Gas Infrastructure Europe

CEER workshop on barriers for gas storage product development

GIE / GSE

Brussels, 17 February 2017

Agenda

1. **Introduction: GIE / GSE and speakers**
2. **Current situation of the European gas storage market**
3. **Examples on barriers for gas storage product development**
   - ❖ Tariff overview 2017
   - ❖ Access to storage (GER, AT examples)
   - ❖ Lengthy approval process (CZ example)
   - ❖ Unnecessary limiting regulation (CZ example)
4. **GSE general feedback to the CEER report**
5. **GSE vision on an ideal EU gas storage market (and its regulatory framework)**

1. Introduction: GIE / GSE and speakers (1)

1. Introduction: GIE / GSE and speakers (2)

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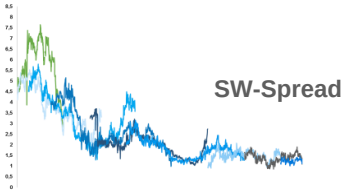
2. Current situation of the European gas storage market (1)

Challenging market environment requires fair treatment of UGS services

Market conditions



The main value driver – **summer/winter spread remains low**

Competition

Fierce competition with other storage operators and **other sources of flexibility,** e.g., virtual storage, flexible supply contracts…

Regulation

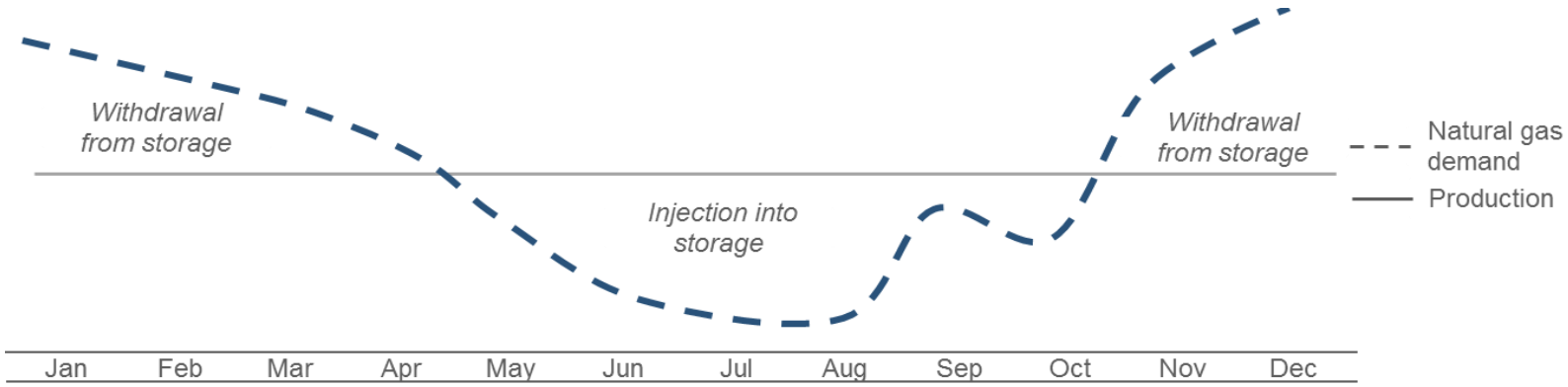
Contribution to **security of supply** currently **not rewarded** in most European markets

Transport

Unfavourable regulations increase the complexity and endanger the commercial attractiveness of storage

2. Current situation of the European gas storage market (2)

UGS is a crucial part of the energy system, as they balance demand and production



… and makes the gas system more efficient

Production	Transport	Trading	Consumption
▶ "Insurance" for technical non-availability of production	▶ Less investment in long-distance pipelines needed to cover seasonal demand ▶ System services (balancing energy)	▶ Asset backed source of flexibility	▶ Security of supply ▶ More stable prices for customers

2. Current situation of the European gas storage market (3)

Commercial value of storage depends mainly on gas price spreads and cost of infrastructure

Value drivers

Intrinsic value

Ability to capture the summer/winter spread at contract closure

Extrinsic value

Added value based on the volatility of the gas spot and forward price curve

Potential added value pool

Strategic value (e.g. power plant supply), balancing services, multi-hub/cross-border products

Cost drivers

Transport Entry/Exit

Customer pays for transport (entry/exit) capacity booking

Variable injection costs

Average operating injection power/gas is charged

Cost of Capital

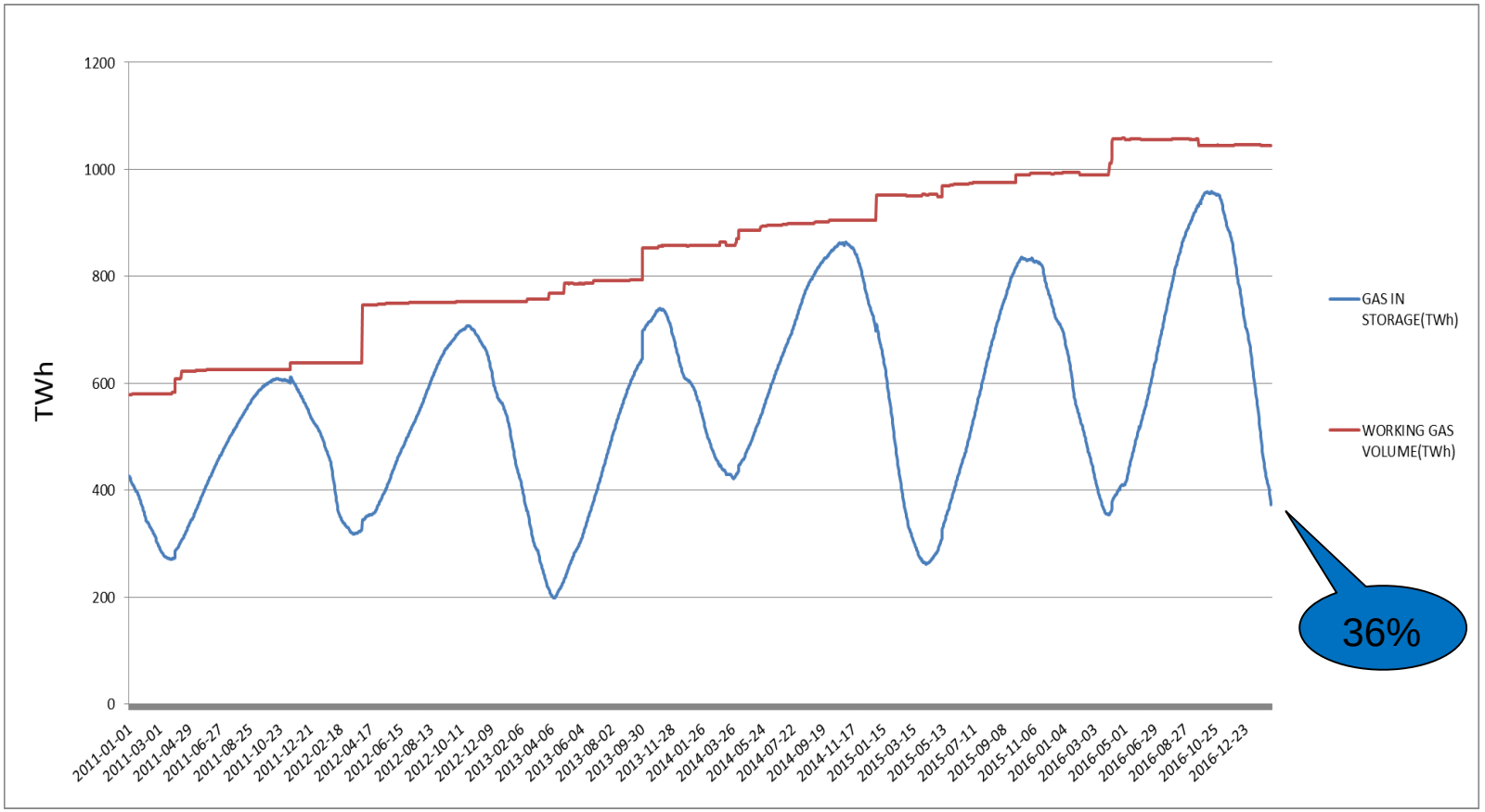
Customer's cost for financing gas in stock

Additional charges

e.g. Market Area Conversion Levy

2. Current situation of the European gas storage market (4)

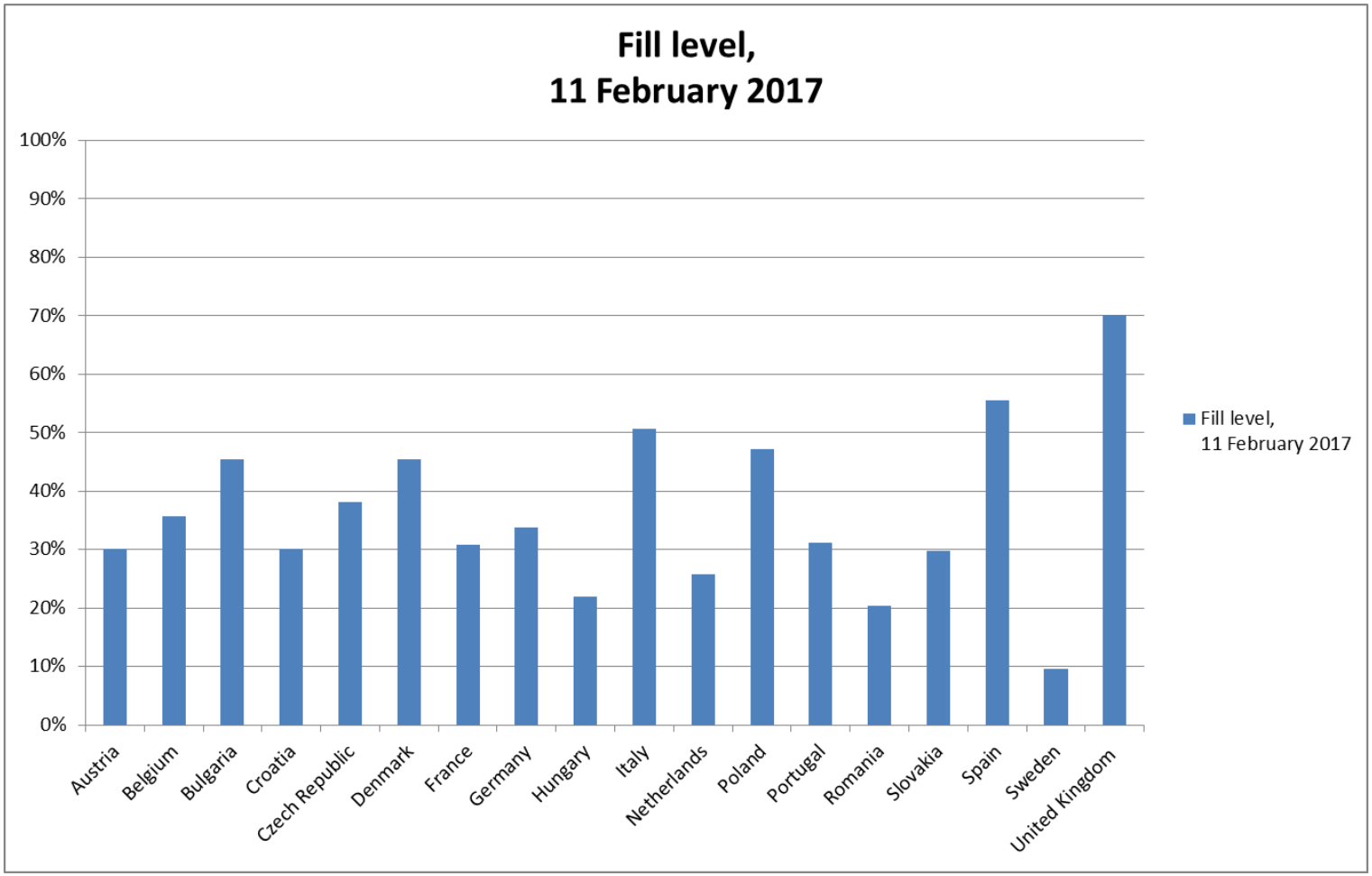
2017/02/11 European gas storages fill level is 36%, the lowest in past 6 years



Source: AGSI+, Gas Storage Europe

2. Current situation of the European gas storage market (5)

Actual fill level (%) by Member State, 11 February 2017

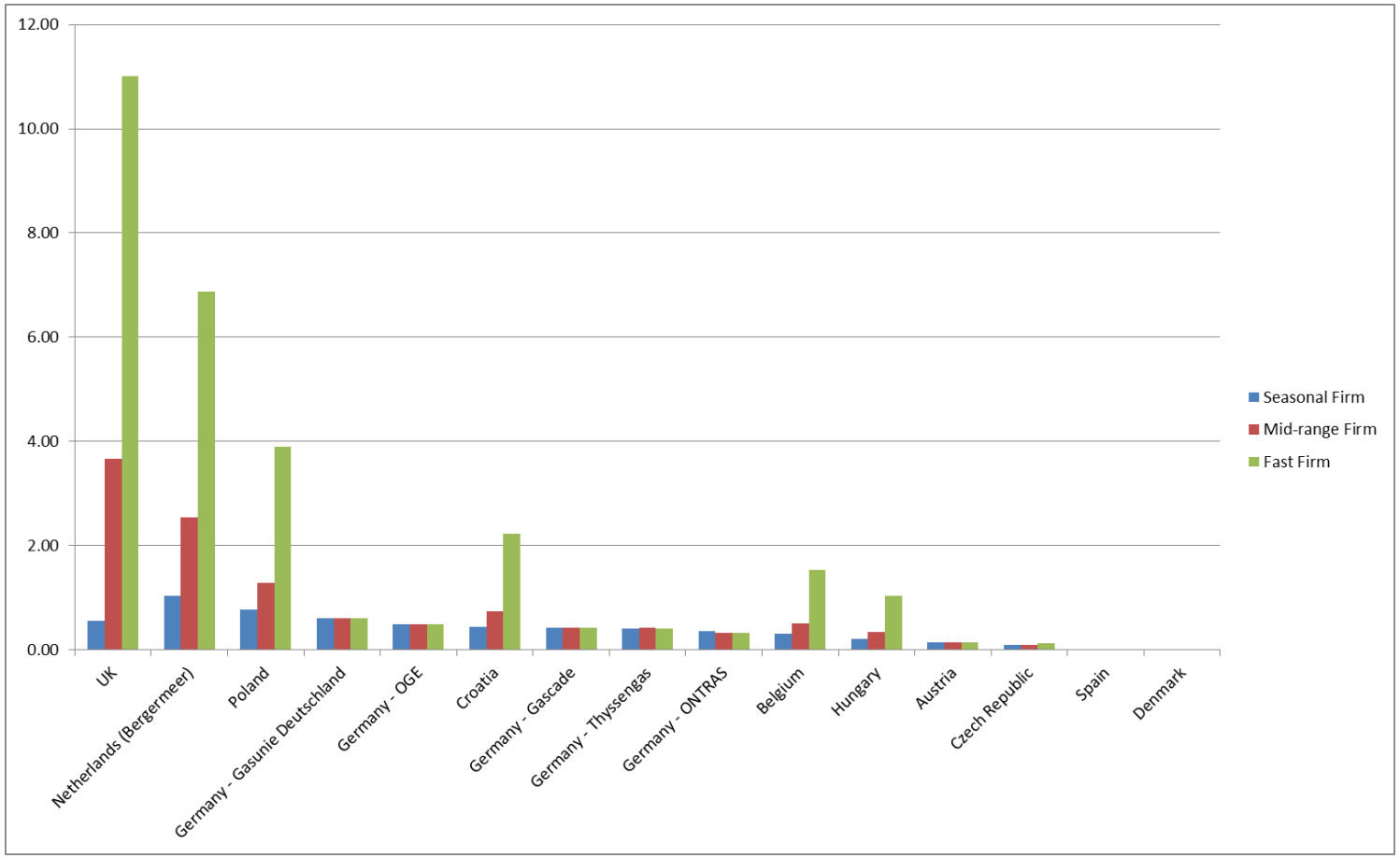


Source: AGSI+, Gas Storage Europe

3. Examples on barriers for gas storage product development (1)

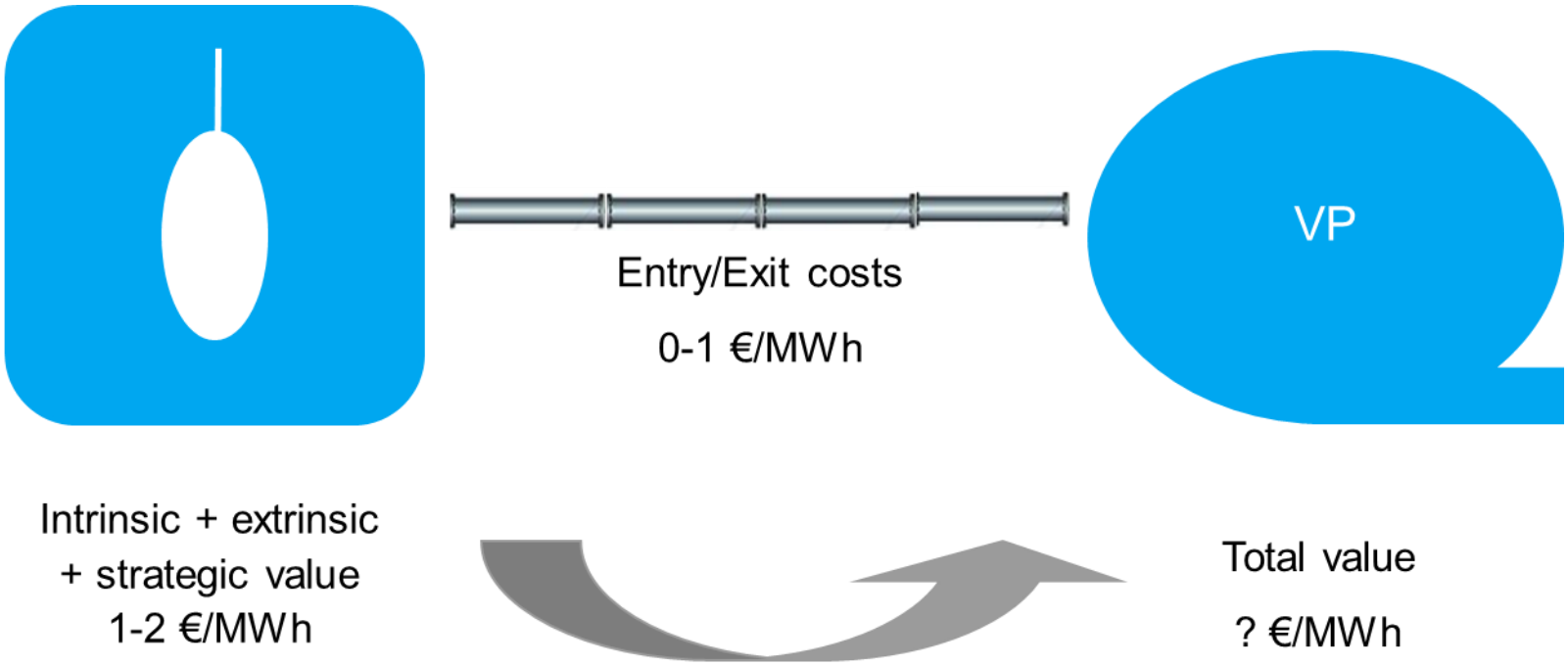
Storage Transmission tariffs at Storage Connection Points (SCP)

- Seasonal Storage Use (Injection/Withdrawal 100/100 days)
- Mid range use (Injection/Withdrawal 60/60 days)
- Fast churn (Injection/Withdrawal 20/20 days)



3. Examples on barriers for gas storage product development (2)

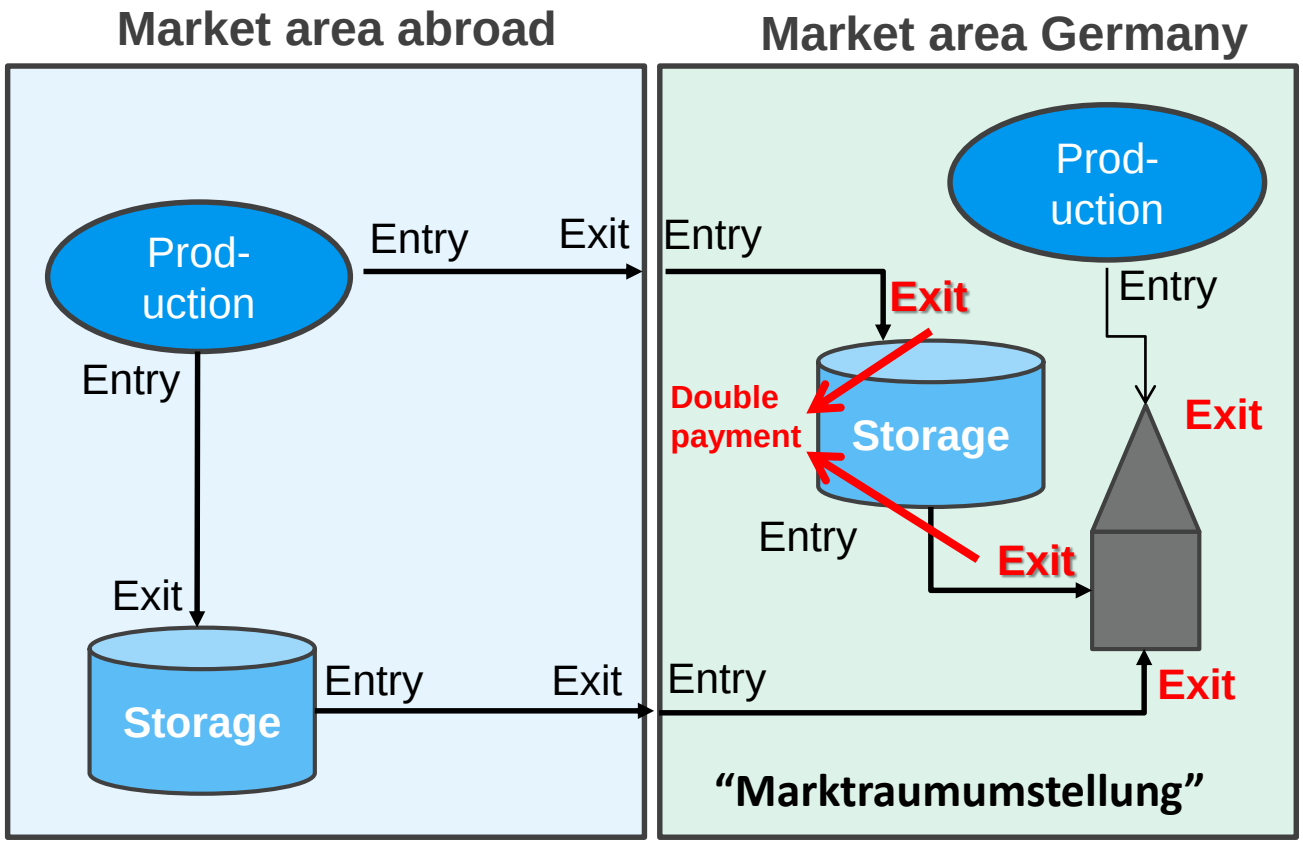
Transport as important element for storage value



➔ **Value of storage only to be realised at the VTP**

3. Examples on barriers for gas storage product development (3)

Distortion of competition through conversion costs in Germany

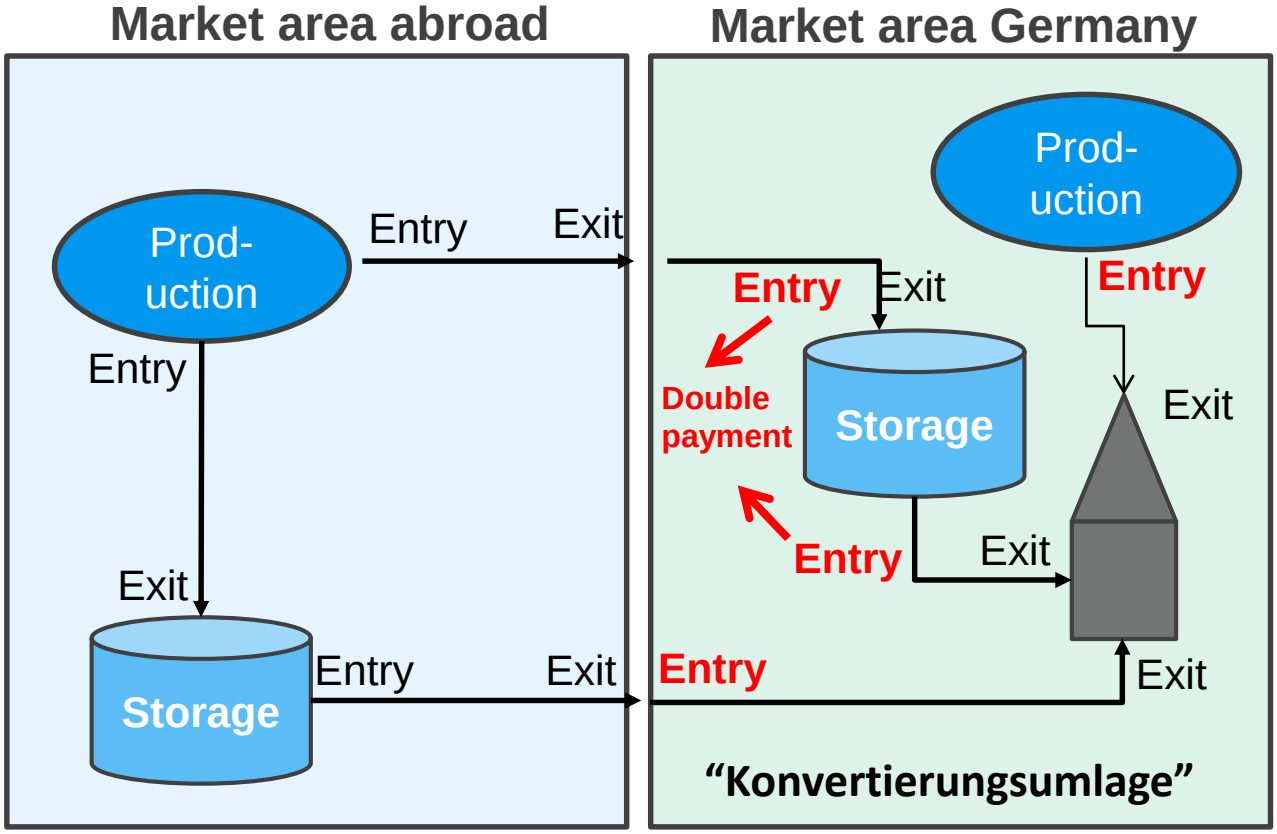


BNetzA plans to allocate the resulting costs equally to all points. Storage users in Germany will pay twice the market region changeover levy, once when injecting into storage and second when delivering to the customer

Allocation of costs to Exit points due to refinance costs for market region changeover from low caloric to high caloric gas

3. Examples on barriers for gas storage product development (4)

Distortion of competition through double payment of a conversion fee in Germany



Allocation of conversion costs due to conversion of H-gas into L-gas in order to provide sufficient L-gas quantities in Germany

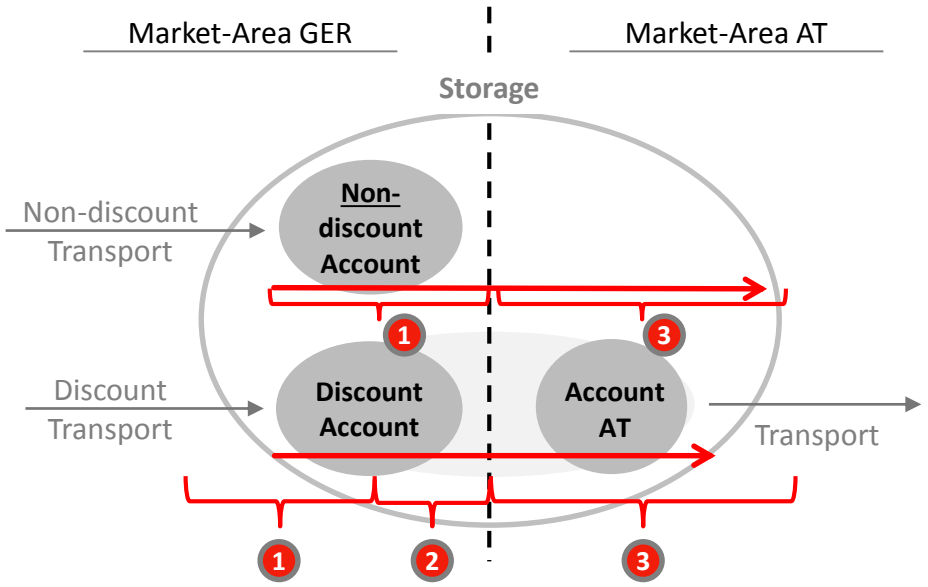
Conversion costs are allocated to all points resulting in double payment for storage customers favouring flexibility from abroad sources

Both fees reduce the value of German storages compared to other flexibility sources

3. Examples on barriers for gas storage product development (5)

Different regulatory regimes for cross border storage use in GER and AT

Two different accounts in Germany for domestic and cross border use !



One account in Austria for storage use (domestic and cross border)

1

Injection Costs (German TSO)

	Exit tariff	
x	Discount factor	50%
x	Interruption factor	89%*
x	Multiplier	1.25

2 Transfer fee (German TSO)

Max. Exit tariff - Min. Exit tariff

x Multiplier 1.40

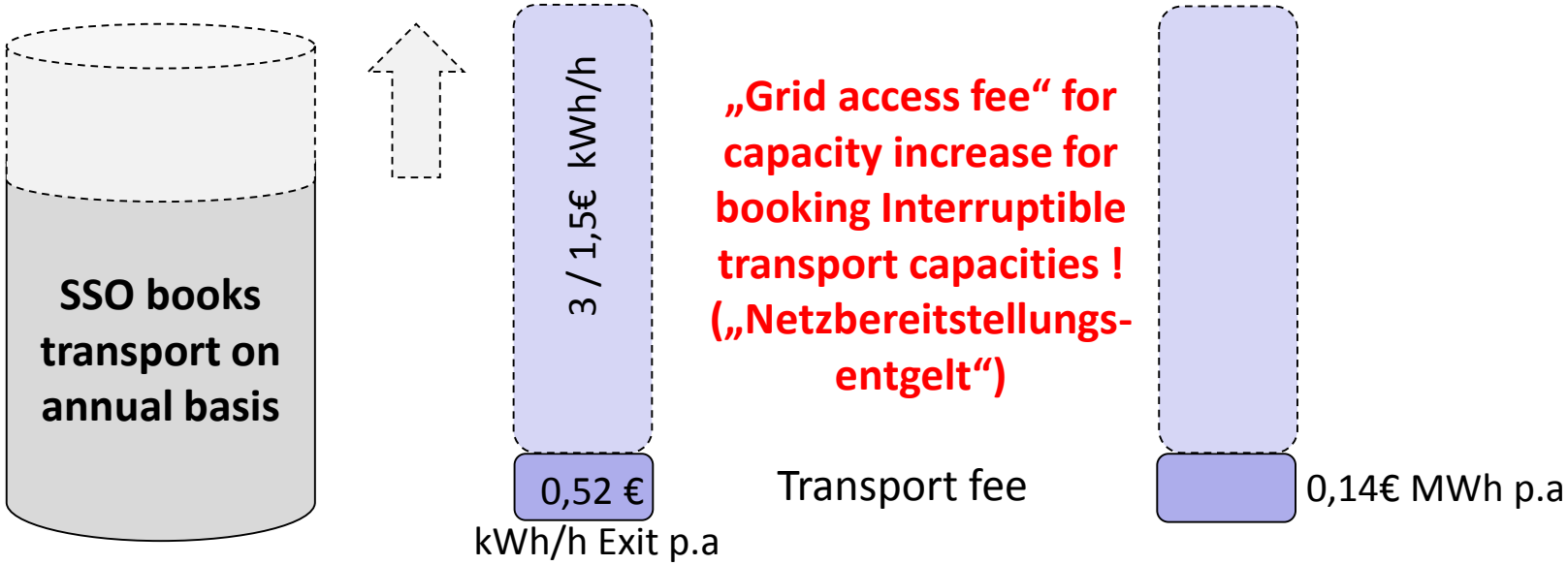
3 Withdrawal Costs (Austria)

Cross-border tariff

* Determination and adjustment of Interruption factor each year based on 3y –average historical data

3. Examples on barriers for gas storage product development (6)

Entry barrier for storage use in Austria in case of capacity expansion



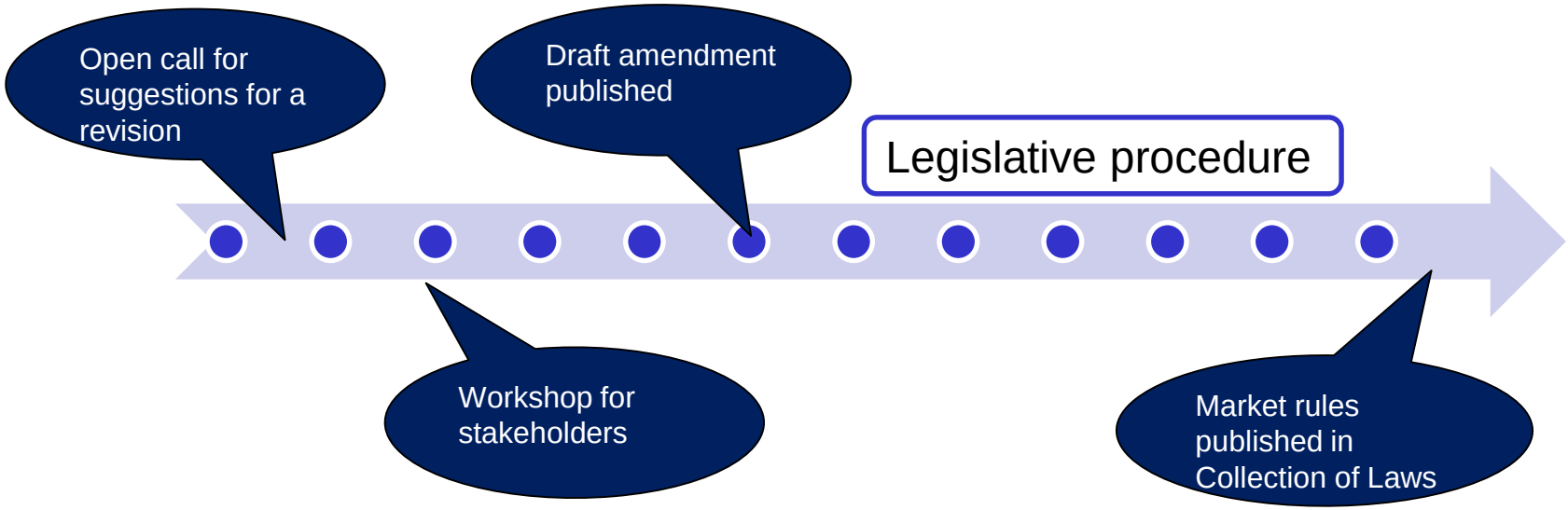
No customer would pay additional 1,5/3 € kWh/h for 1-3 years storage contract

3. Examples on barriers for gas storage product development (7)

- Lengthy legislative procedures slowing down introduction of new storage products, example from CZ

Approval process for a new gas storage product
(revision of a Gas Market Rules Decree)

Example: introduction of an intraday firm capacity in 2016



3. Examples on barriers for gas storage product development (8)

- Unnecessary limiting regulation that allows us to sell storage capacity only in one type of an auction, example from CZ

i.a. Vicrey auction (2nd highest bid)

4. GSE general feedback to the CEER report

- Generally positive feedback from GSE members
- Descriptive CEER report where most of the barriers have been identified
  - ✓ Transmission tariffs and access to the network → ***NC TAR is expected to enter into force in April 2017. NRAs shall implement harmonized methods taking into account the net benefits of storage to avoid double payment required***
  - ✓ Prohibition of certain activities → *NRAs should carefully consider,* ***on a case-by-case basis****, the connection between SSOs trading activities / access to transmission capacity and the efficient operation of the storage facility, which may include the provision of different storage products -* ***clarification needed***
  - ✓ Regulatory framework → ***eliminate entry barriers for storage services to compete on the flexibility market and recognize the insurance value***
  - ✓ Storage obligation → *the use of storage obligations should be restricted to situations where there is clear market failure and the impact on the market should be understood and minimized* ***-> different models are in place, there is no one size fits all solution***
- GGPSSO fully implemented by SSOs and mostly replaced by European legislation eg tansparency requirements

5. GSE vision on an ideal EU gas storage market (and its regulatory framework)

- A challenging times for gas storage operators (low summer/winter spread)
- EC's study on the role of gas storage should reflect this alarming situation for SSOs and recognize key role of storage in ensuring security of supply

Proposed solutions

- Recognizing the insurance value of storage
- Recognizing the system value of storage
  - Fair transport fees at storage connection points (SCP)
  - Adequate quality in transport services at SCP
  - Recognizing the existence of a flexibility market
- Reduce administrative / regulatory burden for SSOs
- Maximize level playing field for flexible and innovative products

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Gas Naturally

GN is a campaign to showcase the essential role of natural gas in the forthcoming energy revolution. The mitigation of climate change has become one of the most important issues for the gas industry.

Thank you for your kind attention.

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