

Review of the GTM and the integration of gas markets

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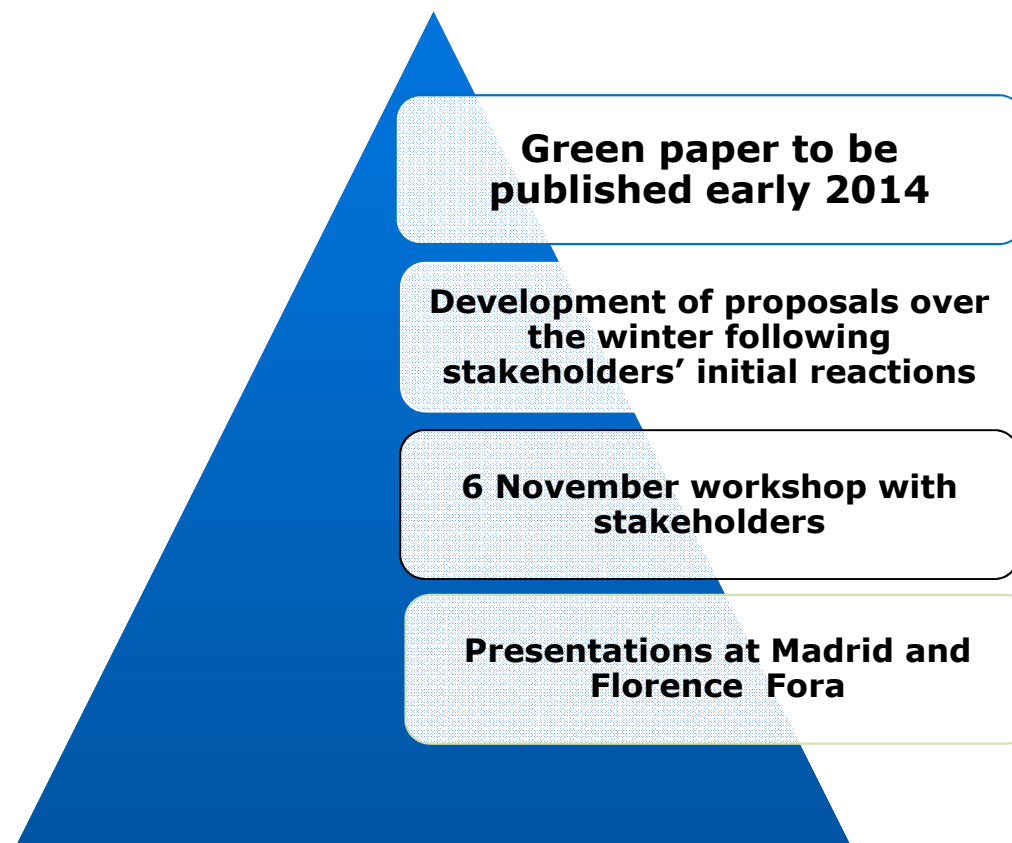
ACER Board of Regulators Vice-Chair

**24th Madrid Forum
15-16 October 2013**

General context

- The development and implementation of the 3rd Package and its associated Framework Guidelines and Network Codes remains our major focus and commitment
- 2014 deadline for the IEM completion is soon approaching. Therefore, there is a need for strategic foresight to guide our post-2014 work and for a vision to serve as a bridge towards the future
- We are developing an overarching strategy paper on key factors, challenges and possible responses for the coming years to 2025
- Part of this work is the enhancement of the gas and electricity target models

Timetable for 2025 Overall Vision



Strategic context

Demand

- Industrial demand very dependent on competitive gas prices
- Use in power generation will continue but role will change and volumes will decline sharply
- Use of gas in heating likely to decline
- Potential for new demand in mobility
- Very likely gas demand will not surpass pre-crises levels

Supply

- Conventional EU production will decline
- Dependence on imported gas will grow
- LNG will continue to grow but fluctuate according to prices
- Uncertain potential for unconventional sources in Europe

Sustainability

- Gas is the cleanest of the fossil fuels – should replace coal in electricity generation, industry and oil based transport fuels
- Gas will achieve this role only if the price is “right”
- Gas-fired power can complement growth of wind and solar energy – but again price is key

Strategic context

Gas market characteristics are changing

- Continuous growth in gas demand until 2008 → declining gas demand since then (wholesale and retail)
- Oil-price indexation → more than 50% of gas is priced according to hub prices, or other price baskets
- Long-term contracts → clear trend to more flexible and more short term oriented contracts

New challenges

- Growing interrelations between electricity and gas
- Higher flexibility requirements to back-up intermittent renewable electricity generation
- Will gas be the fuel of choice for this?
- Changing role of gas storage and LNG

Difficulties

- Declining gas demand
- Massive price spread between Europa and US
- Structural problem: need for gas fired power plant to back-up intermittent RES generation → gas is priced out of electricity generation – will this change?
- Retail markets: very different levels of competition across Member States

Recent studies and market monitoring show the market situation and also underline remaining problems and challenges

Main findings:

Commission study (by DNV KEMA) on entry-exit systems in gas

- Not all EU MS have implemented the entry-exit system yet; MS which have implemented, have taken a number of quite different design choices
- A number of design features of entry-exit systems may lead to significant barriers for entrance of new players and for cross-border trade

Commission study (by DNV KEMA) on long-term – short term markets in gas

- General trend to more flexible and more short term oriented contracts at all levels of the value chain
 - lower entry barriers, further increasing competition and liquidity
- Increase of short term and spot trade
 - Higher volatility of prices and improvement of price signals to consumers
 - boom-and-bust-cycle-type economy
- Long-term contracts remain for parts of the sector but subject to changes (less oil-indexation, more linked to hub prices; price baskets)
 - Less than 50% of gas traded is priced with oil indexes

Main findings:

Commission study (by Booz&Co) on the benefits of an integrated European energy market

- Gas market integration can result in significant benefits for markets in terms of price and security of supply
- If the current situation of oversupply continues, market integration could generate a maximum price benefit of €30bn per year for EU27
- Market integration requires sufficient available connecting infrastructure (reduces dependency and can improve security of supply)

Further market analysis shows

- Declining consumption and increasing prices on many retail markets
- End-user price regulation is still heavily present
- Wholesale markets: EU gas prices still heavily correlated to oil (apart from cold spells, when hubs overshoot)
- EU hub prices are correlated, but not all the time and transportation charges are still very heterogeneous

Why do we need a GTM review

**3rd Package is
not the end of
the process**

- Gas sector has also evolved and further change can be predicted
 - Declining demand in general and especially in power generation
 - Global price effects of shale gas in US (EU?)
 - Growth of LNG trade will link Europe more closely to the global market
 - New usage of gas in transportation possible
- 3rd Package is still being implemented. Crucial to complete this process. But changes and improvements needed (e.g. upstream competition not as effective as it could be)

**Timescales are
long**

- New measures take a long time to conceive, develop and translate into legislation and be implemented – cannot wait until we know complete outcome of 3rd Package

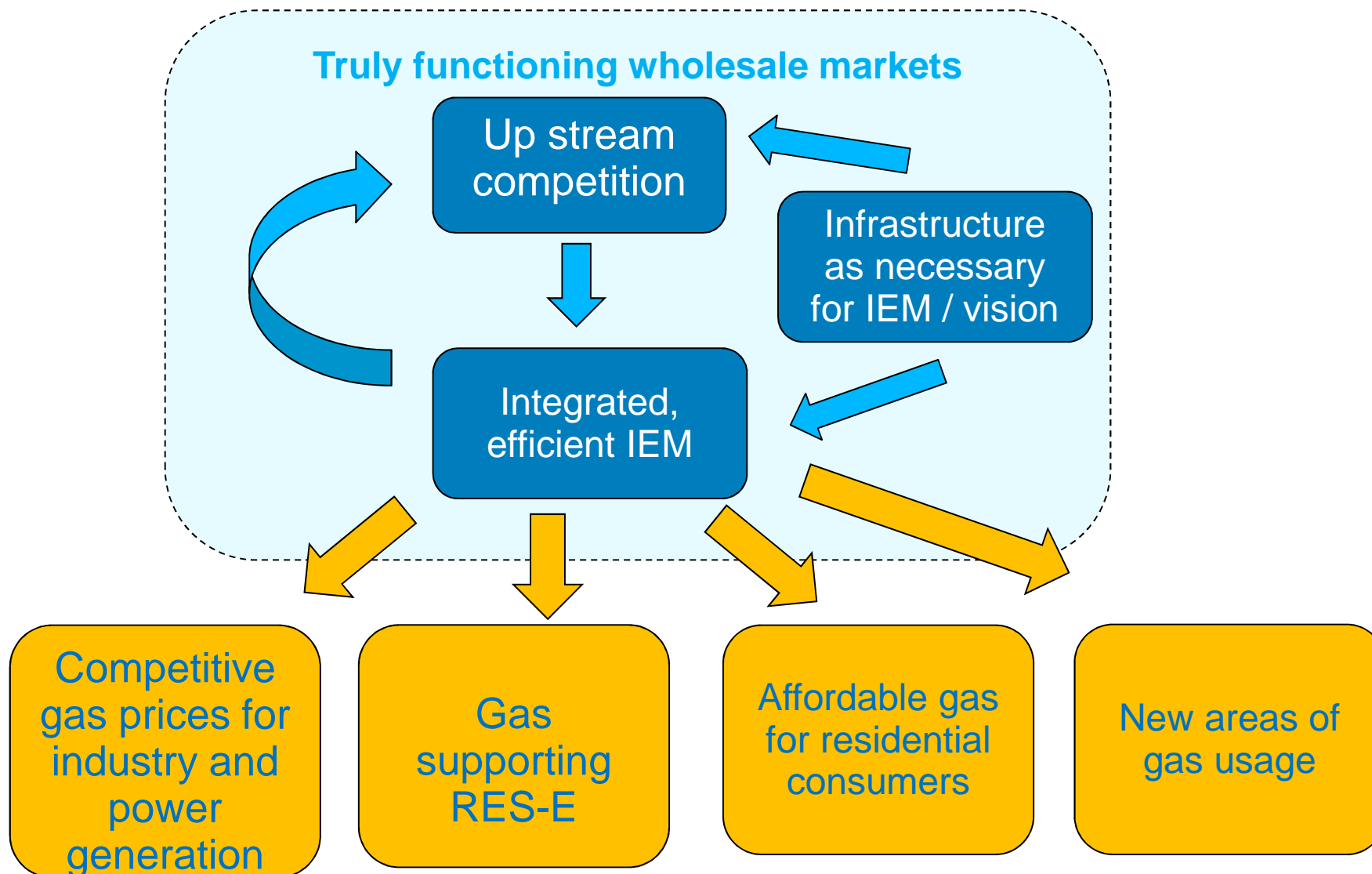
**Need for early
start**

- We need to start work now
 - on measures that address predictable problems and weaknesses
 - on developing a concrete idea in which direction the gas market develops

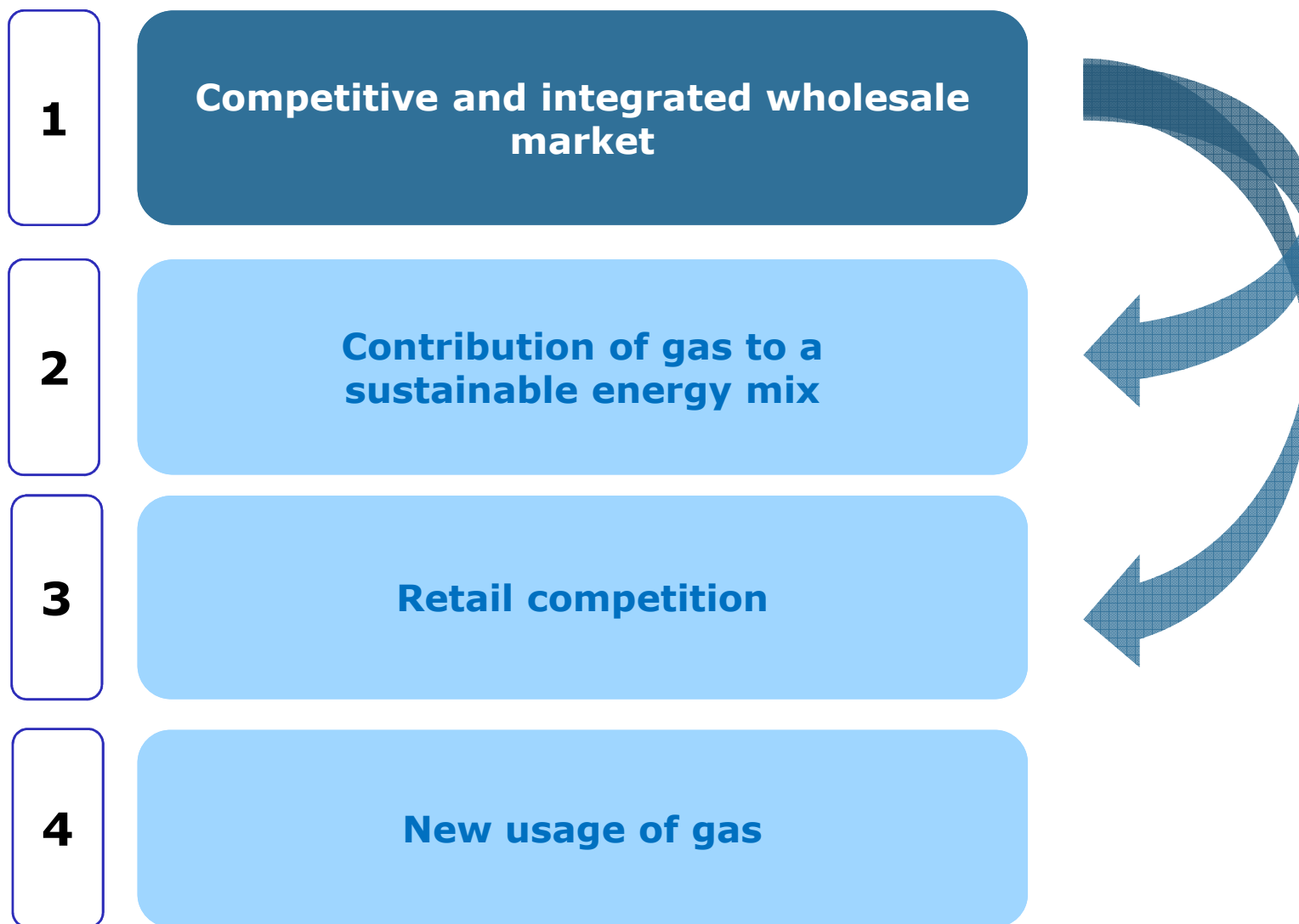
1st ACER Gas Target Model workshop on 8 October

- Great stakeholder interest (over 70 participants in Vienna + over 60 participants following the live streaming)
- Agreement among participants:
 - Priority: complete the 3rd Package implementation, including the development and implementation of Network Codes
 - Nevertheless, changes and improvements could become necessary
 - Given the long lead times of legislative measures, we have to start thinking ahead now
 - Need to assess and define the additional areas where possible additional (regulatory) measures are necessary
- Consensus that the integrated European energy market can bring benefits – at the same time also costs should be also analysed

Concept for the future of gas

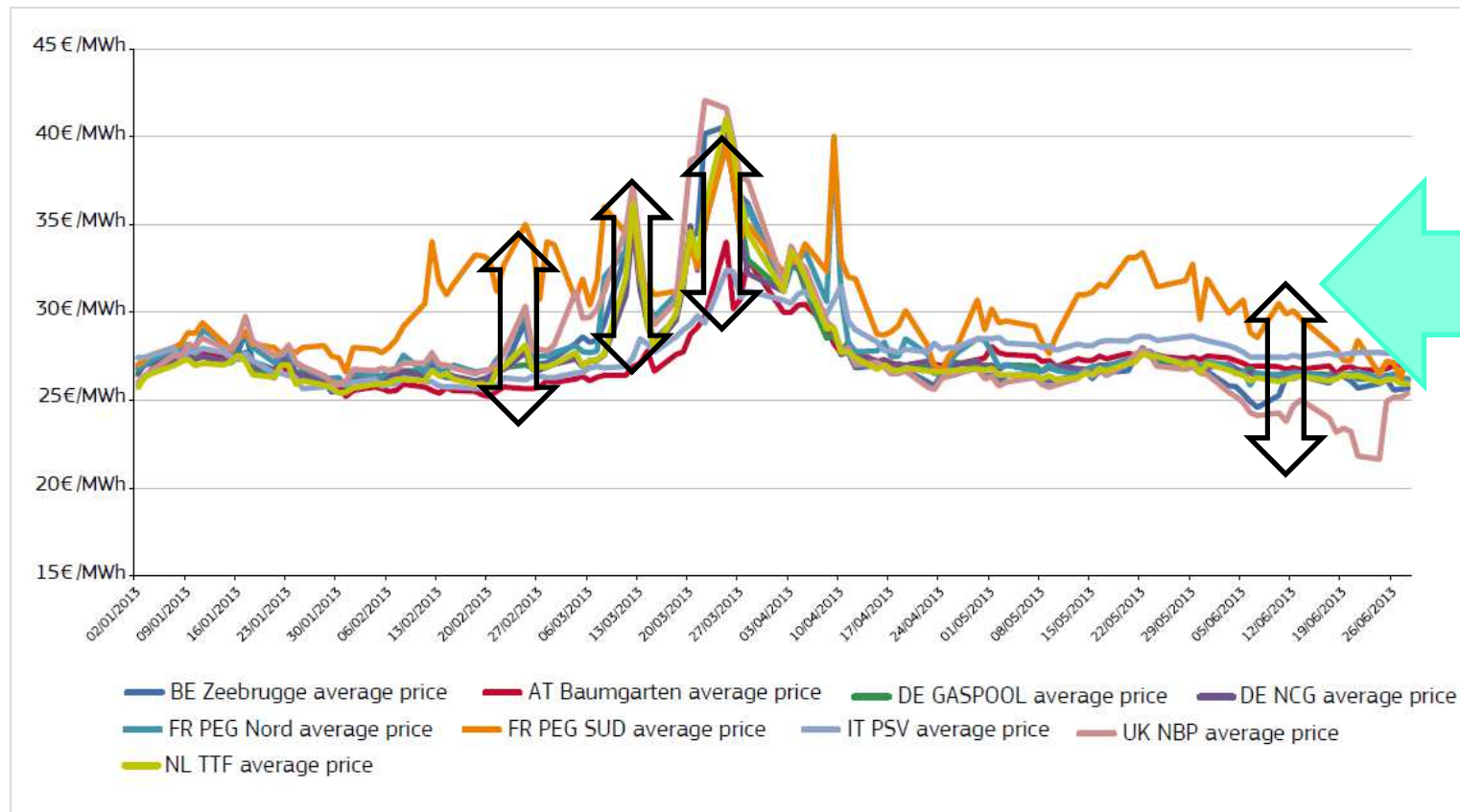


Possible fields of action



Remaining price differentials

Gas prices show that we still don't have a European market, while...



There are still price differentials due to infrastructure constraints in Europe

Datasource: ICIS Heren

Source: Eu Commission,
Quarterly Report on European Gas markets Q2 2013

Evidence - Criteria for competition

Measure	GTM* criteria	Status quo
Infrastructure RSI	RSI > 110% for more than 95% of the days	<i>Not yet assessed ?</i>
Size of Entry-Exit zones	≥ 20 BCM (215 TWh)	Only 6 national markets ≥ 20 bcm demand
Pluralism of sources of supply	≥ 3 significant sources	Importing entities < 3 in Baltic States, FI and SE
Market concentration	HHI < 2000	Problematic in most markets (except for UK and DE)
Liquidity of the market	Churn rates > 8	Only TTF and NBP achieve churn > 8 (ZEE close to 8)

.....GTM criteria generally not yet met

*According to CEER (2011): Vision for a European gas target model.

Possible areas for action

Increasing diversity of gas sources

- Historically gas sources have been limited → market dominance of one or two suppliers
- Need to encourage new sources and diversification
 - LNG, pipelines from new areas, European production, biogas...

Creating alternative infrastructure

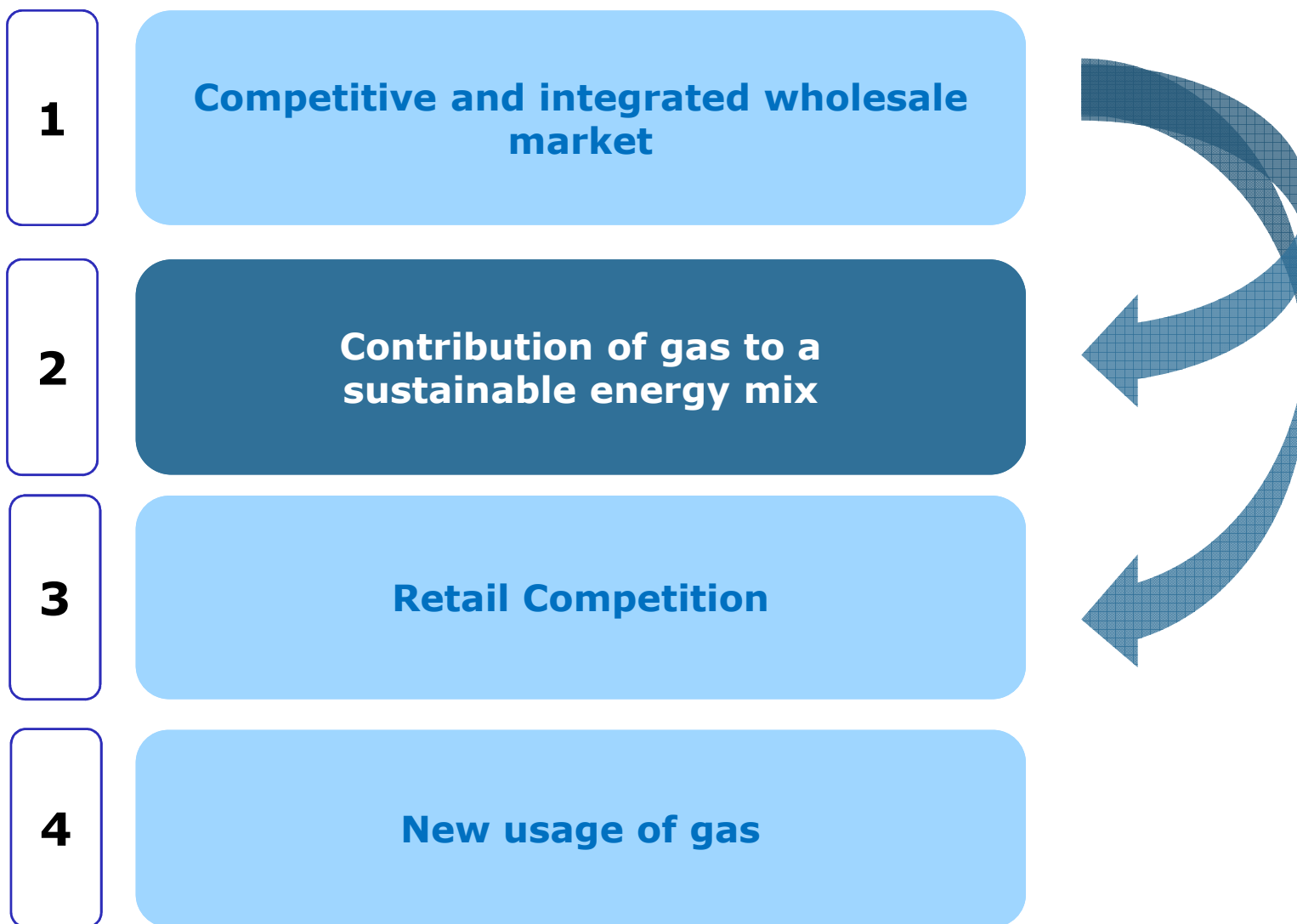
- Without alternatives in transportation capacity, sources of gas cannot compete
 - Many markets still rely on one source/transport route for the majority of imports
 - In markets with declining demand, TSOs might need incentives to maintain infrastructure in order to promote competition
- However, necessary to avoid redundant infrastructure that increase tariffs and do not provide additional benefit

Access arrangements to facilitate competition

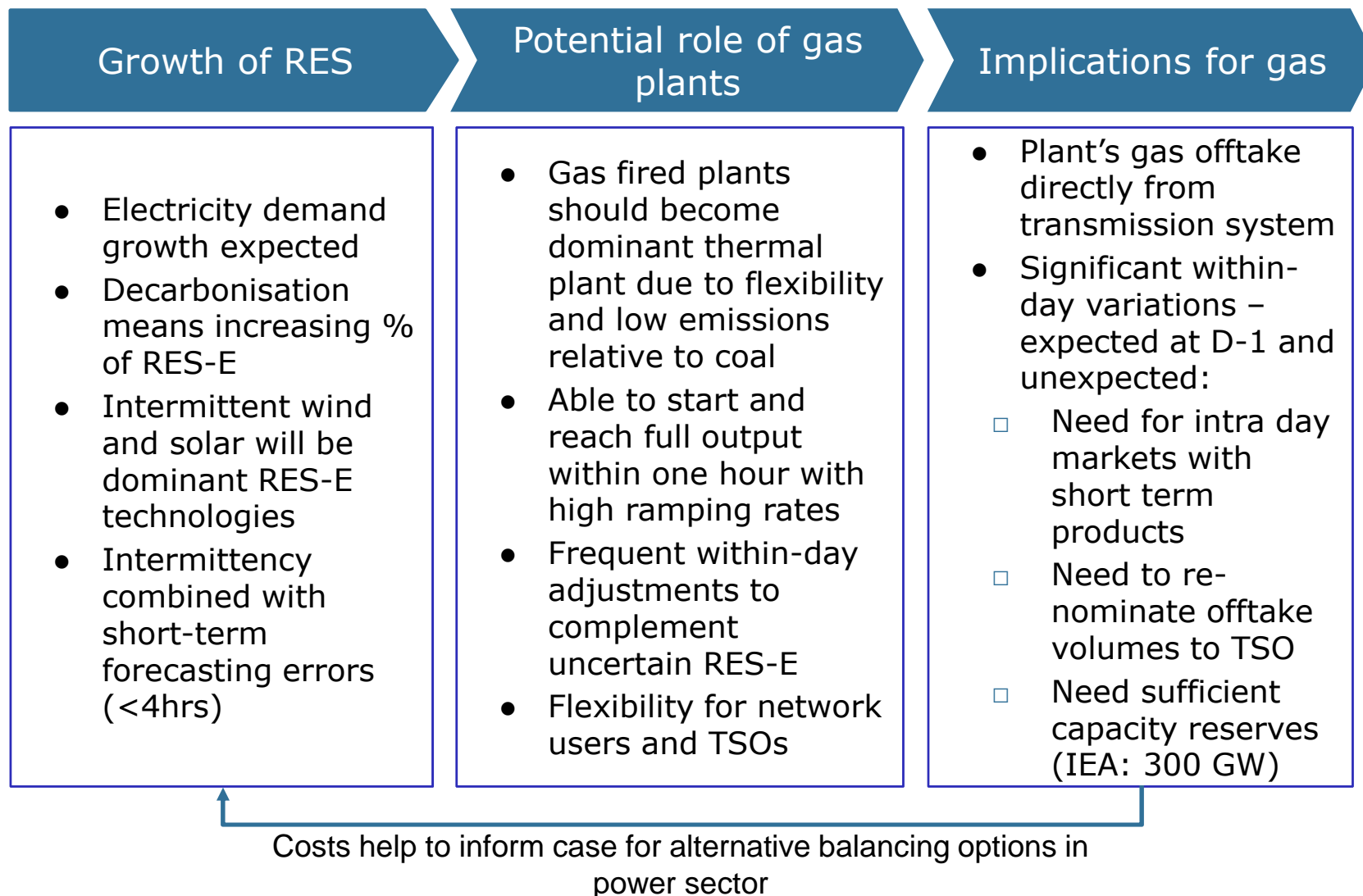
- Physical capacity needs to be complemented by tariff arrangements that facilitate competition over longer distances

..to complete vision of IEM

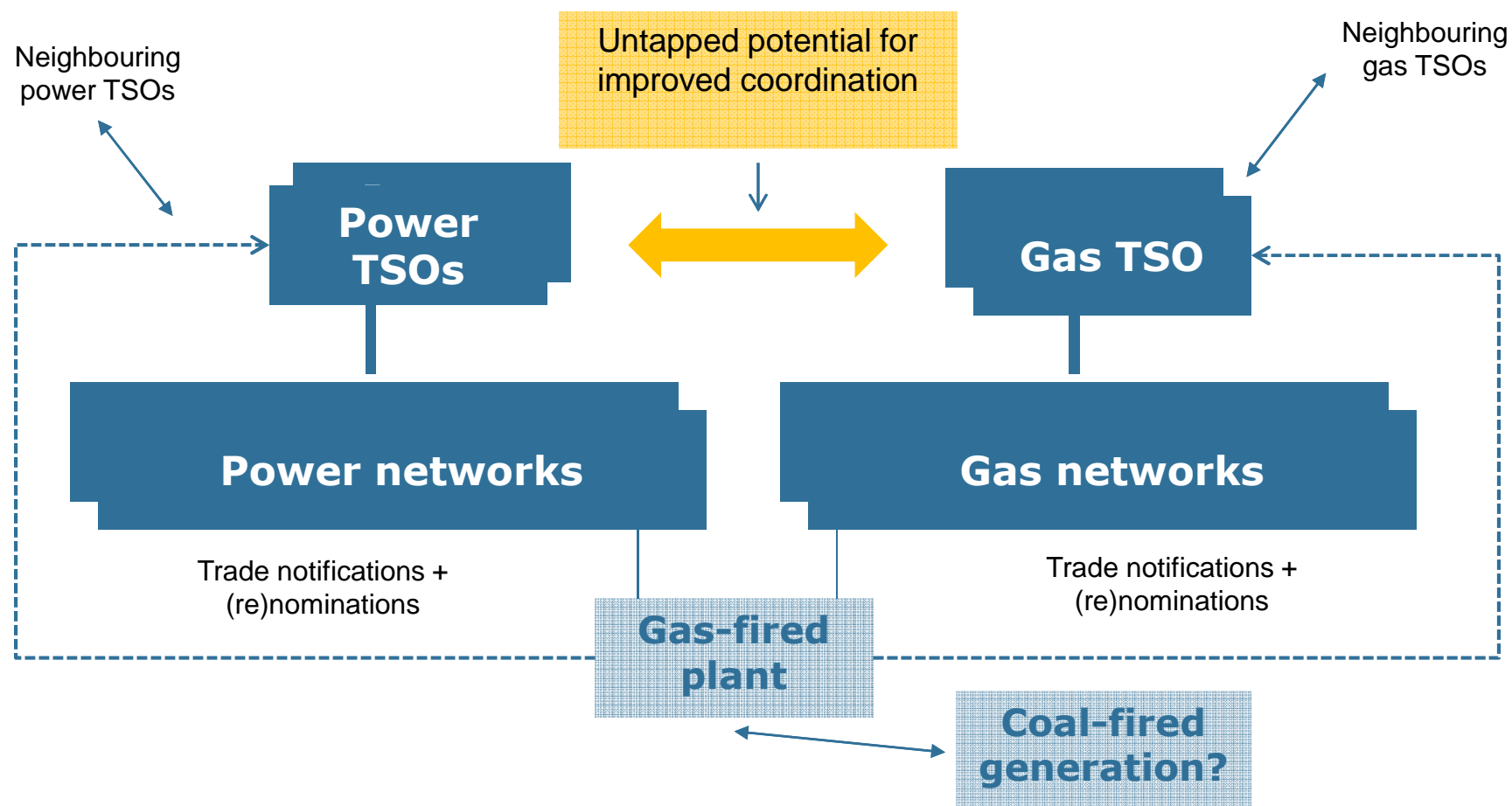
Possible fields of action



Nature of the problem

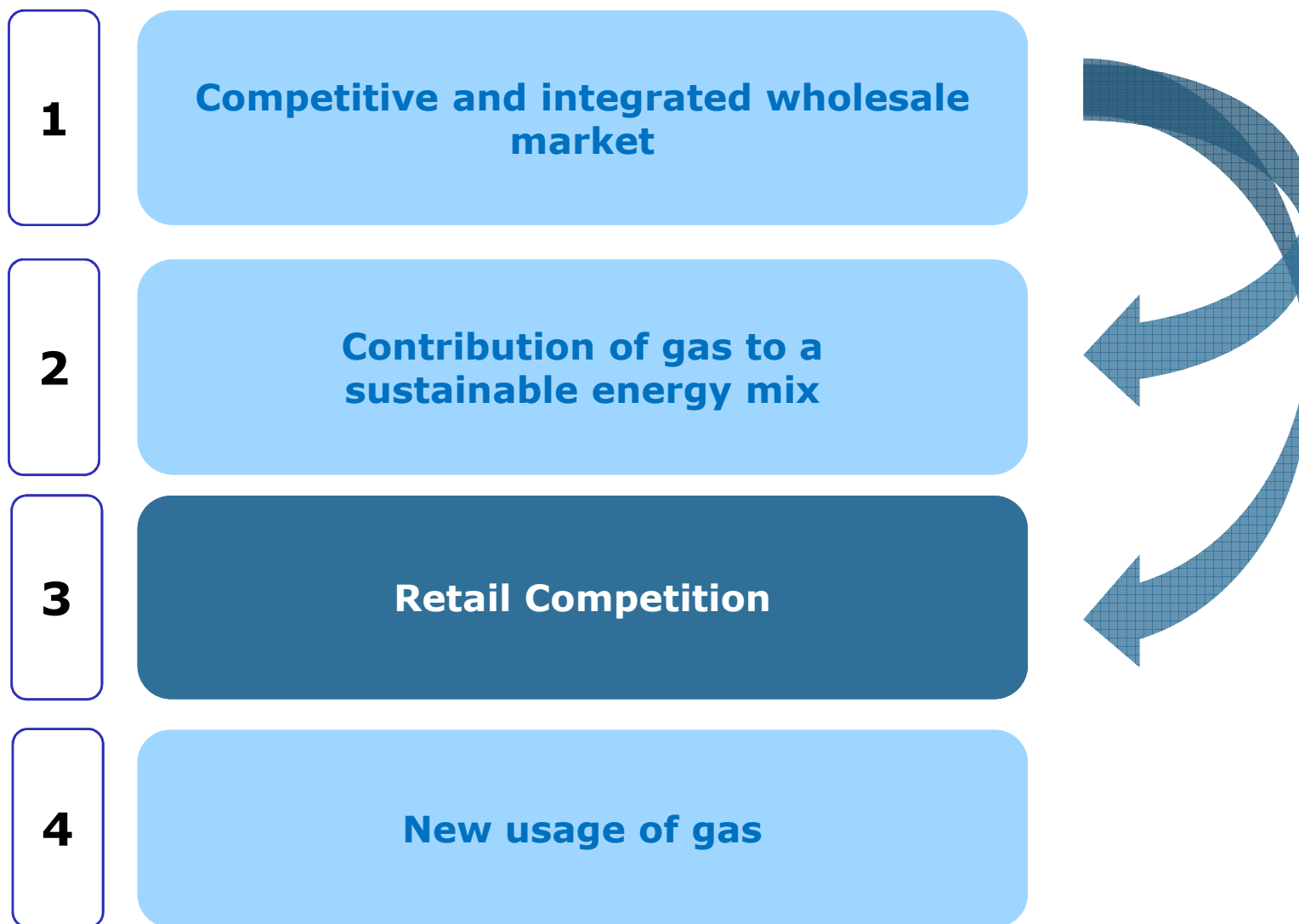


Gas plants are link between sectors

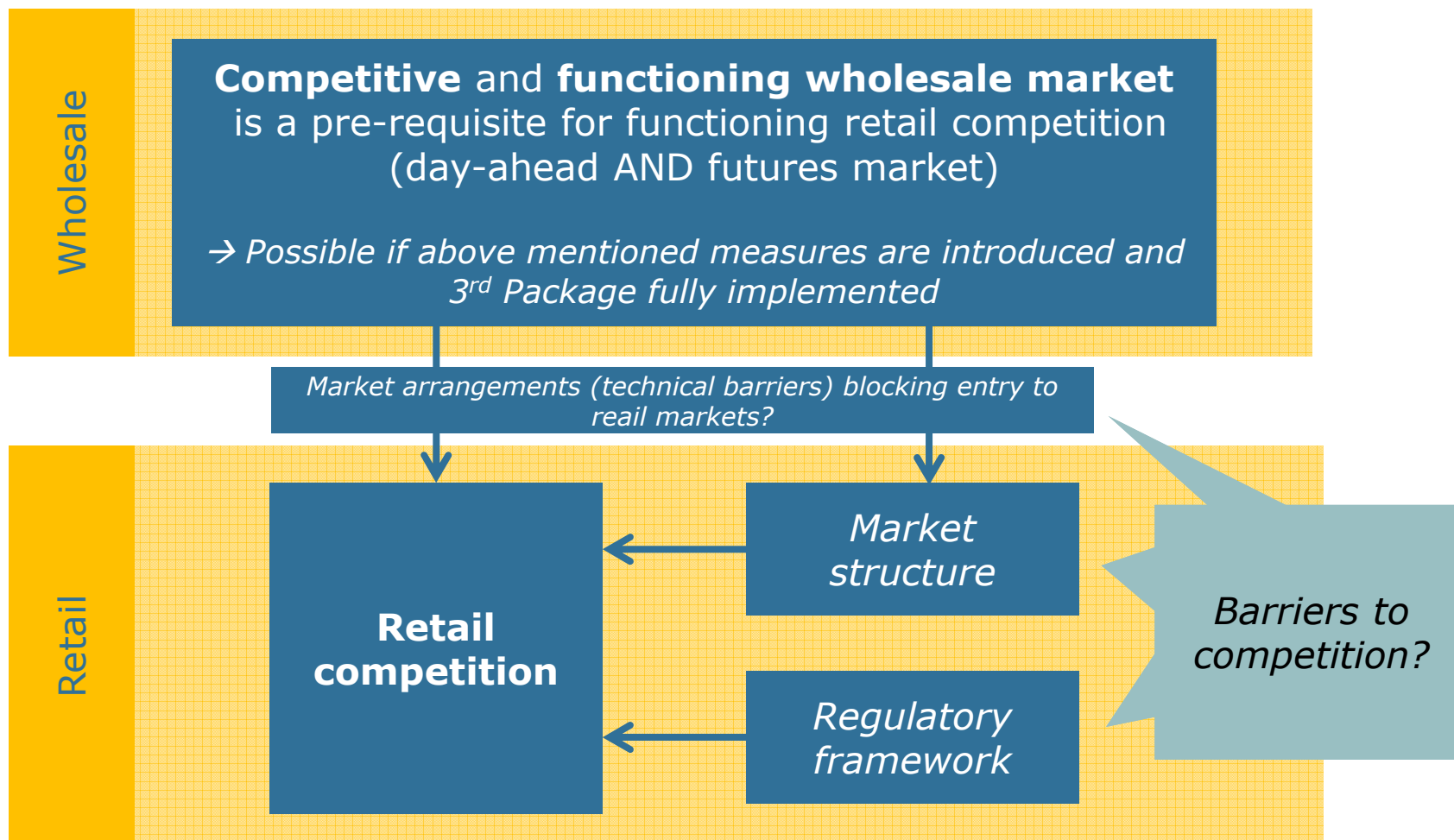


Under network codes, emphasis is on cooperation between TSOs for same energy type (e.g. for x-border balancing) and not between TSOs in gas and power within an area. Plant must operate within separate balancing arrangements of each sector.

Possible fields of action



Retail competition



... to be achieved through competitive wholesale markets

Retail competition - challenges

Price regulation - is still reality!

- 15 MS in gas (and 18 in electricity) with end-user price regulation for household customers

Price regulation - obstacle towards competitive markets

- IEM Communication: phase-out of regulated prices „taking into account universal service obligation and effective protection of vulnerable customers“
- Prevents suppliers from offering attractive services, tailor-made and dynamic pricing schemes
- In some countries prices are even regulated at a level below market costs, threatening SoS
- Discourages new entrants
- No signal for efficient energy use
- Economically unsustainable

Switching rates are still on a low level in most MS

Possible areas for action

Competition instead regulated prices

- Phase out price regulation on retail level
- Where price regulation exists it has to be in line with market conditions
- Price regulation for all household customers is no adequate means to help the poorest → improve the social security systems

Removing barriers to retail competition

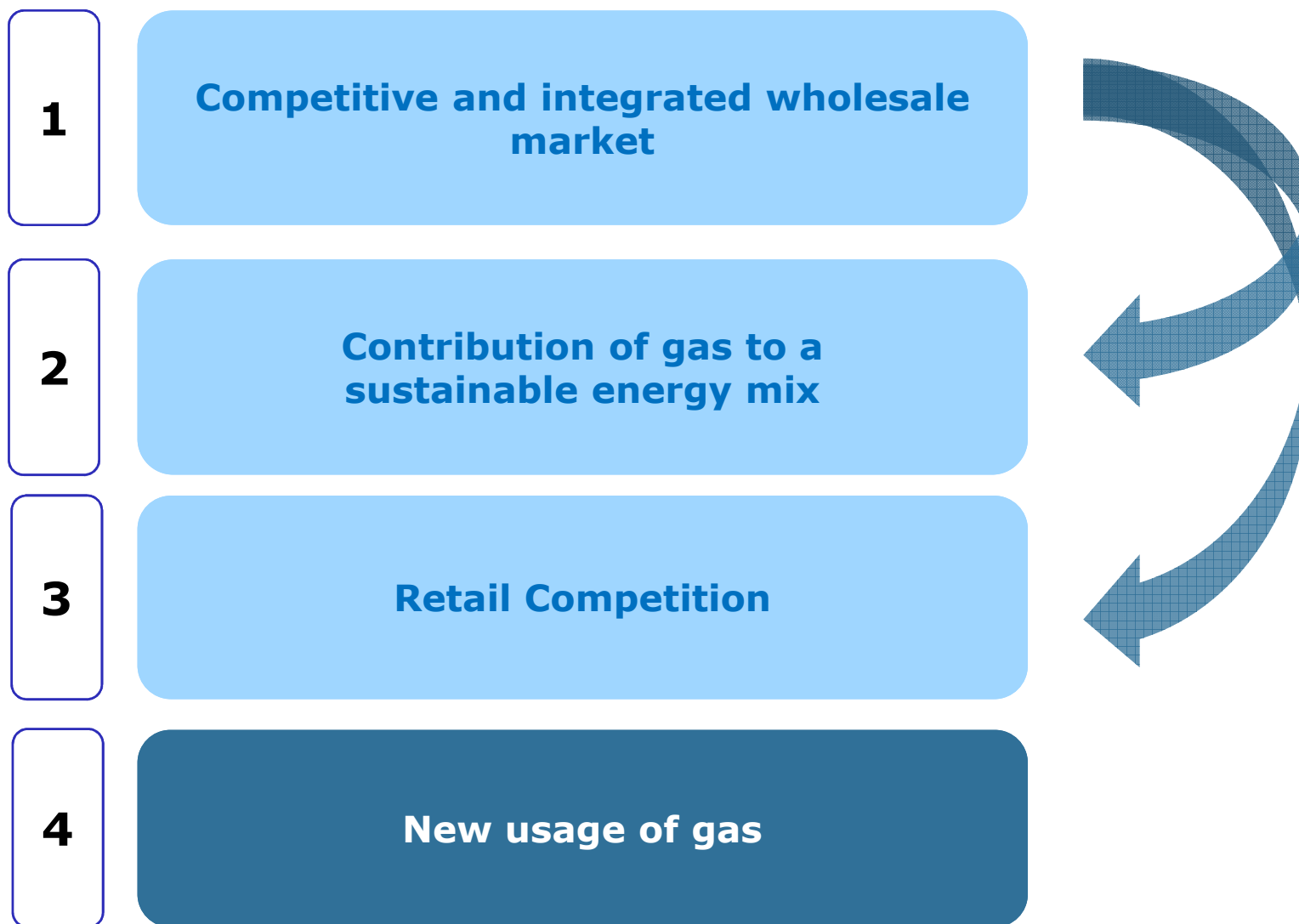
- Possible harmonization of clearing arrangements and data exchanges
- Future role of DSOs as enabler of competition?
- National vs. EU retail license

Consumer protection and empowerment

- Close monitoring of the implementation of 3rd Package consumer protection provisions
- Further facilitating consumer empowerment
- Further harmonisation of arrangements for consumer switching?
- Why should the IEM be limited to wholesale only?

..to the benefit of customers

Possible fields of action



Exploring new markets for gas

- Natural gas for vehicles
 - LNG
 - Compressed Natural Gas (CNG)
- Biogas
- Power to gas



3. GTM review and update

Main milestones

- Concept paper by November 2013 – justification and problem identification
- By December 2013 first outline of draft of GTM review and update
- By May 2014 final draft proposal
- In June-July 2014 finalisation and publication of the updated GTM

ACER informal advisory panel to support the development of the GTM review

Stakeholder workshops

- 8 October 2013, Vienna (written comments invited)
- 20 March 2014, Ljubljana, with public consultation
- Mid-May 2014, Brussels (written comments)

→ **stakeholders are encouraged to participate in the process and provide input (to gtmupdate@acer.europa.eu)**

Thank you for your attention!

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