

UN ECE Hydrogen Task force

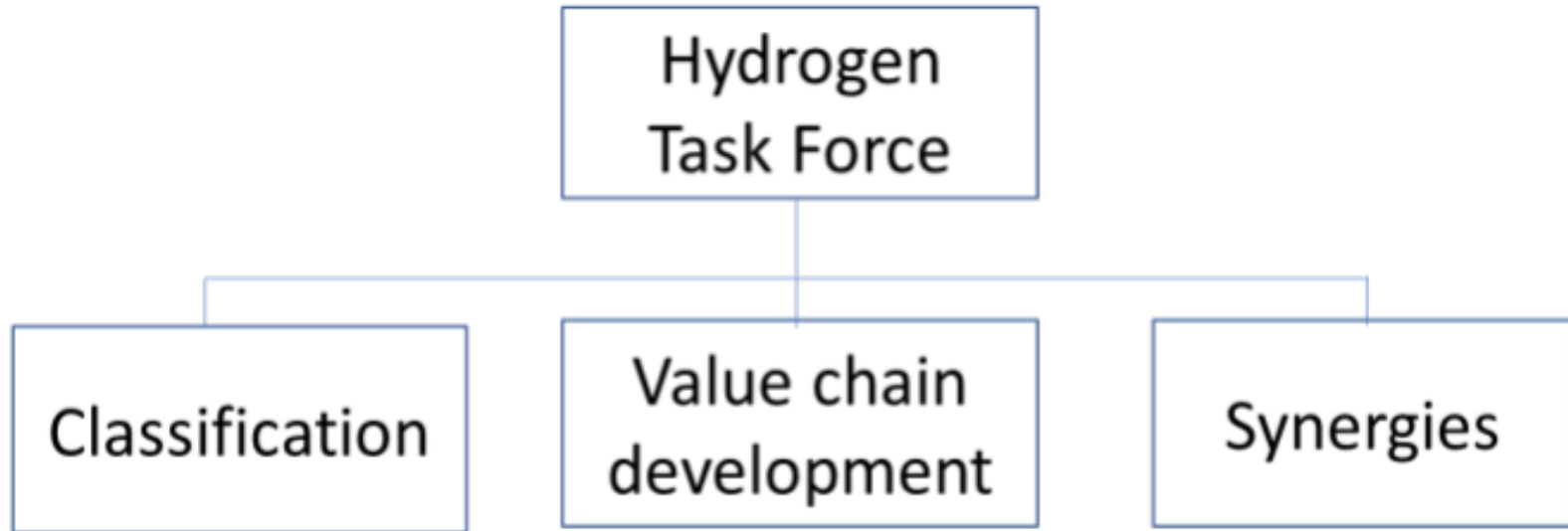
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Structure of the Task force

- In May 2023 the secretariat invited ECE member States to nominate their representatives to the Task Force.
- The secretariat organized several rounds of consultations with member States and several international organizations and mechanisms that cover various facets of hydrogen sector and discussed with them the scope of work of the future Task Force, with an aim to identify complementarities, potential overlaps, and the source of funding for the future activities.
- The Secretariat also reached out to the private sector, academia, and other independent experts, many of which had previously been involved in UNECE hydrogen-related activities.



Classification

- Based on preliminary research done by the ECE secretariat, currently there is no internationally accepted hydrogen classification that deals with its sustainability.
- The Task Force will examine if and how UNFC and UNRMS could be applied to hydrogen projects, with a view to develop pilot hydrogen production projects applying UNFC and UNRMS principles.
- In addition, and pending the availability of resources, the Task Force will work on taxonomy on hydrogen based on a life cycle analysis (LCA) and on developing a Guarantee of Origin for Hydrogen (GOH), in close collaboration with other actors such as Hydrogen Council, Hydrogen Europe, IPHE, the International Organization for Standardization (ISO), and many others.

- It is safe to say that today the hydrogen economy does not exist.
- Production without consumption is not sustainable, and vice versa. Creating a large-scale, multi-sectoral and international hydrogen value chain requires a well-thought, simultaneous, and coordinate action that would establish massive, continuous yet flexible material and energy flows.
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- The Task Force will promote action along the entire value chain: in the upstream production from renewable electricity and gases, in short and long-range transport via pipelines, ships, trains and trucks, in transformation into hydrogen-bearing liquid carriers, in storage in various forms including in underground storage, and in a plethora of end-use applications, many of which use hydrogen as a feedstock.

- Under synergies we primarily refer to the interactions between the renewable electricity sector and the existing gas infrastructure.
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- The Group of Experts on Gas has pointed out many times that the gas infrastructure can play the key role in accelerating development of hydrogen projects.
- This can be illustrated with the concept of Hydrogen Gas Asset Readiness (H2GAR). H2GAR explores how to use the existing assets and materials for the transport of hydrogen, to identify any technological and regulatory gaps, both for existing and for new pipelines.
- Another important concept is the blending of hydrogen with natural gas. In 2023 there was a workshop on this topic

What are the key subjects of the H2 Task force

- Promote and facilitate policy dialogue on hydrogen and foster cooperation on it within the ECE region
- Support current and future extrabudgetary projects on hydrogen managed by the Sustainable Energy Division
- Prepare a paper on existing international initiatives on hydrogen in the ECE region and beyond, and continuously monitor developments in this field, with an aim to minimize duplication of efforts
- Prepare, for the Committee's consideration, a work plan for future hydrogen activities of the Committee aiming to:

- In collaboration with the Expert Group on Resource Management:
 - Develop specifications for the application of the United Nations Framework
- Classification for Resources (UNFC) and the United Nations Resource Management
- System (UNRMS) to hydrogen projects and production technologies
- • Establish a taxonomy on hydrogen based on a life cycle analysis (LCA) approach
- • Work towards developing a Guarantee of Origin for Hydrogen (GOH)
- • Develop pilot hydrogen production projects applying UNRMS principles.

- In collaboration with the Group of Experts on Gas and other Groups of Experts as relevant, discuss, develop, and promote good practices and recommendations on:
 - The business case for blending hydrogen with natural gas
 - Hydrogen purity requirements for its production, transmission, and use
 - The role of gas infrastructure to accelerate development of hydrogen projects
 - Issues related to hydrogen emissions in the context of climate change
 - Help develop project proposals on any of the aforementioned items that may require extrabudgetary resources for presentation to potential donors.

- The Task Force is led by a Chair, nominated by the Group of Experts on Gas, and by several Vice-chairs, nominated by other groups of experts who wish to be actively involved in the Task Force activities.
- In its work the Task Force engages experts nominated by ECE member States' governments.
- The secretariat has also invited some of the experts involved in previous hydrogen activities and projects, who come from the private sector, academia, civil society, and international organizations.
- The work of the Task Force will be supported by the secretary of the Group of Expert on Gas.

- Reporting
 - The Task Force reports to the Group of Experts on Gas at its annual meeting and, through it, to the Committee. Between the session the Task Force will report to the Bureau of the Group of Expert on Gas, as needed.
- Duration
 - The Task Force is established for a period of two years effective September 2023. Its term is renewable, subject to the approval of the Committee.

Concrete action

- Participation in the 20-21. March 2024 meeting Gas Experts Group
- Webinar 23.rd March UN ECE TF H2
- Participation in the 5th April2024 meeting with Working Party 6.
- During the UNECE Resource Management Week, 22-25 April, we are invited to present the work of the Hydrogen Task Force.
- A webinar in June 2024 on a specific topic (ha to be decided)
- Presence/event during the UNECE Sustainable Energy Week (Committee) in September
- Another webinar in October 2024 on another specific topic (has to be decided).
- Participation in November at UNESCAP high-level energy meeting.
- **COP29 in December in Baku.**
- A webinar in December 2024 on a specific topic (has to bedecided)

Many thanks for your attention

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Proposals and remarks are welcomed

