# Annex to the European Citizens' Initiative: The fast, fair and effective solution to climate change

According to the latest IPCC report, global CO2 emissions must be halved by 2030 and the carbon-neutral society must be reached by 2050 to avoid catastrophic climate change. With this European Citizens' Initiative, we want to demonstrate that there is a broad support among the European population for Carbon Fee and Dividend. The solution is designed to impact EU emissions in line with the goals of the Paris agreement. It will have a neutral to positive effect on the EU economy. The policy has significant support from scientists, economists, NGO's, industry and EU citizens.

#### **Contents:**

**Carbon Fee an Dividend** 

**Benefits** 

- 1 The Carbon Fee
- 2 The Dividend
- 3 The Border Carbon adjustment

**Endorsements** 

References

Carbon Fee & Dividend (CF&D) consists of 3 parts:



#### **Carbon Fee**

This policy puts a fee on fossil fuels like coal, oil, and gas. It starts low, and grows steadily over time. This will drive down carbon pollution because companies, industries, the public sector and consumers will move toward cleaner, cheaper options.



## **Carbon Dividend**

The money collected from the carbon fee is returned every month to citizens to spend as they see fit. Program administrative costs are paid from the fees collected. Governments do not keep any of the money from the carbon fee.



## **Border Carbon Adjustment**

Border Carbon Adjustments protect EU manufacturers and jobs from unfair international competition that lacks a carbon price. Imported goods will pay a border carbon adjustment, and goods exported from the EU will receive a refund under this policy.

#### The Benefits of Carbon Fee and Dividend

## Climate change addressed.

A carbon fee is the most efficient way to reduce CO2 emissions (IPCC, 2015). Any other policy will cost more to achieve the same reduction.

## Families get paid.

Most poor and middle income families will be better off. Money returned to households allows people to choose how to spend it.

#### Jobs are created.

The recycled revenue has been demonstrated to create jobs in local communities and in clean energy related work, such as energy efficiency and the renewable energy sector.(REMI 2014)

#### A healthier environment.

Less carbon emissions and air pollution will lead to better air quality. Many lives will be saved and health issues avoided.

## Further economic savings possible.

As other government policies are aligned there will be opportunities for savings, by removing unnecessary regulations and subsidies.

## Rewards positive environmental decisions.

Everyone has an incentive to consider energy efficiency and reducing carbon footprint. This is true for individuals, families, businesses, industry and the public sector.

#### Incentivises EU investment in Innovation

Confidence in the carbon fee signal over time will also dramatically increase green investments, accelerating development and large-scale commercialisation of low-carbon technologies.

## Encourages global adoption.

The simplicity and transparency of the policy combined with the Border Carbon Adjustment encourages other countries to adopt a similar policy, making the planet livable.

## 1. The Carbon Fee



The carbon fee is based on the economic principle that if you want less of something you increase the price.

Putting a steadily rising price on all CO2 pollution places equal economic pressure on every ton. As a market based mechanism this incentivises the economy to remove the most cost effective ton first. As the price rises this process continues until all possible CO2 emissions are removed.

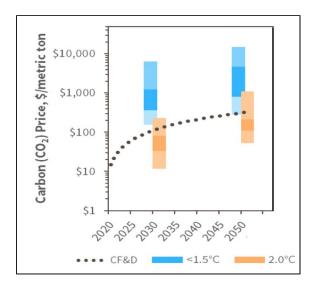
The fee starts low as to avoid a shock to the economy and rises in a steady and predictable way. This enables business and industry to make informed decisions related to energy, such as energy efficiency, long term investments and innovation. The economy gets an initial nudge and a clear signal for the future. All actors in the economy (industry, business, public sector, families & individuals) are motivated to adopt cleaner approaches based on financial benefits.

The most cost efficient place to charge the fee is up-stream as soon as the fossil fuel enters the economy, at the point of extraction or port of entry. This is because there are relatively few points to monitor with in-place processes and resources to charge the fee. The effects of the increased up-stream cost will propagate through the economy, impacting all activity that relies, directly or indirectly, on fossil fuels.

Economic instruments like carbon taxes are attractive because of their simplicity and broad scope covering all technologies and fuels and thus evoking the cost-minimizing combination of changes to inputs in production and technologies to changing behaviour as manifested in consumption choices and lifestyles. This is the reason they have the potential to be more efficient than directly regulating technology, products, or behaviour. To minimize administrative costs, a carbon tax can be levied 'upstream' (at the points of production or entry into the country). Finally,(...), a tax can piggyback off existing revenue collection systems. (IPCC, 2015)

## Price path

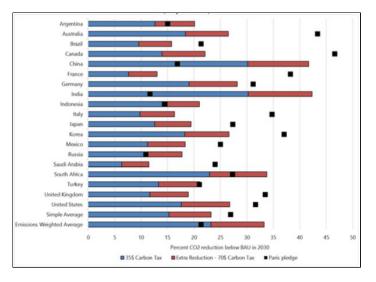
The selected levels of the carbon fee are essential for the effectiveness of the policy and the opportunity for society to adapt. The sooner the policy is introduced, the more gradual the price increase can be. Starting in 2019 at €15 per ton and increasing by €10 per ton per year would add 3c to a litre of gasoline in the first year and 2c each year afterwards and reach the Paris goals.



This graph summarises the latest findings on carbon pricing (IPCC, 2015). It shows the carbon prices needed to keep average global temperature increase below 2°C and 1.5°C. The proposed price levels fit with these goals.

It is based on 21 economic models under 67 different scenarios, varying assumptions on technology and economy to project temperature. 2°C results = orange bars. 1.5°C = blue bars. The DARKER sections show the middle HALF of all the results.

Models for G20 countries (IMF 2018) show the percentage reduction in C02 emissions in 2030 with a rising carbon tax. Blue \$35, Red \$70 and the black dot is the Paris pledge. Under the suggested pricing for CF&D the price would rise to about \$120 by 2030, which is in line with what is needed for the Paris pledge of EU countries.

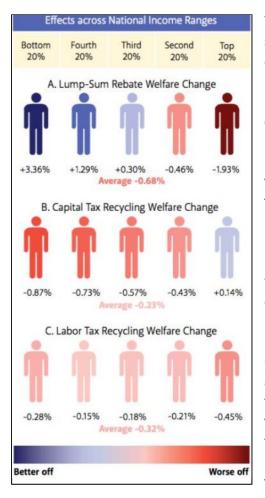


The Canadian *Greenhouse Gas Pollution Pricing Act* starts at CAD 20 and increases with CAD 10 per year (Justice Department Canada 2018). In the USA, the bill *The Energy Innovation and Carbon Dividend Act* proposes a \$10 price growth (U.S. Congress, 2019). The bill includes the capacity to increase in the price more steeply if the emissions targets are not met. This bill is estimated to cause an emission reduction of at least 40% within 12 years. Most reliable sources support a price path similar to an increase of € 10 per ton per year.

## 2. The Dividend



The dividend is designed to keep the economy in balance, protect the vulnerable and secure the long term public support needed to address climate change. As the cost of pollution increases with the fee, recycling all the money directly to citizens means that existing products and services within the economy can be afforded.



The revenue from the fee can be split into equal shares, using 1 share per adult and 0.5 share per child for up to 2 children per household. This dividend is returned to households in the form of a monthly payment making most families better off. Increasing energy costs by Carbon Pricing on its own tends to be regressive, hitting the most vulnerable in society hardest. Recycling the money in an equal and fair way to all citizens protects poorer and middle class families more and ensures pensioners and the unemployed are reached as well. Generally wealthier people with continued larger carbon footprint lifestyles would lose out. The graphic is useful for visualising the impact on quintiles by income, comparing different forms of revenue recycling.

In 2008 British Columbia in Canada committed to a Carbon Tax with revenue recycling. Although initially a hard political sell, ultimately public support for the tax grew to circa 65%. (OECD, 2013) Communication with the public regarding the purpose of the tax and the commitment for 100% of the revenue to be returned to the public were assessed to be important factors in public support.

## 3. The Border Carbon Adjustment



The Border Carbon Adjustment (BCA) is designed to address two key challenges: protecting EU industry from unfair competition and promoting wider adoption of effective carbon pricing.

When trading with regions with lower or no carbon price, imported goods are met with a carbon adjustment fee based on their CO2 footprint, and goods exported from the EU will receive a refund. This creates a fair international market and prevents the loss of industry to more polluting countries known as "leakage". EU companies can then compete on a level playing field with their international competitors.

It is possible to limit implementation costs by reducing the scope of the BCA to goods classed as Energy Intensive and Trade Exposed, commonly referred to as EITE (eg. steel, concrete, paper, ceramics and chemicals such as fertilizers). This reduces the quantity of goods to be monitored.

Border Carbon Adjustments are compatible with WTO-rules under both Gatt article II.2 and III.2 (<u>The German Marshall Fund of the United States, 2013</u>). It is additionally established in principle under Gatt article XX paragraphs (b) and (g) as seen in the Montreal Protocol related to ozone layer depletion. This jurisprudence has confirmed that WTO rules do not trump environment. To gain de facto legitimacy, concerted adoption by major players is prefered.

The BCA creates economic leverage promoting wider policy adoption of compatible carbon pricing. Trading partners are incentivised to adopt matching carbon pricing in order to retain the carbon pricing revenues within their own economies.

## Solving the global problem



Climate change cannot be solved by the EU alone. Each region of the global economy that prices carbon consistently and applies a BCA increases the economic leverage which accelerates global adoption of carbon pricing.

US, EU and China together are 50% of world trade. If two of these adopt Border Carbon Adjustments, the policy will likely gain de facto legitimacy in addition to it's legal justification. The US "Energy Innovation and Carbon Dividend act" already includes a BCA.

Over 50% of GHG emissions are from countries classed by the World Bank or Transparency International as having governments that are weak and/or corrupt. For these countries to be successfully leveraged into carbon pricing, they need a corruption-resilient carbon pricing scheme that's easy to implement.

The simplicity and transparency of CF&D makes it easy to scale and hard to corrupt. It can be deployed within 6 to 12 months, requires minimal new government infrastructure and can be monitored externally (OECD, 2013). By adopting and promoting CF&D as a key solution to climate change, and encouraging the implementation of carbon pricing through a BCA, the EU can contribute to the global process of decarbonisation.

## **Endorsements for Carbon Fee and Dividend.**



Over 3,400 economists signed a statement on Carbon Dividends in 2019. (Climate Leadership Council 2019)

The statement specifically endorses all 3 elements of the policy: the fee, the dividend and border carbon adjustments.

Recognisable global brands to endorse the policy include:





































In addition to economists and brands above, Citizens' Climate Lobby have been collecting endorsements for Carbon Fee and Dividend from a range of organisations that represent society in its widest form.

Citizens' Climate Lobby has over 100,000 members and over 1,250 CF&D endorsements:



- 673 **Business** 141 Faith 200 Government (e.g. states, cities) 134 Academia
  - **Labor Unions** 6
- 7 **National Security** Non-Profits (NGOs) 174
  - 31 Media

## **Carbon Pricing endorsement**

Here are some high level summaries and quotes from global and European sources:



"Carbon Pricing should be primary policy"

"Carbon Pricing and coverage are inadequate" - Ian Parry





"Member States should introduce policies: E.g. Carbon Price or Tax in addition to ETS"

"ETS needs to hit \$30, \$40, \$50 ... and for carbon capture and sequestration: \$80, \$90 ..." - Ian Duncan Lead lawmaker ETS reform 2020



Originally the Carbon Disclosure Project



"2018: 7,000 companies, 50% global market cap, reported"



"A well designed Carbon Price is an essential part of a strategy for reducing emissions in an efficient way."

The Carbon Pricing Leadership Coalition includes the following European countries:

Belgium Germany Portugal United Kingdom

Denmark Italy Spain
Finland Netherlands Sweden
France Norway Switzerland

## Video explainers

Carbon Pricing Leadership Coalition (3 mins runtime)



https://www.youtube.com/watch?v=5fvbD0Ev7eU&feature=youtu.be

Citizens' Climate Lobby: Policy and Citizen voices (2 mins runtime)



https://www.youtube.com/watch?v=9oyquP4nLv0

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