

17:11:23 From Elisabeth Green : Establish Evidence of Environmental and Social Credit and Debt

Identify sources of credentialing data such as carbon emissions measurements, carbon stocks and emissions estimates <https://www.nature.com/articles/s41598-019-54386-6>, certificate-issuing university records, registers of deeds, and medical records. Prioritize the results from credentials over self-reporting.

Self-reports may be derived from the most comprehensive of the following footprint calculators.

<https://offset.climateneutralnow.org/footprintcalc>

<https://www.footprintcalculator.org/>

<https://www.allbirds.com/pages/carbon-footprint-calculator>

www3.epa.gov/carbon-footprint-calculator

nature.org/greenliving/carboncalculator/index.htm

carbonfootprint.com/calculator.aspx

<https://registry.verra.org/#/home>

<https://www.cloudcarbonfootprint.org/>

<https://www.ecoinvent.org/> click on List of all ecoinvent datasets

17:12:14 From Elisabeth Green : <https://www.ecoinvent.org/> click on List of all ecoinvent datasets

when you calculate your carbon footprint, do not take into account the consequences both upstream and downstream because it may result in double accounting.

https://ghgprotocol.org/sites/default/files/standards/Scope3_Calculation_Guidance_0.pdf

17:12:39 From Alan Ransil : Super helpful links, thank you Elisabeth!

17:13:53 From Alan Ransil : Christiaan - you're saying sort of establish a set of best practices and make it really clear when a calculator doesn't follow them

17:14:10 From Alan Ransil : Best practices being similar to what's outlined in the links Elisabeth sent

17:14:15 From Elisabeth Green : Please add any other footprint calculators.

17:15:01 From Alan Ransil : <https://www.wren.co/calculator>

17:15:27 From Alan Ransil : Yes!

17:17:24 From Elisabeth Green : Greenhouse gases include carbon dioxide, nitrous oxide, and sulfur dioxide. Roughly 72% of greenhouse gases are made up of Carbon Dioxide (CO₂). Thus, carbon is used as the international standard of measurement in terms of Metric Tonne Carbon Dioxide Equivalent (MtCO₂e). One MtCO₂e is equal to 1000 kilograms of CO₂ emissions (kgCO₂e). The actual carbon content in it is equal to 272.5 kilograms, which is the molecular weight of the Carbon component relative to the Oxygen component (MtCO₂e.com, 2008). A carbon credit is created when one metric tonne of carbon dioxide or its equivalent is prevented from entering the atmosphere or is neutralized from the atmosphere.

https://www.scirp.org/pdf/LCE_2013010211110989.pdf

17:17:33 From Alan Ransil : I think the best practices will evolve

17:20:32 From Alan Ransil : (Really good book touching on this: <https://www.goodreads.com/en/book/show/49644992-the-price-of-peace>)

17:22:00 From Alan Ransil : I think in the long run an environmental credit would account for land use, non-gas pollution, maybe environmental justice aspects, etc

17:22:06 From Alan Ransil : Solid waste

17:22:28 From Alan Ransil : But definitely would need to be designed to evolved over time

17:24:33 From Alan Ransil : Really good potential framework for environmental states relevant to an “environmental credit” <https://science.sciencemag.org/content/347/6223/1259855>

17:25:13 From Elisabeth Green : separating environmental footprint from social footprint accelerates the process of environmental justice by simplifying the issues into hard science and soft science.

17:38:44 From Elisabeth Green : Can we base all currencies on an environmental standard such as a carbon standard? How could we make the standard currency inclusive of all elements?

17:41:37 From Elisabeth Green : Value Credit in Carbon, Environmental, and/or Social Currency
Problem: valuation of carbon currency is hotly debated. See <http://green247.org/life> for a scientific opinion that one tonne CO₂ is worth \$100,000. For example, <https://www.cooleffect.org/> says that 1 tonne = \$8.32 USD, that the average US citizen emits enough carbon dioxide to cause only \$138.11 of damage per year. With that value, 8 billion Earthlings can stop climate change for only \$333 billion (8b x \$8.32/tonne x 5tonne/person) or \$1.3 trillion (8b x \$8.32/tonne x 20tonne/person).

17:42:17 From Elisabeth Green : per year

17:45:42 From Alan Ransil : I have to go - thanks all!

17:46:18 From Stan Chen : And I'll just add that the cost of plastics once it gets leaked into the oceans amounts to \$8000USD/Ton for the cleanup cost alone, where these carbon units can stop damaging the environment.

17:47:36 From Alex Ivan Howard : Thanks for joining, Alan!

17:49:07 From Stan Chen : <https://www.nature.com/articles/s41598-020-71444-6>

17:49:42 From Stan Chen : Hi my mike isn't working!

17:52:04 From Stan Chen : regarding plastics and the relation to GHG, there is a huge impact from virgin plastics production

17:53:21 From Stan Chen : if you can put it in the chat would be great

17:53:56 From Alex Ivan Howard : <https://wiki.hyperledger.org/display/CASIG/New+ideas%2C+debates+and+discussions>

17:55:20 From Stan Chen : so there should be a proposed methodology and agreed upon taxonomy with regards to plastics and GHG emissions/climate change?

18:00:48 From Stan Chen : thanks everyone!