

Brussels, 30.11.2016 SWD(2016) 420 final

PART 11/13

COMMISSION STAFF WORKING DOCUMENT

Accompanying the document

REPORT FROM THE COMMISSION TO THE EUROPEAN PARLIAMENT, THE COUNCIL, THE EUROPEAN ECONOMIC AND SOCIAL COMMITTEE AND THE COMMITTEE OF THE REGIONS

Energy prices and costs in Europe

{COM(2016) 769 final}

EN EN

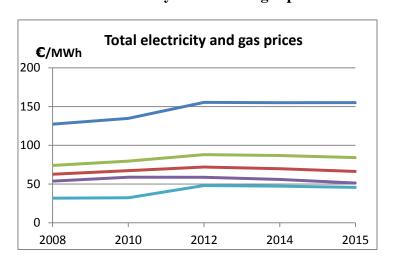
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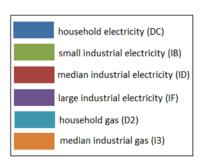
FINLAND	393
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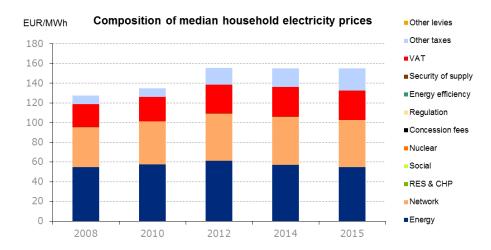
Finland

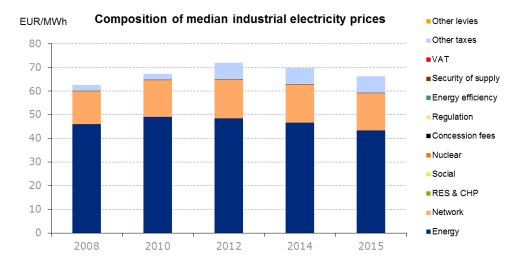
Evolution of electricity and natural gas prices





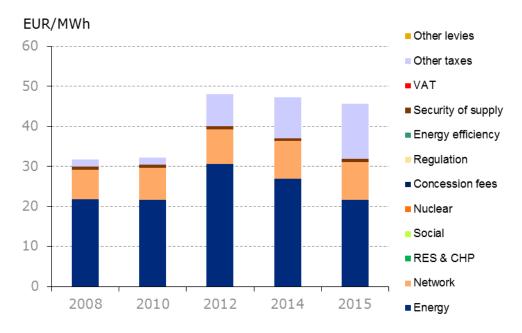
Composition of electricity prices



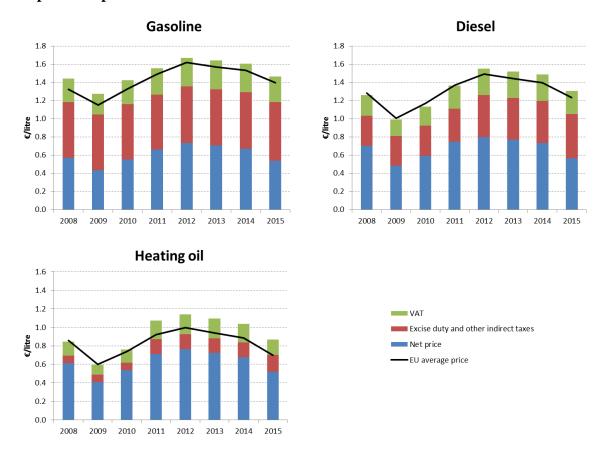


Composition of gas prices

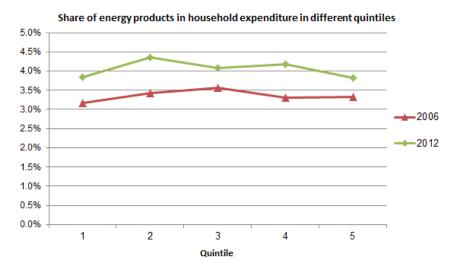
Composition of median industrial gas prices



Oil products prices

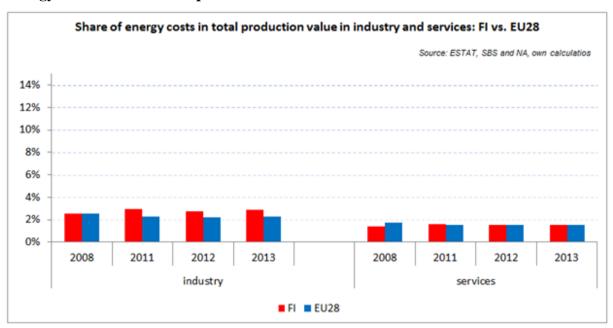


Energy in Households budgets



Finland has been among the EU countries where household spent the lowest share on energy from their total expenditure. However, between 2006 (red line) and 2012 (green line) the share of energy in the poorest households (Quintile 1) rose from 3.2% to 3.9%, while for the middle income households (Quintile 3) it went up from 3.6% to 4.1%.

Energy costs shares in total production costs



Notes
Data for Malta, Poland, Slovenia (prior to 2012) and Ireland (after 2012) is not available
Data for 2009 and 2010 is incomplete and not reported
Industry defined as NACE Rev.2 Section C (Manufacturing)
Services defined as NACE Rev. 2 Sections G - U

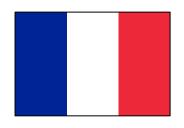
Electricity and gas prices – Breakdown by price element

Band DC	EUR/kWh
	2015
Energy	0.054600
Total energy component	0.054600
Network	0.048000
Total network component	0.048000
Strategic stockpile fees	0.000000
Excise tax, electricity (I class)	0.022400
Supply security fee	0.000100
VAT	0.030000
Excise tax, electricity (II class)	
Total taxes & levies component	0.052500
Total price	0.155100

Band ID	EUR/kWh
	2015
Energy	0.043450
Total energy component	0.043450
Network	0.015750
Total network component	0.015750
Strategic stockpile fees	0.000130
Excise tax, electricity (I class)	
Supply security fee	
VAT	0.000000
Excise tax, electricity (II class)	0.006900
Total taxes & levies component	0.007030
Total price	0.066230

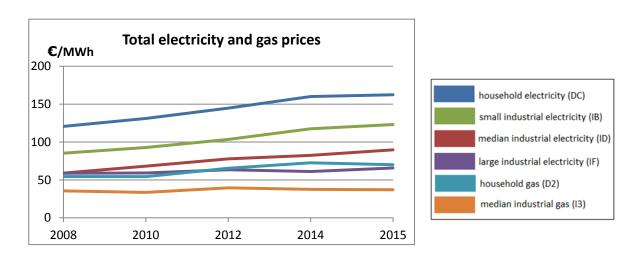
Band D2	EUR/kWh 2015
Energy	
Total energy component	0.000000
Network	

Total network component	0.000000
Excise Tax	
Strategic stockpile fees	
Energy content tax	
Carbon Tax	
VAT	
Total taxes & levies component	0.000000
Total price	0.000000
Band I3	EUR/kWh
	2015
Energy	0.021600
Total energy component	0.021600
Network	0.009540
Total network component	0.009540
Excise Tax	0.000000
Strategic stockpile fees	0.000756
Energy content tax	0.005985
Carbon Tax	0.007839
VAT	0.000000
Total taxes & levies component	0.014580
	0.045500
Total price	0.045720

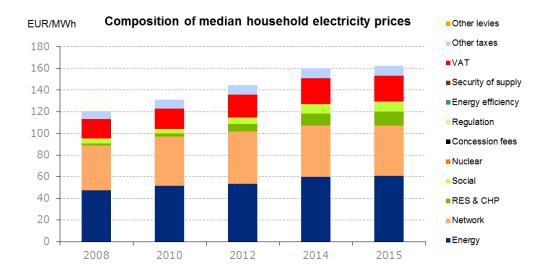


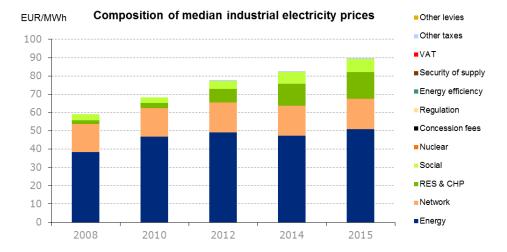
France

Evolution of electricity and natural gas prices



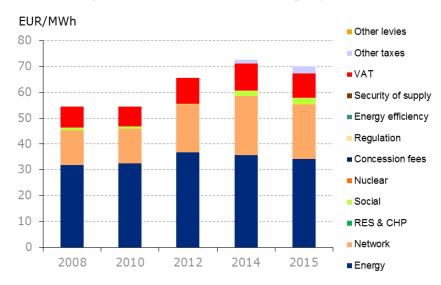
Composition of electricity prices



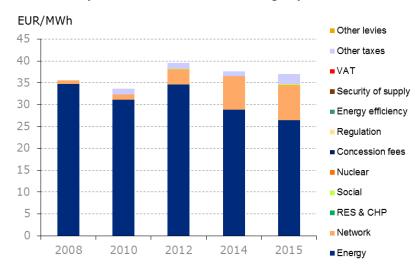


Composition of gas prices

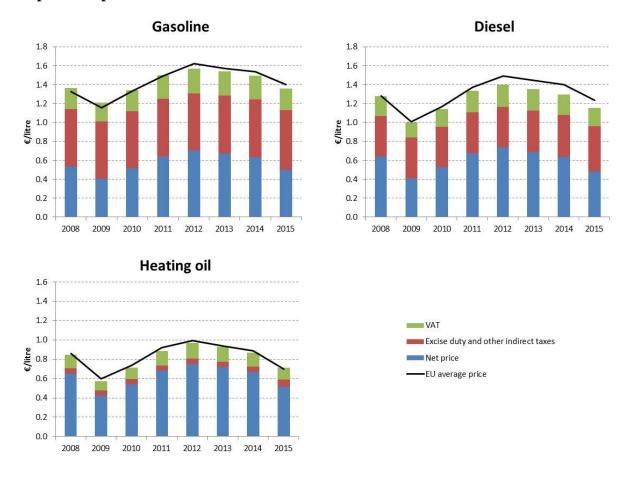
Composition of median household gas prices



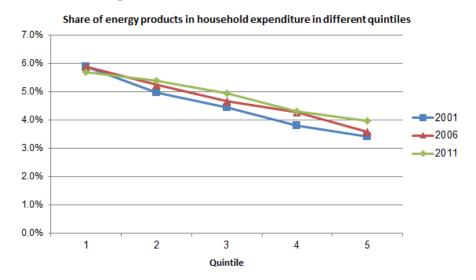
Composition of median industrial gas prices



Oil products prices

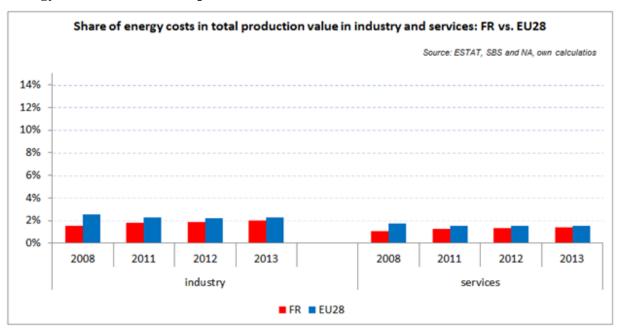


Energy in Households budgets



In France the share of energy in total household expenditure was quite stable between 2001 (blue line) and 2011 (green line); in the case of the poorest households (Quintile 1) it remained practically unchanged, while for households with middle income (Quintile 3) it increased from 4.4% to 4.9%.

Energy costs shares in total production costs



Notes
Data for Malta, Poland, Slovenia (prior to 2012) and Ireland (after 2012) is not available
Data for 2009 and 2010 is incomplete and not reported
Industry defined as NACE Rev.2 Section C (Manufacturing)
Services defined as NACE Rev. 2 Sections G - U

Electricity and gas prices – Breakdown by price element

Band DC	EUR/kWh
	2015
Supply	0.060910
Total energy component	0.060910
Transmission and distribution	0.046210
Total network component	0.046210
PSO renewable and combined heat generation	0.012920
PSO national tariff equalization	0.004950
Tax on final consumption of electricity	0.009000
PSO vulnerable consumer	0.000470
Transmission and distribution duties	0.003690
VAT	0.024270
Total taxes & levies component	0.055300
Total price	0.162420
	B
Band ID	EUR/kWh 2015
Supply	0.050790
Total energy component	0.050790
Transmission and distribution	0.016840
Total network component	0.016840
PSO renewable and combined heat generation	0.014350
PSO national tariff equalization	0.005500
Tax on final consumption of electricity	0.000520
PSO vulnerable consumer	0.000520
Transmission and distribution duties	0.001250
VAT	0.000000
Total taxes & levies component	0.022140
Total price	0.089770

Band D2	EUR/kWh 2015
Supply	0.031530

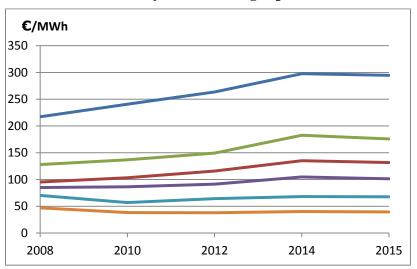
Storage	0.002750
	0.024290
Total energy component	0.034280
Network	0.021120
Total network component	0.021120
Transmission and distribution duties (distribution)	0.002040
VAT	0.009560
Interior tax on consumption of natural gas	0.002650
Transmission and distribution duties (other)	0.000410
Total taxes & levies component	0.014660
Total price	0.070060

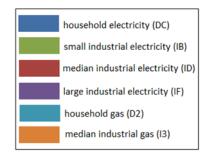
Band I3	EUR/kWh
	2015
Supply	0.024650
Storage	0.001810
Total energy component	0.026460
Network	0.008040
Total network component	0.008040
Transmission and distribution duties (distribution)	0.000160
VAT	0.000000
Interior tax on consumption of natural gas	0.002330
Transmission and distribution duties (other)	0.000030
Total taxes & levies component	0.002520
Total price	0.037020



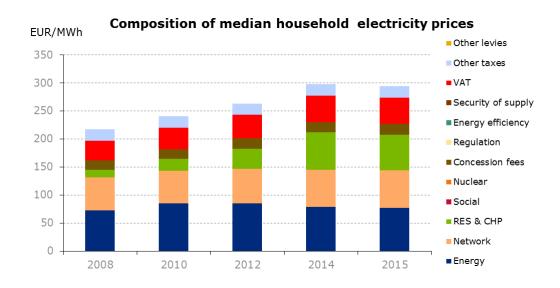
Germany

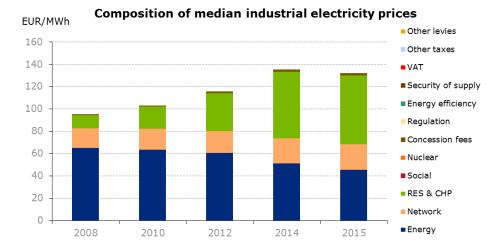
Evolution of electricity and natural gas prices





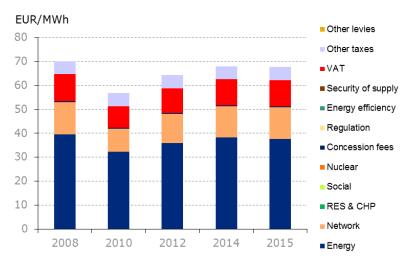
Composition of electricity prices



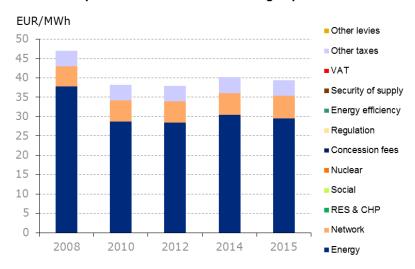


Composition of gas prices

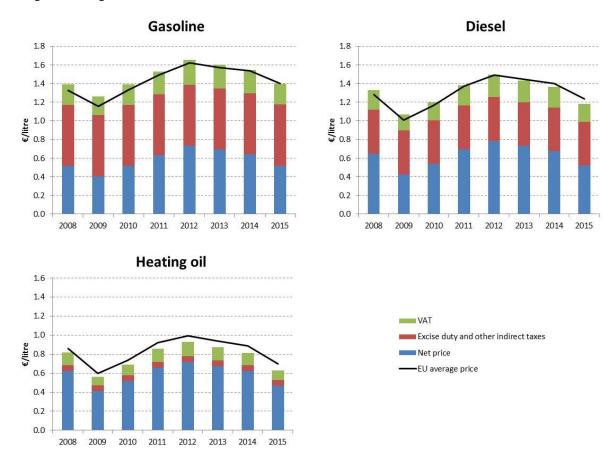
Composition of median household gas prices



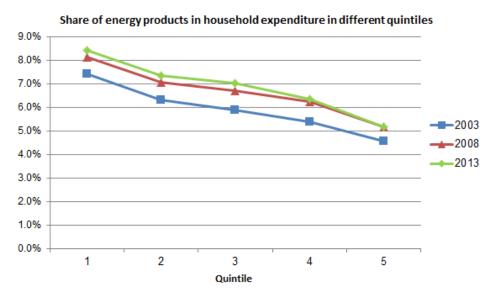
Composition of median industrial gas prices



Oil products prices

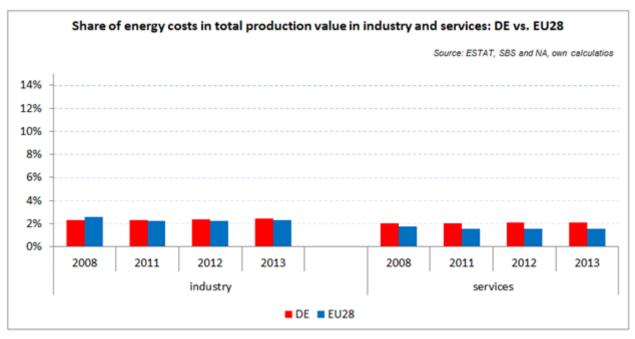


Energy in Households budgets



In Germany the share of energy in the total household expenditure rose from 7.4% to 8.4% in the case of the poorest households (Quintile 1) between 2003 (blue line) and 2013 (green line), while in the case of middle income households (Quintile 3) the energy share went up from 5.9% to 7% in the same period.

Energy costs shares in total production costs



Notes
Data for Malta, Poland, Slovenia (prior to 2012) and Ireland (after 2012) is not available
Data for 2009 and 2010 is incomplete and not reported
Industry defined as NACE Rev.2 Section C (Manufacturing)
Services defined as NACE Rev. 2 Sections G - U

Electricity and gas prices – Breakdown by price element

Band DC	EUR/kWh
	2015
Energy and supply	0.076800
Total energy component	0.076800
Grid fee incl. Metering and Metering Services	
Grid fee	0.061300
Metering, Metering Services	0.006200
Total network component	0.067500
Levy for financing interruptible loads	0.000060
VAT	0.047000
Concession Fee	0.016600
Support for combined heat and power (CHP)	0.002540
Electricity Tax	0.020500
Levy to finance reduced grid fees	0.002370
Renewable Energy Levy	0.061700
Levy for liability of risk at offshore wind	-0.000510
,	
Total taxes & levies component	0.150260
Total price	0.294560
Band ID	EUR/kWh
	EUR/kWh 2015
Band ID Energy and supply	2015
Band ID Energy and supply Total energy component	2015 0.045500
Band ID Energy and supply Total energy component Grid fee incl. Metering and Metering Services	2015 0.045500 0.045500
Band ID Energy and supply Total energy component Grid fee incl. Metering and Metering Services Grid fee	2015 0.045500 0.045500
Band ID Energy and supply Total energy component Grid fee incl. Metering and Metering Services	2015 0.045500 0.045500
Band ID Energy and supply Total energy component Grid fee incl. Metering and Metering Services Grid fee	2015 0.045500 0.045500
Band ID Energy and supply Total energy component Grid fee incl. Metering and Metering Services Grid fee Metering, Metering Services Total network component	2015 0.045500 0.045500 0.023000
Band ID Energy and supply Total energy component Grid fee incl. Metering and Metering Services Grid fee Metering, Metering Services	2015 0.045500 0.045500 0.023000
Band ID Energy and supply Total energy component Grid fee incl. Metering and Metering Services Grid fee Metering, Metering Services Total network component Levy for financing interruptible loads	2015 0.045500 0.045500 0.023000 0.023000 0.000060
Band ID Energy and supply Total energy component Grid fee incl. Metering and Metering Services Grid fee Metering, Metering Services Total network component Levy for financing interruptible loads VAT Concession Fee	2015 0.045500 0.045500 0.023000 0.023000 0.000060 0.000000
Band ID Energy and supply Total energy component Grid fee incl. Metering and Metering Services Grid fee Metering, Metering Services Total network component Levy for financing interruptible loads VAT Concession Fee Support for combined heat and power (CHP)	2015 0.045500 0.045500 0.023000 0.023000 0.000060 0.000000 0.000990
Band ID Energy and supply Total energy component Grid fee incl. Metering and Metering Services Grid fee Metering, Metering Services Total network component Levy for financing interruptible loads VAT Concession Fee Support for combined heat and power (CHP) Electricity Tax	2015 0.045500 0.045500 0.023000 0.023000 0.000060 0.000000 0.000990 0.000520
Band ID Energy and supply Total energy component Grid fee incl. Metering and Metering Services Grid fee Metering, Metering Services Total network component Levy for financing interruptible loads VAT Concession Fee Support for combined heat and power (CHP) Electricity Tax Levy to finance reduced grid fees	2015 0.045500 0.045500 0.023000 0.023000 0.000060 0.000000 0.000990 0.000520 0.000000
Band ID Energy and supply Total energy component Grid fee incl. Metering and Metering Services Grid fee Metering, Metering Services Total network component Levy for financing interruptible loads VAT Concession Fee Support for combined heat and power (CHP) Electricity Tax Levy to finance reduced grid fees Renewable Energy Levy	2015 0.045500 0.045500 0.023000 0.023000 0.000060 0.000000 0.000990 0.000520 0.000000 0.000650
Band ID Energy and supply Total energy component Grid fee incl. Metering and Metering Services Grid fee Metering, Metering Services Total network component Levy for financing interruptible loads VAT Concession Fee Support for combined heat and power (CHP) Electricity Tax Levy to finance reduced grid fees	2015 0.045500 0.045500 0.023000 0.023000 0.000060 0.000000 0.000990 0.000520 0.000000 0.000650 0.060500
Band ID Energy and supply Total energy component Grid fee incl. Metering and Metering Services Grid fee Metering, Metering Services Total network component Levy for financing interruptible loads VAT Concession Fee Support for combined heat and power (CHP) Electricity Tax Levy to finance reduced grid fees Renewable Energy Levy	2015 0.045500 0.045500 0.023000 0.023000 0.000060 0.000000 0.000990 0.000520 0.000000 0.000650 0.060500

Total price 0.131

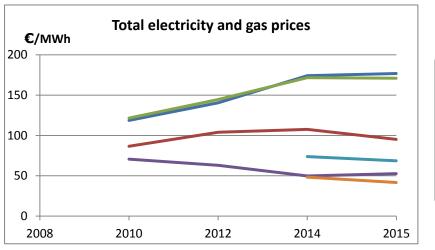
Band D2	EUR/kWh
	2015
Energy and supply	0.037700
Total energy component	0.037700
Grid fee incl. Metering	0.013200
Total network component	0.013200
Natural Gas Tax	0.005500
VAT	0.010800
Concession Fee	0.000450
Total taxes & levies component	0.016750
Total price	0.067650

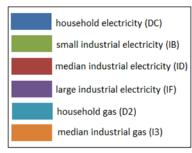
Band I3	EUR/kWh
	2015
Energy and supply	0.029500
Total energy component	0.029500
Grid fee incl. Metering	0.005900
Total network component	0.005900
Natural Gas Tax	0.004040
VAT	0.000000
Total taxes & levies component	0.004040
Total price	0.039440



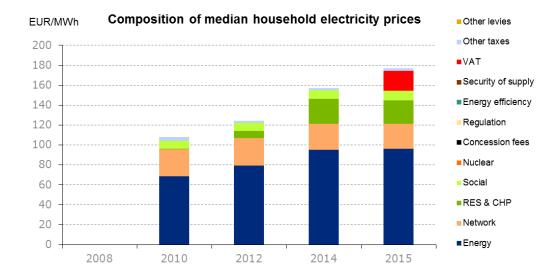
Greece

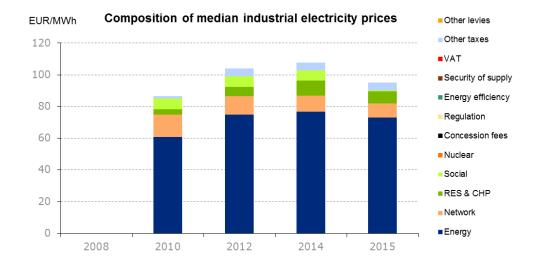
Evolution of electricity and natural gas prices





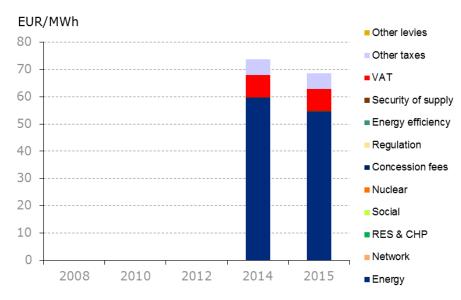
Composition of electricity prices





Composition of gas prices¹

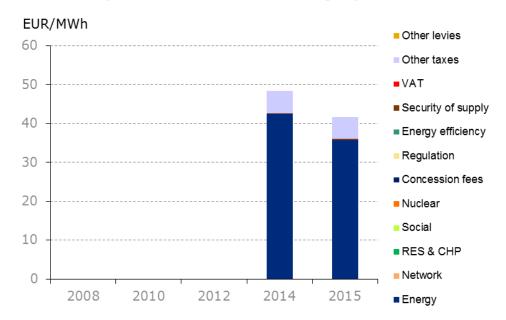
Composition of median household gas prices



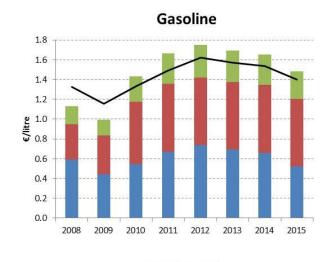
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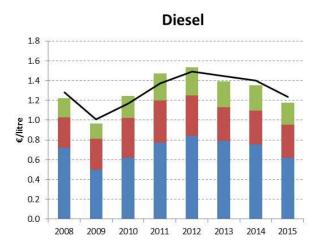
 $^{^{\}mathrm{1}}$ Combined energy and network compotent both for household and industrial data

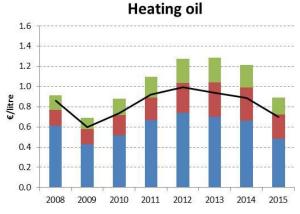
Composition of median industrial gas prices

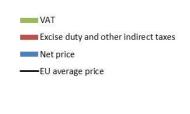


Oil products prices



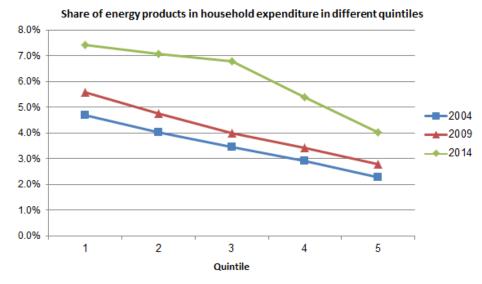






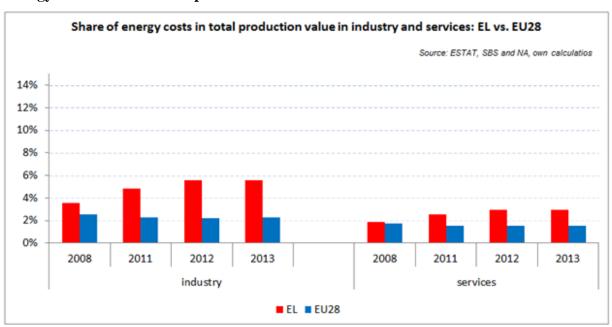
Note: Greece has not reported fuel oil prices from May 2015 to mid-October 2015

Energy in Households budgets



Even between 2004 (blue line) and 2009 (red line) the share of energy in the total expenditure of Greek households showed a measurable increase, however, by 2014 (red line) the energy share in the case of the poorest households (Quintile 1) went up from 4.7% to 7.4% compared to 2004. In the case of households with middle income (Quintile 3) the energy share doubled from 3.4% to 6.8% between 2004 and 2014.

Energy costs shares in total production costs



Notes
Data for Malta, Poland, Slovenia (prior to 2012) and Ireland (after 2012) is not available
Data for 2009 and 2010 is incomplete and not reported
Industry defined as NACE Rev.2 Section C (Manufacturing)
Services defined as NACE Rev. 2 Sections G - U

Electricity and gas prices – Breakdown by price element

Band DC	EUR/kWh
	2015
Supply Charges	0.096200
Total anangy component	0.096200
Total energy component	0.024900
Network	0.024900
Total network component	0.024900
Public Service Obligation (PSO) - Island compensation	0.009024
Public Service Obligation (PSO) - Vulnerable consumers	0.000576
Energy Tax	0.002200
VAT	0.020300
Levy for Renewable Energy Source(RES)	0.023600
Total taxes & levies component	0.055700
<u> </u>	
Total price	0.176800
Band ID	EUR/kWh
	2015
Supply Charges	0.073100
Total energy component	0.073100
Network	0.008900
Total network component	0.008900
Public Service Obligation (PSO) - Island compensation	0.000564
Public Service Obligation (PSO) - Vulnerable consumers	0.000036
Energy Tax	0.005000
VAT	0.000000
Levy for Renewable Energy Source(RES)	0.007500
Total taxes & levies component	0.013100
•	
Total price	0.095100

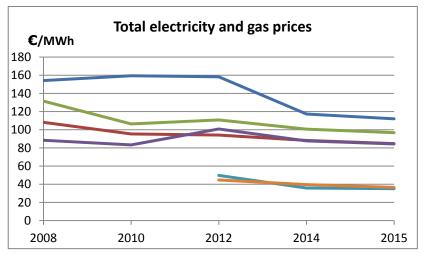
Band D2	EUR/kWh
	2015
Energy Charge + Capacity Charge	0.054480
Total energy component	0.054480
Total network component	0.000000
VAT	0.007850
Security of Supply Fee	0.000480
Excise Tax	0.005400
Customs Tax	0.000300
Total taxes & levies component	0.014030
Total price	0.068510

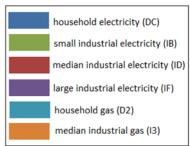
Band I3	EUR/kWh
	2015
Energy Charge + Capacity Charge + RAE Levy	0.035770
Total energy component	0.035770
Total network component	0.000000
VAT	0.000000
Security of Supply Fee	0.000220
Excise Tax	0.005400
Customs Tax	0.000210
Total taxes & levies component	0.005830
Total price	0.041600



Hungary

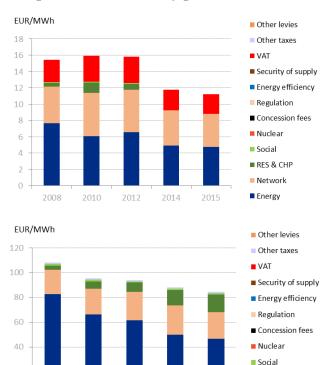
Evolution of electricity and natural gas prices





Composition of electricity prices

2008



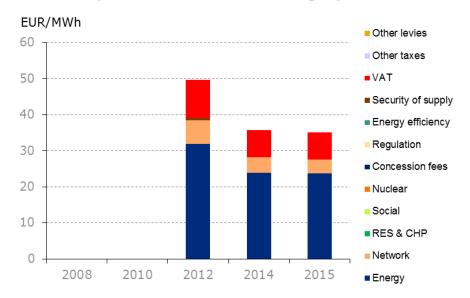
2014

■ RES & CHP

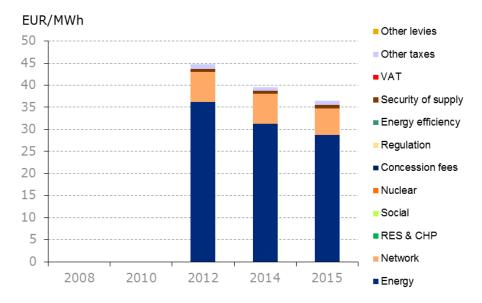
■ Energy

Composition of gas prices

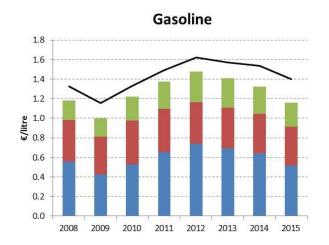
Composition of median household gas prices

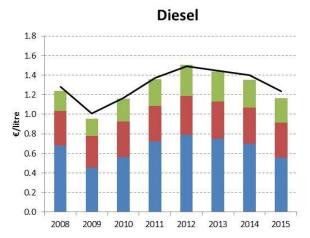


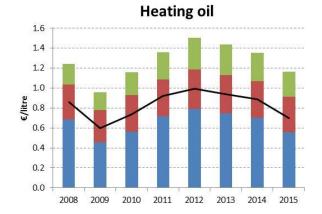
Composition of median industrial gas prices

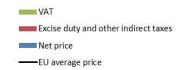


Oil products prices

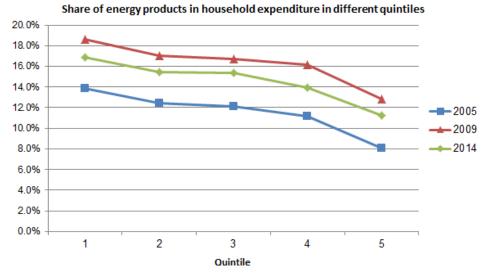






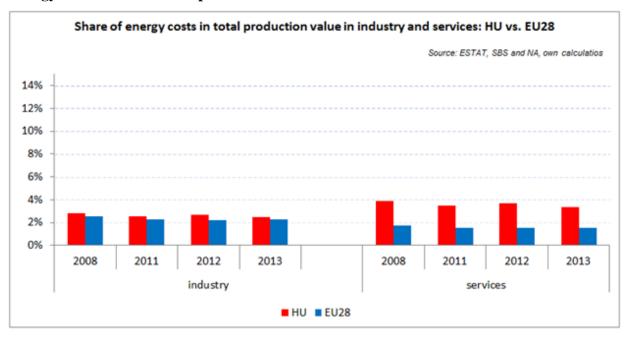


Energy in Households budgets



In Hungary the share of energy within the total household expenditure rose significantly between 2005 (blue line) and 2009 (red line) in the case of both households with low income (Quintile 1 – from 13.9% to 18.6%) and middle income (Quintile 3 - from 12.1% to 16.7%).By 2014 (green line) the share of energy went down 1.3% in both quintiles compared to 2009.

Energy costs shares in total production costs



Notes

Data for Malta, Poland, Slovenia (prior to 2012) and Ireland (after 2012) is not available

Data for 2009 and 2010 is incomplete and not reported

Industry defined as NACE Rev.2 Section C (Manufacturing)

Services defined as NACE Rev. 2 Sections G - U

Electricity and gas prices – Breakdown by price element

Band DC	EUR/kWh
	2015
Energy	0.047256
Total energy component	0.047256
Network	0.040892
Total network component	0.040892
RES support	0.000000
Financial support for employment in the electricity industry	0.000000
Financial support for restructuring cogeneration	0.000000
Financial support for restructuring the coal industry	0.000000
VAT	0.023805
Total taxes & levies component	0.023805
Total taxes & levies component	0.02000
Total price	0.111954
-	
Band ID	EUR/kWh 2015
Energy	0.046779
Total energy component	0.046779
Network	0.021480
Total network component	0.021480
RES support	0.007583
Financial support for employment in the electricity industry	0.000420
Financial support for restructuring cogeneration	0.006719
Financial support for restructuring the coal industry	0.000678
VAT	0.000000
Energy tax	0.001003
Total taxes & levies component	0.016403
Total price	0.084661

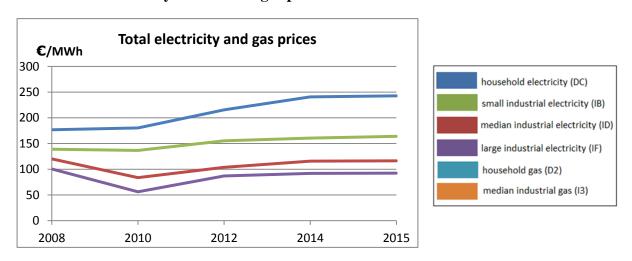
Band D2	EUR/kWh
	2015
Energy	0.023792
Total energy component	0.023792
Network	0.003813
Total network component	0.003813
VAT	0.007452
Strategic storage stockpiling fee	0.000000
Total taxes & levies component	0.007452
Total price	0.035057

Band I3	EUR/kWh
	2015
Energy	0.028710
Total energy component	0.028710
Network	0.006029
Total network component	0.006029
VAT	0.000000
Energy Tax	0.001030
Strategic storage stockpiling free	0.000718
Other price elements, not regulated by law	0.000007
Total taxes & levies component	0.001755
Total price	0.036494

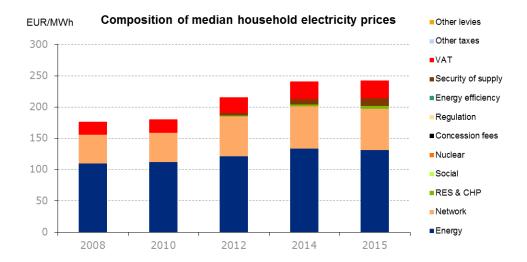


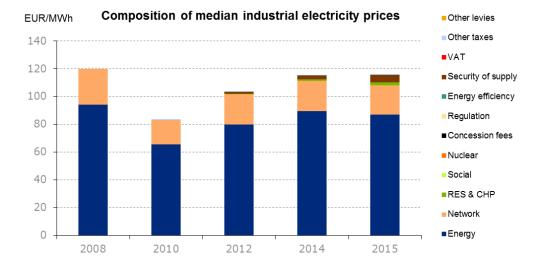
Ireland

Evolution of electricity and natural gas prices

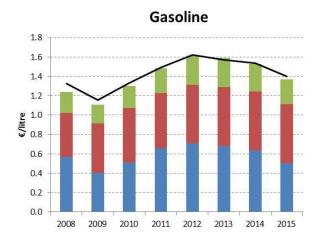


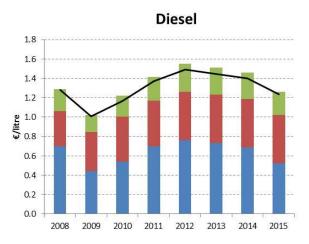
Composition of electricity prices

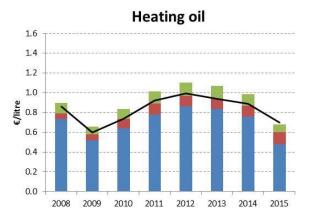


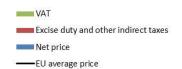


Oil products prices

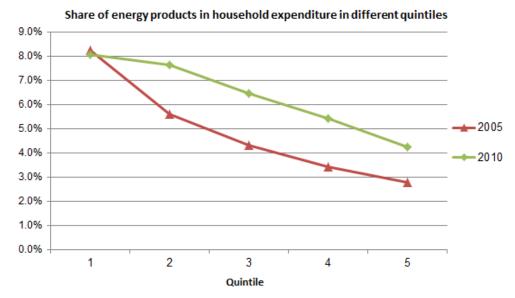






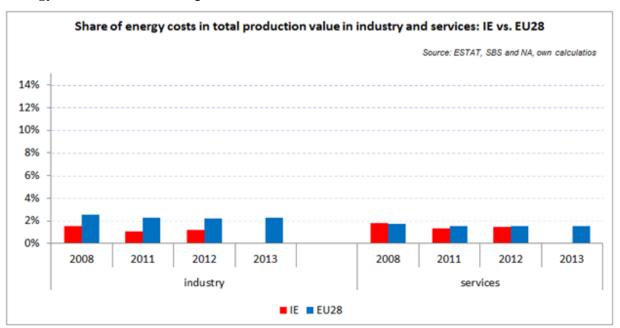


Energy in Households budgets



With the exception of the poorest households (Quintile 1), where the share of energy within the total household expenditure remained practically unchanged, around 8 %, between 2005 (red line) and 2010 (green line) in Ireland, all other households had to spend 1.5-2% higher share of their total expenditure on energy in 2010 than in 2005.

Energy costs shares in total production costs



Notes
Data for Malta, Poland, Slovenia (prior to 2012) and Ireland (after 2012) is not available
Data for 2009 and 2010 is incomplete and not reported
Industry defined as NACE Rev.2 Section C (Manufacturing)
Services defined as NACE Rev. 2 Sections G - U

Electricity and gas prices – Breakdown by price element

Band DC	EUR/kWh
	2015
Energy and supply	0.131100
Total energy component	0.131100
Network	0.065900
Total network component	0.065900
Indigenous Fuel (Peat) Support	0.006300
Security of Supply	0.005500
Renewables and CHP	0.005000
VAT	0.028900
Total taxes & levies component	0.045700
Total price	0.242700

Band IB	EUR/kWh
	2015
Energy and supply	0.103900
Total energy component	0.103900
Network	0.045700
Total network component	0.045700
Indigenous Fuel (Peat) Support	0.005200
Security of Supply	0.004600
Renewables and CHP	0.004100
VAT	0.000000
Electricity Tax	0.000500
Total taxes & levies component	0.014400
Total price	0.164000

Band D2	EUR/kWh
	2015

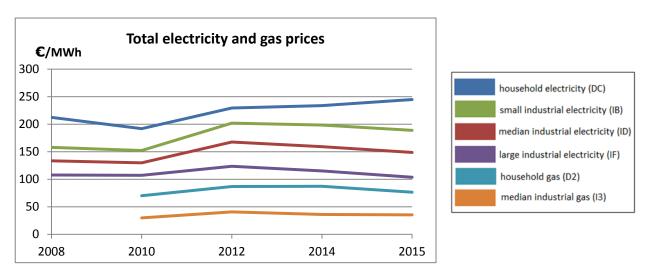
Total energy component	0.000000
Total network component	0.000000
Carbon Tax	0.003800
VAT	0.008000
Total taxes & levies component	0.011800
Total price	0.011800

Band I3	EUR/kWh
	2015
Total energy component	0.000000
Total network component	0.000000
Carbon Tax	0.003600
VAT	0.000000
Total taxes & levies component	0.003600
Total price	0.003600

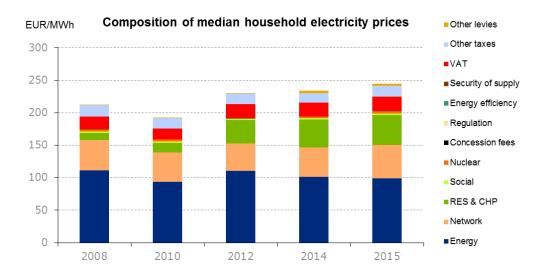


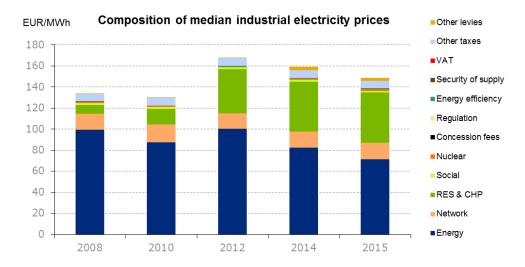
Italy

Evolution of electricity and natural gas prices



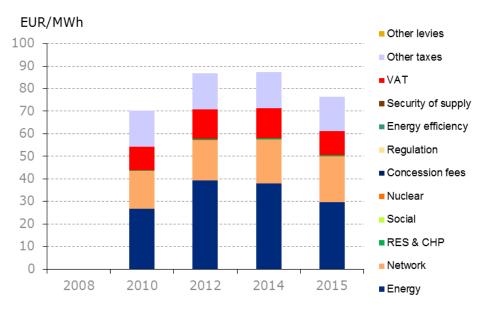
Composition of electricity prices



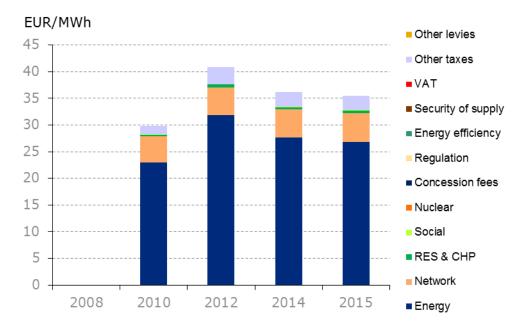


Composition of gas prices

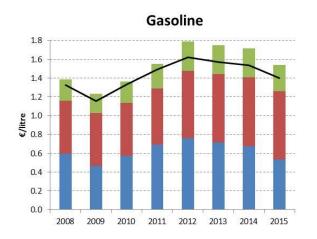
Composition of median household gas prices

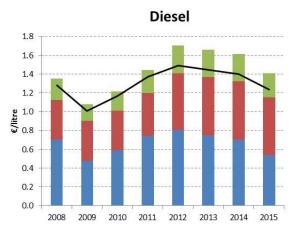


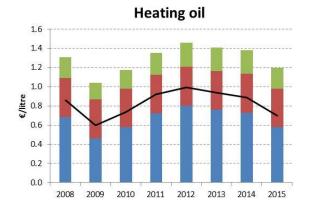
Composition of median industrial gas prices

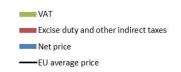


Oil products prices

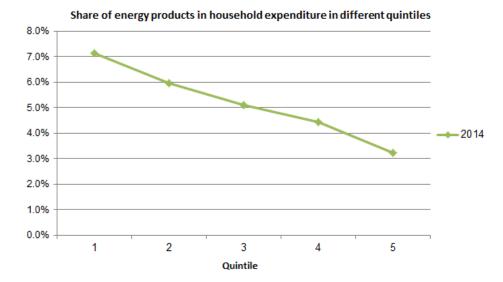






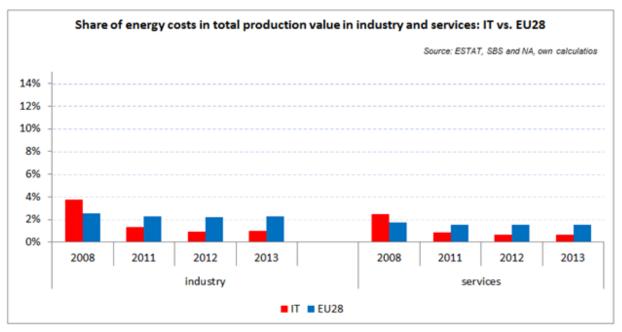


Energy in Households budgets



In the case of Italy data on the share of energy in the total household expenditure are only available for 2014, showing that in this year the poorest households (Quintile 1) spent 7.1% of their expenditure on energy. In the same year households with middle income (Quintile 3) and high income (Quintile 5) respectively spent only 5.1% and 3.2% of their total expenditure on energy.

Energy costs shares in total production costs



Notes
Data for Malta, Poland, Slovenia (prior to 2012) and Ireland (after 2012) is not available
Data for 2009 and 2010 is incomplete and not reported
Industry defined as NACE Rev. 2 Section C (Manufacturing)
Services defined as NACE Rev. 2 Sections G - U

Electricity and gas prices – Breakdown by price element

Band DC	EUR/kWh 2015
Energy and supply	0.098920
Elicigy and supply	0.00002
Total energy component	0.098920
Network	0.051530
Total network component	0.051530
A6: Stranded costs	0.000000
A5: costs of R&D	0.000250
UC7: costs arising from measures to promote energy efficiency in end uses	0.000230
Excise Tax	0.017020
AE: incentives for manufacturing enterprises with high electricity consumption	0.003050
A4: costs for subsidized customers (state railways)	0.000750
VAT	0.022260
AS: cost of social bonus	0.000090
A3: incentives to renewable generation	0.046030
UC4: islands compensations	0.000400
A2: decommissioning costs of nuclear plants	0.003620
MCT: geographical compensation measures	0.000730
Total taxes & levies component	0.094430
Total price	0.244880
Band IB	EUR/kWh
	2015
Energy and supply	0.084620
Total energy component	0.084620
Network	0.028140
Total network component	0.028140
A6: Stranded costs	0.000000
A5: costs of R&D	0.000220
UC7: costs arising from measures to promote energy efficiency in end uses	0.000630
Excise Tax	0.012380
AE: incentives for manufacturing enterprises with high electricity consumption	0.003030
A4: costs for subsidized customers (state railways)	0.001030
VAT	0.000000
AS: cost of social bonus	0.000070
AS: cost of social bonus A3: incentives to renewable generation	0.000070 0.055850

A2: decommissioning costs of nuclear plants MCT: geographical compensation measures	0.002470 0.000200
Total taxes & levies component	0.076150
Total price	0.188910

Band D2	EUR/kWh
	2015
Energy and supply	0.029710
	0.000740
Total energy component	0.029710
Network	0.020110
Total network component	0.020110
Excise duty and regional surcharge	0.015400
VAT	0.010760
RE: for energy saving actions and renewable energy development	0.000540
development	
Total taxes & levies component	0.026700
•	
Total price	0.076520
D 174	
Band I3	EUR/kWh
Band 13	EUR/kWh 2015
Energy and supply	
	2015
	2015
Energy and supply	2015 0.026800
Energy and supply Total energy component	2015 0.026800 0.026800
Energy and supply Total energy component	2015 0.026800 0.026800
Energy and supply Total energy component Network	2015 0.026800 0.026800 0.005390
Energy and supply Total energy component Network Total network component	2015 0.026800 0.026800 0.005390 0.005390
Energy and supply Total energy component Network Total network component Excise duty and regional surcharge VAT RE: for energy saving actions and renewable energy	2015 0.026800 0.026800 0.005390 0.005390 0.002590
Energy and supply Total energy component Network Total network component Excise duty and regional surcharge VAT	2015 0.026800 0.026800 0.005390 0.005390 0.002590 0.000000
Energy and supply Total energy component Network Total network component Excise duty and regional surcharge VAT RE: for energy saving actions and renewable energy development GS: cost of social bonus	2015 0.026800 0.026800 0.005390 0.005390 0.002590 0.000000 0.000510 0.000110
Energy and supply Total energy component Network Total network component Excise duty and regional surcharge VAT RE: for energy saving actions and renewable energy development	2015 0.026800 0.026800 0.005390 0.005390 0.002590 0.000000 0.000510
Energy and supply Total energy component Network Total network component Excise duty and regional surcharge VAT RE: for energy saving actions and renewable energy development GS: cost of social bonus	2015 0.026800 0.026800 0.005390 0.005390 0.002590 0.000000 0.000510 0.000110