



International Forum “Ways for Sustainable Hydrogen Production in Uzbekistan”

18 October 2023
Tashkent, Uzbekistan

Background

Hydrogen has been recognised as a possible approach to decarbonisation of otherwise hard-to-abate sectors such as heavy industry or long-haul transport. In addition, hydrogen can provide a solution for long-term energy storage. By 2050, hydrogen could deliver up to 24 per cent of the world’s energy needs.

Despite its vast potential to decarbonise the energy system, high costs and unclear regulatory frameworks are obstacles to emergence of a hydrogen economy. There is a need for coordinated action at national, subregional, and regional levels to enable full commercialisation of hydrogen projects. Many countries are recognizing the potential for hydrogen to contribute to meeting the objectives of the Paris Climate Agreement. Regional and national hydrogen strategies have also been developed in many countries.

The United Nations Economic Commission for Europe (UNECE) is implementing a project "[Sustainable hydrogen production in the UNECE region and its role in the development of a hydrogen ecosystem and export potential](#)." The objective of this project is to improve capacities of UNECE member States to develop sustainable hydrogen production strategies while raising awareness and overcoming economic, technical, policy and investment barriers.

Every year, since 2018, **the Agency for Innovative Development of the Republic of Uzbekistan** holds a week of innovative ideas [INNOWEEK.UZ](#), where local and foreign companies, investors, representatives of foreign diplomatic missions, entrepreneurs, as well as representatives of ministries and departments and many others take an active part. The aim of the event is to create a reliable platform for demonstrating and promoting the most advanced innovative technologies, products, projects, prototypes or models for various business areas, both from domestic and foreign representatives.

Agenda

At the Innweek-2023, the Agency for Innovative Development of the Republic of Uzbekistan and UNECE will jointly organize the Forum on Ways for Sustainable Hydrogen Production.

The event will be held **in Tashkent, Uzbekistan on 18 October from 10:00 to 18:00**. The format of the event is hybrid (mostly in-person with limited online participation). Simultaneous interpretation into English, Russian and Uzbek will be provided during the event.

The Forum aims to discuss the potential and ability to produce and trade hydrogen both domestically and for export in Uzbekistan and other Central Asian countries. The discussions will touch upon

national low-carbon hydrogen production potential and the possibility of its increase in the future, exploring opportunities for hydrogen export; determining possible directions of local hydrogen demand as well as outlining potential pilot projects implementation.

The event will focus on:

- Legislation and policies to support sustainable hydrogen production in Central Asian countries;
- Perspectives of Uzbekistan hydrogen energy sector in the geopolitical context of the global energy transformation;
- Incentives for development of the hydrogen energy sector;
- Potential pilot projects for sustainable hydrogen market at the regional and national levels;
- Role of Uzbekistan in establishing regional hydrogen infrastructure and value chains.

Welcome Remarks	
10:00-10:10	<ul style="list-style-type: none"> • Mr. Olimjon Tuychiyev, Director of the Agency for Innovative Development of the Republic of Uzbekistan • Mr. Oleg Dzioubinski, Regional Adviser on Energy, UNECE
Session 1: Sustainable Hydrogen Production Pathways in Central Asia	
Moderator: Mr. Oleg Dzioubinski, Regional Adviser on Energy, UNECE	
10:10-10:25	UNECE Study on Sustainable Hydrogen Production Pathways in Central Asia <ul style="list-style-type: none"> • Ms. Nadejda Khamrakulova, Economic Affairs Officer, UNECE
10:25-10:40	Policies and legislation for sustainable hydrogen production in Uzbekistan <ul style="list-style-type: none"> • Dr. Odilhuja Parpiev, Professor, Director of the Institute of Materials Science of the Academy of Sciences of the Republic of Uzbekistan
10:40-10:55	Perspectives and policies for low-carbon hydrogen production in Kazakhstan <ul style="list-style-type: none"> • Ms. Alisa Kim, Lead Engineer, Department of Alternative Energy, KMG Engineering LLP
10:55-11:10	Opportunities and perspectives for hydrogen energy development in Tajikistan <ul style="list-style-type: none"> • Mr. Timur Valamatzade, Chief Energy Expert, Industrial Development and Innovation Fund of the Republic of Tajikistan
11:10-11:25	Questions & Answers: all participants
Session 2: Perspectives for Development of the Hydrogen Energy Sector	
Moderator: Ms. Nadejda Khamrakulova, Economic Affairs Officer, UNECE	
11:25-11:40	Mr. Sergey Makarov, Programme Director, Climate Risk Management in Central Asia, GIZ
11:40-11:55	Project GreenHyRECA: Initial results for a transition pathway for Uzbekistan <ul style="list-style-type: none"> • Mr. Paul Bertheau, Project Manager, GreenHyRECA
11:55-12:10	Dr. Dina Azhgaliyeva, Senior Research Fellow, Asian Development Bank Institute
12:10-12:25	Mr. Yukinori Yanagida, Expert to Uzbek-Japan Innovation Center of Youth, Japan International Cooperation Agency (JICA)
12:25-12:40	Dr. Yuichi Sugai, Professor, Kyushu University, Principal Investigator of Hydrogen SATREPS
12:40-13 :00	Questions & Answers: all participants
13:00-14:00	Lunch break

Session 2: Perspectives for Development of the Hydrogen Energy Sector (cont.)	
Moderator: Ms. Nadejda Khamrakulova, Economic Affairs Officer, UNECE	
14:00-14:15	Mr. John Roberts, Energy Security Specialist, Methinks, UK
14:15-14:30	Mr. Regis Conrad, Synfuel Americas, former Director for Advanced Energy and Hydrogen Systems Division, U.S. Department of Energy (online)
14:30-14:45	Pilot projects in international cooperation in sustainable hydrogen in CIS countries • Mr. Branko Milicevic, Economic Affairs Officer, UNECE
14:45-15:10	Open-source planning tool for energy modelling and energy project developers • Mr. Umid Avlokulov, GreenHyRECA Project
15:10-15:30	Questions & Answers: all participants
15:30-16:00	Coffee break
Session 3: Development of the Sustainable Hydrogen Market: Business Cases	
Moderator: Mr. Branko Milicevic, Economic Affairs Officer, UNECE	
16:00-16:15	Prof. Andrey Yaroslavtsev, Director of the Institute of General and Inorganic Chemistry of the Russian Academy of Sciences
16:15-16:30	Prof. Dong Fang, Faculty of Materials Science and Engineering, Kunming University of Science and Technology, China
16:30-16:45	Dr. Jai Prakash, Professor, Department of Chemistry, National Institute of Technology (NIT), India
16:45-17:00	Green hydrogen pilot project in Qashqadaryo to promote hydrogen energy sector in Uzbekistan Dr. Pierluigi Leone, Professor, Politecnico di Torino, Italy
Session 4: Annual Report on the State of Development of Hydrogen Energy in Uzbekistan	
Moderator: Mr. Sanjar Berdiev, Head of the Department of the Development of Innovation Ecosystem in Sectoral Enterprises, Agency for Innovative Development of the Republic of Uzbekistan	
17:00-17:30	<ul style="list-style-type: none"> • Dr. Odilhuja Parpiev, Professor, Institute of Materials Science of the Academy of Sciences of the Republic of Uzbekistan • Dr. Jasurjon Akhatov, Professor, Physical-Technical Institute of the Academy of Sciences of the Republic of Uzbekistan • Dr. Ulugbek Shaislamov, Professor, National University of Uzbekistan named after Mirzo Ulugbek • Dr. Khatam Ashurov, Professor, Institute of Ion-Plasma and Laser Technologies of the Uzbekistan Academy of Sciences of the Republic of Uzbekistan
17:30-17:50	Questions & Answers: all participants
Closing of Event	
17:50-18:00	<ul style="list-style-type: none"> • Mr. Olimjon Tuychiyev, Director of the Agency for Innovative Development of the Republic of Uzbekistan • Mr. Oleg Dzioubinski, Regional Adviser on Energy, UNECE