



Eliminating or transforming biodiversity-damaging incentives Where does Switzerland stand in international comparison, what progress has been made and what are the success factors?

> Natural History Museum, Bern 11 May 2023

Recording, transforming and abolishing biodiversity-damaging subsidies in Switzerland's neighboring countries

The Example of Italy

Aldo Ravazzi Douvan, Ministry of Environment and Energy Security, Directorate EU & Global Affairs, Chief Economist - T.A. Sogesid Past-President OECD Tax & Environment Experts Meeting Past-President OECD WP Biodiversity, Water & Ecosystems Coordinator of 4 Catalogues of Environmental Subsidies and Technical Secretary of 3 Natural Capital Committee reports

Abbreviations

BHS Biodiversity Harmful Subsidy

BFS Biodiversity Friendly Subsidy

CBD Convention on Biological Diversity

EFR Environmental Fiscal Reform

EFS Environmentally Friendly Subsidy

EHS Environmentally Harmful Subsidy

FFS Fossil Fuel Subsidy

GTR General Tax Reform

SDG Sustainable Development Goals

Introduction: the Catalogue's Framework (1/3)

In international fora, the commitments, pledges, declarations to remove-reform EHS (with a focus on FFS and BHS), and free-up fiscal space for environmental public action, are escalating since the **G20 Summit in Pittsburgh in 2009 and CBD Aichi Targets 2010**. To date, substantial political acts in that regards have been very modest.

The Italian EHS-EFS Catalogue represents a (evolving) **knowledge platform** at the service of:

- policy-makers (Parliament & Government);
- scientific community;
- civil society.



CATALOGO DEI SUSSIDI AMBIENTALMENTE DANNOSI E DEI SUSSIDI AMBIENTALMENTE FAVOREVOLI 2019-2020

ARTICOLO 68 DELLA LECCE 28 DICEMBRE 2015, N. 221

("DUPOLIZIONI IN MATERIA AMBIENTALE PER PROMODURER MILITE DI GREEN ECONOMY

E PER IL CONTENMENTO DELL'USO ESCESSIVO DI RISORIE NATURALI?")

DETTA COLLEGATO AMBIENTALE

(GU SERIE GENERALE N. 15 DEL 18-1-2016)



Direzione Generale per la crescita sostenibile e la qualità dello sviluppo (Cress) - A.T. Sogesid

Introduction: a Catalogue among others (2/3)

The Italian EHS-EFS Catalogue sits rightly next to other countries' subsidy inventory initiatives:

France, "Sainteny", BHS (2012) and Greening State Budget (2021);

Germany, EHS (2017) and BHS (2019);

Ireland, FFS (2020-22);

Sweden, EHS (2017);

Finland, EHS (2019);

Switzerland, BHS (2020);

Italy, EHS-EFS (2016-17-18, 2019/20 in Jan.2022); FFS in G20 PR Italy; BHS in NCC (Natural Capital Committee) 4th Report 2021.

It contributes with knowledge & know-how to G20 Peer Reviews on FFS, Apec FFS Peer Review, OECD FFS Inventory, Eurostat and UN-SDG statistics.

Introduction: BHS in the frame of EHS and EFR (3/3)

- a) **BHS** should be treated consistently with the treatment of EHS & EFS, and FFS
- b) **Subsidies** should be treated in the frame of an **EFR** (Environmental/Green/Ecological Tax/Fiscal Reform): shifting the tax burden from labour and firms income to pollution, GHG emissions and the use of natural resources.
- c) **Fiscal neutrality** of an EFR Dynamic versions in times increasing taxes (e.g. High cumulated public debt Next Generation EU & NRPP)
- d) **One** strong symbolic measure? **EFR** package? In the framework of a **GTR** (General Tax Reform)?

EHS Reform in the context of Ecological Fiscal Reform

The idea of eliminating environmentally harmful subsidies (or «perverse» or «néfastes», as defined by some American and French experts respectively) fits rightly in the framework of an Ecological Tax Reform, developed and promoted by international organisations such as OECD or academics as Von Weizsaecker and Jesinghaus since the early 90s.

«Hunting» for subsidies in legislation: Definitions (1/3)

WTO

«a monetary transfer from the State to a private entity»

OECD

«The result of a government action that generates an advantage for certain producers (consumers) with the aim of reducing their costs (increase their income)»

IMF

«The difference between the observed (market) price and the marginal social cost of a production, which **internalizes** the social damage»

«Hunting» for subsidies in legislation: Definitions (2/3)

Italian law-maker's definition of subsidies

- «subsidies are to be taken in their widest possible definition and comprehend, inter alia, incentives, tax expenditures, favourable loans, tax exemptions»
- art. 68, environmental annex to 2015 budget law ("collegato ambientale")

«Hunting» for subsidies in legislation: Definitions (3/3)

 The Catalogue approach (inspired by OECD) • «A measure that keeps consumer prices underneath market level and producer prices above market level, or reduces costs for producers and consumers, via a direct or indirect support»

Estimates of EHS-EFS, 2016-2020 (reclassified)

Source: CSA4 (2021) [4° Italian Catalogue of EHS and EFS]

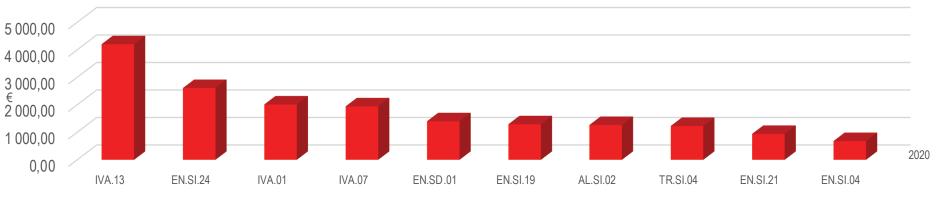
	2016			2017		2018		2019		2020	
Evaluation	n.	estimate (M€)	n.	estimate (M€)	n.	estimate (M€)	n.	estimate (M€)	n.	estimate (M€)	
EHS	57	20.337,95	58	22.216,99	61	23.032,04	61	24.530,65	60	21.648,63	
of which FFS	39	12.665,14	41	13.578,52	41	14.295,23	41	15.014,65	40	13.060,21	
Uncertain	33	8.455,46	35	9.478,16	35	11.217,60	35	12.874,58	35	13.630,05	
EFS	59	16.185,18	62	16.695,92	68	17.089,71	78	17.600,51	85	18.923,46	
Total	149	44.978,59	155	48.391,08	164	51.339,36	174	55.005,73	180	54.202,14	

Biodiversity Harmful and Friendly Subsidies (BHS-BFS)

		2019		2020
	n.	Estimate [B€]	n.	Estimate [B€]
BHS	101	37.93	103	36.17
BFS	55	16.42	61	17.34
Uncertain	18	0.65	16	0.69
Total	174	55.00	180	54.20

The fourth edition featured the introduction of an assessment of EHS that specifically considers the damage done to nature, ecosystems and biodiversity. The two approaches present conflictual positions in evaluation that are still to be addressed.

First 10 EHS by financial effect, 2020 [M€]



€ 2 000,00 1 000,00 0,00											2020
5,55	IVA.13	EN.SI.24	IVA.01	IVA.07	EN.SD.01	EN.SI.19	AL.SI.02	TR.SI.04	EN.SI.21	EN.SI.04	
IVA.13	VAT 1	ebate on t	he purch	ase of ne	ew houses	s (non-lu	xury) (10°	% vs. 22%	6)		4.203,89
ENGL. Differential in fiscal treatment between gasoline and discol											
2.0							2.610,68				
IVA.01 VAT rebate on the purchase of new and first houses (non-luxury) (4% vs. 22%)								2.012,91			
IVA.07 VAT rebate on electric energy for domestic use (10% vs. 22%)								1.944,06			
EN.SD.	oı Free l	ETS allowa	nces								
				1. 1	. C .	,	,	1 0	,		1.402,03
EN.SI.19	, Keim	bursemen	t or extra	diesel co	osts for tr	ansporte	rs (comm	ioaities &	t persons)		1.293,81

Tax credit for the purchase of capital goods in low-income regions in South Italy AL.SI.02 Tax deductions on fringe benefits for company car use by managers & employees TR.SI.o4 Tax rebates on the use of energy products in agriculture and ancillary works EN.SI.21 Excise duty exemption on line airplane fuels

1.266,70

1.231,00

942,72

682,27

The Italian Journey

Italy at a glance (OECD data)

Implicit tax rates on energy are the highest in Europe [not surprising in absence of significant national fossil fuel production]

Italy places fourth for fiscal coverage of emissions and second for average «shadow» (implicit) price for CO2, in Europe

More than 90% of EHS is made up of tax expenditures introduced with the aim of social solidarity or national competitivity [There are other direct & transparent tools for solidarity &competitiveness better than underpricing environment]

The case of «praeter-intentional» taxes: taxes that were introduced without environmental protection purposes (only accidentally impactful, e.g. excise)

CITE (Interministerial Committee for Ecological Transition) has announced in Feb.2022 a proposal by June 2022 for the progressive phase-out of EHS with time horizon 2022-2026.

5 "low-hanging fruits"

EHS cancelled in January 2022

Art. 18 DL "Sostegni" [Decree-Law "Supports", 27 January 2022 n. 4

Code	Title	Financia 2018	al effect 2019	-
EN.SI.o6	Excise duty reduction for fuels used in rail transport (people and commodities)	22,90	25,80	22,40
EN.SI.14	Excise duty exemption for energy products used in the production of sea water magnesium	0,50	0,50	0,50
EN.SI.25	Excise duty reduction for energy products used by ships in transhipment harbour maneouvre	1,80	1,80	1,80
EN.SI.14	R&D fund for coal projects	0,00	0,00	0,00
EN.SI.13	R&D fund for oil projects	42,70	42,37	42,37
EN.SI.13	R&D fund for gas projects	40,67	41,00	41,00

4 editions of the Catalogue

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

COMESTIMATIO DALL'ARRICO O SO RELLA LEGGE 25 DECISSE 2015, N. 221
"THEOLOGICA CA GERBA - MIREATA LE REPROSENTATE METRE OF GELEN LEONIST
E PER R. CONTENUENTO DELL'INDECCISIO DI MONGRE NETERAL")
INTRA COLLEGATO AMBIENTALE
(GUI SERIO ROSPALLANI IN 1910. E 18-1916)



Dimeione Generale per lo oritoppo somenble, per à ânnos ambientale e per i topposi con l'Unione Etampea e gir organismi internazionali (SVI) «U.A.T. Sagoid



CATALOGO DEI SUSSIDI AMBIENTALMENTE DANNOSI E DEI SUSSIDI AMBIENTALMENTE FAVOREVOLI 2017

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Decisione Generale per la reduppo somenhale, il diama uraliserrale, i rapporti con Pl. mosa Europea e gli organismi intermationali (SVI). U.A.T. Sognal



CATALOGO DEI SUSSIDI AMBIENTALMENTE DANNOSI E DEI SUSSIDI AMBIENTALMENTE FAVOREVOLI 2018

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CATALOGO DEI SUSSIDI AMBIENTALMENTE DANNOSI E DEI SUSSIDI AMBIENTALMENTE FAVOREVOLI 2019-2020

ARTOCO O 60 DELLA LEGGE 16 DOCEMBRE 2015, N. 221

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Dietainne Genands par la munica secondishe e la qualità delle milioppo (Cano) - A.T. Soprad.

Dictioner 2019

Three challenges for the next edition(s)

How to deal with...

- 1. the extraordinary, emergency-driven and transition subsidies created to contain the economic, social and health damages of the **Sars-Cov-2** (Covid-19) **pandemic**;
- 2. the extraordinary, emergency-driven and transition subsidies created to reverse the **increasing supply costs of gas and electricity** for households and firms;
- 3. the **EHS vs. BHS relationship**, which poses some evaluation conflicts. Could the EU Taxonomy criteria help in this regard? (DNSH & 6 criteria)

The Swiss experts are welcome and needed!

13-16 June 2023 - BfN Seminar "Economic Incentives that affect Biodiversity"

(German Federal Agency for Nature Conservation)

Conservation Isle of Vilm

https://www.bfn.de/en/events-ina/economic-incentives-affect-biodiversity-06-2023

27-30 June 2023 - EAERE 2023 Annual Conference

(European Association of Environment and Resources Economists)

Limassol, Cyprus (chair: Theo Zachariadis, EEA Scientific Committee)

http://www.eaere-conferences.org/index.php?y=2023

10-15 July 2023 - EU-SUSEET 2023

(EU Summer School in European Environmental Taxation)

Napoli, University Federico II https://www.suseet.eu/

6-8 September 2023 - GCET 2023 Paris

(Global Conference on Environmental Taxation)

Université Paris Dauphine (Chair: Christian De Perthuis - ScB: Milne-Ashiabor-Andersen-Akerfeldt) https://www.gcet24.fr/



Overview

- Why the Catalogue
- Definition of environmental subsidies and their identification in the international literature
- Methodology adopted in the Catalogue
- Overview of the Catalogue's main results
- Subsidies on biodiversity in the framework of the Catalogue
- Main recommendations and policy suggestions
- What is missing? What further subsidies to further analyze in future editions?

International recommendations (1/3)

- G20 (Seul November 2010): "<u>rationalize and phase out over the</u> medium term inefficient <u>fossil-fuel subsidies</u> that encourage wasteful consumption".
- G7 (Ise-Shima 26-27 May 2016): "Given the fact that energy production and use account for around two-thirds of global GHG emissions, we recognize the crucial role that the energy sector has to play in combating climate change. We remain committed to the elimination of inefficient fossil fuel subsidies and encourage all countries to do so by 2025."

International recommendations (2/3)

- Communiqué G7 Environment 2023 Sapporo https://www.env.go.jp/content/000127577.pdf: 28. Resource mobilization: [...] We also commit to aligning all relevant fiscal and financial flows with the GBF and call on all countries and financial institutions, in particular MDBs and, where appropriate, IFIs, to do the same. We are all concerned about incentives, including subsidies, harmful to biodiversity, and call upon all relevant organizations to collaborate with us, including by assisting in identifying such incentives.
- Those G7 members Party to the CBD commit to identifying such incentives by 2025 [i.e. not Usa]. They also commit to eliminating, phasing out or reforming those incentives and scaling up positive incentives for the conservation and sustainable use of biodiversity at the latest by 2030, taking initial steps without delay, and call on all countries and financial institutions, in particular MDBs, to do the same. We will dedicate a significant amount of our climate finance to maximize co-benefits and synergies in addressing climate change and the biodiversity crisis, as appropriate, recognizing that Nature-based Solutions can deliver mitigation, while offering significant benefits for adaptation, and encourage others to do the same. [...]

International recommendations (3/3)

- Communiqué G7 Environment 2023 Sapporo https://www.env.go.jp/content/000127577.pdf:
- 30. **Oceans**: [...] We reconfirm our commitment to ending IUU fishing including through promoting the swift acceptance of the World Trade Organization (WTO) Agreement on **Fisheries Subsidies** by G7 members [...]
- 73. Fossil fuel subsidies: We stress that fossil fuel subsidies are inconsistent with the goals of the Paris Agreement. Phasing out inefficient fossil fuel subsidies is a key component of delivering on Article 2.1.c of the Paris Agreement. We reaffirm our commitment to the elimination of inefficient fossil fuel subsidies by 2025 or sooner, and reaffirm our Leader's previous calls for all countries to do so. We will **report on progress** towards the achievement of our commitment in 2023, building on the ongoing work at the G20, UN, OECD and its subsidies inventory, and other relevant fora to facilitate greater transparency on inefficient fossil fuel subsidies globally, strengthen our action as necessary and consider options for developing joint public inventories of fossil fuel subsidies. We will also take steps to increase cooperation, discussion, and sharing best practices on eliminating inefficient fossil fuel subsidies and enhancing transparency at the international level.

OECD recommendations and tools

- Removal or reform of EHSs, in particular phasing-out FFS (OECD, 2015).
- Warning on «inertia»: in OECD countries, 2/3 of EHSs introduced before the year 2000 (OECD, 2015).
- Starting at the end of the 90s, OECD developed different methodological tools to identify EHSs:
 - Quickscan (1998)
 - ➤ Checklist (2005)
 - ➤ Integrated assessment framework (2007)

OECD recommendations / 2 Italy - Environmental Performance Reviews - 2013

- Introduce a systematic monitoring system of (current and in the pipeline) direct and indirect subsidies, in view of their potential environmental impact;
- Pursue the promotion of renewable energy in the framework of a national energy strategy, guarantee the consistency of incentives and their relative regulatory framework and adapt them to the decrease in costs of green technologies connected to renewable energy;
- Rationalize the incentives for energy efficiency and ensure that existing subsidies contribute to the abatement of entry barriers in a cost-effective manner; encourage the use of white certificates, and expand them, especially to the transport sector;

"European Semester"

- Develop a fiscal framework that promotes sustainable development and pursue the «polluter-pays-principle», leveraging investments in energy efficiency, and encouraging durability and reparability of goods;
- Gradually remove environmentally harmful subsidies, including fossil-fuel subsidies, and shift taxation from income to pollution and natural resources.

International think tanks recommendations

- **Green Budget Europe**: Reform EHS, remove FFS and introduce a carbon tax; shift the fiscal burden from labour and firms towards pollution and natural resources
- IEEP for the European Commission:

Roadmap for the removal of EHSs:

- Need for high quality and transparent data;
- Do not act in isolation;
- Build a coalition;
- GSI Resources for the Future World Resources Institute Worldwatch Inst. Earth Policy Inst. Sustainable Prosperity
- Planetary Boundaries Club of Rome Factor 4/5
- Wuppertal GBG-Foes IDDRI French Green Fiscal Commission - UK Green Fiscal Reform Commission -Fondazione Sviluppo Sostenibile

OECD-EC-Italy (2021) https://www.mase.gov.it/pagina/catalogo-dei-sussidi-

ambientalmente-dannosi-e-dei-sussidi-ambientalmente-favorevoli:

An Action Plan for Environmental Fiscal Reform (EFR) in Italy 5 key instruments described in the Action Plan

Carbon price floor (CPF)

Start at 40 €/tCO2 (e.g. 2022)

Increase by 10 €/tCO2 per annum

Reach 120 €/tCO2 in 2030

Transport sector would be untouched by CPF (effective carbon rates already above level)

Carbon **CFD** (Contract For Difference)

Government and company agree on a carbon price

Until market carbon price is below the agreed price, the company receives the difference (per unit of abatement)

Makes economically viable technologies that are still far from commercialisation in hard-to-abate

Road transport taxation

Road traffic is an efficient tax base **[anelastic** demand]

Taxes on pollution from agriculture

On pesticides, based on the polluting factor, measured in term of damage to human health

Taxes on stationary emissions of pollutants

SO₂ and **NOx**

Mite-backed project, in accord with Mef and PCM, approved and financed by EC (DG Reform), in the framework in support of structural reforms (GRANT AGREEMENT SRSS/S2019/036 - SUPPORT TO EU MEMBER STATES IN THE IMPLEMENTATION OF STRUCTURAL REFORMS)

The project draws inspiration from other OECD works such as Green Tax Reform and Green Budgeting Framework

Tax bads not goods!





Overview

- Why the Catalogue
- Definition of environmentally subsidies and their identification in the international literatures
- Adopted methodology in the Catalogue
- Policy frame and some issues
- What is missing? What further subsidies to deepen in future editions?

Definition of subsidy

... a **transfer** of money from the State to a private body (WTO)

A subsidy is...

... a State action providing an **advantage** in terms of revenue (income or minor cost) (OECD)

... a **difference** between the observed price and the marginal social cost of production, meaning the cost that internalizes the impact to society (IMF)

In our catalogue:

A subsidy is...

...a measure that keeps prices for consumers below market levels, or prices for producers above market levels, or that reduces costs for producers and consumers through direct or indirect support

(Source: OECD)

EFS (Environmentally Friendly Subsidies)

EHS (Environmentally Harmful Subsidies)

Subsidies' classification

Description	Classification			
Direct transfers of funds	0 1 1	Direct subsidies		
Potential direct transfers of funds	On-budget			
Foregone revenues				
Regulatory support mechanisms	Off-budget	Indirect subsidies (Tax expenditures, exemption, tax credit, etc.)		
Tax exemptions and rebates				
Selective exemptions of government				
standards				
Implicit income transfers resulting				
from a lack of full cost pricing				

Estimate of EHS (fossil fuels) in the world

The goal of EHSs identification is to remove or, at least, reform them in order to assure an efficient use of resources.

Their removal may allow for example the reduction of income and corporate taxes.

Some estimates:

- > OECD and IEA (2018): 370-620 billion \$/year for the years 2010-2015 for fossil fuels (76 Countries);
- > IMF: in 2011, 492 billion \$ for fossil fuels (150 Countries);

National experiences (1)

UK



2013 The report of the Parliament on «energy subsidies in UK» total energy subsidies: 12,7 billions of GBP

Ireland

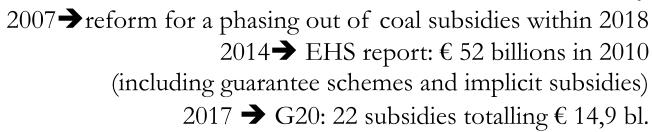
2010 → EEA Study on the potential reform of environmental taxation: up to € 5 bn of extra revenue in 2015 (+ € 1 bn for EHS removal)





2012 "Sainteny report" identifies EHS linked to biodiversity (estimate: € 3 billions in 2010)

Germany



National experiences (2)

Portugal



1995-2010 → environmental taxation: 11,5% to <5% of total fiscal revenue 2010 → EEA Study on potential reform of environmental taxation: In 2016, environmental taxation + € 2,2bn (+€0,2bn from additional VAT + €0,7bn from EHS removal)

Mexico



2014 Starting of energy reform and introduction of a carbon tax on fuels (except natural gas and kerosene for aviation)

2016 → Removal of fuel subsidies through the introduction of fixed excise tax on fuel for transport

2017 \rightarrow G20: 10 subsidies totalling \$ 2,6 bl.



2016 → First National Report on fossil fuels (G20): 17 inefficient fossil fuel subsidies worth US\$ 8,2 bl/yr

China



2016→ First National Report on fossil fuels (G20): 9 inefficient fossil fuel subsidies worth US\$ 14,5 bl/yr

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The international literature: how do we identify an environmental subsidy?

OECD:

- PSR approach (then DPSIR)(1993)
- Quickscan (1998)
- Checklist (2005)
- Integrated assessment framework (2007)

European Commission:

EHS reform tool (2009)

The international literature: how do we quantify an environmental subsidy? (2)

IMF/IEA:

Price gap approach

IEEP/IISD:

> Resource Rent

European Commission / EEA:

- Marginal Social Cost
- Externalities

How did we classify our subsidies: EFS, EHS, ENS, Uncertain

- **EFS** (EU-Eurostat/UN-SEEA definition): current transfer that is intended to support activities which protect the environment or reduce the use and extraction of natural resources
- **EHS**: Scientific literature review
- ➤ **Uncertain**: Unclear environmental impacts (some positive, some negative, some to be assessed). Further investigations are needed
- **ENS : Neutral** If reformed, potential positive impacts

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Catalogue - The policy context

The activities included in the Catalogue mainly consist of an ex post environmental assessment of national subsidy schemes. The Catalogue primarily involves the following public policies (also other greening processes are influencing such policies):

- Public expenditure policies of central public bodies (green public procurement, ex ente assessment of public works, direct subsidies, etc.)
- **Fiscal policy** (greening the taxation system):
 - ✓ Shifting taxation from job to environment;
 - ✓ Interventions on the existing rates of environmental taxes (standard excise duties) to fully cover the environmental external costs;
 - ✓ Tax expenditures: interventions on exemptions and tax breaks to fill the gap against the tax «ordinary rate» (excise duties, VAT, income taxes, etc.)

Issues on Energy excise duties and ETS

- ✓ Removal of exemptions on electricity excise duty that currently benefit specific consumption sectors (E.SF.2-4), except for self-consumption of energy produced from renewable sources (E.SF.27-28).
- ✓ Removal of tax breaks on natural gas, i.e. those benefiting major gas consumers for industrial use (E.SF.22).
- ✓ Removal of excise duty exemption for maritime transport (E.SF.7) and aviation (E.SF.8) through a gradual approach (high tax break to be gradually reduced) starting from domestic tariff (cabotage, domestic flights). International agreements to be reformed domestic vs international traffic.
- Reduction of sectoral discounts provided to road and off-road trasport fuels (freight transport, agriculture, taxi, army).
- ✓ ETS: removal of free allocation of tradable permits (E.SF.26) and of subsidies provided to industry to prevent relocation of industrial plants (carbon leakage) financed through the auctioning process (E.SD.1).

Issues on Rebates on VAT and income taxes

- ✓ Re-alignment to the VAT «reference level» (22%) for goods presently benefiting of VAT breaks (4% or 10%) despite their negative environmental impact:
 - **Fertilizers** (IVA.1)
 - Water and mineral water (IVA.5)
 - Electricity for domestic, agriculture and manufacturing use (IVA.6)
 - **Gas** used by agriculture companies, extraction and manufacturing companies and gas provided to distribution network (IVA.7)
 - Methane gas for domestic use, consumed in small quantities (IVA.12)
 - Mineral oil used in specific energy transformations, including electricity production (IVA.8)
 - Oil products used in agriculture and fishing in inland waters (IVA.9)
 - Pesticides (IVA.10)
- ✓ Reform of personal income tax rebates (IRPEF) linked to the real estate purchase or lease of a real estate (A.SF.16, 18, 19):
- The existing tax rebates can incentivate land consumption and impacts on biodiversity: the tax rebates should be limited to existing buildings or to urban regeneration areas (no rebates for new buildings in new urban areas).

General recommendations How to build upon the Catalogue

- √ The Catalogue is an informative instrument: it should be properly disclosed and diffused
- ✓ Institutional monitoring of the external costs of subsidized activities must be strengthened
- ✓ The introduction of specific environmental requirements/
 conditionalities can improve subsidy management (from
 «uncertain» or «neutral» subsidies to «friendly» subsidies).
- ✓ Towards an ex ante environmental compatibility assessment of subsidies?

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The next Catalogue

- The Catalogue must be conceived as a work in progress:
 - > continuous update of the subsidy schemes;
 - radual extension of the scope of analysis to new forms of subsidies to be classified as EHS or EFS and quantified;
 - improvements in data collection;
 - > stable cooperation with the Expert Commission on tax erosion, with the Ministry of Economy and Finance and with other central public bodies (responsible for sectoral public expenditures).

What is still missing or slowly improving in the Catalogue ... (1)

- The main expenditure categories not included in this first edition:
- 1. EU Structural Funds (Cohesion Policy) linked to National Operational Programmes (PON) and Regional Operational Programmes (POR);
- 2. Direct subsidies managed by the Ministry for Economic Development (i.e. energy, industry and trade), included those managed through regional authorities;
- 3. Direct subsidies autonomously provided by regional authorities
- 4. (Region Lombardia first Catalogue and others started).

What is still missing or slowly improving in the Catalogue ... (2)

- Other subsidies that are not considered in this edition ...
 - The new tax expenditure schemes identified by the Commission on tax erosion (so-called Marè Commission)
 - Implicit subsidies that could be assessed through external costs methods, for example
 - ✓ tax breaks on royalties;
 - concession fees on natural resources that do not cover the external costs (related to the unsustainable use of natural resources).

What is still missing or slowly improving in the Catalogue ... (3)

- →Other subsidies not considered in this edition...
- Subsidies provided through fees on public services (electricity, natural gas, drinking water), due to a debate on their inclusion and quantification;
- Breaks on «general system costs» (electricity bill subsidies for renewables and energy efficiency) provided to companies with high energy consumption levels;
- Crossed subsidies for the coverage of «general system costs» in electricity bill, that are presently included in the tariff systems for domestic and non domestic consumption categories.