



GAS QUALITY

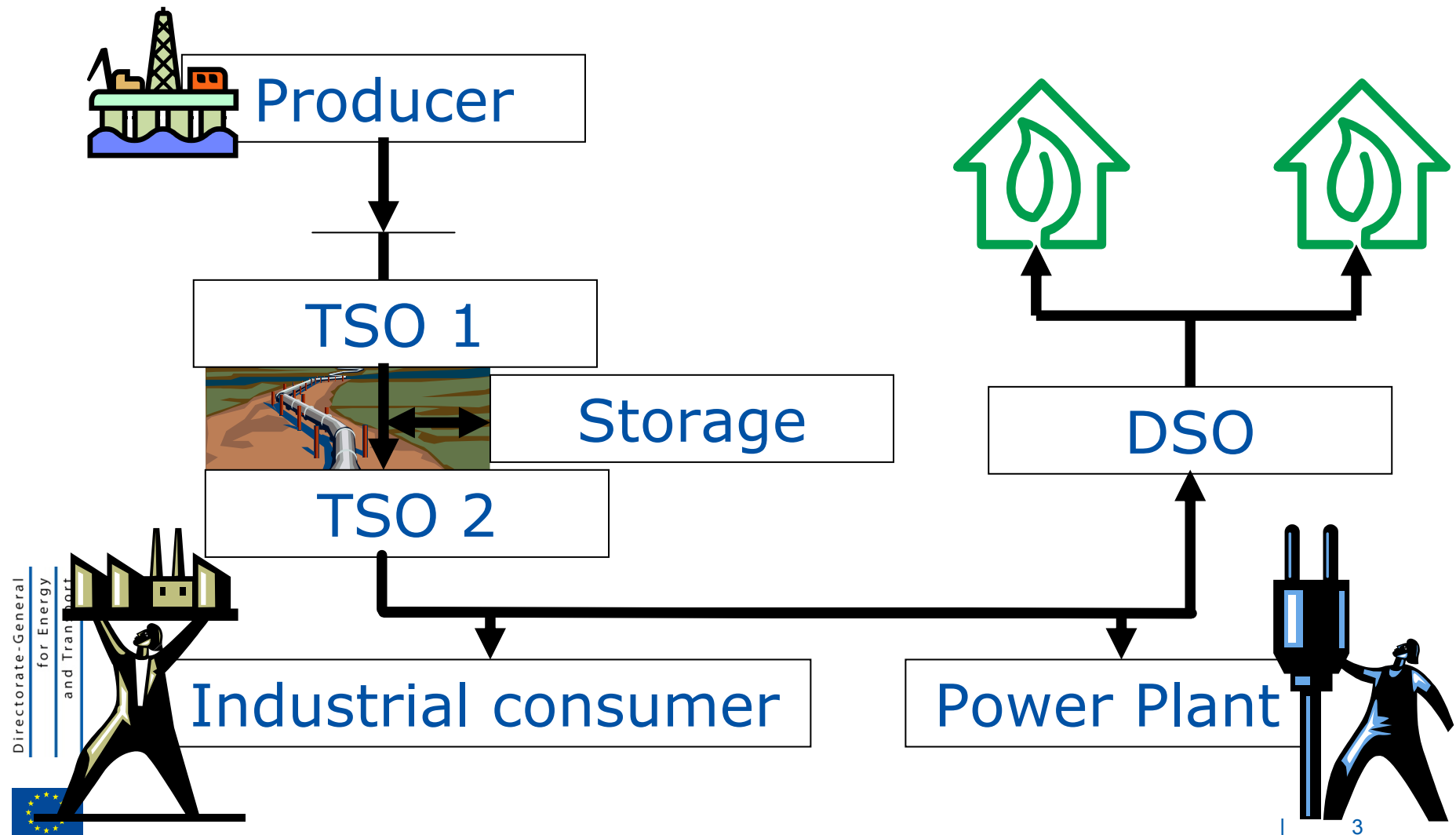
The European policy

C2 – Electricity and Gas
Mark van Stiphout

● Content

- The gas supply chain
- European policies and gas quality
- The internal energy market: Physics vs. Contracts
- Harmonisation of gas quality
- Mandate to CEN

● The gas supply chain



● EU policy and gas quality

- Competition
 - » Gas supply market
 - » Gas appliance market
 - » Industry that uses gas as feedstock
- Security of Supply
 - » Long-term: supply to the EU
 - » Short-term: response to crises
- Sustainability
 - » Gas as back-up fuel to renewables
 - » Gas as cleanest fossil fuel
 - » Efficiency of appliances
- Safety

● Climate change and energy efficiency

- Efficient appliances:
 - » Boilers
 - » CHP
 - » Industrial appliances (turbines)
- Emissions
 - » CO₂
 - » NO_x
- Biogas

→ Other units in DG ENER are involved

● Internal energy market and security of supply

- Network integration
 - Decoupling of physical flow and contractual ownership:
 - » Entry-exit systems
 - » Backhaul
 - » Hubs, trading and liquidity
 - Decrease of domestic consumption
 - Variety of imports
 - Reverse flows and emergencies
- Physical vs. Contractual flows?

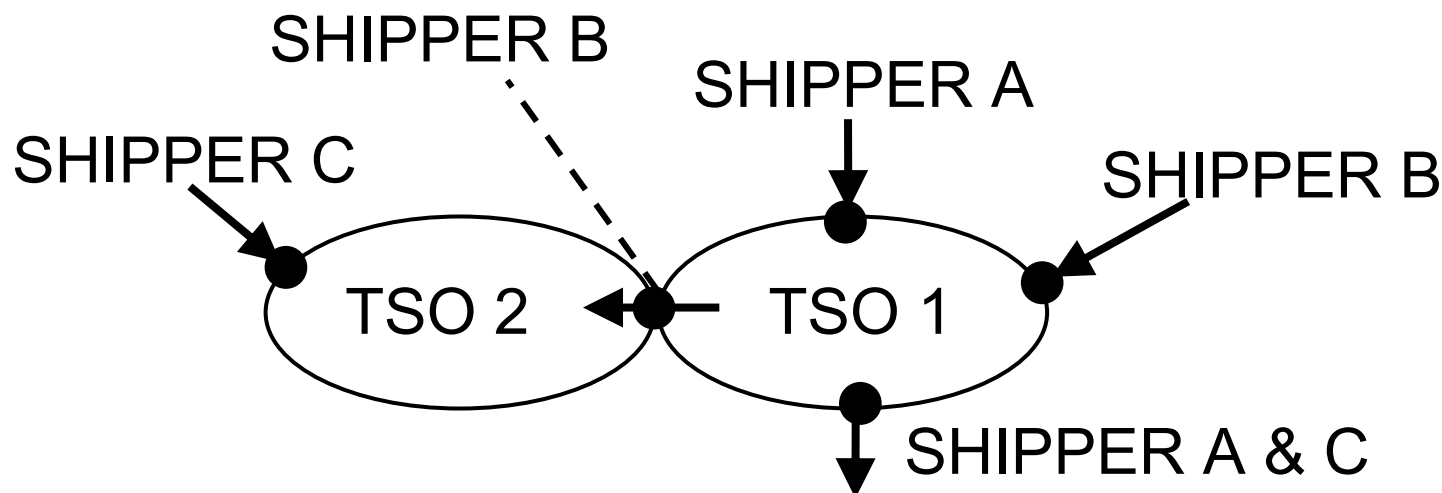
● Responsibility and ability

- TSOs know the gas
- TSOs have the ability

→ Within their system!

- Suppliers own the gas
- Suppliers have the responsibility

→ For their own gas!



● Policy and gas quality Goals

- Sustainability and climate change
 - » Low emissions
 - » Very efficient appliances
- Safety
- Competition and Security of supply
 - » Maximum flexibility

→ Conflictuous goals???

- Gas Quality has always been an issue
 - 1st European Regulatory Forum for Gas in 1999
 - EASEE-gas CBP
 - EU's interoperability project: inventory

● But it has not been solved yet!

- CBP ends at the border
- Gas ends at the burner tip
- What is the effect on appliances?

→ Mandate to CEN to develop GQ standards

→ Assess effects on the whole gas chain

● CEN Mandate M/400

- Testing of appliances for combustion parameters
 - » Including installation and maintenance
 - » Efficiency, safety, emissions
- Costs and benefits of harmonisation for the whole chain
 - » Scenarios of gas flows and sources
 - » Indicators for the whole chain based on policy framework
- CEN to define gas quality standards

→ define standards that are as wide as possible within reasonable costs

● Testing of appliances: GASQUAL

- Monitored and tendered by CEN
- Testing of appliances throughout the EU
- Testing laboratories
- Costs: 3 million Euros
- Funding by DG ENTR and DG TREN

● Cost-Benefit analysis for the whole gas chain: GL and Pöyry

- Producers, Suppliers, Traders
 - Infrastructure operators
 - Appliance users, e.g. turbines
 - Testing results are input
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- Scenarios to model gas variation in the EU
 - Cost indicators to analyse costs for different actors in different scenarios

→ Where to put the costs?

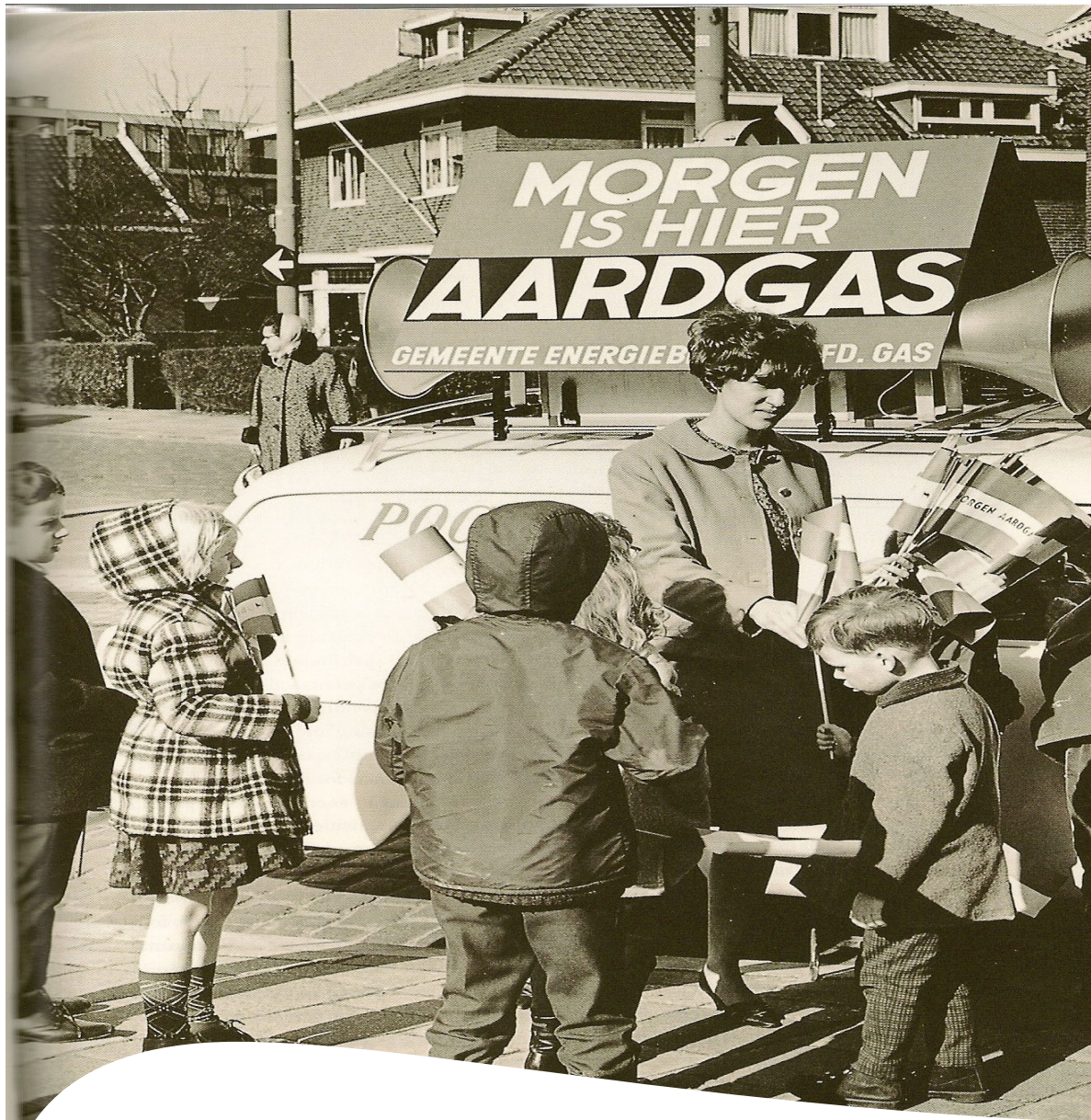
● Planning

- Gasqual: end of 2010
- GL Industries: end of 2011
 - » Scenario development
 - » Meetings with stakeholders for cost information
- CEN standard: 2013

● Conclusion

- Gas quality needs a standard
- Analyse effect on whole gas chain
- Interaction with appliance policy
- CBA to find optimal allocation of costs
- Clarify responsibilities
- Standards for the future!

→ Get involved in the solution:
participate in the workshop tomorrow



**Thank you
for your
attention**

- http://ec.europa.eu/energy/gas_electricity/gas_quality_harmonisation_en.htm