



# ***Power grid infrastructure in South-Eastern Europe***

## ***CESEC 2.0***



- The Commission sees regional co-operation as a key building block for the Energy Union
- Close cooperation between key actors can advance EU energy policy objectives, help integrate energy markets and increase security of supply
- Central and South Eastern Europe Energy Connectivity (CESEC) has been a successful initiative bringing together EU Member States and Energy Community Contracting Parties
- CESEC started in 2015 as a regional high level cooperation forum for gas
- Building on its success, it was extended in 2017 to cover electricity, renewables and energy efficiency
- CESEC recipe for success: priority to projects with biggest value added but are still realistic and feasible, high-level political commitment, clear roadmap

# Central and South Eastern Europe Gas Connectivity (CESEC)

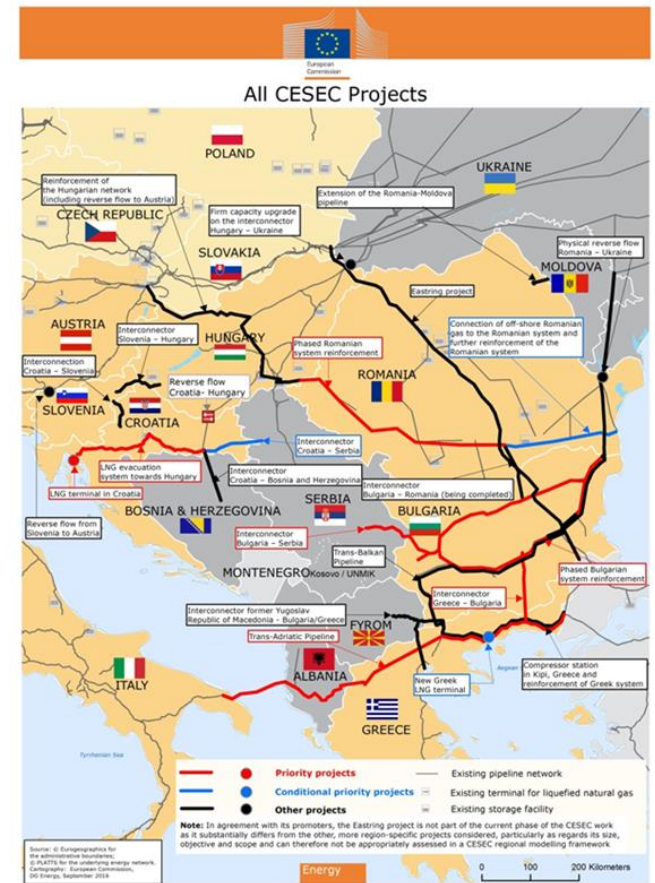
## Achievements so far

- Prioritisation of key projects in the region
- High level political commitment
- Concrete regulatory deliverables with agreed timeline
- Mobilisation of EU financial support



## MATURE Process = New Key Areas

- Electricity Trading and Market Coupling
- Power Grid Infrastructures
- Renewable Energy and Energy Efficiency



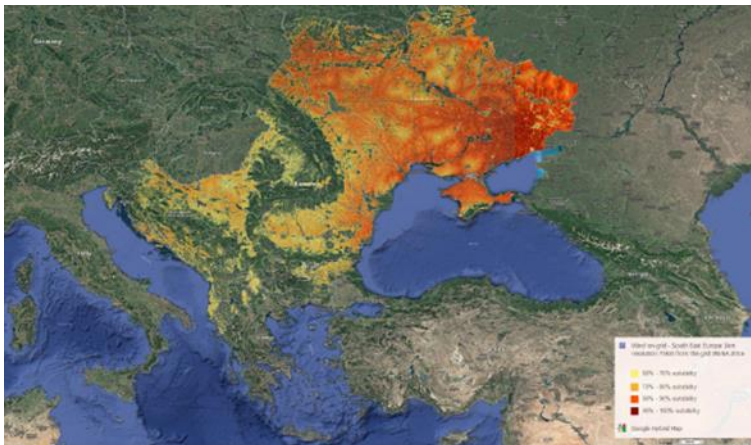
# CESEC "upgrade" – electricity, renewables, energy efficiency



## ***Bucharest September 2017***

The agreed goals complement the 2015 Memorandum of Understanding, the concrete actions are enshrined in a dedicated Action Plan and the revised governance in the Terms of reference which have been signed in Bucharest.

# Boosting renewables and energy efficiency to achieve Energy Union objectives – huge potential in the CESEC region



Suitable locations for wind in Southern-Eastern Europe  
Source: IRENA



Security of supply

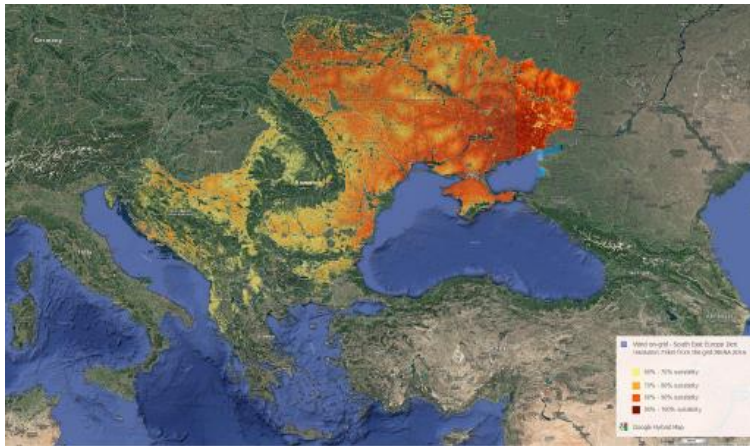
Global leadership in  
renewables



Decarbonization  
(Paris Agreement)

... while promoting growth, jobs and investment

# Immense potential for renewable energy in the CESEC region



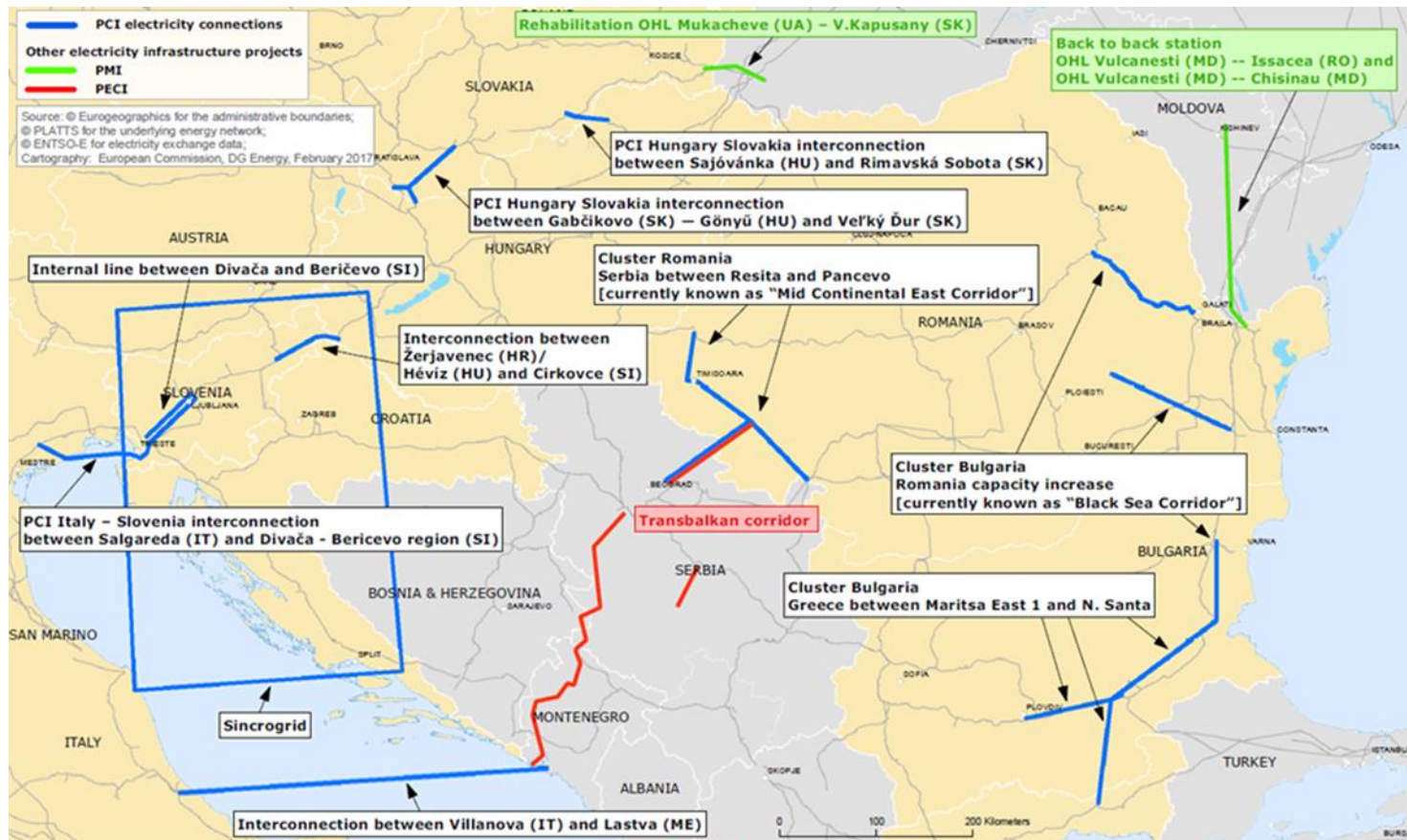
Suitable locations for wind in Southern-Eastern Europe  
Source: IRENA

- IRENA study (2017) analysed potential in the power sector:
  - Status quo: 36 GW in the region (mostly hydro)
  - Estimated technical potential of 740 GW
  - Today, already about 130 GW cost-effective
  - By 2030, almost the full potential of solar PV and wind energy could be cost-competitively deployed



European  
Commission

# Power Grid Infrastructures: prioritisation of projects, link with PECIs/PMIs, coordination with trading and market coupling





European  
Commission

# North-South electricity interconnections in Central Eastern and South Eastern Europe: More than 20 PCIs to be implemented in CESEC countries, but delays due to financing and permitting

Priority Corridor North-South Electricity Interconnections in Central Eastern and South Europe ("NSI East Electricity")





# NSI East Electricity - Main objectives

Article 4(2)(a)	Problem* as identified at RG meeting	Market integration	SoS	Sustainability	Need	Countries affected
Problems that can be addressed through infrastructure needs	High price differentials	•			Infrastructure to enable the reduction of price differentials (by adding capacity) across the EU	GR, HU, IT, PL, RO, DE, SK, SI, CZ, CY
	Integration of renewables and accommodation of flows			•	Infrastructure to mitigate RES curtailment and to improve accommodation of flows	AT, BG, GR, DE, IT
	"Partial isolation" (2020 10% target currently not met)	•			Infrastructure to contribute to achieve the interconnection level to at least 10%	BG, CY, DE, IT, PL, RO
	Adequacy issues due to significant changes in generation mix		•		Infrastructure to ensure system adequacy deficiencies	BG, GR, IT, CY, DE, PL
	System flexibility and stability		•	•	Infrastructure to improve system flexibility and stability	CY, CZ, DE, IT, HU, GR, SI,
	Impact of loop flows	•	•		Internal infrastructure to reduce the occurrence of loop flows in the borders between CZ-DE, DE-PL	DE, PL, CZ
	Ending electricity isolation	•				CY

# CESEC Electricity: Key Projects



# Investing in Energy Infrastructure

## Commission's proposal for MFF 2021-2027:

- Considerable increase in budget available through Connecting Europe Facility and InvestEU
- Connecting Europe Facility: from €30.4 billion to €42.3 out of which €8.65 billion for energy
- InvestEU (successor of EFSI): 30% of overall financial envelope to climate objectives – 50% of investment under Sustainable Development to climate and environment objectives



**Thank you very much for your  
attention!**

***Epistimi Oikonomopoulou  
Unit B1, DG Energy***

*Source: Directorate-General for Energy*