TOTAL: THE CLIMATE CHAOS STRATEGY

Synthesis in English of the French report

The difference between 1 ° C, 1.5 ° C and 2 ° C of global heating is worth hundreds of millions of lives. Acknowledging the stakes, Total is redoubling its communication efforts to appear as a «major of responsible energy», suggesting a major inflection of the group's strategy. This report reveals that the Group is building its strategy on the New Policies Scenario of the International Energy Agency (IEA), a scenario leading to a warming of between 2.7 ° C and 3.3 ° C[1], clearly incompatible with the objectives of the Paris Agreement.

This New Policy Scenario would lead to a significant number of grave and irreversible damages. Indeed, if warming exceeds + 1.5 ° C, between 8 and 13 trillion US dollars may occur[2].

The question is, who will bear the cost of loss and damage arising from these additional climate impacts? In the US, a number of local authorities exposed to rising sea levels are already demanding compensations to the «carbon majors», including Total. Total is indeed the source of more than 0.9% of global emissions[3].

In France, several associations and thirteen local authorities called Total on 22 October 2018 of the need to respect the Paris Agreement in order to comply with the requirements of the law on due diligence[4]. This law compels parent companies to control their subsidiaries in order to prevent the most serious violations of human rights and the environment, both in France and abroad. However, Total reports only a façade climate strategy (I) that would remain incompatible with the Paris Agreement even if it were implemented sincerely (II). Perseverance in hydrocarbons finally exposes the company to imminent financial and legal risks likely to weaken its activities (III).

I- A FACADE CLIMATE STRATEGY

In its registration documents (*notes to the consolidated financial statements*), Total explains that the New Policies Scenario (NPS) is part of an «important reference for the Group» or even «the main scenario retained by the Group»[5]. Yet the NPS leads to a warming between 2.7 ° C and 3.3 ° C.

Relying on this scenario contradicts frontally the Paris Agreement and the numerous declarations of Total, namely :

- His website explicitly mentioning a +2 ° C scenario[6];
- the chapters «social, environmental and societal information» from the various reference documents for 2016 and 2017 in which Total «undertook as of 2016 to contribute to the success of the United Nations Sustainable Development Goals» whose objective is ° 13 provides for urgent actions to keep warming well below 2 ° C and to continue efforts to reach the target 1.5 ° C;
- the various reports «integrating climate into our strategy» from 2016 to 2018, which repeatedly highlight the fact that the group has «*an ambition consistent with the 2 ° C scenario*»[7].

This twofold discourse diffuses subtly in the company's latest climate report of 2018 by deliberately maintaining confusion between the various scenarios of the IEA to justify massive investments in gas and oil production.

1 H. MCKINNON, 1.5°C: IEA's scenarios will fail, need urgent review says letter from experts, business leaders, 2019.
2 Idem.
3 CDP, Carbon majors database, 2017.
4 https://notreaffaireatous.org/nous-sommes-les-territoires-qui-se-defendent/
5 Total, p. 275 registration document 2018 ; p. 257 registration document 2017.
6 https://www.total.com/fr/expertise-energies/exploration-production/petrole-gaz
7 Total, "intégrer le climat à notre stratégie", 2018, p. 41.

These contradictions and the deliberate lack of clarity reveal that Total's voluntary commitments are not followed in practice. This facade climate strategy seems to be misleading the various stakeholders, as well as financiers and investors.

II - MITIGATION LEVERS LARGELY INCOMPATIBLE WITH THE PARIS AGREEMENT

The mitigation levers proposed by Total in no way guarantee the achievement of the objectives set out in the Paris Agreement.

a) Insufficient general objectives of the Group

The climate objectives presented by the Group in its various reports are:

- a reduction of routine burning;
- an average 1 % improvement in energy efficiency between 2010 and 2020;
- a sustainable reduction in the intensity of methane emissions from facilities operated at less than 0.20 % of the commercial gas produced, by 2025;
- a reduction in greenhouse gas (GHG) emissions from facilities operated from 46 Mt CO2e in 2015 to less than 40 Mt CO2e by 2025.
- Total adds that the Group targets a reduction carbon intensity of its products by 15% in 2030 compared to 2010.

The inconsistency of the Group's objectives with the fight against climate change is clear.

First, the temporal scope of these objectives is far too limited. The objectives do not go beyond the year 2030 and mention no objective of carbon neutrality, yet necessary to the horizon 2050. Carbon neutrality seems technically out of reach for Total since it follows a strategy based on the continuation of its oil and gas production activities.

Secondly, the target of reducing by 15% the carbon intensity of Total's products by 2030 compared to 2015 is largely insufficient. According to the Intergovernmental Panel on Climate Change (IPCC), a reduction of at least 45% of GHG emissions in 2030 compared to 2010 is needed to have a sufficiently reasonable chance of achieving the objectives of the Paris Agreement[8].

b) Energy efficiency: a derisory positive impact in the state

Total has set a goal of optimizing the energy consumption of its facilities by approximately 1% on average per year over the 2010-2020 period. If this objective remains limited to Total's oil and gas installations, its impact will remain largely insufficient. Only an energy transition combining energy efficiency and the deployment of renewable energies can ensure an adequate and decarbonated energy supply.

c) The desire to grow in gas: an inadequate and dangerous strategy

Apart from the risks inherent in any hydrocarbon extraction project in sensitive areas such as the Arctic, growth in gas development is not in line with the Paris Agreement. Gas is indeed a fossil energy strongly emitting greenhouse gases and especially methane. Total notes, «*methane is a potent greenhouse gas whose global warming potential (GWP) is, according to IPCC 1, 72 times higher than that of carbon dioxide (CO2) over 20*

8 According to the IPCC, to have a 50% chance of limiting warming to 1.5 ° C by the end of the century, emissions must be reduced by at least 45% by 2030 compared to 2010 and reach carbon neutrality by2050. To have a 66% chance of not exceeding 2 ° C by the end of the century, a reduction of 20% is needed by 2030 compared to 2010 and carbon neutrality must be achieved in 2075. However, in order to have sufficient probability to achieve the objectives of the Paris Agreement, it seems necessary to align with a trajectory of +1.5 ° C since such a trajectory increases the chances of staying below +2 ° C of about 85%.

years, and 25 times superior over 100 years» [9]. The methane emissions from the gas therefore have a potential to worsen global warming far too important for the gas to be considered as a transitional energy. From year to year, studies show that the climate balance of gas is much worse than previously thought, and even more so when it comes to liquefied natural gas (LNG), a sector in which Total counts reinforce.

The trajectories presented by the IPCC in its last special report according to which the share of gas would remain stable or increase slightly in the energy mix foresee the deployment of carbon capture and sequestration techniques (hereinafter CCS or CCUS). However, CCUS techniques are still at the research and development stage and their deployment remains subject to multiple economic, social and environmental constraints, and to great uncertainty about its large-scale technical capability. Taking them into account today is thus more speculative and even incantational than a serious strategy to mitigate climate change.

Thus, if the techniques of CCUS and negative emissions are not used, the share of gas in the global mix must decrease directly and rapidly (-25% in 2030 compared to 2010 and -74% in 2050). It can be seen that an increase in gas production is totally inadequate. As such, the choice to consider gas as a «*low carbon*»[10] energy and put it on the same level as renewable energies («*Gas Sector, Renewables & Power*»), seems particularly inappropriate, and even extremely cynical.

According to a report by Oil Change International, the only gas and oil reserves currently being exploited are already largely sufficient to exhaust the global carbon budget under a scenario at +1.5 ° C. This analysis inspired the French «Hulot» legislation[11] on the end of hydrocarbon exploration and production in France. Total's strategy of growing in gas is therefore contrary to the objectives of the Paris Agreement.

d) Agrofuel development contributing to deforestation

Total's «bio-refineries» can not be presented as a measure to combat climate change, mainly because of the massive imports of palm oil that they require, which contribute significantly to tropical deforestation. Total states that its vegetable oils come from «*certified sustainable charges*» but this information is largely insufficient to infer that they do not participate in deforestation. Indeed, a report commissioned by the French government states that «*there are a large number of certification systems, none of which currently deals with the issue of deforestation*»[12]. Total should therefore exclude palm oil from its refineries. In addition, the production of biomass (palm oil and other plants) for the production of agrofuels competes with land use for other purposes such as feeder agriculture or reforestation, particularly in one world. where land pressure is increasing and the world population to feed is increasing.

e) Investment in carbon sinks: non-available and risky levers

Total intends to preserve and restore ecosystems in their roles as natural carbon sinks. A budget of USD 100 million per year is allocated for this purpose from 2020. However, this emission compensation measure is not yet implemented and as the IPCC recalls, afforestation (reforestation for natural carbon sinks) increases pressure on the land. The consistency of this lever with the previous one is therefore seriously questioned.
With respect to CCUS techniques, as demonstrated above, their deployment is both unproven and risky. The IPCC specifies that GHG reduction projections on their basis constitute a major risk in the ability to limit global warming.

9 Total, "intégrer le climat à notre stratégie", 2018, p. 30.

10 Total, reference document 2018, p. 106.
11 LOI n° 2017-1839 du 30 décembre 2017 mettant fin à la recherche ainsi qu'à l'exploitation des hydrocarbures et portant diverses dispositions relatives à l'énergie et à l'environnement (1).
12 CGEDD et CGAAER, Durabilité de l'huile de palme et des autres huiles végétales, décembre 2016.

f) «Initiatives» not implemented and not very credible

Total's plea for a «balanced and progressive international agreement on CO2 price» or a tax on the largest CO2 consumers remains at the stage of political proposals and discussions. These initiatives can not therefore be considered as appropriate and effective risk reduction measures.

The good faith of these initiatives is also debatable. Indeed, according to an Influence Map report, Total remains a member of trade associations such as the Canadian Association of Petroleum Producers, the American Petroleum Institute and the Australian Petroleum Production & Exploration Association, all of which have actively lobbied set of policies to combat climate change.

III - IMMINENT LEGAL AND FINANCIAL RISKS

If Total continues to rely on projections that are inconsistent with the Paris Agreement, the company will face impending legal and financial risks. Indeed, as Total analyzes it discreetly, but lucidly, in its reference document in the section on risks:

> «Laws and regulations as well as the growing concern of stakeholders regarding climate change are likely to adversely affect the Group's business and financial position. [...] The Group believes that it is impossible to guarantee that the financial costs or commitments related to the risks mentioned in this point 3.1.2 will not be likely in the future to have a significant negative impact on its activities, its financial position, including its operating results and cash flows, its reputation, prospects or shareholder value, if these risks materialize «(Total, registration document, 2018, 76).

However, climate change is not a potential risk but a reality already at work. As the IPCC recalls, human activities, including the burning of fossil fuels (71% of global GHG emissions), are already responsible for a warming of about +1 ° C. If the rate of warming remains constant until, it is almost certain that a warming greater than +1.5 ° C will occur[13]. Refusing to draw the necessary consequences to prevent the occurrence of such warming exposes the company to significant legal and financial risks that could compromise its activities. More specifically, the Carbon Tracker Initiative in partnership with the Principles for Responsible Investment estimates that 30-40% of Total's current assets should be abandoned if a trajectory in line with the objectives of the Paris Agreement is chosen[14].

Conclusion

Although global recognition of anthropogenic effect on the climate system dates back to the late 1980s, the first global climate report was published only in 2016, following the adoption of the Paris Agreement by more than 190 states, under the title «integrating climate into our strategy». The measures proposed in this document and Total's ambition to become the «major of responsible energy» are a decoy. Total continues to invest heavily and almost exclusively in oil and gas[15]. This unambitious strategy is even more grave as a limitation of global warming to +1.5 ° C is still possible, if a real inflection of GHG emissions is initiated. Total should radically change its economic model and abandon its new projects in oil and gas.

TOTAL SHOULD RADICALLY CHANGE ITS ECONOMIC MODEL AND ABANDON ITS NEW PROJECTS IN OIL AND GAS.

13 IPCC, SR 15, p. 4
14 CTI, PRI, 2 degrees of Separation, Company-level transition risk, July 2018 Update.
15 Total has disbursed in the exploration and production of hydrocarbons about 9.2 billion dollars in 2018 in organic investments against only 0.5 billion in 2018 in the sector described as «low carbon» ie gas and renewable, see Total, reference document 2018, p. 68.