



Integrated Photovoltaics Conference



Programme 2025 Meet the Experts in Photovoltaic Integration

25-26th November 2025

Florence Chamber of Commerce

 Piazza Mentana, 1
Firenze



ipv-conference.com

Organised by **etaflorence** * **renewableenergies**

We look forward to welcoming you in Florence



Florence Chamber of Commerce, Piazza Mentana 1, Florence.

Attendance at the conference is free, with mandatory [registration](#).

Secretariat: info@ipv-conference.com

Organised by **etaflorence** 
renewableenergies

An initiative by  **Seamless-PV**

With the Patronage of

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Istituto Nazionale
di Urbanistica

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Aknowledgments



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A leading swiss company specialized in Building-integrated PV

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A pivotal event for the green energy transition, a gathering point for professionals, companies and stakeholders

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A long standing and renowned magazine of the PV sector

Message from the IPV Conference Chair

Integrated PV: Powering a Sustainable Renaissance



*Prof. Francesco Frontini
Director of ISAAC
SUPSI, Switzerland
Integrated PV Conference Chair*

Our cities and built environments must transform if we want to tackle the major challenges of our time. For the energy transition to succeed, we need to unlock every opportunity to integrate renewable energy – especially photovoltaics – into the very fabric of our surroundings, moving beyond standalone systems.

To integrate means more than to install; it is the act of completing, enhancing, and making an element truly functional by embedding it within an existing system. For photovoltaics, integration means designing solar technologies to be structurally, aesthetically, and functionally part of the objects and environments they serve, rather than being treated as add-ons.

When shaping the program for this conference, we emphasized four main areas of integration **architecture (buildings), infrastructure, agriculture, and transport (vehicles)**.

The challenge ahead is both technical and cultural. Technically, we must advance module design, structural integration, systems engineering, materials science, digital tools, and lifecycle approaches. Culturally, we must bridge disciplines – bringing together architects, planners, engineers, manufacturers,

industries, policymakers, and communities – to reimagine how PV can become a natural part of daily life.

This year's program reflects that ambition. You will find sessions on building-integrated PV, urban applications and agrivoltaics, vehicle-integrated solutions, digital modelling, policy frameworks, and resource efficiency strategies. We have shaped a format not only to showcase outstanding projects and lessons learned, but also to foster dialogue that leads to practical, impactful solutions – beyond purely technical constraints.

Let this gathering be a spark for new ideas, collaborations, and innovations that ripple outward, advancing integrated photovoltaics at scale.

We look forward to welcoming you in Florence, Italy – the cradle of the Renaissance, home to Leonardo da Vinci, Michelangelo, and Brunelleschi – on 25–26 November 2025. You won't regret it!

Programme 25 November *Status of 17 October 2025*

08:30 - 09:00

Registration

09:00 - 09:30

Welcome & Opening

Chair: Francesco Frontini, SUPSI, Switzerland
Co-chair: Giulio Poggiaroni, ETA Florence, Italy

Welcome

Giulio Poggiaroni, ETA Florence, Italy

Welcome

Daniel Valencia, Tecnalia, Spain
Seemless Project Coordinator

Welcome

Italia Exhibition Group/ Key Energy, Italy (i)

Message

Francesco Frontini, SUPSI, Switzerland
Conference Chair

Message

Maria Getsiou, European Commission, Belgium

Message

European Commission, Italy, (i)

09:30 - 11:00

Rethinking Architecture with Solary

Chair: Pierluigi Bonomo, SUPSI, Switzerland
Co-chair: (i)

Intro - Solar as part of architectural language, process, and responsibility

Pierluigi Bonomo (Chair), SUPSI, Switzerland

Opening Speech – Milan Campus Goccia: Project Vision and Challenges

Elisabetta Trezzani, Renzo Piano Building Workshop, Italy
Paolo Cresci, ARUP, Italy
Mario Motta, POLIMI, Italy

Moderated Discussion: A conversation on BIPV, exploring its expressive and constructive potential within architecture and cities

Heinz Ossenbrink, ETA Florence Senior Advisor, Italy
Elisabetta Trezzani, Renzo Piano Building Workshop, Italy
Paolo Cresci, ARUP, Italy
Mario Motta, POLIMI, Italy

11:00 - 11:30

Coffee break & Poster Session Visiting Time

11:30 - 12:30

BIPV-New Developments

Chair: Marco Sala, ETA Florence Technical Director, Italy

Co-chair: Sergio Matalucci, PV Magazine, Italy

Introduction

Marco Sala, ETA Florence, Italy

Curtain Wall Facade Designs Integrated with PERC and Shingled HJT Technologies

Alvaro de Gruijter, EURAC Research, Italy

Cassette PV: an Easy Mounting Solution for PV Facades

TNO Solar Energy, Netherlands (i)

Shading-Tolerant Colored Facade BIPV Modules

Marcus Baeckmann, INVITAIC Co. Ltd., Germany

BIPV for Tegola Canadese Roofing: Photovoltaic Integration without Substructures

Nicolò Zennaro, University IUAV, Italy

The Experience of Soltech

Stefan Dewallef, Soltech, Belgium

12:30 - 14:00

Lunch Break & Poster Session Visiting Time

14:00 - 15:45

Advancements in Agrivoltaics among Levels and Disciplines

Chair: Paolo Picchi, ETA Florence, Italy

Co-chair: (i)

Setting the Scene

Paolo Picchi, ETA Florence, Italy

Social Aspects and Planning Considerations for Agrivoltaics

Alexis Pascaris, Agrisolar Consulting, USA

The Experience of Next2Sun with Vertical Agrivoltaics Projects

Next2Sun, Germany (i)

Assessing Sustainability and Circularity in Agrivoltaic Systems: Background and Future Work

Angel Campos-Gonzalez, Universitat Politècnica de Catalunya, Spain

Integration and automation of existing interrelationship processes between photovoltaic technologies, agricultural land production and landscape protection: the GILDA project
Luca Buzzoni, Regione Emilia Romagna, Italy

Agrivoltaic as Catalyst of Energy - Ecological Transitions, Territorial Potential and Case Study
Filippo Lafleur, LAND SRL, Italy

Triple Use of Land with Semitransparent Organic Photovoltaics for Agriculture
Eftychia Martinidou, HOPE-A, Greece

Data-Driven Analysis of Crop Yield in a Controlled Agrivoltaic Installation
Michela Costa, DG Twin, Italy

Panel Discussion

15:45 - 16:15

Coffee Break & Poster Session Visiting Time

16:15 - 17:15

Vehicle Integrated PV (VIPV)

Chair: (i)
Co-chair: (i)

Setting the Scene

The Experience of Lightyear
Bonna Newmann, Lightyear, Netherlands

The Experience of OPES Mobility
Robert Handel, OPES Mobility, Germany

The Experience of IM Efficiency
Ruud Derks, IM Efficiency, Netherlands

17:15 - 17:30

End of Day One

Programme 26 November Status of 17 October 2025

09:00 - 10:10

BIPV-Operational Experience & Reliability

Chair: Gaëtan Masson, Becquerel Institute, Belgium (*i*)

Co-chair: (*i*)

Introduction

Development and Application of New Extended-stress Sequences to Characterise Durability of BIPV Modules

Joseba M. Ormaetxea, Tecnalia, Spain

Advanced Electrical Integration of PV into Building Systems

Jens Moschner, KU Leuven, Belgium

Reliability Challenges of BIPV Products and Systems in Operation

Alessandro Virtuani, CSEM, Switzerland

UV-induced degradation on vertical PV installations: a site-dependent investigation for materials optimization

Eleonora Tomasino, EURAC Research, Italy

Fireproofing BIPV: Overview and Comparison of Building Fire Safety Regulations in INCREASE Demonstration Site Countries

Claire Morin, SolarPower Europe, Belgium

Designing Solar Integration: From Technical Infrastructure to Cultural Asset in an Historic Context

Antonella Trombadore, University of Florence, Italy

10:10 - 11:15

Voices from the PV Industry in Europe

Chair: (*i*)

Co-chair: (*i*)

The BIPV Experince of 3S SWISS Solar Solutions

Rias Stalder, 3S, Switzerland

Abilitanting Technologies for Integrated Photovoltaics

Luigi Marras, Standex, Italy

Machineries and Solutions from ECOPROGETTI

ECOPROGETTI, Italy

Panel Discussion

11:15 - 11:40

Coffee Break & Poster Session Visiting Time

11:40 - 13:00

PV TECHNOLOGY: Custom Building / Façade Elements

Chair: Laura Maturi, EURAC Research, Italy

Co-chair: (i)

Reliability of Lead-free Interconnected Building-integrated Photovoltaic Metal Facade Elements utilizing PERC and HJT Technologies

Ringo Koepge, Fraunhofer-Center für Silizium-Photovoltaik CSP, Germany

Development and Fabrication of Customized Solar Modules

Yu Yao, Sunwellpower, China

Pre-laminates: Enhancing Flexibility in Integrated-photovoltaic (IPV) Manufacturing Lines

Lison Marthey, CSEM, Switzerland

Stability and Optical Performance of FAPbBR3 Semi-transparent Perovskite Mini-modules for BIPV

Noah Tormena, University of Padua, Italy

Parking Lots as Integrated Urban Energy Systems: A Building Specific Approach to Solar Architecture

Tarvo Kargenberg, Parkinglot Category, Germany

Implementation of Energy Active Living Environment through the Use of IPV Solutions

Juras Ulbikas, The Applied Research Institute for Prospective Technologies, Lithuania

Case Study of Bifacial PV based Noise Barriers in Lithuania

Giorgio Pastore, Solitek, Italy

13:00 - 14:30

Lunch break & poster session visiting time

14:30 - 15:30

PV TECHNOLOGY - Manufacturing

Parallel event*

Chair: Heinz Ossenbrink, ETA Florence, Italy

Co-chair: (i)

Wattway: The First Cost Efficient Pavement Integrated PV for Electricity Production

Etienne Gaudin, Wattway, France

Interconnection, Encapsulation and Reliability for Integrated PV technology

Jonathan Govaerts, IMEC, Belgium

Innovative Tool Solutions for Manufacturing Solar IPV Modules

Xabier Otano, Mondragon Assembly, Spain

Tools and Equipment for Bridging the Manufacturing Gap Between Lab and Fab

Yu Yao, Sunwellpower, China

Steps Towards Industrial Mass Production of Semitransparent Organic Photovoltaics for Buildings

Evangelos Mekeridis, OET, Greece

15:30 - 16:00

Parallel event*

PV TECHNOLOGY - Sustainable Value Chains

Chair: (i)

Co-chair: (i)

Resource-efficiency with Building Integrated PV in Construction

Alexa Lutzenberger, INIW, Germany

Circular Manufacturing 5.0: Human-centred AI-aided Digital Framework for Closed-loop Photovoltaic (PV) Products Value Chains (CIRCMAN 5.0)

Ishita Saxena , Politecnico di Milano, Italy

16:00 - 16:30

Closing Remarks & Farewell

Parallel event*

14:30 - 16:00

Land Uses Capability to Integrate PVs[INTERREG - CO2PACMAN Project](#)*Capacità degli Usi del Suolo per l'Integrazione del Fotovoltaico*
INTERREG - CO2PACMAN Project

Moderator: Paolo Picchi, ETA Florence, Italy

Event organised as part of the Interreg Project

POSTERS

Authors will have the opportunity to stand and present their posters during breaks

Implementation of Energy Active Living Environment through the use of IPV solutions

Juras Ulbikas, The Applied Research Institute for Prospective Technologies, Lithuania

Integrating photovoltaics and vegetation in the built environment: a holistic approach for the urban energy transition, the case of Rimini

Lucia Montoni, ETA Florence, Italy

Microstriped Semitransparent CIGS Solar Cells for Transparent Photovoltaic Glazing Applications

Irina Gushchina, Università di Genova, Italy

Quantifying the Microclimatic Benefits of Green Roofs for Rooftop PV Systems Using a Coupled Heat Transfer Model

Ammar Tummalier, Fraunhofer Institute for Solar Energy Systems ISE, Germany

Field Testing and Behaviour Assessment of Multiple BIPV components in Madrid, Spain

Irene Del Hierro Lopez, Universidad Politécnica de Madrid, Spain

Advanced Agrivoltaic Systems for Orchards, Vineyards and Olive Groves

Simone Fungipane, iGreen System, Italy

Numerical and experimental strategies for the performance assessment of point-fixed BIPV modular units in fire

Chiara Bedon, Università degli Studi di Trieste, Italy

BIPV Presentation: Public, Private, and Outdoor Buildings

Vito Antonio Chirenti, Chirenti Solar Glass Energy, Italy

Towards a performance-driven approach to BIPV design and requirements: the Heli-On case study

Claudio Castellan, Glass to Power, Italy

Driving factors for BIPV implementation in The Netherlands

Wiep Folkerts, TNO, The Netherlands

Case studies driving the BIPV adoption in the Global South

Paolo Corti, Sun Appeal, Swiss

Culture, knowledge and awareness of the renewable energies. Italian policies and politics, today's reality and future projections

Liborio Nanni, Tailoring Energy srls

Flexible low-cost PV mini-modules based on IBC solar cells: evaluation and hot spot analysis

Paola Jakuzza, Università di Padova, Italy

VIPV shading model approach based on land use type

Lenneke Slooff, TNO, The Netherlands

Thank you!

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