, not an option

- **Put** a higher price on CO₂
- **Eliminate** coal
- **Expand** the low carbon hydrogen market & electricity storage
- **Make more** efficient plastics use
- **Faster** clean energy innovation

* Carbon Border Adjustment Mechanism

Doubling the pace (vs hist. trend)
80% coming from REN
~35% of energy demand
~50% for SLF incorporation
CO₂ captured 0.4 Gt/y

Efficient EU ETS / CBAM*
Complete phase-out in power
H₂ ~10% final energy
SUP ban 2040
1T$ GD investment plan
This document may contain forward-looking statements within the meaning of the Private Securities Litigation Reform Act of 1995, notably with respect to the financial condition, results of operations, business activities and industrial strategy of TOTAL. This document may also contain statements regarding the perspectives, objectives and goals of the Group, including with respect to climate change and carbon neutrality (net zero emissions). An ambition expresses an outcome desired by the Group, it being specified that the means to be deployed do not depend solely on TOTAL. These forward-looking statements may generally be identified by the use of the future or conditional tense or forward-looking words such as “envisions”, “intends”, “anticipates”, “believes”, “considers”, “plans”, “expects”, “thinks”, “targets”, “aims” or similar terminology. Such forward-looking statements included in this document are based on economic data, estimates and assumptions prepared in a given economic, competitive and regulatory environment and considered to be reasonable by the Group as of the date of this document.

These forward-looking statements are not historical data and should not be interpreted as assurances that the perspectives, objectives or goals announced will be achieved. They may prove to be inaccurate in the future, and may evolve or be modified with a significant difference between the actual results and those initially estimated, due to the uncertainties notably related to the economic, financial, competitive and regulatory environment, or due to the occurrence of risk factors, such as, notably, the price fluctuations in crude oil and natural gas, the evolution of the demand and price of petroleum products, the changes in production and consumption, the ability to achieve cost reductions and operating efficiencies without unduly disrupting business operations, changes in laws and regulations including those related to the environment and climate, currency fluctuations, as well as economic and political developments, changes in market conditions, loss of market share and changes in consumer preferences including those due to epidemics such as Covid-19. Additionally, certain financial information is based on estimates particularly in the assessment of the recoverable value of assets and potential impairments of assets relating thereto.

Neither TOTAL nor any of its subsidiaries assumes any obligation to update publicly any forward-looking information or statement, objectives or trends contained in this document whether as a result of new information, future events or otherwise. Further information on factors, risks and uncertainties that could affect the Group’s business, financial condition, including its operating income and cash flow, reputation or future results or otherwise. Cautionary Note to U.S. Investors—The SEC permits oil and gas companies, in their filings with the SEC, to separately disclose proved, probable and possible reserves that a company has determined in accordance with SEC rules. We may use certain terms in this presentation, such as “potential reserves” or “resources”, that the SEC’s guidelines strictly prohibit us from including in filings with the SEC. U.S. investors are urged to consider closely the disclosure in our Form 20-F/A, File No. 1-10888, available from us at 2, place Jean Millier – Arche Nord Coupoles/Reginauto – 92037 Paris-La Défense Cedex, France, or at our website at total.com. You can also obtain this form from the SEC by calling 1-800-SEC-0330 or on the SEC’s website sec.gov.

However, in certain instances, transactions such as restructuring costs or asset disposals, which are not considered to be representative of the normal course of business, may be qualified as special items although they may have occurred within prior years or are likely to occur again within the coming years.

(ii) Inventory valuation effect

The adjusted results of the Refining & Chemicals and Marketing & Services segments are presented according to the replacement cost method. This method is used to assess the segments’ performance and facilitate the comparability of the segments’ performance with those of its competitors.

In the replacement cost method, which approximates the LIFO (Last-In, First-Out) method, the variation of inventory values in the statement of income is, depending on the nature of the inventory, determined using either the month-end price differentials between one period and another or the average prices of the period rather than the historical value. The inventory valuation effect is the difference between the results according to the FIFO (First-In, First-Out) and the replacement cost.

(iii) Effect of changes in fair value

The effect of changes in fair value presented as an adjustment item reflects for some transactions differences between internal measures of performance used by TOTAL’s management and the accounting for these transactions under IFRS.

IFRS requires that trading inventories be recorded at their fair value using period-end spot prices. In order to best reflect the management of economic exposure through derivative transactions, internal indicators used to measure performance include valuations of trading inventories based on forward prices.

TOTAL, in its trading activities, enters into storage contracts, whose future effects are recorded at fair value in Group’s internal economic performance. IFRS precludes recognition of this fair value effect.

Furthermore, TOTAL enters into derivative instruments to risk manage certain operational contracts or assets. Under IFRS, these derivatives are recorded at fair value while the underlying operational transactions are recorded as they occur. Internal indicators defer the fair value on derivatives to match with the transaction occurrence.

The adjusted results (adjusted operating income, adjusted net operating income, adjusted net income) are defined as replacement cost results, adjusted for special items, excluding the effect of changes in fair value.

Euro amounts presented herein represent dollar amounts converted at the average euro-dollar (€/ $) exchange rate for the applicable period and are not the result of financial statements prepared in euros.

This document also contains extra-financial performance indicators, including a carbon intensity indicator for energy products used by Total customers, that measures the average greenhouse gas emissions of those products, from their production to their end use, per unit of energy. This indicator covers the direct GHG emissions of production and processing facilities (scope 1) and their indirect emissions associated with energy purchase (Scope 2), as well as the emissions associated with the use of products by the customers of the Group (Scope 3) which Total does not control (for the definitions of scopes 1, 2 and 3, refer to Total’s Universal Registration Document).

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