



Post Event Report







### INTRODUCTION

### The EU PVSEC is the leading global forum for PV research and development.

Largest conference on PV solar energy with over 40 years of history.

Annual meeting for experts in research, development, and industry.

Features 1000+ scientific presentations, workshops, and industry forums.

Key platform for exchange between PV science and industry

The EU PVSEC Conference programme is coordinated by the European Commission Joint Research Centre.





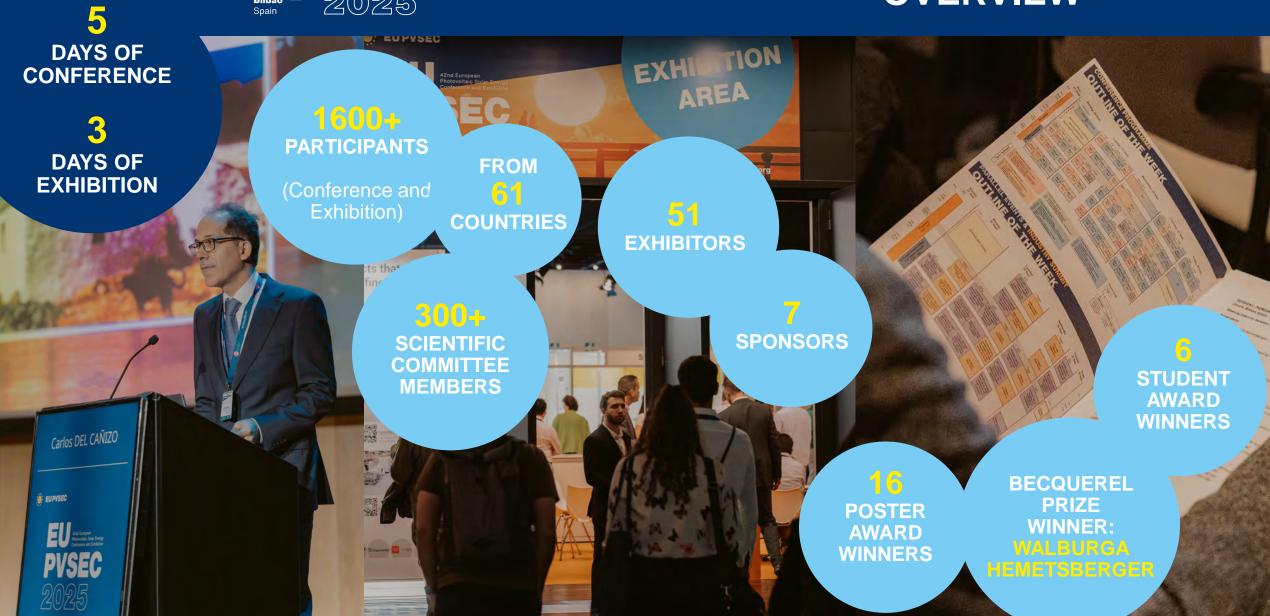




BEC Bilbao Exhibition Centre **PVSEC** 

2025

### **OVERVIEW**









### **FACTS & FIGURES | Presentations**

EU PVSEC
Programme –
Distribution of
Presentations per Type

CONFERENCE PLENARIES & ORALS

349

CONFERENCE VISUALS

**562** 

OPENING & CLOSING

6

1000+
PRESENTATIONS

PANEL
DISCUSSIONS
WITH
29
PANELISTS

PARALLEL EVENTS

110

INDUSTRY SUMMIT

44









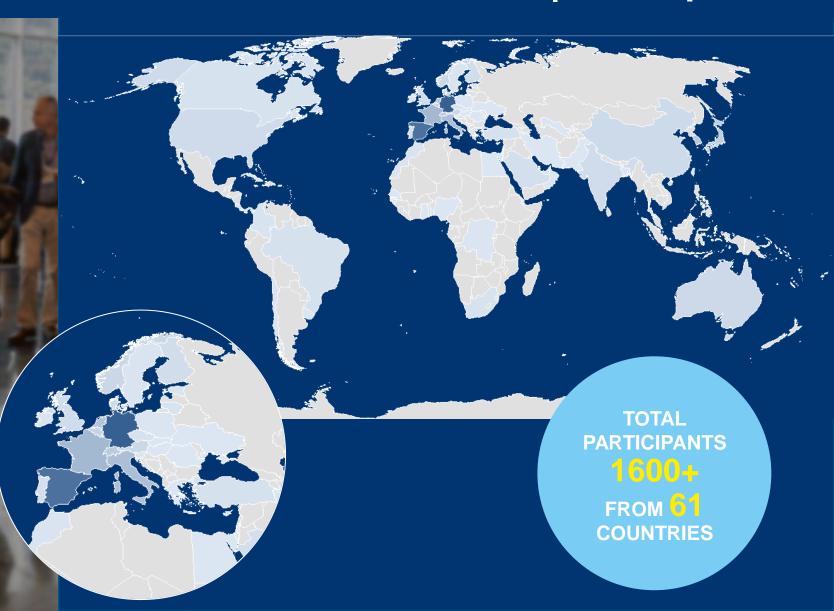


2025

### **FACTS & FIGURES | Participants**

### **Participants by Countries** Top 10

No	Country	Participants
1	Germany	310
2	Spain	270
3	France	108
4	Italy	90
5	The Netherla	ands 76
6	South Korea	67
7	Switzerland	62
8	Japan	55
9	Belgium	44
10	Norway	35



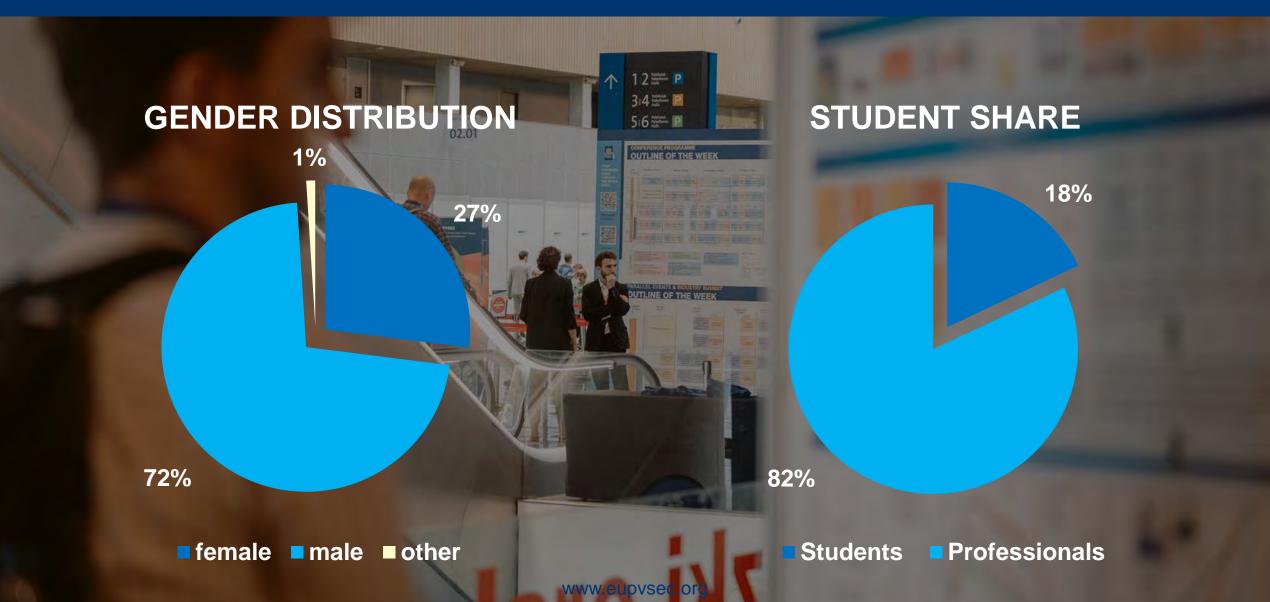




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### **KEY FIGURES**



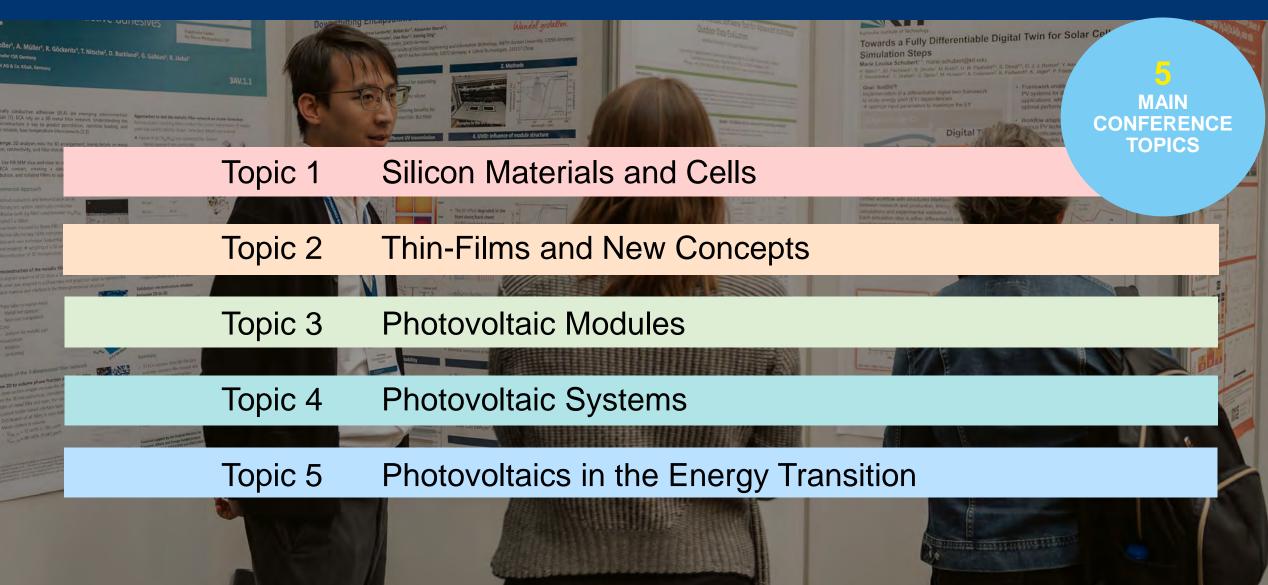






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### **KEY FIGURES**







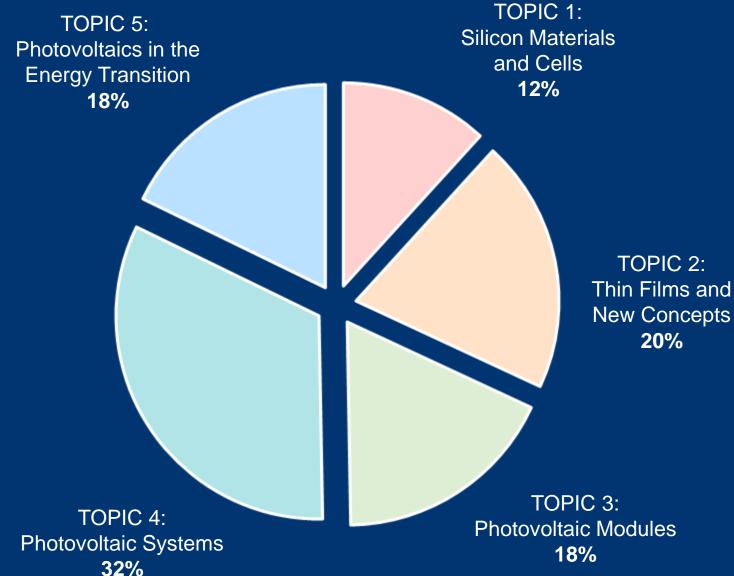
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### **FACTS & FIGURES | Presentations**





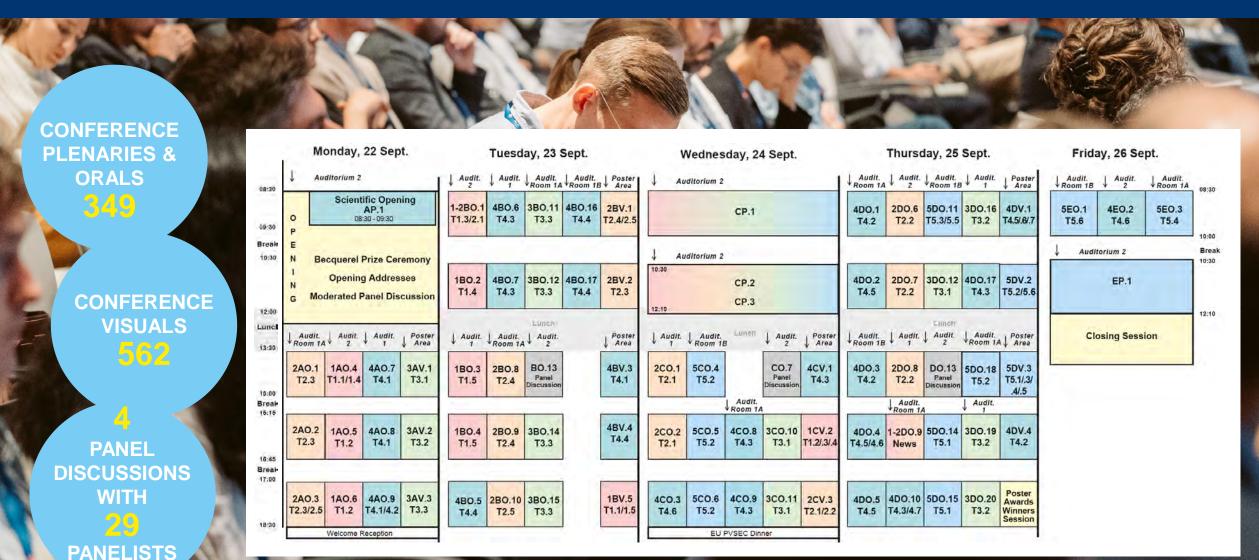
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### **FACTS & FIGURES | Presentations**









### HIGHLIGHTS AND TAKE-AWAYS

The scientific programme reflected the full scope of innovation across the PV value chain, from materials research to system integration.

Rapid advancements in materials, designs, and manufacturing processes reflect the accelerating expansion of the global PV market.

- Cross-cutting themes demonstrated the versatility of solar technologies, spanning traditional and emerging application areas:
  - Sustainability and circularity remain central, with research focused on reducing material use, such as replacing silver with copper, and advancing end-of-life management of modules.
  - Ensuring long-term stability and predictable energy yield is equally essential, with studies of degradation mechanisms such as UVID carried out.
  - The role of AI across the PV value chain is rapidly expanding, from design to operations and maintenance, including drone applications.







### **HIGHLIGHTS AND TAKE-AWAYS**

- Perovskite solar cells continue to stand out as the leading complementary technology to silicon (both alone and in tandems), with research targeting enhanced stability, degradation mechanisms, durability, scalability, and full industrial compatibility.
- Many companies presented impressive results on industrial-size single-junction perovskite modules and perovskite-based tandem modules.
- Efficiency records were presented during the event.
- Rapid innovation in cell and module architecture requires accelerated and more robust testing and qualification methodologies.
- The industry and research community are moving quickly to assess and improve reliability in the rapidly developing PV sector.
- A big theme in module research is optimising module materials and packaging for a long lifetime and a predictable energy yield from high-efficiency cells.
- Options for re-establishing competitive module manufacturing in Europe were extensively analysed, including policy recommendations for industrial support and market growth.







### **HIGHLIGHTS AND TAKE-AWAYS**

- Many innovative advances in O&M of PV systems were presented and discussed.
- "PV can be deployed everywhere": from space to agrivoltaics, PV noise barriers, BIPV, floating PV or vehicles.
- Agrivoltaics is gaining momentum as a promising approach to dual land use, offering economic benefits for farmers and also greater resilience to climate change.
- Flexibility solutions, particularly through battery storage, were recognized in many technical presentations as essential to accommodate higher PV penetration levels and reduce energy curtailment.
- Strengthening grid infrastructure and enhancing grid management capabilities remain critical to enable the next phase of PV integration.
- There is currently a mismatch between PV module installation rates worldwide and PV module production rates,
   leading to increasing inventories and drastically reduced prices.
- Inclusiveness, diversity, citizens participation, awareness, education and social engagement were underlined as vital dimensions of the sector's long-term sustainability and innovation capacity.





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### European **Becquerel Prize** for Outstanding Merits in Photovoltaics

Winner 2025:

Walburga Hemetsberger

CEO SolarPower Europe

### **PRIZES & AWARDS**







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**PVSEC** 2025

### **PRIZES & AWARDS**













### **EXHIBITION**



Australia, Austria, Bangladesh, Belgium, Canada, China, Czech Republic, Estonia, Egypt, Finland, France, Germany, Greece, Hong Kong, Hungary, India, Italy, Japan, Kuwait, Lithuania, Nigeria, Norway, Oman, Pakistan, Poland, Romania, Senegal, South Korea, Spain, Switzerland, The Netherlands, Türkiye, United States of America, Uzbekistan





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### **EXHIBITION**



















































































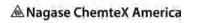


































### **EXHIBITION**

### Exhibitors from the following areas of the value chain



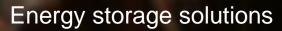
Associations

PV mounting systems and PV components





Consultancy







Research centres and universities

Chemical and material solutions





Industrial equipment for solar manufacturing

Simulation and testing tools



Ingot, wafer, cells and modules production

Labs and testing labs









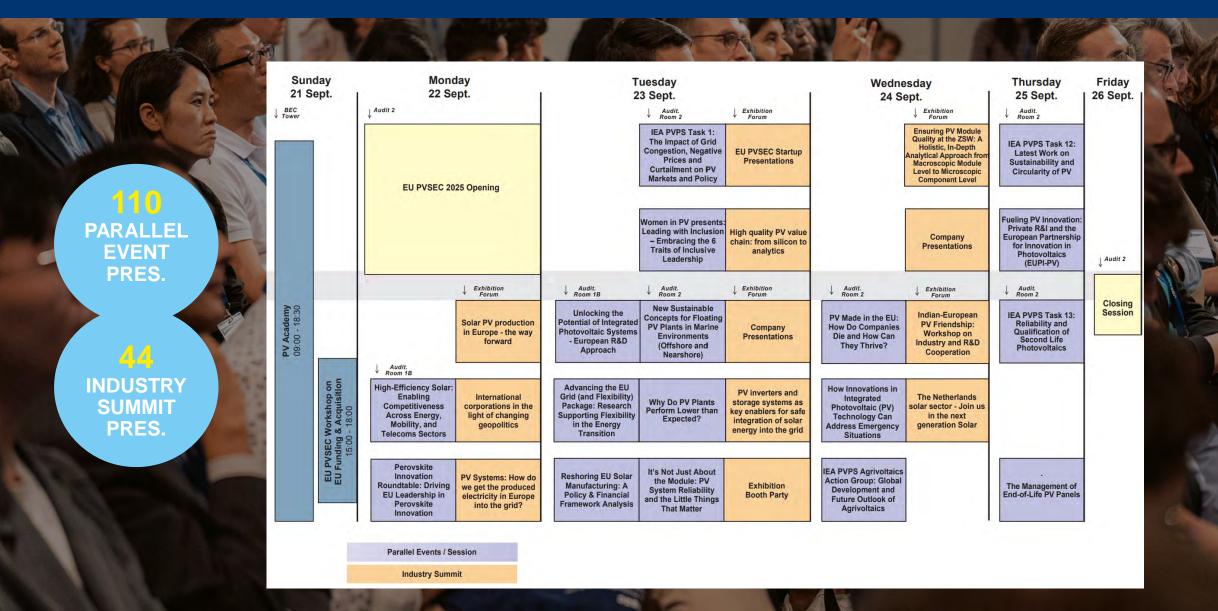
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## PARALLEL EVENTS & INDUSTRY SUMMIT







Free Webinar:

"Unlocking Synergies between Photovoltaics and Storage for a Resilient Energy System"

25 June 2025 | 15:30 - 16:45 CEST



### Webinar in collaboration with the Energy Storage Europe Association



Jon de Gregorio
WIP Renewable Energies,
Conference Director at
EU PVSEC



**Jacopo Tosoni** Head of Policy at EASE



Dr Grazia Barchi
Team Leader in Grid
Integration at Eurac
Research



Dr Robert Kenny

European Commission Joint
Research Centre,
EU PVSEC Technical
Programme Chair



Silvestros Vlachopoulos Energy Storage Research Manager at LCP Delta



Ed McCullough

New Market Entry Lead
EMEA at Tesla



Some of the most recognized and experienced scientists in the field gave four top level lectures on:



# From Fundamentals to New Materials for PV Cells



Prof. Ned Ekins-Daukes (UNSW) Dr Shona McNab (UNSW)

## Degradation and Reliability of PV Modules



Dr David Moser (Becquerel Institute) Dr Teresa Barnes (NREL)

Impact of Photovoltaics on Climate Change Mitigation



Prof. Jan Christoph Goldschmidt (Marburg University)







2025

### **SATELLITE EVENTS**













### **SUSTAINABILITY**

At the EU PVSEC 2025, we continued our strong commitment to environmental and social sustainability. Our efforts focused on reducing the event's carbon footprint through various initiatives, ensuring a carbon-neutral event. Key sustainability actions included:

### **Carbon Footprint Reduction:**

- Promoted sustainable travel options for participants
- Reduced printed materials in favour of digital alternatives.
- Used recyclable packaging and materials to minimise waste

### **Green Ticket Initiative:**

- Participants could contribute to carbon compensation projects through the Green Ticket
- Partnered with myclimate to offset remaining emissions



### **Sustainable Catering:**

 Sourced regional ingredients to reduce transportation emissions and support the local economy





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Alternative Energy from Solac Wind, Biomass.

Five Falls and more

From Research to Industry: The Future of Solar at the EU PVSEC 2025 in

Bilbao

g more than a conference, the EU PVSEC is a platform where knowledge, ideas and

te 42nd edition of the European Photovoltaic Solar Energy Conference and Exhibition will

e place from 22 to 25 September in Bilbao, Spain. For five days, researchers, industry

akthroughs, exchange insights and engage in dialogue on the future of solar energy, ng more than a conference, the EU PVSEC is a platform where knowledge, ideas and

Global Perspectives on the Future of Solar

The event opens with a dynamic programme that sets the tone for

the week. Plenary presentations will explore the ubiquity of photovoltaics both in the grid and applications, followed by the

awarding of the Alexander Edmond Becquerel Prize to Walburga Hernetsberger for her outstanding contribution to Europe's solar

20 W In

ers and policymakers from around the world will showcase the latest scientific

nerships drive progress across the entire PV value chain.

pv magazine

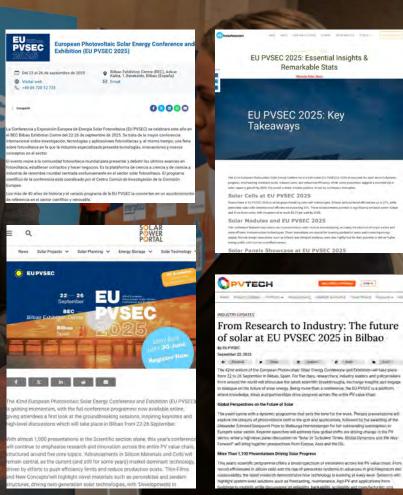
### **PRESS COVERAGE**

















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### **IMPRESSIONS**



































PVSEC 2025

### **IMPRESSIONS**





























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### **COMMITTEE MEMBERS**









### **SPONSORS**

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Gold











**Silver** 



**Bronze** 







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### **SUPPORTERS**

### **Institutional Support**



### **Coordination of the Technical Programme**



#### **Institutional PV Industry Cooperation**





### **Supporting Organisations**

ETIP Photovoltaics









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**BASQUENERGY** 





European Association for Storage of Energy









**EERA** 



























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### MEDIA PARTNERS















































































**Bilbao** -Spain





The **best conference on solar research**, materials, industry trends and for paving the future direction.

 Vignesh Murali, Smit Thermal Solutions, the Netherlands



Great scientific event where you not only meet Europeans and the industry is represented, too.

- Gerry Knoch, exateq, Germany



This is an extraordinary event that successfully integrates academic, industrial, commercial and social dimensions. It plays a key role in shaping the future of PV in Europe.

- Sandra Riaño, Tecnalia, Spain



The event was highly insightful and well organized, providing an excellent platform for knowledge exchange and collaboration in the renewable energy sector.

 Richa Parmar, National Institute of Solar Energy, India



### **GET IN TOUCH**

### THANK YOU FOR JOINING US AT THE EU PVSEC 2025!

Follow us on social media for news, tips and updates:











Organiser of the EU PVSEC: WIP Renewable Energies Sylvensteinstr. 2 81373 Munich, Germany www.wip-munich.de wip@wip-munich.de





# SEE YOUNEXT YEAR IN ROTTERDAM!