

Modelling for CBA: what to, why to, how to, how not to?

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Slovenian gas market in the region workshop

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- Market modelling of infrastructure projects
- Diminishing indigenous production, increasing import need of Europe – infrastructure (PCI)
 - ▶ Well-connected mature market
 - ▶ Not a simple engineering problem
 - ▶ Infrastructure need is highly dependent on demand, political, regulatory inputs and assumptions

- Define main risks and key drivers
- Define impacted stakeholders
- Show robustness
- Helps decision making for promoters
- Compare projects (PECI methodology)
 - Same set of projects come back (only TAP commissioned since 2013) – first mover advantage is with TAP
 - Project ranked positive did not turn negative and negative did not turn positive
 - Defining European infrastructure need – central planning approach – endogeneous investment modelling (SET-NAV)

- Independent
- Transparent: ideal case – online PCI evaluation? Too complex problem
- Inputs and assumptions are crucial
 - PRIMES, ENTSOG, IEA demand/production outlook as key driver > leads to completely different results
 - Low infrastructure scenario > PINT and TOOT bringing the same results (PINT results are easier to interpret) – additional infra need of the project must be addressed!
 - Political and regulatory assumptions: eg. Ukraine transit, limited TPA on infrastructure, delivery point of LTCs may create congestion
 - Region definition (eg. Caspian region)
- Sensitivity is key
 - Determine main risk factors
 - Assign probability?
 - No panacea for unexpected events

- Reference selected should not be an outlier, must be based on realistic assumptions
- Some practical advice:
 - Verify the workings of the model on historical data
 - Set the reference independently
 - Define basic set of sensitivities (the more the better)
 - Demand
 - Supply
 - Key infrastructure setup
 - Lifting regulatory and trade constraints
- No cherry picking from beneficial scenarios

Thank you for your attention

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