Expanding Petrochemicals

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Growing demand for petrochemicals
More cracker capacity needed to meet rising demand

Main polymer demand*
Mt/y

2010 2018 2025

Recycling

> 3% CAGR

Strong market fundamentals
• Growing population
• Lighter weight materials
• Energy efficiency

Additional demand ~5 crackers per year

Recycling offers further growth opportunities

* polyethylene, polypropylene
A clear path to creating value
Low cost feedstock key to profitability

Main polymer feedstock

Polymer price is oil-linked

Feedstock prices
$/t

1,000
500

2000 2018

Ethane and LPG discount
driven by US shale growth

2018 Investor Day – Expanding Petrochemicals
Executing on our Petrochemicals strategy
Low cost feedstock on worldclass integrated platforms

Petrochemical production*
Mt/y

USA – Borealis Nova JV
New 1 Mt/y ethane cracker
PE capacity increase to 1 Mt/y

South Korea
Cracker expansion to 1.4 Mt/y
PE capacity expansion to 1.1 Mt/y

Algeria
Propane to PP

SATORP Petrochemicals
New 1.5 Mt/y cracker
New 0.8 Mt/y PE capacity

More low cost feedstock

Expansion outside Europe

* Olefins, not including refinery production
Operating high return assets in the US

Strong presence along the full value chain

1 B$ CFFO per year

2.5 B$ capital employed

> 5000 employees

Port Arthur integrated platform

Worldclass petrochemicals assets

Hutchinson, a market leader in specialty materials for automotive and aerospace

Port Arthur
- 200 kb/d refinery and 1 Mt/y cracker (40%)
- New 1 Mt/y cracker *

Bayport
- 1 Mt/y polyethylene*

La Porte
- 1.2 Mt/y polypropylene largest site in US

Carville
- 1.2 Mt/y styrene (50%)
- 0.6 Mt/y polystyrene largest site in US

* JV with Nova/Borealis
Expanding worldclass petrochemicals in the US
From low cost ethane to high end polyethylene

Total Borealis Nova JV created in 2018

One of the lowest cost crackers on the US Gulf Coast
- 1.7 B$ cracker for 1 Mt/y ethylene capacity
- Synergies with existing Port Arthur cracker and refinery

Expanding Bayport PE capacity to 1 Mt/y

Leveraging partners strengths to create US leader on the PE market

Start-up in 2021
Growing giant integrated platform in South Korea
Brownfield economics based on low cost propane feedstock

50/50 JV with Hanwha

Best-in-class integrated platform
• Pacesetter in energy efficiency
• Top quartile for availability

Debottlenecking ethylene capacity to 1.4 Mt/y
• 450 M$ Capex, 20% IRR, 2019 start-up
• Increasing flexibility by importing low cost US propane

Increasing polyethylene capacity to 1.1 Mt/y
• 300 M$ Capex, ~15% IRR, 2019 start-up
• ADL** polymer technology

* 100% view
** Advanced Double Loop
SATORP: A unique platform in Saudi Arabia

Successful partnership with Saudi Aramco

- JV Saudi Aramco (62.5%)/Total (37.5%)
  - Started up in 2014
  - Debottlenecked to 440 kb/d in 2018

Top quartile refinery
- Access to heavy crude
- Full conversion process
- >55% middle distillates

~ 1B$ CFFO (100%)
SATORP Petrochemicals: Building giant integrated complex
Maximizing synergies with existing refining platform

5 B$ Capex (100%)
- 1.5 Mt/y mixed-feed cracker with > 50% advantaged feedstock
- ADL* polymer technology

Launching FEED in October 2018
Commissioning and start-up end 2023
IRR > 15%

* Advanced Double Loop
Looking to capture polypropylene demand growth
Taking advantage of low cost propane

Polypropylene market growth driven by light weight material for transportation

#3 in Europe and in the US

Exploring growth opportunities in the US based on abundant low cost propane resources

**Algeria:** *worldclass PP/PDH* project under study
- Large propane resources
- Supplying domestic market and Europe

* PDH: Propane Dehydrogenation
Growth opportunities from circular economy
Developing recycling and bioplastic solutions

Expanding in recycling

PE/PP: Boosters® circular compound

PS: chemical recycling up to 20%

Promoting bio-plastics

JV with Corbion, a leader in lactic acid

#2 player in bio-sourced/bio-degradable Polylactic Acid (PLA)

75 kt/y new production site in Thailand
Executing high return petrochemicals strategy
Redeploying footprint towards growing markets, leveraging cheap feedstock

- 1.8 B$ CFFO in 2017
- ~30% ROACE in 2017
- ~20% CFFO growth 2017-22*

Capturing polymers demand growth

World class projects adding > 30% cracking capacity
- Maximizing synergies on integrated platforms

- > 60% low cost feedstock by 2025
- > 55% non-European capacity by 2025

* In 2017 constant petrochemical environment
The SEC permits oil and gas companies, in their filings with the SEC, to report items although they may have occurred within prior years or are likely to occur again within the coming years.

Due to their unusual nature or particular significance, certain transactions qualified as “special items” are excluded from the business segment figures. In general, special items relate to transactions that are significant, infrequent or unusual. 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.

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.

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 outlook is provided in the most recent Registration Document filed by the Company with the French Autorité des Marchés Financiers and annual report on Form 20-F filed with the United States Securities and Exchange Commission (“SEC”).

Financial information by business segment is reported in accordance with the internal reporting system and shows internal segment information that is used to manage and measure the performance of TOTAL. In addition to IFRS measures, certain alternative performance indicators are presented, such as performance indicators excluding the adjustment items described below (adjusted operating income, adjusted net operating income, adjusted net income), return on equity (ROE), return on average capital employed (ROACE) and gearing ratio. These indicators are meant to facilitate the analysis of the financial performance of TOTAL and the comparison of income between periods. They allow investors to track the measures used internally to manage and measure the performance of the Group. These adjustment items include:

(i) Special items
Due to their unusual nature or particular significance, certain transactions qualified as “special items” are excluded from the business segment figures. In general, special items relate to transactions that are significant, infrequent or unusual. 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 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.

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

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 TOTAL energy sales that measures the weighted average greenhouse gas emissions of energy products sold by TOTAL, from their production in TOTAL facilities to their end use by TOTAL customers. This carbon intensity indicator covers, besides direct GHG emissions of TOTAL (scope 1), indirect GHG emissions (scopes 2 and 3) that TOTAL does not control (for the definitions of scopes 1, 2 and 3, refer to TOTAL’s Registration Document). 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 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, File N° 1-10888, available from us at 2, Place Jean Millier – Arche Nord Cupole/Regnault - 92078 Paris-La Défense Cedex, France, or at our website: 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.