

BERTRAND DE LA NOUE

General Representative of Total in China

"The fight against climate change goes beyond governmental commitments"

Energy companies have for a long time been quite mute on the climate debate, partly because they were accused of all sins, partly because some of them were still skeptical about the extent of climate change challenges.

Total, under the leadership of our late CEO, Christophe de Margerie, has been over the past years at the forefront of a profound change in industry response by being vocal on climate change, by putting environmental issues as a key component of our strategy and by engaging the Group in a new development model, "Committed to better energy", which has become recently our new signature.

He did it with a clear message, endorsed by the entire Company, and restated recently by our new CEO, Patrick Pouyanné, which can be summarized in few points:

- To fuel growth and development, the world will need more energy. Climate issues and energy demand growth should not be opposed, but addressed together, and we will continue to need all sources of energy.
- 1.3 billion persons are still without access to electricity, 2.7 billion have no clean cooking solution: To allow them to access it, energy has to be and remain cheap;
- Cost of energy is a key regional differentiating factor in terms of competitiveness for example, in our industry, energy represents 40% of our industrial costs and in terms of investments, which means jobs. Thanks to unconventional gas development and cheap gas prices, the US are benefitting from \$90 billion of new investments in chemicals with all the jobs associated with, while, at the same time, putting high competitive pressure on European chemical industry. So, Europe cannot and should not act alone on climate change if it wants to preserve its industry. The risk will be to encourage delocalization, not emission control. It is a worldwide problem we should address together:
- Energy efficiency is the first lever of action worldwide and it should address both the quantity side, reduce consumption, and the quality side, use better energy or products. Tremendous gains are there, and we should all be mobilized to grab them;
- Renewable energies, thanks to more investment in innovation, will have to take a bigger part of the energy mix, but they will have to be profitable without subsidies to be sustainable.

In line with this message, Total has been active at three different levels:

The first level is internal. We had to work within our own perimeter, on our own emissions, our own energy efficiency, our innovation and our energy mix to improve our records and make further commitments: we have been reducing by 20% our CO₂ emissions on our sites since 2008; we have reduced by 50% the flaring between 2005 and today; we are committed to improve the energy efficiency in our activity by 1.5%/year between 2012 and 2017; we have developed a pilot for CO₂ capture and sequestration. Gas now represents 50% of our hydrocarbon production and we are among the leaders in LNG, which brings cleaner alternative to coal and oil in many countries, especially in Asia. We also became one of the top 3 leaders in the world in solar photovoltaic sector with the acquisition of Sunpower, while investing at the same time on 2nd generation biomass projects.

The second level is to try to address the question of accessibility to energy and energy efficiency. Of course, one company cannot solve this alone, and we only add our modest contribution, but many initiatives have been taken by our subsidiaries throughout the world in that respect. I will just mention three:



- The first one is Awango: To facilitate access to energy, we launched the "Awango" program, aimed at bringing innovative energy solutions with the use of solar lamps and kits, coupled with financing solutions to low income population, while keeping a viable business model. For that, we are using our retail network and resellers. So far, close to 1 million lamps have been sold, impacting 4 million people in 20 countries, including Myanmar, Cambodia, Indonesia and Bangladesh. Our ambition is to reach 50 million people by 2020. As Christophe de Margerie was saying, "Energy is vital to human development. It boosts living standards, drives growth, and reduces poverty and illiteracy."
- The second one is what we called and labeled "Total Eco Solution", a range of innovative and eco-friendly products we launched mainly in Europe, which either help reducing energy consumption, or are more eco-friendly.
- The last one is the Journey of Harmonious Energy campaign, what we called JOHE, we organized in China over the past 3 years. Just to elaborate a bit more on this one, we run at 5 science museums in the biggest Chinese cities an exhibition addressing the general public on energy efficiency the first ever in China. Supported by social media campaigns and inter-action, universities and schools reached-out, we managed to engage millions of people in better understanding how they use energy and how THEY can be part of the solution on energy efficiency and emission reduction. We do consider education as a key success factor in energy efficiency.

The third level is to take leadership or support international initiatives to combat climate change:

- Teaming up with some of the top oil and gas companies, we launched in Davos in January a Climate Initiative (developed by Luigi Colantuoni)
- Already member of the World Bank Global Gas Flaring Reduction Partnership since 2004, we recently pledged to join the World Bank's planned "Zero Routine Flaring by 2030" initiative
- We decided to join the Climate and Clean Air Coalition, an industry-based partnership promoted by the UN Environment program and the Environmental Defense Fund, to measure, manage and mitigate methane emissions.
- And we support UN Global Compact's call for companies to factor an internal carbon price in their investment decisions. In fact, since 2008, Total has factored a long term carbon price of \$25/t in its investment decisions.

Through these few examples and initiatives, I wanted to demonstrate that Total, and more broadly the industry, are fully mobilized to fight global warming and find solutions.

But there is not ONE miracle solution, rather a mix of solutions which have to be developed in parallel and addressed globally. We cannot have only one region taking strict measures and not the others: it will distort competition, industry, employment. Industry should and can prove that better energy is possible and that they are fully engaged, industry should and can advise politicians on what is and what is not possible, but they urgently need a fair and long reaching worldwide framework to base their investment decisions on.

Thank you for your attention.