

H2 Gas Assets Readiness (H2GAR)

Working together, achieving together



BACK  TOGETHER

Lucerne 2021



Hydrogen

The race for colors

Vittorio
Musazzi

Consultant
Former Snam Rete Gas Operation EVPs Area
Former ENTSOG General Manager (2010-15)

H2GAR

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Working together, achieving together

In 2020, just before the COVID pandemic,

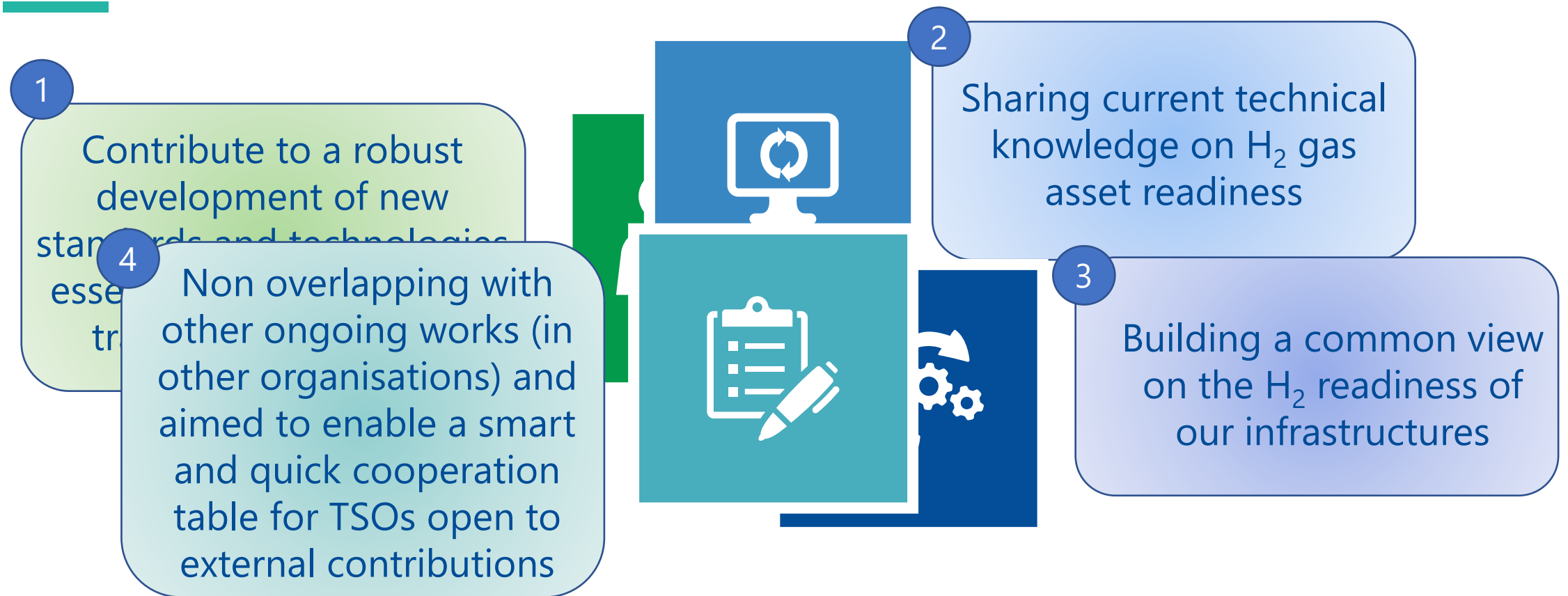


decided to join together to start a **project**:

H2 Gas Asset Readiness

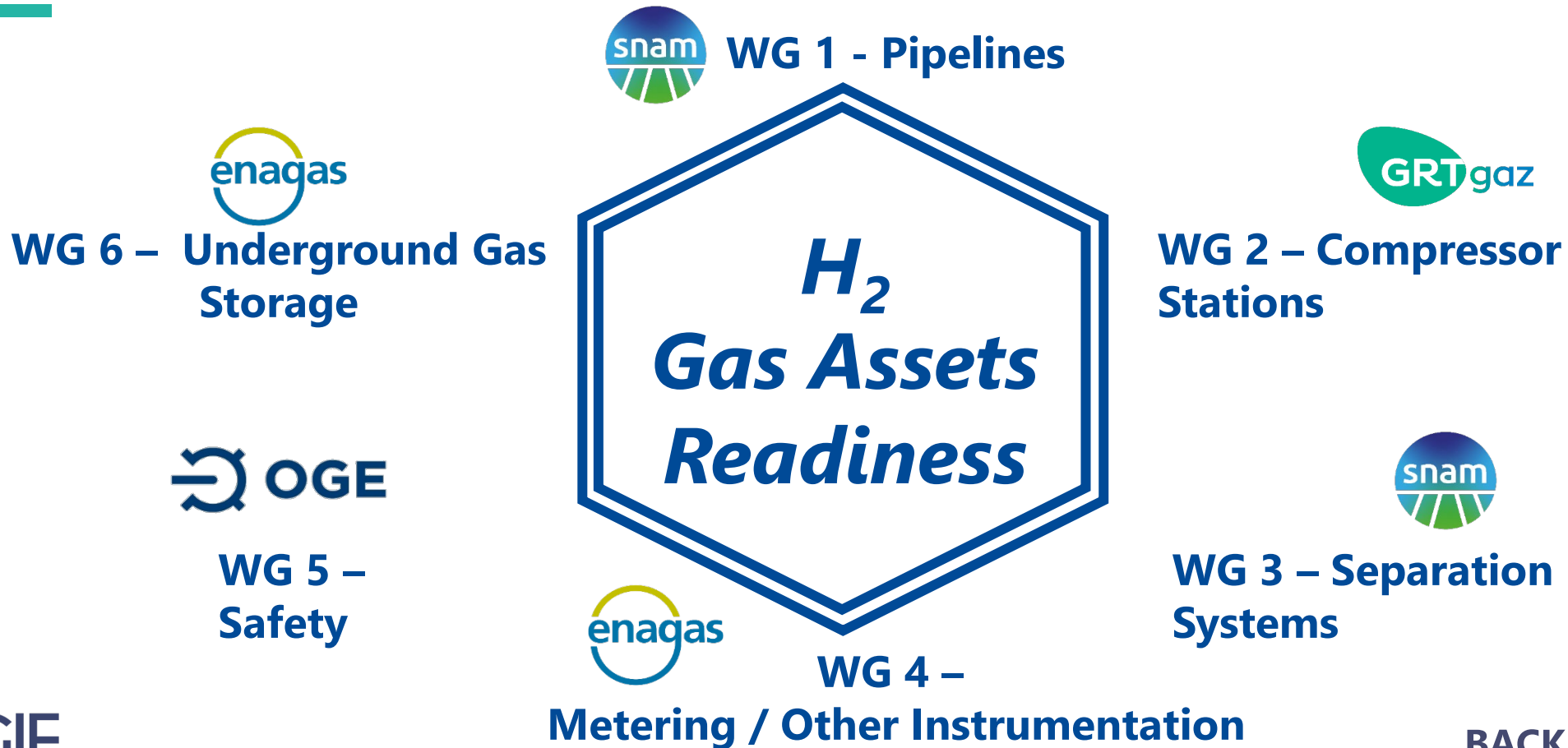
to work together on the action to be considered to get ready for H2.

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Scope - Internal Organisation



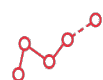
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The way of working



— Strategic Objective

The goal is to define a **common approach among members** regarding two scenarios of **H₂ levels (10% and 100%)** assessing the impact on **gas turbines and compressors**. The WG will collect necessary information from manufacturers regarding the use of H₂ / NG mixtures with gas turbines and compressors.



— Activities developed



Shared data about 21 available projects/documents already available and 12 ongoing activities



Collected details about 25 ongoing material testing initiatives (characterization of steel vs. H₂).



Draft proposal of annex for the revised EN 1594 → *"Annex. Material Compatibility with Hydrogen or Gas Mixture (informative)"*



— Strategic Roadmap

- To continue collecting information form manufacturers/suppliers
- Z-calculation laboratory with H₂/NG mixtures)
- CFD simulation of mixture of H₂ in natural gas pipeline
- Follow up of H₂/NG mixtures test loop to be built by a TSO

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Interactions with external Organisations



CEN/TC 234



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