



european network  
of transmission system operators  
for gas

# CBA methodology

## Progress and next steps

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# Tasks for ENTSOG

## ***To provide a useful methodology to inform the PCI selection process***

- > To develop an energy system wide CBA methodology to reflect the wider socio-economic and environmental benefits of energy infrastructure
- > To develop a project specific CBA methodology, to be applied by the project promoters for the proposed PCIs

## ***ENTSOG- way of work to fulfill this new task:***

- > Develop a pilot CBA methodology in cooperation with stakeholders
- > Exchange regularly with ENTSO-E on the CBA methodology development.
- > Update wider stakeholders on the progress and collect wider feed-back during the 6th TYNDP Workshop on 15 November 2012
- > Launch a formal public consultation
- > Organise bilateral talks with stakeholders, in particular project promoters

# Starting points for ESW-CBA

## ***TYNDP methodology***

- > Definition of scenarios and cases and sensitivity analysis
- > Application of the indicators for the different relevant cases
  - Indicators are not linked to any specific criteria
- > Full description of the network model

## ***Additional elements***

- > Further new indicators included on sustainability
- > Additional information related to financial aspects of proposed PCIs

# Starting points for PS-CBA

## ***Project specific CBA methodology (PS – CBA) will build on:***

- > The TYNDP information and output
- > The DG REGIO CBA Guide 2008
- > Studies within the academic area
- > Specific infrastructure indicators
- > Existing approaches to monetisation of benefits
- > Practical expertise of the TSOs
- > References to reliable external data

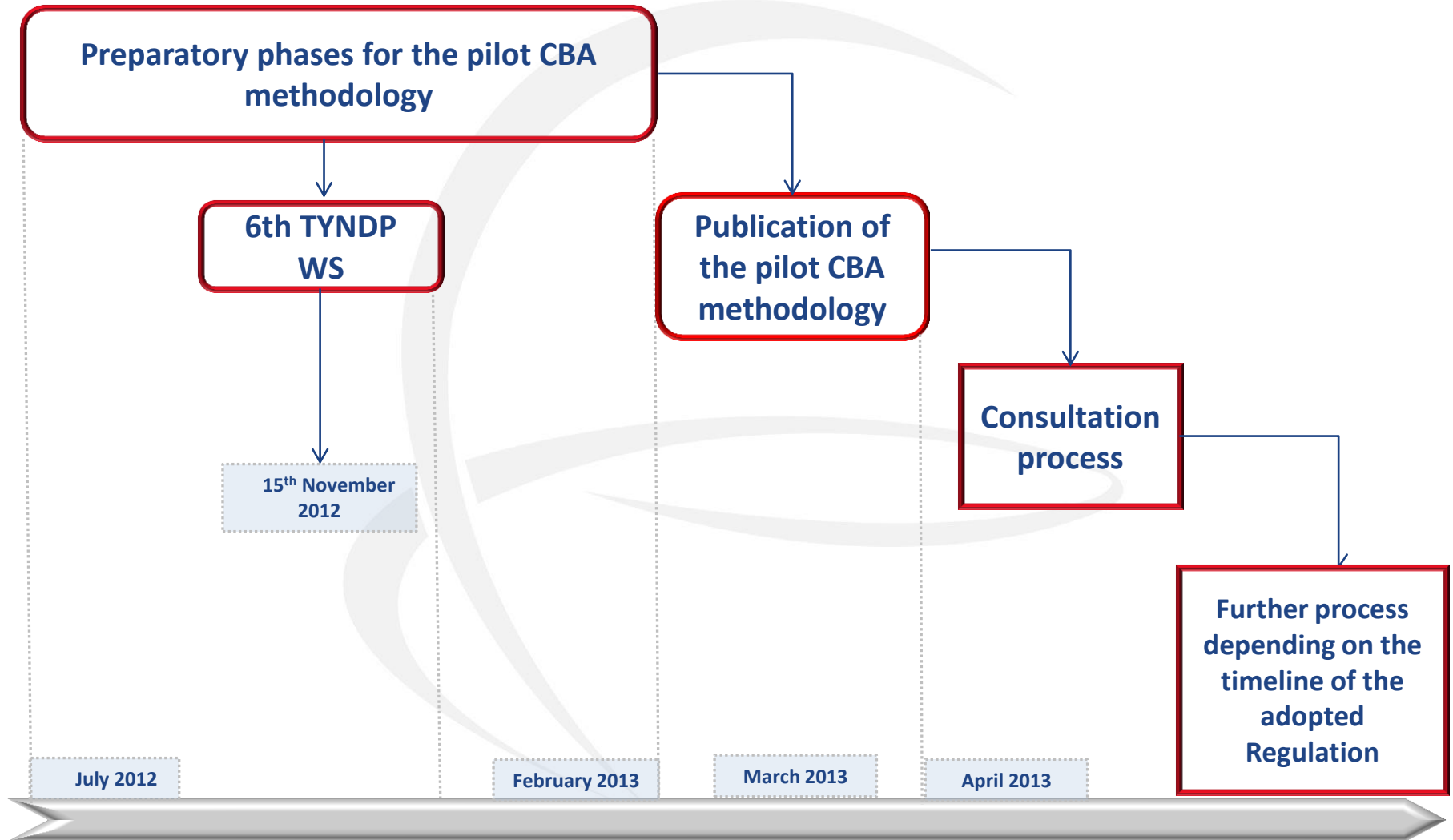
***ENTSOG aims at providing a user friendly methodology for the project promoters to develop a PS-CBA and supporting authorities in the PCIs selection***

# Insight into the work

DRAFT

Criteria	INDICATORS													
	The overall/remaining flexibility of the system	Probability and quantity of energy not being supplied and increase in security and quality of supply	Number of Member States affected	Number of new sources and evolution of supply mix	Price convergence	Disruption behaviour under various scenarios	HHI' index for capacity	Diversification of sources and facilitation of access to indigenous sources of supply	Diversification of counterparts and routes	Additional value of the project to the resilience of the system	Additional value of the project to the integration of market	The project's support to back up the power to gas and biogas transportation considering the climatic conditions	Reducing emissions	Additional capacity provided by the system in relation to the infrastructure standard (N-1rule) at regional level
Market integration and interoperability and system flexibility														
SoS														
Competition														
Sustainability														

# Pilot CBA methodology – development process



# CBA methodology - next steps and challenges (1)

## ***Developing the project specific analysis***

- > Specific infrastructure indicators
- > Financial analysis (based upon the DG REGIO CBA Guide)
- > Economic analysis (consistent with the Financial analysis)
  - Methods to monetize cross-border benefits
    - A complex issue and considered a key challenge
  - Identification of externalities
  - Project performance indicators
  - Guidance for the Social Discount Rate
    - The choice of the SDR to be applied could be a controversial issue
  - Price convergence effect
    - Complex issue considering also the time horizon of CBA
- > Sensitivity analysis (to be developed according to the DG REGIO CBA Guide)
  - Definition of the critical variables
  - Sensitivity cases

# CBA methodology – next steps and challenges (2)

## ***Energy system-wide analysis***

- > Will be largely based on the TYNDP methodology
- > Development of the sustainability related indicators

## ***“Technical” issues***

- > The lack of some data
  - Definition of the N-1 at Regional level
  - The assessment of economic loss following a disruption
  - Future supply prices

## ***Legislative issues***

- > The legislative process is still on going
- > Time constraints likely after the adoption and entry into force of the new Regulation





# Thank You for Your Attention

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