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PART 10/13

### 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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## **Annex 3 - Country fact sheets**

#### For all reporting countries:

Electricity "household price" refers to Eurostat consumption band DC covering annual consumption of 2500 to 5000 kWh.

Electricity "industrial price" refers to Eurostat consumption band ID covering annual consumption of 2000 to 20000 MWh.

Natural gas "household price" refers to Eurostat consumption band D2 covering annual consumption of  $20~\mathrm{GJ}$  to  $200~\mathrm{GJ}$ .

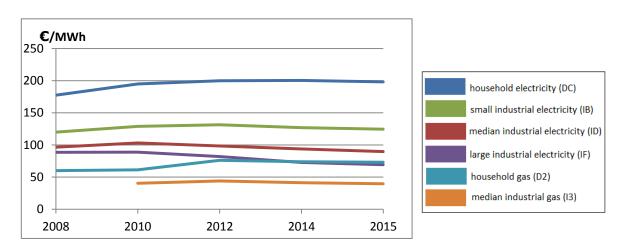
Natural gas "industrial price" refers to Eurostat consumption band I3 covering annual consumption of  $10\,000\,GJ$  to  $100\,000\,GJ$ .

"Energy products in household expenditure" refers to household expenditure on energy products excluding transport fuels

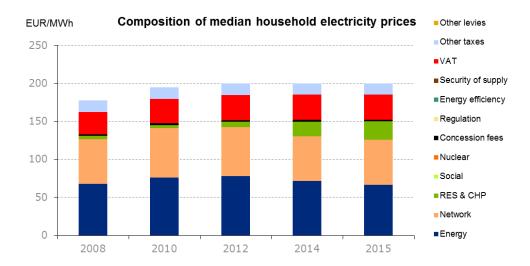


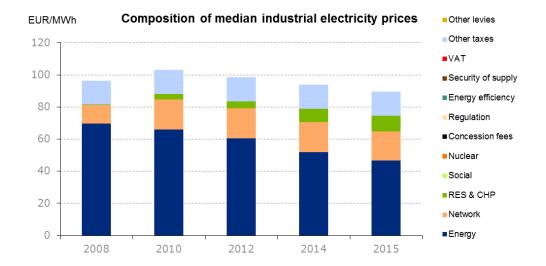
# Austria

#### Evolution of electricity and natural gas prices



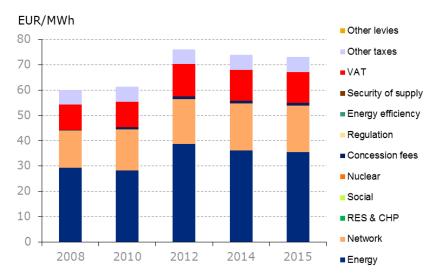
### Composition of electricity prices



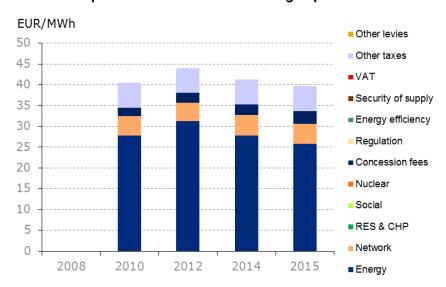


#### **Composition of gas prices**

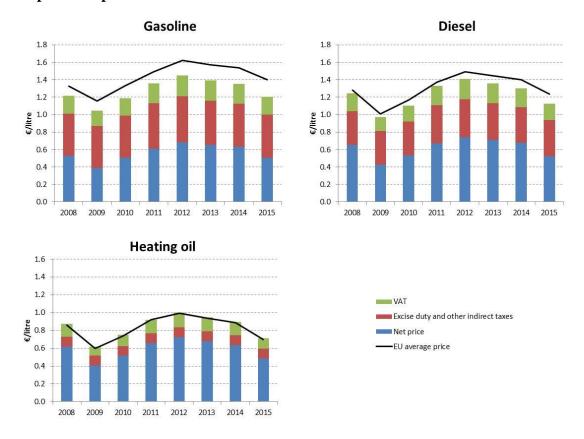
#### Composition of median household gas prices



#### Composition of median industrial gas prices

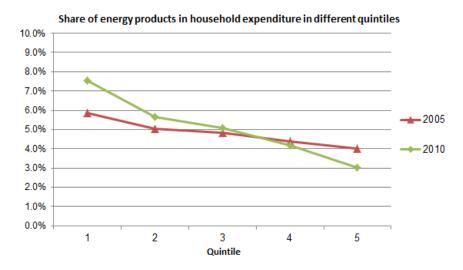


#### Oil products prices



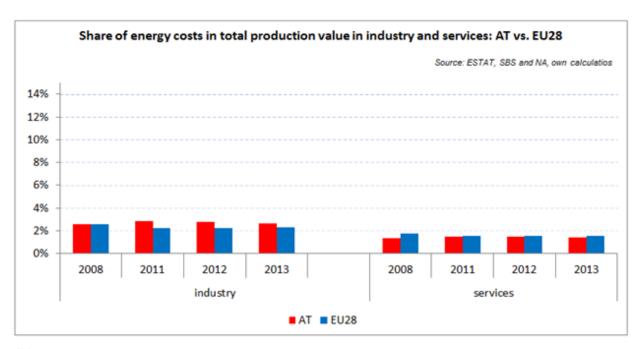
#### **Energy in Households budgets**

#### Austria



In 2005 in Austria (red line) the poorest households (Quintile 1) had to spend 5.9% of their total expenditures on energy products. In 2010 (green line) the poorest households spent 7.5% of their total expenditure on energy. In the case of middle income households (Quintile 3) the share of energy remained practically unchanged.

#### **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	0.066800
Total energy component	0.066800
Network	0.059300
Total network component	0.059300
Local tax	0.002200
Renewables, CHP	0.024100
VAT	0.033000
Excise Tax	0.015000
Total taxes & levies component	0.074300
Total price	0.200400

Band ID	EUR/kWh
	2015
Energy	0.046700
Total energy component	0.046700
Network	0.018000
Total network component	0.018000
VAT	0.000000
Excise Tax	0.015000
RES Support	0.010000
Total taxes & levies component	0.025000
Total price	0.089700

Band D2	EUR/kWh
	2015
Energy	0.035500
Total energy component	0.035500
Network	0.018400
Total network component	0.018400
Natural Gas tax	0.005900

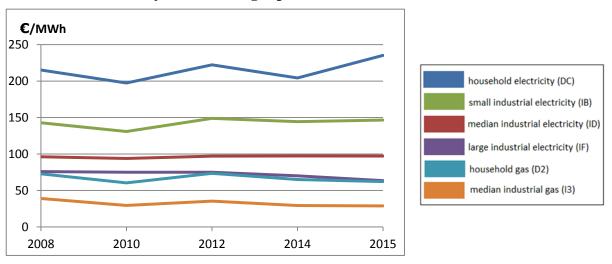
Municipality charges VAT	0.001100 0.012200
Total taxes & levies component	0.019200
Total price	0.073100

Band I3	EUR/kWh
	2015
Energy	0.025800
Total energy component	0.025800
Network	0.004800
Total network component	0.004800
Natural Gas tax	0.005900
Municipality charges	0.003100
VAT	0.000000
Total taxes & levies	0.009000
component	
Total price	0.039600



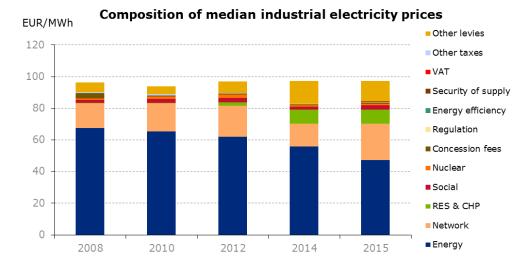
# **Belgium**

#### Evolution of electricity and natural gas prices



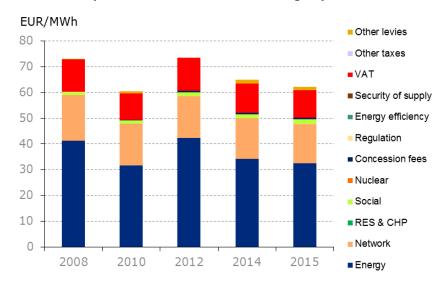
#### **Composition of electricity prices**

#### Composition of median household electricity prices EUR/MWh Other levies 250 Other taxes ■ VAT 200 ■ Security of supply ■ Energy efficiency 150 Regulation ■ Concession fees 100 Nuclear ■ Social 50 RES & CHP ■ Network 0 ■ Energy 2008 2010 2012 2014 2015

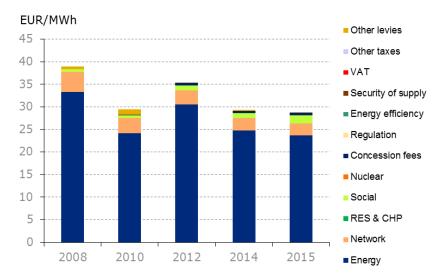


#### Composition of gas prices

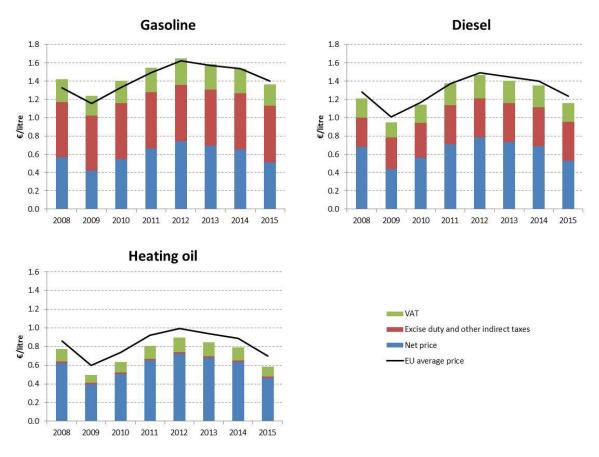
#### Composition of median household gas prices



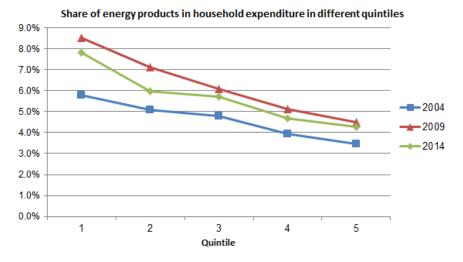
#### Composition of median industrial gas prices



### Oil products prices

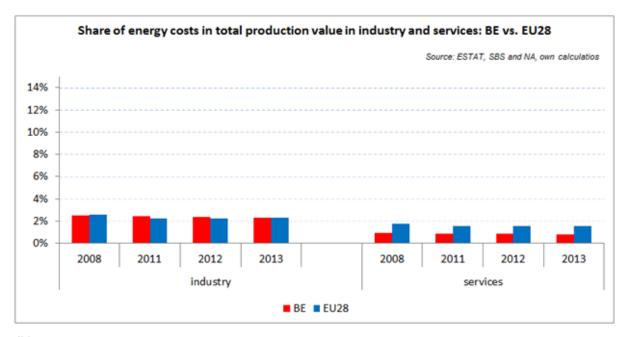


#### **Energy in Households budgets**



Between 2004 (blue line) and 2009 (red line) the share of energy in total household expenditure went up from 5.8% to 8.5% in Belgium in the case of the poorest households (Quintile 1), while it increased from 4.8% to 6.1% in the case of middle income households (Quintile 3). In 2014 (green line) the share of energy slightly decreased in all income quintiles.

#### **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	0.171185
Total energy component	0.171185
Transmission	
Distribution	
Total network component	0.000000
VAT	0.012000
Capacity payments	0.000560
Others	0.014104
Connection of offshore wind	0.000063
Nuclear decommissioning	0.000978
Social measures	0.003316
Connection fee	0.000256
Promotion rational use of energy	0.000035
Contribution for federal regulator (CREG)	0.000151
Promotion of renewables and CHP	0.009600
Levy for occupying public domain	0.000351
Kyoto	
Total taxes & levies component	0.041415
Total price	0.212600

Band ID	EUR/kWh
	2015
Energy	0.047140
Total energy component	0.047140
Transmission	0.004461
Distribution	0.018652
Total network component	0.023112
VAT	0.000000
Capacity payments	0.000560
Others	0.012919
Connection of offshore wind	0.000063
Nuclear decommissioning	0.000978
Social measures	0.002838
Connection fee	0.000217
Promotion rational use of energy	0.000040

Contribution for federal regulator (CREG) Promotion of renewables and CHP Levy for occupying public domain Kyoto	0.000151 0.008868 0.000315
Total taxes & levies component	0.026948
Total price	0.097200

Band D2	EUR/kWh 2015
Energy	0.032569
Total energy component	0.032569
Transmission	0.001517
Distribution	0.013650
Total network component	0.015167
Others	0.001207
Contribution for federal regulator (CREG)	0.000036
Levy for occupying public domain	0.000606
Connection fee	0.000018
VAT	0.010700
Social measures	0.001752
Promotion rational use of energy	0.000039
Total taxes & levies component	0.014357
	0.000000
Total price	0.062093

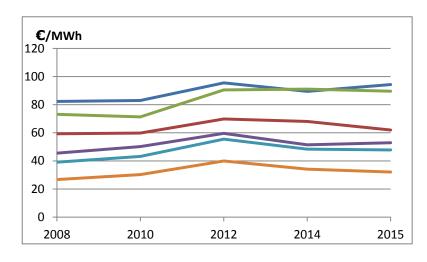
Band I3	EUR/kWh
	2015
Energy	0.023696
Total energy component	0.023696
Transmission	0.000805
Distribution	0.001878
Total network component	0.002683
Others	0.000000
Contribution for federal regulator (CREG)	0.000036
Levy for occupying public domain	0.000530
Connection fee	0.000020
VAT	0.000000
Social measures	0.001752

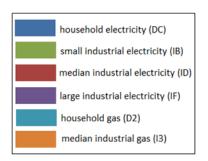
Promotion rational use of energy	
Total taxes & levies component	0.002337
Total price	0.02871723



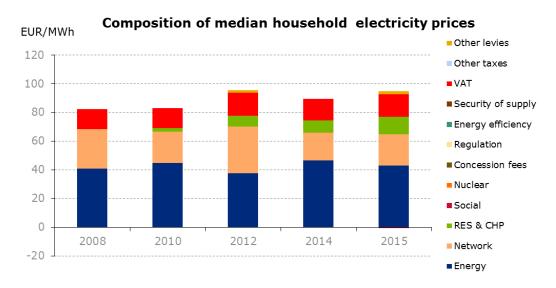
# Bulgaria

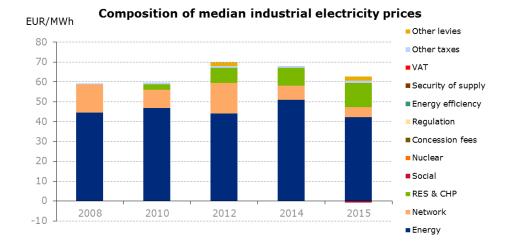
### Evolution of electricity and natural gas prices





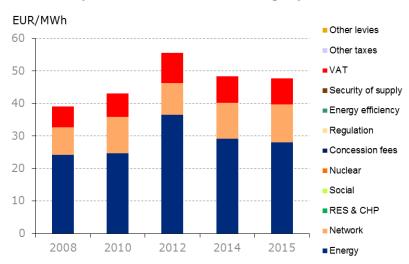
#### **Composition of electricity prices**



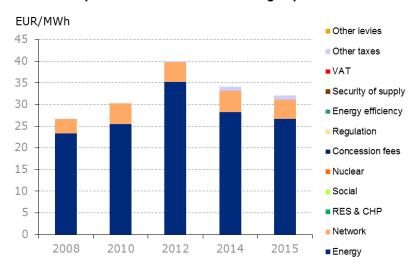


#### **Composition of gas prices**

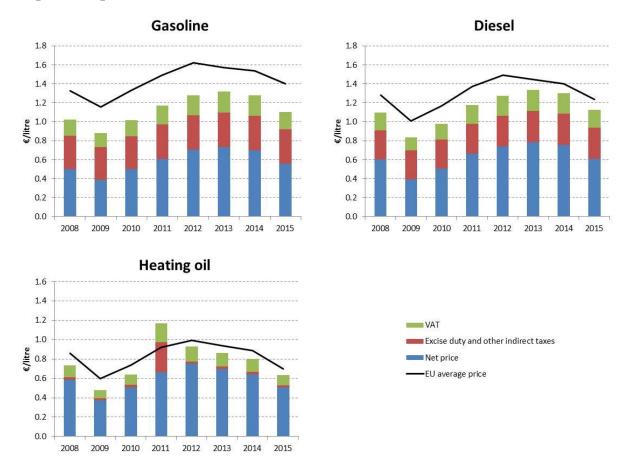
#### Composition of median household gas prices



#### Composition of median industrial gas prices

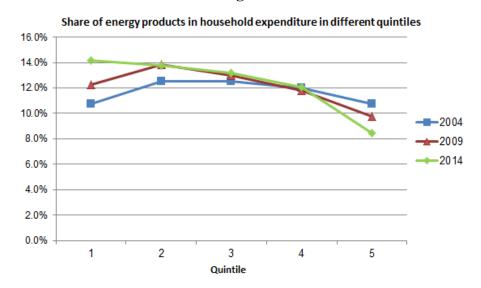


#### Oil products prices



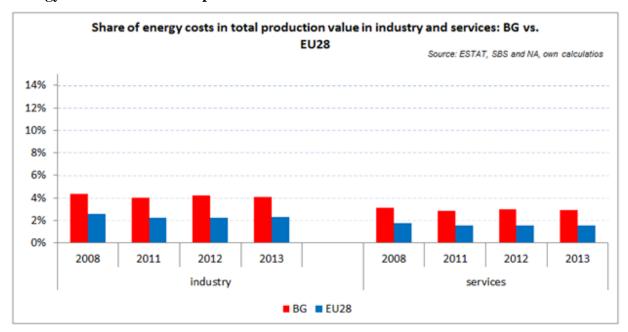
#### **Energy in Households budgets**

#### Bulgaria



Between 2004 (blue line) and 2014 (green line) the share of energy in total household expenditure for the poorest households (Quintile 1) in Bulgaria went up from 10.8% to 14.2%, while for the richest households (Quintile 5) it decreased from 10.7% to 8.4%, implying growing differences in the country in energy affordability across different income quintiles.

#### **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
Price for energy and supply	0.042949
Total energy component	0.042949
Network	0.021986
Total network component	0.021986
Price for high effective combined production of heat and electricity	0.001764
Price for 'green energy supplement'	0.000000
Price for 'non-recoverable expenses'	0.002168
RES Support	0.010441
Critical infrastructure	0.000026
	-0.000767
PSO rebate for vulnerable consumers (from stability reserve fund)	
VAT	0.015697
Total taxes & levies component	0.029328
Total taxes & levies component	0.027520
Total price	0.094263
Total price	0.054205
Band ID	EUR/kWh
	2015
Price for energy and supply	0.042356
Total energy component	0.042356
Network	0.004960
Total network component	0.004960
Price for high effective combined production of heat and electricity	0.001764
Price for 'green energy supplement'	0.000000
Price for 'non-recoverable expenses'	0.002168
Excise Tax	0.001023
RES Support	0.010441
Critical infrastructure	0.000026
PSO rebate for vulnerable consumers (from stability reserve fund)	-0.000767
VAT	0.000000
Total taxes & levies component	0.014654
Total price	0.061970
Band D2	EUR/kWh
	2015
Energy	0.026383
Supply	0.001687

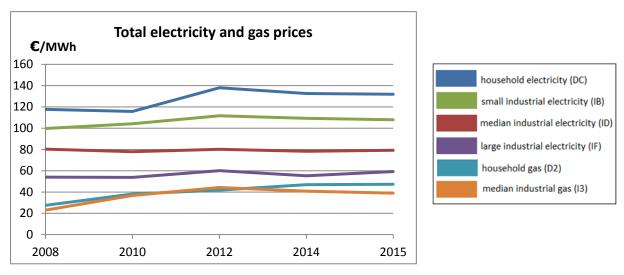
Total energy component	0.028070
Network	0.011709
Total network component	0.011709
VAT	0.007976
Total taxes & levies component	0.007976
Total price	0.047755

Band I3	EUR/kWh
	2015
Energy	0.025821
Supply	0.000920
Total energy component	0.026741
Network	0.004346
Total network component	0.004346
VAT	0.000000
Excise Tax	0.001023
Total taxes & levies component	0.001023
Total price	0.032110

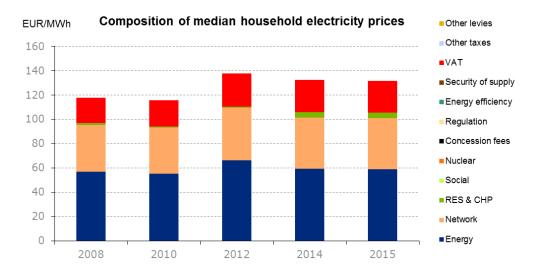


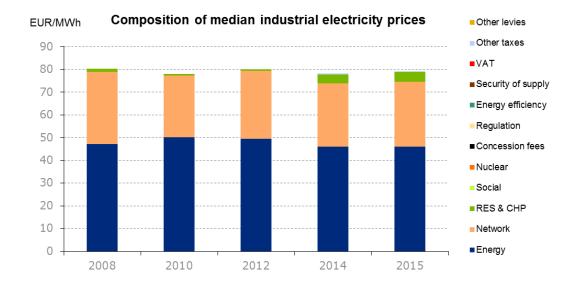
# Croatia

#### Evolution of electricity and natural gas prices



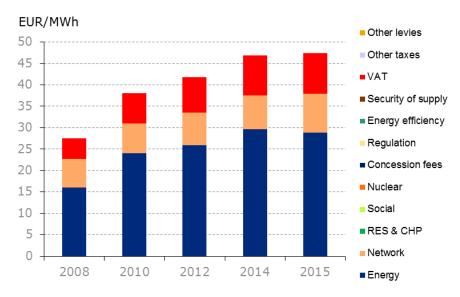
### **Composition of electricity prices**



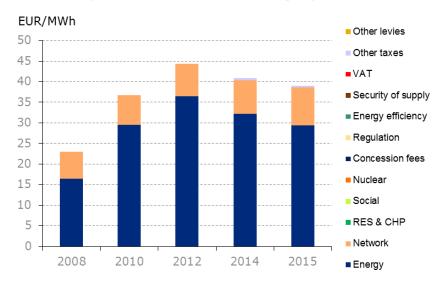


### **Composition of gas prices**

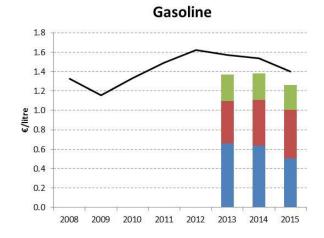
#### Composition of median household gas prices

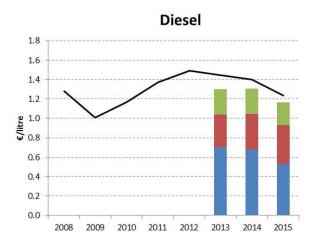


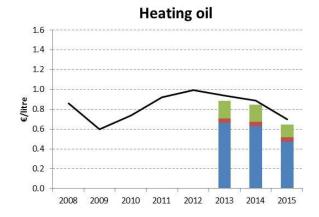
#### Composition of median industrial gas prices

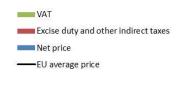


## Oil products prices



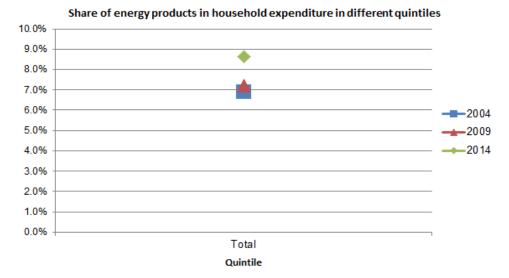






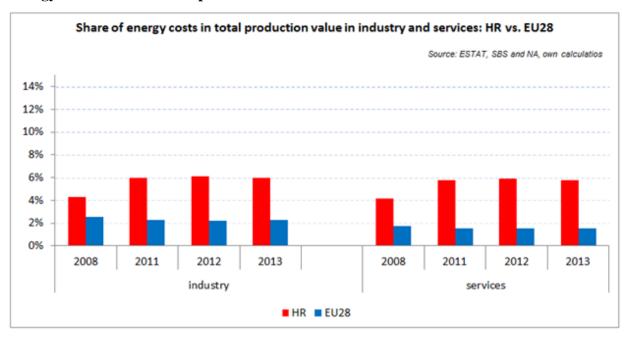
Note: Croatia started reporting oil product prices from 2013

#### **Energy in Households budgets**



In the case of Croatia we only have data for households as whole (without information on different income quintiles) regarding the share of energy in the total expenditure, which practically did not change between 2004 and 2009, however, in 2014 it rose to 8.6% from 6.9% in 2004.

#### **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	0.058806	
Total energy component	0.058806	
Distribution	0.030559	
Transmission	0.011601	
Total network component	0.042160	
VAT	0.026381	
RES support	0.004598	
Total taxes & levies component	0.030979	
Total price	0.131945	
Band ID	EUR/kWh	
	2015	
Energy and supply	0.045957	
Total energy component	0.045957	
Distribution	0.018919	
Transmission	0.009762	
Total network component	0.028680	
VAT	0.000000	
RES support	0.004191	
Excise tax	0.000407	
Total taxes & levies component	0.004598	

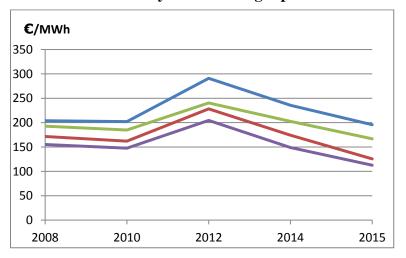
Band D2	EUR/kWh 2015
Energy and supply	0.0288
Total energy component	0.0288
Transmission	0.0024
Distribution	0.0067
Total network component	0.0091
VAT	0.0095

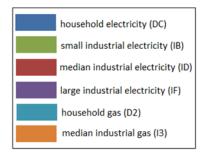
Total taxes component	&	levies	0.0095
Total price			0.0473



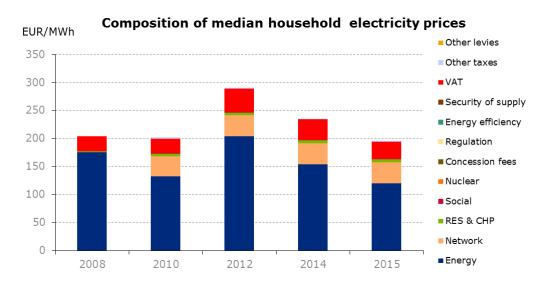
# **Cyprus**

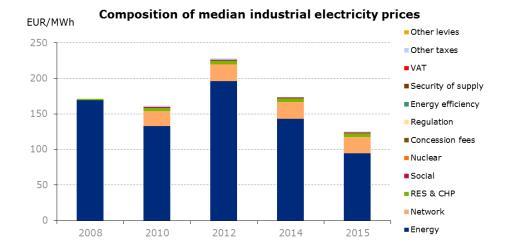
#### Evolution of electricity and natural gas prices



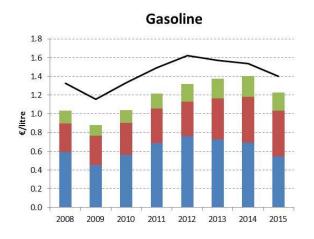


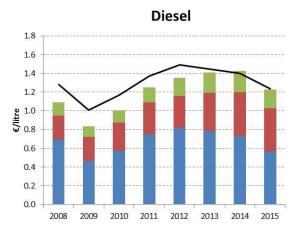
#### **Composition of electricity prices**

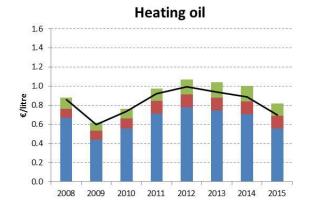


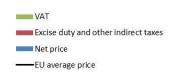


## Oil products prices

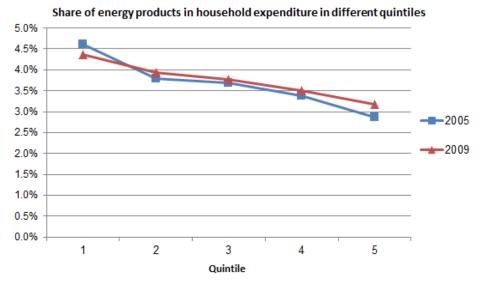






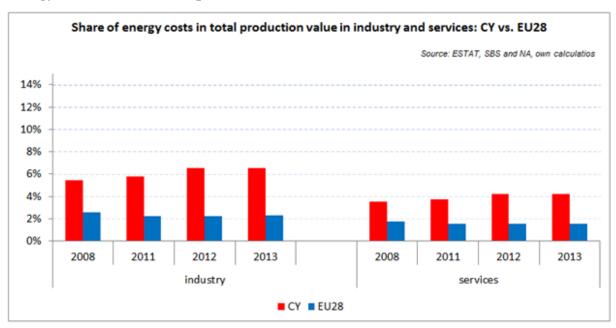


#### **Energy in Households budgets**



In Cyprus the share of energy in the total consumption expenditure remained low in EU comparison between 2005 (blue line) and 2009 (red line): in the case of the poorest households (Quintile 1) the energy share decreased by 0.2% (from 4.6% to 4.4%), while for middle income households (Quintile 3) it remained unchanged.

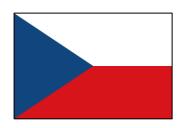
#### Energy costs shares in total production costs



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

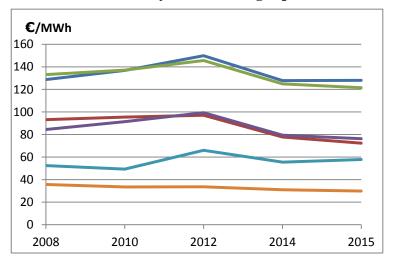
## Electricity and gas prices – Breakdown by price element

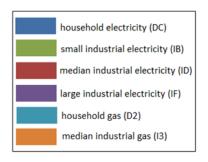
Band DC	EUR/kWh
	2015
Energy Supply and Network	0.000000
Long term reserve	0.000000
Ancillary services	0.002100
Capacity reserve margin	0.004600
Generation and supply	0.113100
Total energy component	0.119800
Transmission System Operator	0.001100
Network	0.036600
Total network component	0.037700
PSO - Vulnerable consumers	0.001400
Greenhouse gas allowances (CO2)	0.001400
RES Support	0.005000
VAT	0.030500
Total taxes & levies component	0.038300
Total price	0.195800
Band ID	EUR/kWh
	2015
Energy Supply and Network	0.000000
Long term reserve	0.004600
Ancillary services	0.002100
Generation and supply	0.087800
Total anaray component	
Total energy component	0.094500
Transmission System Operator	<b>0.094500</b> 0.001100
Transmission System Operator	0.001100
Transmission System Operator Network	0.001100 0.022200
Transmission System Operator Network  Total network component PSO - Vulnerable consumers	0.001100 0.022200 <b>0.023300</b>
Transmission System Operator Network  Total network component PSO - Vulnerable consumers Greenhouse gas allowances (CO2)	0.001100 0.022200 0.023300 0.001400
Transmission System Operator Network  Total network component PSO - Vulnerable consumers	0.001100 0.022200 <b>0.023300</b> 0.001400 0.001400
Transmission System Operator Network  Total network component  PSO - Vulnerable consumers Greenhouse gas allowances (CO2) RES Support	0.001100 0.022200 0.023300 0.001400 0.001400 0.005000
Transmission System Operator Network  Total network component PSO - Vulnerable consumers Greenhouse gas allowances (CO2) RES Support VAT	0.001100 0.022200 0.023300 0.001400 0.001400 0.005000 0.000000



# Czech Republic

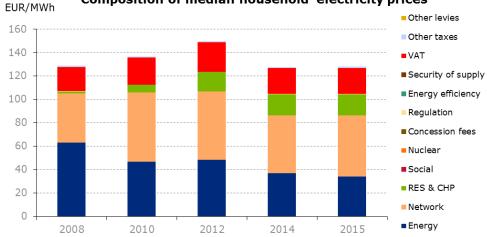
#### Evolution of electricity and natural gas prices



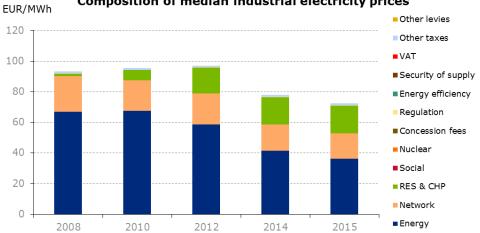


#### **Composition of electricity prices**

#### Composition of median household electricity prices

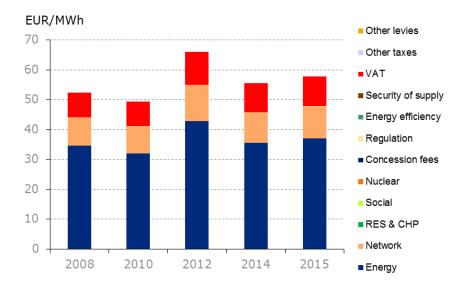


#### Composition of median industrial electricity prices

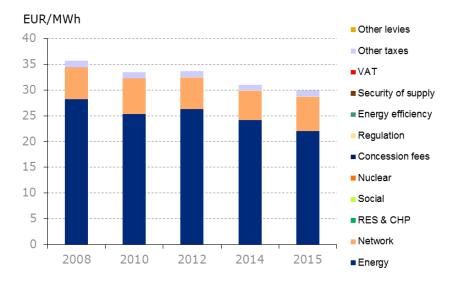


## **Composition of gas prices**

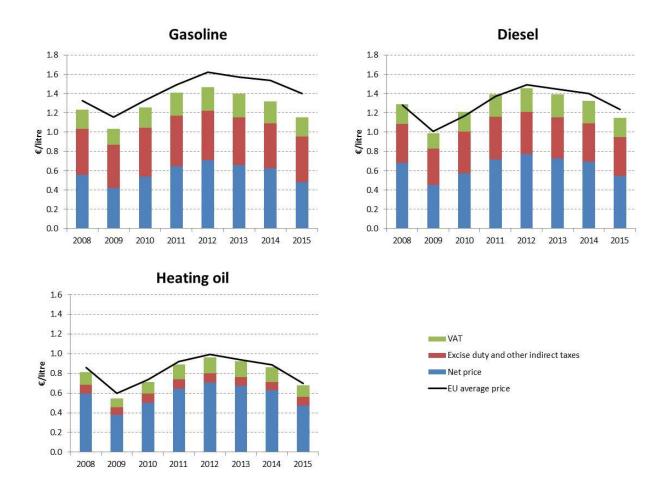
#### Composition of median household gas prices



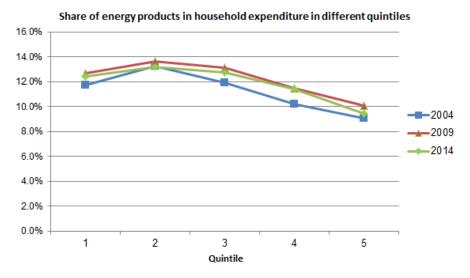
#### Composition of median industrial gas prices



### Oil products prices

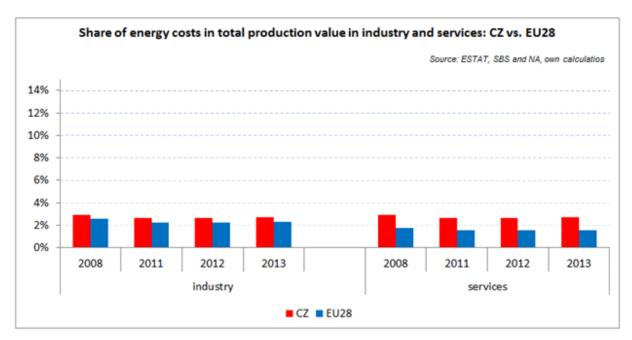


#### **Energy in Households budgets**



In the Czech Republic the share of energy in the total household expenditure rose by 0.5-1% across different income quintiles between 2004 (blue line) and 2014 (green line), amounting to 12.4% in 2014 for the poorest households (Quintile 1)and to 12.7% for middle income households (Quintile 3).

#### **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	0.034065
Total energy component	0.034065
Transmission	0.003857
Distribution	0.048453
Total network component	0.052310
VAT	0.022216
electricity (environmental) tax	0.001037
charge for market operator	0.000253
RES Support	0.018131
Total taxes & levies component	0.041636
Total price	0.128012

Band ID	EUR/kWh
	2015
Energy	0.036333
Total energy component	0.036333
Transmission	0.003857
Distribution	0.012692
Total network component	0.016549
VAT	0.000000
electricity (environmental) tax	0.001037
charge for market operator	0.000253
RES Support	0.018131
Total taxes & levies component	0.019421
Total price	0.072303

Band D2	EUR/kWh
	2015
Energy	0.036985
Total energy component	0.036985
Transmission	0.005359
Distribution	0.005377

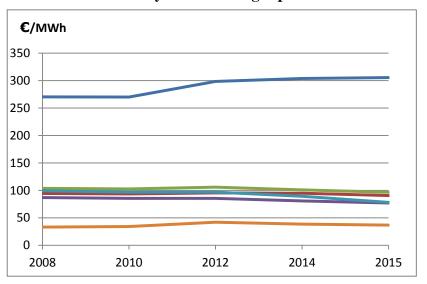
Total network component	0.010736
Charge for market operator	0.000081
VAT	0.010040
Total taxes & levies component	0.010121
Total price	0.057841

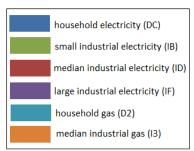
Band I3	EUR/kWh
	2015
Energy	0.022029
Total energy component	0.022029
Transmission	0.000418
Distribution	0.006238
Total network component	0.006656
Charge for market operator	0.000081
VAT	0.000000
Environmental tax	0.001121
Total taxes & levies component	0.001201
Total price	0.029886



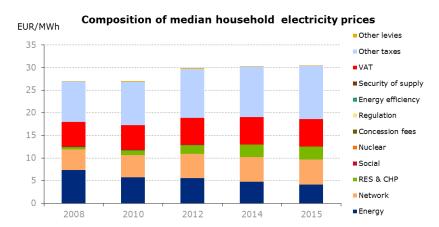
# **Denmark**

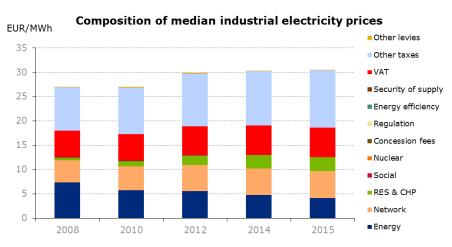
## Evolution of electricity and natural gas prices





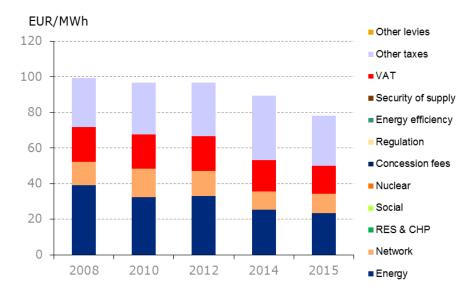
## **Composition of electricity prices**



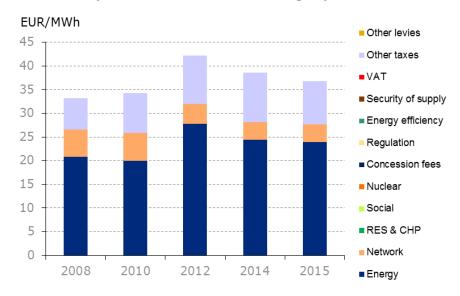


## **Composition of gas prices**

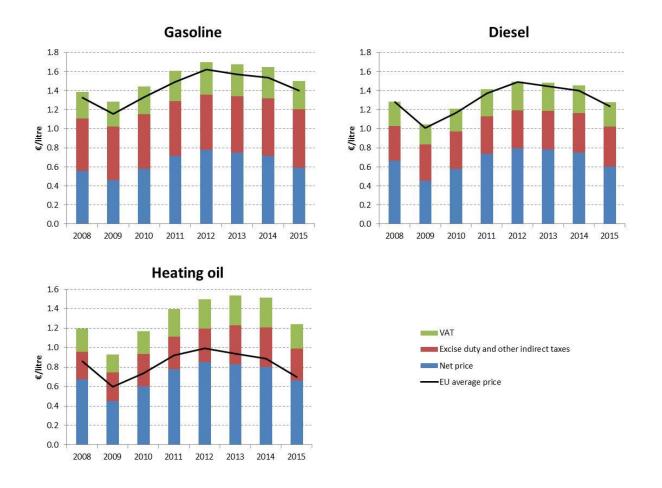
## Composition of median household gas prices



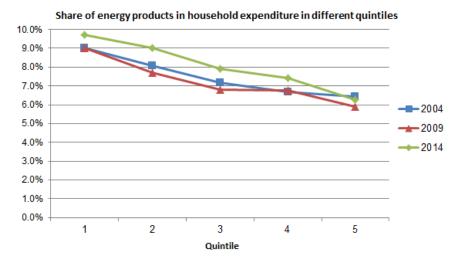
## Composition of median industrial gas prices



## Oil products prices

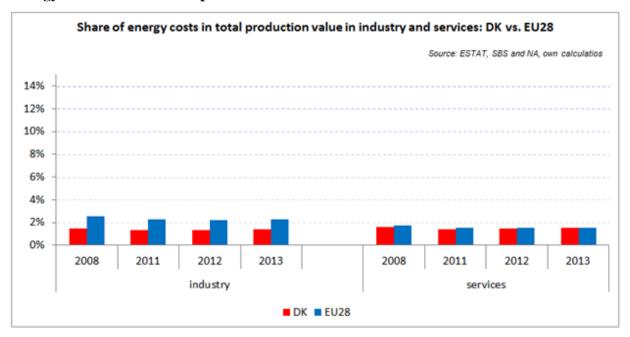


## **Energy in Households budgets**



Between 2009 (red line) and 2014 (green line) the share of energy in the total household expenditure in Denmark went up from 9% to 9.7% in the case of the poorest households (Quintile 1), while in the case of middle income households (Quintile 3) it rose from 6.8% to 7.9%.

## **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
Subscription supplier	0.004424
Energy	0.036736
Total energy component	0.041161
Local network tariff	0.027498
Overlying network tariff	0.000644
Transmission and system tariff	0.009519
Subscription network company	0.017805
Total network component	0.055466
Electricity tax	0.117716
VAT	0.061097
Electricity distribution tax	
Electricity-saving contribution	
Energy saving tax	
PSO_Support for RE	0.022980
PSO_Support for CHP	0.005202
PSO_Support for security of Supply	0.000308
PSO_Compensation for CO2 levy	0.000697
PSO_Support for R&D	0.000912
Total taxes & levies component	0.208913
Total price	0.305540

Band ID	EUR/kWh
	2015
Energy	0.036093
Total energy component	0.036093
Local network tariff	0.013260
Overlying network tariff	0.000402
Transmission and system tariff	0.009519
Subscription network company	0.000737
Total network component	0.023919
Electricity tax	0.000536
VAT	0.000000
Electricity distribution tax	
Electricity-saving contribution	

Total price	0.090580
Total taxes & levies component	0.030569
PSO_Support for R&D	0.000939
PSO_Compensation for CO2 levy	0.000670
PSO_Support for security of Supply	0.000268
PSO_Support for CHP	0.005229
PSO_Support for RE	0.022927
Energy saving tax	

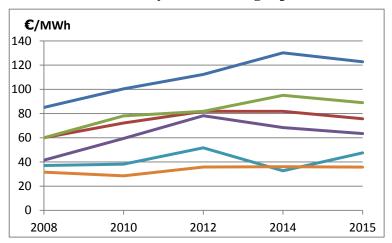
Band D2	EUR/kWh
	2015
Energy	0.023329
Total energy component	0.023329
Emergency tariff	0.000067
Distribution	0.010833
Total network component	0.010900
Carbon Tax	0.004237
NOx tax	0.000469
VAT	0.015650
Natural gas tax	0.023731
Total taxes & levies component	0.044087
Total price	0.078316

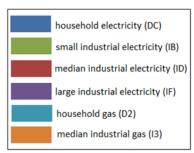
Band I3	EUR/kWh
	2015
Energy	0.023865
Total energy component	0.023865
Emergency tariff	0.000027
Distribution	0.003727
Total network component	0.003754
Carbon Tax	0.003499
NOx tax	0.000469
VAT	0.000000
Natural gas tax	0.005242
Total taxes & levies component	0.009211

Total price	0.036830

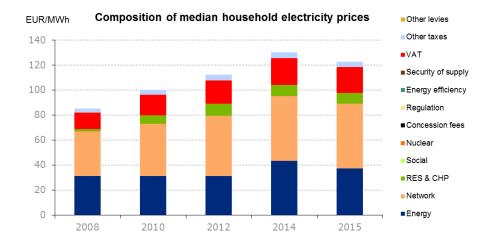
# **Estonia**

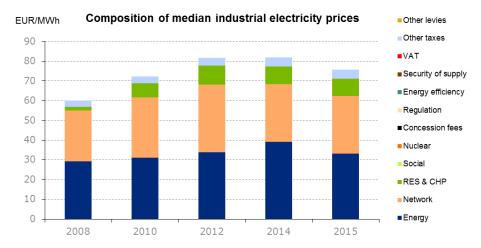
## Evolution of electricity and natural gas prices



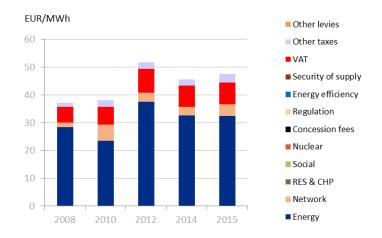


## **Composition of electricity prices**

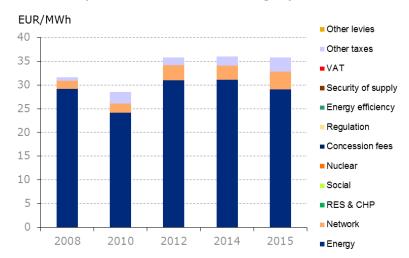




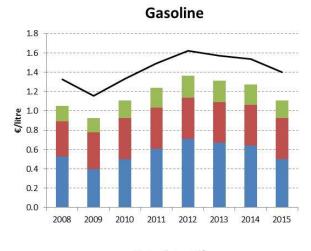
## Composition of gas prices

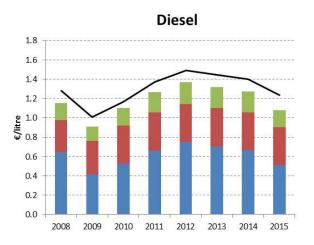


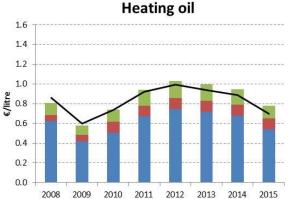
## Composition of median industrial gas prices

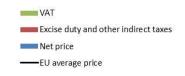


## Oil products prices

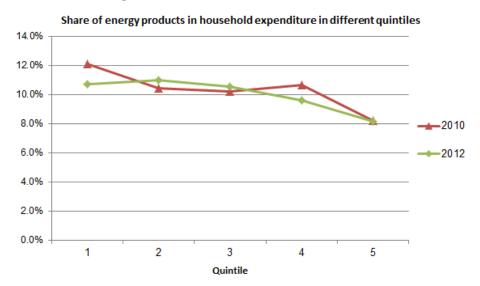






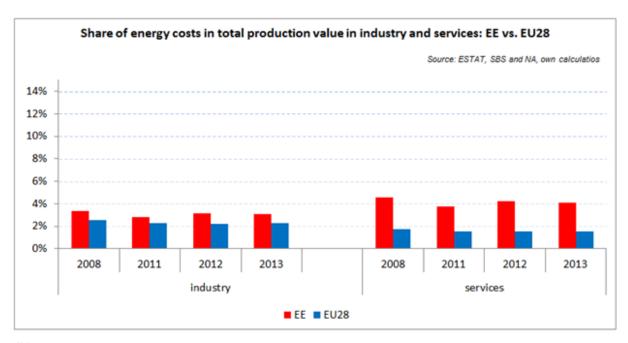


### **Energy in Households budgets**



In Estonia the share of energy products in the total household expenditure slightly decreased between 2010 (red line) and 2012 (green line) for the poorest households (Quintile 1) (from 11.2% to 10.7%), while for households with middle (Quintile 3) and with high income (Quintile 5) it remained practically unchanged.

### **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	0.037360
Total energy component	0.037360
Network	0.051620
Total network component	0.051620
VAT	0.020470
Excise Tax	0.004470
Support for renewable energy	0.008900
Total taxes & levies component	0.033840
Total price	0.122820

Band ID	EUR/kWh
	2015
Energy and supply	0.033110
Total energy component	0.033110
Network	0.029200
Total network component	0.029200
VAT	0.000000
Excise Tax	0.004470
Support for renewable energy	0.008900
Total taxes & levies component	0.013370
Total price	0.075680

Band D2	EUR/kWh
	2015
Energy and supply	0.032520
Total energy component	0.032520
Network	0.004080
Total network component	0.004080
VAT	0.007920
Excise Tax	0.002980

Total taxes & levies component	0.010900
Total price	0.047500

Band I3	EUR/kWh
	2015
Energy and supply	0.029080
Total energy component	0.029080
Network	0.003690
Total network component	0.003690
VAT	0.000000
Excise Tax	0.002980
<b>Total taxes &amp; levies component</b>	0.002980
Total price	0.035750