

DEBATE

Cécile Maisonneuve, Director of the Centre for Energy at IFRI

Thank you, Kevin. I will now reopen the floor for another debate on the question of competitiveness and the fight against climate change.

From the floor

I think those of us who are sceptical of climate change and particularly climate change policies argue that we have no problem with a lot of the ideas people come up with – for example, the idea of electrical power or fluid-based power – and we are generally well aware that there are policy problems that make technology harder to deploy. The main one in the United States, and I do not know whether this is true in Europe or not, was when we liberalised our electricity industry. Electricity is a network industry. That means it has the generation, the flows, and it has the grid, meaning the distribution systems, the transmission lines. We freed up the generation capacity and had a massive expansion in the production of electricity in America, but we did nothing to the grid and so it had nowhere to go. Had we liberalised the grid so that you could make money by essentially investing in grid structure I think we would have a much better grid. We have certainly under-invested in the grid, which makes it harder to use any form of dispersed power in the country.

You raised the argument for subsidising alternative sources of energy and at least implicitly you raised the argument that oil and gas and so forth are subsidised, too. I do not know the European subsidy systems, but in America our tax code has the depreciation allowance. You are always allowed to make a depreciation allowance on your capital assets and reserves are always seen as a capital asset. They are hard to assess and so we have what is called cost allocation – God knows whether it makes sense or not – which gives you an accounting way of coming up with a deprecation figure. You would have one in any case under any normal industry situation. I have no reason at all to think that is a massive subsidy to the oil and gas industry. It is just alluded to by everyone.

It seems to me that the danger – and Europe and America have already got themselves into this before – is that when one believes that something is wrong, like global warming or anything else, you rush in and subsidise something that has some attractiveness or some political supporters and you end up with a technology which might or might not be viable if it were allowed to prove itself in the market. However, since it is an infant industry it is spoon fed from day one and it never grows up. It always becomes a basket case industry and so what could have been an alternative does not work. If you believe in global warming and the need for alternative policies the last thing you want to do is subsidise the industries.

From the floor

Thank you, Kevin. It was a marvellous exposé. I very much support your idea of HVDC. The Chinese are very much going into it and have long distance HVDC. To overcome public resistance to long-distance mains you can put them underground. It is more expensive, but you can do it. On energy storage, there are various options. It is not only that sodium battery. It is a dinosaur in a sense. There are much more elegant ways of storing energy. The Swiss and the Austrians have large-scale storage pumping. This is mechanical. It is very primitive and very cost-effective. The Norwegians are hoping to expand that and they are hoping that the Germans will buy into it.

In addition to that, industry can offer virtual batteries. In Hamburg, Germany they have an electrosteel manufacturer who closes down his steel manufacturing when the wind is not blowing and gets money from not buying kilowatt hours. Then when the wind is blowing he gets the kilowatt hours essentially at zero cost and it is a very profitable operation. The steel manufacturer is a virtual battery. Then there are more technological solutions such as power to gas – of course chemical storage is easy – and large-scale batteries. Donald Sadoway of MIT is offering a battery of two-



megawatt hours. It is the size of a small container. That is really quite a bit for overcoming the nights and so forth. I believe floatable tanks are actually a little better than you depicted it.

Cécile Maisonneuve, Director of the Centre for Energy at IFRI

It may be a little better, but is it the right solution in countries where there is not much sun?

Kevin Sara, Chairman & CEO, Nur Energie

Actually I could have made a presentation just on storage because you can look at the storage paradigms and say, 'This is the solution for renewable,' but I do not think anybody has come close to a breakthrough in storage. Thomas Edison said that this was the one problem that he was unable to crack, and he cracked thousands of technical problems. He was the great genius in electricity and he tried for years to develop a better battery and he failed. However, there is a lot of work going on in storage and I agree that the simplest and most historical thing is pump storage and that is what is used, but it is extremely limited geographically, much more limited than solar hotspots. A storage strategy therefore co-inhabits with a solar strategy. There is no doubt about that.

Regarding your comment that the last thing you want to do is subsidise a new industry, you do need to kick start industries and the US government has been kick starting industry for years, such as with the Department of Defense and the Internet. The Department of Defense is intervening left and right with their battery procurement. This is not at all new. This is a tried and tested way of doing things. For example, how are we pricing our power right now? We are basically asking for a discount to offshore wind. There are existing subsidy regimes out there. We are very happy to price at nuclear. We will accept the feed-in tariff that the UK government has just negotiated with France. If they give us the same terms, the same guarantees and the same period of 35 years we could work with that. It is not requiring compared to a lot of things, especially to the zero-carbon technologies, which is another reason why it is difficult to make these comparisons. There is no carbon price so you are not really comparing apples to apples.

From the floor

I have a very brief question, and a real question, on CSP. I thought one of the problems for countries like those in the Middle East for the use of CSB is getting rid of the sand that will settle on the reflective surfaces. Has that been resolved? Thank you.

Kevin Sara, Chairman & CEO, Nur Energie

It is not just a problem for CSP. It is a problem for PV as well in that region. It is an additional cost. You have to go and clean your panels or clean your mirrors. They are developing automated systems to do that, typically robots, but one of the lessons that has been learned in the Middle East is you have to choose your sites very carefully and you have to choose sites which are not constantly battered by sandstorms.

Cécile Maisonneuve, Director of the Centre for Energy at IFRI

We will hear from André Caillé and then Jun Arima.

Jun Arima, Director General, JETRO London, Special Advisor for Global Environmental Affairs, METI

Thank you very much. In response to the comments from my American friends, first of all, I said some harsh things about climate change, but I am a true believer in climate change. Our government considers that we have to do something to tackle climate change. Secondly, in regards to developing the electricity market, you have a massive new investment for power producers in terms of generation plants but less investment for transmission. Interestingly, Japan has also started market reform for the electricity sectors and we intend to decouple or unbundle generation, transmission and distribution expecting that that will eventually the cost for power in Japan. However, we are not very optimistic in the long run because we do not currently have any surplus capacity. The power price could even go up. That is the current situation in Japan.



The unbundling of the transmission lines is to be governed by central transmission operators. That could enhance the grid connection between the west and east sides of Japan. As you may or may not know, we have a two-grid system. The frequency of the west and east parts of Japan are different and exchange between the two parts is limited and linkage to the north islands of Hokkaido and Honshu is quite weak. That grid connection should be enhanced. As Maria said, Europe has the advantage that you are interconnected to each other among various countries.

From the floor

No, no, no.

Jun Arima, Director General, JETRO London, Special Advisor for Global Environmental Affairs, METI

However, there is of course a lot of room for further enhancement. I know there is a project in the European Commission to enhance grid connection between countries, but Germany can still import nuclear power from the Czech Republic or France and Germany can export wind power to the Netherlands or Belgium. In Japan's case we do not have an international connection with neighbouring countries and, given the currently sour political situation between Japan and China, we do not envisage a grid connection between Japan and China happening in the future. That is the unique challenge for Japan.

Finally, regarding subsidies for renewables, we have introduced a feed-in tariff using the German feed-in tariff as a model. We know, however, the predicament Germany faces in over-subsidising renewables, so we need to be very, very careful. Maria said Japan is subsidising renewables at about double the rate of Germany, but we have to reduce the purchasing price in line with cost reductions in order to avoid the over-subsidisation to renewables. Otherwise the system cannot be sustained and might bring a backlash from consumers or industries, so we need to be very, very careful. We are second banana in terms of FIT, so we have the advantage of learning from the failures of other countries. Thank you.

André Caillé, Director of Junex, Canada

I would like to congratulate you for your efforts to make solar effective and competitive with other sources of power because I think this is the way for renewables to get on the market. Secondly, I would like to encourage you because the European grid has improved a lot after deregulation. There is therefore much more interconnections between countries in Europe at this time than there was before.

I would also like to add that there are serious projects to develop a circular power grid around the Mediterranean. That will allow African producers, with the most potential, to deliver power either south of the Mediterranean or north to richer markets.

Cécile Maisonneuve, Director of the Centre for Energy at IFRI

Maria, you wanted to something.

Maria van der Hoeven, Executive Director, International Energy Agency

I have just a couple of comments. What strikes me is that we currently do not really see a shift in our energy mix. When you look at our energy mix 25 years ago 82% was from fossil fuels. It is currently exactly the same. 82% is from fossil fuels. We expect that it will go down to 75% from fossil fuels in 2035 because of the growth in renewables, for instance, in power generation. The reason for that we talk about power generation, and power generation will be improved by the growth of renewables, but what about transport and industrial processes. We must not forget about these.

The second thing is I think that in Europe we have a very national approach to energy. It is very national. We even have a kind of competition between countries as to who will put the most subsidies in renewables. This is bad and it leads, for instance, to a situation where in northern Germany power is generated from wind, which is fabulous, but they need it in the south. How does it get there? It uses the grid of the neighbouring countries. Are they happy about it?



No, of course they are not. That means it is not only about producing and generating electricity from renewables – and I agree that the problems caused by such energy being intermittent – but we must also look at transportation and distribution. We have to solve those problems as well because you are quite right, Kevin, that it is not about one issue. It is about a systems approach and if we do not talk about a systems approach it will not be helpful.

Finally, not so long ago Greece had a beautiful idea called Helios, which was to produce solar power in Greece and then transport it, for instance, to Germany. It failed. Do you know why it failed? It failed because the Greens in Germany did not want that kind of money to go to Greece. Why not produce it in our own country? Again there was that national approach. Something has to be done at the European level because if do not do that we have national targets and achieving those national targets does not actually help.

One more thing: if we really want to renewables to mature, as hydro waves and geothermal did, we have to see to it that a market is developed. That cannot be done within a couple of years, but we need to work on market development and bring the costs down not only of generation but also of the other aspects of power supply.

Cécile Maisonneuve, Director of the Centre for Energy at IFRI

Mr Chairman, you have a comment.

Christophe de Margerie, Chairman & CEO, Total

I have just a small comment. This is not the final conclusion of the chairman. Otherwise I would take too much time for the conclusion. This is a specific matter. I insist on this because I opened the debate at the IEA again. When we talk about subsidies on fossil fuels I think it is the wrong debate. I can tell you that we do not have subsidies in France or Spain on fossil fuels. You find such subsidies in countries where they have them for political and social reasons. For example, if you try to increase the price of gasoline in Libya and introduce renewables instead, you would just get a madhouse. Those are the so-called fossil fuel subsidies. There are no subsidies in any country where you can switch from fossil fuels to renewables. I would really like to kill this argument because it is poisoning our debates because everybody ultimately agrees with what I am saying. It is the truth. The only subsidies we have in France are some people paying 60% taxes while others pay 50%. I consider 60 to be more than 50, so the one paying the lower rate is subsidised. That is my view because I am a crazy economist. We have to stop this. The total amount of subsidies around the globe for fossil fuels is USD 500 billion and that for renewables is USD 300 billion.

Maria van der Hoeven, Executive Director, International Energy Agency

No, less than that.

Christophe de Margerie, Chairman & CEO, Total

It was the target I got from you. I have no figures myself. Whatever the amount for renewables, I know the amount is 500 for fossil fuels. It is said that we can add subsidies for renewables up to USD 500 billion. That is not the way. I like renewables and we are doing a lot with them. You know this. When I was here last year we had already made this investment in solar energy, so we did not do it in response to your speech, although after your speech I feel better about it. When we made this acquisition our share price was USD 21 per share. A few months later, which was during our last session here, it went down to USD 4. It is now back up to USD 30. It is better at 30. I can now continue to do what I want to do. I agree with you that it is a long-term process and you cannot look at these things in the short term. However, we cannot just make things up and this is where I am embarrassed. We do not have any subsidies for fossil fuels, nothing which takes the place of subsidies for renewables. When we have these kinds of disagreements in these debates we do not make progress because it is used by people to make accusations of lying, and I do not think we need to lie because it is so important. What matters is to look at how many renewables we need and the result we are aiming at.

For example, we know China well. I am working on a coal-to-olefins project in China. Is it cleaner than coal? Yes, it is. Is it clean in terms of CO_2 ? No, it is not. We have tried to find ways to sequestrate after capturing CO_2 but we



cannot find any reservoirs. We are an expert in this, but we know that it is still not very productive or efficient. It does not mean that we will not continue to work on this, but is it better to have coal-to-olefins than coal in a power plant? Yes, it is. Do we consider that it makes things cleaner than doing nothing? Yes, we do, although if we do nothing we will have no CO_2 emissions on our books, which is good. Never forget that those in charge of trying to be better and more efficient sometimes have to pay the price of being told that they pollute the planet. Again I insist it is a question of R&D, pilot schemes and hopes, but it is nothing to do with dividing people into good and bad. That is embarrassing. That is not my conclusion, but I just wanted to say that we should drop this idea that fossil fuels are subsidies. If that is the case then tell me and I will go there. The next one will probably be shale gas in the US because – I am being provocative here – it will need subsidies.

Maria van der Hoeven, Executive Director, International Energy Agency

I will make just a couple of points. Are fossil fuels subsidised? They are subsidised everywhere that fossil fuel products are sold to end users below the cost price.

Christophe de Margerie, Chairman & CEO, Total

Where?

Maria van der Hoeven, Executive Director, International Energy Agency

For instance, all of the oil-producing countries. It is still there in Germany where we need to phase out the subsidies to the coal mines. They need to phase them out by 2017. Those are just two examples. Let us be fair about that. Yes, there are fossil fuel subsidies on end prices for consumers and on some parts of production. I think we have to be realistic about that. Sometimes they have to be done, such as in Saudi Arabia, because it is part of their social costs, as has been mentioned. Is this something that should not be discussed? No, it is something that has to be discussed. Is it something that has to be phased out? Yes, it is something that has to be phased out. Can it be done overnight? No, it cannot be. That would lead to a lot of trouble. Let us look at the subsidies Indonesia gives on fuel transports.

Christophe de Margerie, Chairman & CEO, Total

No, that is not a subsidy.

Maria van der Hoeven, Executive Director, International Energy Agency

Yes, it is a subsidy.

Christophe de Margerie, Chairman & CEO, Total

There is no tax. It is different.

Maria van der Hoeven, Executive Director, International Energy Agency

Listen, dear Christophe, everywhere where you sell your energy below cost price, whether it is called a tax or something else, it is a kind of subsidy.

Christophe de Margerie, Chairman & CEO, Total

I disagree.

Maria van der Hoeven, Executive Director, International Energy Agency

Of course you disagree.



Christophe de Margerie, Chairman & CEO, Total

It is good to have a debate, but tax is something you pay to a state for something. It is not the cost of producing. Otherwise who decides the tax?

Maria van der Hoeven, Executive Director, International Energy Agency

Let us now go back to Indonesia. What we see in Indonesia is that you pay different prices at the pump. One price is for those who can afford it and one price is for those who cannot afford it. Why has that been done? It has been done because they are fully aware that there is a subsidy. On the other hand, they know that they cannot phase it out immediately because there would be uproar. Let us not close our eyes to this situation.

Christophe de Margerie, Chairman & CEO, Total

Do you know what price I sell gas at in Indonesia? We take the gas from the part where we produce the gas to Java because they ask us to sell to the domestic market. We do it because otherwise we will not have the sales. We do not want to lose money. After gasification, which means liquefaction, and then re-gas, it is USD 10 per million BTU. The price paid by the people of Java in a subsidised world is USD 10 per million BTU when it is 3.5 in the US. Where is the subsidy?

Maria van der Hoeven, Executive Director, International Energy Agency

No, it does not work like that. You know exactly what I mean. The same goes, for instance, for the situation in Brazil.

Christophe de Margerie, Chairman & CEO, Total

It means it is not the reason.

Maria van der Hoeven, Executive Director, International Energy Agency

In Brazil a company like Petrobras has to import at a high price and has to sell at a low price. What is in between is a subsidy.

Christophe de Margerie, Chairman & CEO, Total

That is political.

Maria van der Hoeven, Executive Director, International Energy Agency

That is too easy. No, Christophe, that is too easy.

Christophe de Margerie, Chairman & CEO, Total

No, it is a state decision.

Maria van der Hoeven, Executive Director, International Energy Agency

Whether it is a state decision or not it means that the costs are not reflected in the price and that is what I am talking about. Whether it is a state decision, a political decision or something else the costs are not reflected in the price.

From the floor

May I interrupt please? I am from Saudi Arabia and I am surprised to learn that oil and energy prices in Saudi Arabia are subsidised. I will have to check on that because our productions costs are very low. We do not need to subsidise.



Even when we factor in transport and other uses they are at cost. They are not sold at a lower price because we do not need to do that, as far as I know, but I will check Your Excellency's figures. I have been sitting here listening to all of this and Saudi Arabia was mentioned a few times. First of all, let me say to Mr de Margerie, who likes Saudi Arabia, that I like France. Also, I think, Your Excellency and Mr Ramsay, you mentioned something that I find very nice as well, which is that you expect that there will be new monarchies in the Middle East. I say hello to that. That is what I understood from you.

I do not think that anybody is trying to offset the Arab Spring. On the contrary, what we have seen from the so-called Arab Spring is that it is not very spring-like, so we would like to see a situation of evolving improvement in our lives in the Middle East without the costs that we now pay. If you look at what Egypt, Tunisia, Libya, Yemen and Syria are paying it is terrible. The killing in Syria is totally unacceptable. Whether it is Saudi Arabia or the other countries that have not gone through this situation, we are hoping to avoid such costs being paid in our development and hopefully we can do that with more success.

I have a question on the depletion o shale gas and oil wells and the replacement costs that will have to be paid when you have to move your rigs and all of your material from one place to another. Was that added in all of your presentations when you talked about shale gas and shale oil or is it an uncertain field of endeavour that still needs more exploration?

Another point I have is regarding solar and replacement costs. In the Kingdom there is a big discussion on the use of solar and other alternative energy. Needless to say, there is a huge turf war over who is going to do what. I think Total is already doing something with Aramco on that issue, but there are other competitors to Aramco and Total for that. The idea is that because we sell oil abroad at, let us say, at USD 100 per barrel to sell it our electricity producers at cost price is basically a waste of money, so why not have solar even if solar costs more than the USD 4 per barrel cost price, even if it is USD 7 or UDS 10? By doing that the formula would be that you would sell and make the USD 90 or USD 80 and that would make more sense than simply paying more for less or less for more. Thank you.

William Ramsay, Senior Advisor of the Center for Energy, Ifri

The issue of the costs of production of shale oil and shale gas are in the numbers. They are covered in the schedules. However, one of the reasons that I raised this issue of the risk of a price slip is that both shale oil and shale gas are very vulnerable to price. Shale oil is particularly vulnerable price because some of that stuff costs USD 60, USD 70, USD 80 a barrel. With shale gas if you do not have the incentive of the liquids in shale gas production it, too, is very vulnerable to price. It therefore would not just be the oil producers who would be damaged by sharply lower prices. So would many of the producers in the United States of shale oil and shale gas, as well as the stripper wells and all the rest of it. All of us suffer in that scenario. The reason I raised the scenario is that I do not think we pay enough attention to that risk as we plan forward in our economies. That Armageddon scenario that we saw in 1986, 1987 and 1988 devastated our energy sectors and we just do not need to go through that again.

In terms of the definition that the IEA uses for a subsidy, it may be less a precisely economic use of the term 'subsidy' as it is the concept that if Saudi Arabia is putting oil into power generation at USD 3 a barrel it is losing the opportunity cost of the USD 77 per barrel that it could get on the market, and that we count, or Maria counts, as a subsidy.

Maria van der Hoeven, Executive Director, International Energy Agency

That is right.

Christophe de Margerie, Chairman & CEO, Total

That is, however, your definition.

Maria van der Hoeven, Executive Director, International Energy Agency

It is our definition.



William Ramsay, Senior Advisor of the Center for Energy, Ifri

Yes, that is right.

Maria van der Hoeven, Executive Director, International Energy Agency

I know we do not agree on that definition.

Christophe de Margerie, Chairman & CEO, Total

I do not agree either. Going back to Saudi Arabia, because I can give some answers to His Highness, but I will not today in particular. There is no gas today in Saudi Arabia or not sufficient gas. You could effectively use gas in the power plant if you had gas, but today all the gas is used for petrochemical products and so forth. They are short of gas and that is why we are searching, so when you say they are losing the opportunity, that is not the case because then, they would have to buy the gas and from whom should they buy it from ? If it is Qatar then you have other problems.

I agree with what you said, Bill. We have to look at the long term and be careful about what we do. We could be faced with lower prices than we expected and it is not good news because it is not good news to lose money in any sectors, so I fully share this view. We are looking with Saudi Aramco for opportunities like shale gas, but as of today, for the reasons you have stated, Bill, we are careful that it is not just for pleasure. We do not want to look for gas just for the sake of it. At the same time, we know they have plenty of gas in Qatar and plenty of gas in Iran, but then you get into problems related to politics, security and supply. People tell me those problems do not exist anymore, but they do still exist. We do not want to talk about them, but they exist. When people say we should buy from there or take water from Iran, people do not want to depend on Iran for water, even if there is a point of view that the world and everyone in it are nice and everything will be great. We will be looking at the opportunity presented by shale gas with Saudi Aramco. They would like to use our technology, but I agree with you, too, that we might decide that even if it exists it might not be the long-term solution and we might have to leave it for the United States.

From the floor

May I just add one thing? I am not an oil expert or an energy expert. I think the panel would have been greatly enhanced if someone from the IEF or from OPEC had been on it who would know more about these technical issues that you have talked about.

Maria van der Hoeven, Executive Director, International Energy Agency

That is an opinion of course, but I would to mention something else which has not been put forward. You were talking about who the wing producer is going to be in the future and I think this is something that is sometimes forgotten. It is true that the light tight oil experience in the United States will bring the United States into a different position, but when you look forward to the 2020s and beyond the situation will be different. That is why in our view — and this is underpinned by analysis — it is extremely important we also give the signal to the Middle East. That means that because of the depletion of fields it is necessary to have the necessary investments now to have the new fields or to enhance oil recovery from the older fields in the 2020s. If these investments are deferred than I think the world will have a problem with oil supply.

Christophe de Margerie, Chairman & CEO, Total

There may be no OPEC representative, but I think I know OPEC well. I have been working with OPEC members for more than 30 years and I probably know more than some existing members of OPEC. However, again, the important thing is that Saudi Arabia is the country doing this job today. We all know it. When Iran was forced to reduce their exports because of the embargo which country increased its production by one million barrels per day in a two-month period? When Libya dropped from 1.4 million to 200,000 barrels today which country filled the gap? Saudi Arabia did. I was the first to call my friend up in Saudi Arabia and say, 'We need crude. We are short of crude. We need crude for



our refineries in Europe.' We know what it is today, but again it is one of those things – I do not know why – that we refuse to have an open debate about. Even Saudi Arabia sometimes does not want to open that debate.

Why was there this debate about the Americans being told they should export more LNG? It was because there was a time not so long ago – we remember this – when there were envoys from the State Department to tell OPEC members, including during OPEC meetings, 'You have to increase production. We want you to increase production because we need this oil for the world,' just like it was not theirs, which I partially agree with by the way. However, when it is gas from the United States of America it is just for the Americans. I was one of those at the Riyadh meeting in May 2008. We all came to that meeting, including oil companies, the states and the IEA. We were face to face with Saudi Aramco in the person of the minister, Ali al-Naimi, and the king. As producers, we were asked to increase production. At that time everybody knew that the production was more than was needed. It was a pure bubble. The price of oil was splitting at 142. After Saudi Arabia announced an increase in production, which they could not even do because there was no market, the price of oil increased to 148. Why? Because the market considered that it was a weakness to ask Saudi Arabia to increase production. It was thought there must have been something we were not telling the market. In fact, the price then fell from 148 to USD 32. Can you invest in those environments? No, you cannot. Was it clever to ask Saudi Arabia to increase its production? No, it was not. Was it done? Yes, it was at the top. Did the king say yes? Yes, he did. Why? Because we all are sometimes part of a crazy world where we think it is nice to be nice, but being a member of this community, which means we have to invest, means it is difficult to swallow when people tell us to do this or that because that is the way it should be, because they are the United States.

William Ramsay, Senior Advisor of the Center for Energy, Ifri

Do we have time for a version?

Christophe de Margerie, Chairman & CEO, Total

I do not know if that is your version, but that was mine.

Cécile Maisonneuve, Director of the Centre for Energy at IFRI

There are two questions remaining and Bill wanted to say something.

William Ramsay, Senior Advisor of the Center for Energy, Ifri

I had the great and good fortune of being involved in that Riyadh meeting as well and the precursor to the Riyadh meeting was all of the western world screaming, 'We need more oil, we need more oil. The price is too high.' When the price of a commodity is too high that means there is not enough of that commodity in the market and if there were more the price would go down. Most OPEC producers were saying, 'No, no, it is speculation. Speculation has it so high and it will not make any difference whatsoever. If we add more oil to the market it is going to stay high and so we should not do anything.'

That is coming from the classic OPEC stance of those countries that are limited in how much they can export, and they were exporting like hell and going to the bank with it and they rather liked it that way and so they had no incentive to drive the price down, except for Saudi Arabia, which has the longer-term view of this and a longer-term view of the commodity. It does not like high prices because of the implications for its market for the future, and Saudi Arabia, in order to get some political cover, convened this meeting and the paper that was put together by the Saudis with Fatih Birol in the IEA made the point that it is both, it is both a lack of commodity and it is speculation. We cannot do much about the speculation, but we can deal with the commodity and the Saudis were primed to put more oil in the market as soon as they got this paper stamped by people. You should have seen El-Badri's face when he had to accept the fact that this paper was going to go through and he was not going to be successful in making the point that it is purely speculation. The Saudis put the oil on the market. It was not enough because the market was crazy. The market was not responding to anything. However, in any case, that was the background of this meeting. The king called that meeting specifically to deal with the price and the fact that he needed cover to put more oil on the market.



Christophe de Margerie, Chairman & CEO, Total

I can tell you I am not telling stories. I am buying crude from Saudi Arabia. We could not sell. All the tanks were full. When Ali was told to sell more he said, 'There is no buyer.' It was pure speculation like the bubble in the financial market. That was the same foolishness of the markets, so it also exists in our business. It is true. You cannot reduce the speculation by asking us to produce more.

William Ramsay, Senior Advisor of the Center for Energy, Ifri

However, if the market is in large measure driven by speculation, the announcement effect of more oil being produced for the market, even if you cannot sell it, has an impact.

Christophe de Margerie, Chairman & CEO, Total

Yes, but the price increased on that same day.

William Ramsay, Senior Advisor of the Center for Energy, Ifri

It is because the circumstances of the hour were not going to lend themselves to anybody manipulating anything. The market had run away.

André Caillé, Director of Junex, Canada

I think there were many people looking for cover. US intervenors, at the time, were looking for cover; speculation and lack of supply were agreed as a means to cover everybody, not just Saudi Arabia.

Cécile Maisonneuve, Director of the Centre for Energy at IFRI

We have no time to open another topic of discussion, but if you have a point to make about this topic please go ahead.

From the floor

I will hopefully leave us on a happier note. I am from Louisiana, as some of you have heard me say before, and in Louisiana we have had our ups and downs in the oil industry and so forth and a lot of cars in that area have a bumper sticker that says, 'Oh God, give us one more oil boom and this time we will not blow it.' I think that the world has gone through these same kinds of phenomena more than once, but it is the nature of commodity industries. Commodity industries go up and down. They over-invest, under-invest and no one can figure out how to create a long-term stabilised commodity market, whether it is oil or metals. The same thing happens. In any event, it was fun to realise that Europeans disagree as much as Americans do in a cordial way, which I thought was nice.

Cécile Maisonneuve, Director of the Centre for Energy at IFRI

Thank you. It is now time to stop this debate and I want to thank you the panellists.