

Technical support to the Energy Community and its Secretariat to assess the candidate Projects of Energy Community Interest in electricity, smart gas grids, hydrogen, electrolysers, and carbon dioxide transport and storage, in line with the EU Regulation 2022/869

- Project specific and country specific data -

TEN-E (PECI) Groups meeting – 3rd meeting of the “Electricity” Group

16 May 2024

Contents



1. Project specific data questionnaires
2. Eligible projects
3. Project specific data
4. Country specific data

— Project specific data questionnaires

- **Project-specific questionnaires** - used to collect input data on **project specificities** such as technical data, which is specific for each project, and on project maturity
- Provided for 17 different projects
 - 10 high and extra high overhead lines
 - 2 smart electricity grids
 - 2 energy storage
 - 2 gas(es) pipelines
 - 1 smart gas grid
- Out of those, **9 projects were found eligible**

Eligible projects

Eligible projects



E01: Increasing the capacity of existing 220 kV interconnection between Bosnia and Herzegovina and Montenegro, 220 kV OHL Trebinje – Perućica

E02: New 400 kV interconnection between Bosnia and Herzegovina and Montenegro, 400 kV OHL Gacko – Brezna

E03: New 400 kV interconnection between Montenegro and Bosnia and Herzegovina, 400kV overhead line Brezna-Sarajevo with construction 400/220 kV substation Piva's mountain

E04: Trans Balkan Corridor: Double OHL 400 kV Bajina Basta (RS) – Visegrad (BA)/Pljevlja (ME) (BA section)

E05: Internal transmission line 400 kV Banja Luka 6 - Mostar 4

E06: Reconfiguration of 400 kV grid and new 400 kV interconnection Albania-Kosovo

E07: Closing the 400 kV Albanian internal ring

E08: 330 kV OHL Balti (MD) - Dnestrovsk HPP-2 (UA)

E13: DTEK STORAGE 225 MW

Project specific data

E01: Increasing the capacity of existing 220 kV interconnection between Bosnia and Herzegovina and Montenegro, 220 kV OHL Trebinje – Perućica

- *Project promoter(s):* CGES (ME), NOSBiH/Elektroprijenos BiH (BA)
- *Infrastructure category:* High and extra high voltage overhead transmission lines
- *Commissioning year:* 2028
- *Project description:* Reconstruction of the existing line which would resolve existing congestions between Bosnia and Herzegovina and Montenegro, enable and support integration of a large number of RES in Bosnia and Herzegovina (region of East Herzegovina) and Montenegro



Project specific data

E02: New 400 kV interconnection between Bosnia and Herzegovina and Montenegro, 400 kV OHL Gacko - Brezna

- *Project promoter(s):* CGES (ME), NOSBiH/Elektroprijenos BiH (BA)
- *Infrastructure category:* High and extra high voltage overhead transmission lines
- *Commissioning year:* 2035
- *Project description:* New 400 kV interconnection between Bosnia and Herzegovina and Montenegro that will connect SS Gacko (BA) with SS Brezna (ME) with total length of about 51 km



Project specific data

E03: New 400 kV interconnection between Montenegro and Bosnia and Herzegovina, 400 kV overhead line Brezna-Sarajevo with construction 400/220 kV substation Piva's mountain

- *Project promoter(s):* CGES (ME), NOSBiH/Elektroprijenos BiH (BA)
- *Infrastructure category:* High and extra high voltage overhead transmission lines
- *Commissioning year:* 2033
- *Project description:* New 400 kV interconnection between Montenegro and Bosnia and Herzegovina that would connect 400/110/35 kV substation Brezna with 400/220/110/x substation Sarajevo 20 with construction of substation 400/220 kV Piva's mountain that will be constructed in two phases



Project specific data

E04: Trans Balkan Corridor: Double OHL 400 kV Bajina Bašta (RS) – Višegrad (BA)/Pljevlja (ME) (BA section)

- *Project promoter(s)*: NOSBiH/Elektroprijenos BiH (BA), CGES (ME)
- *Infrastructure category*: High and extra high voltage overhead transmission lines
- *Commissioning year*: 2027
- *Project description*: Increasing NTC between Serbia and Bosnia and Herzegovina, enabling full capacity production of HPP Višegrad (N-1 criteria), and increasing and support to RES integration



Project specific data

E05: Internal transmission line 400 kV Banja Luka 6 - Mostar 4

- *Project promoter(s)*: NOSBiH/Elektroprijenos BiH (BA)
- *Infrastructure category*: High and extra high voltage overhead transmission lines
- *Commissioning year*: 2034
- *Project description*: Enabling and supporting integration of a large number of RES, enabling the transfer of energy through Bosnia and Herzegovina power system and avoiding possible congestion in the transmission network, further development and integration of the market



Project specific data

E06: Reconfiguration of 400 kV grid and new 400 kV interconnection Albania-Kosovo*

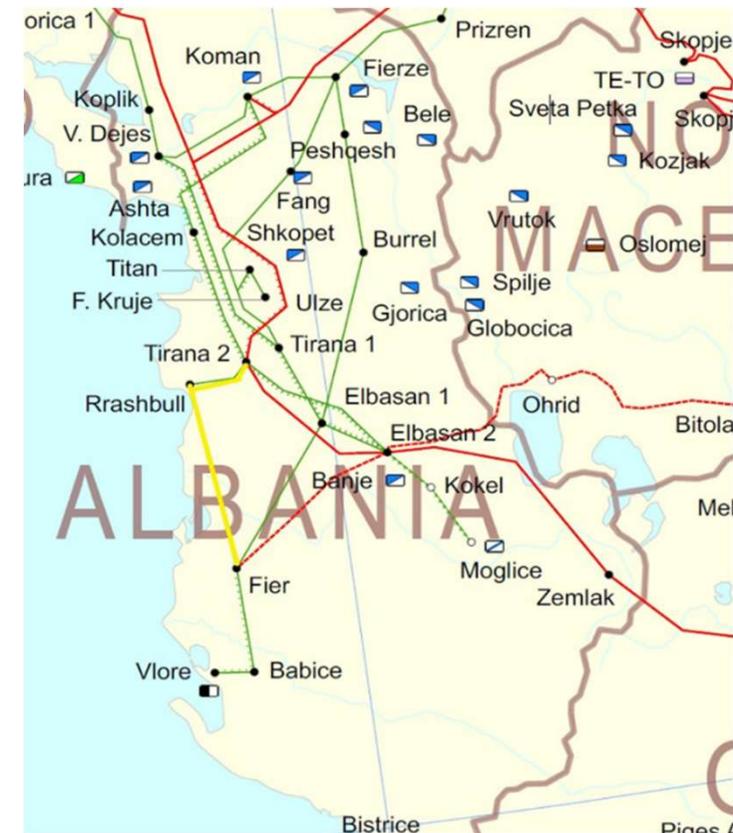
- *Project promoter(s):* KOSTT (XK), OST(AL)
- *Infrastructure category:* High and extra high voltage overhead transmission lines
- *Commissioning year:* 2030
- *Project description:* The project consists of the extension of SS Fierza to 400 kV level and construction of a new 400 kV interconnection between Albania and Kosovo



Project specific data

E07: Closing the 400 kV Albanian internal ring

- *Project promoter(s)*: OST(AL)
- *Infrastructure category*: High and extra high voltage overhead transmission lines
- *Commissioning year*: 2030
- *Project description*: The project consists of closing the 400kV internal transmission lines in a ring topology through the construction of new 400kV transmission line between substations Fier-Rrashbull and further to Tirana2



Project specific data

E08: 330 kV OHL Balti (MD) - Dnestrovsk HPP-2 (UA)

- *Project promoter(s)*: Moldelectrica (MD), Ukrenergo (UA)
- *Infrastructure category*: High and extra high voltage overhead transmission lines
- *Commissioning year*: 2032
- *Project description*: Strengthening the electricity interconnection between Republic of Moldova and Ukraine. Increasing the security of supply



Project specific data

E13: DTEK STORAGE 225 MW

- *Project promoter(s)*: JSC DTEK WESTENERGY (UA)
- *Infrastructure category*: Electricity storage
- *Commissioning year*: 2025-2028
- *Project description*: Construction of 225 MW/450 MWh battery sites located in several locations in Western and Central Ukraine with a single control centre to ensure the power oscillation damping (POD) control and to provide ancillary services (FCR, aFRR) to the power grids of Ukraine and Moldova (UA/MD)



Country specific data

- **Country-specific questionnaires** – used to collect input data on **electricity and gas(es)** markets and infrastructure for Energy Community Contracting Parties
- Collected input data will be used to develop market models of all CPs in order to assess candidate projects taking into account relevant market conditions in each country for the period **until 2050**
- Relevant country specific data that will be used:
 - **Electricity related:** Thermal, Hydro, Wind and Solar, Batteries, Demand, NTC
 - ~~**Smart gas grids, hydrogen, electrolysers and carbon dioxide related:** Demand, Interconnections, Storages, Fields~~

Country specific data

	AL	BA	GE	MD	ME	MK	RS	UA	XK
Electricity	<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>					
Gas(es)		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>						

Country specific data – AL

Data for AL provided by OST

Fuel/technology type	2030	2040	2050
Thermal - Gas	300	300	300
Hydro	2623	2633	2633
Wind	300	700	1650
Solar	700	1300	1650
Batteries	-	-	-

		2030	2040	2050
Total ELECTRICITY demand	GWh	8900	9400	12 116

Country specific data – BA

Data for BA provided by NOSBiH

Fuel/technology type	2030	2040	2050
Thermal - Lignite	1418	1418	-
Hydro	2323.8	2480.3	2480.3
Wind	798	1500	2500
Solar	1514	3000	5000
Batteries	50	381	500

		2030	2040	2050
Total ELECTRICITY demand	GWh	11 158	12 681	13 457

Country specific data – GE

Data for GE provided by Georgian State
Electrosystem

Fuel/technology type	2030	2040	2050	
Thermal - Natural gas	1598.2	1598.2	1598.2	
Thermal - Hard coal	22.3	22.3	22.3	
Hydro	4065	5805	8350	
Wind	750	1700	2900	
Solar	700	1650	2600	
Batteries	200	200	200	
		2030	2040	2050
Total ELECTRICITY demand	GWh	19 111	23 907	29 071

Country specific data – XK

Data for XK provided by Ministry of Economy

Fuel/technology type	2030	2040	2050
Thermal - Lignite	904	904	-
Hydro	100.7	100.7	100.7
Wind	677	1275	1873
Solar	550	1340	1938
Batteries	170	170	170

		2030	2040	2050
Total ELECTRICITY demand	GWh	6802	7998	10 180

Country specific data – MD

Data for MD provided by SE Moldelectrica

Fuel/technology type	2030	2040	2050	
Thermal - Natural gas	1720	1720	1720	
Thermal - Others non renewable	47.2	47.2	47.2	
Hydro	64.5	64.5	64.5	
Wind	442	960	1120	
Solar	470	750	880	
Batteries	10	10	10	
		2030	2040	2050
Total ELECTRICITY demand	GWh	7002	8417	9993

Country specific data – ME

Data for ME provided by Ministry of Energy and Mining

Fuel/technology type	2030	2040	2050
Thermal - Lignite	225	225	-
Thermal - Others renewable	49	49	49
Hydro	961.4	961.4	961.4
Wind	250	600	700
Solar	750	2400	4300
Batteries	28	28	28

		2030	2040	2050
Total ELECTRICITY demand	GWh	4539	5534	6281

Country specific data – MK

Data for MK provided by MEPSO

Fuel/technology type	2030	2040	2050	
Thermal - Natural gas	760	-	-	
Thermal - Others renewable	31	31	31	
Hydro	938.1	1480.5	1480.5	
Wind	443	723	605	
Solar	580	998	11553	
Batteries	-	-	105	
		2030	2040	2050
Total ELECTRICITY demand	GWh	8879	10 147	10 759

Country specific data – RS

Data for RS from TYNDP 2022

Fuel/technology type	2030	2040	2050	
Thermal - Natural gas	400.9	400.9	300	
Thermal - lignite/coal	4427.8	4427.8	-	
Hydro	3193.8	3193.8	3193.8	
Wind	3844	3246	2968	
Solar	235	950	725	
Batteries	-	-	-	
		2030	2040	2050
Total ELECTRICITY demand	GWh	36 498	37 240	37 218

Country specific data – UA

Data for UA provided by NPC Ukrenergo

Fuel/technology type	2030	2040	2050
Nuclear	13 940	13 940	13 940
Thermal – Natural gas	4772.3	4772.3	4772.3
Thermal – lignite/coal	15 855	15 855	-
Hydro	2572.9	2572.9	2572.9
Wind	580	2580	6750
Solar	7350	11 120	21 220
Batteries	258	258	258

		2030	2040	2050
Total ELECTRICITY demand	GWh	151 840	208 500	296 600

Thank you for your attention



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