Cutting personal CO2 emissions is important but not enough. Help is needed. Offsetting is a method, even for individuals, of paying an agent to get climate actions done – see below.

With the wealthy having to reduce about 1 ton of CO2 per month, change to electric or hydrogen motorization is a natural start. As an average car, driven an average number of miles can emit 4 tons fossil CO2 per year it is a good save.

If an electric car is not an option, driving on biofuel offers reductions of fossil CO2 up to 90% depending on the origin of feedstocks. There are replacements for both petrol and diesel.

Using more residues from forests and land that doesn't compete with forestry or agriculture can fill the increased demand for biofuel. The potential of biofuel is limited but so is the need. I suggest car owners, driving fuel cars, use biofuel as much as possible before changing to electric as this presently have a greater effect while the number of electric cars are small.

Cutting 3-4 tons of fossil fuel annually is possible today either by changing type of car or fuel. Up to 6 gigatons globally but it will take time to get that effect.

Food and accommodation produce CO2, but as people need both, possible fast savings are not obvious. How houses are produced, heated, and cooled can save CO2 in time. And of course, one can eat less red meat and fly less. However, voluntary efforts from these areas, of quality of life, are probably very limited.

Reducing CO2 by individuals cutting their CO2 will not be enough for reversing global warming. To get more results, offsetting<sup>1</sup> is an option.

20 US \$/ton in the voluntary market, bought through carbon offset providers, is a fair price for offsetting as far as I have been able to research. A sum easy to remember and one that most of the wealthy people can afford without much strain if paid once a month.

Personally, we drive the family car on HVO100 instead of diesel. At an additional cost of about 7 US \$ per month. We spend another 16 US \$ per month on offsetting. That way we reduce about 3 tons CO2 annually using alternative fuel and 11 tons through offset. All in all, about 14 tons per year - for 23 US \$ per month.

What the wealthy 1,5 billion could do together is more exciting than writing about our marginal accomplishments. Their capital could have an even greater effect used on more direct measures described in the next article.

<sup>&</sup>lt;sup>1</sup> Wikipedia (August 2018) *Carbon Offset* Accessed February 9 2021 from <a href="https://en.wikipedia.org/wiki/Carbon\_offset">https://en.wikipedia.org/wiki/Carbon\_offset</a>

The price of offsetting CO2 in the voluntary market is set by the cost of taking away or neutralize CO2. The price varies with demand and efficiency of methods used. The mandatory market is priced according to demand from industry of a maximum permissible amount set by EU and where it is mandatory for industry to comply.

I base the voluntary price on the recommendations from IATA (International Air Transport Association) presented 2019<sup>2</sup> for their offset program CORSIA. The Swedish Parliament decided June 2020 on a program for the environment<sup>3</sup> in which IATA's price is referenced to as a future price setter. The price was forecasted to go up from 8 US \$/ton 2021 to 20 US \$/ton after 10 years. I have assumed the higher price as fair for the individual market.

Offsetting is an established way to buy CO2 reductions typically bought from developing countries, through carbon offset providers, and through typical projects as forestation and solar energy plants. The market has existed since the UNFCCC Kyoto protocol 1997 and although criticized on efficiency and procedural grounds the method is recognized. My own conclusion, after having followed the debate for a while, is that offsetting as a method is here to stay. It is not a matter if it is an alternative or not but a matter of implementation.

I base this on the following. The Paris agreement stipulates new recommendations for how offsetting should best be used, in other words it is accepted as such. Offsetting is going to be used to limit the effect of emissions from international flights. Offsetting is agreed upon by EU as a means of reductions as a supplementary method. Offsetting is also the only way to get the present and future levels of CO2 back to pre-industrial levels and the only way to reverse the global overheating that already exist. Cutting down on new emissions can't do that for centuries but must be done and be prioritized to stop matters getting worse.

Please share this article if you sympathize with the thoughts. Also see www.climesave.com

<sup>&</sup>lt;sup>2</sup>International Civil Aviation Organization, ICAO (February 2019) *Working Paper for the Assembly 40th session, point 3.3 Carbon Offsetting, price* Accessed February 9 2021 from <a href="https://www.iata.org/contentassets/e45e5219cc8c4277a0e80562590793da/industry-views-corsia.pdf">https://www.iata.org/contentassets/e45e5219cc8c4277a0e80562590793da/industry-views-corsia.pdf</a>

<sup>&</sup>lt;sup>3</sup> Sveriges Riksdag (2020) *Vägen till en klimatpositiv framtid* Accessed february 9 2021 from <a href="https://www.riksdagen.se/sv/dokument-lagar/dokument/statens-offentliga-utredningar/vagen-till-en-klimatpositiv-framtid-H8B34">https://www.riksdagen.se/sv/dokument-lagar/dokument/statens-offentliga-utredningar/vagen-till-en-klimatpositiv-framtid-H8B34</a> (Swedish Parliament decision on - The road to a positive climate future). Pages 808 and 809. Google Translate makes an accurate translation into English.