

TYNDP 2017 Concept

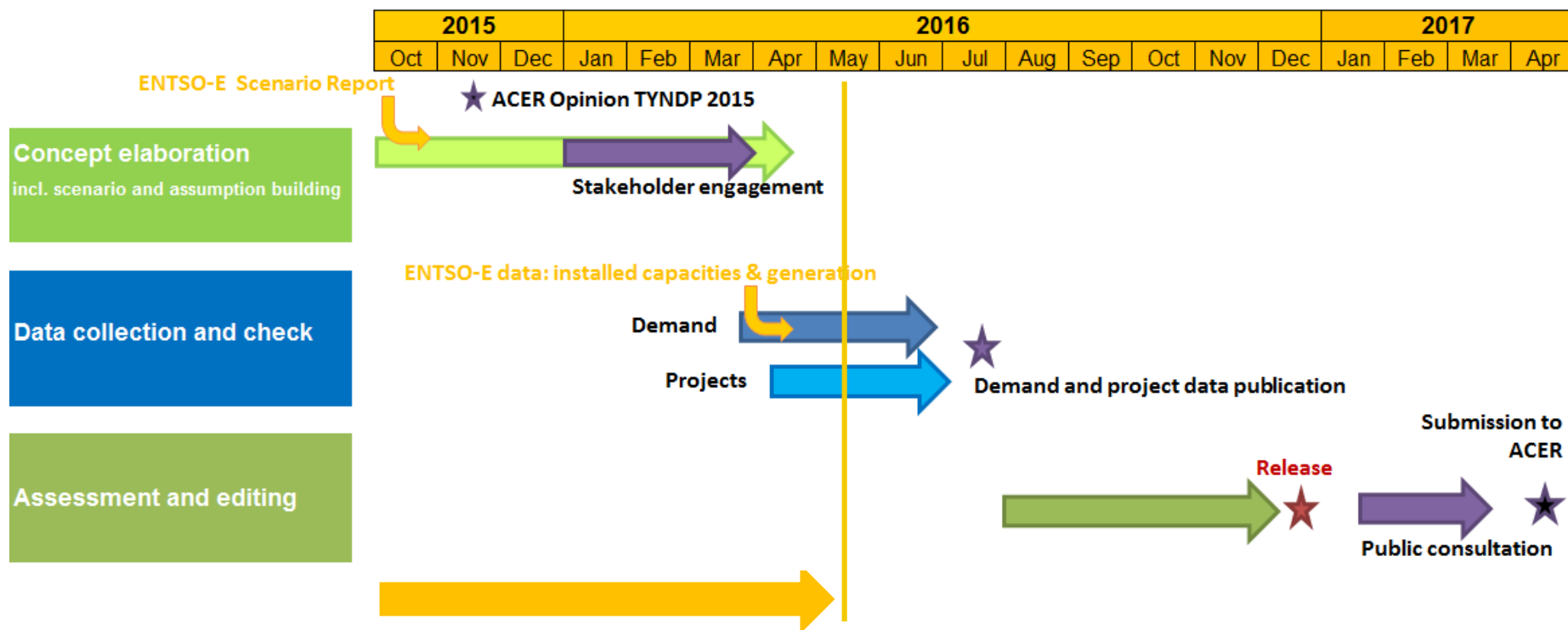
Timeline, concept and next steps

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TYNDP 2017 process and timeline



A high level of transparency towards stakeholders

Reliable inputs ensuring a reliable TYNDP

- > Inputs will feed both TYNDP and the GRIPs (released close in time to TYNDP)

An improved TYNDP assessment

- > An improved assessment of the **infrastructure gap**
- > A better consideration of **project maturity**
- > **Further monetisation** of benefits
- > A new deliverable: the **long-term gas quality monitoring outlook**



Reliable inputs



Reliable inputs: supply potentials

Supply potentials established based on public sources

> Supply potentials, as presented in SJWS#5, are available on ENTSG website

http://www.entsog.eu/public/uploads/files/publications/TYNDP/2016/TYNDP046_160511_TYNDP17_Supply_potentials.pdf



Reliable inputs: 3 scenarios for demand

TYNDP 2017 Scenarios	Slow Progression	Blue Transition	Green Revolution
Energy Policies/ Regulation	2050 targets not realistically reachable	Mainly on track with 2050 targets [closure of coal-fired power plants (regulation)]	On track with 2050 targets
Economic conditions	Limited growth	Moderate growth	Strong growth
Green ambitions	Lowest	Moderate	Highest
CO2 price	Lowest CO2 price (limited spread of carbon taxes)	Moderate CO2 price (carbon taxes mainly spread)	Highest CO2 price (carbon taxes well spread)
Fuel prices	Highest fuel prices [expected gas price > coal price]	Moderate fuel prices [expected gas price > coal price]	Lowest fuel prices [expected gas price > coal price]
Internal energy market	Well functioning, low MS cooperation	Well functioning, moderate MS cooperation	Well functioning, strong MS cooperation
Renewables develop.	Lowest	Moderate	Highest
Gas in heating sector			
Energy Efficiency	Slowest improvement	Moderate improvement	Fastest improvement
Competition with electricity	Limited gas displacement by elec. (new buildings)	Limited gas displacement by elec. (new buildings)	Gas displaced by electricity (district heating, heat pumps)
Electrific. of heating	Lowest	Moderate	Highest
Gas in power sector			
Gas vs Coal	Coal before Gas	Gas before Coal (on regulatory basis)	Gas before Coal (on regulatory basis)
Gas in transport			
Gas in transport	Lowest penetration	Highest penetration	Moderate penetration
Electricity in transport	Lowest penetration	Moderate penetration	Highest penetration
Expectations regarding EU overall gas demand	Expected to remain stable	Expected to increase	Expected to decrease

ENTSO-E
2030 Visions

Vision 1

Vision 3

Vision 4



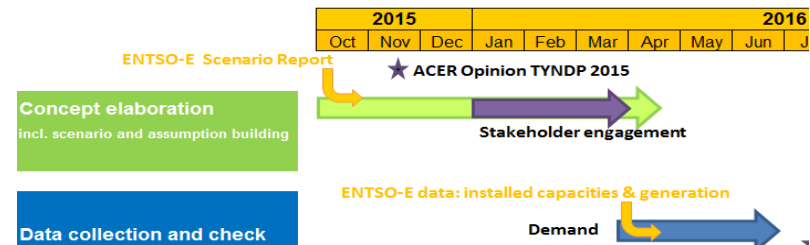
Reliable inputs: demand data

A bottom-up approach to data collection

- > Data collected are from gas TSOs **for the 3 story lines** to build on TSOs expertise on national orientations and country specificities
- > Gas demand data collected separately for the **power sector** and **final sector** (end-users)
- > Collection of **yearly** and **peak** demand data

Gas to power: an increased cooperation with ENTSO-E

- > Alignment ENTSG scenarios / ENTSO-E Visions
- > Yearly power sector gas demand data proposed to gas TSOs based on ENTSO-E data
- > Gas TSOs complement with their own expertise and provide peak demand



Data will be benchmarked against recognised sources (WEO, PRIMES..)

Stakeholder information on demand data

=> July



Reliable inputs: a refined project collection

The Project Portal has been reviewed

- > **Additional information** collected: **costs**, precise project schedule...
- > **New functionalities**: **cross-check of submission** by promoters, checks by ENTSG
- > **Legal notice for promoters** clarifying ENTSG/promoter responsibilities
- > A full **Documentation Kit** has been made available to promoters
<http://www.entsog.eu/publications/tyndp#ENTSG-TEN-YEAR-NETWORK-DEVELOPMENT-PLAN-2017>

Call for projects

- > Announced from early January
- > **Submission / resubmission of projects** ==> **11 April to 8 May**
- > **Cross-check phase** by related promoters ==> **9 May to 25 May**

Stakeholder info on projects submitted to TYNDP

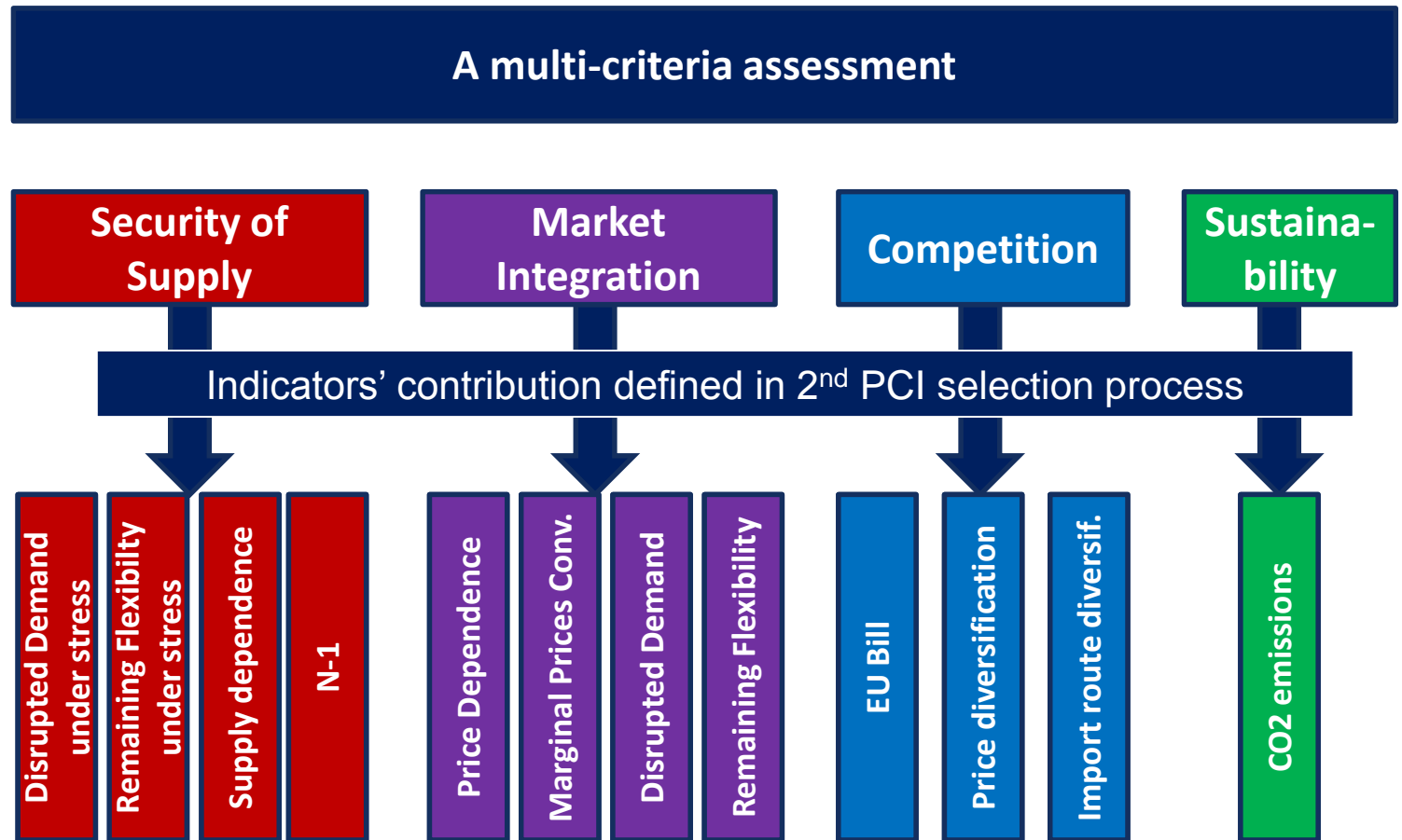
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An improved TYNDP assessement



TYNDP multi-criteria assessment



CBA method. indicators

Year

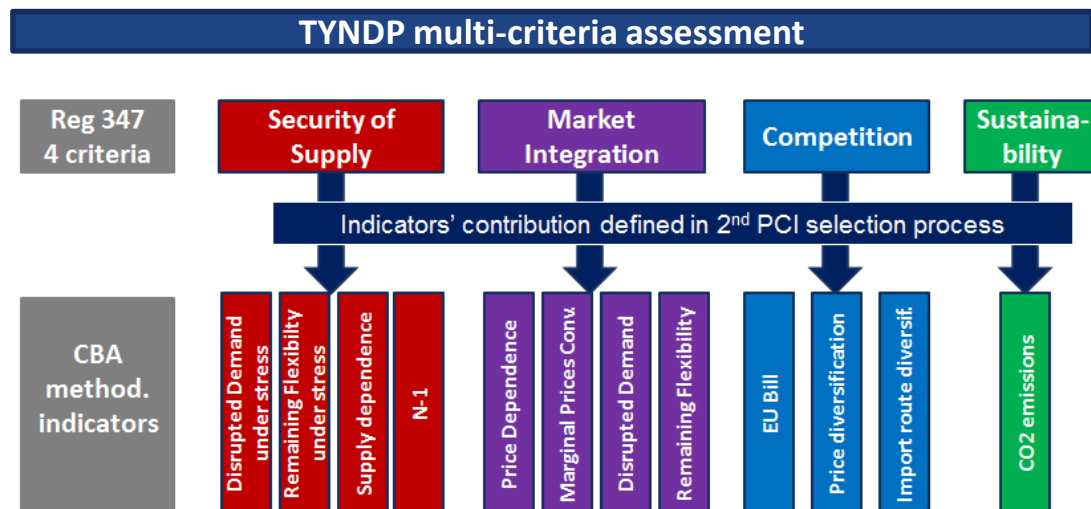
High demand

Capacity-based

Starting point: assessment of the infra gap

Improved assessment: a chapter dedicated to the infrastructure gap

- > Infrastructure gap = gas system situation with existing infra + FID projects
- > Assessment of **CBA indicators** structured along the **criteria from Regulation 347**

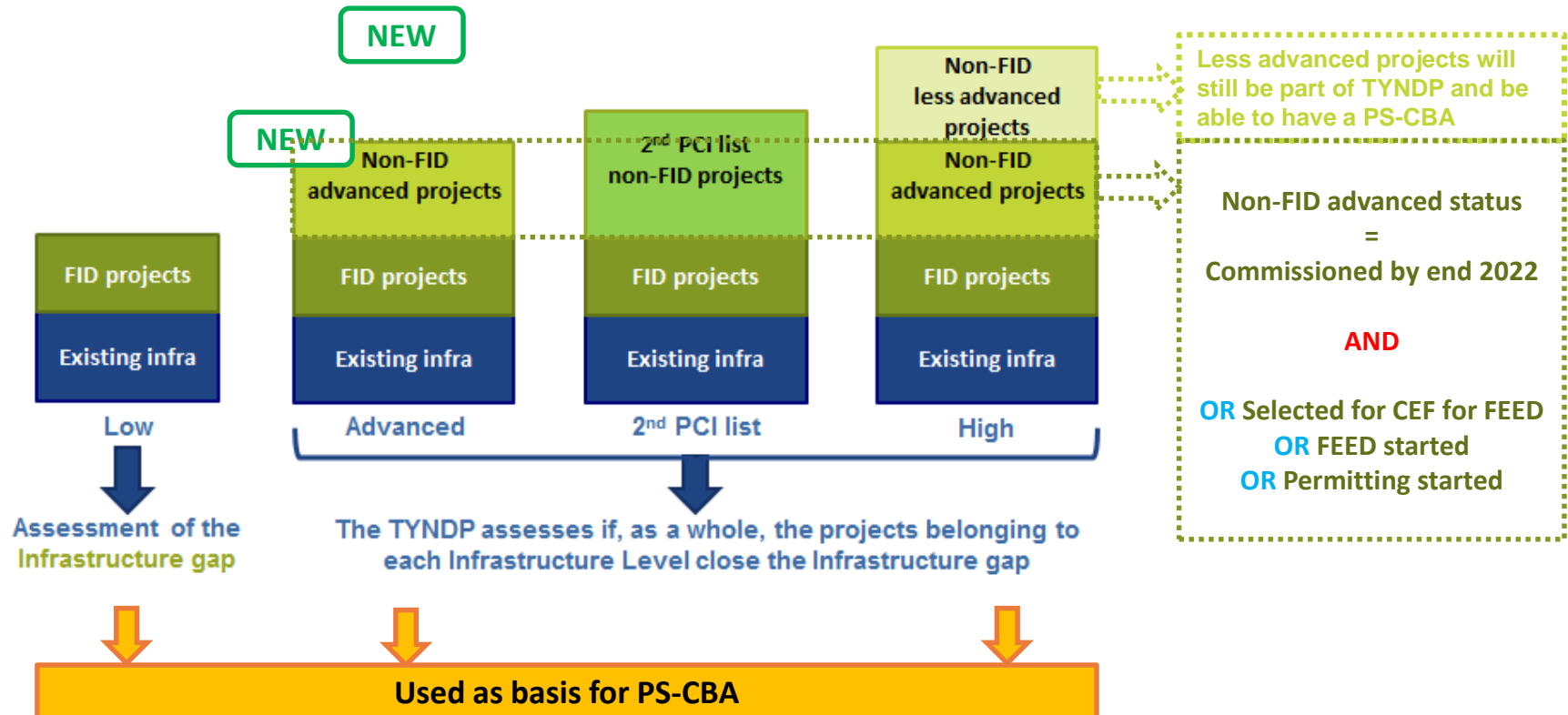


Indicators assess the cross-border situation

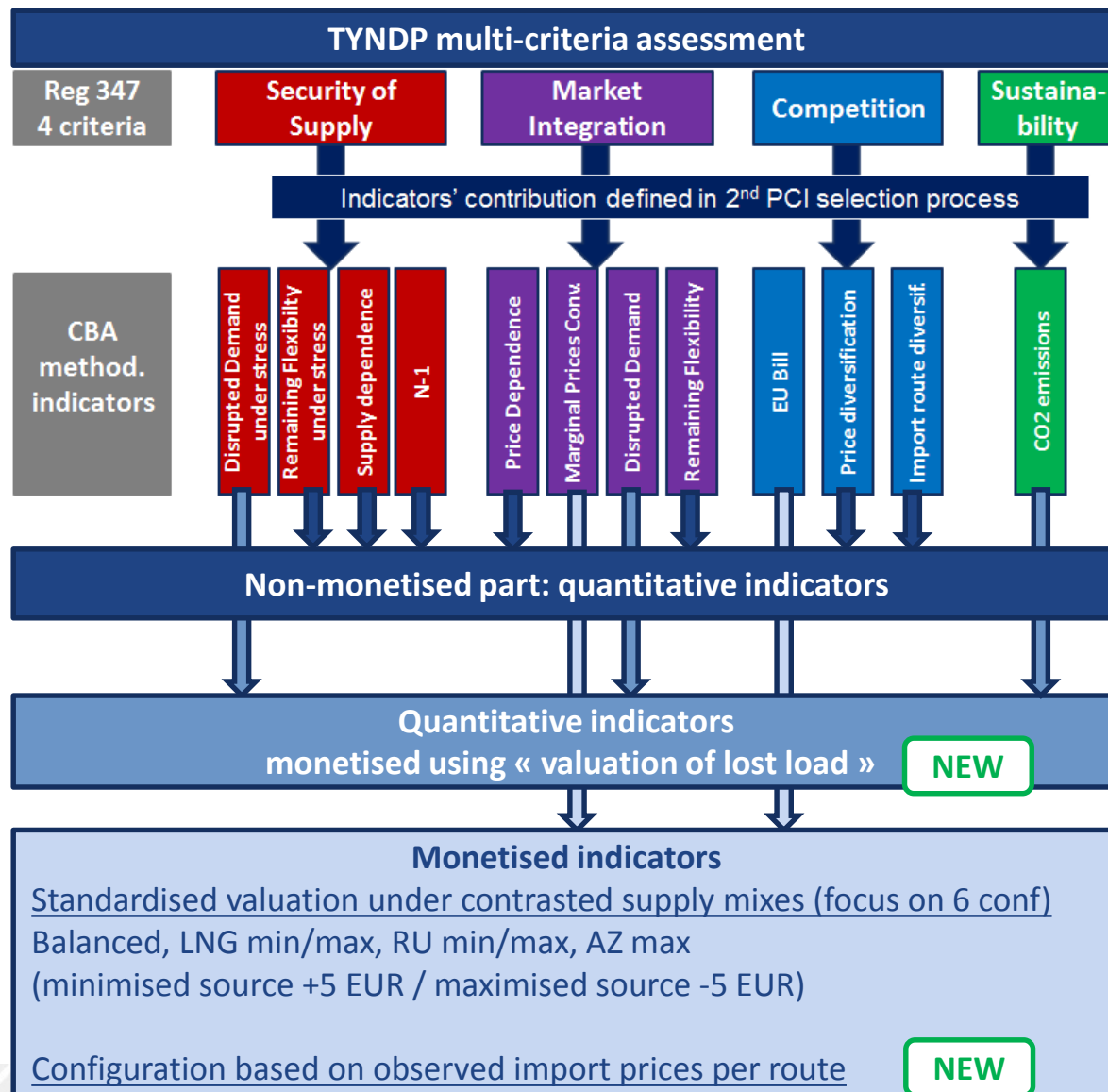
- > All relevant indicators (10) are calculated **at country-level**
- > This provides a detailed assessment of the **cross-border situation**

ESW-CBA assessment

A better consideration of project maturity



Further monetisation





Further monetisation

Valuation of lost load for disrupted volumes

- > **Disrupted volumes** is the main result
- > Information on **demand structure**, provided by TSOs, will complement the analysis
 - such as power sector / final sector
- > **A simple, standardised and fit for purpose approach to VoLL**
 - Basis: Total EU28 GDP / Gross Inland Consumption
 - To keep it even simpler: use of a **fixed value** over the time horizon: **600 EUR/MWh**
 - Ensures a **consistent EU approach** when comparing projects



Further monetisation

EU Bill and Marginal prices

- > A refined and more focused **standardised approach**
 - Focus on 6 supply configurations
 - To value projects lifting an « access to supply » bottleneck or allowing access to new supply sources at EU level

- > An **additional import prices spread configuration**
 - Using actual import prices: ENTSOG intends to use the Eurostat COMEXT database (source for EC Quarterly Report) as a basis.
 - Intended to value projects increasing competition in areas under monopolistic supply situation

Long-term gas quality monitoring outlook

An INT NC requirement

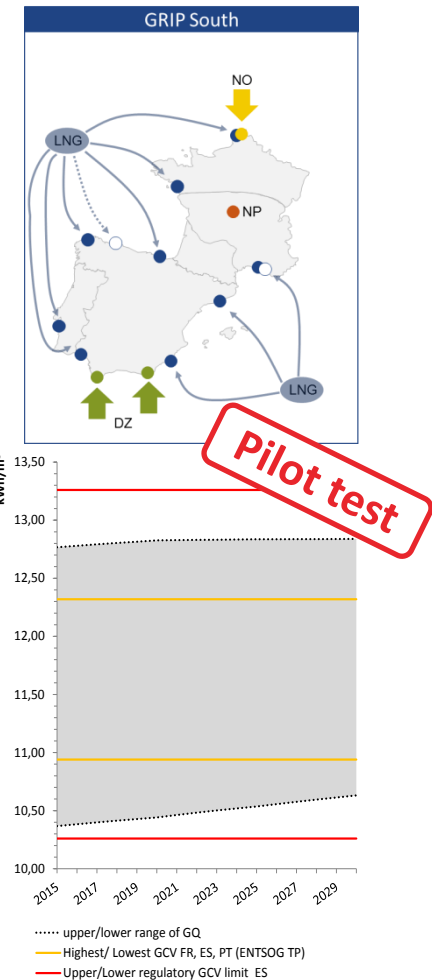
- > the publication of the expected trend and variability range for **GCV and WI** for the next 10 years.
- > Per **region** (specific definition)

Inputs

- > Will use **gas quality data**
 - Past data for all EU entry points and national production
 - assessment for new supply sources
- > TYNDP results for different supply configurations

Output

- > **Gas quality range** calculation for different TYNDP scenarios
- > variability expected to be mostly influenced by the gas quality data collected
- > Will be compared with **national standards** requirements





Next steps



TYNDP 2017 next steps



July 2016: stakeholder information on demand and projects

December 2016: release of TYNDP 2017

Early 2017: public consultation on TYNDP 2017



Related topics

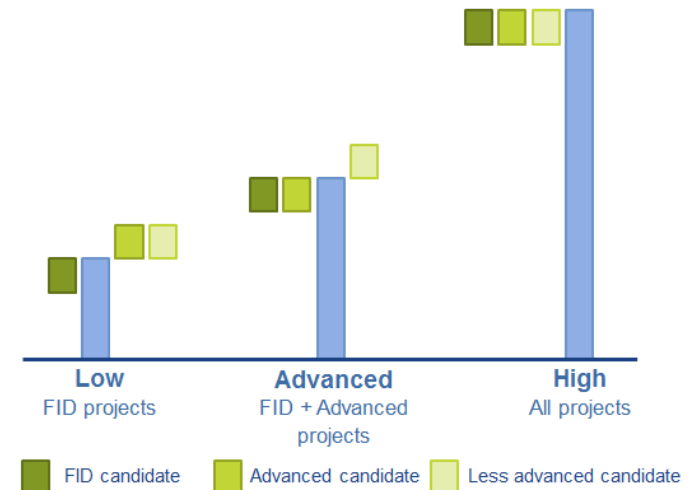


PS-CBA 2017

PS-CBA concerns projects candidating to PCI label

Steps

- > European Commission's call for PCI candidates
- > Clustering of projects where relevant
 - ENTSG will consider how it can support this step
- > PS-CBA
 - ENTSG will support the promoters with the modelling part, under their mandate



PS-CBA assessment frame

Commission fixes the schedule



ENTSOs already prepare TYNDP 2018

ENTSO-E and ENTSG will closely cooperate on the TYNDPs 2018 scenario development process

It is happening already now!

- > Joint ENTSOs' stakeholder **consultation** on scenarios **12 May – 12 June 2016**
- > Joint ENTSOs' stakeholder **workshop** on scenarios **2 June 2016**

> Electricity and gas stakeholders, you can contribute now!



Thank You for Your Attention

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