



# **International carbon charge and dividend**

**A practical mechanism for  
climate justice**

**World Basic Income  
July 2020**

# Executive Summary

1. Climate justice principles frame climate change as a socio-economic as well as an environmental issue. They demand solutions that address inequalities in wealth and power, and create real benefits for communities who have historically lost out.
2. There are several kinds of carbon charging schemes, which together cover 13% of global emissions.<sup>1</sup> National carbon taxes and the EU's Emissions Trading Scheme are briefly assessed. These are found not to meet the requirements of climate justice, as there is no recognition that people outside of polluting countries are being affected by climate change. No attempt is made to redistribute any revenues outside of national borders.
3. The Climate Damages Tax<sup>2</sup> is a highly interesting proposal that would charge a tax on fossil fuel extractors and split the proceeds between:
  - a) National governments, to be used for Just Transition activities
  - b) The UN's Warsaw International Mechanism for Loss and Damage
4. However, 54% of total proceeds from the Climate Damages Tax would end up in high- and upper-middle income countries. Just 13% goes to lower middle income nations and the poorest countries get a tiny 0.13% (because they tend not to be fossil fuel extractors).
5. The remaining 33% goes to the Loss and Damage facility, which may be spent in poorer countries, but there are no guarantees of that. Poorer communities may be less likely to succeed in the grant application process that will be needed to access those funds.
6. This paper proposes an alternative scheme - international carbon charge and dividend. This would charge companies for extracting fossil fuels, place the proceeds into a worldwide Sovereign Wealth Fund, and invest that fund into much-needed renewable energy investment and research. The investment income would then be distributed as monthly cash dividends to every person worldwide, helping to eradicate extreme poverty and better serving the goal of climate justice.
7. Two charging scenarios are modelled. Calculations are based on a starting rate of \$70 per tonne, a figure that the IMF has recommended as the minimum needed to keep global warming below 2 degrees centigrade.<sup>3</sup> This rate would increase each year, to a maximum of \$196 in the last year before carbon extraction ceases.
8. The total amount of extraction permits sold would also be capped, and the cap would decrease each year to reach Net Zero by either 2030 or 2045.
9. International carbon charges at this level would generate a dividend of \$10 per person per month within six years of operation, and reach \$13-\$23 per month for every person worldwide at the scheme's peak. Once carbon extraction ceases, the Sovereign Wealth Fund would cease to grow but investment income would still accrue and therefore the dividends would continue indefinitely, losing value only very gradually as a result of world population growth (which would require the investment income to be shared between more people).

---

<sup>1</sup> <https://www.worldbank.org/en/programs/pricing-carbon>

<sup>2</sup> [https://www.stampoutpoverty.org/live2019/wp-content/uploads/2019/06/CDT\\_guide\\_web23.pdf](https://www.stampoutpoverty.org/live2019/wp-content/uploads/2019/06/CDT_guide_web23.pdf)

<sup>3</sup> <https://blogs.imf.org/2019/05/03/getting-real-on-meeting-paris-climate-change-commitments/>

10. Assessed against the principles of climate justice and intergenerational equity, international carbon charge and dividend performs well in most areas. The full redistribution of carbon charges across borders means that people in the Global South get a far greater share than they would from any other known carbon charging proposal.
11. To top up carbon dividends, the profitable use of other global commons should become subject to international charges. This would provide funding for a much bigger universal cash dividend which we call world basic income.
12. The carbon dividend and later the world basic income would represent a meaningful global redistribution of wealth, and would contribute significantly to the eradication of extreme poverty.
13. This paper makes the following recommendations:
  - A single international carbon charge should be applied as soon as possible to all carbon at the point of extraction.
  - The money raised through this charge should be placed in a worldwide Sovereign Wealth Fund, which should be invested in new renewable energy developments and related research.
  - The investment income from the Sovereign Wealth Fund should be distributed as a monthly dividend to every person worldwide.
  - In working towards this system, countries should work through international fora to lay the groundwork for this scheme, while mirroring its characteristics in national carbon charges.
  - The carbon dividend should be merged into a broader-based world basic income, in order to more thoroughly address world inequality and extreme poverty.

# **Contents**

Executive summary - P2

Introduction - p5

**Part 1: Key principles of climate justice - p7**

**Part 2: Carbon charging schemes: existing and proposed**

- National carbon taxes - P8
- The EU's Emissions Trading Scheme - P8
- Climate Damages Tax - p9

**Part 3: International Carbon Charge and Dividend – a climate justice proposal**

- Making it global: for climate justice, simplicity and world basic income - p14
- How much should carbon cost? And for how long should we keep extracting it? - p15
- How much will people receive in dividends? Two scenarios - p17
- How will carbon dividends be distributed to individuals? - p20
- Who will run this scheme? Governance, legitimacy and practicalities - p20
- Discussion: How well does the international carbon charge and dividend meet climate justice goals? - p21
  - Dividends for all or for some? - P22
  - Why not distribute the carbon charge money directly to people, rather than put it in a Sovereign Wealth Fund? - P23
  - Should carbon charge proceeds be distributed as dividends or used for public spending? - P23
- When the dividends reduce: world basic income? - p24

**Conclusions and recommendations - p26**

*This paper was drafted by Laura Bannister for World Basic Income. For more information, please see [www.worldbasicincome.org.uk](http://www.worldbasicincome.org.uk).*

## Introduction: Climate Justice, International Carbon Charge and Dividend and World Basic Income

**“1.5°C implies very ambitious, internationally cooperative policy environments that transform both supply and demand.” IPCC, 2019<sup>4</sup>**

Climate justice is a concept that treats climate change as a social and economic justice issue. It recognises the unequal responsibility of people around the world for causing climate change, and the unequal impacts it will have on people's well-being and survival. It also recognises that while people need a safe climate, they also need a living income, access to energy and other public services, and that any climate action that threatens these is the wrong way forward.

This concept therefore presents the world with a huge challenge, as it rolls the world's biggest problems into one. Even at our current high levels of fossil fuel use, the world still fails to provide for everyone's needs due to injustices in income distribution. How then can we ensure a decent standard of living for everyone while using less? It feels insurmountable, and few practical proposals have emerged that can address both sides of the climate justice coin. One bold proposal that has arisen is the Climate Damages Tax, which is discussed below. Another bold proposal provides the main topic for this paper: international carbon charge and dividend.

International carbon charge and dividend is a proposed scheme that would cap overall carbon extraction, charge companies for extracting fossil fuels, invest the money in renewable energy through a Sovereign Wealth Fund and then distribute the investment income as a monthly cash payment to people worldwide.

Carbon charge and dividend is usually proposed as a *national* scheme, described as a carbon tax. This paper proposes to adopt it instead as an *international* scheme for three reasons: climate justice, simplicity, and to introduce world basic income, which is an important global justice and resource management mechanism in its own right. These reasons are explored further below; however the last of them will be unfamiliar to many readers and therefore requires an immediate introduction.

World basic income is a proposed mechanism for tackling global inequality that could incorporate a carbon charge as one strand of its funding model. A world basic income scheme would apply charges (like taxes and fees) to profitable use of the global commons and hand out the money as a regular cash payment to people worldwide. The 'global commons' is an idea that includes the spaces and resources of the earth that exist without human effort (e.g. land, oceans, the satellite zone) as well as those that exist due to collective or historic human effort (data, the money system, intellectual property). By requiring companies and well-off individuals to pay a modest rent for their use of these global commons, we could generate an annual money pot of over \$1 trillion. This could be distributed to every adult and child worldwide, perhaps starting at \$30 per person per month and rising as more common resources are brought within the scheme.

The paper that follows comprises four main sections. It begins with a short presentation of the principles of climate justice. This is followed by another short section examining other carbon charging schemes, with a focus on the most interesting of these, the Climate Damages Tax. The latter scheme is analysed in some depth, including an examination of how the proceeds will be distributed between the Global North and South.

---

<sup>4</sup> <https://www.ipcc.ch/sr15/>

The next section presents in full our proposal for an international carbon charge and dividend and its eventual merging into world basic income. Two scenarios are costed to demonstrate how much could be raised, invested and then distributed in dividends. The impacts for climate justice are discussed, followed by a short explanation of the world basic income proposal into which we believe the carbon charge should merge. The final section presents some conclusions and recommendations for action.

Before proceeding it is important to lay out some caveats and limitations of the analysis that follows. Firstly, only the carbon emissions resulting from the burning of fossil fuels are considered here. A separate system will be needed to address carbon emissions from other sources such as deforestation or the draining of bogs, though it is easy to imagine how such schemes could work in harmony with the charge on fossil fuel extraction. For example people undertaking activities that generate significant carbon emissions could be required to buy carbon permits, and the permit money could be placed in the world Sovereign Wealth Fund to generate investment and dividends along with the rest of the carbon charge proceeds. It is beyond the scope of this paper to consider such possibilities any further, however. Experts in these fields will do a better job of assessing how the climate impacts of these activities should best be managed.

Finally it is important to note that the proposal below for international carbon charge and dividend is an ideal one. Political realities in the world today are not well-suited to such far-reaching co-operation, and many people will find it a stretch to believe that such a scheme could be made to operate. This is a legitimate concern but it still makes sense to lay out the proposal. More politically-palatable solutions such as national carbon taxes may still be introduced, but such schemes can be modified in important ways if the considerations below are taken into account. Furthermore, the first stage in any positive change is to articulate a workable vision. That is what we intend to do in the paper below.

## **Part 1: Key principles of climate justice**

Front and Centered, a US coalition rooted in communities of colour and people with lower incomes, has identified the following principles of climate justice:<sup>5</sup>

- 1. Acknowledge that past policies and decisions maintain a system of injustice.**
- 2. Follow the leadership, knowledge and expertise of communities disproportionately impacted.**
- 3. Use racial and economic analysis to drive decisions.**
- 4. Use targeted strategies that create benefits for all.**
- 5. Create net environmental and economic benefits for communities of colour and people with lower incomes.**

These principles frame climate change as a socio-economic as well as an environmental issue. They demand solutions that address inequalities in wealth and power, and create real benefits for communities who have historically lost out. These principles provide a basis against which to assess the proposals for carbon charging analysed below.

---

<sup>5</sup> <https://frontandcentered.org/principles/>

## Part 2: Carbon charging schemes – existing and proposed

There are several kinds of carbon charging schemes, which together cover 13% of global emissions.<sup>6</sup> These may target either carbon extraction (i.e. the digging up of fossil fuels) or emissions (i.e. the burning of fossil fuels). They may charge a low price, like \$2 per tonne of 'carbon dioxide equivalent' (CO<sub>2e</sub>, henceforth referred to simply as 'carbon') or a high price like \$70 or more. They may allow companies a tax-free quota of carbon, or they may charge for all carbon produced or used. They also do different things with the money raised through these carbon charges – they may be handed over to governments for public spending, or to citizens as cash dividends, or invested in specific schemes.

### National carbon taxes

Carbon taxes can be applied to either carbon extraction or carbon emissions. Some countries like Mexico charge carbon tax on all emissions, although companies can purchase 'carbon offsets' to reduce some of their tax burden.<sup>7</sup> In other schemes such as the UK's 2019 No Deal proposal companies would receive a carbon-tax-free allowance and only have to pay the tax on emissions that exceed that level.<sup>8</sup> The proposed UK carbon tax rate in that scheme was \$19.30 (£16) per tonne of CO<sub>2e</sub>. The money from carbon taxes such as these usually ends up within the relevant national government budget for general spending.

### The EU's Emissions Trading Scheme: Carbon cap and trade

***“The system works by putting a limit on overall emissions from covered installations which is reduced each year. Within this limit, companies can buy and sell emission allowances as needed.”***

European Commission, 2016<sup>9</sup>

The EU's cap and trade scheme charges a fee on carbon emissions, not carbon extraction. It therefore has to monitor the activities of a huge number of companies – around 11,000 – and still only covers 43% of the EU's total carbon emissions because only those industries with especially heavy fossil fuel use like power generators, cement and metals producers have to take part.<sup>10</sup>

Most companies receive a large tax-free emissions allowance, so they only have to pay for carbon emissions above this level. For the carbon they do pay for, the price is decided by supply and demand in the trading market. In the scheme's first few years, companies were given such big free allowances that the carbon price fell to zero.<sup>11</sup> More recently companies are required to pay for more of their emissions, but the price remains low: in 2015, 'allowances' traded at an average of \$8.33 (€7.42) per tonne of CO<sub>2e</sub>.<sup>12</sup> Overall carbon emissions are capped, but the cap reduces by just 1.74% each year. This means it will take at least 57 years from the starting point (2005) to reach Net Zero, which is far too late to keep climate change to 1.5°C. The money raised by auctioning carbon allowances ends up with member state governments, who, according to EU law, have to spend at least half of it (and all of the money raised through aviation allowances) 'to combat climate change in Europe or elsewhere in the world'.<sup>13</sup> The effectiveness of this spending is not clear.

<sup>6</sup> <https://www.worldbank.org/en/programs/pricing-carbon>

<sup>7</sup> [https://www.ieta.org/resources/Resources/Case\\_Studies\\_Worlds\\_Carbon\\_Markets/2018/Mexico-Case-Study-Jan2018.pdf](https://www.ieta.org/resources/Resources/Case_Studies_Worlds_Carbon_Markets/2018/Mexico-Case-Study-Jan2018.pdf)

<sup>8</sup> <https://uk.reuters.com/article/uk-eu-britain-carbontrading/british-carbon-tax-to-start-november-4-in-the-event-of-no-deal-brex-it-government-idUKKCN1U7oNG>

<sup>9</sup> [https://ec.europa.eu/clima/sites/clima/files/factsheet\\_ets\\_en.pdf](https://ec.europa.eu/clima/sites/clima/files/factsheet_ets_en.pdf)

<sup>10</sup> [https://ec.europa.eu/clima/sites/clima/files/factsheet\\_ets\\_en.pdf](https://ec.europa.eu/clima/sites/clima/files/factsheet_ets_en.pdf)

<sup>11</sup> [http://blogs.edf.org/climate411/2007/06/27/eu\\_carbon\\_market/](http://blogs.edf.org/climate411/2007/06/27/eu_carbon_market/)

<sup>12</sup> [https://ec.europa.eu/clima/sites/clima/files/factsheet\\_ets\\_en.pdf](https://ec.europa.eu/clima/sites/clima/files/factsheet_ets_en.pdf)

<sup>13</sup> [https://ec.europa.eu/clima/sites/clima/files/factsheet\\_ets\\_en.pdf](https://ec.europa.eu/clima/sites/clima/files/factsheet_ets_en.pdf)

## Climate Damages Tax – a proposal from Stamp Out Poverty

The Climate Damages Tax<sup>14</sup> is a very interesting proposal that would charge a tax on fossil fuel extractors and split the proceeds between:

- a) National governments, to be used for Just Transition activities that decarbonise economies while providing safeguards for workers and citizens.
- b) The UN's Warsaw International Mechanism for Loss and Damage, which was established in 2013 to help countries rebuild after climate change-related disasters, but has, as yet, received no finance.

The proposed charging rate starts at \$5 per tonne of CO<sub>2</sub>e in 2021, rising by \$5 a year until 2030 and then \$10 a year up to 2050. The estimated global revenues begin at \$200 billion, peak at \$1.2 trillion in the 2030s then fall again as fossil fuel extraction dwindles.

The portion of the money that remains with the Loss and Damage facility would be distributed as per Figure 1 (graphic from the CDT campaign's report). This facility would identify adaptation, disaster response and other loss and damage-related projects, and pass on funds – via intermediaries and governments – to NGOs and community groups, who would carry out the work. Clearly some of this work will involve rebuilding vital infrastructure and public services. Others projects may aim to help individuals and households rebuild their livelihoods.

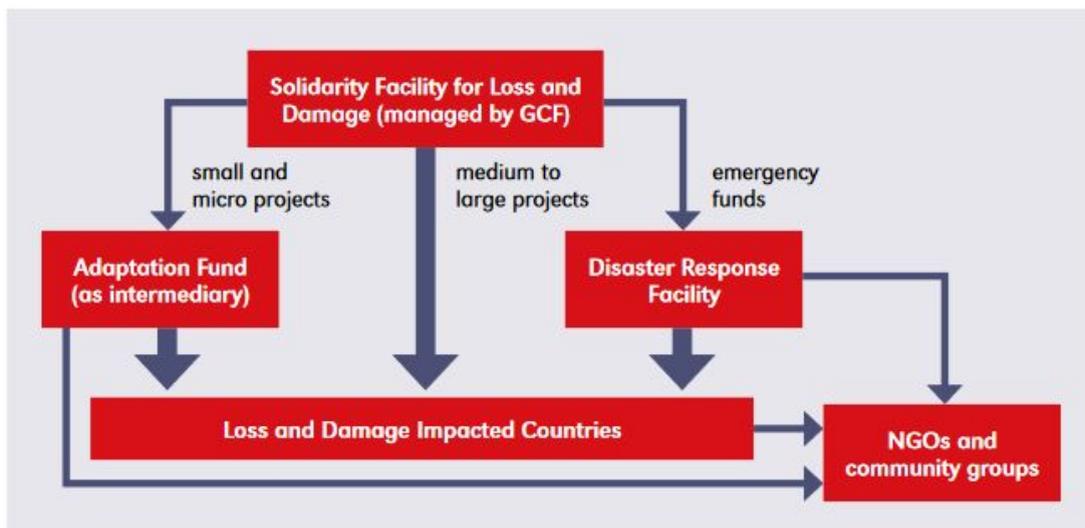


Figure 1 - How the Loss and Damage portion of CDT revenues would be distributed<sup>15</sup>

### Analysis: How effective is the Climate Damages Tax at achieving climate justice?

The Climate Damages Tax has some excellent features. The proposal is based on an awareness that the people and countries likely to suffer the most from climate change are often those who contributed the least to causing it. A large proportion of the money raised would go to ensure that people who have suffered damage are able to rebuild their lives. The scheme also charges for carbon extraction. This is likely to charge for a far greater proportion of total carbon than charging for carbon emissions, because there are far fewer companies (only oil, coal and gas firms) to cover.

<sup>14</sup> [https://www.stampoutpoverty.org/live2019/wp-content/uploads/2019/06/CDT\\_guide\\_web23.pdf](https://www.stampoutpoverty.org/live2019/wp-content/uploads/2019/06/CDT_guide_web23.pdf)

<sup>15</sup> [https://www.stampoutpoverty.org/live2019/wp-content/uploads/2019/06/CDT\\_guide\\_web23.pdf](https://www.stampoutpoverty.org/live2019/wp-content/uploads/2019/06/CDT_guide_web23.pdf)

However, when considering the impact of the scheme on climate justice, there are three important questions to consider:

## **1. Is funding projects the best way to distribute this money?**

Revenues from the Climate Damages Tax would be transferred to the Loss and Damage facility and used to fund projects run by NGOs and community groups. For infrastructure and public services this may be a good approach. For supporting household livelihoods, evidence suggests that cash transfers may be a better way forward.<sup>16</sup>

Cash transfers are increasingly used in development and humanitarian work, so much so that in 2016 the UN Secretary-General's Agenda for Humanity demanded 'cash-based programming as the preferred and default method of support'.<sup>17</sup> If the NGOs and community groups envisaged in this scheme follow this advice, some of the revenue of the Climate Damages Tax may be distributed as cash transfers, therefore functioning in a similar way to the carbon dividend proposed below in this paper. However, within the Climate Damages Tax scheme the route by which individuals receive cash would be convoluted, implying some wastage of funds along the way. It is also likely to be targeted rather than universal. Targeting is discussed further in Part 3 below, as there is evidence that attempts to target resources at the most needy or deserving nearly always allow many other deserving people to slip through the net.

## **2. Would this project-based funding reach everyone who has suffered loss and damage from climate change?**

Some effects of climate change are dramatic. Islanders losing their land to sea level rise and victims of extreme weather events would be obvious candidates to receive Loss and Damage funding. Yet many billions more people will suffer the effects of climate change in ways that are difficult to track. Smallholder farmers will lose income and sometimes suffer total crop failure because of unpredictable weather and gradual desertification. The resulting rural-urban migration could drive up rents and make some existing city dwellers homeless. As fresh water becomes scarcer, water rates could rise and put severe stress on household budgets. People running small tourism businesses could lose their livelihoods through a squeeze on international travel due to higher air fuel prices. The list of affected people is likely to be endless.

Is it realistic to expect the Loss and Damage facility to find and support all of these people? Clearly only a small proportion of people harmed by climate change will benefit from such a scheme. Furthermore, communities that contain (or are able to buy in) the expertise to write good funding applications will inevitably do better than communities where these skills are scarce or unaffordable. This could mean that the poorest communities continue to suffer loss and damage but receive no support. The need for applications, assessment, evaluation and so on also creates lots of work for consultants, who are often high-paid and based in the Global North. This uses up a lot of the money that ideally would go to affected communities.

---

<sup>16</sup> <https://www.odi.org/sites/odi.org.uk/files/odi-assets/publications-opinion-files/9828.pdf>

<sup>17</sup> [http://www.cashlearning.org/resources/library/951-cash-transfers-programming-and-persons-of-concern?keywords=&region=all&country=all&year=all&organisation=all&sector=all&modality=all&language=all&payment\\_method=all&document\\_type=all&searched=1](http://www.cashlearning.org/resources/library/951-cash-transfers-programming-and-persons-of-concern?keywords=&region=all&country=all&year=all&organisation=all&sector=all&modality=all&language=all&payment_method=all&document_type=all&searched=1)

### 3. Does the money mostly end up in the Global North or the Global South?

The scheme as it is currently proposed distributes the Just Transition portion of the money only to countries who extract fossil fuels, in proportion to the amount they extract. Low income countries keep all of the Climate Damages Tax revenue from their extraction projects, while high income countries keep only half. This distribution recognises that countries with large fossil fuel industries may have particularly high costs for Just Transition, and it feels right to use some of the carbon revenue to insulate workers and citizens during decarbonisation. There is also a clear political imperative – citizens, trade unions and politicians need these revenues to keep them on board with the scheme as a whole.

However, Just Transition is not only about supporting ex-fossil fuel workers: it is about enabling whole societies to decarbonise. Countries that don't extract fossil fuels often still have highly carbon-dependent societies. The only available transport may be powered by petrol and diesel. All the factories or power stations may use coal. Households, schools and offices may use gas or kerosene stoves. Of course, many people's livelihoods – bus and taxi drivers, farmers reliant on diesel tractors, street cooks using gas stoves – depend on fossil fuels just as much as coal miners do. These people need support for transition too.

The Climate Damages Tax proposal seems not to reflect this, as it hands more than two thirds of the total proceeds to fossil fuel extracting countries. This inadvertently favours richer countries. Our analysis in Figure 2 of Stamp Out Poverty's data<sup>18</sup> shows that 54% of total proceeds from the Climate Damages Tax ends up with high- and upper-middle income countries. Just 13% goes to lower middle income nations and the poorest countries get an astonishingly small 0.13% (because they tend not to be fossil fuel extractors). The remaining 33% goes to the Loss and Damage facility, so may be disproportionately spent in poorer countries, but there are no guarantees of that. As mentioned above, the poorest countries may be the least likely to succeed in the grant application process that will be needed to access those funds.

%of all CDT revenues that is used for Just Transition in...		%of world population that lives in these countries	Share of Just Transition revenues per person
High income countries	16.99	9.27	1.832
Upper middle income countries	37.06	39.74	0.933
Lower middle income countries	13.08	34.44	0.380
Low income countries	0.13	16.56	0.008

Figure 2: WBI's analysis of where CDT Just Transition revenues end up

An equitable distribution of Just Transition funds would mean that every 1% of the world population would get 1% of the Just Transition money. This is not the outcome of the CDT.

Instead:

- People in high income countries get nearly double their fair share – 1.83%.
- People in upper middle income countries nearly get a fair deal, receiving 0.93% each.
- Lower middle income country citizens are not so lucky, as they get less than half of their share – 0.38%.
- People in low income countries lose out to an extreme degree, as they see less than one hundredth of their fair share of this money – they get 0.008% each rather than the 1% that equity would demand.

<sup>18</sup> <https://www.stampoutpoverty.org/cdt-data-tables/>

By contrast, the international carbon dividend scheme proposed below would give each person the same share, so the top 1% receive 1% of total revenues, and so do the bottom 1%.

The Climate Damages Tax is in many ways an excellent proposal: it would cover most emissions from fossil fuels by taxing extraction directly; it would increase the price of carbon and therefore disincentivise carbon emissions; it provides a funding stream for Loss and Damage, which to date has not been in place; and it achieves a degree of international redistribution of carbon revenues, unlike almost all other carbon charging schemes.

Nevertheless, this analysis suggests that the revenues still end up predominantly in high-polluting wealthy countries. The poorest countries get a particularly small share under these proposals. Our analysis also queries whether project funding is the most effective and most just way to distribute the money.

Assessed against the principles of climate justice outlined above, the Climate Damages Tax does well on several points but falls down on others.

On the first point, 'Acknowledge that past policies and decisions maintain a system of injustice' the performance of the Climate Damages Tax is open to interpretation. The revenues dedicated to Just Transition in fossil fuel producing countries could be seen as an acknowledgement that those historic and problematic industries are unjust and must be dismantled. However it does not properly recognise that the effects of those injustices reach beyond the extractor countries. The money allocated to Loss and Damage more clearly recognises that past policies have led to real losses, for which people should be compensated.

On the second point, 'Follow the leadership, knowledge and expertise of communities disproportionately impacted', the Climate Damages Tax performs fairly well, as many of the eventual spending decisions will be taken locally by governments and community groups. As discussed however, there is a risk that many communities who are disproportionately affected will receive nothing.

On the third point, the Climate Damages Tax falls down. Poor countries get an unfairly small share in this scheme, yet this economic injustice appears not to have been fully considered. Given that most poor countries are communities of colour, the racial dimensions of the revenue distribution also seem to have been overlooked.

On the fourth point, 'Use targeted strategies that create benefits for all', the assessment is mixed. The Loss and Damage Fund would use a targeted strategy to try and reach the most affected communities. But as described, there is a risk that many affected communities will lose out in this targeting approach, and there certainly will not be benefits for all.

On the final point, 'Create net environmental and economic benefits for communities of colour and people with lower incomes', the jury is still out. By charging for carbon extraction rather than emissions, and by applying a decent and rising carbon price, most users of fossil fuels would feel a price effect and be incentivised to reduce their fossil fuel use. This would certainly bring environmental benefits including for communities of colour (who are often worst affected by climate change) though a higher carbon price would have a stronger effect. The economic benefits for communities of colour and people on low incomes are less obvious. Some groups, especially in countries where carbon extraction takes place, may well benefit, as these countries would retain revenues for Just Transition. However those in the poorest countries and communities, especially

where the expertise does not exist to apply for Loss and Damage money, are likely to almost entirely lose out.

An alternative to this proposal exists: international carbon charge and dividend. Like the Climate Damages Tax, it aims to make the polluter pay, and it distributes any proceeds internationally. However some of the issues relating to the Climate Damages Tax, such as a distribution pattern that favours the Global North, are avoided. This proposal is described in full in the next section.

## **Part 3: International Carbon Charge and Dividend – a climate justice proposal**

Carbon charge and dividend is usually proposed as a national scheme. This paper proposes to adopt it instead as an international scheme for three reasons: climate justice, simplicity, and to introduce world basic income, which is an important global justice and resource management mechanism in its own right. These reasons are explored further below.

International carbon charge and dividend is a proposed scheme that can be summarised as follows:

1. A **global cap on total fossil fuel extraction** would be applied, which reduces annually to ensure Net Zero is achieved within an acceptable time-frame.
2. All **companies extracting fossil fuels would be required to buy a permit** for each tonne of coal, barrel of oil or litre of gas they extract. This would make fossil fuels more expensive, incentivising a sharp reduction in fossil fuel use, and supporting the rationing effect of the carbon cap.
3. The **money raised through the sale of these permits (henceforth referred to as carbon charges) would be placed in a global Sovereign Wealth Fund (SWF)**, which would be invested in substantial new development of renewable energy infrastructure and related research.
4. The **investment income from this fund would be distributed via a monthly cash payment to every individual worldwide**. This would help people to cope with an increase in certain prices, and would represent a fair 'rent' for the use of their planet's resources by private companies. These transfers would contribute significantly to an ending of extreme poverty, as well as a boost to local economies and employment in low income areas.

### **Making it global: for climate justice, simplicity and world basic income**

Carbon charges are often applied at the region- or country-level, for instance in Canada,<sup>19</sup> the USA<sup>20</sup> and Ireland.<sup>21</sup> This paper proposes that it instead be introduced as an international scheme, run by a global body like the UN and with the investment dividends distributed to people worldwide. There are three reasons to support this approach.

Firstly, an international approach is vital for climate justice, to ensure that the highest polluting countries don't end up with most of the dividends. A national carbon tax and dividend scheme in a country like the UK would mean UK citizens collect dividends for all the carbon that is extracted here, or that is imported to the UK (as most schemes propose a 'Border Carbon Adjustment' that would charge a tax on carbon-rich products entering the country). The UK imports a lot of fossil fuels and fossil fuel-dense products, so our dividend payments would be far higher than in low-consumption countries. Countries of the Global South where citizens tend to use much less fossil fuel would be penalised for this by receiving very little in dividends from their national carbon taxes, despite often suffering the worst impacts of climate change. This is the opposite of climate justice. Atmospheric pollution does not stay within borders, so nor should carbon dividends. Citizens of low-consumption countries should receive an equal dividend at the very least.

Secondly, an international scheme is likely to be much simpler to administer than a national one. Just

<sup>19</sup> <https://www.theguardian.com/environment/climate-consensus-97-per-cent/2018/oct/26/canada-passed-a-carbon-tax-that-will-give-most-canadians-more-money>

<sup>20</sup> <https://insideclimatenews.org/news/07032019/carbon-tax-proposals-compare-baker-shultz-exxon-conocophillips-ccl-congress>

<sup>21</sup> [https://www.citizensinformation.ie/en/money\\_and\\_tax/tax/motor\\_carbon\\_other\\_taxes/carbon\\_tax.html](https://www.citizensinformation.ie/en/money_and_tax/tax/motor_carbon_other_taxes/carbon_tax.html)

one hundred companies extract 71% of all fossil fuel worldwide.<sup>22</sup> These companies will have data on the total amounts of fossil fuel they have extracted and they could be required to buy permits for each batch prior to shipping. Simple port checks could verify that all the shipped product has a permit, so it would become very difficult for companies to transport and sell their coal, oil or gas without paying these permit fees. Even including the smaller companies that extract the remaining 29% of fossil fuels, this is still a fairly simple market for a global regulatory body to keep an eye on.

By comparison, national schemes with Border Carbon Adjustments seem very complex. Imports of actual fossil fuels would require more in-depth checks than in the international scenario, as authorities would be checking not just for a permit but for the amount of carbon tax that the source country has already charged (as schemes aim to avoid 'dual taxation'). They would then have to take payments at the port, or at least issue invoices to the extractor company – which will doubtless be a different company than the one who is doing the shipping. This sounds fiddly but achievable. The real difficulties start when you begin trying to ascertain the 'embodied carbon' of other products that are being imported, which is necessary if the aim is to charge for all fossil fuel extraction. You would need lists of the usual amount of fossil fuels used in the production of, say, one tonne of cement or one tray of tomatoes. You would want to reward cement and tomato producers that use fuel-efficient processes, so this would have to be certified in order that port authorities could take it into account. Imagine extending this process to all products – bricks, palm oil, t-shirts, washing powder... It soon becomes clear that this could not be done thoroughly without expending immense resources on process and production analysis, product tracking, carbon accountancy and other work.

Thirdly, an international carbon charge and dividend is important because it would lay the groundwork for a worldwide basic income. World basic income is among the very few practical mechanisms that can directly address global inequality and give us all a fair share of common wealth. Other redistributive measures such as tax-and-spend tend to exist within but not between countries, leaving huge inequality between nations. World basic income is a form of *international* tax-and-spend that would help to redistribute wealth from Global North to South. It has the potential to redress some of the unjust inequality that has been created between rich and poor countries, while ending extreme poverty and generating long-deserved life opportunities for people all over the world.

However world basic income is a radical policy that can feel far-fetched in the current political climate. By contrast, an international carbon charge and dividend feels politically winnable, given the growing public and political appetite for climate justice. If introduced, the benefits of the dividends would become obvious: the worst extremes of poverty would begin to fall away and global inequality would begin to reduce. This is likely to create demand for higher dividends, sufficient to end poverty entirely. World basic income, based on 'rent' from a wide range of global commons, could provide a lasting solution.

## **How much should carbon cost? And for how long should we keep extracting it?**

The amount raised for the Sovereign Wealth Fund by the carbon charge depends on how much carbon is extracted, and how much you charge per extracted tonne of carbon dioxide emissions equivalent (CO<sub>2</sub>e, henceforth referred to simply as 'carbon').

How much carbon is extracted depends on overall global fossil fuel use. We propose that a carbon

---

<sup>22</sup>

<https://b8f65cb373b1b7b15feb-c70d8ead6ced550b4d987d7c03fcd1d.ssl.cf3.rackcdn.com/cms/reports/documents/000/002/327/original/Carbon-Majors-Report-2017.pdf?1499691240>

cap is applied to ensure that emissions reach Net Zero within a reasonable time frame. There are different views as to how quickly we need to reach Net Zero, so we have reflected these in the two scenarios, presenting one scenario that requires Net Zero by 2045, and one that requires Net Zero by 2030. We have also assumed that Net Zero means 'no carbon extraction at all'. In reality it might be that we can continue to extract some carbon while at Net Zero, if sustainable carbon capture techniques such as tree planting and wetland restoration are implemented on a large scale. However to keep things simple, we will assume that carbon extraction will end within a few decades.

How much should we charge for extracting a tonne of carbon? All our calculations are based on a starting rate of \$70 per tonne, a figure that the IMF has modelled and recommended as the minimum needed to keep global warming below 2 degrees centigrade.<sup>23</sup> \$70 per tonne is significantly higher than the amount suggested in other carbon charging proposals such as the Climate Damages Tax proposal, but we feel it is important to start at a level that at least begins to achieve the necessary climate objectives.

Unlike the IMF, we propose to use \$70 as a starting rate, and increase the charge year-on-year until carbon extraction ceases. This is because, as aforementioned, we would apply a rapidly lowering cap on carbon extraction as well as the charge. As the cap reduces there will be less and less carbon available, so we need to manage demand for it in order to prevent queues at the petrol pump and the hoarding of goods. The increasing price of carbon will encourage people to reduce their usage of it, simply because it will become too expensive to use if not really necessary. Year-on-year increases in the price of carbon have the added advantage that they deliver bigger revenues to the Sovereign Wealth Fund, meaning there will be more to invest in renewables and bigger dividends for the world's people. The two scenarios presented below therefore recommend raising the year-on-year price of carbon by 4% and 20% respectively of the original price (so adding \$2.80 or \$14 per tonne per year to the charge).

The main concern about charging a high rate on carbon is the impact on prices and therefore on people's standard of living. The IMF's modelling says that a \$35 carbon tax would lead to petrol price increases of only 5-7%.<sup>24</sup> It does not provide equivalent information for what a \$70 tax would do to prices, but we can perhaps assume from the 5-7% figure that prices for road fuels would increase by 10-20% in a \$70 tax scenario. Other energy-intensive goods like cement, steel and air-freighted items would also increase in price. As the charging rate increases year-on-year, the cost of fossil fuel-intensive products would of course increase further too.

If we all continued to rely on fossil fuels as heavily as we do today then these significantly higher prices would be a problem. However a key aim of these measures is to drive a change in corporate and consumer behaviour so that the incentives are aligned for companies to produce lower carbon products and for people to make lower carbon choices. An initial price increase of 10-20% therefore feels like the right sort of starting point.

Furthermore, the investment in renewable energy and research arising from the Sovereign Wealth Fund is likely to significantly drive down the price of alternatives. Some renewable energy technologies already produce energy at lower prices than fossil fuels.<sup>25</sup> Scaling these up could keep prices for necessities at similar levels or even lower than today.

There may nevertheless be some problematic price impacts from carbon charges. Smart policies will be needed to address these. This might include support for initiatives such as the super-insulation of

---

<sup>23</sup> <https://blogs.imf.org/2019/05/03/getting-real-on-meeting-paris-climate-change-commitments/>

<sup>24</sup> <https://blogs.imf.org/2019/05/03/getting-real-on-meeting-paris-climate-change-commitments/>

<sup>25</sup> <https://www.forbes.com/sites/jamesellsmoor/2019/06/15/renewable-energy-is-now-the-cheapest-option-even-without-subsidies/#4caco4255a6b>

homes, or allocating low-cost renewable energy for priority uses such as home heating and public transport. General social protection and wealth redistribution policies will also continue to be vital to bolster incomes at the low end and offset any price increases. The carbon dividend will also help people to manage price changes, as it gives them a small secure income on top of their other earnings.

## **How much will people receive in dividends?**

World Basic Income has generated a number of scenarios, two of which are presented below, to understand how much could be distributed in dividends from the Sovereign Wealth Fund.

These scenarios both envisage a fixed carbon charge that rises annually. An alternative could be to auction carbon extraction permits each year, so the carbon price would vary and potentially be higher than the amounts suggested below. Ultimately, either system could work well. However for the purpose of these models the fixed charging rate is adopted in order to more clearly assess the potential for dividends.

Both of these scenarios assume that the total dividend fund (i.e. the income accrued each year from investing the money in the Sovereign Wealth Fund) is shared equally between every person in the world including children. World population is expected to increase between now and 2050, so the amounts shown here are based on a population that increases gradually from 7.8 billion in 2020 to 9.7 billion in 2050, as per UN predictions.<sup>26</sup> The scenarios also assume that carbon extraction slows in line with the gradual reduction in the carbon cap.

---

<sup>26</sup> [https://population.un.org/wpp/Publications/Files/WPP2019\\_Highlights.pdf](https://population.un.org/wpp/Publications/Files/WPP2019_Highlights.pdf)

## Scenario A

In this scenario, we reach Net Zero by 2045. This means reducing the carbon cap by 4% of the original production amount (36 gigatonnes of CO<sub>2e</sub> per year) each year. The carbon price starts at \$70 and rises by 4% of that original figure annually.

The amounts raised each year are shown in Figure 3 below. Within six years, the monthly dividend has reached \$10.64 per person, which would have a significant effect on poverty in the poorest countries. Within fifteen years the dividend has nearly doubled to \$20.35 per person. This amount peaks in 2044 at \$23.30 just before carbon emissions hit Net Zero. It then begins a very gradual decrease, as growing world population means the total dividend from the now stable fund is shared between more people. This table also shows how quickly the fund builds up, reaching \$10 trillion in just three years. Investing this amount in renewable technologies and research would represent an immense stimulus to the sector, helping to green the world economy in time to address the climate emergency.

Scenario A	Carbon emissions allowed by the cap in gigatons per year	Carbon charge per tonne of CO <sub>2e</sub>	Total amount in the Sovereign Wealth Fund	Monthly basic income per person
Year	Emissions reduce to zero by 2045	Rising by 4% of original each year		Based on an assumed return on SWF investments of 6% <sup>27</sup>
2020	36	\$70.00	\$2.5 trillion	\$1.62
2023	31.7	\$78.40	\$10 trillion	\$6.32
2026	27.4	\$86.40	\$17 trillion	\$10.64
2029	23	\$95.20	\$24 trillion	\$14.49
2032	18.7	\$103.60	\$30 trillion	\$17.76
2035	14.4	\$112.00	\$35 trillion	\$20.35
2038	10.1	\$120.40	\$39 trillion	\$22.19
2041	5.8	\$128.80	\$42 trillion	\$23.19
2044	1.4	\$137.20	\$43 trillion	\$23.30
2045	0	\$140.00	\$43 trillion	\$23.12

Figure 3 – Carbon dividends received each year based on a Sovereign Wealth Fund model in scenario A.

<sup>27</sup> Estimating a return on such a fund is very difficult. The global research agency, Morningstar indicates that "Over 10 years, the average annual return for a sustainable fund invested in large global companies has been 6.9% a year, while a traditionally invested fund has made 6.3% a year." <https://www.theguardian.com/money/2020/jun/13/ethical-investments-are-outperforming-traditional-funds> However the Norwegian Pension Fund is expecting lower returns than this in the future. The truth is that a post carbon economy will look very different from the current economy, though it may be expected that increased carbon prices will incentivise "green investments" and returns could well be higher than 6%.

## **Scenario B**

In this scenario we reach Net Zero much earlier than in the previous scenario, this time aiming for 2030 which requires a steep 10% reduction in the carbon cap each year. The carbon charge rate is therefore increased much more briskly than in scenario A, rising by 20% a year from the original amount.

The amounts raised are shown in Figure 4. The faster charge rate increase means we reach a monthly dividend of over \$10 within just five years. However because the carbon cap is reducing much more quickly, we have far fewer years of carbon extraction in which to build the value of the Sovereign Wealth Fund. This fund peaks at around half of the amount as in scenario A - \$22 trillion – and the dividends are therefore also nearly halved, peaking at \$13.36 in 2029 and then gradually reducing due to world population increase. This scenario demonstrates the trade off we face: reducing more quickly to Net Zero is undoubtedly better from an environmental perspective, but it means we will have less impact on world poverty and inequality through this scheme.

It is worth noting that the dividend would still be \$11.86 per person even fifteen years after carbon extraction ceases. This is due to the Sovereign Wealth Fund that is the basis of both these scenarios. Stockpiling and investing the money raised through the carbon charge means it continues to generate investment returns – and therefore dividends – indefinitely, so continues to contribute to a reduction in poverty and inequality even after the environmental benefits of carbon charge have been realised.

Scenario B	Carbon emissions allowed by the cap in gigatons per year	Carbon charge per tonne of CO <sub>2</sub> e	Total amount in the Sovereign Wealth Fund	Monthly basic income per person
Year	Emissions reduce to zero by 2030	Rising by 20% of original each year		Based on an assumed return on SWF investments of 6%
2020	36	\$70	\$2.5 trillion	\$1.62
2021	32.4	\$84	\$5.2 trillion	\$3.35
2022	28.8	\$98	\$8 trillion	\$5.12
2023	25.2	\$112	\$10.9 trillion	\$6.86
2024	21.6	\$126	\$13.6 trillion	\$8.51
2025	18	\$140	\$16 trillion	\$10.01
2026	14.4	\$154	\$18 trillion	\$11.31
2027	10.8	\$168	\$20 trillion	\$12.33
2028	7.2	\$182	\$21 trillion	\$13.04
2029	3.6	\$196	\$22 trillion	\$13.36
2030	0	N/A	\$22 trillion	\$13.26
2035	0	N/A	\$22 trillion	\$12.78
2040	0	N/A	\$22 trillion	\$12.31
2045	0	N/A	\$22 trillion	\$11.86

**Figure 4 – Carbon dividends received each year based on a Sovereign Wealth Fund model in scenario B.**

## How will carbon dividends be distributed to individuals?

Distributing a carbon dividend means getting money to every person in the world every month. A few years ago this might have been close to impossible, but a mixture of bank transfers and mobile money transfers could now get money to most people worldwide at the click of a button.

Mobile money transfers use innovative banking services initially developed in Kenya in 2007. Using a text message-style service, people can receive and spend money using an old-style mobile phone. Nearly two thirds of people worldwide now have a mobile phone,<sup>28</sup> and many of the remaining third are children who will receive their dividend via their parents.

This leaves a small group of adults who will need extra help to access their dividend. These individuals could be given a cheap mobile phone (potentially supplied by mobile network companies, as it is in their long-term interests to create more phone users) or paid their dividend via a charge card, similar to how cash payments are distributed to some refugees.

Securely registering people for the scheme will be more challenging, but should be achievable given the strong incentive that 'free money' provides. The ideal would be a direct registration system that would allow individuals to sign up remotely so that they can be uniquely identified. A new app called BrightID is currently being trialled that uses peer-to-peer verification to ensure that only real people can sign up for an account, and can have only one account per person.<sup>29</sup> As these schemes develop they are likely to become robust enough to facilitate a dividend system with minimal fraud. In areas where smartphones are not widely used, local sign-up agents could be employed to register their communities, or – more likely – entrepreneurial individuals are likely to establish themselves spontaneously to provide this service for a small fee.

Existing systems for birth and death registrations, social security, mobile phone money, and aid-related cash transfers could also be used where available, to validate each individual's identity. In countries with uncooperative governments, this extra layer of validation may not be available (making erroneous and fraudulent registrations more likely), and employing sign-up agents may be more difficult. With specialist assistance from humanitarian organisations that have experience working in challenging locations, it is likely that many of these barriers could be overcome. Where individuals cannot be reached, money could be pooled in a fund for them to access later once registration is eventually achieved.

Ultimately, none of the issues in registering or distributing carbon dividends are significant enough to cause serious problems for this scheme. They are challenges that can and should be overcome through international co-operation and new technologies.

## Who will run this scheme? Governance, legitimacy and practicalities

There are two main paradigms for governing an international carbon charge and dividend. The first is to use a centralised global body such as the UN or a newly created institution to collect carbon charge proceeds, invest these in research and renewable energy through the Sovereign Wealth Fund and then deliver the investment profits to individuals as dividends. The second paradigm would make use of newer decentralised systems of collection, investment and distribution, using digital IDs, blockchain, and other emerging technologies.

---

<sup>28</sup> <https://www.bankmycell.com/blog/how-many-phones-are-in-the-world>

<sup>29</sup> <https://www.brightid.org/>

The centralised paradigm is easier for most people to imagine. In a push to tackle chronic tax abuse, countries of the Global South have already raised demands for taxation to be overseen by the United Nations.<sup>30</sup> The UN tax body that may emerge could have potential to take on responsibilities for global carbon charges in the future.

The UN is not currently of sufficient capacity to operate a global tax/charges body, but the expertise does exist, particularly at another international agency that handles tax matters: the OECD. In the short term this expertise could be transferred to a newly empowered and resourced body within the UN while experts from a wider constituency of nations are sought and brought on board.

If the carbon charge and dividend system is run by the UN, the legitimacy for applying global charges, investing them and then distributing dividends would emerge essentially from the legitimacy of the national governments that participate in UN democracy. It is possible that in future a more participatory global body could emerge, where people are represented directly rather than via their national governments. Carbon charge and dividend, and later world basic income, could function legitimately in either case, and it is of course beyond the scope of our organisation to define how global democracy should operate.

The decentralised paradigm is harder to picture, but technology is developing quickly and new opportunities may become apparent. A cryptocurrency basic income scheme Mannabase is currently distributing basic income to people in over a hundred countries.<sup>31</sup> Blockchain technology may have the potential to render financial transactions and ID more private than government run ID systems such as India's Aadhaar scheme.<sup>32</sup> Of course these developments could help with distributing carbon charges but not with raising them, so they could perhaps best be used in conjunction with a legitimate global body like the UN.

## **Discussion: How well does international carbon charge and dividend meet climate justice goals?**

International carbon charge and dividend intends to contribute to climate justice, and therefore should be assessed against these principles. Once again, these are:

- 1. Acknowledge that past policies and decisions maintain a system of injustice.**
- 2. Follow the leadership, knowledge and expertise of communities disproportionately impacted.**
- 3. Use racial and economic analysis to drive decisions.**
- 4. Use targeted strategies that create benefits for all.**
- 5. Create net environmental and economic benefits for communities of colour and people with lower incomes.**

The first principle highlights the need for a response to climate change that goes beyond technical solutions to acknowledge – and compensate for – historic injustices and debts. The international carbon charge proposal acknowledges the injustice of keeping carbon charge proceeds within borders, and ensures that ongoing use of carbon comes with compensation. However this does not address the historical injustice and debt, nor can it – as a charge on carbon response – provide the

---

<sup>30</sup> <https://www.globaltaxjustice.org/en/latest/ecuador-leads-campaign-un-tax-body>

<sup>31</sup> <https://cryptocoinmindset.com/mannabase-provides-universal-basic-income/>

<sup>32</sup> <https://www.theguardian.com/world/2017/aug/24/indian-court-rules-privacy-a-fundamental-right-in-battle-over-national-id-cards>

narrative that is needed to truly acknowledge the depths of climate injustice. The proposal raised in this paper must therefore be situated within a wider package of responses. The wider World Basic Income proposal described later in this paper also provides elements of a response to this principle through policies such as wealth tax, which redistributes riches accumulated via past policies and decisions.

On the second principle of climate justice, the performance of this proposal is mixed. The proposal for international carbon charge and dividend appears to originate in the Global North, rather than from within communities disproportionately affected by climate injustice. However, poorer and affected countries have long demanded climate solutions that recognise economic inequalities and involve international co-operation. The Talanoa Dialogue – a discussion forum of communities in the Pacific – identified a wish for countries to co-operate and to use carbon pricing.<sup>33</sup> Minister Riyad Mansour, Chair of the G77, declared that, “No viable solution [to climate change] can ignore the developing countries' urgent developmental needs and priorities, including to pull their populations out of abject poverty.”<sup>34</sup> Furthermore the G77 has led the world in demanding the creation of a global tax body under the auspices of the UN.<sup>35</sup> The aim is to reduce illicit financial flows, but the demand shows a clear appetite for international co-operation for tax justice. Therefore although the specific demand for international carbon charge and dividend has not arisen from low-income communities affected by climate change, many of the demands of affected and low-income communities can be answered by it.

The third, fourth and fifth principles demand that the economic rights of people of colour and people with lower incomes are addressed through climate action. Judged against these principles, international carbon charge and dividend performs well. Charging a fee on carbon extraction internationally and sharing the proceeds with people worldwide means that people in low-carbon countries – usually lower income countries and communities of colour – will get a fair share. This contrasts strongly with national carbon tax and dividend schemes, where citizens of the most polluting countries benefit the most. Even the Climate Damages Tax, which has an element of international redistribution, would still place most of the proceeds in high- and upper-middle income countries. Climate justice surely demands a better solution: one that does not, yet again, give the most to those who are already rich. International carbon charge and dividend provides one such solution. It brings economic justice demands to the very centre of climate action.

## **Dividends for all or for some?**

The proposal presented above would distribute carbon dividends equally to people everywhere. That means that well-off people in high-polluting countries would be entitled to the same dividend as people on low incomes in the Global South.

Would justice be better served if the proceeds went only to certain people, such as people in low income countries, or regions badly affected by climate change? Possibly. However there are good reasons to consider that a universal dividend might be a better idea overall.

First of all, distributing dividends to everyone frames them as a right, not as a gift or act of charity. The atmosphere belongs to all of us – it is a global commons – and therefore it feels right that we should all share in any rents generated from it. There is also evidence that universal schemes, such as the UK's universal free healthcare system, tend to benefit from widespread support that ensures

---

<sup>33</sup> [https://img1.wsimg.com/blobby/go/9fc76f74-a749-4eec-9a06-5907e013dbcb/download/lcgc07toq\\_77988.pdf](https://img1.wsimg.com/blobby/go/9fc76f74-a749-4eec-9a06-5907e013dbcb/download/lcgc07toq_77988.pdf)

<sup>34</sup> <http://www.g77.org/statement/getstatement.php?id=190328>

<sup>35</sup> <http://www.globalissues.org/news/2017/05/22/23170>

they are defended politically. The richer countries and people of the world still, unjustly, tend to be more powerful. Like it or not, we probably need their support to make this scheme happen at all, and to ensure it is preserved in the long term. That may mean it is better to share the dividends universally, in order that they can exist at all.

Secondly there are key practical issues involved in trying to pay dividends only to those who most need or 'deserve' them. If you want to target only low income people, how do you find them without requiring large amounts of bureaucracy to prove their income status? Verifying the income status of billions of people would be an immense task that could undo the scheme entirely. Alternatively, dividends could be paid only to people in low income countries such as those in sub-Saharan Africa. However we must consider that low income countries contain some rich people, while middle income and rich countries contain a shocking amount of people who are utterly destitute. Any approach based on country of residence would also mean that asylum seekers and other migrants leaving a low income country would lose entitlement to their dividend payments at the very time that they may need it most. Whichever way you do it, a targeted approach would mean that many people who deserve dividends would slip through the net.

Finally, we should remember that high-polluting people – usually richer people<sup>36</sup> – will lose more than they gain in this system, as they will pay much more in carbon charges than they gain in dividend. If we want to increase the dividends distributed to people on low incomes, it therefore might make more sense to keep it universal but raise the charge. This would be paid mostly by richer, higher-polluting people, therefore redistributing more of their income, and will create a bigger pie to share out.

### **Why not distribute the carbon charge money directly to people, rather than put it in a Sovereign Wealth Fund?**

An alternative to the model presented here would be to distribute carbon charge proceeds in full, rather than placing them in a fund and distributing only the dividends. This would generate a larger dividend of between \$25-\$30 in the few years before Net Zero carbon emissions are achieved. However, the dividend would dry up rapidly once carbon extraction ceases, leaving nothing from this scheme with which to address poverty and inequality after 2030 or 2045, and no justice for future generations who will still be living with the effects of current climate change. There would also be no fund of money to invest in renewable energy and research, making it uncertain whether the world could generate enough clean energy to properly replace fossil fuels.

Instead of letting the scheme dry up so quickly we should prolong the benefits indefinitely by investing the money through a Sovereign Wealth Fund. Despite providing a lesser amount monthly, the dividends will then continue for decades or even centuries if efforts are made to top up the fund to balance out population growth. In addition, renewable energy development will be properly funded all over the globe, benefiting everyone in the fight for climate justice.

### **Should carbon charges be distributed as dividends or used for public spending?**

The scheme proposed in this paper assumes that 100% of Sovereign Wealth Fund income is distributed as cash dividends to the people of the world. Yet there are many other good ways this money could be spent. Other proposals such as the Climate Damages Tax and national carbon tax

---

<sup>36</sup> <https://www.nature.com/articles/s41467-020-16941-y>

and dividend propose to use revenues for climate-relevant spending, on mitigation, adaptation or loss and damage. Carbon revenues could also be used to fund public services such as healthcare. So why do we propose to pay dividends rather than fund other kinds of public spending?

The answer is that the income from the Sovereign Wealth Fund need not all be used for dividends. Mitigation and adaptation, as well as compensation for loss and damage are vital. Climate efforts will already be well supported in this scheme through investment of the Sovereign Wealth Fund's capital, but there may still be a need for grants, especially for loss and damage. Public services like healthcare and education are equally irreplaceable, and the authors of this paper would be glad if they could be supported in an effective way by carbon charges.

But how would this be done? The investment income would have to be given either to governments or to projects, and mechanisms would be needed to ensure the money is really spent on the intended purpose rather than on, say, government vanity projects or expensive project consultants.

By comparison, cash dividends are cheap and simple to administer, and there is now extensive evidence that people spend cash transfer money wisely to boost their well-being and improve their resilience. A High Level Panel on Humanitarian Cash Transfers, convened by the UK's Overseas Development Institute, concluded that direct cash payments to individuals should be the first option considered because the benefits are so well demonstrated.<sup>37</sup> Furthermore, if we are serious about people's right to fair shares, direct payments are the best way to ensure that everybody benefits. Money is not siphoned off or spent in other regions. Everybody gets their dividend and can use it to improve their life in the ways they see fit. There are therefore strong arguments that cash dividends should form at least part of the solution.

The proportions eventually distributed to dividends, public services and climate action need not be decided now, and should ideally be the result of an international democratic process. This paper simply illustrates the potential for international carbon charges to generate economic benefits, and advocates that these be shared worldwide for climate justice. The ultimate method of delivery is important but this scheme would benefit people worldwide however the money is spent.

## **When the dividends reduce: world basic income?**

Although the carbon charge rate would rise as the cap reduces, the scheme inevitably raises less money for the Sovereign Wealth Fund once the cap begins to bite, and dividends will eventually be reduced as world population grows (as the money has to be shared amongst more people).

At this point, we have a choice. We can allow dividends to fade out, and remember them as a brief but helpful boost for global equality. Alternatively we could build on and expand the scheme to incorporate new streams of financing deriving from the global commons, and turn it into a true world basic income.

There are plenty of global common spaces as well as our atmosphere, including oceans, international airspace and the satellite zone. Other spaces such as land and mineral beds were once commons and we could choose to treat them as such now for charges on use.

Profitable use of these common spaces and resources could be made chargeable, thereby generating rents for the people, which could be distributed as world basic income. These spaces

---

<sup>37</sup> <https://www.odi.org/sites/odi.org.uk/files/odi-assets/publications-opinion-files/9828.pdf>

would benefit from the protection that use-charges would bring, just as the atmosphere would be improved through the carbon charge.

Through this scheme, private land ownership, aviation, shipping and deep sea mining could all be charged. Radio frequencies (used for GPS, TV and many other uses) and satellite space could be rented out on behalf of the world's people rather than given to corporations almost for free. The proceeds from data that we all generate, which has enriched Google, Facebook, Amazon and Apple, could be charged with money added to the collective pot. Financial transactions, which are profitable thanks only to our common monetary system, and intellectual property, which is generated through use of historic common knowledge, could also provide a rich source of revenues. Significant historical wealth could be returned to the people in common via a wealth tax rather than retained by elites through inheritance. These global funding sources, and the amounts that they could raise, are discussed in more detail on the World Basic Income website.<sup>38</sup>

In these ways, we could easily set up streams of financing that would generate \$50 a month for every person worldwide even without dividends from the carbon Sovereign Wealth Fund. Alternatively, some of the charges and taxes mentioned above could be added to the capital of the Fund, bolstering it against population growth and increasing the long term potential for dividends. In time, as more commons resources are covered, it is possible that people everywhere could receive a basic income of several hundred dollars a month or more, sufficient to truly cover basic needs and securing people's human right to life.

---

<sup>38</sup> <http://www.worldbasicincome.org.uk/funding-a-world-basic-income.html>

## **Conclusions and recommendations**

This paper has assessed existing carbon charging schemes, and found that none of them adequately share carbon charge revenues with people in the Global South. This contravenes several key principles of climate justice.

By contrast, the scheme proposed in this paper – international carbon charge and dividend – is designed to share carbon charges with people worldwide. It ensures not only that the polluter pays, but also that the non-polluter receives. By funding a universal cash dividend, international carbon charges would help to eradicate extreme poverty and reduce world inequality. If this model is carried across to further global commons, a much larger dividend could be provided, which could end extreme poverty entirely.

Furthermore, the Sovereign Wealth Fund established through carbon charges would provide a massive source of new investment for green energy and research. Alongside the carbon cap, this would enable us to fully move on from fossil fuels and reach Net Zero within a safe time-frame.

International carbon charge and dividend therefore has unique potential to address the climate emergency at source, while simultaneously resolving the historic injustice of extreme poverty. This scheme should be given the fullest consideration by all who are concerned with climate justice.

### **Recommendations**

**1. A single international carbon charge should be applied as soon as possible to all carbon at the point of extraction.**

It should be set at a decent rate (at least \$70 per tonne of CO<sub>2</sub>e) and rise annually. It should be accompanied by a fixed cap which lowers each year sufficient to reach Net Zero within a decent time-frame.

**2. The money raised through this charge should be placed in a worldwide Sovereign Wealth Fund, which should be invested in new renewable energy developments and related research.**

New energy developments and research should be widely distributed between countries and include micro and community scale initiatives. As well as providing a huge increase in affordable green energy, this would support sustainable job creation in every country.

**3. The investment income from the Sovereign Wealth Fund should be distributed as a monthly dividend to every person worldwide.**

People in every country should be invited (and where necessary, supported) to register directly with the scheme. Payments should be made directly from the global fund to each individual, as a bank or mobile money transfer, or by other secure means such as charge-card.

#### **4. In working towards this system, countries should:**

- Work in international fora to put in place the infrastructure for an international carbon charge and dividend scheme.
- Implement national carbon taxes, but contribute all or some of the revenues to an existing global fund such as the Loss and Damage Fund as proposed by the Climate Damages Tax campaign, as well as retaining some proceeds for the benefit of future generations through Sovereign Wealth Funds.

#### **5. The carbon dividend should be merged into a broader-based world basic income.**

Once the international carbon charge and dividend is in place, further work should take place to diversify the revenue stream. Global charges on other global commons, such as ocean resources, the satellite zone, intellectual property and data, could generate the necessary money to top up carbon dividends sufficiently to eradicate extreme poverty. These dividends would then function as a world basic income, securing the right to life for all. This world basic income should provide the ultimate safety net, and act as a supplement to earned income and any national basic income or other social security paid in each country.