

Call for experts on Joint Task Force hydrogen quality for industrial use

Expected action: for reaction

Due Date: 14 January 2022

To the chairs and members of:

CEN/CLC Sector Forum Energy Management/Working group Hydrogen

CEN Sector Forum Gas Infrastructure (SFG-I)

CEN Sector Forum Gas Utilization (SFG-U)

CEN/CLC Joint Technical Committee 6 (JTC 6) on Hydrogen in energy systems

CEN/TC 234 Gas infrastructure,

Liaison organizations of CEN/CLC JTC 6 and CEN/TC 234,

Dear Mr/Ms,

With this letter, all members of the above-mentioned committees are kindly asked to nominate technical experts who wish to take part in the new Joint Task Force (SFEM/WG hydrogen and SFG_I and U) to identify industrial needs on gas quality of hydrogen. The Joint task force is an initiative of the above-mentioned Technical Committees and Sector Fora.

Task force objectives

Main question for this Joint Task Force is to assess the needs of hydrogen quality requirements of industrial users regarding the impact of the hydrogen production processes and the impact of impurities from existing gas infrastructure (e.g. impurities for a transition phase).

The following issues will be addressed:

- Identification of relevant industries and sub-categories of industrial users
- Identification of the volume of these industries in relation to the need of H₂ (justification for purification)
- Identification of quality needs in their processes (incl. considerations on concentration of hydrogen and impurities)
- Relevance of other H₂ quality parameter and impurities, through repurposed pipelines and infrastructure
- Assessment of the impact of the < 2% impurity in case of > 98% H₂ concentration (including source of the impact)
- Identification of steps needed to accept/receive a higher level of H₂ quality

Background

In CEN/TC 234 a new work item started (WI 00234096) on the gas quality of hydrogen provided from repurposed natural gas infrastructure. The proposal indicates a concentration of a minimum of 98% hydrogen taking the current (transitional) impurities in natural gas infrastructure into account.

A discussion followed in JTC 6 on what is the impact of the remaining 2% but also on how it can be dealt with in end-user applications with an important focus on the use of hydrogen as feedstock but also for combustion. It was decided to investigate this topic further in a dedicated Joint Task Force. This action is understood as a complementary assessment to the CEN/TC 234 work.

A first meeting is planned for **Tuesday 22 February from 02.30 – 04.30 PM**. In this meeting we will establish an enquiry to be sent to industrial end-users to support the JTF work in Q1 2022.

Date: 2021-12-13

Call for experts

For the JTF we are inviting experts related to

- the industrial use of hydrogen
- hydrogen production
- hydrogen quality and/or the gas infrastructure

We kindly ask you to inform us by **14 January 2022** at the latest if you are interested to join this Joint Task Force. Please send your questions and/or your application to Linda Hoekstra (linda.hoekstra@NEN.nl).

Please feel free to share this call for experts with relevant organizations/associations. It seems us crucial that the nominated experts are able and committed to contribute/discuss related information. It would also be good to have access to a network to collect further information.

We are looking forward to your reply and the challenging work in the Joint Task Force.

With best regards,

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