

## SKILLS WORKING GROUP

### Minutes

10 May 2022 (conference call from 10:00 - 12:00)

#### **I. Welcome and introduction**

The first meeting of the Skills WG was open with introductions from the WG coordinators – Katarina Muse (HE) and Julia Cora (HER), followed by remarks by the group's Co-chairs **Massimo Valsania** (VP Engineering at EthosEnergy) and **Robert Steinberger-Wilckens** (Professor and chair of Fuel Cell and Hydrogen Research at the University of Birmingham). The two outlined their vision for the Skills WG, its activities and scope of work.

#### **II. Key data on the Skills WG**

For data on the Skills WG please consult the presentation (uploaded on HE Skills website and HER Share point).

Slido was used to get info on the participants in the room:



Julia (HER) presented the results of the survey from February 2021 conducted amongst HE and HER members respectively. The finding of the survey informed the drafting of the Skills WG programme for 2022/2023. The ongoing survey (see [here](#)), open until 20 May, will also help to inform coordinators about members' expectation from the Skills WG. Several suggestions already provided in the survey include:

- Providing updates on current and upcoming funding opportunities,
- Providing updates on current and upcoming educational and training programmes,
- Networking,
- Consortia building,
- Exchange of best practices,
- Organising events and training courses.

#### **VI. Skills WG Work Programme**

**Massimo Valsania** presented the proposed Work Programme for the Skills WG. This was followed by Slido with members being asked to rank the activities outlined in the Work Programme according to their priorities:



How would you prioritise different topics listed here?

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Members were also asked for their input on what should be in the scope of activities of the Skills WG:

Do you have other suggestions for activities that should be covered in the Working Group?

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It has already been said, but I think that defining common curricula contents for different levels will be very useful

Focus on skills among end-users, eg car owners, to ensure safe implementation and use in the entire eco system

Development of a roadmap based on JU's SRIA and work already done.

Curriculum development for different target groups.

Can we develop common educational materials (e. G ppt-slides) that can be shared and used by Her/he members?

the WG could try to set the framework to avoid that the different actors invest energy and budget individually for local trainings offer (internal, customer and supply chain). We should try to share means to develop the common material supporting the upskilling

Key areas that should be covered in Master's programme related to hydrogen

Sharing the different curriculum and materials from different industry sector players

Developing an expert team that can give skilling-reskilling courses (events) for different places (industries) that need such training

A framework for accreditation, recognition of MicroCredential, granting of MC's, certification and QA

Involving authorities and emergency response teams as well - they also need training and new skills on safety etc.

We run an Erasmus Mundus Master with a focus on Hydrogen (DENSYS). The sustainability and the scaling-up of existing programs is a topic to be addressed in the WP.

In addition, there were several interventions from members on the scope of the WG:

- **Felicity Morris (BP):** noted the need to create a framework on skills before other activities;
- **Erik Zindel (Siemens Energy):** commented that the most relevant issue for him is to understand the trends and training needs, with funding being a secondary issue. He also



offered to present Siemens Energy training programme as an example of best practice in one of the future WG meetings.

- **Andres Lundblad (RISE):** noted that there is a need for dividing into sectors, for example 1) production, 2) distribution and storage, 3) use. Historically use (fuel cells) was in focus, but more attention should be given to 1 and 2 when we talk about skills.
  - **Olaf Jedicke (KIT):** highlighted that the question to be addressed in the WG is how to build the infrastructure/network to educate and training people. He also asked about immediate next steps for the WG.
  - **Robert Steinberger-Wilckens:** explained that members need to exchange on this, as well as highlighting the need to catalogue ongoing projects, training courses, i.e. working on bringing together all activities. Furthermore, WG should also focus on the issue of accreditation, as well as on microcredentials, and ensure that high quality learning is delivered to train people.
  - **Michael Diderich (HE)** asked if there is data on how many people have received training so far, and should the WG set a target for training. Also, Should the WG advocate to covered OPEX to cover training for example?
- ➔ Coordinators, together with the WG Co-Chairs will assess these inputs and will discuss ways to integrate these in the WP.

## VII. Resources and tools for the Working Group

Robert Steinberger-Wilckens gave an overview of past and current projects in the field of FCH skills. For more information, please consult the presentation. HE and HER also took note of members sharing insights on ongoing projects and/or training programs.

- ➔ Information on these projects and well as others relevant for the WG will be collected and shared on the HE and HER respective intranets. Do note that HE and HER intranet are planned to be operational before summer. In the meantime, “Library of projects” (i.e. Share Point) will be established to collect this data.
- ➔ Members are invited to share with Katarina and Julia information about relevant projects and best practices.
- ➔ Member are also encouraged to advertise their job opening on HE & HER job platform (see [here](#)). This service is free for members.

## VIII. Next Steps

### Upcoming meetings:

- 12 July (from 10 am to 12 am) - Workshop on micro-credentials
- 18 October (from 10 to 12 am) - Working Group Meeting

## IX. Participants

First Name	Last Name	Organization
Ain	Laidoja	Estonian Hydrogen Association
Aline	Leon	EIFER
Anders	Lundblad	RISE
Andrea	Barredo	Fundación Asturiana de la Energía



Hydrogen  
Europe



Hydrogen Europe  
Research

Anke	Hagen	Technical University of Denmark
Anna	Filipowicz	PKN Orlen
Anne	TROESCH	FAURECIA
Azahara	Luna-Triguero	Eindhoven University of Technology
Benoit	PRAX	Airbus
Carlos	Merino	CNH2
Carlos	Cudeiro	Mitsubishi Corporation
Christophe	Mendibide	institut de la corrosion
Clarisse	Lorreyte	DLR
Daniel	Hielscher	LIFTE H2
Daria	Vladikova	ISTD
Emanuele	Volpe	DTEK
Erik	Zindel	Siemens Energy
Federico	Ustolin	Norwegian University of Science and Technology NTNU
Felicity	Morris	BP
Florian	Heckert	DLR
Francisco	Tinaut	Institute CMT-UPV
Heathcliff	DEMAIE	Université de Lorraine
Ibrahim	Muritala	Deutsches Zentrum für Luft- und Raumfahrt (DLR) / German Aerospace Center
Irene	Elwin	bp
Jan	Sochor	Czech Hydrogen Technology Platform (HYTEP)
Jan	Michalski	TÜV SÜD / LBST
Jason	Millichamp	UCL
Jose	Rueda	TU Delft
Juan Manuel	Fernandez Etxaniz	Ente Vasco de la Energía
Julia	Cora	Hydrogen Europe Research
Karthikeyan	Natarajan	LUT University
Katarina	Muse	Hydrogen Europe
Lars	Roentzsch	Fraunhofer IFAM
Laura	Sanguino	UPM
Lin April	Løstegård	Norsk Hydrogenforum
Lisa	Renner	Robert Bosch GmbH
Lukas	Hauser	Linde Hydrogen Fuel Tech
Marius	Urbonavicius	Lithuanian hydrogen energy association
Marta	Dołęga-Łasisz	PKN ORLEN
Massimo	Santarelli	Politecnico di Torino
Massimo	Valsania	Ethosenergy
Mette Marie	Karsten	Danish Institute of Fire Safety and Security Technology
Michael	Diderich	Hydrogen Europe
Michael	Kreuz	DLR German Aerospace Center
Oksana	Dybkina	DTEK
Olaf	Jedicke	KIT
Oliver	CURNICK	Coventry University
Pertti	Kauranen	LUT University



Hydrogen  
Europe



Hydrogen Europe  
Research

Robert	Steinberger- Wilckens	University of Birmingham
Ryo	Ujimoto	CaetanoBus S.A.
Sergii	Pylypko	Elcogen
Serhat	Yesilyurt	Sabanci University
Simona	Vitali	Hydrogen Europe Research
Stephan	Abermann	AIT Austrian Institute of Technology GmbH
Teresa	Orellana Pérez	BAM
Thorsten	Lauzat	Open Grid Europe
Tim	Kleier	SMS group GmbH
VERONIQUE	ROUSSEL	HOWDEN
Viktor	Hacker	TU Graz
Vincenzo	Liso	AAU
Vladimir	Molkov	Ulster University