Living within local to global thresholds and phasing out fossil fuels requires rethinking our societies

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The most serious environmental problem is climate change. It exacerbates biodiversity loss and air pollution, and affects the water system. Every hour climate change costs us USD 16 million. Small island states and the least developed regions are suffering the most. We have a small window before 1.5C is out of reach. Countries, companies and people need to phase down greenhouse gas emissions. Promoting renewable energy; we need to actively phase out fossil fuel and strengthen decentralized grids, otherwise science shows that renewable energy services adds to existing energy instead of substituting for it. This requires an active strategy for phasing down energy and dealing with the stranded assets valued at between $ 16-295 Trillion. It requires repurposing stranded technologies and infrastructures. It requires ensuring that labour in this industry is helped to find other employment. It requires shifting investments out of fossil fuel to other sectors. This is not happening, because the price of gas is falling, the social cost of carbon is not internalised in the price of fossil fuel, and worse still there are huge subsidies (7 Trillion) in rich and poor countries to this sector. These subsidies can be redirected to poorer people and countries to enable the just energy transition. Large companies should aim for true zero as soon as possible to make space for smaller companies that may find it more difficult to do so. It is not lack of technology but lack of programmatic vision and policy that stands in the way.

It is necessary to build a hub to discuss the technologies and policy instruments that enable all to meet minimum and decent living standards. This is important to share information on how to decarbonise cities through compact design, decarbonised buildings, decarbonized work spaces, rich network of public transport, that both reduces the need for private transport and road space which can be used to green the city. We need road maps to achieve this goal. Big companies in cities should adopt policies for scope 1, scope 2 and scope 3 emissions. Adopting scope 3 emission control is vital to ensure that along the value chain all production shifts to non-fossil energy.

Many technologies are being discussed. Geoengineering, artificial intelligence, biotechnology. It is critical to evaluate these technologies in terms of their net benefits to society. Generative AI is accelerating the spread of misinformation, weakening democracies, undermining science, and preventing the adoption of policies to enable us to live within our environmental means. Solar geoengineering can affect the water cycle and human rights. We must collectively develop a set of principles against which new technologies can be tested in order to ensure that the technologies themselves don't give rise to bigger problems then that they aimed to address.

Good policy is essential for ensuring wellbeing.