

Report of the Capacity-building workshop on development of hydrogen infrastructure

The Capacity-building workshop on development of hydrogen infrastructure was organized jointly by the United Nations Economic Commission for Europe (UNECE), Ministry of Energy of Ukraine, the State Agency on Energy Efficiency and Energy Saving (SAEE) of Ukraine, and United Nations Development Programme (UNDP) and held in hybrid mode (in person and online) in Kyiv on 25 February 2021. The workshop was attended by 127 participants, of which 31 women. The workshop participants included representatives of Ministries and other Government bodies of Ukraine, business community, academic institutions, NGOs, and international organizations.

In response to a request from the Ministry of Energy of Ukraine and SAEE, UNECE implemented a project “Improving capacity of the Government of Ukraine to develop infrastructure for production and use of hydrogen to support green post-covid-19 recovery.” The outcomes of this project were discussed at this workshop.

Draft Roadmap for production and use of hydrogen in Ukraine, draft Roadmap for the use of hydrogen in Ukraine in road transport, and draft scoping report under the Strategic Environmental Assessment (SEA) procedure of the Roadmap in line with the UNECE Protocol on SEA were developed. The draft Roadmap for production and use of hydrogen in Ukraine analyses best international practices for the use of hydrogen, potential for the use of hydrogen technologies in Ukraine, hydrogen production methods and their cost-effectiveness, existing and required infrastructure for hydrogen storage and transportation for domestic use and export opportunities, and potential for producing renewable hydrogen domestically. It presents three phases for implementation of the Roadmap in 2021-2029 with specific proposed actions. Special consideration in the project was given to the use of hydrogen in road transport, which is an integral part of the overall Roadmap.

An important part of the project is assessing potential environmental implications of the hydrogen development in the country. The draft SEA scoping report includes environmental and health baseline, identification of key policies, plans and programmes of relevance to the draft Roadmap and the SEA process, and identification of the environmental issues including health and potential effects to be considered in the SEA.

The workshop was opened by Yaroslav Demchenkov, Deputy Minister of Energy, Ukraine. Opening remarks were delivered by Kostiantyn Gura, Acting Head, State Agency on Energy Efficiency and Energy Saving (SAEE) of Ukraine; Scott Foster, Director, Sustainable Energy Division, UNECE; Walter Nissler, Chief of Section, Sustainable Transport Division, UNECE; Nicholas Bonvoisin, Chief of Section, Environment Division, UNECE; and Andreas Biermann, Senior Adviser, Energy Efficiency, Energy and Environment Team, UNDP Ukraine. Oleg Dzioubinski, Regional Adviser, Sustainable Energy Division, UNECE moderated this part of the workshop.

Stanislav Dubko, UNECE Consultant made presentation on the Draft Roadmap for production and use of hydrogen in Ukraine. His presentation included the part on the use of hydrogen in road transport prepared by Dmytro Ingul, UNECE Consultant. Martin Smutny, International Expert on SEA made presentation on Main principles of SEA in accordance with the UNECE

Protocol on SEA. Gennadii Marushevskiy, National Expert on SEA and Maryna Shymkus, National Legal Expert presented Draft SEA scoping report and its key results. Nikola Sahovic, Economic Affairs Officer, Sustainable Transport Division, UNECE and Leonid Kalashnyk, Environmental Affairs Officer, Environment Division, UNECE moderated this part of the workshop.

Presentations on the outcomes of the project and developed reports were followed by a discussion moderated by Yulia Rybak, Advisor, Ministry of Energy of Ukraine. The workshop participants came to a conclusion that Ukraine would benefit significantly from developing hydrogen infrastructure. The next step would be developing of a Concept/Strategy on Hydrogen as a national strategic document, for which the draft Roadmap would serve as a solid basis.

Workshop materials are posted at: <https://unece.org/sustainable-energyregional-advisory-services/improving-capacity-government-ukraine-develop>. Project materials are posted at: <https://unece.org/sustainable-energyregional-advisory-services/improving-capacity-government-ukraine-develop>.