

**Interview:** Todd Onderdonk, ExxonMobil

# 'Oil and gas will grow more than renewables'

*ExxonMobil sees great perspectives for renewables, but has no intention of entering this sector of the energy business. Instead, the US oil giant, the wealthiest company in the world, is making record investments in exploration and production of oil and gas. A market-driven strategy. "Oil and gas are going to grow much more in absolute terms than renewables."*

| By Rudolf ten Hoedt

When Anglo-Dutch oil company Shell recently announced it would stop making substantial investments in most renewable energy sectors (apart from biomass), the company got a lot of criticism from environmentalists and politicians. But Shell had only discovered what ExxonMobil has known all along: the markets for oil and gas remain dominant in the coming decades.

Saying ExxonMobil has, in recent years, shunned the renewables sector altogether, may not be quite true. The company has, in its own words, 'geared its involvement in renewables to long term R&D efforts'. Still, in the coming years ExxonMobil is investing a record amount of \$125 to \$150 billion, mainly in oil and gas. This decision reflects its view of the market to 2030, as assessed by ExxonMobil's Corporate Strategic Planning Department in Dallas. The company shares its view with the public nowadays, in order to "raise energy literacy", in the words of Todd Onderdonk, Senior Energy Advisor of ExxonMobil. Onderdonk recently presented ExxonMobil's "Outlook for Energy" for a select audience in The Hague. He talked to EER afterwards.

**Why does ExxonMobil continue to focus on fossil fuels?**

What we are fundamentally trying to do is to have a realistic view. In spite of significant gains in energy efficiency, we

see world energy demand rising about 35 percent by 2030. Although we are experiencing a difficult economic time, we are confident that we will recover and go back to a long term growth path. In market share we see oil close to 35% by 2030, down a little bit, two to three percent from where it is now. But it remains the energy source with the largest share overall. In gas, we see that share increasing to close to 25% in 2030, surpassing coal as the number two source of energy. We see coal's share declining to close to 20 or 21%.

So if you sit back and look at the overall scope and scale of the industry, we really see oil and gas remaining predominant, and they are going to grow much more in absolute terms than renewables. Fundamentally, this reflects the abundance of oil and gas, their availability, their affordability for people around the world. And so we see our company's traditional business areas remain indispensable. The IEA in their latest World Energy outlook projects an investment need for oil and gas close to 500 billion dollars a year out to 2030. We see this as a huge call on our company's scale and capability to help meet that demand for oil and gas and we are adjusting to record levels to do that right now.

**You claim that there is abundant oil and gas to meet a 35 percent growth in demand. Yet there are many inside and outside the industry who believe such a production growth is impossible. Accord-**

ding to Christophe de Margerie, ceo of Total, 'the world will never be able to produce 89m barrels of oil per days', as he has said in the Financial Times. Are the peak oil theorists misguided?

We expect global oil and other liquids demand will reach about 108 million barrels per day by 2030. We are confident that the resource base is sufficient to meet this rising demand through our Outlook horizon of 2030. Our internal global resource estimates are well-aligned with those of the U.S. Geological Survey. Considering just conventional oil, only one-third of total recoverable resources have been produced to date, and including frontier resources, such as from oil sands, extends the available pool significantly. Technology advances have and will continue to allow us to stretch the resource base and access previously hard to reach oil. Many who project supply peaking in the near future tend to take a pessimistic view of technology and its positive impact on resource growth. Experience has given us a more bullish view of technology.

According to the Outlook, CO<sub>2</sub>-emissions will rise by 28% in 2030. As you are no doubt aware, current climate policy is designed to prevent such a rise, and is aimed at stabilisation and reduction of emissions. Do you see a way in which your prediction, and ExxonMobil's insistence on continuing to invest heavily in oil and gas, can be reconciled with climate policy objectives?

Our outlook anticipates that energy-related CO<sub>2</sub> emissions will be lower in OECD countries by 2030, while emissions will rise in developing countries where economies and populations are growing most rapidly. For example, we expect China's

CO<sub>2</sub> emissions to increase approximately 70 percent by 2030, reflecting strong growth in energy demand as well as the prominent use of coal. By 2030, China's CO<sub>2</sub> emissions will be comparable to the combined emissions of the U.S. and Europe and will represent about 25 percent of the world's CO<sub>2</sub> emissions. All of our projections include aggressive assumptions about technology application and efficiency improvements – they are by no means "business as usual" estimates.

There is growing public recognition that addressing the risks posed by rising greenhouse gas emissions will require significant efforts by both the developed and developing nations. ExxonMobil has a comprehensive strategy for alternatives and low-emissions energy technologies. Since 2004 we have invested more than \$1.5 billion in activities that reduce greenhouse gas emissions and improve energy efficiency, and we will be spending at least half a billion more on additional initiatives over the next few years. While addressing emissions is just one among many other important world priorities, we believe it is prudent to develop and implement strategies that address these risks, keeping in mind the central importance of energy to the economies of the world.

So, what do you expect from policymakers then?

In our view, arriving at the best policy options requires an understanding of their likely effectiveness, scale and cost, as



Statue honoring the oil worker in Tulsa. Photo by: Dave Shafer/Corbis

well as their implications for economic growth and quality of life. This is a huge long-term challenge, so it is essential that policies result in the lowest overall cost to society. We believe the most effective energy policy will be achieved by a couple of key issues. In the first place, addressing CO<sub>2</sub> emissions requires clear signals to the market place. So we believe that policymakers must ensure a uniform and predictable cost of carbon emissions that enables the best decisions to be made and that enables to bring out technologies for energy efficiency. Secondly, we would like to see maximum use of markets. Markets historically have proved to be very efficient in allocating capital. We think that given a clear signal in terms of the cost of carbon, markets are going to be very well equipped to move quickly to make investments that capture the value that is ultimately going to help reduce CO<sub>2</sub> emissions. In the third place, we favour global participation. In the long term we need policies and approaches that really cover the globe. We see emissions plateau and then turn down in OECD countries and we see a lot of growth of emissions in developing countries. So ultimately to turn down emissions around the world, all countries are going to need to participate in that effort.

**Some European oil companies, like Total and BP, are turning to other energy resources like nuclear or wind. Some people claim we are at a turning point in energy history.**

I don't know whether this is a turning point but we do see a growing emphasis and a more rapid progress in energy efficiency gains around the world. One of the advantages of open competitive markets is that companies can identify all

### *'Addressing CO<sub>2</sub> emissions requires clear signals to the market place'*

kinds of different opportunities and pick the ones where they think they can add the most value. We are doing that and we will continue to do that, consistent with our own long-time fundamentals. Today, we put a lot of resources in LNG because we see this as a means to meet the rising demand of natural gas. Some of these investments are going to Europe. We also announced recently investments to raise our capacity to produce low sulphur diesel fuel. That is another growth potential that we see coming.

#### **How reliable are your predictions?**

Overall, we find the results of our Outlooks pretty robust. Looking back to the 1990 outlook and the projections for 2005, we were within a few percentage points of actual oil and gas demand. Looking back to the 1980 outlook, and the projections for the year 2000, we missed some things. One of the areas where we missed was nuclear power. We were overly optimistic on the growth in nuclear. Another area where we missed was



Todd Onderbank. Photo by: ExxonMobil

efficiency gains. We understated their impact around the world. That is one of the reasons we spend so much time now to look into efficiency gains and the potential for emerging technologies that come to the marketplace. In this Outlook we built in significant efficiency gains. The impact of that is really tremendous. We think these gains are key to make sure for the world to have a reliable supply of energy.

**In this year's Outlook you write that the main obstacles to bring enough energy resources to market are man-made. One of the most important obstacles is resource nationalism. ExxonMobil was confronted with it in Venezuela and Indonesia not so long ago. How big a problem can resource nationalism become for IOC's.**

As I already mentioned, we do believe abundant resources exist. The challenges are really focused on ensuring access to these resources as well as having a sound and reliable investment framework that encourages the huge investments that are needed to develop these resources. From our perspective it requires a long term view, to promote sound and effective partnerships around the world, but also help strengthen free markets and investment frameworks to make innovation and the application of technology possible. If you look over the long term, we do not see the investment framework deteriorate. But we think it is going to become very important to policymakers to recognize the realities that we face and to continue to promote free trade. That is essential to today's global energy system. We should strengthen and expand the role of free trade, That is going to help ensure supply security. The benefits of that trade apply to both sellers and buyers. ■