



ENTSOOG work in the field of investment

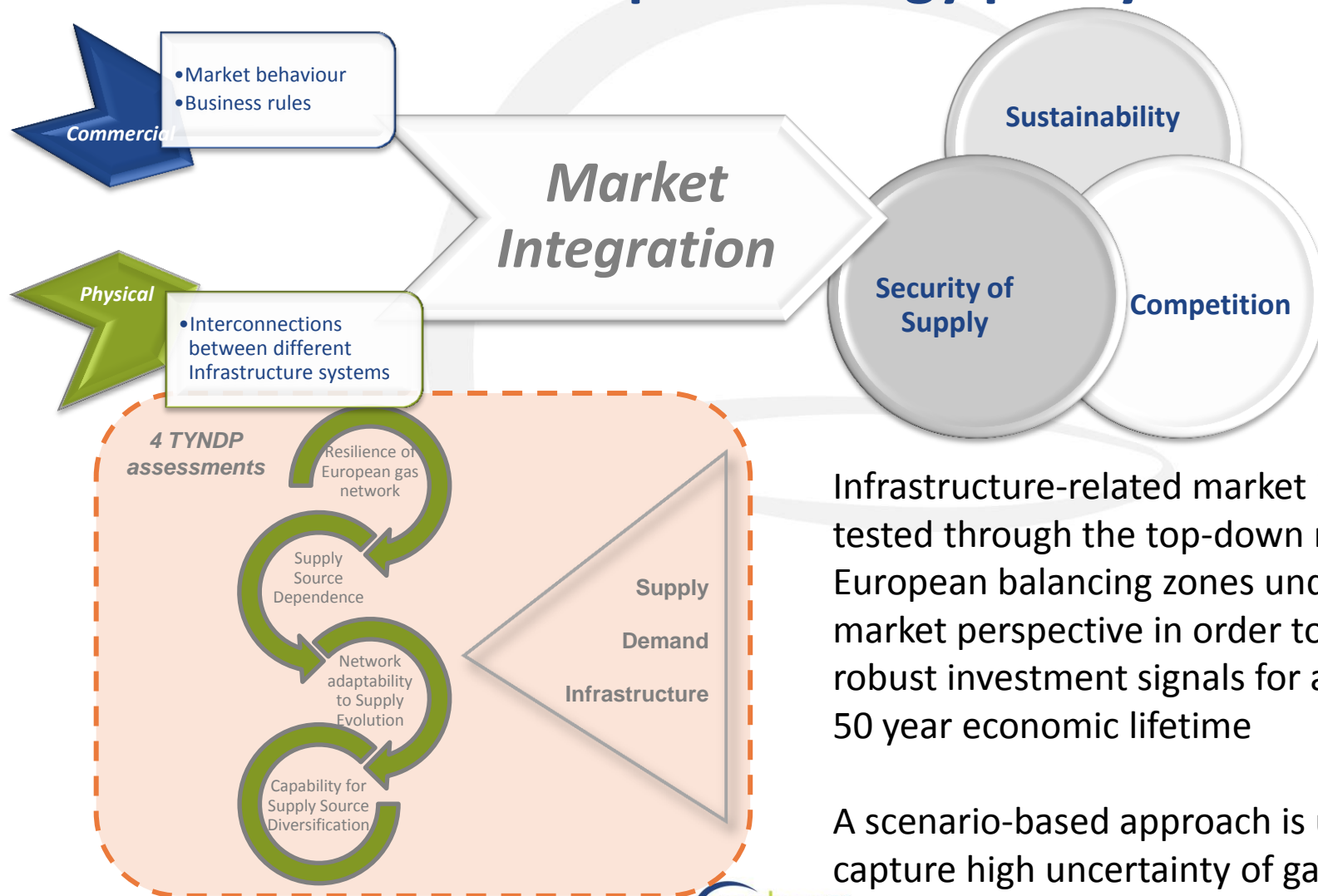
Rafal Wittmann, ENTSOG Board Member

Bratislava – 25 November 2013



TYNDP 2013-2022

Role of TYNDP in the assessment of the 3 pillars of the European Energy policy

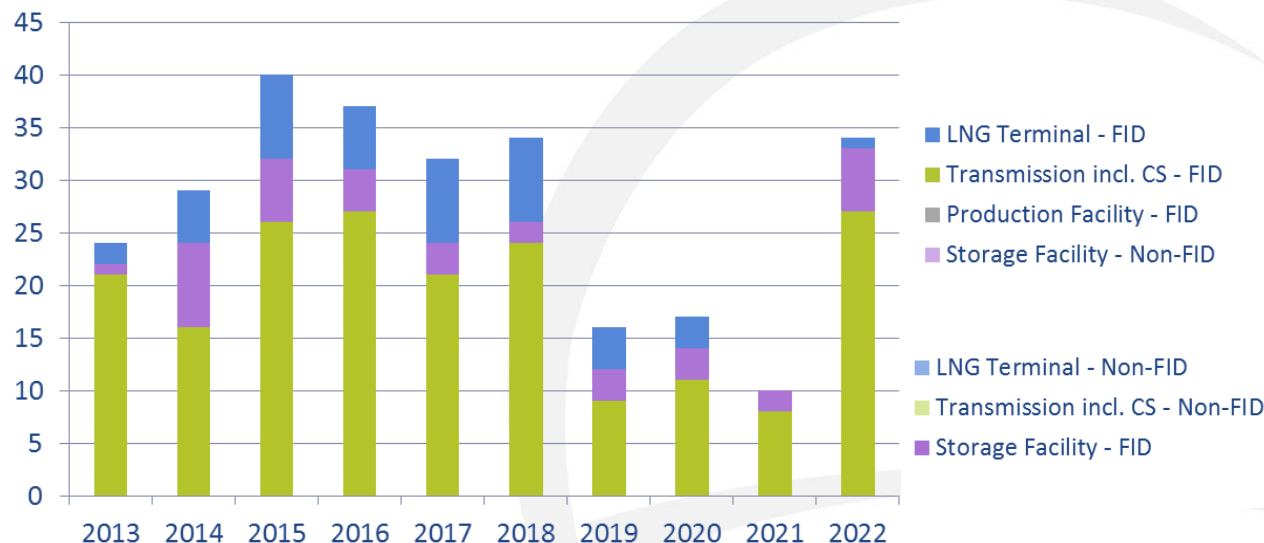


Infrastructure-related market integration is tested through the top-down modelling of European balancing zones under a perfect market perspective in order to identify robust investment signals for asset of 30-50 year economic lifetime

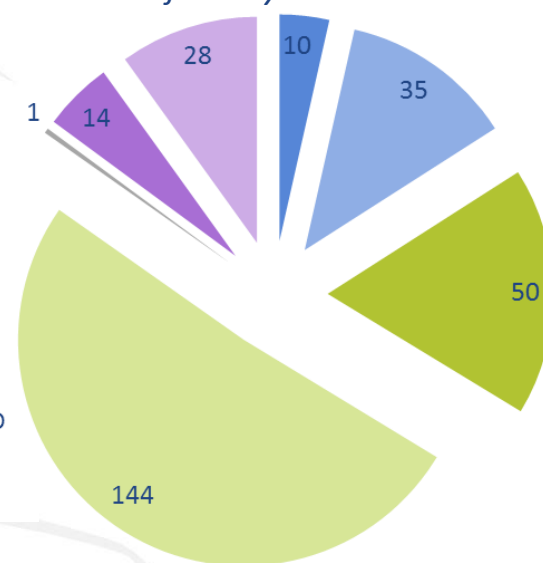
A scenario-based approach is used to capture high uncertainty of gas market

A reference document for infrastructure projects

Projects by commissioning date



Projects by FID status



CEE Region (BG, RO, HU, HR, SK, CZ, HU, PL, AT, DE) represents close to 30% of TYNDP projects

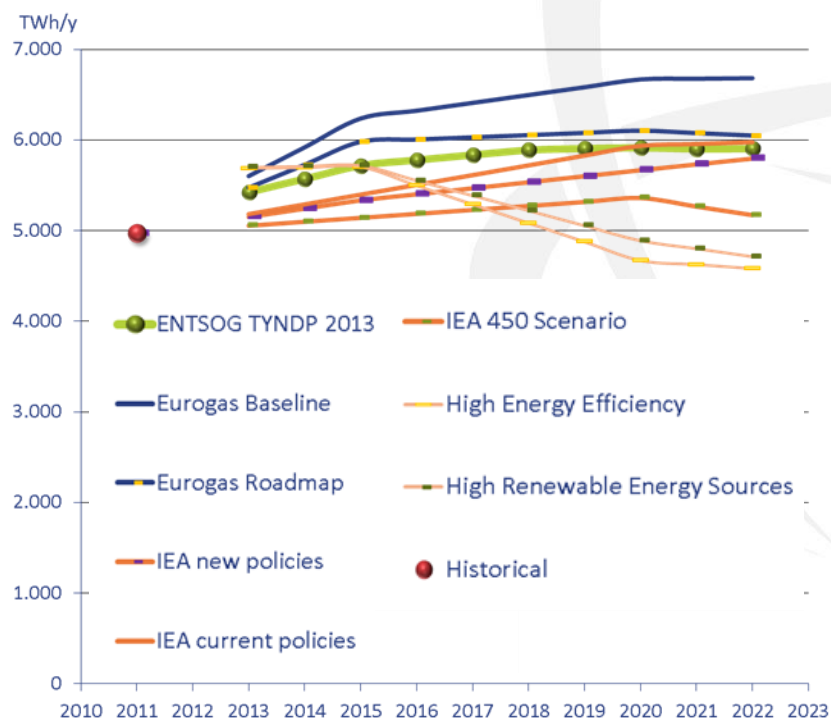
A comprehensive, transparent and non-discriminatory collection

- > A window is open to all project promoters to submit their projects
- > FID is the sole clustering criterion (status as of 15 September 2012)
- > All information are published (Annex A) as provided by project promoters

Demand scenario – TSO best estimate

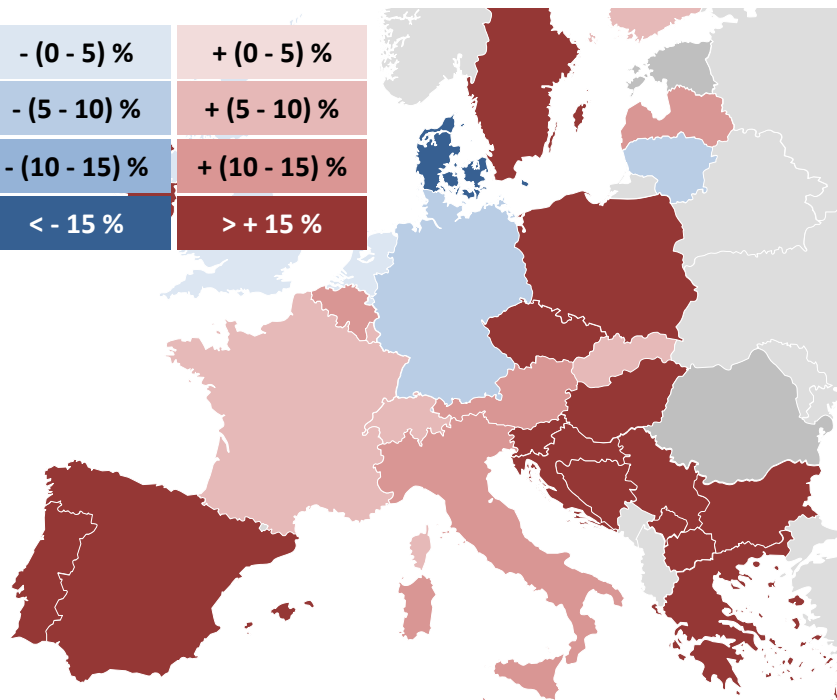
A slow European aggregated growth

- > 9% on the 10-year time horizon but with significant discrepancies by sectors and regions:
 - Power generation (+33%) vs. Dom&Com&Ind (+1%)
 - CEE region vs. decrease in UK, NL, DK & DE
- > TSO best estimate is within the range of scenarios but will be very sensible to the evolution of the role of gas especially in power generation



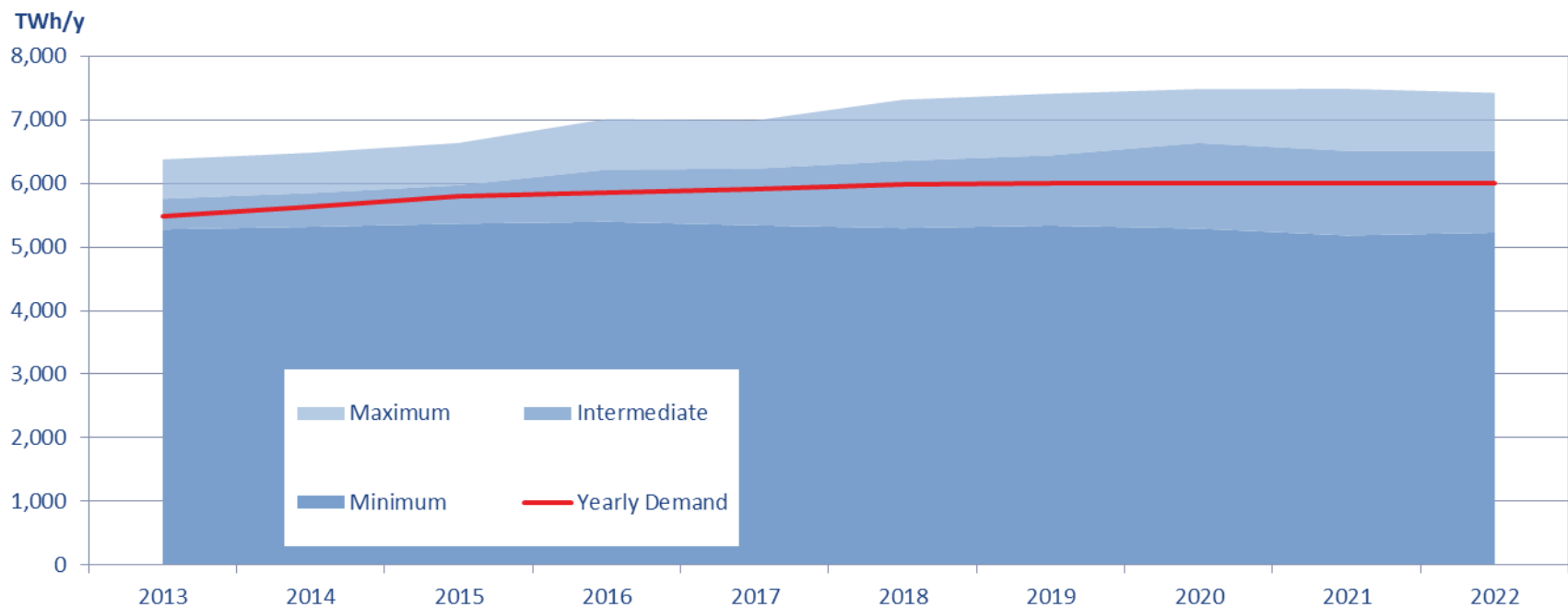
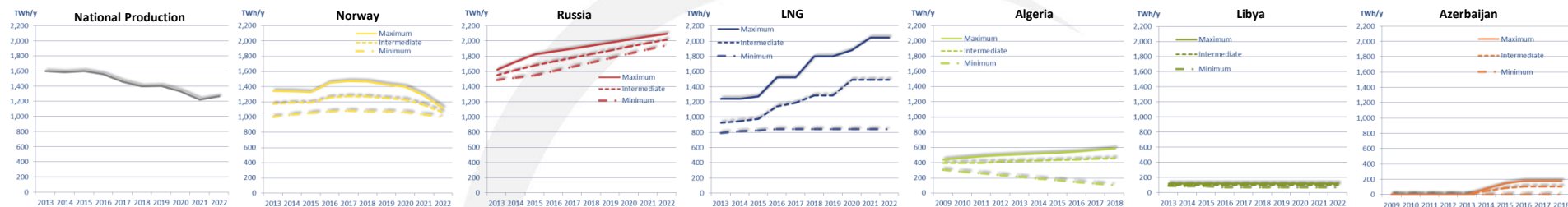
Demand evolution 2013-2022

- (0 - 5) %	+ (0 - 5) %
- (5 - 10) %	+ (5 - 10) %
- (10 - 15) %	+ (10 - 15) %
< - 15 %	> + 15 %



Supply Adequacy Outlook

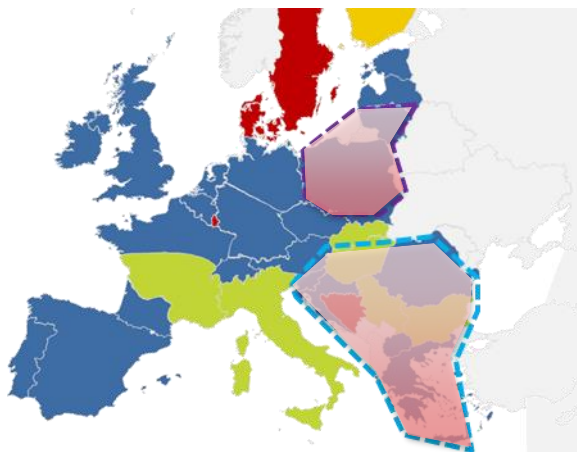
3 scenarios per source to capture supply uncertainty



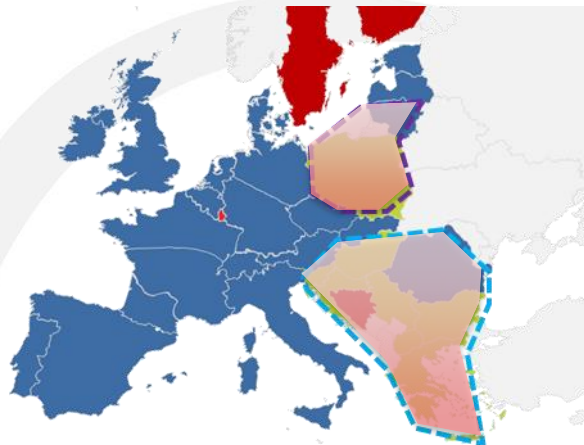
If supply seems to reach Europe on the next 10 years, does it reach every consumer (network assessment) and will it fly away from Europe because of negative gas demand perspective?

Infrastructure resilience under peak conditions

2013



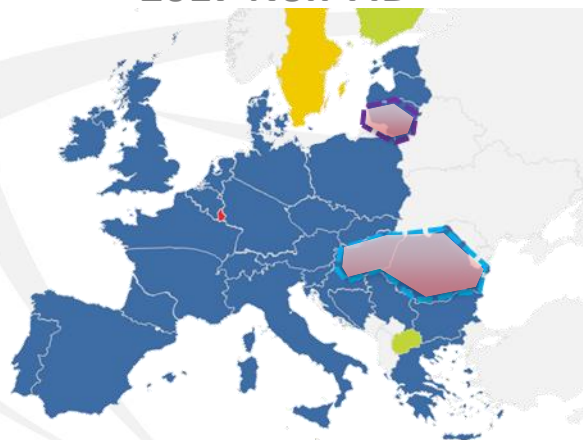
2017 FID



2022 FID



2017 Non-FID



2022 Non-FID



Remaining Flexibility under
Reference Case – Design situation

< 1%

1 - 5%

5 - 20%

> 20%

Areas lacking of Remaining Flexibility

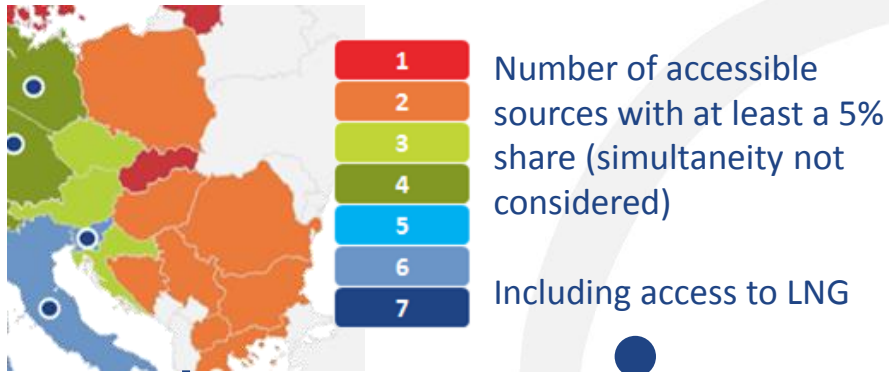
Under disruption of Belarus transit

Under disruption of Ukraine transit

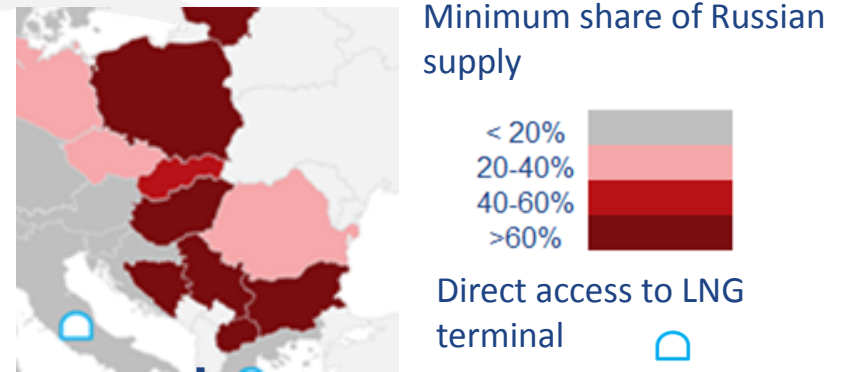
The CEE Region will remain under the threat of demand disruption without new FID decisions

Evolution of the yearly supply mix in the CEE Region

2013

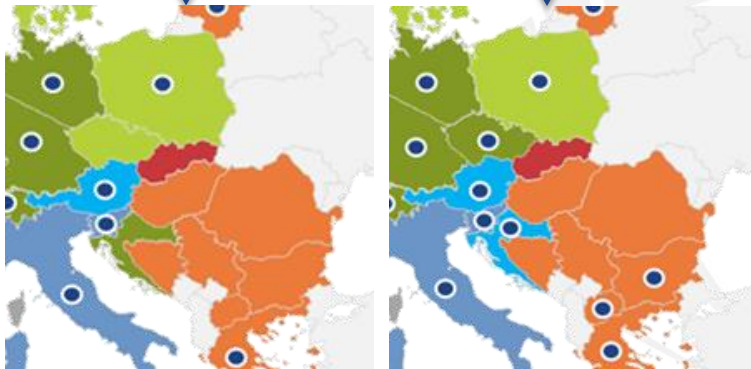


2013



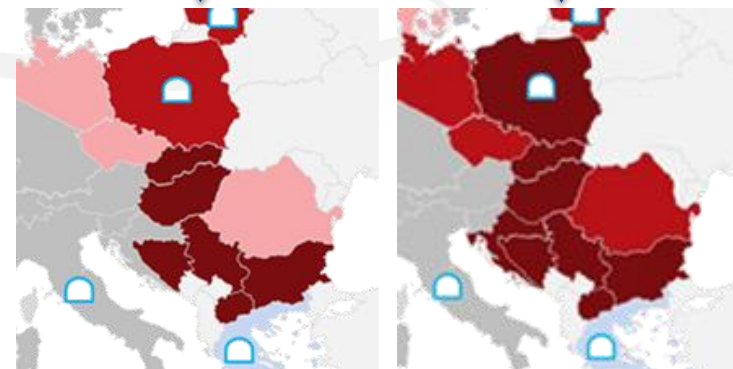
2017 FID

2022 FID



2017 FID

2022 FID



The need for new projects (both FID and non-FID) in the CEE region in order to lower dependence on Russian supply and increase source diversification



CEE GRIP 2014-2023

CEE GRIP 2014-2023 – composition of the region

Countries and TSOs involved:

Austria	BOG GmbH TAG GmbH GAS CONNECT AUSTRIA GmbH
Bulgaria	Bulgartransgaz EAD
Croatia	Plinacro d.o.o.
Czech Republic	NET4GAS, s.r.o.
Germany	GRTgaz Deutschland GmbH ONTRAS – VNG Gastransport GmbH Open Grid Europe GmbH GASCADE Gastransport GmbH terranets bw GmbH
Hungary	FGSZ Ltd.
Poland	GAZ-SYSEM S.A.
Romania	Transgaz SA.
Slovenia	PLINOVODI d.o.o.
Slovakia	eustream, a.s.



The CEE GRIP region covers 10 countries, with the involvement of 16 TSOs

CEE GRIP 2014-2023 – main facts

The report builds on:

- > Conclusions of the 1st edition of the CEE GRIP
- > Stakeholder feedback
- > Methodology applied in TYNDP 2013-2022

Objectives of CEE GRIP:

- > Better connection of regional markets
- > Increase of SoS in the region
- > Identification of potential additional capacity (investment) needs

Scope of CEE GRIP:

- > Supply & Demand analysis
- > Network modelling
- > N-1 analysis
- > Identification of investment barriers in the region

Timeline:

- > The works on the 2nd edition of the CEE GRIP have been already initiated
- > CEE GRIP is planned for publication in Q1 2014
- > This will be followed by a public consultation and a dedicated workshop for stakeholders

CEE GRIP as the most up-to-date source of data on the network development in the CEE region

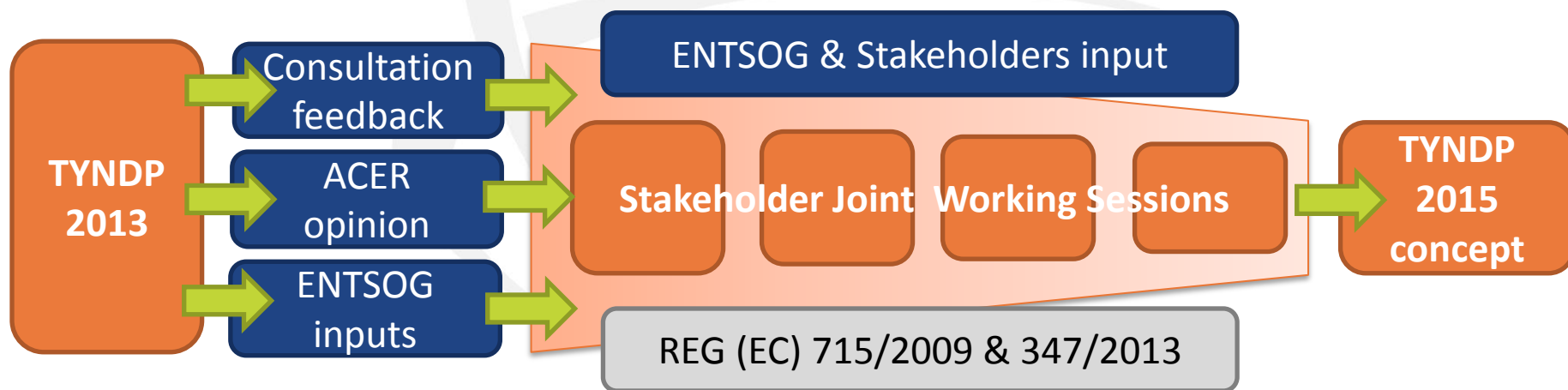


TYNDP 2015 ... and forward

From one edition to the other

Enhancement of TYNDP concept through consultation process

- > Based on the feedback collected since publication, 3 main directions for improvement have been identified:
 - Infrastructure project follow-up
 - Role of gas in the sustainability pillar of EU Energy Policy
 - Inclusion of the Energy System-Wide Cost Benefit Analysis
- > This feedback needs to be cross-analysed, challenged and deepened by stakeholders during first half of 2014:



What to be expected from next edition

Part of the content is defined by Regulations

- > REG (EC) 715/2009, supply adequacy outlook, identification of investment gaps and associated remedies together with investment barriers and solution proposals
- > REG (EC) 347/2013, inclusion of the Energy System Wide CBA analysis:
 - to go deeper and further than TYNDP (20-year time horizon)
 - to provide a consistent framework for the Project Specific CBA of project promoters
- > Both regulations define TYNDP as a non-binding plan aiming at informing decision-makers when about to commit in investment

But the rest is up to you to define it

- > TYNDP process is a multilateral platform put in place and supported by ENTSOG in order to:
 - Identify moving expectations in a fast evolving market
 - Acquire knowledge beyond TSOs' remit but necessary to carry out the assessment of the European gas system (supply availability, fuel and CO2 prices...)

You are all invited to participate to this process to factor in your inputs and be sure that next edition will continue to meet you increasing expectations



Thank You for Your Attention