

Discuss concept
Uniform Global Carbon Tax
with your
friends, organization, demonstration, parties,
prime ministers, UN representative
for COP 26 in Glasgow 2020



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References:

James E. Hansen - pioneer work (2009)
Carbon Tax & 100% Dividend vs. Tax & Trade/Cap & Trade
http://www.columbia.edu/~jeh1/2009/WaysAndMeans_20090225.pdf

James E. Hansen - Climate change strategy (2013)
<http://monthlyreview.org/2013/02/01/james-hansen-and-the-climate-change-exit-strategy>

William D. Nordhaus - Clime Clubs (2018)
Presentation on the Nobel Prize awards - On how to involve more states
<https://www.nobelprize.org/uploads/2018/10/nordhaus-slides.pdf>

International Monetary Fund (2019)
Report on the need for global compliance on a uniform minimum level of carbon tax
<https://www.imf.org/en/Publications/FM/Issues/2019/09/12/fiscal-monitor-october-2019>

global concept
for
global inspiration



Uniform Global Carbon Tax

Uniform progressive global tax on the carbon in extracted fossil fuels and its 100 % dividend

For the first time in history, people face a huge global challenge to come to agreement on:

How to make entire society involved in reduction of CO2 emissions?

- Fair** (everyone pays exactly based on the amount of his/her emissions)
- Socially sensitive** (preventing excessive burden to low-income group)
- As efficiently as possible** (so that the money collected does not disappear in a complex administration and ineffective solutions)
- With minimum impact to the quality of life**
- Without limiting people's freedom of choice** (they continue to decide what to do and buy)
- Naturally and gradually** (acceptable gradual quantitative rules modifications instead of persuasion, prohibitions and orders)



People have always wanted, want and will want to meet their needs at a minimum cost.

If economic behavior becomes ecological, the protection of the planet becomes a matter of course. Everyone is involved in protecting the planet's climate. Even those who are not interested in the global problem.

How to fairly charge for what harms the planet?

Taxation of the primary cause of CO2 emissions - carbon in fossil fuels – at the time of extraction. The rest will follow as a result.

James E. Hansen, director of NASA's Goddard Institute for Space Studies, the world's foremost climate scientist and leading economists of the International Monetary Fund agree that the most effective tool is to establish a price of CO2 emissions and tax carbon in fossil fuels (coal, oil, natural gas) directly at extraction. Several countries already have a national carbon tax in various forms, and many others are considering its introduction. This is great, but it will also bring enormous complications, especially associated with export and import. Such complications would be avoided if the fossil carbon tax was set globally, as suggested by the Nobel Prize economist, William D. Nordhaus and physicist Jiri Svoboda, author of this article.

Pioneer idea of National Carbon Tax from 2009

The **basic concept of national carbon tax and 100% dividend** for the US was introduced more than 10 years ago by above mentioned James E. Hansen. Hansen suggests that a tax should be imposed on all carbon contained in fossil fuels extracted in or imported to the state. This tax will be evenly distributed to people in the state (100% dividend) to compensate for price increases by taxing fossil carbon. In trade with countries with a different or no carbon tax the Border Carbon Adjustment will be implemented as a customs tariff. However, this is a desperately complex procedure.

.. not easy to determine footprint of goods...

First of all, the carbon footprint of each exported/imported product needs to be determined, and it is not at all clear what to include; mining the necessary raw materials, building the factory and its operation, manufacturing, transport to the shop, the carbon footprint of the factory employees, ... and what about the carbon footprint of experts calculating the carbon footprint of products and services?

Limits of the Border Carbon Adjustment

In addition, calculating and making different Border Carbon Adjustments between different countries means exponential growth in administration. Thus, it can be expected that the adjustment will only take place on the most carbon-intensive commodities and products, making the system leaky, similar to the Emission Trading System (ETS). This will put pressure on political and official decisions, which is a breeding ground for clientelism and corruption.

No solidarity for countries without fossil fuels?

Another problem is that if a carbon tax on the extraction of fossil fuels is levied at state level, the states with a huge production of fossil fuels (e.g. Saudi Arabia) will drastically benefit from the tax. Conversely, low-emission countries (e.g. D R Congo), where fossil fuels are not extracted, do not have the chance to raise funds from the system to address the often serious consequences of climate change that they did not themselves cause. The system of national carbon taxes cannot therefore be regarded as solidarity from a global perspective.

Save the pure idea and fulfill it globally!

There is a danger that the simple idea of a carbon tax, inconsistently implemented only nationally and not on extracted carbon, will be condemned by citizens and government due to mentioned complications (see Australia, 2014).

The difference between the effects of the concept of global and national carbon taxes is summarized in the table:

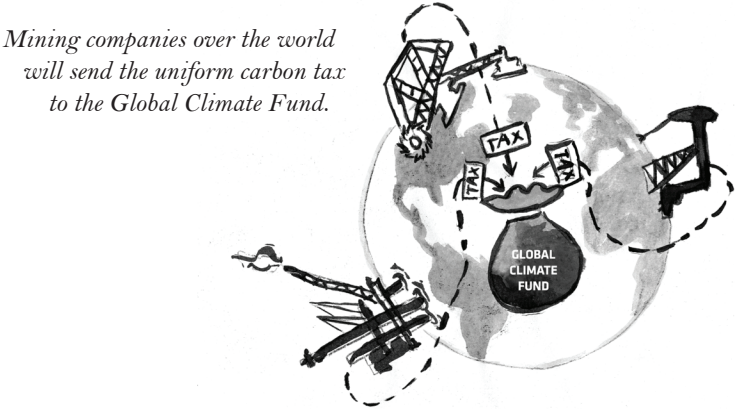
Effect / Concept	Uniform Global Carbon tax	National Carbon tax
Coverage of fossil carbon taxation	Close to 100%	Medium
Administrative demands	Very low	Huge
Barriers to international trade	None	Huge
Global economic solidarity	High	Undefined
Corruption potential	Low	High
Enforceability/feasibility	Unknown, no attempt was made	Politically feasible, impractical
Adjustability of tax progression	Simple	Simple
Perspective	Very high	Very low
Environmental justice	Positive	Neutral

According to a study by the World Bank and the International Monetary Fund (2015): „...call for something like single global price that would guide these policies.“ it is not proper taking the path of different national carbon taxes and losing precious time. Instead the **Heads of all countries should join their forces in favor of a uniform progressive global carbon tax & 100% dividend.**

Concept of Uniform progressive global tax on the carbon in extracted fossil fuels and its 100 % dividend

Tax collection direct from mining companies.

Mining companies worldwide levy the prescribed tax on all the mined carbon to a Global Climate Fund managed, for example, by the International Monetary Fund (IMF) or the World Bank (WB). Mining companies will trade fossil fuels at prices with the uniform global tax included, and manufacturers will purchase all fossil fuels at higher cost. Each end product will then reflect its true carbon footprint in its price. **This trick does not require any calculations**, it is simple, fair, accurate – and, without complicated administration.



Proposal of tax rate and of its progress.

To allow the world economy to adjust and to provide motivation the tax need to be introduced gradually. The carbon tax needs to start at a rather low level and be increasing according to an agreed, pre-announced medium-term scenario (say 10 years). As fossil fuels become more and more expensive, they will be used less and less, and their exploitation will stop in the currently least profitable sources. This will be the most gentle approach to mining companies, when the market and the well-known carbon tax progress scenario will provide them enough information **to decide for themselves** which resources to shut down. Products with a high carbon footprint will become more and more expensive, gradually disappear from the consumer basket of almost all people and stop being produced

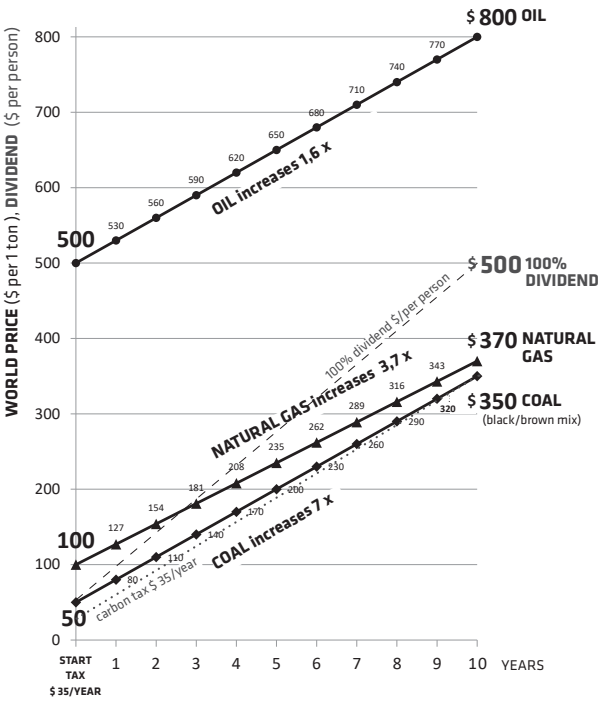
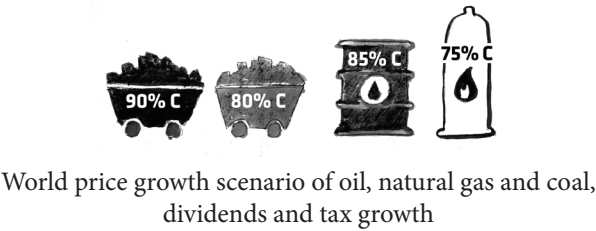


The initial rate of the global carbon tax and its progress would be the subject of political debate at global level. For example, the initial tax rate will be set to \$ 35* per ton of extracted carbon (about \$ 10 per ton of CO2) and its progress will be \$ 35 per year. Such a tax scenario is based on the desirability of reducing global CO2 emissions from burning fossil fuels to around 1/10 by 2050, and such progressing tax has a good prospect to meet this requirement. The amount of carbon in coal, oil and natural gas is known and burning 1 ton of carbon produces almost 4 tons of CO2.

*The calculation of the draft tax rate correlates well with the IMF suggestions that the tax rate should be \$ 75 per ton of CO2 in 2030 (i.e. \$ 300 per ton of fossil carbon).

Percentage of Carbon (C) in individual fossil fuels.

The proposed tax of \$ 35 per ton of extracted carbon (\$ 35/ton carbon tax) means for 1 ton of the specific raw material: Mix of black and brown coal (85% carbon) = tax \$ 30, oil (85% carbon) = tax \$ 30, natural gas (75% carbon) = tax \$ 27.



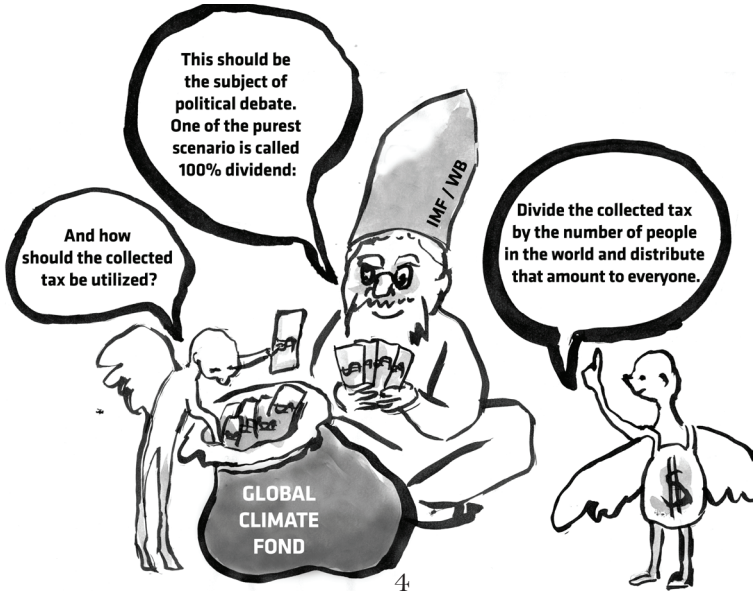
Any market-distorting subsidies for renewables or other selected low-carbon measures will be fair to abolish. Emission-free resources become soon or later competitive to more and more expensive fossil fuels and they will be spontaneously invested. Their research and development will accelerate even without any subsidies.

What to do with the collected tax?

100% dividend to offset price increases by taxing fossil carbon.

Dr. Svoboda in accordance with Dr. Hansen and with the latest IMF report (Fiscal Monitor, Oct. 2019, *How to Mitigate Climate Change*), proposes that the tax collected be distributed to all countries according to their population with the recommendation* that it is the best to distribute the collected tax uniformly to all citizens of the country or in similar socially beneficial means.

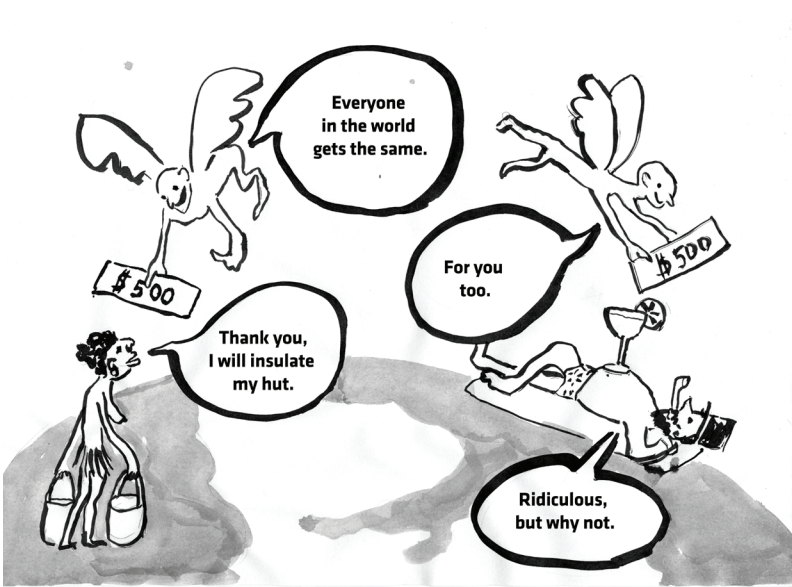
*Payments to the countries found in violation with the tax distribution recommendations will be suspended and retained in the Fund until the appropriate use of the tax is guaranteed. This can have a positive effect on states with an unstable or undemocratic regime.



100% dividend from the collected tax to people

Countries could use the existing system to pay dividends (e.g. bonus to salary, pension, social benefit or income tax reduction). As the carbon tax will grow gradually from a small value, possible mistakes in the system will initially have no serious consequences and there will be sufficient time to fine-tune the system functionality.

Consumers and states with below-average carbon footprint (most in the world) will benefit from such a system, those with a high carbon footprint will have a loss. There will be a net flow of money from high-carbon to low-carbon consumers and countries. If the carbon tax increases annually by \$ 35, after 10 years everyone in the world will receive an annual dividend of around \$ 500 (see chart). At this rate of carbon tax progress, coal use can be expected to cease within 10 years, and oil and gas consumption will be significantly reduced in 20-30 years.



Why could we all enjoy a global carbon tax and 100% dividend?

Developing countries will appreciate the inflow of money (dividend), which will help to improve their living situation and enable them to invest in low carbon technologies. Developing countries are then likely to skip the fossil carbon-based phase.

Developed countries and wealthy people could welcome the ethical dimension of the carbon tax, which would temporarily legalize their lives associated with high CO2 emissions and, at the same time, due to the development of low carbon technologies they might not lose their standard of living even in the low carbon way of life.

Countries that already have a carbon tax would abolish tremendous difficulties in offsetting the carbon footprint of imported and exported goods.

Right-wing parties would appreciate the simplicity of system rules and efficiency of the market-based instrument used.

Left-wing parties could highlight the social aspects of closing global scissors and reducing the pressure on migration.

Environmentalists would enjoy the direct impact of carbon tax on the behavior of each individual and on the overall decarbonisation of the global economy.

Climate-skeptics could appreciate that there is no longer any need to subsidize climate protection ineffectively and that the appropriate green technologies are not selected by politicians and ideologies, but by a fair undistorted market.

The UN could propose a Global Carbon Tax and 100% Dividend as a very effective climate protection tool, discuss it with experts and promote it to the leading politicians at COP 26 in Glasgow (2020), and win universal recognition.

The concept of a Uniform Global Carbon Tax and 100% dividend could become a unifying element of the contemporary world!