

A mission to dramatically speed up climate change mitigation by aligning climate action with the short-term and self-interest driven political and economic priorities



Mitigation Program targeting all Greenhouse Gas Emissions

The Why behind the Climate Moonshot Initiative

- We need to deal with the biggest obstacle in the way of climate change mitigation
 - There is a **conflict between decision-makers' priorities and the nature of climate change**
 - Decision-makers' priorities are dominated by the **short-term** and their **self-interest** or the interest of the country, community or organization they represent
 - In contrast, climate change poses a threat in the **long-term** – in decades and centuries – and its impacts and risks are of **global interest** and not limited to any nation or community
 - As a result, while rapid mitigation makes economic, social and environmental sense at the global level, **climate action does not make political and economic sense at the level of actual decision-makers**
 - The dominance of short-term self-interest is unlikely to change any time soon, as there will always be other urgent and important priorities. This means **climate action needs to be aligned with the short-term self-interest of decision-makers**
 - In short, **we need incentives that support taking action**
- The Climate Moonshot Initiative creates the necessary incentives at the level of the decision-makers to take action
 - Results-based payment mechanisms target governments to take policy action
 - The financing mechanism differs between the program targeting all greenhouse gas emission and the HFC program

Scheme for all greenhouse gas emissions

- An international agreement establishes emission benchmarks for each country
- A price for carbon saving is established e.g. \$50/t (CO₂e)
- Countries emitting less than their benchmark in any year receive a cash payment for every ton saved based on the established price
- An international Fund is created to make these payments, which borrows from private investors for the long-term
- The Fund is backed by and repays its liabilities through the future payments of participating countries (e.g. starting in 20 years). The allocation of costs between countries follows a pre-determined percentage or formula
- Note that payments received and made by countries are not linked. They receive payments based on their emission performance, and make payments based on a pre-determined allocation

Phase 1



Payments for emission cuts

Climate Moonshot Fund



Phase 2



Predetermined allocation of costs

Climate Moonshot Fund



Advantages of the scheme (1/2)

- Much stronger and sustained political support for climate change mitigation
 - Political will is the biggest bottleneck today and is transformed due to all the reasons below
- Alignment with the interest of decision-makers
 - Scheme decouples financial costs, being shared globally, from taking action. In contrast to today, the costs carried by individual countries is not affected by the allocation of action among them
 - Incentives shift from free riding to maximizing benefits from the Fund, as countries will profit from cutting emissions at a cost below the price for carbon saving
 - The individual cost and shared benefit that characterizes mitigation today becomes the combination of individual benefit and shared costs
- Alignment with the interest of decision-makers
 - The financial cost is pushed into the future through the Fund's borrowing, which aligns the benefits and costs of climate action in time
 - Improves the prospect for action today as from the decision-makers perspective a short-term gain replaces a short-term cost
 - Financial debt left to future generations is preferable to environmental debt, as action today reduces the costs and risks of climate change

Advantages of the scheme (2/2)

- Additional private financing raised
 - Capital raised and distributed to countries helps finance the transition to a low-carbon economy
- Flexibility for domestic implementation
 - Through its focus on emission results, the framework offers full political and policy flexibility for countries to achieve emission cuts. No need for one-size fits all policies
 - Politically attractive and fosters policy innovation
- Flexibility of implementation schedule
 - Countries can join in stages. There is no need for a simultaneous agreement among all countries
 - This reduces the risk of delays and countries holding out for better terms
- No need for international enforcement mechanisms
 - Enforcing international commitments is always challenging
 - Framework relies on incentives not enforced commitments. Countries reducing emissions receive payments, others do not

Agreeing the proposed framework (1/2)

- Agreeing to emission benchmarks is politically more attractive and easier
 - Only benchmarks, as opposed to binding caps, and they can be exceeded
 - Sum of individual benchmarks can exceed global target without risking success, as countries will aim to outperform their benchmark. Higher benchmarks are more palatable
 - Framework can be established with countries joining in stages, which improves the prospect of an agreement
 - Agreeing benchmarks and participation offers governments the prospect of receiving cash in the short-term
- Agreeing the price for carbon saving
 - Price will be main driver of emission reductions and one of the main drivers of financing requirements
 - The short-term focus and self-interest of decision-makers will favor setting a meaningful price, as a higher price means higher financial transfers from the future to the present
 - Due to the uncertain and dynamic nature of the relationship between carbon price and emission reductions, the price might need to be set in a dynamic fashion or be adjusted periodically

Agreeing the proposed framework (2/2)

- Agreeing to future liabilities and their allocation is more realistic
 - Agreeing to future liabilities is lower risk than commitments under the current approach. The risk of free ridership / failed reciprocity is mitigated by paying only for performance delivered
 - Agreeing to future liabilities is better value due to the multiplier effect. E.g. a country with a 2% share of future liabilities knows its commitment will deliver 50x the emission reduction compared to acting alone
 - Pushing the financial costs into the future makes liabilities and their allocation easier due to the dominance of short-term consideration, especially if there is a prospect of short-term gains
 - The allocation of liabilities could be coupled to countries' emission benchmarks. The resulting trade-off could make finding an international agreement on both easier
 - Future liabilities are more acceptable if the framework is viewed as effective in terms of delivering emission cuts and climate benefits
- Financing the proposed framework
 - Financing requirement depends on benchmarks and price and would be in the hundreds of billions / trillions of dollars over time. However, its financeability can be ensured
 - Securing the scheme's financial sustainability through covenants without diluting the incentives, e.g. annual overall payment cap by the Fund; or limiting the period financed through borrowing
 - Credit of the Fund, structure of the borrowing, operations (e.g. by World Bank) to be optimized

Overview of the HFC Program

- Implementation of the scheme targeting all greenhouse gases is slow as it requires an international agreement. The same results-based payment incentive mechanism with a different financing structure can be applied to HFC (hydrofluorocarbon) emissions offering a much faster implementation path
- HFC emission reductions can deliver substantial climate benefits
 - Carbon emissions from HFCs exceed all the greenhouse gases produced by the UK and France combined
 - HFC emissions are growing at a rate of 10%-15% p.a.
 - HFC emissions can be reduced very cost-effectively with a cost roughly two orders of magnitude lower than the cost of cutting fossil fuel consumption
- The HFC Program targets emission reductions through results-based payments to governments
 - The HFC Fund pays governments annually for HFC reduction achieved beyond the requirements of the Kigali Amendment. E.g. \$1/CO₂e could provide a strong incentive. Governments deliver national emission reductions through their various policy tools
 - The HFC Fund finances annual payments through the contribution of voluntary investor partners
 - In return, financing partners receive inexpensive and high quality carbon credits that help achieve their carbon targets
- Target size of HFC Program is \$1 billion p.a. in ten years time
 - By 2050, cumulative climate impact is in the tens of billions of CO₂e tons and overall size is in the tens of billions of dollars
 - This means emission savings on the scale of an entire year's global carbon emissions by 2050

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