

SIXTH MEETING OF THE ISA REGIONAL COMMITTEE FOR EUROPE AND THE OTHERS REGION

10 – 12 JUNE 2025 | BRUSSELS, BELGIUM



Advancing Solar Energy Deployment through Energy Storage and Green Hydrogen

12 June 2025, 14:00 hours – 15:00 hours (CET)

Sofitel Brussels Europe, Pl. Jourdan 1, 1040 Bruxelles

Registration link: https://isa.int/rcm_europes

Why Storage and Green Hydrogen?

The need to tackle climate change has prompted a global shift towards renewable energy sources such as solar and wind. While these sources are clean and abundant, their inherent variability presents significant challenges in maintaining a stable and reliable energy supply. To bridge the gap between fluctuating generation and demand, energy storage systems have become increasingly important.

Green Hydrogen (GH), which is produced using renewable energy, is a promising solution to decarbonise various hard to abate sectors, including transportation, refineries, fertilisers, and steel industry, etc.

Context

Storage: Short- to medium- duration storage, such as advanced battery systems, flywheels and other technologies, offer promising solutions by shifting energy over seconds, minutes, or a few hours. Many of these can also deliver a wider array of services to power systems, such as ancillary and reserve services, ensuring system adequacy, and managing congestion in transmission and distribution networks. Long Duration Energy Storage (LDES) technologies, such as pumped storage, green hydrogen and thermal storage systems, enable the storage of solar energy for extended periods, ensuring a stable power supply even when sunlight is not available. This is specifically beneficial for developing countries, particularly in regions like Sub-Saharan Africa, South Asia and Latin America, which possess significant solar power potential. Solar and storage integration enhances energy security, grid stability, economic growth and environmental sustainability.

Green Hydrogen: GH accounts for less than one percent of global hydrogen production. However, the declining costs of renewable electricity and electrolyzers indicate the investment readiness of GH sector. Although this emerging technology is gaining traction across industries, it faces certain challenges like high production and operational costs, underdeveloped infrastructure, absence of dedicated policy and standards, lack of knowledge, shortage of specialized manpower and limited access to affordable financing.

Suggested Topics for Speakers

- **Invited Speakers:** Current and emerging storage and GH technology and policy landscape; global best practices

- **Member Country:** Policy and regulatory frameworks to accelerate GH and storage ecosystem readiness in countries/region of interest; Demand creation
- **Industry:** Existing and emerging business models for off-take of GH and storage that can drive down costs; Manufacturing and supply chain

Expected Outcome

- Identify possible areas of collaboration - Feasibility studies, Joint Pilots, Business Models, Country-specific Roadmaps
- Identify partnership opportunities with ISA's capacity building initiatives, e.g. STAR-C, Green Hydrogen Innovation Centre (www.isa-ghic.org), joint training programmes

Agenda

Time 60 mins	Speakers
Context Setting - ISA initiatives (3 mins)	DG, ISA
Roundtable Discussion (45 mins) Moderator: ISA	Panellists: <ol style="list-style-type: none"> 1. Sturle H Pedersen, Chairman, Greenstat Asia Pvt. Ltd. 2. Jonas Moberg, CEO, Green Hydrogen Organisation, Geneva 3. Andrew Swanson*, Partnerships Manager, Clean Energy Ministerial Secretariat, Paris 4. Olivia Infantes Morales*, Regulatory Affairs Director - Hydrogen and Clean Power, Moeve, Spain 5. Mrityunjoy Samaddar, Business Development, Director Hydrogen, Envision (Europe & India) 6. Long Duration Energy Storage Council
Key Takeaways and Next Steps (10 mins)	ISA – RCM participants
Closing Remarks (2 mins)	ISA

Annexure I

ISA Initiative

Programme on ‘Scaling Solar E-Mobility & Storage’

ISA supports member countries in developing policies and regulations to accelerate solar energy adoption through its ‘Scaling Solar E-Mobility & Storage’ programme. This initiative promotes diverse storage technologies like batteries, compressed air, gravity storage, and pumped hydro. ISA is conducting a study titled ‘Developing Prioritisation Framework for short to medium duration storage for Accelerating Solar Project Deployment in Least Developed Countries (LDCs) and Small Island Developing States (SIDS)’. The study is intended to serve as an assessment report for short to medium duration deployment in ISA member countries, particularly focusing on LDCs and SIDS ⁽¹⁾.

ISA is also conducting a study titled ‘Scaling Solar integrated LDES Technologies: Developing Implementation Roadmap and Identification of project pipelines in Developing Nations’. This study explores the opportunities, challenges, and strategies for deploying LDES technologies.

Programme ‘Solar for Green Hydrogen’

The transition to a low-carbon future necessitates the rapid development and deployment of clean and sustainable energy sources. Recognizing the pivotal role of GH in achieving global climate goals, ISA launched a programme on ‘[Solar for Green Hydrogen](#)’ in its Fourth Assembly held in October 2021. The objective of this programme is to accelerate GH production, utilization, and trade in ISA Member Countries.

Under this programme, ISA has carried out capacity building activities, analytics and advocacy, country insights and feasibility studies for its member countries ⁽²⁻⁹⁾. Building on these advancements, ISA introduced a new initiative—Global Green Hydrogen Start-up Challenge. The objective of this initiative is to identify and support green hydrogen startups engaged in developing innovative, scalable and commercially viable solutions within the steel and transport sectors. This initiative will serve as a global platform for these start-ups to incubate and grow. The challenge will invite applications from eligible start-ups, and ~20 selected startups will receive seed grants along with strategic acceleration support.

ISA Storage and Green Hydrogen Publication Links

1. [Framework for Energy Storage Prioritization to Boost Solar Deployment in LDCs and SIDS](#)
2. [Blueprint for Ecosystem Readiness Assessment for Green Hydrogen](#)
3. [Africa Solar Hydrogen Project \(ASHyP\)](#)
4. [A Roadmap for Developing and Scaling the Green Hydrogen Ecosystem](#)
5. [ISA-INAE Green Hydrogen Report for India](#)
6. [Green Hydrogen Innovation Centre](#)
7. [Readiness Assessment of Green Hydrogen in African Countries](#)
8. [Green Hydrogen Policy Accelerator Training Handbook](#)
9. [Global Green Hydrogen Startup Challenge](#)