

**ACER**

 Agency for the Cooperation  
of Energy Regulators

**CEER**

Council of European  
Energy Regulators



# **ACER/CEER 3<sup>rd</sup> Annual Report on Monitoring the Electricity and Natural Gas Markets**

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**Brussels, 22 October 2014**

## Report scope and structure

- Third joint annual electricity and natural gas market monitoring report by ACER and CEER
- Based on Article 11 of Regulation (EC) No 713/2009
- Four main areas covered:
  - » Retail electricity and gas markets
  - » Electricity wholesale markets and network access
  - » Natural gas wholesale markets and network access
  - » Consumer protection and empowerment
- This 3<sup>rd</sup> edition of the report presents, in a single chapter, the analysis of developments in both the electricity and gas retail markets, to which many common considerations apply

## Outline of the presentation

- Retail markets
- Wholesale electricity markets / network access
- Wholesale gas markets / network access
- Consumer protection and empowerment

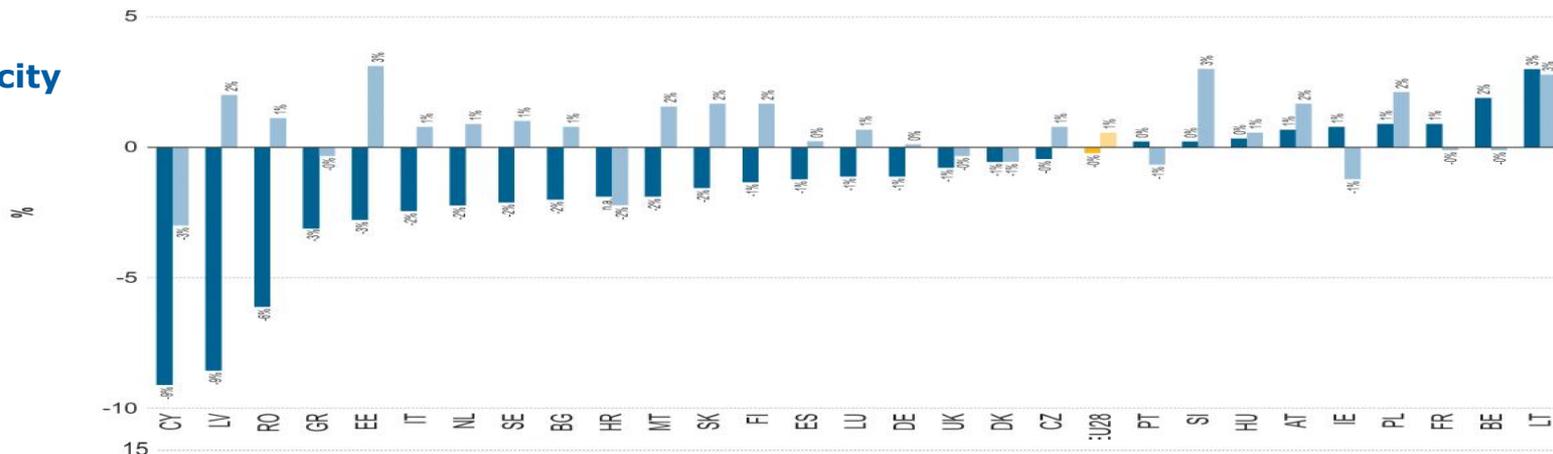
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- Retail markets
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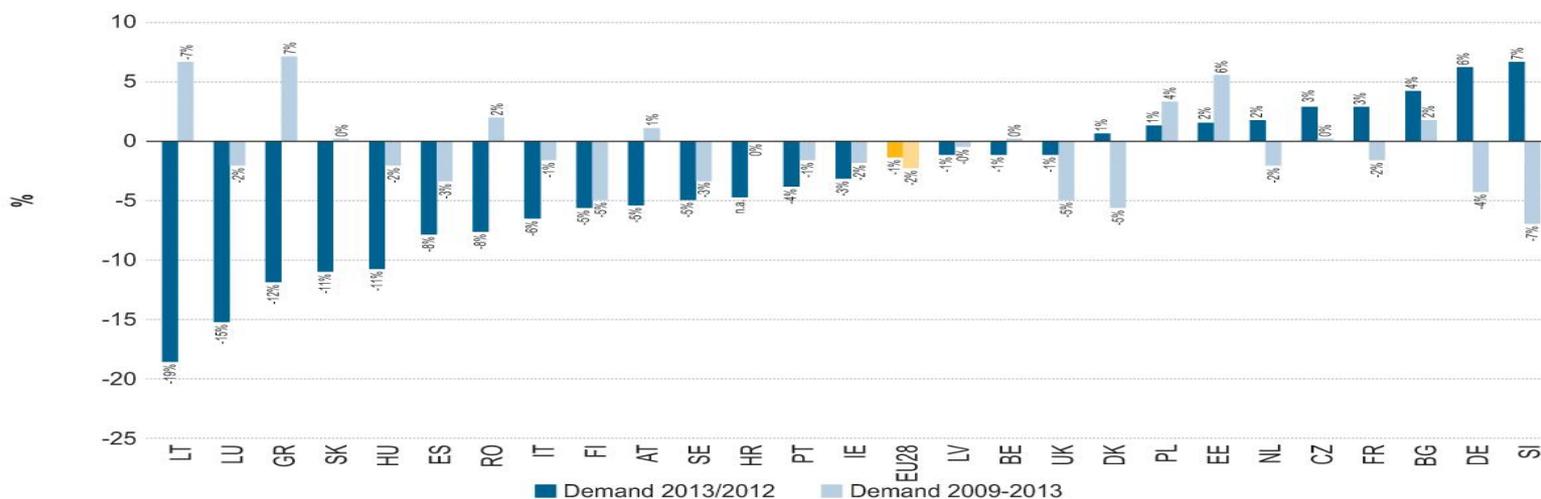
# Decreasing electricity and gas demand in many MSs...

Change in electricity and gas demand in EU28 – 2012 to 2013 and 2009 to 2013 (%)

## Electricity



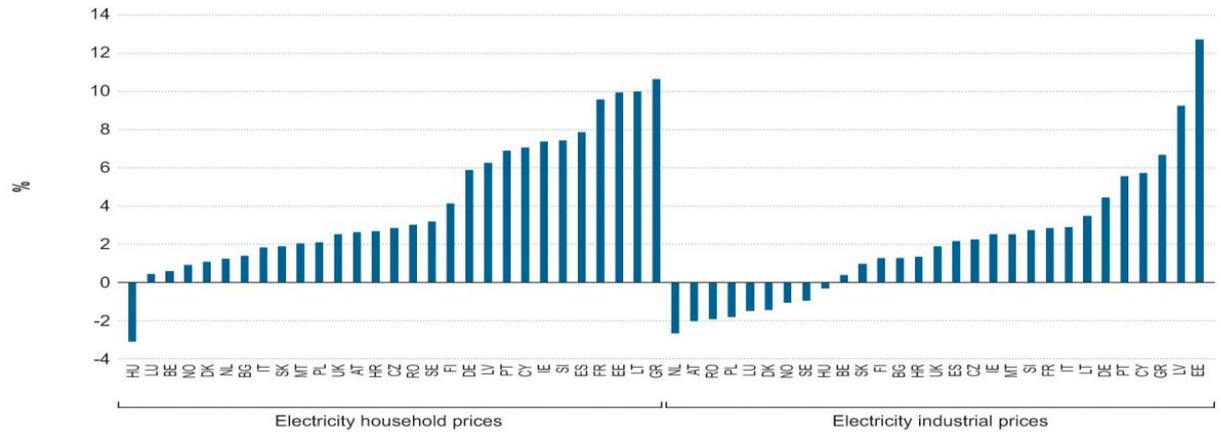
## Gas



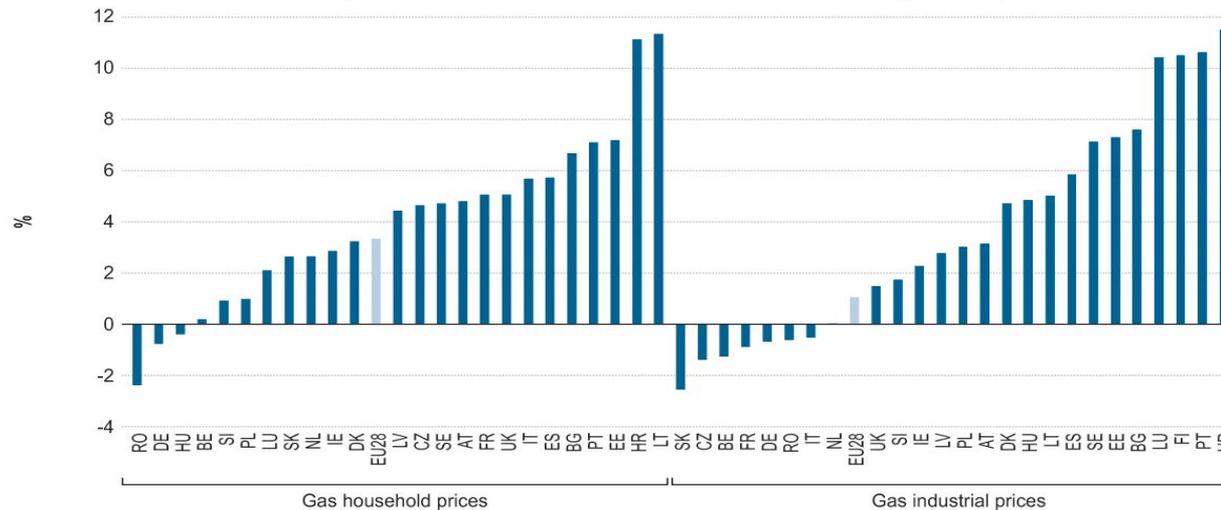
# ...does not result in lower final retail prices...

Post-tax retail prices: compounded annual growth rate in EU28 from 2008 to 2013 (%)

## Electricity



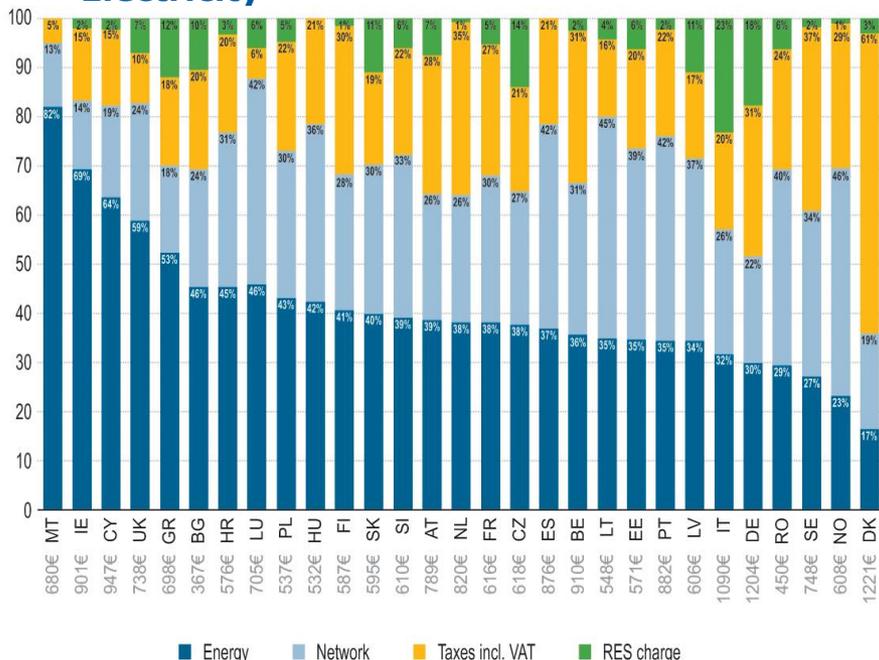
## Gas



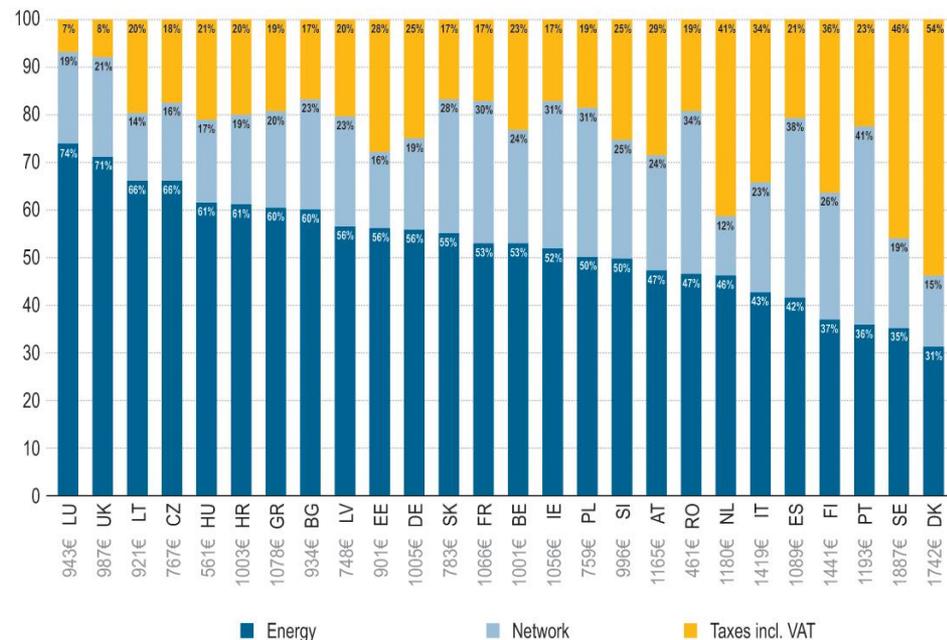
## ...while the energy component continues to represent a relatively small part of the final bill, especially for electricity...

*Post-tax retail price break-down – incumbents' standard offers for households in capital cities – 2013 (%)*

### Electricity



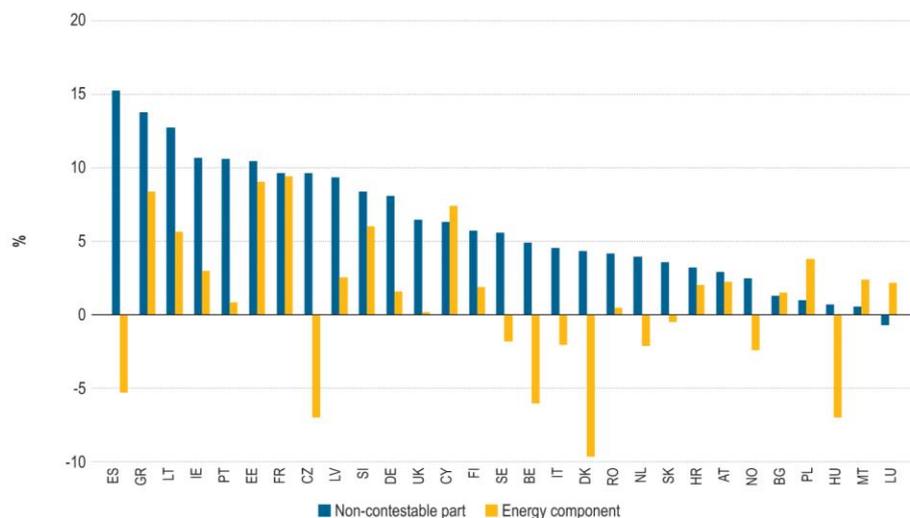
### Gas



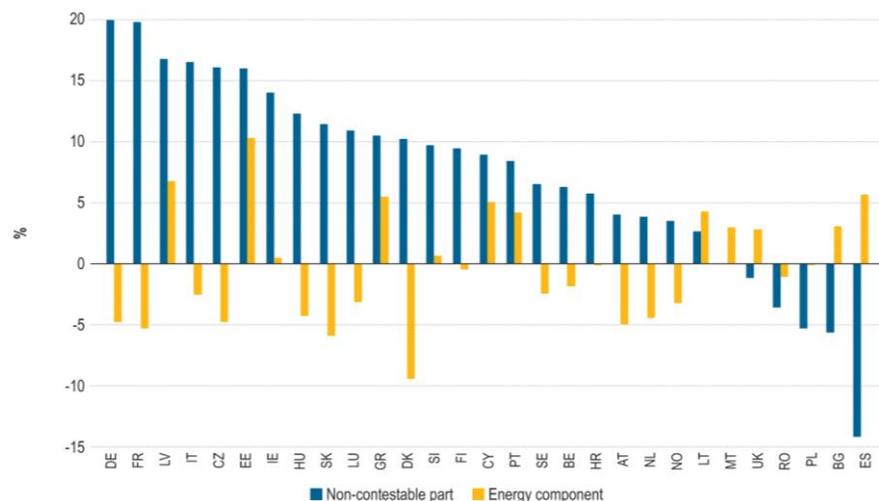
# ...and over time it is becoming an even smaller part of the final bill.

The compounded annual growth rate (CAGR) of the electricity energy component and the non-contestable part of POTPs for households and industry – Europe – 2008–2013 (%)

## Household (electricity)

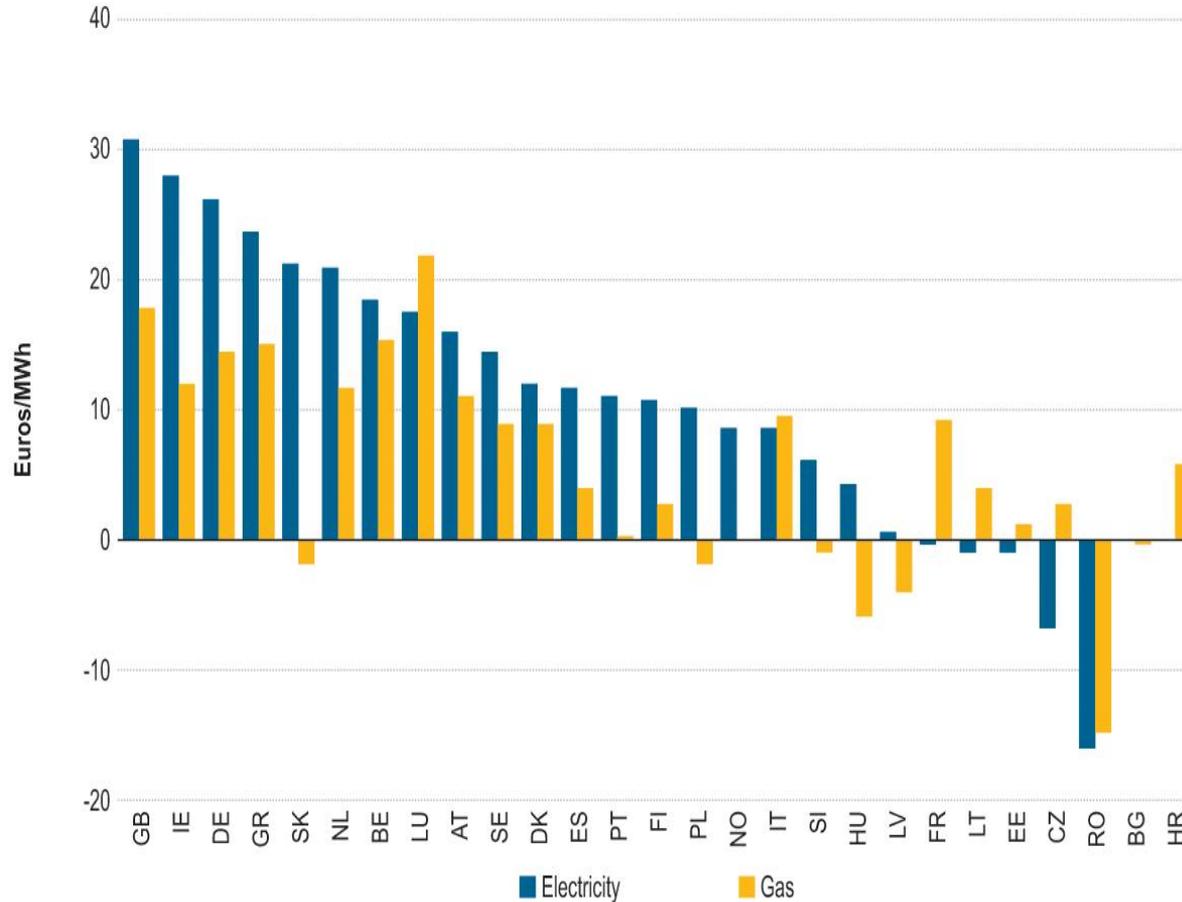


## Industrial (electricity)



# Mark-up levels vary widely among MSs, depending on the level of competition and operational costs

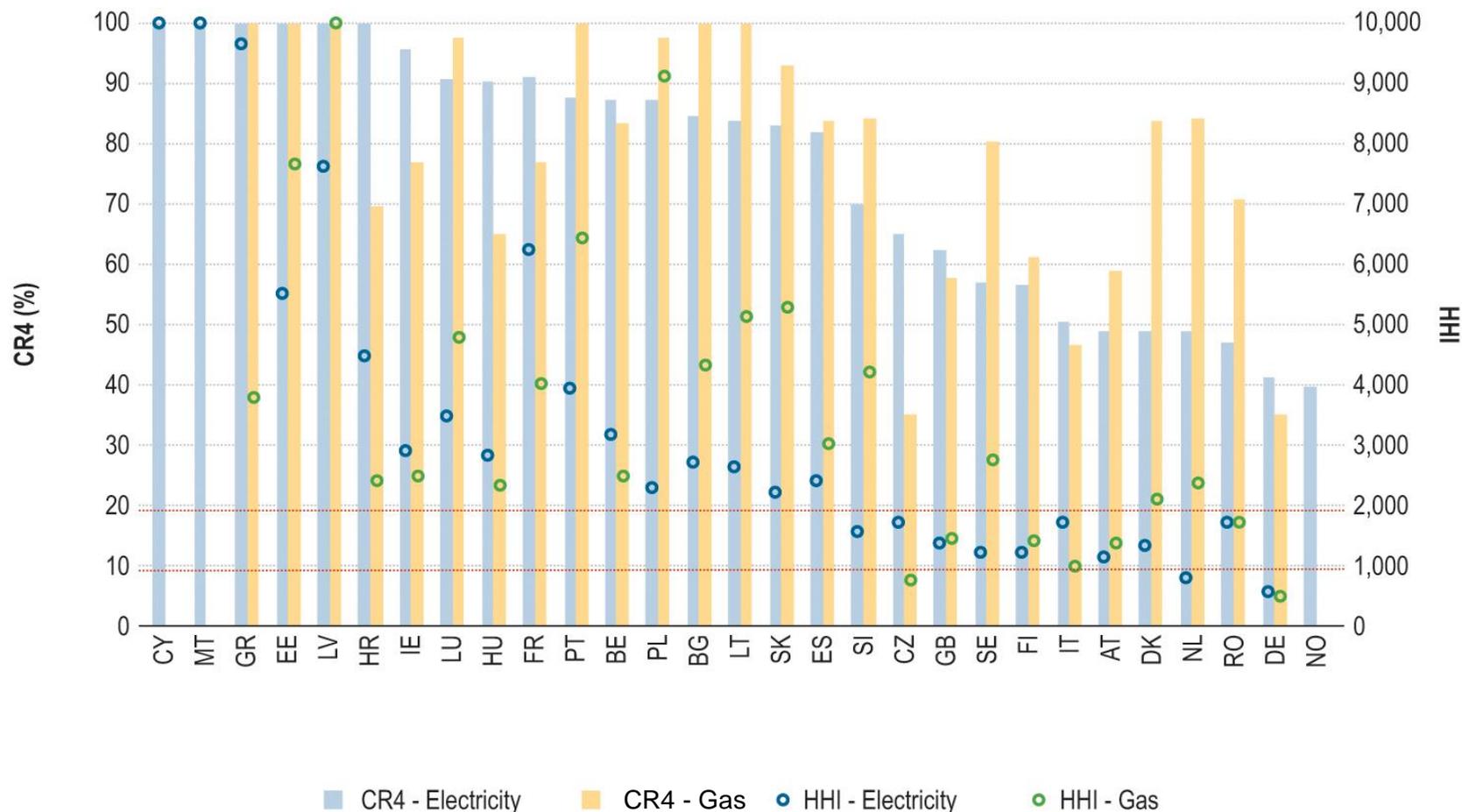
Average annual electricity (2008 to 2013) and gas (2012 to 2013) mark-ups – (euros/MWh)



Mark-ups are defined as the difference between the retail energy (commodity) component and the wholesale energy cost.

# Market concentration remains high in the majority of MSs...

Market concentration in retail electricity and gas markets – 2013 (CR4 % and HHI)



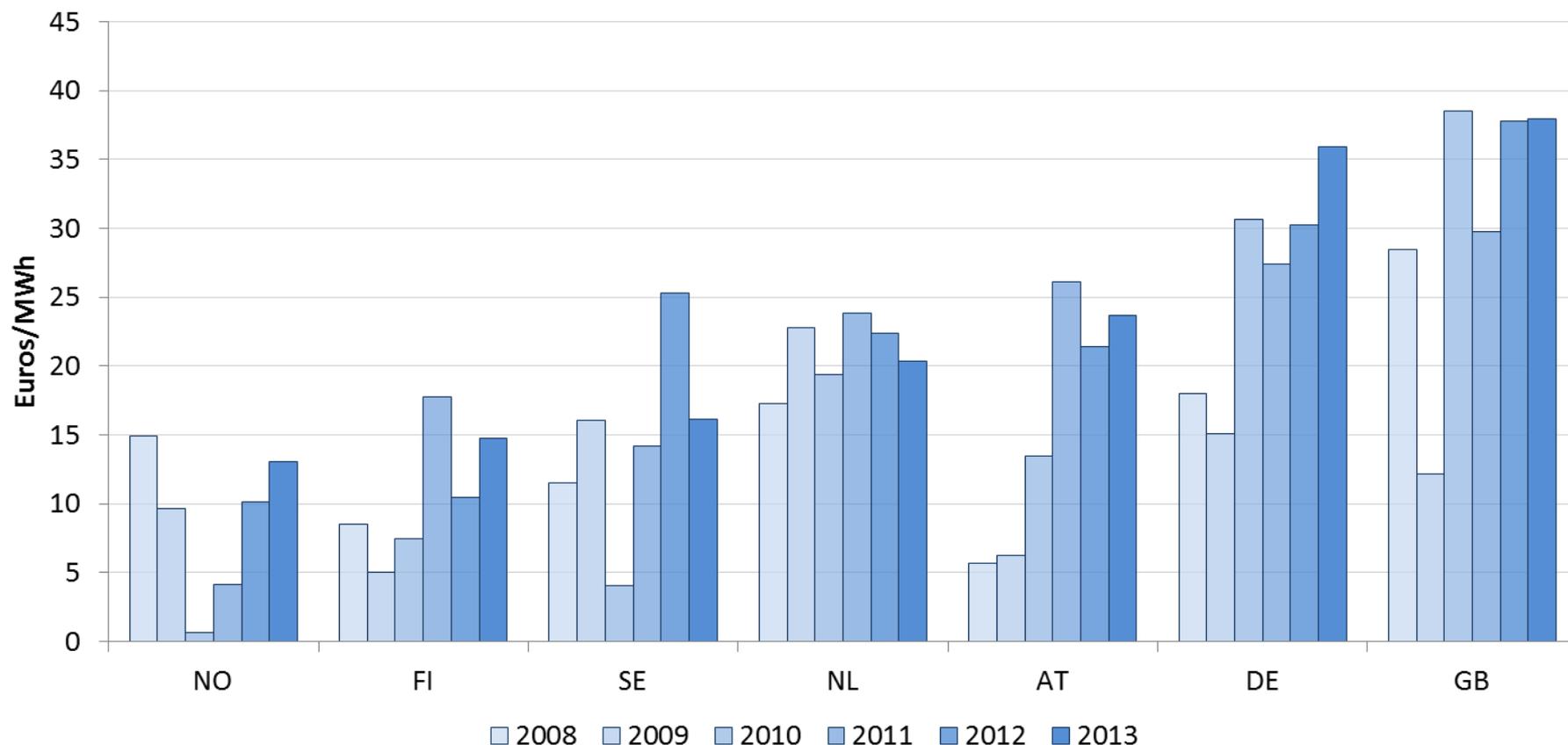
## ...with no correlation between wholesale prices and the energy component of retail prices in some MSs

Relationship between the energy component of the retail electricity price and the wholesale electricity price and mark-up in a selection of countries – 2008–2013 (euros/MWh)



## ...Austria, Germany and Great Britain show significant higher mark-ups compared to the Nordic market, and are still increasing since 2012...

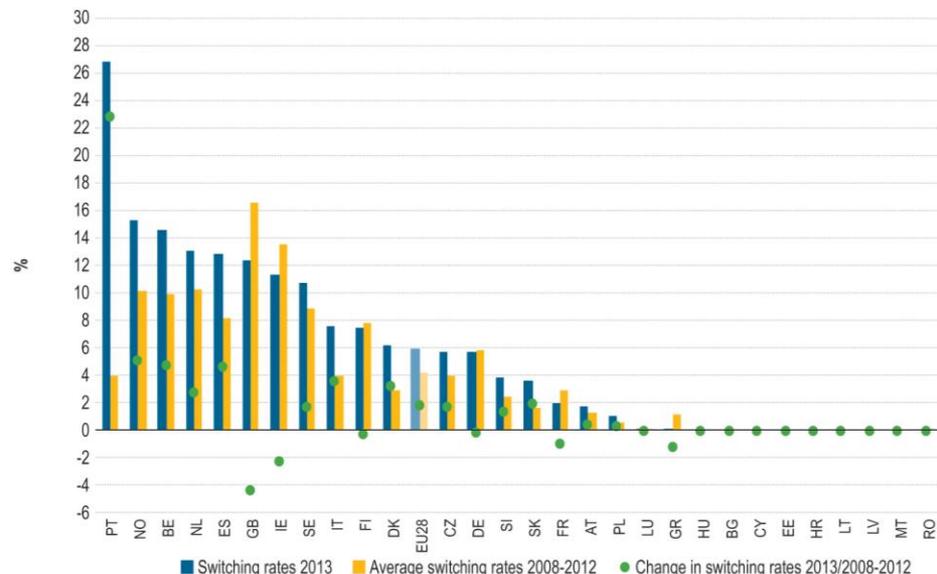
*Electricity mark-ups in a selection of fully liberalised markets – 2008 to 2013 (euros/MWh)*



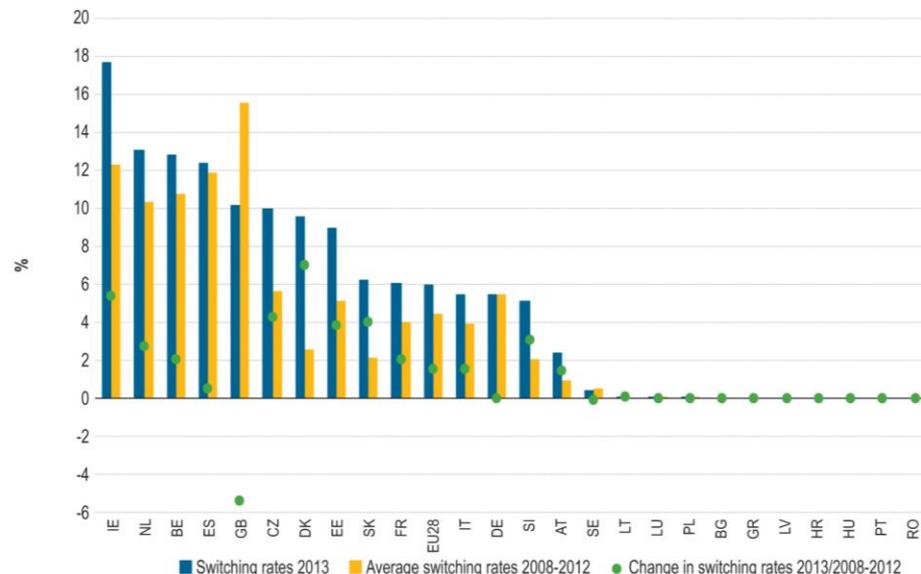
# Switching rates of household consumers remain relatively low...

*Switching rates for electricity/gas household consumers in Europe - 2008-2012 and 2013 (ranked according to switching rates in 2013)*

## Electricity

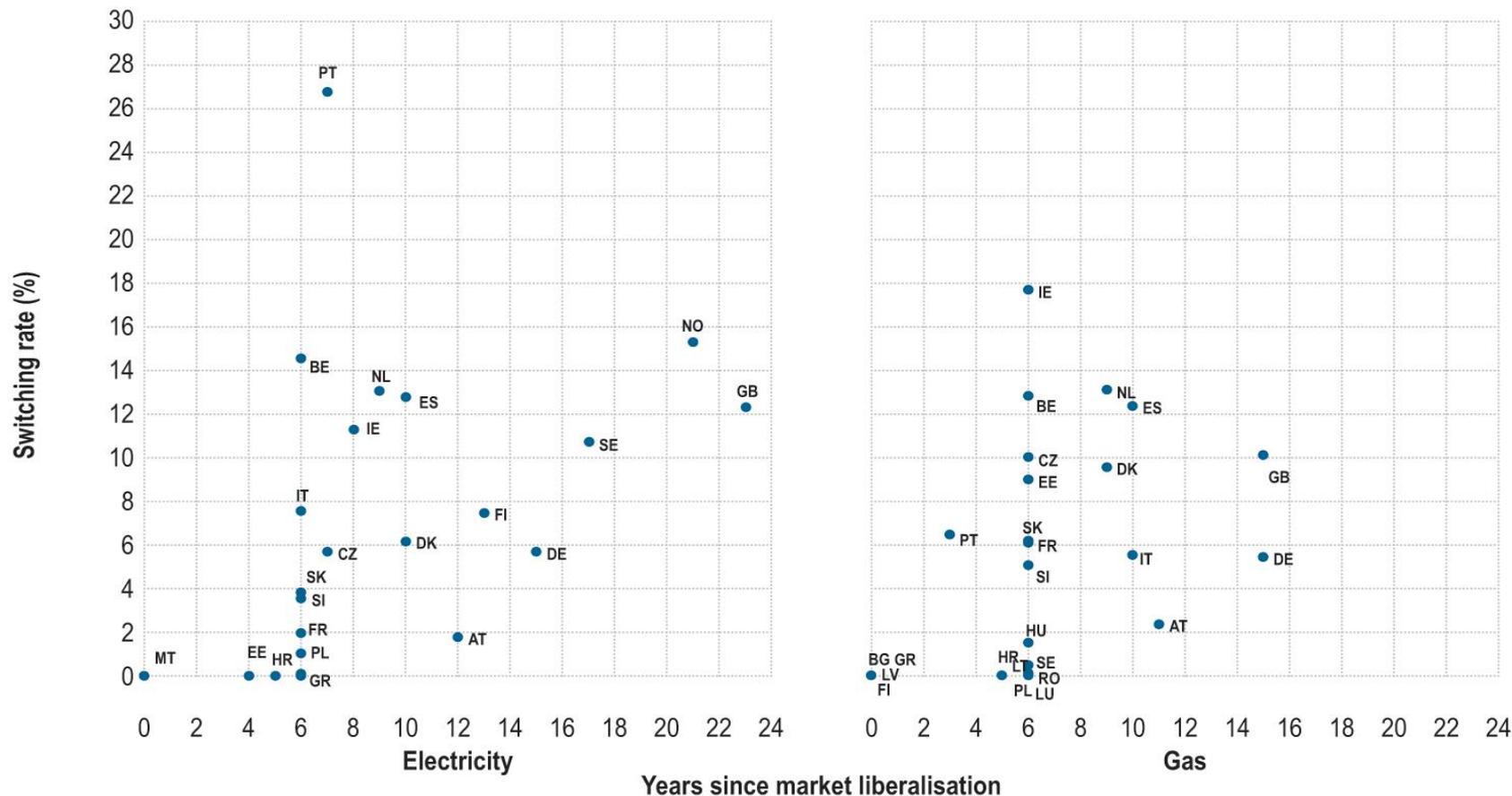


## Gas



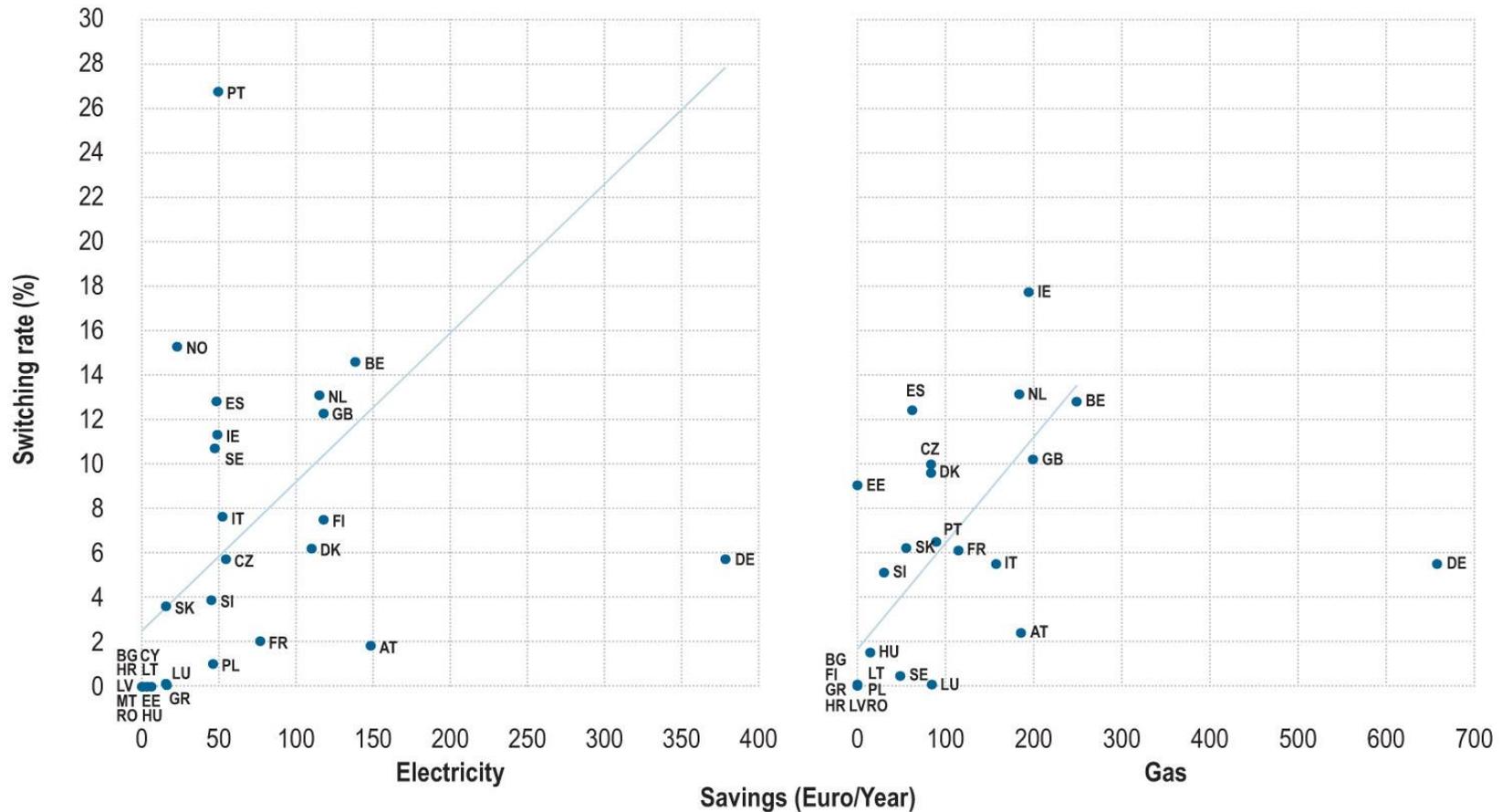
# ...for countries where market liberalisation occurred earlier, the number of supply offers is higher...

Number of offers in capital cities in 2013 and years since market liberalisation



# ...switching rates seem to be positively related to price differentials, more so in gas than in electricity

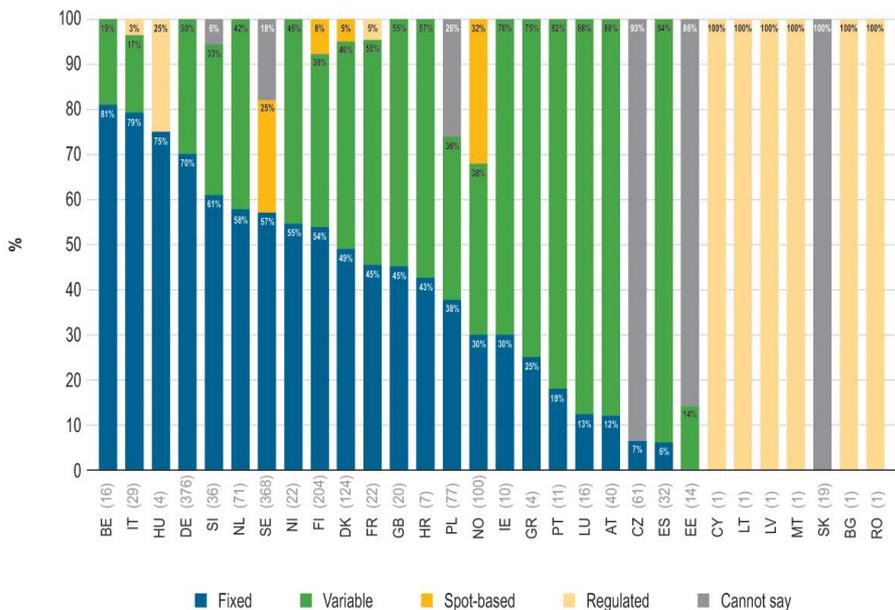
*Relationship between countries' overall switching rates and annual savings available in capital cities – 2013 (%)*



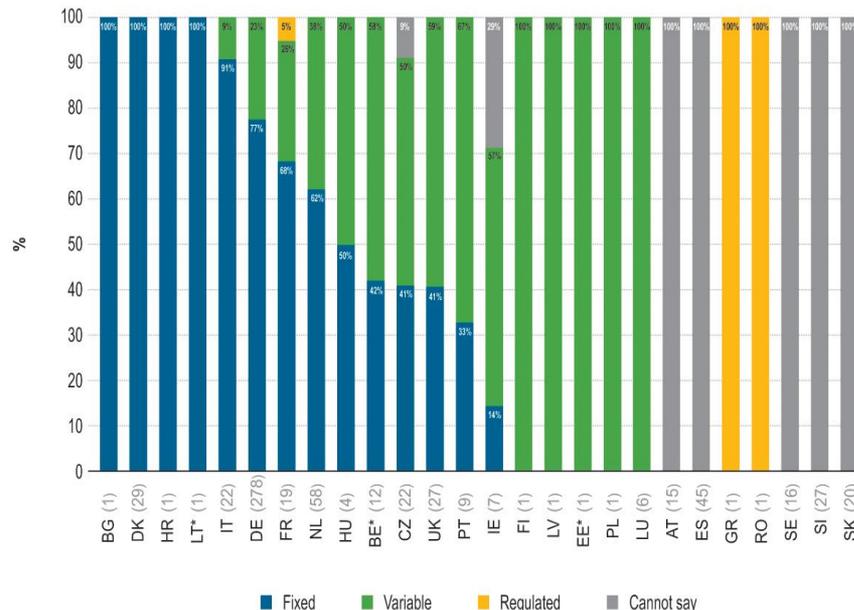
# ... the degree of differentiation in supply offers vary between Member States.

*Type of energy pricing of electricity and gas only offers in EU MSs capital cities*

## Electricity

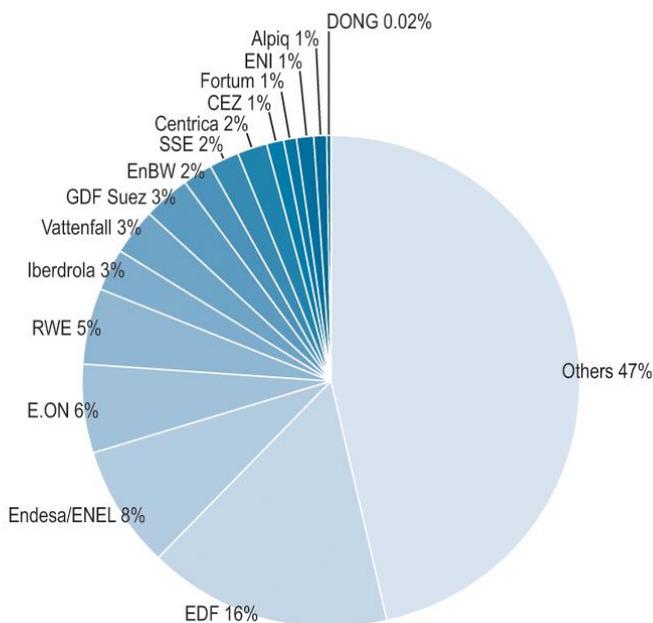


## Gas

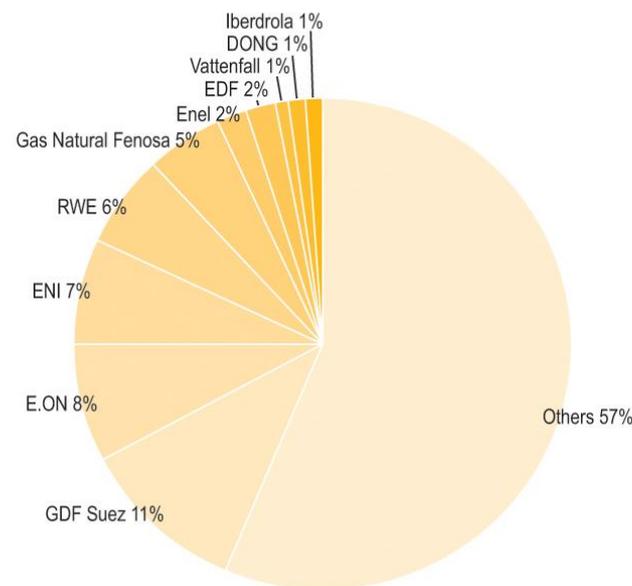


# There is some consolidation in the retail supply market in Europe ...

European share of the major electricity and gas suppliers (including national and local suppliers) – 2013 (%)



**Electricity**  
EU Total Sales:  
2,681,155 GWh

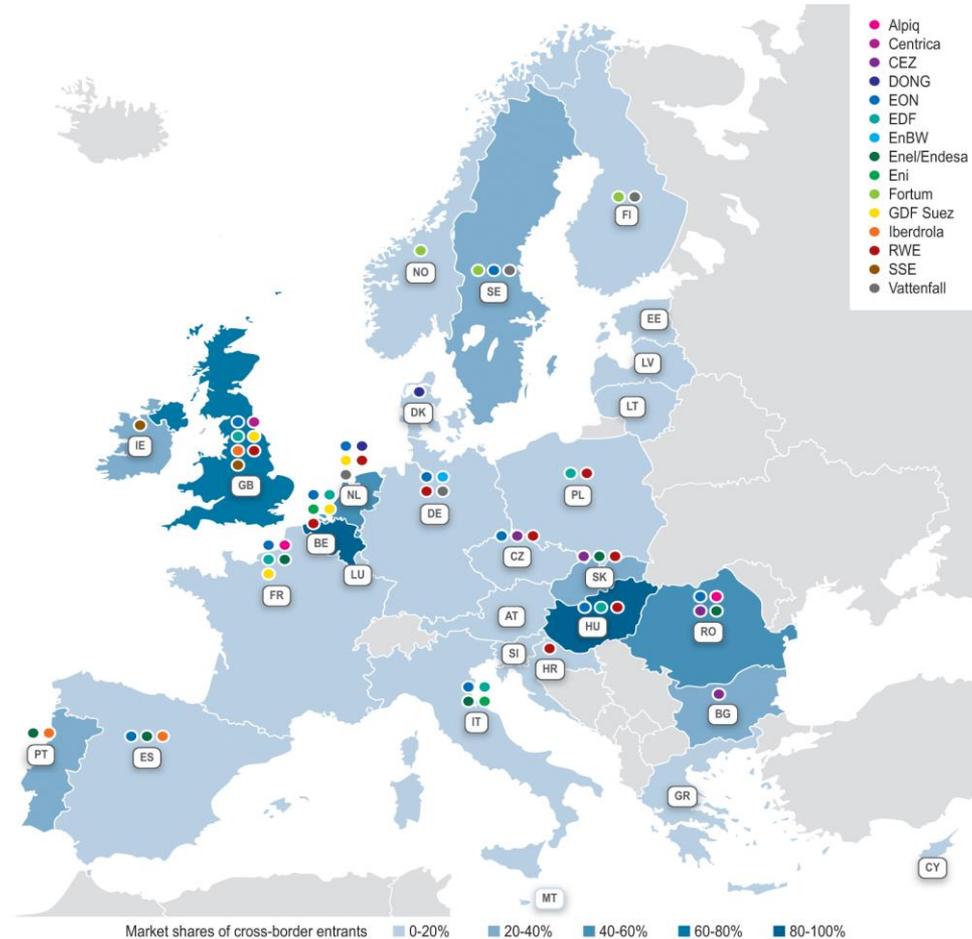


**Gas**  
EU Total Sales:  
4,008,811 GWh

Note: EU Total sales represent the total volumes of electricity and gas sold by retailers in the EU 28. These figures are slightly different from Eurostat's demand data, which is based on total consumption including energy purchased by consumers directly on the wholesale markets.

## ... as suppliers expand into other markets.

*Presence of major European electricity suppliers in Europe and market shares of cross-border entrants in national markets – 2013*



## Barriers to entry persist

- Consumer switching behaviour
  - » loyalty to local, publicly-owned suppliers
  - » switching perceived to be complex, risky and time-consuming
- Retail-price regulation
  - » disengages consumers from switching: "*Regulated prices must be good*"
  - » if set below expected entry cost, it acts as an absolute barrier to entry
- Regulatory framework
  - » different regulation and legislation regimes
  - » complex licensing, non-accredited licenses across MSs
- Lack of full unbundling
  - » in many MSs, not fully implemented yet
  - » re-branding of DSOs/retailers

## Conclusions

- Retail energy prices increased in most MSs
- Energy taxes and other duties in some MSs limit the contestable share of the retail price to less than 50% of the end-user price
- Disparities in MSs' national energy policies reflected in price components
- In several MSs, lack of correlation between wholesale and retail prices
- Switching propensity still very low in many MSs
- Regulated end-user prices, if set below expected entry cost, suppress any competition. If set above entry costs may still reduce switching and therefore discourage entry

## Recommendations

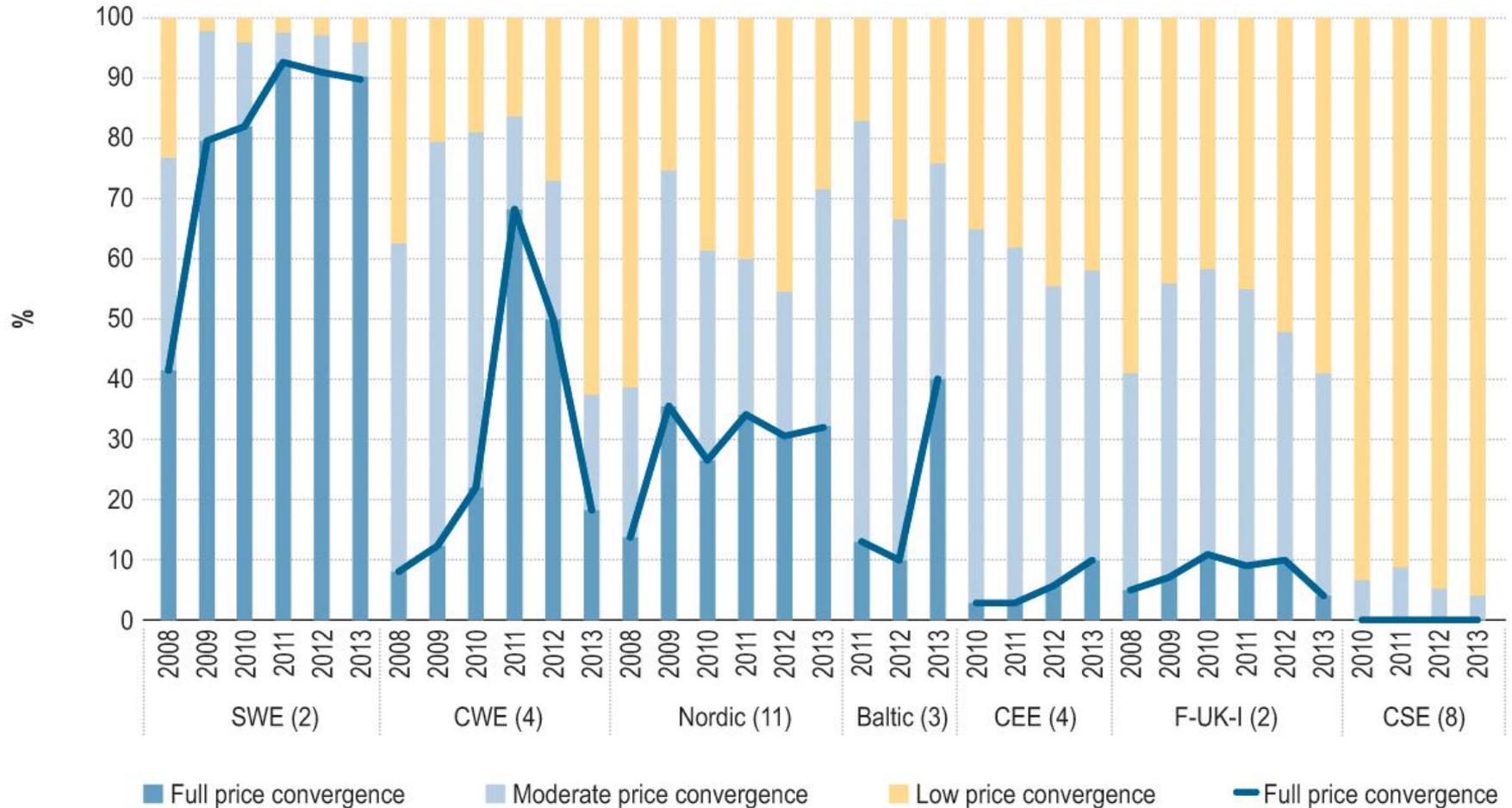
- Increased transparency of all components of the total price is needed, in order to enhance consumer awareness and foster competition
- Regulated retail prices should be removed as soon as a sufficient degree of competition is achieved. Targeted protection of vulnerable customers should be maintained
- Complex switching procedures should be removed
- Reliable tools for easily comparing offers should be made available in all MSs (e.g. by NRAs)
- Collective switching should be facilitated
- ... Fully Implement and Enforce the 3<sup>rd</sup> Energy Package, including Consumers' Rights

## Outline of the presentation

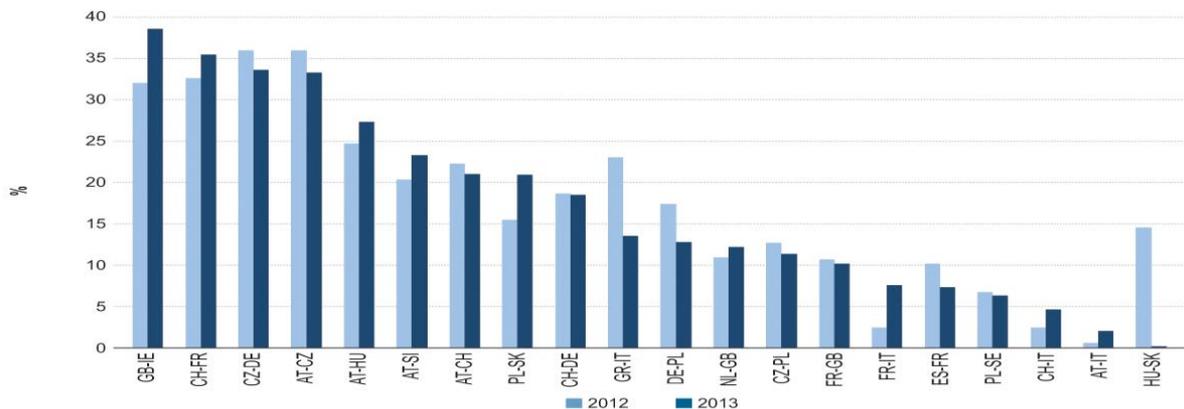
- Retail markets
- Wholesale electricity markets / network access
- Wholesale gas markets / network access
- Consumer protection and empowerment

## Wholesale electricity markets: significant scope for further price convergence

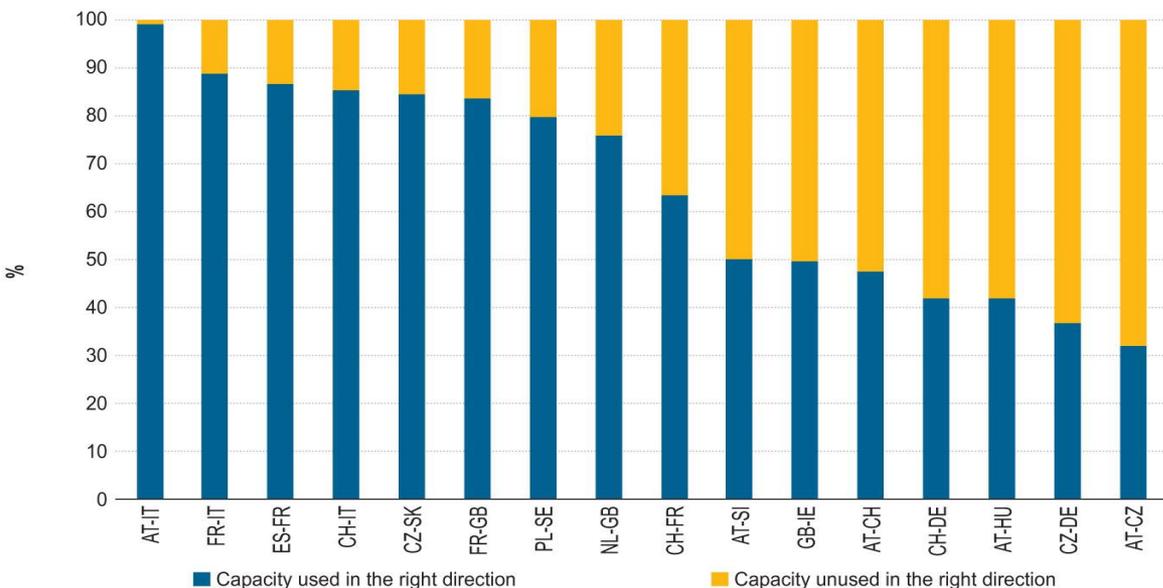
Price convergence in Europe by region (ranked) – 2008 to 2013 (% of hours)



## Wrong-way flows and capacity under-utilisation still persist where market coupling is not implemented yet



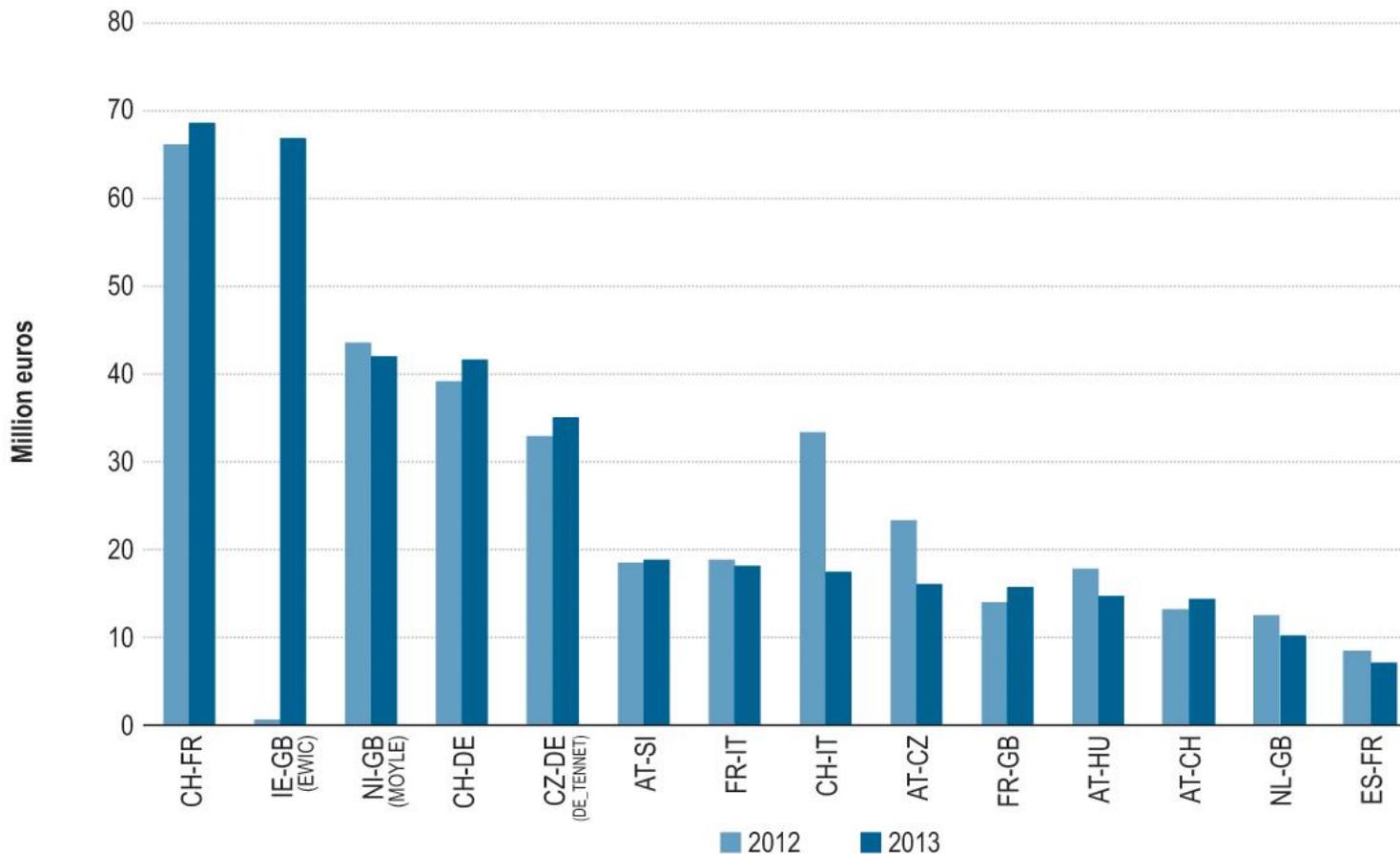
*Percentage of hours with net day-ahead nominations against price differentials per border - 2012-2013 (%)*



*Percentage of available capacity (NTC) used in the 'right direction' in the presence of a significant price differential, per border - 2013 (%)*

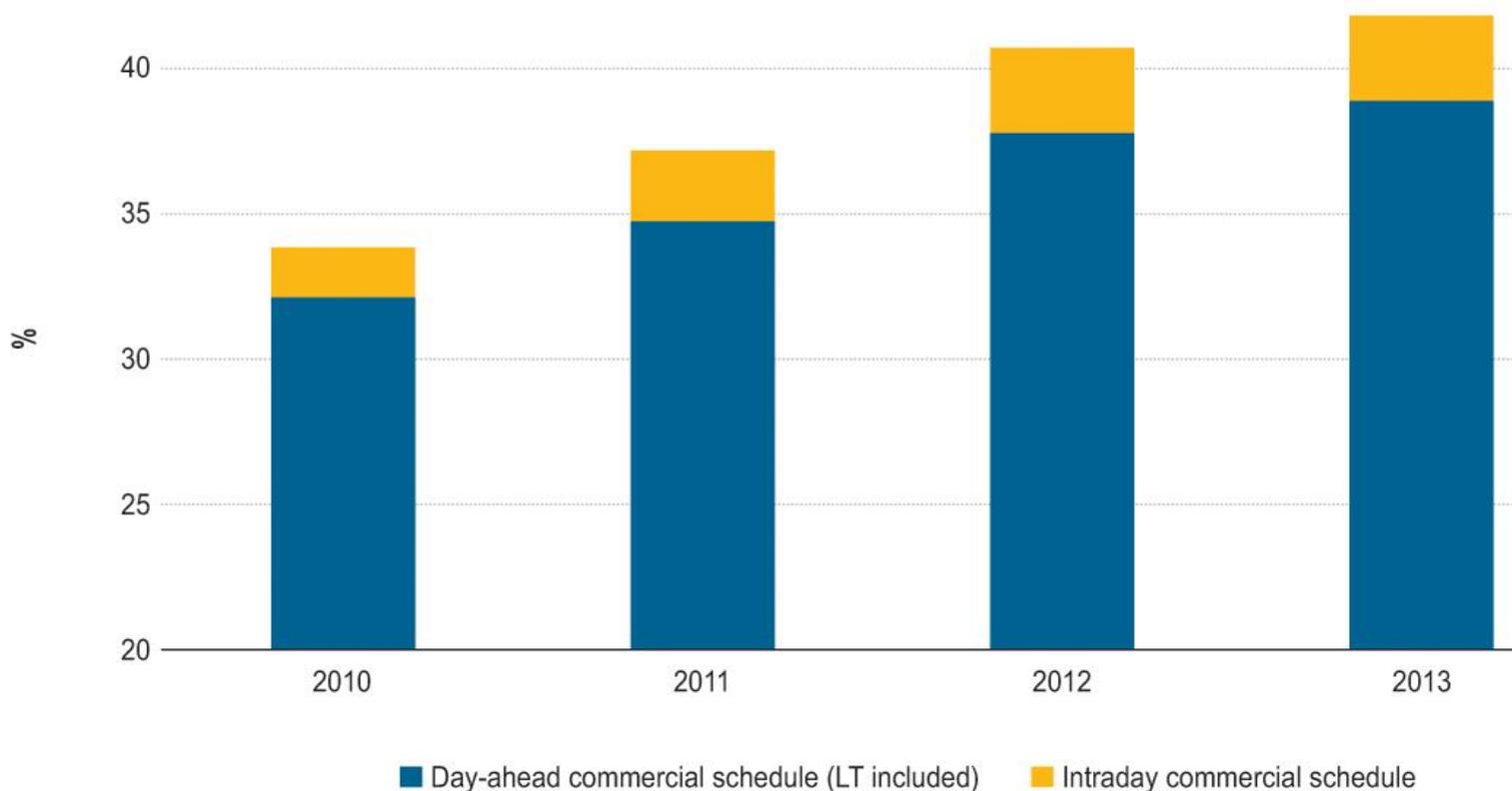
## ...causing loss of social welfare

Estimated 'loss of social welfare' due to the absence of market coupling by region/border – 2012-2013 (million euros)



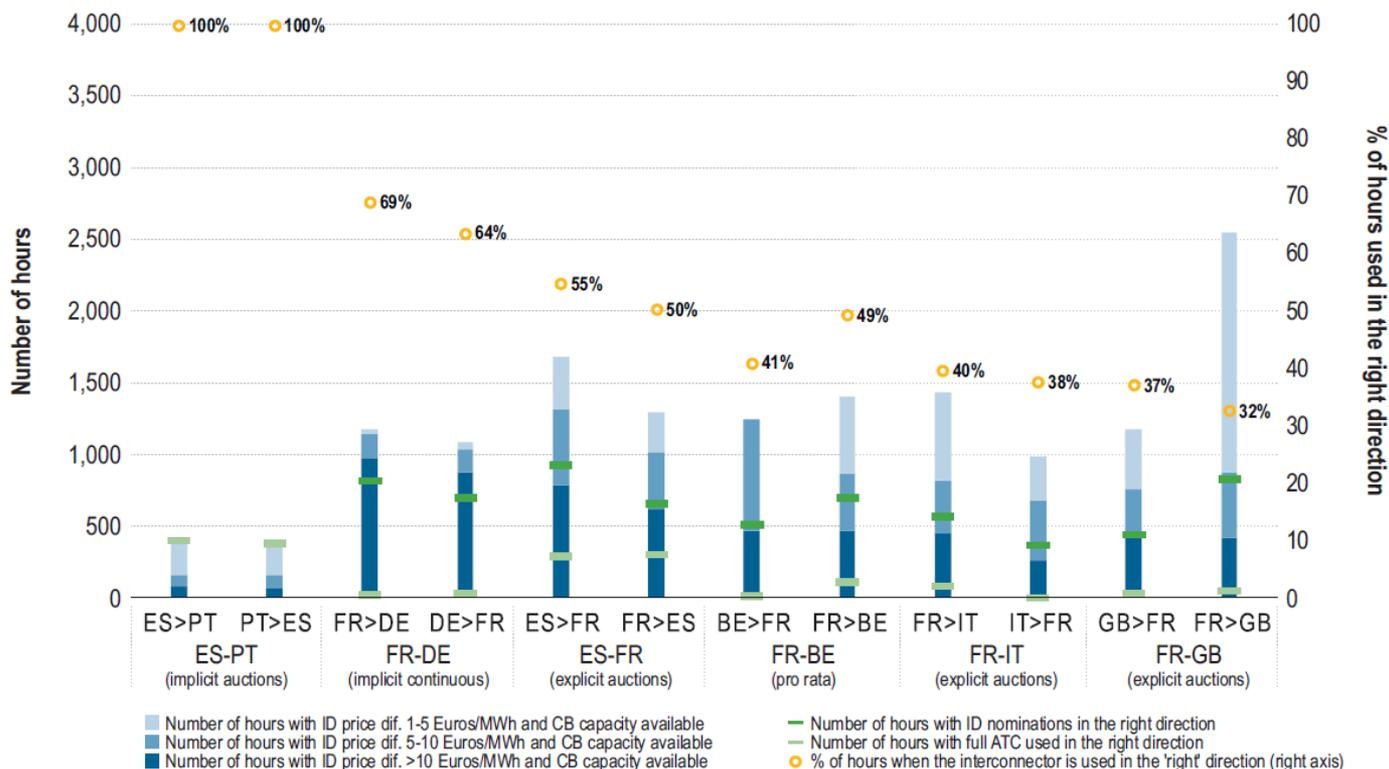
## Cross-border capacity used in the Intra-day timeframe is still a fraction of what is used in the Day-ahead timeframe

*Evolution of the annual level of commercial use of the interconnections (day-ahead and intraday) as a percentage of NTC values for all EU borders – October 2010 to 2013 (%)*



## ... also in the Intra-day timeframe, implicit mechanisms perform better for cross-border allocation

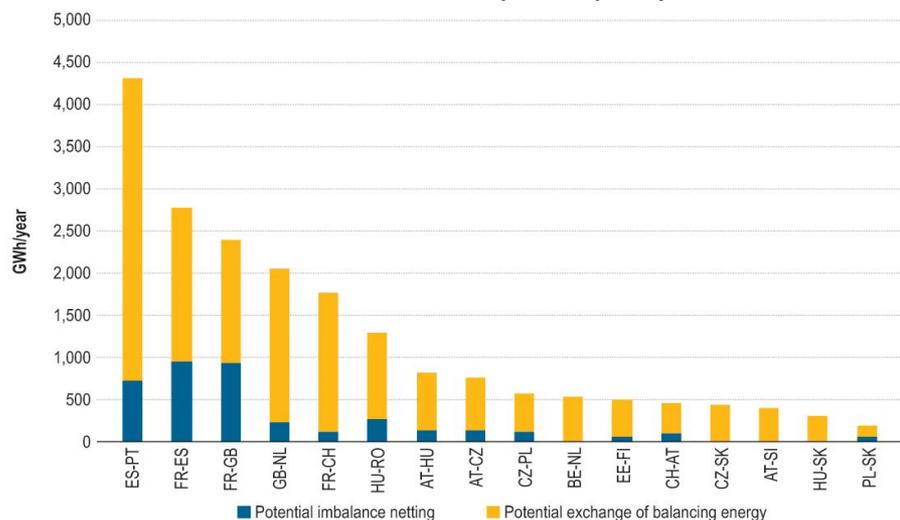
Potential for intraday cross-border trade and efficiency in the use of cross-border intraday capacity on a selection of EU borders – 2013 (number of hours)



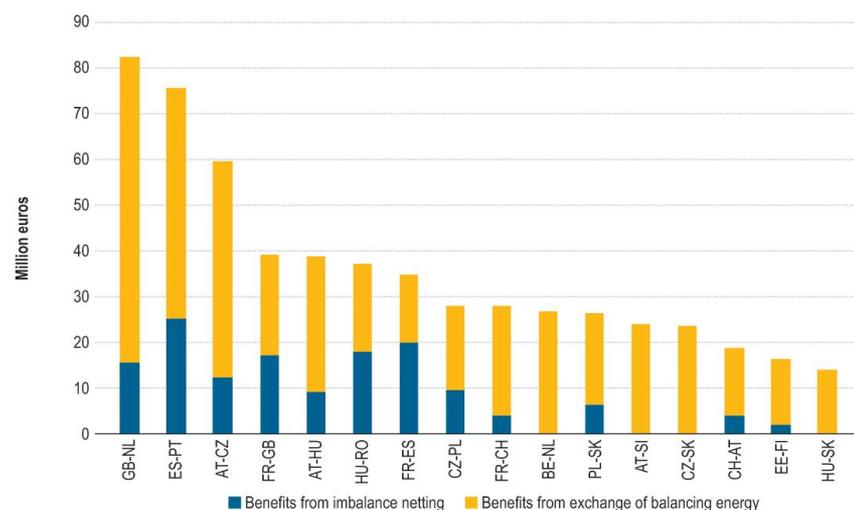
Note: On the FR-DE border there is a combination of implicit continuous and explicit OTC ID allocation.

## Currently, cross-border exchange of balancing services is very limited, though there is significant potential for imbalance netting and further exchange of balancing energy

*Estimation of potential volumes of imbalance netting and further exchange of balancing energy across a selection of EU borders, 2013 (GWh/year)*

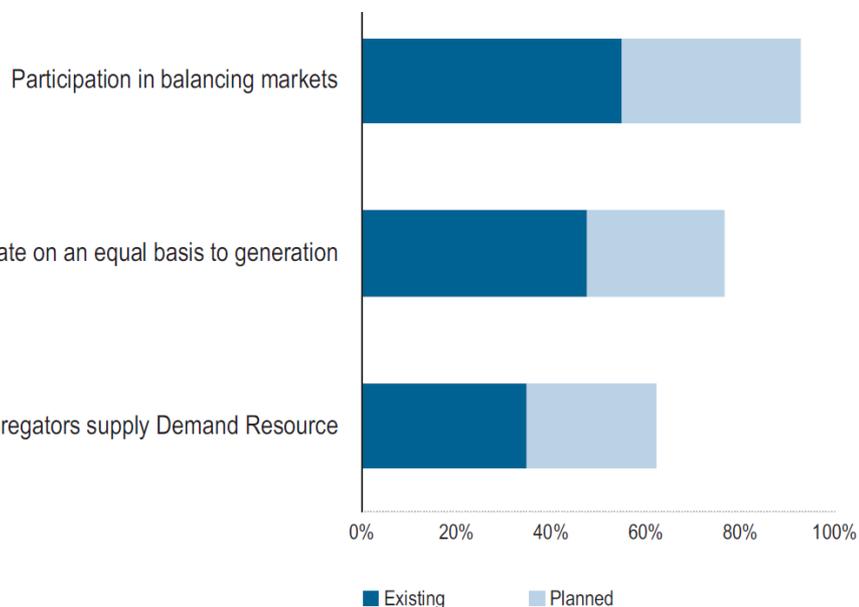


*Estimation of potential benefits from the integration of balancing energy markets per border – selection of borders, 2013 (million euros)*

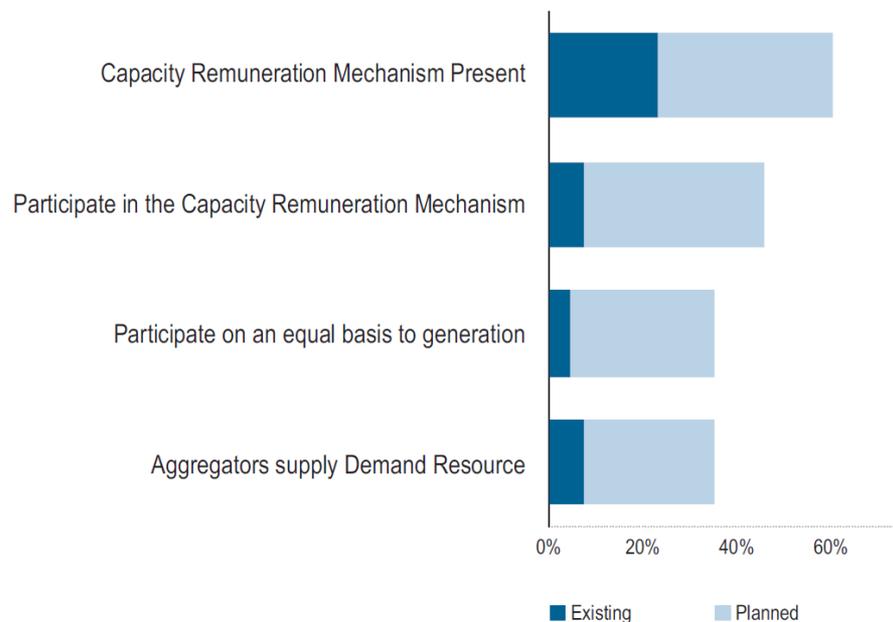


## Demand side flexibility has important benefits to market integration, though it is not yet fully integrated in wholesale markets

*Demand participation in electricity balancing energy markets (% of MSs) – 2013*



*Demand participation in capacity markets (% of MSs) – 2013*



## Increasing unscheduled flows require solutions and more transparency as they affect network security and cross-border capacity

*Absolute aggregated sum of unscheduled flows for three regions – 2012-2013 (TWh)*

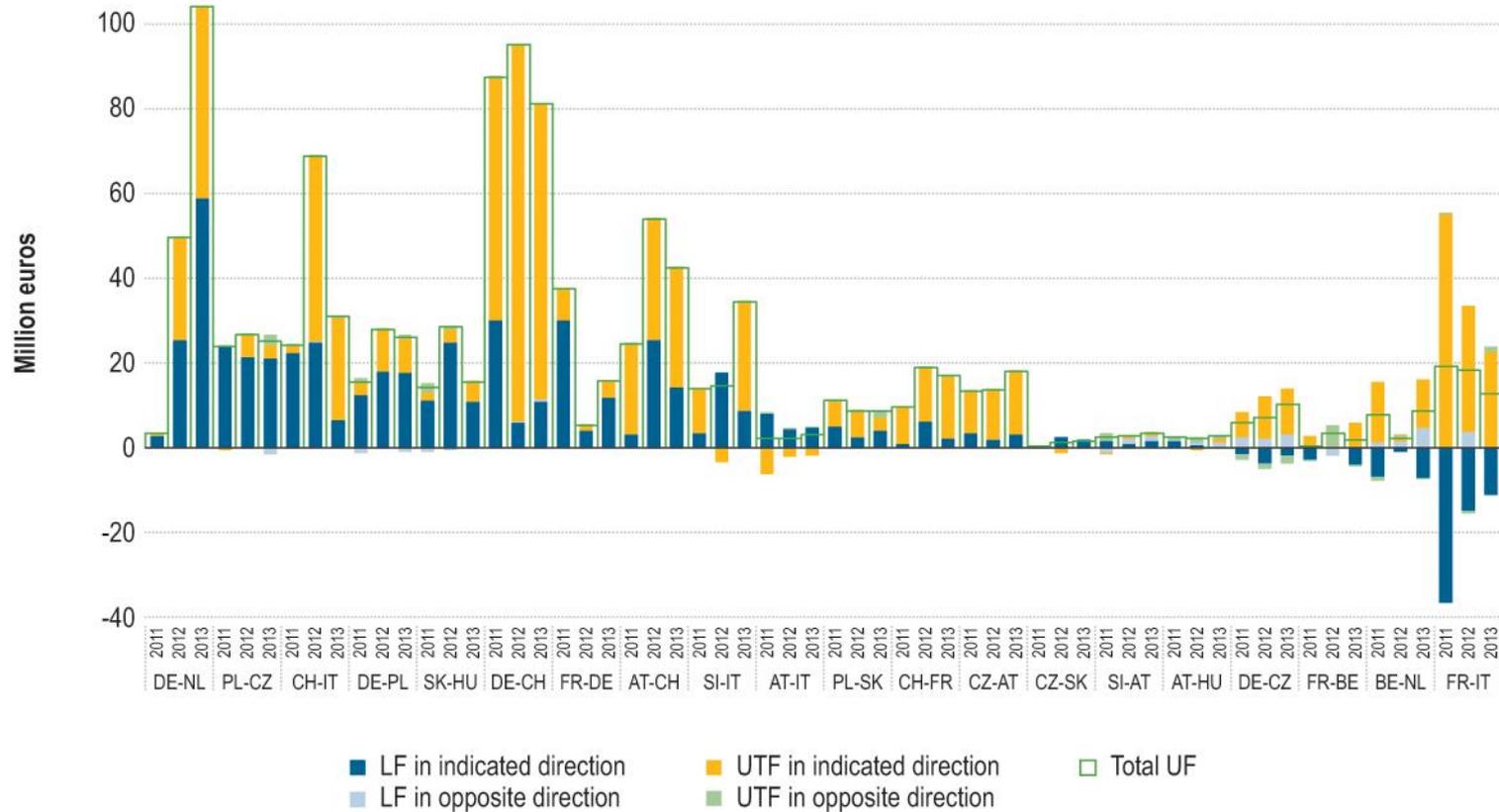


*Average unscheduled flow indicator for three regions – 2013 (MW)*



## Loss of social welfare due to unscheduled flows (loop flows and unscheduled transit flows) excluding TRM

*Estimated loss of social welfare due to unscheduled flows in the CEE, CSE and CWE regions 2011, 2012 (million euros)*



## Conclusions

- Market coupling is a key driver of price convergence and of the efficient use of interconnectors
- RES integration and loop flows reduce electricity price convergence
- Still significant scope to further improve the use of existing infrastructure and the efficiency of trading, in particular in the intraday and balancing timeframes (also to promote RES integration)
- Limited hub liquidity and long-term contract commitments delay EU gas markets integration which impact the electricity market
- Large disparities in Member States' national energy policies, which may reduce the contribution of the Network Codes to market integration and trust in the market

## Recommendations

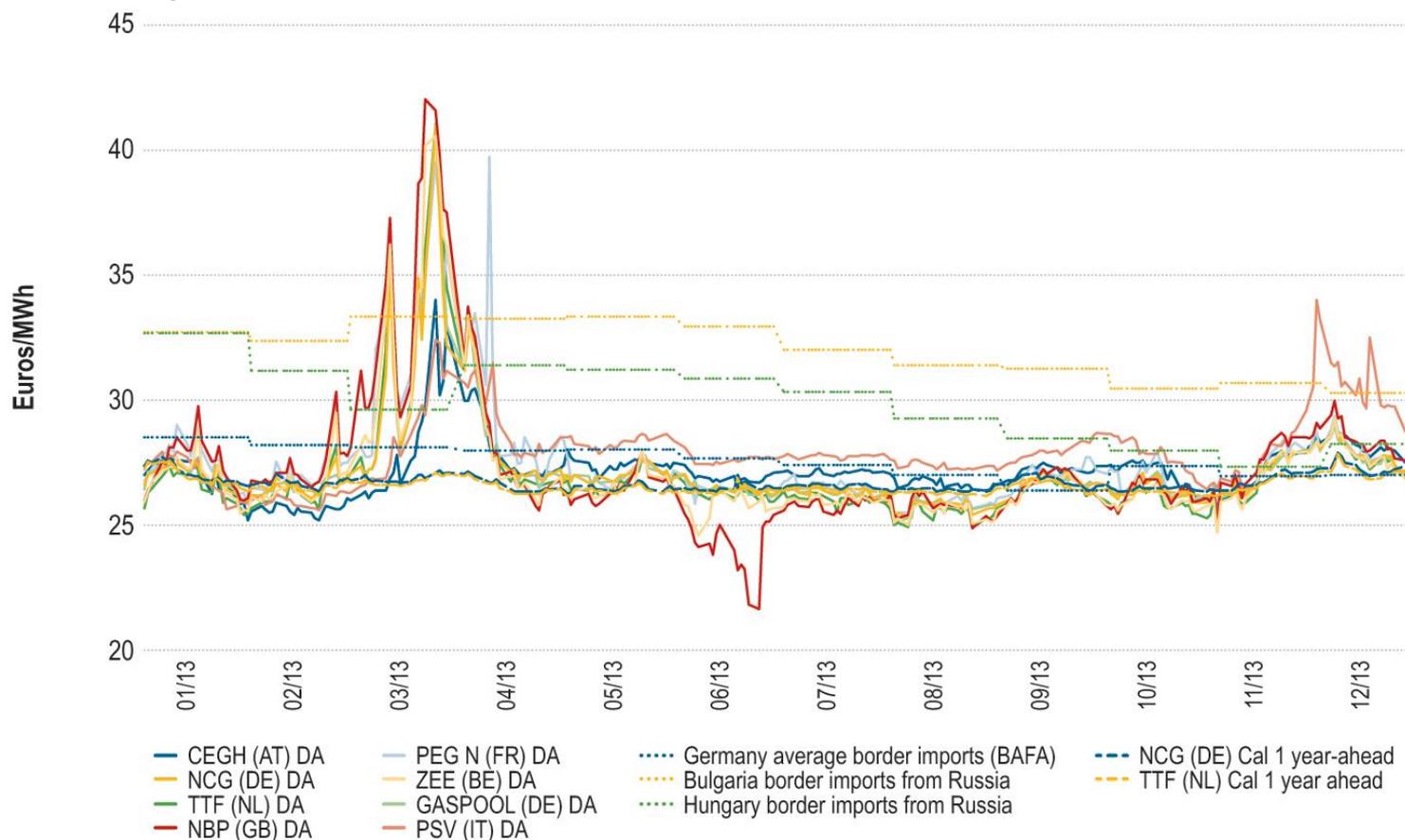
- The full implementation of the Electricity Target Model for cross-border exchanges remains an absolute priority
- Implementation of CACM NC is essential
- Implementation of adequate short-term/ad-hoc solutions to address loop flows and assessment of bidding zones reconfiguration necessary
- Improvement in TSO cooperation on capacity calculation, capacity allocation and remedial actions essential
- Further assessment of how to facilitate demand-side flexibility
- Ensure consistency of energy policies and regulation between MSs and at EU level

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- Retail markets
- Wholesale electricity markets / network access
- Wholesale gas markets / network access
- Consumer protection and empowerment

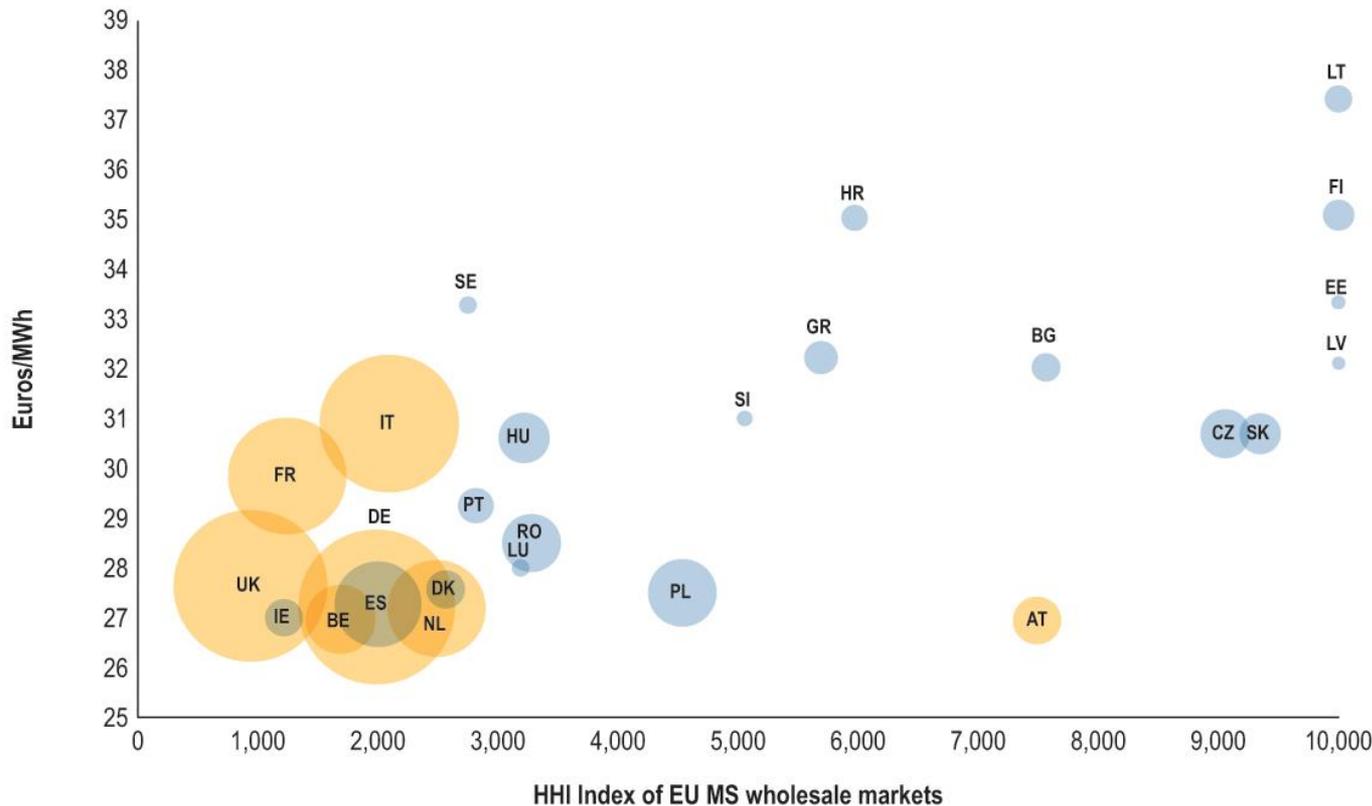
## Significant price correlation among major NWE hubs. Long-term contracts renegotiations and hub indexations are enhancing price convergence among EU MSs...

*Gas prices: comparison between main EU hubs and cross-border import prices – 2013  
(euros/MWh)*



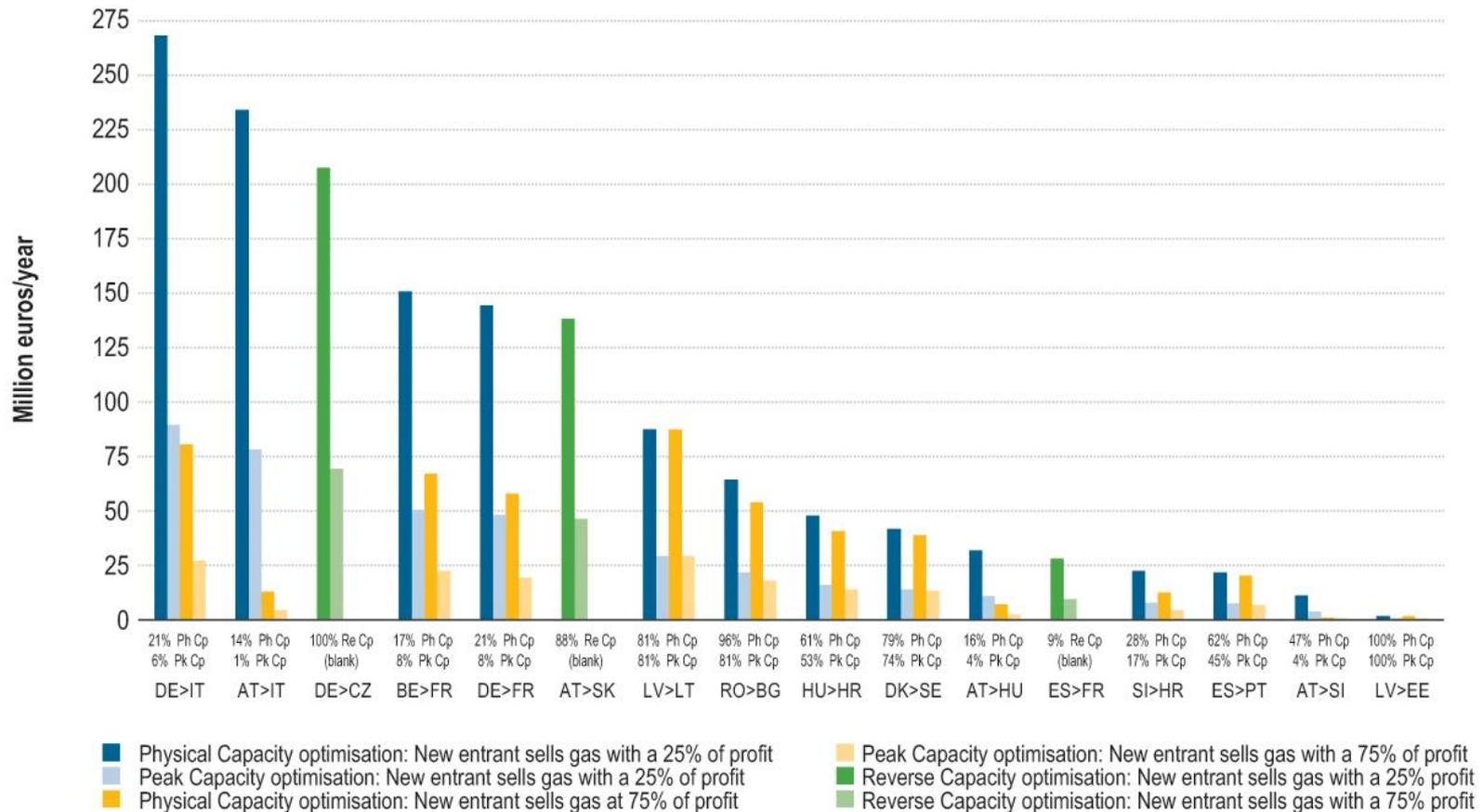
## ...however there are still significant price divergences among MSs due to differing competition levels and varying market fundamentals

*Gas wholesale prices in EU MSs compared with market concentration and gas demand – 2013 (euro/MWh)*



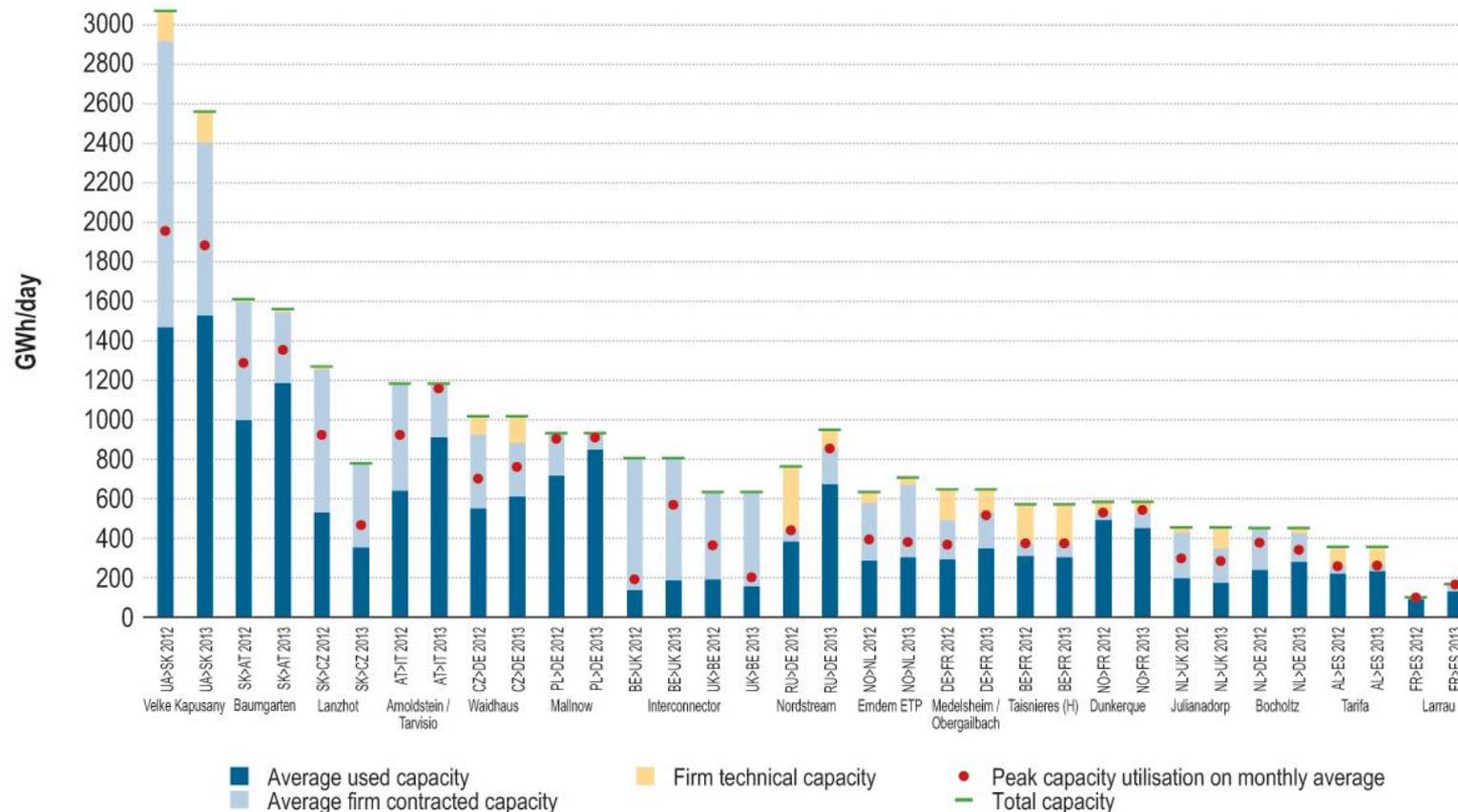
## Significant net welfare gains could be obtained through fully efficient use of available interconnection capacities

*Potential yearly net welfare gains in different EU MSs if cross-border physical unused capacities were fully utilised – 2013 basis, monthly aggregated (millions euro per year)*



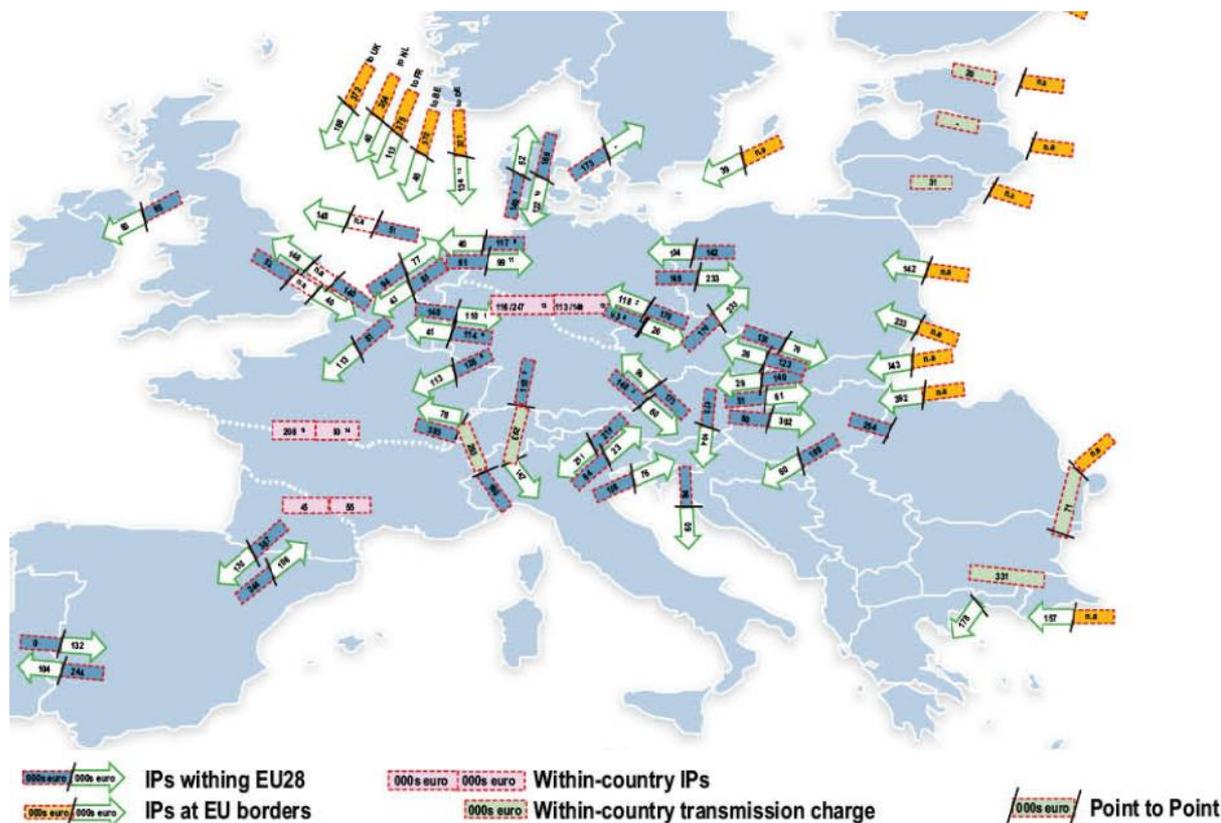
## There is still scope for improving use of IP transportation capacity, which is in some cases booked but not fully used

*Average used versus booked capacity at natural gas IPs in the EU – 2012 and 2013 (GWh/day)*



## Transportation charges across borders are heterogeneous and transparency should be increased to improve integration

*Average gas transportation charges through the EU26 borders – 2013 (1 GWh/day/year in thousand euro)*



## Conclusions

- Despite increasing price convergence, significant social welfare losses still exist due to inadequate market integration and market fragmentation

## Recommendations

- Promote the conversion of long-term contracts into hub-based transactions for energy and bundled products for capacity and services
- Promote regional market integration for markets areas which are too small
- As a minimum, harmonise the structure of cross-border transmission tariffs
- Encourage the coordination of gas and electricity markets in terms of flexibility and balancing
- Full implementation of CAM and CMP legislation (bundled capacity products, CAM auctions and secondary capacity) and promote early implementation of Balancing projects (balancing markets)

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## **Consumer Protection and Empowerment Chapter – underlying mechanisms**

- This assesses mechanisms for 3<sup>rd</sup> Package consumer provisions; their transposition and how final household consumers are protected in practice
- Focus on 6 areas:
  - I. Supplier of last resort (1) and disconnections due to non-payment (2)**
  - II. Vulnerable customers**
  - III. Customer information** (and access to info on energy costs/sources)
  - IV. Supplier switching**
  - V. Metering**
  - VI. Complaint handling and ADR**

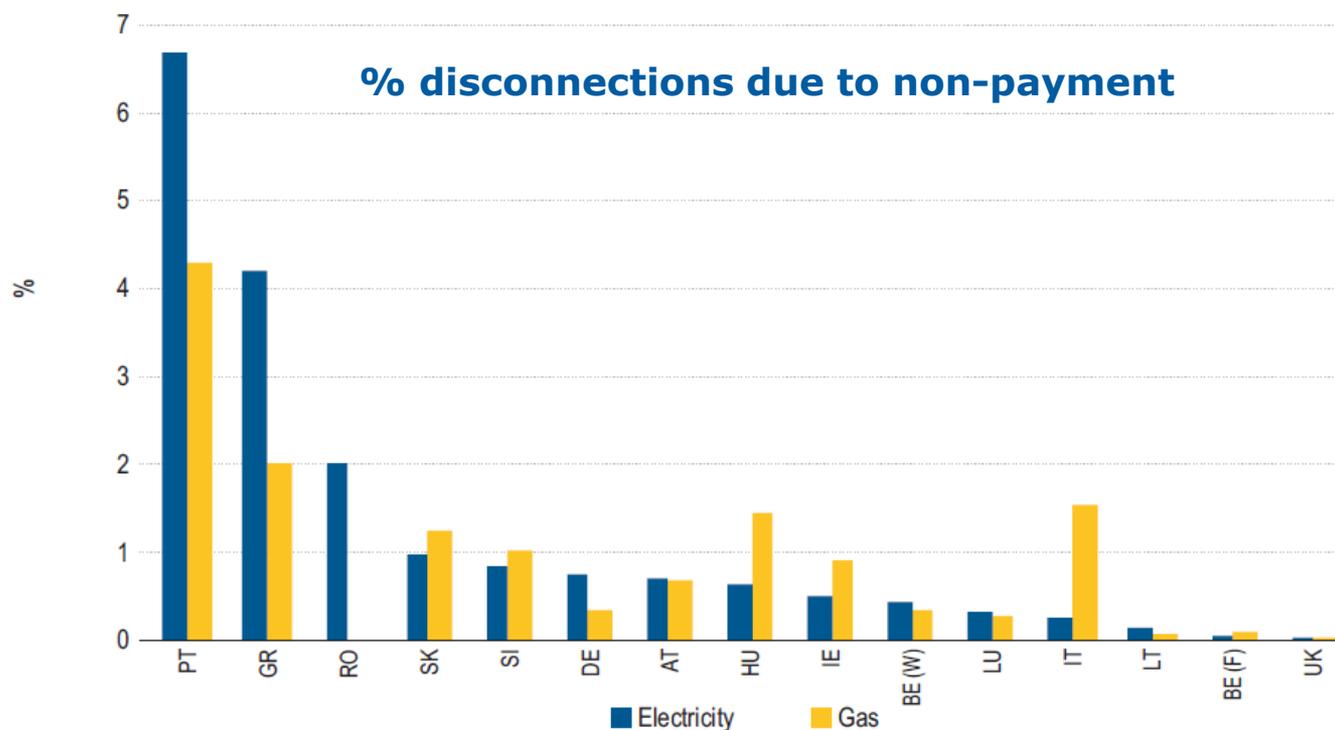
## I. Supplier of last resort (1)

- SoLR obligation transposed into national legislation in all MS, except FR (electricity) and BU, FR, GR and SI (gas)
- In some MS (e.g. CY, RO), data suggests all consumers were supplied by SoLR, while in 9 other MS, no consumer supplied by SoLR in 2013
- Suppliers of last resort fulfil 3 possible functions

<b>Function</b>	<b>Electricity (# MS)</b>	<b>Gas (# MS)</b>
Supplier failure	26	18
Payment difficulties	15	10
Consumer inactivity	14	8

## I. Disconnection due to non-payment (2)

- Low disconnection levels with a few exceptions (GR, PT)
- Significant national differences in legal deadline (10 to 200 days) to disconnect (due to non-payment)
- But, actual disconnections usually take longer in practice
- Many NRAs lack knowledge of disconnection numbers



## **II. Vulnerable customers (1)**

- MS take different approaches to protect vulnerable consumers
  - » Explicit: clear statements on criteria for vulnerability in legal/regulatory framework (13 MS)
  - » Implicit: definition of vulnerable customers in existing energy-specific and social security laws (12 MS)

## II. Vulnerable customers (2)

- Many measures to protect vulnerable customers
  - » But lack of knowledge and of comparability of data on vulnerable customers

	# Countries Electricity	# Countries Gas
A. Restrictions on disconnection due to non-payment	16	11
B. Earmarked social benefits to cover (unpaid) energy expenses	9	7
C. Special energy prices for vulnerable customers (also known as social tariffs)	8	5
D. Additional social benefits to cover (unpaid) energy expenses (non-earmarked financial means)	4	5
E. Free energy-saving advice to vulnerable customers	3	3
F. Right to deferred payment	2	3
G. Exemption from some components of final customer energy costs (e.g. energy price, network tariffs, taxes, levies...)	2	2
H. Financial grants for the replacement of inefficient appliances	2	2
I. Free basic supply of energy	1	1
J. Replacement of inefficient basic appliances at no cost to vulnerable households	1	1
K. Other	5	9

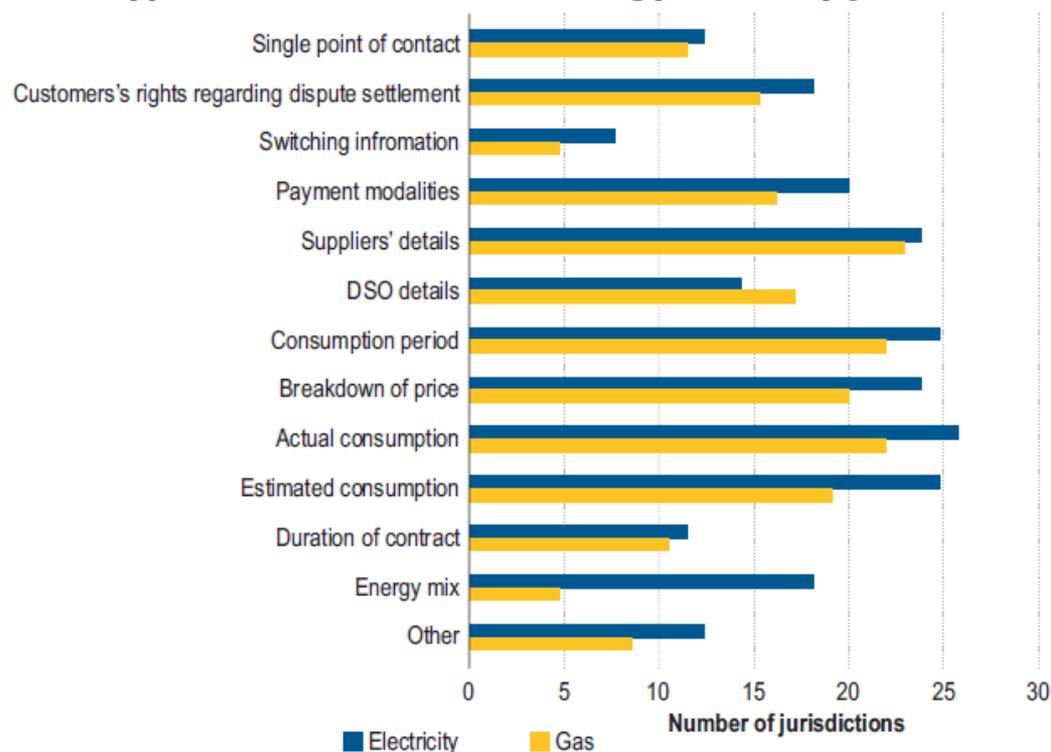
## **III. Customer information (1)**

- **Information on price changes**
  - » Legal requirement in 17 MS
  - » In 13 out of 17 MS one month is required. Specific advance notice period required varies between 15 and 90 days
  - » changes to network tariffs, taxes and/or levies: notification to customers required in 26 out of 28 MS (except AT + GB)
- **Single point of contact**
  - » NRA in 11 MS
  - » Ombudsman in FR
  - » Consumer organisation in GB
  - » Shared by several bodies in 10 MS
- **Consumer checklist**
  - » Available in 14 MS as single document
  - » Elsewhere, same info duplicated in several documents
- **Payment methods**
  - » 2 or more options in all MS
  - » In 12 out of 25 MS, suppliers offer discounts according to payment method

## III. Customer information (2)

- Consumers in all MS have various types of information on energy bill
  - » But in some MS, lack of information on consumer rights and empowerment aspects

**Types of information on energy bills - by jurisdiction**



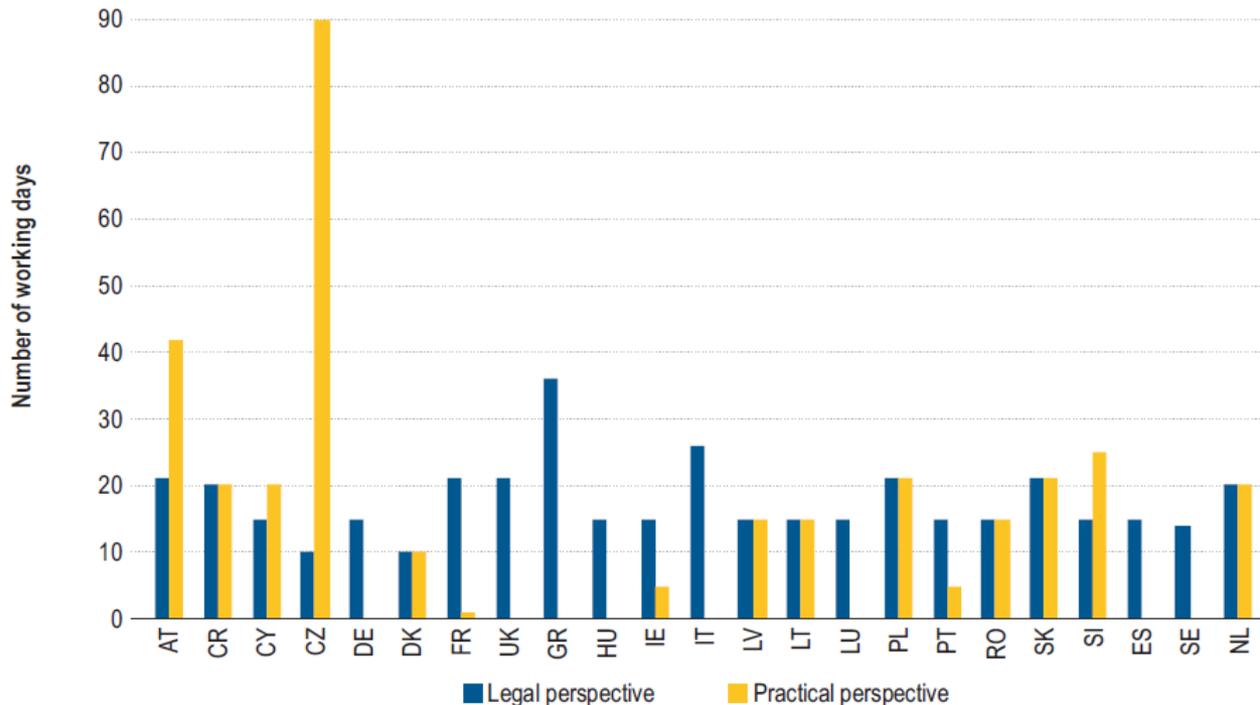
### **III. Customers' access to information (3)**

- Energy prices and source of generation of high interest to many consumers; explanations wanted
  - » Cost and sources of energy most prominently differentiate energy products from a consumer perspective
- Information on cost and sources is available
  - » At different levels of detail
  - » Through different market actors (NRA, suppliers, DSOs ...)
  - » Through different channels (online, bill, print, ...)
- NRAs active in informing consumers through different channels (online, print), but...
  - » Little knowledge about consumer-friendliness of such information
  - » NRAs are poorly informed about the quantity and quality of such information

## IV. Supplier switching

### ● Legal and actual duration

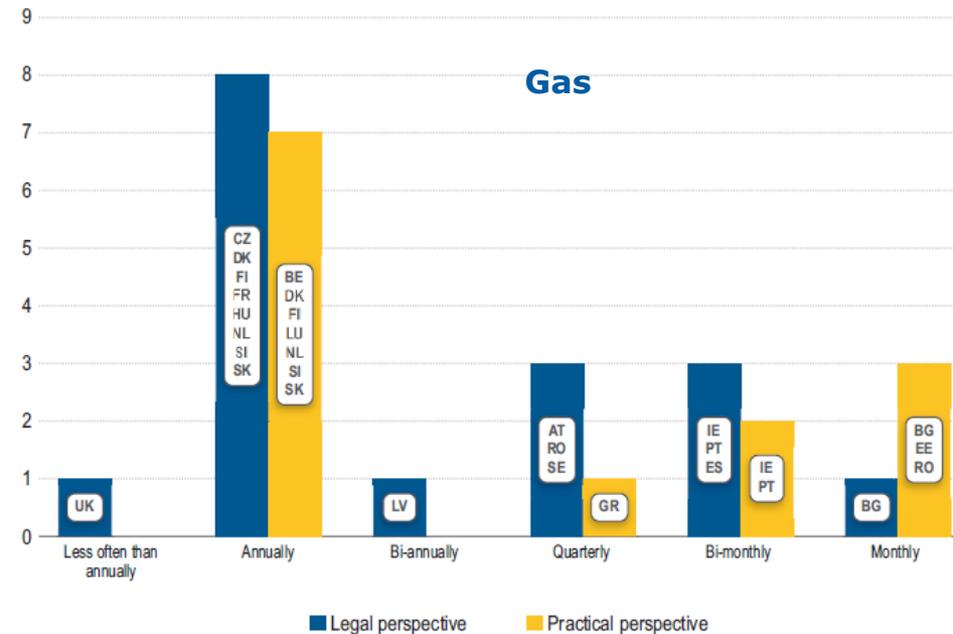
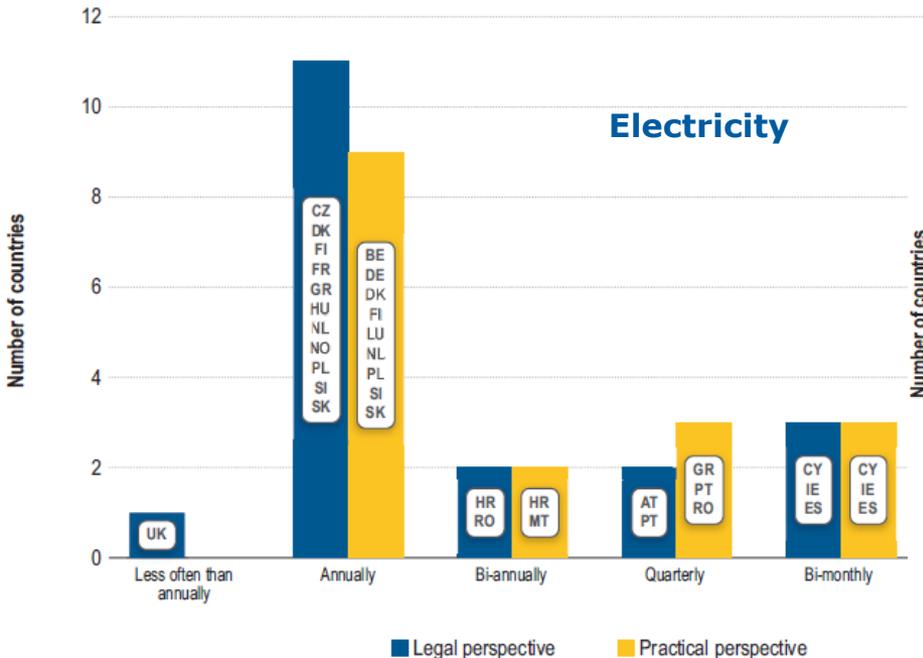
- » Legal requirement of **3-week switching period** met in all MS
- » In practice, actually vary from 3-week period
- » Faster switching than 3 weeks for electricity in 4 MS (DK, FR, IE, PT)



- » **Final bill** received within 6 weeks in most MS; shorter in 6 MS (BU, CZ, HU, FR, LT, SK)

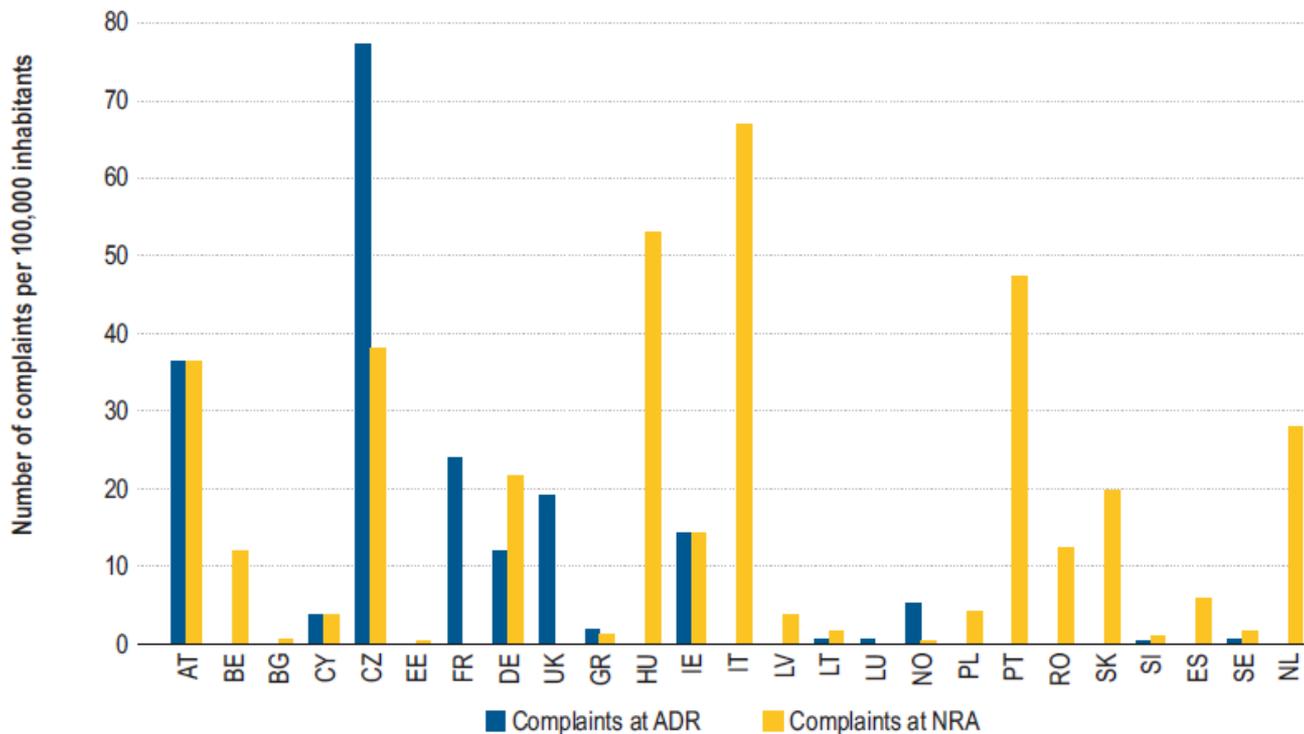
## V. Metering

- Electricity smart-meter roll-out
  - » 100% roll-out (near or complete) in SE, FI and IT
  - » 30% or more in ES, SI and DK
  - » First waves (below 10%) in AT, CZ, FR, GB, PL and NL
- For gas, underway in 4 MS (DK, GB, IT, NL)
- Frequency of billing information based on actual consumption (without smart meters) varies



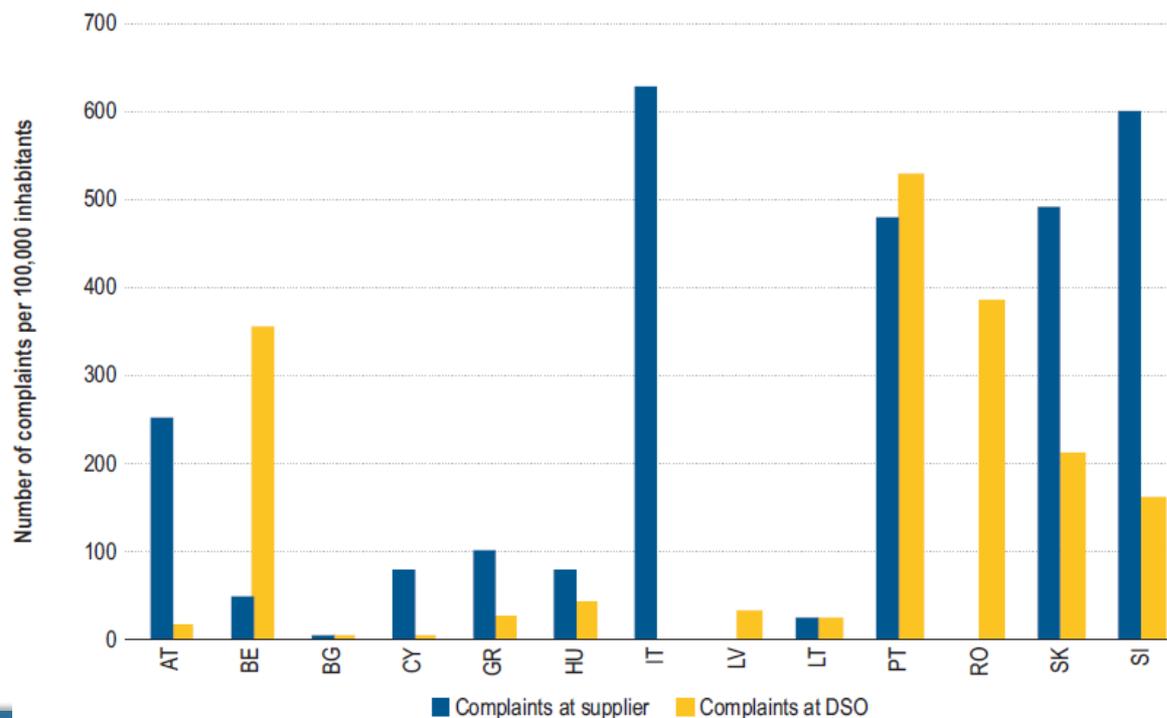
## VI. Complaints handling and Alternative Dispute Resolution (1)

- National differences in definitions and collection methods
- Minority of NRAs have data on complaints to suppliers and DSOs
- Wide range of MS figures raise questions about robustness of data



## VI. Complaints handling and Alternative Dispute Resolution (2)

- In most MS, service providers must handle complaints within 1-2 months
- In 12 MS, NRAs are the ADR body, mostly free of charge
- Time to settle disputes varies between 1 and 6 months, compensation levels varies



## Conclusions (1)

- **Supplier of last resort** widely implemented with varying roles
- **Actual duration of a (non-payment) disconnection** process **longer** than legally required, but only **half of NRAs (14 MS)** able to provide **disconnection rates**
- **Majority of MS** have a **concept for vulnerable customers**, however, **comparisons** between countries are **limited** due to the vast differences
- Supplier **switching within three weeks** legally in all MS – **4 MS apply faster** process (1, 5 or 10 days)

## Conclusions (2)

- Roll-out for electricity **smart meters** completed in 3 MS, progressed in 3 others and started in 6 MS; gas smart meters underway in 4 MS
- Requirement for **complaint monitoring** by NRAs implemented differently across MS: **sources, methodology, definitions vary widely** (lacking data on complaints from service providers)
- Alternative Dispute Resolution (ADR): **implemented**, but few NRAs able to report figures
- Overall, monitoring results for consumer protection show that **many of the national legal provisions (*de jure*) are applied in practice (*de facto*)**, while some MS even go beyond the legal requirements

## Recommendations (1)

- There **remains significant room for improvement** in:
  - » monitoring the number and practicalities of **disconnection due to non-payment**;
  - » systematic collection of **data on consumer complaints** (e.g. ADR);
  - » implementation of **statutory complaint handling standards** (such as shorter answering period);
  - » information provided in bills about supplier switching options; and
  - » the frequency of **informing** consumers **on their actual consumption**

**What are we doing about these?.....**

## Recommendations (2)

- Findings **reinforce and support proposals set out in Bridge to 2025**, notably on need to remove market barriers and deliver functioning retail markets through common approaches and market design features.
- Based and **building on the “RASP principles” of CEER 2020 Vision**, which we continue to develop into practical actions to enable market development across Member States:
  - » Reliability
  - » Affordability
  - » Simplicity
  - » Protection & Empowerment

## Recommendations (3)

- Regulators committed to **concrete actions in CEER to improve retail market functioning**, for the benefit of consumers
  - » **Common criteria** for a well-functioning retail market and a **Roadmap** for competitive, reliable and innovative retail markets
  - » **Key features of retail market design** for a level-playing field
  - » Minimum **standards to remove market barriers**
  - » **Toolbox of good practices** to encourage and empower consumers (incl. simplifying comparability of offers)
  - » Roadmap to secure reliable **supplier switching within 24 hours**
  - » Guidance to **facilitate the phasing out of regulated end-user prices**
  - » develop further and apply the **“RASP principles”** of CEER 2020 Vision
- Continue to identify market distortions through **effective market monitoring** (in 2015, special focus on billing practices)

## Key findings

- Non-contestable charges (mainly taxes and levies) drive retail prices up in most Member States
- Significant scope to improve competition in retail markets
- Household consumers are not switching supplier:
  - » regulated prices
  - » lack of awareness
  - » loyalty to incumbents and distrust of alternative offers
  - » (perceived) complexity of the switching process
- Wholesale market integration is improving, but:
  - » RES integration and loop flows reduce electricity price convergence
  - » Limited hub liquidity and long-term contract commitments delay EU gas markets integration
- Majority of MSs have defined the concept of vulnerable customers, however, comparisons between countries are limited due to the vast differences
- Many of the national legal provisions (de jure) are applied in practice (de facto), but scope for improvement remains

## Key recommendations

- Remove barriers to retail competition and switching (including regulated prices)
- Full transposition and implementation of the 3rd Package
- Development and adoption of the first set of Network Codes and their rapid (early) implementation
- Implement short-term/ad-hoc solutions for distorting flows
- Promote liquidity in gas hubs and more transparent transportation charges
- Full enforcement of consumer rights
- Ensure consistency of energy policies and regulation between Member States and at EU level
- Consumer protection can be further improved

**Thank you for your attention**

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# Annex

# In many Member States wholesale prices are decreasing

*Evolution of European wholesale electricity prices at different European power exchanges – (euros/MWh)*

