

*"The virtues are lost in self-interest as rivers are lost in the sea"*

Franklin D. Roosevelt

*"Governing for the future is ... difficult because it rubs up against the short-termism that is inherent in the politics of the electoral cycle. Its difficulty is compounded when governing for the future involves painful choices in the present"*

House of Commons, UK<sup>1</sup>

With its very long-term and globally distributed effects, **mitigating climate change comes up against two of the strongest forces of political and economic reality: short-termism and self-interest.** These obstacles are prevalent at all levels of decision making – including individual, corporate, sub-national and national – and play an important part in the difficulty of creating and implementing an effective international agreement for global mitigation. Short-term thinking and narrowly viewed national interest are key threats to the Paris Agreement's implementation. The lessons of history highlight that the risks of failure are very real. Voluntary action has in no area succeeded to solve the undersupply of a public good especially in the case of a global public good such as a safe climate<sup>2</sup>.

Experience to date has shown that calling for and relying on **enhanced ambition and moral imperatives need to be complemented by supportive incentives. Climate policy action needs to be aligned with the national interest and the short-term focused priorities** of governments. Effective and rapid **mitigation action needs to be a rational choice at level of the decision-makers** and not only from a global and intergenerational perspective.

This submission outlines and makes the case for a global framework that not just overcomes, but **harnesses the focus on the short-term and national interest to drive climate action**<sup>3</sup>. It achieves this by:

- **offering substantial financial incentives** to national governments in the short-term in order to promote policy action and to deliver carbon emission reductions;
- **decoupling climate action from its financial costs** both in terms of who carries these financial costs and when they materialize; and
- **raising and distributing to countries large amounts of private capital** to support the transition to a decarbonized global economy.

The submission **also includes a hydrofluorocarbons (HFC) scheme** relying on the same approach to boost policy action with a different financing mechanism. HFC emission reductions are highly cost-effective, and the scheme can leverage the achievements of the Kigali Agreement to the Montreal Protocol and the Protocol's institutional strength and track record. The more limited financing requirement of the HFC scheme also offers the possibility of an alternative financing mechanism, one relying on carbon credit investors, which can speed up its implementation. The HFC scheme can deliver globally meaningful climate benefits and prove the concept of offering governments near-term financial incentives to promote policy action.

**The best way to achieve the Paris Agreement's goal is to align the implementation of mitigation policies with countries' short-term national interest.**

## HOW DO WE GET THERE?

The proposed framework can be summarized as follows.

- A new international framework is agreed between participating countries<sup>4</sup>. Participation is voluntary, but the framework is binding for participating countries once they sign up for it.
- The framework determines a future net greenhouse gas emission profile for each country, the country's emission benchmark (the '*benchmark*'). Importantly, the benchmark is not framed as a commitment or an emission cap.
- The framework also determines a price per unit of net emission saving (the '*price for carbon saving*'), for example \$50/tCO<sub>2e</sub>.
- Under the framework, countries emitting less than their emission benchmark in any year receive an annual cash payment made to the national government. The payment equals the product of the price

for carbon saving and the number of units by which the country's actual net emissions are below its benchmark for the year.

- In order to make these payments, the framework establishes an international fund (the '*Fund*'). The Fund finances the annual payments made to countries by borrowing from private investors for the long term, for example through issuing long-term bonds. The bonds offer a financial return to investors similar to government or multilateral development bank debt.
- The creditworthiness of the Fund is supported by the international framework and the financial backing of participating countries. The liability of the Fund including interest is repaid in the long-term future through the payments of participating countries to the Fund. The allocation of future payments among countries is based on a pre-determined percentage or formula. The important point is that this sharing of future liabilities is independent of the annual payments countries receive from the Fund for cutting their emissions.

## EFFECTIVENESS OF THE PROPOSED FRAMEWORK

The following advantages highlight the effectiveness of the framework.

**The framework aligns climate action with the national interest of countries as it decouples financial costs from taking action.** The cost for any country, i.e. its share of the Fund's future liabilities, is independent of whether it, or another country, reduces emissions by a certain amount. On the other hand, the annual payment by the Fund goes to the country reducing emissions. This transforms countries' incentives from free riding on others' efforts to maximizing their benefits from the Fund. Currently, mitigation efforts are characterized by individual costs and shared benefits. Under this framework, climate action results in individual benefits and shared costs.

**The framework also aligns climate action with the time horizon of decision-makers,** as borrowing by the Fund pushes the financial burden into the future. Consequently, the benefits and costs of mitigation both materialize in the future and are more closely aligned in time. This improves the prospect of governments taking action, as short-term costs are replaced by short-term benefits from their perspective. Clearly, this approach implies leaving a financial debt to the future. However, as long as the costs of today's mitigation are smaller than the future costs and risks linked to no mitigation, leaving a financial debt to the future is preferable to a dangerously changed climate.

**The framework raises significant additional financing from private investors** for the benefit of individual countries. These can help finance the investment needed for the low-carbon transition and secure the necessary political and public support, for example, through compensation for the losers of the transition (e.g. regions dependent on coal).

**The framework creates a global carbon price signal** without constraining national policy flexibility and without requiring an international enforcement mechanism. Domestic implementation is not limited to carbon pricing, carbon taxing or cap-and-trade schemes and can be tailored to reflect the specific political, economical, social and environmental circumstances of countries.

**The framework strengthens political commitment** to mitigation and global cooperation thanks to the above advantages. Political will has been the biggest bottleneck to date and transforming it can deliver rapid and effective climate change mitigation.

## IMPLEMENTATION OF THE PROPOSED FRAMEWORK

Reaching an international agreement on the framework, in particular the allocation of emission benchmarks and the allocation of future costs among countries, will undoubtedly be challenging and will require political compromises. Nevertheless, reaching such an agreement seems more realistic than agreeing short-term emission commitments or allocating carbon for the following reasons.

The **benchmarks are neither commitments, nor legally binding caps** and there are no direct transfers among countries, making benchmarks more attractive from a political perspective.

The **sum of individual benchmarks can exceed the targeted total global emissions without risking success** of global mitigation, as the price for carbon saving and the payment mechanism creates a powerful incentive for every country to emit less than its benchmark. A framework with higher (i.e. weaker) benchmarks is more appealing for governments for a variety of reasons including the prospect of receiving higher payments in the near-term. However, unlike in a cap-and-trade system with higher caps, the incentive to cut emissions remains.

The framework offers a **lower risk proposition** to countries. Under the current approach of committing to emission cuts, countries take the risk of free-ridership i.e. that other countries do not deliver on their commitments. Under the proposed framework, a country commits only to its share of future liabilities that are linked to emission cuts actually delivered against the benchmarks. Hence, the risk of free-ridership and unreciprocated action is reduced.

Agreeing the **sharing of costs that materialize in decades** has a better prospect than agreeing near-term commitments or cost sharing. This is due to the dominance of short-term considerations among most decision-makers' priorities and the tendency to discount long-term costs heavily, especially if there is the possibility of short-term gains. The allocation of the Fund's long-term liabilities could also be linked to countries' overall emission benchmarks in some form, which could create a trade-off to having a higher benchmark. Clearly, this trade-off would be most significant for the largest emitters and could contribute to finding common ground among them.

**Implementation can proceed in stages** with countries joining over time. The framework can be launched without every country participating from day one, which reduces the risk of some countries delaying an agreement in an attempt to improve their negotiating position.

Importantly, the **prospect of receiving near-term payments creates a strong incentive** for governments to reach an agreement and establish the scheme. The offer of short-term benefits is an important motivating factor.

Further, **a framework that promises to be more effective and less risky improves the prospect of the necessary compromises**. Overcoming the differences in countries' positions has a better chance if the resulting agreement is believed to deliver on the global mitigation goals.

#### OTHER CONSIDERATIONS FOR THE IMPLEMENTATION OF THE FRAMEWORK

**Setting the price for carbon saving at the right level** is essential for the framework's success, as it is the most important factor determining the level of mitigation achieved and the financing requirement. It has to provide a strong incentive for governments to take policy action. Accordingly, it should reflect the estimated cost of net carbon reduction and be meaningful in the context of countries' fiscal positions. Importantly, as the Fund's payments represent a financial transfer from the future to the present, the dominance of governments' short-term priorities creates an incentive to set the price for carbon saving at a sufficiently high level. This is in contrast to approaches focusing on carbon taxes or carbon pricing mechanisms. Further, the framework has the flexibility to use a dynamic price for carbon saving, such as a pre-determined price path, a price indexed to certain variables, or periodic adjustments.

The Fund has to attract sufficient low-cost private capital. Accordingly, the financial backing of countries and a robust political and legal framework for the Fund is important. The **Fund's credit worthiness and attractiveness can be optimized** in various ways, such as:

- Countries could collectively over-collateralize the Fund's commitments to deal with the potential default of some participants e.g. by each country providing a guarantee for 105% of their respective share of the Fund's liabilities.
- Countries' obligations to the Fund could be structured to benefit from the preferred creditor status of multilateral organizations like the IMF and therefore rank higher than unsecured commercial creditors.
- Bonds issued by the Fund could be eligible as international reserve assets and could be positioned as sustainable investment.
- Checks and covenants could ensure that the finances of the Fund are sustainable. For example total annual payments of the Fund could be capped and/or its liabilities could be limited to the sum of its incentive payments over certain period (e.g. its payments over the past 20 years on a rolling basis). Importantly, both these covenants could be implemented without significantly reducing the incentive of countries to cut emissions.

The framework offers significant **flexibility in terms of its distributional effects across countries** through the allocation of emission benchmarks and the allocation of future liabilities. Both these factors can be determined along a broad spectrum without risking the mitigation objective and the framework's effectiveness, while achieving the desired equity outcome and offering flexibility for international negotiations.

The ideal approach to the institutional setup (for example as a separate institution or under the UNFCCC, the World Bank or other international organizations) as well as the most suitable form of international

law instrument for the framework needs to be identified, as these will have important implications for the governance and the efficiency of implementation.

### HYDROFLUOROCARBON (HFC) SCHEME

The viability and benefits of offering short-term financial incentives to national governments in order to promote policy action could be demonstrated through a scheme focusing on HFC emissions. **HFC emissions are an attractive candidate for a pilot scheme** for the following reasons.

- HFCs are short-lived greenhouse gases with a very high global warming potential and their global emissions are growing at 10–15% p.a.<sup>5</sup> The Kigali Amendment to the Montreal Protocol aims to limit and eventually reduce HFC emissions through a differentiated phasedown across countries over the next three decades. This phasedown is projected to avoid over 70 GtCO<sub>2</sub>e emissions by 2050<sup>6</sup>. Further, HFC emission reductions are very cost-effective with their abatement cost estimated to be in the range of \$0.05–\$0.54/tCO<sub>2</sub>e<sup>7</sup>.
- Faster emission reductions than those mandated by the Kigali Amendment represent a great opportunity for climate change mitigation. A more ambitious and complete phase-out by 2020 could reduce greenhouse gas emissions by 100–200 GtCO<sub>2</sub>e by 2050 and avoid up to 0.5 C warming by 2100<sup>5</sup>.
- The implementation of the HFC scheme's incentive mechanism – the annual payments it offers to countries in order to reduce their HFC emissions beyond the caps of the Kigali Amendment – is facilitated by a number of factors: the emissions limits agreed under the Kigali Amendment, which can serve as benchmarks; the cost-effectiveness of HFC emission reductions, which means that even a very low price for carbon saving (e.g. \$1/tCO<sub>2</sub>e) can provide a strong incentive; and the strong track-record of the Montreal Protocol's organizations and processes.
- The HFC scheme has a much lower financing requirement, which opens up the possibility of an alternative financing mechanism, one relying on unilateral donations and/or carbon investments. Businesses, governments or other organizations pursuing carbon targets can finance the scheme voluntarily in exchange for high quality and inexpensive carbon credits. Avoiding the need for an international agreement or the support of governments this way can speed up the implementation of the HFC scheme. Governments are offered results-based payments without any obligation or trade-off on their part.

The HFC scheme can deliver very significant and globally meaningful climate benefits in its own right and represents a low-hanging fruit for global mitigation. It can also prove the concept of accelerating policy action through financial incentives.

### **THE BEST WAY TO CONSOLIDATE THE ACHIEVEMENTS OF THE PARIS AGREEMENT AND ACHIEVE ITS GOAL IS TO ALIGN CLIMATE ACTION WITH THE SHORT-TERM NATIONAL INTEREST OF COUNTRIES. TAKING GLOBAL COOPERATION TO THIS NEXT LEVEL COULD DRAMATICALLY BOOST CLIMATE ACTION.**

*The Climate Moonshot Initiative aims to dramatically accelerate climate change mitigation by aligning climate action with the short-term and self-interest driven political and economic priorities. We are keen to collaborate with others and would welcome the opportunity of additional discussions. For further information and a more detailed discussion of this proposal, please refer to [www.climatemoonshot.org](http://www.climatemoonshot.org).*

<sup>1</sup> House of Commons. (2007). Governing the future. Second Report of Session 2006–07, Volume I, Public Administration Select Committee. Retrieved from <https://publications.parliament.uk/pa/cm200607/cmselect/cmpubadm/123/123i.pdf>

<sup>2</sup> Stiglitz, J. E. (2015). Overcoming the Copenhagen failure with flexible commitments. *Economics of Energy & Environmental Policy*, 4(2). Retrieved from <http://www.iaee.org/en/publications/eeepjournal.aspx?id=88>

<sup>3</sup> For a more detailed discussion of the proposal refer to Cseh, A. (2018). Aligning climate action with the self-interest and short-term dominated priorities of decision-makers, *Climate Policy*, DOI: <https://doi.org/10.1080/14693062.2018.1478791>

<sup>4</sup> The legal form that the framework would take remains to be decided.

<sup>5</sup> IGSD. (2016). Primer on HFCs (Institute for Governance & Sustainable Development (IGSD) Working Paper). Retrieved from <http://www.igsd.org/wp-content/uploads/2016/09/HFC-Primer-12Sept2016.pdf>

<sup>6</sup> EIA. (2016). Kigali Amendment to the Montreal protocol, a crucial step in the fight against catastrophic climate change. EIA briefing to the 22nd Conference of the Parties (CoP22) to the United Nations Framework Convention on Climate Change (UNFCCC). Retrieved from <https://eia-international.org/wp-content/uploads/EIA-Kigali-Amendment-to-the-Montreal-Protocol-FINAL.pdf>

<sup>7</sup> EIA. (2016). Averting climate catastrophe, our obligation to adopt an ambitious Kigali HFC amendment to the Montreal protocol. EIA briefing to the 38th Resumed OEWG and the 28th meeting of the parties to the Montreal protocol. Retrieved from <https://eiainternational.org/wp-content/uploads/EIA-Averting-Climate-Catstrophe-FINAL.pdf>