

# **The macroeconomic evaluation of energy tax policies within the EU, with the GEM-E3-Europe model**

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## 1. INTRODUCTION

This report presents the results of the study on the economic and environmental impacts of energy tax policies in the EU with the general equilibrium model GEM-E3. The good functioning of the internal market and the objectives of sustainable development call both for the reform of the energy taxation. Tax harmonisation could reduce tax competition between countries. A more environmentally oriented tax system would contribute to sustainable development. The EU Commission has made several proposals regarding energy taxation favouring these objectives: in 1997 the Commission adopted a proposal for a directive restructuring the Community framework for the taxation of energy products (COM(97) 30 final), meant to update an older directive (92/82/EEC). However, the proposed directive has not reached so far the necessary unanimous support by the Member States in the Council negotiations.

The GEM-E3 model is an appropriate tool to evaluate such a reform which has potentially an impact on the economy, the energy system and the environment of each member state and on the interactions between them. As GEM-E3 is a macro-sectoral general equilibrium model, it allows assessing the impact of an energy taxation reform in terms of economic indicators, such as GDP, employment and the balance of trade<sup>1</sup> and their sectoral implications, and in terms of environmental indicators, as CO<sub>2</sub>, SO<sub>2</sub>, NO<sub>x</sub>, VOC and PM emissions. Having a specific model for each of the 14 EU countries (Luxembourg's model is not available) permits giving an indication on the distributive consequences between countries of tax policy changes. The model has been updated to the base year 1995 compared to the previous study with GEM-E3 on energy taxation. The Input-Output tables used are still projected tables from EUROSTAT as a full set of the definite IO tables will only be available in 2003.

The policies evaluated in this study are the following:

- 1) implementation of the pending proposal, imposing EU-wide minimum tax rates for a wide range of energy products combined with a tax recycling through a decrease of the social security contribution or through a reduction of public debt,
- 2) implementation of more environmentally friendly energy tax rates, first in all EU countries and then with enhanced cooperation, where only a subset of the Member States takes part in the EU wide energy tax regime,
- 3) impact of a carbon tax, combined with an allowance trading system for electricity and heat generators and energy intensive sectors<sup>2</sup> as proposed in the Commission Directive (COM(2001)581) such as to reach the Kyoto target for the EU.

The second section describes the existing tax structure as implemented in GEM-E3 based on the data received from DG TAXUD and IEA Energy Prices & Taxes Statistics, and the EU proposal of harmonised minimum energy taxation. In the third section the reference scenario is briefly described and in the fourth section the policy scenarios are analysed. Finally section 5 concludes.

## 2. ENERGY TAX RATES TO BE IMPLEMENTED IN GEM-E3

### 2.1. The energy tax rates in 2000

Two sources are used for the computation of the tax rates to be implemented in GEM-E3, the nominal rates for the different fuels collected by TAXUD and the IEA Energy Prices & Taxes Statistics. The year 2000 is the base year, except for the Netherlands, UK and Sweden where it is 2001. Assumptions have been made by CES-NTUA to arrive at one rate per energy product as needed for GEM-E3. The IEA Statistics allows in certain cases computing an average rate for the category considered, taking into account the exemption possibilities.

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<sup>1</sup> As a general equilibrium model, it can only give the impact on relative prices but not on the level of inflation.

<sup>2</sup> There is no clear definition of a criteria to define such sectors, however it is not within the scope of this proposal to arrive at such a definition, we will limit ourselves to a very general concept given the GEM-E3 sectoral classification.

The tax rates finally computed from these two sources are given in the two tables hereafter. For the implementation in GEM-E3, the price increase due to the tax was computed and then used as input for GEM-E3.

**Table 1: Energy taxes in Agriculture and Industry in EURO/GJ**

		A	B	D	DK	FIN	F	EL	IRL	I	NL	P	E	S	UK
<b>Coal</b>	Energy Int.	0.00	0.00	0.00	0.18	0.54	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.71	0.22
	Electricity	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.10	0.00	0.00	0.00	0.00	0.00
	Other	0.00	0.00	0.00	0.55	1.61	0.00	0.00	0.00	0.00	0.44	0.00	0.00	2.14	0.80
<b>Oil</b>	Energy Int.	1.07	0.15	0.44	0.43	0.47	0.45	0.95	0.34	1.59	0.75	0.68	0.34	0.61	1.08
	Electricity	0.00	0.15	0.44	0.00	0.00	0.00	0.95	0.34	0.38	0.00	0.00	0.00	0.32	1.11
	Other	1.03	0.32	1.06	1.09	1.64	1.19	2.29	0.84	2.42	2.41	0.68	1.23	1.77	1.23
<b>Gas</b>	Energy Int.	0.60	0.30	0.67	0.17	0.17	0.17	0.00	0.00	0.40	0.28	0.00	0.00	0.43	0.34
	Electricity	0.00	0.00	0.67	0.00	0.00	0.00	0.00	0.00	0.12	0.00	0.00	0.00	0.00	0.00
	Other	1.20	0.30	0.67	0.50	0.51	0.33	0.00	0.00	0.40	0.85	0.00	0.00	1.30	0.67
<b>Electricity</b>	Energy Int.	0.00	0.00	0.85	0.98	0.40	0.05	0.00	0.00	1.36	1.72	0.00	0.69	0.00	0.96
	Other	4.17	0.00	0.85	2.94	1.19	0.05	0.00	0.00	4.08	5.17	0.00	0.69	0.00	1.93
<b>Oil for transport purpose</b>		8.08	8.08	10.53	9.61	8.47	10.70	6.80	8.89	10.67	9.81	6.85	7.52	9.56	21.74

**Table 2: Energy taxes for Households in EURO/GJ**

	A	B	D	DK	FIN	F	EL	IRL	I	NL	P	E	S	UK	
<b>Coal</b>	0.00	0.00	0.00	7.51	1.67	0.00	0.00	0.00	0.00	0.00	0.00	0.00	7.45	0.00	
<b>Oil</b>	2.09	0.38	1.69	7.35	1.86	1.88	3.64	1.33	10.59	4.06	0.68	2.13	5.77	1.40	
<b>Gas</b>	1.13	0.38	1.07	7.22	0.51	0.00	0.00	0.00	3.83	2.11	0.00	0.00	4.47	0.00	
<b>Electricity</b>	4.13	0.39	4.27	23.76	1.94	2.02	0.00	0.00	5.62	16.20	0.00	1.57	4.80	0.00	
<b>Oil for transport purpose</b>		10.85	11.70	13.60	12.52	12.73	13.99	7.55	9.77	12.97	13.90	7.81	8.61	12.59	22.31

## 2.2. The "minimum" energy tax rates

The "minimum rates" considered are those corresponding to the compromise proposal of the Spanish Presidency and are reproduced hereafter. These rates apply only on final energy demand, exclusive the non-energy use, and not on energy production or transformation. For the EU minimum rates on transport fuels, the Spanish proposal of 302€1000 l for diesel oil and 359 €1000 l for petrol was increased to 350€ 1000 l for professional diesel oil and to 360€ 1000 l for non-professional diesel oil and petrol in 2005 following the latest proposal by the Commission. It must however be noted that the demand for transport fuels is not a separate category in an Input/Output framework and therefore the implementation of the tax proposal for these fuels in GEM-E3 remains approximate. In the model implementation, the rates are adapted to the general relative price evolution in each country.

**Table 3: Minimum rates proposal**

Min. Rates 2002 Proposal, in EURO/GJ		
Industry		
Coal	Energy Intensive sectors	0.15
	Other sectors	0.15
Oil	Energy Intensive (HFO)*	0.38
	Other (Average HFO/GDO)*	0.47
Gas	Energy Intensive sectors	0.15
	Other sectors	0.15
Electricity	Energy Intensive sectors	0.14
	Other sectors	0.14
Oil for transport purposes (diesel)		9.39
Household		
Coal		0.30
Oil		0.56
Gas		0.30
Electricity		0.28
Oil for transport purposes (petrol)		10.30

\*for energy intensive sectors: tax on heavy fuel oil (HFO)

\*for other sectors, average of tax on heavy fuel and tax on diesel oil (GDO)

The following table shows the changes for the countries and sectors where the implementation of the minimum rates modifies the existing rates. Countries as Denmark, the Netherlands, Sweden, Finland and UK (for industry) will have to implement only minor changes, while the changes are more important in countries such as Ireland, Greece, Spain and Portugal. Therefore the burden of the new energy taxation will differ substantially between countries.

**Table 4: Tax increase (in %) from minimum tax implementation**

Sectors		A	B	D	DK	FIN	F	EL	IRL	I	NL	P	E	S	UK
Coal	Energy Intensive	Min	Min	Min	-	-	Min	Min	Min	Min	Min	Min	Min	-	-
	Other	Min	Min	Min	-	-	Min	Min	Min	Min	-	Min	Min	-	-
Oil	Energy Intensive	-	147%	-	-	-	-	-	9%	-	-	-	10%	-	-
	Other	-	44%	-	-	-	-	-	-	-	-	-	-	-	-
Gas	Energy Intensive	-	-	-	-	-	-	Min	Min	-	-	Min	Min	-	-
	Other	-	-	-	-	-	-	Min	Min	-	-	Min	Min	-	-
Electricity	Energy Intensive	Min	Min	-	-	-	158%	Min	Min	-	-	Min	-	Min	-
	Other	-	Min	-	-	-	158%	Min	Min	-	-	Min	-	Min	-
Oil for transport purposes		16%	16%	-	-	11%	-	38%	6%	-	-	37%	25%	-	-
Coal	Household	Min	Min	Min	-	-	Min	Min	Min	Min	Min	Min	Min	-	Min
Oil	Household	-	49%	-	-	-	-	-	-	-	-	-	-	-	-
Gas	Household	-	-	-	-	-	Min	Min	Min	-	-	Min	Min	-	Min
Electricity	Household	-	-	-	-	-	-	Min	Min	-	-	Min	-	-	Min
Oil for transport prposes		-	-	-	-	-	-	36%	5%	-	-	32%	20%	-	-

Min: means the rate was zero, -: means the existing rate is higher than the minimum rate

The impact might be somewhat less important than what is suggested in the table when linking it to energy consumption. Table 5 gives, by country, the share of the energy products in the total final energy consumption in each broad sectoral category. The use of coal by household is only significant in Ireland, gas is quasi not used in Greece, Portugal and Sweden; in the industry coal is mainly used

for electricity production (not taxed) and in the non-chemical energy intensive industries, where moreover only the energy use is taxed.

**Table 5: Share of energy products in total final energy consumption, excluding consumption for transport purposes, in 2000**

		A	B	D	DK	FIN	F	EL	IRL	I	NL	P	E	S	UK
Coal	Energy Intensive	8.9%	31.2%	22.8%	17.8%	10.4%	19.9%	31.3%	2.9%	12.3%	14.1%	12.8%	8.3%	11.1%	18.6%
Oil	Energy Intensive	9.7%	7.3%	5.7%	24.9%	8.2%	11.5%	35.8%	53.8%	17.5%	15.9%	39.7%	22.7%	11.9%	5.5%
Gas	Energy Intensive	41.7%	37.8%	44.7%	28.9%	11.8%	37.9%	5.6%	21.8%	44.7%	44.7%	16.1%	40.4%	3.7%	48.5%
Electricity	Energy Intensive	27.3%	23.7%	26.7%	28.3%	32.2%	30.6%	27.3%	21.5%	25.5%	25.3%	19.5%	25.2%	34.7%	27.5%
Renewable	Energy Intensive	12.4%	0.0%	0.0%	0.1%	37.4%	0.0%	0.0%	0.0%	0.0%	0.0%	11.8%	3.4%	38.7%	0.0%
Coal	Other	1.4%	0.9%	1.7%	2.8%	1.7%	2.3%	0.3%	0.8%	2.0%	0.3%	0.9%	1.1%	1.3%	1.7%
Oil	Other	20.6%	29.5%	24.4%	32.0%	37.7%	22.7%	49.6%	46.9%	21.3%	9.0%	47.8%	31.3%	28.7%	22.4%
Gas	Other	27.0%	40.0%	34.5%	18.3%	5.4%	33.5%	2.1%	18.2%	25.8%	61.7%	5.2%	18.3%	2.9%	39.6%
Electricity	Other	41.5%	29.0%	37.4%	41.3%	43.1%	37.1%	42.0%	30.6%	46.4%	28.3%	42.2%	44.6%	54.9%	35.2%
Renewable	Other	9.4%	0.7%	2.0%	5.6%	12.1%	4.4%	5.9%	3.3%	4.6%	0.8%	3.9%	4.6%	12.3%	1.1%
Coal	Household	3.8%	2.3%	1.5%	0.0%	0.4%	1.5%	0.5%	20.6%	0.2%	0.0%	0.0%	0.4%	0.0%	3.7%
Oil	Household	29.1%	39.6%	33.0%	28.5%	30.6%	25.5%	53.8%	36.2%	18.4%	0.9%	24.1%	34.0%	16.7%	7.0%
Gas	Household	23.1%	34.8%	40.3%	24.5%	0.6%	24.4%	0.3%	17.6%	56.8%	78.6%	3.5%	17.0%	1.9%	66.5%
Electricity	Household	20.0%	21.6%	18.9%	32.8%	42.8%	28.8%	27.4%	24.0%	14.5%	18.5%	30.9%	31.6%	69.5%	22.3%
Renewable	Household	24.0%	1.7%	6.4%	14.1%	25.7%	19.7%	18.0%	1.6%	10.1%	2.0%	41.5%	17.0%	11.9%	0.5%

The ex-ante price increase, implied by the minimum tax and implemented in the model, are given in the next table. It is the price increase through the minimum tax of the average energy product price inclusive existing energy taxes in 2000.

**Table 6: Ex-ante Price Increase through Minimum Tax**  
(for average energy prices of 2000, incl. existing taxes)

		A	B	D	DK	FIN	F	EL	IRL	I	NL	P	E	S	UK
<b>Coal</b>	Energy Intensive	8.0%	9.4%	7.7%	0.0%	0.0%	5.3%	7.1%	14.4%	19.2%	9.3%	10.9%	3.9%	0.0%	0.0%
	Other	8.0%	9.4%	7.7%	0.0%	0.0%	5.3%	7.1%	14.4%	19.2%	0.0%	10.9%	3.9%	0.0%	0.0%
<b>Oil</b>	Energy Intensive	0.0%	5.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.5%	0.0%	0.0%	0.0%	0.7%	0.0%	0.0%
	Other	0.0%	2.7%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
<b>Gas</b>	Energy Intensive	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	2.4%	5.3%	0.0%	0.0%	2.4%	3.0%	0.0%	0.0%
	Other	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	2.4%	5.3%	0.0%	0.0%	2.4%	3.0%	0.0%	0.0%
<b>Electricity</b>	Energy Intensive	0.9%	1.0%	0.0%	0.0%	0.0%	0.8%	1.1%	0.9%	0.0%	0.0%	0.7%	0.0%	1.6%	0.0%
	Other	0.0%	1.0%	0.0%	0.0%	0.0%	0.8%	1.1%	0.9%	0.0%	0.0%	0.7%	0.0%	1.6%	0.0%
<b>Oil for transport purpose</b>	Industry	8.8%	8.7%	0.0%	0.3%	6.1%	0.0%	18.2%	4.0%	0.0%	0.0%	18.0%	12.8%	0.5%	0.0%
<b>Coal</b>	Household	3.3%	3.3%	2.8%	0.0%	0.0%	3.2%	6.1%	7.2%	26.9%	4.6%	13.8%	4.8%	0.0%	3.8%
<b>Oil</b>	Household	0.0%	2.3%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
<b>Gas</b>	Household	0.0%	0.0%	0.0%	0.0%	0.0%	3.5%	4.0%	3.4%	0.0%	0.0%	3.3%	2.5%	0.0%	3.8%
<b>Electricity</b>	Household	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	1.4%	1.0%	0.0%	0.0%	0.8%	0.0%	0.0%	0.9%
<b>Oil for transport purpose</b>	Household	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	12.5%	0.0%	0.0%	0.0%	9.4%	6.0%	0.0%	0.0%

### 3. THE REFERENCE SCENARIO

#### 3.1. Exogenous assumptions

A reference scenario elaborated with a CGE model such as GEM-E3, cannot be considered as a forecast. It gives however a consistent general evolution of the economic activity given exogenous

assumptions on the main driving forces and represents the benchmark to which to compare the different policy scenarios. One should however have in mind that, in case of scenarios related to the Kyoto target, the evolution of GHG emissions in the reference scenario conditions the EU global reduction effort, as the target is defined in terms of the 1990 emissions. It is therefore an important parameter in the evaluation of a climate change policy.

Building a reference scenario necessitates exogenous assumptions about the technical progress associated with production factors, about world growth and prices and about the national public policies. For technical progress general assumptions have been made in line with past observations for energy efficiency and labour productivity and without sectoral or country differentiation. Regarding public policy no specific assumptions regarding climate change are assumed with the exception of the ACEA agreement for car fuel efficiencies and the energy taxes levied for climate change in some EU countries.

The general World and EU growth and the world energy prices are based respectively on assumptions developed by CEPII for POLES<sup>3</sup> and on POLES results for DG\_TREN Energy projections. For the growth of the EU partners in the rest of the world outside EU, 4.0 % was assumed for the goods sectors, 6.0 % for the service sectors and 1.0 % for the energy sectors compatible with the growth indicators developed by CEPII for POLES. The assumptions for the World energy prices, derived from POLES scenario for DG\_TREN, are reproduced in Table 7 (absolute values) and Table 8 (annual growth rate).

**Table 7: POLES World Energy Prices**

	2000	2010	2020	2030
International Prices				
Oil (\$95/bl)	25.88	18.56	22.04	25.82
GAS (\$95/boe)				
American market	19.50	12.94	14.17	15.72
European and African market	14.34	15.53	19.03	21.55
Asian market	26.97	20.79	24.05	25.55
Coal (\$95/boe)				
American market	4.88	5.38	5.77	6.21
European and African market	6.80	6.63	6.49	6.48
Asian market	6.23	5.68	6.07	6.64

**Table 8: Evolution of the real world energy prices (annual growth rate in %)**

	2000-2010	2010-2020	2020-2030
Oil	-3.3	1.7	1.6
Gas (European market)	0.8	2.1	1.3
Coal (European market)	-0.2	-0.2	0.0

### 3.2. The projections for 2000-2010

The endogenous variables of the GEM-E3 model include (in volume for each sector and each country) the supply (production and imports) and demand (use in production, private and public consumption, investments and exports) of goods and services, the sources and uses of material, energy, labour and capital inputs. The model also computes, for each sector and each country, the changes in relative prices of domestic production, exports, imports and changes in primary factor incomes (average wage rate and return on capital). The following tables gives the macroeconomic growth and the sectoral evolution of production and exports for the EU as a whole.

<sup>3</sup> CEPII, Croissance économique mondiale: un scénario de référence à l'horizon 2030, N.Kousnetzoff, J.Genet et S. Fahr

The EU GDP grows at an average of 2% a year over the period 2000-2010 with a slow shift towards service sectors in the second half of the period. The energy intensity (energy consumption/GDP) is decreasing with a average of 1% per year over the horizon considered which is comparable to what was observed in the past. The CO2 emissions increase with 0.9% a year from 2000 to 2010 and are in 2010 9% higher than in 1990. Taking the allocation of effort between CO2 and other GHG from the ECOFYS study, which gives a reduction target of 4.9% for CO2 only compared to 1990, this means that the reduction effort for the EU in 2010 compared to the reference in 2010 is 12.7% to reach this target.

**Table 9: EU Macroeconomic growth (annual growth rate)**

<b>Macroeconomic Aggregates</b>	<b>2000/2005</b>	<b>2005/2010</b>
<i>Gross Domestic Product</i>	2.1%	1.8%
<i>Employment</i>	1.2%	0.3%
<i>Private Consumption</i>	1.7%	1.8%
<i>Investment</i>	1.7%	1.7%
<i>Energy Consumption</i>	1.0%	0.6%
<i>Exports to RW</i>	3.8%	2.6%
<i>Imports from RW</i>	1.5%	2.5%
<i>Real Wage Rate</i>	1.1%	2.4%
<i>Relative Consumer Price</i>	-0.3%	1.1%
<i>Terms of Trade</i>	-1.1%	0.0%
<i>Current Account (% of GDP)*</i>	2.1%	0.8%
<b>Total Atmospheric Emissions</b>		
<i>CO2 Emissions</i>	1.0%	0.8%
<i>NOX Emissions</i>	-5.2%	1.1%
<i>SO2 Emissions</i>	-0.4%	-0.2%
<i>VOC Emissions</i>	-3.9%	1.6%
<i>PM Emissions</i>	-0.3%	-0.2%

**Table 10: EU sectoral evolution (annual growth rate)**

	<b>Domestic Production</b>		<b>Total Export</b>	
	<b>2000/2005</b>	<b>2005/2010</b>	<b>2000/2005</b>	<b>2005/2010</b>
<i>Agriculture</i>	2.1%	1.7%	2.7%	2.4%
<i>Coal</i>	-0.2%	-0.5%	-0.2%	-0.5%
<i>Oil</i>	1.4%	1.0%	1.4%	1.0%
<i>Gas</i>	1.6%	1.1%	1.6%	1.1%
<i>Electricity</i>	1.4%	0.5%	1.4%	0.5%
<i>Ferrous and non ferrous metals</i>	2.3%	1.3%	3.0%	1.7%
<i>Chemical Products</i>	2.4%	1.5%	3.0%	2.0%
<i>Other energy intensive</i>	1.8%	1.1%	2.5%	1.3%
<i>Electric Goods</i>	2.0%	1.1%	2.2%	1.0%
<i>Transport equipment</i>	2.4%	1.4%	2.6%	1.4%
<i>Other Equipment Goods</i>	2.1%	1.3%	2.6%	1.4%
<i>Consumer Goods Industries</i>	2.3%	1.8%	3.3%	2.3%
<i>Construction</i>	1.6%	1.6%	3.2%	1.8%
<i>Telecommunication Services</i>	1.4%	1.1%	1.4%	0.2%
<i>Transport</i>	2.7%	2.0%	3.9%	2.6%
<i>Services of credit and insurance</i>	1.9%	1.7%	3.2%	2.0%
<i>Other Market Services</i>	1.9%	1.8%	3.4%	2.4%
<i>Non Market Services</i>	1.6%	1.6%	4.9%	4.5%

## 4. THE POLICY SCENARIOS

### 4.1. The minimum tax scenarios

#### 4.1.1. Assumptions

In this scenario, the minimum rates as given in Table 3 are binding in all EU countries in 2005. Two possibilities are considered for the recycling of the tax revenues:

1. The revenues are used to decrease the public deficit which alleviates the financial constraint of private economic agents and reduces the interest rate. This is modelled by imposing that the EU current account remains constant relative to GDP compared to the reference case, limiting the resource allocation induced by the policy to the EU.
2. The revenues are recycled through a decrease of the social security contributions such as to ensure budget neutrality; the reduction is uniform across all sectors. In this scenario the current account can freely adjust.

#### 4.1.2. Results for the EU

The macroeconomic and sectoral results for the EU for both scenarios are reproduced in Table 11 and Table 12. Results by country are given in the annex. The main conclusion is that the overall impact of the implementation of the minimum taxes remains very small in both scenarios, as the induced price increase is very limited (cf. Table 4). Recycling through the SS contributions is slightly positive in terms of GDP and in terms of welfare because it allows an increase in private income with a smaller loss on the export market by reducing the labour tax distortion. The recycling through a decrease of the SS contribution benefits directly to all sectors though the impact is greater on labour intensive sectors and it has a positive effect on employment. Welfare is not improved when the revenues are used to reduce the public deficit and hence the interest rate. Though the decrease of the interest rate affects positively domestic demand (private consumption and investment), the export demand suffers from the tax increase without any compensation in terms of labour cost and the positive effect on domestic demand cannot compensate the negative effect on the costs. Therefore the overall effect is finally more negative when no recycling occurs, though the shift of the burden to the RW through positive terms of trade effect is slightly higher.

At country level, the impact is clearly linked to the tax increase implemented. The positive effect of SS recycling is the greatest where the recycling possibilities are the highest, i.e. where the social security rate is the most reduced. In countries where there is no possibilities of recycling because the energy taxes are already high, the interest rate policy is more favourable, because they benefit from the push in favour of domestic demand through the decrease in interest rate and do not incur higher energy costs. This is the case for countries such as Germany, Denmark, Finland, Italy<sup>4</sup>, the Netherlands, Sweden and UK.

Energy consumption reduces with 0.2% compared to the reference and CO<sub>2</sub> emissions with 0.5%. The CO<sub>2</sub> reduction is slightly higher as the price of coal increases more than the price of other energy products. The changes in the relative cost of the production factors result in substitution away from energy and in favour of employment or capital.

It is important to note that all these effects remain rather small as the tax changes imposed are also small.

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<sup>4</sup> In Italy, only coal tax is increased but coal consumption in the sectors hit by the tax increase, is very small

**Table 11: Macroeconomic impact at EU level**  
(% difference compared to reference, except for \* where difference)

	EU minimum tax with SS recycling of tax revenue		EU minimum tax without direct recycling of tax revenue	
	2005	2010	2005	2010
<b>Macroeconomic Aggregates</b>				
<i>Gross Domestic Product</i>	0.01%	0.00%	-0.01%	-0.01%
<i>Employment</i>	0.02%	0.02%	-0.01%	-0.01%
<i>Private Consumption</i>	0.02%	0.01%	0.00%	0.00%
<i>Investment</i>	-0.01%	-0.01%	-0.01%	-0.01%
<i>Energy Consumption</i>	-0.28%	-0.30%	-0.29%	-0.31%
<i>Share Coal*</i>	-0.17%	-0.17%	-0.17%	-0.17%
<i>Share Oil*</i>	0.10%	0.10%	0.10%	0.10%
<i>Share Gas*</i>	0.05%	0.06%	0.05%	0.06%
<i>Share Electricity*</i>	0.01%	0.01%	0.01%	0.01%
<i>Exports to RW</i>	-0.02%	-0.02%	-0.06%	-0.05%
<i>Imports from RW</i>	-0.04%	-0.04%	-0.04%	-0.04%
<i>Real Wage Rate</i>	0.07%	0.05%	0.00%	-0.01%
<i>Relative Consumer Price</i>	-0.01%	-0.01%	0.00%	0.01%
<i>Real Interest Rate</i>	0.00%	0.00%	-0.03%	-0.03%
<i>Terms of Trade</i>	0.00%	0.01%	0.04%	0.04%
<i>Current Account (% of GDP)*</i>	0.00%	0.00%	0.00%	0.00%
<b>Total Atmospheric Emissions</b>				
<i>CO2 Emissions</i>	-0.51%	-0.53%	-0.52%	-0.54%
<i>NOX Emissions</i>	-0.44%	-0.47%	-0.45%	-0.48%
<i>SO2 Emissions</i>	-0.84%	-0.92%	-0.85%	-0.94%
<i>VOC Emissions</i>	-0.16%	-0.17%	-0.16%	-0.18%
<i>PM Emissions</i>	-0.71%	-0.79%	-0.72%	-0.80%
<b>Environmental Policy</b>				
<i>Energy Tax (% of GDP)</i>	0.04%	0.03%	0.04%	0.03%
<i>Reduction of Social Security Rate (in % points)</i>	0.12%	0.10%	0.00%	0.00%
<b>Welfare</b>				
<i>Economic Welfare</i>	0.01%	0.01%	0.00%	0.00%
<i>Total Welfare</i>	0.02%	0.02%	0.01%	0.01%

At sectoral level, the energy intensive sectors are the most affected by the policy. The increase in prices is the highest in these sectors, with a negative impact on export and domestic demand and hence on domestic production. The more labour intensive sectors, on the other hand, benefit from the reduction in labour cost while suffering less from energy taxes. The cost increase and its impact is more pronounced when no revenue recycling is imposed, as the induced price increase is higher both on the domestic market and on the export market.

**Table 12: Sectoral impact at EU level**  
(% difference compared to reference)

	EU minimum tax with SS recycling of tax revenue		EU minimum tax without direct recycling of tax revenue	
	2005	2010	2005	2010
<b>Sectoral Aggregates</b>				
<b>Domestic Production in Volume</b>				
<i>Agriculture</i>	0.00%	0.00%	-0.01%	-0.01%
<i>Energy Production</i>	-0.19%	-0.23%	-0.21%	-0.24%
<i>Ferrous and non ferrous metals</i>	-0.17%	-0.18%	-0.20%	-0.21%

<i>Chemical Products</i>	-0.02%	-0.02%	-0.04%	-0.04%
<i>Other energy intensive</i>	-0.03%	-0.03%	-0.05%	-0.05%
<i>Electric Goods</i>	0.00%	0.00%	-0.02%	-0.02%
<i>Transport equipment</i>	0.00%	0.00%	-0.02%	-0.02%
<i>Other Equipment Goods</i>	0.00%	0.00%	-0.03%	-0.03%
<i>Consumer Goods Industries</i>	0.00%	0.00%	-0.02%	-0.02%
<i>Construction</i>	-0.01%	-0.01%	-0.01%	-0.01%
<i>Telecommunication Services</i>	0.00%	0.00%	-0.02%	-0.01%
<i>Transport</i>	-0.01%	-0.01%	-0.03%	-0.03%
<i>Services of credit and insurance</i>	0.00%	0.00%	-0.01%	-0.01%
<i>Other Market Services</i>	0.01%	0.01%	-0.01%	-0.01%
<i>Non Market Services</i>	0.00%	0.00%	0.01%	0.00%
<b>Exports in Volume</b>				
<i>Agriculture</i>	-0.01%	-0.01%	-0.01%	-0.01%
<i>Energy Exports</i>	-0.07%	-0.13%	-0.09%	-0.14%
<i>Ferrous and non ferrous metals</i>	-0.26%	-0.27%	-0.30%	-0.30%
<i>Chemical Products</i>	-0.02%	-0.03%	-0.06%	-0.06%
<i>Other energy intensive</i>	-0.04%	-0.05%	-0.08%	-0.08%
<i>Electric Goods</i>	0.02%	0.01%	-0.03%	-0.03%
<i>Transport equipment</i>	0.01%	0.00%	-0.03%	-0.03%
<i>Other Equipment Goods</i>	0.00%	0.00%	-0.04%	-0.04%
<i>Consumer Goods Industries</i>	0.00%	0.00%	-0.03%	-0.02%
<i>Construction</i>	0.04%	0.03%	0.01%	0.01%
<i>Telecommunication Services</i>	0.00%	0.00%	-0.05%	-0.03%
<i>Transport</i>	-0.01%	-0.02%	-0.05%	-0.05%
<i>Services of credit and insurance</i>	0.02%	0.02%	-0.03%	-0.02%
<i>Other Market Services</i>	0.01%	0.01%	0.01%	0.01%
<i>Non Market Services</i>	0.05%	0.04%	0.03%	0.02%
<b>Price of Exports relative to World price</b>				
<i>Agriculture</i>	0.00%	0.00%	-0.01%	-0.01%
<i>Ferrous and non ferrous metals</i>	0.15%	0.16%	0.17%	0.18%
<i>Chemical Products</i>	0.02%	0.01%	0.03%	0.03%
<i>Other energy intensive</i>	0.02%	0.02%	0.04%	0.04%
<i>Electric Goods</i>	-0.01%	-0.01%	0.02%	0.01%
<i>Transport equipment</i>	-0.01%	-0.01%	0.02%	0.01%
<i>Other Equipment Goods</i>	-0.01%	0.00%	0.02%	0.01%
<i>Consumer Goods Industries</i>	0.00%	0.01%	0.01%	0.01%
<i>Construction</i>	-0.03%	-0.02%	-0.01%	-0.01%
<i>Telecommunication Services</i>	-0.01%	0.00%	0.03%	0.02%
<i>Transport</i>	0.00%	0.00%	0.02%	0.02%
<i>Services of credit and insurance</i>	-0.03%	-0.02%	0.01%	0.01%
<i>Other Market Services</i>	-0.01%	-0.01%	-0.02%	-0.02%
<i>Non Market Services</i>	-0.09%	-0.07%	-0.05%	-0.04%

## 4.2. Environmental tax harmonisation scenarios

### 4.2.1. Assumptions

In these scenarios, the structure of the EU minimum rates is changed in 2010 to reflect better the carbon content of each energy product and contribute thus more to the sustainable development

strategy objectives than the current proposal. Moreover the overall level of the taxes is increased. In 2005, the minimum taxes are applied as in the previous scenarios.

The tax rate simulated for each energy product in terms of energy units is computed in such a way that it corresponds to 15€ ton of CO<sub>2</sub>. For electricity, an average rate is computed on the basis of the EU average share of fuels used for electricity production. It is assumed that the taxes are output taxes, i.e. are levied only on final energy use such as the minimum tax rates. The table hereafter gives the changes in existing taxes this measure implies. When existing taxes are higher, they are not changed. No changes are imposed on fuels for transport purposes as the existing taxes are far above 15€/ton CO<sub>2</sub>.

**Table 13: Impact of 15Euro/ton CO<sub>2</sub> tax on existing energy taxes  
(% change)**

Industry	15Euro/ton CO <sub>2</sub> Tax (EURO/GJ)	A	B	D	DK	FIN	F	EL	IRL	I	NL	P	E	S	UK
Coal	<b>1.4</b>	EUtax	EUtax	Eutax	152%	-	EUtax	EUtax	EUtax	EUtax	218%	Eutax	EUtax	-	76%
Oil	<b>1.17</b>	13%	260%	10%	8%	-	-	-	40%	-	-	71%	-	-	-
Gas	<b>0.84</b>	-	180%	26%	67%	66%	155%	EUtax	EUtax	111%	-	EUtax	EUtax	-	25%
Electricity	<b>0.58</b>	-	EUtax	-	-	-	976%	EUtax	EUtax	-	-	EUtax	-	EUtax	-
<b>Household</b>															
Coal	<b>1.4</b>	EUtax	EUtax	EUtax	-	-	EUtax	EUtax	EUtax	EUtax	EUtax	EUtax	EUtax	-	EUtax
Oil	<b>1.11</b>	-	193%	-	-	-	-	-	-	-	-	63%	-	-	-
Gas	<b>0.84</b>	-	123%	-	-	66%	EUtax	EUtax	EUtax	-	-	EUtax	EUtax	-	EUtax
Electricity	<b>0.58</b>	-	50%	-	-	-	-	EUtax	EUtax	-	-	EUtax	-	-	EUtax

Though the tax rates are higher than the minimum taxes, they do not impose higher taxes in all countries. The Netherlands, Sweden and Finland only have to increase their tax on respectively coal, electricity and gas. Moreover the impact of the increase in the tax on coal will be limited for the household because, as said before, the coal consumption is small. For the countries with low energy taxes, the increase in the energy cost will however be higher than in the minimum tax scenario. This scenario therefore increases the differentiation in the burden between countries compared to the previous scenarios. Considering 2000 prices of energy inclusive existing energy taxes, the ex-ante price increase induced by this tax are given in the next table. This table must be compared with Table 5 which gives the shares of energy products in final energy consumption in 2000, to evaluate the direct impact of this price increase.

**Table 14: Price increase for 15Euro tax  
(for average prices in 2000 inclusive existing energy taxes)**

		A	B	D	DK	FIN	F	EL	IRL	I	NL	P	E	S	UK
Coal	Energy Intensive	61.4%	71.8%	59.3%	67.1%	0.0%	41.9%	55.4%	105.2%	134.3%	70.8%	81.8%	31.3%	0.0%	50.0%
	Other	61.4%	71.8%	59.3%	38.8%	0.0%	41.9%	55.4%	105.2%	134.3%	46.7%	81.8%	31.3%	0.0%	20.5%
Oil	Energy Intensive	2.7%	9.9%	11.3%	9.3%	0.0%	0.0%	0.0%	5.8%	0.0%	0.0%	8.2%	0.0%	0.0%	0.0%
	Other	3.9%	5.6%	1.5%	1.0%	0.0%	0.0%	0.0%	4.2%	0.0%	0.0%	8.2%	0.0%	0.0%	0.0%
Gas	Energy Intensive	0.0%	15.9%	3.2%	9.0%	19.6%	13.5%	11.0%	23.0%	20.8%	0.0%	10.6%	13.3%	0.0%	15.3%
	Other	0.0%	15.9%	3.2%	4.3%	8.9%	9.9%	11.0%	23.0%	20.8%	0.0%	10.6%	13.3%	0.0%	4.6%
Electricity	Energy Intensive	0.0%	3.0%	0.0%	0.0%	0.0%	3.5%	3.5%	3.0%	0.0%	0.0%	2.2%	0.0%	5.1%	0.0%
	Other	0.0%	3.0%	0.0%	0.0%	0.0%	3.5%	3.5%	3.0%	0.0%	0.0%	2.2%	0.0%	5.1%	0.0%
Coal	Household	11.7%	11.6%	9.9%	0.0%	0.0%	11.4%	21.0%	24.8%	77.7%	16.3%	44.3%	16.9%	0.0%	13.4%
Oil	Household	0.0%	2.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	5.1%	0.0%	0.0%	0.0%
Gas	Household	0.0%	4.8%	0.0%	0.0%	8.9%	6.1%	6.9%	5.9%	0.0%	0.0%	5.7%	4.3%	0.0%	6.6%

Electricity	Household	0.0%	0.6%	0.0%	0.0%	0.0%	0.0%	1.5%	1.1%	0.0%	0.0%	0.9%	0.0%	0.0%	1.0%
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Two scenarios are considered:

- the environmental tax harmonisation scenario, in which all countries participate in this scheme
- the enhanced co-operation scenario, in which the policy is implemented only by a predefined group of countries who agree on the policy. The country grouping is the following: the three Nordic countries, Benelux, Germany, Austria, France and Italy. The other countries are only implementing the minimum tax.

Results are also given for two scenarios where only one country applies the increased rate, either Germany or France, the other countries applying the minimum rates.

In all scenarios the tax revenue are recycled through a reduction of SS contributions, this option being more favourable given the high tax on labour in the EU countries. However, some scenarios were run with no revenue recycling but with a constraint on the EU current account and the results are given in the annex.

#### 4.2.2. *The results at EU level*

The results at EU level for the scenarios with all EU countries and with only a group/single of countries are given in Table 16 and Table 17, detailed results by country are given in the annex. When all countries participate in the tax reform, the overall impact of higher energy taxes remains rather small in 2010 and is positive in terms of welfare for most countries (except Greece and the Netherlands). Though the tax reduces slightly the EU exports, the recycling of the tax revenue through SS contribution has a positive effect on employment and private consumption. With this level of the tax, the CO2 emissions are reduced by 2.6% compared to the reference when all countries participate, while the Kyoto target imposes a reduction of 12.7% given the reference used in this exercise. The mechanism at play are the same as in the minimum tax scenario: the cost increase through the energy tax is partly compensated by the reduction in the social security rate and this limits the impact of this measure on domestic and foreign demand. It is important to remember that in most countries and sectors, the intra-EU exports represent more than 50% of total exports as can be seen from the table below and this limits the negative effect of the export price increase when a harmonised policy is implemented in the EU.

**Table 15: Share of exports to EU in total exports in 1995 for the goods sectors**

	A	B	D	DK	F	FIN	EL	IRL	I	NL	P	S	E	UK
<i>Agriculture</i>	76.8%	90.1%	76.5%	70.5%	80.2%	46.0%	76.9%	77.7%	80.9%	81.0%	78.6%	71.8%	84.3%	80.0%
<i>Ferrous and non ferrous metals</i>	73.7%	84.2%	64.7%	80.7%	73.4%	66.6%	61.7%	88.3%	65.8%	79.7%	75.6%	66.7%	66.6%	63.9%
<i>Chemical Products</i>	49.4%	68.9%	51.9%	45.1%	59.6%	40.2%	49.4%	67.9%	50.2%	71.3%	78.9%	53.2%	57.4%	56.8%
<i>Other energy intensive</i>	63.5%	87.9%	64.6%	73.1%	68.8%	67.1%	30.1%	67.5%	62.6%	84.3%	81.4%	73.7%	59.2%	57.7%
<i>Electric Goods</i>	71.2%	78.0%	56.2%	66.9%	58.1%	48.7%	63.7%	72.4%	58.0%	66.6%	88.2%	42.7%	65.6%	58.7%
<i>Transport equipment</i>	66.6%	84.1%	60.4%	48.0%	57.3%	41.5%	29.1%	65.3%	62.9%	76.3%	86.3%	47.4%	80.2%	52.3%
<i>Other Equipment Goods</i>	61.4%	69.9%	47.2%	57.7%	58.2%	41.7%	40.3%	74.8%	49.8%	75.5%	71.4%	49.6%	60.3%	53.5%
<i>Consumer Goods Industries</i>	64.7%	66.4%	61.3%	65.1%	64.4%	56.7%	70.1%	76.1%	57.2%	76.7%	80.3%	58.5%	61.2%	54.5%

The recycling strategy imposed in this scenario is important for the results as it allows to limit the price increase due to the energy tax by reducing the labour cost through the reduction of the SS contributions. It has also a positive effect on the real wage and hence on labour income and private consumption. When instead of recycling the revenue through a SS reduction, they are used to reduce the public deficit, the overall level of activity is reduced and welfare is decreasing in the countries where the tax increase and therefore the recycling possibilities were the highest. Their energy cost

disadvantage cannot be compensated by a decrease in their labour cost. The detailed results for this scenario are also given in the annex.

**Table 16: Macroeconomic impact at EU level in 2010**  
(% difference compared to reference, except for \* where difference)

	EU min tax in 2005 and 15Euro carbon tax in 2010 for final energy	EU min tax in 2005 and 15Euro carbon tax in 2010 for final energy in Core group	EU min tax in 2005 and 15Euro carbon tax in 2010 for final energy in Germany	EU min tax in 2005 and 15Euro carbon tax in 2010 for final energy in France
<b>Macroeconomic Aggregates</b>				
<i>Gross Domestic Product</i>	0.02%	0.02%	0.01%	0.02%
<i>Employment</i>	0.10%	0.08%	0.03%	0.05%
<i>Private Consumption</i>	0.07%	0.05%	0.02%	0.03%
<i>Investment</i>	-0.09%	-0.08%	-0.02%	-0.05%
<i>Energy Consumption</i>	-1.38%	-1.09%	-0.50%	-0.49%
<i>Share Coal*</i>	-0.63%	-0.47%	-0.24%	-0.25%
<i>Share Oil*</i>	0.47%	0.32%	0.16%	0.21%
<i>Share Gas*</i>	0.01%	0.05%	0.03%	0.03%
<i>Share Electricity*</i>	0.15%	0.10%	0.05%	0.00%
<i>Exports to RW</i>	-0.08%	-0.04%	-0.04%	0.04%
<i>Imports from RW</i>	-0.19%	-0.18%	-0.06%	-0.10%
<i>Real Wage Rate</i>	0.28%	0.25%	0.09%	0.13%
<i>Relative Consumer Price</i>	-0.11%	-0.10%	-0.02%	-0.09%
<i>Terms of Trade</i>	0.00%	-0.04%	0.03%	-0.10%
<i>Current Account (% of GDP)*</i>	0.03%	0.03%	0.00%	0.02%
<b>Total Atmospheric Emissions</b>				
<i>CO2 Emissions</i>	-2.65%	-1.98%	-0.95%	-0.82%
<i>NOX Emissions</i>	-2.14%	-1.64%	-0.77%	-0.66%
<i>SO2 Emissions</i>	-3.58%	-2.59%	-1.35%	-1.30%
<i>VOC Emissions</i>	-1.21%	-0.93%	-0.48%	-0.24%
<i>PM Emissions</i>	-3.38%	-2.36%	-1.12%	-1.11%
<b>Environmental Policy</b>				
<i>Energy Tax (% of GDP)</i>	0.16%	0.14%	0.05%	0.07%
<i>Reduction of Social Security Rate (in %points)</i>	0.43%	0.33%	0.14%	0.20%
<b>Welfare</b>				
<i>Economic Welfare</i>	0.02%	0.01%	0.01%	0.01%
<i>Total Welfare</i>	0.06%	0.05%	0.02%	0.02%

A reduced participation decreases the overall EU impact only slightly and for the countries participating in the scheme the differences are insignificant, the loss in exports being compensated by the non decrease of demand from the other countries. Another element is the fact that most countries remaining in the scheme are those for which the tax increase is also the smallest. For the countries outside the scheme, the reduction in export is smaller, but this is partly offset by the smaller positive effect on employment and private consumption.

In terms of welfare, the gain is positive, though very limited, through the reduction in the labour tax distortion. However the welfare effect is higher than in the minimum tax scenario only when all countries are participating in the scheme.

At sectoral level, the energy intensive sectors and especially those using coal, are the most affected by the policy both in terms of production and exports, though the impact remains small. In some sectors and countries, the prices can even decrease through the interactions of demand and supply and their impact on production factors cost, especially capital cost.

**Table 17: Sectoral impact at EU level**  
(% difference compared to reference)

	EU min tax in 2005 and 15Euro carbon tax in 2010 for final energy	EU min tax in 2005 and 15Euro carbon tax in 2010 for final energy in Core group	EU min tax in 2005 and 15Euro carbon tax in 2010 for final energy in Germany	EU min tax in 2005 and 15Euro carbon tax in 2010 for final energy in France
<b>Sectoral Aggregates</b>				
<b>Domestic Production in Volume</b>				
<i>Agriculture</i>	-0.02%	-0.01%	-0.01%	0.03%
<i>Energy Production</i>	-0.87%	-0.77%	-0.33%	-0.41%
<i>Ferrous and non ferrous metals</i>	-0.60%	-0.49%	-0.25%	-0.26%
<i>Chemical Products</i>	0.02%	0.04%	-0.02%	0.04%
<i>Other energy intensive</i>	-0.07%	-0.05%	-0.04%	-0.02%
<i>Electric Goods</i>	0.01%	0.01%	0.00%	0.00%
<i>Transport equipment</i>	-0.02%	0.00%	-0.01%	0.02%
<i>Other Equipment Goods</i>	-0.04%	-0.03%	-0.02%	0.00%
<i>Consumer Goods Industries</i>	-0.03%	-0.02%	-0.01%	0.03%
<i>Construction</i>	-0.10%	-0.10%	-0.02%	-0.07%
<i>Telecommunication Services</i>	-0.05%	-0.04%	-0.01%	-0.02%
<i>Transport</i>	-0.11%	-0.10%	-0.03%	-0.02%
<i>Services of credit and insurance</i>	-0.02%	-0.02%	-0.01%	-0.01%
<i>Other Market Services</i>	0.01%	0.01%	0.00%	0.01%
<i>Non Market Services</i>	0.01%	0.01%	0.00%	0.01%
<b>Exports in Volume</b>				
<i>Agriculture</i>	-0.05%	-0.04%	-0.02%	0.04%
<i>Energy Exports</i>	-0.64%	-0.59%	-0.22%	-0.04%
<i>Ferrous and non ferrous metals</i>	-0.85%	-0.71%	-0.36%	-0.38%
<i>Chemical Products</i>	0.06%	0.08%	-0.02%	0.07%
<i>Other energy intensive</i>	-0.05%	-0.01%	-0.06%	0.03%
<i>Electric Goods</i>	0.06%	0.07%	0.02%	0.04%
<i>Transport equipment</i>	-0.01%	0.02%	-0.02%	0.04%
<i>Other Equipment Goods</i>	0.01%	0.02%	-0.01%	0.04%
<i>Consumer Goods Industries</i>	-0.07%	-0.04%	-0.02%	0.05%
<i>Construction</i>	-0.01%	0.00%	0.04%	0.04%
<i>Telecommunication Services</i>	-0.08%	-0.06%	-0.02%	0.01%
<i>Transport</i>	-0.18%	-0.17%	-0.04%	0.00%
<i>Services of credit and insurance</i>	0.09%	0.10%	0.02%	0.06%
<i>Other Market Services</i>	0.05%	0.06%	0.01%	0.08%
<i>Non Market Services</i>	0.27%	0.27%	0.05%	0.26%
<b>Price of Exports relative to World price</b>				
<i>Agriculture</i>	0.04%	0.01%	0.02%	-0.04%
<i>Ferrous and non ferrous metals</i>	0.50%	0.42%	0.22%	0.23%
<i>Chemical Products</i>	-0.05%	-0.06%	0.01%	-0.05%
<i>Other energy intensive</i>	-0.01%	-0.03%	0.02%	-0.04%
<i>Electric Goods</i>	-0.04%	-0.04%	-0.02%	-0.03%
<i>Transport equipment</i>	0.01%	-0.02%	0.00%	-0.03%
<i>Other Equipment Goods</i>	-0.03%	-0.03%	0.00%	-0.03%

<i>Consumer Goods Industries</i>	0.04%	0.02%	0.02%	-0.02%
<i>Construction</i>	0.00%	-0.01%	-0.03%	-0.03%
<i>Telecommunication Services</i>	0.05%	0.03%	0.01%	-0.02%
<i>Transport</i>	0.08%	0.07%	0.01%	-0.02%
<i>Services of credit and insurance</i>	-0.10%	-0.10%	-0.02%	-0.06%
<i>Other Market Services</i>	-0.07%	-0.07%	-0.02%	-0.08%
<i>Non Market Services</i>	-0.43%	-0.44%	-0.08%	-0.41%

### 4.3. The EU allowance system scenarios

These scenarios go one step further in the implementation of an energy tax reform by looking at the Kyoto target for 2010. The European Commission has proposed an EU allowance scheme for electricity and heat generators and energy intensive sectors as a contribution to the Kyoto target. Complementary to this measure, other instruments should also be implemented to reach the Kyoto target and we examine one of these, represented by a domestic carbon tax on energy. The specific assumptions are described hereafter.

#### 4.3.1. The Kyoto target

As GEM-E3 considers, at this stage, only CO<sub>2</sub> emissions, EU and national CO<sub>2</sub> targets for 2010 have been taken from the ECOFYS study<sup>5</sup> with minor adaptations. This implicitly assumes that the relative CO<sub>2</sub> versus other GHG reduction cost does not change with the baseline. The reduction target are given in the next table both in terms of 1990 and in terms of GEM-E3 baseline CO<sub>2</sub> emissions in 2010.

**Table 18: Kyoto reduction target for 2010**

	All GHG (burden sharing agreement) wrt 1990	CO <sub>2</sub> (ECOFYS study with small adaptation) wrt 1990	CO <sub>2</sub> (ECOFYS study with small adaptation) wrt to 2010 in GEM-E3 baseline
A	-13.0%	-18.2%	-31.3%
B	-7.5%	-6.9%	-19.0%
D	-21.0%	-19.4%	-5.4%
DK	-21.0%	-23.2%	-28.4%
FIN	0.0%	4.8%	-4.4%
F	0.0%	6.8%	-9.8%
EL	25.0%	37.2%	-5.5%
IRL	13.0%	20.7%	-25.4%
I	-6.5%	-6.1%	-27.4%
NL	-6.0%	4.3%	-15.1%
P	27.0%	49.6%	-11.2%
E	15.0%	26.7%	-23.2%
S	4.0%	4.5%	-7.0%
UK	-12.5%	-9.7%	-0.9%
EU	-8.0%	-4.9%	-12.7%

As the Kyoto target is defined in terms of the 1990 emissions, the reference emissions in 2010 determines the reduction needed in 2010, this is 12.7%. For 2005, the reduction target imposed corresponds to 50 % of the 2010 reduction target. Because of their participation in the allowance

<sup>5</sup> "Economic Evaluation of sectoral emission reduction objectives for climate change", ECOFYS Energy and Environment the Netherlands, AEA Technology Environment UK, National Technical University Athens Greece.

scheme, the CO<sub>2</sub> emissions of the countries in 2010 in this scenario can be different from their emission target in Table 18.

#### 4.3.2. *The emission allowance scheme*

The emission allowance scheme is implemented in GEM-E3 from 2005 onwards in accordance with the Commission proposal (COM (2001) 581). It covers the following energy intensive sectors: electricity (NACE-CLIO 097) and heat generators, ferrous and non ferrous ore and metals (NACE-CLIO 13) and other energy intensive sectors, covering non metallic mineral products (NACE-CLIO 15), metal products except machinery and transport equipment (NACE-CLIO 19) and paper and printing products (NACE-CLIO 47).

The initial allocation of allowances to the trading sectors is done in a cost-efficient way, i.e. the cost efficient allocation if the member countries would apply a domestic allowance scheme to reach their national Kyoto target. The initial allowances are allocated to the sectors free of charge (grandfathering) and it is assumed that the rent obtained by the firms from grandfathering are distributed as capital income. Another option could be to assume that the whole or part of the rent would be transferred to domestic and foreign consumers through a reduction of the price.

#### 4.3.3. *Complementary measure*

As complementary measure, a domestic carbon tax is implemented in all the sectors not covered by the emission allowance scheme in 2010, the level of the tax being determined such as to reach the Kyoto target. The tax revenue are recycled through a decrease of the social security contribution. This tax must be interpreted as representing different measures a country can take as long as these measures generate revenues. Measures not generating revenues will have different impact, as the impact of the recycling of the revenues is important for the final impact of a measure.

Depending on the scenario, the minimum tax rates are applied on all sectors or only on those not participating in the emission allowance scheme, both in 2005 and 2010.

#### 4.3.4. *The results at EU level*

The impact in 2010 is higher than in the previous scenarios as the carbon constraint is stronger: the GDP and welfare impact become negative. The efficient allocation of the CO<sub>2</sub> reduction and the revenue recycling strategy allow to limit this negative impact even for countries where the reduction compared to the reference emissions is high. Giving exemption to the sectors participating in the allowance scheme has no impact at macroeconomic level, the minimum taxes being very small and the reduction target for those sectors remaining the same.

The gain in employment induced by the policy in 2010 are the highest in the countries with a high decrease in the SS rate and it has then a positive effect on private consumption. Those countries are mostly buyers of allowances. A high reduction target and/or a relatively low share of coal in energy consumption are the main factors explaining that a country is a buyer on the allowance market. Countries selling allowances, i.e. Germany, Denmark, Finland, Greece, Portugal, Sweden and the UK, are those having rather low reduction target compared to the reference. In those countries also, as the low reduction target applies also to the sectors not participating in the EU scheme, the domestic carbon tax is also smaller, generating less revenue for recycling.

Investment demand is decreasing because of the substitution effect towards labour and because of the reduction in demand which both have a negative impact on the rate of return of capital.

**Table 19: Macroeconomic impact at EU level**  
(% difference compared to reference, except for \* where difference)

	EU CO2 allowance scheme plus EU min tax in 2005 and 2010 and domestic CO2 tax with SS recycling in 2010 for Kyoto target		EU CO2 allowance scheme plus EU min tax in 2005 and 2010 and domestic CO2 tax with SS recycling in 2010, with exemption for sectors in EU scheme, for Kyoto target	
	2005	2010	2005	2010
<b>Macroeconomic Aggregates</b>				
<i>Gross Domestic Product</i>	-0.01%	-0.09%	-0.01%	-0.10%
<i>Employment</i>	0.00%	0.40%	-0.01%	0.40%
<i>Private Consumption</i>	-0.02%	-0.31%	-0.02%	-0.32%
<i>Investment</i>	-0.04%	-0.25%	-0.04%	-0.25%
<i>Energy Consumption</i>	-1.60%	-8.49%	-1.60%	-8.49%
<i>Share Coal*</i>	-1.09%	-1.69%	-1.08%	-1.68%
<i>Share Oil*</i>	0.72%	-0.54%	0.71%	-0.55%
<i>Share Gas*</i>	0.23%	1.01%	0.23%	1.00%
<i>Share Electricity*</i>	0.14%	1.22%	0.14%	1.22%
<i>Exports to RW</i>	-0.07%	-0.27%	-0.06%	-0.27%
<i>Imports from RW</i>	-0.21%	-1.50%	-0.21%	-1.50%
<i>Real Wage Rate</i>	-0.01%	0.49%	-0.03%	0.47%
<i>Relative Consumer Price</i>	0.00%	0.65%	0.00%	0.66%
<i>Terms of Trade</i>	0.02%	-0.02%	0.01%	-0.03%
<i>Current Account (% of GDP)*</i>	0.01%	0.24%	0.01%	0.24%
<b>Total Atmospheric Emissions</b>				
<i>CO2 Emissions</i>	-3.25%	-12.65%	-3.25%	-12.65%
<i>NOX Emissions</i>	-3.37%	-14.60%	-3.41%	-14.63%
<i>SO2 Emissions</i>	-8.68%	-20.05%	-8.85%	-20.15%
<i>VOC Emissions</i>	-0.34%	-9.68%	-0.33%	-9.68%
<i>PM Emissions</i>	-8.42%	-20.70%	-8.68%	-20.85%
<b>Environmental Policy</b>				
<i>Energy Tax (% of GDP)</i>	0.04%	-0.11%	0.03%	-0.12%
<i>Environmental Tax (% of GDP)</i>	0.00%	1.08%	0.00%	1.08%
<i>Reduction of Social Security Rate (in % points)</i>	0.10%	2.34%	0.08%	2.32%
<i>CO2 average marginal cost (EURO2000/tn CO2)</i>	5.7	34.4	6.1	34.6
<b>Welfare</b>				
<i>Economic Welfare</i>	-0.01%	-0.50%	-0.02%	-0.50%
<i>Total Welfare</i>	0.07%	-0.31%	0.06%	-0.31%

At sectoral level the impact is also small, even for the energy intensive sectors included in the allowance scheme, which receive relatively higher reduction target given our efficient allocation assumption, because they benefit both from grandfathering and from the decrease in SS contributions. The exemption for the sectors participating in the allowance scheme has only a very small impact on those sectors because the lower energy taxes (for those countries where the minimum tax is higher than existing taxes) are compensated by a small increase in the allowance price as the CO2 constraint for these sectors remains the same. Moreover, there is a smaller reduction in SS rate.

The decrease in labour cost through the revenue recycling compensates the increase of the energy cost in the equipment goods sectors and in the service sectors and allows a decrease in prices especially in those countries where the decrease in the SS rate is high. Except for some service sectors in some countries, the loss on the export market is however more important than on the domestic market.

**Table 20: Sectoral impact at EU level**  
(% difference compared to reference)

	EU CO2 allowance scheme plus EU min tax in 2005 and 2010 and domestic CO2 tax with SS recycling in 2010 for Kyoto target		EU CO2 allowance scheme plus EU min tax in 2005 and 2010 and domestic CO2 tax with SS recycling in 2010, with exemption for sectors in EU scheme, for Kyoto target	
<b>Sectoral Aggregates</b>				
<b>Domestic Production in Volume</b>				
<i>Agriculture</i>	-0.01%	-0.31%	-0.02%	-0.31%
<i>Energy Production</i>	-0.88%	-6.03%	-0.87%	-6.02%
<i>Ferrous and non ferrous metals</i>	-0.55%	-0.72%	-0.47%	-0.64%
<i>Chemical Products</i>	-0.06%	-0.53%	-0.07%	-0.54%
<i>Other energy intensive</i>	-0.15%	-0.21%	-0.14%	-0.20%
<i>Electric Goods</i>	-0.03%	0.09%	-0.03%	0.09%
<i>Transport equipment</i>	-0.03%	-0.30%	-0.03%	-0.30%
<i>Other Equipment Goods</i>	-0.04%	0.05%	-0.04%	0.05%
<i>Consumer Goods Industries</i>	-0.01%	-0.29%	-0.02%	-0.29%
<i>Construction</i>	-0.05%	-0.28%	-0.05%	-0.28%
<i>Telecommunication Services</i>	-0.02%	-0.01%	-0.03%	-0.01%
<i>Transport</i>	-0.03%	-1.63%	-0.04%	-1.64%
<i>Services of credit and insurance</i>	-0.02%	-0.05%	-0.02%	-0.05%
<i>Other Market Services</i>	-0.01%	-0.16%	-0.02%	-0.16%
<i>Non Market Services</i>	-0.01%	-0.01%	-0.01%	-0.01%
<b>Exports in Volume</b>				
<i>Agriculture</i>	-0.01%	-0.49%	-0.01%	-0.50%
<i>Energy Exports</i>	-0.26%	-2.72%	-0.29%	-2.74%
<i>Ferrous and non ferrous metals</i>	-0.78%	-0.91%	-0.65%	-0.79%
<i>Chemical Products</i>	-0.07%	-0.58%	-0.08%	-0.59%
<i>Other energy intensive</i>	-0.27%	0.03%	-0.24%	0.06%
<i>Electric Goods</i>	0.01%	0.43%	0.00%	0.42%
<i>Transport equipment</i>	-0.03%	0.09%	-0.03%	0.08%
<i>Other Equipment Goods</i>	-0.01%	0.38%	-0.02%	0.38%
<i>Consumer Goods Industries</i>	0.00%	-0.40%	-0.01%	-0.41%
<i>Construction</i>	-0.01%	0.06%	-0.01%	0.06%
<i>Telecommunication Services</i>	0.03%	0.55%	0.02%	0.55%
<i>Transport</i>	-0.01%	-2.70%	-0.01%	-2.70%
<i>Services of credit and insurance</i>	0.10%	1.28%	0.09%	1.27%
<i>Other Market Services</i>	0.03%	0.14%	0.03%	0.13%
<i>Non Market Services</i>	0.08%	0.54%	0.06%	0.52%
<b>Price of Exports relative to World price</b>				
<i>Agriculture</i>	-0.01%	0.46%	-0.01%	0.46%
<i>Ferrous and non ferrous metals</i>	0.47%	0.47%	0.38%	0.39%
<i>Chemical Products</i>	0.03%	0.26%	0.04%	0.27%
<i>Other energy intensive</i>	0.15%	-0.17%	0.13%	-0.19%
<i>Electric Goods</i>	-0.02%	-0.37%	-0.02%	-0.37%
<i>Transport equipment</i>	0.01%	-0.33%	0.01%	-0.33%
<i>Other Equipment Goods</i>	-0.01%	-0.31%	-0.01%	-0.31%
<i>Consumer Goods Industries</i>	-0.01%	0.19%	0.00%	0.19%

<i>Construction</i>	0.00%	-0.07%	0.01%	-0.06%
<i>Telecommunication Services</i>	-0.04%	-0.50%	-0.03%	-0.50%
<i>Transport</i>	-0.03%	1.57%	-0.02%	1.58%
<i>Services of credit and insurance</i>	-0.09%	-1.07%	-0.09%	-1.07%
<i>Other Market Services</i>	-0.06%	-0.29%	-0.06%	-0.28%
<i>Non Market Services</i>	-0.14%	-0.89%	-0.11%	-0.86%

## 5. CONCLUSION

The energy tax reform imposing minimum taxes following the Spanish proposal has very small effects at macroeconomic level and negligible positive environmental effects, as the rates proposed are not very high and below the existing rates in nearly half of the EU countries. Recycling the revenue through a reduction of the social security contributions is more beneficial than using the revenues to alleviate the financial constraint within the EU and induce a reduction in the interest rate. The negative demand effect is reduced as both the domestic and export market benefit from the decrease in the labour cost. The measure has a positive impact on employment and on the real wage rate and hence on private consumption. On the contrary, when no recycling of the revenues but an equilibrium on the EU trade balance is imposed, the positive effect of a decrease in the interest rate on private consumption and investment is more than offset by the price effect on the domestic and export market, making this policy more costly.

When imposing a higher and more climate friendly energy tax on final energy demand, equivalent to an EU tax of 15EURO per ton CO<sub>2</sub>, the overall impact remains rather small as the tax increase is still limited and even zero in some countries. Though the tax reduces slightly EU exports, the recycling of the tax revenue through a decrease of the SS rate compensates partly this effect and has a positive impact on private consumption through the increase in employment. This level of taxation reduces the CO<sub>2</sub> emissions only with 2.6% while the Kyoto target imposes a 12.7% reduction given our reference scenario and is thus not at all sufficient for the Kyoto target.

Implementing the EU allowance scheme for CO<sub>2</sub> reduction combined with a domestic carbon tax such as to satisfy the Kyoto target imposes a higher cost on the EU economy, but this cost can remain limited by imposing an efficient policy for the allowance allocation and for the revenue recycling strategy. Exempting the sectors participating in the allowance scheme from the minimum tax has only a very small positive effect for these sectors as the decrease in the energy tax is nearly entirely compensated by an increase in the allowance price and a smaller reduction in the social security contributions.

## **6. ANNEX: DETAILED RESULTS FOR ALL COUNTRIES**



## EU MINIMUM TAX WITH SS RECYCLING OF TAX REVENUE

2005 (% difference compared to reference except \* where difference)

EU Min energy tax with SS recycling compared to Reference Scenario

	Austria	Belgium	Germany	Denmark	Finland	France	Greece	Ireland	Italy	The Netherlands	Portugal	Spain	Sweden	UK	EU
<b>Macroeconomic Aggregates</b>															
<i>Gross Domestic Product</i>	0.01%	0.04%	0.00%	0.00%	0.00%	0.02%	0.03%	0.01%	0.00%	0.00%	0.04%	0.00%	0.01%	0.00%	0.01%
<i>Employment</i>	0.04%	0.16%	0.01%	0.00%	0.00%	0.05%	0.16%	0.01%	0.00%	0.00%	0.12%	0.01%	0.02%	0.00%	0.02%
<i>Private Consumption</i>	0.04%	0.17%	0.01%	0.00%	0.00%	0.05%	-0.01%	0.03%	0.00%	0.00%	0.01%	0.01%	0.03%	0.00%	0.02%
<i>Investment</i>	-0.01%	-0.02%	0.00%	0.00%	0.00%	-0.01%	-0.01%	-0.02%	0.00%	0.00%	0.01%	-0.03%	-0.01%	0.00%	-0.01%
<i>Energy Consumption</i>	-0.82%	-2.13%	-0.13%	0.00%	0.00%	-0.46%	-0.53%	-0.37%	-0.06%	-0.37%	-0.26%	-0.21%	-0.05%	-0.03%	-0.28%
<i>Share Coal*</i>	-0.64%	-0.77%	-0.15%	0.00%	0.00%	-0.27%	-0.29%	-0.06%	-0.06%	-0.28%	-0.11%	-0.11%	-0.01%	0.00%	-0.17%
<i>Share Oil*</i>	0.43%	0.06%	0.08%	0.00%	0.00%	0.24%	0.23%	0.16%	0.04%	0.08%	0.09%	0.14%	0.04%	0.01%	0.10%
<i>Share Gas*</i>	0.13%	0.38%	0.04%	0.00%	0.00%	0.07%	0.00%	-0.12%	0.01%	0.16%	-0.07%	0.00%	-0.01%	-0.01%	0.05%
<i>Share Electricity*</i>	0.08%	0.33%	0.03%	0.00%	0.00%	-0.05%	0.06%	0.01%	0.01%	0.03%	0.03%	0.03%	-0.03%	0.00%	0.01%
<i>Exports</i>	-0.04%	-0.18%	-0.01%	0.00%	0.00%	-0.01%	0.08%	0.00%	0.00%	-0.03%	0.06%	-0.02%	-0.01%	0.00%	
<i>Exports within EU</i>	-0.04%	-0.15%	-0.02%	0.03%	0.01%	-0.01%	0.09%	-0.01%	0.00%	-0.04%	0.06%	-0.01%	0.00%	0.00%	-
<i>Exports to RW</i>	-0.04%	-0.22%	-0.01%	-0.02%	-0.01%	-0.01%	0.08%	0.00%	-0.01%	-0.02%	0.05%	-0.02%	-0.01%	0.00%	-0.02%
<i>Imports</i>	-0.04%	-0.16%	-0.01%	0.00%	0.00%	-0.04%	-0.06%	-0.01%	-0.01%	-0.04%	-0.02%	-0.04%	0.00%	0.00%	-0.04%
<i>Real Wage Rate</i>	0.11%	0.52%	0.02%	0.01%	0.00%	0.18%	0.48%	0.05%	0.01%	0.01%	0.27%	0.03%	0.06%	0.00%	0.07%
<i>Relative Consumer Price</i>	-0.03%	0.00%	-0.01%	0.01%	0.00%	-0.07%	0.16%	0.00%	0.00%	-0.01%	0.27%	-0.01%	-0.02%	0.01%	-0.02%
<i>Terms of Trade</i>	0.01%	0.07%	0.00%	0.00%	0.00%	0.00%	-0.04%	0.00%	-0.01%	0.00%	-0.03%	0.00%	0.00%	0.00%	0.00%
<i>Public Surplus (% of GDP)*</i>	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	-
<i>Current Account (% of GDP)*</i>	0.00%	0.06%	-0.01%	0.00%	0.00%	0.01%	0.05%	0.01%	0.00%	0.00%	0.03%	0.01%	0.00%	0.00%	0.00%
<b>Total Atmospheric Emissions</b>															
<i>CO2 Emissions</i>	-1.66%	-4.19%	-0.34%	0.00%	0.01%	-0.66%	-0.89%	-0.53%	-0.18%	-0.82%	-0.48%	-0.34%	-0.03%	-0.01%	-0.51%
<i>NOX Emissions</i>	-1.03%	-4.33%	-0.27%	0.00%	0.01%	-0.55%	-1.00%	-0.54%	-0.12%	-0.60%	-0.39%	-0.20%	-0.04%	-0.01%	-0.44%
<i>SO2 Emissions</i>	-3.69%	-5.57%	-0.43%	0.00%	0.01%	-2.07%	-1.29%	-0.69%	-0.81%	-2.18%	-0.44%	-0.36%	-0.10%	-0.04%	-0.84%
<i>VOC Emissions</i>	-0.07%	-2.62%	-0.13%	0.00%	0.00%	-0.07%	-0.55%	-0.28%	-0.01%	-0.07%	-0.38%	-0.05%	0.00%	0.00%	-0.16%
<i>PM Emissions</i>	-6.24%	-4.24%	-0.27%	0.00%	0.01%	-1.56%	-2.04%	-0.91%	-0.11%	-0.86%	-0.74%	-0.15%	-0.12%	-0.04%	-0.71%
<b>Environmental Policy</b>															
<i>Energy Tax (% of GDP)*</i>	0.05%	0.27%	0.01%	-0.01%	0.00%	0.08%	0.20%	0.03%	0.00%	0.01%	0.24%	0.03%	0.02%	0.00%	0.04%
<i>Reduction of Social Security Rate*</i>	0.16%	0.76%	0.03%	0.00%	0.00%	0.22%	0.83%	0.12%	0.01%	0.03%	0.67%	0.07%	0.07%	0.02%	0.12%
<b>Welfare</b>															
<i>Economic Welfare</i>	0.02%	0.09%	0.00%	0.00%	0.00%	0.03%	-0.05%	0.01%	0.00%	0.00%	-0.04%	0.00%	0.02%	0.00%	0.01%
<i>Environmental Welfare</i>	2.60%	15.28%	2.36%	1.45%	0.77%	4.02%	17.02%	16.45%	1.05%	5.83%	4.86%	61.98%	1.12%	1.06%	
<i>Total Welfare</i>	0.03%	0.13%	0.02%	0.01%	0.00%	0.03%	-0.04%	0.02%	0.00%	0.03%	-0.03%	0.01%	0.02%	0.00%	0.02%

<b>Sectoral Aggregates</b>	Austria	Belgium	Germany	Denmark	Finland	France	Greece	Ireland	Italy	The Netherlands	Portugal	Spain	Sweden	UK	EU
<b>Domestic Production in Volume</b>															
<i>Agriculture</i>	0.01%	-0.19%	0.01%	0.00%	0.00%	0.02%	0.01%	0.00%	0.00%	0.00%	0.03%	0.01%	0.00%	0.00%	0.00%
<i>Energy Production</i>	-0.37%	-0.98%	-0.12%	0.00%	0.00%	-0.44%	-0.23%	-0.21%	-0.02%	-0.21%	-0.10%	-0.04%	-0.06%	-0.03%	-0.19%
<i>Ferrous and non ferrous metals</i>	-0.38%	-0.45%	-0.10%	0.02%	0.01%	-0.59%	-0.10%	-0.10%	-0.05%	-0.21%	-0.09%	-0.14%	-0.01%	0.01%	-0.17%
<i>Chemical Products</i>	-0.24%	-0.12%	-0.01%	-0.01%	0.00%	-0.01%	-0.01%	-0.01%	0.00%	0.00%	0.05%	-0.04%	-0.01%	0.01%	-0.02%
<i>Other energy intensive</i>	-0.12%	-0.14%	-0.01%	0.00%	0.00%	-0.04%	-0.12%	-0.03%	-0.01%	0.00%	0.01%	-0.06%	-0.04%	0.00%	-0.03%
<i>Electric Goods</i>	0.03%	0.10%	0.00%	-0.01%	0.00%	0.00%	0.01%	0.00%	-0.01%	0.01%	0.05%	-0.01%	0.01%	0.00%	0.00%
<i>Transport equipment</i>	0.02%	0.04%	0.00%	0.00%	0.00%	0.00%	-0.09%	0.02%	-0.01%	0.00%	-0.06%	-0.01%	0.01%	0.00%	0.00%
<i>Other Equipment Goods</i>	0.01%	-0.02%	0.00%	-0.01%	0.00%	0.00%	-0.01%	0.00%	-0.01%	0.00%	0.03%	-0.01%	0.00%	0.00%	0.00%
<i>Consumer Goods Industries</i>	0.03%	-0.19%	0.01%	-0.01%	0.00%	0.03%	0.04%	-0.01%	0.01%	0.00%	0.06%	0.00%	0.00%	0.00%	0.00%
<i>Construction</i>	0.00%	-0.02%	0.00%	0.00%	0.00%	-0.02%	0.00%	-0.02%	0.00%	0.00%	0.01%	-0.03%	-0.01%	0.00%	-0.01%
<i>Telecommunication Services</i>	0.03%	-0.14%	0.00%	0.00%	0.00%	0.00%	0.06%	0.00%	0.00%	0.00%	0.02%	0.00%	0.01%	0.00%	0.00%
<i>Transport</i>	0.06%	-0.39%	0.00%	0.00%	0.00%	0.00%	0.09%	0.01%	-0.01%	0.01%	0.03%	0.01%	0.01%	0.00%	-0.01%
<i>Services of credit and insurances</i>	0.01%	0.03%	0.00%	0.00%	0.00%	-0.02%	0.02%	-0.01%	0.00%	0.00%	-0.02%	0.00%	0.00%	0.00%	0.00%
<i>Other Market Services</i>	0.02%	0.00%	0.00%	0.00%	0.00%	0.02%	0.02%	0.01%	0.00%	0.00%	0.03%	0.01%	0.01%	0.00%	0.01%
<i>Non Market Services</i>	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.02%	0.00%	0.00%	0.00%	0.00%
<b>Exports in Volume</b>															
<i>Agriculture</i>	0.02%	-0.19%	0.00%	0.00%	-0.01%	0.01%	0.02%	0.01%	0.01%	0.00%	-0.05%	0.01%	0.00%	0.00%	-0.01%
<i>Energy Exports</i>	0.33%	0.03%	-0.24%	-0.04%	-0.01%	0.53%	0.06%	-0.12%	-0.02%	-0.36%	0.06%	-0.06%	0.02%	-0.04%	-0.07%
<i>Ferrous and non ferrous metals</i>	-0.48%	-0.48%	-0.19%	0.02%	0.01%	-0.88%	-0.12%	-0.12%	-0.10%	-0.23%	-0.13%	-0.20%	-0.01%	0.01%	-0.26%
<i>Chemical Products</i>	-0.38%	-0.12%	-0.01%	-0.01%	0.00%	0.00%	-0.02%	-0.01%	0.00%	0.00%	0.05%	-0.08%	-0.01%	0.01%	-0.02%
<i>Other energy intensive</i>	-0.22%	-0.19%	-0.04%	-0.01%	0.00%	0.00%	-0.25%	-0.02%	-0.01%	-0.01%	0.02%	-0.10%	-0.05%	0.01%	-0.04%
<i>Electric Goods</i>	0.04%	0.10%	0.01%	-0.01%	0.00%	0.03%	0.10%	0.00%	0.00%	0.01%	0.05%	0.00%	0.02%	0.00%	0.02%
<i>Transport equipment</i>	0.02%	0.04%	0.00%	-0.03%	0.00%	0.00%	0.21%	0.03%	-0.01%	0.01%	0.09%	-0.01%	0.01%	0.00%	0.01%
<i>Other Equipment Goods</i>	0.02%	-0.03%	0.01%	-0.02%	-0.01%	0.03%	0.10%	0.00%	-0.01%	0.01%	0.03%	0.01%	-0.01%	0.00%	0.00%
<i>Consumer Goods Industries</i>	0.04%	-0.23%	0.01%	-0.01%	0.00%	0.05%	0.12%	-0.01%	0.01%	0.00%	0.06%	0.01%	-0.01%	0.00%	0.00%
<i>Construction</i>	0.07%	-0.02%	0.01%	-0.02%	-0.01%		0.10%		0.00%	0.02%				0.00%	0.04%
<i>Telecommunication Services</i>	0.10%	-0.38%	0.00%	-0.01%	0.00%	0.11%	0.23%	0.00%	0.01%	0.03%	0.05%	0.04%	0.02%	0.01%	0.00%
<i>Transport</i>	0.07%	-0.42%	0.01%	-0.01%	0.00%	0.01%	0.20%	0.01%	0.02%	0.01%	0.14%	0.03%	0.01%	0.00%	-0.01%
<i>Services of credit and insurances</i>	0.10%	0.23%	-0.01%	-0.02%	-0.01%	0.06%	0.43%	0.00%	0.01%	0.01%	0.15%	0.04%		0.00%	0.02%
<i>Other Market Services</i>	0.02%	-0.13%	0.00%	-0.01%	0.00%	0.07%	0.11%	0.00%	0.00%	0.01%	0.08%	0.02%	0.00%	0.00%	0.01%
<i>Non Market Services</i>	0.07%		0.01%	-0.01%	0.00%	0.06%		0.03%	0.01%	0.02%			0.02%	0.00%	0.05%
<b>Price of Exports relative EU average<sup>6</sup></b>															
<i>Agriculture</i>	-0.02%	0.13%	-0.01%	0.00%	-0.01%	-0.02%	-0.01%	-0.01%	-0.01%	-0.01%	0.03%	0.00%	-0.01%	0.00%	0.00%
<i>Ferrous and non ferrous metals</i>	0.11%	0.10%	-0.04%	-0.13%	-0.13%	0.29%	-0.06%	-0.05%	-0.09%	-0.02%	-0.04%	-0.03%	-0.11%	-0.14%	0.15%

<sup>6</sup> For the EU it is the relative price compared to world price

<i>Chemical Products</i>	0.17%	0.04%	-0.01%	-0.01%	-0.01%	-0.01%	0.00%	0.00%	-0.01%	-0.01%	-0.03%	0.03%	-0.01%	-0.02%	0.01%
<i>Other energy intensive</i>	0.08%	0.06%	0.00%	-0.01%	-0.02%	-0.01%	0.09%	-0.01%	-0.01%	-0.01%	-0.03%	0.03%	0.00%	-0.02%	0.02%
<i>Electric Goods</i>	-0.01%	-0.05%	0.00%	0.01%	0.01%	0.00%	-0.03%	0.00%	0.01%	0.01%	-0.02%	0.01%	0.00%	0.01%	-0.01%
<i>Transport equipment</i>	0.00%	-0.02%	0.00%	0.02%	0.00%	0.01%	-0.09%	-0.01%	0.00%	0.00%	-0.03%	0.00%	-0.01%	0.00%	-0.01%
<i>Other Equipment Goods</i>	-0.01%	0.01%	0.00%	0.01%	0.01%	0.00%	-0.04%	0.00%	0.00%	0.00%	-0.01%	-0.01%	0.00%	0.01%	-0.01%
<i>Consumer Goods Industries</i>	-0.01%	0.09%	0.00%	0.01%	0.00%	-0.02%	-0.05%	0.00%	-0.01%	0.00%	-0.01%	0.00%	0.00%	0.00%	0.00%
<i>Construction</i>	-0.02%	0.04%	0.02%	0.04%	0.03%	-0.03%	-0.05%	0.01%	0.02%	0.01%	-0.06%	0.00%	0.01%	0.02%	-0.02%
<i>Telecommunication Services</i>	-0.07%	0.25%	0.00%	0.01%	0.00%	-0.07%	-0.16%	0.00%	-0.01%	-0.02%	-0.04%	-0.03%	-0.02%	-0.01%	0.00%
<i>Transport</i>	-0.04%	0.21%	-0.01%	0.00%	0.00%	-0.05%	-0.11%	-0.01%	-0.02%	-0.02%	-0.09%	-0.02%	-0.01%	0.00%	0.00%
<i>Services of credit and insurance</i>	-0.06%	-0.20%	0.02%	0.03%	0.02%	-0.02%	-0.28%	0.00%	0.02%	0.00%	-0.09%	-0.01%	-0.01%	0.03%	-0.02%
<i>Other Market Services</i>	-0.01%	0.09%	0.00%	0.03%	0.02%	-0.04%	-0.06%	0.01%	0.01%	0.00%	-0.05%	0.00%	0.02%	0.01%	-0.01%
<i>Non Market Services</i>	-0.03%	-0.37%	0.06%	0.10%	0.09%	-0.02%	-0.21%	0.04%	0.07%	0.05%	-0.15%	0.03%	0.04%	0.08%	-0.09%

2010		(% difference compared to reference except * where difference)													
EU Min energy tax with SS recycling compared to Reference Scenario															
	Austria	Belgium	Germany	Denmark	Finland	France	Greece	Ireland	Italy	The Netherlands	Portugal	Spain	Sweden	UK	EU
<b>Macroeconomic Aggregates</b>															
<i>Gross Domestic Product</i>	0.01%	0.02%	0.00%	0.00%	0.00%	0.01%	0.03%	0.01%	0.00%	-0.01%	0.03%	0.00%	0.01%	0.00%	0.00%
<i>Employment</i>	0.03%	0.12%	0.00%	0.00%	0.00%	0.04%	0.13%	0.01%	0.00%	0.00%	0.09%	0.01%	0.01%	0.00%	0.02%
<i>Private Consumption</i>	0.03%	0.14%	0.01%	0.00%	0.00%	0.05%	-0.02%	0.02%	0.00%	0.00%	0.00%	0.01%	0.02%	0.00%	0.01%
<i>Investment</i>	-0.01%	-0.03%	0.00%	0.00%	0.00%	-0.02%	-0.01%	-0.01%	0.00%	0.00%	0.00%	-0.02%	-0.01%	0.00%	-0.01%
<i>Energy Consumption</i>	-0.88%	-2.40%	-0.13%	0.00%	0.00%	-0.54%	-0.49%	-0.35%	-0.05%	-0.36%	-0.29%	-0.18%	-0.05%	-0.04%	-0.30%
<i>Share Coal*</i>	-0.70%	-0.74%	-0.15%	0.00%	0.00%	-0.31%	-0.25%	-0.05%	-0.05%	-0.26%	-0.13%	-0.10%	-0.01%	0.00%	-0.17%
<i>Share Oil*</i>	0.47%	-0.06%	0.08%	0.00%	0.00%	0.27%	0.20%	0.15%	0.03%	0.06%	0.10%	0.12%	0.04%	0.01%	0.10%
<i>Share Gas*</i>	0.14%	0.43%	0.04%	0.00%	0.00%	0.09%	0.00%	-0.11%	0.01%	0.17%	-	-0.04%	0.00%	-0.01%	0.06%
<i>Share Electricity*</i>	0.09%	0.37%	0.03%	0.00%	0.00%	-0.05%	0.05%	0.01%	0.00%	0.03%	0.02%	0.03%	-0.03%	0.00%	0.01%
<i>Exports</i>	-0.05%	-0.20%	-0.01%	0.00%	0.00%	-0.03%	0.09%	0.00%	0.00%	-0.04%	0.05%	-0.02%	-0.01%	0.00%	-
<i>Exports within EU</i>	-0.05%	-0.17%	-0.02%	0.03%	0.00%	-0.03%	0.09%	-0.01%	0.00%	-0.06%	0.05%	-0.02%	0.00%	0.00%	-
<i>Exports to RW</i>	-0.05%	-0.24%	-0.01%	-0.02%	-0.01%	-0.02%	0.08%	0.00%	-0.01%	-0.01%	0.05%	-0.02%	-0.01%	0.00%	-0.02%
<i>Imports</i>	-0.05%	-0.19%	-0.01%	0.00%	0.00%	-0.04%	-0.05%	-0.01%	-0.01%	-0.04%	-0.02%	-0.04%	0.00%	0.00%	-0.04%
<i>Real Wage Rate</i>	0.09%	0.43%	0.02%	0.01%	0.00%	0.15%	0.40%	0.04%	0.00%	0.01%	0.20%	0.02%	0.05%	0.00%	0.05%
<i>Relative Consumer Price</i>	-0.02%	0.01%	-0.01%	0.01%	0.00%	-0.06%	0.13%	0.01%	-0.01%	-0.01%	0.23%	-0.01%	-0.02%	0.01%	-0.01%
<i>Terms of Trade</i>	0.01%	0.05%	0.01%	0.00%	0.00%	0.00%	-0.05%	0.00%	-0.01%	0.00%	-0.03%	0.00%	0.00%	-0.01%	0.01%
<i>Public Surplus (% of GDP)*</i>	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	-
<i>Current Account (% of GDP)*</i>	0.00%	0.05%	0.00%	0.00%	0.00%	0.01%	0.04%	0.01%	0.00%	0.01%	0.03%	0.00%	0.00%	0.00%	0.00%
<b>Total Atmospheric Emissions</b>															
<i>CO2 Emissions</i>	-1.81%	-4.60%	-0.35%	0.00%	0.01%	-0.75%	-0.78%	-0.49%	-0.16%	-0.77%	-0.52%	-0.29%	-0.02%	-0.01%	-0.53%
<i>NOX Emissions</i>	-1.13%	-4.80%	-0.28%	0.00%	0.01%	-0.63%	-0.86%	-0.50%	-0.10%	-0.57%	-0.44%	-0.17%	-0.03%	-0.01%	-0.47%
<i>SO2 Emissions</i>	-4.22%	-5.85%	-0.48%	0.00%	0.01%	-2.42%	-1.20%	-0.66%	-0.75%	-2.25%	-0.53%	-0.36%	-0.08%	-0.05%	-0.92%
<i>VOC Emissions</i>	-0.08%	-3.16%	-0.13%	0.00%	0.00%	-0.07%	-0.49%	-0.25%	-0.01%	-0.06%	-0.36%	-0.04%	0.00%	0.00%	-0.17%
<i>PM Emissions</i>	-6.87%	-4.46%	-0.32%	0.00%	0.01%	-1.82%	-1.87%	-0.87%	-0.14%	-0.91%	-0.85%	-0.14%	-0.10%	-0.04%	-0.79%
<b>Environmental Policy</b>															
<i>Energy Tax (% of GDP)*</i>	0.05%	0.25%	0.01%	0.00%	0.00%	0.07%	0.17%	0.04%	0.01%	0.01%	0.20%	0.02%	0.01%	0.00%	0.03%
<i>Reduction of Social Security Rate*</i>	0.13%	0.64%	0.02%	0.00%	0.00%	0.19%	0.70%	0.11%	0.01%	0.02%	0.52%	0.05%	0.05%	0.02%	0.10%
<b>Welfare</b>															
<i>Economic Welfare</i>	0.02%	0.07%	0.00%	0.00%	0.00%	0.02%	-0.05%	0.01%	0.00%	0.00%	-0.03%	0.00%	0.01%	0.00%	0.01%
<i>Environmental Welfare</i>	3.30%	19.57%	2.62%	1.65%	0.97%	5.83%	25.49%	59.03%	1.45%	6.55%	3.69%	5.37%	1.31%	0.99%	-

<i>Total Welfare</i>	0.02%	0.11%	0.02%	0.01%	0.00%	0.03%	-0.04%	0.01%	0.00%	0.03%	-0.03%	0.01%	0.01%	0.00%	0.02%
<b>Sectoral Aggregates</b>	Austria	Belgium	Germany	Denmark	Finland	France	Greece	Ireland	Italy	The Netherlands	Portugal	Spain	Sweden	UK	EU
<b>Domestic Production in Volume</b>															
<i>Agriculture</i>	0.01%	-0.20%	0.01%	0.00%	0.00%	0.02%	0.02%	0.00%	0.00%	0.00%	0.03%	0.01%	0.00%	0.00%	0.00%
<i>Energy Production</i>	-0.39%	-1.19%	-0.12%	0.00%	0.00%	-0.53%	-0.23%	-0.22%	-0.02%	-0.26%	-0.13%	-0.04%	-0.07%	-0.04%	-0.23%
<i>Ferrous and non ferrous metals</i>	-0.40%	-0.47%	-0.09%	0.02%	0.01%	-0.61%	-0.10%	-0.10%	-0.05%	-0.21%	-0.09%	-0.13%	-0.01%	0.01%	-0.18%
<i>Chemical Products</i>	-0.24%	-0.14%	-0.01%	-0.01%	0.00%	-0.01%	-0.01%	-0.01%	0.00%	0.00%	0.03%	-0.04%	-0.01%	0.01%	-0.02%
<i>Other energy intensive</i>	-0.12%	-0.16%	-0.01%	0.00%	0.00%	-0.05%	-0.10%	-0.02%	-0.01%	0.00%	0.00%	-0.05%	-0.04%	0.00%	-0.03%
<i>Electric Goods</i>	0.02%	0.09%	0.00%	-0.01%	0.00%	-0.01%	0.01%	0.00%	-0.01%	0.01%	0.03%	-0.02%	0.01%	0.00%	0.00%
<i>Transport equipment</i>	0.01%	0.03%	0.00%	0.00%	0.00%	-0.01%	-0.02%	0.02%	-0.01%	0.00%	-0.03%	-0.01%	0.01%	0.00%	0.00%
<i>Other Equipment Goods</i>	0.00%	-0.03%	0.00%	-0.01%	0.00%	-0.01%	-0.01%	0.00%	-0.01%	0.00%	0.02%	-0.01%	-0.01%	0.00%	0.00%
<i>Consumer Goods Industries</i>	0.03%	-0.20%	0.01%	-0.01%	0.00%	0.03%	0.04%	0.00%	0.01%	0.00%	0.05%	0.00%	0.00%	0.00%	0.00%
<i>Construction</i>	0.00%	-0.02%	-0.01%	0.00%	0.00%	-0.02%	0.00%	-0.02%	0.00%	0.00%	0.00%	-0.02%	-0.01%	0.00%	-0.01%
<i>Telecommunication Services</i>	0.02%	-0.12%	0.00%	0.00%	0.00%	-0.01%	0.05%	0.00%	0.00%	0.00%	0.01%	0.00%	0.01%	0.00%	0.00%
<i>Transport</i>	0.06%	-0.43%	0.00%	-0.01%	0.00%	-0.01%	0.09%	0.01%	0.00%	0.01%	0.02%	0.01%	0.01%	0.00%	-0.01%
<i>Services of credit and insurances</i>	0.01%	0.02%	0.00%	0.00%	0.00%	-0.02%	0.01%	-0.01%	0.00%	0.00%	-0.03%	0.00%	0.00%	0.00%	0.00%
<i>Other Market Services</i>	0.02%	0.00%	0.00%	0.00%	0.00%	0.01%	0.02%	0.01%	0.00%	0.00%	0.02%	0.00%	0.01%	0.00%	0.01%
<i>Non Market Services</i>	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.01%	0.00%	0.00%	0.00%	0.00%
<b>Exports in Volume</b>															
<i>Agriculture</i>	0.02%	-0.21%	0.00%	0.00%	-0.01%	0.02%	0.03%	0.01%	0.01%	0.00%	-0.02%	0.01%	0.00%	0.00%	-0.01%
<i>Energy Exports</i>	0.25%	-0.02%	-0.25%	-0.04%	-0.01%	0.37%	0.06%	-0.16%	-0.02%	-0.45%	0.03%	-0.07%	-0.01%	-0.06%	-0.13%
<i>Ferrous and non ferrous metals</i>	-0.50%	-0.50%	-0.18%	0.03%	0.01%	-0.88%	-0.12%	-0.12%	-0.09%	-0.23%	-0.14%	-0.20%	-0.01%	0.00%	-0.27%
<i>Chemical Products</i>	-0.37%	-0.14%	-0.01%	-0.01%	0.00%	-0.01%	-0.01%	-0.01%	0.00%	0.00%	0.03%	-0.08%	-0.01%	0.01%	-0.03%
<i>Other energy intensive</i>	-0.22%	-0.21%	-0.04%	-0.01%	0.00%	-0.02%	-0.21%	-0.02%	-0.01%	-0.01%	0.00%	-0.10%	-0.05%	0.01%	-0.05%
<i>Electric Goods</i>	0.03%	0.10%	0.01%	-0.01%	0.00%	0.03%	0.09%	0.00%	0.00%	0.01%	0.04%	-0.01%	0.01%	0.00%	0.01%
<i>Transport equipment</i>	0.01%	0.04%	0.00%	-0.02%	0.00%	0.00%	0.17%	0.03%	-0.01%	0.01%	0.05%	-0.01%	0.01%	0.00%	0.00%
<i>Other Equipment Goods</i>	0.02%	-0.03%	0.00%	-0.02%	-0.01%	0.02%	0.09%	0.00%	-0.01%	0.01%	0.01%	0.00%	-0.01%	0.00%	0.00%
<i>Consumer Goods Industries</i>	0.03%	-0.24%	0.01%	-0.01%	0.00%	0.05%	0.12%	-0.01%	0.01%	0.00%	0.05%	0.00%	-0.01%	0.01%	0.00%
<i>Construction</i>	0.06%	-0.03%	0.01%	-0.02%	-0.01%		0.10%		0.00%	0.02%				0.01%	0.03%
<i>Telecommunication Services</i>	0.08%	-0.31%	0.00%	-0.01%	0.00%	0.09%	0.21%	0.00%	0.01%	0.03%	0.05%	0.02%	0.02%	0.01%	0.00%
<i>Transport</i>	0.06%	-0.46%	0.01%	-0.01%	0.00%	-0.01%	0.19%	0.01%	0.02%	0.01%	0.13%	0.02%	0.01%	0.00%	-0.02%
<i>Services of credit and insurances</i>	0.09%	0.19%	-0.01%	-0.02%	-0.01%	0.05%	0.37%	0.00%	0.01%	0.01%	0.12%	0.02%		0.00%	0.02%
<i>Other Market Services</i>	0.02%	-0.11%	0.00%	-0.01%	0.00%	0.06%	0.11%	0.00%	0.00%	0.01%	0.07%	0.01%	0.00%	0.00%	0.01%
<i>Non Market Services</i>	0.06%		0.01%	-0.01%	0.00%	0.05%		0.02%	0.01%	0.01%			0.02%	0.00%	0.04%

**Price of Exports rel. EU average<sup>7</sup>**

<i>Agriculture</i>	-0.01%	0.14%	-0.01%	0.00%	-0.01%	-0.01%	-0.01%	0.00%	-0.01%	0.00%	0.01%	0.00%	-0.01%	-0.01%	0.00%
<i>Ferrous and non ferrous metals</i>	0.12%	0.10%	-0.05%	-0.14%	-0.13%	0.29%	-0.07%	-0.05%	-0.09%	-0.02%	-0.05%	-0.04%	-0.12%	-0.14%	0.16%
<i>Chemical Products</i>	0.16%	0.05%	0.00%	-0.01%	-0.01%	0.00%	0.00%	-0.01%	-0.02%	-0.01%	-0.02%	0.03%	-0.01%	-0.02%	0.01%
<i>Other energy intensive</i>	0.08%	0.08%	0.00%	-0.01%	-0.02%	-0.01%	0.08%	-0.01%	-0.02%	-0.01%	-0.02%	0.02%	0.01%	-0.02%	0.02%
<i>Electric Goods</i>	-0.01%	-0.05%	0.01%	0.01%	0.01%	-0.01%	-0.03%	0.01%	0.01%	0.00%	-0.01%	0.01%	0.00%	0.01%	-0.01%
<i>Transport equipment</i>	0.00%	-0.02%	0.00%	0.01%	0.00%	0.01%	-0.07%	-0.01%	0.00%	0.00%	-0.02%	0.01%	0.00%	0.00%	-0.01%
<i>Other Equipment Goods</i>	-0.01%	0.01%	0.00%	0.01%	0.00%	-0.01%	-0.04%	0.00%	0.01%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
<i>Consumer Goods Industries</i>	-0.01%	0.09%	0.00%	0.00%	0.00%	-0.02%	-0.04%	0.01%	0.00%	0.00%	-0.02%	0.00%	0.00%	0.00%	0.01%
<i>Construction</i>	-0.02%	0.04%	0.01%	0.03%	0.02%	-0.03%	-0.04%	0.01%	0.02%	0.01%	-0.05%	0.00%	0.01%	0.02%	-0.02%
<i>Telecommunication Services</i>	-0.06%	0.21%	0.00%	0.01%	0.00%	-0.06%	-0.15%	0.01%	-0.01%	-0.01%	-0.03%	-0.02%	-0.01%	0.00%	0.00%
<i>Transport</i>	-0.04%	0.23%	-0.02%	0.00%	0.00%	-0.06%	-0.10%	-0.01%	-0.02%	-0.02%	-0.08%	-0.02%	-0.01%	-0.01%	0.00%
<i>Services of credit and insurance</i>	-0.04%	-0.17%	0.01%	0.03%	0.03%	-0.03%	-0.24%	0.00%	0.01%	0.00%	-0.06%	0.00%	-0.01%	0.02%	-0.02%
<i>Other Market Services</i>	-0.01%	0.07%	0.01%	0.03%	0.02%	-0.04%	-0.07%	0.01%	0.00%	0.00%	-0.04%	0.00%	0.01%	0.01%	-0.01%
<i>Non Market Services</i>	-0.03%	-0.29%	0.06%	0.08%	0.07%	-0.01%	-0.18%	0.03%	0.06%	0.05%	-0.09%	0.04%	0.04%	0.07%	-0.07%

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<sup>7</sup> For the EU it is the relative price compared to world price

## EU MINIMUM TAX WITHOUT RECYCLING OF TAX REVENUE

2005

(% difference compared to reference except \* where difference)

EU Min energy tax with revenue for public deficit compared to Reference Scenario

	Austria	Belgium	Germany	Denmark	Finland	France	Greece	Ireland	Italy	The Netherlands	Portugal	Spain	Sweden	UK	EU
<b>Macroeconomic Aggregates</b>															
<i>Gross Domestic Product</i>	-0.01%	-0.03%	-0.01%	0.00%	-0.01%	0.00%	-0.01%	-0.01%	0.00%	-0.01%	-0.02%	-0.01%	0.00%	-0.01%	-0.01%
<i>Employment</i>	0.00%	0.01%	-0.01%	-0.01%	-0.01%	0.00%	0.01%	-0.02%	-0.01%	-0.01%	-0.01%	-0.01%	-0.01%	-0.02%	-0.01%
<i>Private Consumption</i>	-0.01%	-0.19%	0.03%	0.04%	0.04%	-0.03%	-0.24%	0.00%	0.03%	0.02%	-0.34%	0.01%	0.03%	0.05%	0.00%
<i>Investment</i>	-0.02%	-0.07%	0.00%	0.00%	0.00%	-0.03%	-0.04%	-0.02%	0.00%	0.00%	-0.04%	-0.03%	-0.01%	0.00%	-0.01%
<i>Energy Consumption</i>	-0.85%	-2.24%	-0.13%	0.01%	0.01%	-0.48%	-0.62%	-0.39%	-0.05%	-0.37%	-0.34%	-0.21%	-0.05%	-0.02%	-0.29%
<i>Share Coal*</i>	-0.64%	-0.77%	-0.15%	0.00%	0.00%	-0.26%	-0.29%	-0.06%	-0.06%	-0.28%	-0.11%	-0.11%	-0.01%	0.00%	-0.17%
<i>Share Oil*</i>	0.43%	0.08%	0.08%	0.00%	0.00%	0.24%	0.23%	0.16%	0.04%	0.08%	0.08%	0.14%	0.04%	0.01%	0.10%
<i>Share Gas*</i>	0.13%	0.37%	0.05%	0.00%	0.00%	0.07%	0.00%	-0.12%	0.01%	0.17%	-0.07%	0.00%	-0.01%	0.05%	
<i>Share Electricity*</i>	0.08%	0.32%	0.03%	0.00%	0.00%	-0.05%	0.06%	0.01%	0.01%	0.03%	0.03%	0.03%	-0.03%	0.00%	0.01%
<i>Exports</i>	-0.05%	-0.16%	-0.08%	-0.04%	-0.04%	-0.01%	0.34%	-0.02%	-0.05%	-0.06%	0.25%	-0.05%	-0.03%	-0.09%	-
<i>Exports within EU</i>	-0.05%	-0.13%	-0.08%	0.00%	-0.03%	0.00%	0.34%	-0.02%	-0.05%	-0.07%	0.25%	-0.05%	-0.01%	-0.09%	-
<i>Exports to RW</i>	-0.06%	-0.20%	-0.08%	-0.06%	-0.05%	-0.01%	0.34%	-0.02%	-0.05%	-0.04%	0.25%	-0.05%	-0.04%	-0.09%	-0.06%
<i>Imports</i>	-0.08%	-0.28%	0.00%	0.01%	0.01%	-0.06%	-0.17%	-0.03%	0.00%	-0.04%	-0.18%	-0.05%	-0.01%	0.00%	-0.04%
<i>Real Wage Rate</i>	-0.02%	-0.20%	0.01%	0.02%	0.02%	-0.03%	-0.26%	-0.03%	0.01%	0.00%	-0.41%	-0.01%	0.01%	0.03%	0.00%
<i>Relative Consumer Price</i>	-0.03%	-0.09%	0.03%	0.04%	0.04%	-0.08%	-0.04%	0.02%	0.03%	0.00%	0.18%	0.01%	-0.01%	0.07%	0.00%
<i>Real Interest Rate</i>	-0.03%	-0.03%	-0.03%	-0.03%	-0.03%	-0.03%	-0.03%	-0.03%	-0.03%	-0.03%	-0.03%	-0.03%	-0.03%	-0.03%	-0.03%
<i>Terms of Trade</i>	0.00%	0.04%	0.03%	0.02%	0.01%	0.00%	-0.18%	-0.01%	0.01%	0.00%	-0.12%	0.01%	0.00%	0.04%	0.04%
<i>Public Surplus (% of GDP)*</i>	0.05%	0.24%	0.01%	0.00%	0.00%	0.08%	0.17%	0.03%	0.00%	0.01%	0.21%	0.03%	0.03%	0.01%	-
<i>Current Account (% of GDP)*</i>	0.01%	0.16%	-0.02%	-0.02%	-0.02%	0.02%	0.12%	0.01%	-0.01%	-0.01%	0.15%	0.01%	-0.01%	-0.04%	0.00%
<b>Total Atmospheric Emissions</b>															
<i>CO2 Emissions</i>	-1.68%	-4.29%	-0.34%	0.00%	0.02%	-0.67%	-0.98%	-0.55%	-0.18%	-0.81%	-0.55%	-0.34%	-0.03%	0.00%	-0.52%
<i>NOX Emissions</i>	-1.05%	-4.43%	-0.27%	0.00%	0.02%	-0.57%	-1.09%	-0.56%	-0.12%	-0.59%	-0.46%	-0.20%	-0.04%	-0.01%	-0.45%
<i>SO2 Emissions</i>	-3.71%	-5.68%	-0.43%	0.02%	0.02%	-2.09%	-1.39%	-0.71%	-0.80%	-2.17%	-0.50%	-0.36%	-0.10%	-0.04%	-0.85%
<i>VOC Emissions</i>	-0.10%	-2.73%	-0.12%	0.00%	0.01%	-0.09%	-0.64%	-0.30%	0.00%	-0.07%	-0.47%	-0.05%	0.00%	0.01%	-0.16%
<i>PM Emissions</i>	-6.26%	-4.36%	-0.27%	0.02%	0.03%	-1.58%	-2.15%	-0.93%	-0.10%	-0.86%	-0.79%	-0.15%	-0.12%	-0.03%	-0.72%
<b>Environmental Policy</b>															
<i>Energy Tax (% of GDP)*</i>	0.05%	0.27%	0.01%	-0.01%	0.00%	0.08%	0.20%	0.03%	0.00%	0.01%	0.24%	0.03%	0.02%	0.00%	0.04%
<b>Welfare</b>															
<i>Economic Welfare</i>	-0.01%	-0.17%	0.03%	0.04%	0.04%	-0.03%	-0.26%	0.01%	0.03%	0.02%	-0.31%	0.01%	0.03%	0.04%	0.00%
<i>Environmental Welfare</i>	2.70%	15.82%	2.44%	1.51%	0.78%	4.18%	18.21%	16.81%	1.10%	5.94%	5.21%	63.10%	1.19%	1.10%	

<i>Total Welfare</i>	0.00%	-0.13%	0.05%	0.05%	0.04%	-0.02%	-0.26%	0.01%	0.04%	0.05%	-0.31%	0.02%	0.03%	0.04%	0.01%
<b>Sectoral Aggregates</b>	Austria	Belgium	Germany	Denmark	Finland	France	Greece	Ireland	Italy	The Netherlands	Portugal	Spain	Sweden	UK	EU
<b>Domestic Production in Volume</b>															
<i>Agriculture</i>	0.00%	-0.19%	-0.01%	-0.01%	0.00%	0.00%	0.00%	-0.01%	0.00%	-0.01%	-0.01%	0.00%	-0.01%	-0.01%	-0.01%
<i>Energy Production</i>	-0.39%	-1.06%	-0.12%	0.00%	0.00%	-0.47%	-0.30%	-0.23%	-0.02%	-0.22%	-0.17%	-0.05%	-0.06%	-0.03%	-0.21%
<i>Ferrous and non ferrous metals</i>	-0.41%	-0.48%	-0.13%	-0.01%	-0.01%	-0.60%	-0.08%	-0.12%	-0.07%	-0.23%	-0.08%	-0.16%	-0.02%	-0.03%	-0.20%
<i>Chemical Products</i>	-0.26%	-0.16%	-0.04%	-0.03%	-0.01%	-0.02%	-0.07%	-0.02%	-0.01%	-0.01%	0.01%	-0.06%	-0.02%	-0.04%	-0.04%
<i>Other energy intensive</i>	-0.14%	-0.18%	-0.03%	-0.01%	-0.02%	-0.06%	-0.15%	-0.04%	-0.02%	-0.01%	0.00%	-0.07%	-0.05%	-0.03%	-0.05%
<i>Electric Goods</i>	-0.01%	0.01%	-0.04%	-0.04%	-0.02%	-0.01%	-0.02%	-0.01%	-0.02%	-0.01%	0.05%	-0.04%	-0.01%	-0.04%	-0.02%
<i>Transport equipment</i>	0.00%	-0.02%	-0.02%	0.02%	-0.04%	-0.01%	-0.18%	0.00%	-0.02%	-0.01%	-0.12%	-0.03%	-0.01%	-0.03%	-0.02%
<i>Other Equipment Goods</i>	-0.01%	-0.07%	-0.03%	-0.02%	-0.02%	-0.02%	-0.03%	-0.01%	-0.03%	-0.02%	-0.03%	-0.03%	-0.03%	-0.05%	-0.03%
<i>Consumer Goods Industries</i>	0.01%	-0.21%	-0.02%	-0.02%	-0.01%	0.01%	0.03%	-0.02%	-0.01%	-0.01%	0.06%	-0.01%	-0.01%	-0.03%	-0.02%
<i>Construction</i>	-0.02%	-0.07%	0.00%	0.01%	0.01%	-0.03%	-0.03%	-0.03%	0.00%	0.00%	-0.05%	-0.03%	-0.01%	0.01%	-0.01%
<i>Telecommunication Services</i>	0.00%	-0.30%	0.00%	0.00%	0.00%	-0.04%	-0.01%	-0.01%	0.00%	0.00%	-0.04%	-0.01%	0.00%	0.01%	-0.02%
<i>Transport</i>	0.03%	-0.44%	-0.02%	-0.02%	-0.01%	-0.03%	0.05%	-0.01%	-0.02%	0.00%	0.02%	0.00%	-0.01%	-0.03%	-0.03%
<i>Services of credit and insurances</i>	-0.01%	-0.08%	0.00%	0.00%	0.00%	-0.02%	-0.06%	-0.02%	0.00%	0.00%	-0.15%	-0.01%	-0.01%	-0.01%	-0.01%
<i>Other Market Services</i>	0.00%	-0.07%	0.00%	0.00%	0.01%	-0.01%	-0.03%	-0.01%	0.00%	0.00%	-0.05%	0.00%	0.00%	0.00%	-0.01%
<i>Non Market Services</i>	0.00%	0.00%	0.00%	0.01%	0.00%	0.00%	-0.01%	0.00%	0.00%	0.00%	-0.05%	0.00%	0.00%	0.02%	0.01%
<b>Exports in Volume</b>															
<i>Agriculture</i>	0.05%	-0.15%	-0.03%	-0.02%	-0.04%	0.03%	0.25%	0.00%	-0.02%	-0.01%	0.22%	0.00%	0.00%	-0.05%	-0.01%
<i>Energy Exports</i>	0.33%	0.03%	-0.27%	-0.06%	-0.02%	0.53%	0.09%	-0.14%	-0.03%	-0.38%	0.11%	-0.08%	0.01%	-0.09%	-0.09%
<i>Ferrous and non ferrous metals</i>	-0.51%	-0.52%	-0.25%	-0.01%	-0.01%	-0.88%	-0.05%	-0.15%	-0.13%	-0.24%	-0.07%	-0.23%	-0.02%	-0.07%	-0.30%
<i>Chemical Products</i>	-0.40%	-0.15%	-0.07%	-0.04%	-0.04%	0.00%	0.09%	-0.02%	-0.04%	-0.01%	0.22%	-0.12%	-0.02%	-0.07%	-0.06%
<i>Other energy intensive</i>	-0.24%	-0.19%	-0.10%	-0.04%	-0.03%	0.00%	-0.14%	-0.06%	-0.06%	-0.03%	0.14%	-0.14%	-0.06%	-0.11%	-0.08%
<i>Electric Goods</i>	0.01%	0.05%	-0.07%	-0.04%	-0.03%	0.03%	0.19%	-0.01%	-0.05%	-0.01%	0.12%	-0.04%	-0.01%	-0.08%	-0.03%
<i>Transport equipment</i>	0.00%	0.01%	-0.06%	-0.14%	-0.05%	0.00%	0.22%	0.01%	-0.06%	-0.02%	0.20%	-0.04%	-0.01%	-0.07%	-0.03%
<i>Other Equipment Goods</i>	0.00%	-0.03%	-0.07%	-0.08%	-0.05%	0.02%	0.14%	-0.01%	-0.05%	-0.03%	0.15%	-0.04%	-0.04%	-0.07%	-0.04%
<i>Consumer Goods Industries</i>	0.03%	-0.21%	-0.05%	-0.04%	-0.05%	0.07%	0.38%	-0.03%	-0.03%	-0.01%	0.27%	-0.03%	-0.03%	-0.10%	-0.03%
<i>Construction</i>	0.04%	-0.04%	-0.06%	-0.07%	-0.06%	-	0.20%	-	-0.05%	-0.02%	-	-	-	-0.11%	0.01%
<i>Telecommunication Services</i>	0.12%	-0.41%	-0.08%	-0.07%	-0.07%	0.11%	0.44%	-0.01%	-0.06%	-0.01%	0.35%	-0.01%	-0.01%	-0.11%	-0.05%
<i>Transport</i>	0.04%	-0.46%	-0.05%	-0.03%	-0.04%	0.01%	0.35%	-0.01%	-0.01%	-0.01%	0.30%	0.00%	-0.01%	-0.10%	-0.05%
<i>Services of credit and insurances</i>	0.10%	0.33%	-0.09%	-0.08%	-0.08%	0.08%	0.56%	-0.02%	-0.04%	-0.03%	0.29%	-0.01%	-	-0.09%	-0.03%
<i>Other Market Services</i>	0.05%	0.14%	-0.08%	-0.08%	-0.08%	0.10%	0.51%	-0.01%	-0.07%	-0.03%	0.41%	-0.03%	-0.03%	-0.11%	0.01%
<i>Non Market Services</i>	0.04%	-	-0.03%	-0.04%	-0.04%	0.04%	-	0.00%	-0.02%	0.00%	-	-	0.00%	-0.06%	0.03%

**Price of Exports rel. EU average<sup>8</sup>**

<i>Agriculture</i>	-0.04%	0.10%	0.02%	0.01%	0.01%	-0.03%	-0.16%	0.00%	0.01%	0.00%	-0.13%	0.00%	0.00%	0.03%	-0.01%
<i>Ferrous and non ferrous metals</i>	0.11%	0.11%	-0.03%	-0.13%	-0.14%	0.28%	-0.09%	-0.05%	-0.09%	-0.03%	-0.08%	-0.03%	-0.13%	-0.11%	0.17%
<i>Chemical Products</i>	0.16%	0.05%	0.00%	-0.01%	0.00%	-0.02%	-0.04%	-0.01%	-0.01%	-0.02%	-0.11%	0.03%	-0.02%	0.00%	0.03%
<i>Other energy intensive</i>	0.08%	0.05%	0.01%	-0.01%	-0.02%	-0.02%	0.04%	-0.01%	-0.01%	-0.02%	-0.09%	0.03%	0.00%	0.01%	0.03%
<i>Electric Goods</i>	-0.02%	-0.04%	0.02%	0.01%	0.00%	-0.02%	-0.09%	-0.01%	0.01%	-0.01%	-0.05%	0.00%	-0.01%	0.02%	0.01%
<i>Transport equipment</i>	-0.01%	-0.01%	0.01%	0.05%	0.01%	-0.01%	-0.10%	-0.01%	0.01%	-0.01%	-0.09%	0.00%	-0.01%	0.01%	0.01%
<i>Other Equipment Goods</i>	-0.01%	0.00%	0.01%	0.02%	0.01%	-0.02%	-0.06%	-0.01%	0.00%	-0.01%	-0.08%	-0.01%	0.00%	0.02%	0.01%
<i>Consumer Goods Industries</i>	-0.01%	0.08%	0.01%	0.01%	0.01%	-0.04%	-0.14%	0.00%	0.00%	0.00%	-0.10%	0.01%	0.00%	0.03%	0.01%
<i>Construction</i>	-0.01%	0.03%	0.05%	0.06%	0.05%	-0.04%	-0.14%	0.02%	0.04%	0.02%	-0.16%	0.01%	0.03%	0.09%	-0.01%
<i>Telecommunication Services</i>	-0.10%	0.25%	0.03%	0.03%	0.02%	-0.11%	-0.34%	-0.01%	0.00%	-0.02%	-0.27%	-0.02%	-0.02%	0.04%	0.03%
<i>Transport</i>	-0.05%	0.22%	0.00%	0.00%	0.00%	-0.08%	-0.19%	-0.01%	-0.02%	-0.03%	-0.16%	-0.03%	-0.01%	0.03%	0.02%
<i>Services of credit and insurances</i>	-0.09%	-0.30%	0.04%	0.05%	0.05%	-0.08%	-0.40%	-0.01%	0.01%	-0.01%	-0.22%	-0.02%	-0.01%	0.06%	0.01%
<i>Other Market Services</i>	-0.02%	-0.13%	0.06%	0.08%	0.08%	-0.07%	-0.34%	0.02%	0.07%	0.02%	-0.28%	0.02%	0.04%	0.09%	-0.02%
<i>Non Market Services</i>	-0.02%	-0.22%	0.09%	0.11%	0.10%	-0.03%	-0.21%	0.04%	0.07%	0.04%	-0.26%	0.04%	0.05%	0.14%	-0.05%

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<sup>8</sup> For the EU it is the relative price compared to world price

2010	(% difference compared to reference except * where difference)														
EU Min energy tax with revenue for public deficit compared to Reference Scenario	Austria	Belgium	Germany	Denmark	Finland	France	Greece	Ireland	Italy	The Netherlands	Portugal	Spain	Sweden	UK	EU
<b>Macroeconomic Aggregates</b>															
<i>Gross Domestic Product</i>	-0.01%	-0.03%	-0.01%	0.00%	0.00%	-0.01%	-0.02%	-0.01%	0.00%	-0.01%	-0.02%	-0.01%	0.00%	-0.01%	-0.01%
<i>Employment</i>	0.00%	0.00%	-0.01%	-0.01%	-0.01%	0.00%	0.00%	-0.02%	-0.01%	0.00%	-0.01%	-0.01%	-0.01%	-0.02%	-0.01%
<i>Private Consumption</i>	-0.02%	-0.19%	0.03%	0.04%	0.04%	-0.03%	-0.23%	0.00%	0.02%	0.01%	-0.29%	0.01%	0.02%	0.04%	0.00%
<i>Investment</i>	-0.02%	-0.08%	0.00%	0.00%	0.00%	-0.03%	-0.04%	-0.02%	0.00%	0.00%	-0.04%	-0.02%	-0.01%	0.00%	-0.01%
<i>Energy Consumption</i>	-0.91%	-2.51%	-0.13%	0.01%	0.01%	-0.56%	-0.58%	-0.37%	-0.04%	-0.36%	-0.37%	-0.18%	-0.05%	-0.03%	-0.31%
<i>Share Coal*</i>	-0.70%	-0.74%	-0.15%	0.00%	0.00%	-0.31%	-0.25%	-0.05%	-0.05%	-0.26%	-0.13%	-0.10%	-0.01%	0.00%	-0.17%
<i>Share Oil*</i>	0.48%	-0.05%	0.08%	0.00%	0.00%	0.27%	0.20%	0.15%	0.03%	0.06%	0.10%	0.12%	0.04%	0.01%	0.10%
<i>Share Gas*</i>	0.14%	0.42%	0.05%	0.00%	0.00%	0.09%	0.00%	-0.11%	0.01%	0.17%	-	-0.04%	0.00%	-0.01%	0.06%
<i>Share Electricity*</i>	0.09%	0.37%	0.03%	0.00%	0.00%	-0.05%	0.05%	0.01%	0.00%	0.03%	0.02%	0.03%	-0.03%	0.00%	0.01%
<i>Exports</i>	-0.06%	-0.17%	-0.07%	-0.03%	-0.04%	-0.02%	0.32%	-0.02%	-0.05%	-0.06%	0.22%	-0.05%	-0.03%	-0.08%	-
<i>Exports within EU</i>	-0.05%	-0.14%	-0.08%	0.00%	-0.02%	-0.02%	0.32%	-0.02%	-0.04%	-0.08%	0.22%	-0.06%	-0.02%	-0.08%	-
<i>Exports to RW</i>	-0.06%	-0.21%	-0.07%	-0.06%	-0.05%	-0.02%	0.31%	-0.02%	-0.05%	-0.03%	0.21%	-0.05%	-0.04%	-0.08%	-0.05%
<i>Imports</i>	-0.07%	-0.30%	0.00%	0.01%	0.00%	-0.06%	-0.15%	-0.03%	0.00%	-0.05%	-0.15%	-0.04%	-0.01%	0.00%	-0.04%
<i>Real Wage Rate</i>	-0.03%	-0.22%	0.01%	0.02%	0.02%	-0.04%	-0.26%	-0.03%	0.01%	0.00%	-0.35%	-0.01%	0.01%	0.02%	-0.01%
<i>Relative Consumer Price</i>	-0.03%	-0.07%	0.02%	0.04%	0.04%	-0.08%	-0.02%	0.01%	0.02%	0.00%	0.14%	0.01%	0.00%	0.06%	0.01%
<i>Real Interest Rate</i>	-0.03%	-0.03%	-0.03%	-0.03%	-0.03%	-0.03%	-0.03%	-0.03%	-0.03%	-0.03%	-0.03%	-0.03%	-0.03%	-0.03%	-0.03%
<i>Terms of Trade</i>	0.01%	0.03%	0.03%	0.01%	0.01%	0.00%	-0.17%	-0.01%	0.01%	0.00%	-0.11%	0.01%	0.00%	0.02%	0.04%
<i>Public Surplus (% of GDP)*</i>	0.04%	0.21%	0.00%	0.00%	0.00%	0.06%	0.15%	0.03%	0.01%	0.01%	0.17%	0.02%	0.02%	0.00%	-
<i>Current Account (% of GDP)*</i>	0.01%	0.15%	-0.02%	-0.02%	-0.01%	0.01%	0.10%	0.01%	-0.01%	-0.01%	0.12%	0.00%	-0.01%	-0.03%	0.00%
<b>Total Atmospheric Emissions</b>															
<i>CO2 Emissions</i>	-1.83%	-4.70%	-0.35%	0.00%	0.02%	-0.77%	-0.87%	-0.50%	-0.15%	-0.77%	-0.59%	-0.30%	-0.02%	-0.01%	-0.54%
<i>NOX Emissions</i>	-1.15%	-4.90%	-0.28%	0.00%	0.02%	-0.65%	-0.94%	-0.52%	-0.10%	-0.56%	-0.51%	-0.18%	-0.03%	-0.01%	-0.48%
<i>SO2 Emissions</i>	-4.25%	-5.96%	-0.48%	0.01%	0.02%	-2.44%	-1.30%	-0.68%	-0.74%	-2.24%	-0.59%	-0.36%	-0.09%	-0.04%	-0.94%
<i>VOC Emissions</i>	-0.10%	-3.27%	-0.12%	0.00%	0.01%	-0.10%	-0.58%	-0.27%	0.00%	-0.06%	-0.46%	-0.04%	0.00%	0.01%	-0.18%
<i>PM Emissions</i>	-6.89%	-4.59%	-0.32%	0.02%	0.02%	-1.84%	-1.97%	-0.89%	-0.14%	-0.90%	-0.91%	-0.14%	-0.10%	-0.04%	-0.80%
<b>Environmental Policy</b>															
<i>Energy Tax (% of GDP)*</i>	0.05%	0.25%	0.01%	0.00%	0.00%	0.07%	0.17%	0.04%	0.00%	0.01%	0.20%	0.02%	0.01%	0.00%	0.03%
<b>Welfare</b>															

<i>Economic Welfare</i>	-0.01%	-0.17%	0.03%	0.04%	0.03%	-0.02%	-0.25%	0.00%	0.03%	0.01%	-0.26%	0.01%	0.02%	0.04%	0.00%
<i>Environmental Welfare</i>	3.38%	20.13%	2.69%	1.70%	0.98%	5.99%	27.25%	60.24%	1.50%	6.66%	3.94%	5.43%	1.37%	1.03%	
<i>Total Welfare</i>	0.00%	-0.13%	0.04%	0.04%	0.03%	-0.02%	-0.24%	0.01%	0.03%	0.05%	-0.26%	0.02%	0.03%	0.04%	0.01%

### Sectoral Aggregates

	Austria	Belgium	Germany	Denmark	Finland	France	Greece	Ireland	Italy	The Netherlands	Portugal	Spain	Sweden	UK	EU
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### Domestic Production in Volume

<i>Agriculture</i>	0.00%	-0.21%	-0.01%	-0.02%	0.00%	0.00%	-0.01%	-0.01%	0.00%	-0.01%	-0.02%	0.00%	-0.01%	-0.01%	-0.01%
<i>Energy Production</i>	-0.42%	-1.28%	-0.12%	0.00%	0.00%	-0.55%	-0.30%	-0.24%	-0.01%	-0.27%	-0.20%	-0.05%	-0.07%	-0.04%	-0.24%
<i>Ferrous and non ferrous metals</i>	-0.43%	-0.49%	-0.13%	0.00%	-0.01%	-0.61%	-0.07%	-0.12%	-0.06%	-0.23%	-0.07%	-0.16%	-0.03%	-0.03%	-0.21%
<i>Chemical Products</i>	-0.26%	-0.18%	-0.04%	-0.03%	-0.01%	-0.03%	-0.07%	-0.02%	-0.01%	-0.01%	-0.01%	-0.06%	-0.02%	-0.04%	-0.04%
<i>Other energy intensive</i>	-0.14%	-0.19%	-0.03%	-0.01%	-0.02%	-0.06%	-0.13%	-0.04%	-0.02%	-0.01%	0.00%	-0.07%	-0.05%	-0.03%	-0.05%
<i>Electric Goods</i>	-0.01%	0.02%	-0.03%	-0.04%	-0.02%	-0.02%	-0.01%	-0.01%	-0.02%	0.00%	0.05%	-0.03%	-0.01%	-0.04%	-0.02%
<i>Transport equipment</i>	0.00%	-0.01%	-0.03%	0.01%	-0.04%	-0.01%	-0.06%	0.00%	-0.02%	-0.01%	-0.03%	-0.03%	-0.01%	-0.03%	-0.02%
<i>Other Equipment Goods</i>	-0.02%	-0.07%	-0.03%	-0.02%	-0.02%	-0.03%	-0.03%	-0.01%	-0.02%	-0.02%	-0.04%	-0.03%	-0.03%	-0.05%	-0.03%
<i>Consumer Goods Industries</i>	0.01%	-0.21%	-0.01%	-0.02%	-0.01%	0.01%	0.02%	-0.02%	-0.01%	-0.01%	0.05%	-0.01%	-0.01%	-0.03%	-0.02%
<i>Construction</i>	-0.02%	-0.08%	0.00%	0.01%	0.01%	-0.03%	-0.03%	-0.03%	0.00%	0.00%	-0.05%	-0.02%	-0.01%	0.01%	-0.01%
<i>Telecommunication Services</i>	0.00%	-0.27%	0.00%	0.00%	0.00%	-0.04%	-0.01%	-0.01%	0.00%	0.00%	-0.05%	0.00%	0.00%	0.01%	-0.01%
<i>Transport</i>	0.03%	-0.47%	-0.02%	-0.02%	-0.01%	-0.03%	0.05%	0.00%	-0.02%	0.00%	0.01%	-0.01%	-0.01%	-0.03%	-0.03%
<i>Services of credit and insurance</i>	-0.01%	-0.10%	0.00%	0.00%	0.00%	-0.02%	-0.07%	-0.02%	0.00%	0.00%	-0.14%	-0.01%	-0.01%	-0.01%	-0.01%
<i>Other Market Services</i>	0.00%	-0.08%	0.00%	0.00%	0.01%	-0.01%	-0.04%	-0.01%	0.00%	0.00%	-0.05%	0.00%	0.00%	0.00%	-0.01%
<i>Non Market Services</i>	0.00%	0.00%	0.00%	0.01%	0.00%	0.00%	-0.01%	0.00%	0.00%	0.00%	-0.05%	0.00%	0.00%	0.02%	0.00%

### Exports in Volume

<i>Agriculture</i>	0.05%	-0.16%	-0.03%	-0.02%	-0.03%	0.03%	0.25%	0.00%	-0.02%	-0.01%	0.21%	-0.01%	-0.01%	-0.05%	-0.01%
<i>Energy Exports</i>	0.25%	-0.02%	-0.28%	-0.06%	-0.03%	0.37%	0.09%	-0.18%	-0.03%	-0.47%	0.07%	-0.09%	-0.01%	-0.10%	-0.14%
<i>Ferrous and non ferrous metals</i>	-0.53%	-0.52%	-0.24%	0.00%	-0.01%	-0.89%	-0.05%	-0.15%	-0.12%	-0.24%	-0.08%	-0.23%	-0.03%	-0.06%	-0.30%
<i>Chemical Products</i>	-0.39%	-0.16%	-0.06%	-0.04%	-0.04%	-0.01%	0.09%	-0.03%	-0.04%	-0.01%	0.17%	-0.12%	-0.02%	-0.07%	-0.06%
<i>Other energy intensive</i>	-0.24%	-0.20%	-0.10%	-0.03%	-0.03%	-0.02%	-0.10%	-0.05%	-0.05%	-0.02%	0.11%	-0.14%	-0.06%	-0.10%	-0.08%
<i>Electric Goods</i>	0.01%	0.06%	-0.06%	-0.04%	-0.03%	0.02%	0.17%	-0.01%	-0.05%	-0.01%	0.11%	-0.05%	-0.01%	-0.07%	-0.03%
<i>Transport equipment</i>	0.00%	0.01%	-0.05%	-0.09%	-0.05%	-0.01%	0.17%	0.01%	-0.05%	-0.01%	0.12%	-0.04%	-0.01%	-0.06%	-0.03%
<i>Other Equipment Goods</i>	0.00%	-0.03%	-0.06%	-0.07%	-0.05%	0.01%	0.13%	-0.01%	-0.05%	-0.02%	0.13%	-0.04%	-0.04%	-0.07%	-0.04%
<i>Consumer Goods Industries</i>	0.03%	-0.21%	-0.05%	-0.04%	-0.05%	0.06%	0.37%	-0.03%	-0.03%	-0.01%	0.25%	-0.03%	-0.03%	-0.09%	-0.02%
<i>Construction</i>	0.04%	-0.03%	-0.05%	-0.06%	-0.05%		0.21%		-0.04%	-0.01%				-0.09%	0.01%
<i>Telecommunication Services</i>	0.10%	-0.31%	-0.07%	-0.06%	-0.06%	0.09%	0.39%	0.00%	-0.04%	0.00%	0.31%	-0.02%	-0.01%	-0.09%	-0.03%
<i>Transport</i>	0.04%	-0.49%	-0.05%	-0.03%	-0.04%	0.00%	0.34%	-0.01%	-0.02%	0.00%	0.27%	-0.01%	-0.01%	-0.09%	-0.05%
<i>Services of credit and insurances</i>	0.09%	0.29%	-0.08%	-0.07%	-0.07%	0.07%	0.49%	-0.01%	-0.04%	-0.02%	0.25%	-0.02%		-0.08%	-0.02%
<i>Other Market Services</i>	0.04%	0.11%	-0.07%	-0.06%	-0.07%	0.08%	0.44%	-0.01%	-0.06%	-0.03%	0.34%	-0.03%	-0.03%	-0.09%	0.01%

<i>Non Market Services</i>	0.04%	-	-0.02%	-0.03%	-0.03%	0.04%	-	0.00%	-0.02%	0.00%	-	-	0.00%	-0.05%	0.02%
<b>Price of Exports rel. EU average<sup>9</sup></b>															
<i>Agriculture</i>	-0.03%	0.11%	0.01%	0.01%	0.02%	-0.03%	-0.15%	0.00%	0.01%	0.00%	-0.13%	0.00%	0.00%	0.03%	-0.01%
<i>Ferrous and non ferrous metals</i>	0.11%	0.10%	-0.04%	-0.14%	-0.14%	0.28%	-0.10%	-0.05%	-0.10%	-0.03%	-0.09%	-0.04%	-0.13%	-0.11%	0.18%
<i>Chemical Products</i>	0.15%	0.05%	0.00%	-0.01%	-0.01%	-0.01%	-0.05%	-0.01%	-0.01%	-0.02%	-0.09%	0.03%	-0.02%	0.00%	0.03%
<i>Other energy intensive</i>	0.08%	0.07%	0.01%	-0.02%	-0.02%	-0.02%	0.02%	-0.01%	-0.01%	-0.02%	-0.07%	0.02%	0.00%	0.01%	0.04%
<i>Electric Goods</i>	-0.02%	-0.04%	0.02%	0.00%	0.00%	-0.02%	-0.08%	0.00%	0.01%	-0.01%	-0.04%	0.01%	-0.01%	0.02%	0.01%
<i>Transport equipment</i>	-0.01%	-0.02%	0.01%	0.02%	0.01%	0.00%	-0.08%	-0.01%	0.01%	-0.01%	-0.05%	0.01%	-0.01%	0.01%	0.01%
<i>Other Equipment Goods</i>	-0.01%	0.00%	0.01%	0.02%	0.00%	-0.02%	-0.06%	0.00%	0.01%	-0.01%	-0.06%	0.00%	0.00%	0.01%	0.01%
<i>Consumer Goods Industries</i>	-0.01%	0.08%	0.01%	0.01%	0.01%	-0.03%	-0.13%	0.01%	0.00%	0.00%	-0.09%	0.00%	0.01%	0.03%	0.01%
<i>Construction</i>	-0.02%	0.03%	0.05%	0.06%	0.04%	-0.03%	-0.14%	0.03%	0.04%	0.02%	-0.14%	0.02%	0.03%	0.08%	-0.01%
<i>Telecommunication Services</i>	-0.08%	0.19%	0.03%	0.02%	0.02%	-0.08%	-0.29%	0.00%	0.00%	-0.02%	-0.23%	-0.02%	-0.01%	0.04%	0.02%
<i>Transport</i>	-0.04%	0.23%	-0.01%	0.00%	0.00%	-0.07%	-0.18%	-0.02%	-0.02%	-0.03%	-0.15%	-0.03%	-0.01%	0.02%	0.02%
<i>Services of credit and insurances</i>	-0.06%	-0.27%	0.03%	0.04%	0.04%	-0.08%	-0.36%	-0.01%	0.01%	-0.01%	-0.17%	0.00%	-0.01%	0.05%	0.01%
<i>Other Market Services</i>	-0.02%	-0.11%	0.06%	0.07%	0.07%	-0.07%	-0.29%	0.02%	0.05%	0.01%	-0.23%	0.03%	0.03%	0.08%	-0.02%
<i>Non Market Services</i>	-0.02%	-0.21%	0.07%	0.08%	0.09%	-0.02%	-0.19%	0.03%	0.07%	0.04%	-0.21%	0.04%	0.04%	0.12%	-0.03%

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<sup>9</sup> For the EU it is the relative price compared to world price

## EU MIN TAX IN 2005 AND 15EURO CARBON TAX IN 2010 FOR FINAL ENERGY CONSUMPTION

2010  
(% difference compared to reference except \* where difference)

Min EU energy tax in 2005 and EU energy tax equiv to 15 Euro/t CO2 in 2010, all countries compared to Reference Scenario

	Austria	Belgium	Germany	Denmark	Finland	France	Greece	Ireland	Italy	The Netherlands	Portugal	Spain	Sweden	UK	EU
<b>Macroeconomic Aggregates</b>															
<i>Gross Domestic Product</i>	-0.04%	0.02%	0.00%	0.00%	0.00%	0.12%	0.03%	0.00%	0.01%	-0.04%	0.04%	0.01%	0.01%	0.00%	0.02%
<i>Employment</i>	0.10%	0.53%	0.04%	0.02%	0.00%	0.23%	0.20%	0.12%	0.05%	0.01%	0.30%	0.01%	0.03%	0.06%	0.10%
<i>Private Consumption</i>	0.05%	0.52%	0.03%	0.07%	0.00%	0.10%	0.00%	0.19%	0.06%	-0.03%	0.19%	0.02%	0.04%	0.10%	0.07%
<i>Investment</i>	-0.03%	-0.22%	-0.03%	-0.07%	-0.05%	-0.29%	-0.04%	-0.06%	-0.05%	-0.02%	-0.06%	-0.05%	-0.01%	-0.08%	-0.09%
<i>Energy Consumption</i>	-3.47%	-8.21%	-1.02%	-1.35%	-0.09%	-2.00%	-1.12%	-2.45%	-0.26%	-0.87%	-2.85%	-0.38%	-0.11%	-1.13%	-1.38%
<i>Share Coal*</i>	-2.50%	-2.05%	-0.41%	-0.20%	0.04%	-0.89%	-0.81%	0.23%	-0.22%	-0.64%	-0.40%	-0.27%	-0.01%	-0.73%	-0.63%
<i>Share Oil*</i>	0.94%	-0.56%	0.24%	0.38%	0.08%	1.01%	0.72%	-0.23%	0.25%	0.00%	0.10%	0.32%	0.06%	0.82%	0.47%
<i>Share Gas*</i>	0.75%	1.09%	-0.03%	-0.40%	-0.14%	-0.17%	-0.01%	-0.14%	-0.08%	0.55%	-	-0.12%	0.00%	-0.26%	0.01%
<i>Share Electricity*</i>	0.80%	1.51%	0.21%	0.22%	0.02%	0.05%	0.10%	0.14%	0.05%	0.09%	0.30%	0.06%	-0.05%	0.17%	0.15%
<i>Exports</i>	-0.24%	-0.75%	-0.09%	-0.05%	0.00%	0.24%	0.07%	-0.11%	-0.03%	-0.14%	-0.29%	-0.04%	-0.02%	-0.15%	-
<i>Exports within EU</i>	-0.22%	-0.63%	-0.11%	0.04%	0.00%	0.24%	0.09%	-0.12%	-0.04%	-0.23%	-0.29%	-0.04%	-0.02%	-0.17%	-
<i>Exports to RW</i>	-0.26%	-0.93%	-0.08%	-0.11%	0.00%	0.23%	0.06%	-0.09%	-0.03%	0.00%	-0.30%	-0.04%	-0.02%	-0.12%	-0.08%
<i>Imports</i>	-0.17%	-0.64%	-0.08%	-0.02%	-0.02%	-0.23%	-0.09%	-0.10%	-0.03%	-0.15%	-0.19%	-0.08%	-0.02%	-0.04%	-0.19%
<i>Real Wage Rate</i>	0.24%	1.79%	0.11%	0.16%	0.00%	0.61%	0.67%	0.39%	0.23%	0.01%	0.91%	0.05%	0.10%	0.18%	0.28%
<i>Relative Consumer Price</i>	-0.04%	0.09%	-0.03%	0.00%	-0.01%	-0.47%	0.12%	0.05%	-0.13%	-0.08%	0.23%	-0.02%	-0.04%	-0.03%	-0.11%
<i>Terms of Trade</i>	0.06%	0.24%	0.03%	0.02%	-0.01%	0.00%	-0.05%	0.02%	-0.01%	-0.01%	0.10%	0.01%	-0.01%	0.05%	0.00%
<i>Public Surplus (% of GDP)*</i>	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	-
<i>Current Account (% of GDP)*</i>	0.01%	0.20%	0.01%	0.01%	0.01%	0.15%	0.06%	0.05%	0.01%	0.00%	0.04%	0.02%	0.01%	-0.02%	0.03%
<b>Total Atmospheric Emissions</b>															
<i>CO2 Emissions</i>	-7.27%	-15.42%	-2.10%	-1.85%	-0.10%	-3.12%	-2.06%	-3.49%	-1.02%	-1.65%	-4.18%	-0.66%	-0.03%	-2.97%	-2.65%
<i>NOX Emissions</i>	-5.56%	-16.27%	-1.68%	-1.67%	0.02%	-2.18%	-2.38%	-3.38%	-0.50%	-1.26%	-4.03%	-0.37%	-0.05%	-2.03%	-2.14%
<i>SO2 Emissions</i>	-14.32%	-16.98%	-1.74%	-2.12%	0.11%	-7.32%	-3.51%	-2.72%	-2.82%	-5.46%	-3.21%	-0.77%	-0.15%	-4.30%	-3.58%
<i>VOC Emissions</i>	-2.28%	-12.39%	-1.56%	-1.78%	-0.02%	-0.55%	-0.95%	-3.86%	-0.03%	-0.15%	-4.76%	-0.14%	0.01%	-1.07%	-1.21%
<i>PM Emissions</i>	-24.82%	-13.91%	-1.44%	-2.66%	0.05%	-5.58%	-5.68%	-3.37%	-0.75%	-2.29%	-4.57%	-0.39%	-0.18%	-3.52%	-3.38%
<b>Environmental Policy</b>															
<i>Energy Tax (% of GDP)*</i>	0.17%	1.04%	0.08%	0.09%	0.01%	0.35%	0.27%	0.26%	0.07%	0.02%	0.56%	0.04%	0.04%	0.13%	0.16%
<i>Reduction of Social Security Rate*</i>	0.45%	2.78%	0.19%	0.25%	0.02%	0.81%	1.11%	0.80%	0.22%	0.05%	1.60%	0.11%	0.12%	0.27%	0.43%
<b>Welfare</b>															
<i>Economic Welfare</i>	0.00%	0.23%	0.01%	0.05%	0.00%	0.00%	-0.05%	0.09%	0.04%	-0.03%	0.06%	0.01%	0.03%	0.04%	0.02%
<i>Environmental Welfare</i>	12.49%	61.74%	9.83%	8.72%	4.49%	19.66%	78.04%	293.74%	5.58%	22.46%	20.65%	17.98%	6.59%	15.71%	

<i>Total Welfare</i>	0.03%	0.37%	0.08%	0.08%	0.00%	0.02%	-0.04%	0.10%	0.05%	0.09%	0.08%	0.02%	0.03%	0.07%	0.06%
<b>Sectoral Aggregates</b>	Austria	Belgium	Germany	Denmark	Finland	France	Greece	Ireland	Italy	The Netherlands	Portugal	Spain	Sweden	UK	EU
<b>Domestic Production in Volume</b>															
<i>Agriculture</i>	0.01%	-0.98%	-0.07%	-0.10%	0.00%	0.11%	0.01%	-0.16%	0.01%	0.02%	-0.04%	0.01%	-0.02%	0.01%	-0.02%
<i>Energy Production</i>	-1.47%	-4.11%	-0.58%	-1.09%	-0.01%	-1.61%	-0.52%	-2.06%	-0.07%	-1.06%	-1.47%	-0.07%	-0.17%	-0.46%	-0.87%
<i>Ferrous and non ferrous metals</i>	-2.13%	-1.21%	-0.33%	0.10%	0.04%	-1.24%	-0.24%	-0.42%	-0.28%	-0.52%	-1.02%	-0.27%	-0.01%	-0.81%	-0.60%
<i>Chemical Products</i>	-0.11%	-0.16%	0.00%	-0.03%	0.00%	0.28%	-0.07%	-0.01%	-0.07%	0.04%	-0.10%	-0.01%	0.00%	-0.08%	0.02%
<i>Other energy intensive</i>	-0.17%	-0.31%	-0.06%	-0.17%	-0.03%	0.00%	-0.39%	-0.06%	-0.10%	-0.01%	-0.36%	-0.07%	-0.06%	-0.09%	-0.07%
<i>Electric Goods</i>	0.03%	0.40%	-0.01%	-0.13%	0.01%	-0.01%	-0.05%	-0.02%	0.05%	0.03%	0.04%	-0.07%	0.03%	-0.03%	0.01%
<i>Transport equipment</i>	-0.02%	0.00%	-0.03%	-0.02%	0.01%	0.04%	0.00%	0.11%	-0.05%	0.02%	-0.02%	-0.02%	0.02%	-0.13%	-0.02%
<i>Other Equipment Goods</i>	-0.06%	-0.22%	-0.04%	-0.04%	-0.01%	-0.01%	-0.08%	-0.01%	-0.02%	0.01%	-0.10%	-0.06%	-0.05%	-0.05%	-0.04%
<i>Consumer Goods Industries</i>	0.04%	-0.97%	-0.03%	-0.13%	0.01%	0.15%	0.03%	-0.12%	0.00%	0.02%	-0.10%	-0.01%	-0.02%	-0.03%	-0.03%
<i>Construction</i>	-0.01%	-0.21%	-0.04%	-0.04%	-0.05%	-0.33%	-0.03%	-0.08%	-0.05%	-0.02%	-0.04%	-0.05%	-0.03%	-0.04%	-0.10%
<i>Telecommunication Services</i>	0.07%	-0.61%	-0.05%	-0.07%	0.00%	-0.10%	0.08%	0.00%	0.02%	0.01%	0.03%	-0.01%	0.02%	-0.03%	-0.05%
<i>Transport</i>	-0.06%	-2.14%	-0.07%	-0.11%	0.01%	-0.06%	0.11%	-0.26%	0.02%	0.04%	-0.54%	0.02%	0.02%	-0.01%	-0.11%
<i>Services of credit and insurances</i>	0.03%	0.05%	-0.01%	-0.05%	0.00%	-0.07%	0.01%	-0.04%	0.01%	-0.01%	-0.07%	0.00%	0.00%	-0.01%	-0.02%
<i>Other Market Services</i>	0.00%	-0.09%	0.00%	0.01%	0.00%	0.02%	0.02%	0.00%	0.01%	0.00%	-0.01%	0.01%	0.01%	0.01%	0.01%
<i>Non Market Services</i>	0.00%	0.00%	0.00%	0.01%	0.00%	0.02%	0.00%	0.02%	0.00%	-0.01%	0.05%	0.00%	0.00%	0.04%	0.01%
<b>Exports in Volume</b>															
<i>Agriculture</i>	0.02%	-1.00%	-0.18%	-0.09%	-0.03%	0.18%	0.07%	-0.24%	0.05%	0.01%	-0.23%	0.03%	0.01%	-0.01%	-0.05%
<i>Energy Exports</i>	0.38%	-0.20%	-0.63%	0.55%	-0.08%	1.41%	0.08%	-0.16%	-0.18%	-2.10%	0.51%	-0.47%	-0.22%	-0.46%	-0.64%
<i>Ferrous and non ferrous metals</i>	-2.66%	-1.30%	-0.62%	0.13%	0.04%	-1.78%	-0.29%	-0.67%	-0.49%	-0.56%	-1.55%	-0.42%	-0.02%	-1.22%	-0.85%
<i>Chemical Products</i>	-0.14%	-0.08%	0.02%	-0.03%	0.01%	0.54%	-0.11%	-0.01%	-0.12%	0.04%	-0.31%	-0.01%	0.00%	-0.10%	0.06%
<i>Other energy intensive</i>	-0.29%	-0.31%	-0.11%	-0.19%	-0.03%	0.66%	-0.85%	0.01%	-0.22%	-0.02%	-0.67%	-0.11%	-0.07%	-0.20%	-0.05%
<i>Electric Goods</i>	0.07%	0.45%	0.04%	-0.14%	0.02%	0.18%	0.10%	-0.02%	0.02%	0.05%	0.03%	-0.08%	0.03%	0.00%	0.06%
<i>Transport equipment</i>	-0.04%	0.03%	-0.06%	-0.18%	0.01%	0.15%	0.22%	0.18%	-0.08%	0.03%	0.00%	-0.02%	0.02%	-0.21%	-0.01%
<i>Other Equipment Goods</i>	-0.05%	-0.26%	-0.03%	-0.12%	0.00%	0.30%	0.08%	-0.02%	0.00%	0.02%	-0.32%	-0.06%	-0.06%	-0.02%	0.01%
<i>Consumer Goods Industries</i>	0.06%	-1.16%	-0.07%	-0.17%	0.02%	0.35%	0.11%	-0.20%	0.01%	0.02%	-0.29%	-0.02%	-0.04%	-0.10%	-0.07%
<i>Construction</i>	0.07%	-0.42%	0.07%	-0.12%	0.03%		0.11%		0.15%	0.09%				-0.08%	-0.01%
<i>Telecommunication Services</i>	0.29%	-1.49%	-0.16%	-0.20%	0.02%	0.46%	0.34%	0.02%	0.16%	0.16%	0.14%	0.01%	0.07%	-0.13%	-0.08%
<i>Transport</i>	-0.07%	-2.34%	-0.12%	-0.13%	0.02%	0.34%	0.26%	-0.36%	0.14%	0.08%	-0.82%	0.04%	0.03%	-0.03%	-0.18%
<i>Services of credit and insurances</i>	0.20%	0.84%	-0.10%	-0.08%	-0.01%	0.42%	0.55%	-0.01%	0.12%	0.07%	0.07%	0.01%		-0.02%	0.09%
<i>Other Market Services</i>	-0.01%	-0.59%	-0.02%	-0.04%	0.01%	0.56%	0.13%	-0.10%	0.04%	0.07%	-0.09%	0.02%	0.00%	-0.05%	0.05%
<i>Non Market Services</i>	0.19%		0.06%	0.00%	0.01%	0.33%		0.14%	0.11%	0.07%			0.05%	0.02%	0.27%

**Price of Exports rel. EU average<sup>10</sup>**

<i>Agriculture</i>	-0.04%	0.66%	0.09%	0.04%	-0.04%	-0.18%	-0.06%	0.15%	-0.05%	-0.04%	0.12%	-0.03%	-0.04%	-0.02%	0.04%
<i>Ferrous and non ferrous metals</i>	0.87%	0.19%	-0.13%	-0.44%	-0.40%	0.46%	-0.25%	-0.09%	-0.19%	-0.15%	0.35%	-0.21%	-0.40%	0.17%	0.50%
<i>Chemical Products</i>	0.10%	0.03%	0.02%	0.05%	0.04%	-0.20%	0.09%	0.01%	0.10%	0.00%	0.15%	0.04%	0.03%	0.08%	-0.05%
<i>Other energy intensive</i>	0.12%	0.08%	0.03%	0.07%	0.00%	-0.30%	0.41%	-0.03%	0.08%	-0.03%	0.27%	0.03%	0.02%	0.08%	-0.01%
<i>Electric Goods</i>	-0.01%	-0.22%	0.01%	0.09%	0.02%	-0.03%	-0.02%	0.02%	0.02%	0.01%	-0.01%	0.06%	0.02%	0.03%	-0.04%
<i>Transport equipment</i>	0.01%	-0.06%	0.02%	0.08%	-0.01%	-0.06%	-0.10%	-0.10%	0.03%	-0.02%	-0.02%	0.01%	-0.01%	0.09%	-0.01%
<i>Other Equipment Goods</i>	0.03%	0.08%	0.02%	0.06%	0.01%	-0.11%	-0.02%	0.00%	0.01%	-0.01%	0.13%	0.03%	0.04%	0.02%	-0.03%
<i>Consumer Goods Industries</i>	-0.05%	0.41%	0.00%	0.04%	-0.03%	-0.15%	-0.06%	0.05%	-0.02%	-0.03%	0.09%	-0.01%	-0.01%	0.01%	0.04%
<i>Construction</i>	-0.04%	0.30%	-0.05%	0.08%	-0.03%	-0.42%	-0.07%	-0.03%	-0.11%	-0.08%	-0.12%	-0.05%	-0.03%	0.05%	0.00%
<i>Telecommunication Services</i>	-0.25%	0.95%	0.05%	0.09%	-0.07%	-0.35%	-0.29%	-0.06%	-0.16%	-0.15%	-0.14%	-0.06%	-0.09%	0.04%	0.05%
<i>Transport</i>	-0.06%	1.17%	-0.03%	-0.01%	-0.08%	-0.43%	-0.22%	0.16%	-0.16%	-0.14%	0.36%	-0.10%	-0.09%	-0.09%	0.08%
<i>Services of credit and insurances</i>	-0.07%	-0.72%	0.11%	0.13%	0.08%	-0.24%	-0.33%	0.04%	-0.02%	-0.03%	-0.02%	0.04%	0.01%	0.10%	-0.10%
<i>Other Market Services</i>	0.05%	0.44%	0.04%	0.09%	0.05%	-0.37%	-0.03%	0.12%	0.01%	-0.03%	0.10%	0.04%	0.06%	0.08%	-0.07%
<i>Non Market Services</i>	0.13%	-1.16%	0.34%	0.42%	0.41%	-0.10%	0.05%	0.21%	0.25%	0.31%	-0.18%	0.35%	0.36%	0.39%	-0.43%

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<sup>10</sup> For the EU it is the relative price compared to World prices

## EU MIN TAX IN 2005 AND 15EURO CARBON TAX IN 2010 FOR FINAL ENERGY CONSUMPTION, CORE GROUP OF COUNTRIES, MIN TAX FOR OTHERS

2010 Min EU energy tax in 2005 and EU energy tax equiv to 15 Euro/t CO2 in 2010, core countries compared to Reference Scenario	(% difference compared to reference except * where difference)														
	Austria	Belgium	Germany	Denmark	Finland	France	Greece	Ireland	Italy	The Netherlands	Portugal	Spain	Sweden	UK	EU
<b>Macroeconomic Aggregates</b>															
<i>Gross Domestic Product</i>	-0.04%	0.02%	0.00%	0.00%	0.00%	0.12%	0.03%	0.00%	0.01%	-0.04%	0.03%	0.00%	0.01%	0.00%	0.02%
<i>Employment</i>	0.10%	0.53%	0.04%	0.02%	0.00%	0.23%	0.13%	0.01%	0.05%	0.01%	0.09%	0.01%	0.03%	0.00%	0.08%
<i>Private Consumption</i>	0.05%	0.52%	0.04%	0.07%	0.00%	0.10%	-0.01%	0.02%	0.06%	-0.03%	0.00%	0.02%	0.05%	0.00%	0.05%
<i>Investment</i>	-0.03%	-0.22%	-0.03%	-0.06%	-0.05%	-0.29%	-0.01%	-0.01%	-0.05%	-0.02%	0.00%	-0.02%	-0.01%	-0.01%	-0.08%
<i>Energy Consumption</i>	-3.47%	-8.20%	-1.02%	-1.35%	-0.09%	-2.00%	-0.49%	-0.35%	-0.26%	-0.87%	-0.30%	-0.17%	-0.12%	-0.04%	-1.09%
<i>Share Coal*</i>	-2.50%	-2.05%	-0.41%	-0.20%	0.04%	-0.89%	-0.25%	-0.05%	-0.22%	-0.63%	-0.13%	-0.10%	-0.01%	0.00%	-0.47%
<i>Share Oil*</i>	0.94%	-0.56%	0.24%	0.38%	0.08%	1.01%	0.20%	0.15%	0.25%	0.01%	0.10%	0.11%	0.06%	0.01%	0.32%
<i>Share Gas*</i>	0.75%	1.09%	-0.03%	-0.40%	-0.14%	-0.17%	0.00%	-0.11%	-0.08%	0.54%	-	-0.04%	0.00%	-0.01%	0.05%
<i>Share Electricity*</i>	0.80%	1.51%	0.21%	0.22%	0.02%	0.05%	0.05%	0.01%	0.05%	0.09%	0.03%	0.03%	-0.05%	0.00%	0.10%
<i>Exports</i>	-0.24%	-0.75%	-0.09%	-0.05%	0.00%	0.24%	0.08%	-0.01%	-0.03%	-0.14%	0.05%	-0.03%	-0.02%	0.00%	-
<i>Exports within EU</i>	-0.23%	-0.63%	-0.12%	0.02%	-0.01%	0.24%	0.10%	-0.02%	-0.04%	-0.23%	0.04%	-0.03%	-0.03%	-0.03%	-
<i>Exports to RW</i>	-0.25%	-0.91%	-0.07%	-0.10%	0.01%	0.24%	0.07%	0.02%	-0.03%	0.02%	0.05%	-0.02%	-0.02%	0.02%	-0.04%
<i>Imports</i>	-0.17%	-0.63%	-0.07%	-0.02%	-0.02%	-0.22%	-0.05%	-0.01%	-0.02%	-0.15%	-0.02%	-0.03%	-0.02%	-0.01%	-0.18%
<i>Real Wage Rate</i>	0.24%	1.80%	0.12%	0.16%	0.01%	0.61%	0.40%	0.04%	0.23%	0.01%	0.20%	0.03%	0.11%	0.00%	0.25%
<i>Relative Consumer Price</i>	-0.05%	0.09%	-0.03%	0.00%	-0.02%	-0.48%	0.14%	0.00%	-0.13%	-0.08%	0.22%	-0.01%	-0.03%	0.00%	-0.10%
<i>Terms of Trade</i>	0.07%	0.25%	0.04%	0.02%	0.00%	0.00%	-0.04%	0.00%	0.00%	-0.01%	-0.02%	0.02%	0.00%	-0.01%	-0.04%
<i>Public Surplus (% of GDP)*</i>	0.00%	0.00%	-	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	-
<i>Current Account (% of GDP)*</i>	0.00%	0.20%	0.00%	0.00%	0.02%	0.14%	0.04%	0.01%	0.01%	0.00%	0.03%	0.00%	0.00%	0.00%	0.03%
<b>Total Atmospheric Emissions</b>															
<i>CO2 Emissions</i>	-7.27%	-15.42%	-2.10%	-1.85%	-0.10%	-3.12%	-0.77%	-0.48%	-1.02%	-1.67%	-0.52%	-0.28%	-0.04%	0.01%	-1.98%
<i>NOX Emissions</i>	-5.56%	-16.27%	-1.68%	-1.67%	0.02%	-2.18%	-0.85%	-0.49%	-0.50%	-1.26%	-0.44%	-0.16%	-0.06%	0.01%	-1.64%
<i>SO2 Emissions</i>	-14.32%	-16.98%	-1.74%	-2.13%	0.11%	-7.32%	-1.20%	-0.65%	-2.82%	-5.47%	-0.53%	-0.34%	-0.17%	-0.03%	-2.59%
<i>VOC Emissions</i>	-2.28%	-12.39%	-1.56%	-1.78%	-0.02%	-0.55%	-0.49%	-0.24%	-0.03%	-0.15%	-0.36%	-0.03%	0.01%	0.02%	-0.93%
<i>PM Emissions</i>	-24.82%	-13.91%	-1.44%	-2.67%	0.05%	-5.58%	-1.87%	-0.87%	-0.75%	-2.30%	-0.85%	-0.12%	-0.21%	-0.03%	-2.36%
<b>Environmental Policy</b>															
<i>Energy Tax (% of GDP)*</i>	0.17%	1.05%	0.08%	0.10%	0.01%	0.35%	0.17%	0.04%	0.07%	0.02%	0.20%	0.02%	0.03%	0.01%	0.14%
<i>Reduction of Social Security Rate*</i>	0.45%	2.78%	0.19%	0.25%	0.02%	0.81%	0.70%	0.10%	0.22%	0.05%	0.52%	0.05%	0.12%	0.02%	0.33%

**Welfare**

<i>Economic Welfare</i>	0.00%	0.23%	0.01%	0.05%	0.00%	0.00%	-0.04%	0.01%	0.04%	-0.03%	-0.03%	0.01%	0.03%	0.00%	0.01%
<i>Environmental Welfare</i>	12.21%	58.76%	9.15%	6.37%	3.58%	18.42%	35.83%	117.72%	5.36%	19.05%	4.70%	9.71%	4.97%	2.63%	
<i>Total Welfare</i>	0.03%	0.36%	0.07%	0.07%	0.00%	0.02%	-0.04%	0.01%	0.05%	0.07%	-0.02%	0.01%	0.03%	0.00%	0.05%

**Sectoral Aggregates**

	Austria	Belgium	Germany	Denmark	Finland	France	Greece	Ireland	Italy	The Netherlands	Portugal	Spain	Sweden	UK	EU
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**Domestic Production in Volume**

<i>Agriculture</i>	0.01%	-0.98%	-0.07%	-0.10%	0.00%	0.11%	0.02%	0.01%	0.01%	0.02%	0.03%	0.01%	-0.02%	0.01%	-0.01%
<i>Energy Production</i>	-1.47%	-4.10%	-0.58%	-1.09%	-0.01%	-1.61%	-0.23%	-0.24%	-0.07%	-1.06%	-0.15%	-0.05%	-0.17%	-0.08%	-0.77%
<i>Ferrous and non ferrous metals</i>	-2.13%	-1.21%	-0.33%	0.09%	0.04%	-1.24%	-0.10%	-0.06%	-0.28%	-0.51%	-0.07%	-0.12%	0.00%	0.03%	-0.49%
<i>Chemical Products</i>	-0.11%	-0.15%	0.00%	-0.02%	0.00%	0.29%	-0.01%	-0.02%	-0.07%	0.04%	0.03%	-0.04%	0.00%	0.01%	0.04%
<i>Other energy intensive</i>	-0.17%	-0.31%	-0.06%	-0.17%	-0.03%	0.00%	-0.11%	-0.03%	-0.10%	-0.01%	-0.02%	-0.06%	-0.06%	0.00%	-0.05%
<i>Electric Goods</i>	0.04%	0.40%	0.00%	-0.13%	0.01%	-0.01%	0.00%	0.00%	0.05%	0.03%	0.02%	-0.03%	0.03%	0.00%	0.01%
<i>Transport equipment</i>	-0.02%	0.01%	-0.03%	-0.02%	0.01%	0.04%	-0.02%	0.02%	-0.05%	0.02%	-0.04%	-0.02%	0.02%	0.00%	0.00%
<i>Other Equipment Goods</i>	-0.05%	-0.22%	-0.04%	-0.03%	-0.01%	-0.01%	-0.01%	-0.01%	-0.02%	0.02%	0.01%	-0.02%	-0.04%	0.00%	-0.03%
<i>Consumer Goods Industries</i>	0.04%	-0.97%	-0.03%	-0.13%	0.01%	0.15%	0.05%	0.01%	0.00%	0.02%	0.06%	0.01%	-0.02%	0.01%	-0.02%
<i>Construction</i>	0.00%	-0.21%	-0.04%	-0.04%	-0.05%	-0.33%	0.00%	-0.02%	-0.05%	-0.02%	0.00%	-0.02%	-0.02%	0.00%	-0.10%
<i>Telecommunication Services</i>	0.07%	-0.61%	-0.05%	-0.07%	0.00%	-0.10%	0.05%	0.00%	0.02%	0.01%	0.01%	0.00%	0.02%	0.00%	-0.04%
<i>Transport</i>	-0.06%	-2.14%	-0.07%	-0.11%	0.01%	-0.06%	0.09%	0.01%	0.02%	0.04%	0.03%	0.01%	0.02%	0.01%	-0.10%
<i>Services of credit and insurances</i>	0.03%	0.05%	-0.01%	-0.05%	0.00%	-0.07%	0.01%	-0.01%	0.01%	-0.01%	-0.03%	0.00%	0.00%	0.00%	-0.02%
<i>Other Market Services</i>	0.00%	-0.09%	0.00%	0.01%	0.00%	0.03%	0.02%	0.00%	0.01%	0.00%	0.02%	0.01%	0.01%	0.00%	0.01%
<i>Non Market Services</i>	0.00%	0.00%	0.00%	0.01%	0.00%	0.02%	0.00%	0.00%	0.00%	-0.01%	0.01%	0.00%	0.00%	0.00%	0.01%

**Exports in Volume**

<i>Agriculture</i>	0.01%	-1.00%	-0.18%	-0.09%	-0.03%	0.18%	0.03%	0.02%	0.04%	0.01%	-0.03%	0.02%	0.00%	0.01%	-0.04%
<i>Energy Exports</i>	0.38%	-0.17%	-0.62%	0.53%	-0.10%	1.41%	0.06%	-0.67%	-0.12%	-2.08%	-0.18%	-0.27%	-0.25%	-0.29%	-0.59%
<i>Ferrous and non ferrous metals</i>	-2.67%	-1.30%	-0.63%	0.12%	0.04%	-1.76%	-0.13%	-0.05%	-0.48%	-0.55%	-0.10%	-0.20%	0.00%	0.02%	-0.71%
<i>Chemical Products</i>	-0.14%	-0.08%	0.03%	-0.02%	0.02%	0.54%	0.00%	-0.02%	-0.12%	0.05%	0.00%	-0.07%	0.01%	0.01%	0.08%
<i>Other energy intensive</i>	-0.29%	-0.31%	-0.11%	-0.19%	-0.03%	0.66%	-0.24%	-0.05%	-0.21%	-0.02%	-0.04%	-0.15%	-0.07%	-0.02%	-0.01%
<i>Electric Goods</i>	0.07%	0.45%	0.05%	-0.13%	0.02%	0.19%	0.08%	0.00%	0.03%	0.05%	0.03%	-0.03%	0.03%	0.00%	0.07%
<i>Transport equipment</i>	-0.04%	0.04%	-0.06%	-0.17%	0.02%	0.15%	0.16%	0.03%	-0.07%	0.04%	0.04%	-0.02%	0.02%	0.00%	0.02%
<i>Other Equipment Goods</i>	-0.05%	-0.25%	-0.02%	-0.10%	0.01%	0.31%	0.08%	-0.01%	0.00%	0.03%	-0.03%	-0.02%	-0.06%	0.00%	0.02%
<i>Consumer Goods Industries</i>	0.05%	-1.16%	-0.07%	-0.17%	0.02%	0.35%	0.12%	0.00%	0.01%	0.02%	0.08%	0.03%	-0.04%	0.02%	-0.04%
<i>Construction</i>	0.07%	-0.42%	0.08%	-0.11%	0.04%		0.08%		0.15%	0.10%				0.02%	0.00%
<i>Telecommunication Services</i>	0.29%	-1.49%	-0.16%	-0.20%	0.02%	0.46%	0.21%	0.01%	0.15%	0.16%	0.05%	0.01%	0.06%	0.02%	-0.06%
<i>Transport</i>	-0.07%	-2.34%	-0.12%	-0.12%	0.02%	0.34%	0.19%	0.01%	0.14%	0.08%	0.13%	0.02%	0.03%	0.01%	-0.17%
<i>Services of credit and insurances</i>	0.21%	0.84%	-0.10%	-0.07%	0.00%	0.43%	0.33%	-0.04%	0.12%	0.07%	0.05%	-0.03%		0.00%	0.10%
<i>Other Market Services</i>	-0.01%	-0.59%	-0.02%	-0.03%	0.01%	0.56%	0.10%	-0.01%	0.04%	0.07%	0.06%	-0.01%	-0.01%	0.01%	0.06%

<i>Non Market Services</i>	0.19%	-	0.05%	0.00%	0.01%	0.33%	-	0.02%	0.11%	0.07%	-	-	0.04%	0.01%	0.27%
<b>Price of Exports rel. EU average<sup>11</sup></b>															
<i>Agriculture</i>	-0.02%	0.67%	0.10%	0.05%	-0.03%	-0.16%	-0.03%	-0.01%	-0.04%	-0.03%	0.00%	-0.01%	-0.03%	-0.02%	0.01%
<i>Ferrous and non ferrous metals</i>	0.95%	0.25%	-0.06%	-0.38%	-0.34%	0.52%	-0.26%	-0.25%	-0.12%	-0.08%	-0.25%	-0.24%	-0.34%	-0.34%	0.42%
<i>Chemical Products</i>	0.11%	0.04%	0.03%	0.06%	0.04%	-0.20%	0.05%	0.03%	0.10%	0.01%	0.03%	0.08%	0.04%	0.03%	-0.06%
<i>Other energy intensive</i>	0.14%	0.10%	0.05%	0.09%	0.01%	-0.29%	0.13%	0.02%	0.10%	-0.01%	0.01%	0.06%	0.04%	0.01%	-0.03%
<i>Electric Goods</i>	-0.01%	-0.23%	0.02%	0.09%	0.03%	-0.03%	-0.01%	0.02%	0.02%	0.01%	0.01%	0.04%	0.02%	0.03%	-0.04%
<i>Transport equipment</i>	0.02%	-0.05%	0.04%	0.08%	0.00%	-0.04%	-0.06%	0.00%	0.04%	-0.01%	-0.01%	0.02%	0.00%	0.00%	-0.02%
<i>Other Equipment Goods</i>	0.03%	0.08%	0.03%	0.06%	0.01%	-0.11%	-0.02%	0.01%	0.02%	-0.01%	0.02%	0.02%	0.03%	0.01%	-0.03%
<i>Consumer Goods Industries</i>	-0.03%	0.43%	0.02%	0.06%	-0.02%	-0.15%	-0.05%	0.00%	-0.01%	-0.02%	-0.03%	-0.02%	0.01%	-0.02%	0.02%
<i>Construction</i>	-0.05%	0.30%	-0.05%	0.07%	-0.03%	-0.42%	-0.05%	-0.01%	-0.11%	-0.08%	-0.07%	-0.01%	-0.03%	-0.02%	-0.01%
<i>Telecommunication Services</i>	-0.23%	0.96%	0.07%	0.10%	-0.05%	-0.33%	-0.19%	-0.04%	-0.14%	-0.13%	-0.07%	-0.06%	-0.07%	-0.05%	0.03%
<i>Transport</i>	-0.05%	1.17%	-0.02%	-0.01%	-0.07%	-0.42%	-0.16%	-0.08%	-0.15%	-0.13%	-0.13%	-0.09%	-0.08%	-0.08%	0.07%
<i>Services of credit and insurances</i>	-0.06%	-0.71%	0.11%	0.12%	0.08%	-0.24%	-0.17%	0.07%	-0.02%	-0.02%	0.02%	0.08%	0.01%	0.09%	-0.10%
<i>Other Market Services</i>	0.05%	0.44%	0.05%	0.09%	0.05%	-0.36%	0.00%	0.06%	0.01%	-0.02%	0.02%	0.06%	0.07%	0.07%	-0.07%
<i>Non Market Services</i>	0.12%	-1.17%	0.35%	0.41%	0.41%	-0.10%	0.18%	0.39%	0.24%	0.31%	0.27%	0.39%	0.36%	0.41%	-0.44%

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<sup>11</sup> For the EU it is the relative price compared to World prices

## EU MIN TAX IN 2005 AND 15EURO CARBON TAX IN 2010 FOR FINAL ENERGY CONSUMPTION, IN GERMANY ONLY, MIN TAX FOR OTHERS

2010 (% difference compared to reference except \* where difference)

Min EU energy tax in 2005 and EU energy tax equiv to 15 Euro/t CO2 in 2010, Germany alone compared to Reference Scenario

	Austria	Belgium	Germany	Denmark	Finland	France	Greece	Ireland	Italy	The Netherlands	Portugal	Spain	Sweden	UK	EU
<b>Macroeconomic Aggregates</b>															
<i>Gross Domestic Product</i>	0.01%	0.02%	0.00%	0.00%	0.00%	0.01%	0.03%	0.01%	0.00%	-0.01%	0.03%	0.00%	0.01%	0.00%	0.01%
<i>Employment</i>	0.03%	0.12%	0.04%	0.00%	0.00%	0.04%	0.13%	0.01%	0.00%	0.01%	0.09%	0.01%	0.01%	0.00%	0.03%
<i>Private Consumption</i>	0.03%	0.14%	0.03%	0.00%	0.00%	0.04%	-0.02%	0.02%	0.00%	-0.01%	0.00%	0.01%	0.02%	0.00%	0.02%
<i>Investment</i>	-0.01%	-0.03%	-0.03%	0.00%	0.00%	-0.02%	-0.01%	-0.01%	0.00%	-0.01%	0.00%	-0.02%	-0.01%	-0.01%	-0.02%
<i>Energy Consumption</i>	-0.88%	-2.42%	-1.03%	0.00%	0.00%	-0.54%	-0.49%	-0.35%	-0.05%	-0.33%	-0.29%	-0.18%	-0.06%	-0.04%	-0.50%
<i>Share Coal*</i>	-0.70%	-0.74%	-0.41%	0.00%	0.00%	-0.31%	-0.25%	-0.05%	-0.05%	-0.27%	-0.13%	-0.10%	0.00%	0.00%	-0.24%
<i>Share Oil*</i>	0.47%	-0.07%	0.24%	0.00%	0.00%	0.27%	0.20%	0.15%	0.03%	0.02%	0.10%	0.12%	0.03%	0.01%	0.16%
<i>Share Gas*</i>	0.14%	0.43%	-0.03%	0.00%	0.00%	0.09%	0.00%	-0.11%	0.01%	0.21%	-	-0.04%	0.00%	-0.01%	0.03%
<i>Share Electricity*</i>	0.09%	0.38%	0.21%	0.00%	0.00%	-0.05%	0.05%	0.01%	0.00%	0.03%	0.02%	0.03%	-0.03%	0.00%	0.05%
<i>Exports</i>	-0.05%	-0.20%	-0.08%	0.00%	0.00%	-0.03%	0.09%	0.00%	-0.01%	-0.05%	0.05%	-0.02%	-0.01%	0.00%	-
<i>Exports within EU</i>	-0.05%	-0.17%	-0.08%	0.04%	0.01%	-0.02%	0.10%	0.00%	0.01%	-0.07%	0.05%	-0.01%	0.00%	0.00%	-
<i>Exports to RW</i>	-0.05%	-0.25%	-0.08%	-0.03%	-0.01%	-0.03%	0.08%	-0.01%	-0.01%	-0.01%	0.04%	-0.03%	-0.02%	0.00%	-0.04%
<i>Imports</i>	-0.06%	-0.19%	-0.07%	0.00%	0.00%	-0.04%	-0.05%	-0.01%	-0.02%	-0.05%	-0.03%	-0.04%	-0.01%	-0.01%	-0.06%
<i>Real Wage Rate</i>	0.09%	0.43%	0.11%	0.01%	0.00%	0.14%	0.40%	0.04%	0.00%	0.01%	0.20%	0.02%	0.05%	0.00%	0.09%
<i>Relative Consumer Price</i>	-0.02%	0.01%	-0.02%	0.01%	0.00%	-0.06%	0.14%	0.01%	-0.01%	-0.03%	0.23%	0.00%	-0.02%	0.01%	-0.02%
<i>Terms of Trade</i>	0.00%	0.05%	0.04%	0.00%	0.00%	0.00%	-0.05%	0.00%	-0.01%	-0.01%	-0.03%	0.00%	0.00%	-0.02%	0.03%
<i>Public Surplus (% of GDP)*</i>	0.00%	0.00%	-	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	-
<i>Current Account (% of GDP)*</i>	0.00%	0.05%	0.00%	0.00%	0.00%	0.01%	0.04%	0.01%	0.00%	0.00%	0.03%	0.00%	0.00%	0.00%	0.00%
<b>Total Atmospheric Emissions</b>															
<i>CO2 Emissions</i>	-1.81%	-4.59%	-2.11%	0.00%	0.01%	-0.75%	-0.78%	-0.48%	-0.16%	-0.70%	-0.52%	-0.29%	-0.02%	-0.01%	-0.95%
<i>NOX Emissions</i>	-1.13%	-4.79%	-1.70%	0.00%	0.01%	-0.63%	-0.85%	-0.50%	-0.10%	-0.53%	-0.44%	-0.17%	-0.03%	-0.01%	-0.77%
<i>SO2 Emissions</i>	-4.21%	-5.84%	-1.77%	0.01%	0.01%	-2.42%	-1.20%	-0.66%	-0.75%	-2.27%	-0.53%	-0.36%	-0.08%	-0.05%	-1.35%
<i>VOC Emissions</i>	-0.08%	-3.15%	-1.57%	0.00%	0.01%	-0.07%	-0.49%	-0.25%	-0.01%	-0.04%	-0.36%	-0.04%	0.00%	0.01%	-0.48%
<i>PM Emissions</i>	-6.86%	-4.45%	-1.46%	0.01%	0.01%	-1.82%	-1.87%	-0.87%	-0.14%	-0.91%	-0.85%	-0.14%	-0.10%	-0.05%	-1.12%
<b>Environmental Policy</b>															
<i>Energy Tax (% of GDP)*</i>	0.05%	0.25%	0.08%	0.00%	0.00%	0.07%	0.17%	0.04%	0.01%	0.01%	0.20%	0.02%	0.01%	0.00%	0.05%
<i>Reduction of Social Security Rate*</i>	0.13%	0.64%	0.19%	0.00%	0.00%	0.18%	0.70%	0.11%	0.01%	0.02%	0.52%	0.05%	0.05%	0.02%	0.14%
<b>Welfare</b>															
<i>Economic Welfare</i>	0.01%	0.07%	0.01%	0.00%	0.00%	0.02%	-0.05%	0.01%	0.00%	-0.01%	-0.03%	0.00%	0.01%	0.00%	0.01%
<i>Environmental Welfare</i>	4.95%	20.94%	5.38%	2.61%	1.88%	6.71%	27.30%	69.06%	1.91%	7.53%	3.81%	5.89%	2.48%	1.27%	

<i>Total Welfare</i>	0.02%	0.12%	0.05%	0.01%	0.00%	0.03%	-0.04%	0.01%	0.00%	0.03%	-0.03%	0.01%	0.02%	0.00%	0.02%
<b>Sectoral Aggregates</b>	Austria	Belgium	Germany	Denmark	Finland	France	Greece	Ireland	Italy	The Netherlands	Portugal	Spain	Sweden	UK	EU
<b>Domestic Production in Volume</b>															
<i>Agriculture</i>	0.01%	-0.20%	-0.07%	0.00%	0.00%	0.02%	0.02%	0.01%	0.00%	0.01%	0.03%	0.01%	0.00%	0.00%	-0.01%
<i>Energy Production</i>	-0.39%	-1.24%	-0.57%	0.00%	-0.01%	-0.53%	-0.23%	-0.22%	-0.02%	-0.35%	-0.13%	-0.04%	-0.08%	-0.05%	-0.33%
<i>Ferrous and non ferrous metals</i>	-0.42%	-0.47%	-0.34%	0.03%	0.02%	-0.60%	-0.10%	-0.08%	-0.04%	-0.21%	-0.09%	-0.13%	-0.01%	0.01%	-0.25%
<i>Chemical Products</i>	-0.24%	-0.14%	0.00%	-0.01%	0.00%	-0.01%	-0.01%	-0.01%	0.00%	0.01%	0.03%	-0.04%	-0.01%	0.01%	-0.02%
<i>Other energy intensive</i>	-0.13%	-0.16%	-0.05%	-0.01%	0.00%	-0.05%	-0.10%	-0.03%	-0.01%	0.00%	0.00%	-0.05%	-0.04%	0.00%	-0.04%
<i>Electric Goods</i>	0.01%	0.08%	0.00%	-0.02%	0.00%	-0.01%	0.00%	0.00%	-0.01%	0.01%	0.03%	-0.02%	0.01%	0.00%	0.00%
<i>Transport equipment</i>	0.01%	0.02%	-0.03%	0.00%	-0.01%	-0.01%	-0.02%	0.02%	-0.01%	0.01%	-0.03%	-0.01%	0.01%	0.00%	-0.01%
<i>Other Equipment Goods</i>	0.00%	-0.03%	-0.03%	-0.01%	-0.01%	-0.01%	-0.01%	0.00%	-0.01%	0.01%	0.02%	-0.02%	-0.01%	0.00%	-0.02%
<i>Consumer Goods Industries</i>	0.03%	-0.20%	-0.04%	-0.01%	0.00%	0.03%	0.04%	0.00%	0.01%	0.01%	0.05%	0.00%	0.00%	0.01%	-0.01%
<i>Construction</i>	-0.01%	-0.03%	-0.03%	0.00%	0.00%	-0.02%	0.00%	-0.02%	0.00%	-0.01%	0.00%	-0.02%	-0.01%	0.00%	-0.02%
<i>Telecommunication Services</i>	0.02%	-0.12%	-0.05%	0.00%	0.00%	-0.01%	0.05%	0.00%	0.00%	0.00%	0.01%	0.00%	0.01%	0.00%	-0.01%
<i>Transport</i>	0.06%	-0.42%	-0.08%	-0.01%	0.00%	-0.01%	0.09%	0.01%	0.00%	0.01%	0.02%	0.01%	0.01%	0.01%	-0.03%
<i>Services of credit and insurances</i>	0.01%	0.02%	-0.01%	0.00%	0.00%	-0.02%	0.01%	-0.01%	0.00%	0.00%	-0.03%	0.00%	0.00%	0.00%	-0.01%
<i>Other Market Services</i>	0.01%	0.00%	0.00%	0.00%	0.00%	0.01%	0.02%	0.01%	0.00%	0.00%	0.02%	0.00%	0.01%	0.00%	0.00%
<i>Non Market Services</i>	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.01%	0.00%	0.00%	0.00%	0.00%
<b>Exports in Volume</b>															
<i>Agriculture</i>	0.03%	-0.20%	-0.17%	0.00%	0.00%	0.02%	0.04%	0.01%	0.01%	0.01%	-0.01%	0.01%	0.01%	0.01%	-0.02%
<i>Energy Exports</i>	0.28%	-0.16%	-0.11%	-0.09%	-0.04%	0.33%	0.06%	-0.19%	-0.04%	-0.70%	0.02%	-0.08%	-0.09%	-0.12%	-0.22%
<i>Ferrous and non ferrous metals</i>	-0.54%	-0.51%	-0.62%	0.04%	0.02%	-0.88%	-0.11%	-0.09%	-0.09%	-0.23%	-0.14%	-0.19%	-0.01%	0.01%	-0.36%
<i>Chemical Products</i>	-0.37%	-0.14%	0.02%	-0.01%	0.00%	-0.01%	-0.01%	-0.01%	0.00%	0.01%	0.02%	-0.08%	-0.01%	0.01%	-0.02%
<i>Other energy intensive</i>	-0.23%	-0.22%	-0.07%	-0.01%	-0.01%	-0.02%	-0.22%	-0.03%	-0.02%	0.00%	0.00%	-0.11%	-0.05%	0.01%	-0.06%
<i>Electric Goods</i>	0.03%	0.10%	0.04%	-0.02%	0.00%	0.02%	0.08%	0.00%	-0.01%	0.01%	0.03%	-0.02%	0.01%	0.00%	0.02%
<i>Transport equipment</i>	0.00%	0.03%	-0.05%	-0.03%	-0.01%	0.00%	0.16%	0.04%	-0.01%	0.01%	0.05%	-0.01%	0.01%	0.00%	-0.02%
<i>Other Equipment Goods</i>	0.00%	-0.04%	-0.01%	-0.03%	-0.01%	0.01%	0.08%	0.00%	-0.01%	0.01%	0.00%	-0.01%	-0.01%	0.00%	-0.01%
<i>Consumer Goods Industries</i>	0.03%	-0.24%	-0.09%	-0.01%	0.00%	0.05%	0.12%	-0.01%	0.01%	0.01%	0.06%	0.00%	-0.01%	0.01%	-0.02%
<i>Construction</i>	0.06%	-0.04%	0.07%	-0.03%	-0.01%		0.09%		-0.01%	0.03%				0.01%	0.04%
<i>Telecommunication Services</i>	0.10%	-0.30%	-0.16%	-0.01%	0.00%	0.09%	0.21%	0.00%	0.02%	0.06%	0.05%	0.03%	0.02%	0.01%	-0.02%
<i>Transport</i>	0.06%	-0.46%	-0.11%	-0.01%	0.00%	-0.01%	0.19%	0.01%	0.02%	0.03%	0.13%	0.02%	0.01%	0.01%	-0.04%
<i>Services of credit and insurances</i>	0.10%	0.19%	-0.07%	-0.02%	-0.01%	0.05%	0.37%	0.00%	0.01%	0.04%	0.11%	0.02%		0.01%	0.02%
<i>Other Market Services</i>	0.02%	-0.11%	-0.01%	-0.02%	-0.01%	0.06%	0.11%	0.00%	0.00%	0.02%	0.07%	0.01%	0.00%	0.01%	0.01%
<i>Non Market Services</i>	0.06%		0.05%	-0.01%	0.00%	0.05%		0.02%	0.01%	0.03%			0.02%	0.01%	0.05%

**Price of Exports rel. EU average<sup>12</sup>**

<i>Agriculture</i>	-0.03%	0.13%	0.10%	-0.01%	-0.02%	-0.03%	-0.03%	-0.01%	-0.02%	-0.02%	0.00%	-0.02%	-0.03%	-0.02%	0.02%
<i>Ferrous and non ferrous metals</i>	0.08%	0.07%	0.12%	-0.19%	-0.17%	0.25%	-0.12%	-0.09%	-0.14%	-0.06%	-0.10%	-0.09%	-0.17%	-0.18%	0.22%
<i>Chemical Products</i>	0.16%	0.05%	-0.02%	0.00%	0.00%	0.00%	0.00%	0.00%	-0.01%	-0.02%	-0.01%	0.03%	-0.01%	-0.01%	0.01%
<i>Other energy intensive</i>	0.08%	0.08%	0.01%	-0.02%	-0.02%	-0.01%	0.08%	-0.01%	-0.02%	-0.02%	-0.02%	0.02%	0.00%	-0.02%	0.02%
<i>Electric Goods</i>	-0.01%	-0.05%	-0.01%	0.01%	0.01%	0.00%	-0.03%	0.01%	0.02%	0.01%	0.00%	0.02%	0.00%	0.01%	-0.02%
<i>Transport equipment</i>	-0.01%	-0.02%	0.02%	0.00%	0.00%	0.00%	-0.08%	-0.02%	0.00%	-0.01%	-0.02%	0.00%	-0.01%	-0.01%	0.00%
<i>Other Equipment Goods</i>	-0.01%	0.01%	0.01%	0.01%	0.00%	-0.01%	-0.04%	0.00%	0.01%	-0.01%	0.00%	0.00%	0.00%	0.00%	0.00%
<i>Consumer Goods Industries</i>	-0.02%	0.09%	0.04%	0.00%	-0.01%	-0.03%	-0.05%	0.00%	-0.01%	-0.01%	-0.02%	-0.01%	0.00%	-0.01%	0.02%
<i>Construction</i>	-0.02%	0.06%	-0.02%	0.05%	0.03%	-0.02%	-0.03%	0.03%	0.03%	0.01%	-0.04%	0.01%	0.02%	0.02%	-0.03%
<i>Telecommunication Services</i>	-0.07%	0.19%	0.10%	0.00%	-0.01%	-0.07%	-0.16%	0.00%	-0.03%	-0.04%	-0.04%	-0.03%	-0.02%	-0.02%	0.01%
<i>Transport</i>	-0.05%	0.22%	0.03%	-0.01%	-0.01%	-0.07%	-0.11%	-0.02%	-0.03%	-0.04%	-0.08%	-0.03%	-0.02%	-0.03%	0.01%
<i>Services of credit and insurances</i>	-0.04%	-0.17%	0.03%	0.03%	0.03%	-0.02%	-0.24%	0.01%	0.01%	-0.01%	-0.06%	0.00%	-0.01%	0.02%	-0.02%
<i>Other Market Services</i>	-0.01%	0.07%	0.00%	0.04%	0.02%	-0.04%	-0.07%	0.01%	0.01%	-0.01%	-0.03%	0.01%	0.02%	0.02%	-0.02%
<i>Non Market Services</i>	-0.03%	-0.29%	-0.01%	0.08%	0.08%	-0.01%	-0.18%	0.03%	0.07%	0.03%	-0.08%	0.04%	0.04%	0.07%	-0.08%

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<sup>12</sup> For the EU it is the relative price compared to World prices

## EU MIN TAX IN 2005 AND 15EURO CARBON TAX IN 2010 FOR FINAL ENERGY CONSUMPTION, IN FRANCE ONLY, MIN TAX FOR OTHERS

2010 (% difference compared to reference except \* where difference)

Min EU energy tax in 2005 and EU energy tax equiv to 15 Euro/t CO2 in 2010, France alone compared to Reference Scenario

	Austria	Belgium	Germany	Denmark	Finland	France	Greece	Ireland	Italy	The Netherlands	Portugal	Spain	Sweden	UK	EU
<b>Macroeconomic Aggregates</b>															
<i>Gross Domestic Product</i>	0.01%	0.02%	0.00%	0.00%	0.00%	0.12%	0.03%	0.00%	0.00%	-0.01%	0.03%	0.00%	0.01%	0.00%	0.02%
<i>Employment</i>	0.03%	0.12%	0.01%	0.00%	0.00%	0.23%	0.13%	0.01%	0.00%	0.01%	0.09%	0.01%	0.01%	0.00%	0.05%
<i>Private Consumption</i>	0.03%	0.15%	0.01%	0.01%	0.00%	0.11%	-0.01%	0.02%	0.00%	0.00%	0.00%	0.02%	0.02%	0.01%	0.03%
<i>Investment</i>	-0.01%	-0.03%	0.00%	0.00%	0.00%	-0.29%	-0.01%	-0.01%	0.00%	-0.01%	0.00%	-0.02%	-0.01%	0.00%	-0.05%
<i>Energy Consumption</i>	-0.88%	-2.43%	-0.13%	0.00%	0.00%	-1.99%	-0.49%	-0.36%	-0.05%	-0.33%	-0.29%	-0.18%	-0.05%	-0.03%	-0.49%
<i>Share Coal*</i>	-0.70%	-0.77%	-0.15%	0.00%	0.00%	-0.89%	-0.25%	-0.05%	-0.05%	-0.28%	-0.13%	-0.10%	-0.01%	0.00%	-0.25%
<i>Share Oil*</i>	0.47%	-0.05%	0.08%	0.00%	0.00%	1.02%	0.20%	0.15%	0.03%	0.05%	0.10%	0.11%	0.03%	0.01%	0.21%
<i>Share Gas*</i>	0.14%	0.43%	0.05%	0.00%	0.00%	-0.17%	0.00%	-0.10%	0.01%	0.20%	-	-0.04%	0.00%	-0.01%	0.03%
<i>Share Electricity*</i>	0.09%	0.38%	0.03%	0.00%	0.00%	0.04%	0.05%	0.01%	0.00%	0.03%	0.02%	0.03%	-0.03%	0.00%	0.00%
<i>Exports</i>	-0.05%	-0.19%	-0.02%	0.00%	0.00%	0.25%	0.08%	0.00%	0.00%	-0.04%	0.05%	-0.02%	-0.01%	0.00%	
<i>Exports within EU</i>	-0.07%	-0.19%	-0.05%	0.02%	-0.02%	0.24%	0.06%	-0.02%	-0.03%	-0.08%	0.03%	-0.05%	-0.03%	-0.03%	-
<i>Exports to RW</i>	-0.03%	-0.21%	0.01%	-0.01%	0.01%	0.26%	0.09%	0.03%	0.02%	0.02%	0.08%	0.00%	0.01%	0.02%	0.04%
<i>Imports</i>	-0.04%	-0.17%	0.00%	0.01%	0.00%	-0.20%	-0.04%	-0.01%	0.00%	-0.04%	-0.02%	-0.02%	0.00%	0.01%	-0.10%
<i>Real Wage Rate</i>	0.09%	0.45%	0.02%	0.01%	0.00%	0.62%	0.41%	0.04%	0.01%	0.02%	0.20%	0.03%	0.05%	0.01%	0.13%
<i>Relative Consumer Price</i>	-0.03%	-0.01%	-0.02%	0.00%	-0.01%	-0.48%	0.13%	-0.01%	-0.02%	-0.04%	0.21%	-0.02%	-0.03%	0.00%	-0.09%
<i>Terms of Trade</i>	0.01%	0.07%	0.02%	0.01%	0.00%	0.00%	-0.04%	0.00%	0.00%	0.00%	-0.02%	0.03%	0.01%	0.01%	-0.10%
<i>Public Surplus (% of GDP)*</i>	0.00%	0.00%	-	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	-
<i>Current Account (% of GDP)*</i>	0.00%	0.05%	0.00%	0.00%	0.00%	0.15%	0.04%	0.01%	0.00%	0.01%	0.03%	0.00%	0.00%	0.00%	0.02%
<b>Total Atmospheric Emissions</b>															
<i>CO2 Emissions</i>	-1.81%	-4.61%	-0.34%	0.00%	0.01%	-3.13%	-0.78%	-0.49%	-0.16%	-0.69%	-0.52%	-0.29%	-0.02%	0.00%	-0.82%
<i>NOX Emissions</i>	-1.13%	-4.80%	-0.28%	0.00%	0.01%	-2.19%	-0.85%	-0.51%	-0.10%	-0.50%	-0.45%	-0.17%	-0.03%	0.00%	-0.66%
<i>SO2 Emissions</i>	-4.22%	-5.87%	-0.47%	0.00%	0.01%	-7.34%	-1.20%	-0.67%	-0.75%	-2.09%	-0.54%	-0.35%	-0.09%	-0.03%	-1.30%
<i>VOC Emissions</i>	-0.08%	-3.16%	-0.13%	0.00%	0.00%	-0.55%	-0.49%	-0.26%	-0.01%	-0.05%	-0.36%	-0.04%	0.00%	0.00%	-0.24%
<i>PM Emissions</i>	-6.87%	-4.50%	-0.31%	0.00%	0.00%	-5.59%	-1.87%	-0.88%	-0.14%	-0.79%	-0.85%	-0.13%	-0.10%	-0.03%	-1.11%
<b>Environmental Policy</b>															
<i>Energy Tax (% of GDP)*</i>	0.05%	0.25%	0.01%	0.00%	0.00%	0.35%	0.17%	0.04%	0.01%	0.01%	0.20%	0.02%	0.01%	0.00%	0.07%
<i>Reduction of Social Security Rate*</i>	0.14%	0.65%	0.02%	0.00%	0.00%	0.81%	0.70%	0.10%	0.01%	0.02%	0.52%	0.06%	0.05%	0.02%	0.20%
<b>Welfare</b>															
<i>Economic Welfare</i>	0.02%	0.08%	0.01%	0.01%	0.00%	0.00%	-0.04%	0.01%	0.00%	0.00%	-0.03%	0.01%	0.02%	0.00%	0.01%
<i>Environmental Welfare</i>	4.01%	23.10%	3.31%	2.08%	1.23%	13.49%	27.16%	68.18%	2.45%	7.59%	4.08%	7.44%	1.62%	1.28%	

<i>Total Welfare</i>	0.03%	0.13%	0.03%	0.01%	0.00%	0.02%	-0.04%	0.01%	0.01%	0.04%	-0.02%	0.01%	0.02%	0.00%	0.02%
<b>Sectoral Aggregates</b>	Austria	Belgium	Germany	Denmark	Finland	France	Greece	Ireland	Italy	The Netherlands	Portugal	Spain	Sweden	UK	EU
<b>Domestic Production in Volume</b>															
<i>Agriculture</i>	0.01%	-0.19%	0.00%	-0.01%	0.00%	0.11%	0.01%	0.00%	0.00%	0.01%	0.03%	0.01%	0.00%	0.00%	0.03%
<i>Energy Production</i>	-0.40%	-1.21%	-0.12%	0.00%	0.00%	-1.58%	-0.23%	-0.22%	-0.02%	-0.28%	-0.13%	-0.04%	-0.07%	-0.03%	-0.41%
<i>Ferrous and non ferrous metals</i>	-0.39%	-0.50%	-0.08%	0.03%	0.02%	-1.22%	-0.10%	-0.08%	-0.05%	-0.19%	-0.08%	-0.13%	-0.01%	0.02%	-0.26%
<i>Chemical Products</i>	-0.24%	-0.12%	-0.01%	-0.01%	0.00%	0.29%	0.00%	-0.01%	0.00%	0.02%	0.03%	-0.04%	0.00%	0.01%	0.04%
<i>Other energy intensive</i>	-0.13%	-0.17%	-0.02%	-0.01%	-0.01%	0.01%	-0.10%	-0.03%	-0.01%	-0.01%	-0.01%	-0.06%	-0.05%	0.00%	-0.02%
<i>Electric Goods</i>	0.02%	0.09%	0.00%	-0.01%	0.00%	0.00%	0.01%	0.00%	-0.01%	0.01%	0.04%	-0.02%	0.02%	0.00%	0.00%
<i>Transport equipment</i>	0.01%	0.04%	0.00%	0.00%	0.00%	0.05%	-0.01%	0.01%	0.00%	0.01%	-0.03%	-0.01%	0.01%	0.00%	0.02%
<i>Other Equipment Goods</i>	0.00%	-0.03%	0.00%	-0.01%	0.00%	0.00%	-0.01%	0.00%	-0.01%	0.01%	0.02%	-0.02%	-0.01%	0.00%	0.00%
<i>Consumer Goods Industries</i>	0.02%	-0.17%	0.01%	-0.01%	0.00%	0.15%	0.04%	0.00%	0.01%	0.02%	0.05%	0.01%	0.00%	0.01%	0.03%
<i>Construction</i>	0.00%	-0.02%	0.00%	0.00%	0.00%	-0.33%	0.00%	-0.02%	0.00%	0.00%	0.00%	-0.01%	-0.01%	0.00%	-0.07%
<i>Telecommunication Services</i>	0.03%	-0.11%	0.00%	0.00%	0.00%	-0.10%	0.05%	0.00%	0.00%	0.00%	0.01%	0.00%	0.01%	0.00%	-0.02%
<i>Transport</i>	0.06%	-0.42%	0.00%	-0.01%	0.00%	-0.06%	0.09%	0.01%	0.00%	0.01%	0.02%	0.01%	0.01%	0.00%	-0.02%
<i>Services of credit and insurances</i>	0.01%	0.02%	0.00%	0.00%	0.00%	-0.07%	0.01%	-0.01%	0.00%	0.00%	-0.03%	0.00%	0.00%	0.00%	-0.01%
<i>Other Market Services</i>	0.02%	0.00%	0.00%	0.00%	0.00%	0.03%	0.02%	0.00%	0.00%	0.00%	0.02%	0.01%	0.01%	0.00%	0.01%
<i>Non Market Services</i>	0.00%	0.00%	0.00%	0.00%	0.00%	0.02%	0.00%	0.00%	0.00%	0.00%	0.01%	0.00%	0.00%	0.00%	0.01%
<b>Exports in Volume</b>															
<i>Agriculture</i>	0.00%	-0.20%	-0.01%	-0.01%	-0.01%	0.20%	0.02%	0.01%	0.01%	0.00%	-0.03%	0.00%	-0.01%	0.00%	0.04%
<i>Energy Exports</i>	0.20%	-0.14%	-0.35%	-0.06%	-0.01%	1.68%	0.06%	-0.17%	-0.02%	-0.55%	0.00%	-0.07%	-0.03%	-0.07%	-0.04%
<i>Ferrous and non ferrous metals</i>	-0.48%	-0.54%	-0.16%	0.04%	0.03%	-1.72%	-0.12%	-0.10%	-0.10%	-0.20%	-0.12%	-0.22%	-0.01%	0.01%	-0.38%
<i>Chemical Products</i>	-0.37%	-0.11%	-0.01%	-0.01%	0.01%	0.55%	0.01%	-0.01%	0.02%	0.02%	0.03%	-0.06%	0.00%	0.01%	0.07%
<i>Other energy intensive</i>	-0.25%	-0.23%	-0.07%	-0.03%	-0.02%	0.68%	-0.22%	-0.04%	-0.04%	-0.04%	-0.02%	-0.13%	-0.07%	-0.02%	0.03%
<i>Electric Goods</i>	0.04%	0.11%	0.01%	-0.01%	0.00%	0.18%	0.09%	0.01%	0.00%	0.01%	0.05%	-0.01%	0.02%	0.00%	0.04%
<i>Transport equipment</i>	0.02%	0.05%	0.00%	-0.03%	0.01%	0.16%	0.18%	0.04%	0.00%	0.02%	0.06%	-0.01%	0.01%	0.01%	0.04%
<i>Other Equipment Goods</i>	0.01%	-0.03%	0.00%	-0.03%	0.00%	0.32%	0.10%	0.00%	-0.01%	0.01%	0.00%	0.00%	-0.01%	0.00%	0.04%
<i>Consumer Goods Industries</i>	0.03%	-0.21%	0.02%	-0.01%	0.01%	0.35%	0.11%	-0.01%	0.02%	0.02%	0.06%	0.02%	0.00%	0.01%	0.05%
<i>Construction</i>	0.07%	-0.01%	0.02%	-0.02%	0.01%	-	0.10%	-	0.01%	0.05%	-	-	-	0.01%	0.04%
<i>Telecommunication Services</i>	0.09%	-0.31%	-0.01%	-0.02%	0.01%	0.44%	0.21%	0.01%	0.01%	0.05%	0.06%	0.01%	0.02%	0.00%	0.01%
<i>Transport</i>	0.07%	-0.46%	0.00%	-0.01%	0.00%	0.33%	0.19%	0.00%	0.02%	0.02%	0.13%	0.02%	0.01%	0.00%	0.00%
<i>Services of credit and insurances</i>	0.09%	0.16%	-0.03%	-0.03%	-0.01%	0.46%	0.35%	-0.01%	0.00%	0.01%	0.10%	-0.01%	-	0.00%	0.06%
<i>Other Market Services</i>	0.02%	-0.13%	-0.02%	-0.02%	-0.01%	0.55%	0.11%	-0.01%	0.00%	0.01%	0.07%	-0.01%	0.00%	-0.01%	0.08%
<i>Non Market Services</i>	0.06%	-	0.01%	-0.01%	0.00%	0.32%	-	0.02%	0.01%	0.02%	-	-	0.02%	0.00%	0.26%

**Price of Exports rel. EU average<sup>13</sup>**

<i>Agriculture</i>	0.03%	0.16%	0.02%	0.04%	0.04%	-0.10%	0.03%	0.04%	0.02%	0.02%	0.04%	0.03%	0.03%	0.03%	-0.04%
<i>Ferrous and non ferrous metals</i>	0.06%	0.05%	-0.12%	-0.20%	-0.19%	0.66%	-0.12%	-0.11%	-0.16%	-0.08%	-0.10%	-0.10%	-0.18%	-0.19%	0.23%
<i>Chemical Products</i>	0.21%	0.08%	0.04%	0.04%	0.04%	-0.21%	0.04%	0.03%	0.03%	0.02%	0.01%	0.06%	0.03%	0.03%	-0.05%
<i>Other energy intensive</i>	0.13%	0.10%	0.05%	0.03%	0.02%	-0.27%	0.14%	0.04%	0.03%	0.02%	0.02%	0.07%	0.05%	0.03%	-0.04%
<i>Electric Goods</i>	0.00%	-0.05%	0.02%	0.02%	0.02%	-0.05%	-0.02%	0.01%	0.02%	0.01%	0.00%	0.02%	0.01%	0.02%	-0.03%
<i>Transport equipment</i>	0.01%	-0.01%	0.02%	0.03%	0.02%	-0.03%	-0.06%	0.00%	0.02%	0.01%	-0.01%	0.02%	0.02%	0.01%	-0.03%
<i>Other Equipment Goods</i>	0.01%	0.02%	0.02%	0.04%	0.02%	-0.11%	-0.02%	0.02%	0.03%	0.01%	0.01%	0.02%	0.02%	0.02%	-0.03%
<i>Consumer Goods Industries</i>	0.01%	0.10%	0.02%	0.02%	0.02%	-0.11%	-0.02%	0.02%	0.02%	0.01%	-0.01%	0.01%	0.02%	0.02%	-0.02%
<i>Construction</i>	-0.02%	0.04%	0.02%	0.04%	0.02%	-0.39%	-0.04%	0.01%	0.02%	0.00%	-0.05%	0.00%	0.01%	0.02%	-0.03%
<i>Telecommunication Services</i>	-0.05%	0.21%	0.01%	0.03%	0.01%	-0.28%	-0.14%	0.01%	0.00%	-0.02%	-0.03%	-0.01%	0.00%	0.01%	-0.02%
<i>Transport</i>	-0.02%	0.24%	0.00%	0.02%	0.01%	-0.33%	-0.08%	-0.01%	0.00%	-0.02%	-0.07%	0.00%	0.01%	0.00%	-0.02%
<i>Services of credit and insurances</i>	-0.01%	-0.14%	0.05%	0.07%	0.05%	-0.28%	-0.22%	0.03%	0.04%	0.02%	-0.03%	0.03%	0.03%	0.06%	-0.06%
<i>Other Market Services</i>	0.05%	0.13%	0.07%	0.10%	0.07%	-0.35%	0.00%	0.06%	0.07%	0.04%	0.02%	0.07%	0.07%	0.08%	-0.08%
<i>Non Market Services</i>	0.32%	0.04%	0.40%	0.43%	0.42%	-0.11%	0.16%	0.36%	0.39%	0.37%	0.25%	0.37%	0.38%	0.41%	-0.41%

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<sup>13</sup> For the EU it is the relative price compared to World prices

## EU MIN TAX IN 2005 AND 15EURO CARBON TAX IN 2010 FOR FINAL ENERGY CONSUMPTION, IN ALL COUNTRIES, EU CURRENT ACCOUNT FIX

2010	(% difference compared to reference except * where difference)														
Min EU energy tax in 2005 and EU energy tax equiv to 15 Euro/t CO2 in 2010, all countries, EU CA fix compared to Reference Scenario															
	Austria	Belgium	Germany	Denmark	Finland	France	Greece	Ireland	Italy	The Netherlands	Portugal	Spain	Sweden	UK	EU
<b>Macroeconomic Aggregates</b>															
<i>Gross Domestic Product</i>	-0.11%	-0.21%	-0.05%	-0.03%	-0.03%	0.01%	-0.04%	-0.08%	-0.02%	-0.06%	-0.11%	-0.03%	-0.02%	-0.08%	-0.05
<i>Employment</i>	-0.03%	0.01%	-0.05%	-0.03%	-0.06%	0.02%	-0.02%	-0.07%	-0.02%	-0.02%	-0.01%	-0.06%	-0.06%	-0.09%	-0.04
<i>Private Consumption</i>	-0.03%	-0.81%	0.11%	0.09%	0.18%	-0.17%	-0.21%	-0.05%	0.12%	0.10%	-0.58%	0.15%	0.16%	0.18%	0.03
<i>Investment</i>	-0.06%	-0.41%	-0.03%	-0.06%	-0.04%	-0.34%	-0.07%	-0.09%	-0.05%	-0.01%	-0.16%	-0.04%	-0.01%	-0.07%	-0.11
<i>Energy Consumption</i>	-3.52%	-8.63%	-1.01%	-1.37%	-0.04%	-2.09%	-1.21%	-2.56%	-0.26%	-0.84%	-3.05%	-0.34%	-0.08%	-1.15%	-1.41
<i>Share Coal*</i>	-2.50%	-2.05%	-0.42%	-0.20%	0.05%	-0.89%	-0.82%	0.22%	-0.22%	-0.64%	-0.40%	-0.26%	-0.01%	-0.73%	-0.63
<i>Share Oil*</i>	0.95%	-0.49%	0.24%	0.37%	0.08%	1.01%	0.73%	-0.22%	0.26%	-0.01%	0.09%	0.33%	0.07%	0.82%	0.47
<i>Share Gas*</i>	0.76%	1.05%	-0.03%	-0.40%	-0.14%	-0.17%	-0.01%	-0.14%	-0.08%	0.56%	-	-0.12%	0.00%	-0.25%	0.01
<i>Share Electricity*</i>	0.79%	1.49%	0.21%	0.22%	0.02%	0.04%	0.09%	0.14%	0.04%	0.09%	0.30%	0.05%	-0.06%	0.16%	0.15
<i>Exports</i>	-0.36%	-0.65%	-0.38%	-0.15%	-0.20%	0.21%	0.18%	-0.16%	-0.21%	-0.26%	0.11%	-0.36%	-0.16%	-0.45%	-
<i>Exports within EU</i>	-0.30%	-0.51%	-0.37%	-0.01%	-0.14%	0.25%	0.23%	-0.15%	-0.18%	-0.34%	0.13%	-0.35%	-0.12%	-0.45%	-
<i>Exports to RW</i>	-0.40%	-0.86%	-0.39%	-0.24%	-0.23%	0.17%	0.16%	-0.17%	-0.23%	-0.12%	0.06%	-0.37%	-0.20%	-0.45%	-0.27
<i>Imports</i>	-0.25%	-1.10%	-0.06%	-0.04%	0.00%	-0.33%	-0.19%	-0.21%	-0.03%	-0.16%	-0.56%	-0.05%	-0.03%	-0.05%	-0.16
<i>Real Wage Rate</i>	-0.10%	-0.90%	0.02%	-0.02%	0.09%	-0.15%	-0.32%	-0.17%	0.07%	0.03%	-0.68%	0.04%	0.05%	0.10%	-0.02
<i>Relative Consumer Price</i>	0.00%	-0.26%	0.13%	0.09%	0.17%	-0.49%	0.03%	0.08%	-0.02%	0.00%	0.02%	0.23%	0.09%	0.18%	0.00
<i>Real Interest Rate</i>	-0.15%	-0.16%	-0.16%	-0.15%	-0.16%	-0.16%	-0.16%	-0.16%	-0.16%	-0.16%	-0.16%	-0.15%	-0.16%	-0.16%	-0.16
<i>Terms of Trade</i>	0.07%	0.14%	0.15%	0.04%	0.05%	0.00%	-0.15%	-0.01%	0.04%	0.00%	-0.12%	0.13%	0.01%	0.17%	0.23
<i>Public Surplus (% of GDP)*</i>	0.15%	0.93%	-	0.09%	0.00%	0.28%	0.24%	0.23%	0.07%	0.01%	0.52%	0.04%	0.04%	0.11%	-
<i>Current Account (% of GDP)*</i>	-0.01%	0.59%	-0.06%	-0.03%	-0.09%	0.16%	0.10%	0.08%	-0.04%	-0.08%	0.27%	-0.07%	-0.07%	-0.11%	0.00
<b>Total Atmospheric Emissions</b>															
<i>CO2 Emissions</i>	-7.32%	-15.79%	-2.10%	-1.87%	-0.05%	-3.20%	-2.16%	-3.59%	-1.01%	-1.63%	-4.37%	-0.62%	0.00%	-2.98%	-2.67
<i>NOX Emissions</i>	-5.61%	-16.64%	-1.68%	-1.69%	0.07%	-2.26%	-2.47%	-3.48%	-0.50%	-1.23%	-4.22%	-0.33%	-0.03%	-2.05%	-2.17
<i>SO2 Emissions</i>	-14.38%	-17.39%	-1.76%	-2.12%	0.18%	-7.40%	-3.64%	-2.83%	-2.82%	-5.41%	-3.37%	-0.72%	-0.11%	-4.33%	-3.62
<i>VOC Emissions</i>	-2.33%	-12.82%	-1.53%	-1.81%	0.03%	-0.64%	-1.04%	-3.96%	-0.02%	-0.12%	-5.00%	-0.10%	0.04%	-1.07%	-1.22
<i>PM Emissions</i>	-24.87%	-14.38%	-1.44%	-2.66%	0.14%	-5.65%	-5.82%	-3.47%	-0.75%	-2.24%	-4.74%	-0.32%	-0.13%	-3.55%	-3.42
<b>Environmental Policy</b>															
<i>Energy Tax (% of GDP)*</i>	0.17%	1.05%	0.08%	0.09%	0.01%	0.35%	0.28%	0.25%	0.06%	0.02%	0.57%	0.04%	0.03%	0.12%	0.17
<i>Reduction of Social Security Rate*</i>	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00
<b>Welfare</b>															

<i>Economic Welfare</i>	-0.01%	-0.74%	0.12%	0.11%	0.18%	-0.17%	-0.22%	-0.01%	0.13%	0.11%	-0.54%	0.15%	0.16%	0.16%	0.03
<i>Environmental Welfare</i>	12.91%	64.45%	10.23%	9.05%	4.53%	20.41%	80.79%	302.10%	5.87%	22.96%	21.18%	17.56%	6.85%	16.15%	
<i>Total Welfare</i>	0.02%	-0.60%	0.18%	0.13%	0.18%	-0.14%	-0.21%	0.00%	0.14%	0.24%	-0.51%	0.16%	0.17%	0.19%	0.07

<b>Sectoral Aggregates</b>	Austria	Belgium	Germany	Denmark	Finland	France	Greece	Ireland	Italy	The Netherlands	Portugal	Spain	Sweden	UK	EU
<b>Domestic Production in Volume</b>															
<i>Agriculture</i>	-0.03%	-0.99%	-0.13%	-0.13%	-0.02%	0.05%	-0.03%	-0.19%	-0.02%	-0.02%	-0.15%	-0.03%	-0.05%	-0.05%	-0.07
<i>Energy Production</i>	-1.54%	-4.43%	-0.59%	-1.11%	0.00%	-1.70%	-0.61%	-2.17%	-0.08%	-1.09%	-1.66%	-0.06%	-0.14%	-0.51%	-0.92
<i>Ferrous and non ferrous metals</i>	-2.26%	-1.34%	-0.50%	0.01%	-0.06%	-1.31%	-0.28%	-0.51%	-0.37%	-0.61%	-1.03%	-0.45%	-0.10%	-0.98%	-0.73
<i>Chemical Products</i>	-0.21%	-0.31%	-0.15%	-0.11%	-0.06%	0.20%	-0.17%	-0.06%	-0.13%	-0.02%	-0.23%	-0.14%	-0.06%	-0.26%	-0.09
<i>Other energy intensive</i>	-0.26%	-0.44%	-0.15%	-0.21%	-0.11%	-0.09%	-0.47%	-0.15%	-0.16%	-0.05%	-0.39%	-0.17%	-0.12%	-0.24%	-0.16
<i>Electric Goods</i>	-0.10%	0.06%	-0.19%	-0.23%	-0.11%	-0.09%	-0.11%	-0.08%	-0.03%	-0.03%	0.02%	-0.20%	-0.10%	-0.19%	-0.12
<i>Transport equipment</i>	-0.10%	-0.18%	-0.16%	-0.02%	-0.16%	-0.02%	-0.11%	-0.05%	-0.13%	-0.04%	-0.14%	-0.16%	-0.08%	-0.24%	-0.12
<i>Other Equipment Goods</i>	-0.15%	-0.41%	-0.20%	-0.11%	-0.12%	-0.11%	-0.12%	-0.08%	-0.11%	-0.09%	-0.27%	-0.18%	-0.16%	-0.24%	-0.16
<i>Consumer Goods Industries</i>	-0.04%	-1.03%	-0.14%	-0.19%	-0.05%	0.07%	-0.03%	-0.19%	-0.07%	-0.03%	-0.12%	-0.09%	-0.08%	-0.19%	-0.12
<i>Construction</i>	-0.05%	-0.41%	-0.03%	-0.04%	-0.03%	-0.37%	-0.06%	-0.13%	-0.04%	-0.01%	-0.18%	-0.03%	-0.02%	-0.01%	-0.12
<i>Telecommunication Services</i>	-0.01%	-1.20%	-0.07%	-0.08%	-0.01%	-0.22%	-0.03%	-0.08%	0.01%	0.01%	-0.12%	-0.02%	0.02%	-0.07%	-0.11
<i>Transport</i>	-0.20%	-2.33%	-0.19%	-0.18%	-0.06%	-0.17%	0.01%	-0.35%	-0.05%	-0.01%	-0.59%	-0.10%	-0.05%	-0.15%	-0.22
<i>Services of credit and insurance</i>	-0.04%	-0.39%	-0.01%	-0.07%	-0.01%	-0.09%	-0.10%	-0.12%	-0.03%	-0.01%	-0.38%	-0.02%	-0.01%	-0.06%	-0.06
<i>Other Market Services</i>	-0.05%	-0.39%	-0.02%	0.00%	0.02%	-0.08%	-0.05%	-0.09%	0.01%	-0.01%	-0.19%	0.02%	0.00%	-0.05%	-0.04
<i>Non Market Services</i>	0.00%	0.00%	0.01%	0.01%	0.01%	0.01%	-0.01%	-0.01%	0.00%	0.01%	-0.11%	0.02%	0.01%	0.06%	0.02
<b>Exports in Volume</b>															
<i>Agriculture</i>	0.05%	-0.82%	-0.32%	-0.14%	-0.15%	0.23%	0.24%	-0.25%	-0.04%	-0.03%	0.35%	-0.11%	-0.06%	-0.15%	-0.08
<i>Energy Exports</i>	0.32%	-0.18%	-0.75%	0.47%	-0.14%	1.40%	0.09%	-0.24%	-0.22%	-2.19%	0.59%	-0.60%	-0.28%	-0.61%	-0.72
<i>Ferrous and non ferrous metals</i>	-2.82%	-1.42%	-0.92%	0.03%	-0.07%	-1.85%	-0.34%	-0.78%	-0.64%	-0.66%	-1.47%	-0.69%	-0.10%	-1.47%	-1.02
<i>Chemical Products</i>	-0.26%	-0.18%	-0.23%	-0.13%	-0.18%	0.48%	-0.15%	-0.07%	-0.28%	-0.03%	0.01%	-0.33%	-0.07%	-0.38%	-0.09
<i>Other energy intensive</i>	-0.41%	-0.27%	-0.40%	-0.27%	-0.18%	0.59%	-0.92%	-0.15%	-0.42%	-0.13%	-0.43%	-0.47%	-0.17%	-0.64%	-0.23
<i>Electric Goods</i>	-0.10%	0.26%	-0.32%	-0.25%	-0.14%	0.10%	0.01%	-0.09%	-0.19%	-0.04%	0.13%	-0.42%	-0.10%	-0.29%	-0.16
<i>Transport equipment</i>	-0.17%	-0.09%	-0.34%	-0.38%	-0.23%	0.09%	0.04%	0.06%	-0.29%	-0.09%	0.15%	-0.28%	-0.11%	-0.43%	-0.19
<i>Other Equipment Goods</i>	-0.20%	-0.25%	-0.36%	-0.30%	-0.22%	0.20%	-0.03%	-0.08%	-0.19%	-0.14%	-0.08%	-0.40%	-0.24%	-0.29%	-0.20
<i>Consumer Goods Industries</i>	-0.06%	-1.04%	-0.35%	-0.26%	-0.23%	0.37%	0.25%	-0.25%	-0.16%	-0.07%	0.16%	-0.38%	-0.18%	-0.47%	-0.21
<i>Construction</i>	-0.11%	-0.45%	-0.25%	-0.27%	-0.25%		0.07%		-0.08%	-0.09%				-0.48%	-0.18
<i>Telecommunication Services</i>	0.22%	-1.50%	-0.50%	-0.31%	-0.31%	0.42%	0.36%	0.04%	-0.06%	-0.06%	0.80%	-0.49%	-0.23%	-0.51%	-0.30
<i>Transport</i>	-0.22%	-2.47%	-0.38%	-0.21%	-0.17%	0.29%	0.26%	-0.42%	-0.01%	-0.03%	-0.50%	-0.19%	-0.12%	-0.39%	-0.37
<i>Services of credit and insurance</i>	0.10%	1.24%	-0.41%	-0.21%	-0.33%	0.47%	0.47%	-0.07%	-0.08%	-0.15%	0.36%	-0.44%		-0.30%	-0.11
<i>Other Market Services</i>	-0.04%	0.39%	-0.34%	-0.15%	-0.34%	0.62%	0.36%	-0.10%	-0.17%	-0.15%	0.62%	-0.47%	-0.24%	-0.39%	-0.05
<i>Non Market Services</i>	0.04%		-0.11%	-0.09%	-0.15%	0.23%		0.01%	-0.03%	-0.03%			-0.10%	-0.20%	0.15

**Price of Exports rel. EU average<sup>14</sup>**

<i>Agriculture</i>	-0.06%	0.55%	0.17%	0.06%	0.03%	-0.22%	-0.17%	0.14%	-0.01%	-0.03%	-0.28%	0.02%	-0.01%	0.05%	0.03
<i>Ferrous and non ferrous metals</i>	0.87%	0.20%	-0.07%	-0.47%	-0.43%	0.41%	-0.29%	-0.11%	-0.20%	-0.19%	0.25%	-0.18%	-0.45%	0.21%	0.60
<i>Chemical Products</i>	0.09%	0.04%	0.06%	0.02%	0.04%	-0.24%	0.05%	-0.03%	0.10%	-0.04%	-0.03%	0.10%	-0.01%	0.13%	0.02
<i>Other energy intensive</i>	0.10%	0.02%	0.07%	0.03%	-0.02%	-0.34%	0.36%	-0.03%	0.09%	-0.06%	0.11%	0.10%	-0.02%	0.19%	0.10
<i>Electric Goods</i>	-0.02%	-0.20%	0.07%	0.05%	-0.01%	-0.09%	-0.06%	-0.04%	0.01%	-0.05%	-0.12%	0.11%	-0.03%	0.06%	0.07
<i>Transport equipment</i>	0.00%	-0.04%	0.06%	0.08%	0.01%	-0.11%	-0.10%	-0.12%	0.04%	-0.05%	-0.13%	0.04%	-0.05%	0.10%	0.11
<i>Other Equipment Goods</i>	0.01%	0.02%	0.07%	0.05%	0.01%	-0.16%	-0.05%	-0.06%	0.00%	-0.03%	-0.04%	0.08%	0.02%	0.05%	0.08
<i>Consumer Goods Industries</i>	-0.04%	0.35%	0.06%	0.03%	0.01%	-0.21%	-0.15%	0.03%	-0.01%	-0.05%	-0.11%	0.07%	0.00%	0.10%	0.11
<i>Construction</i>	-0.04%	0.21%	0.05%	0.07%	0.06%	-0.47%	-0.16%	-0.03%	-0.06%	-0.08%	-0.38%	0.12%	0.02%	0.21%	0.12
<i>Telecommunication Services</i>	-0.32%	0.83%	0.12%	0.03%	0.02%	-0.47%	-0.46%	-0.20%	-0.16%	-0.17%	-0.73%	0.11%	-0.04%	0.14%	0.22
<i>Transport</i>	-0.07%	1.16%	0.00%	-0.06%	-0.07%	-0.47%	-0.30%	0.12%	-0.18%	-0.17%	0.16%	-0.09%	-0.10%	0.00%	0.17
<i>Services of credit and insurance</i>	-0.13%	-1.14%	0.19%	0.10%	0.18%	-0.41%	-0.39%	-0.03%	-0.02%	-0.03%	-0.31%	0.21%	0.08%	0.15%	0.04
<i>Other Market Services</i>	0.02%	-0.41%	0.19%	0.13%	0.29%	-0.49%	-0.24%	0.06%	0.11%	0.04%	-0.45%	0.32%	0.19%	0.26%	-0.03
<i>Non Market Services</i>	0.18%	-0.77%	0.42%	0.37%	0.49%	-0.13%	0.08%	0.24%	0.29%	0.28%	-0.49%	0.52%	0.39%	0.56%	-0.24

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<sup>14</sup> For the EU it is the relative price compared to World prices

## EU MIN TAX IN 2005 AND 15EURO CARBON TAX IN 2010 FOR FINAL ENERGY CONSUMPTION, IN CORE COUNTRIES, EU CURRENT ACCOUNT FIX

2010	(% difference compared to reference except * where difference)														
Min EU energy tax in 2005 and EU energy tax equiv to 15 Euro/t CO2 in 2010, core countries, EU CA fix compared to Reference Scenario															
	Austria	Belgium	Germany	Denmark	Finland	France	Greece	Ireland	Italy	The Netherlands	Portugal	Spain	Sweden	UK	EU
<b>Macroeconomic Aggregates</b>															
<i>Gross Domestic Product</i>	-0.11%	-0.21%	-0.05%	-0.03%	-0.02%	0.02%	-0.03%	-0.03%	-0.02%	-0.05%	-0.03%	-0.03%	-0.02%	-0.05%	-0.03%
<i>Employment</i>	-0.02%	0.02%	-0.04%	-0.03%	-0.05%	0.03%	-0.02%	-0.06%	-0.02%	-0.02%	-0.04%	-0.05%	-0.05%	-0.09%	-0.03%
<i>Private Consumption</i>	-0.06%	-0.84%	0.08%	0.06%	0.15%	-0.20%	-0.11%	0.11%	0.09%	0.07%	-0.14%	0.14%	0.13%	0.25%	0.03%
<i>Investment</i>	-0.06%	-0.41%	-0.03%	-0.06%	-0.04%	-0.34%	-0.02%	-0.02%	-0.05%	-0.02%	-0.02%	-0.01%	-0.01%	0.01%	-0.09%
<i>Energy Consumption</i>	-3.53%	-8.63%	-1.02%	-1.37%	-0.05%	-2.09%	-0.54%	-0.34%	-0.26%	-0.85%	-0.35%	-0.14%	-0.09%	-0.01%	-1.11%
<i>Share Coal*</i>	-2.50%	-2.05%	-0.42%	-0.20%	0.05%	-0.89%	-0.26%	-0.04%	-0.22%	-0.63%	-0.13%	-0.10%	-0.01%	0.00%	-0.47%
<i>Share Oil*</i>	0.95%	-0.49%	0.24%	0.38%	0.08%	1.01%	0.21%	0.15%	0.26%	0.00%	0.10%	0.12%	0.07%	0.00%	0.32%
<i>Share Gas*</i>	0.75%	1.05%	-0.03%	-0.40%	-0.14%	-0.17%	0.00%	-0.11%	-0.08%	0.55%	-	-0.04%	0.00%	0.00%	0.05%
<i>Share Electricity*</i>	0.79%	1.49%	0.21%	0.22%	0.02%	0.04%	0.04%	0.01%	0.04%	0.09%	0.02%	0.02%	-0.06%	0.00%	0.09%
<i>Exports</i>	-0.32%	-0.63%	-0.31%	-0.12%	-0.16%	0.26%	0.08%	-0.10%	-0.17%	-0.23%	0.03%	-0.32%	-0.14%	-0.41%	-
<i>Exports within EU</i>	-0.27%	-0.49%	-0.31%	0.00%	-0.12%	0.29%	0.14%	-0.08%	-0.15%	-0.32%	0.05%	-0.30%	-0.10%	-0.42%	-
<i>Exports to RW</i>	-0.35%	-0.82%	-0.32%	-0.20%	-0.19%	0.23%	0.06%	-0.12%	-0.19%	-0.09%	-0.01%	-0.33%	-0.16%	-0.41%	-0.22%
<i>Imports</i>	-0.25%	-1.10%	-0.07%	-0.04%	0.00%	-0.32%	-0.10%	-0.04%	-0.03%	-0.16%	-0.11%	0.00%	-0.03%	0.04%	-0.15%
<i>Real Wage Rate</i>	-0.11%	-0.91%	0.01%	-0.03%	0.07%	-0.16%	-0.21%	0.03%	0.06%	0.02%	-0.26%	0.06%	0.04%	0.17%	-0.03%
<i>Relative Consumer Price</i>	-0.02%	-0.28%	0.09%	0.06%	0.14%	-0.52%	0.13%	0.08%	-0.05%	-0.02%	0.26%	0.23%	0.07%	0.28%	-0.01%
<i>Real Interest Rate</i>	-0.14%	-0.13%	-0.13%	-0.14%	-0.13%	-0.13%	-0.13%	-0.13%	-0.14%	-0.13%	-0.13%	-0.12%	-0.14%	-0.13%	-0.13%
<i>Terms of Trade</i>	0.06%	0.14%	0.12%	0.03%	0.04%	0.00%	-0.08%	-0.03%	0.03%	-0.01%	-0.05%	0.13%	0.01%	0.16%	0.19%
<i>Public Surplus (% of GDP)*</i>	0.15%	0.93%	-	0.08%	0.01%	0.28%	0.16%	0.03%	0.07%	0.01%	0.17%	0.02%	0.04%	0.00%	-
<i>Current Account (% of GDP)*</i>	0.00%	0.61%	-0.04%	-0.01%	-0.07%	0.17%	0.05%	-0.08%	-0.03%	-0.06%	0.05%	-0.07%	-0.05%	-0.15%	0.00%
<b>Total Atmospheric Emissions</b>															
<i>CO2 Emissions</i>	-7.33%	-15.79%	-2.10%	-1.87%	-0.06%	-3.20%	-0.83%	-0.49%	-1.02%	-1.64%	-0.57%	-0.24%	-0.01%	0.03%	-2.00%
<i>NOX Emissions</i>	-5.62%	-16.64%	-1.69%	-1.69%	0.06%	-2.27%	-0.91%	-0.50%	-0.50%	-1.24%	-0.49%	-0.13%	-0.04%	0.04%	-1.66%
<i>SO2 Emissions</i>	-14.38%	-17.40%	-1.76%	-2.14%	0.17%	-7.40%	-1.29%	-0.65%	-2.82%	-5.43%	-0.58%	-0.30%	-0.15%	0.00%	-2.61%
<i>VOC Emissions</i>	-2.34%	-12.83%	-1.55%	-1.81%	0.02%	-0.65%	-0.53%	-0.24%	-0.03%	-0.13%	-0.41%	0.01%	0.03%	0.09%	-0.95%
<i>PM Emissions</i>	-24.87%	-14.40%	-1.45%	-2.68%	0.12%	-5.65%	-1.96%	-0.86%	-0.75%	-2.26%	-0.91%	-0.06%	-0.18%	0.02%	-2.39%
<b>Environmental Policy</b>															
<i>Energy Tax (% of GDP)*</i>	0.17%	1.05%	0.08%	0.09%	0.01%	0.35%	0.17%	0.03%	0.06%	0.02%	0.19%	0.02%	0.03%	0.00%	0.14%
<i>Reduction of Social Security Rate*</i>	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
<b>Welfare</b>															

<i>Economic Welfare</i>	-0.04%	-0.77%	0.08%	0.07%	0.15%	-0.20%	-0.12%	0.11%	0.10%	0.08%	-0.11%	0.14%	0.13%	0.20%	0.02%
<i>Environmental Welfare</i>	12.60%	61.36%	9.51%	6.62%	3.62%	19.12%	37.66%	118.84%	5.62%	19.46%	4.68%	9.15%	5.19%	2.71%	
<i>Total Welfare</i>	-0.01%	-0.63%	0.15%	0.09%	0.15%	-0.17%	-0.11%	0.12%	0.11%	0.19%	-0.11%	0.15%	0.14%	0.20%	0.06%

### Sectoral Aggregates

	Austria	Belgium	Germany	Denmark	Finland	France	Greece	Ireland	Italy	The Netherlands	Portugal	Spain	Sweden	UK	EU
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#### Domestic Production in Volume

<i>Agriculture</i>	-0.02%	-0.99%	-0.12%	-0.12%	-0.02%	0.06%	-0.01%	-0.02%	-0.01%	-0.01%	-0.02%	-0.03%	-0.04%	-0.04%	-0.05%
<i>Energy Production</i>	-1.55%	-4.42%	-0.60%	-1.11%	0.00%	-1.70%	-0.28%	-0.25%	-0.08%	-1.09%	-0.21%	-0.04%	-0.15%	-0.10%	-0.81%
<i>Ferrous and non ferrous metals</i>	-2.24%	-1.32%	-0.47%	0.03%	-0.05%	-1.28%	-0.16%	-0.17%	-0.36%	-0.59%	-0.13%	-0.29%	-0.07%	-0.18%	-0.60%
<i>Chemical Products</i>	-0.19%	-0.29%	-0.12%	-0.09%	-0.05%	0.22%	-0.08%	-0.07%	-0.12%	-0.01%	-0.04%	-0.15%	-0.05%	-0.19%	-0.06%
<i>Other energy intensive</i>	-0.24%	-0.43%	-0.13%	-0.20%	-0.10%	-0.07%	-0.18%	-0.08%	-0.15%	-0.04%	-0.06%	-0.16%	-0.11%	-0.14%	-0.13%
<i>Electric Goods</i>	-0.07%	0.08%	-0.15%	-0.20%	-0.09%	-0.07%	-0.05%	-0.07%	-0.02%	-0.01%	-0.04%	-0.14%	-0.08%	-0.18%	-0.10%
<i>Transport equipment</i>	-0.09%	-0.16%	-0.14%	-0.04%	-0.13%	0.00%	-0.09%	0.02%	-0.12%	-0.02%	-0.08%	-0.14%	-0.06%	-0.11%	-0.09%
<i>Other Equipment Goods</i>	-0.13%	-0.39%	-0.16%	-0.09%	-0.10%	-0.09%	-0.04%	-0.08%	-0.09%	-0.07%	-0.07%	-0.13%	-0.14%	-0.23%	-0.14%
<i>Consumer Goods Industries</i>	-0.03%	-1.02%	-0.12%	-0.17%	-0.04%	0.09%	0.00%	-0.04%	-0.06%	-0.02%	0.01%	-0.06%	-0.07%	-0.14%	-0.09%
<i>Construction</i>	-0.05%	-0.41%	-0.04%	-0.04%	-0.03%	-0.38%	-0.02%	-0.03%	-0.04%	-0.01%	-0.03%	0.01%	-0.02%	0.07%	-0.10%
<i>Telecommunication Services</i>	-0.01%	-1.19%	-0.08%	-0.08%	-0.01%	-0.22%	-0.02%	-0.02%	0.00%	0.01%	-0.05%	0.00%	0.01%	0.03%	-0.09%
<i>Transport</i>	-0.18%	-2.32%	-0.16%	-0.16%	-0.05%	-0.16%	0.01%	-0.03%	-0.04%	0.00%	-0.02%	-0.10%	-0.04%	-0.13%	-0.20%
<i>Services of credit and insurance</i>	-0.03%	-0.40%	-0.02%	-0.07%	-0.01%	-0.08%	-0.06%	-0.04%	-0.02%	-0.01%	-0.12%	-0.01%	-0.01%	-0.03%	-0.05%
<i>Other Market Services</i>	-0.06%	-0.39%	-0.02%	-0.01%	0.02%	-0.09%	-0.03%	-0.01%	0.01%	-0.01%	-0.04%	0.02%	0.00%	-0.01%	-0.04%
<i>Non Market Services</i>	0.00%	0.00%	0.00%	0.00%	0.01%	0.01%	0.00%	0.01%	0.00%	0.01%	-0.02%	0.02%	0.01%	0.10%	0.02%

#### Exports in Volume

<i>Agriculture</i>	0.07%	-0.82%	-0.29%	-0.13%	-0.13%	0.26%	0.09%	-0.03%	-0.02%	-0.03%	0.04%	-0.11%	-0.05%	-0.23%	-0.06%
<i>Energy Exports</i>	0.33%	-0.14%	-0.71%	0.47%	-0.16%	1.43%	0.06%	-0.72%	-0.15%	-2.17%	-0.20%	-0.38%	-0.29%	-0.49%	-0.67%
<i>Ferrous and non ferrous metals</i>	-2.80%	-1.39%	-0.86%	0.05%	-0.05%	-1.81%	-0.21%	-0.22%	-0.61%	-0.63%	-0.18%	-0.45%	-0.07%	-0.33%	-0.86%
<i>Chemical Products</i>	-0.23%	-0.16%	-0.17%	-0.10%	-0.14%	0.53%	-0.09%	-0.09%	-0.24%	-0.02%	-0.04%	-0.35%	-0.06%	-0.34%	-0.06%
<i>Other energy intensive</i>	-0.38%	-0.25%	-0.33%	-0.24%	-0.16%	0.64%	-0.36%	-0.23%	-0.37%	-0.11%	-0.08%	-0.48%	-0.15%	-0.57%	-0.18%
<i>Electric Goods</i>	-0.06%	0.30%	-0.23%	-0.22%	-0.11%	0.15%	-0.04%	-0.09%	-0.14%	-0.02%	-0.05%	-0.34%	-0.08%	-0.38%	-0.13%
<i>Transport equipment</i>	-0.13%	-0.05%	-0.27%	-0.27%	-0.18%	0.14%	-0.02%	-0.08%	-0.24%	-0.05%	-0.06%	-0.25%	-0.08%	-0.30%	-0.14%
<i>Other Equipment Goods</i>	-0.15%	-0.22%	-0.28%	-0.24%	-0.18%	0.26%	-0.04%	-0.10%	-0.15%	-0.11%	-0.10%	-0.34%	-0.21%	-0.34%	-0.16%
<i>Consumer Goods Industries</i>	-0.02%	-1.02%	-0.28%	-0.23%	-0.19%	0.42%	0.14%	-0.10%	-0.12%	-0.05%	0.08%	-0.30%	-0.16%	-0.46%	-0.17%
<i>Construction</i>	-0.07%	-0.42%	-0.18%	-0.21%	-0.20%	-	-0.01%	-	-0.03%	-0.06%	-	-	-	-0.54%	-0.15%
<i>Telecommunication Services</i>	0.27%	-1.47%	-0.41%	-0.26%	-0.25%	0.48%	0.14%	-0.08%	0.00%	-0.02%	0.10%	-0.43%	-0.17%	-0.52%	-0.30%
<i>Transport</i>	-0.19%	-2.45%	-0.32%	-0.18%	-0.14%	0.35%	0.12%	-0.07%	0.03%	-0.01%	0.12%	-0.19%	-0.09%	-0.47%	-0.33%
<i>Services of credit and insurance</i>	0.14%	1.27%	-0.33%	-0.16%	-0.27%	0.52%	0.20%	-0.13%	-0.03%	-0.11%	0.00%	-0.45%	-	-0.43%	-0.15%
<i>Other Market Services</i>	0.00%	0.42%	-0.26%	-0.10%	-0.28%	0.67%	0.16%	-0.12%	-0.11%	-0.12%	0.10%	-0.46%	-0.20%	-0.50%	-0.05%
<i>Non Market Services</i>	0.06%	-	-0.07%	-0.06%	-0.12%	0.25%	-	-0.06%	-0.01%	0.00%	-	-	-0.07%	-0.28%	0.17%

**Price of Exports rel. EU average<sup>15</sup>**

<i>Agriculture</i>	-0.07%	0.55%	0.16%	0.07%	0.03%	-0.22%	-0.07%	0.01%	-0.01%	-0.03%	-0.05%	0.04%	0.00%	0.12%	0.01%
<i>Ferrous and non ferrous metals</i>	0.93%	0.26%	-0.02%	-0.41%	-0.37%	0.47%	-0.28%	-0.25%	-0.14%	-0.13%	-0.28%	-0.21%	-0.38%	-0.27%	0.51%
<i>Chemical Products</i>	0.09%	0.05%	0.05%	0.03%	0.04%	-0.25%	0.03%	0.00%	0.09%	-0.03%	0.00%	0.14%	0.00%	0.12%	0.01%
<i>Other energy intensive</i>	0.11%	0.03%	0.07%	0.04%	-0.01%	-0.34%	0.11%	0.04%	0.09%	-0.05%	-0.03%	0.13%	0.00%	0.18%	0.07%
<i>Electric Goods</i>	-0.03%	-0.20%	0.05%	0.04%	-0.01%	-0.10%	-0.03%	-0.02%	0.00%	-0.05%	-0.03%	0.09%	-0.02%	0.11%	0.06%
<i>Transport equipment</i>	0.00%	-0.03%	0.06%	0.06%	0.01%	-0.10%	-0.05%	-0.02%	0.05%	-0.04%	-0.02%	0.06%	-0.03%	0.06%	0.08%
<i>Other Equipment Goods</i>	0.01%	0.02%	0.05%	0.04%	0.01%	-0.16%	-0.04%	-0.02%	0.00%	-0.03%	-0.02%	0.07%	0.02%	0.08%	0.06%
<i>Consumer Goods Industries</i>	-0.05%	0.35%	0.05%	0.04%	0.01%	-0.21%	-0.10%	-0.01%	-0.01%	-0.05%	-0.07%	0.05%	0.00%	0.11%	0.09%
<i>Construction</i>	-0.04%	0.20%	0.02%	0.06%	0.05%	-0.48%	-0.09%	0.01%	-0.07%	-0.08%	-0.07%	0.16%	0.01%	0.27%	0.09%
<i>Telecommunication Services</i>	-0.37%	0.80%	0.06%	-0.01%	-0.03%	-0.51%	-0.31%	-0.12%	-0.20%	-0.20%	-0.26%	0.08%	-0.08%	0.15%	0.22%
<i>Transport</i>	-0.07%	1.17%	-0.01%	-0.06%	-0.08%	-0.48%	-0.21%	-0.10%	-0.18%	-0.17%	-0.19%	-0.07%	-0.10%	0.07%	0.16%
<i>Services of credit and insurance</i>	-0.19%	-1.20%	0.10%	0.03%	0.11%	-0.47%	-0.23%	0.00%	-0.08%	-0.09%	-0.09%	0.19%	0.01%	0.21%	0.07%
<i>Other Market Services</i>	-0.02%	-0.44%	0.12%	0.08%	0.24%	-0.53%	-0.10%	0.10%	0.06%	0.00%	-0.06%	0.32%	0.15%	0.35%	-0.02%
<i>Non Market Services</i>	0.16%	-0.78%	0.39%	0.35%	0.47%	-0.14%	0.21%	0.37%	0.28%	0.27%	0.26%	0.56%	0.38%	0.71%	-0.26%

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<sup>15</sup> For the EU it is the relative price compared to World prices

## EU CO2 ALLOWANCE SCHEME PLUS EU MIN TAX IN 2005 AND 2010 AND DOMESTIC CO2 TAX WITH SS RECYCLING IN 2010 FOR KYOTO TARGET

2005 (% difference compared to reference except \* where difference)

U CO2 allowance scheme plus EU min tax in 2005 and 2010, domestic tax for Kyoto, SS recycling, allowance rent in capital income compared to Reference Scenario

	Austria	Belgium	Germany	Denmark	Finland	France	Greece	Ireland	Italy	The Netherlands	Portugal	Spain	Sweden	UK	EU
<b>Macroeconomic Aggregates</b>															
<i>Gross Domestic Product</i>	-0.01%	0.03%	-0.03%	-0.01%	-0.04%	0.02%	-0.04%	-0.01%	0.00%	-0.02%	0.03%	0.00%	0.01%	-0.04%	-0.01%
<i>Employment</i>	0.02%	0.13%	-0.02%	-0.01%	-0.04%	0.05%	0.08%	-0.04%	0.00%	-0.01%	0.08%	-0.02%	0.01%	-0.04%	0.00%
<i>Private Consumption</i>	-0.01%	0.17%	-0.04%	-0.03%	-0.06%	0.05%	0.00%	-0.08%	0.00%	-0.04%	0.00%	-0.03%	0.03%	-0.10%	-0.02%
<i>Investment</i>	-0.04%	-0.05%	-0.03%	-0.01%	-0.07%	-0.04%	-0.09%	-0.05%	-0.03%	-0.03%	-0.06%	-0.08%	-0.04%	-0.07%	-0.04%
<i>Energy Consumption</i>	-1.83%	-4.15%	-1.33%	-2.22%	-5.49%	-1.07%	-3.81%	-3.85%	-0.28%	-1.80%	-2.54%	-1.80%	-1.98%	-1.72%	-1.60%
<i>Share Coal*</i>	-1.17%	-2.33%	-0.80%	-1.59%	-3.82%	-0.66%	-2.74%	-2.38%	-0.18%	-1.37%	-1.72%	-1.22%	-1.63%	-1.21%	-1.09%
<i>Share Oil*</i>	0.81%	0.97%	0.49%	0.90%	2.69%	0.49%	2.37%	1.85%	0.12%	0.65%	1.52%	1.08%	1.04%	0.86%	0.72%
<i>Share Gas*</i>	0.14%	0.69%	0.20%	0.45%	0.26%	0.15%	0.03%	0.42%	0.03%	0.62%	0.00%	0.03%	0.03%	0.27%	0.23%
<i>Share Electricity*</i>	0.22%	0.67%	0.12%	0.23%	0.88%	0.02%	0.34%	0.10%	0.02%	0.10%	0.20%	0.14%	0.56%	0.09%	0.14%
<i>Exports</i>	-0.09%	-0.33%	-0.09%	-0.03%	-0.15%	-0.03%	-0.26%	-0.07%	-0.03%	-0.10%	-0.06%	-0.11%	-0.05%	-0.03%	-
<i>Exports within EU</i>	-0.11%	-0.30%	-0.10%	0.01%	-0.17%	-0.04%	-0.33%	-0.09%	-0.04%	-0.11%	-0.08%	-0.13%	-0.06%	-0.05%	-
<i>Exports to RW</i>	-0.08%	-0.38%	-0.07%	-0.06%	-0.13%	-0.02%	-0.22%	-0.04%	-0.03%	-0.08%	-0.03%	-0.09%	-0.05%	-0.01%	-0.07%
<i>Imports</i>	-0.13%	-0.33%	-0.10%	-0.06%	-0.24%	-0.09%	-0.25%	-0.15%	-0.05%	-0.14%	-0.20%	-0.28%	-0.10%	-0.12%	-0.21%
<i>Real Wage Rate</i>	0.03%	0.47%	-0.08%	-0.07%	-0.14%	0.17%	0.24%	-0.15%	0.00%	-0.08%	0.17%	-0.06%	0.06%	-0.15%	-0.01%
<i>Relative Consumer Price</i>	-0.03%	0.05%	0.03%	0.03%	0.11%	-0.12%	0.30%	0.11%	-0.05%	0.03%	0.30%	0.02%	-0.01%	0.02%	0.00%
<i>Terms of Trade</i>	-0.01%	0.09%	0.03%	0.00%	0.03%	0.00%	0.07%	-0.01%	-0.01%	-0.02%	-0.03%	-0.01%	-0.02%	-0.02%	0.02%
<i>Public Surplus (% of GDP)*</i>	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	-
<i>Current Account (% of GDP)*</i>	0.01%	0.07%	0.01%	0.00%	0.04%	0.01%	0.06%	0.03%	0.00%	0.00%	0.06%	0.03%	0.02%	0.04%	0.01%
<b>Total Atmospheric Emissions</b>															
<i>CO2 Emissions</i>	-3.47%	-9.07%	-2.45%	-3.71%	-11.36%	-1.70%	-7.43%	-7.03%	-0.75%	-4.28%	-5.29%	-2.92%	-4.73%	-3.87%	-3.25%
<i>NOX Emissions</i>	-2.47%	-9.59%	-2.47%	-4.65%	-11.58%	-1.56%	-6.93%	-9.58%	-0.59%	-4.98%	-5.70%	-2.70%	-5.31%	-4.66%	-3.37%
<i>SO2 Emissions</i>	-9.85%	-16.29%	-5.22%	-12.20%	-20.12%	-6.03%	-16.23%	-16.00%	-3.84%	-17.76%	-8.07%	-6.73%	-13.12%	-9.97%	-8.68%
<i>VOC Emissions</i>	-0.17%	-3.00%	-0.28%	-0.36%	-1.05%	-0.16%	-1.22%	-0.97%	-0.05%	-0.27%	-0.81%	-0.15%	-0.36%	-0.26%	-0.34%
<i>PM Emissions</i>	-11.99%	-15.25%	-4.68%	-13.43%	-21.55%	-5.19%	-16.36%	-17.97%	-1.98%	-14.06%	-9.61%	-6.76%	-14.97%	-10.08%	-8.42%
<b>Environmental Policy</b>															
<i>Energy Tax (% of GDP)*</i>	0.05%	0.27%	0.01%	-0.01%	-0.01%	0.08%	0.18%	0.04%	0.00%	0.00%	0.24%	0.03%	0.01%	0.01%	0.04%
<i>Environmental Tax (% of GDP)*</i>	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
<i>Reduction of Social Security Rate*</i>	0.13%	0.76%	0.00%	-0.03%	-0.05%	0.23%	0.73%	0.06%	0.01%	-0.01%	0.70%	0.06%	0.09%	-0.02%	0.10%
<i>EU CO2 allowance price (EURO2000/tn CO2)</i>	5.55	5.69	5.51	5.63	5.72	6.00	5.65	5.97	5.71	5.96	6.34	5.83	5.68	5.55	5.68

<b>Welfare</b>															
<i>Economic Welfare</i>	-0.01%	0.10%	-0.02%	-0.03%	-0.03%	0.03%	-0.02%	-0.05%	0.00%	-0.04%	-0.03%	-0.02%	0.02%	-0.05%	-0.01%
<i>Environmental Welfare</i>	10.61%	57.37%	16.23%	17.34%	51.88%	17.07%	161.26%	276.99%	5.44%	37.88%	68.38%	907.88%	19.93%	44.88%	
<i>Total Welfare</i>	0.02%	0.26%	0.09%	0.03%	-0.01%	0.05%	0.03%	-0.01%	0.02%	0.19%	0.03%	0.02%	0.04%	0.04%	0.07%
<b>Sectoral Aggregates</b>	Austria	Belgium	Germany	Denmark	Finland	France	Greece	Ireland	Italy	The Netherlands	Portugal	Spain	Sweden	UK	EU
<b>Domestic Production in Volume</b>															
<i>Agriculture</i>	-0.01%	-0.20%	-0.04%	-0.01%	-0.01%	0.03%	-0.03%	-0.02%	0.00%	-0.01%	0.01%	-0.03%	0.00%	-0.02%	-0.01%
<i>Energy Production</i>	-0.91%	-1.37%	-1.26%	-0.70%	-1.40%	-0.97%	-1.83%	-1.23%	-0.15%	-0.51%	-0.98%	-0.81%	-0.48%	-0.92%	-0.88%
<i>Ferrous and non ferrous metals</i>	-0.65%	-1.06%	-0.37%	0.02%	-0.54%	-1.07%	-1.32%	-1.14%	-0.18%	-0.72%	-0.56%	-0.58%	-0.21%	-0.70%	-0.55%
<i>Chemical Products</i>	-0.31%	-0.22%	-0.08%	-0.05%	-0.10%	0.02%	-0.17%	-0.07%	0.00%	-0.06%	-0.08%	-0.13%	-0.01%	-0.08%	-0.06%
<i>Other energy intensive</i>	-0.20%	-0.37%	-0.13%	-0.51%	-0.25%	-0.08%	-1.07%	-0.20%	-0.12%	-0.09%	-0.24%	-0.33%	-0.12%	-0.13%	-0.15%
<i>Electric Goods</i>	-0.01%	0.03%	-0.04%	-0.02%	-0.02%	0.01%	-0.26%	-0.05%	-0.02%	-0.03%	-0.06%	-0.10%	0.02%	-0.05%	-0.03%
<i>Transport equipment</i>	-0.02%	-0.01%	-0.02%	-0.01%	-0.07%	0.00%	-0.19%	-0.02%	-0.03%	-0.03%	-0.17%	-0.10%	0.01%	-0.08%	-0.03%
<i>Other Equipment Goods</i>	-0.03%	-0.08%	-0.04%	-0.03%	-0.06%	-0.01%	-0.21%	-0.06%	-0.04%	-0.04%	-0.08%	-0.09%	-0.03%	-0.04%	-0.04%
<i>Consumer Goods Industries</i>	0.02%	-0.23%	-0.02%	-0.01%	0.00%	0.05%	-0.06%	-0.08%	0.01%	-0.02%	0.00%	-0.03%	0.00%	-0.01%	-0.01%
<i>Construction</i>	-0.03%	-0.05%	-0.05%	0.00%	-0.06%	-0.05%	-0.08%	-0.08%	-0.03%	-0.02%	-0.05%	-0.09%	-0.04%	-0.06%	-0.05%
<i>Telecommunication Services</i>	0.01%	-0.21%	-0.03%	-0.01%	-0.03%	-0.01%	0.03%	-0.06%	0.00%	0.00%	-0.05%	-0.01%	0.02%	-0.05%	-0.02%
<i>Transport</i>	0.06%	-0.43%	-0.02%	0.00%	-0.02%	-0.02%	0.03%	-0.05%	-0.02%	-0.02%	0.00%	0.01%	0.01%	-0.04%	-0.03%
<i>Services of credit and insurances</i>	0.00%	0.02%	-0.01%	-0.03%	-0.04%	-0.02%	-0.06%	-0.07%	-0.03%	0.00%	-0.08%	-0.04%	-0.01%	-0.02%	-0.02%
<i>Other Market Services</i>	0.01%	-0.01%	-0.02%	-0.01%	-0.03%	0.02%	-0.01%	-0.04%	0.00%	-0.01%	0.00%	-0.02%	0.01%	-0.05%	-0.01%
<i>Non Market Services</i>	0.00%	0.00%	0.00%	-0.01%	0.00%	0.00%	0.00%	-0.01%	0.00%	0.00%	0.02%	0.00%	0.00%	-0.04%	-0.01%
<b>Exports in Volume</b>															
<i>Agriculture</i>	0.01%	-0.19%	-0.07%	-0.01%	0.06%	0.02%	0.04%	0.05%	0.01%	-0.01%	0.00%	-0.02%	0.00%	0.04%	-0.01%
<i>Energy Exports</i>	-0.69%	-0.27%	-1.07%	-0.53%	-0.13%	0.35%	0.04%	-0.33%	-0.02%	-0.37%	-0.23%	-0.14%	-0.33%	-0.19%	-0.26%
<i>Ferrous and non ferrous metals</i>	-0.81%	-1.15%	-0.66%	0.02%	-0.62%	-1.62%	-1.80%	-1.65%	-0.33%	-0.77%	-0.84%	-0.81%	-0.21%	-0.96%	-0.78%
<i>Chemical Products</i>	-0.47%	-0.23%	-0.08%	-0.05%	-0.11%	0.05%	-0.27%	-0.07%	0.03%	-0.06%	-0.21%	-0.17%	-0.01%	-0.04%	-0.07%
<i>Other energy intensive</i>	-0.33%	-0.55%	-0.25%	-0.88%	-0.32%	0.01%	-2.41%	-0.30%	-0.27%	-0.14%	-0.39%	-0.64%	-0.15%	-0.12%	-0.27%
<i>Electric Goods</i>	0.01%	0.04%	0.00%	-0.01%	0.00%	0.07%	-0.15%	-0.04%	-0.02%	-0.02%	-0.05%	-0.04%	0.02%	0.03%	0.01%
<i>Transport equipment</i>	-0.02%	-0.01%	-0.02%	0.00%	-0.08%	0.01%	0.07%	0.04%	-0.03%	-0.03%	-0.05%	-0.11%	0.01%	-0.06%	-0.03%
<i>Other Equipment Goods</i>	-0.02%	-0.10%	-0.01%	-0.01%	-0.05%	0.05%	-0.08%	-0.05%	-0.05%	-0.04%	-0.14%	-0.03%	-0.03%	0.03%	-0.01%
<i>Consumer Goods Industries</i>	0.04%	-0.28%	-0.01%	0.00%	0.00%	0.11%	-0.14%	-0.09%	0.03%	-0.02%	-0.02%	-0.04%	-0.01%	0.06%	0.00%
<i>Construction</i>	0.11%	-0.12%	0.04%	-0.07%	-0.06%	-	-0.26%	-	0.01%	-0.02%	-	-	-	0.01%	-0.01%
<i>Telecommunication Services</i>	0.14%	-0.53%	0.00%	0.03%	0.01%	0.18%	0.13%	-0.03%	0.05%	0.02%	-0.04%	0.16%	0.02%	0.17%	0.03%
<i>Transport</i>	0.07%	-0.46%	0.02%	0.02%	-0.02%	0.00%	0.08%	-0.05%	0.07%	-0.01%	0.12%	0.07%	0.01%	0.04%	-0.01%
<i>Services of credit and insurance</i>	0.15%	0.19%	-0.05%	0.01%	-0.03%	0.10%	0.35%	-0.03%	-0.01%	-0.02%	0.09%	0.16%	-	0.14%	0.10%
<i>Other Market Services</i>	0.05%	-0.19%	0.01%	0.00%	-0.06%	0.10%	-0.01%	-0.02%	0.02%	0.00%	0.11%	0.06%	-0.02%	0.08%	0.03%

<i>Non Market Services</i>	0.09%	-	0.03%	0.00%	-0.03%	0.09%	-	-0.01%	0.03%	0.01%	-	-	0.03%	0.04%	0.08%
<b>Price of Exports rel. EU average<sup>16</sup></b>															
<i>Agriculture</i>	-0.01%	0.12%	0.04%	0.00%	-0.05%	-0.03%	-0.03%	-0.04%	-0.01%	0.00%	0.00%	0.01%	-0.01%	-0.03%	-0.01%
<i>Ferrous and non ferrous metals</i>	0.02%	0.18%	-0.06%	-0.36%	-0.07%	0.39%	0.49%	0.40%	-0.23%	-0.02%	0.04%	0.01%	-0.28%	0.07%	0.47%
<i>Chemical Products</i>	0.19%	0.07%	0.01%	0.00%	0.02%	-0.05%	0.10%	0.00%	-0.04%	-0.01%	0.06%	0.05%	-0.02%	-0.01%	0.03%
<i>Other energy intensive</i>	0.03%	0.13%	-0.01%	0.28%	0.02%	-0.12%	1.01%	0.01%	0.00%	-0.06%	0.06%	0.17%	-0.06%	-0.07%	0.15%
<i>Electric Goods</i>	0.00%	-0.03%	0.01%	0.01%	0.01%	-0.02%	0.07%	0.01%	0.01%	0.01%	0.02%	0.02%	0.00%	-0.01%	-0.02%
<i>Transport equipment</i>	0.00%	-0.02%	0.00%	-0.01%	0.03%	-0.02%	-0.04%	-0.04%	0.00%	0.00%	0.01%	0.04%	-0.02%	0.02%	0.01%
<i>Other Equipment Goods</i>	0.00%	0.03%	0.00%	0.00%	0.02%	-0.03%	0.04%	0.01%	0.02%	0.01%	0.05%	0.01%	0.01%	-0.01%	-0.01%
<i>Consumer Goods Industries</i>	-0.02%	0.10%	0.00%	0.00%	0.00%	-0.04%	0.06%	0.03%	-0.01%	0.01%	0.01%	0.02%	0.00%	-0.03%	-0.01%
<i>Construction</i>	-0.08%	0.08%	-0.03%	0.04%	0.03%	-0.10%	0.18%	0.06%	-0.02%	0.00%	-0.05%	-0.05%	-0.03%	-0.02%	0.00%
<i>Telecommunication Services</i>	-0.07%	0.37%	0.02%	0.00%	0.02%	-0.10%	-0.06%	0.03%	-0.02%	0.00%	0.05%	-0.09%	0.01%	-0.09%	-0.04%
<i>Transport</i>	-0.02%	0.23%	-0.01%	0.01%	0.00%	-0.10%	-0.06%	0.01%	-0.03%	-0.01%	-0.09%	-0.02%	0.00%	-0.02%	-0.03%
<i>Services of credit and insurance</i>	-0.03%	-0.14%	0.04%	0.05%	0.08%	-0.01%	-0.21%	0.06%	0.08%	0.06%	-0.02%	-0.06%	0.01%	-0.02%	-0.09%
<i>Other Market Services</i>	-0.01%	0.13%	-0.01%	0.04%	0.05%	-0.05%	0.05%	0.01%	0.02%	0.01%	-0.06%	-0.03%	0.05%	-0.02%	-0.06%
<i>Non Market Services</i>	-0.01%	-0.31%	0.09%	0.13%	0.17%	-0.03%	-0.01%	0.13%	0.08%	0.11%	-0.15%	0.03%	0.07%	0.06%	-0.14%

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<sup>16</sup> For the EU it is the relative price compared to World prices

2010	(% difference compared to reference except * where difference)														
EU CO2 allowance scheme plus EU min tax in 2005 and 2010, domestic tax for Kyoto, SS recycling, allowance rent in capital income compared to Reference Scenario	Austria	Belgium	Germany	Denmark	Finland	France	Greece	Ireland	Italy	The Netherlands	Portugal	Spain	Sweden	UK	EU
<b>Macroeconomic Aggregates</b>															
<i>Gross Domestic Product</i>	-0.27%	-0.04%	-0.06%	-0.18%	-0.13%	0.10%	-0.17%	-0.16%	-0.38%	-0.08%	-0.03%	-0.12%	-0.01%	-0.12%	-0.09%
<i>Employment</i>	0.78%	0.21%	0.01%	0.18%	-0.08%	0.32%	0.07%	0.38%	1.90%	0.25%	0.11%	0.68%	0.04%	-0.07%	0.40%
<i>Private Consumption</i>	-0.55%	0.12%	-0.15%	0.12%	-0.13%	-0.18%	0.03%	0.25%	-1.49%	-0.29%	-0.03%	0.02%	0.00%	-0.24%	-0.31%
<i>Investment</i>	-0.32%	-0.12%	-0.10%	-0.29%	-0.18%	-0.30%	-0.16%	-0.19%	-0.64%	-0.17%	-0.18%	-0.34%	-0.08%	-0.19%	-0.25%
<i>Energy Consumption</i>	-16.18%	-9.04%	-4.22%	-17.30%	-10.92%	-5.74%	-7.52%	-15.67%	-17.41%	-7.55%	-7.94%	-14.96%	-4.92%	-3.73%	-8.49%
<i>Share Coal*</i>	-1.10%	-4.22%	-1.65%	-2.42%	-6.81%	-1.42%	-4.23%	-2.75%	-0.13%	-2.25%	-3.78%	-1.45%	-2.83%	-2.29%	-1.69%
<i>Share Oil*</i>	-4.18%	1.12%	0.65%	-1.99%	4.61%	-0.11%	3.52%	0.42%	-5.01%	1.21%	3.09%	-1.24%	1.28%	1.55%	-0.54%
<i>Share Gas*</i>	1.73%	1.41%	0.51%	1.65%	0.39%	0.39%	0.05%	1.48%	3.07%	0.51%		0.53%	0.06%	0.55%	1.01%
<i>Share Electricity*</i>	3.55%	1.69%	0.49%	2.76%	1.81%	1.14%	0.66%	0.85%	2.07%	0.52%	0.69%	2.15%	1.50%	0.19%	1.22%
<i>Exports</i>	-0.61%	-0.75%	-0.23%	-0.75%	-0.41%	0.24%	-0.94%	-0.57%	-0.61%	-0.36%	-0.56%	-1.49%	-0.22%	-0.13%	-
<i>Exports within EU</i>	-0.50%	-0.84%	-0.43%	-0.53%	-0.68%	0.04%	-1.38%	-0.63%	-0.12%	-0.45%	-0.65%	-1.34%	-0.47%	-0.50%	-
<i>Exports to RW</i>	-0.68%	-0.63%	-0.07%	-0.89%	-0.21%	0.44%	-0.76%	-0.47%	-0.95%	-0.20%	-0.42%	-1.63%	-0.05%	0.13%	-0.27%
<i>Imports</i>	-0.89%	-0.78%	-0.41%	-0.52%	-0.52%	-0.66%	-0.57%	-0.66%	-2.86%	-0.60%	-0.76%	-1.81%	-0.35%	-0.32%	-1.50%
<i>Real Wage Rate</i>	0.88%	0.62%	-0.15%	0.80%	-0.30%	0.51%	0.29%	0.88%	4.18%	0.52%	0.22%	1.40%	0.08%	-0.33%	0.49%
<i>Relative Consumer Price</i>	2.01%	0.38%	0.19%	0.38%	0.24%	0.17%	0.64%	0.87%	2.87%	0.24%	0.52%	1.31%	0.12%	-0.06%	0.65%
<i>Terms of Trade</i>	0.15%	0.24%	0.04%	0.21%	0.07%	0.00%	0.38%	0.20%	0.33%	-0.03%	0.02%	0.57%	0.00%	-0.10%	-0.02%
<i>Public Surplus (% of GDP)*</i>	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	-
<i>Current Account (% of GDP)*</i>	0.21%	0.17%	0.06%	0.04%	0.10%	0.24%	0.12%	0.26%	0.91%	0.18%	0.13%	0.18%	0.05%	0.09%	0.24%
<b>Total Atmospheric Emissions</b>															
<i>CO2 Emissions</i>	-21.55%	-17.08%	-7.21%	-22.58%	-21.03%	-7.93%	-13.15%	-22.49%	-22.04%	-13.41%	-13.69%	-17.40%	-10.54%	-7.53%	-12.65%
<i>NOX Emissions</i>	-25.14%	-18.30%	-7.57%	-25.89%	-20.99%	-8.59%	-12.22%	-25.85%	-26.77%	-14.26%	-14.87%	-18.65%	-11.77%	-8.92%	-14.60%
<i>SO2 Emissions</i>	-26.28%	-29.88%	-13.19%	-32.14%	-36.16%	-17.02%	-28.39%	-32.75%	-21.94%	-34.67%	-20.06%	-20.00%	-25.47%	-20.08%	-20.05%
<i>VOC Emissions</i>	-22.36%	-7.15%	-2.97%	-22.44%	-2.85%	-4.98%	-3.40%	-16.98%	-23.85%	-7.29%	-4.59%	-16.30%	-3.08%	-0.56%	-9.68%
<i>PM Emissions</i>	-30.12%	-29.32%	-12.39%	-34.00%	-38.22%	-15.73%	-27.87%	-36.23%	-28.38%	-29.74%	-23.35%	-21.07%	-28.43%	-20.28%	-20.70%
<b>Environmental Policy</b>															
<i>Energy Tax (% of GDP)*</i>	-0.28%	0.19%	-0.02%	-0.16%	-0.02%	-0.01%	0.11%	-0.07%	-0.57%	-0.09%	0.16%	-0.24%	0.00%	0.01%	-0.11%
<i>Environmental Tax (% of GDP)*</i>	2.13%	0.37%	0.19%	1.08%	0.02%	0.74%	0.16%	1.11%	4.65%	0.69%	0.29%	1.89%	0.12%	0.03%	1.08%
<i>Reduction of Social Security Rate*</i>	4.39%	1.41%	0.31%	2.41%	-0.03%	1.56%	1.04%	3.05%	9.78%	1.53%	1.26%	3.74%	0.31%	-0.02%	2.34%
<i>CO2 average marginal cost (EURO2000/tn CO2)</i>	97.98	14.08	11.03	46.05	7.65	32.22	7.04	31.57	132.19	22.53	13.82	41.26	8.31	4.59	34.44
<i>EU CO2 allowance price (EURO2000/tn CO2)</i>	14.20	14.72	14.11	14.15	14.90	16.40	14.65	16.64	14.88	15.79	16.37	14.36	14.80	14.12	

<i>CO2 domestic tax (EURO2000/tn CO2)</i>	140.38	13.78	9.11	60.32	1.23	35.88	2.88	41.19	154.44	24.92	11.23	53.50	6.29	0.69	
<b>Welfare</b>															
<i>Economic Welfare</i>	-0.81%	0.02%	-0.13%	0.02%	-0.07%	-0.30%	0.02%	0.01%	-2.34%	-0.36%	-0.07%	-0.30%	-0.01%	-0.12%	-0.50%
<i>Environmental Welfare</i>	43.54%	141.19%	40.95%	43.78%	117.48%	67.39%	569.50%	2097.93%	65.34%	82.63%	135.05%	296.99%	49.64%	75.22%	
<i>Total Welfare</i>	-0.69%	0.33%	0.13%	0.14%	-0.03%	-0.21%	0.12%	0.09%	-2.18%	0.10%	0.08%	-0.15%	0.03%	0.03%	-0.31%
<b>Sectoral Aggregates</b>	Austria	Belgium	Germany	Denmark	Finland	France	Greece	Ireland	Italy	The Netherlands	Portugal	Spain	Sweden	UK	EU
<b>Domestic Production in Volume</b>															
<i>Agriculture</i>	-0.19%	-0.34%	-0.22%	-1.07%	-0.03%	0.11%	-0.16%	-0.87%	-0.82%	-0.53%	-0.09%	-0.91%	-0.06%	0.00%	-0.31%
<i>Energy Production</i>	-12.70%	-4.68%	-3.63%	-11.87%	-3.66%	-4.66%	-4.29%	-11.08%	-13.14%	-3.52%	-4.08%	-9.50%	-2.42%	-2.69%	-6.03%
<i>Ferrous and non ferrous metals</i>	-0.24%	-1.81%	-0.76%	0.48%	-1.31%	-1.53%	-2.90%	-2.51%	1.32%	-1.12%	-1.42%	-0.68%	-0.47%	-1.56%	-0.72%
<i>Chemical Products</i>	-1.66%	-0.52%	-0.24%	-1.11%	-0.24%	0.10%	-0.46%	-0.20%	-2.04%	-0.48%	-0.53%	-1.89%	-0.05%	-0.09%	-0.53%
<i>Other energy intensive</i>	0.05%	-0.69%	-0.31%	-1.17%	-0.66%	-0.14%	-2.27%	-0.37%	0.42%	-0.11%	-0.79%	-0.51%	-0.32%	-0.29%	-0.21%
<i>Electric Goods</i>	0.25%	0.07%	-0.06%	-0.45%	-0.05%	0.12%	-0.52%	-0.19%	1.01%	0.01%	-0.26%	-0.07%	0.05%	-0.11%	0.09%
<i>Transport equipment</i>	-1.02%	-0.20%	-0.26%	-0.53%	-0.18%	-0.04%	-0.22%	0.22%	-0.90%	-0.19%	-0.46%	-0.82%	-0.02%	-0.27%	-0.30%
<i>Other Equipment Goods</i>	-0.25%	-0.14%	-0.08%	-0.16%	-0.16%	0.10%	-0.40%	-0.10%	0.68%	0.11%	-0.36%	-0.42%	-0.09%	-0.04%	0.05%
<i>Consumer Goods Industries</i>	-0.58%	-0.34%	-0.09%	-1.20%	0.00%	0.12%	-0.25%	-0.59%	-1.10%	-0.11%	-0.24%	-0.74%	-0.08%	0.03%	-0.29%
<i>Construction</i>	-0.44%	-0.11%	-0.13%	-0.24%	-0.15%	-0.35%	-0.16%	-0.30%	-0.72%	-0.11%	-0.16%	-0.33%	-0.08%	-0.16%	-0.28%
<i>Telecommunication Services</i>	0.38%	-0.18%	-0.06%	-0.80%	-0.06%	-0.03%	-0.01%	-0.03%	0.41%	-0.02%	-0.17%	0.21%	0.02%	-0.11%	-0.01%
<i>Transport</i>	-2.05%	-0.71%	-0.08%	-1.90%	-0.01%	-0.60%	-0.32%	-1.39%	-8.30%	-0.91%	-0.37%	-2.73%	-0.04%	0.07%	-1.63%
<i>Services of credit and insurances</i>	0.05%	0.00%	-0.02%	-0.61%	-0.09%	-0.15%	-0.17%	-0.17%	0.38%	-0.06%	-0.32%	-0.10%	-0.04%	-0.06%	-0.05%
<i>Other Market Services</i>	-0.38%	-0.04%	-0.06%	0.02%	-0.07%	-0.03%	-0.06%	-0.17%	-0.75%	-0.03%	-0.12%	-0.21%	-0.01%	-0.12%	-0.16%
<i>Non Market Services</i>	-0.03%	0.00%	-0.01%	0.03%	0.00%	0.03%	0.01%	0.06%	-0.01%	-0.01%	0.03%	0.05%	0.01%	-0.09%	-0.01%
<b>Exports in Volume</b>															
<i>Agriculture</i>	-0.15%	-0.34%	-0.49%	-1.27%	0.18%	0.21%	-0.17%	-1.34%	-0.74%	-0.68%	-0.04%	-1.67%	0.03%	0.16%	-0.49%
<i>Energy Exports</i>	-0.03%	-5.43%	-4.51%	-1.36%	-1.39%	-2.16%	-2.03%	-2.73%	-1.94%	-1.80%	-4.58%	3.17%	-4.92%	-3.43%	-2.72%
<i>Ferrous and non ferrous metals</i>	-0.22%	-1.95%	-1.28%	0.67%	-1.48%	-2.16%	-3.92%	-3.61%	2.56%	-1.18%	-1.96%	-0.69%	-0.47%	-2.10%	-0.91%
<i>Chemical Products</i>	-2.43%	-0.56%	-0.26%	-1.17%	-0.28%	0.27%	-1.06%	-0.21%	-3.47%	-0.52%	-1.31%	-3.49%	-0.05%	0.03%	-0.58%
<i>Other energy intensive</i>	0.42%	-1.04%	-0.57%	-1.03%	-0.88%	0.62%	-5.16%	-0.08%	3.21%	-0.04%	-1.29%	-0.65%	-0.41%	-0.34%	0.03%
<i>Electric Goods</i>	0.57%	0.15%	0.09%	-0.46%	0.02%	0.62%	-0.27%	-0.13%	3.55%	0.09%	-0.22%	0.22%	0.07%	0.07%	0.43%
<i>Transport equipment</i>	0.07%	-0.19%	-0.18%	0.25%	-0.17%	0.31%	0.02%	0.42%	2.31%	-0.08%	-0.47%	-0.57%	-0.01%	-0.31%	0.09%
<i>Other Equipment Goods</i>	-0.25%	-0.14%	0.07%	0.08%	-0.10%	0.63%	-0.14%	-0.08%	1.85%	0.22%	-0.56%	-0.34%	-0.06%	0.12%	0.38%
<i>Consumer Goods Industries</i>	-0.89%	-0.42%	-0.10%	-1.50%	-0.01%	0.33%	-0.75%	-0.90%	-1.40%	-0.12%	-0.46%	-1.94%	-0.14%	0.24%	-0.40%
<i>Construction</i>	-0.08%	-0.08%	0.27%	-0.40%	-0.12%	-	-0.78%	-	3.30%	0.52%	-	-	-	0.25%	0.06%
<i>Telecommunication Services</i>	1.92%	-0.49%	-0.08%	-1.10%	0.05%	1.06%	-0.10%	0.10%	4.90%	0.36%	-0.04%	1.01%	-0.03%	0.36%	0.55%
<i>Transport</i>	-2.18%	-0.78%	-0.06%	-2.07%	0.02%	-0.05%	-0.69%	-1.77%	-13.05%	-1.14%	-0.57%	-3.79%	-0.05%	0.42%	-2.70%

<i>Services of credit and insurances</i>	1.27%	0.11%	-0.23%	0.28%	-0.19%	0.32%	-0.28%	-0.07%	5.75%	0.50%	-0.35%	0.15%	-	0.37%	1.28%
<i>Other Market Services</i>	-0.47%	-0.30%	0.05%	0.23%	-0.18%	0.79%	-0.33%	-0.55%	0.78%	0.27%	0.06%	-1.00%	-0.10%	0.18%	0.14%
<i>Non Market Services</i>	1.27%	-	0.16%	0.32%	-0.03%	0.52%	-	0.45%	2.77%	0.29%	-	-	0.07%	0.16%	0.54%
<b>Price of Exports rel. EU average<sup>17</sup></b>															
<i>Agriculture</i>	-0.35%	-0.03%	-0.04%	0.56%	-0.53%	-0.51%	-0.26%	0.60%	0.10%	0.17%	-0.33%	0.83%	-0.41%	-0.43%	0.46%
<i>Ferrous and non ferrous metals</i>	-0.32%	0.49%	0.18%	-0.73%	0.28%	0.59%	1.46%	1.18%	-1.76%	0.09%	0.49%	-0.16%	-0.21%	0.58%	0.47%
<i>Chemical Products</i>	0.86%	0.01%	-0.14%	0.29%	-0.12%	-0.38%	0.23%	-0.19%	1.25%	-0.01%	0.33%	1.34%	-0.24%	-0.25%	0.26%
<i>Other energy intensive</i>	-0.19%	0.45%	0.31%	0.51%	0.45%	-0.26%	2.62%	0.06%	-1.54%	0.01%	0.57%	0.28%	0.22%	0.22%	-0.17%
<i>Electric Goods</i>	-0.10%	0.08%	0.18%	0.42%	0.25%	-0.07%	0.31%	0.21%	-1.53%	0.14%	0.22%	0.03%	0.23%	0.19%	-0.37%
<i>Transport equipment</i>	-0.01%	0.09%	0.15%	0.03%	0.28%	-0.08%	0.20%	-0.09%	-1.08%	0.10%	0.19%	0.15%	0.17%	0.25%	-0.33%
<i>Other Equipment Goods</i>	0.28%	0.21%	0.19%	0.16%	0.29%	-0.10%	0.28%	0.15%	-0.79%	0.05%	0.39%	0.29%	0.25%	0.16%	-0.31%
<i>Consumer Goods Industries</i>	0.19%	0.04%	-0.10%	0.47%	-0.14%	-0.27%	0.14%	0.20%	0.29%	-0.08%	0.08%	0.60%	-0.09%	-0.24%	0.19%
<i>Construction</i>	0.12%	0.10%	-0.15%	0.29%	0.09%	-0.59%	0.62%	-0.01%	-2.19%	-0.33%	-0.03%	0.29%	0.04%	-0.15%	-0.07%
<i>Telecommunication Services</i>	-0.95%	0.64%	0.37%	1.15%	0.41%	-0.41%	0.52%	0.26%	-2.83%	0.09%	0.42%	-0.38%	0.40%	0.15%	-0.50%
<i>Transport</i>	-0.40%	-0.99%	-1.34%	-0.50%	-1.45%	-0.62%	-1.16%	-0.09%	6.44%	-0.62%	-1.02%	0.40%	-1.38%	-1.62%	1.57%
<i>Services of credit and insurance</i>	-0.01%	0.52%	0.85%	0.59%	1.00%	0.53%	0.88%	0.76%	-2.98%	0.36%	0.93%	0.66%	0.84%	0.74%	-1.07%
<i>Other Market Services</i>	0.52%	0.24%	-0.01%	-0.09%	0.22%	-0.49%	0.46%	0.47%	-0.38%	-0.17%	0.05%	0.82%	0.23%	0.02%	-0.29%
<i>Non Market Services</i>	-1.09%	0.09%	0.61%	0.33%	0.90%	0.03%	0.92%	0.14%	-3.31%	0.38%	0.31%	-0.12%	0.74%	0.61%	-0.89%

<sup>17</sup> For the EU it is the relative price compared to World prices

**EU CO2 ALLOWANCE SCHEME PLUS EU MIN TAX IN 2005 AND 2010 AND DOMESTIC CO2 TAX WITH SS RECYCLING IN 2010, WITH EXEMPTION FOR SECTORS IN EU SCHEME, FOR KYOTO TARGET**

2005 (% difference compared to reference except \* where difference)

EU CO2 allowance scheme plus EU min tax in 2005 and 2010, domestic tax for Kyoto, SS recycling, with exemption for EI of min tax, rent in capital income compared to Reference Scenario

	Austria	Belgium	Germany	Denmark	Finland	France	Greece	Ireland	Italy	The Netherlands	Portugal	Spain	Sweden	UK	EU
<b>Macroeconomic Aggregates</b>															
<i>Gross Domestic Product</i>	-0.01%	0.02%	-0.03%	-0.01%	-0.04%	0.02%	-0.04%	-0.01%	-0.01%	-0.02%	0.03%	0.00%	0.01%	-0.04%	-0.01%
<i>Employment</i>	0.01%	0.11%	-0.02%	-0.01%	-0.05%	0.03%	0.06%	-0.04%	0.00%	-0.02%	0.08%	-0.02%	0.00%	-0.04%	-0.01%
<i>Private Consumption</i>	-0.02%	0.14%	-0.04%	-0.04%	-0.07%	0.03%	-0.01%	-0.09%	0.00%	-0.04%	0.00%	-0.04%	0.02%	-0.10%	-0.02%
<i>Investment</i>	-0.04%	-0.05%	-0.04%	-0.01%	-0.08%	-0.03%	-0.08%	-0.05%	-0.03%	-0.03%	-0.06%	-0.07%	-0.04%	-0.07%	-0.04%
<i>Energy Consumption</i>	-1.83%	-3.94%	-1.35%	-2.34%	-5.77%	-0.91%	-3.89%	-3.99%	-0.28%	-1.71%	-2.68%	-1.81%	-2.05%	-1.82%	-1.60%
<i>Share Coal*</i>	-1.23%	-2.18%	-0.78%	-1.67%	-4.00%	-0.56%	-2.77%	-2.48%	-0.17%	-1.25%	-1.82%	-1.23%	-1.71%	-1.28%	-1.08%
<i>Share Oil*</i>	0.80%	0.90%	0.48%	0.94%	2.82%	0.40%	2.40%	1.93%	0.12%	0.61%	1.61%	1.08%	1.07%	0.91%	0.71%
<i>Share Gas*</i>	0.14%	0.64%	0.18%	0.48%	0.26%	0.12%	0.03%	0.45%	0.03%	0.56%	0.02%	0.03%	0.28%	0.23%	
<i>Share Electricity*</i>	0.28%	0.64%	0.12%	0.25%	0.92%	0.04%	0.35%	0.11%	0.02%	0.09%	0.21%	0.14%	0.61%	0.09%	0.14%
<i>Exports</i>	-0.09%	-0.30%	-0.08%	-0.03%	-0.16%	-0.02%	-0.27%	-0.07%	-0.03%	-0.10%	-0.07%	-0.10%	-0.05%	-0.03%	-
<i>Exports within EU</i>	-0.10%	-0.28%	-0.10%	-0.01%	-0.19%	-0.03%	-0.35%	-0.09%	-0.04%	-0.11%	-0.09%	-0.12%	-0.06%	-0.05%	-
<i>Exports to RW</i>	-0.07%	-0.35%	-0.07%	-0.05%	-0.14%	-0.01%	-0.23%	-0.04%	-0.02%	-0.06%	-0.04%	-0.08%	-0.05%	-0.01%	-0.06%
<i>Imports</i>	-0.13%	-0.31%	-0.11%	-0.07%	-0.26%	-0.08%	-0.25%	-0.16%	-0.05%	-0.13%	-0.21%	-0.28%	-0.11%	-0.13%	-0.21%
<i>Real Wage Rate</i>	-0.01%	0.40%	-0.09%	-0.08%	-0.15%	0.11%	0.19%	-0.16%	0.00%	-0.10%	0.16%	-0.08%	0.03%	-0.15%	-0.03%
<i>Relative Consumer Price</i>	-0.02%	0.07%	0.03%	0.03%	0.11%	-0.09%	0.32%	0.12%	-0.05%	0.03%	0.31%	0.03%	0.00%	0.02%	0.00%
<i>Terms of Trade</i>	-0.01%	0.08%	0.02%	0.00%	0.03%	0.00%	0.08%	-0.01%	-0.01%	-0.02%	-0.03%	-0.02%	-0.02%	-0.01%	0.01%
<i>Public Surplus (% of GDP)*</i>	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	-
<i>Current Account (% of GDP)*</i>	0.01%	0.07%	0.01%	0.00%	0.04%	0.01%	0.07%	0.03%	0.00%	0.00%	0.06%	0.02%	0.02%	0.04%	0.01%
<b>Total Atmospheric Emissions</b>															
<i>CO2 Emissions</i>	-3.57%	-8.54%	-2.45%	-3.91%	-11.90%	-1.46%	-7.56%	-7.28%	-0.74%	-3.98%	-5.59%	-2.93%	-4.97%	-4.09%	-3.25%
<i>NOX Emissions</i>	-2.54%	-9.21%	-2.50%	-4.89%	-12.12%	-1.38%	-6.98%	-9.94%	-0.58%	-4.84%	-6.03%	-2.76%	-5.57%	-4.92%	-3.41%
<i>SO2 Emissions</i>	-10.21%	-15.52%	-5.37%	-12.82%	-21.04%	-5.36%	-16.66%	-16.63%	-3.80%	-17.18%	-8.54%	-6.94%	-13.75%	-10.53%	-8.85%
<i>VOC Emissions</i>	-0.19%	-2.92%	-0.28%	-0.38%	-1.10%	-0.14%	-1.17%	-1.00%	-0.05%	-0.24%	-0.83%	-0.14%	-0.38%	-0.28%	-0.33%
<i>PM Emissions</i>	-12.42%	-15.04%	-4.89%	-14.10%	-22.52%	-4.72%	-16.52%	-18.66%	-2.06%	-14.14%	-10.16%	-7.10%	-15.67%	-10.64%	-8.68%
<b>Environmental Policy</b>															
<i>Energy Tax (% of GDP)*</i>	0.03%	0.24%	0.00%	-0.01%	-0.01%	0.06%	0.17%	0.03%	0.00%	0.00%	0.24%	0.02%	0.01%	0.01%	0.03%
<i>Environmental Tax (% of GDP)*</i>	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
<i>Reduction of Social Security Rate*</i>	0.07%	0.67%	-0.02%	-0.03%	-0.05%	0.16%	0.68%	0.04%	0.01%	-0.03%	0.70%	0.04%	0.07%	-0.02%	0.08%
<i>EU CO2 allowance price (EURO2000/tn CO2)</i>	5.93	6.08	5.90	6.02	6.12	6.42	6.04	6.38	6.11	6.38	6.78	6.24	6.08	5.94	6.08

**Welfare**

<i>Economic Welfare</i>	-0.02%	0.09%	-0.03%	-0.03%	-0.04%	0.01%	-0.02%	-0.05%	0.00%	-0.05%	-0.03%	-0.02%	0.01%	-0.05%	-0.02%
<i>Environmental Welfare</i>	10.72%	55.70%	16.34%	17.77%	54.07%	16.36%	164.21%	286.76%	5.38%	37.41%	71.72%	934.92%	20.58%	47.06%	
<i>Total Welfare</i>	0.01%	0.24%	0.08%	0.03%	-0.01%	0.04%	0.03%	-0.01%	0.02%	0.18%	0.03%	0.02%	0.04%	0.04%	0.06%

**Sectoral Aggregates**

	Austria	Belgium	Germany	Denmark	Finland	France	Greece	Ireland	Italy	The Netherlands	Portugal	Spain	Sweden	UK	EU
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**Domestic Production in Volume**

<i>Agriculture</i>	-0.02%	-0.21%	-0.05%	0.00%	-0.01%	0.02%	-0.03%	-0.02%	0.00%	-0.01%	0.01%	-0.04%	-0.01%	-0.02%	-0.02%
<i>Energy Production</i>	-0.84%	-1.32%	-1.29%	-0.74%	-1.48%	-0.82%	-1.88%	-1.27%	-0.16%	-0.51%	-1.04%	-0.84%	-0.48%	-0.97%	-0.87%
<i>Coal</i>	-13.25%	-13.22%	-5.63%	-22.15%	-24.39%	-7.32%	-21.80%	-12.74%	-10.60%	-10.94%	-12.87%	-10.15%	-23.23%	-11.30%	-7.70%
<i>Oil</i>	-0.22%	-1.27%	-0.18%	-0.67%	-0.54%	-0.12%	-0.39%	-0.21%	-0.09%	-0.44%	-0.39%	-0.15%	-0.22%	-0.16%	-0.26%
<i>Gas</i>	-0.95%	0.38%	-0.47%	0.15%	-1.52%	0.02%	-0.98%	-1.30%	-0.15%	-0.16%		-1.48%	-0.04%	-0.51%	-0.25%
<i>Electricity</i>	-0.71%	-1.07%	-0.76%	-0.79%	-1.55%	-0.69%	-1.58%	-2.74%	-0.07%	-0.73%	-1.08%	-0.94%	-0.33%	-1.07%	-0.75%
<i>Ferrous and non ferrous metals</i>	-0.60%	-0.82%	-0.34%	0.01%	-0.58%	-0.67%	-1.28%	-1.11%	-0.18%	-0.58%	-0.60%	-0.51%	-0.22%	-0.74%	-0.47%
<i>Chemical Products</i>	-0.33%	-0.24%	-0.09%	-0.05%	-0.11%	-0.01%	-0.18%	-0.07%	0.00%	-0.06%	-0.09%	-0.14%	-0.02%	-0.08%	-0.07%
<i>Other energy intensive</i>	-0.10%	-0.28%	-0.13%	-0.54%	-0.27%	-0.05%	-1.03%	-0.19%	-0.12%	-0.10%	-0.26%	-0.30%	-0.10%	-0.14%	-0.14%
<i>Electric Goods</i>	-0.02%	0.01%	-0.04%	-0.01%	-0.03%	-0.01%	-0.26%	-0.05%	-0.02%	-0.03%	-0.06%	-0.10%	0.01%	-0.05%	-0.03%
<i>Transport equipment</i>	-0.03%	-0.02%	-0.02%	-0.01%	-0.08%	-0.01%	-0.21%	-0.03%	-0.03%	-0.03%	-0.17%	-0.10%	0.00%	-0.08%	-0.03%
<i>Other Equipment Goods</i>	-0.04%	-0.09%	-0.05%	-0.02%	-0.07%	-0.02%	-0.21%	-0.06%	-0.04%	-0.04%	-0.09%	-0.09%	-0.04%	-0.04%	-0.04%
<i>Consumer Goods Industries</i>	0.00%	-0.24%	-0.03%	0.00%	0.00%	0.03%	-0.07%	-0.08%	0.01%	-0.02%	0.00%	-0.04%	-0.01%	-0.01%	-0.02%
<i>Construction</i>	-0.03%	-0.05%	-0.05%	0.00%	-0.07%	-0.04%	-0.08%	-0.08%	-0.03%	-0.02%	-0.05%	-0.09%	-0.03%	-0.06%	-0.05%
<i>Telecommunication Services</i>	0.00%	-0.24%	-0.03%	-0.02%	-0.03%	-0.02%	0.02%	-0.06%	0.00%	0.00%	-0.06%	-0.02%	0.01%	-0.05%	-0.03%
<i>Transport</i>	0.04%	-0.44%	-0.03%	0.01%	-0.02%	-0.02%	0.02%	-0.05%	-0.02%	-0.02%	0.00%	0.01%	0.00%	-0.04%	-0.04%
<i>Services of credit and insurances</i>	0.00%	0.01%	-0.01%	-0.03%	-0.04%	-0.02%	-0.06%	-0.08%	-0.03%	0.00%	-0.09%	-0.04%	-0.01%	-0.03%	-0.02%
<i>Other Market Services</i>	0.00%	-0.01%	-0.02%	-0.01%	-0.03%	0.01%	-0.01%	-0.05%	0.00%	-0.02%	-0.01%	-0.02%	0.00%	-0.06%	-0.02%
<i>Non Market Services</i>	0.00%	0.00%	0.00%	-0.01%	0.00%	0.00%	0.00%	-0.01%	0.00%	0.00%	0.02%	0.00%	0.00%	-0.04%	-0.01%

**Exports in Volume**

<i>Agriculture</i>	0.00%	-0.19%	-0.07%	-0.01%	0.06%	0.02%	0.03%	0.05%	0.01%	-0.01%	0.00%	-0.02%	0.00%	0.04%	-0.01%
<i>Energy Exports</i>	-0.91%	-0.28%	-1.05%	-0.55%	-0.13%	0.12%	0.04%	-0.34%	-0.03%	-0.37%	-0.24%	-0.15%	-0.37%	-0.19%	-0.29%
<i>Coal</i>	-	-8.06%	-9.13%	0.04%	-8.41%	-7.45%	-	-0.75%	-3.47%	-0.95%	-2.50%	-5.01%	-3.31%	-6.70%	-6.14%
<i>Oil</i>	0.05%	-0.11%	-0.18%	0.09%	-0.07%	-0.18%	0.04%	-0.25%	-0.02%	-0.58%	-0.05%	0.03%	-0.25%	-0.15%	-0.24%
<i>Gas</i>	-	-	0.36%	-0.10%	-	-0.19%	-	-	0.74%	0.51%	-	-	-	0.46%	0.48%
<i>Electricity</i>	-1.27%	-1.06%	-1.45%	-4.50%	-4.44%	0.41%	-	-9.25%	-0.45%	-5.37%	-1.20%	-2.20%	-0.91%	-5.03%	-0.56%
<i>Ferrous and non ferrous metals</i>	-0.76%	-0.89%	-0.59%	0.01%	-0.67%	-1.02%	-1.74%	-1.63%	-0.31%	-0.62%	-0.90%	-0.70%	-0.22%	-1.02%	-0.65%
<i>Chemical Products</i>	-0.50%	-0.25%	-0.09%	-0.05%	-0.11%	0.01%	-0.31%	-0.07%	0.03%	-0.07%	-0.23%	-0.18%	-0.02%	-0.04%	-0.08%
<i>Other energy intensive</i>	-0.14%	-0.39%	-0.25%	-0.94%	-0.35%	0.09%	-2.32%	-0.29%	-0.29%	-0.15%	-0.42%	-0.58%	-0.12%	-0.13%	-0.24%
<i>Electric Goods</i>	-0.01%	0.02%	-0.01%	-0.01%	0.00%	0.04%	-0.16%	-0.04%	-0.02%	-0.03%	-0.05%	-0.04%	0.02%	0.04%	0.00%

<i>Transport equipment</i>	-0.03%	-0.02%	-0.02%	0.02%	-0.08%	0.00%	0.05%	0.04%	-0.03%	-0.04%	-0.06%	-0.11%	0.01%	-0.07%	-0.03%	
<i>Other Equipment Goods</i>	-0.02%	-0.10%	-0.01%	0.00%	-0.05%	0.02%	-0.10%	-0.05%	-0.04%	-0.05%	-0.14%	-0.03%	-0.03%	0.03%	-0.02%	
<i>Consumer Goods Industries</i>	0.02%	-0.29%	-0.01%	0.00%	0.00%	0.08%	-0.17%	-0.09%	0.02%	-0.03%	-0.03%	-0.05%	-0.01%	0.06%	-0.01%	
<i>Construction</i>	0.09%	-0.11%	0.04%	-0.06%	-0.06%	-	-0.26%	-	0.01%	-0.02%	-	-	-	0.01%	-0.01%	
<i>Telecommunication Services</i>	0.11%	-0.60%	0.00%	0.04%	0.01%	0.11%	0.10%	-0.03%	0.06%	0.02%	-0.05%	0.15%	0.01%	0.18%	0.02%	
<i>Transport</i>	0.05%	-0.48%	0.01%	0.02%	-0.02%	-0.01%	0.06%	-0.05%	0.07%	-0.02%	0.12%	0.06%	0.00%	0.04%	-0.01%	
<i>Services of credit and insurances</i>	0.12%	0.16%	-0.05%	0.03%	-0.03%	0.07%	0.31%	-0.03%	-0.02%	-0.03%	0.09%	0.16%	-	0.15%	0.09%	
<i>Other Market Services</i>	0.05%	-0.18%	0.01%	0.01%	-0.06%	0.08%	-0.03%	-0.02%	0.02%	0.00%	0.11%	0.06%	-0.02%	0.08%	0.03%	
<i>Non Market Services</i>	0.07%	-	0.02%	0.00%	-0.03%	0.07%	-	-0.02%	0.03%	0.00%	-	-	0.02%	0.04%	0.06%	
<b>Price of Exports rel. EU average<sup>18</sup></b>																
<i>Agriculture</i>	0.00%	0.12%	0.05%	0.00%	-0.05%	-0.03%	-0.03%	-0.04%	-0.01%	-0.01%	-0.01%	0.01%	-0.01%	-0.03%	-0.01%	
<i>Ferrous and non ferrous metals</i>	0.06%	0.12%	-0.03%	-0.30%	0.01%	0.17%	0.52%	0.44%	-0.17%	-0.03%	0.13%	0.02%	-0.22%	0.17%	0.38%	
<i>Chemical Products</i>	0.20%	0.07%	0.00%	-0.01%	0.02%	-0.04%	0.11%	-0.01%	-0.05%	-0.01%	0.07%	0.05%	-0.03%	-0.01%	0.04%	
<i>Other energy intensive</i>	-0.04%	0.07%	0.00%	0.32%	0.04%	-0.15%	0.99%	0.02%	0.02%	-0.04%	0.09%	0.16%	-0.06%	-0.05%	0.13%	
<i>Electric Goods</i>	0.00%	-0.02%	0.01%	0.00%	0.00%	-0.01%	0.07%	0.01%	0.01%	0.01%	0.02%	0.02%	0.00%	-0.01%	-0.02%	
<i>Transport equipment</i>	0.00%	-0.01%	0.00%	-0.02%	0.03%	-0.01%	-0.03%	-0.04%	0.00%	0.00%	0.02%	0.04%	-0.02%	0.02%	0.01%	
<i>Other Equipment Goods</i>	0.00%	0.03%	0.00%	-0.01%	0.02%	-0.02%	0.04%	0.01%	0.01%	0.01%	0.05%	0.01%	0.01%	-0.02%	-0.01%	
<i>Consumer Goods Industries</i>	-0.01%	0.10%	0.00%	-0.01%	-0.01%	-0.04%	0.06%	0.03%	-0.01%	0.00%	0.01%	0.02%	0.00%	-0.03%	0.00%	
<i>Construction</i>	-0.07%	0.07%	-0.04%	0.03%	0.03%	-0.09%	0.18%	0.06%	-0.02%	0.00%	-0.06%	-0.05%	-0.03%	-0.02%	0.01%	
<i>Telecommunication Services</i>	-0.06%	0.41%	0.02%	-0.01%	0.01%	-0.06%	-0.05%	0.02%	-0.02%	0.00%	0.04%	-0.09%	0.01%	-0.10%	-0.03%	
<i>Transport</i>	-0.01%	0.24%	-0.01%	0.01%	-0.01%	-0.06%	-0.05%	0.01%	-0.03%	-0.01%	-0.09%	-0.02%	0.00%	-0.03%	-0.02%	
<i>Services of credit and insurances</i>	-0.01%	-0.12%	0.04%	0.04%	0.07%	0.01%	-0.18%	0.06%	0.08%	0.06%	-0.02%	-0.05%	0.02%	-0.03%	-0.09%	
<i>Other Market Services</i>	0.00%	0.13%	-0.01%	0.02%	0.04%	-0.04%	0.06%	0.01%	0.01%	0.01%	-0.07%	-0.03%	0.05%	-0.03%	-0.06%	
<i>Non Market Services</i>	-0.01%	-0.29%	0.06%	0.09%	0.14%	-0.02%	0.00%	0.11%	0.05%	0.09%	-0.19%	0.01%	0.05%	0.03%	-0.11%	

<sup>18</sup> For the EU it is the relative price compared to World prices

2010	(% difference compared to reference except * where difference)														
EU CO2 allowance scheme plus EU min tax in 2005 and 2010, domestic tax for Kyoto, SS recycling, with exemption for EI of min tax, rent in capital income compared to Reference Scenario	Austria	Belgium	Germany	Denmark	Finland	France	Greece	Ireland	Italy	The Netherlands	Portugal	Spain	Sweden	UK	EU
<b>Macroeconomic Aggregates</b>															
<i>Gross Domestic Product</i>	-0.27%	-0.04%	-0.06%	-0.19%	-0.14%	0.10%	-0.17%	-0.16%	-0.38%	-0.08%	-0.03%	-0.12%	-0.01%	-0.12%	-0.10%
<i>Employment</i>	0.77%	0.20%	0.01%	0.18%	-0.08%	0.31%	0.06%	0.38%	1.90%	0.25%	0.11%	0.68%	0.03%	-0.07%	0.40%
<i>Private Consumption</i>	-0.56%	0.10%	-0.15%	0.11%	-0.13%	-0.19%	0.03%	0.24%	-1.49%	-0.29%	-0.03%	0.01%	-0.01%	-0.24%	-0.32%
<i>Investment</i>	-0.32%	-0.11%	-0.10%	-0.29%	-0.19%	-0.29%	-0.16%	-0.19%	-0.64%	-0.17%	-0.19%	-0.34%	-0.08%	-0.19%	-0.25%
<i>Energy Consumption</i>	-16.15%	-8.90%	-4.24%	-17.37%	-11.06%	-5.60%	-7.57%	-15.74%	-17.42%	-7.53%	-8.05%	-14.98%	-4.95%	-3.79%	-8.49%
<i>Share Coal*</i>	-1.15%	-4.13%	-1.63%	-2.46%	-6.90%	-1.33%	-4.25%	-2.81%	-0.12%	-2.18%	-3.86%	-1.46%	-2.87%	-2.33%	-1.68%
<i>Share Oil*</i>	-4.20%	1.09%	0.65%	-1.97%	4.68%	-0.19%	3.53%	0.46%	-5.01%	1.20%	3.16%	-1.23%	1.28%	1.58%	-0.55%
<i>Share Gas*</i>	1.74%	1.37%	0.51%	1.66%	0.39%	0.36%	0.05%	1.49%	3.06%	0.47%		0.55%	0.06%	0.56%	1.00%
<i>Share Electricity*</i>	3.61%	1.68%	0.48%	2.76%	1.83%	1.16%	0.66%	0.85%	2.07%	0.51%	0.70%	2.15%	1.53%	0.19%	1.22%
<i>Exports</i>	-0.60%	-0.73%	-0.23%	-0.75%	-0.42%	0.26%	-0.95%	-0.58%	-0.61%	-0.35%	-0.58%	-1.48%	-0.22%	-0.14%	-
<i>Exports within EU</i>	-0.49%	-0.82%	-0.43%	-0.55%	-0.70%	0.06%	-1.40%	-0.64%	-0.12%	-0.44%	-0.66%	-1.34%	-0.47%	-0.51%	-
<i>Exports to RW</i>	-0.67%	-0.60%	-0.07%	-0.88%	-0.21%	0.46%	-0.77%	-0.47%	-0.94%	-0.20%	-0.43%	-1.62%	-0.04%	0.13%	-0.27%
<i>Imports</i>	-0.89%	-0.76%	-0.41%	-0.53%	-0.53%	-0.65%	-0.57%	-0.67%	-2.86%	-0.60%	-0.77%	-1.81%	-0.36%	-0.33%	-1.50%
<i>Real Wage Rate</i>	0.85%	0.56%	-0.16%	0.79%	-0.30%	0.46%	0.26%	0.86%	4.18%	0.51%	0.22%	1.39%	0.06%	-0.33%	0.47%
<i>Relative Consumer Price</i>	2.01%	0.39%	0.19%	0.38%	0.24%	0.19%	0.66%	0.88%	2.87%	0.24%	0.53%	1.32%	0.13%	-0.05%	0.66%
<i>Terms of Trade</i>	0.15%	0.23%	0.04%	0.20%	0.08%	0.00%	0.38%	0.20%	0.33%	-0.03%	0.02%	0.56%	-0.01%	-0.10%	-0.03%
<i>Public Surplus (% of GDP)*</i>	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	-
<i>Current Account (% of GDP)*</i>	0.21%	0.17%	0.06%	0.04%	0.11%	0.24%	0.12%	0.26%	0.91%	0.18%	0.13%	0.18%	0.05%	0.09%	0.24%
<b>Total Atmospheric Emissions</b>															
<i>CO2 Emissions</i>	-21.61%	-16.76%	-7.21%	-22.69%	-21.30%	-7.75%	-13.23%	-22.59%	-22.05%	-13.29%	-13.91%	-17.42%	-10.65%	-7.66%	-12.65%
<i>NOX Emissions</i>	-25.18%	-18.07%	-7.60%	-26.01%	-21.25%	-8.45%	-12.25%	-26.00%	-26.78%	-14.20%	-15.11%	-18.70%	-11.89%	-9.07%	-14.63%
<i>SO2 Emissions</i>	-26.55%	-29.39%	-13.32%	-32.46%	-36.60%	-16.46%	-28.62%	-33.03%	-21.93%	-34.33%	-20.41%	-20.16%	-25.79%	-20.42%	-20.15%
<i>VOC Emissions</i>	-22.36%	-7.10%	-2.97%	-22.45%	-2.87%	-4.97%	-3.38%	-16.98%	-23.86%	-7.29%	-4.60%	-16.29%	-3.09%	-0.57%	-9.68%
<i>PM Emissions</i>	-30.44%	-29.20%	-12.56%	-34.33%	-38.67%	-15.33%	-27.96%	-36.54%	-28.42%	-29.75%	-23.76%	-21.30%	-28.77%	-20.62%	-20.85%
<b>Environmental Policy</b>															
<i>Energy Tax (% of GDP)*</i>	-0.30%	0.16%	-0.02%	-0.16%	-0.02%	-0.03%	0.10%	-0.07%	-0.57%	-0.09%	0.16%	-0.24%	-0.01%	0.01%	-0.12%
<i>Environmental Tax (% of GDP)*</i>	2.13%	0.37%	0.19%	1.08%	0.02%	0.74%	0.16%	1.11%	4.65%	0.69%	0.29%	1.89%	0.12%	0.03%	1.08%
<i>Reduction of Social Security Rate*</i>	4.34%	1.35%	0.30%	2.41%	-0.03%	1.51%	1.01%	3.04%	9.78%	1.51%	1.26%	3.72%	0.29%	-0.02%	2.32%
<i>CO2 average marginal cost (EURO2000/tn CO2)</i>	98.11	14.21	11.17	46.21	7.81	32.31	7.17	31.74	132.27	22.65	14.03	41.38	8.37	4.68	34.56
<i>EU CO2 allowance price (EURO2000/tn CO2)</i>	14.59	15.12	14.50	14.54	15.31	16.85	15.05	17.09	15.29	16.22	16.82	14.76	15.21	14.51	

<i>CO2 domestic tax (EURO2000/tn CO2)</i>	140.28	13.77	9.10	60.31	1.22	35.92	2.88	41.15	154.45	24.93	11.20	53.49	6.26	0.68	
<b>Welfare</b>															
<i>Economic Welfare</i>	-0.82%	0.01%	-0.14%	0.01%	-0.07%	-0.31%	0.02%	0.01%	-2.34%	-0.36%	-0.07%	-0.30%	-0.02%	-0.13%	-0.50%
<i>Environmental Welfare</i>	43.63%	139.85%	41.04%	44.01%	118.70%	66.63%	572.03%	2113.62%	65.30%	82.29%	136.71%	298.59%	50.01%	76.25%	
<i>Total Welfare</i>	-0.70%	0.31%	0.13%	0.14%	-0.03%	-0.22%	0.12%	0.09%	-2.18%	0.09%	0.09%	-0.16%	0.03%	0.03%	-0.31%
<b>Sectoral Aggregates</b>	Austria	Belgium	Germany	Denmark	Finland	France	Greece	Ireland	Italy	The Netherlands	Portugal	Spain	Sweden	UK	EU
<b>Domestic Production in Volume</b>															
<i>Agriculture</i>	-0.20%	-0.35%	-0.22%	-1.07%	-0.03%	0.10%	-0.17%	-0.87%	-0.82%	-0.54%	-0.10%	-0.91%	-0.06%	0.00%	-0.31%
<i>Energy Production</i>	-12.61%	-4.62%	-3.66%	-11.90%	-3.72%	-4.52%	-4.33%	-11.11%	-13.15%	-3.53%	-4.14%	-9.53%	-2.41%	-2.73%	-6.02%
<i>Ferrous and non ferrous metals</i>	-0.20%	-1.60%	-0.73%	0.46%	-1.35%	-1.17%	-2.87%	-2.50%	1.33%	-1.01%	-1.47%	-0.63%	-0.48%	-1.60%	-0.64%
<i>Chemical Products</i>	-1.67%	-0.53%	-0.25%	-1.11%	-0.25%	0.09%	-0.47%	-0.20%	-2.04%	-0.49%	-0.54%	-1.89%	-0.05%	-0.09%	-0.54%
<i>Other energy intensive</i>	0.15%	-0.60%	-0.31%	-1.20%	-0.67%	-0.10%	-2.25%	-0.37%	0.41%	-0.11%	-0.81%	-0.49%	-0.30%	-0.30%	-0.20%
<i>Electric Goods</i>	0.25%	0.06%	-0.06%	-0.45%	-0.05%	0.12%	-0.52%	-0.19%	1.01%	0.01%	-0.27%	-0.07%	0.04%	-0.11%	0.09%
<i>Transport equipment</i>	-1.03%	-0.21%	-0.26%	-0.53%	-0.18%	-0.05%	-0.22%	0.22%	-0.90%	-0.19%	-0.47%	-0.81%	-0.03%	-0.27%	-0.30%
<i>Other Equipment Goods</i>	-0.26%	-0.15%	-0.08%	-0.16%	-0.16%	0.09%	-0.40%	-0.10%	0.68%	0.11%	-0.36%	-0.42%	-0.10%	-0.04%	0.05%
<i>Consumer Goods Industries</i>	-0.59%	-0.35%	-0.09%	-1.20%	0.00%	0.10%	-0.26%	-0.59%	-1.10%	-0.12%	-0.25%	-0.74%	-0.08%	0.03%	-0.29%
<i>Construction</i>	-0.43%	-0.11%	-0.13%	-0.24%	-0.16%	-0.35%	-0.16%	-0.30%	-0.73%	-0.11%	-0.17%	-0.32%	-0.08%	-0.16%	-0.28%
<i>Telecommunication Services</i>	0.37%	-0.20%	-0.07%	-0.80%	-0.06%	-0.04%	-0.02%	-0.04%	0.41%	-0.03%	-0.18%	0.21%	0.02%	-0.11%	-0.01%
<i>Transport</i>	-2.07%	-0.73%	-0.09%	-1.90%	-0.01%	-0.61%	-0.33%	-1.39%	-8.30%	-0.91%	-0.38%	-2.74%	-0.04%	0.07%	-1.64%
<i>Services of credit and insurances</i>	0.05%	-0.01%	-0.03%	-0.61%	-0.09%	-0.14%	-0.17%	-0.17%	0.38%	-0.06%	-0.33%	-0.11%	-0.04%	-0.06%	-0.05%
<i>Other Market Services</i>	-0.39%	-0.04%	-0.06%	0.02%	-0.08%	-0.03%	-0.06%	-0.17%	-0.75%	-0.03%	-0.13%	-0.22%	-0.01%	-0.12%	-0.16%
<i>Non Market Services</i>	-0.03%	0.00%	-0.01%	0.03%	0.00%	0.03%	0.01%	0.06%	-0.01%	-0.01%	0.03%	0.04%	0.00%	-0.09%	-0.01%
<b>Exports in Volume</b>															
<i>Agriculture</i>	-0.16%	-0.34%	-0.49%	-1.27%	0.18%	0.20%	-0.18%	-1.34%	-0.75%	-0.68%	-0.04%	-1.67%	0.03%	0.16%	-0.50%
<i>Energy Exports</i>	-0.21%	-5.43%	-4.50%	-1.38%	-1.39%	-2.32%	-2.03%	-2.73%	-1.94%	-1.79%	-4.60%	3.16%	-4.96%	-3.44%	-2.74%
<i>Ferrous and non ferrous metals</i>	-0.17%	-1.71%	-1.22%	0.65%	-1.53%	-1.62%	-3.87%	-3.60%	2.58%	-1.07%	-2.02%	-0.60%	-0.48%	-2.15%	-0.79%
<i>Chemical Products</i>	-2.46%	-0.58%	-0.27%	-1.16%	-0.28%	0.24%	-1.09%	-0.22%	-3.47%	-0.52%	-1.34%	-3.50%	-0.06%	0.02%	-0.59%
<i>Other energy intensive</i>	0.60%	-0.89%	-0.57%	-1.08%	-0.90%	0.70%	-5.12%	-0.06%	3.19%	-0.05%	-1.33%	-0.60%	-0.39%	-0.36%	0.06%
<i>Electric Goods</i>	0.56%	0.13%	0.08%	-0.45%	0.01%	0.60%	-0.28%	-0.13%	3.56%	0.09%	-0.22%	0.22%	0.06%	0.07%	0.42%
<i>Transport equipment</i>	0.07%	-0.19%	-0.18%	0.27%	-0.17%	0.31%	0.00%	0.42%	2.31%	-0.08%	-0.48%	-0.57%	-0.01%	-0.32%	0.08%
<i>Other Equipment Goods</i>	-0.26%	-0.14%	0.07%	0.09%	-0.10%	0.62%	-0.15%	-0.08%	1.85%	0.22%	-0.57%	-0.34%	-0.07%	0.12%	0.38%
<i>Consumer Goods Industries</i>	-0.90%	-0.43%	-0.11%	-1.49%	0.00%	0.30%	-0.77%	-0.90%	-1.40%	-0.13%	-0.47%	-1.94%	-0.15%	0.24%	-0.41%
<i>Construction</i>	-0.10%	-0.07%	0.27%	-0.39%	-0.12%		-0.78%		3.31%	0.51%				0.25%	0.06%
<i>Telecommunication Services</i>	1.89%	-0.54%	-0.08%	-1.09%	0.05%	1.02%	-0.13%	0.10%	4.91%	0.35%	-0.05%	1.01%	-0.04%	0.36%	0.55%
<i>Transport</i>	-2.20%	-0.80%	-0.06%	-2.06%	0.02%	-0.05%	-0.71%	-1.77%	-13.05%	-1.15%	-0.57%	-3.80%	-0.06%	0.42%	-2.70%

<i>Services of credit and insurances</i>	1.24%	0.09%	-0.22%	0.29%	-0.19%	0.30%	-0.31%	-0.07%	5.75%	0.50%	-0.35%	0.15%	-	0.38%	1.27%
<i>Other Market Services</i>	-0.47%	-0.30%	0.05%	0.23%	-0.19%	0.77%	-0.35%	-0.55%	0.78%	0.27%	0.06%	-1.00%	-0.10%	0.18%	0.13%
<i>Non Market Services</i>	1.25%	-	0.16%	0.33%	-0.03%	0.50%	-	0.44%	2.77%	0.28%	-	-	0.06%	0.16%	0.52%
<b>Price of Exports rel. EU average<sup>19</sup></b>															
<i>Agriculture</i>	-0.35%	-0.03%	-0.04%	0.55%	-0.54%	-0.51%	-0.25%	0.60%	0.10%	0.17%	-0.33%	0.83%	-0.41%	-0.43%	0.46%
<i>Ferrous and non ferrous metals</i>	-0.29%	0.44%	0.21%	-0.66%	0.36%	0.39%	1.50%	1.22%	-1.70%	0.09%	0.57%	-0.14%	-0.15%	0.66%	0.39%
<i>Chemical Products</i>	0.86%	0.01%	-0.14%	0.28%	-0.13%	-0.38%	0.24%	-0.19%	1.24%	-0.02%	0.34%	1.34%	-0.24%	-0.25%	0.27%
<i>Other energy intensive</i>	-0.26%	0.40%	0.32%	0.55%	0.48%	-0.28%	2.61%	0.07%	-1.52%	0.02%	0.60%	0.27%	0.22%	0.24%	-0.19%
<i>Electric Goods</i>	-0.10%	0.08%	0.18%	0.41%	0.25%	-0.06%	0.31%	0.20%	-1.53%	0.14%	0.22%	0.03%	0.23%	0.19%	-0.37%
<i>Transport equipment</i>	-0.01%	0.09%	0.15%	0.02%	0.28%	-0.08%	0.21%	-0.09%	-1.09%	0.10%	0.19%	0.14%	0.17%	0.25%	-0.33%
<i>Other Equipment Goods</i>	0.28%	0.22%	0.19%	0.15%	0.28%	-0.09%	0.29%	0.15%	-0.79%	0.05%	0.39%	0.28%	0.25%	0.16%	-0.31%
<i>Consumer Goods Industries</i>	0.19%	0.04%	-0.10%	0.47%	-0.14%	-0.27%	0.15%	0.19%	0.28%	-0.08%	0.08%	0.60%	-0.09%	-0.24%	0.19%
<i>Construction</i>	0.12%	0.09%	-0.16%	0.28%	0.09%	-0.58%	0.62%	-0.01%	-2.20%	-0.33%	-0.03%	0.29%	0.04%	-0.16%	-0.06%
<i>Telecommunication Services</i>	-0.94%	0.67%	0.37%	1.14%	0.41%	-0.38%	0.53%	0.25%	-2.84%	0.09%	0.42%	-0.38%	0.40%	0.14%	-0.50%
<i>Transport</i>	-0.39%	-0.98%	-1.34%	-0.51%	-1.46%	-0.60%	-1.16%	-0.09%	6.43%	-0.62%	-1.02%	0.40%	-1.39%	-1.62%	1.58%
<i>Services of credit and insurances</i>	0.01%	0.54%	0.85%	0.58%	1.00%	0.55%	0.90%	0.76%	-2.98%	0.36%	0.93%	0.65%	0.84%	0.73%	-1.07%
<i>Other Market Services</i>	0.52%	0.25%	-0.02%	-0.10%	0.21%	-0.47%	0.47%	0.46%	-0.38%	-0.17%	0.05%	0.81%	0.23%	0.02%	-0.28%
<i>Non Market Services</i>	-1.09%	0.10%	0.60%	0.30%	0.87%	0.03%	0.93%	0.12%	-3.34%	0.36%	0.28%	-0.13%	0.73%	0.58%	-0.86%

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<sup>19</sup> For the EU it is the relative price compared to World prices