NOVEL - Novel materials and system designs for low cost, efficient and durable PEM electrolysers

**First International Workshop**

Durability and Degradation Issues in PEM Electrolysis Cells and its Components

**First Results from the Questionnaire**

March 12$^{th}$-13$^{th}$, 2013
Fraunhofer ISE | Freiburg | Germany

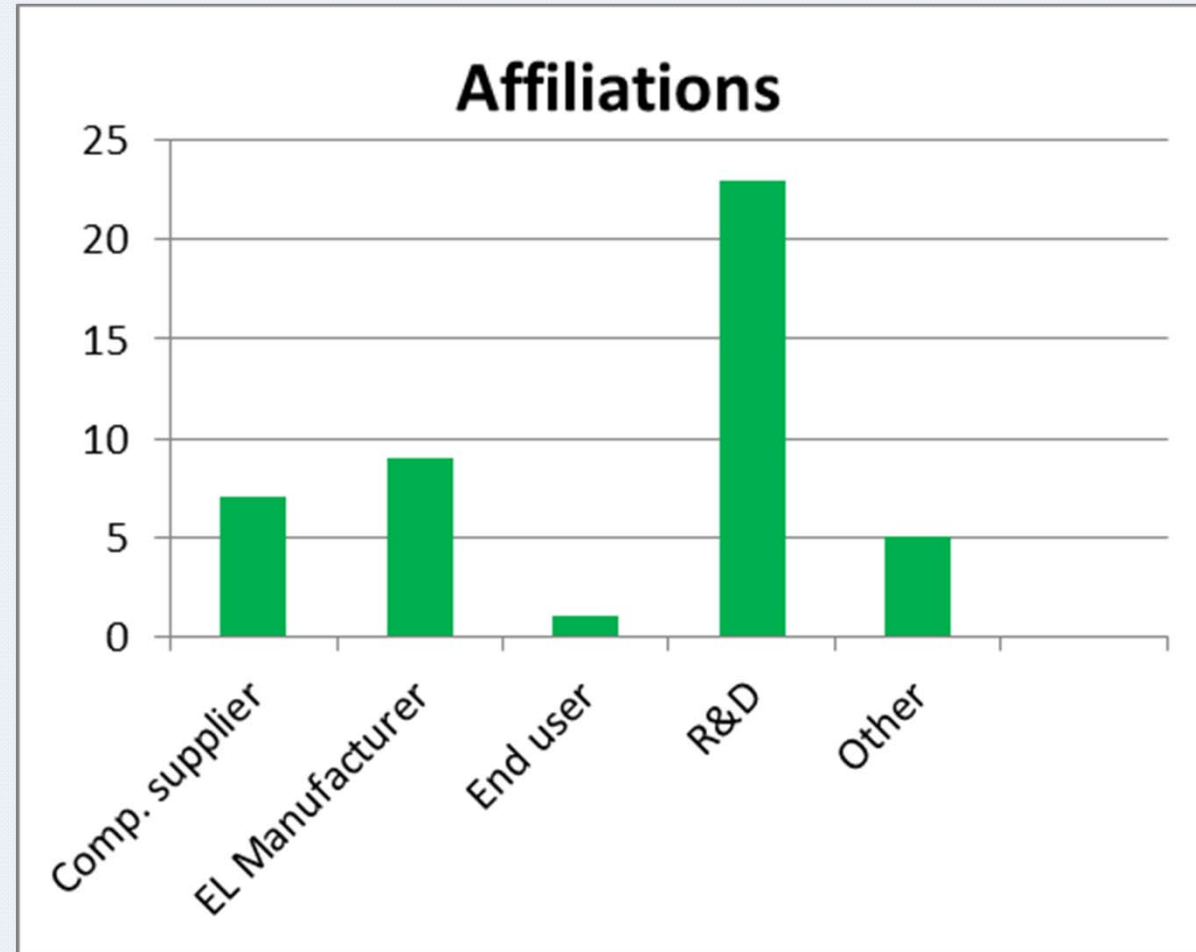# Main conclusion:

## We need more time!

# Some statistics about the audience

■ Where do we come from?

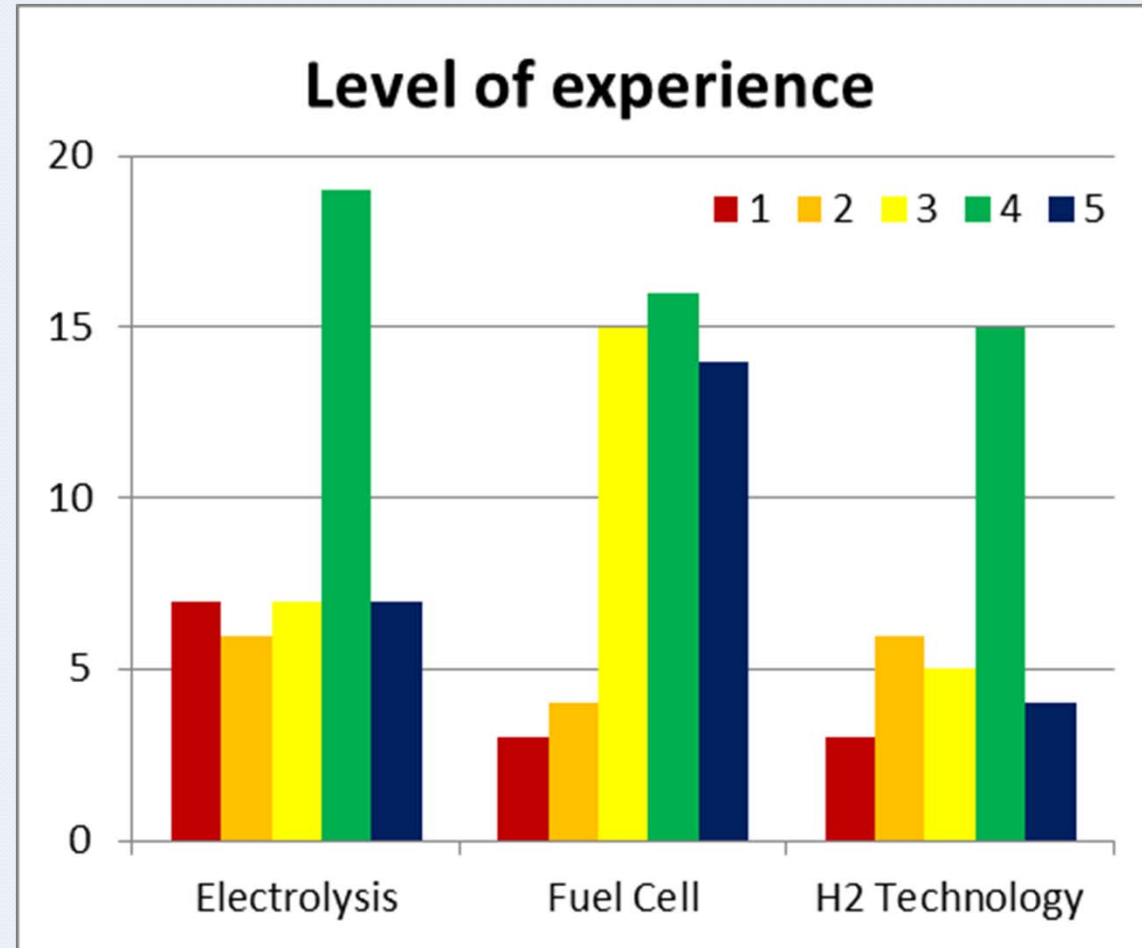| | Country |
|---|---|
| 1 | Belgium, Czech Republic, Finnland, Russia |
| 2 | Canada, Denmark, South Africa |
| 3 | Italy, Norway, US |
| 4 | Spain |
| 8 | Switzerland, UK |
| 15 | France |
| 57 | Germany |

# Some statistics about the audience

- Share according to affiliation
- 45 participants filled in the questionnaire
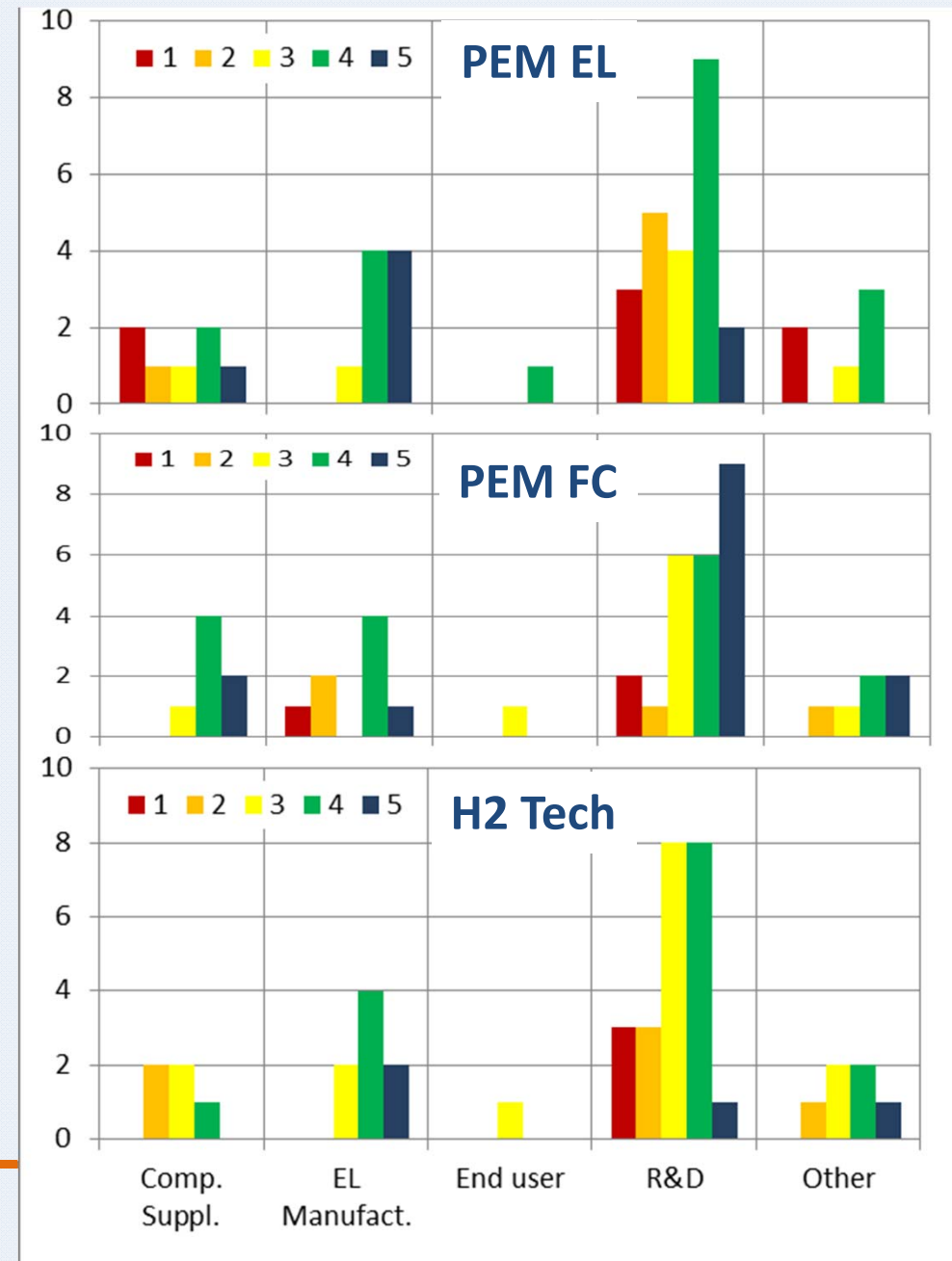


Affiliations

# Some statistics about the audience

- Question:
  "How would you grade your experience with …"
  - 1: basic
  - 5: expert



**Level of experience**

Legend: 1 2 3 4 5

Categories: Electrolysis, Fuel Cell, H2 Technology

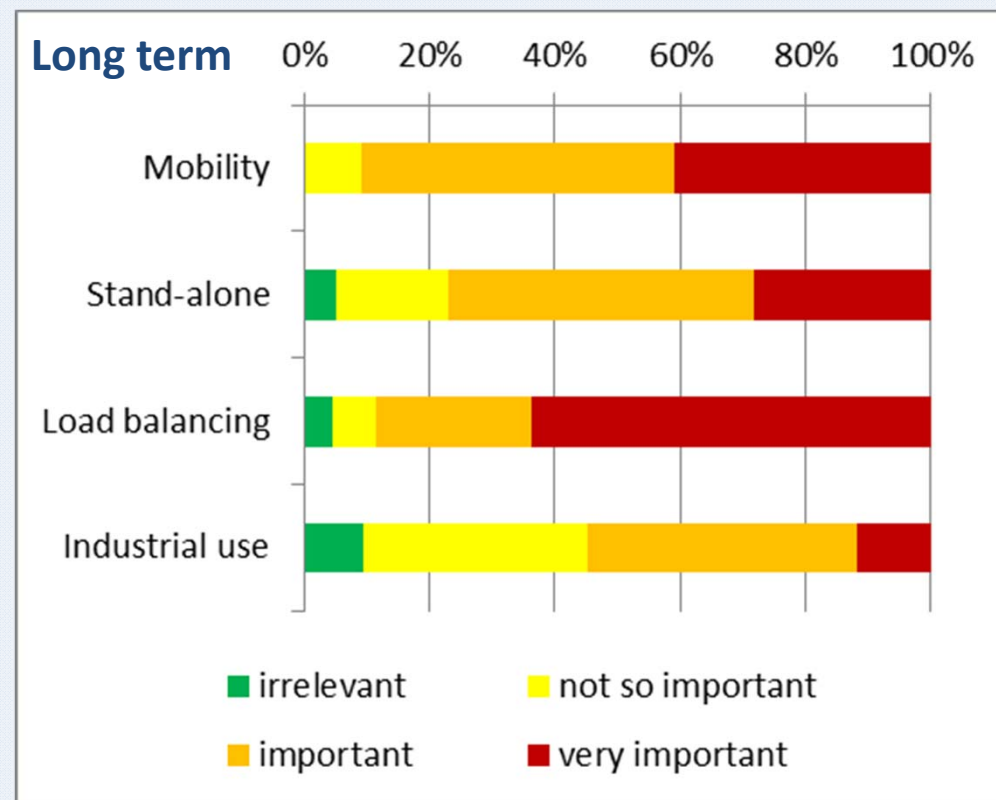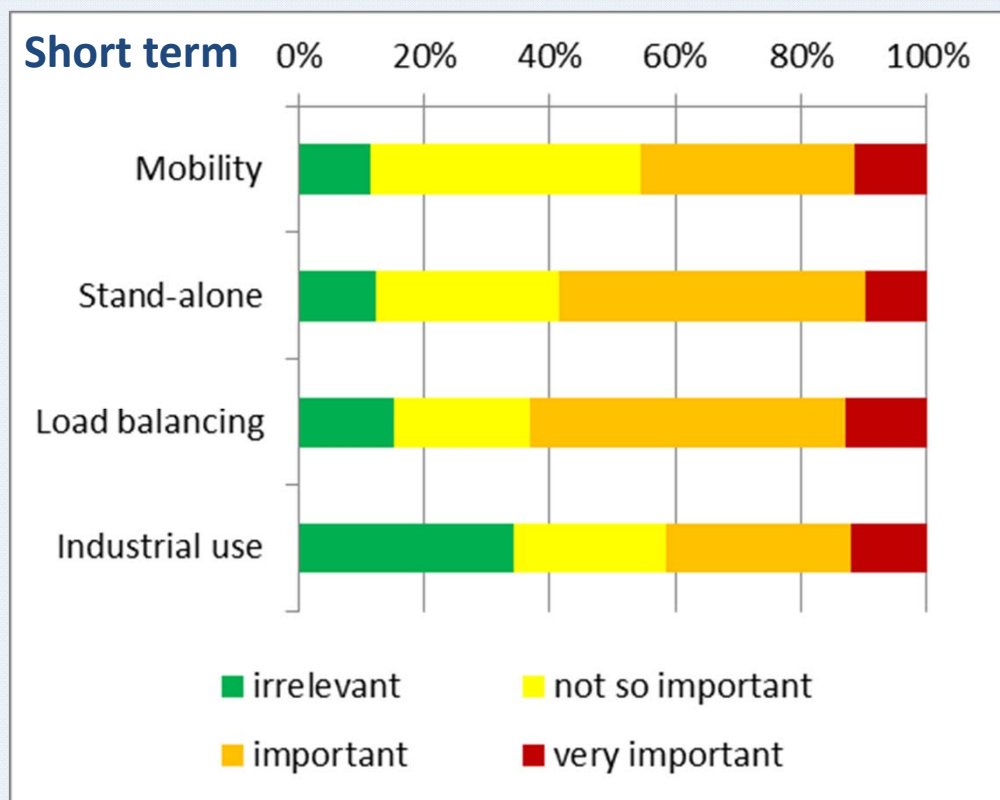# Some statistics about the audience

- Question
  "How would you grade your experience with …"

- Level of experience acccording to professional background

  - 1: basic

  - 5: expert

# Fields of applications

- Question "Where do you see the most relevant fields of application for PEM electrolysers .. "
- Distinction between short and long term
- Nearly no feedback for "other"

# Typical operating conditions

- Question:
  "What are in your opinion the typical operating conditions for the most relevant applications?"

| Spec | Short term | Long term |
|------|------------|-----------|
| Temperature | 68 °C | 88 °C |
| Pressure | 32 bar | 93 bar |
| No. of Cycles | 1.650 | 17.000 |

- Average/log average values
- Short and long term is not defined

# Another kind of statistic: Word cloud

■ Caught during the workshop: