



IEA Experts Group on R&D Priority-setting and Evaluation Workshop Developments in demonstrations, tests and standardization

Technical University of Denmark
DTU Risø Campus
Frederiksborgvej 399, DK-4000 Denmark
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The energy transition relies on widely accepted international standardisation systems that adequately reflect countries policy priorities and values regarding an affordable, secure and safe energy system. International standards play a crucial role in an interconnected world and help make the development, manufacturing and supply of goods and services safer, reliable, more efficient and cost-competitive and sustainable.

Standards are ideally based on sound knowledge creation processes and quality assurance throughout the entire innovation system, from research to commercialisation. Standards help researchers and innovators bring their research closer to the market and spread technological advances by establishing uniform criteria and by developing methods, practises and procedures. Standards offer a basis for the integration of diverse technologies (or components) into complex, innovative systems and solutions and enable interoperability between components, products and services. Standards ensure that products and services meet safety, reliability and quality standards, setting minimum safety requirements to the development, transport and use of technologies and services and protecting the public and workers. By harmonizing technical specifications, standards make industries more efficient and make trade between countries easier and more competitive because the same specifications are adopted for use in different countries as national or regional standards. Standards contribute by promoting good regulatory practices and reducing technical barriers to open international trade.

In the IEA technology cooperation programmes, experts work to advance the research, development and commercialisation of energy technologies by sharing knowledge, identify best practises and develop recommended practises in new technology areas, in which international standards have not yet been developed. In the many international standardisation committees such as ISO or IEC, experts from industry and academia work collectively to develop standards in rapidly developing technology areas that rely on state-of-the-art knowledge on demonstrations, tests and measurements.

The workshop will focus on developments in demonstrations, tests and measurements and the coupling to international standards and procedures for clean energy technologies and systems. Demonstrations, test, measurements and international standards and procedures are important to demonstrate and deploy new technologies in a safe and reliable way and there is a need to accelerate the process without comprising the quality and impartiality of demonstration, tests and measurements. Selected use-cases

will be presented and discussed, including wind energy, storage technologies as well as sustainability and circularity.

The workshop is organized by the IEA Experts Group on R&D Priority Setting and Evaluation (EGRD) and it is hosted by The Technical University of Denmark. EGRD is an informal advisory group under the IEA Committee on Research and Technology (CERT) with the role of supporting CERT delegates with advice on R&D priority-setting and the linkage to governmental policy objectives, methods and approaches for evaluation of R&D activities, and understanding of emerging and systematic R&D topics. Recent topics include: Improving the Resilience of the Complete Clean Energy Supply Chain (2023) and Social Impacts of Clean energy Policies (2023). Workshop summaries are available here: <https://userstcp.org/iea-egrp>

Key questions to be addressed are:

1. How can standards support and accelerate the technology development and vice versa, in particular in the demonstration and deployment stages? Can better feedback loops between R&D and standardisation activities be accelerated? Are there any issues related to intellectual property or research results valorisation? What are the recent developments in tests – the role of AI, machine learning, digital twins etc. – and challenges when converting results and protocols into standards?
2. What are the lessons learned in different technology cases and can such lessons be transferred to other technology areas?
3. What can the IEA Technology cooperation Programmes do to strengthen the necessary knowledge creation from reference cases / recommended practices to the international standardization committees and vice versa?

Leading experts from research institutions, standardization bodies, government and IEA Technology Cooperation Programmes will provide insight into this challenging area. The workshop is structured:

- Introductory session
- Session 1: Setting the scene with interventions from the EU Commission and standardization bodies
- Session 2: Accelerating the technology development: from demonstration, test to industrial standards for reliable, safe, sustainable and affordable energy technologies
- Session 3: Navigating and managing the vectors in technology development - practises and lessons learned from different use cases
- Session 4: International cooperation, TCPs and technology standards and certification
- Final discussion session

Practical information

The Workshop will take place at The Technical University of Denmark, DTU Wind and Energy Systems at DTU Risø Campus, Denmark. The event will be hybrid, while physical presence of the participants is strongly encouraged. It will be a 1.5 days event, starting at 9.00 on 21/11 and concluding at 13.00 on 22/11.



After the end of the Workshop, the members of the Executive Committee of IEA EGRD will hold the annual Executive Committee meeting.

DTU Wind and Energy Systems is located a little outside Roskilde, about 45 km west of Copenhagen Airport. Participants will arrive on the evening before the start.

Here you can find more information about how to get to DTU Risø Campus by car or public transportation: [How to get to DTU Risø campus](#)

Deadline for in-person registration will be no later than 14th November.

Please register here: [IEA Experts Group on R&D Priority-setting and Evaluation Workshop | The Event \(conferencemanager.dk\)](#)

Accommodation options in Roskilde:

[Zleep Hotel Prindsen Roskilde | Hotel in Roskilde | H Rewards](#)

[Scandic Roskilde Park - Guest Reservations](#)

Accommodation options in Copenhagen (just a few out of many more):

[Hotel Copenhagen | Best Online Rate | Radisson Collection Royal \(radissonhotels.com\)](#)

[Bryggen Guldsmeden - 4 star superior Urban Eco Resort with pool \(guldsmedenhotels.com\)](#)