

ExxonMobil's 2012 Outlook for Energy Sees Efficiency, Developing World Economic Growth and Natural Gas Reshaping Global Demand through 2040

- Demand to be about 30 percent higher in 2040 versus 2010 as population grows and global GDP doubles; demand in developing nations rises nearly 60 percent.
- Less-carbon-intensive fuels, particularly natural gas, gain market share, while coal peaks and begins a decline for the first time in modern history.
- Gas from shale and other unconventional rock formations will account for 30 percent of global gas production by 2040.
- Demand growth would be more than four times the projected 30 percent without expected gains in efficiency.

IRVING, Texas--(BUSINESS WIRE)-- Demand for energy will rise through 2040 as global economic output doubles and prosperity expands across a world where population will grow to nearly 9 billion people, [Exxon Mobil Corporation](#) (NYSE:XOM) states in its [The Outlook for Energy: A View to 2040, issued today](#). Extending its annual long-term energy forecast to 2040 for the first time, ExxonMobil said this year's *Outlook* reveals several trends that will influence how the world uses energy over the coming decades.

The *Outlook* projects that global energy demand in 2040 will be about 30 percent higher than it was in 2010, led by growth in developing regions such as China, India, Africa and other emerging economies.

While oil will remain the most widely used fuel, overall energy demand will be reshaped by a continued shift toward less-carbon-intensive energy sources – such as natural gas – as well as steep improvements in energy efficiency in areas like transportation, where the expanded use of hybrid vehicles will help push average new-car fuel economy to nearly 50 miles per gallon by 2040.

"*The Outlook for Energy* demonstrates that by applying innovation and technology, the world does not need to choose between economic growth and environmental stewardship," said Rex W. Tillerson, chairman and chief executive officer of Exxon Mobil Corporation. "As people in developed countries look to regain their economic momentum, and as everyone seeks improved living standards for themselves and their families, ExxonMobil will continue to invest in the technologies that enable us to provide the reliable, affordable energy central to economic growth and human progress."

As in previous editions of *The Outlook for Energy*, rising demand for electricity is identified

as the single largest influence on energy trends. ExxonMobil projects that global electricity demand will rise by 80 percent through 2040 as economies and living standards improve, and consumers switch to electricity from other sources such as oil, coal or biomass. By 2040, four out of every 10 units of energy produced in the world will be going toward the production of electricity.

The mix of fuels used to produce electricity will change dramatically, however, as nations shift away from coal in favor of lower-carbon sources such as natural gas, which emit up to 60 percent less CO₂ than coal when used for electricity generation. By 2040, 30 percent of the world's electricity will be produced using natural gas, while demand for coal will peak and experience its first long-term decline in modern history.

The Outlook for Energy also reveals the impact of new technologies that are expanding global energy supplies, such as advances in production techniques that have unlocked a century's worth of natural gas across the United States. ExxonMobil estimates that natural gas from shale and similar sources will account for 30 percent of global gas production by 2040.

Developed by a team of experts using a combination of public and proprietary sources, *The Outlook for Energy* guides ExxonMobil's global investment decisions. Many of its findings are similar to those from other respected organizations, including the International Energy Agency. ExxonMobil publishes *The Outlook for Energy* to encourage broader understanding of energy issues among policy makers and the public.

Among this year's findings:

- While demand in the United States and other fully developed economies will remain relatively constant, global growth in energy demand will be led by China and other countries which are not part of the Organization for Economic Cooperation and Development (OECD). Non OECD energy demand is projected to rise by nearly 60 percent from 2010 to 2040.
- While global energy demand is expected to rise by about 30 percent from 2010 to 2040, demand growth would be approximately four times that amount without projected gains in efficiency. Efficiency is the key reason why energy demand will rise by only about 1 percent a year on average even as global GDP rises by nearly 3 percent a year. It also is the reason why OECD energy demand will remain relatively unchanged through 2040 even as its economic output nearly doubles.
- In transportation, the second-fastest growing demand sector behind electricity generation, ExxonMobil sees advanced hybrid vehicles accounting for 50 percent of the cars people will drive in 2040, compared to about 1 percent today. This, plus improved fuel economy in conventional vehicles, will cause demand for energy for personal vehicles to remain essentially flat through 2040 even as the number of personal vehicles in the world doubles.
- However, demand for energy for commercial transportation -- trucks, airplanes, ships and trains -- will rise by more than 70 percent, driven by economic growth, particularly in Non OECD nations.
- Demand for oil and other liquid fuels will rise by nearly 30 percent, and most of that

increase will be linked to transportation. A growing share of the supplies used to meet liquid-fuel demand will come from deepwater, oil sands, tight oil, natural gas liquids and biofuels.

- Natural gas will continue to be the fastest-growing major fuel, and demand will increase by about 60 percent from 2010 to 2040. Growth is particularly strong in the Non OECD countries in the Asia Pacific region, where demand for natural gas is expected to triple over the next 30 years.
- While growth in nuclear capacity is expected to slow in the near-term, demand for nuclear power is projected to nearly double over *The Outlook for Energy* period as nations seek to lower emissions and diversify energy sources.
- Renewable fuels will see strong growth. By 2040, more than 15 percent of the world's electricity will be generated by renewable fuels -- solar, wind, biofuels, biomass, geothermal and hydroelectric power. The fastest-growing of these will be wind, which will increase by about 8 percent per year from 2010 to 2040.

Demand for reliable, affordable energy exists every day in every community. Meeting this demand requires foresight and effective long-term planning followed by huge investments and years of work to build the infrastructure required to produce and deliver energy and chemicals. It also takes an ongoing ability to understand and manage an evolving set of technical, financial, geopolitical and environmental risks in a dynamic world. *The Outlook for Energy* is an essential tool to help ExxonMobil provide the energy needed for continuing human progress.

For more information about ExxonMobil's Outlook for Energy, visit www.exxonmobil.com/energyoutlook.

Cautionary Statement: The Outlook and this release contain forward-looking statements. Actual future conditions (including economic conditions, energy demand, energy supply sources, and efficiency gains) could differ materially due to changes in law or government regulation and other political events, changes in technology, the development of new supply sources, demographic changes, and other factors discussed in the Outlook and under the heading "Factors Affecting Future Results" on the Investors page of our website at www.exxonmobil.com. See also Item 1A of ExxonMobil's latest Form 10-K.

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[ExxonMobil](http://www.exxonmobil.com), the largest publicly traded international oil and gas company, uses technology and innovation to help meet the world's growing energy needs. ExxonMobil holds an industry-leading inventory of resources, is the largest refiner and marketer of petroleum products, and its chemical company is one of the largest in the world.

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Media Adviser, 972-444-1107

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