

# Positioning for a lower-emission future

## Our strategic priorities

We remain focused on five strategic priorities to create sustainable solutions that improve quality of life and meet society's evolving needs. Our vision is to lead industry in innovations that advance modern living and a net-zero future.

- **Leading performance**  
Industry leader in operating and financial performance.
- **Essential partner**  
Value through win-win solutions for our customers, partners, and broader stakeholders.
- **Advantaged portfolio**  
Portfolio of assets and products outperform competition and grow value in a lower-emission future.
- **Innovative solutions**  
New products, technologies, and approaches to accelerate large-scale deployment of solutions essential to modern life and lower emissions.
- **Meaningful development**  
Diverse and engaged organization with unrivaled opportunities for personal and professional growth doing impactful work to meet society's needs.

We plan to play a leading role in the energy transition as we retain investment flexibility across a portfolio of evolving opportunities to maximize shareholder returns.

# Positioning for a lower-emission future

We have evolved our operating model, enabling efficiencies that better leverage the scale of an increasingly integrated company. At the same time, we have centralized many of the skills and capabilities required by our business, allowing us to improve allocation of critical resources; drive continuous improvement, including detection and measurement of emissions; and grow value. This serves us well in a variety of future scenarios, irrespective of the pace of the energy transition.

## Core businesses

- Upstream strengthens energy security by expanding access to reliable and affordable supply while focusing on achieving industry-leading emissions intensity.
- Product Solutions is the world’s largest downstream and chemical company developing high-value innovative products needed by modern society.
- Low Carbon Solutions helps to lower society’s greenhouse gas emissions by providing solutions in growing markets for carbon capture and storage, hydrogen, and biofuels. It also supports reducing emissions from our major operations and products.

## Evolving our model to strengthen competitiveness

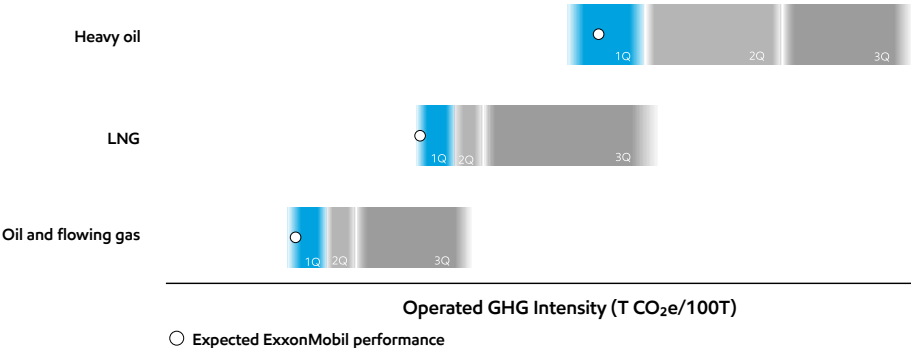


Realizing full set of corporate competitive advantages.

## Upstream

We are well positioned to help meet the need for oil and natural gas through the next decade and beyond, delivering value by reducing structural costs, growing high-value production at low cost of supply, and improving emissions intensity.<sup>1</sup> As part of our net-zero ambition, we have identified more than 100 potential modifications to reduce emissions across all upstream operated assets including energy efficiency measures and equipment upgrades. Examples include carbon capture and storage at operations in the United States, Australia, and Canada; electrification of compressors and heaters in our Permian operations; and replacement of pneumatic devices with electrical or mechanical devices to eliminate fugitive emissions in natural gas operations. These examples, as shown in the chart below, demonstrate our capacity to lead industry as a responsible operator and are expected to deliver first-quartile Scope 1 and 2 emissions intensity performance by 2030 for each asset class when benchmarked against other operators based upon available data.<sup>2</sup>

**2030 Upstream GHG intensity<sup>3</sup>**  
By asset class and benchmarking quartile (Q)



## Unconventional operations

We have set a goal to be net zero in Scope 1 and 2 greenhouse gas emissions by 2030 for our Permian Basin unconventional operated assets. The enhancements in our unconventional operations include electrification, improving processes, and using electricity from renewables and other lower-emission sources. In 2022, we eliminated routine flaring in our Permian Basin operated assets in line with the World Bank's Zero Routine Flaring Initiative.<sup>4</sup> Further, we achieved the top certification for methane emissions management at our Poker Lake, New Mexico, facilities from independent validator MiQ.

## Liquefied natural gas (LNG)

ExxonMobil is progressing development of approximately 13 million metric tons per year of high-efficiency liquefaction capacity to meet expected global demand growth for LNG. This includes diverse projects in the United States, Papua New Guinea, Mozambique, and Qatar. ExxonMobil operated assets are expected to be among industry's lowest in greenhouse gas intensity.<sup>5</sup>

## Deepwater

ExxonMobil's deepwater oil and gas developments are being designed to support our 2030 greenhouse gas emission-reduction plans.

Prosperity joins the Liza Unity as two of the world's first FPSOs to be awarded the SUSTAIN-1 notation by the American Bureau of Shipping in recognition of the sustainability of its design, documentation and operational procedures.

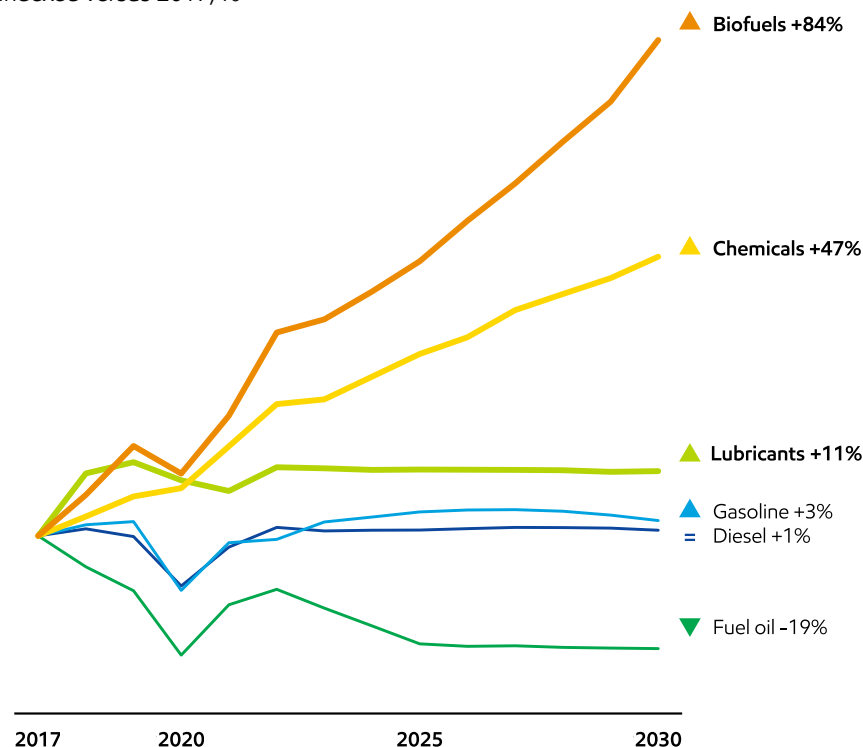
## Product Solutions

Our Product Solutions business plays a critical role in providing products that are needed for modern life. Our customers want high-value products with lower life-cycle greenhouse gas emissions, which requires product innovation and emissions intensity reductions in our manufacturing processes.

Our refining and chemicals businesses each operate assets that are among the lowest in industry for greenhouse gas intensity.<sup>6</sup> Through 2030, we expect to more than offset emissions from new operated facilities needed to meet growing demand. Our emission-reduction plans consider fuel switching to hydrogen; carbon capture and storage projects in Houston, Rotterdam, Fife, and Antwerp; renewable power purchase agreements; energy efficiency projects; and conversions of select refineries to terminals.

## Global demand growth<sup>7</sup>

Indexed versus 2017, %



## Energy products

Demand for conventional fuels is expected to peak this decade and then begin to decline, while demand for energy-dense, lower-emission fuels is expected to grow rapidly, driven by hard-to-decarbonize transportation sectors such as aviation, marine, and heavy-duty trucking.

Around 85% of our manufacturing capacity is co-located in large, integrated sites that have the flexibility to shift product yield to best meet society's evolving needs. As demand for conventional road transport fuels declines, select assets can be repurposed to manufacture high-value products including chemicals, lubricants, and lower-emission fuels.

We continue to improve our portfolio, focusing investments on those major assets in locations with sound comprehensive carbon policy. Our investments in North America, China, and Singapore will help meet the growing demand for products with lower life-cycle emissions, and the flexibility of our sites will allow us to change as society's needs evolve.

## Chemical products

Global chemical demand is expected to grow faster than the global economy,<sup>8</sup> driven by demand for products like cell phones and medical supplies, as well as products necessary to preserve food and improve hygiene. Demand for performance chemicals, including our performance polyethylene and polypropylene, is expected to remain strong and resilient through the energy transition. These products support customers' efficiency and greenhouse gas emission-reduction needs. To further support our customers, we continue to grow the supply of performance chemicals through large, competitively advantaged investments such as:

- The Gulf Coast Growth Venture, which started up at the end of 2021, ahead of schedule and under budget. The operation includes a 1.8 million-metric-ton-per-year ethane steam cracker, two polyethylene units capable of producing up to 1.3 million metric tons per year, and a monoethylene glycol unit with a capacity of 1.1 million metric tons per year.
- The Baton Rouge, Louisiana, performance polypropylene project, which started up in fourth quarter 2022, expanded our production capacity along the Gulf Coast by 450,000 metric tons per year.
- The Baytown, Texas, chemical expansion, started up in 2023, will have the capacity to produce about 400,000 metric tons of Vistamaxx<sup>TM</sup> polymers per year and about 350,000 metric tons of Elevexx<sup>TM</sup> linear alpha olefins per year.
- The chemical complex in Guangdong province, China, which is currently under construction, includes performance polyethylene lines, differentiated performance polypropylene lines, and a flexible feed steam cracker with a capacity of about 1.6 million metric tons per year.

# Key plan activities to grow high-value products?



**Major expansions**

- Performance chemicals – Guangdong, China
- Lubricants and chemicals – Singapore

**Biofuels**

- Renewable diesel – Strathcona, Canada
- Bio co-processing – Sarnia & Nanticoke, Canada

**Advanced recycling**

- Baton Rouge, Louisiana
- Baytown, Texas
- Beaumont, Texas
- Joliet, Illinois
- Sarnia, Canada

- Antwerp, Belgium
- Gravenchon, France
- Rotterdam, Netherlands
- Singapore

**Other**

- U.S. Gulf Coast refinery reconfigurations
- China lubricants expansion
- India lubricant manufacturing plant

## Specialty products

Demand for lubricants is expected to remain strong and grow in the industrial, aviation, and marine sectors. Our Singapore Resid Upgrade Project will upgrade bottom-of-the-barrel products into higher-value lubricant basestocks and cleaner fuels. This investment will position us to better meet demand growth in Asia, while displacing higher carbon-intensity products in the marketplace.

## Helping customers reduce their emissions

Our competitive advantages of scale, integration, and proprietary technology provide customers with products that improve efficiency, avoid greenhouse gas emissions associated with alternative products, and serve a range of applications, including health and safety, packaging, transportation, and industrial.

### Innovative solutions to improve modern life

- Plastic packaging has 54% lower life-cycle greenhouse gas emissions versus alternatives.<sup>10</sup>
- Exceed™ XP enables up to 30% thinner plastic packaging versus conventional plastics for equivalent performance.<sup>11</sup>
- Certified circular polymers<sup>12</sup> offer equivalent performance of virgin plastics.

### Total vehicle product solutions improve transportation efficiency

- Plastics enable lighter vehicles and 6%-8% fuel efficiency improvement for every 10% reduction in vehicle weight.<sup>13</sup>
- Butyl rubber improves air retention in tires, which can increase electric vehicle range by up to 7%.<sup>14</sup>
- Mobil 1 ESP X2 0W-20 engine oil helps provide up to 4% fuel economy improvement.<sup>15</sup>
- Renewable diesel can reduce carbon emissions by up to 70% compared to conventional diesel.<sup>16</sup>
- Marine biofuel can reduce carbon emissions by up to 30% compared to conventional marine fuel.<sup>17</sup>

## Reliable solutions for industrial efficiency

- Mobil DTE 10 Excel Series provides up to 6% improvement in hydraulic pump efficiency.<sup>18</sup>
- Mobil SHC™ 600 Series provides up to 3.6% energy efficiency gain.<sup>19</sup>
- Mobil SHC™ Gear WT helps reduce oil consumption and maintenance costs through extended oil life and drain intervals.<sup>20</sup>

## Footnotes

1. ExxonMobil operated facilities; excludes startup phase of major new facilities. Projected emission intensity includes Scope 1 and 2 emissions of ExxonMobil operated assets as compared to available benchmark. Reduction estimates provided herein have a high degree of uncertainty, and are subject to change based on potential future conditions. 2030 first quartile projection based on comparison of available peer performance data, publicly available announcements, third-party sources (Rystad for oil and flowing gas, COSIA for heavy oil, Phillip Townsend and Associates Inc. for LNG), and ExxonMobil analysis.
2. Ibid.
3. Ibid.
4. References to routine flaring herein are consistent with the World Bank's Zero Routine Flaring Initiative/Global Gas Flaring Reduction Partnership's (GGFRP) principle of routine flaring and excludes safety and non-routine flaring.
5. First quartile operated performance based on Phillip Townsend and Associates Inc. industry benchmarking analysis for operating year 2021.
6. Based on Scope 1 and 2 emissions of ExxonMobil operated assets. Refining performance results based on ExxonMobil analysis of 2020 Solomon Associates' proprietary Carbon Emissions Index; Chemicals performance results based on ExxonMobil analysis of key competitors' publicly available information, annual data (2016-2022).
7. Total demand through 2030 – ExxonMobil 2023 Global Outlook. Chemicals based on ExxonMobil 2023 Global Outlook for Energy chemical feedstock projected demand excluding direct ethane from Upstream operations.
8. Global economy - ExxonMobil's 2023 Global Outlook; Chemicals growth - IHS Markit Report, Global (Polyethylene, Polypropylene, and Paraxylene), 2023 edition: Fall 2023 update.
9. May not reflect final investment decisions made by the company. Individual opportunities may advance based on a number of factors, including availability of supportive policy, technology for cost-effective abatement, and alignment with our partners and other stakeholders. The company may refer to these opportunities as projects in external disclosures at various stages throughout their progression.
10. April 2018 report of Franklin Associates on Life Cycle Impacts of Plastic Packaging Compared to Substitutes (April 2018 Franklin Associates Report); U.S. packaging market; alternatives include steel, aluminum, glass, paper-based packaging, fiber-based textiles, and wood (Table 4-14). Source: <https://www.americanchemistry.com/better-policy-regulation/plastics/resources/life-cycle-impacts-of-plastic-packaging-compared-to-substitutes-in-the-united-states-and-canada-theoretical-substitution-analysis>.
11. Based on performance of specific ExxonMobil Exceed™ XP grades versus conventional polyethylene in flexible packaging applications.
12. Certifications through the International Sustainability and Carbon Certification (ISCC) PLUS process. For more information, please visit <https://www.exxonmobilchemical.com/en/exxonmobil-chemical/sustainability/advanced-recycling-technology/mass-balance-attribution>.
13. Department of Energy statements at <https://www.energy.gov/eere/vehicles/lightweight-materials-cars-and-trucks>.
14. Based on ExxonMobil analysis: <https://www.exxonmobilchemical.com/en/resources/library/library-detail/91254/properly-inflated-tires-affect-energy-consumption-en>.
15. Based on ExxonMobil analysis when compared to conventional mineral oils: <https://www.mobil.com/en-be/passenger-vehicle-lube/pds/eu-xx-mobil-1-esp-x2-0w-20>.
16. Based on ExxonMobil analysis using Argonne National Labs' GREET2022 model and published fuel carbon intensity from California LCFS regulations. Argonne National Laboratory GREET model: <https://greet.anl.gov/>, California Air Resources Board Low Carbon Fuel Standard Regulation: <https://ww2.arb.ca.gov/our-work/programs/low-carbon-fuel-standard/lcfs-regulation>.
17. Based on ExxonMobil analysis using Argonne National Labs' GREET2022 model versus conventional fuel oil. Argonne National Laboratory GREET model: <https://greet.anl.gov/> Performance dependent on blend rates and bio components used.
18. Based on ExxonMobil analysis; performance profile at <https://www.mobil.com/en-us/industrial/pds/gl-xx-mobil-dte-10-excel-series>.
19. Based on ExxonMobil analysis; performance profile at <https://www.mobil.com/en-us/industrial/pds/gl-xx-mobil-shc-600-series>.
20. Based on ExxonMobil analysis; performance profile at <https://www.mobil.com/en-us/industrial/pds/gl-xx-mobilshc-gear-320-wt>.