

SLOP2G project integrally links two energy locations where renewable electricity and the surplus of electricity in the system will be converted to green hydrogen which, through methanation, will be further converted into synthetic methane. On both locations, the green hydrogen and synthetic methane will be available for injection into the gas transmission network and for use by industrial and commercial users. The management of Slovenia's largest companies in electricity and gas sectors (ELES, HSE, Plinovodi) submitted an application to the European Innovation Fund for the SLOP2G project, which represents the first concrete step into a carbon-free society and an energy transition in the field of unifying the two sectors.

The options for injections will be both in the form of green hydrogen through hydrogen pipelines or synthetic methane through gas lines. The project also envisions the establishment of optimization and simulation models for optimizing the sources of electricity needed to produce green hydrogen and the use of mixtures of hydrogen and synthetic gas with natural gas. The important part of the project is to establish a trading platform for renewable gases with certificates of origin for the green gas.

The first Slovenian green hydrogen project brings together key Slovenian companies in the field of managing transmission networks for gas and electricity and producers of electricity from various renewable sources. This, alongside a demonstrative introduction of the project for green electricity into green gas, actually represents the infrastructural intertwining of electricity and gas sectors that, besides the already recognized goals and benefits, will have a much larger impact.