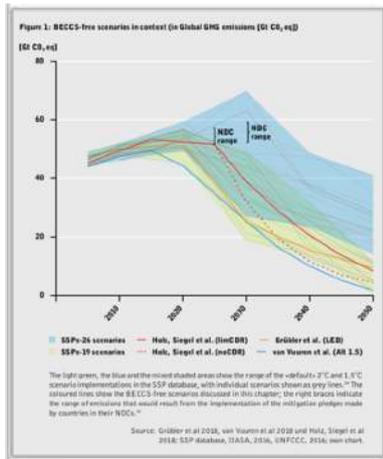
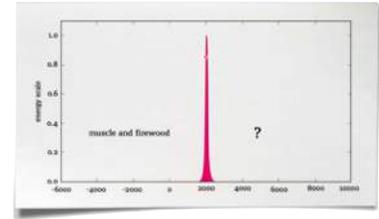


Climate Justice and Fair Shares

1. The fossil fuel era will only ever be a flash in human history. The question is whether we will succeed in cutting to near-zero emissions in a humane and planned way, leading to improved happiness for all the world's people; or if we will instead continue towards a crash with unimaginable suffering – with the most vulnerable hit first, and everyone else soon after.



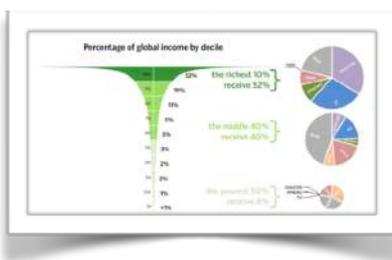
2. There is not much ‘carbon budget’ left in the atmosphere until we hit 1.5 °C of warming. The size of the remaining carbon budget depends on what temperature increase we are ready to accept (and with what probability). We can not rely on risky, unproven ‘geo-engineering’ technologies to fix the problem. To have a reasonable chance of avoiding runaway climate breakdown, we need global greenhouse gas (GHG) emissions to go down by more than 10% per year, starting now.

3. Who should do how much? What are countries’ ‘Fair Shares’?

Emissions cuts should be based on ‘climate justice’. This means allocating responsibility in a fair way between rich and poor countries, and between rich and poor people within countries.

Wealthy countries that have caused the climate problem must do the most to fix it.

4. In addition to dividing emission reductions fairly, costs for **Adaptation** (e.g. building flood protections, strengthening bridges, adapting agriculture etc.) and coping with **Loss and Damage** caused by climate change (e.g. rebuilding after cyclones, islands disappearing under rising seas, farmlands turning to desert etc.) must also be covered in equitable ways. Those who have done the least to cause climate change but are most affected must be given support to cope. This is another key dimension of climate justice.



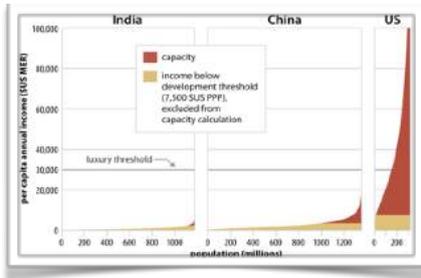
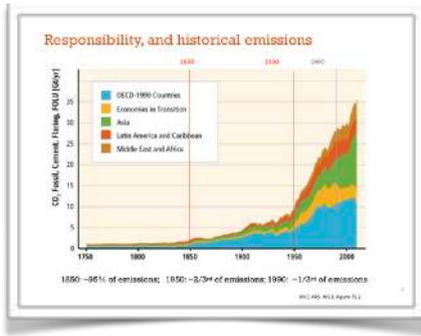
5. There is extreme inequality in the world. The world’s richest 10% of people make 52% of the world’s income; the poorest 50% of people get only 8%. 26 individuals own as much as the poorest half of humanity, or 3.8 billion people. GHG emissions reflect this obscene inequality – the richest individuals and corporations are the highest emitters. They have the greatest responsibility to act and pay for the costs of addressing the climate crisis.

6. The United Nations Framework Convention on Climate Change (UNFCCC) affirms the **principle of equity**, and makes clear that all countries must contribute to climate action, in accordance with their historical responsibility and current capacity.

Acknowledging that the global nature of climate change calls for the widest possible cooperation by all countries and their participation in an effective and appropriate international response, in accordance with their common but differentiated responsibilities and respective capabilities and their social and economic conditions,

The UNFCCC’s Paris Agreement of 2015 introduced a ‘pledge and review’ system which only requires countries to declare climate plans (Nationally Determined Contributions - NDCs). However, it lacks a clear system to determine what is fair and equitable between rich and poor countries.

How can we fairly and equitably allocate countries’ emissions reductions?



8. An example: Sweden's 'Fair Share'

A fair allocation of emissions reductions globally requires an industrialised country such as Sweden to reduce its domestic emissions to as near as possible to zero as quickly as possible, and to simultaneously make it possible for poor countries to avoid emissions while they develop (e.g. build roads, renewable energy systems, hospitals, schools, environmentally friendly industries etc.).

Using 1850 as a start date to calculate historical emissions and a carbon budget to keep warming below 1.5 °C without geo-engineering, means that Sweden's 'Fair share' equals **90% GHG reductions within Sweden by 2030** while also **enabling the avoidance of four times** as much emissions in **poor countries**.

Sweden must cooperate with poorer countries and provide **climate finance** and other forms of cooperation to enable yearly avoidance of 212 megatons of emissions in the world by 2030. (Sweden's current annual emissions are 55 megatons per year).

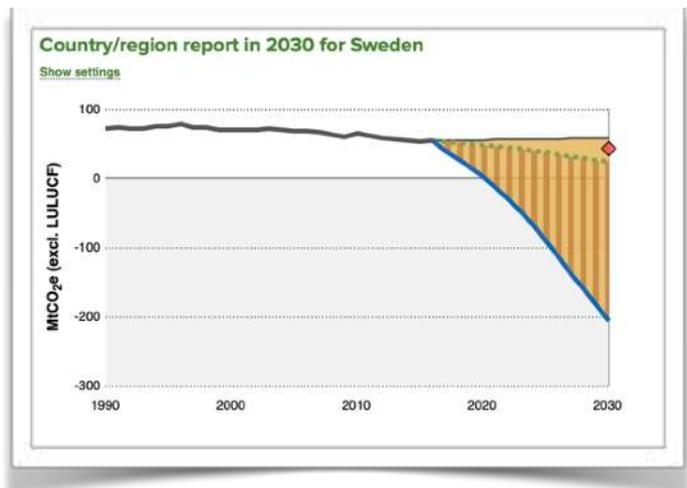
This corresponds to -384% by 2030 compared to Sweden's current emissions and -294% compared to 1990. With a 2°C goal and the least equitable assumptions in the calculator, Sweden's fair share still requires it to enable poor countries to avoid approximately 2.5 times the current emissions in Sweden (-245% compared with 2019; - 188% compared with 1990).

7. Researchers at the Stockholm Environment Institute (SEI) have developed a model and calculator (<https://calculator.climateequityreference.org>) based on the equity principles of the UN Climate Convention. The model allows the user to experiment with different assumptions.

The model determines **historical responsibility** based on the amount of emissions each country has put into the atmosphere (with choice of starting date between the beginning of industrialisation in the 1850s and 1950). Since carbon dioxide remains in the atmosphere for a very long time, 1850 as starting year is the most fair and equitable, and results in more historical responsibility for the rich countries..

The model also determines each country's **capacity** to reduce the emissions it will put into the atmosphere from now on, by considering incomes across the population. Incomes of people who can only cover basic needs are not counted (a large part of the populations in poor countries). Incomes above USD 7,500 per person and year are counted towards a country's capacity. It is also possible to count high incomes, e.g. above USD 50,000, at a proportionally higher rate (as countries do in their progressive income tax systems where those who earn more contribute a higher percentage of their income in tax).

Combining historical responsibility and capacity provides a measurement of how much each country's **'Fair Share'** of reducing emissions should be.



Rich industrialised countries must make it possible for poorer countries to take greener development pathways than the high-emitting and wasteful development followed by industrialised countries. This is the responsibility of wealthy countries, but it is also in their self-interest to help to avoid climate catastrophe.

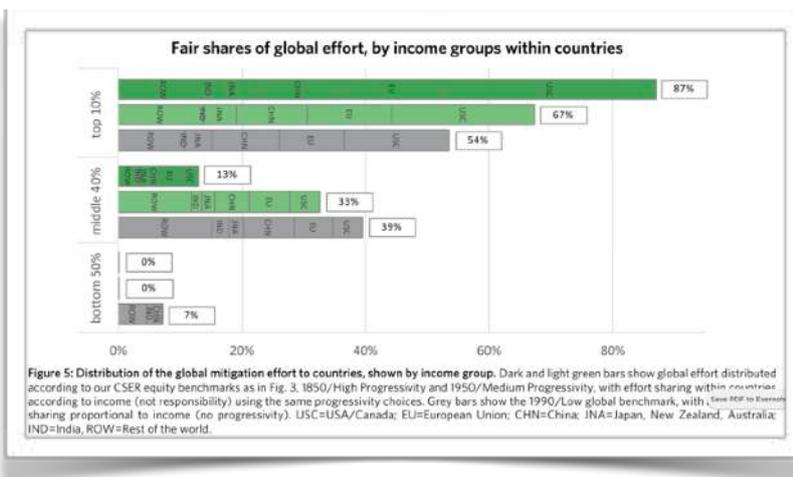


Figure 5: Distribution of the global mitigation effort to countries, shown by income group. Dark and light green bars show global effort distributed according to our CSER equity benchmarks as in Fig. 3. 1850/High Progressivity and 1950/Medium Progressivity, with effort sharing within countries according to income (not responsibility) using the same progressivity choices. Grey bars show the 1990/Low global benchmark, with 'time left to Sweden' sharing proportional to income (no progressivity). USC=USA/Canada; EU=European Union; CHN=China; JNA=Japan, New Zealand, Australia; IND=India, ROW=Rest of the world.

9. Fair shares must also be based on **equality within countries**. The richest people who have polluted the most must cut their emissions and pay the most. According to the SEI model, the world's 10% richest people are responsible for 87% of the required emissions cuts. Only strong popular mobilisation can create the force for the transformative change that is needed.

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 What Next Volume III (www.whatnext.org/publications)