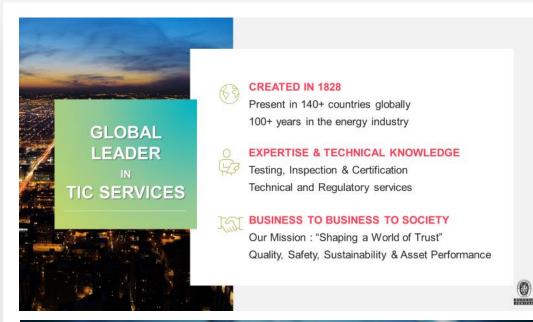


CARBON EMISSION ASSOCIATED WITH GREEN HYDROGEN PRODUCTION

ICGH 2023
PANEL DISCUSSION

BUREAU VERITAS – BRINGING TRUST TO HYDROGEN INDUSTRY











BUREAU VERITAS POSITIONING ON HYDROGEN: BRINGING TRUST AND TRANSPARENCY

With our long-standing experience in the energy industry, especially in risk & safety management and quality assurance, our overarching role is to bring trust to the hydrogen energy industry.

FOR HYDROGEN AND DERIVATIVES ALONG THE VALUE CHAIN

As an independent third party:

- Certification of production assets / site
- Label for produced molecule
- Certification of Electrolysers
- Independent testing & measurement

As a technical expertise provider:

- Owner's engineer
- Technical & Regulatory services
- Permitting support
- Risk & safety management





EMISSIONS ASSOCIATED WITH GREEN H2 PRODUCTION - CHALLENGES

Green H2: Tradeable & Decarbonized energy vector enabling Sustainable energy transition

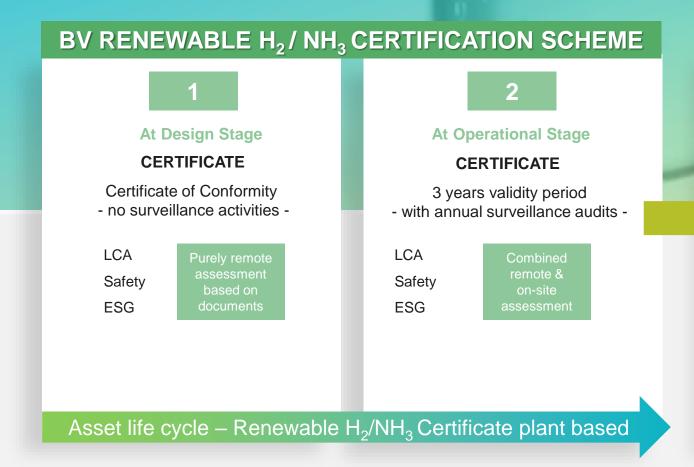
- □ No global criteria for Green / Renewable / Low Carbon H2 Challenges with mis-labelling
 - > Need common definition of minimum emission saving threshold vs fossil fuel comparators
- ☐ Lack of common emission accounting standards for 'apples to apples' comparison
 - > Address multiple pathways for H2 production with combinations for input, output & co-products
- ☐ Local regulations emerging impacting cross-border trading
 - > No current harmonization of regulations globally ... Building a global consensus is taking time
- ☐ Emission savings should not be the only KPI for Green H2 production
 - Sustainability and overall environmental impact to be assessed together with emission savings

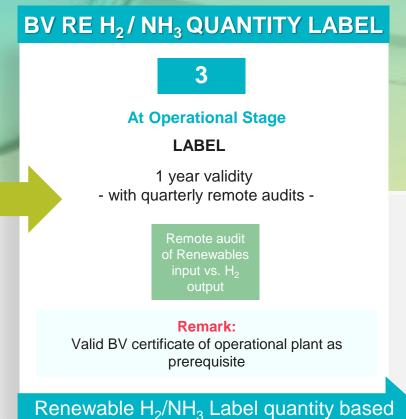
Need for Certification Scheme addressing "Green" H2 & derivatives production

> Address trust & visibility for developers, investors & off-takers to ramp-up investments & capacities



A CERTIFICATION PROCESS IN 3 STEPS





Regulatory Compliance will be assessed in combination with BV scheme either to local and/or to end-market regulation









