

## *Argentina's Policies for gradual rationalization of Inefficient Fossil Fuel Subsidies*

### **Listed Subsidies**

Two subsidies were listed in previous Argentina's submissions as considered for rationalization: *Butane Gas Subsidy* ("Garrafa para todos" Program) and *Residential Consumption of Natural Gas and Liquefied gas Subsidy*. As both measures play an important social role, it is crucial to implement specific policies to mitigate the undesirable negative effects of subsidy reduction on low income population.

As included in previous reports, we state that those subsidies will be reduced in line with the completion of high priority energetic public works. Some of them are currently in progress, whereas others 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.

Among these public works, the Project of GNEA Pipeline (after Spanish: Gasoducto del Noreste Argentino – Northeastern Argentine Pipeline) will be a complement to the current transportation system of natural gas in the Northeastern region of the country, which does not count with any provision of this fuel yet. Regarding households, the use of bottled natural gas will be replaced by this safer and better-quality energy source. This infrastructure project is currently under tender process.

### **Other policies for energy subsidies reduction**

In addition to the abovementioned list, Argentina's government has decided to reform the subsidies policies in order to improve competitiveness, reinforce the industrialization process and guarantee universal access to public services.

With this in mind, in December 2011, Argentina's national government has launched a plan to gradually reduce subsidies on natural gas and electricity consumptions. Although subsidies on natural gas and electricity markets are not considered as an inefficient fossil fuel subsidy, it is worth mentioning this program as it refers to an overall reform regarding energy markets.

In order to achieve the objectives in the aforementioned plan, a working group comprising authorities and staff from the Ministry of Economy and Public Finance and the Ministry of Federal Planning, Public Investment and Services has been put to work aiming to analyze and determine the incidence of subsidies currently in place. This Working Group provides analytical support for developing regulation that is necessary to carry out the adjustments of subsidy policies.

In the Natural Gas market, the subsidy is meant to reduce the impact of natural gas import costs on the demand. This policy is implemented through subsidized unit values charged to specific user types, and surcharge exemptions to certain demand segments. The subsidy reduction policy is carried on by increasing unit values of the specific surcharge, and then removing the exceptions on certain demand segments.

On the other hand, in the electricity market, subsidy is implemented by charging only a part of the inherent global cost incurred to supply that electricity. In consequence, the policy designed to reduce subsidies, consists on transferring the whole cost of electricity supply by applying non-subsidized reference prices for the wholesale electricity market. This reference prices are then charged on specific demand segments.

The reduction of these subsidies is not planned to affect all demand segments of natural gas and electricity, but only those segments and economic activities that are able to afford the increasing costs of supply.

## **Brazilian Progress Report on Implementing Strategies Reported to the G-20 for Rationalizing and Phasing Out Inefficient Fossil Fuel Subsidies**

2 May 2012

As reported to the G20 in 2010, 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 developments related to government measures in the energy sector associated with the consumption or production of fossil fuels.

### **Power Generation in Isolated Electrical Systems**

The Account for Fuel Consumption (CCC, acronym in Portuguese) is responsible for the power generation cost leveling mechanism in the electrical systems not connected to the Brazilian national interconnected transmission grid. It allows Brazilians who live in less developed regions of the country (primarily areas in the Amazon region), 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. Essentially, consumers in the national grid pay a little more on their electricity bill, so as to even the price for consumers outside the grid. 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 and renewable hydroelectric energy throughout the whole country. These connections are expected to be substantially completed by 2013, reducing the annual cost of the benefit from current US\$ 2.2 billion to approximately US\$ 960 million in 2014.

### **Fuel Costs for Coal Power Plants**

The payment of fuel costs for national coal power through the Energetic Development Account (CDE<sup>1</sup>, acronym in Portuguese) 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.

The National Energy Agency (ANEEL), regulator body of the Brazilian electric system, is examining regulatory changes which could reduce the reimbursements significantly (up to 1/3 of current expense). But the process is still in its early stages.

**Annual cost (2011):** US\$ 280 million, paid for by consumers through electricity bills, and expected to end in 2027.

### **Diesel oil for fishing boats**

Diesel oil in Brazil costs more than the world average, meaning that even with government help, Brazilian fishing boats often pay higher diesel prices than global average. In fact, and in practice, the global average price is the benchmark (and the ceiling) for the perception of this benefit.

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<sup>1</sup> CDE stands for "Conta de Desenvolvimento Energético" and its use is not restricted to the payment of fuel costs for national coal fired plants.

**Annual cost (2010):** US\$ 7,2 million.

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Obs: Values for both CCC and CDE can be found at the website of Eletrobras under the link:

<http://www.eletrabras.com/ELB/data/Pages/LUMIS1C20E00EPTBRIE.htm>

# **Canada's Progress Report on Implementing Strategies Reported to the G-20 for Rationalizing and Phasing Out Inefficient Fossil Fuel Subsidies**

## **Part 1: Inefficient fossil fuel subsidies proposed for reform in an implementation strategy reported to the G-20**

### **Accelerated Capital Cost Allowance for Oil Sands (Current Action Reported in Canada's Implementation Strategy)**

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 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.

Additional details on the phase-out of accelerated CCA for oil sands projects can be found on pages 408 to 411 of the 2007 Budget: <http://www.budget.gc.ca/2007/pdf/bp2007e.pdf>

### **Intangible Capital Expenses in Oil Sands Projects (New Action Announced since the Submission of Canada's Implementation Strategy)**

Budget 2011 announced changes to better align the deduction rates for intangible costs in the oil sands sector with rates in the conventional oil and gas sector.

#### **Oil Sands Properties**

The cost of acquiring oil sands leases and other oil sands resource property generally could be treated as Canadian development expense (CDE), which is deductible at the rate of 30 per cent per year on a declining balance basis. Budget 2011 announced that the cost of oil sands leases and other oil sands resource property will be treated as Canadian oil and gas property expense and thus be eligible for deduction at 10 per cent per year. This change will also apply to oil shale property, which is treated in a manner similar to oil sands resource property.

#### **Pre-Production Development Expenses of Oil Sands Mines**

Development expenses incurred for the purpose of bringing a new oil sands mine into production in reasonable commercial quantities are treated as Canadian exploration expense (CEE), which can be deducted in full in the year incurred. This includes such expenses as the cost of clearing land or removing overburden in order to expose the oil sands prior to the start of mining operations. Budget 2011 announced that these expenses will be treated as CDE, which is deductible at the rate of 30 per cent per year on a declining balance basis. This change will also apply to pre-production development expenses in respect of oil shale mines.

These changes are expected to increase federal revenues by approximately \$15 million in 2011–12 and \$30 million in 2012–13.

Additional details on the reduction of deduction rates for intangible capital expenses in oil sands projects can be found on pages 310 to 312 of the 2011 Budget:

<http://www.budget.gc.ca/2011/plan/Budget2011-eng.pdf>

### **The Atlantic Investment Tax Credit – Oil & Gas and Mining (New Action Announced since the Submission of Canada’s Implementation Strategy)**

The Atlantic Investment Tax Credit (AITC) is a 10-per-cent credit available for certain investments in new buildings, machinery and equipment used in the Atlantic region and the Gaspé Peninsula. The credit supports investments in farming, fishing, logging, manufacturing and processing, oil & gas, and mining.

Budget 2012 announced the phase-out of the AITC for investments in the oil and gas and mining sectors.

The phase-out is expected to increase federal revenues by approximately \$135 million over the period 2012-13 to 2016-17.

Additional details on the phase-out of the AITC for the oil & gas and mining sectors can be found on pages 407 to 409 of the 2012 Budget:

<http://www.budget.gc.ca/2012/plan/pdf/Plan2012-eng.pdf>

### **Part 2: Implementation strategies and timeframes for rationalizing and phasing out subsidies described in Part 1**

#### **Accelerated Capital Cost Allowance for Oil Sands**

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 assets acquired before 2012 that are part of a project phase 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 Department of Finance is responsible for the development and evaluation of federal taxation policies and legislation.

#### **Intangible Capital Expenses in Oil Sands Projects**

The change related to oil sands resource properties is effective for acquisitions made on or after March 22, 2011.

For pre-production development expenses for oil sands mines, the current CEE treatment will be maintained for expenses incurred before March 22, 2011, and for expenses incurred before 2015

for new mines on which major construction began before March 22, 2011. For other expenses, the transition from CEE treatment to CDE treatment will be phased in over the 2013-2016 period. Taxpayers will allocate pre-production development costs proportionally to the two resource expense categories according to the following schedule based on the year in which the expense is incurred:

Year	2011	2012	2013	2014	2015	2016
CEE proportion	100%	100%	80%	60%	30%	--
CDE proportion	--	--	20%	40%	70%	100%

The Department of Finance is responsible for the development and evaluation of federal taxation policies and legislation.

### **The Atlantic Investment Tax Credit – Oil & Gas and Mining**

The AITC will apply at a rate of 10 per cent for eligible oil & gas and mining assets acquired before 2014 and at a rate of 5 per cent in 2014 and 2015. The credit will not be available for such assets acquired after 2015.

Transitional relief will be provided in recognition of the long timelines involved in some oil & gas and mining projects. The AITC will continue to apply at a rate of 10 per cent for assets acquired by a taxpayer before 2017 either:

- under a written agreement entered into by the taxpayer before March 29, 2012; or
- as part of a project phase where
  - the construction of the project phase was started by, or on behalf of, the taxpayer before March 29, 2012, or
  - the engineering and design work for the construction of the project phase, as evidenced in writing, was started by, or on behalf of, the taxpayer before March 29, 2012.

The Department of Finance is responsible for the development and evaluation of federal taxation policies and legislation.

### **Part 3: Current status of implementation strategies and timeframes for rationalizing and phasing out inefficient fossil fuel subsidies**

#### **Accelerated Capital Cost Allowance for Oil Sands**

The draft regulations concerning the implementation of the phase-out of accelerated CCA for oil sands were released for consultation on May 3, 2010. The consultation period closed on July 6, 2010.

The final regulations implementing the phase-out of accelerated CCA for oil sands were published in Canada Gazette Part II on February 16, 2011. <http://www.canadagazette.gc.ca/rp-pr/p2/2011/2011-02-16/pdf/g2-14504.pdf> (pages 136 to 149).

## **Intangible Capital Expenses in Oil Sands Projects**

The draft legislation concerning the implementation of the changes related to the intangible capital expenses in oil sands projects were released for consultation on August 16, 2011. The consultation period closed on September 16, 2011.

The legislation implementing the changes has been enacted. Bill C-13 received Royal Assent on December 15, 2011.

<http://www.parl.gc.ca/HousePublications/Publication.aspx?Docid=5339192&file=4>

## **The Atlantic Investment Tax Credit – Oil & Gas and Mining**

Draft legislation relating to the phase-out is expected to be released at an early opportunity.

# 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 CO<sub>2</sub> taxes for example). These taxes are always “specific taxes” – they are levied on the quantity of energy products once these are released for consumption.<sup>1</sup> 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 2003<sup>2</sup>. A 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 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.

#### **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.

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<sup>1</sup> Some EU 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.

<sup>2</sup> 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](http://eur-lex.europa.eu/LexUriServ/site/en/oj/2003/l_283/l_28320031031en00510070.pdf)

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: Minimum levels of taxation as set by the Energy Taxation Directive

Energy product and taxable unit	EU minimum tax rates in EUR/USD <sup>3</sup> according to use			
	Motor fuel use	Off-road use (agriculture, stationary motors)	Heating (business use)	Heating (non business use)
Petrol (1000 l)	359/474.1	-	-	-
Gas oil (1000 l)	330/435.8	21/27.7	21/27.7	21/27.7
Kerosene (1000 l)	330/435.8	21/27.7	0	0
HFO (1000 kg)	-	-	15/19.8	15/19.8
LPG (1000 kg)	125/165.1	41/54.1	0	0
Natural gas (GJ)	2.6/3.4	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, 1.0/1.3	-	0.5/0.7	1.0/1.3

Note: 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 energy content as common denominator, is shown in Figures 1 and 2), they reflect historic levels of taxation in force in Member States and usually differ product by product.

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"<sup>4</sup>.

<sup>3</sup> ECB exchange rate on 25 April 2012 (1.3206 \$/€).

<sup>4</sup> [http://ec.europa.eu/taxation\\_customs/resources/documents/taxation/excise\\_duties/energy\\_products/rates/excise\\_duties-part\\_ii\\_energy\\_products\\_en.pdf](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)

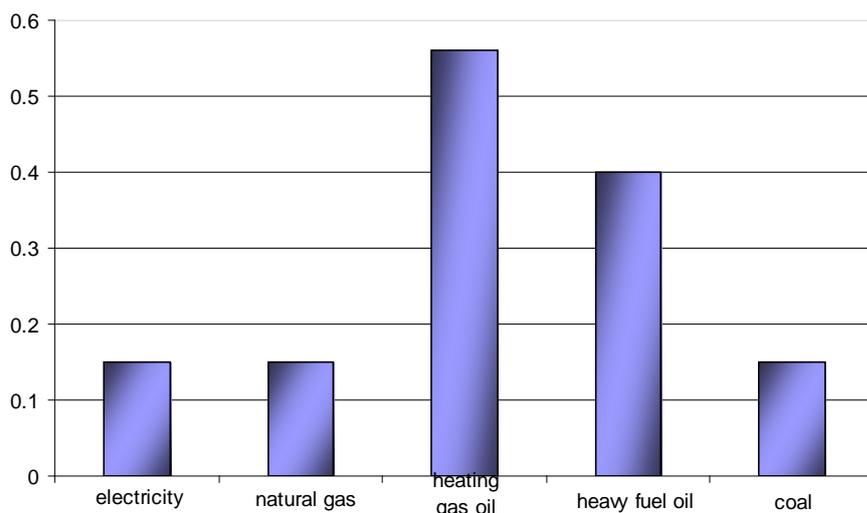
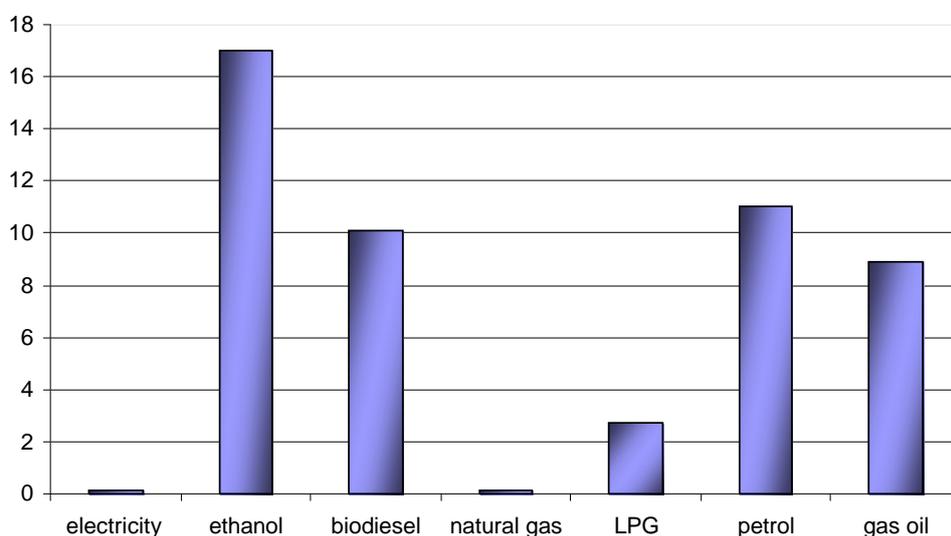


Figure 2: Minimum tax structure - motor fuel use (euro per GJ)



## 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. Council Decision 2010/787/EU<sup>5</sup> stipulates the phase-out of subsidies for the production of coal from uncompetitive mines by the end of 2018. In 2008 the aid to coal sector 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. The Europe 2020 strategy, adopted in 2010, includes a call on the Member States "to phase out environmentally harmful subsidies, limiting exceptions to people with social needs". The Annual Growth Survey (January 2011) includes, as part of the action "Implementing a rigorous fiscal consolidation", a call that "Unjustified subsidies, e.g. environmentally harmful subsidies, should be eliminated". More recently, in the "Roadmap to a Resource Efficient Europe" (September 2011), the Commission asks the Member States, by 2012-2013, to identify the most significant EHS and prepare plans and timetables to phase them out<sup>6</sup>.

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”.

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<sup>5</sup> OJ L 336 , 21.12.2010, p. 24-29

<sup>6</sup> Roadmap to a Resource Efficient Europe, COM(2011) 571, p. 9-11

## **France Progress Report on Inefficient Fossil Fuel Subsidies**

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 EC and EIA data, in 2012, the retail price for gasoline reached 212 US cents per litre, well above, for instance, that of the United States (101 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 exonerations can not be considered as inefficient fossil fuel subsidies.

## Country Progress Report for Germany

### 1. Hard coal mining subsidy proposed for reform in an implementation strategy reported to the G-20

As part of the G-20 initiative to phase out inefficient fossil-fuel subsidies, Germany selected hard coal subsidies. The German Federal Government, the state of North Rhine-Westphalia, Saarland, RAG AG and the Mining, Chemical and Energy Industrial Union (IG BCE) agreed to discontinue subsidized German coal mining in a socially acceptable manner by the end of 2018. The Federal Government, the state of North Rhine-Westphalia and Saarland are jointly providing the state aid required during the phase-out period to 2018. RAG AG will also make its own contribution to the financing of coal production. The Federal Government, North Rhine-Westphalia, Saarland and RAG concluded a framework agreement on 14 August 2007 which regulates the basis for the phase out, as well as the amount, domestic distribution of and conditions for financial assistance. The agreement also stipulates that subsidies are subject to approval by the European Commission.

Coal mining is important to the regional economy in the Ruhr area and Saarland. Past experience has shown that structural change and the creation of promising employment alternatives requires sufficient time and a favourable socio-economic environment. The regional unemployment rate of 11,2% in January 2012 remains high above the national average. The process for phasing out subsidized mining by the end of 2018 that is stipulated in the agreement is also intended to protect the regional structural progress which can already be seen.

As part of the discontinuation of subsidized coal mining by 2018, the customers of German coal in the power-producing and iron-producing industries are to be given sufficient time to adapt their plant and supply structures to the new conditions as well. The Hard Coal Financing Act (*Steinkohlefinanzierungsgesetz*) introduced on 28 December 2007 against this background regulates the financing of:

1. the sale of German coal for use in power plants and producing steel in blast furnaces up to 2018
2. the costs for mining companies that arise from permanent closures
3. site contamination and perpetual liabilities in coal mining
4. the socially acceptable process of adjustment for older employees in the German coal mining sector

Perpetual liabilities in mining cover the tasks that have to be undertaken after closure, especially mine-water drainage and groundwater treatment. To finance the perpetual liabilities once mining is discontinued in 2018, the RAG Foundation (RAG-Stiftung) was established under civil law in 2007 and acquired the shares of the previous RAG AG shareholders for €1 each ([www.rag-stiftung.de/en/home](http://www.rag-stiftung.de/en/home)). While RAG AG's mining division remains with the RAG Foundation, the sale of the non-mining operations bundled under the umbrella of Evonik Industries AG is intended to finance the perpetual liabilities. The financing of the perpetual liabilities is secured via a contract on this matter that was concluded between North Rhine-Westphalia, Saarland and the RAG Foundation on 14 August 2007. In the event that the RAG Foundation does not have sufficient assets to cover the perpetual liabilities, the Federal Government bears one third of the contingent liability assumed by North Rhine-Westphalia and Saarland in the contract.

## 2. Implementation strategy and timeframe for rationalizing and phasing out hard coal subsidies

According to the closure plan for German coal mining approved by the European Commission in December 2011, German coal mining **production** is to be reduced from 12.4m tce in 2011 to 4m tce in 2018, the cut-off point for the final two mines. From 2019 onwards, subsidized coal will no longer be produced in Germany. The planned closure of the final two mines in 2018 will mark the conclusion of a process of restructuring that has been underway for decades and which has already led to substantial reductions in production. In 1990 the level of coal production was still 71.0m tce. It has since fallen by more than 80%.

Production capacities have been reduced continuously since 2007 under the closure plan for German coal mining. Three mines have been closed from 2007 till 2011. In June 2012 the last mine in Saarland will be closed, at the End of 2012 one in the Ruhr area. At the end of 2012, three mines will be still in operation – two in the Ruhr area and one near the town of Ibbenbüren (in North Rhine Westphalia). By way of comparison, coal was being produced at a total of 27 mines back in 1990. The remaining mines are to be closed till 2018.

The **subsidies** granted for coal mining in Germany serve to implement the phase-out by the end of 2018 in a socially acceptable manner. The state aid will be lowered continuously up until 2018. It has already been reduced significantly. Between 2000 and 2010 it was cut by around 60%.

State aid programming assumes there will be proceeds of an average €46/tce from the sale of coal. From 2013 onwards, it is assumed there will be a proceeds line of €55/tce. Higher profits lead to cuts in the aid actually granted. The world-market prices for coal currently stand at around €100/tce, which means there is considerable potential for reductions.

Only part of the aid is granted for promoting the sale of coal; a large part, which is growing as coal production declines, serves to finance the costs of closure and of contaminated sites. The level of sales aid as a percentage of overall state aid is expected to decline from almost 60% in 2011 to around 26% in 2018.

	2011	2013	2015	2017	2018
Total state aid (€m)	1,956	1,761	1,503	1,182	1,091

In addition to the state aid set out in the above table, the Hard Coal Financing Act and the framework agreement provide for additional assistance towards the burdens companies will incur from 2018 onwards as a result of the closures. This includes an amount of up to €1,047m to compensate for the costs of closure that are to be financed from 2018 onwards, to which RAG AG will contribute €32m. An amount of up to €2,182m (of which RAG AG will contribute €61m) will serve to compensate for the burdens of ongoing obligations following the permanent discontinuation of subsidized coal mining in Germany. This only includes such obligations that are not perpetual liabilities.

In 2011 the **workforce** in the German coal mining sector decreased by 3,300 to 20,900. This is 109,000 less than in 1990; since then, more than 5,000 jobs have been cut on average each year. The workforce reduction has been implemented in a socially acceptable manner – i.e. without operational redundancies. The further reduction in the workforce foreseen in the closure plan is also to be conducted in a socially acceptable manner. A system for early retirement, which is already in place and applies until 2022, is a primary tool in this regard. Further measures will be required to reduce the number

of younger employees not eligible for early retirement in the period under consideration.

### **3. Current status of implementation strategies and timeframes for rationalizing and phasing out inefficient fossil-fuel subsidies**

Till the end of 2012, another two hard coal mines will be closed and only three mines will be left. Germany will further reduce workforce in a socially acceptable manner till 2018. The remaining mines will be closed step by step.

## **India – G-20 Country Progress Report for Rationalizing and Phasing Out Inefficient Fossil Fuel Subsidies (Updated)**

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### **Background**

In response to the decision of the Pittsburgh Summit to rationalize and eliminate inefficient fossil-fuel subsidies in a manner that wasteful energy consumption is avoided while, recognizing the importance of providing essential energy services to those in need; individual member countries have been in the process to evolve a phase-out plan of such subsidies. It was decided that all the countries would provide their own definition of inefficient subsidies. Accordingly, following definition of subsidy has been adopted in India:

*“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”.*

No timeframe was committed by India to rationalize and reduce inefficient fossil fuel subsidies. The Government decided in June 2010 to make the prices of petrol and diesel market-determined, both at the refinery gate and the retail level. However, it was proposed that increase in prices of diesel will be staggered over time, in order to minimize the overall impact on the poor and the vulnerable from the impact of rise in international oil prices and domestic inflationary pressures. It has also been decided that in case of a high rise and volatility in international oil prices, Government will suitably intervene in the pricing of petrol and diesel.

### **Part- 1:**

- **Overview of the subsidy program in India**

Subsidies are being provided in India for the following petroleum products:

1. PDS Kerosene.
2. Domestic LPG.
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 consumers in the difficult areas of North-Eastern region of the country.

- **Policy Objective**

The Government is committed to making available essential fuels, particularly cooking fuels to the common man at affordable prices. In view of the importance of the household fuels, namely PDS Kerosene and

Domestic LPG, the Government has decided that the subsidies on these products should be continued. Accordingly, the PDS Kerosene and Domestic LPG Subsidy Scheme 2002 and the Freight Subsidy (for far-flung areas) scheme, 2002 have been extended till 31.03.2014.

- **Relevant Ministries or government bodies involved in implementing the subsidy program**

On recommendations of the *Ministry of Petroleum & Natural Gas* and the *Ministry of Finance*, the Government decides the subsidy program for petroleum products.

- **Eligible subsidy recipients**

The Government of India has been providing LPG for domestic cooking at subsidized prices. Subsidized domestic LPG is provided by the public sector Oil Marketing Companies (OMCs) through their distribution network across the country. Also in order to provide fuels for cooking and lighting to the poor and vulnerable, subsidized Kerosene is provided through the Public Distribution System.

- **Annual cost estimates**

Subsidy on PDS Kerosene and Domestic LPG is met from the fiscal budget and has been fixed on a specified flat rate basis for each Depot/Bottling Plant based on the difference between the cost price and the issue price per selling unit. In addition, the Government also provides Freight subsidy for far flung areas (North-Eastern states) under Scheme, 2002. The total budgetary support provided for Petroleum sector in India is as follows:

(Figs. in US \$ Billion)

Subsidies	2007-08	2008-09	2009-10	2010-11	2011-12
<b>Petroleum Subsidies</b>	0.701	0.621	3.153	8.422	14.267*

Source: Central Govt. Budget document

Note: Petroleum Subsidies for 2011-12 are Revised Estimates (RE) and calculated assuming an average exchange rate of Rs.48/\$ for 2011-12.

- **Duration of the Subsidy Program**

In view of the sharp rise in LPG prices since 2004 and considering the importance of the household fuels, namely PDS Kerosene and Domestic LPG, the Government has decided that the subsidies on these products will be continued. The PDS Kerosene and Domestic LPG Subsidy Scheme 2002 and the Freight Subsidy (for far-flung areas) scheme, 2002 have been extended till 31.03.2014.

- **Any publically available information sources**

Information related to subsidies under Petroleum & Natural Gas sector can be accessed from the Basic Statistics report on Indian Petroleum & Natural Gas from the website of *Ministry of Petroleum & Natural Gas* (<http://petroleum.nic.in/>) and from that of *Petroleum Planning and Analysis Cell* (<http://ppac.org.in/>).

Information pertaining to the budgetary subsidies can be accessed from the Statement of the Non-Plan Expenditure, Vol.-I of the Expenditure Budget (<http://indiabudget.nic.in/>).

## **Part 2:**

- **Legislative and/or administrative actions taken to rationalize and phase out the subsidy program**

Government has been monitoring the prices of administered petroleum products viz. diesel, PDS kerosene and domestic LPG. It has been decided that the increase in prices of Diesel will be staggered overtime to minimize the overall impact on poor and vulnerable. The prices of PDS kerosene and domestic LPG is administered since these are essential for cooking and lighting purposes. There is continued effort to have better targeting of subsidies on these commodities.

In this regard, a task force had been constituted in February, 2011 to recommend and implement a solution for direct transfer of subsidies on PDS Kerosene and domestic LPG to the intended beneficiaries. The report of the task force on “*Direct transfer of Subsidies on Kerosene, LPG and Fertilizer*” has been accepted by the Government. A subsidy framework for direct transfer of cash subsidy on Domestic LPG and PDS Kerosene to the targeted beneficiaries is being drawn up in consultation with the States and other stakeholders. Pilot projects have been initiated in selected districts of the country.

- **Specific timeframes for rationalization and phasing out the subsidy program**

No time-frame has been fixed by India for elimination of inefficient fossil fuel subsidy.

- **The Ministry or government body responsible for carrying out reforms**

The Ministry of Petroleum & Natural Gas and Ministry of Finance are the main Government bodies that are responsible for carrying out reforms in the sector.

- **Any alternatives measures that are being implemented simultaneously to mitigate impacts on affected populations**

The Government has undertaken several programmes for developing alternate fuels like Bio-ethanol Blended programme and Bio-Diesel programme. The 5% ethanol blended Petrol programme is underway and the government has taken decision and issued guidelines for effective implementation of ethanol blending programme. Under the Bio-Diesel programme, Oil Marketing Companies (OMCs) would purchase bio-diesel for blending with High Speed Diesel to the extent of 5% at identified selected purchase centres across the country.

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**INDONESIA: G-20 Country Progress Reports on Implementing Strategies Reported to the G-20 for Rationalizing and Phasing Out Inefficient Fossil Fuel Subsidies**

**Part 1: Inefficient fossil fuel subsidies proposed for reform in an implementation strategy reported to the G-20**

Subsidy Program Overview	The National Budget Law defines fuel subsidy as a budgetary allocation channeled through companies or institutions that produce and/or sell oil fuel and liquefied petroleum gas (LPG) with the purpose of providing to people at large an access to energy at an affordable price. Previously, there were five energy commodities considered as subsidized fuel: gasoline, kerosene, diesel for vehicle, diesel for industry, and burning oil. Since 2006, the commodities have been reduced to only include gasoline, kerosene, and diesel for vehicle.
Policy Objective	The fuel subsidy is given to consumers at large so that they can afford energy for supporting their basic living, and for covering the basic costs of production. Subsidy (government transfer payment) has been designed as among the government policy tools for income redistribution and price stabilization.
Relevant entity in the subsidy program implementation	The line ministries involved in the fuel subsidy program are the Ministry of Energy and Mineral Resources-MEMR (technical aspect) and the Ministry of Finance-MOF (fiscal aspect). The Ministry of Mineral and Energy Resources has responsibility to measure the amount and selling price of the subsidized fuel and to arrange the mechanism for its distribution. On the other hand, the Ministry of Finance supports the policy made by the Ministry of Mineral and Energy Resources by allocating the needed funding in the budget.
Eligible subsidy recipients	Target recipients are limited to households, micro industries, fishery industry, public transportation and public services.
Annual cost estimates	The budget provided for fuel subsidy changes every year depending upon the amount of fuel consumption approved by the parliament for that particular year. For 2012, the budget of fuel subsidy program is proposed at IDR137.4 trillion as result in the increase of the ICP (Indonesian Crude Oil Price).
Duration	Subsidy program budgeted and reviewed annually (12 months).

**Part 2: Implementation strategies and timeframes for rationalizing and phasing out subsidies described in Part 1**

Legislative and/or administrative actions in rationalizing and phasing out subsidy	The Government has revised several existing regulations on subsidized fuel program. However, due to complexity of this program, the Government also adjust its policy according to conditions at present. The Government has evaluated and improved policy related to the mechanism of determining eligible subsidy recipients and volumes of the subsidized fuel. This is aimed at creating a better mechanism of fuel subsidy distribution and ensuring the optimal benefit of the subsidy program for well targetted consumers.
Relevant entity	Fuel subsidy policy reform is led by the Coordinating Ministry for Economic Affairs involving the Ministry of Energy and Mineral Resources (for regulation and technical aspects), the Ministry of Finance (for budget and fiscal policy impacts), and the Oil Downstream Regulatory Agency (for supervision on fuel distribution).
Policy Framework for Phasing out Fuel Subsidy	The Government has committed to a framework to alleviate gradually all fuel subsidies through promoting greater use of Pertamina (market price-based fuel), pushing further energy conservation, improving infrastructure of public transports, and encouraging people to more environmentally friendly alternative energy such as biofuel.
Policy Implementation	The fuel Subsidy reform is implemented on both demand and supply. On the demand side, the Government controls the volume of fuel consumption through diversifying energy choice, imposing closed distribution system, and limiting consumption for private vehicles. Since 2007, the Government has also implemented a conversion program for general public from kerosene to LPG. On the supply side, the Government adjusts as necessary the price of subsidized fuels to reflect changes of the reference price.
Mitigation of impact to the affected populations	Government has provided compensation through the following forms: <ul style="list-style-type: none"> <li>✓ Education (eq. School Operational Assistance/BOS and Student Special Assistance /BKM)</li> <li>✓ Health (eq. basic health services, health care referrals, and other support services).</li> <li>✓ Rural infrastructure (roads/bridges, clean water, sanitation, boat moorings, irrigation system, and electricity supply to isolated areas)</li> <li>✓ Temporary Direct Cash Transfers (BSLT) for the poors.</li> </ul>
Specific timeframes	The reform follows the National Energy Policy (KEN), in particular as set in the MEMR's roadmap endorsed by the President. As reported last year, the phasing-out program is implemented through managing the demand side and then narrowing the gap between domestic and international prices. These gradual efforts taken to minimize unexpected adverse impacts on the poors.

**Part 3: Current status of implementation strategies and timeframes for rationalizing and phasing out inefficient fossil fuel subsidies**

*(Subsidy Name)*

Implemented strategies	<ul style="list-style-type: none"> <li>✓ Reduced the type of subsidized fuels from five to three by removing diesel oil for industry and burning oil.</li> <li>✓ Modified the subsidy payment mechanism from cost and fee system to alpha system (margin + distribution cost)</li> <li>✓ Converted Kerosene to LPG</li> <li>✓ Pushing energy diversification for public transportation</li> <li>✓ Rationalizing retail fuel price</li> <li>✓ Improved the mechanism of subsidized fuel distribution to better targeted subsidy recipients.</li> </ul>
Implementing policy in 2012	<ul style="list-style-type: none"> <li>✓ Continuing kerosene to LPG conversion (it started in 2007)</li> <li>✓ Continuing gradual conversion from fossil fuel to gas</li> <li>✓ Improving closed distribution system as a way to control consumption</li> <li>✓ Increasing the utilization of alternative energy (such as bio fuels)</li> <li>✓ Adjusting the current fuel price if it increases by more than 10%.</li> <li>✓ Incorporating a vehicle fuel Tax of 5 percent into the subsidy structure</li> </ul>
Policy 2012-2014	<p>Government has committed to continue rationalizing the domestic prices of both fuel and electricity. It is aimed at giving more fiscal space for the central Government to increase allocation for investment in infrastructure and other growth-supporting sectors. The Government has also set strategies to mitigate possible social impacts from the fuel subsidy reduction through increasing budget allocation to social welfare programs including direct cash transfers to targeted citizens and communities.</p>
Constraints	<p>Political issues and domestic regulatory process, as well as trade off with increasing economic activities in a shorter-run.</p>

## **Italy's G-20 Country Progress Report on Implementing Strategies Reported to the G-20 for Rationalizing and Phasing Out Inefficient Fossil Fuel Subsidies**

Italy considers favorably the International Energy Agency's (IEA) definition of fossil fuel subsidies as: "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".

However, and according to this definition, Italy as much as most other EU member states 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.

The Italian tax measures do not represent subsidies on the basis of the IEA's definition. Nevertheless for transparency reasons it is important to remark that 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). This is done not only to raise revenues but also to reduce consumption, thereby contributing to the overarching European objectives of improving energy efficiency, fighting against climate change and securing supply.

While not having any consumer subsidies, Italy identified a producer subsidy proposed for reform, reported to the G-20 last year, regarding the subsidization of renewable energy production capacity, comprising cogeneration plants, commonly referred to as **CIP6 scheme** (resolution n.6 of the Interministerial Price Committee of 1992).

### **Part 1: Inefficient fossil fuel subsidies proposed for reform in an implementation strategy reported to the G-20**

**CIP6 scheme** (resolution n.6 of the Interministerial Price Committee of 1992)

This scheme was introduced by law in 1992, targeting the development of Renewable Energy production capacity, while also comprising cogeneration capacity based on fossil fuels. It was cancelled in 2007, but existing contracts were granted their natural expiration, i.e. incentives in terms of guaranteed feed-in tariffs for 20 years. The total cost of subsidizing the non-renewable capacity under CIP6 is estimated in € 1.700 million, with all contracts signed with plant operators due to expire by 2020.

The relevant ministries and government bodies involved in implementing the subsidy program are the Ministry of Economic Development (MSE) and the public Energy Services Operator (Gestore Servizi Energetici "GSE").

<http://www.sviluppoeconomico.gov.it>  
<http://www.gse.it>

**Part 2: Implementation strategies and timeframes for rationalizing and phasing out subsidies described in Part 1**

**CIP6 scheme** – anticipated resolution strategy

Not only did Italy abolish the CIP6 scheme, but it also decided to consider an accelerated phasing-out process for the existing contracts signed with the private operators of non-renewable plants. Hence, in July 2009 the Authority for Electrical Energy and Gas (AEEG) was asked to elaborate proposals for the Ministry of Economic Development (MSE) on how to have energy producers withdraw their CIP6 contracts concerning non-renewable electricity, on a voluntary basis, and under most convenient economic terms for all parties. The AEEG's proposals (deliberation PAS 22/09) led to the MSE's decree (law n. 99/2009), called "Mechanism for the anticipated resolution of the CIP6/92 conventions". Procedures and timeframes for the determination of the corresponding compensation settlements were defined in four following decrees, approved in August and October 2010, in June 2011 and in March 2012 respectively.

**Part 3: Current status of implementation strategies and timeframes for rationalizing and phasing out inefficient fossil fuel subsidies**

**CIP6 scheme** – anticipated resolution: current status

To date MSE and GSE's efforts and negotiations with private operators have led to the anticipated resolution of 12 out of 129 existing contracts concerning fossil fuel energy production facilities, equivalent to an installed capacity of 1.527 MW, out of 5.130 MW total under the CIP6 scheme.

The cost of the anticipated phasing-out of these first 12 contracts is approx. € 455 million, primarily for compensation payments, while the equivalent incentives without contract resolution would have cost approx. €666 million. Consequently, the economic convenience for the system is already 211 million€

The described anticipated subsidy resolution mechanism is being carried forward, and shall lead to further cost savings in years to come.

## **Korea's Progress Report on Implementing Strategies Reported to the G20 for Rationalizing and Phasing Out Inefficient Fossil Fuel Subsidies (in 2012)**

### **Part 1: Inefficient fossil fuel subsidies proposed for reform in an implementation strategy reported to the G20**

Korea defines fossil fuel subsidy as a government measure with the objective or direct consequence of reducing below production cost—for net importers, world price instead of production cost—the effective cost for fossil fuels paid by end consumers, or reducing the costs or increasing the revenues of fossil fuel producing companies.

In Toronto, Korea submitted an implementation strategy on two types of subsidies for producers—one for stable coal production and the other for briquette production.

- *Subsidy for stable coal production*

This subsidy is granted to coal miners in order to ensure stable supply of affordable fuels for low-income families in the form of briquettes. The price of anthracite coal is kept below the cost of production, and the subsidy is provided to producers to make up for the price gap.

- *Subsidy for briquette production*

This subsidy is granted to briquette producers in order to ensure that low-income families have access to affordable fuels in the form of briquettes. The price of briquettes is kept below the cost of production, and the subsidy is provided to producers to make up for the price gap.

### **Part 2: Implementation strategies and timeframes for rationalizing and phasing out subsidies described in Part 1**

- *Subsidy for stable coal production*

Korea planned to phase out this subsidy by the end of 2010, which means that the 2011 budget proposal does not allow the subsidy for stable coal production. In order to address the possible negative effects on the coal mining industry, the government decided to find ways to help miners; for instance, optimizing the mine reclamation system or developing alternative industries.

- *Subsidy for briquette production*

This subsidy was decided to be phased out by the end of 2020, which allows relatively sufficient time to respond to growing concerns about the inflationary pressure and energy security of low-income households until the completion.

### Part 3: Current progress in implementation strategies and timeframes for rationalizing and phasing out inefficient fossil fuel subsidies

- *Subsidy for stable coal production*

This subsidy has been completely phased out since 2011.

As part of efforts to revitalize economic activities in abandoned mine areas, the government is planning to support 12 projects that were developed by the areas. Spanning from 2012 to 2015, the plan will be funded by the central government and local governments . Five billion won was assigned for 2012.

< Development Projects for 12 Abandoned Mine Areas >

- 1) Dongjeom, Taebaek City, Gangwon Province; The area plans to build an eco-friendly sports complex using convergence technology and carbon-based new materials for building. It also plans to attract research institutes, cultural facilities, and new material product manufacturers.
- 2) Mt. Hwangjori, Dogye, Samcheok City, Gangwon Province; The area will create a town for the combined industry of wild plants and leisure, which includes natural forests, flower and herb gardens, and various leisure facilities.
- 3) Simpo, Dogye, Samcheok City, Gangwon Province; The area will open Glass Theme Park. The park will consist of glass crafts centers, glass museums, and glass arts experience classes.
- 4) Bukssang, Yeongwol City, Gangwon Province; The area will establish Bobsleigh Experience Village and related recreational facilities using abandoned roads.
- 5) Sangdong, Yeongwol City, Gangwon Province; The area will create Leports (leisure and sports) Resort. For this, the local government is planning to change tracks that were used to move coals into mountain biking routes. The resort will also have hot springs.
- 6) Gohan, Jeongseon City, Gangwon Province; The area will create Lavender Town, which includes lavender farms, lavender parks, lavender drying facilities, lavender exhibits, and lavender shops
- 7) 794, Yemi, Jeongseon City, Gangwon Province; The area plans to create Kimchi Village, which includes Kimchi factories, Kimchi cellars, soybean fermentation facilities, and Kimchi-making experience classes.
- 8) Bangje, Jeongseon City, Gangwon Province; The area will create a town for the horse industry. It will build racecourse parks and horse markets. Policies to attract horsemeat businesses will also be considered.
- 9) 858, Yemi, Jeongseon City, Gangwon Province; The area will create a distribution center for SMEs. The local government is planning to build the refrigeration system and warehouses for the group wholesale purchase of SMEs.

- 10) Seongju, Boryeong City, South Chungcheong Province; The area will create Starlight Village. The local government is developing a special tour program that includes camping grounds and astronomical observatories.
- 11) Hwasun City, South Jeolla Province; The area will establish traditional food research institutes and manufacturers.
- 12) Mungyeong City, North Gyeongsang Province; The area will be transformed to an industrial complex.

- *Subsidy for briquette production*

As daily necessities prices have recently increased, and public utility rates continue to rise, for now it is difficult to increase briquette prices, whose major consumers are the low income bracket. In this respect, the Korean government decided to continue to freeze the price at 373.5 won, which has been fixed since 2010.

In the 2012 budget plan, 95.6 billion won is assigned for briquette subsidies, which is higher than 83.7 billion won in 2011. The production costs have increased consistently since last year, and it is expected that the amount of the subsidies will increase unless the government removes the freeze policy.

The Korean government is closely monitoring inflation and making possible efforts to increase briquette prices after August 2012. To this end, the government hired private service companies to calculate the exact cost of production and impacts of the price increase. Through a result analysis in July and consultation among relevant Ministries, it will decide the level of the increase. If the increase is proceeded as planned, the amount of subsidy for 2012 is expected to be much smaller than the previously assigned budget.

## Mexico – G-20 Country Progress Report on Implementing Strategies Reported to the G-20 for Rationalizing and Phasing Out Inefficient Fossil Fuel Subsidies

### **Part 1: Inefficient fossil fuel subsidies proposed for reform in an implementation strategy reported to the G-20**

- Overview of the subsidy program

#### *Gasoline and Diesel*

The Ministry of Finance in Mexico (Secretaría de Hacienda y Crédito Público –SHCP) has the mandate, under the law, to set the retail prices of gasoline and diesel. Starting in December 2009 the Government has implemented a scheme that increases retail prices of on a monthly basis; low-octane gasoline (magna) and diesel at a rate of 0.9%, and high octane gasoline (premium) at 0.4% on average. On the other hand PEMEX is the only wholesale distributor of high-octane and low-octane gasoline and it receives a price that is based on an international reference price that fully reflects market conditions. As a result the price setting mechanism might (but does not always) result in subsidized prices; subsidies arise when international prices surpass controlled prices.

#### *LPG*

The Federation's Revenues Law (Ley de Ingresos de la Federación) establishes that the Executive power is entitled to fix the LPG price in order to avoid sudden and disproportionate increases. This power has been exercised since 2008 in order to contain price increases linked both to increases in the international prices of inputs and to a lack of competition in the LPG distribution market.

The resulting regulated price is lower than the opportunity costs of the LPG, although since January 2010 the implicit subsidy is being gradually phased out by an increase in consumer price at a monthly rate of .65%

- Policy objective

#### *Gasoline and Diesel*

Gasoline and diesel retail prices are set by the SHCP and historically have grown at a certain rate in different periods of time, thus the policy objective has changed as national and international economic conditions evolve. Before 2009 gasoline prices were adjusted with inflation to keep the real value of gasoline constant. As a result of

the financial crisis of 2008-2009 prices were kept constant to attenuate the impact on the households' real incomes. Starting in December 2009, controlled prices were set to increase on a monthly basis at a constant rate. This is the current policy implemented in Mexico and it obeys to a number of objectives, one of them being the phasing-out of the potential subsidy implied by high international gasoline prices. The growth rate of gasoline prices has been set to a modest rate to fulfill a complementary objective of restraining the negative impact of households' real income.

### *LPG*

LP Gas retail prices have been set by the Federal Government since 1999, although liberalization in 2003 resulted in negative effects in terms of volatility and price manipulation by certain distribution companies. Since then prices have been controlled (mostly to ensure a stable price). Before 2008 LPG prices were adjusted with inflation to keep the real value of LPG constant. As a result of the financial crisis of 2008-2009 prices were kept constant to attenuate the impact on the households' real incomes. Starting in January 2010, controlled prices were set to increase on a monthly basis at a constant monthly rate of 0.65%.

- Relevant ministries or government bodies involved in implementing the subsidy program.

### *Gasoline and Diesel*

The main government body in the implementation of the price scheme is the SHCP which, through the *Oil Products, Natural Gas and Petrochemical Prices Committee*, decides on a monthly basis the retail price of gasoline to be charged by PEMEX gas station franchises nationwide. The prices that are set by the Ministry are officially communicated to PEMEX in a monthly basis and are valid the day after the announcement.

### *LPG*

The price regulation of LPG involves the Chief of the Executive, the Economy Ministry, the Energy Regulatory Commission and the Oil State Own Enterprise Pemex.

- Eligible subsidy recipients

### *Gasoline and Diesel*

When controlled prices result in subsidies, the benefits of the subsidy apply to all the population. However only those who own or use automobiles are the direct recipients of the subsidy. The population as a whole benefits through lower transportation costs of goods in general.

## LPG

All the LPG consumers benefit from the subsidy. This means that about two thirds of the subsidy is allocated to the households, and the rest to the industry and commerce activities.

- Annual cost estimates

Table 1 shows the evolution of the revenues of excise taxes to gasoline and diesel and highlights the years when price differentials have resulted in subsidies. (The pricing scheme has produced subsidies since 2006 and their magnitude depends heavily on the international prices.)

Table 2: Revenues from Excise Taxes

	LP Gas		Gasoline and Diesel	
	%GDP	2011 USD Million	%GDP	2011 USD Million
<b>2004</b>	0.11%	1,004.97	0.62%	5,422.45
<b>2005</b>	0.06%	564.14	0.16%	1,554.24
<b>2006</b>	0.06%	598.86	-0.41%	-4,202.05
<b>2007</b>	0.10%	1,160.02	-0.43%	-4,610.28
<b>2008</b>	0.25%	2,882.13	-1.79%	-20,240.49
<b>2009</b>	0.06%	588.56	0.03%	239.36
<b>2010</b>	0.21%	2,253.56	-0.43%	-4,441.74
<b>2011</b>	0.32%	3,668.66	-1.02%	-11,349.78

- Duration of the subsidy program

For all these fuels the current price scheme is expected to continue for the short and medium runs. With this pricing policy, and contingent on international oil prices, it is expected that subsidies would gradually disappear in the medium term.

- Publicly available information sources

The Ministry of Finance (SHCP) publishes regularly national public finance data in its website ([www.shcp.gob.mx](http://www.shcp.gob.mx)). The *Timely Public Finance and Public Debt Statistics* include monthly information for excise taxes (and thus gasoline subsidies when applicable) as part of the table in the subsection “Public Sector Budgetary Revenues” within the section “Public Sector”. The Spanish version can be found in the following link:

[http://www.shcp.gob.mx/POLITICAFINANCIERA/FINANZASPUBLICAS/Estadisticas\\_Oportunas\\_Finanzas\\_Publicas/Informacion\\_mensual/Paginas/finanzas\\_publicas.aspx](http://www.shcp.gob.mx/POLITICAFINANCIERA/FINANZASPUBLICAS/Estadisticas_Oportunas_Finanzas_Publicas/Informacion_mensual/Paginas/finanzas_publicas.aspx)

Whereas the English version can be downloaded from:

[http://www.hacienda.gob.mx/English/Timely\\_Public\\_Finances/Monthly\\_Information/Paginas/public\\_finances.aspx](http://www.hacienda.gob.mx/English/Timely_Public_Finances/Monthly_Information/Paginas/public_finances.aspx)

Once located in this page you should click “Public Sector” and then click again “Public Sector Budgetary Revenues” in order to get the information. The table that pops up in a separate window shows all budgetary revenues.

Gasoline excise taxes are shown in the section dubbed “Oil related” in the line “Excise Taxes”. Notice that this row has two components “Article 2º.-A Fraction I” and “Article 2º.-A Fraction II”. The latter refers to the resources of the surcharge to gasoline and diesel according to the Article 2º.-A Fraction II of the Law of Special Tax on Production and Services. This is a surcharge on gasoline and diesel that is distributed to the local governments according to the laws overseeing fiscal federalism in Mexico and does not represent the subsidy. Thus in order to get the information of the revenues coming from excise taxes to gasoline not distributed to states, one should consider the line “Article 2º.-A Fraction I”; when the numbers shown are negative there is a subsidy coming from higher international prices.

Useful sources of information are the following:

- Energy Information System (Sistema de Información Energética) from the Ministry of Energy: <http://sie.energia.gob.mx> (Sales volume and public prices are reported)
- PEMEX: [www.pemex.com](http://www.pemex.com), (PEMEX reports the amount of the subsidy on its financial statements)

## **Part 2: Implementation strategies and timeframes for rationalizing and phasing out subsidies described in Part 1**

- Legislative and/or administrative actions that must be taken to rationalize and phase out the subsidy program

For all fuels mentioned before, the gradual increase in prices, contingent on market conditions, is expected to reduce significantly or eliminate the implied subsidy in the medium term.

This needs no extra administrative or legislative action, and there are no foreseen changes in the laws granting the executive branch the powers to continue this policy.

- Specific timeframes for rationalizing and phasing out the subsidy program

Fossil fuel subsidies are fully rationalized based on the market information and the current price setting mechanism. With this scheme, and depending on the conditions of the international prices, it is expected the retail price to converge with the international price in the medium term and reduce or eliminate the subsidies.

- The ministry or government body responsible for carrying out reforms

#### *Gasoline and Diesel*

The ministry responsible for carrying out any reforms on this matter is the Ministry of Finance.

#### *LPG*

All the ministries involved in the consumer and wholesale prices: the Economy Ministry, the Energy Regulatory Commission as well as the Oil State Own Enterprise, Pemex.

- Technical or administrative capacity must be built up to achieve subsidy reform, and how this capacity will be built

The ministries involved are staffed with a number of well-trained economists and policy makers as well as public servants with long tenures in public service. This along with the ability to coordinate with other institutions provides with the required capacity to implement the reform.

- Alternative measures that are being implemented simultaneously to mitigate impacts on affected populations

Under the current price schemes there are no measures to mitigate impact on affected populations. When international prices are higher than controlled prices all gasoline and diesel users are benefited by this price differential; on the other hand every gasoline or diesel user is affected when international prices fall below the controlled price.

- The consultation and communication strategy that will be used to explain the benefits of reform to relevant stakeholders, address valid concerns, and educate about alternative measures

Currently there is no communication strategy specifically designed to explain the benefits of the reduction in subsidies. However the SHCP on a daily basis publishes statistics and press briefings of all relevant economic information that, when applicable, includes information on energy, taxes and subsidies.

### **Part 3: Current status of implementation strategies and timeframes for rationalizing and phasing out inefficient fossil fuel subsidies**

- Legislative and/or administrative actions that have been taken or that are currently underway to rationalize and phase out the subsidy program

The price setting mechanism currently implemented in Mexico fully rationalizes subsidies when they arise. The program underway will continue in the months to come. This needs no extra administrative or legislative action.

- Near-term and medium-term steps that remain needed to complete rationalization and phase-out of the subsidy program

With the current pricing policy, and depending on the conditions of the international gasoline and diesel prices, it is expected that the subsidy will disappear in the medium term. Additionally, we acknowledged the importance of assessing alternative price schemes that eliminate the subsidy and its effects on vulnerable population, mitigation and compensation mechanisms, effects on public finances, and schemes to reduce externalities and the political economy involved in the process.

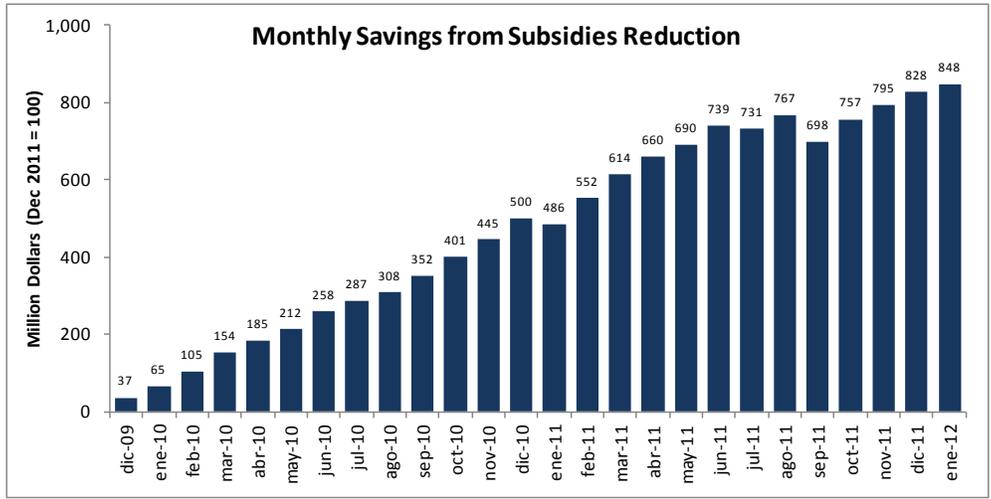
- The status of any alternative measures that have been or are being introduced alongside subsidy reform to mitigate impacts on affected populations, including timeframes for introduction and (where relevant) conclusion

The controlled price mechanism in place does not include a measure to mitigate impacts on affected populations. The alternative policies that are currently under study include the analysis of compensation mechanisms and long run infrastructure investment.

- Where relevant, estimates of the annual budgetary cost savings realized from subsidy reform

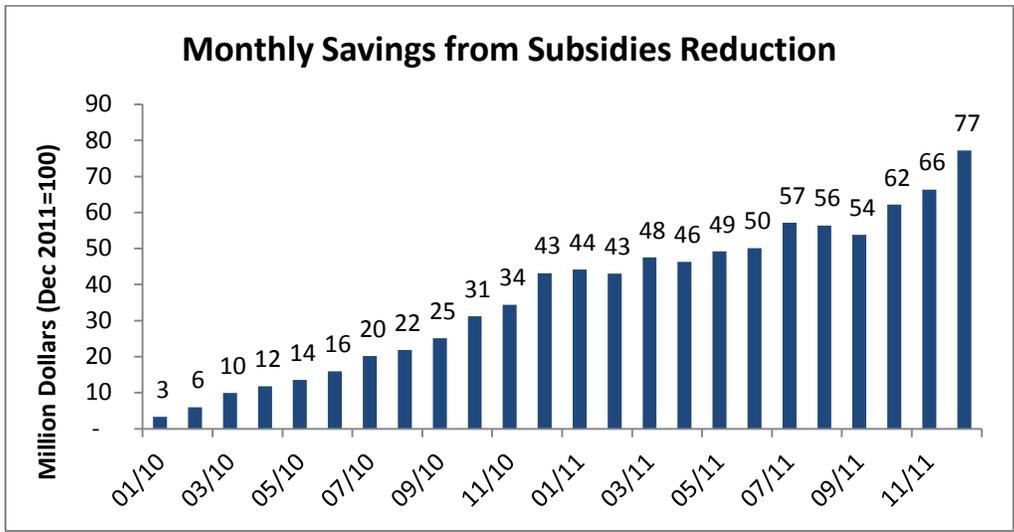
### *Gasoline and Diesel*

The graph below shows the savings derived from subsidies reduction. This calculation shows the additional amount of money that would add up to the subsidy if prices were kept at its December 2009 level; starting in that month the government implemented the scheme that increases prices on a monthly basis at a constant rate.



*LPG*

The same calculation is presented for the LPG



- Publicly available information related to rationalization and phase out of subsidy programs

Same links as above.

## **Russia's progress report on implementing the G20 initiative for rationalizing and phasing out inefficient fossil fuel subsidies**

The strategy of the Russian Federation for rationalizing and phasing out over the medium and long term inefficient fossil fuel subsidies that encourage wasteful consumption (hereinafter – the strategy) is being implemented by Russia within the framework of the Energy Strategy 2020, the state programme “Energy Saving and Increase of Energy Efficiency for the period until 2020” and the Concept of Long-Term Social and Economic Development for the period till 2020.

Russia at the current stage of the implementation of the strategy has not identified any inefficient fossil fuel subsidies. Some of our partners within the G20 also state that they do not have inefficient fossil fuel subsidies. As the initiative for rationalizing and phasing out inefficient fossil fuel subsidies is a mid-term one and in some cases could be considered as a long-term issue Russia assumes that it is relevant to provide the progress report every three years. Efficient reporting on phasing out inefficient fossil fuel subsidies is also hindered by the fact that for the moment the term “energy subsidies” and the way to calculate them have not been clearly identified and generally agreed which leads to unstandardized reporting from the G20 members.

At the same time the Government of the Russian Federation is actively working to improve the functioning of the whole energy sector and to implement initiatives aimed at increasing energy saving and energy efficiency.

As one of the main scopes of work Russia emphasizes its measures to improve the state regulation of gas prices, in particular, the gradual development of market pricing principles in the domestic gas market.

In this context the Government of the Russian Federation has adopted the Resolution №1205 dated December 31, 2010, that provides for the transition to the regulation system of wholesale gas prices based on price formula (except population). This formula is focused on phased achieving equal yield from gas deliveries to domestic and foreign markets during the transition period (2011-2014). Thereby, gas prices during 2013-2014 will be recalculated quarterly in accordance with the approved formula. The Government of the Russian Federation will also fix the band of price changes determined by the formula. The aforementioned Resolution provides for the preparation of proposals on the transition from the state regulation of wholesale gas prices to the state regulation of tariffs for gas transportation services since 2015.

The transition to the formula pricing mechanism towards wholesale gas prices and the changes in the existing normative-legal framework demonstrate the consistent trend in convergence of internal and external gas prices.

The Energy Strategy 2030 provides for the elaboration of further steps in order to improve the regulation of retail energy prices for population, taking into account the development of targeted social support system and the improvement of the rationing consumption system of energy resources for household needs.

Another scope of work in order to implement the strategy is to carry out the state programme of the Russian Federation named “Energy Saving and Increase of Energy Efficiency for the period until 2020» (hereinafter – the Programme).

The Programme is focused on ensuring the increase of competitiveness, financial stability, energy and ecological security of the Russian economy, as well as increase of the level and quality of life due to the potential of the energy saving and increase of energy efficiency on the basis of modernization, technological development and transfer to rational and ecologically responsible use of energy sources.

The problem of energy efficiency is so important for the Russian economy as the GDP energy intensity of Russia is 2.5 times higher than an average world level and 2.5-3.5 times higher than the level of the developed countries.

The major aim of the Programme is the decrease of the GDP energy intensity not less than by 13.5% against the level of 2007 due to the programme activities only (total decrease of energy intensity for the stated period should equal 40%).

The main instruments of the Programme’s implementation are:

- Co-financing of best regional energy efficiency programmes;
- Granting of government loan guarantees to the enterprises for the implementation of the energy efficiency increase programmes;
- Creation of state information system in the sphere of energy efficiency increase;
- Training of people responsible for energy efficiency increase, formation of economic model of public behavior;
- Methodical and normative provision of energy efficiency.

The implementation of the strategy and solution of the problem of energy saving and increase of energy efficiency are to a greater extent long-term issues. That is determined by the necessity to change the system of relations on the energy markets as well as to change and modernize considerable part of manufacturing, engineer and social infrastructure and its development on the basis of a new technology.

## Spain – G-20 Country Progress Report on Implementing Strategies Reported to the G-20 for Rationalizing and Phasing Out Inefficient Fossil Fuel Subsidies

### **Inefficient fossil fuel subsidies proposed for reform in an implementation strategy reported to the G-20**

Subsidy name: Financial Assistance for hard coal mining.

Overview: This aid is regulated under a specific EU regulation and in accordance national legislation, which allow financial assistance for the following items:

- Closure aids: It covers the difference between the production cost and the retail price freely agreed by the parties, taking into account the international market price. Established for those mines with production units forming part of a closure plan, the deadline of which does not extend beyond December 2018.
- 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.

Annual Cost Estimates: 850 m € following a decreasing path.

Assessment: This subsidy is regarded as efficient for various reasons. Firstly, 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.

Secondly, generating a manageable source of power, thermal power stations using coal provide an adequate degree of reliability to the energy system. Manageable sources provide a flexible and backup conventional generation capacity which is crucial for safely integrating renewable energies into the system.

In addition, there are some social concerns since coal reserves are geographically concentrated in areas where GDP per capita is below national average and highly dependent on mining. National industry of coal is under a restructuring plan, which provides incentives for a progressive reduction in capacity through measures intended to minimize the social impact of the adjustment. At the European level, domestic regulation 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.

Finally, the lost of indigenous coal production, and consequently electrical energy produced with this source will be gradually replaced by renewable energy sources.

Duration: Council *Decision of 10 December 2010 on State aid to facilitate the closure of uncompetitive coal mines* establishes the possibility to continue to grant, under certain conditions, public aid to the coal industry with a view to facilitating the closure of uncompetitive coal mines until December 2018, following a downward trend.

Publicly available information:

- National Plan for Strategic Coal Reserves 2006-2012.  
[http://www.irmc.es/common/Plan\\_Carbon.pdf](http://www.irmc.es/common/Plan_Carbon.pdf)
- Council Decision of 10 December 2010: <http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:L:2010:336:0024:0029:EN:PDF>

**Implementation strategies and timeframes for rationalizing and phasing out subsidies**

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, Energy and Tourism, in coordination with the European Commission.

## Turkey – G-20 Country Progress Report on Implementing Strategies Reported to the G-20 for Rationalizing and Phasing Out Inefficient Fossil Fuel Subsidies

### **Part 1: Inefficient fossil fuel subsidies proposed for reform in an implementation strategy reported to the G-20**

One subsidy was listed in the Turkey's submission to be rationalized: Capital injection to Turkish Hard Coal Company.

Overview: Turkish Hard Coal Company (TTK), which is a state owned enterprise, produces hard coal and sells majority (around 58 %) of its production to power plants for electricity generation. Due to the geological conditions of the region where TTK is operating, the production is mostly labor intensive. This is one of the reasons that the average selling price is not enough to cover production costs. Capital transfers from the budget (through Treasury) have been made to sustain the financial viability of TTK. In 2011 annual cost the subsidy was around US\$ 285.2 million.

### **Part 2: Implementation strategies and timeframes for rationalizing and phasing out subsidies described in Part 1**

The implementation plan for rationalizing/phasing out this inefficient producer side subsidy is planned to be achieved with the restructuring of TTK. The restructuring study began in 2009 along with the Annual Program coordinated by the Ministry of Development. (<http://ekutup.dpt.gov.tr/program/prog09in.pdf>). 2010, 2011 and 2012 Annual Programs\* also included this measure. ([http://ekutup.dpt.gov.tr/program/2010/2010\\_program\\_i.pdf](http://ekutup.dpt.gov.tr/program/2010/2010_program_i.pdf) , [http://ekutup.dpt.gov.tr/program/2011/2011AnnualProgram\\_i.pdf](http://ekutup.dpt.gov.tr/program/2011/2011AnnualProgram_i.pdf) ).

\*English version of 2012 Annual Program is not available.

### **Part 3: Current status of implementation strategies and timeframes for rationalizing and phasing out inefficient fossil fuel subsidies**

The Undersecretariat of Treasury, the Ministry of Energy and Natural Resources and the Ministry of Development have been working on a report which includes data related to financial situation of the Turkish Hard Coal Company, production and the annual cost of the subsidies. When the report is completed, those parties are going to work on the restructuring plan. The parties are expected to suggest cost-side and/or receive-side measures. Since this restructuring plan will very likely have social and economic consequences; related parties, trade unions and non-governmental organizations should reach an agreement. Besides, the support of the public is as important as the issues mentioned above since the households in Zonguldak mainly earn their livings from mining. Turkey will continue to monitor the restructuring efforts and follow the best implementation examples and case studies in order to rationalize/phase out this inefficient fossil fuel subsidy.

## United States – Progress Report on Fossil Fuel Subsidies

### Part 1: Identification and Analysis of Fossil Fuel Provisions

There are a number of tax preferences, described below, available in the United States to producers of fossil fuels. The preferences below are all permanent provisions in the tax code. The annual revenue costs estimated for each provision are taken from the General Explanation of the Administration’s Revenue Proposal, sometimes referred to as the Treasury Green Book, which is available here: [http://www.treasury.gov/resource-center/tax-policy/Pages/general\\_explanation.aspx](http://www.treasury.gov/resource-center/tax-policy/Pages/general_explanation.aspx)

Tax Provision	Description	Analysis	Expiration	Annual Revenue Cost (millions of \$) <sup>1</sup>
<b>Percentage depletion for oil and gas</b>	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, 2012.	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 tax system. This market distortion is detrimental to long-term energy security and is also inconsistent with the Administration’s policy of supporting a clean energy economy, reducing our reliance on oil, and cutting carbon pollution. 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.	None  Suspension of taxable income limitation for marginal properties expired December 31, 2011.	\$1,147

<b>Tax Provision</b>	<b>Description</b>	<b>Analysis</b>	<b>Expiration</b>	<b>Annual Revenue Cost (millions of \$)<sup>1</sup></b>
<b>Expensing of intangible drilling costs</b>	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.	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.	None	\$1,390
<b>Geological &amp; geophysical expenditures</b>	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.	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.	None	\$140

<b>Tax Provision</b>	<b>Description</b>	<b>Analysis</b>	<b>Expiration</b>	<b>Annual Revenue Cost (millions of \$)<sup>1</sup></b>
<b>Percentage depletion for hard mineral fossil fuels</b>	<p>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.</p> <p>The deduction may not exceed 50 percent of the net income from the mineral property in any year (the "net-income limitation").</p>	<p>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. The lower rate of tax provided by percentage depletion distorts markets by encouraging more investment in the fossil-fuel industry than would occur under a neutral tax system. This market distortion is inconsistent with the Administration's policy of supporting a clean energy economy and cutting carbon pollution. Moreover, the tax subsidy for coal and other hard-mineral fossil fuels must ultimately be financed with taxes that result in underinvestment in other, potentially more productive, areas of the economy.</p>	None	\$174

<b>Tax Provision</b>	<b>Description</b>	<b>Analysis</b>	<b>Expiration</b>	<b>Annual Revenue Cost (millions of \$)<sup>1</sup></b>
<b>Royalty taxation of coal</b>	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.	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 hard mineral fossil fuels for further analysis of the effects of fossil fuel tax preferences.	None	\$42
<b>Expensing of exploration and development costs for hard mineral fuels.</b>	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.	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 hard mineral fossil fuels for further analysis of the effects of fossil fuel tax preferences.	None	\$44

<b>Tax Provision</b>	<b>Description</b>	<b>Analysis</b>	<b>Expiration</b>	<b>Annual Revenue Cost (millions of \$)<sup>1</sup></b>
<b>Passive loss exception for working interests in oil and gas properties</b>	<p>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.</p> <p>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.</p>	<p>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.</p>	None	\$8
<b>Deduction for tertiary injectants</b>	<p>Taxpayers engaged in petroleum extraction activities may generally deduct qualified tertiary injectant expenses incurred while applying a tertiary recovery method.</p>	<p>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.</p>	None	\$10

<b>Tax Provision</b>	<b>Description</b>	<b>Analysis</b>	<b>Expiration</b>	<b>Annual Revenue Cost (millions of \$)<sup>1</sup></b>
<b>Enhanced oil recovery (EOR) credit</b>	Provides a 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.	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.	None	\$0
<b>Marginal wells credit</b>	Production credit (\$3-per-barrel of oil or \$0.50-per-1,000-cubic-feet adjusted for inflation from 2004) for marginal wells or wells that have an average daily production of not more than 25 barrels per day. Currently phased out due to high oil prices.	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.	None	\$0
<b>Domestic manufacturing deduction for fossil fuels</b>	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.	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 distorts markets by encouraging more investment in the fossil fuel industries than would occur under a neutral tax system. This market distortion is detrimental to long-term energy security and is also inconsistent with the Administration's policy of supporting a clean energy economy, reducing our reliance on oil, and cutting carbon pollution. The manufacturing deduction must ultimately be financed with taxes that result in underinvestment in other potentially productive areas of the economy.	None	\$1,188

<sup>1</sup> Nominal annual average figure based on the U.S. FY2013 Budget 10-year revenue estimate.

There is one consumption subsidy that is funded by the federal government in the United States. It is targeted at low-income households, and benefits are typically dispersed as a lump sum credit on a household's utility bill. Because the program is a targeted transfer that helps low-income households obtain essential energy services and does not encourage wasteful consumption, this program is not proposed for phase-out. Further information about the program can be obtained at: [www.acf.hhs.gov/programs/liheap](http://www.acf.hhs.gov/programs/liheap) and <http://liheap.ncat.org/>

Consumption Subsidy	Description	Analysis	Expiration	Annual Cost
<p><b>Low Income Home Energy Assistance Program (LIHEAP)</b></p>	<p>A discretionary block grant awarded to States, territories, and tribes and tribal organizations to provide home heating and cooling<sup>1</sup> energy assistance to low-income households.</p> <p>Grantees may use a portion of their LIHEAP funds for low-cost residential weatherization services and for program administration.</p> <p>Federal guidelines limit eligibility to households with incomes up to 150% of poverty or 60% of State median income<sup>2</sup>.</p> <p>The program typically reaches a small share (less than 20%) of eligible households and offsets a portion of participants' home heating and cooling expenses.</p> <p>In FY 2008, the average LIHEAP heating benefit (heating and winter crisis benefits combined) was \$363, representing 43% of average home heating expenditures for LIHEAP households.<sup>3</sup></p>	<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.<sup>4</sup></p> <p>In FY 2008, 32% of LIHEAP households had an elderly member, 32% included a disabled member, and 21% had a child under 5 years old.<sup>3</sup> The average energy burden among LIHEAP recipient households was 17%, compared to 14% among all low-income households.<sup>5</sup></p>	<p>Authorization expired at the end of FY 2007. Congress continues to provide annual appropriations.</p>	<p>\$3,472 million for FY 2012</p>

<sup>1</sup> Home heating and cooling accounts for about 42 percent of residential energy expenditures among low-income households. Source: LIHEAP Home Energy Notebook for Fiscal Year 2009, page ii.

<sup>2</sup> States 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).

<sup>3</sup> From LIHEAP Report to Congress for Fiscal Year 2008: Executive Summary, page vi. FY 2008 figures are from the most recent publically available report to Congress on LIHEAP.

<sup>4</sup> From LIHEAP Report to Congress for Fiscal Year 2006: Appendix E, page 86.

<sup>5</sup> From LIHEAP Report to Congress for Fiscal Year 2008, page 20.

## Part 2: Implementation Strategies and Timeframes For Phase-Out of Fossil Fuel Tax Provisions

Tax Provision	Strategy and Timeframe	Implementation
<b>Percentage depletion for oil and gas</b>	The Administration's Fiscal Year 2013 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, 2012.	The U.S. Congress must pass enabling legislation for this proposal to become law.
<b>Expensing of intangible drilling costs</b>	The Administration's Fiscal Year 2013 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, 2012.	The U.S. Congress must pass enabling legislation for this proposal to become law.
<b>Geological &amp; geophysical expenditures</b>	The Administration's Fiscal Year 2013 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, 2012.	The U.S. Congress must pass enabling legislation for this proposal to become law.
<b>Percentage depletion for hard mineral fossil fuels</b>	The Administration's Fiscal Year 2013 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, 2012.	The U.S. Congress must pass enabling legislation for this proposal to become law.
<b>Royalty taxation of coal</b>	The Administration's Fiscal Year 2013 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, 2012.	The U.S. Congress must pass enabling legislation for this proposal to become law.
<b>Expensing of exploration and development costs for hard mineral fuels.</b>	The Administration's Fiscal Year 2013 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, 2012.	The U.S. Congress must pass enabling legislation for this proposal to become law.

<b>Tax Provision</b>	<b>Strategy and Timeframe</b>	<b>Implementation</b>
<b>Passive loss exception for working interests in oil and gas properties</b>	The Administration's Fiscal Year 2013 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, 2012.	The U.S. Congress must pass enabling legislation for this proposal to become law.
<b>Deduction for tertiary injectants</b>	The Administration's Fiscal Year 2013 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, 2012.	The U.S. Congress must pass enabling legislation for this proposal to become law.
<b>Enhanced oil recovery (EOR) credit</b>	The Administration's Fiscal Year 2013 Budget proposal would repeal the investment tax credit for enhanced oil recovery projects beginning after December 31, 2012.	The U.S. Congress must pass enabling legislation for this proposal to become law.
<b>Marginal wells credit</b>	The Administration's Fiscal Year 2013 Budget proposal would repeal the production tax credit for oil and gas from marginal wells in taxable years beginning after December 31, 2012.	The U.S. Congress must pass enabling legislation for this proposal to become law.
<b>Domestic manufacturing deduction for oil fossil fuels</b>	The Administration's Fiscal Year 2013 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 and of coal, other hard mineral fossil fuels, or a primary product thereof for taxable years beginning after December 31, 2012.	The U.S. Congress must pass enabling legislation for this proposal to become law.

### Part 3: Current Status of Phase-Out Strategies

<b>Tax Provision</b>	<b>Actions Implemented to Date</b>	<b>Remaining Actions to Fully Implement Phase-Out</b>
<b>Percentage depletion for oil and gas</b>	None	The U.S. Congress must pass enabling legislation for this proposal to become law.
<b>Expensing of intangible drilling costs</b>	None	The U.S. Congress must pass enabling legislation for this proposal to become law.
<b>Geological &amp; geophysical expenditures</b>	None	The U.S. Congress must pass enabling legislation for this proposal to become law.
<b>Percentage depletion for hard mineral fossil fuels</b>	None	The U.S. Congress must pass enabling legislation for this proposal to become law.
<b>Royalty taxation of coal</b>	None	The U.S. Congress must pass enabling legislation for this proposal to become law.
<b>Expensing of exploration and development costs for hard mineral fuels</b>	None	The U.S. Congress must pass enabling legislation for this proposal to become law.
<b>Passive loss exception for working interests in oil and gas properties</b>	None	The U.S. Congress must pass enabling legislation for this proposal to become law.
<b>Deduction for tertiary injectants</b>	None	The U.S. Congress must pass enabling legislation for this proposal to become law.
<b>Enhanced oil recovery (EOR) credit</b>	None	The U.S. Congress must pass enabling legislation for this proposal to become law.
<b>Marginal wells credit</b>	None	The U.S. Congress must pass enabling legislation for this proposal to become law.
<b>Domestic manufacturing deduction for fossil fuels</b>	None	The U.S. Congress must pass enabling legislation for this proposal to become law.