



# PATRICK POUYANNE

CEO of Total

## Thierry de Montbrial

Mr. Fabius is proactive, but insofar as I know him so is Mr. Pouyanné.

## Patrick Pouyanné

I would add pragmatic.

Climate change is an inherently complex issue because it is a global issue. You mentioned governance, but there is no global governance of the planet. We tried to build it after the Second World War, and what strikes me is that we see a certain tendency to want to dissolve it. In other words, instead of wanting to deal with a complex global issue requiring all of us to unite our efforts, we see a geopolitical trend by certain major powers towards fragmenting, or even dismantling, the structures that have been set up to regulate globalisation and interdependence

Similarly, when we observe the relationship between States and energy, each State thinks about it in a selfish way, considering that one of its missions is its own country's energy security. Energy is not the only cause of climate change, but it makes up around 60% of greenhouse gas emissions. Each State is pursuing a policy within its own borders, whereas we are dealing with a global issue. Europe is a perfect example of this contradiction. On the one hand, Europe advocates an ambitious European climate policy, but at the same time there are 28 national energy policies. We cannot have a European climate policy if we do not have a real European energy policy. A European energy policy means having a common vision of Europe's energy mix, and therefore of its energy independence. But we, starting with France, do not want that, even though Europe was born out of the coal (energy!) and steel community.

Then there are the citizen-consumers. Wherever they are in the world, when we talk to them about energy, they have three demands.

First of all, they want access to energy. They want it to be reliable and always available. Recently, California's grid went offline for five days. One of the states with the most climate-compatible and forward-thinking environmental policies had to deal with power cuts. There are parts of the world where people have no access to energy at all. A billion people on this planet have no electricity. At the current rate of population growth, if we want to achieve the Paris Agreement objectives the world must actually decline economically. For a population that is growing from seven to nine billion, stabilising energy consumption at about the current level has never been done within the framework of humanity. It requires an unprecedented energy-saving effort—over 3% a year compared to a historical average of 1.5%. This means there is an underlying assumption of low economic growth or that a significant part of the population would not have access to energy. But all the citizens of the world have two demands. The first is that they all want access to energy.

The second is that citizens and consumers want affordable energy because it is a basic necessity. They almost think it is their due. The relationship to the price of energy is emotional, even in the developed countries. When petrol prices rise, it immediately triggers a strong collective reaction because it is a basic necessity. In France, 75% of the people drive to work every day. Not everybody lives in Paris, where they can use multi-modal systems. Lastly, as consumers and citizens they want it both ways. They want cheap energy and at the same time energy that does not harm the environment. So the climate issue recalls the planet's fragility.

Here I will take the liberty of disagreeing with what Mr. Fabius said about people in developed countries very clearly having a high awareness of global climate issues. Our children tell us they will be here 50 years from now and that our

generation is not doing the right thing for them. Their message is loud and clear. But as someone who spends his time travelling around the world, to be honest, I have noticed that awareness of climate change is much higher in the developed than in the developing countries. Air quality is the most important environmental issue in large Indian and Chinese cities. Sometimes the solutions can overlap, but it is not really the same issue as the global problem. In that part of the world—and this is the whole diplomatic debate underlying the Paris Agreement—the priority is development: first they want to lift their people out of poverty.

So our planet is full of contradictions. On the one hand, all the world's leaders meet in New York to proclaim "1.5°" together. On the other, global investment in coal rose again last year. Why? That is real life on our planet. When you are in the Philippines or Vietnam and you need more energy for development, the cheapest way to go is coal. Moreover, a certain number of countries provide the financing.

What can replace coal? Not renewables. They are part of the energy mix, but since the priority is a reliable, sustainable energy mix that everybody can rely on year round, these countries must be offered an alternative. The alternative is one of the lowest-emitting fossil fuels, natural gas. If we keep lumping all fossil fuels together and saying we want to get rid of them, we will not have a sustainable, serious energy mix by 2040 or 2050 that meets emerging countries' development expectations. When I say we need natural gas, I would like to add that to achieve carbon neutrality (which the Paris Agreement calls for in the second half of the century and not by 2050; this is a current collective interpretation by some who signed it), we must develop technology to eliminate excess greenhouse gases. Anybody who thinks we can live in a world without carbon emissions is making a fundamental mistake. We would have to give up a lot. Cement or steel cannot be made without oil. A high energy density energy source is needed. Technologies to offset carbon emissions must be developed. Incidentally, the most effective carbon neutral technology is reforestation, which means stopping deforestation. The most economically efficient carbon sinks are forests and rehabilitated degraded soils. They cost roughly \$5 to 10 a tonne instead of \$100 a tonne.

We need a carbon price economy. I am all for that. But so far, it has been a collective failure. We cannot do it. We cannot do it because some of the major economies are having a hard time accepting it. We are failing because if we put a price on carbon, it increases the price of energy, and we must therefore accompany it with massive energy-saving policies. Redistributive systems must then be put in place to give consumers back part of what we want to tax them to encourage virtuous, energy-saving behaviour.

Make no mistake. If we produce oil, it means there is a demand for it. We do not consume oil because companies produce it. I would like to recall that State-owned companies account for 60% of oil production. Private companies do not even account for half. If Total stopped producing oil, given that it accounts for barely 1% of global output, there might be an impact on the price but there would be no impact on the fact that there will always be demand. Incidentally, States, not companies, signed the Paris Agreement. If we take the sum of all the national contributions of the signatory States (the famous NDCs), we were on track to 3°C and not less than 2°. It is a mistake to say we must speed up and immediately be on track to 1.5° and neutral by 2050. The Paris Agreement is intelligent since it provides for positive movement. On the other hand, States have said they are going to keep on gradually improving their contributions and that there is room for optimism since new technologies will emerge. It is therefore not surprising to say we are not on track. The 3° is in the agreement but we are feigning surprise. I would add that if you read the entire IPCC report and if you believe in the scientific theory of the carbon budget, in order to be at 1.5° we would have to stop all greenhouse gas emissions immediately! That is what the report says.

There is now a collective awareness that we must take responsibility, but that is not enough. We must act. That is why I spoke of pragmatic proactivity: we must act. If I had just one message to put across on global governance, it would be this: how can we collectively stop increasing investment in coal when we all know that it is the primary source of emissions? Coal still accounts for 27% of the world's energy mix. How do we get such an agreement? I would have been delighted to see such an agreement come out of the G7 or the G20. How do we stop the net deforestation of the planet? If we could preserve natural carbon sinks, we might see a start. We cannot rely on renewables alone to solve the problem. That will take a long time. We are talking about investing trillions of dollars. Make no mistake; that will have an impact on the cost of energy. None of this is free. The fundamental question is: how fast can or should we go? It is not just up to the world's leaders to decide. Citizens and consumers must also have their say. This dialogue is



getting off to a rough start. Young people who go out into the streets but also want cheap energy are sometimes not totally consistent.

**Thierry de Montbrial**

Thank you, Patrick.