



# ACER/CEER 2<sup>nd</sup> Annual Report on monitoring the electricity and natural gas markets

Alberto Pototschnig

Director, ACER

**Lord Mogg** 

President, CEER
Chairman, ACER Board of Regulators

**Brussels, 28 November 2013** 





#### Report scope and structure

- Second joint annual electricity and natural gas market monitoring report by ACER and CEER
- Based on Article 11 of Regulation (EC) No 713/2009
- Three main areas covered:
  - » Electricity markets
  - » Natural gas markets
  - Consumer protection and empowerment
- Electricity (E) and gas (G) chapters sub-divided into retail, wholesale and access to networks (including transportation tariffs)





#### **Key findings**

- In spite of the economic downturn, over the last four years households have experienced increasing energy prices
- Wholesale market integration is improving, but:
  - » RES integration and loop flows reduce price convergence
  - Still limited liquidity in most gas markets and lack of transparency in gas transportation charges
- Competition in retail markets is increasing in many, but not all Member States, but many European households are not switching supplier:
  - » regulated prices
  - » lack of awareness
  - » loyalty to incumbents and distrust of alternative offers
  - » (perceived) complexity of the switching process





#### **Key recommendations**

- Full transposition and implementation of the Third Package
- Development and adoption of the first set of Network Codes and their rapid (early) implementation
- Remedial action and solutions for loop flows
- Promote liquidity in gas hubs and more transparent transportation charges
- Remove barriers to consumer switching (including regulated prices)
- Full enforcement of consumer rights





#### **Outline of this presentation**

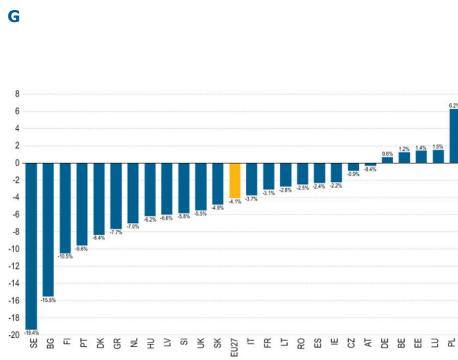
- Retail markets
- Wholesale electricity markets/Access to networks
- Wholesale gas markets
- Consumer protection and empowerment
- Recommendations





## Retail markets: almost unchanged electricity demand and a decrease in gas demand...





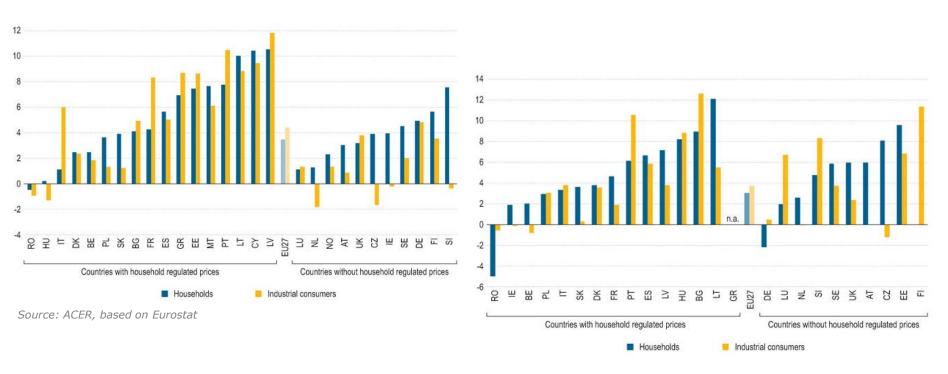
Change in electricity and gas demand in EU27 and Norway - 2011 to 2012 (%)





#### ...and increasing retail prices



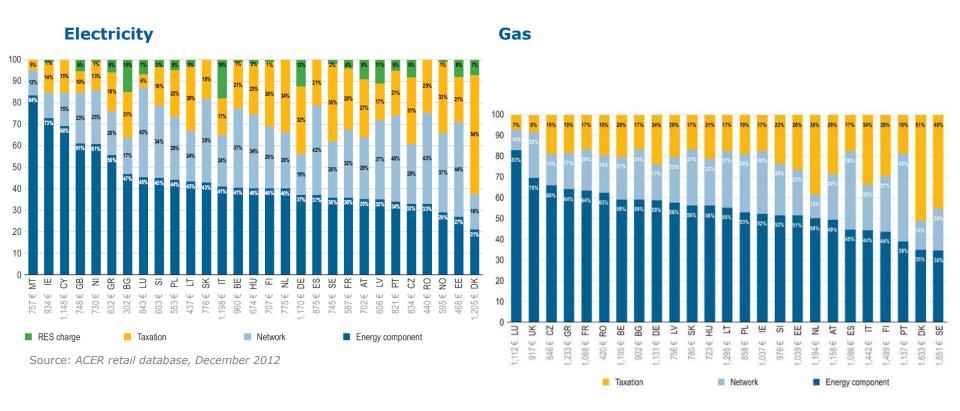


Post tax retail prices: compounded annual growth rate in EU27 from 2008 to 2012 (%)





## The energy component makes up a relatively small part of the final bill...



Post tax retail price break-down – incumbents' standard offers for households in capital cities – December 2012 (%)





## ... and incumbents are still dominant with most retail markets showing low foreign presence

**Electricity** Gas

		Estimated incumbent market share in the household market - December 2012 (capital city)				
		>90%	Between 50 and 90%	Less than 50%		
Presence of foreign players (capital city)	>50%	BG (1/1); HU (1/2); RO (1/1)				
	Between 20 and 50%		CZ (5/24); ES (4/16); NL (6/18); PT (2/4); BE (2/6)	GB (4/14)		
	Between 0 and 20%	NI (1/4); SK (6/16)	DE (1/14); FI (2/37); IE (1/4); IT (2/7)	SE (4/41)		
	0%	CY (0/1); MT (0/1); GR (0/1); LT (0/1); LU (0/6); LV (0/1); EE (0/1); PL (2/7); FR (1/9)	AT (0/18); DK (0/19); SI (0/8)	NO (0/11)		

Source: A	ACER	retail	database,	December	2012
-----------	------	--------	-----------	----------	------

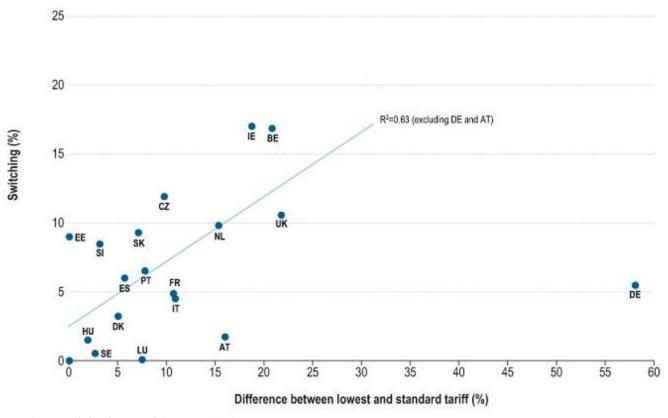
		Estimated incumbent market share in the household market - December 2012 (capital city)			
		>90%	Between 70 and 90%	Less than 70%	
Presence of foreign players (capital city)	>50%	RO (1/1)		ES (4/6); SK (9/12)	
	Between 20 and 50%		IT (4/8); FR (3/8); IE (2/4); BE (2/4)	NL (6/18); CZ (4/18); GB (4/14)	
	Between 0 and 20%			AT (2/10); DK (2/11); DE (4/74); SE (1/6)	
	0%	GR (0/1); BG (0/1); EE (0/1); FI (0/1); LT (0/1); LV (0/1); EE (0/1); PL (0/1); PT (0/3)	SI (0/6)		

An overview of incumbents' presence and foreign supply side substitution to promote retail market integration – December 2012 – European capitals – (number of active foreign retailers/overall number of active retailers)





## Switching is increasing in some countries, correlating with savings potential (in gas)



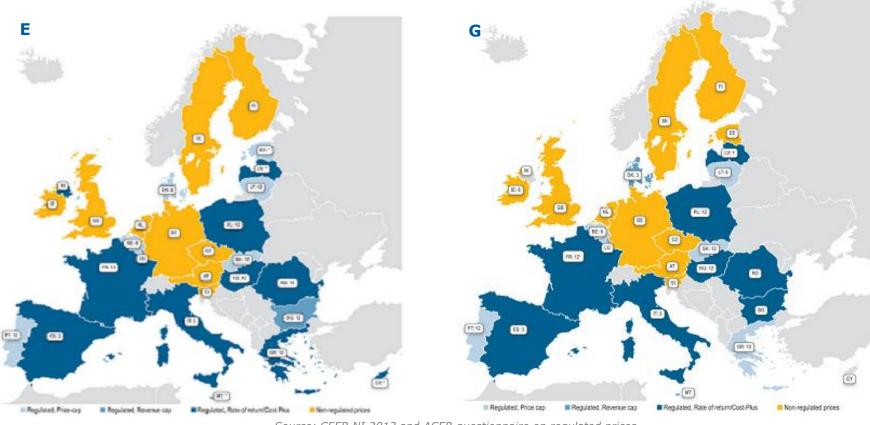
Source: ACER retail database and CEER NI 2013

Average monthly saving from switching from the incumbent's standard offer to the lowest priced offer on the market in the capital as of December 2012 compared with the country's overall switching rate – 2012 (%)





# End-user price regulation still heavily present: around 49% of households are supplied under regulated electricity prices and 46% under regulated gas prices



Source: CEER NI 2013 and ACER questionnaire on regulated prices

Price regulation method and frequency of energy component updates in Europe – 2012 (months)





#### **Barriers to entry persist**

- Consumer switching behaviour
  - » switching rates still low in majority of MSs
  - » loyalty to local, publicly-owned suppliers
  - » switching perceived to be complex, risky and timeconsuming
- Retail price regulation
  - disengages consumers from switching
  - 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





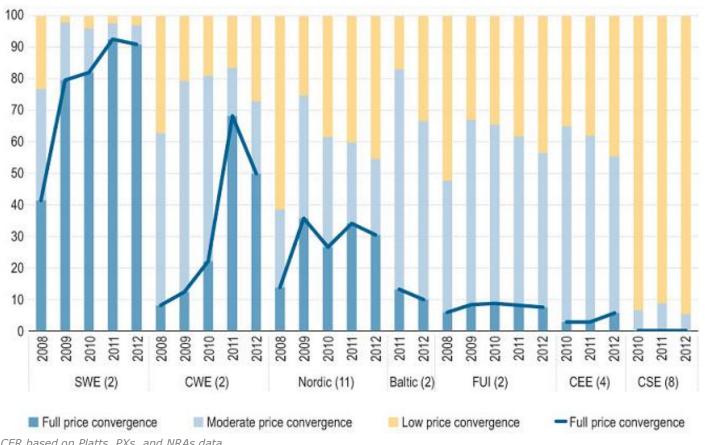
#### **Conclusions and recommendations**

- Retail energy prices increased in most MSs, despite the economic downturn
- Energy taxes and other duties in some MSs limit contestability to less than 50% of the end-user price
- The low level of switching propensity still plays a major role in many MSs
- Increased transparency of all components of the total price is needed, in order to enhance consumer awareness and foster competition
- Regulated end-user prices, if set below expected entry cost, suppress competition. Retail price regulation should be lifted as soon as a sufficient degree of competition is achieved
- NRAs should play an active role in enforcing the 3<sup>rd</sup>
  Package and raising consumer awareness in terms of
  switching possibilities
- Consumer rights should be enforced





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



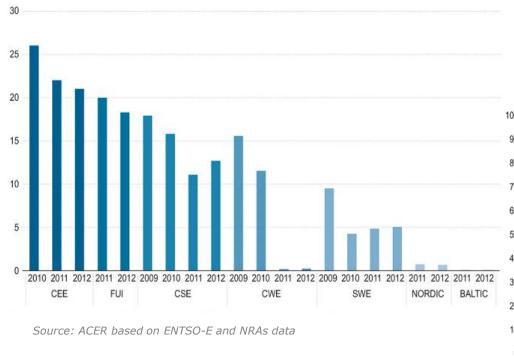
Source: ACER based on Platts, PXs, and NRAs data

Price convergence in Europe by region (ranked) -2008 to 2012 (%)



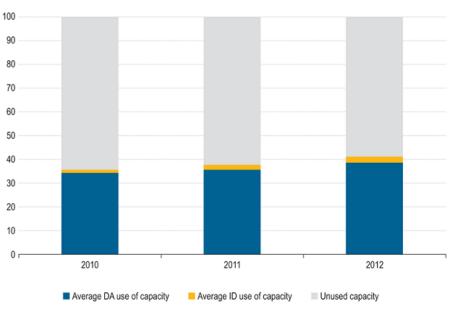


## An increase in the efficient use of interconnectors in the day-ahead timeframe



Percentage of hours with day-ahead nominations against price differentials by region – 2008 to 2012 (%)

Available capacity is currently not limiting cross-border intraday trade or balancing exchanges (which are important for RES integration)

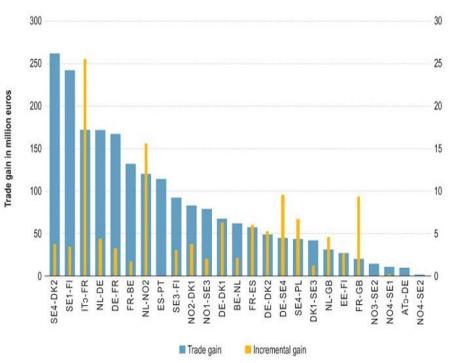


Commercial use of interconnections as a % of Net Transfer Capacity – 2010 to 2012





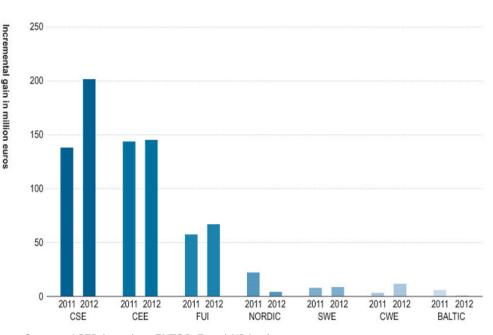
#### Significant welfare benefits from cross-border trade ...



Source: PCR project, including APX, EPEX SPOT, Nord Pool Spot, GME, OMIE

Simulation results: gross welfare benefits from crossborder trade and incremental gain per border – 2012 (million euros)

## ... but still a loss of social welfare due to the absence of day-ahead market coupling



Source: ACER based on ENTSO-E and NRAs data

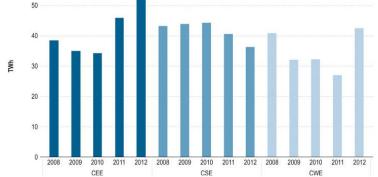
Estimated 'loss of social welfare' due to the absence of market coupling by region – 2011 to 2012 (million euro)





## Increasing unscheduled (incl. loop) flows require urgent solutions and more

transparency...

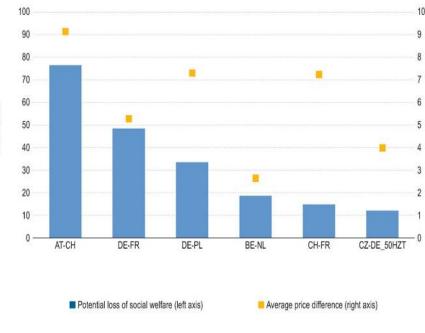


Absolute aggregated sum of unscheduled flows for three regions – 2008 to 2012 (TWh)



Average unscheduled flow indicator for three regions – 2012 (MW)

# ... as they affect network security and cross-border capacity (potential loss of social welfare)



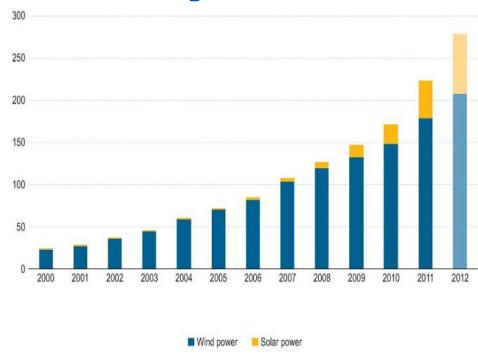
Sources: ACER based on Vulcanus and ENTSO-E data

Potential loss of social welfare due to unscheduled flows on selected borders – 2012 (million euros)





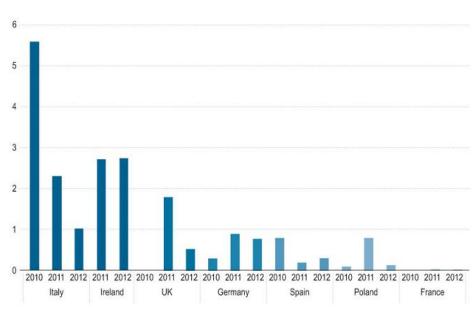
# Increasing RES-based generation poses a challenge for supply and demand balancing



Source: Eurostat

Aggregated solar and wind generation in Europe – 2000 to 2012 (TWh)

# Wind (and other RES) curtailments not too frequent, although they may increase with higher RES penetration



Source: CEER National Indicators 2013

Percentage of energy loss due to the curtailment of wind-generated energy at national level – 2010 to 2012 (%)





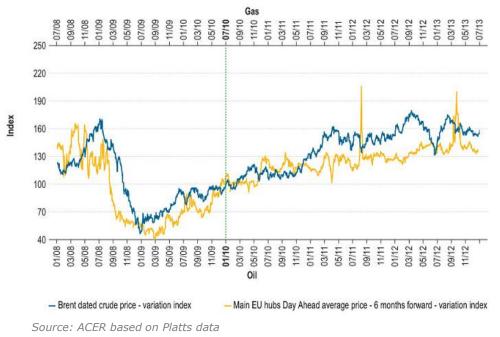
#### **Conclusions and recommendations**

- Market coupling is a key driver of price convergence and of the efficient use of interconnectors
- The full implementation of the Electricity Target Model (ETM) for cross-border trade remains an absolute priority. Rapid adoption of the CACM NC and its rapid (early) implementation essential
- 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)
- The transparency and improved monitoring of unscheduled flows are of high priority
- The implementation of adequate remedial actions to address loop flows is urgently needed
- Well-functioning electricity markets with wellintegrated gas markets can provide for the flexible resources needed to balance variable RES output



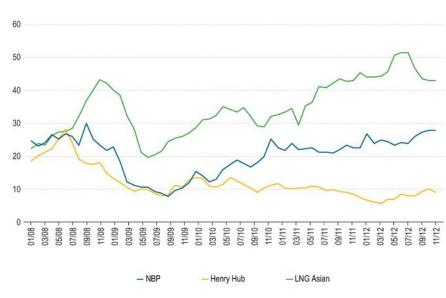


# In spite of increasing hub indexation, EU gas and oil prices were still correlated in 2012, with a 6-month lag (excluding cold spells, when hubs tended to overshoot)



Brent crude v day-ahead hub prices

#### In terms of gas prices, Europe is still de-coupled from the rest of the world



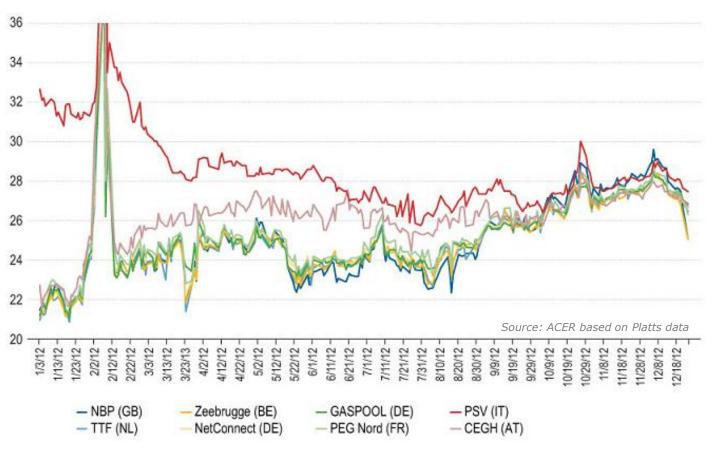
Source: Platts and Thomson Reuters

International wholesale price evolution since 2008 (euro/MWh)





## EU hub prices are correlated ... albeit not all the time

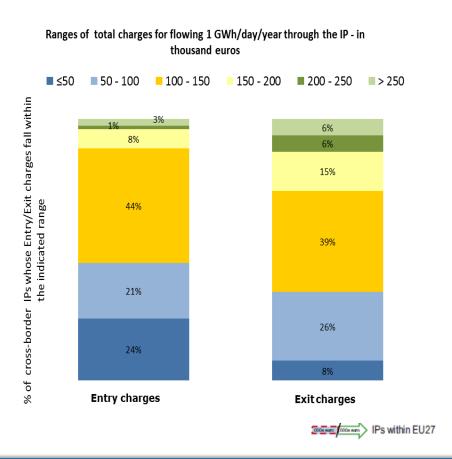


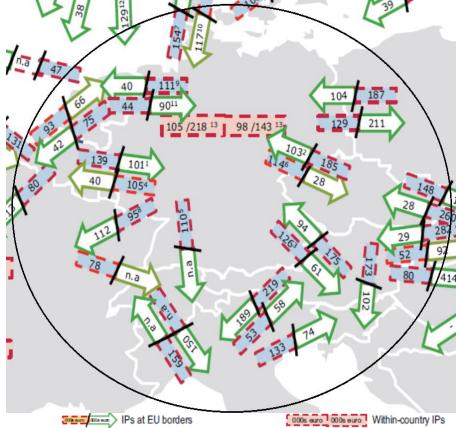
Day-ahead gas prices at main EU hubs in 2012 (euro/MWh)





# Transportation charges across borders are still very heterogeneous in magnitude and depend on a number of factors





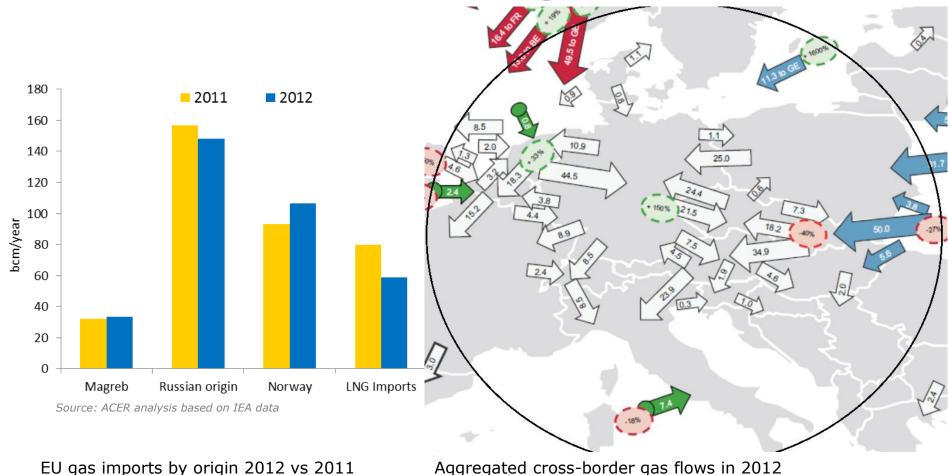




Significant 2011/2012 cross-border flow variations

in % over 2011 base value

Tariffs should react to changing longdistance flows, including reverse ones



Geographical origin

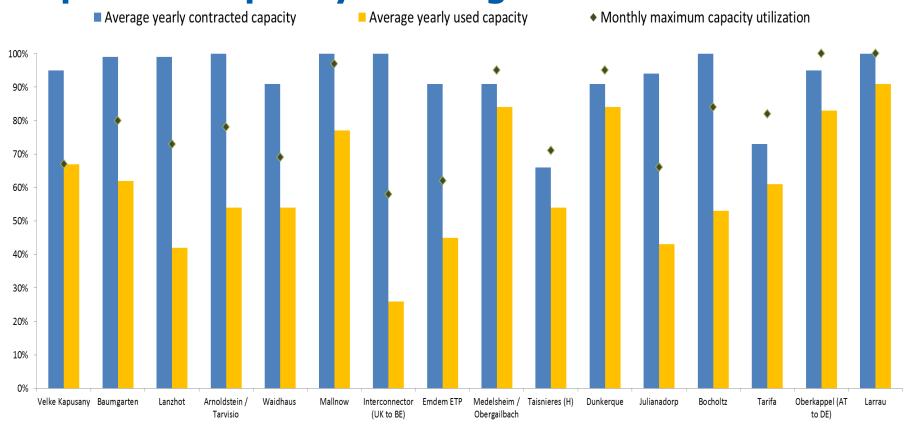
Algeria

Norway





# Although most capacity at IPs is still fully pre-booked on a long-term basis, shorter-term commodity contracting at VTPs is having an impact on capacity bookings

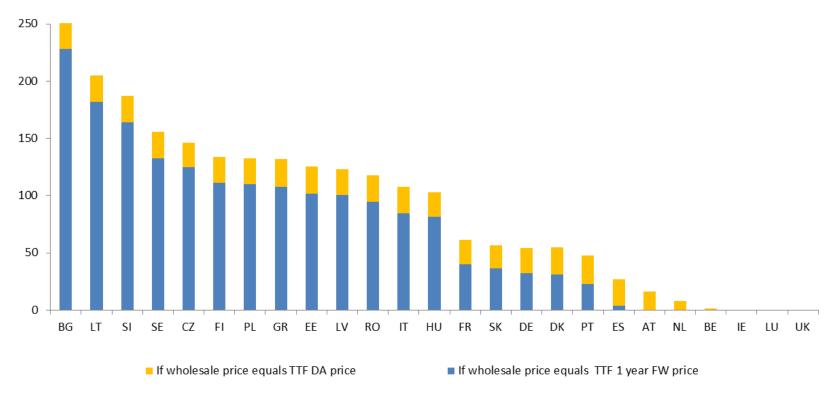


Source: ACER based on TSO data





## Differing wholesale prices due to the lack of alternative supplies and/or imperfect network integration lead to social welfare losses in some MSs



Source: ACER based on COMEXT (Eurostat) and Platts

Gross welfare loss per year, per typical household consumer, due to the lack of wholesale and network integration in the EU-27 – 2012 (euro/year)





#### **Conclusions and recommendations**

- Significant social welfare losses due to inadequate market integration and retail market fragmentation
- Fully implement CMP and CAM legislation. Promote early implementation CAM and Balancing projects (bundled capacity products, CAM auctions, secondary capacity and balancing markets)
- Promote the conversion of long-term contracts into hub-based transactions for energy and bundled products for capacity and services
- Develop rules for trading at hubs, especially hub-tohub ('trading regions')
- As a minimum, harmonise the structure of crossborder transmission tariffs
- Encourage the coordination of gas and electricity markets in terms of flexibility and balancing





## The consumer protection and empowerment chapter provides:

- Our assessment of level of compliance on consumer rights in the Third Package:
  - » Universal service
  - » Supplier switching
  - » Protection of vulnerable customers
  - Consumer information requirements
  - » Alternative dispute resolution
- Consumer complaints across Europe
- Smart meters roll-out in Europe

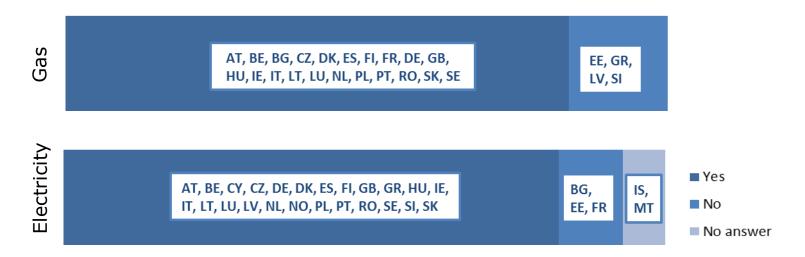




#### Consumer rights applied across countries (I)

#### Universal service

- Definitions and conditions applied vary widely (e.g. supplier bankruptcy, impossibility of finding a supplier on the market, etc)
- Most countries have designated suppliers of last resort (24 electricity, 21 gas)



Countries with and without supplier of last resort





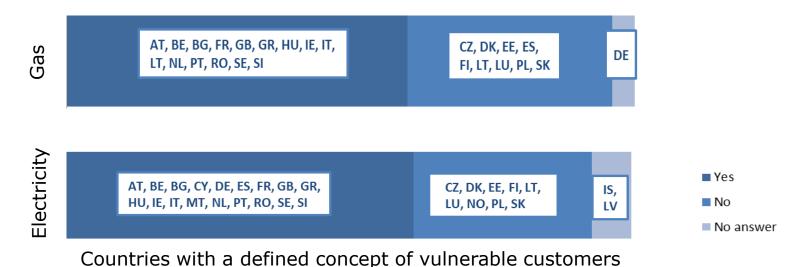
#### Consumer rights applied across countries (II)

#### Supplier switching

- The three week period for switching: (23 electricity, 18 gas)
- The final closure account within 6 weeks: (20 electricity, 21 gas)

#### Vulnerable customers

- A definition of vulnerable customers: (18 electricity, 15 gas)
- Measures to protect vulnerable customers also varies widely across European countries: this issue might be dealt with in energy legislation, social care systems or a combination of both







#### Consumer rights applied across countries (III)

#### Consumer information requirements

- Most have a single point of contact (23 electricity, 22 gas)
- Information on contractual changes (26 electricity, 24 gas).
   Consumers have the possibility to withdraw in case of disagreement
- Information on actual consumption and costs applied differently across MSs: "frequently enough to enable customers to regulate their consumption" is interpreted very differently in different MSs

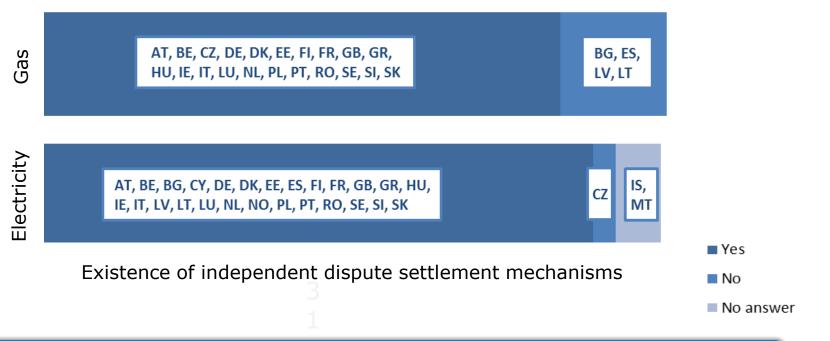




#### **Consumer rights applied across countries (IV)**

#### Alternative dispute resolution

Most MSs have independent dispute settlement mechanisms in place (20 in gas and 25 in electricity). In some, ADR is specific to energy consumers; in others dealt with by multi-sector consumer associations or advisory bodies.





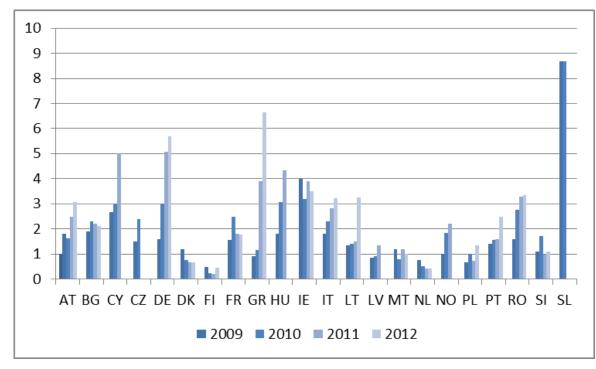




#### **Customer Complaints**

Differences in data collection makes it difficult to compare complaint data across MSs

- In some, NRA is single point of contact
- In others, other bodies responsible



#### Complaints are rising. Why?

- Possibly due to higher consumer engagement
- Consumers have more information on complaint possibilities at their disposal
- A signal of market malfunctioning
- Complaints require a careful analysis at national level
- More work is needed to improve management and analysis of complaints data







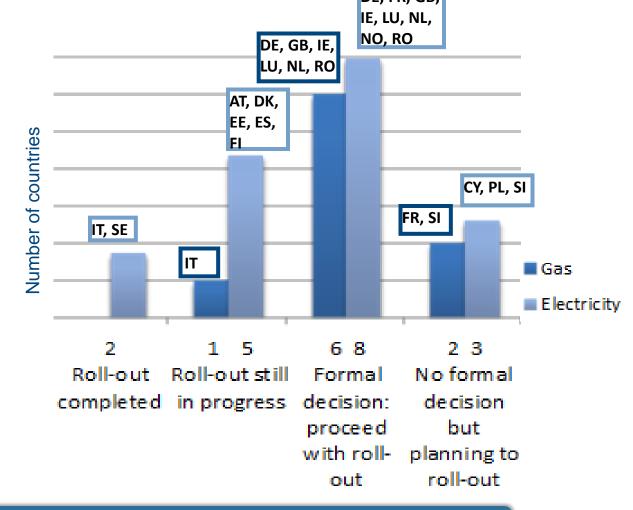
**Smart metering roll-out in Europe** 

(Legislative deadline for electricity meters 2020; no deadline for gas meters)

DE, FR, GB,

#### Countries where:

- Roll-out completed
- Roll-out has started
- Formal decision to roll-out taken
- or No formal decision but plan to roll-out









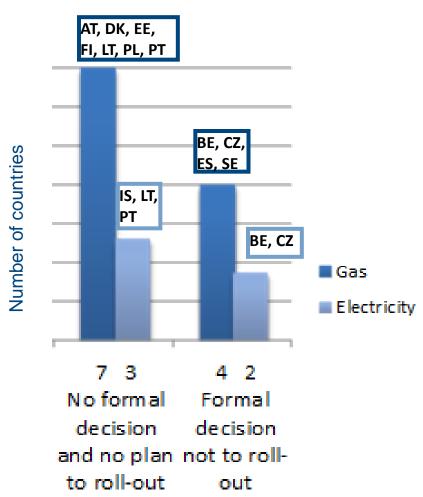
**Smart metering roll-out in Europe** 

(Legislative deadline for electricity meters 2020; no deadline

for gas meters)

#### Countries where:

- No formal decision or plan to roll-out;
- or formal decision not to roll-out









#### **Conclusions**

- Some disparity how consumer-related provisions of the Third Package are applied across MSs
- Not all MSs have a specific definition of a 'vulnerable consumer' and measures to protect them may vary
- Level of compliance with the consumer information requirements of the Third Package is very high across MSs
- Most MSs have independent dispute settlement mechanisms in place (20 in gas and 25 in electricity) either specific to energy consumers or multi-sector
- Lack of harmonisation on how complaint data are collected makes comparison difficult. Improvements needed in managing and analysing complaints data
- Smart metering systems are being (or will be) rolled out in more than half the MSs





#### **Acknowledgements**

## Electricity (ACER)

#### **Martin Godfried**

Silke Ebnet Rafal Gawin Ljuban Milicevic Rafael Muruais Lea Slokar

#### Gas (ACER)

#### **Gian Carlo Scarsi**

Joaquin Garcia Antonio Santos

# Consumer Protection (CEER)

#### Patricia de Suzzoni

Nadia Horstmann Antonio Ocaña Katharina Tappeiner





#### Thank you for your kind attention



www.acer.europa.eu





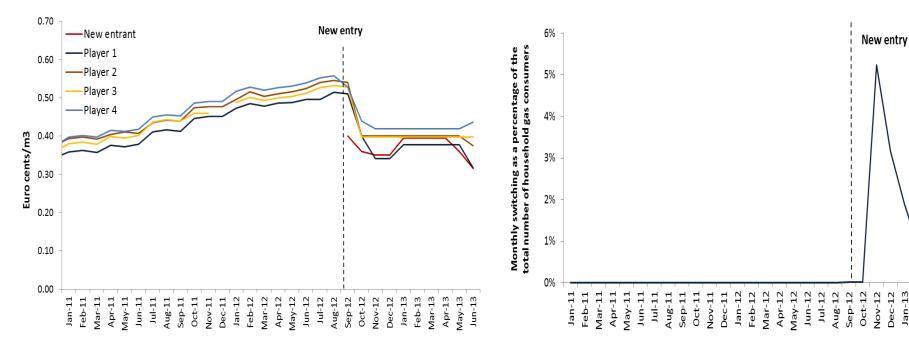
#### **Annex**





### The impact of a new supplier's entry into a recently liberalised (non-regulated) retail gas market: Slovenia

- From 2007 to 2012 retail competition remained static
- In autumn 2012, an independent supplier entered the Slovenian retail gas market
- It offered significant lower prices, sustained through buying gas on European hubs instead of relying on long-term contracts
- In two months, the announcement of lower prices made the switching rate rise to almost 5%
- Other suppliers responded to the new entrant and started to fine-tune their own offers

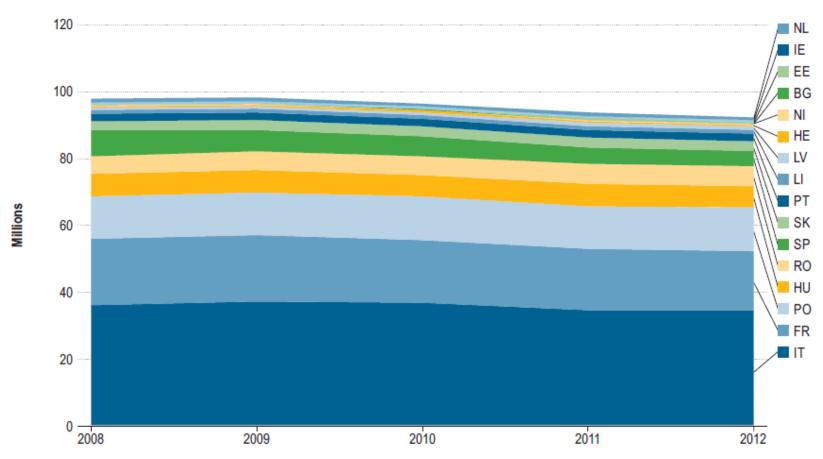


Source: Slovenian Energy Agency (AGEN-RS)





## Household consumers supplied under regulated gas prices in the EU-27 – 2008 to 2012 (Millions)

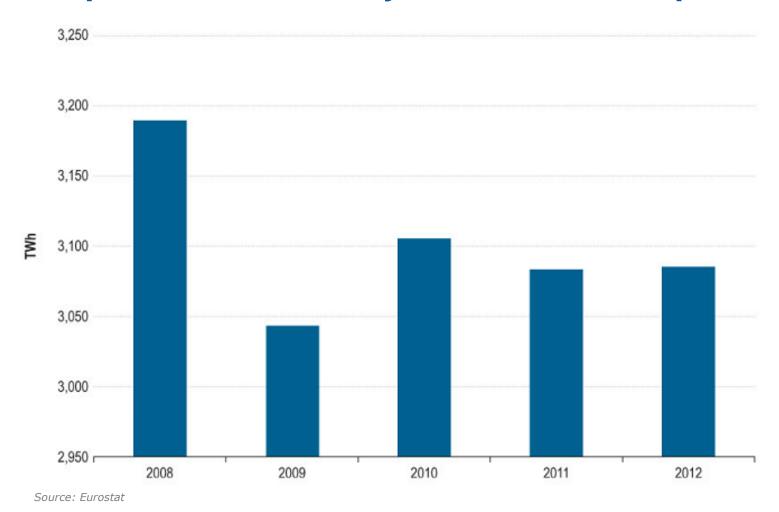


Source: CEER National Indicators (2013)





#### Development of electricity demand in Europe







#### **Overview of price regulation regimes**

MS	Switching in and out allowed	% of household customers under regulated prices in 2012	Customer segments covered by regulation	Frequency of price updates (months)	2012 switching rate for household consumers
Belgium*	~	8%	1/4	6	14.8%
Portugal	~	90%	2/4	12	13.2%
Spain	<b>Y</b>	59%	3/4	3	11.6%
Denmark	<b>V</b>	80%	2/4	3	3.7%
Italy	~	80%	2/4	3	6.4%
Northern Ireland	<b>~</b>	90%	2/4	NA	2.0%
France	V	93%	4/4	12	3.6%
Poland	~	99%	2/4	12	0.6%
Greece	~	100%	3/4	12	4.0%
Slovakia	~	100%	2/4	12	5.0%
Latvia	<b>v</b>	97%	1/4	Whenever needed	0.0%
Hungary	<b>~</b>	98%	2/4	12	1.6%
Bulgaria	~	100%	2/4	12	0.0%
Lithuania	V	100%	2/4	12	0.0%
Romania	Only switch out	100%	4/4	12	0.0%
Estonia	Only switch out	100%	4/4	Whenever a supplier seeks a new price	0.0%
Malta	X	100%	4/4	Whenever needed	NA
Cyprus**	X	100%	4/4	Ad hoc	0

Source: CEER NI 2013 and ACER questionnaire on regulated prices





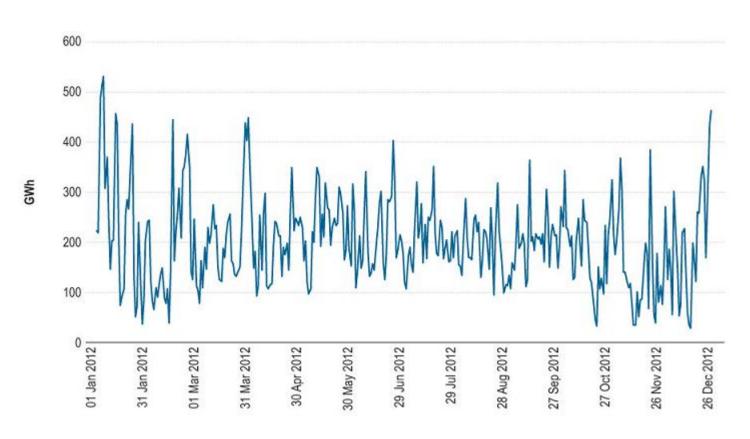
### Price convergence between the Czech Republic, Hungary and Slovakia - July 2010 to December 2012 (%)







## **Aggregated daily wind and solar production in Germany - 2012 (GWh)**

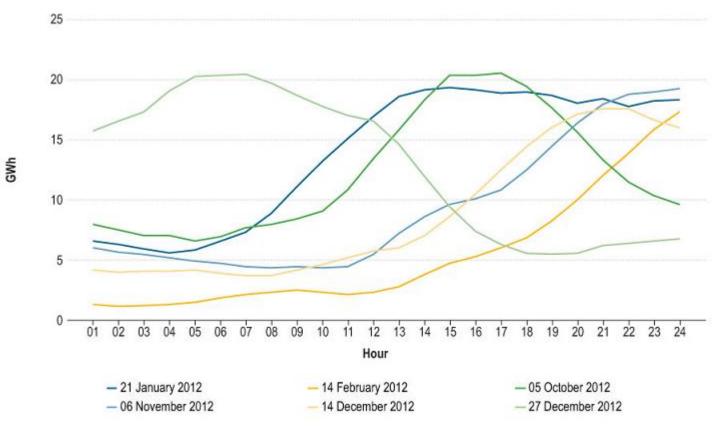


Source: German TSOs





## Hourly wind power production in Germany for a selection of days in 2012 (GWh)



Source: German TSOs