Constructing ExxonMobil’s First Integrated Report: An Experiment

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Abstract

While interest in integrated reporting is growing, the number of listed companies issuing such reports remains a very small minority. Common concerns expressed by companies include complexity, cost, and litigation risk. To address these concerns, we decided to conduct an experiment answering the question of “Is it possible and, if so, how difficult would it be to construct an integrated report for a company based on information from documents the company has placed in the public domain?” For our experiment we chose ExxonMobil. We were able to construct a decent integrated report for the year 2016 in about 40 hours. This suggests that the concerns companies have about integrated reporting are exaggerated. We are working to develop an “Integrated Report Generator Tool (IRGT)” that will use natural language processing and artificial intelligence technologies to produce an integrated report for any listed company in the world. These reports would be freely available. If we are successful in developing such a tool, an interim technology solution will solve the problem of the dearth of integrated reports. Ideally, these freely available integrated reports will encourage companies to produce their own.

Keywords: ExxonMobil, integrated reporting, long-term strategy, International Integrated Reporting Council, Statement of Significant Audiences and Materiality, TCFD recommendations

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The Concept of Integrated Reporting

In 2002, Steen Riisgaa, then CEO of Novozymes\(^1\) wrote the following passage in what is acknowledged to be the first integrated report.\(^2\)

> This report is an integrated financial, environmental, and social report that also focuses on knowledge and the economic significance of our business. Our decision to bring everything together in one report is a natural consequence of business and sustainability moving ever closer together, and of various stakeholders asking for a wider overview of the business.

Riisgaard’s comments built a foundation for the International Integrated Reporting Council’s (IIRC) definition of integrated reporting today. “The International <IR> Framework” (the Framework) states that an integrated report explains “how an organization’s strategy, governance, performance and prospects lead to the creation of value over the short, medium, and long term.”\(^3\) The integrated report is targeted at “providers of financial capital,”\(^4\) i.e., current and potential equity and debt holders, however, the Framework notes that “an integrated report benefits all stakeholders.”\(^5\)

Integrated reporting is much more than a communication to the capital markets and society. It is also can drive change. In 2015, co-author Eccles and Harvard Business School professor George Serafeim asserted that integrated reporting is better than standalone financial and sustainability reports because it has two distinct functions; information and transformation.\(^6\)

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4. Ibid.
5. Ibid.
“Corporate information that is more decision-useful is more likely to encourage counterparties to transact with the company and, all else equal, to transact with a company at better terms.”

While financial reporting impacts resource allocation decisions of parties who do business with a company, it does not allow for feedback to the company from these counterparties. In contrast, “the transformation function relaxes this assumption, allowing for engagement and activism from the counterparties. The counterparties receive and evaluate the information. Where they see opportunities to influence corporate behavior to their benefit, and potentially to the benefit of the corporation, they actively try to bring change.”

By affecting the resource allocation decisions of the company itself, “This engagement, activism, and change process enables a company to transform.”

The IIRC’s view is consistent with the foregoing assessment by Eccles and Serafeim. The IIRC’s website states that integrated reporting enables “a better understanding of the factors that materially affect an organization’s ability to create value over time. It can lead to behavioural changes and improvement in performance throughout an organization.”

The State of Integrated Reporting Today

On August 2, 2010, The Prince’s Accounting for Sustainability initiative and Global Reporting Initiative (GRI) announced the formation of the International Integrated Reporting Committee, the forerunner to today’s IIRC. The IIRC is a global coalition of regulators, investors, companies, standard setters, the accounting profession, and NGOs currently engaged in the promulgation and refinement of its Framework.

An interactive map on the IIRC website describes the state of integrated reporting adoption in 10 countries plus the European Union (EU). It is difficult to determine the precise number of companies around the world that have published integrated reports. The IIRC interactive map links to the United States integrated reporting community where the U.S. companies that prepare integrated reports are identified. For Brazil and South Africa, the specific number of companies preparing integrated reports is not shown, however, clicking on the respective country pin brings up a reference to the BM&FBOVESPA and Johannesburg Stock Exchange

7 Ibid.
8 Ibid.
9 Ibid.
listing requirements. Six countries and the EU highlight integrated reporting initiatives that are hoped to drive adoption. The information for Japan notes that over 300 companies are adopting integrated reporting.

The IIRC map illustrates how difficult it has been to drive widespread global adoption, especially in the world’s two largest capital markets, the U.S. and China. Only 21 U.S. companies prepare an integrated report. The People’s Republic of China, which has the second largest market capitalization in the world, is not referenced on the IIRC map.

Benefits of Integrated Reporting

The International Integrated Reporting Council and Black Sun plc released “Realizing the benefits: The impact of Integrated Reporting” in September 2014. The report addresses the benefits of integrated reporting through the lens of the corporation.

The key findings identified five benefits for companies.

1. **Breakthroughs in understanding value creation.** 71% of companies said the board of directors had a better understanding of how the organization created value as a result of using new information.

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13 International Integrated Reporting Council. Find out what is happening in your region. Brazil reports that “over 100 companies” are preparing integrated reports. These companies are listed on BM&FBOVESPA, which has a report or explain provision in its listing requirements. Similarly, the 379 listed companies (as of December 31, 2016, see “Ownership of JSE-listed companies,” Report of the National Treasury, September 2017) prepared integrated reports in accordance with the listing requirements of South Africa’s Johannesburg Stock Exchange.

14 International Integrated Reporting Council. Find out what is happening in your region. The remaining six countries on the IIRC’s interactive map are Australia, India, Malaysia, New Zealand, Singapore, and United Kingdom.


20 Ibid.
2. *Improving what is measured.* 71% of companies noted a greater emphasis on measuring the longer-term success of the business as they change what they measured.

3. *Improving management information and decision making.* 79% of companies said was improved largely attributable to change in management information.

4. *A new approach to stakeholder relations.* 91% saw a positive impact on engagement with external stakeholders.

5. *Connecting departments and broadening perspectives.* One of the earliest reported benefits was breaking down internal silos and increasing respect and understanding between departments.

Companies believed that the quality of relations with providers of financial capital improved, with 56% noting improvement with institutional investors and 52% reporting better relations with analysts. In addition, 87% believed that investors and analysts better understood the organization’s business model and 79% had greater confidence in the long-term viability of the business model.\(^{21}\)

In February 2018, The Association of International Certified Professional Accountants, Black Sun plc, and the IIRC released “Purpose Beyond Profit: The Value of Value—Board-level Insights.\(^{22}\) Key findings of the research included: \(^{23}\)

- 93% of executives agree that effectively explaining value creation is important
- 79% agree that a longer-term perspective would improve value creation
- 96% agree that bringing financial and non-financial information together provides a more forward-looking, longer-term view of performance
- Only 28% report a high level of confidence in the strategic information their businesses disclose (including goals and competencies)
- Only 24% report a high level of confidence in business model reporting (including types of value created for different stakeholders)
- Only 24% believe their company’s disclosure does a very good job of meeting external information needs

\(^{21}\) Ibid.

\(^{22}\) This global survey explored how business leaders think they can best tell their value creation story. Questions covered a range of topics investigating how executives understand value, think about value, and tell their own value creation story. This survey is based on the views of over 400 AICPA and CIMA members in 2016. The survey population included 41 CEO/Presidents, 177 CFOs and other C-suite executives from over 50 countries. Purpose Beyond Profit: The Value of Value—Board-level Insights, https://www.blacksunplc.com/content/dam/black-sun/corporate-comms/images/Research/Purpose_Beyond_Profit.pdf, accessed March 13, 2018.

A frequently overlooked benefit of integrated reporting is its appeal to long-term focused investors. In an article published in the Spring 2015 issue of the “Journal of Applied Corporate Finance,” George Serafeim wrote:

Integrated reporting is a recent reporting innovation that has gained traction in both the corporate and investor communities. In this article, I present the findings of my study of how the practice of Integrated reporting affects the investor base of the firm. The main finding of my analysis is that companies that produce integrated reports show a clear tendency to have more long-term, “dedicated” holders and fewer transient investors. Moreover, through the use of firm-fixed effects and lead-lag analysis, my study provides evidence that suggests a causal relationship between the corporate practice of integrated reporting and an investor base with longer-term shareholders. In support of such a causal relationship, my study shows that the relation between integrated reporting and investor base is stronger for companies with high growth opportunities, with no (or very limited) ownership by the founding family, for “sin” companies (those subjected to strong social criticism), and for companies with a consistent integrated reporting practice.

Objections to Integrated Reporting

A Google search on terms such as, “objections to integrated reporting,” “cost of integrated reporting,” and “legal risks of integrated reporting” did not identify scholarly articles that fully explore the anecdotal objections that we have heard since we began our integrated reporting research in 2009. Three concerns—complexity, cost, and legal risk—were the focus of our work to produce the ExxonMobil 2016 Mock Integrated Report.

Complexity

Critics argue that integrated reporting is too complex for organizations with diverse operations around the world and overly burdensome for small- and medium-sized organizations that are resource constrained. These problems are exacerbated by the absence of reporting standards similar to those issued by the U.S. Financial Accounting Standards Board or the International Accounting Standards Board. Another issue is the need to determine materiality for financial filings required by securities regulators, sustainability reports, and again for integrated reports.

Cost

The arguments related to complexity drive the cost issue. It is simply cost prohibitive, the argument goes, to spend millions of dollars of preparing securities filings and an annual report

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plus the related audit fees to expect any sized organization to invest the financial and human resources to prepare yet another report.

**Litigation Risk**

It is widely believed that disclosure breeds litigation risk, a view reflected in concerns about the forward-looking nature of both an integrated report and any discussion of long-term strategy and execution plans. Corporate counsel is worried that this information could be misinterpreted as being the equivalent of a financial forecast and, if inaccurate, become the basis for legal action by investors.

**The Experiment**

In order to assess these challenges, we decided to conduct an “integrating reporting experiment.” We wanted to determine if it was possible to construct a decent integrated report for a company simply based on data it had already provided in the public domain. If so, we wanted to know just how difficult and time-consuming the task would be. Our experiment answering three questions:

1. To what extent is the information necessary to construct an integrated report already in the public domain? If the information is available, then how difficult is it to build an integrated report?
2. To what extent is the information necessary to construct a Statement of Significant Audiences and Materiality (The Statement) already in the public domain? If the information is available, then how difficult is it to build The Statement?

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25 The authors introduced the Statement of Significant Audiences and Materiality in their second book, *The Integrated Reporting Movement: Meaning, Momentum, Motives, and Materiality.* The Statement would be issued by the board of directors. It identifies the company’s significant audiences, for example, shareholders, debt holders, employee, NGOs, customers. It also identifies which issues are material to which audiences. “Determining the relative importance of different providers of financial capital and different stakeholders is ultimately a responsibility of the board. What does this mean in operational terms? We suggest that annually the board issue, as part of the company’s integrated report, a forward-looking “Statement of Significant Audiences and Materiality.” This statement will inform management, providers of financial capital, and all other stakeholders of the audiences the board believes are important to the survival of the corporation. While management can play a significant role in preparing this statement, it is ultimately a statement of the board, somewhat analogous to the annual financial audit. While management is deeply involved in the audit and, in the United States, the chief executive officer and chief financial officer must personally sign off on the adequacy of a company’s internal control systems, it is the Audit Committee of the board that selects and engages the audit firm and signs off on the scope of the audit. The difference is that the audit statement is ultimately a responsibility of the board—not management.” Eccles, Robert G.; Krzus, Michael P.; and Ribot, Sydney. “Materiality,” chap. 5 in *The Integrated Reporting Movement: Meaning, Momentum, Motives, and Materiality.* New York: John Wiley & Sons, Inc., 2014. Coauthor Eccles and Tim Youmans, a significant contributor to Chapter 5 of *The Integrated Reporting Movement*, have further developed the idea of The Statement of Significant Audiences and Materiality since 2014. See the following. MIT Sloan Management Review. “Restoring Trust After a Scandal,” blog entry by Eccles, Robert G. and Youmans, Tim, October 23, 2017.
3. To what extent does the International <IR> Framework facilitate communication of long-term strategy and plans and the recommendations of the Task Force on Climate-related Financial Disclosures (TCFD)?

We selected ExxonMobil as the target of our experiment because of what we learned about the extent of the company’s reporting during our research into the impact of the recommendations of the TCFD on the oil & gas industry.26

Construction Methodology

We obtained ExxonMobil reports that were in the public domain at the time we began our project—mid-February 2018—to construct an integrated report for 2016 since that’s the year for which most documents were available. The documents from 2017 and 2018 contain information that would be available to a company producing its own integrated report for a given year. We referred to the ExxonMobil corporate website for general information and used the following reports:27

Our first step in constructing “ExxonMobil’s 2016 Mock Integrated Report” was to create a template (Table 1) to organize the information. A three-step process was used.

First; creating a template began with a decision to organize the ExxonMobil Mock Integrated Report around the four core elements—governance, strategy, risk management, and metrics and targets—presented in the TCFD’s Final Report.28 We did this to test the versatility of integrated reporting as a temporary vehicle for providing TCFD disclosures until such time that companies’ controls and processes support embedding the TCFD recommended information in corporate financial filings.29

Second; we assigned FCLTGlobal’s30 “10 elements of a long-term strategy”31 to one of the four TCFD core elements (Table 1).

31 The 10 elements of a long-term strategy were first published in March 2015 by Focusing Capital on the Long Term in “Straight talk for the long term: How to improve the investor-corporate dialogue,”
Third, the Content Elements, Guiding Principles, and other guidance from the International Integrated Reporting Council’s International <IR> Framework\textsuperscript{32} were then mapped to each of the 10 elements of a long-term strategy using a roadmap created by co-author Krzus.\textsuperscript{33} With this step, the authors wanted to test whether the International <IR> Framework can be used to communicate a company’s long-term strategy to capital market participants.

**Analysis of the 2016 Mock Integrated Report**

We constructed a 40-page “ExxonMobil 2016 Mock Integrated Report” (Appendix A) which includes a “Statement Significant Audiences and Materiality” from the company’s SEC filings and other reports.

We spent approximately 40 hours constructing, reviewing, and editing the report. Our integrated reporting expertise and the knowledge gained from our paper on the TCFD recommendations proved helpful. That factor is offset by our lack of experience with the oil & gas industry and the absence of direct contact with ExxonMobil.

We found that the International <IR> Framework can communicate an organization’s long-term strategy and the information recommended by the TCFD.

**The Integrated Report**

Compared to actual integrated reports, our “ExxonMobil 2016 Mock Integrated Report” passed the test of being a decent first integrated report although it is not technically perfect. It is proof that, at least in the case of ExxonMobil, that the information necessary to produce an integrated reporting is already in the public domain. Every single word, figure, and diagram in the report is taken from and referenced to an ExxonMobil document. We should also note that this report compares favorably with GE’s 68-page “2016 Integrated Summary Report.”\textsuperscript{34} Both reports include financial highlights, chairman’s letter, and discussions of strategy, the business, risk, governance, and compensation. The reports diverged on two points.


First, the GE Integrated Summary Report included the basic financial statements; statements of earnings, comprehensive income, changes in shareowners’ equity, financial position, and cash flow, all of which are in the GE annual report and Form 10-K. Our ExxonMobil mock integrated report excluded the full financial statements to avoid replicating other disclosure documents.

Second, the GE report makes extensive use of graphics. Practical considerations such as quality of screen shots, document size, and downloading speeds drove our decision to recreate ExxonMobil graphics as text to the extent possible.

This divergence raises questions primarily for “providers of financial capital.” The overarching question is: What do investors and analysts want in an integrated report? How useful is it to include full financial statements in an integrated report? Are graphics relevant and useful to institutional investors? Would investors prefer numbers in a format that can be easily loaded into spreadsheets for analysis?

The ExxonMobil integrated report addresses the International <IR> Framework’s Guiding Principles of Stakeholder relationships and Materiality, although these disclosures would be improved by the inclusion of a Sustainable Value Matrix, another concept introduced by Eccles, Krzus, and Ribot in The Integrated Reporting Movement. The Connectivity Principle does exist in the narrative; however, an illustration or an interactive website graphic would improve reader comprehension of the relationships between financial and environmental and social performance.

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35 International <IR> Framework. Executive Summary, page 4, “The primary purpose of an integrated report is to explain to providers of financial capital how an organization creates value over time.”

36 “The transformative power of the Sustainable Value Matrix (SVM) is a product of the exercise of governance judgment, evidenced by clearly displaying this binary treatment of materiality and significance, drawing clear lines to inform reporting, stakeholder engagement, resource commitment decisions, and opportunities for innovation. By being clear on what it sees as material and significant and what is not, the company establishes credibility and legitimacy. It avoids charges of “greenwashing” that can legitimately be made when a company says “we care about everything and everybody.” Yes, such demarcations can lead to conflict. Stakeholders unhappy with the placement of their issue(s) in a company’s SVM may choose to try to influence them to change it. That is their right. It is also the company’s obligation to engage—although not necessarily agree—with them. The SVM is the basis for a more meaningful conversation between a company and all of its stakeholders within the now-clarified framework of how the corporation sees its role in society. While the general quality of integrated reports being produced today is fair, however, there is substantial room for improvement in how companies communicate their views on materiality—an issue addressed in the next chapter on the quality of integrated reporting.” Eccles, Robert G.; Krzus, Michael P.; and Ribot, Sydney. “The Sustainable Value Matrix,” chap. 6 in The Integrated Reporting Movement: Meaning, Momentum, Motives, and Materiality. New York: John Wiley & Sons, Inc., 2014.

37 SAP provides one of the best illustrations of the concept of connectivity. The Connectivity section of SAP’s online 2017 Integrated report states, “Integrated reporting is based on the idea that social, environmental, and economic performance are interrelated, with each creating tangible impacts on the others. To achieve a truly integrated strategy, we must understand these connections and work to support them throughout SAP.” This passage is followed by an interactive image that displays how...
The Statement of Significant Audiences and Materiality

There are no generally accepted standards for The Statement. Based on the work of the Eccles and Youmans, and reference to The Statement issued by Atlas Copco’s\(^{38}\) and Telia’s\(^{39}\) boards of directors, critical elements might be the responsibilities of the board, identification of significant stakeholders, description of codes of ethics business conduct, and reference to material issues. We used the ExxonMobil 2016 Form 10-K, ExxonMobil Notice of 2017 Annual Meeting and Proxy Statement, 2018 Carbon and Energy Summary, and the 2016 Corporate Citizenship Report to write a one-page mock version of The Statement.

Communicating Long-term Strategy and TCFD recommendations

Our ExxonMobil 2016 Mock Integrated Report demonstrates the viability of using integrated reporting to communicate an organization’s long-term strategy. We used the information suggested in the International <IR> Framework’s Content Elements to address all of the 10 elements of a long-term strategy (Table 1). We acknowledge that the level of detail may not meet the full expectations of, for example, the CECP Strategic Investor Initiative Advisory Board Investor Subcommittee.\(^{40}\) The ExxonMobil report covers significant risks including megatrends (specifically climate change), its growth plans and operations look forward to 2040,\(^{41}\) and the overall strategy discussion has eyes on the future, not the past.

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\(^{41}\) 2018_Exxon_Energy and Carbon Summary.
Conclusion

When we decided to conduct this experiment of constructing an integrated report for ExxonMobil, we had no idea if it would be successful or not. The requisite information may not have been available. Or the task could have become too tedious that we gave up after several weeks. This did not turn out to the case. Using publicly available information, we were able to construct a decent mock integrated report in a reasonable amount of time. The fact that every single piece of information in this report comes from an ExxonMobil document belies the concern of increased litigation risk from integrated reporting.

We now plan on taking two next steps. The first is to use this experiment to encourage ExxonMobil to produce an integrated report for itself. We invite any reader of this paper who would like to have the company to do so to let them know through whatever channels and contacts you have. Having ExxonMobil show leadership in integrated reporting, as GE has already done, would add tremendous momentum to integrated reporting in the U.S. (where it is desperately needed) and in the oil & gas industry (also true here).

The second is to see if it is possible to use natural language processing and artificial intelligence technology to create an “Integrated Report Generator Tool (IRGT).” This tool would comb through company documents and its website as we did manually to generate an integrated report for any listed company in the world. Of course, the more disclosure by the company, the better the report will be. The quality of the reports will improve as the software gets smarter. If we can create such a tool, we will house it on a publicly-available website that will be free to anyone.

We see two benefits from the IRGT. The first is that it will give investors and other stakeholders a holistic view of the company’s performance and prospects through a technology-enabled integrated report. To the extent that adoption of integrated reporting remains slow, this tool will be an interim “first approximation” solution. The second is that we hope this provides an incentive for companies to produce their own integrated report. They will face a simple choice. Let software provide an integrated reporting perspective on the company or the company can shape its own narrative.
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Authors’ note: The page numbering within this document restarts with this page as-if this mock integrated report were a separate document.

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Forward Looking Information

Statements of future events or conditions in this report, including projections, targets, expectations, estimates, and business plans, are forward-looking statements. Actual future results or conditions, including demand growth and energy source mix; the impact of new technologies; production rates and reserve growth; efficiency gains and cost savings; emission reductions; and results of investments could differ materially due to, for example, changes in the supply in and demand for crude oil, natural gas, and petroleum and petrochemical products and resulting price impacts; the outcome of exploration and development projects; the outcome of research projects and ability to scale new technologies on a cost-effective basis; changes in law or government policy, including environmental regulations and international treaties; the actions of competitors and customers; changes in the rates of population growth and economic development; unexpected technological developments; general economic conditions, including the occurrence and duration of economic recessions; unforeseen technical difficulties; and other factors discussed in this report and in Item 1A of ExxonMobil’s most recent Form 10-K. Third-party scenarios discussed in this report reflect the modeling assumptions and outputs of their respective authors, not ExxonMobil. References to “resources,” “resource base,” and similar terms include quantities of oil and gas that are not yet classified as proved reserves under SEC definitions but that we believe will ultimately be produced. For additional information see the “Frequently Used Terms” on the Investors page of our website at exxonmobil.com.

References to “oil” and “gas” include crude, natural gas liquids, bitumen, synthetic oil, and natural gas.

The term “project” as used in this publication can refer to a variety of different activities and does not necessarily have the same meaning as in any government payment transparency reports.

Sources: The disclaimer was created from ExxonMobil 2016 Form 10-K, page 40, and ExxonMobil 2018 Energy and Carbon Summary, page COV_2.
Governance

Statement of Materiality and Significant Audiences

“ExxonMobil Corporation was incorporated in the State of New Jersey in 1882. As the world’s largest publicly held oil and natural gas company, ExxonMobil uses technology and innovation to safely and responsibly deliver the energy and products the world needs.”

The Board has adopted Corporate Governance Guidelines that govern the structure and functioning of the Board and set out the Board’s position on a number of governance issues. "Risk oversight is the responsibility of the full Board of Directors. The Board throughout the year participates in reviews with management on the Company’s business, including identified risk factors." "Climate-related matters are also considered by the Board throughout the year in various other contexts, including reviews of the Outlook for Energy, the company’s safety, health and environmental performance, the annual corporate planning process, shareholder proposals, and regulatory filings such as the 10-K.

“The Board maintains policies and procedures that represent both the code of ethics for the principal executive officer, principal financial officer, and principal accounting officer under SEC rules, and the code of business conduct and ethics for directors, officers, and employees under NYSE listing standards. The Code applies to all directors, officers, and employees. The Code includes a Conflicts of Interest Policy under which directors, officers, and employees are expected to avoid any actual or apparent conflict between their own personal interests and the interests of the Corporation.

“We recognize the significant responsibilities we have to our shareholders, neighbors, customers and communities as we find ways to bring affordable energy to the global market. For a company of our size and scope, building and maintaining relationships with a diverse group of stakeholders is critical. Regular stakeholder engagement helps us understand a variety of perspectives and improve our company’s performance. Because our business directly affects many people around the world, we seek to understand their viewpoints. We interact with our diverse stakeholders through a variety of mechanisms, including community meetings, web and social media content, corporate publications, and one-on-one and group discussions.

42 ExxonMobil. 2016 Form 10-K, page 1.
Guiding Principles

Exxon Mobil Corporation is committed to being the world’s premier petroleum and petrochemical company. To that end, we must continuously achieve superior financial and operating results while simultaneously adhering to high ethical standards.

The following principles guide our relationships with our shareholders, customers, employees, and communities:

**Shareholders**

We are committed to enhancing the long-term value of the investment dollars entrusted to us by our shareholders. By running the business profitably and responsibly, we expect our shareholders to be rewarded with superior returns. This commitment drives the management of our Corporation.

**Customers**

Success depends on our ability to consistently satisfy ever changing customer preferences. We commit to be innovative and responsive, while offering high quality products and services at competitive prices.

**Employees**

The exceptional quality of our workforce provides a valuable competitive edge. To build on this advantage, we will strive to hire and retain the most qualified people available and to maximize their opportunities for success through training and development. We are committed to maintaining a safe work environment enriched by diversity and characterized by open communication, trust, and fair treatment.

**Communities**

We commit to be a good corporate citizen in all the places we operate worldwide. We will maintain high ethical standards, obey all applicable laws, rules, and regulations, and respect local and national cultures. Above all other objectives, we are dedicated to running safe and environmentally responsible operations.


**Standards of Business Conduct**

Exxon Mobil Corporation aspires to be at the leading edge of competition in every aspect of our business. That requires the Corporation’s resources—financial, operational, technological, and human—to be employed wisely and evaluated regularly.
While we maintain flexibility to adapt to changing conditions, the nature of our business requires a focused, long-term approach. We will consistently strive to improve efficiency and productivity through learning, sharing, and implementing best practices. We will be disciplined and selective in evaluating the range of capital investment opportunities available to us. We will seek to develop proprietary technologies that provide a competitive edge.

We aspire to achieve our goals by flawlessly executing our business plans and by adhering to these guiding principles and our Standards of Business Conduct.

The high quality of the directors, officers and employees of Exxon Mobil Corporation is the Corporation's greatest strength. The resourcefulness, professionalism and dedication of those directors, officers and employees make the Corporation competitive in the short term and well positioned for ongoing success in the long term.

The Corporation's directors, officers, and employees are responsible for developing, approving and implementing plans and actions designed to achieve corporate objectives. The methods we employ to attain results are as important as the results themselves. The Corporation's directors, officers, and employees are expected to observe the highest standards of integrity in the conduct of the Corporation's business.

The Board of Directors of the Corporation has adopted and oversees the administration of the Corporation's Standards of Business Conduct. The policies in the Standards of Business Conduct are the foundation policies of the Corporation. Wholly-owned and majority-owned subsidiaries of Exxon Mobil Corporation generally adopt policies similar to the Corporation’s foundation policies. Thus the Corporation’s foundation policies collectively express the Corporation’s expectations and define the basis for the worldwide conduct of the businesses of the Corporation and its majority-owned subsidiaries.

The directors, officers, and employees of Exxon Mobil Corporation are expected to review these foundation policies periodically and apply them to all of their work. The Corporation publishes from time to time guidelines with respect to selected policies. Those guidelines are interpretive and administrative and are not part of the Standards of Business Conduct. Any employee who has questions concerning any aspect of these policies should not hesitate to seek answers from management.

No one in the ExxonMobil organization has the authority to make exceptions or grant waivers with respect to the foundation policies. Regardless of how much difficulty we encounter or pressure we face in performing our jobs, no situation can justify the willful violation of these policies. Our reputation as a corporate citizen depends on our understanding of and compliance with these policies.
To Our Shareholders

ExxonMobil is dedicated to generating long-term value for you, our shareholders. We strive to remain the industry leader in safely supplying the energy necessary to support economies and improve the lives of billions of people, while at the same time protecting the environment. This challenge is what drives the thousands of men and women of ExxonMobil to push the frontiers of science and technology, develop new products and resources, optimize our operations, and continually improve.

ExxonMobil maintains a long-term view and strategic focus in our business plans and investments. Underpinning our investment plans is our Outlook for Energy, an annual, long-range energy supply and demand forecast. We anticipate global economic output will double by the year 2040 while the world strives to embrace a future with lower carbon intensity consistent with the Paris Agreement commitments. With population growth, rising economic prosperity, increasing trade, and evolving technology, we project global energy demand will grow by about 25 percent between 2015 and 2040. Meeting the growth in demand will require development of all energy types, as well as new technologies and further gains in energy efficiency.

As we work to meet this demand, we must also work to reduce the environmental impact of global development and do our part in mitigating the risks of climate change. We recognize that these risks are serious and warrant thoughtful action, requiring large-scale, economic, broad-based solutions implemented around the world. At ExxonMobil, we are working to improve energy efficiency and reduce emissions from our own operations, while also helping consumers use energy more efficiently with the advanced products we manufacture. Since 2000, ExxonMobil has spent nearly $7 billion on researching, developing, and deploying emissions-reducing technologies, such as carbon capture and storage. Our efforts have made us a global leader in this technology with a working interest in about one quarter of the world’s current capacity. We announced a new partnership in 2016 to research the use of fuel cells in capturing carbon dioxide that could substantially reduce costs and lead to large-scale application globally. We are also working on energy efficiency initiatives, cogeneration, flare reduction, advanced biofuels, and research on other lower-carbon energy solutions.

We appreciate the confidence you have placed in us as we work to expand energy supplies, develop breakthrough technologies, and support global prosperity in a safe, secure, and environmentally responsible way. The men and women of ExxonMobil remain committed to creating long-term value for our shareholders, and we look forward to continued success in the future.

Overview
The Board of Directors and its committees perform a number of functions for ExxonMobil and its shareholders, including: Overseeing the management of the Company on your behalf, including oversight of risk management; Reviewing ExxonMobil’s long-term strategic plans; Exercising direct decision-making authority in key areas, such as declaring dividends; Selecting the CEO and evaluating the CEO’s performance; and Reviewing development and succession plans for ExxonMobil’s top executives.

Board Tenure. The Board does not impose tenure limits on its directors, other than a mandatory retirement age of 72 and the requirement to stand for election annually.

Risk Oversight. Risk oversight is the responsibility of the full Board of Directors. The Board throughout the year participates in reviews with management on the Company’s business, including identified risk factors. As a whole, the Board reviews include litigation and other legal matters; political contributions, budget, and policy; lobbying costs; developments in climate science and policy; the Energy Outlook, which projects world supply and demand to 2040; stewardship of business performance; and long-term strategic plans.

Climate risk oversight
ExxonMobil’s Board of Directors is responsible for risk oversight, including the risks of climate change. The Board routinely reviews and considers this risk, including briefings on public policy, scientific and technical research, as well as company and external positions and actions in this area. Climate-related matters are also considered by the Board throughout the year in various other contexts, including reviews of the Outlook for Energy, the company’s safety, health and environmental performance, the annual corporate planning process, shareholder proposals, and regulatory filings such as the 10-K.

The Chairman of the Board/Chief Executive Officer and other members of the Management Committee have responsibility for management of climate risk, including in business plans, performance, and public policy. The long-term nature of ExxonMobil’s compensation program requires consideration of the risks of climate change and other sustainability matters.

Board Leadership Structure The Board believes that the decision as to who should serve as Chairman and/or CEO is the proper responsibility of the Board.

Director Qualifications. The Board has adopted guidelines outlining the qualifications sought when considering non-employee director candidates. In part, the guidelines describe the necessary experiences and skills expected of director candidates as follows: “Candidates for non-employee director of Exxon Mobil Corporation should be individuals who have achieved prominence in their fields, with experience and demonstrated expertise in managing large,
relatively complex organizations, and/or, in a professional or scientific capacity, be accustomed to dealing with complex situations, preferably those with worldwide scope.”

**Director Independence.** Our Corporate Governance Guidelines require that a substantial majority of the Board consist of independent directors. In general, the Guidelines require that an independent director must have no material relationship with ExxonMobil, directly or indirectly, except as a director. The Board determines independence on the basis of the standards specified by the New York Stock Exchange (NYSE).

**Code of Ethics and Business Conduct.** The Board maintains policies and procedures (which we refer to in this proxy statement as the “Code”) that represent both the code of ethics for the principal executive officer, principal financial officer, and principal accounting officer under SEC rules, and the code of business conduct and ethics for directors, officers, and employees under NYSE listing standards. The Code applies to all directors, officers, and employees. The Code includes a Conflicts of Interest Policy under which directors, officers, and employees are expected to avoid any actual or apparent conflict between their own personal interests and the interests of the Corporation.

**Board Meetings and Committees; Annual Meeting Attendance.** The Board met 12 times in 2016. ExxonMobil’s incumbent directors, on average, attended approximately 93 percent of Board and committee meetings during 2016. No director attended less than 75 percent of such meetings. ExxonMobil’s non-employee directors held eight executive sessions in 2016.

The Board appoints committees to help carry out its duties. Board committees work on key issues in greater detail than would be possible at full Board meetings. Only non-employee directors may serve on the Audit, Compensation, Board Affairs, and Public Issues and Contributions Committees. Each committee has a written charter.


**Director Compensation**

Director compensation elements are designed to: Ensure alignment with long-term shareholder interests; Ensure the Company can attract and retain outstanding director candidates who meet the selection criteria outlined in the Guidelines for Selection of Non-Employee Directors, which can be found on the Corporate Governance section of our website; Recognize the substantial time commitments necessary to oversee the affairs of the Corporation; and Support the independence of thought and action expected of directors.

Non-employee director compensation levels are reviewed by the Board Affairs Committee each year, and resulting recommendations are presented to the full Board for approval. The Committee uses an independent consultant, Pearl Meyer, to provide information on current
developments and practices in director compensation. Pearl Meyer is the same consultant retained by the Compensation Committee to advise on executive compensation, but performs no other work for ExxonMobil.

ExxonMobil employees receive no additional pay for serving as directors. Non-employee directors receive compensation consisting of cash and equity in the form of restricted stock.

Non-employee directors are also reimbursed for reasonable expenses incurred to attend Board meetings or other functions relating to their responsibilities as a director of Exxon Mobil Corporation. The annual cash retainer for non-employee directors in 2016 was $110,000 per year. Chairs of the Audit and Compensation Committees and the Presiding Director receive an additional $10,000 per year.

A significant portion of director compensation is granted in the form of restricted stock to align director interests with the interests of our long-term shareholders. The annual restricted stock award grant for incumbent non-employee directors is 2,500 shares. A new non-employee director receives a one-time grant of 8,000 shares of restricted stock upon first being elected to the Board.

Sources:
- The “Climate risk oversight” section is from the ExxonMobil 2018 Energy and Carbon Summary, page 22.
## Executive Compensation

<table>
<thead>
<tr>
<th>How did we perform?</th>
<th>How do we link performance and pay?</th>
<th>How do we pay?</th>
<th>How do we manage risk?</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Best-ever safety performance</td>
<td>• Industry-leading results required in <strong>7 pre-established performance areas and metrics</strong>, over time periods aligned with investment lead times of the business, to achieve top level incentive award</td>
<td>• Bonus program <strong>down 30 percent</strong>, which <strong>followed a 35-percent reduction</strong> in 2015</td>
<td>• Significant performance share holding requirement through <strong>long vesting periods</strong></td>
</tr>
<tr>
<td>• Industry-leading ROCE over the business cycle</td>
<td></td>
<td>• Ultimate value of long-term performance shares determined by share price at vest</td>
<td>• Performance shares <strong>at risk of forfeiture</strong> and <strong>cannot be used as collateral</strong> for any purpose, including during retirement</td>
</tr>
<tr>
<td>• 2016 results</td>
<td></td>
<td>• Vesting periods that are <strong>3 times longer</strong> than competitors</td>
<td>• <strong>No change-in-control arrangements</strong> and <strong>no employment contracts</strong></td>
</tr>
<tr>
<td>o Earnings of <strong>$7.8 billion</strong></td>
<td></td>
<td>• CEO realized and unrealized pay at <strong>43rd</strong> percentile of benchmark companies</td>
<td>• <strong>Bonus clawback policy</strong></td>
</tr>
<tr>
<td>o Distributed <strong>$12.5 billion</strong> to shareholders</td>
<td></td>
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<tr>
<td>• Strongest balance sheet among industry peers</td>
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Source: Table recreated from “Executive Compensation Overview” section of the ExxonMobil Notice of 2017 Annual Meeting and Proxy Statement, pages 27-36.
Strategy

About ExxonMobil

As the world’s largest publicly held oil and natural gas company, ExxonMobil uses technology and innovation to safely and responsibly deliver the energy and products the world needs. Every day, our employees work diligently to address the challenges of meeting growing global energy demand. In 2016, ExxonMobil supplied about 1.5 percent of the world’s energy demand, equivalent to about 10 percent of U.S. energy demand. The reliable and affordable energy we supply is vital to fueling economic activity and helping improve the living standards of people around the world.

As we make significant investments around the world to help meet the world’s growing energy needs, we also invest in the communities in which we work. In 2016, we contributed $242 million to communities around the world.

ExxonMobil has a diverse portfolio of high-quality assets, projects and resources across our Upstream, Downstream and Chemical businesses. Our technical expertise, global reach and integrated business model provide ExxonMobil with a competitive advantage. Our flexibility and focus on fundamentals enable us to deliver value irrespective of the industry environment.

In 2016, we continued to demonstrate strong financial and operating performance across our business despite very challenging industry conditions:

- Achieved earnings of $7.8 billion and return on average capital employed of 3.9 percent.
- Spent $19.3 billion on capital and exploration expenditures.
- Completed five major Upstream projects with a working interest production capacity of almost 250,000 oil-equivalent barrels per day.
- Made significant oil discoveries offshore Nigeria and Guyana, and a gas discovery onshore Papua New Guinea.
- Progressed construction of a new hydrocracker project at our refinery in Rotterdam, Netherlands.
- Advanced construction of a world-scale specialty polymers facility in Singapore that will produce halobutyl rubber and performance resins.


Management’s View of the Market

Our Upstream business includes exploration, development, production, natural gas marketing, and research activities.
We maintain a large, diverse portfolio of opportunities that facilitate selective and profitable long-term value growth. We create value by progressing attractive opportunities while maintaining capital discipline. Proven project management systems incorporate best practices developed from our experience of rigorously managing a global project portfolio from the initial discovery phase to production start-up.

Technology is vital to increasing shareholder value. We have a long-standing commitment to apply research and technology to find, develop, and produce lower-cost oil and gas in an environmentally responsible manner. We benefit from an integrated model where technological advances in the Upstream, Downstream, and Chemical businesses are used to generate opportunities across the value chain.

We focus on improving long-term profitability by investing in low-cost, higher-margin barrels, maximizing the value of installed capacity, and reducing costs through productivity and efficiency gains. When appropriate, we engage resource owners to develop mutually beneficial fiscal and contractual terms to promote competitive resource development.

Our Upstream strategies, supported by a relentless focus on effective risk management and safety, are designed to generate industry-leading shareholder value over the long term.

Meeting the world’s growing demand for energy presents a tremendous challenge that requires a long-term view, significant investment, and continued innovation. Over the coming decades, energy sources will continue to evolve and diversify, driven by changes in technology, consumer needs, and public policies. Crude oil is projected to remain the single biggest source of energy, while natural gas will play an increasingly important role in meeting global energy needs. Demand for oil is expected to rise by approximately 20 percent from 2015 to 2040, led by increased commercial transportation activity and petrochemicals. As a result of advances in technology, a growing share of this demand will be met by sources such as deep water, tight oil, and oil sands. As a component of supply, natural gas will be the fastest-growing major energy source through 2040. Global demand for natural gas is expected to rise by close to 45 percent from 2015 to 2040. Gas supplies from unconventional sources are projected to account for about 60 percent of that growth. In addition, liquefied natural gas volumes are expected to be about 2.5 times higher by 2040.

ExxonMobil’s Downstream business has a diverse global portfolio of refining and distribution facilities, lubricant plants, marketing operations, and brands, supported by a world-class research and engineering organization. We are one of the world’s largest refiners and lube basestock manufacturers.

ExxonMobil’s operating results reflect 22 refineries with distillation capacity of more than 4.9 million barrels per day and lube basestock capacity of 126 thousand barrels per day. Our business model leads the industry with more than 80 percent of our refining capacity integrated with chemical or lube basestock manufacturing facilities, providing unique optimization capabilities across the entire value chain.
Our fuels and lubricants marketing businesses have a global reach, supported by world-renowned brands, including Exxon, Mobil, and Esso. Our long-standing record of technology leadership underpins innovative products and services that deliver superior performance for consumers and long-term value for shareholders.

By 2040, demand for transportation fuel is expected to increase by 25 percent versus 2015. This increase will be driven by commercial transportation, primarily in developing countries. The resulting fuel mix will continue to shift from gasoline to diesel. In fact, global transportation demand for diesel is expected to increase by more than 30 percent over the period, with more than half of the growth in Asia Pacific. At the same time, worldwide gasoline demand is expected to be essentially flat, as declining demand from fuel economy improvements in developed countries is offset by growth in developing nations. Stricter emissions standards will reduce demand for high-sulfur fuel oil as the marine sector shifts to cleaner fuels over the coming decade. Natural gas is likely to increase its penetration as a transportation fuel, particularly for heavy-duty vehicles and marine vessels, where its characteristics as a lower-emission fuel may provide significant benefits.

Lubricant demand is also expected to grow with increased economic activity, particularly in Asia Pacific. Within the high-value synthetic lubricants sector, where ExxonMobil has a leading market position, demand is expected to significantly outpace industry growth.

Refining margins can vary significantly across regions. Refineries in North America have benefited from cost-competitive feedstock and energy supplies. European refining remains challenged due to site configurations and declining demand, while Asia Pacific has the highest demand growth. In all regions, ExxonMobil is selectively investing in advantaged sites and value chains to improve long-term competitiveness. Regardless of the industry environment, our integrated business model, world-class assets, and feedstock flexibility position us to be a market leader across the business cycle.

ExxonMobil Chemical is one of the largest chemical companies in the world. Our unique portfolio of commodity and specialty businesses generates annual sales of nearly 25 million tonnes of prime products. We have world-scale manufacturing facilities in all major regions, and our products serve as the building blocks for a wide variety of everyday consumer and industrial products.

We process feedstocks from ExxonMobil’s Upstream and Downstream operations, supplemented by market sources, to manufacture chemical products for higher-value end uses. We focus on product lines that capitalize on scale and technology advantages, building on our strengths in advantaged feedstocks, lower-cost processes, and performance products. As a result, we have strong positions in the markets we serve and generate advantaged returns through the business cycle.
Worldwide chemical demand growth remained strong in 2016, supported by growth of the broader economy. Over the next decade, we estimate global chemical demand will grow nearly 45 percent, or about 4 percent per year, which is a faster pace than energy demand and economic growth.

Nearly three-quarters of the increased demand is expected to be in Asia Pacific with rising prosperity and a growing middle class. As middle-class consumers seek higher standards of living and move to cities, they are expected to purchase more packaged goods, appliances, cars, and clothing, many of which are manufactured from the chemicals produced by ExxonMobil.

While chemical demand growth is expected to be driven mainly by developing economies, regions with advantaged feedstocks are participating in supply growth. For example, unconventional natural gas development in the United States has brought significant benefits to domestic chemical producers by providing lower-cost feedstocks and energy.

For decades, chemical markets have been supplied from within regions, but global trade in chemicals is increasing. Ten years ago, the volume of chemicals traded between regions totaled about 10 percent of global production. By 2020, trade volumes are expected to be nearly 20 percent, and ExxonMobil projects that by 2025, North America could more than double its exports of major petrochemical products.

ExxonMobil is well positioned to meet the needs of Asia Pacific, Africa, Latin America, and other growth markets through our world-scale facilities, strategic investments, and commercial and technical resources around the globe. While the relative attractiveness of feedstocks changes over time, our feed flexibility, global supply capability, and integration across our operations allow us to adapt to changing market conditions and outperform competition.

Source: Excerpts from the ExxonMobil 2016 Summary Annual Report, pages 30-35.

Business Model

Upstream: Capturing Attractive Opportunities

ExxonMobil pursues quality exploration opportunities and development projects to grow high-value production capacity around the globe. By leveraging proprietary technology and focusing on project execution, we achieve lower unit cost of installed capacity. We also maximize the productivity of our existing operations and capture unique opportunities for capital-efficient expansion. This approach enables us to deliver increased shareholder value.

ExxonMobil’s exploration program pursues a diverse set of high-quality resource opportunities. We are focused on exploring in areas with high resource potential, such as Guyana, Mozambique, Cyprus, and deepwater offshore Newfoundland and Labrador. We are also
focused on areas near our current operations, where discoveries can leverage existing infrastructure, including Papua New Guinea, West Africa, and the Gulf of Mexico. Recognizing the opportunity presented by current market conditions, we are investing in large-scale seismic acquisition programs. In 2016, we participated in more than 24,000 square miles of 3D seismic surveys covering diverse geological basins around the world, including in Eastern Canada, Mexico, Guyana, Ireland, South Africa, and Mozambique. This data enables us to evaluate recently captured acreage and identify new prospective exploratory drilling locations. Proprietary research in advanced seismic imaging and high-performance computing enhances our ability to extract maximum value from seismic data. Recent large-scale discoveries in Guyana and Nigeria demonstrate the success of these efforts.

**Upstream: Advancing Unconventional Developments**

ExxonMobil’s success in unconventional development is underpinned by our expertise in drilling, completing, and operating horizontal wells in shale, tight oil, and other unconventional reservoirs. Our quality acreage position, which contains the largest unconventional resource base in the industry, is enhanced by high-impact technologies from our world-class research organization. These competitive strengths enable us to reduce development costs, improve recovery, and grow profits. Our current focus is on liquids-rich plays, primarily in the Permian Basin, Bakken Formation, and Argentina.

Covering more than 11 million net acres, our diverse asset base includes operations in 14 U.S. states, Western Canada, and Argentina; interests in more than 55,000 producing oil and natural gas wells; and material holdings in virtually every major unconventional play.

Benefiting from expertise built from completing more than 5,000 horizontal wells since Barnett operations began in 2004, we operate about 80 percent of our U.S. unconventional assets, facilitating optimum development. We have a robust and deep inventory of more than 24,000 unconventional oil and gas wells that deliver a greater-than-10-percent rate of return at $60 per barrel oil and $3 per thousand cubic feet of gas. Additionally, we have the ability to quickly adjust activity levels based on market conditions.

Over the past few years, ExxonMobil has generated significant growth from liquids-rich plays, where we have focused the bulk of our investment. For example, since 2014, we have increased gross operated Permian and Bakken production by about 60 thousand barrels of oil per day, or more than 50 percent. In particular, in the Permian, production has increased 70 percent over the same period. Natural gas activity is focused in the Utica and Haynesville plays where we operate joint venture projects with attractive terms. In the Utica, 2016 production increased five-fold over 2015 levels, reaching 250 million cubic feet of gas per day by year end.

ExxonMobil continues to enhance our acreage position through trades, farm-ins, and acquisitions. Since 2014, we have completed six transactions in the Permian Basin targeting quality acreage in the Midland and Delaware basins.
Downstream: Strengthening the Portfolio
Investments across the value chain continue to strengthen ExxonMobil’s portfolio of refineries and other advantaged manufacturing assets. We continue to increase our feedstock and logistics flexibility, upgrade the value of hydrocarbon molecules we process in our system, and expand volumes of specialty products. Our ability to generate attractive returns across the business cycle is driven by our disciplined investment program, our unrelenting focus on safe and reliable operations, and our unwavering commitment to world-class brands and products.

ExxonMobil’s Downstream segment is meeting our customers’ growing need for transportation fuels, lubricants, and specialties. The segment is generating solid cash flow to support shareholder distributions and investments in the business. We are consistently focused on operational excellence, leveraging our global scale and maximizing integration across our businesses to optimize costs and maximize returns. As a result, cash operating costs in our refinery network remain well below the industry average. We also continue to optimize the portfolio. We divested smaller, less-competitive facilities and redeployed resources and capital to our larger, more efficient sites that are integrated with chemical and lubricant manufacturing. Since 2005, these steps have reduced our refining capacity by more than 1.4 million barrels per day.

Chemical: Enhancing Value Through Strategic Investments
ExxonMobil’s Chemical business is strategically investing to capture advantaged feedstocks and increase performance product capacity to supply growing markets worldwide. Using our ability to efficiently produce high-volume commodity chemicals, we continue to add performance and specialty products to our platform. Our refineries and chemical manufacturing sites use advanced technologies to provide benefits to our customers while delivering industry-leading value to our shareholders. ExxonMobil’s Chemical business leads the industry in return on capital employed across the cycle.

ExxonMobil’s portfolio of manufacturing assets is geographically diverse, highly integrated with our refining network, and yields a wide range of products. This provides the flexibility to shift our mix of feedstock supply and production as market conditions change. Our strength in operational excellence, efficiency, and process technology allows us to use a higher percentage of advantaged feeds than our competition. We have the ability to process a diverse slate of both gas and liquid feeds, including ethane, refinery gas, and a variety of heavy liquids. For example, by leveraging proprietary technologies, our world-class steam cracker in Singapore can process an unprecedented range of feedstocks, from light gases to heavy liquids, including crude oil. The ability to process crude oil directly into chemicals provides a unique cost advantage over naphtha feedstock, which is the industry standard in Asia. We are building on this strength with a research program focused on developing performance products, deploying lower-cost processes, and processing advantaged feedstocks.
Strategic Goals

Positioning for a lower-carbon energy future
The global energy system has continued to evolve throughout ExxonMobil’s history due to growing demand and developments in technology and policy. While the future is difficult to predict, we are well positioned to respond to a range of future outcomes, which will be driven largely by society’s needs.

Our annual Outlook for Energy process is a vital tool for understanding energy markets. It provides valuable insights on energy supply and demand trends, advancements in technology, and developments in policy. It also provides a forum to monitor lower-carbon signposts that could signal shifts in efficiency and decarbonization trends toward 2°C pathways.

With the ongoing changes in the energy system, ExxonMobil has continuously evolved its portfolio, capabilities, and flexibility to respond. This flexibility is due in large part to our:

- Portfolio diversity, including integrated upstream, downstream and chemicals businesses
- Long-standing research and development program assessing a wide spectrum of energy alternatives
- Disciplined operating and investment capabilities
- Financial strength and access to capital

As we look to the future, we remain confident that these proven capabilities will enable our businesses to adjust to society’s needs, including those that may result from evolving technology and policy.

Taking near-term action
As demonstrated by the Paris Agreement, governments have signaled an aspiration to move towards a lower-carbon energy system. We have already observed the beginnings of a shift, and are taking action to position ourselves to help meet future global energy needs. For example, we are:

Expanding supply of cleaner-burning natural gas. This will enable greater substitution of coal with natural gas in power generation. Natural gas can be up to 60-percent less carbon intensive than coal for power generation and is a significant component of ExxonMobil’s portfolio and investment activities.

Transitioning our manufacturing facilities. We are retooling our refining capacity to shift from fuel oils and light-duty vehicle gasoline to higher-value distillates (e.g., diesel, jet fuel), lubricants, and chemical feedstock. This reflects projected trends in consumer products and policy, such as growing EV penetration, increasing requirements for heavy-duty transportation...
fuels, higher performance lubricants, and increasing demand for chemical products that provide sustainability benefits.

**Mitigating emissions from our own facilities/operations.** Our prime focus is on energy efficiency and reducing flaring, venting, and fugitive emissions. ExxonMobil also extensively employs cogeneration in its operations to increase energy efficiency and reduce net emissions while reducing the need to import power. Currently, our global gross capacity for cogeneration is 5.3 gigawatts, enough to meet the annual electricity needs of 2.5 million U.S. homes.

**Developing consumer products that help others reduce their emissions.** ExxonMobil has one of the largest chemical companies in the world. Leveraging proprietary technologies, we produce an array of materials that bring both energy efficiency and sustainability benefits to consumers.

**Engaging on climate policy.** We continue to encourage policy that addresses the risks of climate change at the lowest cost to society.

We are actively engaged in evaluating potential renewable alternatives, including solar, bioenergy, and wind. Our focus is on contributing in areas where we can help make a difference in line with our technical capabilities. Our research and development program includes opportunities that could make renewable technologies more competitive. We also support the deployment of renewables as a supplier of synthetic lubricants to wind turbines around the world. The natural gas that we produce can also serve as an energy backstop to address intermittency issues associated with these energy sources. We continue to actively monitor developments in this area through our research activities and our annual *Outlook* process, advancing opportunities that appear to hold promise.

**Preparing for the long term**

We believe society will continue moving towards a lower-carbon energy system, and we are committed to longer-term solutions through our ongoing research and development program. We have collaborations with more than 80 academic institutions around the globe to progress an array of technologies that have the potential to be scalable, reliable, and commercially viable. We are focused on fundamental research to discover or enhance energy solutions for the future.

**Power generation.** One of the attributes of a lower-carbon future is the increased electrification of society. We have several areas of research that support this trend, including greater utilization of CCS and developments in energy storage technology. ExxonMobil is a leader in existing CCS, participating in more than one-fifth of the world’s CCS capacity.

**Industrial/Petrochemicals.** As economic development progresses, energy demand for industry and the need for petrochemicals will continue to grow. Here again, we expect CCS will be an important technology to reduce emissions. Biofuels, as an alternative source of energy or as feedstock, is another significant opportunity being investigated. We are also researching ways to reduce energy requirements of manufacturing facilities by fundamentally changing processes that require significant heat and pressure.
Commercial transportation. Large-scale commercial transportation requirements by road, sea, and air will continue to require fuels with high energy density. Advanced biofuels offer potential to meet these energy requirements while reducing emissions and minimizing the impact on land, fresh water, and food supplies. Our research programs are focused on algae and conversion of agricultural waste to liquid fuels. These technologies could provide renewable, lower-emission fuels that utilize existing refining processes and infrastructure.

Prepared for the potential of shifting demand
We also recognize that society’s choices on lower-carbon energies may impact demand for some products we produce. For those sectors of our business that might see a decrease in demand, rationalization of industry capacity could occur. Capacity rationalization has been a key dimension of our industry for decades. For example, over the past twenty years, the global refining sector has been overbuilt, leading to industry rationalization. During this period, our Downstream business has strengthened its competitive position by divesting smaller, less-competitive facilities and redeploying resources and capital to our larger, more efficient sites that are integrated with chemical and lubricant manufacturing. This constant highgrading of our portfolio has positioned ExxonMobil’s Downstream to be one of the most cost-competitive in industry, and positioned to address a wide variety of future scenarios. In many regards, a lower-carbon scenario may just accelerate the trend of the past two decades. ExxonMobil’s Downstream business is well positioned to compete in this environment as one of the lowest-cost producers, as illustrated in the chart below.

With our diverse portfolio and demonstrated capabilities, ExxonMobil can be successful in a wide range of future energy scenarios.

Risk Management

Stakeholder Engagement

We recognize the significant responsibilities we have to our shareholders, neighbors, customers and communities as we find ways to bring affordable energy to the global market. For a company of our size and scope, building and maintaining relationships with a diverse group of stakeholders is critical. Regular stakeholder engagement helps us understand a variety of perspectives and improve our company’s performance.

Because our business directly affects many people around the world, we seek to understand their viewpoints. We interact with our diverse stakeholders through a variety of mechanisms, including community meetings, web and social media content, corporate publications, and one-on-one and group discussions. Examples of stakeholder engagement are included throughout this report. The following list provides examples of common areas of interest.

Communities. Community development; economic development; grievance management; human rights; operational impacts; environmental performance

Customers. Product safety and sustainability; supply chain management; greenhouse gas emissions

Employees. Benefits; diversity; development opportunities; safety, health and wellness

Governments. Taxes and other revenue sources; climate change; local supplier development; job creation; human rights; impact assessments; ethics; health; education; energy supply and security

Nongovernmental organizations. Biodiversity; water management; climate change; human rights; transparency; social issues

Shareholders. Governance practices; board composition; policy engagement; risk management; climate change

Suppliers. Expectations for suppliers; local business opportunities; supplier diversity; capacity building; environmental performance

Source: ExxonMobil 2016 Corporate Citizenship Report, page 6

Material Issues

About the [2016 Corporate Citizenship Report] and materiality

We developed the 2016 Corporate Citizenship Report in accordance with the reporting guidelines and indicators of IPIECA (the global oil and gas industry association for environmental and social issues), the International Association of Oil and Gas Producers (IOGP) and the American Petroleum Institute (API). ExxonMobil was a key contributor to IPIECA, IOGP and API’s updated Oil and Gas Industry Guidance on Voluntary Sustainability Reporting (2015), and this report reflects the new common reporting-level metrics. The majority of these indicators are also consistent with the indicators used by the Global Reporting Initiative (GRI) in its G4 Sustainability Reporting Guidelines; this report is informed by the G4 guidelines but has
not been prepared in accordance with a particular GRI model. To help interested stakeholders easily access our key sustainability indicators, we have mapped relevant IPIECA, GRI and United Nations Sustainable Development Goals (SDG) indicators on our website. Note that many of the standards and metrics used in preparing this report continue to evolve and are based on management assumptions believed to be reasonable at the time of preparation, but should not be considered guarantees.

Materiality

A key step in developing this Corporate Citizenship Report is ensuring the content reflects ExxonMobil’s most material issues. According to IPIECA, material issues for sustainability reporting are those that, in the view of both the company’s management and its external stakeholders, have the potential to affect sustainability performance significantly. ExxonMobil has been conducting a materiality assessment to guide our reporting since 2006.

For this 2016 report, we reevaluated and prioritized key sustainability issues for our business and key stakeholders. A cross-functional team of ExxonMobil managers reviewed stakeholder feedback and business information to prioritize sustainability issues. The issues that are most critical to the success of our business and to stakeholder interest are covered in detail in this report. Additional information is available on exxonmobil.com and in other company publications. Please see our IPIECA/GRI/SDG index for a detailed mapping of where information regarding all material issues is located. Our draft materiality assessment results were reviewed and updated by internal subject matter experts and the External Citizenship Advisory Panel during fall 2016. Note that the concept of “material issues” under IPIECA guidelines used for purposes of this report is not meant to correspond to the concept of materiality for purposes of securities laws and disclosures required by the U.S. Securities and Exchange Commission’s rules. Our material issues are listed below.

2016 Material Issues

Safety, health and the workplace
- Emergency preparedness and response
- Employee benefits and practices
- Personnel and process safety
- Product safety and responsibility
- Product transportation safety
- Workforce engagement
- Workplace security
- Worksite health and wellness

Managing climate change risks
- Developing technology solutions
- Engaging on climate change policy
- Mitigating emissions
• Providing solutions for customers

Environmental performance
• Air emissions
• Biodiversity and ecosystem services
• Decommissioning and rehabilitation of the environment
• Environmental compliance
• Environmental management approach
• Spill performance
• Water management

Community engagement, human rights and strategic investments
• Community relations
• External stakeholder engagement
• Human rights
• Indigenous peoples

Local development and supply chain management
• Local economic growth and development
• Supply chain management

Corporate governance
• Board leadership
• Ethics and integrity
• Executive compensation and strategic advantage
• Political advocacy and contributions
• Shareholder relations
• Transparency

Business operations
• Energy future and portfolio management
• Management systems
• Operating in sensitive environments


10-K Risk Factors
ExxonMobil’s financial and operating results are subject to a variety of risks inherent in the global oil, gas, and petrochemical businesses. Many of these risk factors are not within the Company’s control and could adversely affect our business, our financial and operating results, or our financial condition. These risk factors include:
Supply and Demand. The oil, gas, and petrochemical businesses are fundamentally commodity businesses. This means ExxonMobil’s operations and earnings may be significantly affected by changes in oil, gas, and petrochemical prices and by changes in margins on refined products.

Economic conditions. The demand for energy and petrochemicals correlates closely with general economic growth rates. The occurrence of recessions or other periods of low or negative economic growth will typically have a direct adverse impact on our results.

Other demand-related factors. Other factors that may affect the demand for oil, gas, and petrochemicals, and therefore impact our results, include technological improvements in energy efficiency; seasonal weather patterns, which affect the demand for energy associated with heating and cooling; increased competitiveness of alternative energy sources.

Other supply-related factors. Commodity prices and margins also vary depending on a number of factors affecting supply. For example, increased supply from the development of new oil and gas supply sources and technologies to enhance recovery from existing sources tend to reduce commodity prices to the extent such supply increases are not offset by commensurate growth in demand.

Other market factors. ExxonMobil’s business results are also exposed to potential negative impacts due to changes in interest rates, inflation, currency exchange rates, and other local or regional market conditions.

Government and Political Factors
ExxonMobil’s results can be adversely affected by political or regulatory developments affecting our operations.

Access limitations. A number of countries limit access to their oil and gas resources, or may place resources off-limits from development altogether.

Restrictions on doing business. ExxonMobil is subject to laws and sanctions imposed by the U.S. or by other jurisdictions where we do business that may prohibit ExxonMobil or certain of its affiliates from doing business in certain countries.

Lack of legal certainty. Some countries in which we do business lack well-developed legal systems, or have not yet adopted clear regulatory frameworks for oil and gas development.

Regulatory and litigation risks. Even in countries with well-developed legal systems where ExxonMobil does business, we remain exposed to changes in law (including changes that result from international treaties and accords) that could adversely affect our results.

Security concerns. Successful operation of particular facilities or projects may be disrupted by civil unrest, acts of sabotage or terrorism, and other local security concerns.

Climate change and greenhouse gas restrictions. Due to concern over the risk of climate change, a number of countries have adopted, or are considering the adoption of, regulatory frameworks to reduce greenhouse gas emissions. These include adoption of cap and trade regimes, carbon taxes, restrictive permitting, increased efficiency standards, and incentives or mandates for renewable energy.

Government sponsorship of alternative energy. Many governments are providing tax advantages and other subsidies to support alternative energy sources or are mandating the use of specific fuels or technologies. Governments and others are also promoting research into
new technologies to reduce the cost and increase the scalability of alternative energy sources. Governments and others are also promoting research into new technologies to reduce the cost and increase the scalability of alternative energy sources. We are conducting our own research both in-house and by working with more than 80 leading universities around the world, including the Massachusetts Institute of Technology, Princeton University, the University of Texas, and Stanford University. Our research projects focus on developing algae-based biofuels, carbon capture and storage, breakthrough energy efficiency processes, advanced energy-saving materials and other technologies. For example, ExxonMobil is working with Fuel Cell Energy Inc. to explore using carbonate fuel cells to economically capture CO2 emissions from gas-fired power plants. Our future results may depend in part on the success of our research efforts and on our ability to adapt and apply the strengths of our current business model to providing the energy products of the future in a cost-competitive manner.

**Management Effectiveness**

In addition to external economic and political factors, our future business results also depend on our ability to manage successfully those factors that are at least in part within our control.

**Exploration and development program.** Our ability to maintain and grow our oil and gas production depends on the success of our exploration and development efforts. Among other factors, we must continuously improve our ability to identify the most promising resource prospects....

**Project management.** The success of ExxonMobil’s Upstream, Downstream, and Chemical businesses depends on complex, long-term, capital intensive projects....

**Operational efficiency.** An important component of ExxonMobil’s competitive performance, especially given the commodity-based nature of many of our businesses, is our ability to operate efficiently....

**Research and development.** To maintain our competitive position, especially in light of the technological nature of our businesses and the need for continuous efficiency improvement....

**Safety, business controls, and environmental risk management.** Our results depend on management’s ability to minimize the inherent risks of oil, gas, and petrochemical operations, to control effectively our business activities, and to minimize the potential for human error....

**Preparedness.** Our operations may be disrupted by severe weather events, natural disasters, human error, and similar events. For example, hurricanes may damage our offshore production facilities or coastal refining and petrochemical plants in vulnerable areas....

Source: Excerpts from the ExxonMobil 2016 Form 10-K, pages 2-4

**Managing risks to meet energy demand**

Many things we do contain an element of risk, whether technical, operational, environmental, or financial. Equipped with mature risk-management systems, we identify the risks inherent in our businesses, look to understand implications, and implement safeguards to eliminate or mitigate exposures.

**Engineering resiliency**
ExxonMobil has long operated facilities in a wide range of challenging physical environments around the globe. Our long history of design, construction, and operations provides us a solid foundation to address risks associated with different physical environments. The company is aware of the risks posed by weather and other natural elements, and actively designs its facilities and operations in consideration of this risk.

When considering physical environmental risks, we evaluate the type and location of our current and planned facilities. As an example, offshore facilities could be impacted by changes in wave and wind intensity as well as by ice flow patterns, while onshore facilities could be vulnerable to sea level rise, changes in storm surge, or geotechnical considerations.

Our facilities are designed, constructed, and operated to withstand a variety of extreme weather and environmental conditions. We use historical experience with additional safety factors to cover a range of uncertainties.

After construction of a facility, we monitor and manage ongoing facility integrity; for example through periodic checks on key aspects of the structures. In addition, we regularly participate with major engineering societies and industry groups to assess and update engineering standards.

Once facilities are in operation, we maintain disaster preparedness, response, and business continuity plans. Detailed, well-practiced, and continuously improved emergency response plans tailored to each facility help ExxonMobil prepare for unplanned events, including extreme weather. Regular emergency drills are practiced in partnership with appropriate government agencies and community coalitions to help ensure readiness and minimize the impacts of such events.

ExxonMobil's comprehensive approach and established systems enable us to manage a wide variety of possible outcomes.


Operational Excellence
Maximizing shareholder value requires that we focus relentlessly on operational excellence and effective risk management. ExxonMobil’s highly skilled and dedicated workforce rigorously employs proven management systems in all work processes and at all levels. These systems enable us to continuously improve our personnel safety, process safety, security, health, and environmental performance.

Our Commitment to Safety, Security, Health, and the Environment
ExxonMobil is committed to conducting business in a manner that is compatible with both the environmental and economic needs of the communities in which we operate, while protecting
the safety, security, and health of our employees, contractors, and the public. Operational excellence is the foundation for everything we do.

The safety, security, and health of our workforce are fundamental to the company’s success. We aim to ensure each employee and contractor comes home from work each day safe and in good health. As a result, we have significantly reduced injuries over the long term, with lost-time injuries and illnesses 80-percent lower since 2000. We will never stop working toward our goal of Nobody Gets Hurt.

Strong environmental management is crucial for our business and for society. Our Protect Tomorrow. Today expectations underscore our dedication to improving environmental performance, including reducing emissions and increasing energy efficiency.

Culture of Excellence
Achieving strong performance begins with leadership. Personal leadership drives our culture of excellence and the behaviors that sustain high operational standards. We are proud of this culture, which is reflected in our employees’ daily accomplishments around the globe. Our culture has been built over decades by men and women dedicated to doing the right things in the right way. This culture also extends to our contractors as we partner and share our vision with them.

Structured Approach
ExxonMobil’s Operations Integrity Management System (OIMS) is the cornerstone of our approach to managing safety, security, health, and environmental risks, as well as achieving excellence in performance. The OIMS framework includes 11 elements. Each element contains an underlying principle and set of expectations. Application of OIMS is required across all of ExxonMobil, with particular emphasis on facility design, construction, operations, and decommissioning. Management is responsible for ensuring appropriate systems satisfying the OIMS framework are in place, and compliance testing is performed on a regular basis. OIMS also supports our efforts to meet or exceed applicable regulations and relevant industry standards. Our management systems provide a disciplined process for continuous improvement and implementation of best practices.

Everything we do contains an element of risk, whether technical, operational, environmental, or financial. We identify the hazards inherent in our businesses, look to understand the associated consequences, and implement safeguards to eliminate or mitigate them to an acceptable level. We focus our efforts on understanding the root cause and potential consequence of each injury, spill, or process safety event. We also assess the effectiveness of our safeguards, including equipment, procedures, personnel training, and execution discipline. We gain insight from actual, near-miss, or potential events and then share learnings across our business. Through analysis of actual or potential events, including industry events, we aim to prevent all incidents, especially those with potentially significant consequences.
As a key component of our OIMS framework, our change management approach enables us to effectively identify, plan for, and mitigate changing conditions and risks. Similarly, our approach to risk management is supported by well-developed and clearly defined policies and procedures to ensure that we have a structured, globally consistent system with the highest standards in place.

Implemented by our highly competent workforce, OIMS helps us do our jobs in a safe, responsible, and efficient manner; sustain ongoing continuous improvement; and ultimately achieve operational excellence.


Sensitivities Included in our Projections

We use sensitivities to provide greater perspective on how changes to our base Outlook assumptions could affect the energy landscape. The charts below depict potential impacts to demand related to fuel economy and EV penetration, full EV penetration in light-duty vehicles, and potential changes affecting natural gas demand for electricity generation. Further discussion on sensitivities can be found in the Outlook for Energy.

Three graphs on sensitivity analysis omitted

1. Liquids—Light-duty demand sensitivities (millions of oil-equivalent barrels per day)
   1. Shaded ranges are indicative of potential shifts in global demand relative to base Outlook
   2. Liquids demand could fall about 1.2 million barrels per day for every additional 100 million electric vehicles on the road in 2040
   3. Trends in fuel economy gains lower than the Outlook basis could add more than 2 million barrels per day of liquids demand by 2040

2. Liquids—Full EV demand sensitivity (millions of oil-equivalent barrels per day)
   4. Sensitivity assumes the global light-duty vehicle fleet is 100-percent electric by 2040, requiring all new light-duty vehicle sales to be electric by 2025
   5. Battery manufacturing capacity for electric cars would need to increase by more than 50 times from existing levels by 2025
   6. Total liquids demand in 2040 could be similar to levels seen in 2013

3. Natural gas—Electricity demand sensitivities (million cubic feet per day)
   7. Accelerated deployment of solar and wind globally due to swifter cost declines and/or more generous policies could reduce natural gas demand for base load electricity
   8. Stiffer public sentiment against nuclear or coal and/or a shift toward more technology-neutral carbon abatement policies could increase natural gas demand for base load electricity
Considering 2°C Scenarios

World energy-related CO emissions related to energy intensity and CO emissions intensity (kBTU of energy used per dollar of global GDP)

Omitted chart displays global energy intensity (left axis) and CO₂ emissions intensity (bottom axis).

From 1980 to 2015, there have been large gains in efficiency, though energy-related CO₂ emissions rose from 18 billion to 33 billion tonnes. The blue circle shown for 2040 indicates these emissions are projected to be about 36 billion tonnes even with significant gains in efficiency and CO₂ emissions intensity.

To be on a 450 ppm, or hypothetical 2°C pathway, the performance in 2040 likely needs to be significantly closer to the purple line, implying faster gains in efficiency and/or faster reductions in CO₂ emissions per unit of energy. This would increase the chance of reaching a 2°C pathway, with further gains required between 2040 and 2100.

Based on this scenario analysis, primary energy demand on a worldwide basis is projected to increase about 0.5 percent per year on average from 2010 to 2040. Expected changes in demand vary by model and energy type:

- Oil demand is projected on average to decline by about 0.4 percent per year
- Natural gas demand is expected on average to increase about 0.9 percent per year
- The outlook for coal is the most negative, with diverse projections showing an average decline of about 2.4 percent per year, or about a 50 percent decline by 2040
- The projected growth rates for renewable energies and nuclear are generally quite strong averaging between 4 and 4.5 percent per year for non-bioenergy (e.g., hydro, wind, solar) and bioenergy, and about 3 percent per year for nuclear

All energy sources remain important across all the Assessed 2°C Scenarios, though the mix of energy and technology shifts over time. Oil and natural gas remain important sources, even in models with the lowest level of energy demand. Oil demand is projected to decline modestly on average, and much more slowly than its natural rate of decline from existing producing fields. Natural gas demand grows on average due to its many advantages, including lower greenhouse gas emissions.

Potential Proved Reserves and Resources Impacts Considering 2°C Scenarios

Up close: Significant investment still needed in 2°C scenarios
Considering the 2°C Scenarios Average, global oil demand would be projected to decline from 95 million barrels per day in 2016 to about 78 million barrels per day in 2040. Using the lowest oil demand growth rate among the Assessed 2°C Scenarios, oil demand would still be 53
million barrels per day in 2040, as seen in the chart below. However, absent future investment, world oil production to meet demand would be expected to decrease from 95 million barrels per day in 2016 to about 17 million barrels per day in 2040. This decrease would result from natural field decline as oil is produced. This natural field decline rate is forecasted to greatly exceed the decline rate in global oil demand even under the 2°C Scenarios Average.

With the potential 2040 imbalance (absent future investment) the more than 90 percent of our proved reserves that are projected to be produced by 2040 are clearly supported by ample demand, and therefore face little risk related to the 2°C Scenarios Average.

Natural gas reserves face even less risk, as demand in 2040 is expected to increase under the 2°C Scenarios Average, versus 2016 demand levels.

Considering the IEA’s Sustainable Development Scenario (a 2°C scenario), the IEA estimates that almost $14 trillion of investment will be needed for oil and natural gas supply between 2017 and 2040.

**Omitted graphs**

1. **Global liquids supply estimate** (million oil-equivalent barrels per day)
   Two side-by-side bars are presented. One represents “Existing supplies” in 2016. The other bar illustrates three demand estimates for 2040—(1) Highest demand based on Assessed 2°C Scenarios; (2) Demand based on 2°C Scenarios average; and (3) Lowest demand based on Assessed 2°C Scenarios.

2. **Global natural gas supply estimate** (billion cubic feet per day)
   Two side-by-side bars are presented. One represents “Existing supplies” in 2016. The other bar illustrates three demand estimates for 2040—(1) Highest demand based on Assessed 2°C Scenarios; (2) Demand based on 2°C Scenarios average; and (3) Lowest demand based on Assessed 2°C Scenarios.

**Proved Reserves and Producing Assets**

At the end of 2016, ExxonMobil’s proved reserves totaled about 20 billion oil-equivalent barrels, of which approximately 53 percent were oil and 47 percent were natural gas. These proved reserves, which represent a diverse portfolio, are assessed annually and reported in our annual report on Form 10-K. A recent study concluded that the main driver of intrinsic value of an integrated oil company’s upstream operations is its proved reserves. Based on currently anticipated production schedules, we estimate that by 2040, over 90 percent of our year-end 2016 proved reserves will have been produced. Considering that the 2°C Scenarios Average implies significant use of oil and natural gas through the middle of the century, we believe these reserves face little risk.
For the less than 10 percent of our year-end 2016 proved reserves that are projected to be produced beyond 2040, the reserves are generally associated with assets where the majority of development costs have been incurred before 2040. While these proved reserves may be subject to more stringent climate policies in the future, we believe that investments could mitigate production-related emissions and associated costs. In addition, these assets have generally lower risk given the subsurface and operational knowledge that accumulates over many decades of production. Accordingly, we believe the production of these reserves will likely remain economic even under the 2°C Scenarios Average.

For producing assets that do not currently meet the SEC’s definition of proved reserves, we expect to continue producing these assets through the end of their economic lives. We continue to enhance the long-term viability of these assets through increased efficiency, cost reductions, and the deployment of new technologies and processes.

Metrics and Targets and Performance

Key Metrics

How did we perform?

Industry-leading results in 7 pre-established performance areas and metrics over the investment lead times of the business, across companies within the oil and gas industry of similar scale and complexity, formed the basis for decisions made by the Compensation Committee in 2016.

1. Safety and Operations Integrity
   - Leading safety performance; indicator of business performance and underscores safety as a core value. Omitted graphic—A line graph compares “Lost-Time Injuries and Illnesses Rate” (incidents per 200,000 work hours) for ExxonMobil to the U.S. Petroleum Industry Benchmark over 2007-2016.

2. Return on Average Capital Employed (ROCE)
   - Balanced and highly competitive portfolio of resources, assets, and products, resulting in industry-leading ROCE over the business cycle.
     - Omitted graphic—A bar chart compares ROCE (percent) using a 10-year average, a 5-year average, and 2016 of ExxonMobil to Industry Group Average, Chevron, Shell, Total, and BP

3. Free Cash Flow
   - Strong long-term free cash flow outpacing competitors
   - Superior cash flow provides capacity for investments and shareholder distributions
     - Omitted graphic—A bar chart compares free cash flow (dollars in billions) using a 10-year average, a 5-year average, and 2016 of ExxonMobil to Industry Group Average, Chevron, Shell, Total, and BP

4. Shareholder Distributions
   - Industry-leading shareholder distributions over the business cycle
   - Distributed 53 cents of every dollar of cash generated from operations and asset sales from 2007 to 2016
     - Omitted graphic—A bar chart compares shareholder distributions (yield, percent) using a 10-year average, a 5-year average, and 2016 of ExxonMobil to Industry Group Average, Chevron, Shell, Total, and BP

5. Total Shareholder Return
   - Superior relative returns through a range of economic environments and business cycles
   - Leading the industry in TSR in all performance periods, aligned with the long investment lead times of our business
6 & 7. Strategic Business Results and Project Execution

A. Upstream: Capital-Efficient Resource Developments and Portfolio Enhancements
- Averaged 22.8 percent ROCE over the past 10 years
- Added nearly 2.5 billion net oil-equivalent barrels of new resource and maintained a total resource base of 91 billion oil-equivalent barrels
- Completed five major Upstream projects in 2016, contributing about 250 thousand oil-equivalent barrels per day of working interest production capacity; start-up of 27 major projects since 2012

B. Downstream and Chemical: Growing the Value of Premier Integrated Businesses
- Averaged 22.7 percent ROCE over the past 10 years
- Invested $4.7 billion, focused on higher-value products, feedstock flexibility, logistics, and energy efficiency
- Advanced construction of major expansions at our Baytown and Mont Belvieu, Texas, facilities, including a new world-scale 1.5-million-tonne-per-year ethane steam cracker and associated polyethylene units

C. Unparalleled Financial Flexibility
- Financial strength a distinct competitive advantage
- Ability to invest in attractive opportunities
- Access to financial markets on favorable terms
- Respected partner of choice

Source: Created from the ExxonMobil Notice of 2017 Annual Meeting and Proxy Statement, pages 28-29.

Emissions

Mitigating emissions in our operations
As we seek to increase production of oil and natural gas to meet growing global energy demand, we are committed to mitigating greenhouse gas emissions within our operations.
ExxonMobil has a robust set of processes to improve efficiency, mitigate emissions and contribute to effective long-term solutions to manage climate change risks. These processes include, where appropriate, setting tailored objectives at the business, site and equipment levels, and then stewarding progress toward meeting those objectives. Based on decades of experience, ExxonMobil believes this rigorous bottom-up approach is a more effective and meaningful way to drive efficiency improvement and greenhouse gas emissions reduction than simply setting high-level corporate targets.

We also believe that continuing to use this approach will yield further improvements in all sectors of our business.

In the near term, we are working to increase energy efficiency while reducing flaring, venting and fugitive emissions in our operations. In the medium term, we are deploying proven technologies such as cogeneration and carbon capture and storage where technically and economically feasible. Longer term, we are conducting and supporting research to develop breakthrough technologies. Since 2000, ExxonMobil has spent approximately $8 billion to develop lower-emission energy solutions.

In 2016, ExxonMobil’s net equity greenhouse gas emissions were 125 million CO₂-equivalent metric tons. Relative to our 2015 performance, our 2016 emissions increased by approximately 3 million CO₂-equivalent metric tons. This increase was primarily driven by new facilities in our Upstream operations, such as our Gorgon Jansz liquefied natural gas project in Western Australia.

2016 CDP Response (link omitted)

Energy efficiency
In 2016, energy used in our operations totaled 1.5 billion gigajoules. Energy utilized in our operations generates more than 80 percent of our direct greenhouse gas emissions and is one of our largest operating costs. As such, we have focused on energy efficiency for many decades. Since 2000, we have used our Global Energy Management System in the Downstream and Chemical businesses, and our Production Operations Energy Management System in our Upstream businesses to identify and act on energy savings opportunities. Through our commitment to energy efficiency, application of structured processes and continued use of a bottom-up approach, we continue to yield industry-leading results.

For example, in the 2010, 2012 and 2014 Refining Industry Surveys, ExxonMobil’s global refining operations achieved first quartile energy efficiency performance.

Cogeneration
Cogeneration technology captures waste heat generated from the production of electricity for use in production, refining and chemical processing operations. Due to its inherent energy efficiency, the use of cogeneration leads to reduced greenhouse gas emissions. Our
cogeneration facilities enable the avoidance of approximately 6 million metric tons per year of greenhouse gas emissions.

We have interests in approximately 5,300 megawatts of cogeneration capacity in more than 100 installations around the world. This capacity is equivalent to the annual energy needed to power 2.5 million U.S. homes. Over the past decade, we have added more than 1,000 megawatts of cogeneration capacity and continue to develop additional investment opportunities.

**Flaring**
Flaring is the process of burning natural gas as an alternative releasing the gases directly into the atmosphere. Flaring is done for safety reasons or because barriers to the development of gas markets and gas infrastructure prevent natural gas from being used.

ExxonMobil is a charter member of the *Global Gas Flaring Reduction Partnership*, an initiative of the World Bank that seeks to reduce flaring by increasing the use of natural gas associated with oil production, by helping remove technical and regulatory barriers to flaring reduction, conducting research, disseminating best practices and developing regulatory country-specific gas flaring reduction programs. In addition, we put in place our own Upstream Flaring and Venting Reduction Environmental Standard for Projects in 2005. Our goal is to avoid routine flaring in new Upstream projects and to reduce “legacy” flaring in our existing operations.

In 2016, flaring volume from our combined Upstream, Downstream and Chemical operations totaled 5.0 million metric tons. This represents a decrease of 0.3 million metric tons compared with our 2015 performance. The decrease in flaring in 2016 was largely due to changes at our Usan field in Nigeria, where—since assuming operatorship in 2014—we have implemented a program to eliminate routine flaring.

**Venting and fugitive emissions**
Venting is the process of releasing methane and other gases into the atmosphere. Fugitive emissions occur when gases or vapors escape from pressurized equipment. We recognize the importance of reducing these emissions and continue implementing cost-effective methods to reduce methane and other hydrocarbon emissions in our operations. This includes structured leak detection and repair programs in which we use optical gas imaging cameras to identify leaks for prompt repair. Additionally, we continue to replace high-bleed pneumatic devices with lower-emission technology and conduct reduced emissions completions in our ongoing efforts to enhance the environmental performance of our operations.

Our methane emissions in 2016 totaled 7 million CO2-equivalent metric tons, which is similar to our performance over the last several years. Most of our venting and fugitive emissions are methane, which represent approximately 6 percent of our direct greenhouse gas emissions.

**Omitted graphics**
**Greenhouse gas emissions (net)**
A bar chart presents 2007-2016 Net equity, CO$_2$-equivalent emissions, measured in millions of metric tons. A note explains, “Our calculations are based on the guidance provided in API’s Compendium of Greenhouse Gas Emission Estimation Methodologies for the Oil and Gas Industry and IPIECA’s Petroleum Industry Guidelines for Reporting Greenhouse Gas Emissions. We report greenhouse gas emissions on a net equity basis for our business operations, demonstrating a share of emissions from any facility or operation in which ExxonMobil holds a financial interest, with the share reflecting the equity fractional interest.”

**Greenhouse gas emissions (normalized)**
A line graph reports 2007-2016 Net equity, CO$_2$-equivalent emissions, measured in millions of metric tons per 100 metric tons of throughput or production. Data are presented for Upstream, Downstream, and Chemical.

**Greenhouse gas emissions avoided from ExxonMobil actions**
A bar chart presents 2007-2016 Net equity, CO$_2$-equivalent emissions, measured in metric tons. Data are presented for Energy efficiency and cogeneration and Flare/vent reduction.

**Hydrocarbon flaring**
A bar chart presents 2007-2016 hydrocarbon flaring in millions of metric tons. Data are presented for Upstream, Downstream, and Chemical.

2016 Financial & Operating Summary

Results & Highlights

- Strong environmental results and best-ever safety performance
- Earnings of $7.8 billion and return on average capital employed of 3.9 percent
- Cash flow from operations and asset sales of $26.4 billion, demonstrating the resilience of the integrated business
- Annual dividends per share increased 3.5 percent in 2016, the 34th consecutive year of per-share dividend increases
- Total shareholder distributions of $12.5 billion
- Capital and exploration expenditures of $19.3 billion
- Completed five major Upstream projects with working interest production capacity of almost 250 thousand oil-equivalent barrels per day, including projects in Australia, Kazakhstan, and the United States
- Made significant oil discoveries offshore Nigeria and Guyana, and a significant gas discovery onshore Papua New Guinea
- Captured more than 6 million net exploration acres
- Advanced construction of world-scale specialty polymers facilities in Singapore that will produce halobutyl rubber and performance resins
- Progressed construction of a new hydrocracker project at our refinery in Rotterdam, Netherlands, which will use proprietary technology to produce ultra-low sulfur diesel and premium Group II lube basestocks
- Approved projects to increase low-sulfur gasoline and polyethylene production at our integrated site in Beaumont, Texas
- Approved the expansion of our facility in Wales, United Kingdom, to increase production of Santoprene high-performance elastomers

Omitted graphics


2. Return on Capital Employed. This bar chart compared both 2016 and 2012-2016 average Return on Capital Employed for ExxonMobil compared to Chevron, Shell, Total, and BP.

Source: This page was created from the ExxonMobil 2016 Financial and Operating Review, page 2.
## Financial Information

### Financial Highlights

<table>
<thead>
<tr>
<th>(millions of dollars, unless noted)</th>
<th>2016</th>
<th>2015</th>
<th>2014</th>
<th>2014</th>
<th>2012</th>
</tr>
</thead>
<tbody>
<tr>
<td>Net income attributable to ExxonMobil</td>
<td>7,840</td>
<td>16,150</td>
<td>32,520</td>
<td>32,580</td>
<td>44,880</td>
</tr>
<tr>
<td>Cash flow from operations and asset sales</td>
<td>26,357</td>
<td>32,733</td>
<td>49,151</td>
<td>47,621</td>
<td>63,825</td>
</tr>
<tr>
<td>Capital and exploration expenditures</td>
<td>19,304</td>
<td>31,051</td>
<td>38,537</td>
<td>42,489</td>
<td>39,799</td>
</tr>
<tr>
<td>Research and development costs</td>
<td>1,058</td>
<td>1,008</td>
<td>971</td>
<td>1,044</td>
<td>10,042</td>
</tr>
<tr>
<td>Total debt and year end</td>
<td>42,762</td>
<td>38,687</td>
<td>29,121</td>
<td>22,699</td>
<td>11,581</td>
</tr>
<tr>
<td>Average capital employed</td>
<td>212,438</td>
<td>208,755</td>
<td>203,110</td>
<td>191,575</td>
<td>179,094</td>
</tr>
<tr>
<td>Market valuation at year end</td>
<td>374,438</td>
<td>323,928</td>
<td>388,398</td>
<td>438,684</td>
<td>389,680</td>
</tr>
<tr>
<td>Regular employees at year end (thousands)</td>
<td>71.1</td>
<td>73.5</td>
<td>75.3</td>
<td>75.0</td>
<td>76.9</td>
</tr>
</tbody>
</table>

### Key Financial Ratios

<table>
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</tr>
</thead>
<tbody>
<tr>
<td>Return on average capital employed (percent)</td>
<td>3.9</td>
<td>7.9</td>
<td>16.2</td>
<td>17.2</td>
<td>25.4</td>
</tr>
<tr>
<td>Earnings to average ExxonMobil share of equity (percent)</td>
<td>4.6</td>
<td>9.4</td>
<td>18.7</td>
<td>19.2</td>
<td>28.0</td>
</tr>
<tr>
<td>Debt to capital (percent)</td>
<td>19.7</td>
<td>18.0</td>
<td>13.9</td>
<td>11.2</td>
<td>6.3</td>
</tr>
<tr>
<td>Net debt to capital (percent)</td>
<td>18.4</td>
<td>16.5</td>
<td>11.9</td>
<td>9.1</td>
<td>1.2</td>
</tr>
<tr>
<td>Current assets to current liabilities (times)</td>
<td>0.87</td>
<td>0.79</td>
<td>0.82</td>
<td>0.83</td>
<td>1.01</td>
</tr>
<tr>
<td>Fixed-charge coverage (times)</td>
<td>5.7</td>
<td>17.6</td>
<td>46.9</td>
<td>55.7</td>
<td>62.4</td>
</tr>
</tbody>
</table>

### Dividend and Shareholder Return Information

<table>
<thead>
<tr>
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</tr>
</thead>
<tbody>
<tr>
<td>Dividends per common share (dollars)</td>
<td>2.98</td>
<td>2.88</td>
<td>2.70</td>
<td>2.46</td>
<td>2.18</td>
</tr>
<tr>
<td>Dividends per share growth (annual percent)</td>
<td>3.5</td>
<td>6.7</td>
<td>9.8</td>
<td>12.8</td>
<td>17.8</td>
</tr>
<tr>
<td>Number of common shares outstanding (millions)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Average</td>
<td>4,177</td>
<td>4,196</td>
<td>4,282</td>
<td>4,419</td>
<td>4,628</td>
</tr>
<tr>
<td>Average—assuming dilution</td>
<td>4,177</td>
<td>4,196</td>
<td>4,282</td>
<td>4,419</td>
<td>4,628</td>
</tr>
<tr>
<td>Year end</td>
<td>4,128</td>
<td>4,156</td>
<td>4,201</td>
<td>4,335</td>
<td>4,502</td>
</tr>
<tr>
<td>Total shareholder return (annual percent)</td>
<td>19.8</td>
<td>(12.6)</td>
<td>(6.0)</td>
<td>20.1</td>
<td>4.7</td>
</tr>
<tr>
<td>Common stock purchases (millions of dollars)</td>
<td>977</td>
<td>4,039</td>
<td>13,183</td>
<td>15,998</td>
<td>21,068</td>
</tr>
<tr>
<td>Market quotations for common stock (dollars)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>High</td>
<td>95.55</td>
<td>93.45</td>
<td>104.76</td>
<td>101.74</td>
<td>93.67</td>
</tr>
<tr>
<td>Low</td>
<td>71.55</td>
<td>66.55</td>
<td>86.19</td>
<td>84.79</td>
<td>77.13</td>
</tr>
<tr>
<td>Average daily close</td>
<td>86.22</td>
<td>82.83</td>
<td>97.27</td>
<td>90.51</td>
<td>86.53</td>
</tr>
<tr>
<td>Year-end close</td>
<td>90.26</td>
<td>77.95</td>
<td>92.45</td>
<td>101.20</td>
<td>86.55</td>
</tr>
</tbody>
</table>

Source: Recreated from ExxonMobil 2016 Financial and Operating Review, page 82.