

Introduction

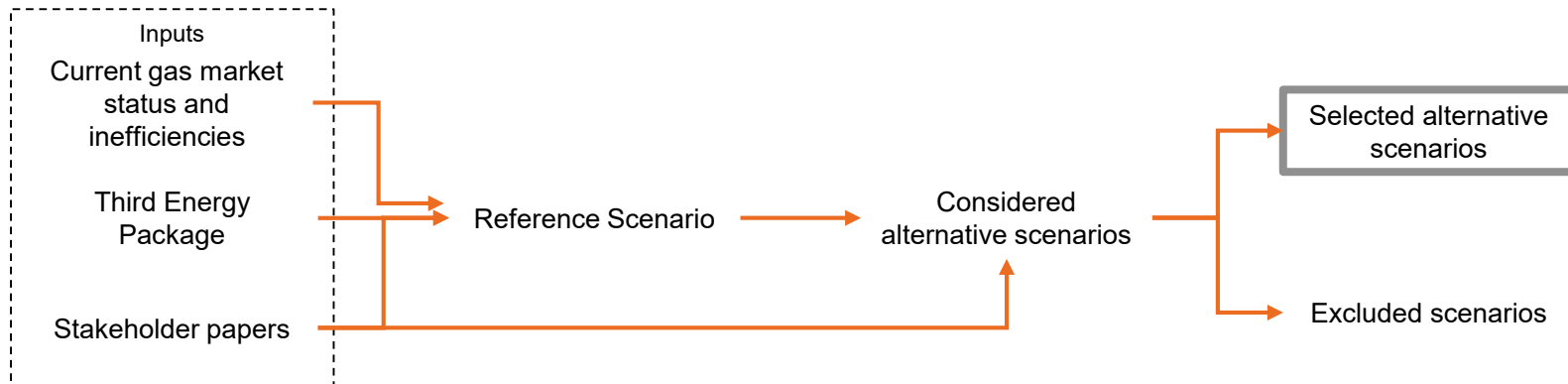
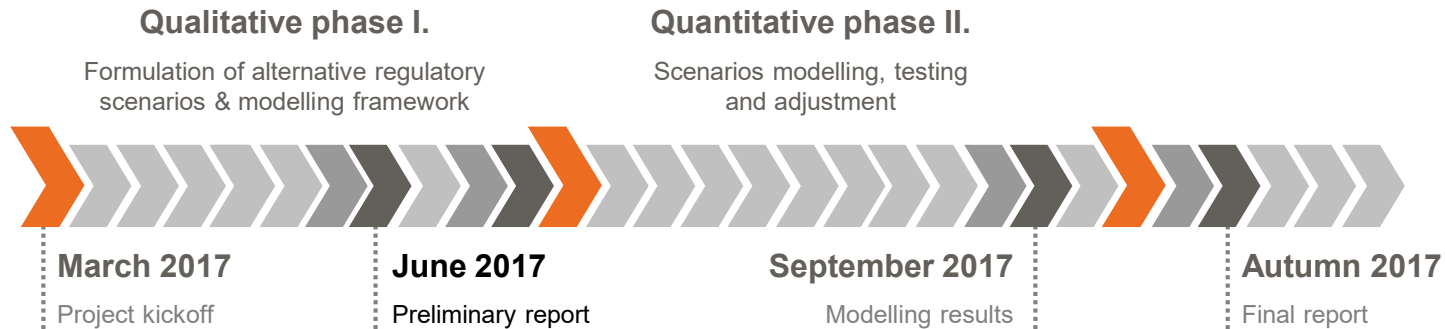
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Workshop on gas market modelling for the
Quo Vadis project
26 July, 2017
Budapest

- Improve the transparency of the modelling background for the QV project
- Review the major characteristics of the European Gas Market Model (EGMM)
- Partially reflect on stakeholders' comments relevant for modelling
- Illustrate the welfare analysis characteristics of the EGMM
- Collect feedback on modelling approach and assumptions
- Make more explicit the limitations of EGMM modelling
- Not to define a task force to refine EGMM

- Policy scenario analysis by comparing welfare impacts of changes in
 - infrastructure topology (new infrastructure) and performance (existing infrastructure) (PCI, PEI, DRS PA2)
 - system use tariffs (CESEC)
 - LTC / LNG prices (Cheniere)
- CBA/CBCA analyses
- Supply security analyses
- Wholesale price forecasting

Project approach and status



Phases of scenario analysis

1. Status Quo scenario: 2016 IGM and global supply structure
2. Reference Scenario (2020): based on Status Quo, fully implemented Third Package. Compare welfare change to Status Quo
3. Regulatory Scenarios (2020): marginal and non-marginal regulatory changes and welfare effects compared to Reference scenario
4. Sensitivity Scenarios (2020): compare results to Reference/Regulatory scenarios
 - ▶ Supply shocks: domestic production (eg. Ukraine, Romania, Netherlands), higher LNG penetration, failing North African supplies
 - ▶ Demand shocks: fuel switching in the electricity sector
 - ▶ Extreme scenarios: combination of shocks to create extreme conditions.

- LNG & Storage strategy follow up study (ongoing, European Commission)
- Effect of tariffs on natural gas pipeline utilisation and flows in the CESEC region (2016, European Commission)
- CBA of PECI projects for the Energy Community (2016, 2013)
- LNG receiving capability of Europe at different price scenarios and pricing strategies and infrastructure bottlenecks (2015, Cheniere and 2016 Danube region)
- CESEC gas infrastructure corridor modelling (2015, European Commission)
- How can renewables and energy efficiency improve gas security in selected Member States? (2015, Towards2030 – Dialogue project)
- CBA of PCI projects for the Hungarian Energy and Public Utility Regulatory Authority (2014-2015, MEKH)
- The impact of gas infrastructure corridors on the regional gas market (MoFA RoBoGo, March 2014), FGSZ South Stream (April 2014)
- Supply Security analyses related to the Ukrainian crisis (2014, Atlantic Council, EFET, IDDRI)
- Measures To Increase The Flexibility And Resilience Of The European Natural Gas Market (2014, IEA)
- Latest significant upgrade supported by FGSZ (Hungarian TSO) (2013)
- Analysis of the CSEE gas storage market; the impact of system use charges on the demand for gas storage capacity (E.ON, 2012) and (MoFA, 2013)

- CBA of the PL-SK gas interconnector (Hungarian Regulator MEKH)
- CBA analysis of the RO-HU-AT gas corridor (Hungarian Regulator MEKH)
- SI-HU interconnector (Slovenian TSO Plinovodi 2016-17)
- Evaluation of PECI infrastructure for Energy Community Secretariat (2016)
- Expert opinion on the Krk LNG CBA (Hungarian Regulator MEKH 2015)
- CBA analysis of the HR-SI gas interconnector (MEKH 2015)

Thank you for your attention

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