

SUMMONS

BEFORE LE TRIBUNAL JUDICIAIRE DE NANTERRE

THE ... OF TWO THOUSAND AND TWO

AT THE REQUEST OF:

1. **NOTRE AFFAIRE À TOUS**, an association governed by the Law of 1 July 1901, headquartered in Paris, represented by its President acting under Article 11 of its Articles of Association (**Exhibit No. 1-1**).
2. **SHERPA**, an association governed by the Law of 1 July 1901, headquartered in Paris, represented by its President acting under Article 12 of its Articles of Association (**Exhibit No. 1-2**).
3. **ZÉA**, an association governed by the Law of 1 July 1901, headquartered in Toulon, represented by one of its co-chairs, acting under a decision of its Board of Directors dated 14 September 2019 (**Exhibit No. 1-3**).
4. **ÉCO-MAIRES** "Association Nationale des Maires et des Élus Locaux pour l'Environnement et le Développement Durable", an association governed by the Law of 1 July 1901, headquartered at 215 bis boulevard Saint Germain in Paris (75007), represented by its President acting under Article 12 of its Articles of Association (**Exhibit No. 1-4**).
5. **FRANCE NATURE ENVIRONNEMENT**, an accredited association for the protection of the environment governed by the Law of 1 July 1901, headquartered in Paris, represented by its President, acting under deliberation of its Bureau dated 21 January 2020 (**Exhibit No 1-5**).
6. **THE MUNICIPALITY OF ARCUEIL**, domiciled at its City Hall located at 10 Avenue Paul Doumer, 94110 ARCUEIL, represented by its Mayor-in-Office, acting under the Municipal Council's deliberation 2019DEL106 dated 3 October 2019 (**Exhibit No. 1-6**).
7. **THE MUNICIPALITY OF BAYONNE**, domiciled at its City Hall located at 1 Avenue du Maréchal Leclerc, 64100 BAYONNE, represented by its Mayor-in-Office, acting under the Municipal Council's deliberation dated 14 April 2014 by which power was delegated to him and pursuant to a decision dated 25 June 2019 (**Exhibit No. 1-7**).
8. **THE MUNICIPALITY OF BÈGLES**, domiciled at its City Hall, located at 77 rue Calixte Camelle, 33130 BÈGLES, represented by its Mayor-in-Office, acting under the Municipal Council's Deliberation No. 1 dated 3 October 2019 (**Exhibit No. 1-8**).
9. **THE MUNICIPALITY OF BIZE-MINERVOIS**, domiciled at its City Hall, located at 4 Avenue de l'Hôtel de Ville, 11120 BIZE-MINERVOIS, represented by its Mayor-in-Office, acting under the Municipal Council's deliberation n°2019-33 dated 29 May 2019 (**Exhibit n°1-9**).
10. **THE MUNICIPALITY OF CORRENS**, domiciled at its City Hall, located at 5 Place Général de Gaulle, 83570 CORRENS, represented by its Mayor-in-Office, acting under Decision No 2019/056 of the Municipal Council dated 6 August 2019 (**Exhibit No 1-10**).
11. **THE MUNICIPALITY OF CHAMPNEUVILLE**, domiciled at its City Hall located at 9 rue de l'Église, 55100 CHAMPNEUVILLE, represented by its Mayor-in-Office, acting under Deliberation DE_2019_0_31 of the Municipal Council dated 26 September 2019 (**Exhibit No. 1-11**).
12. **THE PUBLIC TERRITORIAL ESTABLISHMENT EST ENSEMBLE**, domiciled at 100 avenue Gaston Roussel, 92232 ROMAINVILLE, represented by its

President-in-Office, acting under deliberation 2016- 01-07-05 of the Territorial Council and Decision No. 2019

13. THE MUNICIPALITY OF GRENOBLE domiciled at its City Hall located at 11 boulevard Jean Pain, 38021 GRENOBLE, represented by its Mayor-in-Office, acting under Deliberation No. 27-E016 of the Municipal Council dated 23 May 2016 and Order No. ARR_2019_026 dated 9 January 2019 (**Exhibit No. 1-13**).

14. THE MUNICIPALITY OF LA POSSESSION, domiciled at its City Hall located in rue Waldeck Rochet, LA POSSESSION, LA REUNION, represented by its Mayor-in-Office, acting under Deliberation No. 09 of the Municipal Council dated 29 March 2017 and Decision No. 10/2019-SG of 25 July 2019 (**Exhibit No. 1-14**).

15. THE COMMUNE OF MOUANS-SARTOUX, domiciled at its City Hall located at Place du Général de Gaulle, 06370 MOUANS-SARTOUX, represented by its Mayor-in-Office (**Exhibit No. 1-15**).

16. THE MUNICIPALITY OF NANTERRE, domiciled at its City Hall located at 88 rue du 8 mai 1945, 92000 NANTERRE, represented by its Mayor-in-Office, acting under the Municipal Council's Deliberation DEL2014-79 of 29 March 2014 and the Mayor's decision of 4 October 2019 (**Exhibit No. 1-16**).

17. THE MUNICIPALITY OF SEVRAN, domiciled at its City Hall located at 28 Avenue du Général Leclerc, 93270 SEVRAN, represented by its Mayor-in-Office, acting under Deliberation No. 4 of the Municipal Council dated 15 May 2018 and Decision No. 2018/299 dated 19 October 2018 (**Exhibit No. 1-17**).

18. THE MUNICIPALITY OF VITRY-LE-FRANÇOIS, domiciled at its City Hall located at Place de l'Hôtel de Ville 51300 VITRY-LE-FRANÇOIS, represented by its Mayor-in-Office, acting under Deliberation DEL 36-2014 of the Municipal Council dated 17 April 2014 (**Exhibit No 1-18**). **19. THE REGION CENTRE VAL DE LOIRE**, domiciled at its Hôtel de Région located at 9 rue Saint-Pierre Lentin 45000 ORLEANS, represented by the President of the Regional Council acting under Deliberation 15.05.04 of 21 December 2015 (**Exhibit No. 1-19**).

Represented by Counsel:

Mr Sébastien MABILE
Mr François de CAMBIAIRE,
Lawyers at the Paris Bar
Practising within the SELARL SEATTLE AVOCATS
1, rue Ambroise Thomas - 75009 PARIS
Tél.: 01.44.29.77.77- Fax: 01.45.02.85.61
Toque P 206

Where domicile is established, who are acting for the plaintiffs for this summons and seq.

Have the honour to inform :

I, the undersigned Bailiff

Residing

1/ The company **TOTAL S.A.**, a limited liability company with a capital of €6,646,286,507.50, headquartered at 2 place Jean Miller, La Défense 6, 92400 COURBEVOIE, France registered in the Trade and Companies Register of NANTERRE under company registration number 542 051 180, represented by its President and CEO, Mr Patrick POUYANNE,

TO APPEAR

Before the NANTERRE Judicial Tribunal located at 179-191 avenue Joliot Curie, 92020 NANTERRE, for the factual and legal grounds set out below,

VERY IMPORTANT

You are being sued according to the object and reasons set out below, and you are reminded as such:

That you are required to instruct counsel within fifteen days from the date indicated at the head of the present act, subject to an extension due to distance in accordance with Articles 643 and 644 of the Code of Civil Procedure, by appointing a lawyer having his professional residence in the jurisdiction of the Court of Appeal of Versailles or of one of the Bars of Paris, Bobigny or Créteil to represent you before the court.

That failure to do so will expose you to a judgment being passed against you on the sole basis of the evidence provided by the opposing party.

That the exhibits on which the claim is based are indicated at the end of this act.

You are reminded of the following provisions, taken from Law No. 71-1130 of 31 December 1971 on the reform of certain judicial and legal professions, which are applicable here:

Article 5 of Law No. 71-1130 of 31 December 1971 as amended by Law No. 2015-990 of 6 August 2015:

“Lawyers shall exercise their function and may plead without territorial limitation before all courts and jurisdictional or disciplinary bodies, subject to the reservations provided for in Article 4. They may apply before all the judicial courts of the jurisdiction of the Court of Appeal in which they have established their professional residence and before the aforementioned Court of Appeal.

By way of derogation from the second subparagraph, lawyers may not apply to any court other than that in which their professional residence is established, either in the context of proceedings for seizure of property, sharing and auction, or in proceedings relating to legal aid, or in proceedings in which they are not also in charge of pleading the case. »

Article 5-1:

"Notwithstanding the second paragraph of Article 5, lawyers registered with the bar of one of the judicial courts of Paris, Bobigny, Créteil and Nanterre may apply to each of these courts. They may apply to the Court of Appeal of Paris when they have applied to one of the judicial courts of Paris, Bobigny and Créteil, and to the Court of Appeal of Versailles when they have applied to the judicial court of Nanterre. The derogation provided for in the last paragraph of the same Article 5 is applicable to them."

You are also reminded of the following articles of the Code of Civil Procedure:

Article 641:

“Where a time-limit is expressed in days, the day of the process, of the event, of the decision or that of service that causes it to run will not be counted. Where the time-limit is expressed in months or years, it will expire on the day of the last month or year bearing the same date as the day of the process, of the event, of the decision or of the notification that causes the time-limit to run. In the absence of an identical date, the time-limit will expire on the last day of the

Article 642: *“All time-limits will expire on the last day at midnight. The time-limit that would normally expire on a Saturday, Sunday or a public or non-working day will be extended till the first following working day.”*

Article 642-1:

“The provisions of Articles 640 and 642 apply likewise to time-limits within which registration and other formalities of publication must be made.”

Article 643:

“Where the action is brought before a court sitting in the mainland of France, the time-limits for appearances, lodging an appeal, a motion to set aside in the case provided for in Article 586 (3), a motion for revision and an appeal in cassation will be extended by:
1° One month for persons residing in Guadeloupe, French Guiana, Martinique, Reunion, Mayotte, St. Barthelemy, St. Martin, St. Pierre and Miquelon, French Polynesia, Wallis and Futuna Islands, New Caledonia and the French Southern and Antarctic Territories.
2° Two months for persons living in a foreign country.”

Article 644:

“Where the action is brought before a court sitting in Guadeloupe, French Guiana, Martinique, Réunion, Mayotte, Saint Barthelemy, Saint Martin, Saint Pierre and Miquelon and the Wallis and Futuna Islands, the time-limit for appearances, lodging an appeal, a motion to set aside in the case provided for in Article 586 (3), a motion for revision will be extended by one month for persons not living in that administrative department as well as for those who live in the districts of such administrative department in whose jurisdiction the court has its seat and by two months for persons living aboard.”

Lastly, it is stated, under article 752 of the Code of Civil Procedure, that the plaintiffs do not agree that the proceedings should take place without a hearing, under article L. 212-5-1 of the Code of Judicial Organisation.

The exhibits on which the claim is based shall be indicated at the end of the act in the attached list of exhibits.

In accordance with the terms of Article 54 of the French Code of Civil Procedure (formerly Article 56), the complaining associations and municipalities approached TOTAL S.A. with a view to reaching an

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1. FACTS AND PROCEEDINGS

1.1. DEFINITIONS

The terms related to climate change used in the claim thereafter have the following meaning:

Boe: *barrel oil equivalent*. This conventional unit allows the comparison between different sources of energy, such as between oil, natural gas, and coal.

Btu - *British thermal unit*: British measure of the heat content of energy, corresponding to 1055,06 joules.

CO₂eq: *CO₂ equivalent* is as a metric measure, created by the IPCC in its first assessment report, used to compare the emissions from various greenhouse gases (GHG) on the basis of their global-warming potential, by converting amounts of other gases to the equivalent amount of carbon dioxide with the same global warming potential (GWP). For instance, for the IPCC the GWP for methane (CH₄) is 28. This means that emissions of 1 ton of methane are equivalent to emissions of 28 tons of CO₂ over a hundred year. Thus, each ton of methane is accounted for as 28 tons of CO₂ equivalent in GHG emission reports.

Indirect emissions: the ‘methodological guidelines for public authorities to draft greenhouse gases emission reports according to article L. 229-95 of the French Environmental Code’, established by the Ministry of Ecology, defines indirect emissions as the « consequence of a legal person’s activities »:« *Other indirect GHG emission: GHG emission, other than the indirect emissions of GHG associated with energy, that is a consequence of a legal person’s activity otherwise resulting from GHG sources pertaining to or controlled by other entities* ».

GHG or Greenhouse gases: according to the IPCC, GHG is « *gaseous constituents of the atmosphere, both natural and anthropogenic, that absorb and emit radiation at specific wavelengths within the spectrum of thermal infrared radiation emitted by the Earth’s surface, the atmosphere itself, and by clouds. This property causes the greenhouse effect. Water vapor (H₂O), carbon dioxide (CO₂), nitrous oxide (N₂O), methane (CH₄), and ozone (O₃) are the primary greenhouse gases in the Earth’s atmosphere. Moreover, there are a number of entirely human-made greenhouse gases in the atmosphere, such as the halocarbons and other chlorine- and bromine-containing substances, dealt with under the Montreal Protocol. Beside CO₂, N₂O, and CH₄, the Kyoto Protocol deals with the greenhouse gases sulfur hexafluoride (SF₆), hydrofluorocarbons (HFCs), and perfluorocarbons (PFCs)* ».

IPCC: Intergovernmental Panel on Climate Change, which studies provide the most recent overview of scientific knowledge regarding climate change. The IPCC is an intergovernmental organism gathering 195 States. The IPCC’s mission is, firstly, to provide elements that have formed a consensus in the scientific community and secondly, to identify the limits in current knowledge or regarding the interpretation of results. Its studies are the result of the collaboration of thousands of experts from more than 40 countries, referring themselves to thousands of scientific references that are evaluated by public institutions worldwide that are allowed to raise observations on the results.

Scope: GHG emissions of companies are accounted for in the following categories:

- *Scope 1* refers to direct emissions related to an operated perimeter;
- *Scope 2* refers to indirect emissions related to energy consumption on the operated sites;
- *Scope 3*, the most important, refers to all indirect emissions related to the use of goods and services produced (i.e. oil combustion - see category 11 of *scope 3* referring to 85% of emissions for petroleum and gas companies such as TOTAL), including also emissions related to investments (category 15 of *scope 3*), relevant for the financial sector.

The Report of Réseau Action Climat (*Climate Action Network*) on companies' climate responsibilities (May 2016) defines scope 3 emissions as « indirectly produced by activities » of legal persons: « *other indirect emissions (or SCOPE 3). Other indirect emissions produced by the activities of the organization that are not accounted for in scope 2 but are related to the overall value chain as, for example, the purchase of raw materials, services or other products, mobility of employees, overall transportation of goods, management of waste generated by the organism's activities, use, and lifespan of products and sold services, immobilization of goods and production equipment* ».

Net negative emissions according to the IPCC, « *“a situation of net negative emissions is achieved when, as a result of human activities, more greenhouse gases are removed from the atmosphere than are emitted into it. such a state would require a balancing of residual emissions with emission (carbon dioxide) removal as well as accounting for regional or local biogeophysical effects of human activities that, for example, affect surface albedo or local climate. See also Negative emissions, Net-zero emissions, and Net-zero CO2 emission” (Glossary - Report on Global Warming at 1.5°C, 2018).*

Article L100-4 of the French Code of Energy provides that « *net negative emissions is understood as a balance, on the national territory, between anthropogenic emissions by sources and removals by sinks of greenhouse gases, as mentioned in article 4 of the Paris Agreement ratified on 5 October 2016. The accounting of these emissions and removals is realized according to the same modalities than those applicable to national GHG inventories notified to the European Commission and those pertaining to the framework of the UNFCCC Convention, without taking into account international credits of carbon compensation* ».

1.2. THE LEGAL FRAMEWORK APPLICABLE TO THE FIGHT AGAINST GLOBAL WARMING

1.2.1. In terms of international law

In **1988**, the Intergovernmental Panel on Climate Change (IPCC) was created under the auspices of the United Nations Environment Programme (UNEP) and the World Meteorological Organisation (WMO).

In **1992**, during the United Nations Conference on the environment and development, 154 States adopted the United Nations Framework Convention on Climate Change. Its objective, reaffirmed in its Article 2, « *is to achieve, in accordance with the relevant provisions of the Convention, stabilization of greenhouse gas concentrations in the atmosphere at a level that would prevent dangerous anthropogenic interference with the climate system* ».

In November and December 2015, the 21st Conference of the Parties to the UNFCCC took place in Paris and led to the adoption of the Paris Agreement on 12 December 2015 (« *Paris Agreement* » thereafter). France ratified it on 5 October 2016 and it came into force on 4 November 2016 in accordance with its Article 21§1.

Article 2 of this Agreement provides that:

« 1. This Agreement, in enhancing the implementation of the Convention, including its objective, aims to strengthen the global response to the threat of climate change, in the context of sustainable development and efforts to eradicate poverty, including by:

1.2.1.1. Holding the increase in the global average temperature to well below 2 °C above pre-industrial levels and pursuing efforts to limit the temperature increase to 1.5 °C above pre-industrial levels, recognizing that this would significantly reduce the risks and impacts of climate change (...) »;

In October 2018, the IPCC published a special report on the warming of 1.5°C, highlighting the worsening of climate change effects and the pressing need to contain global warming at 1.5°C in order to avoid the rise of a series of risks of severe damage to the environment as well as health and security of individuals (**Exhibit n°4**).

The COP21 of the UNFCCC requested this document at the same time as the adoption of the Paris Agreement, to provide evidence of the climate emergency based on more than 6000 scientific researches.

1.2.2. In terms of local law

Following the ratification of the Paris Agreement on 5 October 2016, the French lawmaker intended to draw the appropriate conclusions as regards the oil and gas industry.

Law n°2017-1839 of 30 December 2017, ending exploration and extraction of hydrocarbons, and containing several provisions on energy and the environment — the "Law Hulot" (for the name of the former Environment Minister Mister Nicolas Hulot) - organizes the progressive phase-out of hydrocarbon production on the French territory by 2040 and prohibits the exploration and exploitation of shale gas and all other non-conventional hydrocarbons.

The French lawmaker thus intended to:

- Prohibit the exploitation of new oil fields as of 1 January 2018;
- Prohibit the exploitation of existing oil fields after 1 January 2040.

The explanatory memorandum of the law states that :

« The works of the Intergovernmental Panel on Climate Change (IPCC) show that the achievement of the objective of a 2°C increase in temperature from the preindustrial era supposes to limit the exploitation of fossil energy reserves (oil, gas, coal) present in the underground. 80% of the already known fossil reserves should remain underground in order to allow the achievement of the objective in the increase in temperatures

provided in the Paris Agreement. Accordingly, granting new exploration licenses is incompatible with the Paris Agreement ».

Law n°2019-1147 of 8 November 2019 relating to energy and climate modified article L.100-4 of the French Energy to increase the reduction of national greenhouse gases emissions ('GHG' thereafter) objectives in accordance with the Paris Agreement and translated into law the aim to reach carbon neutrality in 2050 with a division by six of GHG in comparison to their level in 1990:

*« I. To respond to the ecologic and climate emergency, the national energy policy aims at:
1° Reducing the GHG emission from 40% between 1990 and 2030 and reach carbon neutrality as of 2050 by dividing GHG emissions by a factor of more than six between 1990 and 2050 (...) ».*

These texts, both national and international, echo the recent works of the IPCC by upholding the objective to reach carbon neutrality by 2050 to avoid severe damage risks that would result from global warming *« much below 2°C in comparison to the preindustrial levels and in accordance with the action undertaken to limit the evolution of temperature at 1.5°C »* in accordance with the Paris Agreement.

1.3. PRESENTATION OF THE GROUP TOTAL S.A.

1.3.1. TOTAL S.A. activities

TOTAL S.A. is a public limited company under French law created in France on 28 March 1924 under the denomination « French petroleum company » (*Compagnie française des pétroles - CFP*). The group started its activities in the Middle East in 1924 and later developed its presence globally.

The company is renamed « Total CFP » in 1985, then « Total » in 1991.

At the beginning of 1999, the Company took control of Petrofina S.A. thus becoming « TotalFina ». At the beginning of 2000, « TotalFina » took control of Elf Aquitaine, thus becoming « TotalFinaElf ». The group finally adopts its new name « TOTAL » in May 2003. In 2019, TOTAL S.A. is present in more than 130 countries and gathers almost 100 000 collaborators. The group produces and sells oil products, natural gas, and low carbon electricity.

According to the Reference document of 2018 by Total (« RD 2018 » thereafter), the activities of the Group are divided into four sectors:

□ The Exploration Production sector

According to TOTAL, *« the Exploration Production (EP) has the objective to discover and develop oil and gas deposits to satisfy an increasing energy demand carried out by non-OECD members »* (**Evidence n°5, p.34**).

In 2018, almost 2,8 Mboe of hydrocarbon per day (gas and oil) were produced by TOTAL, an increase of 8% in comparison with the previous years (2.6 Mboe in 2017 and 2,4 Mboe in 2016).

The increase in production should continue in the following years, as TOTAL estimates that it is able to *« increase the production by roughly 6 to 7% each year over the period 2017-2020 »* (**Evidence n°5, p.34**).

According to TOTAL, « *the proven reserves of hydrocarbon established according to the rules of the SEC (Brent at 71,43\$/b in 2018) are up to 12 050 Mboe on 31 December 2018* », « *which represents approximately 20 years of lifespan at the average production level in 2018* » (Evidence n°5, p.33).

Expenses in the exploration of new oil deposits remain high: « *In 2018, exploration expenses on all the subsidies of EP amounted to 1.2 billion dollars and were realized mostly in the United States, Guyana, United Kingdom, Norway, Myanmar, French Guyana, Mexico, South Africa, Azerbaijan and Nigeria against 1.2 billion dollars in 2017 and 1.4 billion dollars in 2016* ». (Evidence n°5, p.34).

□ **The Gas, Renewables, and Power sector:**

According to TOTAL, « *the Gas, Renewables & Power carries the ambition of the Group in low carbon jobs through the development in the gas and low carbon electricity area, as well as jobs in the energy efficiency sector* » (Evidence n°5, p.51).

Notably, this sector includes the subsidiaries of TOTAL S.A. operating in the sector of renewable energy « *Quadra, Total Solar* » as well as its « *shares in SunPower and Total Eren* » (Evidence n°5, p.51).

□ **The Refining and Chemistry sector (début p/ 11)**

According to TOTAL, « *Refining and Chemistry constitute a big industrial sector encompassing refining, basic petrochemistry (olefins and aromatics), polymer derivatives (polyethylene, polypropylene, polystyrene, hydrocarbon resin), biomass transformation and elastomer transformation (Hutchinson). This sector moreover includes Trading-Shipping activities* » (Evidence n°5, p.56).

On 31 December 2018, the Group's refining capacities were up to 2Mboe per day.

« *TOTAL holds shares in 18 refining infrastructures (from which nine are operated by the Group's subsidiaries) located in Europe, in the Middle East, in the United States in Asia and Africa* » (Evidence n°5, p.57).

□ **The Marketing and Services sector**

According to TOTAL, « *Marketing and Services encompasses global supply activities and commercialization of products and oil services* » (Evidence n°5, p.62).

This sector covers 14 311 petrol stations of the Group TOTAL on 31 December 2018.

1.3.2. Direct and indirect emissions from TOTAL represent almost 1% of the global GHG emissions

The attribution of GHG emissions to companies was the subject of recent works, specifically from the American researcher Richard HEEDE published on 7 April 2014¹. These works allow measuring how

¹ R. HEEDE, Carbon Majors : Accounting for carbon and methane emissions 1854-2010, Methods and Results Report, Snowmass, Climate Mitigation Services, 2013.

90 companies (83 companies in the petroleum sector and 7 companies in the business of concrete production) in the world contributed to the climate crisis (**Evidence n°6**).

According to this report, direct and indirect emissions generated by TOTAL's activities represent 0.82% of the global GHG emissions for the period 1751-2010 ²(**Evidence n°6, p. 26**).

The NGO Carbon Disclosure Project and Richard HEEDE published in 2017 a second study according to which 100 companies are responsible for 71% of the global GHG emissions in the period 1988-2015 (**Evidence n°7**).

These works allow us to link half of the global emissions on this period to solely 25 companies around the world. Among them, TOTAL is the first French company, with 0.9% of the global GHG emissions allocated to it (**Evidence n°7, p.14**).

Appendix I

Cumulative emissions 1988-2015

Producer	Cumulative 1988-2015 Scope 1 st GHG, MtCO ₂ e	Cumulative 1988-2015 Scope 3 rd GHG, MtCO ₂ e	Cumulative 1988-2015 Scope 1+3 GHG, MtCO ₂ e	Cumulative 1988-2015 Scope 1+3 of global industrial GHG, %
China (Coal)	9,622	119,312	128,933	14.3
Saudi Arabian Oil Company (Aramco)	4,263	36,298	40,561	4.5
Gazprom OAO	4,652	30,569	35,221	3.9
National Iranian Oil Co	2,468	18,037	20,505	2.3
ExxonMobil Corp	1,833	15,952	17,785	2.0
Coal India	892	15,950	16,842	1.9
Petroleos Mexicanos (Pemex)	2,055	14,749	16,804	1.9
Russia (Coal)	1,216	15,524	16,740	1.9
Royal Dutch Shell PLC	1,212	13,805	15,017	1.7
China National Petroleum Corp (CNPC)	1,479	12,564	14,042	1.6
BP PLC	1,072	12,719	13,791	1.5
Chevron Corp	1,215	10,608	11,823	1.3
Petroleos de Venezuela SA (PDVSA)	1,108	9,971	11,079	1.2
Abu Dhabi National Oil Co	1,135	9,635	10,769	1.2
Poland Coal	884	9,506	10,490	1.2
Peabody Energy Corp	266	10,098	10,364	1.2
Sonatrach SPA	1,490	7,507	8,997	1.0
Kuwait Petroleum Corp	767	8,194	8,961	1.0
Total SA	778	7,762	8,541	0.9
BHP Billiton Ltd	588	7,595	8,183	0.9

Source : CDP, *The Carbon Majors Dataset*, p. 14 (**pièce n°7**)

TOTAL is ranked 19th in the history of companies that have most contributed to global warming in the world, but is also the only French one.

² R. HEEDE, Carbon Majors : Accounting for carbon and methane emissions 1854-2010, Methods and Results Report, Snowmass, Climate Mitigation Services, 2013., p. 21.

In 2018, according to the numbers provided by TOTAL S.A. in the Reference Document 2018³, the Group was responsible for:

- 54 Mt CO₂eq of direct emissions (scope 1)
- Including 40 Mt CO₂eq of GHG direct emissions (scope 1) in operated sites;
- 4 MT CO₂eq of indirect emissions resulting from the energy consumption on the operated sites (scope 2);
- 400 Mt CO₂eq of indirect emissions resulting from the use of sold products (scope 3).

Which amounts to 458 Mt CO₂eq in 2018 (Evidence n°5, page 202).

In comparison, on the same year (2018), French territorial GHG, excluding UTCATF ⁴(*use of land and change of destination of land and forests*) represented **445 Mt CO₂eq**⁵.

Thus, yearly emissions generated by TOTAL's activities are **higher** than the global volume of territorial GHG emission in France, with its 67 million inhabitants.

Such a high contribution from TOTAL is recognized by the group as, according to its CEO, M. POUYANNE, direct emissions « *associated with infrastructures operated by the TOTAL group globally represent 42 million tons of CO₂, that is to say 0.1% of the global emissions. The global use of our products by our clients generates emissions ranking at 400 million tons of CO₂, i.e. 0.8% of the global emissions* » (Evidence n°2-4), with a result of 0.9% of global emissions.

According to the IPCC, anthropic activities emitted 42 billion tons of CO₂eq in the atmosphere in 2017⁶.

The 458 million tons generated by TOTAL's activities thus amount to slightly more than 1% of the global GHG emissions.

1.4. PROCEEDINGS

1.4.1. The successive publication of two irregular duty of care reports

In March 2018, following the entry into force of the provisions of article L.225-102-4-I. of the Code of Commerce, TOTAL S.A. published a first 'duty of care report' in its Reference Document 2017 (Evidence n°8, p. 96).

However, this first plan appeared to be severely incomplete, and so for two main reasons:

By registered mail of 22 October 2018, the Claimants called on TOTAL S.A. on the incomplete character of this duty of care report (Evidence n°2-1). More specifically, they indicated that:

³ The obligation to perform a summary of GHG emissions is codified in articles L.229-25 and R.229-45 to R.229-50-1 of the Environmental Code. It is applicable for private legal persons (as opposed to public legal persons such as State entities) that employ more than 500 individuals. Article L.225-102-1 of the Code of Commerce established as a result of article. L.225-102-1 clarifies the content of this declaration of extra-financial performance, which must contain « *social and environmental consequences of the activity, including its consequences on global warming resulting from the use of goods or services that the company produces* »(scope 3).

⁴ Use of land and change of destination of land and forests.

⁵ High Council for the Climate, Yearly Carbon Neutrality Report, 2019, p.29.

⁶ IPCC, Special Report 1.5°C, 2018, Chapter 2 of the consolidated Report, p.107.

- The published risks mapping had no mention of global warming risks that would result from a raise in global GHG emissions flowing from TOTAL Group's activities.
- Moreover, this plan did not provide for any adapted action in relation to risk mitigation and prevention of severe damage that result from global warming.

Thus, on 20 March 2019, TOTAL S.A. published a _____ second '**duty of care report**' within the Reference Document 2018, which now explicitly identifies global warming in its risk mapping (**Evidence n°5, p. 93 et s.**).

However, this second report also falls behind legal requirements, as will be shown thereafter.

1.4.2. TOTAL S.A.'s formal notice

In accordance with the provisions of article L.225-102-4 II of the Code of Commerce, the Claimants enjoined TOTAL

S.A. to respect its obligations provided in article L.225-102-4 I of the Code of Commerce by publishing a new duty of care report that would comply with legal requirements within the 3 months of the receipt of this formal notice (**Evidence n°3**).

This notice, sent on 19 June 2019, was received by TOTAL S.A. on 20 June 2019 (**Evidence n°3-1**).

The Claimants required that TOTAL S.A. publishes a new duty of care report that should encompass, among other:

- *"An identification of the risk resulting from the GHG emissions generated by the use of goods and services that your group produces;*
- *An identification of the risks of severe damage as underlined in the last IPCC special report of October 2018;*
- *Adapted actions that would guarantee that your Group falls in line with a compatible objective related to a global warming « much below 2°C in comparison with preindustrial levels and in pursuit of the action led to limit the raise of temperature to 1.5°C », without taking into account the possible use of technologies that remain submitted to several hurdles and high uncertainties ».*

On 17 September 2019, the Head of the Legal Department of the Group formally refused to comply with the notice of the claim, and indicated that: « *the 2019 duty of care report was established in accordance with legal requirements* ». He further considered that « *litigation is not the right path to bring solutions in relation to the fight against global warming* » (**Evidence n°2-5**).

Against this background and taking into account TOTAL S.A.'s refusal to consider the risks related to climate warming in its duty of care report, the public entities and associations that are the Claimants see no other choice than submitting a claim before the Nanterre Judicial Tribunal.

2. DISCUSSION

2.1. ON CLAIMANTS INTEREST AND STANDING TO ACT

Following the enactment, on March 27th, 2017, of the statute on parent and/or ordering companies⁷ duty of care, article L. 225-102-4 II of the French Commercial Code now provides that: when a company receives a formal demand to comply with the duty specified in the aforesaid statute and fails to do so within three months following the receipt of the formal demand:

“The competent court may, at the request of any person having a legitimate interest in this regard, order the company, if necessary under penalty, to respect the said duty.”

Pursuant to the Report issued on behalf of the French National Assembly Law Commission on the Duty of Care statute, anyone with a legitimate interest has the standing to act. It is not limited to a particular claimant type: *“Any person with a legitimate interest can bring an action (other than an action for damages) before a judge, to verify the plan’s existence, publication and effective implementation - therefore also, implicitly, its adequacy to the identified risks”*⁸.

In the present case, organizations as well as the requesting communities have addressed TOTAL SA a formal notice to comply with its obligations under Article L. 225-102-4 I. of the French Commercial Code on June 19th, 2019 (**Exhibit 3**).

The Legitimate interest justifying such action against TOTAL SA is the contribution to reduce TOTAL SA considerable GHG emissions and to mitigate global warming effects affecting whole humanity to various levels.

This type of litigation, known as “climate litigation”, is developing massively around the world.

In May 2017, UN Environment identified almost 900 climate trials on a worldwide scale. This figure is increasing every day: in May 2018, the Sabin Center for Climate Change Law database recorded 1,440 climate trials worldwide, including 1,151 in the United States.

Local authorities (such as the cities of New York, San Francisco, Oakland, Imperial Beach) and organizations (such as Greenpeace, MilieuDefensie) are the main claimants in litigation against the most polluting companies.

As UN Environment emphasizes, *“litigation has arguably never been a more important tool to push policymakers and market participants to develop and implement effective means of climate change mitigation and adaptation than it is today. Technological developments and non-climate policy initiatives cannot be counted on to stave off climate destabilization”*⁸

Pursuing the same preventive purpose, the Statute on biodiversity restoration dated August 8th, 2016, introduced a new chapter on " ecological damage compensation" in the French Civil Code including article 1252 which provides that:

⁷ Report n ° 2628 made on behalf of the Law Commission, by Dominique POTIER, registered at the Presidency of the French National Assembly on March 11, 2015, page 35

⁸ UN Environment in partnership with Columbia Law School, The State of Climate Litigation, World Review, May 2017.

“Irrespective of the ecological damage compensation, the court seized for that purpose by a person mentioned in article 1248, can order reasonable measures to prevent or stop damages.”

The persons mentioned in article 1248 include "any local authorities and their groupings which have an affected territory, as well as public bodies and approved organizations or organizations created for at least five years on the date of the beginning of the proceedings ".

For several years, organizations and communities are among the first civil society representatives expressing massively its concerns, anxiety, or even sometimes anger against global warming effects: climate marches, a petition from the Case of the Century, etc.

They have a clear legitimate interest in bringing an action.

2.1.1. Regarding organizations

Any duly registered organization may bring legal action to defend collective interests as long as it is part of the organization's purposes.

Four out five of the claimant organizations , namely Notre Affaire à Tous (NAAT), Sherpa, ZEA and France Nature Environnement (FNE) set out in their respective by-laws, the defense of the environment and human rights, including by pursuing legal actions (**Exhibits # 1-1, # 1-2, # 1-3 and 1- 5**).

Similarly, ECO-MAYORS by-laws, encourage all actions which purpose is to improve the environment "(**Exhibit 1-4**).

France Nature Environnement (FNE) is an approved organization for the protection of the environment (**Exhibit 1-5**) under article L.141-1 of the French Environment Code.

In all cases, the claimants duly-empowered their legal representatives to bring this action (**exhibits no. 1-1, no. 1-2, no. 1-3, no. 1-4, no. 1-5**).

2.1.2. Regarding local authorities

French local authorities are at risk with climate change dangers and currently bear the costs of mitigation and adaptation.

They have a legitimate interest to protect their territory and population against serious environmental hazards and their citizens' health and safety.

As a matter of fact, France is at risk with global warming effects and is increasingly suffering from them (floods and submergence, droughts, storms, heatwaves, forest fires surge, development of allergens, the collapse of biodiversity...).

Global warming thus contributes to increasing certain risks for the claimants' communities' populations. They are, for example, exposed to changes in the distribution of allergenic species and intensification in the exposure period, thus increasing the sensitivity of the most vulnerable populations. They are also exposed to the appearance of new diseases linked to changes in the distribution of insect vectors (dengue, malaria, etc.).

The urban populations of the claimants' communities (Grenoble, Nanterre, Servan, Arcueil, Est Ensemble, Bayonne, Bègles, Center Val de Loire, La Possession, Mouans-Sartoux, and Vitry-le-Francois) are particularly exposed to heat waves mortality risks. This risk generates a drop in

thermal comfort and excess mortality among the most vulnerable populations (young children, the elderly, outdoor workers).

The populations of the Mediterranean area communities (Bize-Minervois, Mouans-Sartoux, Correns) are particularly exposed to these drought threats. Those risks are likely to facilitate the spread, frequency, and intensity of forest fires similar to the ones that recently devastated millions of hectares in Australia or California. The link between forest fires and global warming is clearly established.

Flooding and submergence hazards related to rising sea levels and the intensification and surge in the frequency of extreme weather events have already become tragically apparent in France: the claimant municipality of Bize-Minervois was once again impacted by the Aude floods in October 2018 during which 15 people lost their lives. The claimant municipality of La Possession in the Reunion Island is particularly exposed to more intense and frequent tropical cyclones dangers. As for the coastal communities (La Possession, Bayonne) or communities on the edge of an estuary (Bègles), they must anticipate marine submergences hazards caused by the continuous average rise in sea levels.

Furthermore, each community commits significant human and financial resources to adapt to climate change consequences.

For example, they must act within the Territorial Energy Climate Plan (TECP) framework provided for in article L.229-26 of the French Environment Code; or the SRADDET planning schemes (regional planning, development scheme sustainable and territorial equality) provided for in article L.4251-1 of the French General Code of Local Authorities.

They thus develop at regional and local level climate change adaptation plans and risk mitigation plans, implementing land use and urban planning strategies allowing reduction and adaptation to climate change (**Exhibit n ° 9**).

Municipalities are particularly concerned as the mayor has, under articles L. 2212-1 and following of the French General Code of Territorial Collectivities (GCTC), general police powers on the municipal territory: local police, public security, peace, and health.

Finally, we emphasize that local authorities action contributes to the explicit goal of article L. 225-102-4 of the French Commercial Code on vigilance plan, to involve “*society stakeholders, if necessary as part of multi-stakeholder initiatives within sectors or at **the territorial level***”.

Therefore, claimants justify of perfectly characterized interest
and standing to act.

2.2. GENERAL ENVIRONMENTAL DUTY OF CARE

Article 1 of the French Charter for the Environment⁹ provides that: “*Everyone has the right to live in a balanced environment which shows due respect for health.* »

Article 2 then provides that: “*Everyone has the duty to participate in preserving and enhancing the environment.*”.

Considering these two articles, the Constitutional Council deduced the existence of an environmental duty of care:

⁹ Constitutional law n ° 2005-205 of March 1, 2005 relating to the Charter for the Environment

*“compliance with the rights and duties set out in general terms under these Articles is a requirement not only for public bodies and the administrative authorities within their respective areas of competence but also for all persons; that **it follows from these provisions that every person is under an obligation to exercise care that no damage to the environment results from his actions**”;* (Decision n ° 2011-116 QPC “ Michel z. ”)

This solution was reaffirmed in Decision n ° 2017-672 QPC of November 10, 2017 "Association Between Seine and Bretonne and others".

According to Franck TERRIER, former President of the Third Civil Chamber of the Court of Cassation:

*" The Constitutional Council decision of April 8, 2011, interprets that the Charter assigns, not only to public and administrative bodies but also to everyone with a duty of care, each being required to answer for environmental damage resulting from its activity and the standing to bring an action for damages which conditions cannot be limited to distort its scope. Once these principles have been established, **it is for the judges to bring them to life** ¹⁰”.*

According to the doctrine, the Constitutional Council case law on the environmental duty of care implementation, it *"does not require the legislator's intervention. Thus, the judge [...] could directly sanction environmental duty of care infringements [...] and allow a ground for environmental fault-based liability "*. One should consider that the environmental duty of care and the sanction of its infringement imposes itself *"not only in case of environmental damage... but also in the event of risk a damage ¹¹".*

In terms of legislative texts¹², Court of Cassation case-law¹³ as well as general public international law sources¹⁴, the duty of care implies a duty to prevent and a duty to accommodate in case of known or reasonably foreseeable damage risk.

Environmental duty of care therefore implies a duty to prevent known risks, but also a duty of care against uncertain risks.

Yet, in view of the predictability of global warming worsening and induced risks, associated losses, and significant damage, everyone is fully bound to reduce his /her impact on - global warming in proportion to his/her means.

Above all, preventive measures must be adapted to the seriousness and importance of the damage risk incurred in the light of the best scientific evidence available¹⁵.

¹⁰ Nomenclature of environmental damage, Preface Franck TERRIER President of the Third Civil Chamber of the Court of Cassation, p. 7.

¹¹ K. FOUCHER, "The first application of the Charter for the Environment by the Constitutional Council in the context of the QPC: unprecedented, unnecessary and vague", A.J.D.A., 2011, p.1158.

¹² Law n ° 2017-399 of March 27, 2017, on the duty of care of parent companies and ordering companies, establishes an obligation to identify and prevent serious violations of the human and environmental rig.

¹³ Cass. 1st civ., March 7, 2006 [2 judgments], appeal no 04-16.179 and no 04-16.180, Bull. civ. I, n 142 and n 143; RTD civ. 2006, p. 565, obs. P. Jourdain; 1st esp., D. 2006, IR p. 812, and the editor's note. *See more particularly the expected principle concerning doubts about the harmlessness of a drug: "UCB Pharma, which, before these known and scientifically identified risks, had taken no action, which it would have had to do even in the presence of discordant results as to the advantages and disadvantages, had failed in its duty of care "*.

¹⁴ See paragraphs 22 to 25 of the Third Air Protection Report, Shinya Murase, Special Rapporteur, International Law Commission, 68th session, 2016 <https://legal.un.org/docs/index.asp?symbol=A/CN.4/692&referer> consulted on October 1st 2019.

In addition to this general constitutional duty of care, there are specific legislative obligations applicable to private individuals.

¹⁵ The International Law Commission, therefore, considers that “a *reasonable standard of care or due diligence may change with time; what might be considered an appropriate and reasonable procedure, standard or rule at one point in time may not be considered as such at some point in the future. Hence, due diligence in ensuring safety requires a State to keep abreast of technological changes and scientific developments.*” This precision on the duty of care concept is entirely relevant to the duty of care under French law (see “*the definition of the pharmaceutical laboratory's duty of care*” by A. GOSSEMENT, On the civil liability of the pharmaceutical laboratory on the basis of the drugs marketed, Recueil Dalloz 2004, p.2071).

2.3. PRIMARILY CONCERNING THE SPECIFIC OBLIGATIONS ARISING FROM THE LAW OF MARCH 27, 2017 ON THE DUTY OF VIGILANCE

2.3.1. The duty of care resulting from Article L 225-102-4 of the French Code of Commerce

Law n°2017-399, issued on March 27, 2017, concerning the duty of parent companies and contracting companies is now codified in Article L.225-102-4 of the French Code of Commerce.

Article L.225-102-4 I of the French Code of Commerce now stipulates that:

“I. Any company that, at the end of two consecutive financial years, employs at least five thousand employees, including in its direct or indirect subsidiaries, and whose head office is established on French territory, or at least ten thousand employees, including in its direct or indirect subsidiaries, and whose head office is established on French territory or abroad, establishes and effectively implements a duty of care plan.

Subsidiaries or controlled companies that exceed the thresholds mentioned in the first paragraph are deemed satisfactory in meeting the obligations provided for in this article when the controlling company, in accordance with article L. 233-3, establishes and implements a duty of care plan relating to the activity of the company and all of the subsidiaries or companies it controls.”

Furthermore, this new Article requires that the Plan:

“include reasonable due diligence measures in order to identify risks and prevent serious harm to human rights and fundamental freedoms, the health and safety of humans and the environment, resulting directly or indirectly from the activities of the company and of its controlled companies in accordance with Section II of Article L. 233-16, as well as from the activities of subcontractors or suppliers with whom a stable business relationship is established, when these activities are related to this relationship.

The duty of care plan and the report on its effective implementation are made public and included in the report mentioned in Article L. 225-102.”

According to the third paragraph of Article L.225-102-4 I of the French Code of Commerce, the vigilance measures that the company must establish, implement, and publish as part of its due diligence are:

“capable of identifying risks and preventing serious harm to human rights and fundamental freedoms, the health and safety of humans and the environment”.

In its observations communicated to the Constitutional Council referred *a priori* to the constitutionality of the law, the Government added:

“The obligation imposed on the companies concerned is therefore not a simple reporting obligation but an obligation of the means to implement the due diligence measures provided for by law and the content of which is defined in view of the risks their activity may cause. The company must be able to demonstrate that the measures mentioned in the duty of care plan have been implemented¹⁶”.

According to some authors, the duty of care can thus be understood as:

“the sum of the efforts the company must make to prevent damage¹⁷”

Finally, it will be recalled that:

“The plan is intended for development in association with the company's stakeholders, where appropriate, within the framework of multi-stakeholder initiatives within sectors or at the territorial level.

It includes the following measures:

1° A risks map intended for their identification, analysis, and ranking;

2° Procedures for regularly assessing the situation concerning the subsidiaries, subcontractors, or suppliers with whom a stable business relationship is established, with regard to risk mapping;

3° Appropriate actions to mitigate risks or prevent serious harm;

4° A mechanism for alerting and collecting reports relating to the existence or realization of risks, established in consultation with representative trade unions in the said company;

5° A system for monitoring the measures implemented and evaluating their effectiveness. (...)”

In the present case, it is without question that TOTAL S.A., whose head office is located in La Défense and employs more than 5,000 employees in France, falls within the scope of these provisions.

Consequently, it must establish, effectively implement and publish a duty of care plan in accordance with the procedures required by law relating to the duty of care of parent companies codified to Article L.225-102-4 of the French Code of Commerce.

2.3.2. The activities of TOTAL S.A. significantly contribute to the risk of serious harm to human rights and fundamental freedoms, the health, and safety of humans and the environment.

The decision of the 21st session of the Conference of the Parties (hereinafter “COP 21”) to the United Nations Framework Convention on Climate Change aiming to adopt the Paris Agreement invited the IPCC to present a special report in 2018 on the impacts of global warming of 1.5°C above pre-industrial levels and trajectories related to global greenhouse gas emissions.

The summary for policymakers (SPM) of the IPCC Special Report “*on the impacts of global warming of 1.5°C compared to pre-industrial levels and the trajectories related to global greenhouse gas*

¹⁶ Government observations on the law concerning the duty of vigilance of parents, and contracting companies, JORF n°074 of March 28, 2017, text n°5.

¹⁷ S. COSSART and M.L. GUISLAIN, The duty of care plan for multinational companies, a legal imperative for a sustainable economy, Revue Lamy de droit des affaires, n° 104, 2015.

emissions, in the context of strengthening the global response to climate change, sustainable development, and the fight against poverty” was published on October 8, 2018 (**Exhibit 4**).

It presents the main conclusions of this special report, based on the evaluation of the available scientific, technical and socio-economic documentation relating to global warming of 1.5°C, aiming to compare global warming of 1.5°C and 2°C with pre-industrial levels.

It should be noted that:

“The ‘Approval’ of a summary for policymakers signifies that the material has been examined line-by-line and approved by the participating IPCC member countries in consultation with the scientists responsible for drafting the report. This approval process ensures the summary reflects as directly, clearly, and precisely as possible the factual elements in the Assessment Report or the corresponding Work Group Special Report. Participation of assessment authors ensures that any changes to the summary are scientifically sound and consistent with the underlying report .” (**Exhibit 18**).

The policymakers’ summary of the October 2018 Special Report presents the risks of serious harm to humanity in the event of a 1.5°C and 2°C warming.

According to the IPCC,

“A.3. Climate-related risks for natural and human systems are higher for global warming of 1.5°C than at present but lower than at 2°C (high confidence)” (**Exhibit 4, page 7**).

As explained above, the activities of the TOTAL group generated, directly or indirectly, 450 Mt CO₂eq in 2018, representing between 0.9% and 1.1% of global GHG emissions depending on whether or not the emissions from land use, land-use change and forestry (LULUCF) are taken into account.

The activities of the TOTAL group, which is one of the main global GHG emitters, thus contribute significantly to climate change which results in a risk of serious harm *“to human rights and fundamental freedoms, the health and safety of humans and the environment”* according to the law relating to the duty of vigilance.

These risks will be detailed successively based on the universally recognized work of the IPCC:

2.3.2.1. Risks of serious damage to the environment

Global warming of anthropogenic origin to which TOTAL contributes by the direct and indirect release of GHG constitutes damage to the atmosphere due to the alteration of its ecological functions of climate regulation.

It is also a question of "atmospheric pollution" under article L220-2 of the Environmental Code and an infringement upon the common national heritage defined in article L110-1 of the Environmental Code.

Finally, it is damaging to the environment according to the nomenclature of environmental damages established under the direction of Professors L. NEYRET and G. MARTIN: *“damage to the air or the atmosphere and their functions means a violation of air or atmosphere quality that could affect their*

ecological functions. Notably, these damages may take the form of a change in the air composition or the atmosphere. The ecological functions of air or atmosphere mean the role they play within ecosystems, such as, for example: supporting biodiversity, absorbing ultraviolet solar radiation, or participating in climate regulation¹⁸.

According to the IPCC, global warming generates risks of serious damage to other elements of the environment that form part of the common national heritage, including “spaces, resources and natural habitats of the land and sea, sites, day and night landscapes, living things and biodiversity”.

- The global warming to which TOTAL contributes generates risks of serious damage to **terrestrial ecosystems**:

“B.3.1. Of the 105,000 species studied, 9.6% of insects, 8% of plants, and 4% of vertebrates are projected to lose over half the area of their climatic niche with global warming of 1.5°C, compared with 18% of insects, 16% of plants and 8% of vertebrates with global warming of 2°C (medium confidence). Impacts associated with other biodiversity-related risks such as forest fires and the spread of invasive species are lower at 1.5°C compared to 2°C of global warming (high confidence).

“B.3.2 Approximately 4% (interquartile range: 2–7%) of the global land surface is projected to undergo a transformation from one type of ecosystem to another at 1°C of global warming, compared with 13% (interquartile range 8–20%) at 2°C (medium confidence). This indicates that the area at risk is approximately 50% lower with global warming of 1.5°C compared to 2°C (medium confidence)” (Exhibit 4, page 10).

Consequently,

“On land, impacts on biodiversity and ecosystems, including species loss and extinction, are projected to be more limited at 1.5°C of global warming compared to 2°C. Limiting global warming to 1.5°C compared to 2°C is projected to lower the impacts on land, freshwater, and coastal ecosystems and to retain more of their benefits to humans (high confidence).” (Exhibit 4, page 10).

- It also contributes to the risk of serious damage to **marine ecosystems**:

“B.4.2 A global warming of 1.5°C is projected to shift the ranges of many marine species to higher latitudes and worsen the damage to many ecosystems (...). The risks of climate-induced impacts are projected to be higher at global warming of 2°C than those of 1.5°C (high confidence). Coral reefs, for example, are projected to continue deteriorating, affecting 70– 90% at global warming of 1.5°C (high confidence) with larger losses (>99%) at 2°C (very high confidence). The risk of irreversible loss of many marines and coastal ecosystems increases with global warming, especially at 2°C or more (high confidence)” (Exhibit 4, page 10).

Consequently,

¹⁸ L. NEYRET and G. MARTIN, L.G.D.J. lextenso éditions, April 2012, page 14

“(…) limiting global warming to 1.5°C is projected to reduce risks to marine biodiversity, fisheries, and marine ecosystems, and their functions and benefits to humans, as illustrated by recent changes to Arctic sea ice and tropical coral reef ecosystems (high confidence)” (Exhibit 4, page 10).

Global warming beyond 1.5°C, therefore, generates risks of serious damage to all environmental components.

2.3.2.2. Risks of serious damage to human health and safety

The IPCC specifies that *“Any increase in global warming is projected to affect public health with primarily negative consequences (high confidence)” (Exhibit 4, page 11).*

These risks are multifaceted:

□ Increase in heatwaves.

According to the IPCC,

“Temperature extremes on land are projected to rise more than the global mean surface temperature (high confidence): thus, temperature extremes on hot days could rise by about 3°C in mid-latitudes with global warming of 1.5°C and about 4°C at 2°C.”

“Risks are projected to be lower at 1.5°C of warming than at 2°C for heat-related morbidity and mortality (very high confidence) and for ozone-related mortality if emissions needed for ozone formation remain high (high confidence). Urban heat islands often amplify the impacts of heatwaves in cities (high confidence)” (Exhibit 4, page 9).

□ Increased risk of drought

According to the IPCC,

“Risk of droughts and precipitation deficits are projected to be higher at 2°C compared to 1.5°C of global warming in some regions (medium confidence)” (Exhibit 4, page 9).

□ Increased risk of heavy rainfall and floods

According to the IPCC,

“Risk of heavy rainfall is projected to be higher at 2°C compared to 1.5°C of global warming in several northern hemisphere high-latitude and/or high-elevation regions, eastern Asia and eastern North America (medium confidence). Heavy precipitation associated with tropical cyclones is projected to be more intense at 2°C compared to 1.5°C of global warming (medium confidence). There is generally a low degree of confidence in projected differences in heavy precipitation at 2°C compared to 1.5°C of global warming in other regions. As a whole, heavy precipitation, when aggregated at a global level, is projected to be higher at 2°C than at 1.5°C of global warming (medium confidence). As a consequence of heavy precipitation, the area of land affected by flood hazards is projected to be larger at 2°C compared to 1.5°C of global warming (medium confidence)” (Exhibit 4, page 9).

□ Risks of submersion linked to a rise in sea level

According to the IPCC,

“By 2100, global mean sea level rise is projected to be around 10 centimeters lower with global warming of 1.5°C compared to 2°C (medium confidence). Sea level will continue to rise well beyond 2100 (high confidence), and the magnitude and rate of this rise will depend on the trajectory of future emissions”(Exhibit 4, page 9).

Global warming beyond 1.5°C, therefore, generates risks of serious damage to human health and safety.

2.3.2.3. Risks of serious harm to human rights and fundamental freedoms

Multiple authorities have recognized the risk of serious harm to human rights due to climate change.

On March 25, 2009, the United Nations Human Rights Council adopted Resolution 10/4, which estimates that:

“The effects of climate change have a range of implications, both direct and indirect, on the effective application of human rights, in particular the right to life, the right to adequate food, the right to the highest attainable standard of health, the right to adequate housing, the right to self-determination and human rights obligations related to access to drinking water and sanitation, and emphasizing that in no case may a people be deprived of their own means of subsistence”¹⁹.

At the opening of the 42nd session of the Human Rights Council in Geneva on September 9, 2019, the UN High Commissioner for Human Rights called on states to act on the threat posed by climate change, noting that *“the world has never seen a threat to human rights of this magnitude”*.

UN human rights committees have also jointly published a declaration in which they highlight the impact of climate change on human rights²⁰. According to the latter, the IPCC special report published on October 8, 2018, on global warming of 1.5°C:

“confirms that climate change poses significant risks to the enjoyment of the human rights protected by the International Convention on the Elimination of All Forms of Discrimination Against Women, the International Covenant on Economic, Social and Cultural Rights, the International Convention on the Protection of the Rights of All Migrant Workers and Members of Their Families, the Convention on the Rights of the Child, and the International Convention on the Rights of Persons with Disabilities. The adverse impacts identified in the report threaten, among other things, the right to life, the right to adequate food, the right to adequate housing, the right to health, the right to water, and cultural rights [...] Such adverse effects on human rights are already occurring at 1°C of warming and every additional increase in temperature will further undermine the realization of rights. The IPCC report

¹⁹ Human Rights Council, 10th session, Resolution 10/4. Human rights and climate change, March 25, 2009

²⁰ Committee on the Elimination of Discrimination Against Women, Committee on Economic, Social and Cultural Rights, Committee on the Protection of the Rights of All Migrant Workers and Members of their Families, Committee on the Rights of the Child, Committee on the Rights of Persons with Disabilities, September 16, 2019 (available in English at this link): <https://www.ohchr.org/EN/NewsEvents/Pages/DisplayNews.aspx?NewsID=24998&LangID=E> (accessed January 2, 2020)

makes it clear that to avoid the risk of large-scale, irreversible systemic impacts, urgent and decisive climate action is required.”

The summary for policymakers of the IPCC special report of October 2018 confirms these risks for people (**Exhibit 4, page 5-12**), and in particular for human rights:

“Climate-related risks to health, livelihood, food security, water supply, human security, and economic growth are projected to increase with global warming of 1.5°C and increase further with 2°C” (**Exhibit 4, page 11**).

In the Netherlands, the *Urgenda* case gave the Supreme Court (*Hoge Raad*) the opportunity to confirm the threat climate change poses on the right to life under Article 2 of the European Convention on Human Rights and on the right to private and family life under Article 8²¹.

These implications for the effectiveness of human rights, and in particular the right to life, make it possible to consider the effects of global warming create risks of serious damage to public health and safety may seriously affect human rights.

For example, among the requesting communities, some are witnesses and actors in managing a growing number of refugees, many of whom are fleeing their countries due to climate change and land depletion.

According to the United Nations, *“in the coming decades, climate change will displace millions of people. Current estimates of the number of “climate refugees” and “environmental migrants” are expected to range from 25 million to 1 billion people by 2050”* (**Exhibit 10, page 32**).

Human rights threatened by global warming include the right to life, the right to health, water, food, a healthy environment, and other social, economic, and cultural rights, as well as the rights of children, women, minorities, and indigenous peoples.

The work of the IPCC shows that global warming resulting from anthropogenic activities creates risks of serious damage to the environment, human rights, human health, and safety which will be aggravated and amplified by warming greater than 1.5°C.

The effects of global warming thus fall into the three risk categories outlined by lawmakers as part of the duty of vigilance law that very large companies are required to prevent and mitigate by adopting “appropriate actions to mitigate risks and prevent serious harm”.

In this regard, it should be mentioned that according to Professor François-Guy TRÉBULLE:

“it now seems difficult to dispute that climate relates to human rights and the environment, and the law requires that the plan must provide “appropriate actions in order to mitigate risks or prevent serious harm,” which implies positive actions [...] and the absence of positive action can be analyzed as faulty²²”.

²¹ District Court of The Hague, June 24, 2015, *Urgenda c. Netherlands*, C/09/456689/HA ZA 13-1396; The Hague Court of Appeal, *Urgenda c. Netherlands*, October 9, 2018, n ° 200.178.245/01; Dutch Supreme Court, ECLI:NL:HR:2019:2006, *Hoge Raad*, 19/00135, 12/20/2019.

2.3.3. Non-compliance of the duty of care plan by TOTAL S.A. in identifying and preventing risks linked to global warming

In March 2019, TOTAL S.A. published its duty of care plan for the year 2018 (**Exhibit n°5**).

The following shall explain how this plan does not comply with legal requirements, whether in regards to identifying risks linked to climate change (2.3.3.1.) or in terms of taking measures to prevent serious damage resulting from those risks (2.3.3.3.).

2.3.3.1. On the non-compliance of risk mapping

→ *On the absence of risk mapping designed to identify, analyze and prioritize said risks*

By law, article L.225-102-4 of the French Code of Commerce requires that the duty of care plan be made up of “ (...) *1° A risks map designed to identify, analyze and prioritize risks;*”

In this case, neither the 2017 nor the 2018 baseline reports present “*risk mapping of serious damages*” in compliance with legal requirements.

Indeed, both baseline reports settle for presenting the so-called “*mapping work*” without presenting a map as such.

Yet legal provisions are clear and precise. Lawmakers intended that the duty of care plan include a risk map to identify, analyze, and prioritize risks.

The definition of the word “map” is unambiguous. According to the Larousse Dictionary, it is “*the system of operations aimed at developing, drafting and publishing maps*”.

It is clear that the said company intended to interpret the law in the manner that avoided the obligation of presenting an accessible, genuine, and complete **map** designed to identify the risks resulting from its activities and from the companies it controls in more than 130 countries.

Indeed, the TOTAL S.A. company merely published a list of risks regarding human rights and fundamental freedoms, safety, health, and the environment (**Exhibit n°5, page 94**).

This is in no way risk mapping.

Yet the activities of the TOTAL S.A. company as well as those of the companies it controls are perfectly geographically located. The company possesses all of the information regarding its 800 industrial sites and its presence in 130 countries over 5 continents: Africa, North and South America, the Asia-Pacific region, Europe, and the Middle East.

With a turnover value of 186,954,624 euros for 2018 and net revenue of 10,313,789 euros (**Exhibit n°5**), TOTAL S.A. has ample financial means to set up precise risk mapping.

²² F.-G. TREBULLE, “Responsibility and climate change: responsibility for the private sector?”, Energy – Environment – Infrastructure, n° 8-9 – August – September 2018, LexisNexis, page 26.

The TOTAL S.A. company very well could have - and should have - set up a map of GHG emissions by each activity sector and each project in order to “analyze” their respective contributions to global warming and “rank” the resulting risks.

For each of its activity sectors and projects, TOTAL S.A. should also map their respective shares of oil and gas.

In any case, a general list of the risks cannot be considered a mapping.

In doing so, the current plan is clearly insufficient and does not abide by the legal requirements.

→ ***On omissions and failure in identifying risks resulting from global warming***

Certainly, global warming appears in the second vigilance plan in the supposed “risk mapping” published by TOTAL S.A.

However, TOTAL S.A. endeavored to restrict its major contribution to climate change resulting from its activities, as well as to limit the specific identification and the seriousness of the risks linked to climate change regarding human rights, health, and public safety, and most of all, the environment.

Indeed, contrary to the serious risks of damage on which the company indicates having a “direct and significant” impact, for instance, the risk of oil spills, TOTAL S.A. argues that “climate change is a global risk resulting from various human activities, including production and power consumption” (Exhibit n°5, page 94).

This assessment is widely incomplete and aims to conceal the company’s liability as the main contributor to global warming among the big *Carbon Majors*.

TOTAL S.A. does not indicate that it is the cause of about 1% of worldwide GHG emissions, or that it is listed among the big *Carbon Majors* that must take urgent measures to limit climate change in order to respect the objectives of the Paris Agreement.

In particular, TOTAL S.A. does not specify its major contribution to worldwide GHG emissions.

In other words, we can deduce from the risk identification TOTAL S.A.’s desire to dilute its liability in climate matters and to deny its significant contribution to global warming.

Moreover, TOTAL S.A. does not analyze risks resulting from climate change as are now demonstrated by the most recent scientific works summarized by the IPCC and in regard to emission reduction trajectories.

TOTAL S.A. refers to certain global warming scenarios without explaining how they are not sufficient to conform to the Paris Agreement objectives and thus lead to global warming exceeding 1.5°C, or even beyond 2°C, thereby presenting serious risks of damage to the environment, and public health and safety.

It is notable that, according to the appendices of TOTAL S.A.’s consolidated accounts, “the NPS and the SDS are important references for the Group” (Exhibit n°5, page 275).

The NPS is the IEA's *New Policies Scenario* which leads to a warming of between 2.7°C, according to the International Energy Agency (hereinafter "IEA"), and 3.3°C according to reputed climate experts²³.

The IEA's SDS is the IEA's *Sustainable Development Scenario* which officially leads to global warming between 1.6°C and 1.7°C, but according to the same experts mentioned above, it would actually lead to a warming of 2°C²⁴.

In any case, neither of these two reference scenarios would make it possible to contain the warming to 1.5°C in keeping with the Paris Agreement.

Considering the TOTAL group uses these scenarios as its main reference, it should precisely specify and evaluate the risks resulting from global warming beyond the 1.5°C limit to which its activities significantly contribute, based on the IPCC's work.

These **omissions break the requirement to identify risks** under the law on the duty of vigilance since this directly results the risk of serious damage (see *infra*).

2.3.3.2. The inadequacy and insufficiency of measures to reduce risk or prevent serious damage

In the part of the 2018 vigilance plan dedicated to "*Report on implementing the vigilance plan measures*" (**Exhibit n°5, pages 98 to 110**), TOTAL S.A. partially takes up the elements of its "climate strategy" published a few months earlier in October 2018 (**Exhibit n°5, pages 105 to 108**). These elements are broken down into three categories of commitment: governance, the "major levers", and finally the "objectives".

Regarding **governance** (**Exhibit n°5, page 198**), TOTAL S.A. indicates that its climate strategy is decided at the highest level of the company (chief executive, member of the executive committee) and supervised by the administrative council.

In order "*to integrate climate into its strategy*", TOTAL states that it relies on five "major levers" (**Exhibit n°5, pages 199 and subsequent pages**):

- "*1. To improve the energy efficiency of its installments by 1% per year on average during the 2010-2020 period*;
- *To save gas by limiting the methane emissions of operating facilities to less than 0.20% of commercial gas produced by 2025*;
- *To develop profitable activities in low-carbon electricity with "the ambition of holding a production capacity of 10 GW of low-carbon electricity by 2030"*;
- *To promote sustainable biofuels by taking a share of more than 10% of the European market in the production of hydrotreated vegetable oils (HVO)*;
- *To invest in carbon sinks by allocating up to 10% of its R&D budget and investing 100 million dollars per year starting in 2020 in an "entity dedicated to investing in natural carbon sinks"*.

TOTAL S.A. also affirms having fixed "**objectives**" (**Exhibit n°5, page 202**):

²³ H. MCKINNON, 1.5°C: IEA's scenarios will fail, need urgent review says letter from experts, business leaders, 2019.

²⁴ *Ibid.*

- Reducing routine flaring in operating facilities by 80% between 2010 and 2020 with the objective of its elimination by 2030;
- Improving the energy efficiency of operating facilities by 1% per year on average between 2010 and 2020;
- Sustainably reducing the degree of methane emissions of operating facilities in the Exploration-Production sector to less than 0.20% of commercial gas produced by 2025;
- Reducing GHG emissions (scopes 1 & 2) in oil & gas operating facilities from 46 Mt CO₂e in 2015 to 40 Mt CO₂e in 2025.

These “levers” and “objectives” included in TOTAL S.A.’s 2018 vigilance plan represent the only “*appropriate actions to mitigate risk or to prevent serious damage*” that TOTAL would have set up to deal with risks linked to climate change under article L.225-102-4 I n°3 of the French Code of Commerce.

→ **Overall, the insufficiency of TOTAL’s vigilance plan and the reference to global warming present serious risks**

These measures are clearly not adapted to preventing the risks of serious damage from global warming and are absolutely ludicrous in regard to TOTAL’s significant contribution to climate change.

To claim to have taken proper measures to limit risks from climate change, TOTAL bases its argument on scenarios leading to a rise in global warming higher than 2°C (NPS) and even 3.7°C, generating irreversible damages to the environment and public health and safety.

The IPCC special report on a 1.5°C global warming demonstrates the measures required to have a reasonable chance at limiting global warming to well below 2°C and to continue efforts to limit warming to 1.5°C “*on the understanding that it would considerably reduce the risks and effects of climate change*”, according to the terms of Article 2 of the Paris Agreement.

Multiple sources have thus scientifically established the measures TOTAL would have to implement, at a minimum, to prevent the risks linked to climate change resulting from its activities, notably the works of the organization, Carbon Tracker, showing that these efforts must be individually implemented by each of the *Carbon Majors* to limit global warming in line with the objectives of the Paris Agreement (**Exhibit n°11**).

Moreover, TOTAL’s Chief Executive Officer has himself confirmed that the global warming objectives sought after by his group far exceed those set by the Paris Agreement in limiting the risks of serious damage linked to global warming: the Cash Investigation magazine revealed that, in October 2015, during a conference, Mr. POUYANNÉ publicly declared:

“I am here, and I do not know if it will be published, our own scenario. It is not 6 degrees, it is not 2 degrees either because we cannot be too pragmatic, it must be 3 or 3.5 degrees”²⁵ (**Exhibit n°12**)

More recently, on January 21, 2020, during the World Economic Forum in Davos, Mr. Pouyanné announced, “*At Total, we are completely aware that there is a responsibility to the environment.*” Yet, he then judged the Paris Agreement objective with contempt, asserting that “*this tendency to say that by 2050 everything will be neutral, it is nice, but none of us will be there by 2050*” (**Exhibit n°13**).

²⁵https://www.francetvinfo.fr/monde/environnement/video-cash-investigation-climat-quand-le-pdg-de-total-parlait-dun-scenario-a-3-5_1459591.html

Like the disdain and condescension shown by TOTAL's CEO toward climate issues, TOTAL S.A.'s vigilance plan is largely insufficient to prevent risks of serious damage resulting from its activities to which the complainants' associations and local authorities have been exposed, as well as the environment they have been mandated to protect from global warming above 1.5°C.

→ *In more detail, the “inadequacy” of each “lever” presented by TOTAL in its vigilance plan and the inadequacy to efficiently fight against global warming*

Even considering the measures described by TOTAL S.A. to lower its GHG emissions, whether direct or indirect emissions integrated into its vigilance plan, it appears they are insufficient to contribute to containing global warming beyond the threshold for risk of serious damage.

□ **“Lever” 1 on improving energy efficiency (Exhibit n°5, page 199)**

While improving energy efficiency is a prerequisite in every field to reduce GHG emissions, energy transition must essentially go along with reducing hydrocarbon production and developing renewable energies to ensure a reduction of GHG emissions as in the Paris Agreement objectives.

The measures announced by TOTAL are therefore largely insufficient since improving energy efficiency cannot have a significant, positive impact if it is not paired with a combined drop in the production of all hydrocarbons.

By way of illustration, the Carbon Tracker organization indicates that to achieve carbon neutrality by 2060 (i.e an objective less ambitious than that of the Paris Agreement), the seven oil and gas “*Carbon Majors*”, including TOTAL, must reduce their total emissions by 40% and their production by 35%, according to the NGO (Exhibit n°11).

□ **“Lever” 2 on the increase in natural gas production (Exhibit n°5, page 200)**

The long-term growth of gas production is hardly compatible with the GHG reduction trajectories in line with the Paris Agreement.

While “natural” gas is often considered transition energy because it emits less than coal during combustion, it is important to remember that it remains in the fossil fuel category and that the inevitable methane leaks throughout its life cycle worsen its carbon footprint.

According to TOTAL, “methane is a powerful gas whose global warming potential (GWP), according to IPCC, is 72 times higher than carbon dioxide (CO₂) over a period of 20 years, and 25 times higher over a period of 100 years” (Exhibit n°14, page 30). Consequently, gas remains a fossil fuel whose extraction, production and use emit considerable GHG.

TOTAL's objective to considerably increase its gas production, and particularly its liquefied natural gas (LNG), is inconsistent with the necessity to fight global warming.

This analysis comes from the IPCC's trajectories congruent with the Paris Agreement (Exhibit n°4).

In the median warming scenario, within or slightly above the threshold at 1.5°C, the portion of gas in primary energy remains stable until 2030 without increasing (about 23% of the global energy mix in 2020, then 22.5% in 2030, with a demand for stable or declining energy), then declines almost by half

between 2030 and 2050 (13% of the global energy mix by this point) (IPCC, 1.5°C special report in English, chapter 2, p.132²⁶).

Therefore, to abide by the necessary decrease in the portion of gas in such a scenario, research for new gas extraction sites should logically stop increasing, as deposits currently being exploited should be sufficient in terms of supply.

Therefore TOTAL's expected growth in gas is not compatible with the median of the warming scenarios within or slightly above the threshold at 1.5°C.

□ **“Lever” 3 on the development of profitable activities in low-carbon electricity (Exhibit n°5, page 200)**

This lever gives the impression that the group intends to develop renewable energies.

However, TOTAL S.A. includes gas among the purported “low-carbon” energies. In fact, the group cites the acquisition of four combined-cycle natural gas power plants, for example. This “lever” is thus closely linked to the previous one, namely the one on developments in gas inconsistent with the objective to contain warming to 1.5°C.

It is to be noted that, for all the 1.5°C scenarios, the share of renewable energies (not from biomass) considerably increases from 245% to 436% in 2030 and from 550% to 1017% in 2050 compared to 2010 (Exhibit n°4, page 16).

Preventing risks induced by warming beyond the 1.5°C threshold therefore requires expansive investing in renewable energies. Yet, according to the chart on principal investments in 2016 to 2018, TOTAL would allot about 95% of its investments to hydrocarbons, and therefore an extremely insufficient share to renewable energies (Exhibit n°5, page 68).

□ **“Lever” 4 on promoting sustainable biofuels (Exhibit n°5, page 200)**

TOTAL's “biorefineries” cannot seriously be presented as a measure in fighting against climate change, mainly because of the large reliance on palm oil²⁷.

According to the European Court of Auditors, *“because of deficiencies in the recognition procedures and in the monitoring of voluntary certification systems, the European system for certifying the sustainability of biofuels is not fully reliable”*²⁸. (Exhibit n°15)

A French public report specifies that *“there exists a great number of certification systems, but to this day, none effectively deal with the issue of deforestation”*²⁹. (Exhibit n°16)

²⁶ Rogelj, J. et al.: *Mitigation Pathways Compatible with 1.5°C in the Context of Sustainable Development*. In: *Global Warming of 1.5°C. An IPCC Special Report on the impacts of global warming of 1.5°C above pre-industrial levels and related global greenhouse gas emission pathways, in the context of strengthening the global response to the threat of climate change, sustainable development, and efforts to eradicate poverty* [Masson-Delmotte, V. et al. (eds.)]. In Press.

²⁷ See: <https://www.lemondedelenergie.com/les-amis-terre-bioraffinerie-total/2018/06/04/> (accessed 05.06.2019).

²⁸ European Court of Auditors Special Report (N°18/2016), The European Union's system for certifying sustainable biofuels, July 2016

²⁹ CGEDD and CGAAER, The sustainability of palm oil and other vegetable oils, December 2016

TOTAL should therefore completely exclude palm oil from all of its refineries, and not only in France where French legislators have recently been taxing its importation, a measure approved by the French Constitutional Council:

“Article 266n in the Customs Code, in its drafting from the Law of December 28th, 2018 mentioned above, introduces a tax incentive for the incorporation of biofuels. The last paragraph of 2B in subsection V states: ‘Palm oil products are not considered biofuels’. [...]

8. Secondly, by endorsing the contested provisions, the legislator supported the realization that palm oil is distinguished by the marked growth and significant expansion of the world’s surface dedicated to its production, in particular in carbon-rich land, leading to deforestation and the draining of bogs. It has therefore been taken into consideration that cultivating palm oil presents a high risk, higher than that of other oleaginous plants, indirectly leading to an increase in greenhouse gas emissions. It is not up to the Constitutional Council, which does not possess a general assessment power or decision-making power similar to that of Parliament, to call into question the legislator’s assessment of the environmental consequences of cultivating the raw materials in question, provided the assessment is not knowingly and visibly inadequate in the objective of the continued protection of the environment for the common good³⁰”.

Moreover, biomass production (i.e palm oil and other plants) for agrofuel production competes with land use for other purposes, like food agriculture or reforestation, particularly in a world where land pressure is rising and the world population is growing³¹. (Exhibit n°4, page 23)

□ “Lever” 5 on CO2 capture and storage technologies and carbon sinks (hereinafter “CCS”) (Exhibit n°5, page 200)

According to lever 5, TOTAL intends to develop CCS technologies.

Under its vigilance plan, TOTAL takes part in projects in cooperation with other companies in the sector as well as the OGCI (Oil & Gas Climate Initiative) by dedicating 10% of its research & development budget to them.

But according to the IPCC, these CCS technologies are unreliable and present obvious climate risks:

*“Trajectories that aim to limit warming to 1.5°C by 2100 after a temporary temperature overage rely largely on carbon dioxide removal (CDR) measures, **which are unreliable and include obvious risks.**”*

“Large-scale CDR is unproven, and relying on such technology is a major threat to limiting warming to 1.5°C.”

“The longer the delay in reducing CO2 emissions to zero, the greater the likelihood of exceeding 1.5°C, and the more returning to 1.5°C will rely on net negative emissions after the middle of the century (high confidence).” (Exhibit n°4, page 34).

³⁰ Constitutional Council, Decision n° 2019-808 QPC on October 11th, 2019 Total Raffinage France [Subjugation of palm oil-based biofuels to the tax incentive for the incorporation of biofuels]

³¹ IPCC, SR 15, Summary, p. 23; see also the Intergovernmental Expert Group report on biodiversity: Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services (IPBES), Global assessment for policymakers, May 6th, 2019.

Even the International Energy Agency (IEA), whose SDS and NPS scenarios are highlighted in TOTAL's vigilance plan, observes that these technological advances suffer from a considerable lag compared to the implementation envisioned in the NPS scenario (**Exhibit n°19, pages 219 and 232**).

The implementation of these CO2 removal methods is therefore subject to multiple constraints in terms of feasibility and sustainability and could have significant impacts on land-use, energy production, aquatic resources, or others if implemented on a large scale (**Exhibit n°4, pages 21 to 23**).

Beyond the technological aspect that still remains uncertain, a scientific article published in "*Nature Communications*" magazine and verified by a review committee, seriously questions the sole financial viability of these technologies³². The author considers implementing them only marginally to counter the uncertainties of the carbon cycle and its interactions with the climate, but that a decrease in GHG emissions is necessary.

Finally, let it be noted that J. STIGLITZ, Nobel Laureate in economics, exclusively recommends an immediate reduction of GHG as a means of mitigation due to significant costs associated with negative emissions technologies³³.

In that sense, it should be underlined that in the "Urgenda" case, wherein the Netherlands was ordered to review and increase its ambitions to reduce GHG on the basis of "*duty of care*", a notion very close to "vigilance" in French law, **the Dutch State was ordered to reduce its greenhouse gas emissions before the end of 2020, without the right to rely on negative emissions (CCS)**.³⁴

In 2018, The Hague Court of Appeal ruled that:

*"(...)We conclude that these technologies [Court: negative emission technologies, or NETs] offer only limited realistic potential to remove carbon from the atmosphere and not at the scale envisaged in some climate scenarios (...)" (p. 1) (...) the inclusion of CDR [Court: removal of CO2 from the atmosphere] in scenarios is merely a projection of what would happen if such technologies existed. It does not imply that such technologies would either be available or would work at the levels assumed in the scenario calculations. As such, it is easy to misinterpret these scenarios as including some judgment on the likelihood of such technologies being available in the future." (P. 5). The State has failed to contest this by not providing adequate substantiation. **Therefore, the Court assumes the option to remove CO2 from the atmosphere with certain technologies in the future is highly uncertain and the climate scenarios based on such technologies are not very realistic considering the current state of affairs.**"³⁵*

In December 2019, The Supreme Court of the Netherlands will confirm that:

³² J. BEDNAR et al., ON the financial viability of negative emissions, *Nature Communications*, volume 10, Article number: 1783 (2019).

³³ J. STIGLITZ cites HOUSE, K.Z., et al., "Economic and energetic analysis of capturing CO2 from ambient air," *Proceedings of the National Academy of Sciences*, 108(51) (December 2011): 20428- 20433, <http://www.pnas.org/content/108/51/20428.full.pdf> (Accessed October 3rd, 2019): "Our empirical analysis of energetic and capital costs of existing, mature, gas separation systems indicates that air capture processes will be significantly more expensive than mitigation technologies aimed at decarbonizing the electricity sector unless a technological breakthrough [is subsequently realized]..."

³⁴ District Court of the Hague, June 24th, 2015, *Urgenda v. the Netherlands*, C/09/456689 / HA ZA 13-1396; The Hague Court of Appeal, *Urgenda v. the Netherlands*, October 9th, 2018, n° 200.178.245/01; Supreme Court of the Netherlands, ECLI:NL:HR:2019:2006, *Hoge Raad*, 19/00135, 12/20/2019.

³⁵ From the Hague Court of Appeal, *Urgenda v. The Netherlands*, October 9th, 2018, n°200.178.245/01, §49.

*“7.2.5. AR5 does contain new scenarios to achieve by 2050 and 2100 the reductions in greenhouse gas concentrations deemed necessary. These are largely based on the premise that there will not be a sufficient reduction in greenhouse gas emissions and that the concentration of greenhouse gases will therefore have to be **reduced by taking measures to remove these gases from the atmosphere** (see 2.1(12) above). It is certain, however, that at the moment there is no technology that allows this to take place on a sufficiently large scale. Therefore, as the Court of Appeal held in para. 49, these new scenarios cannot be taken as a starting point for policy at this time without taking irresponsible risks by doing so. Taking such risks would run counter to the precautionary principle that must be observed when applying Articles 2 and 8 ECHR and Article 3(3) UNFCCC (see 5.3.2 and 5.7.3 above).”³⁶*

The reference to a scenario based on “CCS” technologies is therefore neither technologically nor financially adapted to limit serious risks of damage to which the claimants are exposed. Uncertainties regarding these technologies, their acceptability, as well as their availability and the reliability of their storage, should lead to eliminating their implementation and development, especially in GHG reduction projections.

If implementing these “CCS” technologies is not possible, whatever the reasons, continuing to emit large amounts of GHG for many years will lead to global warming far beyond the Paris Agreement objectives and also irreversible risks for the environment, public health and safety, and human rights all over the world.

Finally, TOTAL intends to preserve and restore ecosystems working as carbon sinks. A yearly budget of 100 million USD will be allocated to this goal as of 2020.

Based on the TOTAL 2019 report, “*Integrating climate into our strategy*”, this leverage would only offset 5Mt CO₂eq per year starting in 2030 (**Exhibit n°17, page 42**).

This eventual offset seems very marginal compared to the 450 Mt CO₂eq that TOTAL generates directly as well as indirectly through the use of its products.

Moreover, as specified in the IPCC Special Report summary on global warming of 1.5°C (**Exhibit n°4, page 21**), reforestation and afforestation (reforestation in order to create natural carbon sinks) could compete with bioenergy production and food agriculture.

In an article published on September 2nd, 2019, CIRAD (French Agricultural Research Centre for International Development) researcher and forest specialist, Alain Karsenty, seriously questions the usefulness of the measure announced by TOTAL, saying, “*multiple issues, well known to scientists but less to the public, include the area necessary for forests (as forests planted may potentially compete with agriculture and pastures), the time required for trees to store CO₂ (whereas emissions are immediately found in the atmosphere) and the duration of carbon storage in trees.*”³⁷

The coherence between this lever and the previous one (bioenergy production) is therefore still seriously questioned and contributes to increasing land pressure.

³⁶ From the following passage from the Supreme Court of the Netherlands (ECLI:NL:HR:2019:2006, *Hoge Raad*, 19/00135, 12/20/2019).

³⁷ KARSENTY, A. “Total and the forests”, September 2nd, 2019, available online at the URL: <https://www.teloseu.com/fr/economie/total-et-les-forets.html> (accessed January 26th, 2020)

The “levers” presented by TOTAL in its 2018 vigilance plan are very insufficient and inappropriate in preventing risks and mitigating serious damages from warming beyond the 1.5°C threshold.

As a result, they render the vigilance plan non-compliant.

→ *Limits and shortfalls of TOTAL’s “objectives”*

The Group’s “climate objectives” laid out in TOTAL S.A.’s 2018 vigilance plan are far too limited and inadequate in global warming mitigation objectives resulting from the IPCC’s work and the Paris Agreement.

- The time frame of the “objectives” is much too limited.

Indeed, they do not go beyond 2030 and specifically do not include a date when the Group must have reduced its GHG emissions in order to reach carbon neutrality by 2050.

Yet, according to the IPCC, the industrial sector must reduce its global greenhouse gas emissions by 75-90% by 2050 compared to their level in 2010, the date when the world will have to be carbon neutral to limit warming to 1.5°C (**Exhibit n°4**).

- The supply limit of these “objectives” is also too limited.

In fact, they only aim to reduce GHG emissions within the area covered by *scopes* 1 and 2, meaning only direct emissions representing less than 10% of the Group’s global emissions (44 Mt CO₂eq). Yet, TOTAL can act on indirect emissions, known as “*scope* 3”, which are much more significant (400 Mt CO₂eq, i.e about 0.8% of global emissions).

The lack of an objective to mitigate direct and indirect emissions generated by TOTAL’s activities as well as the lack of a precise schedule for emission reduction going as far as 2050, in line with the IPCC’s work and the Paris Agreement, overall constitute a failure in vigilance.

2.3.4. The request for an injunction under the provisions of the French Code of Commerce related to the duty of vigilance

Article L. 225-102-4.II of the French Code of Commerce provides that:

“II.-When a company is given a formal notice to respect the obligations provided in I and does not comply within three months of the notice, the competent jurisdiction can, at the request of any interested persons, order the company to respect them under penalty, when appropriate.”

It has been demonstrated that the vigilance plan published by TOTAL S.A. was not compliant with legal requirements in regard to both risk identification and actions to mitigate risks or prevent serious harm.

TOTAL S.A. was regularly given formal notice by the plaintiffs through registered mail dated June 19, 2019 (**Exhibit n°3**), and failed to comply by refusing to publish an appropriate vigilance plan.

The Court will therefore order TOTAL S.A., on the basis of article L. 225-102-4 II of the French Code of Commerce, to respect the obligations provided in article L. 225-102-4 I of the French Code of Commerce and to render its vigilance plan compliant.

TOTAL S.A. will be required to publish a new vigilance plan respecting the obligations under the duty of vigilance resulting from risks related to climate change and including at a minimum:

- Regarding risk identification:

To enjoin TOTAL S.A. to integrate the following in the “risks identification” chapter of its vigilance plan:

- The risks related to global warming beyond the 1.5°C threshold with reference to the most recent and relevant IPCC studies and the Paris Agreement objectives, and by specifying the risks of serious damage to human rights, fundamental freedoms, public health and safety, and the environment, in particular:
 - Risks of serious damage to land ecosystems,
 - Risks of serious damage to ocean ecosystems,
 - Increase in heat waves,
 - Increased risk of droughts,
 - Increased risk of heavy rainfall and floods,
 - Risks of flooding related to sea-level rise,
 - Risks of serious damage to human rights and fundamental freedoms;
- As a result of its activities, its contribution to global greenhouse gas emissions and to risks induced by climate change amounts to about 1% of global emissions;
- The incompatibility of a GHG emissions reduction trajectory limiting global warming to 1.5°C and pursuing new exploration projects for exploiting hydrocarbon deposits;
- Its contribution to depleting the existing global carbon budget for limiting global warming to 1.5°C and to aggravating the risks caused by pursuing hydrocarbon exploitation projects (oil and gas);
- The risks associated with using CO2 capture and storage technologies, or “CCS”, within TOTAL’s GHG emissions reduction trajectory.

TOTAL S.A will be required to identify:

- The risks related to an overage of the global carbon budget compatible with limiting global warming to 1.5°C above pre-industrial levels, and to analyze the risks resulting from its own activities according to the Group TOTAL’s growth and production assumptions by 2050.

Finally, TOTAL S.A will be required to establish:

- A complete and exhaustive mapping of the risks resulting from its activities and, in particular, GHG emissions by each activity sector and project including their primary energy mix;
- An analysis and prioritization of each of these risks according to their level of impact to bring to light the significance of the climate-related risks.

- Regarding actions for risk mitigation or preventing serious damage:

According to the IPCC, only a widespread and rapid reduction of GHG emissions would enable risk mitigation and prevent serious damage from global warming beyond the 1.5°C threshold.

According to the IPCC:

“Net emissions can be reduced through different combinations of mitigation measures”: “Trajectories limiting global warming to 1.5°C with no or limited overshoot would require rapid and radical transitions in the energy sector, land development, urban planning, infrastructure (including transportation and construction), and industrial systems (high confidence). These systemic transitions are unprecedented in size but not necessarily in their pace, and assume considerable emissions reduction in all sectors, a wide range of mitigation options, and a net increase in investments in those options (medium confidence).” (Exhibit n°4, page 15)

GHG emissions will need to decline rapidly, “well before 2030”:

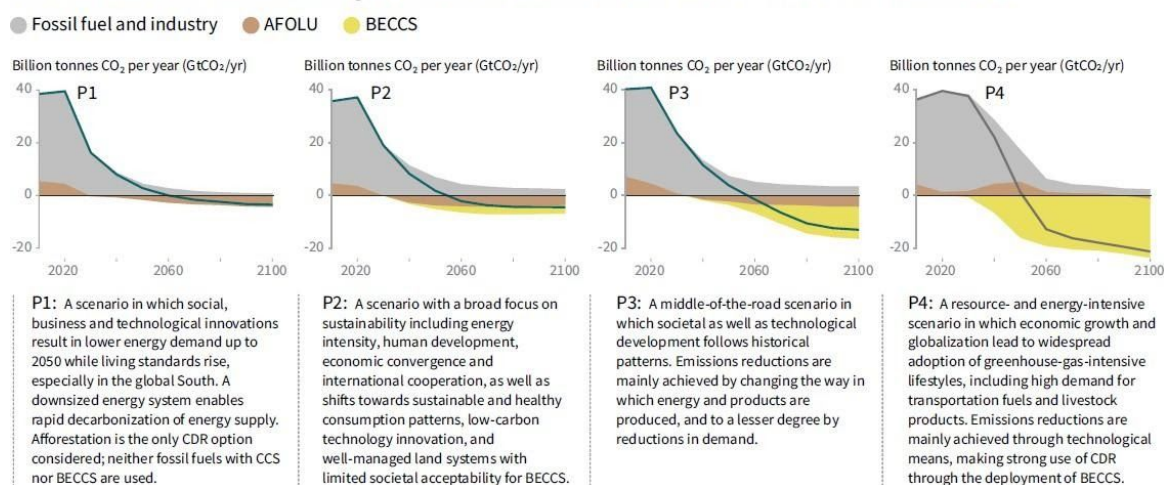
“It will not be possible to avoid overshoot and reliance on large-scale CO₂ elimination unless global CO₂ emissions start to decline well before 2030 (high confidence).” (Exhibit n°4, page 18)

In the executive summary for policymakers from the report on global warming of 1.5°C, the IPCC developed four model trajectories illustrating global GHG emissions:

Characteristics of the Four Illustrated Model Trajectories

Different mitigation strategies can allow for the net emission reductions necessary for limiting global warming to 1.5°C with no or minimal overshoot. All sectors employ carbon dioxide removal (CDR), but the amount varies from sector to sector, just like the relative bioenergy contribution with carbon capture and storage (BECCS) and elimination in agriculture, forestry, and other land use (AFOLU). This has repercussions on emissions and many other trajectory specifics.

Breakdown of contributions to global net CO₂ emissions in four illustrative model pathways



These four pathways differ particularly in their impact on immediate global warming and reliance on CO₂ capture (CCS) technologies:

- Only the P1 trajectory limits global warming to 1.5°C with no overshoot and without relying on CCS technologies that are not currently available or funded;
- The P2 trajectory projects a limited reliance on CCS technologies with a limited overshoot of global warming of 1.5°C;

- The P3 trajectory projects a limited overshoot and also relies on intensive use of CO₂ capture (CCS) technologies at 687 Gt by 2100, equivalent to 13 years of global emissions at the 2017 level (53.5 Gt including the LULUCF);

- The P4 trajectory projects a “significant overshoot” beyond the 1.5°C threshold, generating risks of serious damage to the environment and public health and security. This overshoot puts humanity at risk of losing control of the fight against climate change. In particular, it may lead to a tipping point or point of no return, provoking a gradual but irreversible melting of ice caps and permafrost in Antarctica or Greenland³⁸. This would result in a significant amount of methane being released into the atmosphere³⁹(recall that, according to Total, citing the IPCC, “methane is a powerful greenhouse gas with a global warming potential (GWP) that, according to the IPCC1, is 72 times more potent than carbon dioxide over a 20-year time span, and 25 times more potent over 100 years”).⁴⁰This chain reaction would significantly decrease the carbon budget by hundreds of gigatons of CO₂⁴¹. Besides, “emissions reduction is mainly achieved through technology that makes strong use of CDR through BECCS”, i.e. technologies currently unavailable and for which deployment is still significantly constrained (**Exhibit n°4, page 14**);

Recall that, according to the IPCC, “Feasibility and sustainability are among multiple obstacles impeding the *removal of several hundreds of GtCO₂ (high confidence)*” (**Exhibit n°4, page 17**).

Besides the question of their feasibility, CCS, and bioenergy with carbon capture and storage (BECCS) may generate new risks or worsen existing risks:

“Most current and potential CDR measures could have significant impacts on landmass, water, or nutrients if implemented at large scale (high confidence). Afforestation and bioenergy may compete with other land use and have significant impacts on agricultural and food systems, biodiversity, and other ecosystem functions and services (high confidence).” (**Exhibit n°4, page 17**)

The uncertainty of this technology and the evident risks that could lead to irreversible global warming also led the Dutch judge (District Court, Court of Appeal as well as the Dutch Court of Cassation) to dismiss trajectories relying on intensive CCS usage (see *supra*).

In any case, all emission trajectories limiting global warming to 1.5°C involve a reduction of net CO₂ emissions decreasing to zero on a global scale by 2050.

The objective of reaching carbon neutrality in 2050 is now scientifically and legally recognized as having the highest probability to limit global warming to 1.5°C.

- Consequently, the explanatory memorandum to Law n°2019-1147 issued on November 8, 2019, on energy and climate recalls that “*in a context of urgency to take action and as a response to appeal to the Paris Agreement*”, **the French legislator** adopted the objective of carbon neutrality by 2050 on a national scale.

- The objective of carbon neutrality by 2050 is shared by **many countries** including France, the **European Union**, but also a lot of **non-state actors** such as cities (London, Melbourne, Minneapolis, New-York, Oslo, Portland, Rio, San Francisco, Seattle, Sydney, Toronto, Vancouver as well as Washington DC) (**Exhibit n°20, page 99**).

³⁸ IPCC, SR 15, Chapter 3, p. 283.

³⁹ IPCC, SR 15, Chapter 3, p. 179.

⁴⁰ Total, 2018 climate report, p. 30.

⁴¹ IPCC, SR 15, summary for policymakers, p. 16

- **A great many companies** are also committed to reaching carbon neutrality by this time to prevent and mitigate the risks of global warming, showing the “prudence” of this widely shared objective.

- Through the campaign “Business Ambition for 1.5°C”, **87 large companies**, representing 2,300 billion dollars in revenue, are committed to this project of reaching carbon neutrality by 2050, including Nestlé, Danone, Burberry, Saint Gobain, and L’Oréal.⁴²

Several large industrial groups already comply with the commitment of carbon neutrality:

- The Spanish oil company **Repsol** aims to reduce its carbon footprint by 10% by 2025 (from 2016 levels), 20% by 2030, and 40% by 2040 in order to reach carbon neutrality by 2050⁴³. The top executives of the Group will see at least 40% of their long-term variable pay indexed to achieving these objectives.

- **ENGIE** mentions the objective of reducing GHG direct emissions by 85% by 2050 with respect to 2012 levels. Renewable energies should represent 25% of their energy mix in 2020 and 50% in 2030⁴⁴.

- **PSA** is committed to reducing its vehicle emissions by 30% in 2025 and thus its GHG emissions by 55% in 2035 (from their 2012 level). To this end, the group plans to use electric and hybrid vehicles. The vigilance plan refers to the DPEF for suitable and honest actions as a whole.

- **AIRBUS** mentions adopting a policy in line with a trajectory well below 2°C. Moreover, internal objectives have been determined, such as reducing the emissions of *scopes* 1 and 2 by 50% by 2020 with respect to 2006 levels and reducing the intensity of emissions by 60% by 2030 (from 2015 levels). Airbus refers to these objectives in its vigilance plan.

- **MICHELIN** “committed to the Science Based Targets initiative in 2018 of defining shorter-term reduction objectives for the production phase (Scopes 1 and 2) and for the tire usage phase (Scope 3). This commitment aims to guarantee that the ambitions for 2030 and 2050, mentioned above, are consistent with a global warming scenario below 2°C.” Furthermore, these commitments are included in the vigilance plan.

- **Schneider Electric** aims for carbon neutrality across the extent of its supply chain by 2030, taking into consideration CO2 emissions and savings carried out on the entire value chain⁴⁵.

⁴² UN Global Compact, “Business Ambition for 1.5°C,” follow-up of signatory companies, <https://www.unglobalcompact.org/take-action/events/climate-action-summit-2019/business-ambition/businessleaders-taking-action> Novethic, “Sommet climat de New York : 12 nouvelles qu’il ne fallait pas loucher” 25 September 2019, <https://www.novethic.fr/actualite/environnement/climat/isr-rse/sommet-climat-de-new-york-12-nouvellesqu-il-ne-fallait-pas-loucher-147735.html>

⁴³ Press release <https://www.repsol.com/en/press-room/press-releases/2019/repsol-will-be-a-net-zeroemissions-company-by-2050.cshml>; annual report: https://www.repsol.com/imagenes/global/en/integratedmanagement-report-and-independent-verification-report-non-financial-2018_tcm14-147660.pdf

⁴⁴ See the document Business Climate Pledge, p. 42

⁴⁵ Schneider Electric, Press release, 11 December 2019 <https://www.se.com/fr/fr/aboutus/newsroom/actualites/schneider-electric-reaffirme-ses-engagements-notamment-avec-ses-fournisseurs-et-sesclients-pour-limiter-le-rechauffement-planetaire-a-1-5-c-3167-636ff.html>

- As for **EDF**, the ambition to “*go beyond the 2°C trajectory*” by reducing its direct emissions to 30 Mt CO₂ by 2030 and by reaching carbon neutrality by 2050⁴⁶.
- The importance of the objective for companies to reach carbon neutrality by 2050 is even pointed out by the “International Energy Agency”.⁴⁷
- **The French Institute of Administrators (FIA)** recommends its members “*adopt a footprint reduction and transition risk mitigation trajectory in line with the Paris Agreement*”.⁴⁸
- Finally, a study published on November 1, 2019, by the organization **Carbon Tracker** indicates that in order to reach carbon neutrality by 2060, the seven oil and gas *Carbon Majors* (the American ExxonMobil, Chevron, and Conoco Phillips, the Dutch-English Shell, the French TOTAL, the British BP, the Italian Eni) will have to reduce their total emissions by 40% and their productions by 35% according to the NGO (**Exhibit n°11**).

Therefore, the efforts to which TOTAL must agree in order to reach carbon neutrality by 2050 will need to be greater today in terms of effectively lowering carbon intensity and production.

In light of the above, TOTAL S.A. should commit, in its vigilance plan, to preventing and mitigating risks from global warming risks in order to achieve carbon neutrality by 2050 across all direct and indirect emissions resulting from its activities.

Total will also be required to set intermediate reduction objectives for 2025, 2030, and 2040 for the direct emissions and carbon intensity of its products and services to contribute to carbon neutrality by 2050.

These objectives should be presented in a realistic and manageable way, taking into consideration the available technologies to date, and also excluding the reliance on CCS which does not have available technology or financial support to date, and only makes limiting global warming uncertain and illusory.

Consequently, under the obligation to establish, implement and publish “actions adapted to mitigating risk and preventing serious damage”, the Court will order TOTAL to include the following measures in its vigilance plan, which TOTAL will publish and execute:

Primarily,

- **To conform to a reduction trajectory of direct and indirect GHG emissions (scope 1, 2 and 3) compatible with limiting warming to 1.5°C with no overshoot to reach carbon neutrality by 2050⁴⁹, this involves:**
 - **Conforming its activities to the GHG emissions reduction trajectory called “P1” as defined by the IPCC in 2018, which is, given the current state of scientific and technological**

⁴⁶ EDF, 2018 Reference document, p.158, accessible at URL: <https://www.edf.fr/groupe-edf/espacesdedies/investisseurs-actionnaires/documents-de-reference>; L’objectif de neutralité carbone ne concerne cependant que les émissions de scope 1.

⁴⁷ “Many companies have also announced that they are committed to rendering their activities compatible with the Paris Agreement. These commitments can be important because companies can be a driver of innovation and learning. The global shipping giant, Maersk, for example, has committed to becoming carbon neutral by 2050” (free translation) IEA, World Energy Outlook 2019, page 100.

⁴⁸ French Institute of Administrators (FIA), *The role of the board of directors in dealing with climate issues*, 9 December 2019 <https://www.ifa-asso.com/informer/centre-de-ressources/travaux-de-l-ifa/le-role-du-conseildadministration-dans-la-prise-en-compte-des-enjeux-climatiques.html>

⁴⁹ Such a 1.5°C trajectory leaves a 50% chance of limiting warming to below 1.5°C according to the IPCC (RID, p.26) and an 85% chance of containing it below 2°C (Climate Analytics 2015, Timetables for zero emissions and 2050 emissions reductions: State of the Science for the ADP Agreement).

expertise, the only trajectory that allows for, with an acceptable degree of probability, limiting global warming to 1.5° C with no overshoot;

- **Setting intermediate objectives to reduce the carbon intensity of its products in line with this trajectory;**
- **Reducing gas production by 25% by 2030 and 74% by 2050 (from 2010 levels);**
- **Reducing oil production by 37% by 2030 and by 87% by 2050 (from 2010 levels);**
- **Immediately ceasing research and exploitation of new hydrocarbon deposits;**

Alternatively, the Court will order TOTAL to include the following measures in its vigilance plan which TOTAL will publish and execute:

- To set objectives to keep the average global temperature rise at 1.5° C in order to reach carbon neutrality by 2050.
- To cover all greenhouse gas (GHG) emissions, both from its operations, and from its products (Scopes 1, 2 and 3) in the medium and long term.
- To foster quantitative measures such as GHG intensity indicators (GHG emission per unit of energy) or other suitable quantitative measures, to conform its objectives to a trajectory compatible with global warming of 1.5°C.

In any case:

- To conform with a direct and indirect emissions reduction trajectory compatible with the Paris Agreement objective;
- **To decrease net emissions by at least 40% by 2040** (from 2019 levels) with a 1.8% annual reduction;
- **To decrease its hydrocarbon production by 35% by 2040** (from 2019 levels) with a 1.7% annual reduction;
- **To decrease its net emissions by at least 40% by 2040** (from 2019 levels) with a 1.8% annual reduction;
- To end the exploration and the solicitation of new hydrocarbon exploration permits;
- **To implement a gradual cessation, by 2040, of research and exploitation of hydrocarbon deposits by committing to leave 80% of known reserves in the subsoil** in accordance with the objective defined by Law n° 2017-1839 of December 30, 2017 known as “Hulot”;

2.4. ADDITIONALLY: ON THE OBLIGATION TO PREVENT ECOLOGICAL DAMAGE

2.4.1. The obligation to prevent ecological damage

Article 1252 of the Civil Code provides that:

“Independent from repairing the ecological damage and having received a request to this effect by a person mentioned in Article 1248, the judge may prescribe reasonable steps to prevent or stop the damage from occurring.”

This provision may constitute the legal basis for action with a purely preventive purpose, apart from any action for repairing ecological damage⁵⁰.

2.4.2. Through its GHG emissions, TOTAL contributes significantly to bringing about and aggravating ecological damage

Damage prevention is of particular importance in environmental matters since damage to the environment can have irreversible consequences.

This is particularly the case for environmental damage that would result from global warming beyond the 1.5°C threshold, as described above.

The process of global warming contributes to the realization of multiple environmental damages of a protean nature.

2.4.3. TOTAL S.A.'s actions to reduce GHG emissions will not prevent ecological damage from global warming

TOTAL S.A.'s vigilance plan actions are notoriously insufficient and will not prevent the risk of global warming above 1.5°C.

In November 2019, TOTAL S.A. published a new version of its climate strategy, which, for the most part, consisted of measures already included in the vigilance plan for the 2018 fiscal year with the exception of its "ambition" to reduce the carbon intensity of its products by 15% by 2030.

According to TOTAL,

"Carbon intensity makes it possible to comprehend as a whole the emissions from energy products used by the Group's customers. This indicator measures the average GHG emissions of these products over their entire life cycle, from production to final use, per unit of energy."

TOTAL adds that:

"The Group has set a goal of reducing this carbon intensity by 15% between 2015, the date of the Paris Agreement, and 2030. In the longer term, beyond 2030, our ambition is to continue these efforts, or even to accelerate them according to technological developments and public incentive policies, which would make it possible to achieve a drop of around 25 to 40% by 2040."

⁵⁰ François Guy TRÉBULLE, Recognizing the reception of ecological damage in the Civil Code, energy - environment - infrastructure - LexisNexis JurisClasseur monthly review - November 2016.

This last preventive measure, not included in the vigilance plan, cannot help prevent ecological damage from global warming above 1.5°C.

Firstly, it is a simple “ambition” integrated into the Group's “climate strategy”, described by TOTAL S.A. as a “report” “published solely for informational purposes” of which “no legal consequence can ensue”.

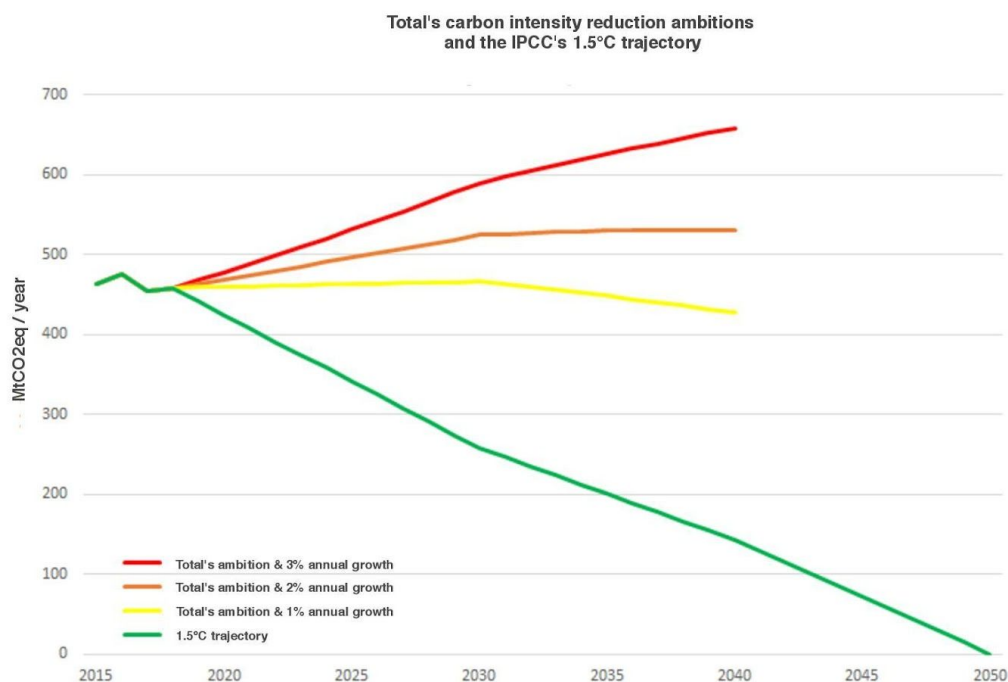
Secondly, assuming this ambition engages the TOTAL Group, it is very insufficient.

Johannes Svensson, a climate researcher, made a comparison between net emissions and carbon intensity objectives.

The graph below compares the absolute emission trajectories according to different growth scenarios for the products sold by Total (equivalent barrels of oil sold). TOTAL S.A. presented its carbon intensity reduction target in its 2019 climate strategy, aiming to reduce the carbon intensity (CO₂eq/Btu sold) of its products by 15% by 2030 and by 25% by 2040, using 2015 as the reference year. TOTAL S.A.'s trajectories are compared with the 1.5°C trajectory from the IPCC SR15 report (based on their P1 scenario).

Despite the objective of reducing the carbon intensity of its products by 15% by 2030, the TOTAL group's global emissions will not decrease if the objective is set on carbon intensity, even if the growth rate of hydrocarbon products sold is little more than 1% per year on average.

If a growth rate exceeds 3% per year on average, the company's absolute emissions still continue to increase until 2040.



The inadequacy of TOTAL S.A.'s "ambition" with the trajectories in line with the Paris Agreement is therefore obvious.

TOTAL S.A.'s "ambition" to reduce the carbon intensity of its products by 15% is therefore notoriously insufficient to achieve carbon neutrality by 2050 and reduce its emissions on a trajectory in line with the Paris Agreement.

2.4.4. The request for an injunction under the provisions of Article 1252 of the Civil Code

In order to prevent serious ecological damage from occurring as a result of warming beyond the 1.5°C threshold, the Court will order TOTAL S.A. to take measures to reduce its emissions in a trajectory in line with the Paris Agreement.

In this regard, TOTAL S.A. will be ordered to publish within six months of the decision to intervene:

Appropriate actions to reduce its direct and indirect emissions in line with the Paris Agreement in order to limit global warming to "significantly below 2°C", and in particular:

Primarily,

- **To align with a reduction trajectory of direct and indirect GHG emissions (scope 1, 2 and 3) compatible with limiting warming to 1.5°C without overshoot to reach carbon neutrality by 2050⁵¹, which involves:**
 - **Aligning its activities with the "P1" GHG emissions reduction trajectory defined in 2018 by the IPCC as, given the current state of scientific and technological knowledge, the only trajectory that allows for, with an acceptable degree of probability, limiting global warming to 1.5°C without overshoot;**
 - **Setting intermediate objectives for reducing the carbon intensity of its products in line with this trajectory.**
 - **Reducing its gas production by 25% by 2030 and 74% by 2050 (compared to 2010);**
 - **Reducing its oil production by 37% by 2030 and 87% by 2050 (compared to 2010);**
 - **Immediately ceasing research and exploitation of new hydrocarbon deposits;**

Alternatively, the Court will order TOTAL to include the following measures in its vigilance plan, which TOTAL will undertake to publish and implement:

- **To set objectives aimed at containing the average global temperature rise to 1.5°C in order to reach carbon neutrality by 2050.**
- **To cover all greenhouse gas (GHG) emissions, both from its operations and from its products (Scopes 1, 2, and 3) in the medium and long term.**
- **To rely on quantitative indicators such as GHG intensity indicators (GHG emission per unit of energy) or other suitable quantitative indicators, to align its objectives with a trajectory compatible with global warming of 1.5°C.**

⁵¹ Such a 1.5°C trajectory leaves a 50% chance of limiting warming to below 1.5°C according to the IPCC (SPM, p.26) and an 85% chance of containing it below 2°C (Climate Analytics 2015, Timetables for zero emissions and 2050 emissions reductions: State of the Science for the ADP Agreement).

In any case:

- To align a trajectory for reducing direct and indirect emissions compatible with the Paris Agreement objective;
- **To reduce its net emissions by 40% by 2040** (compared to 2019) with an annual reduction of 1.8%;
- **To reduce its hydrocarbon production by 35% by 2040** (compared to 2019) with an annual reduction of 1.7%;
- **To reduce its net emissions by 40% by 2040** (compared to 2019) with an annual reduction of 1.8%;
- To put an end to the exploration and the solicitation of new hydrocarbon exploration permits;
- **To implement a gradual cessation, by 2040, of research and exploitation of hydrocarbon deposits by committing to leave 80% of known reserves in the subsoil** in accordance with the objective defined by Law n° 2017-1839 of December 30, 2017, known as “Hulot”;

2.5. ON PENALTY PAYMENT

Pursuant to Article L. 225-102-4.-II of the French Code of Commerce, the request for an injunction to publish a new vigilance plan should be made under a penalty of **50,000 euros per day of delay**, sufficiently dissuasive so that TOTAL S.A. does not obstruct the execution of a court decision.

Recall that, in 2018, TOTAL S.A. recorded a turnover of 186,954,624 euros and a net result of 10,313,789 euros (**Exhibit 5**).

This penalty payment is all the more justified by the urgency, in view of TOTAL S.A.’s considerable carbon footprint, of publishing appropriate actions to mitigate risks and prevent serious damage linked to global warming beyond the 1.5°C threshold.

3. ON IRRECOVERABLE COSTS

Given the circumstances, it would be entirely unfair for the plaintiffs to bear the costs they had to incur to initiate action and compel TOTAL to comply with its legal obligations.

Consequently, the plaintiffs request that the Court order TOTAL S.A. to pay each of them the sum of **5,000 (five thousand) euros under Article 700 of the Code of Civil Procedure** and order TOTAL to pay all costs.

Finally, pursuant to Article 536-1 of the Code of Civil Procedure, the judgment to be issued will be accompanied by **provisional enforcement**.

* *

*

FOR THESE REASONS

Regarding the Charter for the Environment, particularly Articles 1 and 2 Regarding the UN Framework Convention on Climate Change of May 9, 1992, Regarding the Paris Agreement of December 15, 2015,

Regarding Articles L. 225-102-4.-I and L. 225-102-4 II of the Code of Commerce, Regarding the Civil Code, particularly Article 1252,

Regarding the Environment Code, Regarding the foregoing,

Regarding the exhibits submitted for the proceedings,

It is requested that the Nanterre Judicial Tribunal:

- **DECLARE** the CENTRE-VAL-DE-LOIRE Region, the territorial public establishment EST ENSEMBLE, the communes of ARCUEIL, BAYONNE, BÈGLES, BIZE-MINERVOIS, CHAMPNEUVILLE, CORRENS, GRENOBLE, LA POSSESSION, MOUANS-SARTOUX, NANTERRE, SERVAN, VITRY-LE-FRANÇOIS, and the associations NOTRE AFFAIRE À TOUS, LES ÉCO MAIRES, SHERPA, ZÉA and FRANCE NATURE ENVIRONNEMENT admissible and well founded in their requests;

On the basis of Articles L. 225-102-4.-I and L. 225-102-4 II of the French Code of Commerce:

- **ORDER TOTAL S.A.** to publish, within six months of being notified of the decision to intervene, a new vigilance plan including the following in the "risks identification" chapter:

○ The risks associated with global warming beyond the 1.5°C threshold, referencing the IPCC's most recent and relevant work and the Paris Agreement objectives, and specifying the risks of serious harm to human rights and fundamental freedoms, public health and safety, and the environment, in particular:

- Risks of serious damage to land ecosystems,
- Risks of serious damage to marine ecosystems,
- Increase in heat waves,
- Increased risk of drought,
- Increased risk of heavy rainfall and floods,
- Risks of flooding due to sea-level rise,
- Risks of serious violations to human rights and fundamental freedoms;

○ As a result of its activities, its contribution to global greenhouse gas emissions and the risks induced by climate change amounts to approximately 1% of global emissions;

○ The incompatibility of a GHG emissions reduction trajectory limiting global warming to 1.5°C and pursuing exploration projects for exploiting new hydrocarbon deposits;

- Its contribution to depleting the existing global carbon budget for limiting global warming to 1.5°C and to aggravating the risks induced by pursuing hydrocarbon (oil and gas) exploitation projects;
- The risks associated with using CO2 capture and storage technologies, known as "CCS", within TOTAL's GHG emission reduction trajectories;
- The risks related to exceeding the global carbon budget compatible with limiting global warming to 1.5°C compared to pre-industrial levels, and to analyze the risks resulting from its own activities according to the TOTAL Group's growth and production assumptions for 2050.
- A complete and exhaustive mapping of the risks resulting from its activities and, in particular, GHG emissions by each activity sector and project including their primary energy mix;
- Analysis and prioritization of each of these risks according to their seriousness in order to highlight the importance of climate-related risks.

- **ORDER TOTAL S.A.** to publish, within six months of being notified of the decision to intervene, a new vigilance plan including the following measures, which TOTAL will publish and implement:

Primarily,

- Aligning itself with a direct and indirect GHG emissions reduction trajectory (Scope 1, 2 and 3) compatible with limiting warming to 1.5°C without overshoot in order to achieve carbon neutrality by 2050, which involves:
 - Aligning its activities with the "P1" GHG emissions reduction
 - The trajectory as defined in 2018 by the IPCC, as this is, according to current scientific and technological knowledge, the only trajectory that allows for, with an acceptable degree of probability, limiting global warming to 1.5°C without overshoot;
 - Setting intermediate objectives for reducing the carbon intensity of its products in line with this trajectory;
 - Reducing gas production by 25% by 2030 and 74% by 2050 (compared to 2010);
 - Reducing oil production by 37% by 2030 and 87% by 2050 (compared to 2010);
 - Immediately ceasing the exploration and exploitation of new hydrocarbon deposits;

Alternatively:

- To set objectives to contain the average global temperature rise to 1.5°C in order to achieve carbon neutrality by 2050.

- To cover all greenhouse gas (GHG) emissions, both from operations and from products (Scopes 1, 2, and 3) over the medium and long term.
- To use quantitative indicators such as GHG intensity indicators (GHG emission per unit of energy) or other appropriate quantitative indicators to align its objectives with a trajectory compatible with global warming of 1.5°C.

In any case:

- Aligning with a direct and indirect emissions reduction trajectory consistent with the Paris Agreement objective;
- Minimizing its net emissions by 40% by 2040 (compared to 2019) with an annual reduction of 1.8%;
- Reducing its hydrocarbon production by 35% in 2040 (compared to 2019) with an annual reduction of 1.7%.
- Minimizing its net emissions by 40% by 2040 (compared to 2019) with an annual reduction of 1.8%;
- Putting an end to the exploration and solicitation of new hydrocarbon exploration permits;
- Implementing a gradual cessation, by 2040, of hydrocarbon exploration and exploitation by committing to leave 80% of known reserves in the subsoil in accordance with the objective defined by Law n° 2017-1839 of December 30, 2017, known as "Hulot";
- **MATCH** this **obligation** with a penalty payment of **50,000 euros** per day of delay from the expiration of the six-month period for bringing the vigilance plan into compliance;

In addition, on the basis of Article 1252 of the Civil Code:

Primarily,

- To align itself with a direct and indirect GHG emissions reduction trajectory (Scope 1, 2 and 3) compatible with limiting warming to 1.5°C without overshoot in order to achieve carbon neutrality by 2050, which involves:

- to 2010);
- Reducing its oil production by 37% by 2030 and 87% by 2050 (compared to 2010);
- Immediately ceasing the exploration and exploitation of new hydrocarbon deposits;

Alternatively:

- To set objectives to contain the average global temperature rise to 1.5°C in order to achieve carbon neutrality by 2050.
- Cover all greenhouse gas (GHG) emissions, both from its operations and from its products (Scopes 1, 2, and 3) over the medium and long term.
- Use quantitative indicators such as GHG intensity indicators (GHG emission per unit of energy) or other appropriate quantitative indicators to align its objectives with a trajectory compatible with global warming of 1.5°C.

In any case:

- Conforming to a direct and indirect emissions reduction trajectory consistent with the Paris Agreement objective;
- Minimizing its net emissions by 40% by 2040 (compared to 2019) with an annual reduction of 1.8%;
- Reducing its hydrocarbon production by 35% by 2040 (compared to 2019) with an annual reduction of 1.7%.
- Minimizing its net emissions by 40% by 2040 (compared to 2019) with an annual reduction of 1.8%;
- Putting an end to the exploration and solicitation of new hydrocarbon exploration permits; Aligning its activities with the "P1" GHG emissions reduction trajectory as defined in 2018 by the IPCC, as this is, according to current scientific and technological knowledge, the only trajectory that allows for, with an acceptable degree of probability, limiting global warming to 1.5°C without overshoot;
 - Setting intermediate objectives for reducing the carbon intensity of its products in line with this trajectory;
 - Reducing its gas production by 25% by 2030 and 74% by 2050 (compared

- Implementing a gradual cessation, by 2040, of hydrocarbon exploration and exploitation by committing to leave 80% of known reserves in the subsoil in accordance with the objective defined by Law n° 2017-1839 of December 30, 2017, known as "Hulot";

In any case:

- **CONDEMN** TOTAL S.A. to pay the CENTRE-VAL-DE-LOIRE Region, the territorial public establishment EST ENSEMBLE, the communes of ARCUEIL, BAYONNE, BÈGLES, BIZE-MINERVOIS, CHAMPNEUVILLE, CORRENS, GRENOBLE, LA POSSESSION, MOUANS-SARTOUX, NANTERRE, SERVAN, VITRY-LE-FRANÇOIS, and the associations NOTRE AFFAIRE À TOUS, LES ÉCO MAIRES, SHERPA, ZÉA and FRANCE NATURE ENVIRONNEMENT the sum of 5,000 euros each under the provisions of Article 700 of the Code of Civil Procedure;
- **CONDEMN** TOTAL S.A. to pay all legal costs;
- **STATE** that there are no grounds to exclude provisional enforcement of the decision to intervene

WITHOUT PREJUDICE

SCHEDULE OF RELEASED EXHIBITS

Exhibit n°1-1: Notre Affaire à Tous statutes;

Exhibit n°1-2: SHERPA statutes;

Exhibit n°1-3: ZEA statutes and the decision of the Board of Directors of September 14, 2019;

Exhibit n°1-4: ÉCO-MAIRES "Association Nationale des Maires et des Élus Locaux pour l'Environnement et le Développement Durable" statutes;

Exhibit n°1-5: France Nature Environnement statutes;

Exhibit n°1-6: Deliberation 2019DEL106 of the ARCUEIL Municipal Council, dated October 3, 2019;

Exhibit n°1-7: Deliberation of the BAYONNE Municipal Council of April 14, 2014, delegating authority to the mayor of Bayonne and the mayoral decision dated June 25, 2019;

Exhibit n°1-8: Deliberation n°1 of the BÈGLES Municipal Council dated October 3, 2019;

Exhibit n°1-9: Deliberation n°2019-33 of the BIZE-MINERVOIS Municipal Council dated May 29, 2019;

Exhibit n°1-10: Deliberation n°2019/056 of the CORRENS Municipal Council dated August 6, 2019;

Exhibit n°1-11: Deliberation DE 2019_0_31 of the CHAMPNEUVILLE Municipal Council dated September 26, 2019;

Exhibit n°1-12: Deliberation 2016- 01-07-05 of the Territorial Council and Decision n°D2019-598 of November 28, 2019;

Exhibit n°1-13: Deliberation n°27-E016 of the GRENOBLE Municipal Council and Order ARR_2019_026 of the mayor of GRENOBLE dated January 9, 2019; **Exhibit n°1-14:** Deliberation n°09 of the LA POSSESSION Municipal Council and mayoral Decision n°10/2019-SG of July 25, 2019;

Exhibit n°1-15: Deliberation authorizing the mayor of MOUANS SARTOUS to take legal action.

Exhibit n°1-16: Deliberation DEL2014-79 of the NANTERRE Municipal Council dated March 29, 2014, and mayoral decision dated October 4, 2019;

Exhibit n°1-17: Deliberation n°4 of the SEVRAN Municipal Council dated May 15, 2018, and mayoral decision dated October 19, 2018;

Exhibit n°1-18: Deliberation DEL 36-2014 of the VITRY-LE-FRANÇOIS Municipal Council dated April 17, 2014;

Exhibit n°1-19: Deliberation REGION CENTRE VAL DE LOIRE n° 15.05.04 of December 21, 2015;

Exhibit n°2-1: letter from SEATTLE AVOCATS to Mr. Patrick POUYANNÉ dated October 22, 2018;

Exhibit n°2-2: letter from Mr. Aurélien HAMELLE to SEATTLE AVOCATS dated January 14, 2019;

Exhibit n°2-3: letter from SEATTLE AVOCATS to Mr. Aurélien HAMELLE dated February 14, 2019;

Exhibit n°2-4: letter from Mr. Patrick POUYANNÉ to Mr. Jean-Pierre BOUQUET, mayor of the commune of VITRY-LE-FRANÇOIS dated February 27, 2019; **Exhibit n°2-5:** letter from Mr. Aurélien HAMELLE to SEATTLE AVOCATS dated September 17, 2019;

Exhibit n°2-6: letter from Mr. Patrick POUYANNÉ to Mr. Alain FABRE, mayor of the commune of BIZE-MINERVOIS, dated September 20, 2019;

Exhibit n°3: formal notice for TOTAL dated June 19, 2019;

Exhibit n°3-1: acknowledgment of receipt n°1A 166 153 7995 0 of the formal notice dated June 20, 2019;

Exhibit n°4: IPCC, Summary for Policymakers, “*Global Warming of 1.5°C, IPCC Special Report on the impacts of global warming of 1.5°C above pre-industrial levels and the trajectories related to global greenhouse gas emissions in the context of strengthening the global response to climate change, sustainable development, and the fight against poverty*” edited by V. Masson-Delmotte, et al., World Meteorological Organization, Geneva, Switzerland, p. 32

Exhibit n°5: TOTAL, Reference Document, 2018

Exhibit n°6: Richard HEEDE, "Carbon Majors: Accounting for carbon and methane emissions 1854-2010, Methods and Results Report, Snowmass, Climate Mitigation Services, 2013".

Exhibit n°7: Carbon Disclosure Project, Richard HEEDE, "The Carbon Majors Database, CDP Carbon Majors Report 2017",

Exhibit n°8: TOTAL Reference Document, 2017;

Exhibit n°9: Letter to ONERC elected officials, Adaptation Plan, December 30, 2018; **Exhibit n°10:** United Nations Environment Programme & Columbia Law School, *L'état du contentieux climatique*, revue mondiale, Nairobi, May 2017;

Exhibit n°11: latribune.fr, *Pour respecter l'accord de Paris, les géants du pétrole vont devoir réduire leur production*, November 4, 2011 and Carbon Tracker report, "Balancing the budget. Why deflating the carbon bubble requires oil and gas companies to shrink", November 1, 2019;

Exhibit n°12: Interview with Patrick POUYANNÉ by Cash Investigation; **Exhibit n°13:** France Inter, Camille Crosnier, *Davos, les patrons et le climat*, Wednesday, January 22, 2020;

Exhibit n°14: Total, *Intégrer le climat à notre stratégie*, September 2018;

Exhibit n°15: European Court of Auditors Special Report (N°18/2016);

Exhibit n°16: Interdepartmental advisory mission report n°16089 CGAAER - CGEDD "*Durabilité de l'huile de palme et des autres huiles végétales*", December 2016; **Exhibit n°17:** Total, *Intégrer le climat à notre stratégie*, November 2019;

Exhibit n°18: IPCC, *Fiche d'information sur le GIEC : Comment le GIEC approuve-t-il les rapports?*, August 30, 2013

Exhibit n°19: International Energy Agency (IEA), "World Energy Outlook 2018", November 2018;

Exhibit n°20: International Energy Agency (IEA), "World Energy Outlook 2019", November 2019.