

Introduction

Anders Plejdrup Houmøller CEO, Houmoller Consulting ApS

- ⇒ This PowerPoint presentation is animated
 - ✓ It's recommended to run the animation when viewing the presentation.
- ⇒ On most computers, you can start the animation by pressing <u>F5</u>.
 - ✓ Now the presentation moves one step forward, when you press <u>Page Down</u>. It moves one step backward, when you press <u>Page Up</u>.



New gas grid fees

Improved transparency and competition

- This document presents a new system for the gas grid fees.
- ⇒ In order to improve the gas market's transparency and competition, the domestic grid fees should be paid directly by the domestic consumers
 - ✓ Note: also today, the domestic consumers finance the grid by paying grid fees.
 - ✓ However, in many countries, the consumers currently pay some of the grid fees indirectly via their commercial supplier
 - Which is bad for transparency and competition.



Step one: domestic trading of gas - 1

In the first part of the presentation, we'll only consider domestic trading of gas.

At the last slide, we'll consider cross-border trading of gas.

Terminology: in this presentation, a "commercial player" is a player, who buys and sells at the whole-sale market.





Gas exchange



Commercial player B



consumer



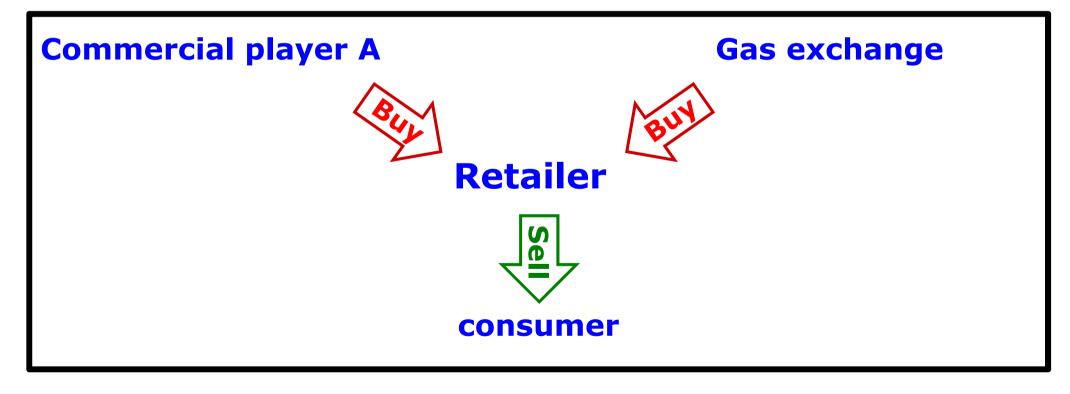
Gas exchange



Step one: domestic trading of gas - 2

In order to simplify the discussion, we'll focus on a domestic retailer.

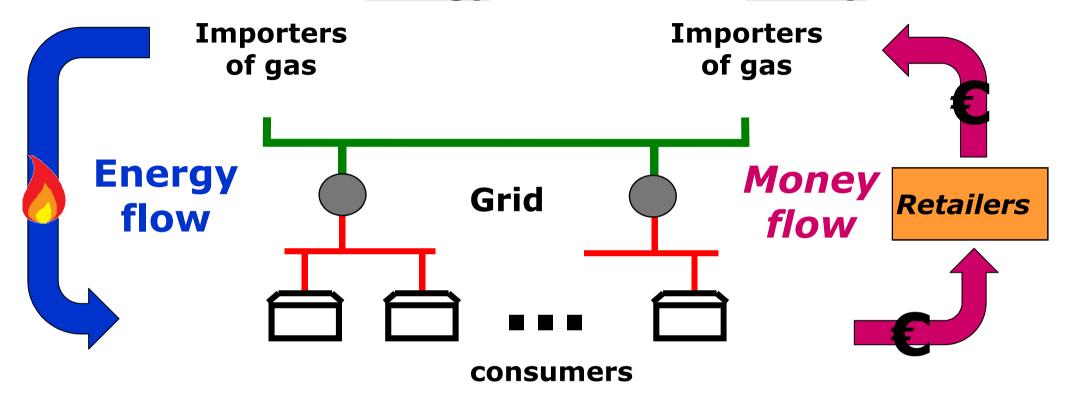
Here, "domestic" means the retailer does not import the gas himself. He buys gas inside the country.







A flow of energy and a flow of money



Energy flow is created by consumers and cross-border traders.

Domestic retailers are <u>not</u> involved in the energy flow.

Hence, they are not users of gas grid capacity.

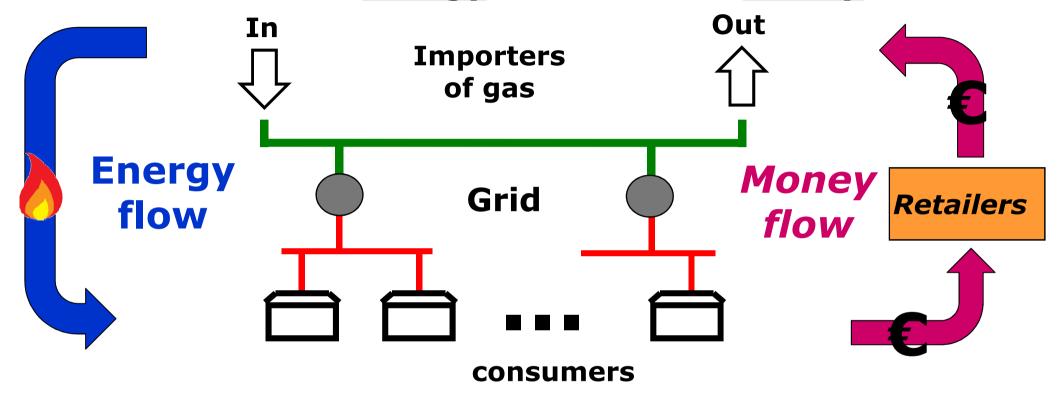
Therefore, domestic retailers should not pay for capacity.

Domestic retailers are heavily involved in the flow of money.

Two flows



A flow of energy and a flow of money



You may import gas here, and export it there.

Question: apart from such import-export, who is using capacity?

Answer: the consumers are the users of capacity.

Hence, the consumers should pay for capacity directly.



Division of work

Between grid companies and commercial players

- ⇒ The commercial players set the price for the energy
 - ✓ The TSO and the distribution grid operators must never set the price for gas.
- The grid companies take care of everything concerning the physical system and the security of supply
 - √ They must ensure there is always sufficient energy & capacity.
 - ✓ A domestic commercial player must <u>never</u> be concerned with the physical state of the gas system.



Consumer gas bill

Payment for grid (monopoly supplier)

EUR XXX

Payment for energy (commercial supplier)

EUR YYY

The size of the grid payment must <u>not</u> be dependent upon the consumers' choice of commercial supplier.

Transparency is required: an unambiguous separation making it clear what the consumer is paying for the commercial and the monopoly service, respectively.



The transparency and the separation requirements are <u>not</u> met, when the consumer <u>indirectly</u> is paying for grid capacity via the commercial supplier's capacity payment.

Houmoller Consulting

Gas grid tariffs

The important criteria are the following

- ⇒ The fees must ensure the financing of the grid.
- ⇒ The fees must provide transparency
 - ✓ Distinction between monopoly services and commercial services
 - Meaning: clear separation between payment for grid and payment for energy.
- ⇒ The fee structure must <u>not impede the competition</u>
 - ✓ For example: the fee structure must <u>not impede the</u> <u>establishment of new retailers</u>.
- New tariffs: the burden of paying grid fees should remain unchanged among the consumers
 - ✓ For example: no new distribution of grid fees between peak load users and base load users.



Gas grid tariffs With capacity fees paid by the consumers

Transmission grid

The distribution grid owner pays volume fees and capacity fees to the transmission grid owner (TSO)

Distribution grid

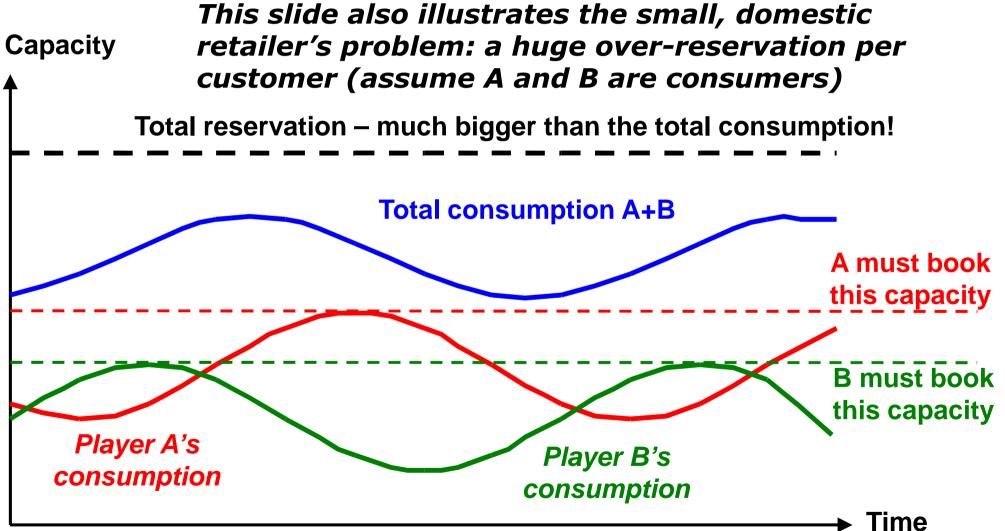


The consumer pays volume fees and capacity fees to the distribution grid owner



Capacity reservation may create artificial bottlenecks

Two domestic retailers A and B





Improved competition on the gas market

- Capacity fees paid directly by consumers do not discriminate against small retailers.
- ⇒ Because: with this system, a domestic retailer needs not reserve grid capacity for his customers.
- ⇒ Thereby, it becomes much easier for new retailers to enter the market
 - ✓ As this artificial, extra entry barrier is removed.
- **⇒** This improves the competition.



Capacity fees paid by consumers: pooling consumers' capacity utilisation

- With the new fee system, each consumer's consumption is part of the biggest possible capacity pool
 - ✓ For the distribution grid, which the consumer is using:
 - The consumer is in the pool af all users of this distribution grid.
 - √ For the country's transmission grid:
 - The consumer is in the pool of all domestic consumers.
- ⇒ Note: physically, this is always the case
 - ✓ So the these grid fees reflect reality.

Who is paying how big grid fees?

The distribution of the grid fees among the consumers

- ⇒ On the previous slides, it's claimed that consumer capacity fees can be organised, so the distribution of the grid fees among peak load users and base load users remains the same.
- ⇒ Let's examine the claim:
 - ✓ Assume a domestic retailer wins one, new customer.
 - ✓ With the current capacity fees: how much will the retailer's capacity cost increase?
 - ie, which capacity fee should the retailer charge the new customer?
 - √ The answer is unknown to the retailer!
 - ✓ The capacity fee charged to the new customer is a choice made by the retailer based on a guess.
- Upshot: actually, the <u>in-transparency</u> of the current grid financing system makes it impossible to verify or reject the claim!



Introducing new gas grid fees

Capacity fees paid by consumers

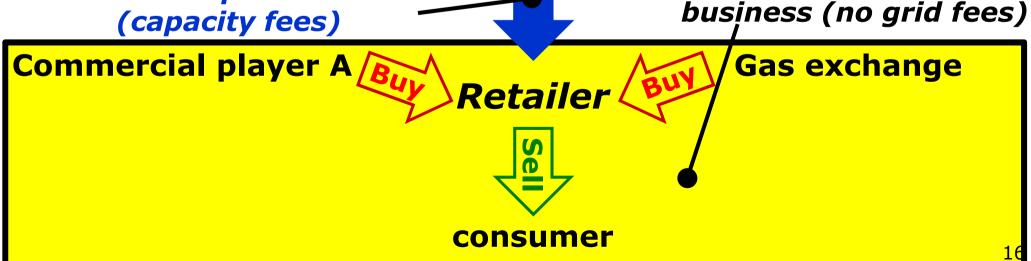
- ⇒ Question: how to introduce the new fees in a way, so the distribution of the grid payment between peak load users and base load users remains the same?
- ⇒ Answer: due to the in-transparency of the current system, a grid operator introducing the new fees must resort to estimates.
- ⇒ At least we'll have full transparency after the shift to the new grid fees
 - ✓ Each consumer will know exactly the payment for the grid and the payment for the energy, respectively.
 - This is no longer based on the retailer's guess.



Import and export of gas

- ⇒ It will take a long time before we have market coupling on the gas market.
- ⇒ Therefore, for cross-border energy trading, we'll live with capacity tariffs for a long time
 - ✓ Auctioning of cross-border capacity (or the like).
- **⇒** Therefore, the system presented on the previous slides applies to the domestic gas grid only.
- ⇒ Hence, for the "domestic retailer" presented in this document: ✓ Actually, this is the "domestic part" of the retailer's business.
 - Retailer's domestic Retailer's import business

(capacity fees)





Thank you for your attention!

Anders Plejdrup Houmøller

Houmoller Consulting ApS

Tel. +45 28 11 23 00

anders@houmollerconsulting.dk

Web houmollerconsulting.dk