

MISSING PIECES

Steps to phasing out dirty fossil fuel subsidies in Europe



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Introduction

“For every \$1 spent to support renewable energy, another \$6 is spent on fossil fuel subsidies.” (IEA, 2013)

Five years ago, at the G20 summit in Pittsburgh all major economies committed to phase out fossil fuel subsidies. These commitments were made in recognition of the severe negative economic, social and environmental impacts that fossil fuels subsidies put upon countries. To date, the steps required to effectively and efficiently phase out fossil fuel subsidies have not been taken. Billions of dollars and euros are still being poured into the fossil fuel industry, hindering national and international efforts to effectively tackle one of the root causes of climate change.

Fossil fuel subsidies contribute directly and indirectly to climate change through the continuous support of dirty energy across sectors such as industry, transport and power generation. Fossil fuel use has contributed to over half of all global CO₂ emissions in our global atmosphere, increasing year on year since 1970.¹ It is therefore very sobering to think that approximately €78 billion of public money in the ten largest EU economies is being directed to fossil fuel subsidies that are contributing to the pollution of our environment and climatic changes that devastate countries and people’s lives all over the world. These funds continue to flow while European governments are falling short of reaching their fair share in global climate finance commitments.

This report puts forward recommendations for the phase out of fossil fuel subsidies with the aim to increase climate action in the European Union. Its focus and analysis is upon the broader challenges surrounding fossil fuel subsidies in the EU; namely the need for a clear roadmap for the phase out of all fossil fuel subsidies, the need for increased transparency and reporting of fossil fuel subsidies, as well as the need for legislative policy instruments to steer investments away from dirty energy. Our analysis also calls for increased political will to phase out subsidies across all EU Member States, and shows how a freeing up and redirection of subsidies can

fund international climate finance initiatives and support the phase in of renewable energy and energy efficiency both domestically and internationally.

In particular, this report assesses the current levels of such subsidies in the ten most wealthy EU Member States (as defined by GDP). It groups countries according to subsidy ‘types’ offered and interprets how differing definitions of fossil fuel subsidies apply to these groups. The difficulty in both accessing data and comparing different subsidies, underlines the need for streamlining, harmonising and aligning fossil fuel subsidy data.

The top 10 EU Member states (by GDP) have allocated at least €78 billion to fossil fuel production subsidies over the last 13 years. Please note this is a minimal figure and does not necessarily include externalities or export credit agency funds. Therefore it is highly likely the actual figure is much higher. External costs for the EU, incurred through climate change impacts, resource depletion and health costs (among others) have been estimated at €200 billion, with a range that goes as high as €300 billion.

The transport sector in Europe has also enjoyed wide-scale support for fossil fuel use. Our analysis for the countries in focus has found that over \$30 billion has been spent on subsidizing transport fuels for the period of 2008-2011.

Action on phasing out fossil fuels and fossil fuel subsidies

The September 2014 Climate Summit in New York saw numerous assertions by developed countries, including EU Member States, that the age of fossil fuels is coming to an end. Though such positive declarations are welcome, now is the time to turn words into action.

The EU needs to adopt a long-term vision and action plan for completely phasing out dirty fossil fuels and phasing in 100% renewable energy by 2050 at the latest. Immediate phase out of fossil fuels and their subsidies should be realised across all countries, with developed countries leading the way by phasing out fossil fuel subsidies by 2020. This effort is paramount to keeping global temperature rise below 2°C and the EU is fit to play a key role in this. It is time to set

1 IPCC, 2007, http://www.ipcc.ch/publications_and_data/ar4/syr/en/spms2.html

**SNAPSHOT OF OUR FINDINGS
BASED ON THE DATA AVAILABLE:**

€78 bn

Total # of production subsidies found 10 wealthiest countries (by GDP, 1999-2013)

Germany €47.5 bn

UK €12.8 bn

France €7.6 bn

Spain €5.8 bn

Poland €4.2 bn

Top five countries for fossil fuel production subsidies (1999-2013)

Over €24 bn

Fossil fuel subsidies in the transport sector for countries identified in this report (2005-2011)

€200 bn

Estimated costs of externalities in fossil fuel production & consumption²

**Austria, Netherlands,
Sweden, Italy**

Data gaps found for countries in this research

€8.77 bn

Estimated support for international fossil fuel production for countries in this research (2007-2013)

€7.34 bn

Total fast start finance pledged by the EU (2010-2012)

a specific policy pathway that will phase out fossil fuel subsidies and direct public and private investments and finance towards low carbon and clean energy sources.

Issues of transparency

Member States across the EU should spell out clearly how public funds are being applied to the fossil fuel sector. This is particularly crucial given the task at hand of reducing the EU's greenhouse gas emissions and increasing the use of renewable energy and energy efficiency.

The EU has made a first attempt at outlining the amount of public money being directed towards various energy subsidies. In 2014, the European Commission published a report that gathered together information on all subsidies across its 28 Member States, an important but challenging task. This initial report sheds a stark light on the level of public financial support for fossil fuels, which directly undermines the EU's own efforts to mitigate climate change. The release of this overview of subsidies is the first of many steps that need to be taken in order to timely phase out subsidies for dirty and polluting industries.

A murky business: defining the problem

In order to pursue an ambitious pathway for phasing out fossil fuel subsidies, there needs to be meaningful analysis of the extent and scale of fossil fuel subsidies globally. This is difficult to achieve due to the lack of clear definitions of what and how public finance is being applied in support of the fossil fuel industry. At the heart of the problem is the lack of a universally accepted set of definitions and financial accounting tools. This is a primary barrier to transparent reporting and thus increased political action to phase out fossil fuel subsidies.

Collecting and using information to help phase out

As the agreed phase out of fossil fuel subsidies is a voluntary initiative, countries are able to hide behind this lack of obligation, either not reporting progress or even renegeing on reform altogether. Therefore, the EU needs to implement a fair and mandatory reporting mechanism that accounts for

² European Commission 2014, http://ec.europa.eu/energy/studies/doc/20141013_subsidies_costs_eu_energy.pdf

both direct subsidies and external related costs³. It should also facilitate access to information on subsidies in order to assist Member States to establish and implement national policies for fossil fuel subsidy phase out that are both effective and appropriate.

In short, improved clarity on definition, regular financial reporting and transparency and coordination are three key pieces of the puzzle towards fossil fuel subsidy reform.

Reinforcing existing structures to build momentum for phase out

As the world's largest development aid donor and historically a global champion of climate action, the EU needs to reinvigorate itself and proactively build up the momentum for fossil fuel phase out. At the domestic level the EU can spearhead further efforts by introducing a more coherent and legally binding framework for fossil fuel subsidy phase out. This should be in line with a global roadmap that guides developed countries to phase out subsidies by 2020.

At the international level, the EU and its Member States can build on the momentum established through the Friends of Fossil Fuel Subsidy Reform, and work to lead reform efforts through international processes and fora such as the Sustainable Development Goals, the UNFCCC and the G20.⁴ These international negotiations demand effective and equitable outcomes – developed countries being at the forefront of phasing out fossil fuel subsidies should be one of those outcomes.

The EU should use its full scope of information on subsidies to begin addressing the unbalanced level of domestic support given to fossil fuel production and use through direct state aid, tax exemptions, royalty exemptions and free allocation of emission allowances under the EU Emission Trading System (ETS), to name a few. It should also exercise efforts to scrutinise and guide the role of export credit agencies and multilateral development banks. It is no longer viable to lend financial support directly, through research, exploration, storage or transport of by-products, or indirectly through reduced costs within various sectors that use fossil fuels at a large scale, for example the aviation sector.



3 Externally related costs such as increased climate impacts, health costs, resource depletion, etc.

4 The Friends of Fossil Fuel Subsidy Reform is a group of non-G20 countries that support the reform of inefficient FFS. European members include Denmark, Sweden, Finland, Norway and Switzerland, (<http://www.mfat.govt.nz/ffsr/tabs/friends.php>)

Policy recommendations

1. The global phase out of fossil fuels and their subsidies should be spearheaded by developed countries

In order to prevent dangerous climate change, the Climate Action Network and its over 900 members from all over the globe are calling for the end of fossil fuel use as soon as possible, and well before 2050. To achieve this, all fossil fuel subsidies will need to be phased out by 2030, with developed countries leading the international efforts, particularly on exploration and production subsidies.

2. Clear commitment to phase out all fossil fuel subsidies in the EU by 2020

The EU can and should take the lead in immediately phasing out subsidies that go to fossil fuel production. It also needs to set down robust policy frameworks and legislation that direct public and private investments and finance away from the fossil fuel industry and instead towards low carbon and clean energy sources.

3. EU roadmap for fossil fuel subsidy phase out by 2020

In order to achieve phase out commitments as soon as possible, the EU should set down a roadmap for total fossil fuel subsidy phase out by 2020. This roadmap should include an annual EU-wide review of phase out efforts, with guidelines for strengthening and improving fiscal policy and planning for national policy-makers. EU leaders need to strongly support such a roadmap and recognise the need to act collectively in line with scientific, economic and political recommendations.

4. Immediate mandatory accountability reporting

Although the EU and individual Member States should be encouraged to enhance the level and quality of self-reporting as a way of increasing transparency and accountability of fossil fuel subsidies, this will not ensure a concrete overview. The following research suggests that the EU should take the lead and introduce a harmonised reporting system, where self-reporting is reinforced by “a new institution or institutional role that facilitates the collection, analysis, and fully transparent publication of fossil fuel subsidy data when countries themselves fail to deliver.”⁵

5. Comprehensive mapping of all subsidies to help drive transparency

There is a wide and ever-changing range when it comes to defining fossil fuel subsidies, where definitions have been used interchangeably depending on the context and country in question. Despite this challenge, the EU can build on information and data that it has already acquired and use it, among other sources, to identify and draw up an overview of the various areas and sectors where fossil fuel subsidies are applied; for example, research, exploration, storage, and transport.

6. Increase climate finance

The need for financial support for low carbon, climate resilient development is increasing, and should be met through new commitments and measures. While phasing out fossil fuel subsidies is initiated across the EU, increased financial support for climate action should be phased in. Re-directed funds can be categorised and used as an additional source of much needed climate finance for funding mitigation and adaptation activities in developing countries. Re-directed funds can also increase the EU's contribution to the global efforts to phase in clean, renewable energy and energy efficiency.

5 OCI, 2012, <http://priceofoil.org/2012/06/17/report-phasing-out-fossil-fuel-subsidies-in-the-g20-a-progress-update/>

Fuelling climate change

Carbon dioxide emissions from fossil fuel combustion and industrial processes were responsible for approximately 78 per cent of the total cumulative greenhouse gas emissions between 1970 and 2010.⁶ This finding from the recent Intergovernmental Panel on Climate Change report highlights the importance of getting to grips with our societies dependence on fossil fuels if we are to tackle climate change.

What are the consequences of continued use of fossil fuels?

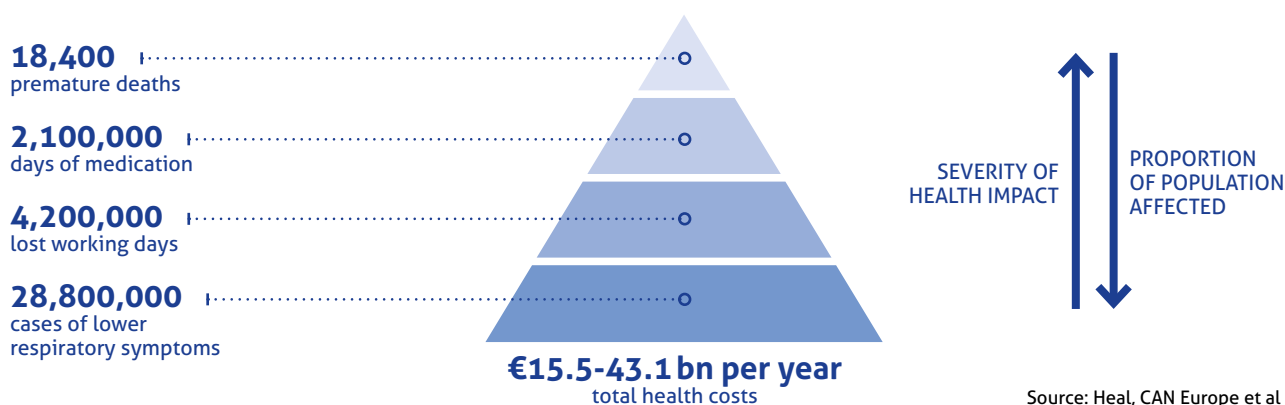
With scientists predicting average global temperature increases of between 3.6 and 5.3 degrees Celsius by the end of this century the consequences will likely include "exacerbating the polar ice-sheet loss, frequent and intense storms, sea-level rise, heat waves and droughts".⁷ This in turn will further exacerbate other global environmental challenges such as biodiversity loss, desertification and ocean acidification. This has serious and negative implications for sustainable development and climate resilience, particularly in the most vulnerable developing countries. The growing impacts of climate change have implications for our food and water security, global health and well-be-

ing, as well as access to safe and clean energy. The continued use of dirty fossil fuels will perpetuate a climate crisis, where poverty and inequality will preside in even more volatile circumstances.

Both direct and indirect impacts of the fossil fuel production and consumption process should be included in order to better understand the absolute costs. This is starting to happen under the accountability label of 'externalities'. For example, health costs associated with air pollution such as nitrogen oxides and sulphur dioxide have been estimated at €26-71 billion per year, while €15.5-43.1 billion was estimated as the annual health impact costs caused by coal power plants in the EU-28 (Figure One).⁸

Subsidies not only help to fuel climate change, they also contribute, either directly or indirectly, to the depletion of natural resources. One example would be where subsidies are provided as incentives for exploration, production and use of natural resources.⁹ Water and soil damage are also associated with fossil fuel exploration and production, this includes oil spills, solid waste from coal mines and the coal itself which leaches through into the water table and nearby

Figure One: Estimate of total health costs



6 UNEP (2014b)
7 IISD, 2013, http://www.iisd.org/gsi/sites/default/files/pb16_prioritizing.pdf

8 CAN Europe, Heal et al, 2014, http://awsassets.panda.org/downloads/dirty_30_report_finale.pdf
9 Pearce, 2002, <http://www.oecd.org/site/agrehs/35215571.pdf>

rivers and streams. The cost of exploration and post-mining environmental remediation could also be considered as an externality cost.

In addition to the financial, environmental and social costs of fossil fuel subsidies, they also encourage wasteful consumption of energy and potentially undermine the competitiveness of renewable energy, energy efficiency and other low-emission energy technologies.¹⁰

Various forms of fossil fuel production subsidies in Europe

There are a number of ways that fossil fuels are subsidised across the EU and Europe. Respective to particular countries, OCI (2014) identifies *national subsidies* that have been applied among a number of EU Member States:

- Funds for research and development;
- Direct government support to exploration activities – for example surveying and exploration drilling;
- Tax deductions for exploration costs and related expenses incurred during exploration projects;
- Lower royalty rates and tax exemptions for production of fuels;
- Financial support for transportation (including transport services) and storage costs;
- Cheapened access to government owned land for exploration and production;
- Government support in de-commissioning inefficient fossil fuel industries, for example coal mines.

In regard to public finance used towards *international subsidies*, EU Member States' role chiefly lies in the actions and investments of international financial institutions and export credit agencies. For example, multilateral development banks are still heavily investing in offshore oil and gas exploration and wide-scale coal mining in countries all over the world.

The role of financial institutions in fossil fuel subsidies

Over 75% of energy-project support from IFIs to 12 of the top developing-country emitters went to fossil fuel projects.¹¹ Together estimates suggest the amount allocated by IFIs, in 2008 totalling \$11.7 billion, had risen to \$14.4 billion in 2010. CEE Bankwatch estimates that the EIB, between 2007-2014 has allocated \$1.58 billion, with the EBRD allocating a further \$0.66 billion.

More recently, Export Credit Agencies (ECAs) are estimated to have supported fossil fuel projects to the total of \$10 billion in 2010 and at least \$55.7 between 2007 and 2013 for coal projects alone. Of this total amount, approximately 58% (\$32 billion) is estimated to come from national ECAs from OECD countries.

It has been highlighted that collectively, ECAs provide among the largest global sources of public financing and guarantees for fossil fuel projects.¹² These financial transfers and investments could be much better placed to fund low carbon technologies and adaptation mechanisms in countries outside the EU, particularly developing countries. The EU and its Member States have an important responsibility to steer policy and legislation in the direction that incentivises ECAs to invest in long-term low carbon and clean energy sources. Otherwise, ECAs will continue to be one of the largest contributors to subsidising fossil fuels, particularly coal, in Europe. This starkly undermines domestic and international efforts to effectively curb climate change.

10 IEA, 2011, <http://www.iea.org/media/weowebiste/factsheets/factsheets.pdf>

11 (ODI, 2013)

12 <http://www.fern.org/campaign/trade-and-investment/export-credit-agencies>

Challenges & opportunities in the EU for phasing out fossil fuel subsidies

In order to timely and effectively phase out fossil fuel subsidies, there needs to be access to accurate and complete data on levels and types of subsidies. Unfortunately, this is not the case and is one of the biggest impediments to reform and eventual phase out. The following chapter explores the problem of definitions, the lack of transparency and data comparability and gets to grips with the scale of the problem.

A MURKY BUSINESS: DEFINING THE PROBLEM

Fossil fuel subsidies – state of affairs in applying definitions

Establishing an internationally agreed definition of subsidies remains a challenge and is considered a primary barrier to developing associated transparency and accountability reporting.¹³ It also lends itself to confusion among stakeholders and this further encourages inaction around reform. The G20 countries have adopted their own agreed definitions of energy subsidies. Other groups (for example WTO members) agreed on a single specific definition (as set out by the WTO Agreement on Subsidies and Countervailing Measures¹⁴). As a result, different definitions of subsidies continue to be used by different countries, and through different groups. This has made it very difficult to advance towards a common and uniform definition of subsidies.

The EU must apply a common definition

Whilst there are a number of definitions of energy subsidies at an international level, at a European level there is no commonly agreed definition among EU Member States. Though the task in applying one set definition is complex, the EU should make efforts to secure an agreement on a definition that can be most effectively (yet flexibly) applied to Member States. This should be done with the intention to clarify and lay down steps for collective reform across the EU where all countries have a fair and equal part to play according to their means.

Box One:

Production and consumption subsidies definitions

Producer subsidies: arise when prices received by suppliers are above a benchmark price or when producers make losses at the benchmark price.

Benchmark price used to calculate subsidies for internationally traded energy products (i.e. natural gas and petroleum products): international price adjusted for distribution and transportation costs.

Consumer subsidies: arise when the prices paid by consumers are below a benchmark price.

Benchmark price used to calculate subsidies for non-traded energy products (i.e. electricity): price at which the domestic producer recovers costs, including a normal return to capital.

Source: IMF (2013c) – reforming energy subsidies summary note

For the purpose of this report and in subsequent guidance to policy makers, we wish to use and support the definition put forward by the WTO, see Annex 1. Our reasoning for this choice lies in the broad approach of the definition, which leaves room to apply more specific language when breaking down the various forms of government intervention in the energy sector.

¹³ ODI, 2013; IEEP, 2009; Pearce, 2002; IISD-GSI, 2013b, OCI, 2012c

¹⁴ IISD-GSI (2010a) recommends the WTO definition and Oil Change International references it on the shiftthesubsidies.org website.

Fossil fuel subsidies – categorising and calculating

Methods for calculating the levels of subsidies are equally, if not more prolific in number. Energy subsidies can be deconstructed according to energy type:

- fossil fuel or renewables;
- whether they are environmentally harmful or beneficial, whether deemed to include externalities of subsidies;
- whether they support production, consumption or research and development.

Both the G20 and the EU have stated the need to phase out 'inefficient' fossil fuel subsidies, leaving the door open to defend the continuation of some fossil fuel subsidies depending on how they are categorised.

Despite this wide range of terminology and classifications associated with subsidies there should be a clear acknowledgement that all fossil fuel subsidies are inefficient and should therefore be phased out completely. The EU has a strong role to play in guiding Member States on categorisation and calculation that reflects the true cost of fossil fuel subsidies; this practice must incorporate external costs associated with exploration, production and the eventual emission of CO₂ from fossil fuel use.

COLLECTING INFORMATION TO STIMULATE MORE ACTION

Strengthening the level of voluntary reporting and its transparency

Reporting by voluntary means, such as peer review by other countries, has been considered as a "new global governance tool". This stems from the need to implement domestic action in a coordinated manner with other countries. Some of the considered benefits particularly related to fossil fuel subsidy reform include: increased transparency and accountability, comparing and contrasting the data with other countries and receiving and sharing expert advice on reform.¹⁵

However, there are also perceived challenges to advancing reform and phase out through voluntary measures, amongst them: requirements for exercise of power and accountability, learning from peer countries in terms of identifying and assessing fossil fuel subsidies, and autonomy and trust between actors involved in voluntary reform and phase out efforts.

Due to the voluntary nature of the peer review, it is quite easy for countries to avoid implementing reform policy, citing numerous political or practical reasons for this decision. Furthermore, a lack of either an incentive to report or a mechanism for enforcement has resulted in little action being taken by individual countries.¹⁶

Given the need to enhance coordinated action on phasing out fossil fuel subsidies, the EU has an important role to play in strengthening the current reporting system of subsidies. It is essential that within the EU, there is a recognised robust mechanism for collecting, storing and facilitating information on fossil fuel subsidies. This is a prerequisite to guiding phase out of fossil fuel subsidies at Member State level.

A regulatory body that Member States can report to:

The EU should push for and support the formal establishment of a regulatory body that monitors the efforts and information provided by individual governments on their phase-out plans. Given the on going international processes on climate change and sustainable development, 2015 is the ideal year to advance such an initiative. Such a body would facilitate annual submissions from national finance ministries and access to relevant information for scrutiny by non-state actors.

15 IISD-GSI (2013 b)

16 OCI, (2010)

Why phase out of fossil fuel subsidies is essential – Benefits

“Taking action on this issue alone – energy subsidies – would be good for the budget, good for the economy, and good for the planet.”

Christine Lagarde, Managing Director of the IMF 2013

Phasing out fossil fuel subsidies is essential in the effort to avoid catastrophic climate change, to stimulate low carbon development, and safeguarding the health Europe’s people as well as our biodiversity and ecosystems. Not only are there a plethora of environmental reasons for phase-out, there are a growing number of economic arguments that expose the incompatibility of fossil fuel subsidies with long-term economic security and business viability.

Eliminating fossil fuel subsidies will lead to additional economic, environmental and public health benefits in the EU and beyond. Money redirected from fossil fuel subsidies could be committed to low carbon and renewable energies, both domestically and internationally. It could also be directed to international climate finance, which seeks to protect the most vulnerable people and communities at risk of climate impacts, whilst stimulating low-carbon development pathways.

INTERNATIONAL CLIMATE FINANCING

At the 2009 UN Climate Negotiations (UNFCCC COP15), developed countries recognised the strong need to scale up and mobilize climate finance for mitigation and adaptation in developing countries. Through this recognition, the Copenhagen Accord set out to address both immediate and long-term financial needs. It therefore initiated Fast Start Finance – funds to be dispersed between 2010 and 2012. The UNFCCC also set down the goal to raise 100 bn US dollars in climate finance by 2020.

As we draw towards the end of 2014, there is a clear gap between the finance that is pledged and the funds needed for adequate action on the ground. This finance gap is even more shocking when we look at the amount of money that is directed to dirty industry, domestically and internationally. For the period of Fast Start Finance the EU contributed €7.34

billion. However, this figure is undermined and dwarfed by the amount of finance being directed to the fossil fuel industry.¹⁷ As the needs for climate finance continue to grow, the EU should look towards the opportunities of subsidy phase out as a means to assist in the global solutions on climate mitigation and adaptation, particularly in countries that are most vulnerable to the impacts of climate change.

In line with the civil society demand to completely phase out the use of fossil fuels by 2050, NGOs are also looking towards the phase out of fossil fuel subsidies as an element that the UNFCCC can facilitate more concrete discussions on. Fossil fuel subsidies are gaining more and more attention as a potential source among the other “innovative sources”¹⁸ that countries will explore in order to increase levels of climate finance.

The EU has debated the role of innovative sources for climate finance for years, acknowledging the important role that they will play in public funding for climate action at home and abroad. As EU Member States are declaring that the era of fossil fuels is over, they should also be taking action through re-directing subsidies from dirty energy investments to clean, safe and renewable energy and increased climate resilience.

DOMESTIC CLIMATE FINANCING

In addition to supporting international climate finance for developing countries, subsidy reform will create opportunities for national and regional funding for climate mitigation and adaptation projects across the EU.

National subsidies for energy efficiency (households)

The phase out of fossil fuel subsidies can help provide the motivation needed for the internal energy market to move

17 As our research presents, the level of finance directed to the fossil fuel industry over the last decade or so far outweighs the level of public finance that has been applied to Fast Start Finance.

18 The term “Innovative sources” as mentioned in this report refers to new and additional sources of public funding that are being explored to increase flows of finance. These sources can stem from existing mechanisms such as revenues, taxation and carbon pricing, and can be applied to increase finance particularly for action on climate change.

towards renewable energy sources and energy savings. Financial support should be directed towards the improvement of energy efficiency across infrastructure, transport and in domestic households.

Investing in renewables

To reiterate the call by NGOs all over the world, there is a drastic need to completely phase out fossil fuels and phase in renewable energy as soon as possible, and by 2050 at the latest. Changing the financial and investment streams is a crucial aspect to this process. The EU needs to maintain and strengthen these efforts through shifting more investments away from fossil fuels and into renewable energy.

The findings of the REN21 illustrate that renewable energy has grown and will continue to grow as a source of energy within the overall energy mix, further stimulating the argument for more investment and support in renewable energy while moving away from fossil fuels.

It makes economic sense to phase out fossil fuel subsidies

Based on the known data and the analysis that has been applied, the level of financial implications as a result of subsidising fossil fuels is very substantial. Depending on which calculation methodology is applied, the total annual cost of fossil fuel subsidies globally ranges from \$509 billion to \$2 trillion.¹⁹ The phase out of fossil fuel production subsidies could result in immediate freeing up of funds – which, according to GSI data, total in the region of approximately €75²⁰ billion per year.

In assessing costs and making a comparative analysis on subsidies policy makers must consider and **include externalities**. These are the costs to our societies that are not picked up by the polluter and beneficiary of production but by all taxpayers. Both production and consumption of fossil fuels add costs to society through detrimental impacts such

as climate change, resource depletion, the environment degradation and biodiversity loss, and human health.²¹ Inclusion of externality costs is a key argument highlighted by many. Not factoring in the costs of externalities results in an economically unfair advantage to fossil fuels over renewable energy sources.²²

The wide-scale and deep costs associated with fossil fuel production and consumption highlight that it is no longer economically viable or sensible to continue supporting this industrial sector. The negative impacts and full cost of fossil fuel use should be incorporated into policy-making and investment decisions across the EU.

“In the European Union, renewables represented the majority of new electric generating capacity for the sixth consecutive year. The 72% share in 2013 is in stark contrast to a decade earlier, when conventional fossil (fuel) generation accounted for 80% of new capacity in the EU-27 plus Norway and Switzerland.”

(REN21, 2014)

19 IEA, 2011; IMF, 2012

20 The GSI data is reported at US\$100 billion, the exchange rate applied was taken from OANDA annual average for 2013.

21 WWI, 2012b

22 EC, 2007



Initiatives and progress towards phase out

A number of frameworks, legislation, commitments and charters have been and continue to be introduced at a global level such as the G20; Convention on Biological Diversity; SDGs and at a regional level such as the EU Roadmap for reform by 2020 directives, as well as the Communication Roadmap 2050. However, there is seemingly no international synthesis of these efforts that sets out a clear pathway and framework for fossil fuel subsidy phase out.

The role of the EU in leading fossil fuel subsidy phase out

As the world's largest development aid donor and historical global champion in climate action, the EU needs to reinvigorate itself and take a more proactive role in rebuilding momentum for phasing out fossil fuel subsidies. At the domestic level the EU can spearhead further efforts by introducing a more coherent and legally binding framework for fossil fuel subsidy phase out. This should be in line with a global roadmap that guides developed countries to phase out subsidies by 2020.

At the international level, the EU and its Member States can build on the momentum established through the Friends of Fossil Fuel Subsidy Reform, and work to lead reform efforts through international processes and discussions such as the Sustainable Development Goals (SDGs), the UNFCCC and the G20.²³ These international negotiations demand effective and equitable outcomes – developed countries being on the frontline of phasing out fossil fuel subsidies should be one of those outcomes.

EU climate & energy policies that should guide action

EU policy instruments are guided by international frameworks such as the SDGs, the UNFCCC, and the commitments as set out by the G20. Such processes should provide the EU and its Member States with clear incentives to lay down policy guidelines and legislative frameworks that efficiently phase out fossil fuel subsidies in two ways:

- A re-direction of funding away from national exploration and production activities taking place in EU Member States (including transport, storage and various tax-related interventions; and
- Robust policy and legislation that shifts public and private investments away from fossil fuel related activities. More stringent policy instruments will provide better guidance on how finance channelled through IFIs and ECAs can be better allocated in the interests of climate action and low carbon development.

23 The Friends of Fossil Fuel Subsidy Reform is a group of non-G20 countries that support the reform of inefficient FFS. European members include Denmark, Sweden, Finland, Norway and Switzerland, (<http://www.mfat.govt.nz/ffsr/tabs/friends.php>)

Data per country²³

This report, whilst focusing on production subsidies does not consider the other forms of subsidies as any less important under the process of transparency and accountability. The focus on production subsidies stems from the initial approach that the EU must start its phase out of fossil fuel subsidies in this sector and directly follow this with fossil fuel consumption subsidies. The research attempts to obtain clarity on one aspect of fossil fuel subsidies with a view to elaborating and expanding upon this in future work.

Focussing on the top 10 (by GDP) EU Member States (Table One) we gain a snapshot of the state of production subsidies within Europe and can appreciate the current limits to data access and accountability. Here below, insights are provided for each of the 10 countries on funding for domestic purposes and funding for international purposes.

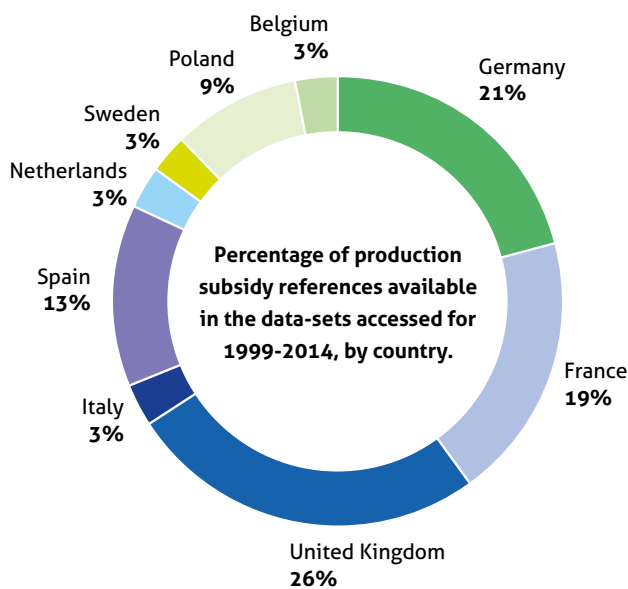
Table One:
Ranking of EU Member States by GDP

COUNTRY	GLOBAL RANKING – 2014	RANKING – EU COUNTRY
Germany	4	1
France	5	2
United Kingdom	6	3
Italy	8	4
Spain	13	5
Netherlands	17	6
Sweden	21	7
Poland	22	8
Belgium	23	9
Austria	26	10
Denmark	33	11
Finland	42	12
Greece	44	13
Portugal	47	14
Ireland	48	15
Romania	53	16
Czech Republic	54	17
Hungary	59	18
Slovak Republic	62	19
Luxembourg	68	20
Croatia	73	21
Bulgaria	77	22
Lithuania	81	23
Slovenia	82	24
Latvia	92	25
Estonia	100	26
Cyprus	105	27
Malta	135	28

Source: http://www.oecd.org/site/0,3407,en_21571361_48776931_1_1_1_1_1,00.html#data

The data²⁴ collection activities sourced a total of 735 data points relating to global and country level fossil fuel subsidies and covered a period of 1999 to 2014. Of these, 362 (49%) contained in some way production subsidy values and of the 362 approximately 98% relate to one or other of the top 10 (by GDP) EU Member States (Figure Two).

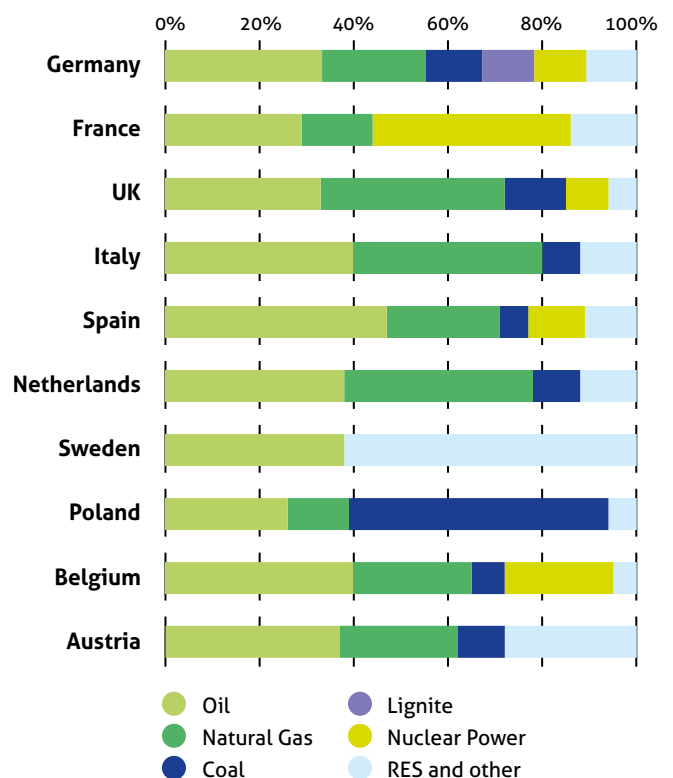
Figure Two:
Access to data-sets



The following figures (Figure Three) provides an overview of the energy mix for the 10 country cases emphasising the fact the majority of countries are still massively dependent on fossil fuels despite the apparent increase in investment and up-take of renewable energy.

The chart in Figure Three clearly demonstrates oil and natural gas as the two main energy types in all of the major EU member states apart from Poland where these are outweighed by coal.

Figure Three:
Proportion of energy mix of 10 country cases (2010)



Source: OECD (2013)

The inclusion of transport

Some analysis of the fuel subsidies enjoyed by the transport sector in the selected countries, was also carried out. Fuel subsidies for transport are not included in the data tables as they are considered to be a consumer subsidy. However, as the transport sector plays a crucial role in environmental policy and climate action it is important to highlight the level of public support and intervention applied to fuels used in this sector.²⁵

24 The data is secondary sourced data given the complexity and challenges of transparency and access. In each case a synthesis of this secondary data is documented where available relating to production subsidies for domestic and international purposes.

25 All information on transport subsidies has been sourced through the OECD (2013) and shiftthesubsidies.org.



Germany

Funding for domestic purposes

Germany provides the most support to coal in the EU, with funding to the sector amounting to 71% of all EU support to the sector.²⁶ As reported by the OECD (2012; 2013) in 2010 subsidy support mostly benefitted hard-coal and lignite producers and some oil producers. The reported figures increase slightly from €5 bn in 1999 to an average of €5.5 bn for 2000, 2001 and 2002. The reported figures then appear to reduce from 2003 averaging at around €3 bn right up to 2010. A possible further reduction is evident in 2011 with a single estimation for production subsidies for hard coal totalling €2 bn.

Therefore, an approximate calculation suggests that cumulatively for the 13 years between 1999 and 2011 at least €47.5 bn has been allocated to fossil fuel production subsidies.

Funding for international purposes

Germany provides funding for fossil fuel projects overseas via external credit agencies, such as Hermes, who according to NRDC provided approximately \$2.91 billion from 2007-2013. Other funds²⁷ via International Development Finance of KfW were additionally available over the same period.

Table Two:
Accessible data on production subsidies – Germany

Combined subsidies (in € equivalent)

	PRODUC. & CONSUMP. & GEN.	PRODUC. & GEN.
1999		
2000	11 897 113 804	5 491 561 498
2001	12 277 915 411	5 491 561 498
2002	10 974 161 819	5 491 561 498
2003-2007		
2008	7 439 790 648	3 390 617 989
2009	7 439 790 648	3 038 889 686
2010	7 439 790 648	2 922 440 678
2011		

Transport

The transport sector in Germany has benefitted from wide-scale fuel subsidies. For the period 2005-2011, the aviation sector alone received €3.2 billion in subsidies. Adding public transport and water-based transport, this figure jumps to approximately €4.5 billion for the same period.²⁸ This exposes the level of further subsidies for fossil fuel use within the country.

26 EC, 2014, http://ec.europa.eu/energy/studies/doc/20141013_subsidies_costs_eu_energy_annex1-3.pdf

27 Proportion of total amount – US \$3.78 billion unknown

28 Shiftthesubsidies via OCI, (<http://shiftthesubsidies.org>)

Specific German production subsidies examples – part 1 (in € equivalent)

	PRODUCTION	PRODUCTION	PRODUCTION	PRODUCTION	PRODUCTION	PRODUCTION	PRODUCTION	PRODUCTION
FUEL TYPE	COAL	COAL	COAL	COAL	COAL	COAL	COAL	COAL
1999-2004								
2005				2 139 000 000	12 000 000	151 000 000	201 000 000	25 000 000
2006				2 130 000 000	11 000 000	141 000 000	200 000 000	21 000 000
2007				2 288 000 000	8 000 000	141 000 000	204 000 000	11 000 000
2008				2 332 000 000	8 000 000	191 000 000	191 000 000	1 000 000
2009				1 781 000 000	6 000 000	140 000 000	no data	na
2010	2 231 420 000	1 316 007 533	€1.7 billion	1 727 000 000	6 000 000	153 000 000	no data	na
2011				1 778 000 000	7 000 000	153 000 000	no data	na

Combined aid for production (linked to 2010 COAL columns)
 Income support – combined aids in North Rhine Westphalia (linked to 2010 COAL columns)
 Support for land and natural resources – mining royalty exemption for hard coal (linked to 2010 COAL columns)
 Support for labour – miners’ bonus (linked to 2010 COAL columns)
 Support for intermediate inputs – manufacturer privilege (linked to 2010 COAL columns)
 Support for land and natural resources – mining royalty exemption for lignite (linked to 2010 COAL columns)

Specific German production subsidies examples – part 2 (in € equivalent)

	PRODUCER	PRODUCTION	PRODUCTION	PRODUCTION	PRODUCTION	PRODUCTION	PRODUCTION	PRODUCTION
FUEL TYPE	HARD COAL	NATURAL GAS	OIL	HARD COAL	LIGNITE	OIL	PETROLEUM	NATURAL GAS
1999	€5 billion							
2000-2004								
2005							355 000 000	28 000 000
2006							365 000 000	21 000 000
2007							247 000 000	13 000 000
2008							242 000 000	17 000 000
2009							260 000 000	29 000 000
2010		13 510 000	256 040 000	201 129 944	149 152 542	192 843 691	260 000 000	29 000 000
2011	€2 billion						303 000 000	34 000 000

Mining royalty exemption (linked to 2010 HARD COAL and LIGNITE columns)
 Manufacturer privilege (linked to 2010 OIL column)
 Support for intermediate inputs – manufacturer privilege (linked to 2010 PETROLEUM and NATURAL GAS columns)

Source: OECD (2012, 2013)



France

Funding for domestic purposes

In terms of the G20 Phase-out commitments France is reported to have stated “No inefficient fossil fuel subsidies” and “previously reformed subsidies for hard coal mining”.²⁹ The last coal mine closed in 2004, and the state-owned enterprise Charbonnages de France (CdF) was liquidated in 2007. The debts of CdF were passed on to the French government along with the responsibility for all social and environmental liabilities.³⁰ However, production subsidies are still being provided albeit in rather limited amounts – benefiting mostly petroleum refiners using petroleum products for their own energy processes.

The reported figures increase from approximately €1 bn for the years 2000, 2001, 2002 and 2005 (no reported data for 2003 and 2004) to €3 bn for 2006. Figures substantially reduce to between €0.2 bn and €0.1 bn for the years of 2007 to 2011.

Therefore, an approximate calculation suggests that cumulatively for the 12 years between 2000 and 2011 at least €7.6 bn has been allocated to fossil fuel production subsidies by the French government.

Funding for international purposes

France is also a source of funding for fossil fuel projects overseas via external credit agencies such as Coface which, according to NRDC, provided approximately \$1.64 billion for the period 2007-2013.

Table Three:
Accessible data on production subsidies – France

Combined subsidies (in € equivalent)

	PRODUC. & CONSUMP. & GEN.	PRODUC. & GEN.
1999		
2000	3 280 614 812	997 445 711
2001	3 280 614 812	997 445 711
2002	3 280 614 812	997 445 711
2003-2007		
2008	2 538 207 900	100 305 935
2009	2 727 262 946	121 926 553
2010	2 609 084 746	107 698 682
2011		

Transport

In France the transport sector is also heavily subsidised in various forms and across numerous sub-sectors, from the aviation sector to taxi services. The cumulative figure for fuel subsidies in transport amounted to around €5.68 billion between 2005 and 2011.³¹ This includes road, aviation, and some types of shipping. Subsidies are applied in the form of tax exemptions, refunds, and reduced tax rates. Domestic aviation is exempted excise tax while shipping support is focused on maritime navigation, including fisheries.

29 OCI, 2010
30 OECD, 2013

31 OECD, 2013

Specific French production subsidies examples – part 1 (in € equivalent)

	PRODUCTION	PRODUCTION	PRODUCTION	PRODUCTION	PRODUCTION	PRODUCTION	PRODUCTION	PRODUCTION
FUEL TYPE	NATURAL GAS	NATURAL GAS	NATURAL GAS	NATURAL GAS	NATURAL GAS	COAL	COAL	COAL
1999-2004								
2005			2 000 000	na	4 000 000	940 000 000	32 000 000	
2006			2 000 000	na	4 000 000	2 880 000 000	32 000 000	
2007			9 000 000	0	6 000 000	60 000 000	32 000 000	
2008			0	1 000 000	11 000 000	na	na	
2009			5 000 000	2 000 000	5 000 000	na	na	
2010	2 000 000	2 000 000	0	2 000 000	5 000 000	na	na	
2011			na	2 000 000	5 000 000	na	na	
2007-2013								\$1.64 billion

Tax exemption for natural-gas producers

Support for intermediate inputs – excise tax exemption for natural gas producers

Income support – Capital Contribution to CdF

International – Coal projects abroad

Income support – partial tax deduction for exploration cost

Support for intermediate inputs – excise tax exemption for refiners

Support for capital formation – Interest payments on 1997-99 debt of CdF

Specific French production subsidies examples – part2 (in € equivalent)

	PRODUCTION	PRODUCTION	PRODUCTION	PRODUCTION
FUEL TYPE	OIL	PETROLEUM PRODUCTS	PETROLEUM	PETROLEUM
1999-2004				
2005			3 000 000	106 000 000
2006			3 000 000	94 000 000
2007			11 000 000	95 000 000
2008			0	94 000 000
2009			6 000 000	100 000 000
2010	105 000 000	105 000 000	0	100 000 000
2011			na	100 000 000

Tax exemption for petroleum refiners

Support for intermediate inputs – excise tax exemption for refiners

Income support – partial tax deduction for exploration cost



United Kingdom

Funding for domestic purposes

Due to wide-scale privatisation of the energy sector in the UK, a great deal of oil and gas production and exploration is now carried out by a large number of private companies.³² In terms of the G20 phase out commitments the UK reported that it has no inefficient fossil fuel subsidies and had previously reformed subsidies for hard-coal mining.³³

Oil and gas production is subject to three taxes: a Petroleum Revenue Tax (PRT, 50% tax on profits made on new extraction fields); a ring-fence corporation tax (30%); and a supplementary charge (32%). The reported figures decrease from approximately €2.2 bn for the years 2000, 2001, 2003 to €1.4 bn in 2005 before increasing slightly in 2006 and then decreasing again in the years 2007 to 2011.

An approximate calculation suggests that cumulatively for the last 12 years between 2000 and 2011 at least €12.8 bn has been allocated to fossil fuel production subsidies by the UK government.

Funding for international purposes

The UK funds fossil fuel projects overseas via external credit agencies such as UKEF which provided approximately \$1.3 billion for the period 2010-2013. UKEF provided two financing packages to Brazil's national oil company in 2012 and 2013 to support exploration. It also supported coal mining expansion projects in Russia in 2011 and 2012. In addition to the projects associated with UKEF, the UK contributed to fossil fuel exploration projects through shares in the World Bank Group, the EBRD, the Asian Development Bank and the EIB.³⁴

Table Four: **Accessible data on production subsidies – United Kingdom**

Combined subsidies (in € equivalent)

	PRODUC. & CONSUMP. & GEN.	PRODUC. & GEN.
1999		
2000	4 577 822 230	2 271 348 388
2001	4 577 822 230	2 271 348 388
2002	4 577 822 230	2 271 348 388
2003-2007		
2008	3 704 962 948	759 174 655
2009	3 280 332 807	486 637 498
2010	4 253 423 729	524 195 857
2011		

Transport

Though there is a substantial amount of subsidies directed for 'consumption' in the UK, there is no differentiation between where these subsidies are applied, whether to the transport sector or other sectors. There are levels of reduced rates of VAT for Fuel and Power amounting to over \$19 billion. However, it is unknown where these consumption subsidies are allocated across the various sectors. The lack of information on what sectors benefit from consumption subsidies further highlights the need for more streamlined reporting by individual countries.

32 The Greens (2012), Fossil fuel subsidies and government support in 24 OECD countries. Summary for decision-makers, The Greens, EFA, Available at: <http://www.iisd.org/gsi/news/report-highlights-fossil-fuel-subsidies-24-oecd-countries>

33 OCI, 2010

34 OCI, 2014,

Specific UK production subsidies examples – part 1 (in € equivalent)

	PRODUCTION	PRODUCTION	PRODUCTION	PRODUCTION	PRODUCER	PRODUCER	PRODUCER	PRODUCER	PRODUCER
FUEL TYPE	OIL & GAS	OIL	NATURAL GAS	NATURAL GAS	NATURAL GAS	NATURAL GAS	NATURAL GAS	NATURAL GAS	NATURAL GAS
1999-2004									
2005					546 943 551	27 785 902	58 496 636	55 571 805	55 571 805
2006					591 255 869	35 211 268	117 370 892	68 955 399	35 211 268
2007					379 894 798	0	58 445 354	0	39 450 614
2008					384 518 723	no data	37 697 914	no data	33 928 123
2009					159 335 727	no data	22 441 652	no data	29 174 147
2010		272 163 988	240 298 160	196 832 052	165 385 511	no data	0	no data	31 446 541
2011	322 654 990				119 843 282	no data	0	no data	19 589 767

Tax concessions

PRT oil allowance for the development of natural gas sites

Support for land and natural resources – PRT safeguard

Support for capital formation – PRT uplift for certain capital expenditures

Support for land and natural resources – PRT oil allowance

Support for land and natural resources – PRT exemption for sales to British Gas

Support for capital formation – PRT tariff receipts allowance

Specific UK production subsidies examples – part 2 (in € equivalent)

	PRODUCTION	PRODUCER	PRODUCER	PRODUCER	PRODUCER	PRODUCER	PRODUCTION	NOT SPECIFIED – LIKELY PRODUCER
FUEL TYPE	PETROLEUM SITES	PETROLEUM	PETROLEUM	PETROLEUM	PETROLEUM	COAL	COAL	COAL
1999-2004								
2005		608 365 019	30 710 734	61 421 468				
2006		655 809 859	38 145 540	38 145 540	61 619 718	27 875 587		
2007		467 562 829	0	48 217 417	77 440 094	14 611 338		
2008		457 401 357	no data	41 467 705	0	502 639		
2009		210 951 526	no data	38 150 808	no data	1 122 083		
2010	234 102 027	207 314 232	no data	38 434 661	no data	na	82 925 693	
2011		156 718 138	no data	26 503 803	no data	na		
2007-2013					no data	na		\$0.10 billion

PRT oil allowance for the development of petroleum sites

Support for land and natural resources – PRT safeguard

Support for capital formation – PRT uplift for certain capital expenditures

International – Coal projects abroad

Support for land and natural resources – PRT oil allowance

Support for capital formation – PRT tariff receipts allowance

Support for capital formation – Coal investment aid



Italy

Funding for domestic purposes

Very little data exists for Italy's allocation of funds on fossil fuel subsidies. Data for 2010 proposes €0.1 bn.³⁵

Legislation indicates a producer subsidy is possible – royalty-free threshold – however since a significant amount of oil and gas is imported, the OECD found that no data is available. In regard to G20 phase-out commitments, Italy proposed to continue with the planned expiration of subsidies for certain cogeneration plants and negotiate on a voluntary basis with private operators of these plants on the timing of their recess from the subsidy scheme.³⁶

In regard to implementation, Italy has begun implementation of its plans to gradually eliminate, ahead of time, previously conceded feed-in tariffs for certain cogeneration facilities by pursuing voluntary agreements with private operators.³⁷ It has also been noted that industry-specific tax breaks have been ignored because overall tax rates on fuels are already high.

Funding for international purposes

Italy funds fossil fuel projects overseas via external credit agencies such as SACE which the NRDC finds, has provided approximately \$0.34 billion for the period 2007-2013.³⁸ In 2013, the oil and gas sector accounted for 23% of SACE financing. In addition to SACE, Italy has also contributed to fossil fuel exploration through another Italian agency named Società Italiana per le Imprese all'Estero (SIMEST) and through its shares in the World Bank Group, EBRD, EIB and the Asian Development Bank.³⁹

Table Five:
Accessible data on production subsidies – Italy

Combined subsidies (in € equivalent)

	PRODUC. & CONSUMP. & GEN.	PRODUC. & GEN.
FUEL TYPE	NOT SPECIFIED	NOT SPECIFIED
1999		
2000-2002	0	0
2003-2007		
2008-2009	0	0
2010	154 546 139	0
2011		

Specific Italian production subsidies example (in € equivalent)

	NOT SPECIFIED – LIKELY PRODUCER
FUEL TYPE	COAL
1999-2006	
2007-2013	\$0.34 billion

International – Coal projects abroad

Transport

Fuel subsidies in the Italian transport sector are substantial, particularly for shipping and trucks. For the period of 2005 to 2011 fuel subsidies for shipping, rail, public transport and trucking companies amounted to approximately over €4.5 billion. This is in the form of tax reductions, exemptions and relief.⁴⁰

35 OECD, 2013

36 OCI (2010)

37 OCI (2012c)

38 Bast et al, 2012

39 OCI (2014), http://priceofoil.org/content/uploads/2014/08/G7_exploration_subsidies.pdf

40 OECD, 2013



Spain

Funding for domestic purposes

According to the OECD, coal production, the only domestic fossil-fuel source of any consequence in Spain, is uneconomic. The majority of the gas and oil used in the country is imported, with less than 1% produced domestically. The reported figures decrease from an average of around €0.7 bn for 2000, 2001, 2002 to €0.42 bn in 2005, 2006 and 2007 before increasing again to approximately €0.7 bn for 2008, 2009 and 2010. For 2011, the figures once again decrease to around €0.3 bn.

An approximate calculation suggests that cumulatively for the last 12 years between 2000 and 2011 at least €5.8 bn has been allocated to fossil fuel production subsidies by the Spanish government.

Funding for international purposes

No data could be sourced or accessed for this piece of research.

Table Six:
Accessible data on production subsidies – Spain

Combined subsidies (in € equivalent)

	PRODUC. & CONSUMP. & GEN.	PRODUC. & GEN.
1999		
2000	2 346 970 659	736 603 674
2001	2 346 970 659	736 603 674
2002	2 346 970 659	736 603 674
2003-2007		
2008	1 896 090 829	667 795 227
2009	2 263 419 882	738 746 234
2010	2 672 075 330	689 084 746
2011		

Specific Spanish production subsidies examples – part 1 (in € equivalent)

	PRODUCTION	PRODUCTION	PRODUCTION	PRODUCER
FUEL TYPE	COAL	COAL	COAL	COAL
1999-2010				
2010	684 600 000	335 000 000	250 000 000	€1 billion
2011				

Inherited liabilities due to coal mining

Operating aid to coal producers

Specific Spanish production subsidies examples – part 2 (in € equivalent)

	PRODUCER	PRODUCER	PRODUCER	PRODUCER
FUEL TYPE	COAL	COAL	COAL	COAL
1999-2004				
2005	296 000 000	4 000 000	89 000 000	42 000 000
2006	284 000 000	7 000 000	85 000 000	20 000 000
2007	284 000 000	7 000 000	85 000 000	35 000 000
2008	267 000 000	11 000 000	85 000 000	40 000 000
2009	253 000 000	14 000 000	80 000 000	40 000 000
2010	250 000 000	13 000 000	76 000 000	10 000 000
2011	231 000 000	–	72 000 000	6 000 000

Support to unit returns – subsidy for the interbasin transport of coal

Income support – adjustment aid to coal producers

Support to unit returns – operating aid to coal producers

Support to unit returns – operating aid to HUNOSA

Transport

The transport sector in Spain benefits from fuel subsidies in the form of fuel tax exemptions and reductions. For the period of 2005 to 2011, these subsidies amounted to nearly €9.5 billion.⁴¹

41 OECD, 2013



The Netherlands

Funding for domestic purposes

Despite there being two associated legislations indicating producer subsidies (oil and gas exploration and production) – Small Fields Policy and Aid for Exploration of Offshore Marginal Gas Fields – no data was available for either. The data for the Netherlands can only be sourced relating to a combined total for production, consumption and general and so inclusion of this data component of reporting would wholly skew the findings.

Funding for international purposes

Other funds⁴² via International Development Finance of FMO were made available during the period of 2007-2013.

Table Seven: **Accessible data on production subsidies – The Netherlands**

Combined subsidies (in € equivalent)

	PRODUC. & CONSUMP. & GEN.	PRODUC. & GEN.
1999		
2000	63 403 778	0
2001	63 403 778	0
2002	63 403 778	0
2003-2007		
2008	323 053 913	0
2009	324 436 953	0
2010	355 306 968	0
2011		

42 Proportion of total amount – \$3.78 billion unknown



Sweden

Funding for domestic purposes

In its 2012 report, the OECD noted that Sweden has minimal fossil fuel energy resources and annually harvests only 2.2 million cubic meters (about 1.2 million tonnes of coal equivalent) of peat for energy use. The data for Sweden is sourced relating to a combined total for production, consumption and general rather than broken down into subsidy type. However, it must be noted that further research suggests production subsidies in numerous forms, from reduced tax rates for heating supplied to the industrial sector to reduced rates of energy tax for fuels used in energy intensive companies.⁴³ For the period of 2008-2011, the estimated subsidies for such sectors amounts to \$1.6 bn.

Funding for international purposes

No financial data was sourced or accessed.

Table Eight: **Accessible data on production subsidies – Sweden**

Combined subsidies (in € equivalent)

	PRODUC. & CONSUMP. & GEN.	PRODUC. & GEN.
1999		
2000-2002	0	0
2003-2007		
2008	2 249 214 766	0
2009	2 417 909 912	0
2010	2 512 595 104	0
2011		

Transport

In Sweden fuel subsidies applied to the transport sector are in the form of tax exemptions and reduced tax rates for certain sub-sectors of transport. Some beneficiaries of these subsidies include domestic aviation and shipping as well as the rail sector. The various forms of transport in Sweden have received fuel subsidies to the amount of \$8.2 billion between 2008 and 2011.⁴⁴

43 www.shiftthesubsidies.org

44 www.shiftthesubsidies.org



Poland

Funding for domestic purposes

Most of the current costs related to fossil fuels in Poland are associated with historical liabilities. Since 2011 state aid is only applied for the purposes of closing and decommissioning mines, the treatment of health damages sustained by miners, and addressing the environmental liabilities related to past mining. Some funding has also been applied in the form of investment aid for hard coal mining and coal allowances.

The reported figures decrease significantly from an average of €0.2 bn for the years 2000, 2001 and 2002 to €0.5 million

in 2008. No data is available for 2003-2007. The figures increase substantially in 2009 to approximately €0.53 bn and €2.5 bn in 2010 before reducing again in 2011 to approximately €0.5 bn.

An approximate calculation suggests that cumulatively for the last 12 years between 2000 and 2011 at least €4.2 bn has been allocated to fossil fuel production subsidies by the Polish government.

Funding for international purposes

No data sourced/accessible.

Table Nine: Accessible data on production subsidies – Poland

FUEL TYPE	Combined subsidies		Specific Polish production subsidies examples				(in € equivalent)	
	PRODUC. & CONSUMP. & GEN.	PRODUC. & GEN.	PRODUCER / PRODUCTION	PRODUCTION	PRODUCTION	PRODUCTION	PRODUCER	PRODUCER
	NOT SPECIFIED	NOT SPECIFIED	COAL	COAL	COAL	COAL	COAL	COAL
1999								
2000	483 617 933	215 288 543						
2001	483 617 933	215 288 543						
2002	483 617 933	215 288 543						
2003-2004								
2005							na	na
2006							na	na
2007							na	na
2008	173 845 945	401 115					570 890	na
2009	754 992 110	535 683 546					515 066 542	na
2010	881 770 245	638 056 497	2 231 420 000	533 975 710	100 371 374	48 931 045	515 066 542	100 371 374
2011							515 066 542	na
2007-2013			PLN25 billion \$7 billion					

Exemption or deferral of taxes and fines for coal production

Aid for coal mining decommissioning

Support for capital formation – initial investment aid for hard coal mining

Initial investment aid for hard coal mining

Support to unit returns – stranded costs compensations



Belgium

Funding for domestic purposes

The last coal mine closed in Belgium in 1992 and it has not supported the production of fossil fuel since then (OECD, 2013).

No data sourced or available.

Funding for international purposes

No data sourced or available.

Table Ten:
Accessible data on production subsidies – Belgium

Combined subsidies (in € equivalent)

	PRODUC. & CONSUMP. & GEN.	PRODUC. & GEN.
1999		
2000	2 000 175 974	0
2001	2 000 175 974	0
2002	2 000 175 974	0
2008	1 751 927 391	0
2009	1 719 258 356	0
2010	1 722 357 815	0
2011		



Austria

Funding for domestic purposes

Austria, with a large share of primary energy supply comprised of renewable energy, provides support to research and development in the energy sector. Austria's largest petroleum operates extensively in Central Europe, concentrating most of its efforts on exploration and production. In 2008, OMV AG⁴⁵ reported spending about €14 million from its own funds on R&D. In the same year, about €2.7 million, or 3.8% of the total public expenditure for R&D in the energy sector related to fossil fuels.

There is no concrete data available on production subsidies in Austria.

Funding for international purposes

No data sourced or available.

Transport

In comparison to the data found on transport fuel subsidies in other EU Member States, the level of subsidies in Austria is relatively low. The beneficiaries are public transport services and the rail sector, amounting to approximately €124 million in the years 2005-2011.⁴⁶

45 OMV AG is the largest Austrian petroleum company, 31.5%-owned by the state and is the biggest integrated petroleum company in Central Europe (OECD, 2013).

46 OECD, 2013.

Overview

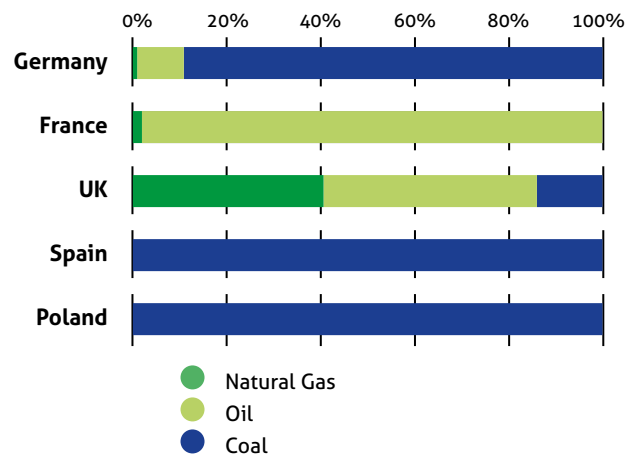
Adding up each of the top 10 EU Member states (by GDP) available data suggests that at least €78 bn has been allocated over the last 13 years on fossil fuel production subsidies.

Please note this is a minimal figure and does not include full externalities or export credit agency funds. Therefore it is highly likely the actual figure for the member states in question is much higher.

Inclusion of transport

The analysis on fuel subsidies for the transport sector albeit conditional to data availability exposes even more public expenditure on dirty fuels and energy. **Our analysis for the countries in this report suggests that over €24 billion has been spent on subsidizing transport fuels for the period or 2005-2011 in six of the ten countries analysed.** For Sweden, it was found that \$8.5 billion finance the transport sector between 2008 and 2011.

Figure Four: Proportion of production subsidies



Conclusions

The findings in this report show that despite the numerous assertions by the EU and individual Member States about phasing out polluting fossil fuels, their production and use is still heavily and unnecessarily subsidised in the EU. This problem directly undermines both our domestic and international efforts to tackle climate change and foster renewable energy and energy efficiency. The figures illustrated in this report are also a stark reminder of how much funding the dirtiest of industries receive while climate finance is vastly under-resourced and insufficient to meet the needs for international climate action.

Without cutting the finance for fossil fuels, it will be impossible to reduce and eliminate the EU's dependence on dirty energy. Therefore, immediate phase out of fossil fuel subsidies is essential to the realisation of clean and healthy Europe.

Benefitting the future

Phasing out fossil fuel subsidies can have profound benefits for the European economy as well as the broader international energy system. It is no longer economically, environmentally or socially acceptable to support a sector that has wide-scale negative impacts upon both people and the planet. The EU is in a firm position to lead the phase out fossil fuel subsidies and the phase in of clean, sustainable renewable energy and energy efficiency.

Coupling phase out measures with the global efforts to increase climate finance will ensure that all countries, particularly vulnerable developing countries, will have the necessary resources to adapt to climate change and integrate essential mitigation activities across their development and economic planning.


The causes and impacts of climate change are the primary drivers for the necessity to completely phase out of fossil fuel subsidies and fossil fuel energy use. Phasing out dirty fossil fuels is essential to ensuring that our economies avoid run-away climate change and the catastrophic impacts that it will impose. It will be integral to the efforts to create greater security for people all over the world against climate impacts, protect our natural environment and resources, and stabilise our economies.

However, there is a much broader picture of other direct and in-direct benefits envisaged through the phase out of fossil fuel subsidies:

- Reduced health impacts caused by coal power plants in the EU-28, and subsequently reduced costs associated with treating such impacts;
- A reduction in air pollution across countries and cities in the EU;
- Green energy growth is estimated to result in over one million direct and in-direct jobs in the renewable energy sector (REN21, 2014);
- Environmental protection of water sources, natural biodiversity and habitats;
- A reduction in remediation costs associated with extraction and accidents such as oil spills;
- Long-term incentives for investments in renewable energy and energy savings.

The Time is Now

Since the G20 declaration in 2009 calling for the phase-out of inefficient fossil fuel subsidies, the necessary steps towards ambitious and efficient phase out of fossil fuel subsidies have not been taken. Today, billions of dollars and euros are still being pumped into the fossil fuel industry, hindering national and international efforts to effectively tackle one of the roots causes of climate change.



It is time for the EU to implement mandatory accountability reporting for all public, private and civil society organisations involved in the energy sector. The EU should also lead in setting down legislative policy instruments that help to steer investments away from dirty energy and into clean, sustainable renewable energy. Our analysis suggests there is a need for a renewed strong political will to phase out subsidies across EU Member States.

Increasing support to climate action both at home and abroad will be essential in the fight against climate change. Freed up and re-directed subsidies can be used to fund international climate finance initiatives, support the phase in of renewable energy and energy efficiency and support vulnerable developing countries to adapt to the current and future impacts of climate change.

Recognising that no one 'silver bullet' will drive reform momentum and accelerate demand for a greener economy, a multiplicity of effort is required. However, the EU can stimulate collective action, objectively guided to achieve the global common good. Roles and responsibilities need to be clearly defined. What's more, the goals to reduce the EU's GHG emissions need to be compatible with the efforts to phase out fossil fuel subsidies and therefore calls for higher ambition in our energy sector.

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ANNEX – WTO Definition of Subsidies

PART I: GENERAL PROVISIONS

Article 1 Definition of a Subsidy

1.1 For the purpose of this Agreement, a subsidy shall be deemed to exist if:

(a)(1) there is a financial contribution by a government or any public body within the territory of a Member (referred to in this Agreement as "government"), i.e. where:

(i) a government practice involves a direct transfer of funds (e.g. grants, loans, and equity infusion), potential direct transfers of funds or liabilities (e.g. loan guarantees);

(ii) government revenue that is otherwise due is foregone or not collected (e.g. fiscal incentives such as tax credits);

(iii) a government provides goods or services other than general infrastructure, or purchases goods;

(iv) a government makes payments to a funding mechanism, or entrusts or directs a private body to carry out one or more of the type of functions illustrated in (i) to (iii) above which would normally be vested in the government and the practice, in no real sense, differs from practices normally followed by governments;

or

(a)(2) there is any form of income or price support in the sense of Article XVI of GATT 1994;

and

(b) a benefit is thereby conferred.

Source: WTO Agreement on Subsidies and Countervailing Measures (SCM); (http://www.wto.org/english/tratop_e/scm_e/subs_e.htm)

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ABBREVIATIONS/ACRONYMS

APEC	Asia-Pacific Economic Cooperation	MDGs	Millennium Development Goals
CO₂	Carbon dioxide	MLEI	Mobilising Local Energy Investments
CEE Bankwatch	Central and Eastern Europe Bankwatch	NRDC	Natural Resource Defense Council
Coface	(French)	NOX	Nitrogen Oxide
COM	Communication	n.d.	No date
CAN Europe	Climate Action Network Europe	NGO	Non-governmental organisation
DECC	Department for Energy and Climate Change	OCI	Oil Change International
EPS PEAKS	Economic and Private Sector Professional Evidence and Applied Knowledge Services	OWG	Open Working Group
EUR	Euro	ODI	Overseas Development Institute
EEA	European Environment Agency	OECD	Organisation for Economic Co-operation and Development
EU	European Union	Ofgem	Office of Gas and Electricity Markets
EC	European Commission	OPEC	Organisation of the Petroleum Exporting Countries
EBRD	European Development Bank	PRT	Petroleum Revenue Tax
EIB	European Investment Bank	RO	Renewable Obligation Scheme
ECA	Export Credit Agencies	R&D	Research and Development
ETS	Emissions Trading System	SCBA	Social cost benefit analysis
FFS	Fossil fuel subsidies	SCM	Subsidies and Countervailing Measures
FFF/FFSR	Friends of Fossil Fuel Reform	SDGs	Sustainable Development Goals
GATT	General Agreement on Tariffs and Trade	SDC	Swiss Agency for Development and Cooperation
GIZ	Deutsche Gesellschaft für Internationale Zusammenarbeit	UK	United Kingdom
GEF	Global Environment Facility	UKEF	UK Export Finance
GCF	Green Climate Fund	UN	United Nations
GHG	Greenhouse Gas	UNEP	United Nations Environment Programme
GDP	Gross Domestic Product	UNFCCC	United Nations Framework for Climate Change
HEAL	Health and Environment Alliance	UNISDR	United Nations Office for Disaster Risk Reduction
IASB	International Accounting Standards Board	USA	United States of America
IEA	International Energy Agency	WB	World Bank
IIEP	Institute for European Environmental Policy	WDR	World Development Report
IISD-GSI	International Institute for Sustainable Development – Global Subsidies Initiative	WEO	World Energy Outlook
IMF	International Monetary Fund	WMO	World Meteorological Organisation
IPCC	International Panel on Climate Change	WTO	World Trade Organisation
ISO	International Standards Organisation	WWI	WorldWatch Institute
IPS	Inter Press Service News Agency		
kWh	Kilowatt per hour		



Climate Action Network (CAN) Europe is Europe's leading network working on climate and energy issues. With over 120 members in more than 25 countries, CAN Europe works to prevent dangerous climate change and promote sustainable energy and environment policy in Europe.

CAN Europe is a regional node of CAN, a worldwide network of over 900 Non-Governmental Organizations (NGOs) in more than 90 countries, working to promote government and individual action to limit human-induced climate change to ecologically sustainable levels. CAN members work to achieve this goal through information exchange and the coordinated development of NGO strategy on international, regional, and national climate issues. CAN has regional network hubs that coordinate these efforts around the world.

CAN members place a high priority on both a healthy environment and development that meets the needs of the present without compromising the ability of future generations to meet their own needs. CAN's vision is to protect the atmosphere while allowing for sustainable and equitable development worldwide.

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