

The gas markets of the Energy Community contracting parties are currently facing large transformations so as to comply with the requirements of the Third Energy Package. The Study objective is to identify the most sustainable geographic options of market integration for the Energy Community countries. As the result of the Study, four regional options of market integration are presented (Eng. MIOs) which include the Contracting Parties and the neighbouring EU countries: MIO 1 Ukraine West; MIO 2: Serbia North; MIO 3: Adriatic Integration; and MIO 4 Ukraine South.

The gas markets of the Energy Community contracting parties are currently facing large transformations so as to comply with the requirements of the Third Energy Package. The requirements of harmonization and coordination which are the result of full market integration, may represent a challenge even for the countries which have been brought in conformity with the European legal framework. Therefore, the concept which reduces the number of harmonization requirements and implementation barriers leads to the following recommended integration tools:

- Trade region: offers almost all benefits of full market coupling with significantly reduced implementation efforts and enables maximum scope of integration in later phases
- Satellite market (if preconditions are fulfilled): offers the same benefits as the trade region and requires lesser implementation efforts

When it comes to general characteristics, the share of gas in the total national energy consumption in Serbia amounts to 12%, there are two sources of supply (Russia and domestic production), Herfindahl - Hirschmann index (HHI - concentration of gas producers supplying the market; higher HHI indicates higher market concentration) is 10.000, the residual supply index (market potential for supply from alternative sources in case of suspended delivery of the leading supplier) is 24%. Organized market has not been established.

The following feasibility criteria have been applied in the Study: gas sources, interconnection, gas hubs, timescale and consumption.

There are two gas sources, the physical (net producer countries and LNG terminals) and the market, virtual gas hubs. The physical sources for the pre-selection of options are: LNG Italy, LNG Greece, LNG Poland, LNG Croatia, LNG Albania, Algeria, Libya, Russia and the Southern Corridor. Gas hubs: VTP NCG, VTP Gaspool, VTP PSV and VTP CEGH.

MIO 2 participating countries: the Contracting Parties of the Energy Community - Serbia, Bosnia and Herzegovina, (potentially Macedonia and Kosovo); Austria, Croatia, Slovenia and Hungary (potentially Bulgaria, Slovakia, The Czech Republic, Poland).

When it comes to MIO 2, the option is based mainly on the existing infrastructure. Analogously to the corridor Ukraine West, the aim is to integrate Serbia in the direction north (-west) and to provide a direct access to the closest gas hubs in Western Europe. It covers the already improved markets and it has the potential for LNG. It offers the

possibility for the market integration of Bosnia/Herzegovina without the need for new infrastructure. There is a possibility of extension to Macedonia, and potentially, to Kosovo. Net import demand 16.5 bcm/a (potentially 43.2 bcm/a). Direct access to sources: VTP NCG, VTP PSV, LNG and potentially Gaspool.

When it comes to the potential supply sources for MIO 2, these are (10 in total): Russia, Norway, Holland, Qatar, Egypt, Trinidad and Tobago, Algeria, Libya, Kazakhstan and the autochthone production.

The scope of market integration is set as the trade region. Alternatively, until the completion of the PEI projects of interconnections of Serbia and/or Bosnia and Herzegovina with the neighbouring countries, these contractual parties could be integrated as satellite markets. The interconnection Serbia - Bulgaria negates this option for Serbia, transmits Serbia-energy.eu