



## DEBATE 1

### **Philippe CHALMIN, Managing Director, Total E&P Qatar and Total Group Representative in Qatar**

I would like to have your view on what will happen in Vienna on 30 November. That is the only question. Do you think there will be an agreement? If yes, what kind of agreement will it be? Will it have an effect on the market? I loved your cartoon and I do not see a way to get out of the dilemma.

### **Olivier APPERT, Chairman of the Conseil Français de l'Énergie**

I was anticipating this type of question and that is why I presented this cartoon, which is a way to answer it. I would say that the situation today in Vienna will be much more difficult than it was in Algiers. In Algiers, it was a surprise, and the day before, nobody was anticipating any decision. Since Algiers at the end of September, it appears that the production of OPEC countries has been increasing and furthermore that the demand has been decreasing significantly. Stock has been increasing.

I would say the question is not about whether they want to have an effect on the market. It is not only 750,000 barrels per day which have to be reduced, but the production has to be reduced. It is between 0.9 and 1.2 million barrels per day, which would be much more difficult to achieve. Regarding how to share the burden between countries, what could the contribution of Russia be? I attended a conference in Istanbul, the World Energy Conference. Mr Novak, the Minister, said in a meeting session that in Russia, it is very difficult to control production, because there are 200 producers which are producing 90% of the Russian production. It would be very hard to reach an agreement between all those producers.

Will Iran be ready to contribute? Will Iraq contribute? I am afraid that this would be a very tough decision, but the challenge for OPEC is to send a message to the market. If not, then the price would come back to USD 30 per barrel, as was the case in February, which is a disaster for the producing countries. Also, I will not comment further because I am afraid that next week, you will remind me of what I am saying today.

### **Donald JOHNSTON, Chair of the McCall MacBain Foundation, Geneva, Switzerland, Former Secretary-General of the Organisation for Economic Co-operation and Development (OECD) in Paris**

These are really complex issues on oil markets, which I have had a lot of difficulty following over the last year. I think we all have. How the stock markets track them is the other thing I find quite extraordinary. I do not think I have seen that in my lifetime.

### **Marie-Claire AOUN, Director, Center for Energy, Ifri**

I had a question for both of you, but maybe more specifically for Ladislav from Total. In your scenario, you quote USD 40 for the price of carbon. We see today that the price of carbon is low everywhere. In most countries, the market is giving a price signal of less than USD 10. I was wondering how you see the evolution of the carbon markets in the world in the long term, and whether this USD 40 is something that is realistic and achievable for you. Maybe it is one of the ways to reach this 2° target that we are looking for.



**Olivier APPERT, Chairman of the Conseil Français de l'Énergie**

We think that the way carbon pricing should take place would not be to have one price everywhere in the world. That is not something which is feasible. What we advocate is to have it on a regional basis. Depending on the specificities of each of these different regions, we will have a carbon price with systems which can interlink this ability or right between different segments or different areas. Why is it USD 30-40? I think that if you have too low a price, it will have no impact.

If you have too high a price, you will not manage to get to the desired result, which is to substitute gas for coal. There is an area, and we consider that about USD 30 per tonne does make sense in order to permit the substitution of more emitting fuels than others. Meanwhile, at the same time, we maintain the attractiveness of fuel-like gas, permit the delivery of energy and satisfy the demand.

**Donald JOHNSTON, Chair of the McCall MacBain Foundation, Geneva, Switzerland, Former Secretary-General of the Organisation for Economic Co-operation and Development (OECD) in Paris**

Let me throw out a supplement to that, for both of you, and in fact for all of you. What we hear is something that we would not have heard 10 years ago in terms of supply. Remember we are talking about climate change and energy, and one of the things we have talked about in many fora is that this is finite. Fossil fuels are finite and so we have to look at other sources of energy in the relatively near term, and that should push us to do that more quickly than we otherwise would.

What I hear from you people at the moment is that it is finite and it has to be finite, but how finite is it? When we get these low prices, what is the incentive effectively to move on these other fronts? These are so critical to climate change. We always put these two in juxtaposition. I find that is a dimension we did not have before. Look at the United States. You are saying it has become self-sufficient and it is exporting in the gas markets and so on. It is quite extraordinary what technology has done in that sector.

**Olivier APPERT, Chairman of the Conseil Français de l'Énergie**

10 years ago, the mood was about peak oil and peak supply, and this is no longer the case due to the shale revolution. I think that we need to consider peak oil differently. It is peak demand, and thanks to technology, I am convinced that sometime, there will be a peak in demand for oil, due to the breakthroughs in technology, but I assume that we will come back and comment on this issue.

**Salman DOSSARY, Senior policy advisor and head of Public Policy Analysis at the Kingdom Economic and Energy Analysis Department of Saudi Aramco (SA)**

I am Salman from Saudi Aramco. My question is for Total and it is about the OGCI. I am fully aware of the initiative and I participated in the initial stage of the OGCI. My question is about how the European oil and gas community is reacting now to this serious initiative and to the recent announcements about establishing the fund to finance these projects. My other question is for Olivier, which he has just partially answered. It is about the demand side. We are talking a lot about the supply and the excess supply in the market, but how do you see and anticipate the demand picking up over the next year or years. Perhaps we need to look at what is happening in China to predict what the demand and growth is going to be like over the next decade or so.

**Olivier APPERT, Chairman of the Conseil Français de l'Energie**

Regarding the evolution of demand, it depends on whether you refer to oil or to gas. I refer only to fossil fuels, and it depends on whether you are discussing the short term or the long term. What I said just before is related to oil, because the oil demand is more and more related to the transport sector. There is an increasing demand for mobility, which is linked to the growth in population and GDP. However, there are new and alternative technologies for transport. In fact, there is a race between the increasing demand for mobility and technological improvement and alternative energy sources for transport. I think that in two decades, there will perhaps also be a peak in oil demand. Already, there is a peak in oil demand in OECD countries, because the improvement in technology is far more significant than the increase in demand for mobility.

**Donald JOHNSTON, Chair of the McCall MacBain Foundation, Geneva, Switzerland, Former Secretary-General of the Organisation for Economic Co-operation and Development (OECD) in Paris**

However, regarding this demand, we are also looking at population issues here too, are we not? When we look at the numbers, I see the developing world, where that demand is going to explode. We are estimating that there will be 9 billion people by 2040 and 11.2 billion by the end of the century. I do not know how accurate those figures are. If we stay on fossil fuels, it seems to me that there is going to be a great deal of demand.

I am making an assumption that we are going to be on fossil fuels for a long time, and that being said, I think we then have to turn to the technology people. They will tell us how they are going to decarbonise this world. Coal I can see diminishing. Everybody is talking about coal going out. However, it seems natural gas is on the rise pretty much everywhere.

**Ladislav PASZKIEWICZ, Vice President Strategy & Climate, Total**

I would like to address the question that you raised. If I understand, the question is about how the OGCI initiative has been received in Europe, in particular following the announcement that was made. I should say I think generally that the perception is very positive regarding this initiative. I do see different reasons that can explain that. First, this initiative is borne by the top people within the organisations. It is really all CEOs of these 10 companies that commit themselves personally to engaging in these climate initiatives. It is very important that these kinds of things are carried at the highest level in companies.

Second, it is very diverse, because you have Saudi Aramco in OGCI and Mr Amin Nasser was present when the announcement was made. You have European companies, and I think to that extent, it has been very well perceived in Europe, because all the major European players are there. These include BP, Shell, Total, Statoil, Repsol and ENI. You can see that the whole industry is there. Finally, I think it has been very well perceived because sometimes, these kinds of organisations tend to speak a lot and not do that much. Here, they are committing USD 1 billion to invest in some programmes in order to improve the technology for combating climate change. This is a demonstration that it is action and not just words. I believe that that has been very well perceived.

**Donald JOHNSTON, Chair of the McCall MacBain Foundation, Geneva, Switzerland, Former Secretary-General of the Organisation for Economic Co-operation and Development (OECD) in Paris**

You touched upon some technologies that you were talking about. One was solar and one was your Brazilian portfolio, but you also mentioned carbon capture and sequestration. I do not know if you are going to talk about that, but this has been on the books for a long time. We were doing work on this back in the early 2000s, but it has never gone to scale anywhere. Remember, the Americans had a major project in the West which they then cancelled. There is one



in Saskatchewan, there is one in North Africa and there is one in the North Sea, as I recall, but they were done primarily for recovery of oil, I think.