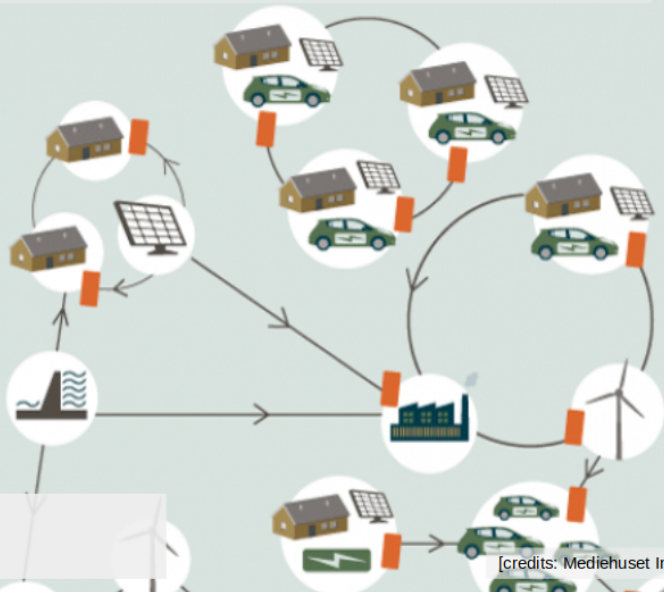
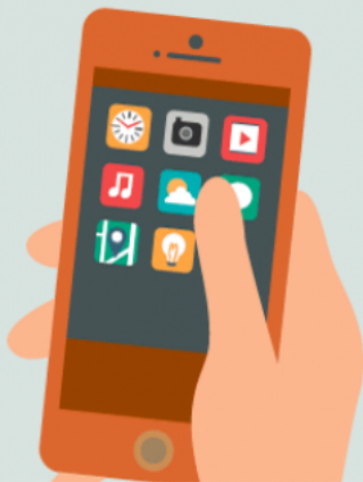


# Module 5 – Impact of Renewables on Electricity Markets

## 5.1 Electricity cost and cost structure

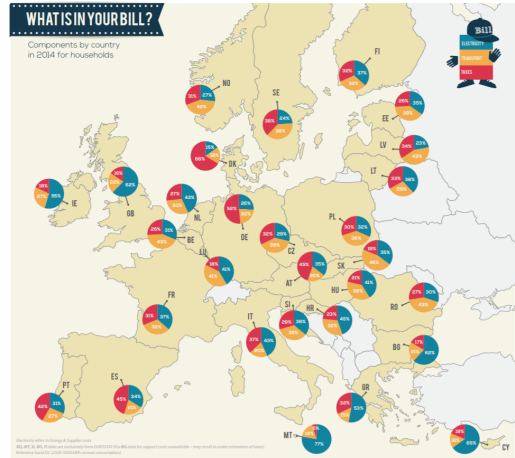
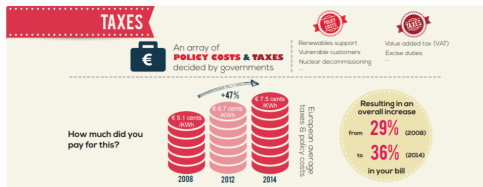
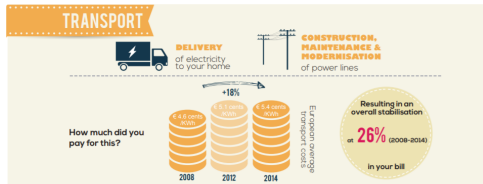
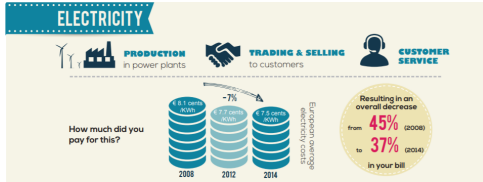


**Pierre Pinson**  
Technical University of Denmark

[credits: Mediehuset Ingeniøren]



# The electricity cost structure



**Union of the Electricity Industry - EURELECTRIC**

Boulevard de l'Industrie, 68 boîte 2  
1000 Brussels  
Belgium

T. + 32 (0)2 518 10 00 - F. + 32 (0)2 518 10 10  
website: [www.eurelectric.org](http://www.eurelectric.org)  
twitter: @EURELECTRIC

EU Transparency Register number: 4276427698-87

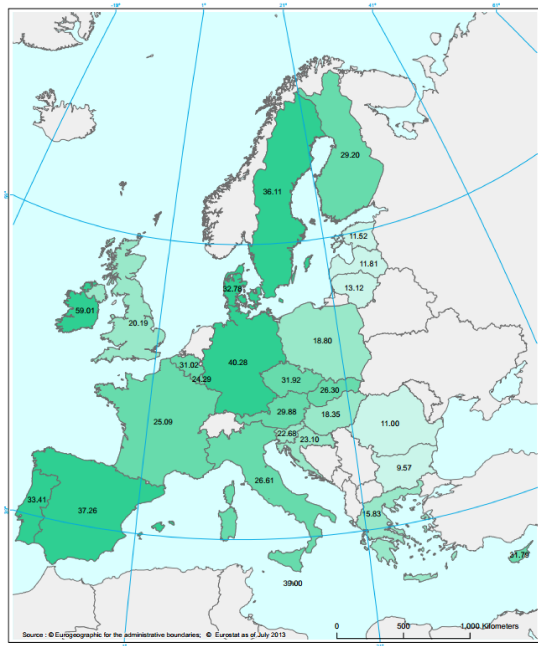
**eurelectric**  
ELECTRICITY FOR EUROPE

Contact:  
Samuele REPETTO, Data Analyst - [srepetto@eurelectric.org](mailto:srepetto@eurelectric.org)  
Giuseppe LORUBIO, Manager Retail Markets & Customers - [glorubio@eurelectric.org](mailto:glorubio@eurelectric.org)

- In Denmark, 85% of the electricity costs are for grid-related costs and taxes(!)



# How much do we pay?



Retail prices in € cents per kWh for “**small**” **consumers** (typically households, tax included), Q2 of 2012

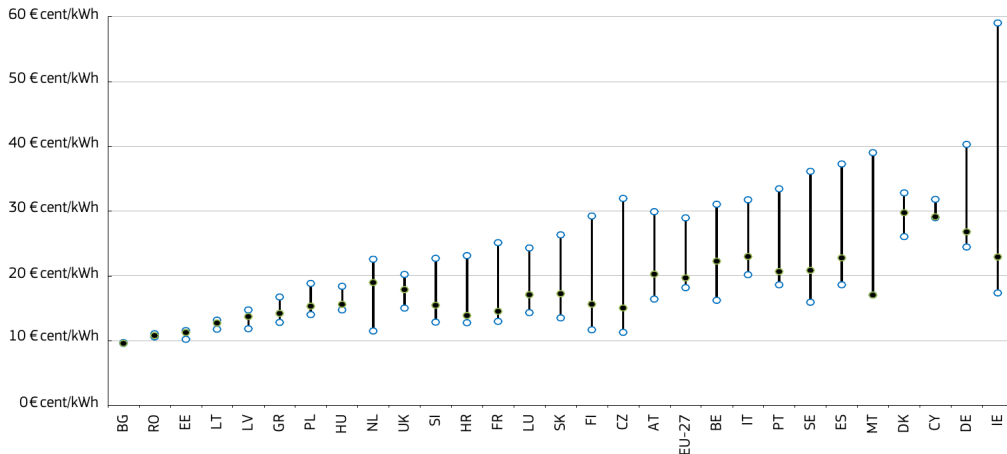
[source: Quarterly Report on European Electricity Markets 6(2), 2nd Quarter 2013)

On the web: [http://ec.europa.eu/energy/observatory/electricity/electricity\\_en.htm](http://ec.europa.eu/energy/observatory/electricity/electricity_en.htm)



# Do we all pay the same?

Range of electricity prices paid by households (€ cents per kWh, tax included), depending on ranges of annual consumption, Q2 of 2012

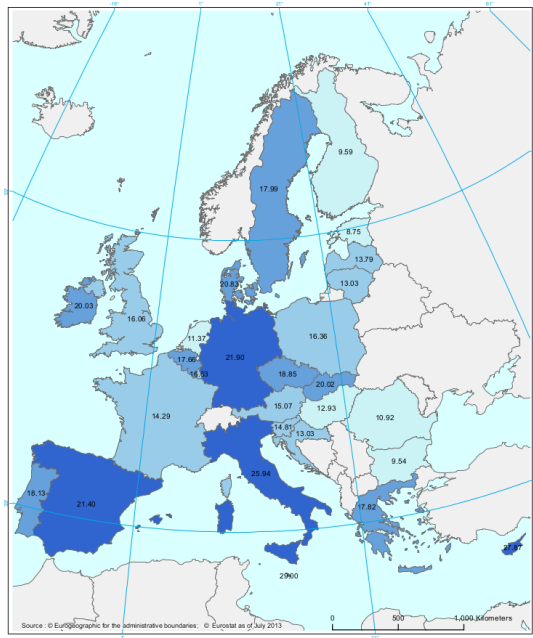


[source: Quarterly Report on European Electricity Markets 6(2), 2nd Quarter 2013)

On the web: [http://ec.europa.eu/energy/observatory/electricity/electricity\\_en.htm](http://ec.europa.eu/energy/observatory/electricity/electricity_en.htm)



# The case of the large consumers (industry)...



Retail prices in € cents per kWh for **“large” consumers** (industry, no tax), Q2 of 2012

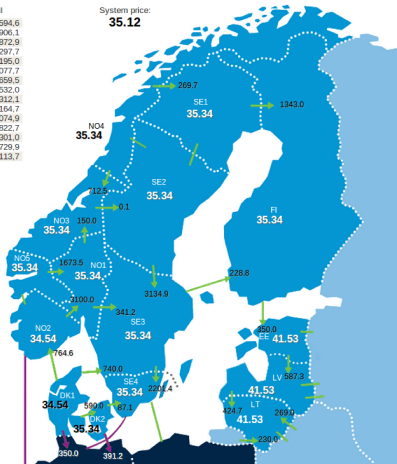
[source: Quarterly Report on European Electricity Markets 6(2), 2nd Quarter 2013]

On the web: [http://ec.europa.eu/energy/observatory/electricity/electricity\\_en.htm](http://ec.europa.eu/energy/observatory/electricity/electricity_en.htm)



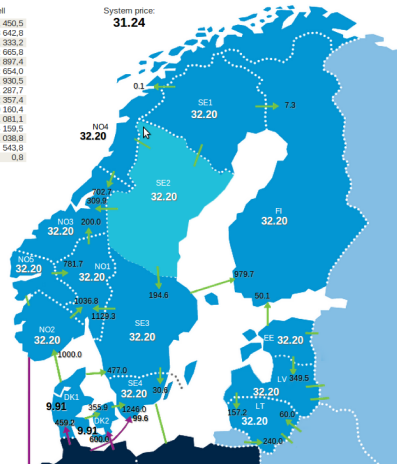
06-12-2013 Resolution 11 - 12 Currency EUR Capacities ITVC Flow ITVC Area Prices

	Buy	Sell
NO1	5 076.9	1 594.6
NO2	4 570.7	6 906.1
NO3	2 735.3	1 872.9
NO4	2 315.5	3 297.7
NO5	2 521.5	4 195.0
OK1	1 983.1	4 077.7
DK2	2 162.4	3 550.5
SE1	1 456.7	2 532.0
SE2	2 177.3	5 312.1
SE3	11 950.6	10 164.7
SE4	3 363.4	1 074.9
FI	6 044.5	4 822.7
EE	1 063.7	1 301.0
LT	1 154.6	729.9
LV	276.3	113.7



06-12-2013 Resolution 04 - 05 Currency EUR ☐ Capacities ☒ Flow ☒ Area Prices  
ITVC ITVC

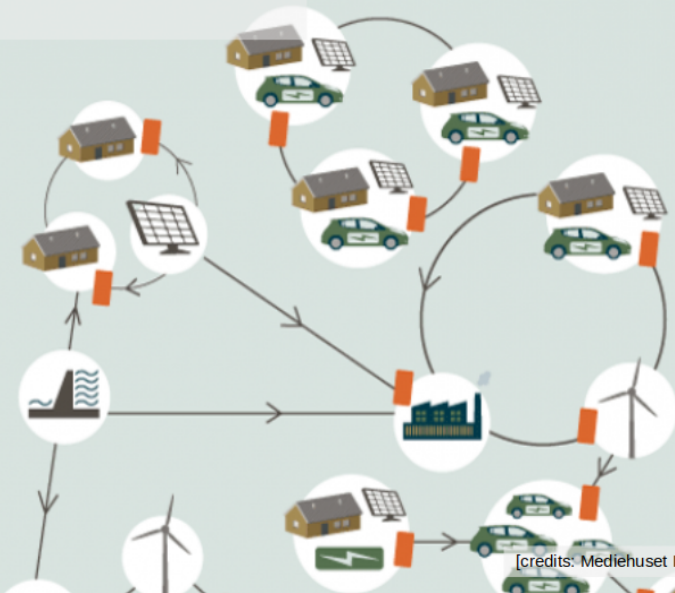
	Buy	Sell
NO1	4 198.3	1 450.5
NO2	3 606.0	3 642.8
NO3	2 545.8	1 333.2
NO4	1 963.2	2 665.8
NO5	2 115.7	2 897.4
DK1	821.1	2 654.0
DK2	1 040.4	1 830.5
SE1	1 280.3	1 287.7
SE2	1 852.9	2 357.4
SE3	8 692.4	10 160.4
SE4	2 357.7	1 081.1
FI	5 196.6	4 159.5
EE	639.2	1 038.8
LT	701.0	543.8
LV	193.1	0.8



6 December 2013, 4:00 - 5:00



**Use the self-assessment quizz to check your understanding!**



[credits: Mediehuset Ingeniøren]