

IUCN Congress

CFA – Conservation Finance Pavilion

Reforming Harmful Subsidies

Marseille 6 September 2021

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Water & Ecosystems; Environmental Performance country peer reviews

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Salaam Aleikum and Greetings from Roma!



Key points

- 1) BHS harmful subsidies reform in the frame of EHS reform (or FFS), BHS: a) deal with 1-2 clearly harmful subsidies, or b) in the frame of EFR (Ecological Fiscal Reform), of GTR (General Tax Reform)
- 2) we can (we must) help the poor and the vulnerable citizens-consumers, maybe also some vulnerable industrial & agricultural sectors, but not by under-pricing the environment
- 3) the importance of national catalogues/inventories (e.g. Fra, Ger, Ita, ...) to prepare knowledge for policy-makers and politicians who will decide and act
- 4) the importance of IGOs (Oecd, Unep, Undp, Imf, Irena, Wb, ...) and Think Tanks (Iisd-Gsi, Ieep, Vva, Wri, Gbe, ...) working on these issues
- 5) the usefulness of G20 FFS PRs, the need to accelerate them and agree action,
- 6) the importance of cooperation between the 3 communities of experts: industry-energy, fiscal-finance and environment-biodiversity
- 7) the misinterpretation of "inefficient" FFS (descriptive, not limiting the scope of analysis)
- 8) the opportunity that biodiversity scientists take the issue on board (IPBES, but also IPCC, IRP, IUCN)
- 9) the link to SDGs, UN-CBD, UN-FCCC
- 10) G7 and G20

1) Biodiversity subsidies reform

- in the frame of BHS (Biodiversity/Nature/Fisheries/Natural Capital Harmful Subsidies)
 - in the frame of FFS (Fossil Fuel Subsidies) reform
 - in the frame of EHS (Environmentally Harmful Subsidies) reform
- in the frame of EFR (Ecological/Environmental/Green Fiscal Reform)
 - [e.g. shifting the tax burden from labour and firms to pollution and the use of natural resources]
 - in the frame of GTR (General Tax Reform)
 - *No “optimal” solution: depends on political conditions*
- 1-2 measures (e.g. Indonesia energy subsidies, Germany excise/labour, Sweden CO2 tax)
 - EFR (e.g. Sweden, Norway, Finland)
 - GTR (Ireland water/CO2, Portugal, Italy?)
 - *No optimal solution: depends on political conditions*
- Level:
 - National – Sub-National (States-Provinces-Regions-Counties-Länder)
 - Regional (e.g. Apec - EU - AU - Nafta/Umsca) - Global level
- *The larger, the better: economies of scale and scope, level playing field, common effort*

2) we can (we must) **help the poor** and the vulnerable citizens-consumers, maybe also some vulnerable industrial & agricultural sectors,

but not by under-pricing the environment

solidarity is fundamental , but redistribution issues might probably be treated as general affordability to life, not specific to each sector, energy, food, water, ...

we have alternative instruments: reduction on income tax, environmental checks, direct transfers, ...

the idea of “offering” something in exchange, compensation measures not as a privilege but as a means to eliminate market distortions, apply the polluter-pays-principle, internalize externalities, promote sustainability

to be announced together, possibly the day before, certainly not the day after (case of French Gilet Jaunes or Italian Plastic Tax)

3) the importance of **national catalogues/inventories** (e.g. Fra, Ger, Ita, Swe, Fin, Swi) to prepare knowledge for policy-makers and politicians who will decide and act

- France - Sainteny Report – BHS (2012)
- Germany - Environment Agency - EHS (2012, 2017)
- Germany - Nature Agency - BHS (2020)
- Sweden - EHS
- Italy - EHS-EFS (2017-18-19)
- Finland - EHS
- Switzerland - EHS (2020)
- France - Greening State Budget - EHS-EFS (2020)
- G20 FFS Peer Reviews
- APEC FFS Peer Reviews

CATALOGUE EHS-EFS ITALY

Madamina, il catalogo è questo [...]
un catalogo egli è che ho fatt'io;
Osservate, leggete con me.
In Italia seicento e quaranta;
In Alemagna duecento e trentuna;
Cento in Francia, in Turchia novantuna;
Ma in Ispagna son già mille e tre.
(Atto I, Scena 5, Don Giovanni di Mozart)



CATALOGO

DEI SUSSIDI AMBIENTALMENTE FAVOREVOLI E DEI SUSSIDI AMBIENTALMENTE DANNOSI 2016

COME STABILITO DALL'ARTICOLO 68 DELLA LEGGE 28 DICEMBRE 2015, N. 221
("DISPOSIZIONI IN MATERIA AMBIENTALE PER PROMUOVERE MISURE DI GREEN ECONOMY
E PER IL CONTENIMENTO DELL'USO ECCESSIVO DI RISORSE NATURALI")
DETTA COLLEGATO AMBIENTALE
(GU SERIE GENERALE N. 13 DEL 18-1-2016)



Direzione Generale per lo sviluppo sostenibile, per il danno ambientale e per i rapporti con l'Unione
Europea e gli organismi internazionali (SVI) - U.A.T. Sogesid

DICEMBRE 2016



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LUGLIO 2018



MINISTERO DELL'AMBIENTE
DELLA TUTELA DEL TERRITORIO E DEL MARE

CATALOGO DEI SUSSIDI AMBIENTALMENTE DANNOSI E DEI SUSSIDI AMBIENTALMENTE FAVOREVOLI 2018

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DICEMBRE 2019



4) the importance of ~~IGOs and Think Tanks~~ working on these issues

IGOs:

➤ OECD, BHS, Scaling up biodiversity finance, Fossil Fuel Subsidies

Inventory, Fisheries Subsidies, EFR, Pine Database

➤ UNEP, Green Fiscal Policy Network, with IMF and GIZ

➤ IMF, work on externalities

➤ IRENA, Energy Subsidies Report, recent G20 supporting event

➤ UNDP-Biofin Catalogue with 140 measures available for biodiversity

➤ World Bank, CPLC Carbon Pricing Leaders Coalition

➤ ...

Think Tanks:

➤ IISD-GSI

➤ IEEP, research on EFR for the European Commission

➤ VVA, research on EHS for the European Commission

➤ WRI

➤ GBE (Green Budget Europe) - EEB (European Environment Bureau)

➤ ...

**5) the usefulness of G20 PRs on FFS
(G20 Peer Reviews on Fossil Fuel Subsidies),**

2016: China and Usa

2017: Mexico and Germany

2018: Indonesia and Italy

2019: Argentina and Canada (expected)

2020: Netherlands

2021: next? France and India?

the need to accelerate them and agree action,

**Should we propose similar Peer Reviews for BHS,
Fisheries, Nature, Natural Capital, ...**

6) the importance of cooperation between the **3 communities of experts:**
energy-industry, fiscal-finance and environment-biodiversity

the G20 Peer Reviews

advantages and limits of the voluntary nature
cannot be only a matter for one area of expertise

Indonesian and Italian experience on FFS

legitimate different points of views
compromise, synthesis and consensus should not target the lowest level
transparency

7) the misinterpretation of "inefficient" FFS (descriptive, not limiting the scope of analysis)

G20 Pittsburgh 2009 – Statement (Communiqué)

29. Enhancing our energy efficiency can play an important, positive role in promoting energy security and fighting climate change. Inefficient fossil fuel subsidies encourage wasteful consumption, distort markets, impede investment in clean energy sources and undermine efforts to deal with climate change. OECD and IEA have found that eliminating fossil fuel subsidies by 2020 would reduce global greenhouse gas emissions in 2050 by ten percent. Many countries are reducing fossil fuel subsidies while preventing adverse impact on the poorest. Building on these efforts and recognizing the challenges of populations suffering from energy poverty, we commit to:

Rationalize and phase out over the medium term inefficient fossil fuel subsidies that encourage wasteful consumption. As we do that, we recognize the importance of providing those in need with essential energy services, including through the use of targeted cash transfers and other appropriate mechanisms. This reform will not apply to our support for clean energy, renewables, and technologies that dramatically reduce greenhouse gas emissions. We will have our Energy and Finance Ministers, based on their national circumstances, develop implementation strategies and timeframes, and report back to Leaders at the next Summit. We ask the international financial institutions to offer support to countries in this process. We call on all nations to adopt policies that will phase out such subsidies worldwide.

30. We request relevant institutions, such as the IEA, OPEC, OECD, and World Bank, provide an analysis of the scope of energy subsidies and suggestions for the implementation of this initiative and report back at the next summit.

All fossil fuel subsidies are inefficient from an economic and environmental point of view. Some Countries and some experts have tried to limit the scope of analysis hiding behind “inefficient” and “wasteful consumption” (what about production?)

SDG Indicator 12.c: fossil fuel subsidies

- SDG 12.c “Rationalize inefficient fossil-fuel subsidies that encourage wasteful consumption by removing market distortions, in accordance with national circumstances, including by restructuring taxation and phasing out those harmful subsidies, where they exist, to reflect their environmental impacts, taking fully into account the specific needs and conditions of developing countries and minimizing the possible adverse impacts on their development in a manner that protects the poor and the affected communities”.
 - UNEP (UN Environment) is the “custodian” of the indicator. The Experts Group has developed the methodological document with OECD, IISD-GSI and Country experts.
 - Indicator upgraded by UN-IAEG
From Tier III (*no internationally established methodology*)
To Tier II (*conceptually clear, has an internationally established methodology and standards are available, but not all countries are collecting data on a regular basis*).
- The Indicator include all FFS, not only those restricted to inefficient**

**8) the opportunity that biodiversity scientists take the issue on board (IPBES, but also IPCC, IRP, IUCN)
role of CFA?**

9) let's use our common work in the international human community with the links

- to SDGs (UN Agenda 2030 Sustainable Development Goals)
- to UN-FCCC (UN Framework Climate Change Convention) and Paris Agreement – Pre-COP Milano (Italy) and COP Glasgow (Scotland-UK)
- to UN-CBD (UN Convention on Biological Diversity), Aichi Targets, COP Kunming (China)

Without robust biodiversity, ecosystems services and natural capital, there is no support for our economic systems

10. G7 and G20

Communiqué G7 Cornwall 13.07.2021 inter alia:

28. [...] “Looking ahead to the 12th WTO Ministerial Conference (MC12) in November, we will work with other WTO members to make progress on immediate issues, including reaching a meaningful conclusion to the multilateral negotiation on **fisheries subsidies** and advancing negotiations on e-commerce”. [...]
30. [...] “market-distorting actions of state owned enterprises, and **harmful industrial subsidies**, including those that lead to excess capacity;” [...]
38. [...] “facilitate the clean, green transition. More broadly, **we reaffirm our existing commitment to eliminating inefficient fossil fuel subsidies by 2025, and call on all countries to join us**, recognising the substantial financial resource this could unlock globally to support the transition and the need to commit to a clear timeline. [...]

10. G7 and **G20**

Indonesia next **G20 Presidency starting on 1st Dec. 2021,**
discussions on the topics of **energy subsidies and FFS**

- 9 July - G20 ETWG – CSWG Energy Transitions and Climate Sustainability Working Group extraordinary sessions
- 11 July - G20 Venice Conference on Climate (Venezia)
- 20-21 July - 4th Energy Transitions and Climate Sustainability Working Group
- 22 July - **Environment Ministers' Meeting (Napoli)**
- 23 July - Climate and Energy Joint Ministerial Joint Session (Napoli)
- 23 July - Energy Ministers' Meeting (Napoli)
- 30-31 October - **G20 LEADERS' SUMMIT (Roma)**

Key points

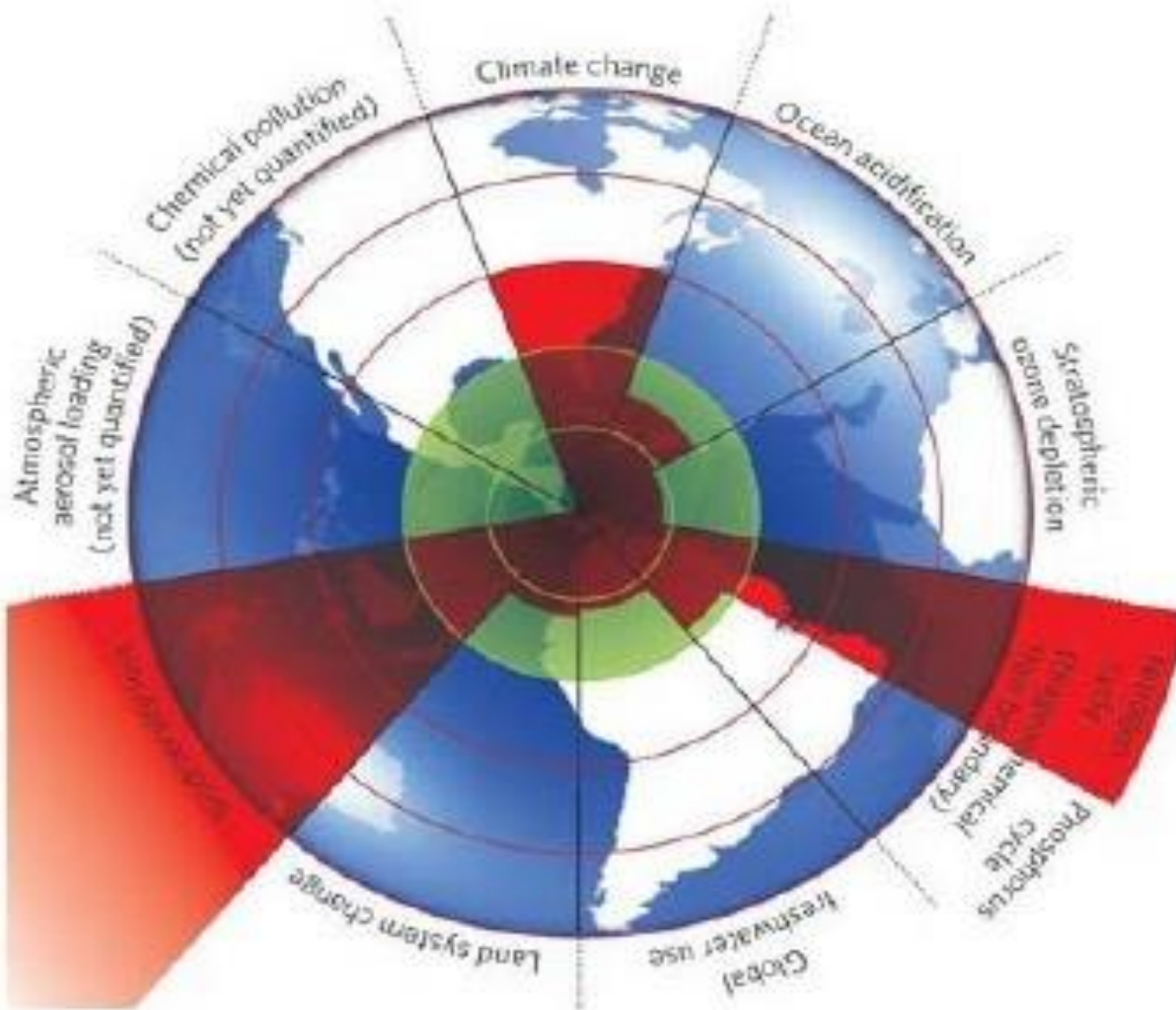
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Background slides
for possible discussion

10 Planet Ecosystems to be kept under control:

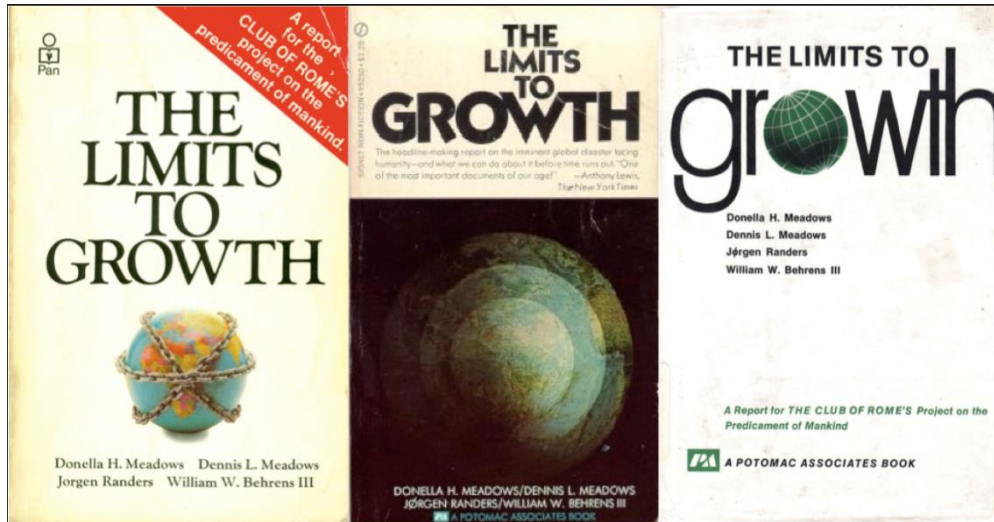
1. Climate change
2. Biodiversity loss
3. Nitrogen cycle
4. Phosphorus cycle
5. Stratospheric ozone depletion
6. Ocean acidification
7. Global freshwater use
8. Land system change
9. Atmospheric aerosol loading
10. Chemical pollution



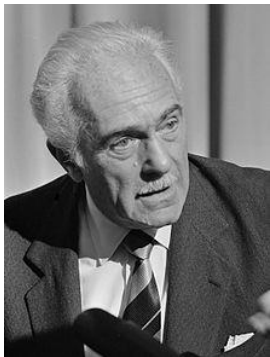
Source: Rockstrom et al (2009)

BE BASED ON AVAILABLE SCIENCE: THE PLANETARY BOUNDARIES

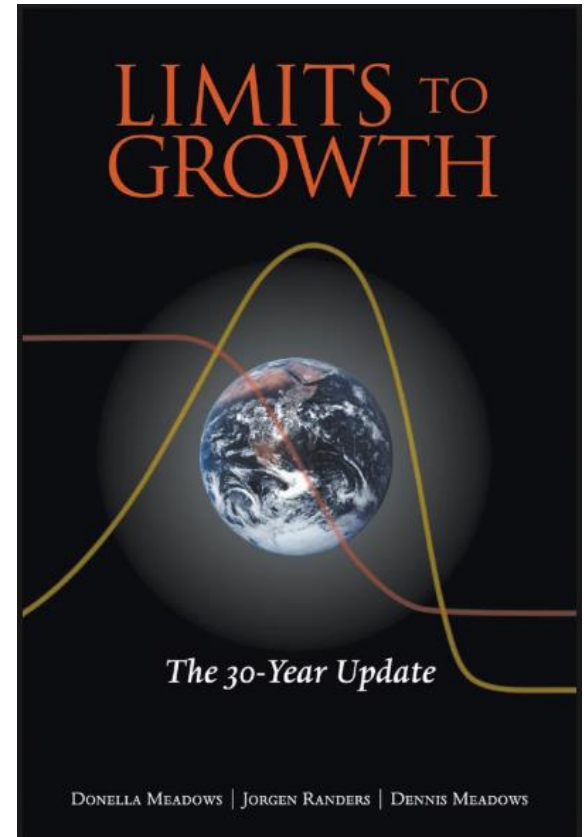
Club of Rome (1968): the MIT study 1972 – Oct. 2018 (50 years celebration in Rome)



1968



“It is not impossible to foster a human revolution capable of changing our present course”.
Aurelio Peccei.



2018

EU Economists' Statement on Carbon Pricing

Launched at EAERE 2019 Manchester in view of the COP UN-FCCC
Global climate change - serious problem calling - immediate & ambitious action.

1. A price on carbon offers the most cost-effective lever to reduce carbon emissions at the scale and speed that is necessary. ...
2. Action should be taken to ensure that the price on carbon gradually increases until the goals of the Paris Agreement are met. ... A carbon price can be set through a tax or an emissions trading system.
3. The EU has established an ETS ... the cap needs to be tightened further, the share of auctioned permits increased. A border carbon adjustment system could be considered in a multilateral context.
4. In parallel to the EU ETS, a carbon tax in transport and housing. In particular, the tax exemption of the international aviation and maritime sectors needs to be addressed.
5. ... revenues could be used to support innovation and to address social and distributional impacts of carbon pricing.

European economists encourage the emergence of a global carbon price

Environmental Taxation and Green Fiscal Reform

- GFR: Green/Environmental/Ecological Tax/Fiscal Reforms
- Level of Environmental taxation still low in OECD Countries (1-5% of GDP, 2-14% of Total Revenues); wide margins; shifting tax-bases;
- Distribution problems can be solved (income tax, direct subsidies)
- Removing EHS Environmentally Harmful Subsidies (Fossil Fuel Subsidies but not only: Nuclear, Water, Waste, Transport, Land, ...)
- Introducing EFS Environmentally Friendly Subsidies must be done efficiently but is justifiable for a transition period
- Environmental taxes do not distort the market, they restore fair market conditions (transparency, competition, economic efficiency, level playing field)

OECD Policy Instruments

Policy Instruments for EP-GG-SD-LC

(Environmental Policy – Green Growth – Sustainable Development – Low Carbon)

1. Regulatory Instruments
2. Voluntary Instruments
3. Economic Instruments
- + Environmental Assessment Instruments (IA/SDIA/RIA-SEA-EIA-Emas-Ecolabel)

Economic Instruments for EP-GG-SD-LC

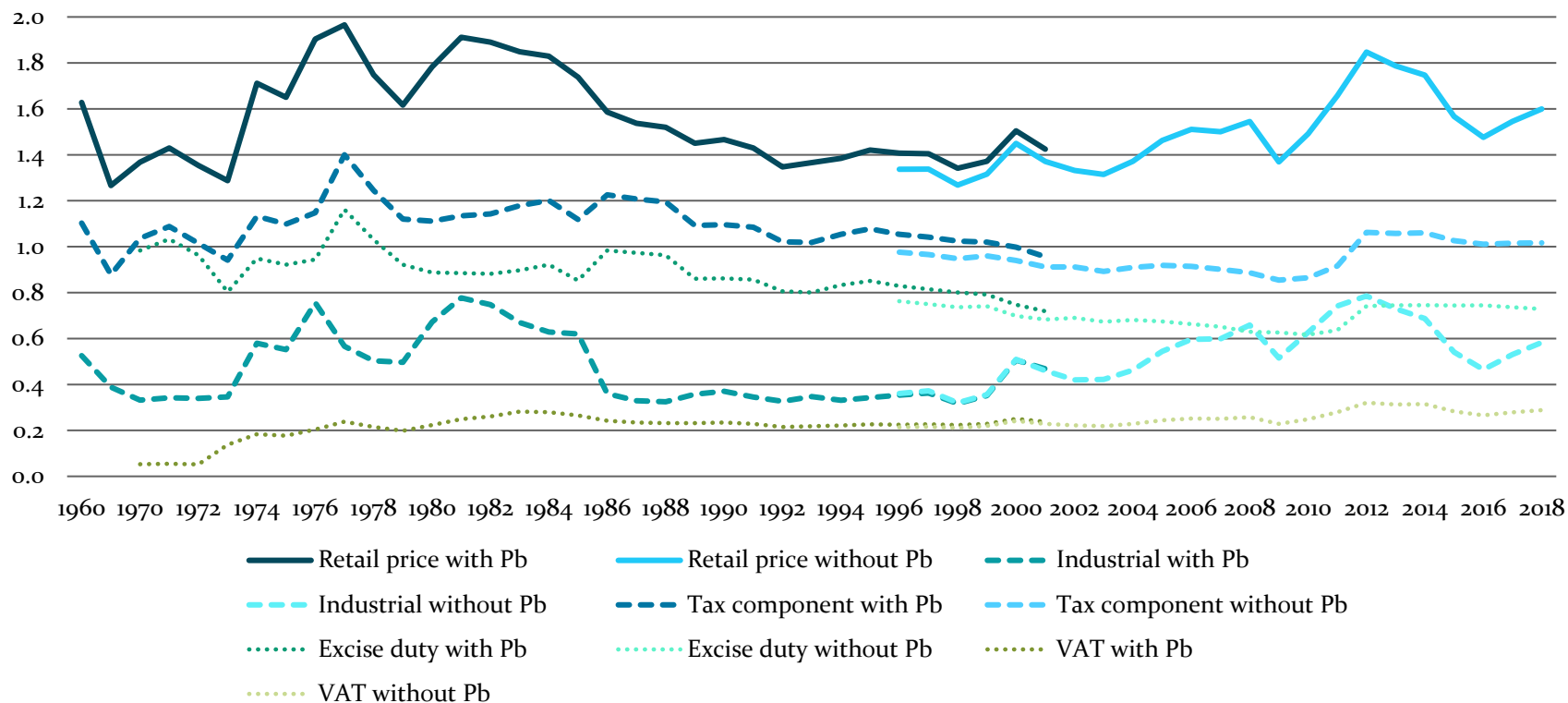
- a) Environmental Taxes or Taxes with an environmental impact
- b) Environmental Fees/Charges/Tariffs
- c) Deposits systems
- d) Sanctions-penalties
- e) Creation of markets where they do not exist
(e.g. ETS-Insurance-GPP-GreenCertificates-WhiteCertificates)

OECD Data, Analysis & Policy Work

- Effective Carbon Rates
- Inventory of Fossil Fuel Subsidies
- Scaling up Financial Instruments for Biodiversity
- Green Budgeting
- Environmental Performance Country Reviews
- Technical support and chairship of G20 FFS PRs

Italy - Price of gasoline with tax component (Euro constant 2017 per litre)

Source: Mattm processing on MiSE and UP data (Istat GDP deflator)



The Catalogue on EHS and EFS in Italy

- The first edition of the Catalogue was transmitted to the Parliament in 2017 and identified 131 measures for a total financial effect of an estimated 41 bl. €
 - 16.2 bl. € of EHS (FFS estimated at 12.2 bl. €)
 - 15.7 bl. € of EFS;
- The third edition identified 171 measures for a total financial effect of an estimated 44 bl. €
 - 19.7 bl. € of EHS (FFS are estimated at 17.7 bl. €)
 - 15.7 bl. € of EFS
 - 8.1 bl. € of EUS (uncertain)
- 75% of EHS are tax expenditures
- **EHSs: Environmentally Harmful Subsidies**
- **EFSs: Environmentally Friendly Subsidies**
- **FFSs: Fossil Fuel Subsidies**

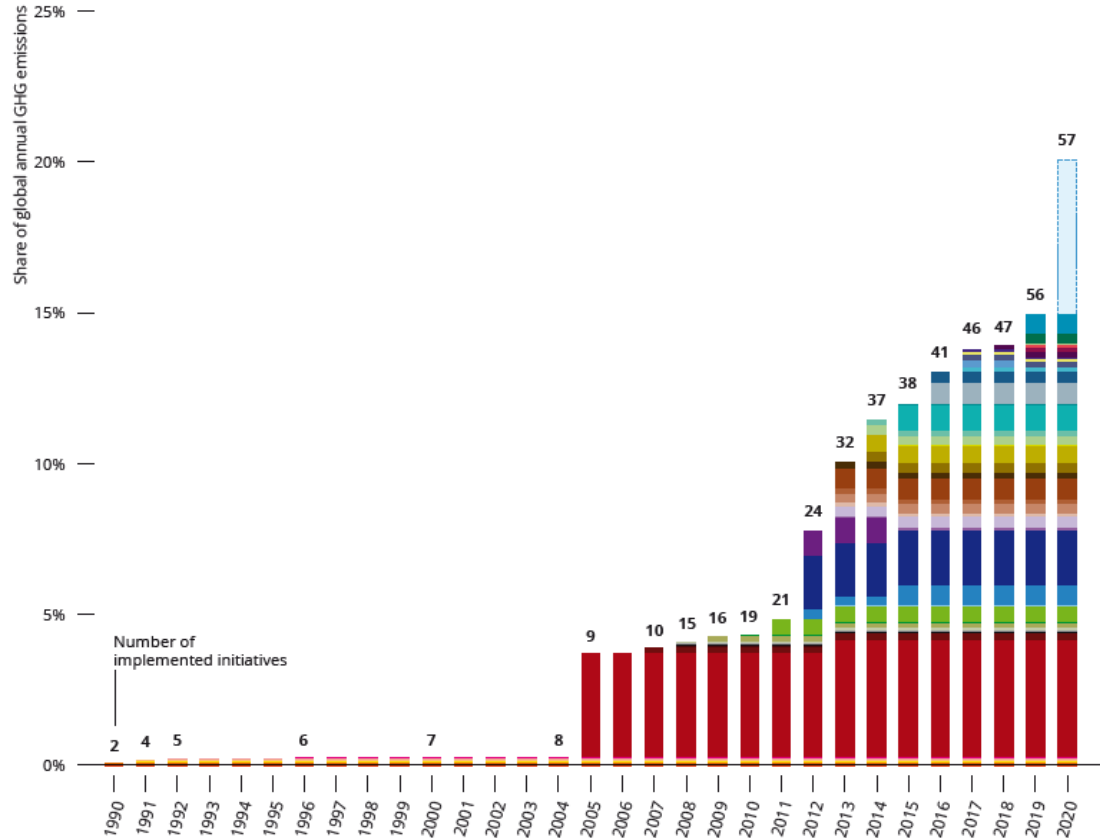
State and Trends of Carbon Pricing 2019 - CPLC

CARBON PRICING INITIATIVES AROUND THE WORLD



Range of prices in existing initiatives
US\$1 - 127/tCO₂e

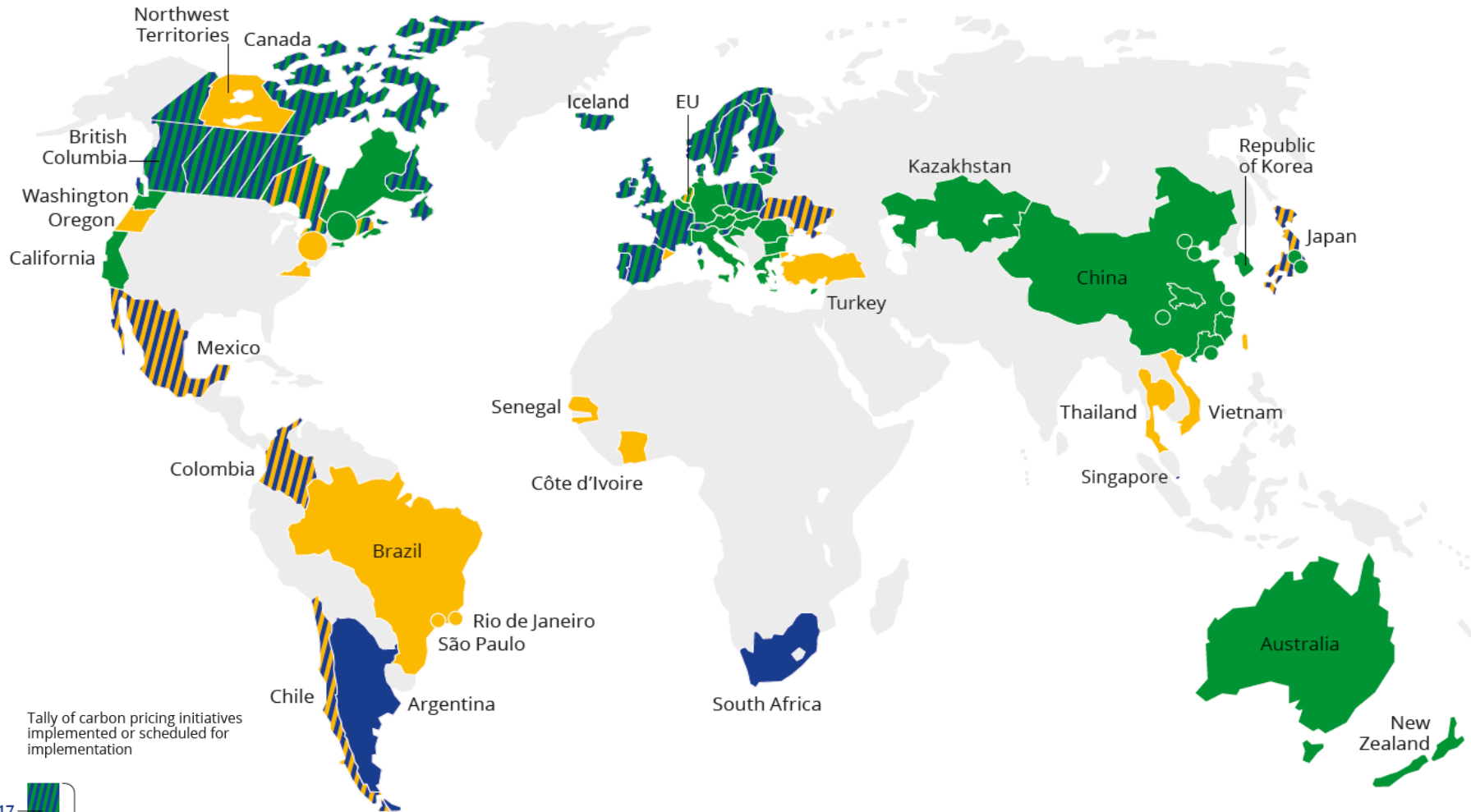
51% of the emissions covered are priced < US\$10/tCO₂e



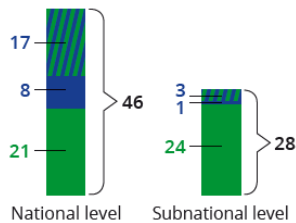
- Finland carbon tax (1990 →)
- Poland carbon tax (1990 →)
- Norway carbon tax (1991 →)
- Sweden carbon tax (1991 →)
- Denmark carbon tax (1992 →)
- Slovenia carbon tax (1996 →)
- Estonia carbon tax (2000 →)
- Latvia carbon tax (2004 →)
- EU ETS (2005 →)
- Alberta CCIR (2007 →)
- Switzerland ETS (2008 →)
- New Zealand ETS (2008 →)
- Switzerland carbon tax (2008 →)
- Liechtenstein carbon tax (2008 →)
- BC carbon tax (2008 →)
- RGGI (2009 →)
- Iceland carbon tax (2010 →)
- Tokyo CaT (2010 →)
- Ireland carbon tax (2010 →)
- Ukraine carbon tax (2011 →)
- Saitama ETS (2011 →)
- California CaT (2012 →)
- Japan carbon tax (2012 →)
- Australia CPM (2012 - 2014)
- Québec CaT (2013 →)
- Kazakhstan ETS (2013 →)
- UK carbon price floor (2013 →)
- Shenzhen pilot ETS (2013 →)
- Tianjin pilot ETS (2013 →)
- Beijing pilot ETS (2013 →)
- Guangdong pilot ETS (2013 →)
- France carbon tax (2014 →)
- Mexico carbon tax (2014 →)
- Spain carbon tax (2014 →)
- Hubei pilot ETS (2014 →)
- Chongqing pilot ETS (2014 →)
- Mexico carbon tax (2014 →)
- Portugal carbon tax (2015 →)
- BC GGIRCA (2016 →)
- Australia ERF Safeguard Mechanism (2016 →)
- Fujian pilot ETS (2016 →)
- Washington CAR (2017 →)
- Ontario CaT (2017 - 2018)
- Alberta carbon tax (2017 →)
- Chile carbon tax (2017 →)
- Colombia carbon tax (2017 →)
- Massachusetts ETS (2018 →)
- Argentina carbon tax (2018 →)
- Canada federal OBPS (2019 →)
- Singapore carbon tax (2019 →)
- Nova Scotia CaT (2019 →)
- Saskatchewan OBPS (2019 →)
- Newfoundland and Labrador carbon tax (2019 →)
- Newfoundland and Labrador PSS (2019 →)
- Canada federal fuel charge (2019 →)
- Prince Edward Island carbon tax (2019 →)
- South Africa carbon tax (2019 →)
- China national ETS (2020 →)

State and Trends of Carbon Pricing 2019

Source: «State and Trends of Carbon Pricing 2019», World Bank – April 2019.



Tally of carbon pricing initiatives implemented or scheduled for implementation



- ETS implemented or scheduled for implementation
- Carbon tax implemented or scheduled for implementation
- ETS or carbon tax under consideration
- ETS and carbon tax implemented or scheduled
- Carbon tax implemented or scheduled, ETS under consideration
- ETS implemented or scheduled, carbon tax under consideration
- ETS and carbon tax implemented or scheduled, ETS or carbon tax under consideration

Carbon Pricing (CP) – The Faster Principles for Successful CP (CPLC)

- **Fairness**

Italy identifies, through the first Catalogue of environmentally harmful and friendly subsidies (respectively, EHS and EFS), sectors benefitting of subsidies damaging the environment. Encouraging a reform helps to restore, in accordance with the Polluter Pays Principle (henceforth PPP), fairer market conditions and contributes to an environmental fiscal reform (fiscal pressure on labour and firms to consumption and production damaging the environment).

- **Alignment of Policies and Objectives**

Italy participates to the G20 FFS self-report with Indonesia. This encourages to remove FFS and align energy policy with climatic objectives, providing consistent signals to consumers, producers and investors. The reports recommend an ex-ante environmental impact assessment for future incentives in order to ensure alignment with climatic and environmental policies.

- **Stability and Predictability**

In the Catalogue, Italy considers free allocation of ETS allowances as a EHS. The reduction of free allocations and hence the extension of the PPP has to keep a stable, fast and predictable pace towards full auctioning.

- **Transparency**

Italy published the Catalogue on EHS and EFS to make transparent statement on the environmental impact of fiscal policy. The participation to the 2018 G20 FFS self-report aims at enhancing further transparency on FFS through the disclosure of data and legislative measures.

- **Efficiency and Cost-Effectiveness**

Through the Catalogue, Italy identifies exemptions from current taxes (e.g. excise duties). Removing these barriers leaves place to EFR and increase taxes in different polluting sectors. This enables affected entities to adjust decision-making process.

- **Reliability and Environmental Integrity**

Removing EHS is the first step to discourage environmentally harmful behaviours. Improving the EU-ETS scheme and enhancing EFR will ensure environmental integrity and contribute to reach the Paris Agreement and UN 2030 Agenda SDGs. (“Measuring Fossil Fuel Subsidies in the Context of the SDGs” UNEP-IISD/GSI-OECD, SDG indicator 12.c.1).

4 dimensions of Innovation for the Energy Transition



● ENABLING TECHNOLOGIES

- 1 Utility-scale batteries
- 2 Behind-the-meter batteries
- 3 Electric-vehicle smart charging
- 4 Renewable power-to-heat
- 5 Renewable power-to-hydrogen
- 6 Internet of things
- 7 Artificial intelligence and big data
- 8 Blockchain
- 9 Renewable mini-grids
- 10 Supergrids
- 11 Flexibility in conventional power plants

● BUSINESS MODELS

- 12 Aggregators
- 13 Peer-to-peer electricity trading
- 14 Energy-as-a-service
- 15 Community-ownership models
- 16 Pay-as-you-go models

● MARKET DESIGN

- 17 Increasing time granularity in electricity markets
- 18 Increasing space granularity in electricity markets
- 19 Innovative ancillary services
- 20 Re-designing capacity markets
- 21 Regional markets
- 22 Time-of-use tariffs
- 23 Market integration of distributed energy resources
- 24 Net billing schemes

● SYSTEM OPERATION

- 25 Future role of distribution system operators
- 26 Co-operation between transmission and distribution system operators
- 27 Advanced forecasting of variable renewable power generation
- 28 Innovative operation of pumped hydropower storage
- 29 Virtual power lines
- 30 Dynamic line rating

Source: IRENA (2019b)

Source: Solutions to integrate high shares of variable renewable energy: A report from the International Renewable Energy Agency (IRENA) to the G20 Energy Transitions Working Group (ETWG) – 2019

EU Economists' Statement on Carbon Pricing

Global climate change is a serious problem calling for immediate and ambitious action. Guided by sound economic principles, we are united in the following policy recommendations:

1. A price on carbon offers the most cost-effective lever to reduce carbon emissions at the scale and speed that is necessary. By correcting a well-known market failure, a carbon price sends a powerful signal, steering economic actors towards a low-carbon future. This encourages technological innovation, large-scale infrastructure development, as well as the diffusion of carbon-efficient goods and services.
2. Action should be taken to ensure that the price on carbon gradually increases until the goals of the Paris Agreement are met. A sufficiently robust price on carbon reduces the need for less efficient policies and provides the regulatory certainty companies need for long-term investment in clean-energy alternatives. A carbon price can be set through a tax or an emissions trading system.
3. The European Union has established an Emissions Trading System (ETS) covering the energy and manufacturing sectors, as well as intra-European aviation. To improve the effectiveness of the ETS, the cap needs to be tightened further while the share of auctioned permits should be increased. To safeguard competitiveness, a border carbon adjustment system could be considered in a multilateral context.
4. In parallel to the EU ETS, a carbon tax should be adopted to reduce the greenhouse gas emissions in transport and housing. In particular, the tax exemption of the international aviation and maritime sectors needs to be addressed.
5. To promote the effectiveness, fairness and political viability of EU's carbon pricing, revenues could be used to support innovation and to address social and distributional impacts of carbon pricing.

European economists encourage the emergence of a global carbon price and are committed to deepen the understanding of carbon pricing, both as carbon taxes and emissions trading.

EU Economists' Statement on Carbon Pricing

Launched at EAERE 2019 Manchester

Signed by 1,700 economists

Proposed by:

Jos Delbeke, EU Commission, 20 years Director for Environment and Climate (1992 EU Carbon-Energy Tax proposal with Majocchi & Delors)

Ottmar Edenhofer, Potsdam, IPCC, Enciclica Laudato Si

Carlo Carraro, U. Venezia, IPCC

Herman Vollebergh, PPBL Netherlands, U. Tilburg

Dominique Bureau, French Ministry of Ecology

Cameron Hepburn, Oxford U.

Xavier Labandeira, Vigo U.

Simon Dietz, LSE, London School of Economics

Christian Gollier, Toulouse U.

Thomas Sterner, Goteborg U.

Aldo Ravazzi Douvan, Italian Ministry of Ecology

<https://www.eaere.org/statement/>

IRP-UNEP, OECD, WRI support to G7 Environment Italian Presidency 2017

