

# The Outlook for Energy: A View to 2040

### By Charles (Chuck) Darnell Manager, Research and Development Support Services ExxonMobil Research & Engineering Company

#### ABSTRACT

The Outlook for Energy is ExxonMobil's long-term view of our shared energy future. We developed the Outlook to assess future trends in energy supply, demand, and technology to help guide the long-term investments that underpin our business strategy. The Outlook reveals a number of key findings about how we use energy, how much we will need in the future, and what types of fuels will meet demand. Example elements of the Outlook include: 1) Efficiency will continue to play a key role in solving our energy challenges; 2) Energy demand in developing nations will rise 65 percent by 2040, reflecting growing prosperity and expanding economies; 3) Overall, global energy demand will grow 35 percent, even with significant efficiency gains; 4) Around 2030, the nations of North America will likely transition from a net importer to a net exporter of oil and oil-based products. The Outlook provides a window to the future, a view that we use to help guide our own strategies and investments. Over the next five years, ExxonMobil expects to invest approximately \$185 billion in energy projects. Given the magnitude of our investments, it is critical that we take an objective and data-driven approach to ensure that we have the most accurate picture of energy trends.

#### **BIOGRAPHY**

Mr. Darnell received his B.S. in Chemical Engineering from Louisiana State University in 1981. Upon graduation, he joined Exxon's Research and Development Laboratories and held a variety of research and engineering assignments at Baton Rouge, LA, and Florham Park, NJ. In 1997, Mr. Darnell moved to the Corporate Planning Department at Dallas, followed by an assignment in Refining and Supply Planning at Fairfax. From 2001 to 2011, he held a number of management positions in both ExxonMobil Research and Engineering and Refining and Supply, including Director of Lubes Process Research, Director of Fuels Process Research, Technical Manager of the Torrance Refinery, and Manager of Optimization and Fundamentals in Engineering. In August 2011, Mr. Darnell began his current assignment as Manager of Research and Development Support Services in Clinton, NJ.



## **EVENT DETAILS**

DATE: Wednesday, February 20, 2013

> **TIME:** 3:00 PM

#### LOCATION:

EAS 222 Stevens Institute of Technology

#### **ATTENDANCE:**

This event is open to Stevens' Faculty, Students, Staff, and Invited Guests