

Rimini, 24 August 2006

ENERGY ON BOTH SIDES OF THE ALPS

Good afternoon,

As you might imagine, in my line of work, nobody talks to me about anything but oil. Also recently, on holiday, friends, and even curious strangers worried about the price of petrol, continued to bombard me with questions: is the age of petroleum coming to an end? Or, are producer countries taking advantage of global instability to speculate to the detriment of consumers? Or even, is it China, with its dizzying levels of growth, that is absorbing such growing quantities of energy and forcing up the price of crude oil? Well, I would like to take advantage of this occasion to try to respond to these questions and also to talk about resources; of scarce resources and the use man makes of them. Man that experiences reason as an opening onto reality and views resources as good that has been entrusted to him and of which he must give account.

Let's start with the most frequent question: but is there still petroleum under the earth? Or is the era of hydrocarbon fuels coming to an end?

Let me state straight away that there is oil in the world. And lots of it.

Our planet currently has so-called "proven" reserves of more than a thousand billion barrels. These reserves amount to more than all the oil consumed since the beginning of the age of petroleum in the middle of the nineteenth century.

But to understand how much petrol we have left we need to add to these proven reserves also "probable" and "possible" reserves.

In total there is at least another 5 thousand billion barrels under the earth with which to satisfy world demand for the next 70 years.

But if there is so much oil, why are prices heading for the stars?

- The answer to this question is that for many years the price of oil has been low, too low. From 1986 to 2001, the average price of crude oil was \$18 a barrel. And over the same period of time there were also two authentic collapses in the price - in 1986 and 1998 when prices fell to less than \$10.
- In those years, with those prices, producer countries and oil companies had neither the interest nor the financial resources to invest in the exploration of new reservoirs, the

development of those that had already been discovered, in new refineries and in all the indispensable infrastructure to deliver refined products such as petrol and diesel to consumers.

- So, while there is an abundance of oil under the ground, the ability to extract it, transport it and refine it has not kept pace with the growth in demand. Currently, the capacity to extract oil in excess of demand is just 2%. At a moment of such tension it is clear that any stop in production, whether caused, like last year, by Hurricane Katrina in the Gulf of Mexico, or, this year, by guerrilla sabotage in Nigeria, results in a jump in the price of a barrel of oil. Which is then worsened by the millions of “paper barrels” generated by international speculation in efforts to anticipate the price fluctuations of real oil.
- It should be said that what is happening, historically high oil prices and threats to the security of supplies, could have been avoided. Already in the first half of the 1990s, when oil was hovering around \$15 a barrel, OPEC attempted to open a dialogue with the West in favour of pushing prices up to around \$25 a barrel in order to allow producer countries to invest in the development of new reservoirs. It was a request that went unheeded. Industrialised countries are today

paying, with interest, for the bonanza of low cost oil of those years.

Expensive crude oil is, therefore, not due to a scarcity of the raw material. But, rather, the price we pay for our short-sightedness in the '90s.

But, apart from anything else, producer countries are not primarily responsible for the prices we pay at the pumps.

A barrel of oil, which today is hovering around \$70, costs around \$200 when we go to fill up at the forecourt. In Italy and Europe most of the cost of petrol is tax. And, in fact, when producer countries are blamed by western governments for raising the price of crude oil, they defend themselves, and not without reason, by calling on governments to lower taxes if they want to protect consumers.

And then, who says that petrol is expensive at \$70 a barrel?

The truth is that we have become accustomed to paying little for precious resources such as oil, gas and even water, as if they were ours by divine right.

Of course, at current prices, oil seems to us expensive. But if you were of a mind to buy a barrel of Coca Cola or orange juice you would pay more than double.

The paradox is that we complain about the high price of petrol, but continue to unflinchingly to pursue behaviours and energy policies that are absolutely crazy.

Following the logic, in the face of price increases since 2001, petroleum now costs 4 times more than it did 5 years ago, consumers might reasonable have been expected to changed their behaviour. Also politics might have intervened on the demand side, discouraging waste and excessive consumption. In these terms the big consumers, above all the United States and Europe, have done little or nothing.

In the US demand has continued to increase year on year.

Irrational lifestyles have also contributed to pushing up oil prices. Half of the 17 cars sold in the United States every year are SUVs, off road vehicles that travel only 4 or 5 kilometres on a litre of petrol; useless and polluting monsters of inefficiency.

This is also why Americans are the most voracious consumers of petrol in the world. Every American burns 26 barrels of oil per year, compared with 12 in Europe, and 2 in China. India is at the bottom of the list with less than 1 barrel per year.

And while individually both the Chinese and the Indians can claim to be low consumers, also collectively they are not huge consumers. Despite the dizzying growth of recent years, China still accounts for less than 8% of world demand for oil. Even if it

continues to grow at current rates, its impact on the oil market will be contained, at least in the medium term.

A reasoned world energy policy should, through education and awareness building, and without impacting excessively on personal choice, ought to push us in the direction of a more efficient use of oil in industrialised countries, rather than blaming the rapid growth of the Chinese economy or petroleum producer countries.

On the contrary, with the oil producing countries, which are rightly pushing for accelerated economic development, we need to create new alliances. We have the technologies, the competences and the capacity to manage resources. They have the energy that keeps the world moving. We need to be able to forge alliances around the development of integrated projects in their territories that take account of their strategic development objectives. For Eni which has always, since the time of Mattei, developed innovative and supportive models of cooperation this is nothing new.

And it is also important that our efforts for cooperation are accompanied by action of the foreign policy front. Exactly as we are doing now with the peace process in Lebanon.

And if we want the global economy to continue to grow, improving living conditions and life expectancy for hundreds of

millions of the inhabitants of our planet who have until now been excluded from the civilisation of well-being, we will need energy. A lot of energy, and at a price that is sustainable for everyone, above all the countries of Asia, Africa and Latin America that do not have oil and that are seriously disadvantaged by the sky high oil prices that so preoccupy the irrational western consumer.

And then, as I said before, hydrocarbon reserves will only cover our needs for the next 70 years. This means that, at this rate, the children of many of you here, in this hall, will live in a world without petroleum. Fortunately, there is no shortage of scientific and technological responses to this problem:

first of all, renewables: wind, solar, geothermal, biomass. With current technologies these still account for too little to effect the dynamics of the energy market. But over the next 30 to 40 years, by continuing to invest in innovation, their contribution to world energy consumption will become significant.

Then there are biofuels, vegetable hydrocarbons produced mainly from sugar cane and palm oil. New technologies are making it possible for large tropical countries, such as Brazil and Indonesia, to increasingly replace the use of fossil fuels with biofuels.

Above all, we need to continue to invest in both the research to produce hydrogen from coal, capturing the CO₂, and in low waste nuclear energy. Coal and uranium are abundant resources on our

planet and could help us to realise the dream of low cost energy production for generations to come.

But while science and technology is busy building humanity's energy future, the challenge is to prolong the era of fossil fuels. To do this we need to invest with conviction in the only alternative source of energy that can have a meaningful impact on the oil market: an efficient and rational use of energy.

I want to give you just one example of how great the potential for reducing waste is.

On average, the American car travels just 7 km on a litre of fuel. In Europe, where something has been done to promote efficiency, the average figure is 13 km per litre. If, without imposing restrictions on personal freedoms, the American consumer could be convinced to buy vehicles that were as efficient as those in Europe, this alone would result in the saving of 4 million barrels of oil per day, which corresponds to the entire production of a country like Iran, the world's third biggest oil exporter.

But why should we be satisfied with cars that do only 13 km to the litre? Europe is not so very virtuous. There are very comfortable cars that can do 20 km on a litre. Consequently, if all the cars in Europe, the United States, Canada, Australia and Japan - in other words the rich petrol consuming countries - could achieve an average of 20 km per litre, this would save more than 10 million

barrels of oil per day, in other words all of the production of the world's biggest producer, Saudi Arabia and, more precisely, more than all the oil consumed by China and India combined.

This would turn the world oil market upside down and lead to a substantial fall in prices.

But the story of the “road monsters” that waste a precious resource is only one of the many follies of our world. Here's another. Let's look again at North America and its use of heating and air conditioning. I have never understood why, in the United States, homes have to be over heated and, in the summer you need a coat to survive in offices and restaurants due to the glacial temperatures. All this means that America's energy consumption for heating and conditioning is 30% higher than those in Europe.

Just think. If the industrialised world had a more efficient pool of vehicles and Americans could adapt their lifestyles in terms of heating and air conditioning to European standards, we could save 15 million barrels per day, almost 20% of world oil consumption, and extend the era of fossil fuels by at least 20 years.

A rational use of the planet's resources, of which we are not the owners, but merely custodians, is an inescapable duty of our generation and, above all, of leading companies such as Eni. The waste that is so characteristic of the behaviour of the citizens of rich countries, merely underlines the distance between the opulent

west and the rest of the world. A gap that, for ethical reasons, and also for the instability that it provokes, we cannot allow to continue. The closing of this gap is an opportunity to strengthen the less developed countries and to make them a part of the global economy, helping them to avoid the mistakes that we have made in our use of energy resources.

When we become fully aware of all of this, and, if we are able to modify our individual behaviour in a rational manner, we can move towards a time when petroleum will no longer be our primary energy source because it will have been replaced by other sources. But also the oil companies, those that see in these changes an opportunity to grow and to innovate, can satisfy world energy demand in a balanced and sustainable way, by continuing to create value for their shareholders. In this area, Eni wants to be on the front line. For reasons of economic efficiency, but also because of the responsibility we have to those who will come after us.

This is our challenge for the future.