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ANNEX

G20 Initiative on Rationalizing and Phasing Out Inefficient Fossil Fuel Subsidies

Implementation Strategies & Timetables

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I . ANNEX 1: SUMMARY TABLE OF IMPLEMENTATION STRATEGIES AND TIMETABLES

Country	Summary of Implementation Strategy
Argentina	Proposes to reduce household subsidy for propane gas consumption as natural gas access is expanded.
Australia	No inefficient fossil fuel subsidies.
Brazil	No inefficient fossil fuel subsidies. Lists several government measures in the energy sector related to the production or consumption of fossil fuels
Canada	Proposes to implement recently released draft legislation to phase out the accelerated capital cost allowance for oil sands assets over the 2011-15 period. Previously phased out other tax preferences applying to fossil fuel producers.
China	Proposes to gradually reduce the urban land use tax relief for fossil fuel producers.
France	No inefficient fossil fuel subsidies. Previously reformed subsidies for hard coal mining.
Germany	Proposes to discontinue subsidized coal mining in a socially acceptable manner by the end of 2018.
India	Proposes to work out implementation strategies and timetables for rationalizing and phasing out inefficient fossil fuel subsidies based on the recommendation of the Empowered Group of Ministers that has been constituted.
Indonesia	Proposes to phase out inefficient fossil fuel subsidies in a gradual manner in parallel through managing the demand side by adopting measures that will reduce fossil fuel energy consumption and by gradually narrowing the gap between domestic and international prices.
Italy	Proposes to continue with planned expiration of subsidy 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.
Japan	No inefficient fossil fuel subsidies.
Korea	Proposes to phase out subsidies to anthracite coal and briquette producers.
Mexico	By continuing current policies and based on current market conditions, subsidies to gasoline, diesel and LP gas are expected to disappear in the medium term.
Russia	Proposes to implement the commitment to rationalize and phase out inefficient fossil fuel subsidies through national economic and energy policy, within the framework of its Energy Strategy 2030 and the Concept of Long-Term Social and Economic Development, as well as in the context of its joining the WTO.
Saudi Arabia	No inefficient fossil fuel subsidies. Saudi Arabia has a long-standing energy policy to improve the utilization of economic resources with emphasis on rationalization.
South Africa	No inefficient fossil fuel subsidies. Noting recently introduced electricity tax that applies to electricity generated from non-renewables as well as other relevant tax measures and incentives to reduce wasteful consumption and encourage clean energy development.
Spain	Proposes to implement current coal industry restructuring plan until 2012 when further restructuring will be considered.
Turkey	Proposes to work on a restructuring plan to rationalize the inefficient producer subsidies transferred to a stated-owned hard coal producing enterprise.
United Kingdom	No inefficient fossil fuel subsidies. Previously reformed subsidies for hard coal mining.
United States	Proposes to pass legislation to eliminate twelve preferential tax provisions related to the production of coal, oil, and natural gas.

II. Annex 2: IMPLEMENTATION STRATEGIES AND TIMETABLES OF G20 MEMBERS

ARGENTINA

PLAN AND SCHEDULE FOR SUBSIDY REDUCTION

GENERAL ASPECTS

Taking into consideration that the subsidies exposed in the preliminary stage play a social role, it becomes essential to delineate specific policies to mitigate the undesirable negative effects of subsidy reduction on low income population.

In this sense, Argentina's position is that those subsidies will be reduced in line with the completion of high priority energetic public works which are currently in progress in our country, and those which are planned for the nearby future. The proposed policies have the aim of ensuring energy supply to household users and productive activities, which constitute the main driver of economic growth, without disregarding social aspects which are considered the cornerstone of economic policy.

Bearing in mind the abovementioned ideas and attending the final goal of reducing future needs for subsidies, a list of policies is exhibited. On the one hand, tariff compensations to consumers of piped and bottled LPG will be reduced *pari passu* with the extension of natural gas mains across the country. On the other hand, a subsidiary objective of these policies is to provide the necessary incentives in order to satisfy natural gas demand with domestic production. This, in time, will substitute fuel imports, reducing the need for subsidies introduced to avoid the pass-through of high international prices to the tariff paid by end users.

Despite the fact that the referred measures have the direct consequence of reducing fossil fuel subsidies, from an environmental point of view, they will have a neutral effect on carbon dioxide emissions. For this reason, special emphasis is made on public works and programs which alleviate the negative environmental impact of fossil fuels use. An illustrative list of such measures is detailed in the present document.

By these means, and considering our country's particular circumstances, we reaffirm Argentina's commitment to social, economic and environmental issues.

POLICIES TO REDUCE SUBSIDIES

1. Natural Gas Pipeline expansion

In order to achieve the goal of supporting domestic growth and national progress based on the improvement of the energy balance, the National Government, through the Ministry of Federal Planning, Public Investment and Services, has promoted the expansion of firm transport capacity by natural gas pipelines. This works are known as “*Transport Capacity Expansion 2006-2008*” and “*North-East Gas Pipeline*”.

The “*Transport Capacity Expansion 2006-2008*” is the most important development project of the natural gas system registered in our national history. It is expected that by August 2010, 40% of the total expansion capacity planned for this project will be in use.

It is worth highlighting that this project includes the public work named “*Strait of Magellan New Submarine Pipeline*”, which is extremely necessary to the future development of the Southern gas transport system, since the largest proved reserves are located in the Austral Offshore Gas Basin, in the province of Tierra del Fuego.

A second landmark in natural gas supply is the “*North East Gas Pipeline*” project. This project involves the building of a new gas pipeline to complement the existing natural gas transport system. The objective is that of supplying natural gas to the population in the North-Eastern region that currently consume Butane Gas Cylinders because of the lack of natural gas mains.

2. Expansion of Natural Gas mains and the reduction of subsidies to households

In order to expand the gas mains to meet the goals of universal service, a financial scheme has been designed to finance the replacement of propane gas consumption for natural gas consumption. Every additional household that receives natural gas instead of propane gas because of the expansion of natural gas mains will not receive the subsidy to propane consumption in the future, so the Government will be able to save future expenditures in those subsidies. The total money amount saved will be used to repay the public works that will permit the substitution of propane gas for natural gas.

The implementation of these policies made possible the expansion of natural gas mains, and consequently, the availability of this fuel for households and industries located in the most populated cities in the Patagonic Region.

3. “Gas Plus” Program

Considering the current volume of available gas, this Government has implemented an incentives mechanism to encourage the necessary investments to increase private sector’s gas production and exploration as well as the development of new investment projects. This program is closely related to the aforementioned measures, as it increases the share of domestic demand for natural gas that is met by domestic production and therefore reducing the reliance on imports.

POLICIES FOR THE MITIGATION OF THE ENVIRONMENTAL IMPACT OF FOSSIL FUELS

In the year 2003, the National Government has implemented the most important energetic infrastructure plan in years. At present, as a result of this set of public policies, the energetic infrastructure available has been widely expanded: 37% of Gas Transport System, 55% of Electric Energy Generation Capability and the 70% of High Tension Lines.

The stage of infrastructure development achieved allowed the energy supply to meet the fast growing demand due to Argentina’s economic growth. Our country is now looking forward to reach a second stage which involves the rational use of energy resources, reducing carbon dioxide emissions following the global tendency of attaining environmentally sustainable growth.

An illustrative list of those policies aimed to reach this new stage of development can add clarity to Argentina’s statement.

1. Encouraging the use of renewable energy sources

Act 26.190, which encourages the Use of Renewable Energy Sources, stated that by year 2016, 8% of national energy consumption should be supplied with renewable energy. Additionally, a set of fiscal benefits for investments has been designed, as well as a surcharge on market prices applied to this type of projects.

2. Electric energy provision from renewable sources

As a result of the energy plan implemented by the National Government, the regions where the country’s main renewable energy sources are located have accomplished the connection to the National Electric System. This is the basis for the development of wind energy potential and other alternative sources. In order to take advantage of this new opportunity we are currently

deploying a bidding process for the Development of Electricity Generation from Renewable Sources (GENREN).

This policy is highly significant because the additional generation based on these alternative sources represents a 4% of the current electricity generation balance, which added to the current 2.5%, will raise its share close to the 6.5%.

3. National Hydroelectric Development Program and Nuclear Plan

The main objective of the recently announced National Hydroelectric Development Program is to increase the hydroelectric generation potential by 2.900 MW, which represents 10% of the total current power generation.

The completion of Atucha II, the Third Nuclear Plant, is scheduled for early 2011 and will provide 745 MW to the system, representing a 74% increase in supply from this source, and increasing to a 13% the share of nuclear power stations in total energy supply.

On the other hand, in the field of technological innovation, the construction of a CAREM modular nuclear reactor bound for electric power generation is in progress.

4. National Program for Rational and Efficient Use of Energy

On the demand side, different measures have been outlined to improve efficiency in energy use. Federal Government has launched the National Program for Rational and Efficient Use of Energy (PRONUREE), a set of policies that seek to raise consumer's awareness about the importance of rational and efficient use of energy.

5. Production and sustainable use of biofuels

In order to complement the set of policies that tend to improve the electricity sector, the Government has promoted other policies to replace the use of fossil fuels. In particular, Act 26.093 created the Regime for the Regulation and Promotion of the Production and Sustainable Use of Biofuels. According to this Act, every liquid fuel characterized as fuel oil or diesel oil which is commercialized within national territory, must be blended with the biofuel classified as "Biodiesel." Additionally, it is stated that any liquid fuel characterized as gasoline and commercialized in national territory, must be blended with the biofuel classified as "Bioethanol". It is worth noting that the methodology used to calculate the price of biofuels under this regime has not caused an increase in the price paid by final consumers.

MONITORING AND ASSESSMENT OF SUBSIDY REDUCTION

Considering the viewpoint from which the rationalization of inefficient fossil fuel subsidies has been posed, the monitoring and assessment of the proposed policies is subject to the progress of works, the results achieved with their concretion and the effectiveness of the programs to achieve established goals. In this sense, the Ministry of Federal Planning, Public Investment and Services, as the main responsible for developing and promoting the mentioned public works and programs, is in charge of monitoring the fulfillment of terms and objectives established for each measure.

AUSTRALIA

Fossil fuel production

Australia does not have measures related to the production of fossil fuels that fall within the scope of the G20 commitment.

Australia is a significant fossil fuel producer. It produces oil, liquefied petroleum gas, natural gas and coal for domestic consumption and export.

Fossil fuel production in Australia is generally determined by market forces. The Australian Government does not impose trade restrictions on the import of fossil fuels. The import of fossil fuel is subject to a customs duty which is equivalent to the excise on domestically produced fuel. The Australian government does not provide significant budgetary or other sectoral assistance to the industry.

Budget assistance

Australian Government budgetary support for fossil fuel production is limited to measures that are intended to support production of clean energy. These measures are outside the scope of the G20 commitment.

Tax expenditures

Australia does not have any sector-specific tax expenditures for fossil fuel production (although fossil fuel producers are able to access general measures that apply across the economy or across the mining and quarrying sector as a whole).

In the 2008-09 Budget, the Australian Government abolished an excise exemption that previously applied to the production of condensate.

Fossil fuel consumption

Oil, coal and natural gas are consumed for transport, electricity generation, heating and other industrial purposes.

The Australian Government does not have measures related to the consumption of fossil fuels that fall within the scope of the G20 commitment.

The Australian Government does not regulate fuel prices (although petrol prices are subject to monitoring by the Australian Competition and Consumer Commission).

Budget assistance

The Australian Government provides means-tested income support payments to low income earners. It does not provide any payments that are tied to the consumption of fossil fuel (such as heating oil or natural gas).

Under the *Australian Fuel Tax Act 2006*, the Australian Government provides a credit that partially or fully offsets the excise on the taxable fuel used by businesses (Fuel Tax Credit Scheme). The types of business users and the use of the fuel determine the amount rebated. For example, 100 per cent of the excise less a 'road user charge' is rebated for heavy on road transport. The 'road user charge' reflects the cost of road maintenance. Because of its relationship to the tax treatment of fossil fuel consumption, it is discussed below under 'tax expenditures'.

Tax expenditures

Production or import of fossil fuel in Australia is subject to excise and the consumption of any fuel is subject to the Goods and Services Tax (GST). The GST applies at a rate of one eleventh of the final retail price. Excise is levied on a volumetric basis.

The rate of excise that applies in Australia varies between different types of fossil fuels.

- LPG, CNG and LNG are currently exempt from excise.
- Aviation fuel excise is raised for the purpose of funding the operations of the Civil Aviation Safety Authority (CASA), the agency responsible for provision of aviation services.

These measures are listed as tax expenditures in the Australian Government's Tax Expenditure Statement (as the applicable excise rate is below the relevant benchmark rate).

The excise exemption for LPG, CNG and LNG was introduced to diversify Australia's sources of transport fuels. Its main effect is to encourage the substitution of two conventional fossil fuels (petrol and diesel) for other cleaner fossil fuels (LPG, LNG and CNG).

The measure does not fall within the scope of the G20 commitment as it does not encourage wasteful consumption.

To further improve the efficiency of Australia's fuel tax arrangements, the Australian Government recently confirmed in the 2010-11 Budget that it will phase-in excise on LPG, LNG and CNG between 1 July 2011 and 1 July 2015. At the end of this transition period, these fuels will be taxed at 50 per cent of the full energy content tax rate.

Under Australia's tax system, consumption taxes are intended to apply to final consumption (rather than business inputs). In the case of the GST, the liability for the GST falls on the supplier but the incidence of the tax is intended to fall on the final consumer. To achieve this outcome, businesses who have incurred GST on their inputs are entitled to a tax offsetting input tax credit. Similarly, although the liability for fuel tax falls on producers or importers, the incidence of fuel tax is generally intended to fall on on-road users of light vehicles (with a road user charge applying to heavy vehicles). Therefore, like the GST input tax credits, businesses who have purchased fuel on which excise has been levied (other than those using the fuel in light on-road vehicles) are generally entitled to a fuel tax credit to offset the incidence of the tax.

Measures aimed at avoiding the application of consumption taxes on business inputs are not within the scope of the G20 commitment. Similarly, collecting excise from fuel producers or importers and rebating business users on whom the tax is not intended to apply is more efficient than requiring individual fuel vendors to apply different rates of tax at the point of sale depending on the customer.

Under Australia's tax framework, employers are taxed on certain benefits they provide to employees. The Fringe Benefits Tax applies to the provision of motor vehicles. The tax liability on employers for the provision of a motor car to employees reflects the extent to which the vehicle is used for private use. One of the methods available for determining this is the statutory method that uses distance travelled as a proxy for business use. The longer the distance travelled, the lower the effective tax rate paid by the employer. The purpose of this measure is to provide a simple way of determining the balance between business and private use. In addition, it applies to all costs associated with acquisition and operation of a motor vehicle, not only fuel. Also, it applies equally to all types of fuel (including renewables).

This approach which is aimed at providing a simple approach to determining the application of the Fringe Benefit Tax to the provision of motor vehicles does not fall within the scope of the G20 commitment.

BRAZIL

During the Pittsburgh Summit, Leaders of the G-20 agreed to “*phase out and rationalize over the medium term inefficient fossil fuel subsidies while providing targeted support for the poorest*”.

Brazil has not identified any inefficient subsidy regarding either the production or consumption of fossil fuels.

For the sake of completeness, the following list examines future developments related to government measures in the energy sector associated with the consumption or production of fossil fuels.

Regarding power generation in Brazil’s isolated electrical systems:

The power generation cost leveling mechanism allows Brazilians living in less developed regions of the country (primarily areas in the Amazon region not connected to the national energy grid), where power is predominantly derived from expensive liquid fossil fuels, to have access to electricity at the same price paid by those living in more developed areas. Despite its social nature, the benefit is expected to suffer a sharp decrease once most of these regions are connected to the national electric grid, which transmits cheap hydroelectric energy throughout the whole country. These connections are expected to be substantially completed by the end of 2012, reducing the annual cost of the subsidy from current 1.56 billion USD to approximately 400 million USD in 2013.

Regarding fuel costs for national coal power generation:

The payment of fuel costs for national coal power plants in Brazil is a temporary mechanism, resulting from the transition between regulatory models in the Brazilian power industry during the 1990s. These plants’ Power Selling Contracts depend upon the fuel cost recovery mechanism, are legally binding and, as such, have to be preserved.

The legislation that created the transition mechanism commands its extinction in 2027. Furthermore, it establishes a limit for overall expenditure on this sort of benefit, and such limit has already been practically reached by the payments made to current plants.

Regarding rebates on diesel fuel for fishing boats:

This measure involves very small transfers to fishing boats (totaling US\$ 13 million). Even with this help, the average price of fishing diesel in Brazil is still above world market prices.

CANADA

Canadian Reforms to Taxation of Fossil Fuel Production

Action Plan

Accelerated Capital Cost Allowance for Oil Sands

Accelerated capital cost allowance (CCA) is available for tangible assets acquired for use in new oil sands projects or major project expansions. The accelerated CCA is an additional allowance that supplements the regular CCA claim (25 per cent on a declining balance basis). The additional allowance allows the taxpayer to deduct in computing income for a taxation year up to 100 per cent of the undepreciated cost of the eligible assets, not exceeding the taxpayer's income for the year from the project.

The accelerated CCA for oil sands projects will be phased out over the 2011-2015 period. The accelerated CCA will be maintained for oil sands assets acquired before March 19, 2007 and those acquired before 2012 that are required for the completion of project phases on which major construction began before March 19, 2007. For other assets, the accelerated CCA will be gradually reduced over the years 2011 to 2014, to 90 per cent, 80 per cent, 60 per cent, and 30 per cent, respectively, of the otherwise allowable accelerated CCA. No accelerated CCA may be claimed on these assets after 2014.

The revenue cost of providing accelerated CCA for oil sands is volatile and can vary considerably from year to year based on project and industry factors. The average cost on a current cash-flow basis over the period 2007-2011 was forecast as \$300 million per year.

On May 3, 2010, the Government released detailed draft amendments to the *Income Tax Regulations* to implement the phase-out.

Past Reforms

Resource Allowance

The resource allowance, described below, was phased out, and a deduction for actual royalties and mining taxes paid was phased in (deductible under general principles as a cost of doing business), over the 2003-2006 period. As of 2007, the resource allowance was fully eliminated.

In 1974, the deductibility of Crown royalties and mining taxes in respect of the production of oil and gas and minerals (generally paid to provincial governments) was eliminated. This was a response to concerns that these provincial levies were eroding the federal corporate income tax base. The resource allowance was introduced in 1976 as a rough proxy, to provide recognition in the determination of taxable income, within reasonable limits, that provinces impose royalties and mining taxes.

The resource allowance was a deduction equal to 25 per cent of a corporation's resource profits. The resulting tax deduction could be in excess of, or lower than, actual royalties and mining taxes incurred in a particular year or over the life of a project. In aggregate, the value of the resource allowance became higher than the value of royalties or mining taxes actually paid, so the resource allowance was considered to be a tax expenditure.

The estimated revenue cost of the resource allowance, net of the non-deductibility of Crown royalties, was around \$353 million per year (average 2000-2002¹).

Syncrude Remission Order

The Syncrude remission order, described below, ended on December 31, 2003.

The Syncrude oil sands project was initiated in the early 1970s when Crown royalty charges paid to provincial governments were fully deductible in the computation of income taxes. In May 1976, the federal government granted a remission order to Syncrude participants by Order-in-Council. The remission order permitted project participants to deduct joint venture payments made to the Province of Alberta. This deduction was allowed in addition to the resource allowance, which was introduced in 1976 in the resource sector generally as a rough proxy in lieu of royalty deductibility, which had been removed in 1974.

The estimated revenue cost of the Syncrude Remission Order was around \$143 million per year (average 2001-2002 to 2003-2004²).

Earned Depletion Deduction

Pursuant to an announcement made in 1987, additions to the depletion pools for earned depletion and mining exploration depletion, described below, were eliminated as of January 1, 1990. Companies now are only entitled to deduct pre-1990 depletion amounts not previously claimed.

Earned depletion was a deduction of up to 33⅓ per cent of certain exploration and development expenses in the oil and gas and mining sectors and of the cost of assets related to new mines (including oil sands mines) and major mine expansions. This deduction supplemented the deduction for actual costs.

The deduction was generally limited to 25 per cent of a corporation's annual resource profits, although mining exploration depletion could be deducted against non-resource income. Earned depletion amounts were pooled and any remaining balance could be carried forward indefinitely for use in later years.

The estimated revenue cost of the earned depletion deduction was around \$102 million per year

¹ *Tax Expenditures and Evaluations*, Department of Finance (2005, 2006 and 2007).

² *Public Accounts of Canada – Additional Information and Analysis*, Government of Canada (2002, 2003 and 2004).

(1989 figure³).

Canada's Experience with Rationalization

Rationalization of the measures described above was facilitated by various factors:

- **Consultation with Industry**: For example, prior to announcing the phase-out of the resource allowance, the Government undertook an extensive series of consultations with industry on options to improve the tax structure for the resource sector. Following the announcement, the Department of Finance released a detailed technical paper in March 2003 which outlined the rationale for reform.
- **Broader Package of Reforms**: In certain cases, measures were phased out as part of a broader package of reforms. For example, the elimination of the resource allowance was announced as part of a broader package which included the gradual extension to the resource sector of the lower federal tax rate of 21 per cent that applied in other sectors. The phase-out of accelerated CCA for oil sands was announced together with enhancements to the accelerated CCA for clean energy generation equipment.
- **Transitional Relief**: The above measures involved a variety of transitional mechanisms, tailored to the situation, in order to provide industry with time to adjust where appropriate or to protect existing investments. Transitional measures included: advance notice of the change before it came into effect, preservation of the old rule for certain projects at an advanced stage at the time of announcement ("grandfathering"), and gradual implementation of the change on a phased basis.

Going Forward

Consistent with the goals set out in Advantage Canada (our 2006 strategic economic plan), Canada will continue to review its policies on an ongoing basis to ensure that they provide an internationally competitive economic environment, while achieving their aims in an efficient manner.

³ *Personal and Corporate Income Tax Expenditures*, Department of Finance (December 1993). The last full year before phase-out was 1987, but tax expenditure estimates were not published for that year or 1988.

CHINA

The Chinese Government will gradually reduce the urban land use tax relief to fossil fuel producers.

China has granted urban land use tax relief to fossil fuel producers using urban land for construction and production. This tax relief policy does not encourage or depress energy consumption, therefore, it does not fall in the category of inefficient fossil fuel subsidies that encourage wasteful consumption as required by the G20 to be rationalized and phased out. However, in consideration of the fact that it is a temporary measure intended to reduce the excessive burden of fossil fuel producers for a specified period of time, China will, by following the originally-set plan and in line with progress of relevant reforms, adjust the tax relief policy as appropriate, gradually reduce the preferential tax treatment and phase out the policy over the medium and long term.

FRANCE

Based on the IEA's approach to fossil fuel subsidies, we can define fossil fuel subsidies as: "A fossil-fuel subsidy is any government measure or program with the objective or direct consequence of reducing below world-market prices, including all costs of transport, refining and distribution, the effective cost for fossil fuels paid by final consumers, or of reducing the costs or increasing the revenues of fossil-fuel producing companies".

Traditionally, France, as most of the other EU member states, taxes fossil fuels consumption by means of energy (excise) taxes, levied on the quantity of energy products once these are released for consumption. These taxes help raise revenues, but also contribute to reducing fossil fuel consumption by raising the price of energy and energy-using goods and services. They thus support in a general way the goals of improving energy efficiency, fighting climate change and contributing to energy security.

The level of taxation levied on gasoline is very high in France with respect to international standards. According to the GTZ, in 2008, the retail price for gasoline reached 152 US cents per litre, well above, for instance, that of the United States (56 US cents/litre).

In some cases, reduced rates of duty apply to specific sectors, in order to preserve their international competitiveness. Reduced rates may also apply to sectors (such as public transportation) which produce positive externalities. Where excise taxes on fuel oil aim at covering externalities from the use of roads, they do not apply to the off-road uses of diesel fuels (agriculture, building...).

A list of the excise tax exemptions currently existing in France on fossil fuels was distributed to G20 members involved in this consultation process. They are well above the minimum levels of taxation fixed by the European Council directive of October 2003 restructuring the Community framework for the taxation of energy products and electricity. Moreover, the price paid by the corresponding final users remains well above a European reference price, which corresponds to the European average price without value added tax and excise duty. Therefore, according to our definition for fossil fuel subsidies, these exemptions cannot be considered as fossil fuel subsidies.

Lessons learned from the past

In order to participate in the G20 members' effort to rationalize and phase out inefficient fossil fuel subsidies, the example of the gradual reduction of coal production starting in the 1960's in France can provide valuable lessons.

The OECD's case study on "*Reform of subsidies to hard coal mining in France*", Annex 3 of IEA, OECD, OPEC and World Bank (2010), "*Analysis of the Scope of Energy Subsidies and Suggestions for the G-20 Initiative*" describes this particular example.

Subsidies were given from the French Government, partly via the special fund SOFIREM (Société Financière pour favoriser l'Industrialisation des Régions Minières) to accompany the closing of coal mines, promote investment in the mining regions, retrain workers and encourage entrepreneurship, and to support the establishment of new businesses, industrial zones and entities responsible for local economic development. Between 1971 and 2000, the state spent around EUR 35 billion on restructuring the coal sector and CdF (Charbonnages de France) accumulated EUR 5.5 billion of debt to which could be added EUR 7.7 billion of “special agreements” for its staff, such as free housing and transportation (Laan, Beaton and Presta, 2010; Philippon, 2004).

Preliminary OECD estimates, based on IEA data and French budget documents, indicate that total government funding to the sector amounted to EUR 975 million in 2000 and EUR 972 million in 2005. While aid to cover operating losses represented 34% of the total in 2000, this share had decreased to 3% in 2005. In 2007, the CdF fund was liquidated and subsidies to the sector were largely stopped. (IEA, 2001 and 2002; CdF, 2006; French Senate, undated.)

After a gradual reduction⁴ of coal production starting in the early 1960s, an agreement (*pacte charbonniere*) was reached in 1994 to close all remaining coal mines. This was combined with extensive measures to promote alternative economic activity in the affected regions and long-lasting measures to protect the interests of the former miners. According to the agreement, former miners were guaranteed employment with CdF until the age of 45, when those with at least 25 years of service became eligible for a “leave”, during which they would receive 80% of their final working salary until retirement (Laan, Beaton and Presta, 2010;)

In addition to European competition legislation, the major drivers of the reform were budgetary considerations and a reduced perceived “need” to secure “energy independence” via coal mining due to an expansion of nuclear energy capacity.

While coal was still a crucial source of energy at the start of the reform, the last French coal mine was closed in 2004.

However, after a reform lasting many decades, the ANGDM, the Agence Nationale pour la Garantie des Droits des Mineurs, still provides social support to over 200 000 people. Its activities require state support of around EUR 700 million a year, an amount that will decline over time as former miners pass away (Laan, Beaton and Presta, 2010).

The expansion of nuclear-based electricity generating capacity and the generous provisions offered to the former miners helped making the closure of all the coal mines possible.

⁴ The process was not quite smooth. In 1981, the Government decided to re-launch coal mining, causing CdF to hire 10,000 new workers – which is said to have increased the restructuring costs by EUR 3.5 billion (Philippon, 2004).

GERMANY

Like other European member states, we define fossil-fuel subsidies on the basis of the IEA's approach as follows:

“A fossil-fuel subsidy is any government measure or programme with the objective or direct consequence of reducing below world-market prices, including all costs of transport, refining and distribution, the effective cost for fossil fuels paid by final consumers, or of reducing the costs or increasing the revenues of fossil-fuel producing companies.”

On the basis of this definition, the German subsidies list includes financial assistance for hard coal mining.

Financial assistance for hard coal mining (Producer's Subsidy)

A. Identification

The German Government and the federal state of North Rhine-Westphalia make substantial grants in respect of sales of German coal for electricity generation, sales to the steel industry, and compensation for burdens due to capacity adjustments.

The coal subsidies are regulated under a specific EU regulation and decrease over time. Dependent as they are on world market coal prices, the annual cost of the subsidies for Germany (including the federal state of North Rhine Westphalia) was €1,757 billion in 2009.

B. Analysis

Geological reasons in particular mean that when compared with production costs in other countries, the cost of coal mining in Germany is so high that it would not be possible without permanent subsidies.

In 2007 the German Government and the federal states of North Rhine-Westphalia and Saarland reached a basic agreement with the mining enterprise and the mining trade union that coal subsidies be run down and that subsidised coal mining be discontinued in a socially acceptable manner by the end of 2018. This is laid down in the Coal Financing Act.

Coal mining capacities are being reduced as scheduled. A mounting share of these subsidies is tied for these capacity adjustment costs. The decrease in subsidies is accompanied by a continual reduction in extraction. In 2008 around 30,000 employees at seven mines extracted 17 million tonnes of coal. In 2009 six mines extracting around 14 million tonnes of coal and staffed by 27,000 employees were still in operation.

A foundation was established in particular to assume the dewatering costs following the cessation of coal mining. The foundation will finance these costs by selling the mine's equity investment assets.

C. Monitoring and evaluation of effectiveness of subsidy reduction

The 2018 cut-off point makes it possible to avoid redundancies in the mining sector. The socially compatible exit from subsidising coal extraction is primarily ensured through the gradual retirement of older miners.

In 2012 the German Bundestag (national parliament) will have to conduct a review to ascertain whether the agreement to end subsidised coal mining should be maintained in the light of efficiency considerations, the security of energy supply and other energy policy objectives.

INDIA

Identification of fossil fuel subsidies:

As discussed in the G20 Energy Experts meeting held in Paris on 11th-12th March, 2010 as far as petroleum and natural gas is concerned, subsidies are being provided in India for the following petroleum products:

- (1) Kerosene supplied under Public Distribution System.
- (2) Domestic LPG for supplying clean natural gas for cooking.
- (3) Freight subsidy for identified far flung areas on PDS kerosene and domestic LPG in order to mitigate the impact of high transportation costs.
- (4) Natural gas subsidy scheme provided as difference between consumer price and producer price as per the allocated quantity uplifted by eligible consumer in the different areas of North-Eastern region of the country.

This list is based on the following definition:

‘A fossil-fuel subsidy is any government measure or budgetary support that has a consequence of reducing the effective cost for fossil-fuel paid by consumer, (after accounting for taxes on these fuels) or of reducing the costs or increasing the revenue of fossil-fuel producing companies’

It may be mentioned that this list does not include the indirect subsidy provided for energy services like tax benefits on profits derived from commercial production and refining of mineral oils and natural gas; investment linked incentives for expenses on new pipelines; sales tax concessions by State/local government etc.

Implementation Strategy and Timetables on rationalization and phasing out of inefficient fossil fuel subsidies:

The Kirit Parikh Committee set up by the Government to suggest a viable and sustainable policy for pricing of petroleum products has inter-alia, recommended strategies for rationalization and phasing out of inefficient fossil fuel subsidies. The Government has constituted an EGoM to look

into all issues relating to the sale of petroleum products in the light of recommendations of the Dr. Kirit Parikh Committee Report.

Implementation Strategy and Timetables on rationalization and phasing out of inefficient fossil fuel subsidies would be worked out on the recommendations of the Empowered Group of Ministers (EGoM). However, subsidies on PDS Kerosene and Domestic LPG could be outside the net.

INDONESIA

1. Definition of fossil fuel subsidy and the domestic context

According to the Indonesian Budget Law, a fossil fuel subsidy is defined as a budgetary allocation given to a company or institution that produces and/or sells the oil fuel and Liquefied Petroleum Gas (LPG), with the purpose of providing access to energy at an affordable price for consumers. As a developing country, fossil fuel subsidies are viewed as important to ensure the purchasing power of poor people. Nonetheless, the Government of Indonesia is aware of both the fiscal impact and equity implications of these subsidies as well as their consequences for environmental policy. The Government has on several occasions narrowed the gap between domestic and international prices and eliminated subsidies for some products.

2. Strategy

- a. The phasing out of inefficient fossil fuel subsidies in Indonesia is to be implemented in a gradual manner in order to minimize the spill-over impact on the poor noting that a large part of the consumption basket of the poor is affected by higher fossil fuel prices.
- b. The phasing out strategy is to be sequenced through managing the demand side by adopting measures that will reduce fossil fuel energy consumption and then by gradually narrowing the gap between domestic and international prices.

3. Action Plan

- a. Reducing the size of inefficient subsidies by reducing consumption of certain fuel types by:
 - Replacing use of less-efficient fuels, such as kerosene, by giving incentives for people to use cleaner and more efficient energy such as liquid gas
 - Diversifying energy use by focusing on cleaner energy
 - Providing fiscal incentives for renewable energy (such as funding to develop the capacity to use renewable energy, reduction of income tax, acceleration of the rate of asset amortization, loss compensation, and import duty exclusions for industries using renewable energies) and fiscal disincentives (such as imposing sales tax and value added tax on fossil fuels).
 - Containing the distribution of subsidized fuel to certain users (for example, by providing a subsidy for poor fisherman to buy fuel in fixed quantities)
- b. Transforming the price subsidy to a targeted subsidy through reinforcement of poverty alleviation programs.
- c. Establishing correct standards for the pricing of fuel
 - Reducing fuel distribution costs
 - Calculating the economic price of fuel supply
 - Establishing a selling price for certain fuels to match the purchasing power of certain users

4. Progress in 2009

- Eliminating completely the subsidy for diesel and burning oil
- Changing the payment subsidy mechanism from a cost and fee system to an alpha system (margin + distribution cost)
- Continuing the program to transform kerosene to LPG (40 million households have shifted their consumption from kerosene to LPG in the period through 2009).
- Narrowing the gap between international and domestic prices.

5. Strategy in 2010

- Limiting subsidized fuel users to households, micro businesses, fishery businesses, public transportation and public services
- Reducing the consumption of fossil fuels by introducing new types of bio-fuel
- Continuing the conversion program of kerosene to LPG
- Improving the mechanism for distribution of subsidized fuels to enable the subsidy to be more targeted
- Intensifying monitoring of the distribution of subsidized fuel, increasing sanctions for misuse, and reforming the fuel business sector administration

ITALIA

Italy's Position on the G-20 Initiative

Italy recognizes the importance of the initiative to phase out fossil-fuel subsidies as a major contribution to improving energy efficiency, securing supply, and mitigating climate change, and encourages G-20 Members to take the commitment seriously.

Italy considers favorably the IEA's definition of fossil fuel subsidies, i.e.: "any government measure or program with the objective or direct consequence of reducing below world-market prices, including all costs of transport, refining and distribution, the effective cost for fossil fuels paid by final consumers, or of reducing the costs or increasing the revenues of fossil-fuel producing companies".

Italy's Fossil Fuel Subsidies List

According to this definition, Italy does not have subsidies that lower the price of fossil fuels below international market price levels. Furthermore, State aid within the EU is clearly limited by the Treaty on the Functioning of the European Union (TFEU), which forbids any public support not compatible with the TFEU. Hence, the final price paid for fossil fuels in Italy amounts to the world average price plus industrial costs enhanced by taxation of about 150%.

For the sake of completeness of Italy's list, measures other than tax reductions have also been listed. These are basically tariff rebates or exemptions on electricity and gas consumption, to sustain vulnerable population, such as those affected by the Abruzzo region earthquake in 2009. The subsidization of renewable Energy production capacity, commonly referred to as CIP6 scheme (resolution n.6 of the Interministerial Price Committee of 1992), initially comprised cogeneration capacity, which is clearly to be ruled out.

Italy's list is not confidential and can thus be published.

1. Tax measures

The following list is composed of tax measures regrouped by category and it is provided to G20 countries for transparency reasons as these measures do not represent subsidies on the basis of the IEA's definition.

In fact:

- the final price paid for fossil fuels in Italy (and in Europe) is the result of the world price plus the industrial costs (refinery, storage, distribution, margin) plus taxation (excise duties, VAT, other taxes). Official data shows that in Italy, as of end-march 2010, being the final price equal to 100, taxation represents 57,7 and world price plus industrial costs 42,3;
- according to the data available internationally, Italy ranks very high in the classification of G20 countries by final price paid (second for both gasoline and diesel) by a significant margin on other countries;
- the European legislation provides for a minimum level of taxation.

The result is that the final price paid in Italy is any case:

- well above the world price plus industrial costs plus the minimum level of taxation;
- well above the initial price of many other G20 countries.

The rationale of the measures described below is either economic, i.e. economic growth and competitiveness, or related to public objectives, such as the development of public transportation.

Category	Measure	Type	Rationale	Expiration	Cost (euro mln.)*
Taxation	Reduction/exemption excise duty	Consumption by productive activities (aviation, maritime sector, railways, public transport, commodities transport, agriculture, fishery, industrial plants)	Economic/public objectives	None	3350
Taxation	Reduction excise duty	Consumption by public bodies	public objectives	None	40
Taxation	Reduction/exemption excise duty/consumption tax, reduction in price	heating treated fuels	public objectives	None 2013	101

* Nominal average figure based on budget revenue estimate.

2. Other measures

The rationale of the measures described below is either social, i.e. economic sustain to the poor, or related to public objectives, such as the development of renewable energy production capacity. All social payments are clearly exempt from the reform objectives of the G20 Initiative on fossil fuel subsidies. The subsidization of renewable Energy production capacity initially comprised cogeneration plants and is commonly referred to as CIP6 scheme (resolution n.6 of the Interministerial Price Committee of 1992).

Category	Measure	Type	Rationale	Expiration	Cost (euro mln.)*
Social payment	“Safeguard regime” during transition to fully liberalised energy market dedicated, both for gas and electricity sector, to: - domestic consumers - non domestic consumers, with low voltage connections to the grid, less than 50 employees and an annual turnover of less than 10 euro mln - both domestic and non domestic consumers for gas consumption up to 200.000 cm per year	Customers who have not chosen a supplier on the free market are guaranteed by a last resort supplier, and pay for it	Social objectives	None (until the market will be fully liberalized) 30/09/2011 for non domestic gas consumers	No additional cost to the state budget
Social payment	Electricity and gas Bonus: to vulnerable consumers due to economic disadvantage or serious health conditions	Vulnerable households (ISEE** < 7.500 €/y, or < 20.000 €/y with more than 3 children) and/or with an ill person at charge that requires an electrically powered lifesaving device, get a tariff rebate covering 15% (gas) or 20% (electricity) of	Social objectives	None	No additional cost to the state budget. Subsidies are covered by specific provision in tariffs for up to 80 euro mln per year for the electricity sector. Subsidies for the gas sector are still to be estimated since the measure is in a start up phase
Social payment	Gas and electricity consumers of the Abruzzo Region are temporarily exempted from power and gas charges	Customers living in the Abruzzo Region damaged by the earthquake benefit from a full tariff rebate from April 6, 2009, for 36 months	Social objectives	2012	25
Subsidy	Electricity Production Capacity provided for by resolution n.6 of the Interministerial Price Committee of 1992 (CIP6)	Subsidy of renewable Energy production capacity investments and feed-in tariffs, also for cogeneration plants	Public objectives	Ruled out system. Last CIP6 contract will be expiring by 2020, unless implementation of different future provisions (i.e. compensation settlement)	1700

* Nominal average figure based on budget revenue estimate.

** ISEE: Indicator of equivalent Economic status, for selecting beneficiaries on the basis of a single threshold.

Italy's Fossil Fuel Subsidies Phasing-Out Implementation Strategy and Timetable

Again, the only item on the list that clearly results as a subsidy according to the IEA's definition is the subsidization of cogeneration power production capacity, initially assimilated to renewable Energy under the CIP6 scheme (resolution n.6 of the Interministerial Price Committee of 1992). This scheme is not accessible anymore since April 1999 (legislative decree n.79 "Bersani" of March 16th, 1999).

However, and since the CIP6 scheme entitles to feed-in tariffs for the entire lifespan of the respective generation facilities, the G20 leader's summit at Pittsburgh helped to push through a further legislative decree in December 2009, regarding the negotiation on a voluntary basis with the private operators of assimilated plants, as to their eventually anticipated recess from the scheme (Ministry of Economic Development, December 2nd, 2009).

KOREA

The two producer subsidies – subsidy for stable anthracite coal production and briquette production - will be phased out according to their respective timetables.

Name of Subsidy	Description	Implementation Strategy & Timetable
Subsidy for stable anthracite coal production	<ul style="list-style-type: none"> - Beneficiaries: Anthracite coal miners - Purpose: To compensate beneficiaries for the cost of production - Amount: 6.8 billion won in 2009(1,611 won per tonne) - The purpose of this subsidy is to support anthracite coal mines and ensure a stable supply of affordable fuel to low-income families in the form of briquettes. The price of anthracite coal is kept below the cost of production, and the difference is provided to the producers to reflect that fact. 	<p>The subsidy for stable anthracite coal production would be repealed by the end of 2010. (The Administration's Fiscal Year 2011 Budget proposal would not allow this subsidy.)</p>
Subsidy for briquette production	<ul style="list-style-type: none"> - Beneficiaries: Briquette producers - Purpose: To compensate beneficiaries for the cost of production - Amount: 147.5 billion won in 2009(160 won per unit since November 2009; previously 218 won per unit) - The purpose of this subsidy is to ensure that low-income households have an affordable supply of fuel in the form of briquettes. The price of briquettes is kept below the cost of production and the difference is provided to the producers to reflect that fact. 	<p>The subsidy for briquette production would be phased out by gradual price increasing of briquettes and repealed by the end of 2020. (From the Administration's Fiscal Year 2021 Budget proposal, this subsidy would be excluded.)</p>

- ✓ It is expected to provide expanded briquette vouchers for low-income households as a complementary measure for phasing out the two subsidies.

MEXICO

While current policies in Mexico are consistent with the goals of the G-20 commitment, we believe that in order to make a stronger commitment regarding the phase out of our fossil-fuel subsidies, it would be necessary for all countries to agree on a uniform methodology for calculating subsidies. Using such a common methodology, peer monitoring would be an effective tool to gauge progress across countries in removing fossil fuel subsidies in an objective and clear manner.

The current legal framework allows the Executive to set retail prices of gasoline, diesel, and LP gas. Hence, no action from the Legislative power is needed in order to modify fossil fuel prices.

Timeframes. Current policies in Mexico are consistent with the goals of the G-20 commitment:

- Since December 2009, retail prices of fossil fuels have been gradually increased on a monthly basis.
- The prices of low-octane gasoline (Magna) and diesel, high-octane gasoline (Premium) and LPG have been increased by around 1%, 0.4% and 0.6% per month, respectively.
- As of May, Magna, Premium, diesel and LP gas prices have increased by around 5.1%, 2.6%, 4.9% and 4.0%, respectively from their values in December 2009.

Assuming that current policies remain unchanged, and given the futures curves of international oil prices observed in May 2010, subsidies to gasoline and diesel are expected to disappear by the end of 2010, and the gap of LP gas prices is expected to close in 2012.

Mitigation. In order to mitigate the impact on the poorest, The Ministry of Social Development, is in charge of creating a national urban census of households that consume gasoline, diesel, LP Gas and natural gas. This urban census will complement the household registry used in the conditional cash transfer program Oportunidades, which is predominantly composed of rural households, which have a relatively low consumption of fossil fuels.

This census of fossil fuels consumers at the household level will allow the Government to design and implement well-targeted and focused support programs to compensate poor households for fossil fuel price increases. It is expected that the census will be finished in the first semester of 2011.

RUSSIA

Implementation Strategy

to rationalize and phase out inefficient fossil fuel subsidies that encourage wasteful consumption

1. The G-20 Pittsburgh summit commitment to rationalize and phase out over the medium term inefficient fossil fuel subsidies that encourage wasteful consumption will be implemented in Russia within the framework of its Energy Strategy 2030 and the Concept of Long-Term Social and Economic Development till 2020. The implementation of the Pittsburgh Initiative becomes a part of the national economic and energy policy.
2. The implementation strategy can include:
 - Identification and total revision of all energy subsidies with special attention given to fossil fuel subsidies;
 - Analysis of their efficiency in terms of the intended goals and their optimal integration into national overall economic and energy policy;
 - Development of Russia's Energy Subsidies Model;
 - Drafting and making decisions to amend, replace or phase-out concrete inefficient fossil fuel subsidies that encourage wasteful energy consumption;
 - Executive and Legislative moves to reform energy subsidies set-up;
 - Implementation of the Executive and Legislative formal decisions on rationalizing and phasing out inefficient fossil fuel subsidies that encourage wasteful consumption in the context of reforming energy subsidies set-up.
3. The implementation of the fossil fuel initiative by Russia will be carried out in the context of its joining the WTO. The developments in the area of fossil fuel subsidies will not in any way negatively affect the conditions of Russia's joining WTO.

SAUDI ARABIA

Saudi Arabia has considered a definition of inefficient subsidies on the basis that there is no cost to the Government that outweighs the social and economic benefits of the pricing mechanism, leading to wasteful rather than natural growth in consumption, and that these benefits, including in the form of economic diversification, cannot be provided by equally effective ways or by use of available alternative sources of energy.

Based on these criteria, the Government would like to articulate that while domestic fossil fuel prices in Saudi Arabia could be below international prices, these prices reflect the country's comparative advantage in oil production and are above the production costs. Indeed, the Government is not paying any fossil fuels-related subsidy from the treasury. Therefore, Saudi Arabia is not implementing any measures that fit the criteria for inefficient fossil fuel subsidies. The G20 proposal for phasing out inefficient fossil fuel subsidies does not therefore apply to Saudi Arabia.

However, the vision embodied in the National Development Plans considers the non-renewable nature of oil resources and the need to optimize the use of this natural resource to build a diversified and competitive economy. Toward that goal, the Government's energy policy emphasizes the need to improve the utilization of economic resources, with emphasis on rationalization as a key element, and to ensure the sustainability of long term consumption and its consistency with sustainable development.

SOUTH AFRICA

South Africa has introduced the electricity tax of 2c/kWh applies to electricity generated from non-renewables, from 01 July 2009. Household and industries using coal generated electricity pay this tax as part of their electricity bill. The purpose of the tax is to reduce wasteful consumption and provide incentives for the deployment of cleaner, more energy efficient technologies in the long term, and in the short term, to assist in demand side management.

Petroleum is already heavily levied. There are different tax imposts within the South African fuel price structure for different purposes, making fuel petroleum one of the most expensive products. These taxes include the general fuel levy (GFL), custom & excise levy (CEL) and road accident fund (RAF) levy. The general fuel levy finances general meritorious expenditure programmes of government; the custom and excise duty is used for the custom union revenue pool; and the Road accident fund (RAF) levy finances the compulsory third party motor vehicle insurance. For the 2010/11 financial year, the rates for GFL are 167.5c/l for petrol & 152.5 for diesel; CEL of 4c/l and RAF of 72c/l for both petrol and diesel, respectively.

In addition, South has introduced Accelerated Depreciation (Renewable Energy investment) tax incentive, providing for three year accelerated depreciation for plant, equipment and machinery used in the production of energy generation from renewable sources such as wind, solar, small-scale hydro and biomass.

Through the Energy Efficiency Strategy currently being drafted, South African government seeks to encourage energy efficiency while making sure pricing is properly reflective of the environmental impacts of energy production, handling and use.

SPAIN

Common EU definition: A fossil fuel is any government measure or program with the objective or direct consequence of reducing below world-market prices, including all costs of transport, refining and distribution, the effective cost for fossil fuels paid by final consumers, or of reducing the costs or increasing the revenues of fossil-fuel producing companies.

PART 1 A: Identification of Fossil Fuel Provisions

Expenditure provisions	Description	Annual Revenue Cost (millions of €) 2010
Financial assistance for hard coal mining	This aid is regulated under a specific EU regulation ⁵ and in accordance national legislation ⁶ , which allow financial assistance for the following items: -Reserves access: Production of the minimum quantity of indigenous coal necessary to guarantee access to coal reserves. It covers the difference between the production cost and the retail price freely agreed by the parties, taking into account the international market price. -Technical costs: It covers real costs of closure and exceptional intrinsic depreciation resulting from the closure of production units. -Social costs: Early retirements, costs for the readaptation of workers outside the coal industry, coal voucher.	980.1
Coal mine safety	Finance for the National Plan on Mining Safety and for aid to production units in respect of environmental health and safety at work.	4.3
LPG fixed price	Quarterly updated using a formula linked to international prices (months from “n-4” to “n-2”, where “n” is the month of update), transport costs (last known) and exchange rates (months from “n-4” to “n-2”).	0
Tax provisions		
Refunds and Exemptions (Hydrocarbon excise duty)	-Reduced tax rates 0%: biofuels -Exemptions: aviation, navigation, train transport, electricity, R&D -Refunds: Diesel fuel for professional use and for agriculture and stockbreeding	1,957.5
Freedom in amortization for mining (Corporate tax)	During the first 10 years of operation, mining companies enjoy freedom of amortization for investments on mining assets and for the amounts paid in respect of surface fee.	1.6

⁵ Council Regulation (CE) 1407/2002 of 23 July 2002 on State Aid to Coal Industry: <http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:L:2002:205:0001:0008:EN:PDF>

⁶ National Plan for Strategic Coal Reserves 2006-2012. http://www.irmc.es/common/Plan_Carbon.pdf

PART 1B: Analysis of Fossil Fuel Provisions

Expenditure provisions	Analysis
Financial assistance for hard coal mining	Currently, Spain is a relatively isolated country in terms of electricity and gas interconnection with the rest of Europe and has neither oil nor gas national production. Coal and renewable are the only national primary energy sources and thus this provision contributes to national energy security.
Mining security	Furthermore, coal reserves are geographically concentrated in areas where GDP per capita is below national average. From 80s, national industry of coal is under a restructuring plan, which provides incentives to a progressive reduction in capacity through measures intended to minimize the social impact of the reduction. At the European level, the aforementioned regulation (see footnote 1) is perfectly compatible with strict EU state aid rules, pursuant to wider socio-economic considerations, such as energy security or regional development. Implementing these objectives does not put into question the need to continue the restructuring process of the coal industry.
LPG fixed price	Formula is transparent and linked to international prices.
Tax provisions	
Refunds and Exemptions (Hydrocarbon excise duty)	The Special Tax on Hydrocarbons in Spain is, as in the rest of the EU, relatively high by international standards (OECD Tax Database 2010 ⁷). In addition to this excise duty, EU members levy the standard VAT rate on energy products, which does not exist yet in many other G20 members. As a result the price paid by consumers is much higher than the world price. According to CNE ⁸ , in February 2010 the retail price for gasoline reached 110.18 euro-cents per liter in Spain compared to before taxes 48.73 euro-cents per liter in the euro area; in the case of gasoil the corresponding prices are 99.37 euro-cents per liter in Spain and 49.33 in the euro area. Therefore any tax credit or refund on the Hydrocarbon tax should then not be deemed as a subsidy. Even in the extreme case of exemptions (e.g. biofuels, air and sea navigation), the price paid by final consumers is above world prices. Moreover, such reductions or exemptions from excise duties have an indirect environmental objective by facilitating the introduction or modification of such duties.
Freedom in amortization for mining (Corporate tax)	As mines deplete, the quality of service provided by the same asset also declines. This provision allows mining companies to adjust their depreciation expense so that it reflects more accurately how much of the asset's value is being used up each year.

⁷ http://www.oecd.org/document/60/0,3343,en_2649_34533_1942460_1_1_1_1,00.html#vat

⁸ Comisión Nacional de la Energía (CNE) is the Spanish independent regulatory body for energy systems. It elaborates monthly bulletins on the price of fuels in Spain and in the EU that can be consulted at http://www.eng.cne.es/cne/Publicaciones?id_nodo=288&accion=1&soloUltimo=si&slCat=22&keyword=&auditoria=F

PART 2: Plan and timetable for subsidy reduction

The National Plan for Strategic Coal Reserves 2006-12 currently in force aims at enhancing coal sector planning, taking into account social and regional implications, as well as ensuring reserves access to indigenous coal. Among other measures, the Plan envisages reducing coal production from 12,102 ktons in 2005 to 9,200 ktons by 2012; and reducing the labour force in that industry from 8,310 workers in 2005 to 5,302 in 2012. On that year, further restructuring will be considered. The responsible body for taking forward plans on coal subsidies is the Ministry of Industry, Tourism and Trade, in coordination with the European Commission.

The rest of the provisions cannot be deemed as a subsidy for the reasons stated above, and thus there are no foreseen changes on them.

PART 3: Monitoring and evaluation of effectiveness of subsidy reduction

The Ministry of Industry, Tourism and Trade, through its State Secretary for Energy, is responsible for monitoring and evaluating the regulatory aspects of coal subsidy reforms and the Ministry Finance, through its State Secretary for the Budget, is responsible for the fiscal issues. The mitigation measures intended to minimize the undesirable social impact of the reduction will be implemented by the Institute for Coal Mining Restructuring and Alternative Development in Mining, a government agency chaired by the State Secretary for Energy. Any change in the regulation on the special state aid regime for coal should be communicated to the European Commission.

TURKEY

The appropriate definition for “Inefficient Fossil Fuel Subsidy” is stated below:

“A fossil-fuel subsidy is any government measure or program with the objective of reducing, below production cost, the effective cost for fossil fuels paid by consumers or of reducing the costs or increasing the revenues of fossil-fuel producing companies through measures other than efficiency improvement measures and/or measures for the penetration of new technologies (e.g. clean coal technologies)”.

Definition of Subsidy	Type of Subsidy	Explanation
Capital injection to a state owned enterprise which sells majority of its hard coal for electricity production	Producer Subsidy	<p>Turkish Hard Coal Company (TTK), which is a state owned enterprise, produces hard coal and sells majority (around 60 %) of its production for electricity generation. Due to geological conditions of region where TTK is operating, the production is labor intensive. Therefore, the average selling price is not enough to cover commercial costs.</p> <p>Capital transfers from the budget (through Treasury) are made to sustain the financial viability of TTK.</p>

Implementation Plan For Phasing Out the Inefficient Producer Subsidies to TTK

The implementation plan for phasing out the inefficient producer subsidies is planned to be achieved with restructuring plan of TTK. The restructuring study began in 2009 in accordance with Annual Programme coordinated by State Planning Organization. Since then, the study is continuing with the goal of drafting a strategy to rationalize the subsidies transferred to company and to reorganize TTK so that it operates in an efficient manner. The restructuring plan is planned to be finalized in 2010 to determine the details of the implementation plan for phasing out the inefficient producer subsidies to TTK, both in medium and long term.

UNITED STATES

Part 1A: Identification of Fossil Fuel Provisions

Tax Provision	Description	Expiration	Annual Revenue Cost (millions of \$)*
Permanent Provisions			
Percentage depletion for oil and gas	<ul style="list-style-type: none"> Depletion is available to any person having an economic interest in a producing oil and gas property. There are generally two types of depletion--cost and percentage depletion. Cost depletion is limited to the taxpayer's basis in the property, whereas percentage depletion is not limited by the basis, but is subject to limitations based on net income derived from the property and taxable income. Percentage depletion for producing oil and gas property (15 percent rate) is available only to independent producers and royalty owners. For marginal properties, the taxable income limitation is suspended for taxable years ending before January 1, 2010. 	<p>None</p> <p>Suspension of taxable income limitation for marginal properties expired December 31, 2009.</p>	\$1,003
Expensing of intangible drilling costs	<ul style="list-style-type: none"> Taxpayers may elect to currently deduct intangible drilling costs (IDCs) paid or incurred with respect to the development of an oil or gas property located in the United States. For an integrated oil company that has elected to expense IDCs, 30 percent of the IDCs on productive wells must be capitalized and amortized over a 60-month period. 	None	\$789
Geological & geophysical expenditures	<ul style="list-style-type: none"> Geological and geophysical expenditures incurred by independent producers and smaller integrated oil companies in connection with domestic oil and gas exploration may be amortized over 2 years compared to 7 years for major integrated oil companies. 	None	\$111
Percentage depletion for hard mineral fossil fuels	<ul style="list-style-type: none"> Percentage depletion is available for coal and lignite (10 percent rate) and oil shale (15 percent rate). The percentage depletion deduction is generally subject to the alternative minimum tax at a 20 percent rate to the extent it exceeds the adjusted basis of the property. The deduction may not exceed 50 percent of the net income from the mineral property in any year (the "net-income limitation"). 	None	\$106

* Nominal annual average figure based on the U.S. FY 2011 Budget 10-year revenue estimate.

Tax Provision	Description	Expiration	Annual Revenue Cost (millions of \$)*
Royalty taxation of coal	<ul style="list-style-type: none"> Royalties received on the disposition of coal generally qualify for treatment as long-term capital gain and the royalty owner does not qualify for percentage depletion with respect to the coal. This treatment does not apply unless the taxpayer has been the owner of the mineral in place for at least one year before it is mined. The treatment also does not apply to income realized as a co-adventurer, partner, or principal in the mining of the mineral or to certain related party transactions. 	None	\$75
Expensing of exploration and development costs for hard mineral fuels.	<ul style="list-style-type: none"> Mining companies may elect to deduct 70 percent of domestic exploration and development costs. The 30 percent of expenses that cannot be deducted must be capitalized and amortized over a 60-month period. Taxpayers may also elect to capitalize mine exploration and development expenses and amortize them over a 10-year period. If this election is made, the expenses will not be tax preference items under the alternative minimum tax. 	None	\$41
Passive loss exception for working interests in oil and gas properties	<ul style="list-style-type: none"> The passive loss rules limit deductions and credits from passive trade or business activities. Deductions attributable to passive activities, to the extent they exceed income from passive activities, generally may not be deducted against other income, such as wages, portfolio income, or business income that is not derived from a passive activity. A similar rule applies to credits. Suspended deductions and credits are carried forward and treated as deductions and credits from passive activities in the next year. An exception is provided, however, for any working interest in an oil or gas property that the taxpayer holds directly or through an entity that does not limit the liability of the taxpayer with respect to the interest. 	None	\$18
Deduction for tertiary injectants	<ul style="list-style-type: none"> Taxpayers engaged in petroleum extraction activities may generally deduct qualified tertiary injectant expenses incurred while applying a tertiary recovery method. 	None	\$7
Enhanced oil recovery (EOR) credit	<ul style="list-style-type: none"> 15 percent credit for expenses associated with an EOR project Currently phased out due to high oil prices An EOR project is generally a project that involves the use of one or more tertiary recovery methods to increase the amount of recoverable domestic crude oil 	None	\$0
Marginal wells credit	<ul style="list-style-type: none"> Production credit (\$3-per-barrel of oil or \$0.50-per-1,000-cubic-foot adjusted for inflation from 2004) for marginal wells or wells that have an average daily production of not more than 25 barrels 	None	\$0

Tax Provision	Description	Expiration	Annual Revenue Cost (millions of \$)*
	per day • Currently phased out due to high oil prices		
Domestic manufacturing deduction for oil and gas.	• A deduction is allowed with respect to income attributable to domestic manufacturing and production activities. This deduction is widely available and not targeted at fossil fuel industries. The manufacturing deduction is equal to 6 percent of the lesser of qualified production activities, limited to 50-percent of the W-2 wages of the taxpayer. For taxable years beginning after 2009, the deduction is computed at a 9 percent rate, except that the deduction for income from oil and gas production activities is computed at a 6 percent rate.	None	\$1,731
Domestic manufacturing deduction for coal and other hard mineral fossil fuels	• A deduction is allowed with respect to income attributable to domestic manufacturing and production activities. This deduction is widely available and not targeted at fossil fuel industries. The manufacturing deduction is equal to 6 percent of the lesser of qualified production activities, limited to 50-percent of the W-2 wages of the taxpayer. For taxable years beginning after 2009, the deduction is computed at a 9 percent rate.	None	\$6

Part 1A (cont.): Identification of Fossil Fuel Subsidies

Consumption Subsidy	Description	Expiration	Annual Cost
Low Income Home Energy Assistance Program (LIHEAP)	<ul style="list-style-type: none"> • A discretionary block grant awarded to States, territories, and tribes and tribal organizations to provide home heating and cooling⁹ energy assistance to low-income households. • Grantees may use a portion of their LIHEAP funds for low-cost residential weatherization services and for program administration. • Federal guidelines limit eligibility to households with incomes up to 150% of poverty or 60% of State median income¹⁰. • The program typically reaches a small share (less than 20%) of eligible households and offsets a portion of participants' home heating and cooling expenses. • In FY 2006, the typical LIHEAP household had income at 80% of poverty and received a heating assistance or crisis benefit of \$385 representing 42% of their total home heating expenditures¹¹. 	Authorization expired at the end of FY 2007. Congress continues to provide annual appropriations.	\$5,100 million for FY2010 ¹²

⁹ Home heating and cooling accounts for about 43 percent of residential energy expenditures among low-income households. Refrigeration, water heating and other appliances account for the remainder. Source: LIHEAP Home Energy Notebook for Fiscal Year 2007, page ii.

¹⁰ The FY 2009 and FY 2010 LIHEAP appropriations language extended eligibility to households with income up to 75% of State median income. States also have the flexibility to set lower income limits, define "income," and adopt other eligibility criteria within Federal guidelines (e.g. asset tests, living in non-subsidized housing, elderly, young child in household, utility disconnection notice, etc.).

¹¹ From LIHEAP Report to Congress for Fiscal Year 2006: Executive Summary.

¹² This includes \$4.51 billion in base grants and \$590 million in contingency funding which is released at the discretion of the Administration to provide additional assistance to States affected by energy-related emergencies.

Part 1B: Analysis of Fossil Fuel Provisions

Tax Provision	Analysis
Permanent Provisions	
Percentage depletion for oil and gas	Percentage depletion effectively provides a lower rate of tax with respect to a favored source of income. Cost depletion computed by reference to the taxpayer's basis in the property would place oil and gas producers on a cost recovery system similar to that employed by other industries and reduce economic distortions. The lower rate of tax provided by percentage depletion, like other oil and gas preferences the Administration proposes to repeal, distorts markets by encouraging more investment in the oil and gas industry than would occur under a neutral system. To the extent the lower tax rate encourages overproduction of oil and gas, it is detrimental to long-term energy security and is also inconsistent with the Administration's policy of reducing carbon emissions and encouraging the use of renewable energy sources. Moreover, the tax subsidy for oil and gas must ultimately be financed with taxes that result in underinvestment in other, potentially more productive, areas of the economy.
Expensing of intangible drilling costs (IDCs)	The expensing of IDCs provides a tax preference to the oil and gas industry. Capitalization of IDCs would place the oil and gas industry on a cost recovery system similar to that employed by other industries and reduces economic distortions. See percentage depletion for oil and gas for further analysis of the effects of fossil fuel tax preferences.
Geological & geophysical expenditures	The accelerated amortization of geological and geophysical expenditures incurred by independent producers provides a tax preference to the oil and gas industry. Increasing the amortization period for geological and geophysical expenditures incurred by independent oil and gas producers from two years to seven years would provide a more accurate reflection of their income and more consistent tax treatment for all oil and gas producers. See percentage depletion for oil and gas for further analysis of the effects of fossil fuel tax preferences.
Percentage depletion for hard mineral fossil fuels	Percentage depletion effectively provides a lower rate of tax with respect to a favored source of income. Cost depletion computed by reference to the taxpayer's basis in the property would place these fossil fuel industries on a cost recovery system similar to that employed by other industries and reduce economic distortions. See percentage depletion for oil and gas for further analysis of the effects of fossil fuel tax preferences.
Royalty taxation of coal	The capital gain treatment of coal and lignite royalties provides a tax preference to these fossil fuel industries. Treating royalties as ordinary income would place taxpayers in that industry on a cost recovery system similar to that employed by other industries and reduce economic distortions. See percentage depletion for oil and gas for further analysis of the effects of fossil fuel tax preferences.
Expensing of exploration and development costs for hard mineral fuels.	The expensing of exploration and development costs relating to coal and other hard mineral fossil fuels provides a tax preference to the these fossil fuel industries Capitalization of exploration and development costs relating to coal and other hard mineral fossil fuels would place taxpayers in that industry on a cost recovery system similar to that employed by other industries and reduce economic distortions. See percentage depletion for oil and gas for further analysis of the effects of fossil fuel tax preferences.
Passive loss exception for working interests in oil and gas properties	The special tax treatment of working interests in oil and gas properties provides a tax preference to the oil and gas industries. Eliminating the working interest exception would subject oil and gas properties to the same limitations as other activities and reduce economic distortions. See percentage depletion for oil and gas for further analysis of the effects of fossil fuel tax preferences.

Tax Provision	Analysis
Deduction for tertiary injectants	The deduction for tertiary injectants provides a tax preference to the oil and gas industries. Capitalization of tertiary injectants would place the oil and gas industry on a cost recovery system similar to that employed by other industries and reduces economic distortions. See percentage depletion for oil and gas for further analysis of the effects of fossil fuel tax preferences.
Enhanced oil recovery (EOR) credit	The credit provides a tax preference to the oil and gas industries. See percentage depletion for oil and gas for further analysis of the effects of fossil fuel tax preferences.
Marginal wells credit	The credit provides a tax preference to the oil and gas industries. See percentage depletion for oil and gas for further analysis of the effects of fossil fuel tax preferences.
Domestic manufacturing deduction for oil and gas.	The manufacturing deduction, which is widely available, effectively provides a lower rate of tax for income from certain activities, including the production of fossil fuels. This lower rate of tax encourages more investment in fossil fuel production than would otherwise occur. The manufacturing deduction must ultimately be financed with taxes that result in underinvestment in other potentially productive areas of the economy.
Domestic manufacturing deduction for coal and other hard mineral fossil fuels	The manufacturing deduction, which is widely available, effectively provides a lower rate of tax for income from certain activities, including the production of coal and other hard mineral fossil fuels. See domestic manufacturing deduction for oil and gas for further analysis.

Part 1B (cont.): Analysis of Fossil Fuel Subsidies

Consumer Subsidy	Analysis
Low Income Home Energy Assistance Program (LIHEAP)	<p>LIHEAP assistance is targeted to vulnerable households (those with elderly, disabled or young children) and to the poorest (those with the highest energy burdens relative to their income). These households are targeted as they may face serious health and safety risks if they do not have adequate heating and cooling in their homes. Health risks can include death from hypothermia or hyperthermia and increased susceptibility to strokes and heart attacks. Safety risks may include the use of makeshift or faulty heating and cooling sources that can lead to indoor fires, sickness, or asphyxiation.¹³</p> <p>In FY 2006, 31% of LIHEAP households had an elderly member, 30% included a disabled member, and 21% had a child under 5 years old.¹⁴ Likewise, in FY 2007, the average energy burden among LIHEAP recipient households was 16%, compared to 13% among all low-income households and 7% among households of all income levels.¹⁵</p>

¹³ From LIHEAP Report to Congress for Fiscal Year 2006: Appendix E, page 86.

¹⁴ From LIHEAP Report to Congress for Fiscal Year 2006: Executive Summary.

¹⁵ FY 2006 and FY 2007 figures are from the most recent publically available reports on LIHEAP.

Part 2: Draft National Implementation Plan for Phase-Out of Fossil Fuel Provisions

Tax Provision	Strategy and Timetable	Implementation
Percentage depletion for oil and gas	The Administration's Fiscal Year 2011 Budget proposal would not allow percentage depletion with respect to oil and gas wells. Taxpayers would be permitted to claim cost depletion on their adjusted basis, if any, in oil and gas wells. The proposal would be effective for taxable years beginning after December 31, 2010.	The U.S. Congress must pass enabling legislation for this proposal to become law.
Expensing of intangible drilling costs	The Administration's Fiscal Year 2011 Budget proposal would not allow expensing of intangible drilling costs and 60-month amortization of capitalized intangible drilling costs would not be allowed. Intangible drilling costs would be capitalized as depreciable or depletable property, depending on the nature of the cost incurred, in accordance with the generally applicable rules. The proposal would be effective for costs paid or incurred after December 31, 2010.	The U.S. Congress must pass enabling legislation for this proposal to become law.
Geological & geophysical expenditures	The Administration's Fiscal Year 2011 Budget proposal would increase the amortization period from two to seven years for geological and geophysical expenditures incurred by independent producers in connection with all oil and gas exploration in the United States. The proposal would be effective for amounts paid or incurred after December 31, 2010.	The U.S. Congress must pass enabling legislation for this proposal to become law.
Percentage depletion for hard mineral fossil fuels	The Administration's Fiscal Year 2011 Budget proposal would not allow percentage depletion with respect to coal and other hard mineral fossil fuels. Taxpayers would be permitted to claim cost depletion on their adjusted basis, if any, in coal and other hard mineral fossil fuel properties. The proposal would be effective for taxable years beginning after December 31, 2010.	The U.S. Congress must pass enabling legislation for this proposal to become law.
Royalty taxation of coal	The Administration's Fiscal Year 2011 Budget proposal would repeal capital gain treatment of coal and lignite royalties and the royalties would be taxed as ordinary income. The proposal would be effective for amounts realized in taxable years beginning after December 31, 2010.	The U.S. Congress must pass enabling legislation for this proposal to become law.
Expensing of exploration and development costs for hard mineral fuels.	The Administration's Fiscal Year 2011 Budget proposal would not allow expensing and 60-month amortization of exploration and development costs relating to coal and other hard mineral fossil fuels. The costs would be capitalized as depreciable or depletable property, depending on the nature of the cost incurred, in accordance with the generally applicable rules. The proposal would be effective for costs paid or incurred after December 31, 2010.	The U.S. Congress must pass enabling legislation for this proposal to become law.
Passive loss exception for working interests in oil and gas properties	The Administration's Fiscal Year 2011 Budget proposal would repeal the exception from the passive loss rules for working interests in oil and gas properties. Deductions attributable to passive activities in oil and gas properties, to the extent that they exceed income from passive activities, generally could not be deducted against other income. The proposal would be effective for taxable years beginning after December 31, 2010.	The U.S. Congress must pass enabling legislation for this proposal to become law.
Deduction for tertiary injectants	The Administration's Fiscal Year 2011 Budget proposal would not allow the deduction for qualified tertiary injectant expenses. These costs would be capitalized as depreciable or depletable property, depending on the nature of the cost incurred, in accordance with the generally applicable rules. The proposal would be effective for amounts paid or incurred after December 31, 2010.	The U.S. Congress must pass enabling legislation for this proposal to become law.

Tax Provision	Strategy and Timetable	Implementation
Enhanced oil recovery (EOR) credit	The Administration's Fiscal Year 2011 Budget proposal would repeal the investment tax credit for enhanced oil recovery projects beginning after December 31, 2010.	The U.S. Congress must pass enabling legislation for this proposal to become law.
Marginal wells credit	The Administration's Fiscal Year 2011 Budget proposal would repeal the production tax credit for oil and gas from marginal wells in taxable years beginning after December 31, 2010.	The U.S. Congress must pass enabling legislation for this proposal to become law.
Domestic manufacturing deduction for oil and gas.	The Administration's Fiscal Year 2011 Budget proposal would exclude from the definition of domestic production gross receipts all gross receipts derived from the sale, exchange or other disposition of oil, natural gas or a primary product thereof for taxable years beginning after December 31, 2010.	The U.S. Congress must pass enabling legislation for this proposal to become law.
Domestic manufacturing deduction for coal and other hard mineral fossil fuels	The Administration's Fiscal Year 2011 Budget proposal would exclude from the definition of domestic production gross receipts all gross receipts derived from the sale, exchange or other disposition of coal, other hard mineral fossil fuels, or a primary product thereof for taxable years beginning after December 31, 2010.	The U.S. Congress must pass enabling legislation for this proposal to become law.

G-20 ACTION ON FOSSIL FUEL SUBSIDIES: THE SITUATION IN THE EUROPEAN UNION

1. THE EUROPEAN UNION FRAMEWORK FOR ENERGY TAXATION

Introduction

Traditionally the EU member states have taxed energy consumption by means of energy taxes (known as excise duties, energy taxes, or CO₂ taxes for example). These taxes are always “specific taxes” – they are levied on the quantity of energy products once these are released for consumption.¹⁶ In practice such taxes are levied once the finished product is released from a refinery. This means that such taxes are easy to administer, since they are applied only once and the number of taxpayers is extremely limited. These taxes are then included in the final price of energy paid by all consumers, be they private individuals or industry. In many cases, reduced rates of duty apply to industry in order to preserve its international competitiveness. In practical terms this is handled by means of refunds or authorised consignments without tax.

Taxes related to energy use are well-established measures in all Member States of the European Union. Although their main purpose has traditionally been to raise revenues, they also contribute to reducing energy consumption by raising the price of energy and energy-using goods and services. They thus support in a general way the goals of improving energy efficiency and fighting climate change. Energy taxes also act as a “shock absorber” by damping the impact of energy price swings on the EU economy, as long as the tax base is the quantity of the energy and not its monetary value. In this way, and by reducing overall energy consumption, they contribute to security of supply.

Details of the legislation

At the EU level the harmonisation of energy taxes started in 1992 with the latest relevant legislation dating back to 2003¹⁷. The Directive sets common rules for what should be taxable and when it should be taxable and what exceptions are allowed and under which conditions.

Energy products and electricity are only taxed when they are used as **motor or heating fuel**, and not when they are used as raw materials or for the purposes of chemical reduction or in electrolytic and metallurgical processes (e.g. for the production of plastics, steel and other metals). As a result of international agreements, and due to the international nature of shipping, energy products supplied for use as fuel for the purpose of air navigation and sea navigation are exempt from taxation.

¹⁶ Some countries also levy specific taxes on goods that use energy as a primary input, such as motor cars, when they are bought for consumption purposes.

¹⁷ Council Directive 2003/96/EC of 27 October 2003 restructuring the Community framework for the taxation of energy products and electricity: see http://eur-lex.europa.eu/LexUriServ/site/en/oj/2003/l_283/l_28320031031en00510070.pdf

Taxable products are:

- mineral oils (e.g. gasoline, diesel, LPG, kerosene, heavy fuel oil, as well as vegetable oils, etc.),
- natural gas,
- coal and other solid hydrocarbons,
- electricity (irrespective of its origin); energy products used in electricity generation are exempt from tax.

In order to avoid fraud, any product used as motor fuels is taxable and any other hydrocarbon used as heating fuel is taxable. As a consequence, non-fossil energies used as motor fuels are always taxable at the rate of the fossil fuel they replace. The legislation provides for an option, according to which motor fuels (or their components) that are of bio origin can be exempt from energy taxation. Several Member States are using that option, to a varying degree.

When it comes to tax rates, EU legislation only sets **minimum levels of taxation**. These are shown in table 1 below. Above these minima EU Member States are free to set their own national rates as they see fit.

Table 1: the minimum levels of taxation as set by the Energy Taxation Directive

Energy product and taxable unit	EU minimum tax rates in EUR/USD ¹⁸ according to use			
	Motor fuel use	Off-road use (agriculture, stationary motors)	Heating (business use)	Heating (non business use)
Petrol (1000 l)	359/485	-	-	-
Gas oil (1000 l)	330/446	21/28.4	21/28.4	21/28.4
Kerosene (1000 l)	330/446	-	0	0
HFO (1000 kg)	-	-	15/20.3	15/20.3
LPG (1000 kg)	125/169	41/55.4	0	0
Natural gas (GJ)	2.6/3.5	0.3/0.4	0.15/0.2	0.3/0.4
Coal and coke (GJ)	-	-	0.15/0.2	0.3/0.4
Electricity (MWh)	0.5/0.7, 1.0/1.4	-	0.5/0.7	1.0/1.4

¹⁸ ECB exchange rate on 23 March 2010

(The volumes are measured at a temperature of 15° C)

The current minimum rates are most commonly based on the volume of energy consumed (their structure, recalculated to common denominator - energy content - is shown in Figures 1 and 2), they reflect historic levels of taxation in force in Member States and usually differ product by product. A revision of the directive is currently being considered, with the objective to bring it more closely into line with the EU's energy and climate change objectives. In particular, it would aim to ensure that all energy products are treated equally and coherently and that tax differentiation is based on an objective basis (e.g. between fossil and non-fossil energy sources).

Detailed information on the **rates actually applied by Member States** is regularly published by the European Commission in the overview called "Excise duty tables – Energy products and Electricity":

http://ec.europa.eu/taxation_customs/resources/documents/taxation/excise_duties/energy_products/rates/excise_duties-part_ii_energy_products_en.pdf

Figure 1: Minimum tax structure - heating use (euro per GJ)

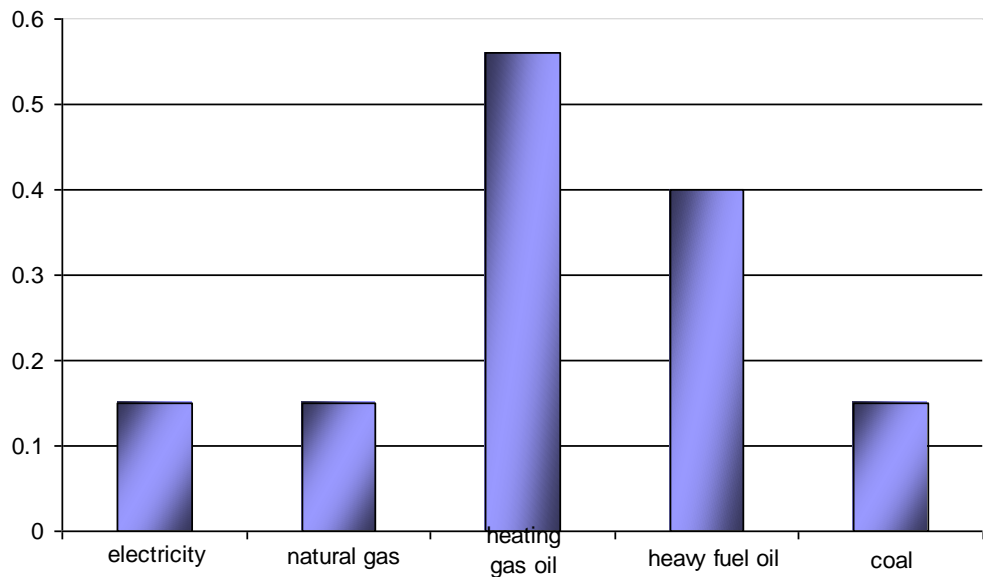
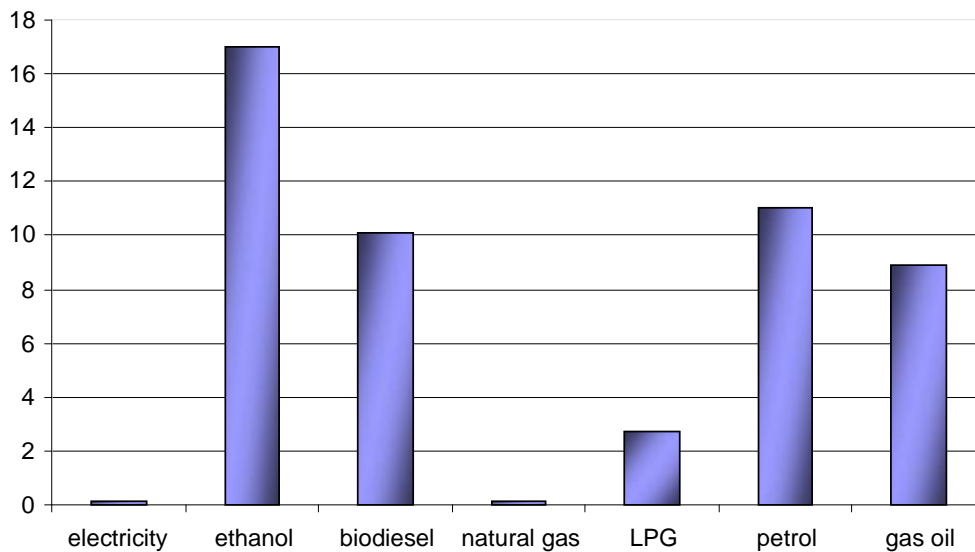


Figure 2: Minimum tax structure - motor fuel use (euro per GJ)



2. SUBSIDY CONTROL – STATE AID

EU state aid rules in the Treaty on the Functioning of the European Union (TFEU, Articles 107 and 108) forbid State aid in general. State aid rules aim to ensure that government interventions do not distort competition and trade inside the EU internal market. They should in principle ensure that national subsidies to firms are justified by wider socio-economic considerations. This means that public support can only be granted if the European Commission declares it compatible with the TFEU, under the applicable State aid rules.

As stated above, energy taxes in the EU Member States are subject to a minimum harmonised tax level set in the Energy Tax Directive (2003/96/EC). However, these taxes may cause a competitive disadvantage for companies subject to them. Therefore EU State aid rules, that is, the Environmental Aid Guidelines (“Community guidelines on state aid for environmental protection”, Official Journal C 82 of 01.04.2008) allow exemptions from such taxes provided certain conditions are met. Such reductions or exemptions from environmental taxes have an indirect environmental objective by facilitating the introduction or modification of the normal, higher tax rate on other companies, which are not threatened with losing their competitiveness due to the tax. However, companies eligible for such exemptions are at the same time obliged to contribute to the aim of the tax by applying other measures, for example, paying at least 20% of the normal tax rate, entering into environmental agreements or applying best available techniques of production.

Until 2008 the exemptions were granted when a new environmental tax was introduced or significantly modified, provided that the companies subject to such exemptions delivered an environmental objective fixed in an agreement linked to the tax exemption. As of 2008, the revised Environmental Aid Guidelines require that tax reductions going below the EU harmonised level of the energy taxes are

subject to a test which aims to assess if companies are able to pass on a significant cost increase due to the tax if they are subject to international competition. In 2008, the value of such reductions or exemptions was estimated at a little under €8 billion, as against energy tax revenues of more than €200 billion.

A number of EU Member States give state aid to the coal sector. This aid is regulated under a specific EU regulation, and must decline over time. In 2008 this aid amounted to €2.7 billion. Of the total amount of aid about 30% is granted to cover inherited liabilities of the coal industry – such as welfare or retraining payments to former miners, or payments to repair environmental damage. Payments for these purposes support neither production nor consumption of fossil fuels.

More generally, the 2009 review of the EU's sustainable development strategy invited the European Commission to continue to review environmentally harmful and unsustainable subsidies, with a view to gradually eliminating them as a matter of priority.

For the purposes of the exercise launched by the G-20 Pittsburgh summit, the EU and its Member States have chosen to take as a working definition of fossil fuel subsidies the following, based on the approach of the International Energy Agency:

“A fossil-fuel subsidy is any government measure or program with the objective or direct consequence of reducing below world-market prices, including all costs of transport, refining and distribution, the effective cost for fossil fuels paid by final consumers, or of reducing the costs or increasing the revenues of fossil-fuel producing companies”.