



December 19, 2005

Sir Nicholas Stern  
The Stern Review  
2nd Floor, Room 35/36  
HM Treasury  
1 Horse Guards Road  
London, SW1A 2HQ

Re: Stern Review of the Economics of Climate Change: Call for Evidence (October 12, 2005)

Dear Sir Nicholas:

ExxonMobil is pleased to provide this initial submission pursuant to the review you are conducting on behalf of the Cabinet Office and HM Treasury concerning the economics of climate change. We understand that the review is focused on understanding more comprehensively the nature of the economic challenges inherent in climate change policies, and how they can be met, both in the United Kingdom and globally.

We further understand this review is intended to advance the outcome of the G-8 Summit in Gleneagles this year, where partner nations agreed to a far-reaching Plan of Action. The Plan commits the partners to the development of clean energy technologies to achieve the combined goals of alleviating poverty throughout the developing world, increasing energy security, reducing harmful air pollution and reducing the growth in greenhouse gas emissions. Developing nation leaders participated in the G-8 Summit discussions on climate change, reflecting not only their role in addressing this global issue, but addressing it in a manner that is integrated with their development priorities. Indeed, the G-8 Plan of Action envisions a realistic evaluation of the continuing and projected growth of developing country economies and an assessment of options to deploy advanced technologies in these countries.

In particular, one of the review's Terms of Reference addresses the implications for energy demand and emissions resulting from economic growth over the coming decades, a topic that our company must address as part of its fundamental business planning. Specifically, the solicitation requests information on the potential impact of technological advances on the future costs of actions to reduce the "net global balance" of greenhouse gas emissions. On these points particularly, ExxonMobil would welcome further consultation as you proceed with your review.

Enclosed for your consideration are several of our company's recent publications covering a number of the topics relevant to your review. The first is our recently-issued ***Outlook for Energy: A View to 2030 (December 2005)***. This analysis projects a nearly fifty percent increase in global energy use by 2030, with the vast majority of growth -- approximately 80 percent -- in the developing countries, where living standards are projected to improve significantly. Our demand models link energy growth for various end use sectors to economic drivers such as Gross Domestic Product, population, and efficiency gains spurred by new technologies (both to enhance the supply base and moderate demand).

By 2030, our analysis projects that electricity generation will constitute 39 percent of daily energy use; transport will constitute 19 percent; heat/other will require over 37 percent; and chemical production will constitute 5 percent. Oil and natural gas will represent about 60 percent of overall energy supply, followed by coal, which will represent 24 percent. We assume significant annual growth rates of 11 percent in wind and solar energy; however, as they are starting from a low base, most experts predict that they will comprise only about 1 percent of the global energy supply in 2030.

Our analysis indicates that non-OECD energy demand in the developing Asia-Pacific region will grow at a 3.2 percent annual rate, constituting a third of total demand by 2030.

As a result of increasing energy demand, our Outlook projects a 65 percent increase in carbon dioxide emissions between 2000 and 2030, 86 percent of which arises in non-OECD developing countries (reflecting an absolute 122 percent increase). This highlights the importance of creating an environment that encourages more rapid use of existing efficient technologies in both developed and developing countries, while stimulating research and development of innovative and affordable low greenhouse gas technologies for the future.

Also enclosed is ExxonMobil's **Report on Energy Trends, Greenhouse Gas Emissions and Alternative Energy (February 2004)**. This report describes our company's views of the business challenges and opportunities that are associated with likely energy trends, greenhouse gas emissions and alternative energy options. In particular, the report covers our deep involvement in improving the energy efficiency of our own operations as well as helping consumers use our products more efficiently. Working closely with leading academics, energy experts and other technologically advanced companies, we are contributing to the development of better answers to meeting the world's future energy needs. Finally, the report covers the issues and challenges associated with alternative energy options.

Looking to the future, ExxonMobil has committed to provide up to \$100 million over a 10 year period to Stanford University's Global Climate and Energy Project (GCEP), which is the largest-ever investment in independent climate and energy research. GCEP is a major long-term research program designed to accelerate the development of commercially viable technologies that can meet global energy demand while dramatically lowering GHG emissions. GCEP is investigating a full spectrum of energy resources, environmental technology, and end uses that can be adopted globally for:

- Advanced transportation options;
- Improved electric power generation and transmission;
- Expanded use of hydrogen and biomass fuels;
- Next-generation coal, nuclear power, and renewable energy; and
- Carbon dioxide capture and storage.

GCEP projects initiated in 2003 and further developed in 2004 include an integrated assessment of technology options, studies of hydrogen production and use, advanced combustion-system research, and studies of geologic sequestration of carbon dioxide. More recently, GCEP launched new research projects targeting fundamental breakthroughs in technologies, including biomass, fuel cells, and solar cells. More information on GCEP can be found in the enclosed **Global Climate and Energy** brochure.

ExxonMobil appreciates the opportunity to provide this initial information in response to your Call for Evidence, and we would be very pleased to meet with you to discuss further our views regarding the outlook for energy, technology and global greenhouse gas emissions. Achieving sustained gains in economic development and growth throughout the world will continue to depend in coming decades on the availability of abundant energy supplies and advancements in energy technologies. Successful strategies to mitigate the projected growth in global greenhouse gas emissions will need to be calibrated realistically to those factors.

Sincerely,



Enclosures