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Dear Thierry, Ministers and Ambassadors, it is a great honour for me to speak for the first time at this conference, which is taking place in a period when the international situation is undoubtedly in turmoil, to say the least. In my speech, I had planned to talk about instability in the world and to point out the links between energy and geopolitics. Unfortunately, as could have been expected, that instability directly hit France during the terrorist attacks. They have been discussed enough for me not to go back to them, but of course they echo the points I am about to make.

Tonight, I am not going to try and theorise about international relations, but to speak as an energy professional. Obviously, the geography of oil and gas resources and production means that a major global oil company like Total is at the heart of geopolitical issues. My talk will be slightly longer than the time Thierry has allotted me because he asked me two questions: "How much will oil cost tomorrow?" and "Could you explain everything you know about the Middle East?" I'm afraid it is impossible to answer those questions in five minutes! First, I think it would be useful to recall some facts about oil and gas, starting with the geography of oil and gas reserves and production. You'll understand why oil and gas are intertwined with geopolitics in the countries I am going to mention.

Then, I am going to talk about history in order to help us understand what is happening in the oil world today. The history of oil is not that old, but it has much to teach us. It also helps to shed light on what might happen on the oil markets and in the oil-producing countries.

Lastly, I will try to explain the challenges that an oil company like Total can face. They are connected to the geopolitical instability in which a company like Total could eventually be a stabilising factor. These are long-term challenges that also involve a development, and, therefore, a geopolitical issue: climate change.

Let us start with some reminders about fossil fuel geography, although I have no doubt all of you know which countries are the biggest oil producers. Two of them, Venezuela and Saudi Arabia, have one-third of the world's reserves. Just five have two-thirds: the previous two, plus Canada, Iran and Iraq. So that means five countries have two-thirds of the world's oil reserves. If you add Russia, Kuwait and the United Arab Emirates, it's 80 %. Eight countries have 80 % of the world's oil reserves. Another way of looking at it is that half the world's oil reserves are in the Middle East.

The geography of oil production is a different matter. Today the world's biggest oil producer is the United States. That is a very recent development, dating back only to the decision to extract shale oil and gas. The United States is ahead of Saudi Arabia and Russia. Those three countries alone produce 40 % of the world's oil. If Canada and China are added, you reach 50 %. Then there are the United Arab Emirates, Iran and Iraq. In fact, although the Middle East has 50 % of the world's oil reserves, it only accounts for around 30 % of global oil output. This means that their best days are ahead of them from the point of view of oil, provided that oil has a future. That leads to the issue of climate change, to which I will return later.

The gas production situation looks quite different. The two biggest countries are Iran and Russia, with one-third of the world's reserves between them. You can understand why I am broadening my talk to include gas: those two countries are at the heart of geopolitical news. To reach 60 % of the world's gas reserves, add Qatar and Turkmenistan. Those four countries alone possess 60 % of the world's gas reserves. To reach 80 %, add the United States, Saudi Arabia, the United Arab Emirates, Venezuela and Nigeria. The Middle East holds 40 % of the world's gas reserves.

When you take a look at gas output, the ranking is different because some countries overproduce compared to their reserves. For example, the United States is the world's biggest gas producer by far, with 20 % of global output, followed by Russia. Those two countries alone produce 40 % of the world's gas. If you add Qatar, Iran and Canada, you reach two-thirds. And then there are countries like Algeria, which produces 2 % of global output. So Iran, Russia, Qatar and Turkmenistan are four key gas-producing countries.

As soon as people start talking about climate, coal is also mentioned. The United States, Russia and China have the biggest coal reserves. China is the world's leading producer, accounting for 50 % of global output.



To wrap up this overview of energy geography, let me ask you this question: which country produces the most power from renewable sources? China does: 25 % of the world's electricity from renewable sources is produced by China. Of course, it is mostly hydroelectric power, but also solar energy, partly, and wind energy. Next come the United States and Brazil. But renewable sources account for just 21 % of the world's electricity.

So, in the end, there are just a few key oil and gas countries. I have talked about Saudi Arabia and Iran, which will obviously come up again in my speeches and are at the heart of Middle Eastern geopolitics. And I have mentioned Russia several times.

Fossil fuel resources and their control have long been at the core of geopolitics. To illustrate that point, let me remind you of Total's history. How did a company like Total come about? Well, after the First World War, France realised it was highly dependent during the war on English and American oil, so it decided to achieve oil independence. At the 1920 San Remo conference, as compensation for war damages France was awarded Deutsche Bank's 25 % stake in the Turkish Petroleum Company, which exploited Iraq's reserves. In 1924, President Poincaré set up the *Compagnie française des pétroles*, Total's forerunner.

The French state had only a 35 % stake in the capital. It was not a national company. It entrusted it with this stake in the Turkish Petroleum Company. Therefore Total was created in the Middle East. In 1928, Total branched out into the Emirates, into Qatar, the part of the Middle East at the heart of the Group's culture.

Total is also the outcome of a merger with Elf. The history of Elf's creation is just as interesting. After the Second World War, the French government set up Elf to reach the same objective of energy independence. Its goal was to develop the resources in the huge gas field found southwest of Lacq — the only national resources the Group has ever owned — as well as resources in Algeria and Africa. For years, Elf grew in Africa as decolonisation moved forward.

Recalling this history allows me to answer the question asked in one of this afternoon's workshops: "Do firms have a nationality?" As the head of Total, I find that very easy to answer. Total has a nationality and it would be an awful mistake to move its headquarters out of France, because I'm sure if that happened, the Group would lose some of its value. Total is France's biggest oil company and that is how the oil-producing countries see us. We have a nationality. That is one of the Group's assets.

We are also relatively original because Total is the only major oil company — number four in the world today — without domestic resources. France has neither oil nor gas. So we have no choice but to grow through partnerships negotiated with the producer countries I mentioned earlier. That is why understanding global geopolitics is at the heart of our business.

Before addressing the question, "Where are oil prices heading?" — which, by the way, I will not answer tonight — it would also be interesting to look at the history of the oil economy, especially the history of OPEC.

When people talk about the Middle East and oil, they often associate the Middle East and OPEC with each other. Oil-producing countries set up OPEC in 1960 to have more control over prices and assert their political independence from the big multinationals, the famous Seven Sisters, which, in the 1950s, had set the price of oil at an extremely low level: two dollars a barrel. Creating OPEC empowered the producer countries, which quickly ramped up to a higher level: nationalising the oil industry. All our companies underwent nationalisation, for example in Iraq and Qatar, when they decided to create national companies in the 1970s.

Then came the oil crises in 1973 and 1979, when the price soared from three to 40 dollars a barrel. OPEC became a major political player. The oil companies lost some of their concessions and had to find new positions. A new world opened up: the Middle East countries and the Gulf monarchies, especially, acquired a power they had never had before. In the 1980s and 1990s, the price rose to 40 dollars a barrel, prompting a sharp fall in demand; oil was too expensive. All consumer countries started to develop energy-saving policies. "We may not have oil, but we have ideas," France said.

That is also when the scramble for offshore oil began as a way of bypassing OPEC. Total developed its third major area, the North Sea. Expensive oil in the 1980s, combined with the development of new technology that those high prices made possible, led to offshore exploration and the discovery of North Sea oil and gas. OPEC's share of oil output fell from 50 to 30 % and in 1986 the price of a barrel plummeted to 10 dollars. The price stayed low for a long time, from



1986 to 1999/2000. OPEC set up a quota system to try and regulate its output. But prices did not really start rising again until the early 2000s, fuelled by very strong demand from Asia.

China's development and the growth of Chinese demand are what actually prompted a new rise in the global demand for oil. The price increased from 10 dollars in 1999 — I got into the oil business in 1997, so I saw the price when it was at that level — to 40 dollars in 2004, then 80 and 100 dollars in 2007. Remember when some people said, "This is the end of oil. It is getting scarcer and therefore more expensive. The reserves are running out." Silly remarks like that have been making the rounds for decades. Of course the Earth is finite, but the last 15 years have shown that reserves are anything but exhausted. The idea of reserves is linked to the economy, to the ability to extract them profitably, which affects the price. And that is not even mentioning our ability to innovate and make technological strides, which are also influenced by the price level and opens up new possibilities. The truth is that prices went up in the 2000s because there was a huge demand for oil, especially in China.

That is what happened over the roughly 10-year period from 2005 to 2015, when several people, especially in the most recent years, thought the price could no longer dip below 100 dollars. In fact, we had seen the same phenomena in the 1970s/80s. Higher prices lead to energy efficiency policies. Today, there is talk about cars that can get 100 kilometres to three litres, whereas just 10 years ago, one could only contemplate 100 kilometres to five to six litres. Higher prices also allowed the development of new technology, including renewable sources — although they will still have to be subsidised for a long time — but also and above all the extraction of unconventional oil and gas, the shale oil and gas everybody is talking about. They were discovered and developed because the price was high.

This is all a matter of classic raw materials price cycles. On the supply side, higher prices mean higher cash flows, prompting higher investment, leading to many new production start-up capacities. Meanwhile, efficiency drives down demand, the curves cross each other and the price of oil falls. That is what happened.

OPEC's position arrived on top of that, which is interesting because economics and geopolitics come together in this club. From my viewpoint, the economy is what first drove the entire oil market in 2014 as well as OPEC's position.

The reason is that higher prices resulted in an oil glut and slower growth in demand. You might wonder why the overwhelming majority did not see this coming. I think it is a matter of psychology: people like to look on the bright side when thinking about the future. It is hard to suddenly tell yourself, "Tomorrow we are going to have to live on half our income." When you are appointed the Head of Total and the price suddenly collapses by 50 dollars and you are 10 billion dollars short, you realise you would have rather it remained at 100 dollars. I can tell you that!

Based on this new situation, it is hard to say what is going to happen next, because these are long investment cycles. Of course the price will go back up, but on the one hand overcapacity must be sponged up, and on the other demand must start rising again. All the short-term signals are wrongly over-interpreted today, because investments are being made in long cycles. I can tell you that capacity will grow almost to the end of the decade, because all the projects that national and international oil companies have decided to roll out are still under construction. There is no stopping them, and they will continue coming online in the next two to three years. We saw the sharp spike in demand this year, so the relationship between demand and price is very flexible. Will this last?

Of course, the geopolitical instability I am going to talk about now may disprove everything I have just said. As I pointed out in an interview with *Les Echos*, I have never seen so much instability in the world in my life, especially in an area close to us Europeans, the Mediterranean region from Algiers to Baghdad or even Teheran. Not to mention the Ukrainian situation. We are going through complex times that are sources of instability. What a company like Total is experiencing may be the best example.

In my opinion, Libya was the first place rocked by instability. People don't talk much about Libya these days, which never ceases to amaze me. Libya is no longer a state. There are several states, or rather there is no longer a single state. One thing I am sure of is that ISIS has destroyed everything in the fields where we operated, but that we had abandoned. Libya now produces one-third of its capacity. It was a military arsenal that we left in the hands of various tribes. To me, Libya represents a key risk of destabilisation. It is not just an open door to terrorists on the Mediterranean coast, but also represents a real risk of destabilisation in Africa. Every African Head of State I speak with talks to me about Libya, fearing that the flow of weapons and terrorist groups from there will reach them, as they have reached Central Africa. Do not forget that Boko Haram is operating in Africa's biggest country, Nigeria, jeopardising its stability.



In 2015, Libya took a back seat to Syria, but it undeniably remains a key issue if we want to restabilise the Mediterranean rim one day.

Then there is Iraq. Today Iraq is suffering terribly. We no longer have anybody there. The Head of Total has a categorical imperative: he cannot earn 10 billion dollars a year by putting his employees' lives at risk. We objectively decided that it was impossible to leave people permanently in Iraq. The situation there, including economically, is extremely unstable. With the price of oil at 50 dollars a barrel, Iraq is unable to offer a return on oil companies' investments, which have therefore stopped. At 50 dollars a barrel, Iraq can afford to pay its security forces, but it cannot boost its oil production capacity.

We were a player in Syria, producing in some fields in the Deir Ez Zor area. We obviously left four years ago. Syria has become the battleground where all the forces vying for power in the Middle East are fighting each other.

So has Yemen. Total also produced a lot in Yemen: the facility we operated there accounted for 20 % of the government's revenues. We had to stop in March when it was announced that al-Qaeda was 50 kilometres away and I gave the order to evacuate the plant. Syria and Yemen are complex situations because they are where you find all the ingredients of the Middle East's complex situation: Shiite factions, Sunni powers, al-Qaeda, ISIS, the Gulf monarchies' interventions and Iran's backing for certain factions. When you take a look at the situation in those countries, there is a word that immediately comes to mind: Lebanonisation. It is very hard to see how solutions to such complex situations can be found.

This is the context in which the historic agreement with Iran was reached. The agreement is historic, but it is also another source of destabilisation throughout the Middle East because it calls into question the established order that has prevailed there for 30 years, when the Gulf monarchies dominated that part of the world. Iran was out of the picture. So Iran is stepping back onto the international stage is rekindling strife between Shiites and Sunnis.

You might ask, "When you are CEO of a major oil company, how do you balance the interests of the Emirates, Qatar, Saudi Arabia and Iraq?" Well, that is why major oil corporations like Total, which have such a big financial footprint, were created — to have companies sizeable enough to manage geopolitical risks, to be a stabilising factor, despite everything, and to take control of a number of responsibilities. That is what we are doing in Yemen, where, despite everything, we are bending over backwards to supply people with gas so that they can have electricity.

Lastly, no mention of geopolitical instability would be complete without addressing the issue of Ukraine and Russia. In 2005, Christophe de Margerie placed his bets on Russia. I will never forget the note presented to the Executive Committee in which the Group's Strategy Director listed and explained 15 good reasons to stay out of Russia. I recently reread it, and all 15 risks identified have materialised in the past 10 years. In my opening remarks, I told you where the oil and gas are. And yet, despite the fact that those risks have come to pass, we are moving forward on our road in Russia, where we are also a stabilising factor because we act as a go-between for the French and Russian governments. We are consequently taking part in the dialogue between France and Russia. Economic sanctions cannot settle diplomatic issues. Diplomacy is primarily a matter of dialogue.

My closing remarks will be about the challenge of climate change.

Today's climate change talks are a matter of energy and development. Those are the real issues involved in the negotiations. Of course there are the two degrees, but the underlying questions are, what are the development models? What is the best energy mix? I always start talking about this topic by recalling — because, let us face it, the media can sometimes cloud our minds a little — that today the reality is that oil, gas and coal account for 80 % of the world's energy. Nuclear power accounts for 5 %, hydroelectric 2 %, wood 5 %, biofuels 5 % and wind and solar power 1 to 2 %. That is the reality in 2015.

When I consider the IEA's two-degree objective — a target I agree with — in 2040 the energy mix will consist of 60 % fossil fuels, 10 % wind and solar and 11 % nuclear. That is the reality of the world of energy and of the world in which we are and will be living. At the same time, I am not saying that to defend oil companies because I also always start my speeches by pointing out that oil and gas companies like Total are an integral part of the problem: energy accounts for approximately two-thirds of CO₂ emissions and oil and gas for 40 %. But I am also convinced that some of the solutions are in our hands because energy is our world, and we have the technological and financial means to achieve them. Any energy transition can only take place gradually.



A bit of perspective on this issue is called for. Three hundred years ago, the world ran on wood. Then the transition was made to coal, and after that to oil. Well, we are going to move on to gas and then to renewable sources. But that is a gradual technological change, which will take time. It will not happen overnight. We must be capable of accompanying the shift. A company like Total must always aim to remain one of tomorrow's energy giants so that it can help to develop gas, renewable energy and energy efficiency and make a commitment — this gets us back to geopolitics — to ensuring that oil and gas companies become responsible players. For two years, we have been striving to do just that by spearheading a joint initiative with some other oil companies.

We brought oil and gas companies together to say, "True, we are responsible, but we have also got solutions and we are going to do our part so that the world can achieve the 2°C target." Again, that will take time, but we must make a steadfast effort.

Debates about climate are also debates about development. When people talk about development, they think of Africa, where two-thirds of the population have no access to energy. That is another challenge for our Group, which is deeply involved in Africa.

In conclusion, we are facing short- and medium-term challenges, and major geopolitical challenges, especially in the Middle East and North Africa. Solving them will take time: at least 20 years, one of those country's leaders told me. Nobody in their right mind should expect the mess that has taken so long to create to be untangled anytime soon.

And then there are longer-term issues, including climate change. Again, the next 20 years — I would say we think in terms of 20-year timeframes — will undoubtedly be crucial for the world of energy and for energy companies.

Therefore, we must have our own medium and long-term visions by trying to become stabilising factors in a world where, unfortunately, short-sightedness and volatility prevail. I am convinced that events like the WPC help us understand the world better, and I would like to thank Thierry de Montbrial for his commitment to organising this conference.

My dear Thierry, I understood loud and clear that the message in your introduction was intended for the successor of Christophe de Margerie, who supported the WPC. But, dear Thierry, the price of a barrel of oil has been cut in half and Total is 12 billion dollars poorer!

Thank you for your attention.