

In its National Low-Carbon Strategy, [Stratégie Nationale Bas Carbone](#), France had set a clear trajectory on increasing a carbon tax. However, the new government elected in 2017 decided last year to increase it even more than anticipated. As the increase is slowly cumulating with fossil fuel price hikes, the Government faces unprecedented mobilization against fossil fuel increase; this could have been avoided if the context had been explained and social compensation had not been neglected. Unfortunately, the former State Secretary to the Environmental and Social Transition (MTES - Ministre d'Etat à la Transition Ecologique et Solidaire), Nicolas Hulot, has done a poor job on the advocacy and enlightenment of the people, leaving them with no clue on how to face this sudden jump in carbon tax, although it had been anticipated by the so-called "French Elite", now bitterly criticized for its ignorance of the real condition of underprivileged people. This is exactly what the Paris Agreement is designed to avoid: lack of practical implementation due to the gap between the understanding of the problem and the lack of means and solution awareness among the people; while greenhouse-gas-driven climate change is a widely accepted fact among the French people, in large part thanks to people like Nicolas Hulot, insufficient compensation and information about effective solutions has plagued the action of all former governments and resulted in excessive CO2 emissions in France for the past 10 years, compared to its 2020 objectives.

At this point, Climate Scorecard and partner organizations (Saving Our Planet) recommend to French President Emmanuel Macron, recently appointed "Champion of the Earth", a unique title so far, to up his game and adopt a practical, aggressive strategy to switch to a Carbon Fee & Dividend policy, similar to that recently adopted by Canada, albeit at a much lower level than required to reach the objectives of the 2015 Paris Agreement on Climate Change. This strategy is drawn from the main conclusion of the IPCC SR15 report published in October 2018: Worldwide Carbon Neutrality (WCN) must be reached before 2050 in order to limit global warming to +1.5°C.

Context

There are the 10 European countries which are serious about Carbon Neutrality by 2050: Denmark, Finland, France, Italy, Luxembourg, the Netherlands, Portugal, Slovenia, Spain and Sweden, since they all signed a letter demanding the EU to adopt a [Net Zero Emission goal](#) by 2050.

These 10 countries can quickly join Canada to adopt and apply the CCL CF&D ([Citizens Climate Lobby Carbon Fee & Dividend](#)) using the following formula, named the SOP formula, after our partner organization [Saving Our Planet](#) :

$$CFandD_euros_tCO2 = -30+200*(100/(ppmCO2-550))^2$$

Where CFandD_euros_tCO2 is the value of the [Carbon Fee & Dividend](#) in euros and ppmCO2 is the concentration of CO2 in parts per million. Figure 1 shows that the CF&D becomes zero when the concentration of CO2 becomes lower than the 1900s optimum (300 ppmCO2), because extremely low CO2 concentrations lead to ice ages and photosynthesis rate shortages.

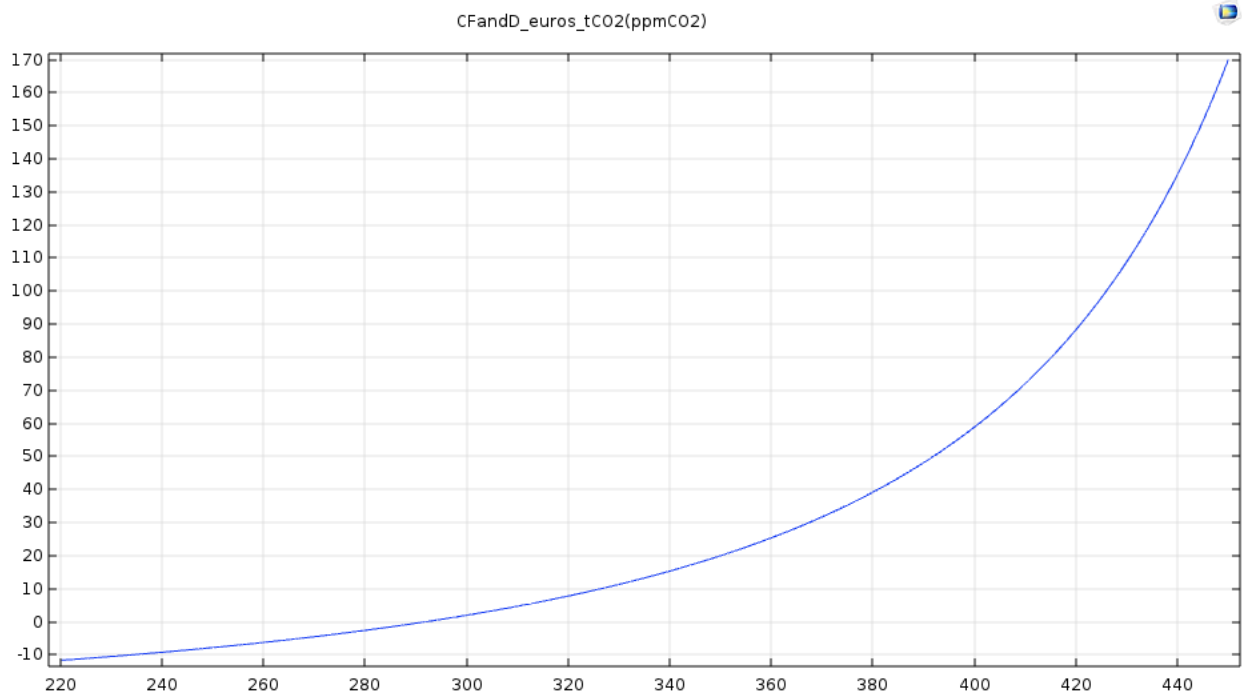


Figure 1 : CF&D between 220 and 450 ppmCO2

The number on the horizontal axis is the average CO2 concentration estimated from currently available data, such as the Mauna Loa daily index, available from: <https://www.co2.earth/daily-co2> .

The vertical axis yields the value of the carbon tax in euros per ton of CO2 emissions (€/tCO2) that should be paid in order to prevent further increase. Future values of the carbon tax should rely upon estimates of future estimates of the average CO2 concentration, such as estimates from [future pathways](#).

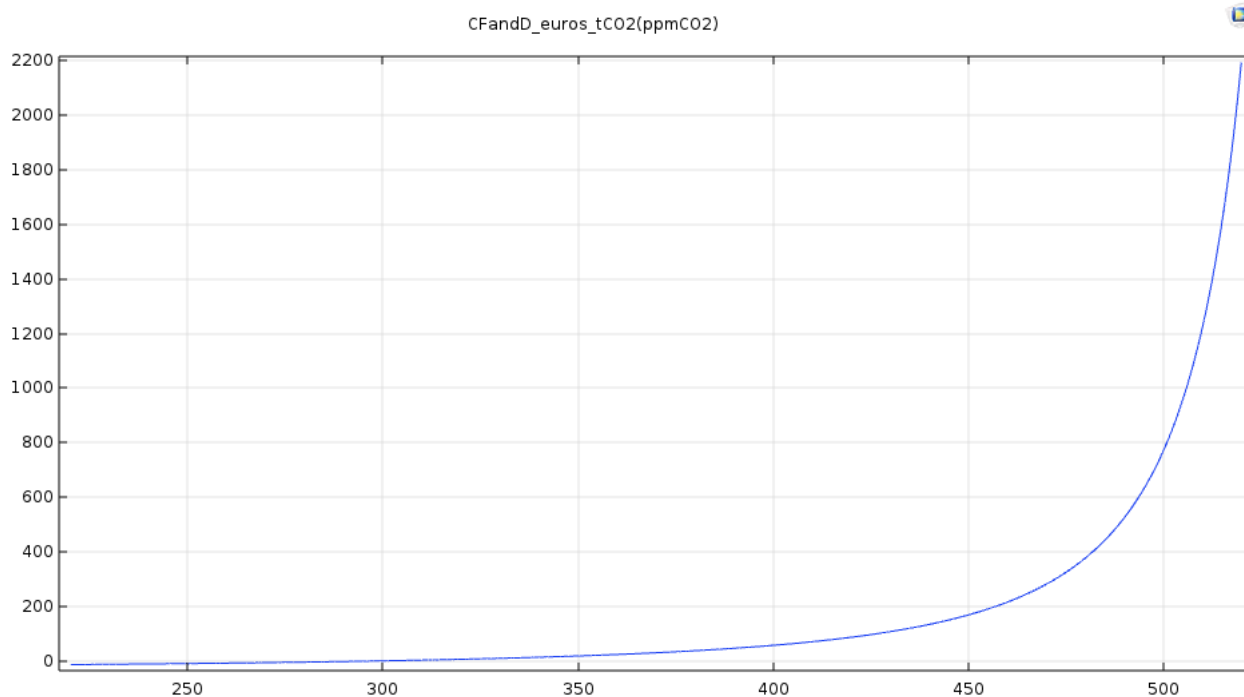


Figure 2 : CF&D between 220 and 520 ppmCO2

Figure 2 shows that the CF&D becomes very large beyond 500 ppmCO2. It tends to infinity at 550 ppmCO2 which is the threshold beyond which there is a probability larger than 90% to meet dramatically catastrophic climate change.

Hence this formula yields a comprehensive framework to explain and define a universal carbon tax scheme with automatic compensation to the people, on an egalitarian basis. In France, this would mean that every taxpayer would receive a yearly statement from the French republic and the European Union, and eventually the CETA community, reminding them that they are receiving a substantial part (well over 50%) of the CF&D paid by all the consumers of products and services, based upon their CO2 contents, not the added values or economic benefits. This paradigm change would strengthen not only climate change policy awareness and support, but also citizen empowerment to choose their low-carbon solutions, and the feeling of belonging to a strong community of almost one billion people acting for the greater good and fixing the consequences of ignorance, greed, procrastination and irresponsibility, fostered by the dependence on fossil fuels. We could say that finally, we are acting together for “saving our planet” or #MakeOurPlanetGreatAgain !

How to estimate the Carbon Fee & Dividend ?

Although it is difficult to define a worldwide price for CO2 and GHG emissions, there is an urgent need to reduce carbon dioxide (CO2) and methane (CH4) emissions, which are the most abundant GreenHouse Gases (GHGs). However, tackling methane emissions is not yet feasible, but CO2 emissions are now accurately monitored worldwide. Hence, we propose to index the Carbon Fee & Dividend on CO2 emissions only, until a consensus is reached on how to measure local CH4 emissions and a precise definition of the average GHG index (in ppmCO2eq).

Hence, we propose to define a Carbon Fee & Dividend (CF&D) in free-trade zones governed by free-trade agreements, like the European Union and Canada, by including the CF&D as an addendum to the [CETA](#). Inside the Free-Trade Zone, countries applying the CF&D would be allowed to use the Border Adjustment mechanism to tax incoming CO₂ emissions from countries which do not use the CF&D or an equivalent national carbon tax or use a much lower carbon tax. Exemptions should be prohibited, except for international shipping which is already governed by other regulations independent from the sovereign states. Exemptions have annihilated the efficiency of older carbon tax schemes, including the infamous ETS (European Trading Scheme), which concentrates all the errors and complications any carbon taxing scheme should avoid: across-the-board exemptions, free emission certificates given away at levels larger than emission needs of the most polluting industries, resulting in subsidies to the biggest polluters followed by the crash of carbon prices, under 5 euros/tCO₂. Since 2009, neoliberal ideologists, including economists and politicians, have claimed it could be fixed, to no avail.

Future values of the Carbon Fee & Dividend ?

Using the current pathways, we propose the following values for the CETA CF&D:

Year: value in €/tCO₂

2025: 100

2030: 200

2040: 400

2050: 1600

Only Sweden already complies with this trajectory, but only partially, since its carbon tax does not apply to all domestic sectors and there is no Border Adjustment scheme.

Next steps:

We propose that:

1. the 10 countries quoted above set up a joint European initiative to implement a full CF&D scheme by 2025, including the required level at 100 €/tCO₂, ZERO exemptions and a full [Border Carbon Adjustment](#) system, including Tariffs and Rebates.
2. Canada should also quickly increase its CF&D level from 30 to 100 €/tCO₂ and ask for a revision of NAFTA to include CF&D, on the basis that current US and Mexico policies are not compatible with the Paris Agreement on Climate.
3. The EU should propose member countries to comply with CF&D before 2025 and insist that it is possible based on the tax neutral aspect of it. The EU will provide the necessary support for implementation to all member countries by 2025, by using the methodologies developed by Sweden and France to implement a national carbon tax with border adjustments.
4. The EU and Canada should sign an addendum to CETA, named for instance the Canada-EU CF&D Agreement (CECA).
5. The EU should propose an extension of CETA, say before 2030, to other European countries, the US and Mexico, under the provision of compliance with the CECA.

Conclusion

The Carbon Fee & Dividend is a form of carbon tax that tackles the main blocking points for a flat carbon tax or carbon trading systems: climate efficiency, public acceptance and international trade regulations. Although revenue neutral, it does create a powerful incentive for taxpayers to reduce CO2 emissions both at the individual and national levels, while preventing disloyal carbon dumping between countries or unfair retribution of large CO2 emitters. CF&D enables setting a realistic price on carbon in entire free-trading zones such as the EU and CETA, or maybe even NAFTA. The result would be the first low-carbon Economic Alliance by 2030, between Europe and North America, so over 1 billion people if all those countries sign up to start the Climate Transition.

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Annex

Let's recall some facts from our Post #9

- Examples of the partial exoneration from carbon tax for some kinds of fuels shown in the following snapshot taken from the [Carbon tax chart](#):

--pétrole lampant :							
----destiné à être utilisé comme combustible :	15 bis	Hectolitre	15,25	17,90	20,55	23,21	25,86
----autres ;	16	Hectolitre	51,28	53,93	56,58	59,24	61,89
--carburéacteurs, type pétrole lampant :							
----carburant utilisé pour les moteurs d'avions ;	17 bis	Hectolitre	39,79	42,44	45,09	47,75	50,40
----autres ;	17 ter	Hectolitre	51,28	53,93	56,58	59,24	61,89
----autres huiles moyennes ;	18	Hectolitre	51,28	53,93	56,58	59,24	61,89
--huiles lourdes :							
--gazole :							
----destiné à être utilisé comme carburant sous condition d'emploi ;	20	Hectolitre	18,82	21,58	24,34	27,09	29,85
----fioul domestique ;	21	Hectolitre	15,62	18,38	21,14	23,89	26,65
----autres ;	22	Hectolitre	59,40	64,76	70,12	75,47	78,23
----gazole B 10 :	22 bis	Hectolitre	59,40	64,76	70,12	75,47	78,23

---gazole B 10 ;	22 bis	Hectolitre	59,40	64,76	70,12	75,47	78,23
---fioul lourd ;	24	100 kg nets	13,95	17,20	20,45	23,70	26,95
--huiles lubrifiantes et autres.	29	Taxe intérieure de consommation applicable conformément au 3 du présent article					
2711-12							
*propane, à l'exclusion du propane d'une pureté égale ou supérieure à 99 % :							
--destiné à être utilisé comme carburant (y compris le mélange spécial de butane et de propane dans lequel le propane représente plus de 50 % en poids) :							
--sous condition d'emploi ;	30 bis	100 kg nets	15,90	19,01	22,11	25,22	28,32
--autres ;	30 ter	100 kg nets	20,71	23,82	26,92	30,03	33,13
--destiné à être utilisé pour d'autres usages que comme carburant (y compris le mélange spécial de butane et de propane dans lequel le propane représente plus de 50 % en poids).	31	100 kg nets	6,63	13,25	19,9	26,5	33,13
2711-13							
*butanes liquéfiés :							
--destinés à être utilisés comme carburant (y compris le mélange spécial de butane et de propane dans lequel le butane représente au moins 50 % en poids) :							
--sous condition d'emploi ;	31 bis	100 kg nets	15,90	19,01	22,11	25,22	28,32
--autres ;	31 ter	100 kg nets	20,71	23,82	26,92	30,03	33,13
--destinés à être utilisés pour d'autres usages que comme carburant (y compris le mélange spécial de butane et de propane dans lequel le butane représente au moins 50 % en poids).	32	100 kg nets	6,63	13,25	19,9	26,5	33,13

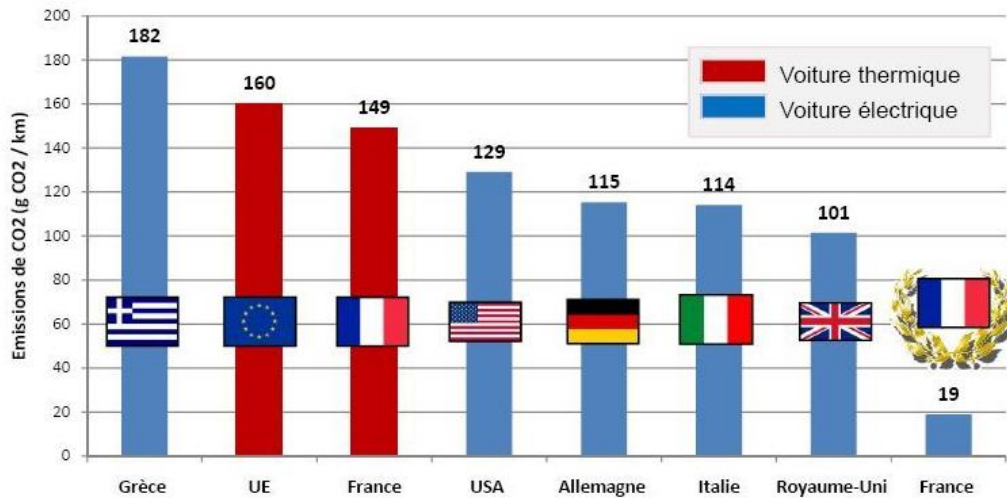
- **The scheduled increase is enough to have an impact on consumers and investors:**

Year	Price before VAT (€/tCO ₂)
2018	44,6
2020	65,4
2022	86,2
2025	100*
2030	200*
2040	400*

*projected increase

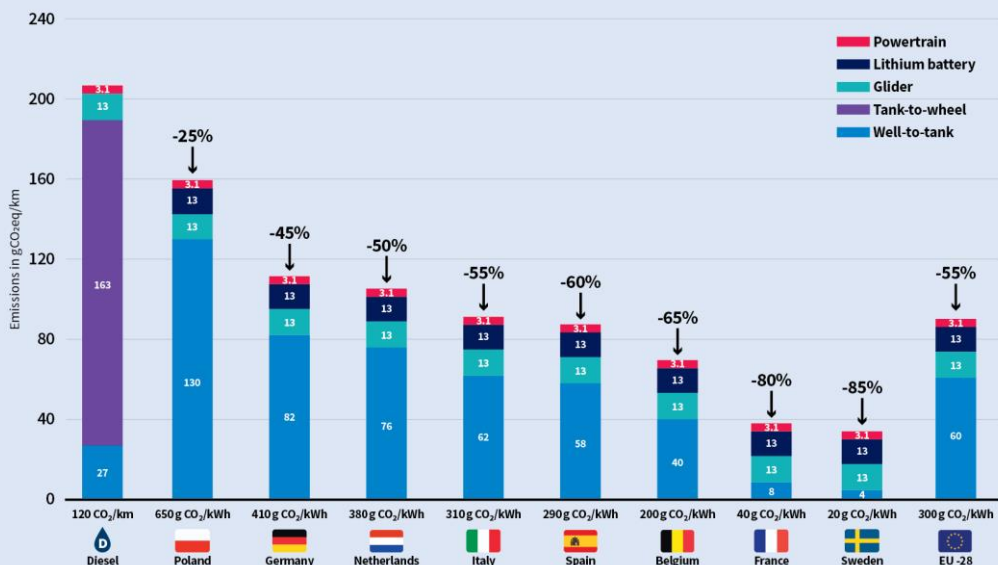
- Examples of low-carbon solutions that could be paid by the yearly dividend: reversible air conditioning (heat pumps) and electric vehicles:

Comparaison émissions CO2 VE VT



www.acti-ve.org

Electric vehicles' climate impact in different energy mixes



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Source: Messagie, M. Life Cycle Analysis of the Climate Impact of Electric Vehicles, October 2017. VUB university, Brussels.

CO2 emissions of electric vehicles depending upon GHG emissions of national power mix.

Source: Transport & Environment.

- Climate Score card urges the French Government to adopt clear-cut low-emission investment bonuses or a general “carbon fee and dividend” like the one adopted by Canada a few weeks ago. The “[Carbon fee & dividend](#)” scheme has been proposed for many years by CCL, the Citizens Climate Lobby, as a means to effectively amplify the price signal effect of GHG emissions with a clear orientation to the benefits of such a tax: everyone receives a dividend,

i.e.. a yearly allowance, that they can spend or save on low-carbon solution. The amount of the dividend is equal to the total sum of the tax, minus collection fees and a large budget for education and media communication campaigns to inform the public about the most efficient low-carbon alternatives, divided by the number of beneficiaries (households). Companies do not receive any compensation because they usually have more budget for choosing between fossil and alternative energy solutions. A [border compensation](#) scheme is established to account for the level or lack of “[Carbon fee & dividend](#)” scheme, or an equivalent carbon price scheme, in other countries. Finally, care must be taken to offset the level of the carbon price depending on the kind of GHG source, or worse, the exclusions on some companies and industrial sectors, which in principle, should be eliminated in order to ensure a fair treatment of all economic actors. In fact, a previous version of the carbon tax in France had been repelled ten years ago by the Conseil Constitutionnel, the French equivalent to the Supreme Court, on the grounds that too many exclusions created an unfair treatment between taxpayers.

Deep decarbonation in Europe and worldwide

The synthesis of research work carried out over the past 20 years at multiple levels, particularly at the level of various UN bodies (IPCC, UNECE, UNDP, UNFCCC), has led to the definition of 5 major projects applicable at the global level, to reach a negative level of GHG emissions before 2050. However, this is necessary to avoid the Climate Red Zone (global warming larger than 1.5 degrees Celsius).

