



# E-CONTROL

WORKING FOR YOU – WHEREVER YOU NEED ENERGY.



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# **Energy market opening in Austria and future challenges for the Internal Energy Market**

Martin Graf

Zagreb, 25th October 2012

# Agenda

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- Introduction and Motivation
- Liberalisation of electricity and gas markets in Austria
- Current issues and challenges for the IEM
- Internal Energy Market – the road ahead

# Challenges lie ahead



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New technologies and integration of renewables

Environment and long-term sustainability



Competition, pricing and the IEM

Efficiency and profitability

Consumer protection



Security of supply and network stability

Investment in “smartness”

# Agenda

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# Liberalisation in Austria: 10 years+



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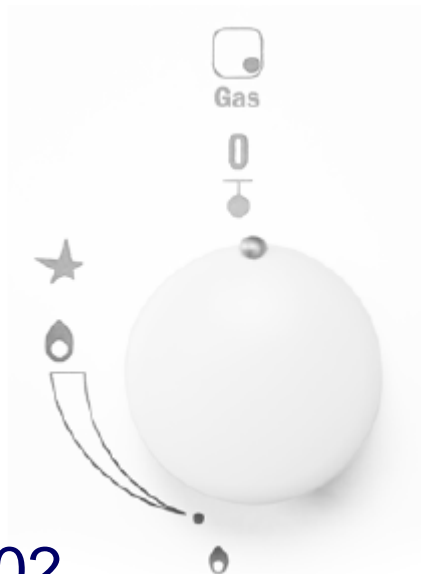
- Free supplier switching for all customers



2001

- Experiences in the past decade generally **positive**

- Higher efficiency in energy supply
- Better services for final consumers
- Fair share for customers in liberalisation “dividend”
- Efficient regulation with a decrease in costs and high levels of security of supply



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# There is still room for improvement.

- Mixed developments on **wholesale level**
  - Liquidity on exchanges and trading facilities is on the rise
  - For natural gas oil indexed contracts are diminishing in importance
  - But structural problems persist (market concentration), lack of harmonisation
- For **final consumers** competition has increased slowly
  - Low switching rates, incumbents and local players dominate
  - Economic effects however are positive
  - Final consumers have benefited from lower prices: ~12 Bn EUR

LIBERALISIERUNGSEFFEKTE 2001–2009 (MRD EURO)		
	Strom	Gas
Gewerbe	8,90	1,20
Haushalte	1,30	0,08
Summe	10,20	1,28

Quelle: Berechnungen E-Control auf Basis Kratena K. (2011) 'Gesamtwirtschaftliche Effekte der Energiemarktliberalisierung', Mimeo, Wien.



## Effect on Companies

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- In general profits have developed positively for electricity/natural gas companies in Austria
- For electricity in the first decade of liberalisation revenues increased by 130% or 9 Bn Euros
- Reasons included the favourable development of energy prices and expansion to new sectors (water, environment) and abroad

Future will depend on economic outlook and prices!

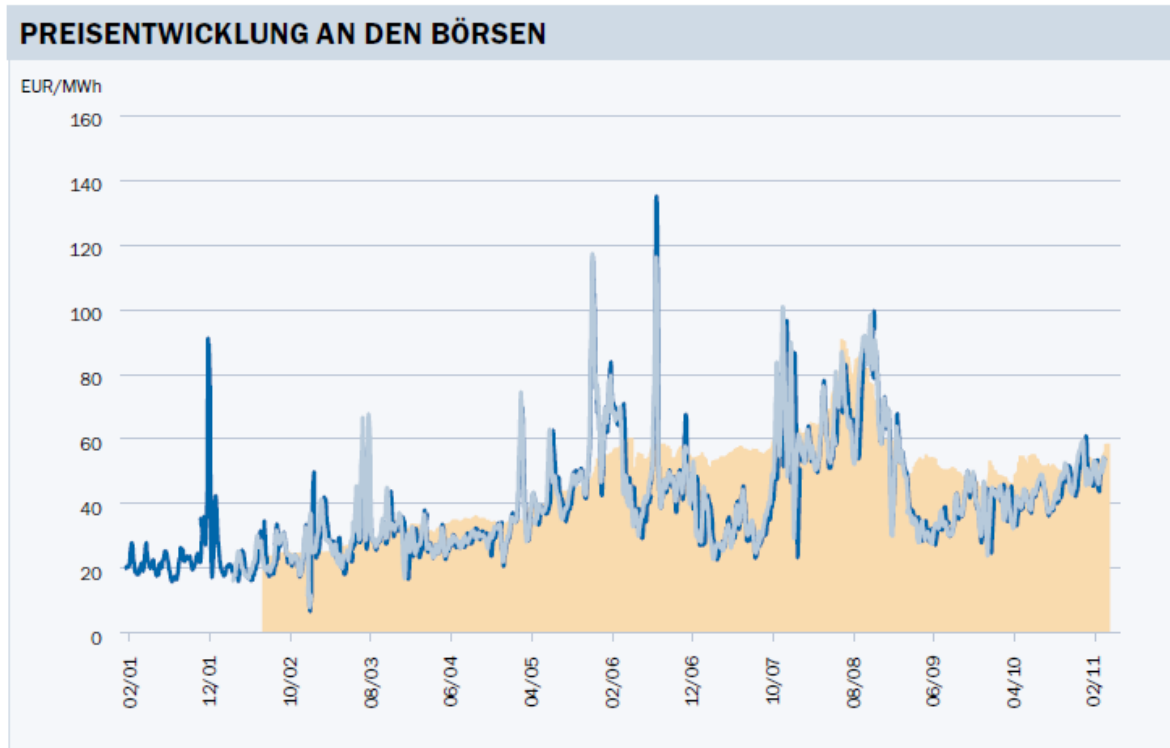


# Price development Electricity (Wholesale)



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- The last 10 years have seen a number of ups and downs



Preisentwicklung an den  
Börsen: Kassa- und Terminmarkt  
im Vergleich

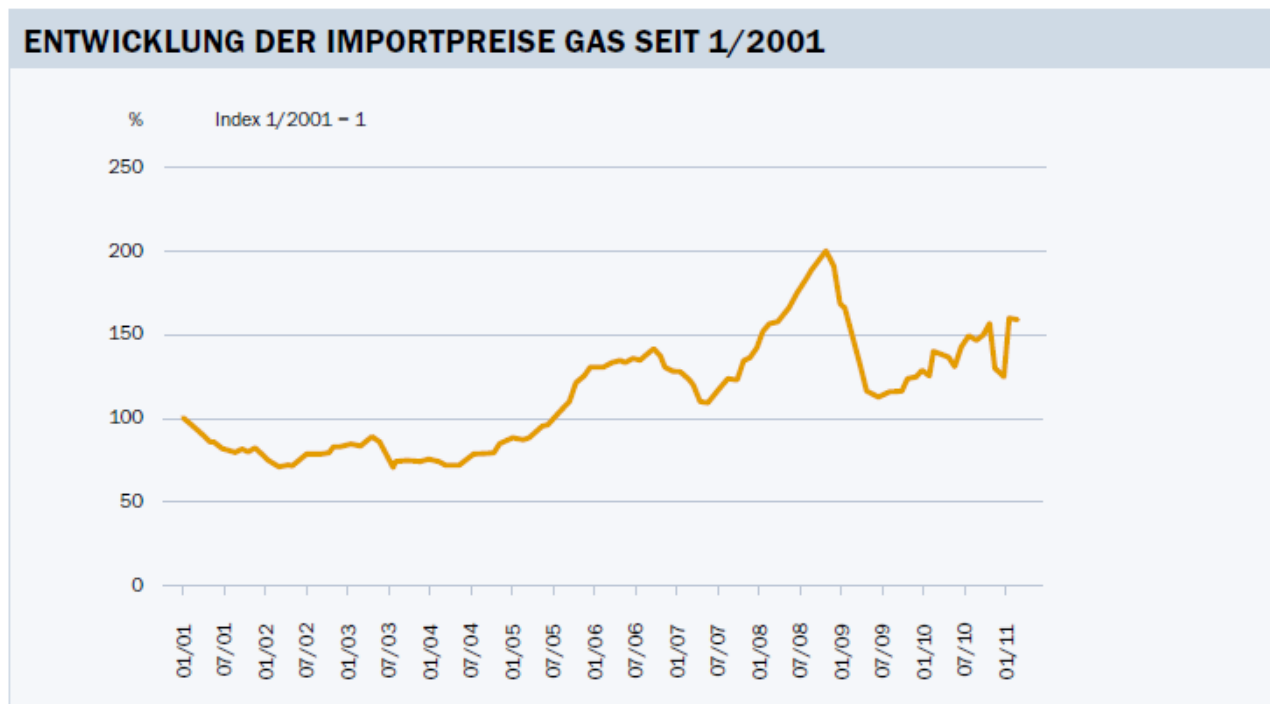
Quelle: EEX, EPEX Spot, EXAA

# Natural Gas Prices (Wholesale)



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- Bearish and bullish developments were also observed on the natural gas market



Entwicklung der Importpreise Gas Januar 2001 bis Februar 2011



Quelle: Berechnungen E-Control auf Datenbasis Statistik Austria

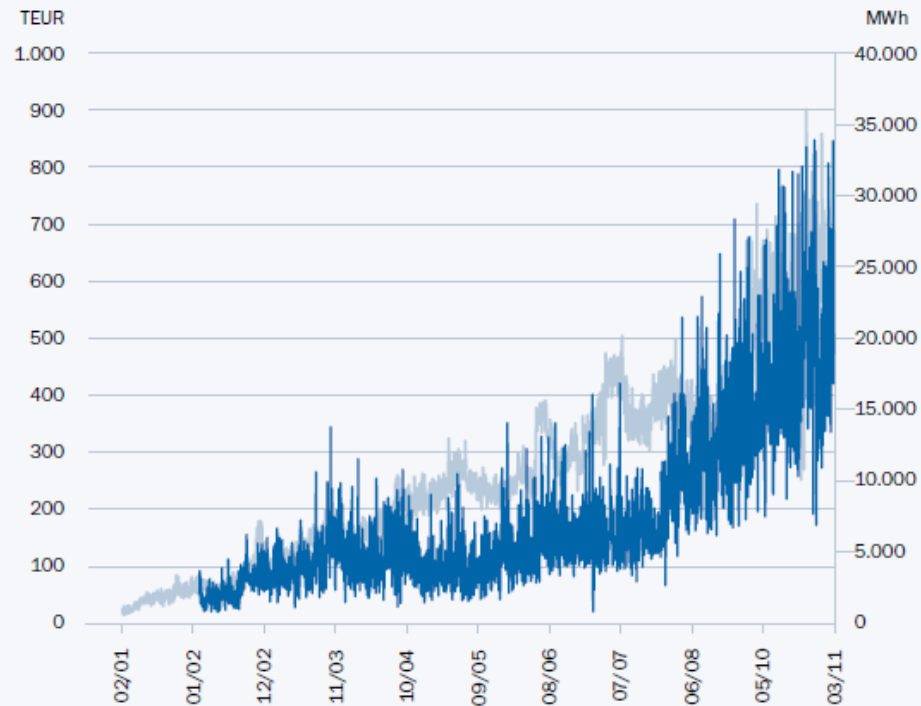
# But Liquidity has risen constantly



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## HANDELSVOLUMINA AN DEN SPOTBÖRSEN

EEX/EPEX Spot (links)   
EXAA (rechts) 



Handelsvolumina an den  
Spotbörsen für den  
Großhandelsmarkt

Quelle: EEX/EPEX Spot, EXAA

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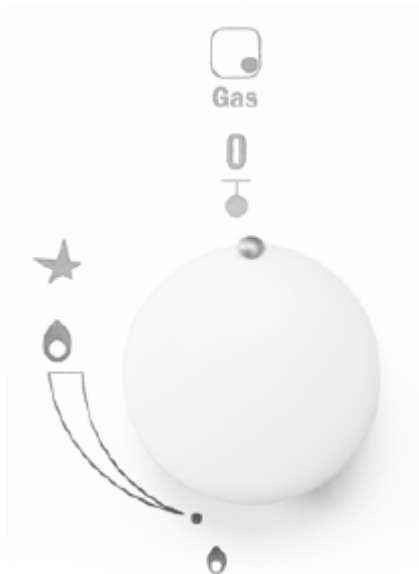
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# Security of supply



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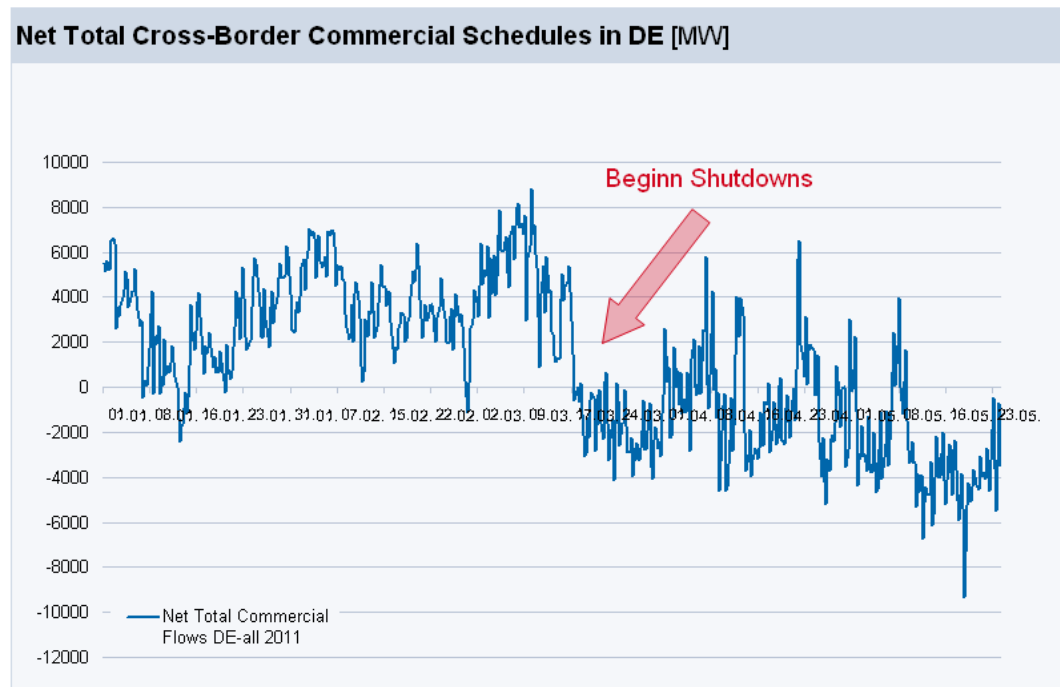
- The importance of security of supply is clear



- Concerns voiced recently:
  - Effect of German nuclear shutdowns on system adequacy
  - Increasing intermittents changing the merit order: Gas-fired plants no longer profitable, back-up missing
  - Economic climate adversely affecting investment in generation capacity

# The market can react

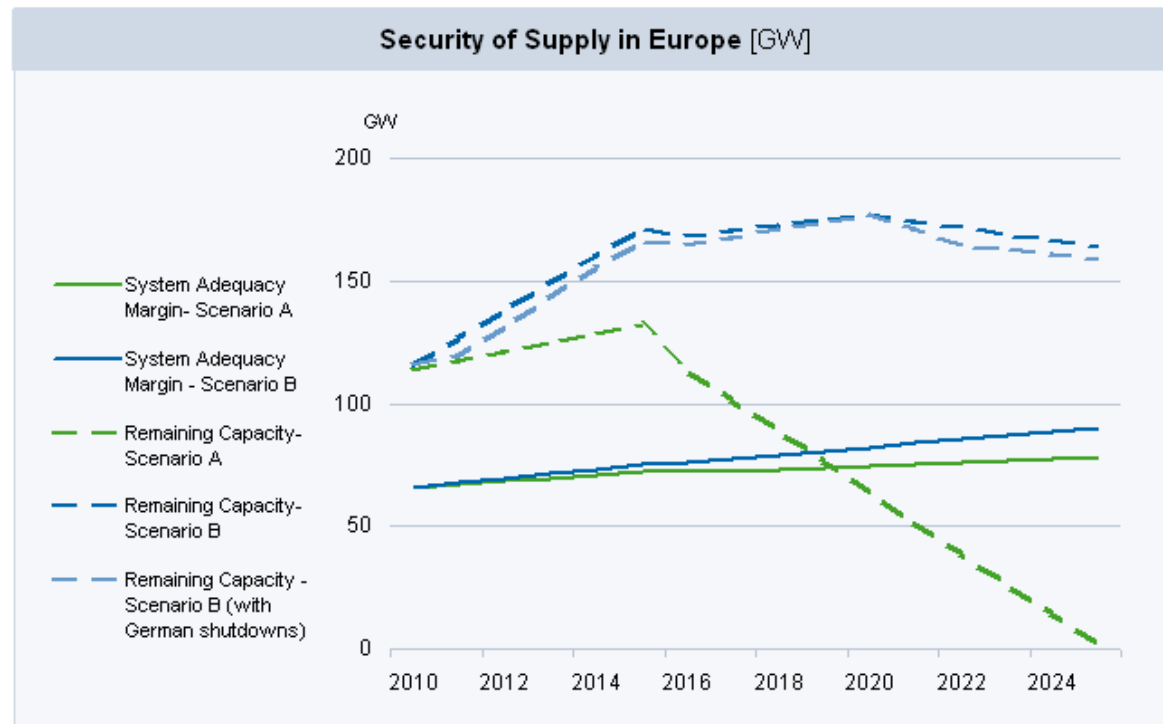
- Closure of nuclear power plants in Germany
  - Decrease in generation capacity of around 8.500 MW
  - Germany became an importer



Source: ENTSO-E, Bundesnetzagentur

# System adequacy forecasts by ENTSO-E

- Scenario A makes conservative assumptions: Problems possible from 2018 – Scenario B does not forecast problems until 2025



# The winter outlook usually depends on weather conditions



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- During severe weather conditions import grows in importance



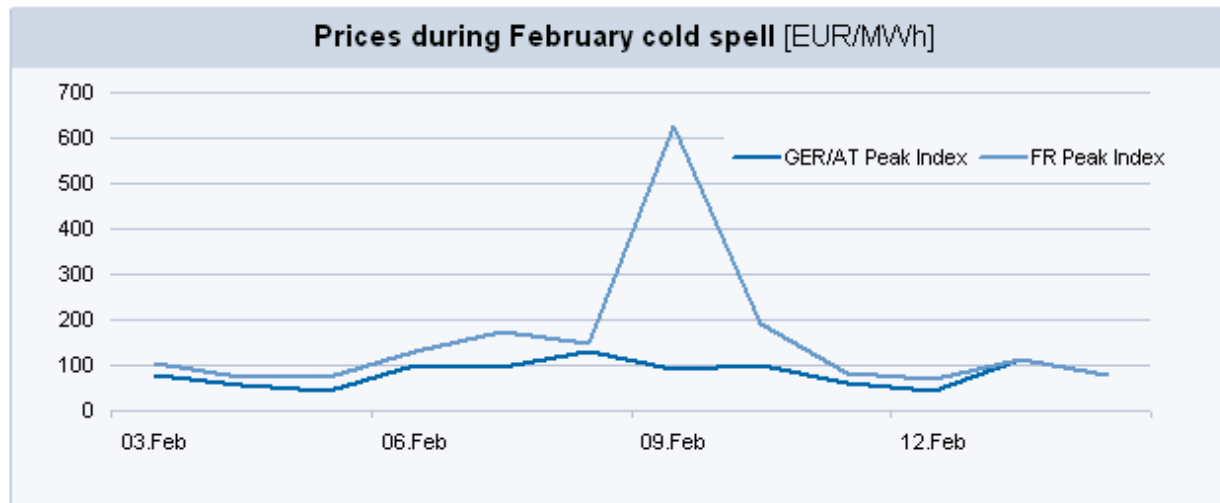
Source: ENTSO-E Winter Outlook 2011/2012





# Regional prices spikes may be a result

- Are a reaction of the market to supply and demand conditions (if they reflect fundamentals)
- System limits do exist in most markets, e.g.
  - EPEX Day-Ahead 3000 EUR/MWh
  - EPEX Intraday 9999 EUR/MWh



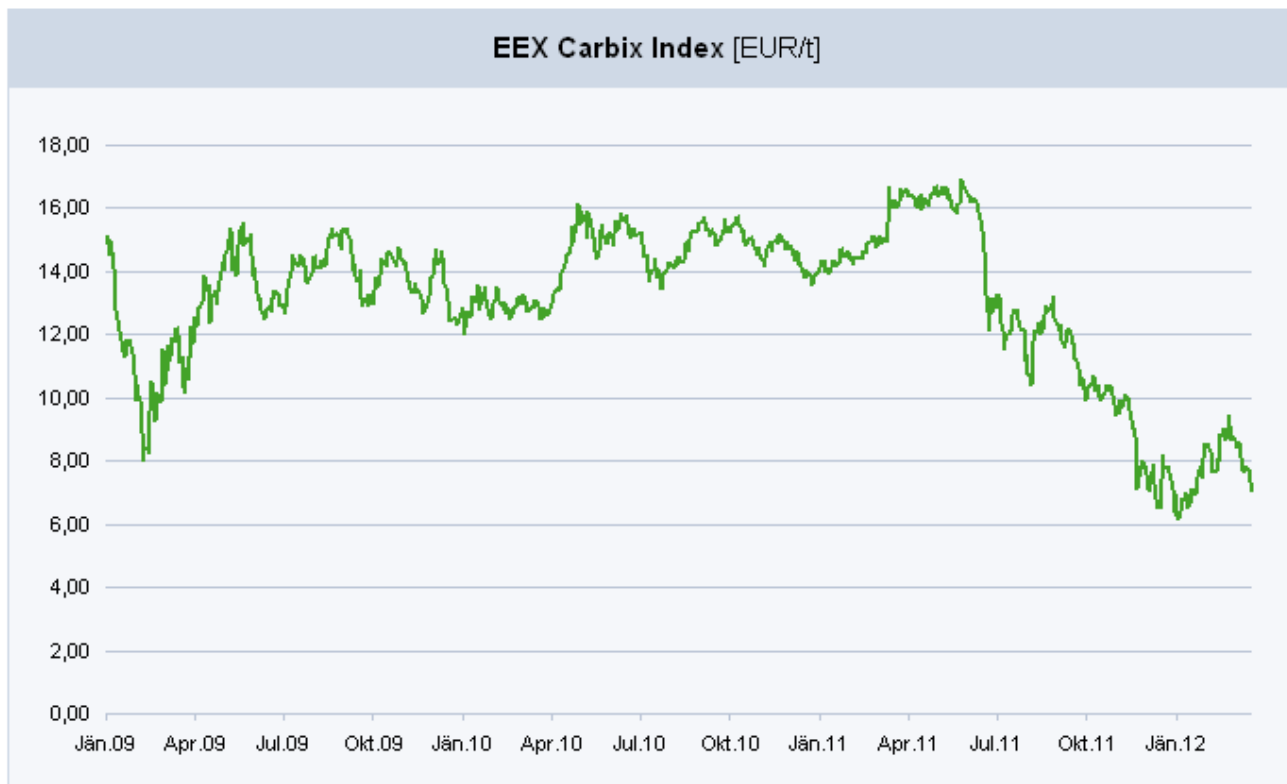
Source: EPEX Spot

# The EU ETS



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- The system has difficulty of keeping up with economic developments



Quelle: EEX



# Are national solutions efficient?

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- Renewables:
  - Feed-in tariffs
  - Fixed subsidies for investment
  - Market premiums
  - A mixture of the above
- Market design
  - Energy only markets
  - Capacity payments, capacity obligations
  - Strategic/operating reserves
  - Different balancing energy markets

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# A new role for infrastructure



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- Electricity Transmission
  - Expansion in Europe (North-South)
  - What about transit (loop flows)



- Electricity Distribution
  - New investment incentives through smart meters?

- Gas Transmission
  - Expansion necessary
  - Increased flexibility (no main flow direction)

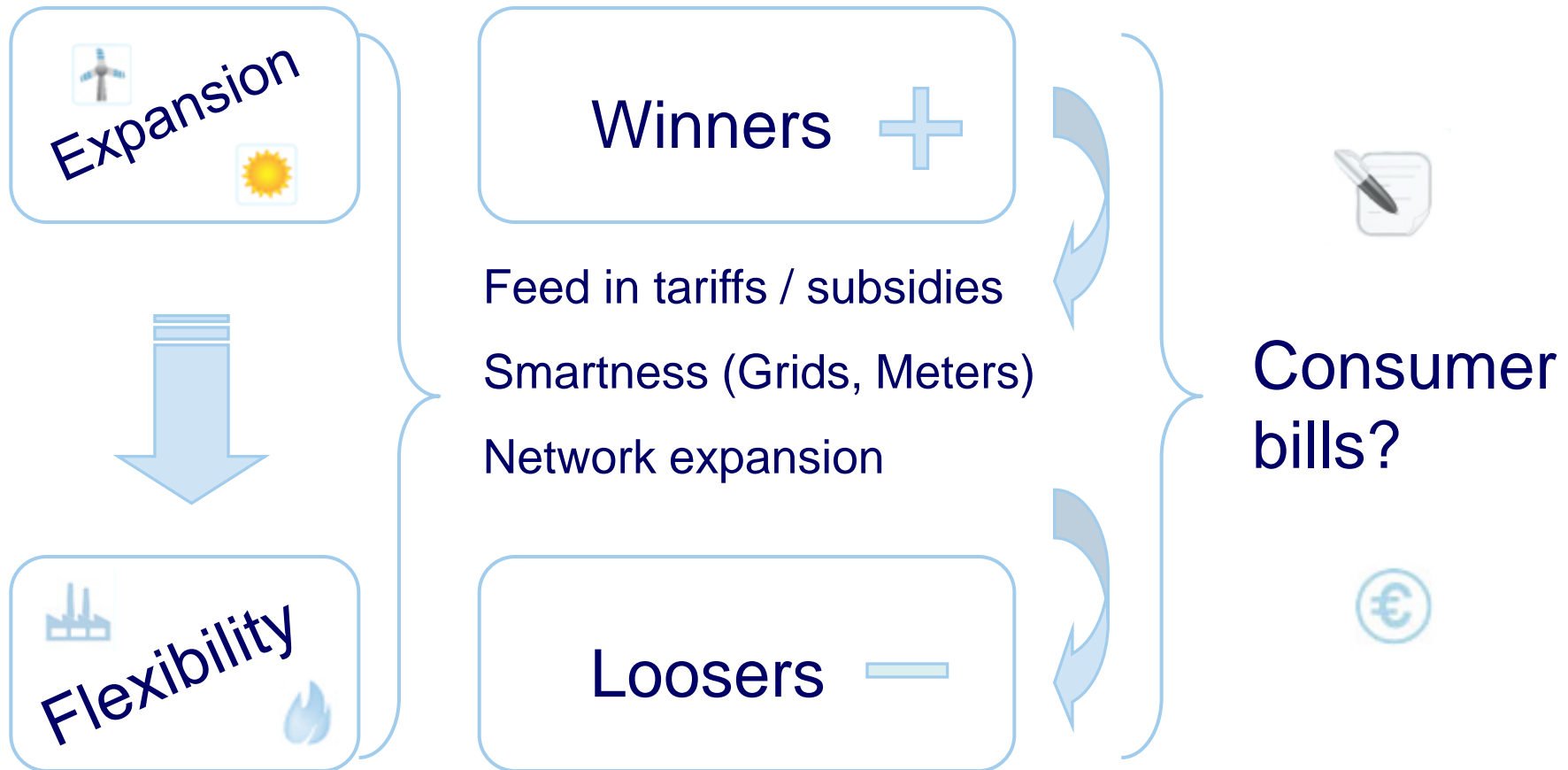


- Gas Distribution
  - In some countries built back – competition from other sources of energy

# Ultimately the future of the IEM will have an impact on consumer bills.



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# The road ahead – careful exploration of different options necessary.

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- Investment in infrastructure
  - Network expansion necessary to integrate intermittents
  - Key: Speed up decisions made by authorities on go ahead of new infrastructure
- Further Harmonisation
  - Common network codes
  - Market Coupling
  - Common oversight framework: Third package, REMIT
- Integration of renewables into the market
  - See for example introduction of market price top up in Germany
  - Investigation into future role of EU ETS and relation to national feed in tariffs
  - Harmonisation of subsidy schemes towards IEM

# The role of Austria and Croatia in the IEM

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- Two small countries in the heart of Europe
  - Cooperation between Austria and Croatia in the energy sector will strengthen our position in the Internal Energy market
- Strong interest in diversification of supply
  - LNG will be important in Europe the next ten years
- Some countries experience with renewables shows that unrestricted subsidies create problems
  - Share know-how and best practice on how to integrate renewables
- Only market integration will lead to efficient, competitive and sustainable energy markets
  - To make this work some degree of harmonisation (i.e. common rules) is needed





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