

#### **SP23 DETAILED PROGRAM**

14<sup>th</sup> JUNE

09:00 - 12:00

FREE EVENT – "New European Bauhaus (NEB) & Built4People (B4P) partnership: 1st Matchmaking session"

This matchmaking session will expose the B4P Stakeholder Community, ECTP members and WorldGBC members to relevant upcoming European and national funding opportunities related to the NEB which is a creative and interdisciplinary initiative of the European Commission that connects the European Green Deal to living spaces and experiences. It calls on the public to imagine and co-create a sustainable and inclusive built environment.

## FREE EVENT – Actionable strategies for climate change mitigation and adaptation: DISTENDER"

This workshop will present DISTENDER, an EU project guiding the integration of climate adaptation and mitigation through participatory approaches in ways that respond to specific impacts and risks of climate change, supported by quantitative and qualitative analysis that facilitates understanding of interactions, synergies and trade-offs between climate change actions. The Intergovernmental Panel on Climate Change (IPCC) will participate, making the link between DISTENDER and the three IPCC Working Groups.

16:00 - 17:30

## WORKSHOP – "B4P x NEB: Built4People Meets the New European Bauhaus"

This workshop aims to stimulate and nurture collaboration between two major initiatives which both contribute to delivering the European Green Deal objectives: (i) The Built4People (B4P) partnership and (ii) The New European Bauhaus (NEB) initiative. Chaired and moderated by the NEBULA project, this workshop will offer pitches of both B4P and NEB innovation projects; it will invite B4P and NEB stakeholders' communities to collaborate toward an inclusive and positive built environment. This workshop will support conducting an initial brainstorming on a potential collaboration plan over 2023-2024 between B4P & NEB communities.

#### WORKSHOP - "Circular and Bio-Based Building Solutions"

This workshop brings together four current EU-funded projects (BIO4EEB, BIOMAT, MEZeroE and CE4Con) to discuss increasing the energy efficiency of buildings to achieve climate neutral conditions by adopting circular and bio-based solutions. Experts will present innovative building envelopes and renovation materials that boost energy savings, save resources, and decrease carbon emissions both during building construction and operation.

WORKSHOP – "Energy Communities for the Energy Transition: ERA-NET GENTE Special Session"



This workshop, guided by the ERA-NET project GENTE, will begin with an analysis of the past growth of energy communities to enable a forecast of their continued development in Europe. An overview of the GENTE toolkit for energy communities, explaining the role of IoT, edge intelligence, and AI in community implementation to support ongoing growth, will be followed by a pitching session for cross-project networking and future collaborations.

### WORKSHOP - "50 Shades of Industrial Deep Energy Retrofit"

This workshop, endorsed by several chapters of Energiesprong, is organized by several EU projects on industrialized, modular renovation, both in development and market uptake stages: Giga Regio Factory, BuildUPspeed (LIFE), INFINITE, DRIVE 0, PLURAL, ENSNARE (H2020). Circular renovation and circular economy are key aspects of these projects as well. Pioneers and front-runners of the emerging renovation industry will share their feedback and lessons learned, to empower the next phase of housing retrofit policies.

# WORKSHOP – "Innovative Solutions and Co-Creation for Effective Implementation of Demand Response"

The workshop addresses user outreach and engagement as the key drivers for innovation of digital and technology-based demand response solutions. Five EU projects (HESTIA, REDREAM, ACCEPT, SENDER, and IFLEX) will present co-creation activity findings from their pilot sites, and discuss impacts that the energy crisis is having or will have on user engagement.

#### PAPER SESSION – "Sustainable Agriculture"

- 1) "PV4Plants: boosting the energy-agricultural synergy of agriPV technologies" Mehmet Eren, Kalyon PV (PV4Plants project)
- 2) "Renewable energies for Africa: Effective valorisation of agri-food waste" Riccardo Camerano, TIFEO (REFFECT AFRICA project)
- 3) "Agro2Circular: territorial circular systemic solution for the upcycling of residues from the agrifood sector" Sergio Benitez Benitez, Centro tecnologico del calzado y del plastico (AGRO2CIRCULAR project)

15<sup>th</sup> JUNE 09:00 – 10:30

# WORKSHOP – "Digital Twin Platforms' Development for the Construction Sector: Technology, Services, and Data Models"

The workshop consists of three presentations from the COGITO, BIM2TWIN and OMICRON projects about technologies, services, and systems used to connect devices and functionalities with digital twin platforms. Multi-perspective lessons learned will be provided based on the development of several demonstrations: construction phase in buildings and infrastructure projects and maintenance phase in road projects.

PAPER SESSION - "Industry 4.0 and Zero-Defect Manufacturing"



- 1) "ECOFACT: ECO-innovative Energy FACTory Management System" Andrea Perego and Riccardo Merizzi, One Team Srl (ECOFACT project)
- 2) "Virtualization for Sustainable and Flexible Industrial Applications" Talib Sankal, Fraunhofer IPT (ECOFACT project)
- 3) "Zero defect manufacturing for the photovoltaic industry" Regis Decorme, R2M France (PLATFORM-ZERO project)

# WORKSHOP – "Digitalisation of Energy Performance Assessment to Enable Retrofits"

In this workshop, six EU projects will come together to present and discuss their work at the intersection of building digitalization, BIM, and AI. The discussion will reveal how projects will pave the way to future reference implementations on several application fields, addressing the needs of relevant stakeholders and presenting in quantified terms the short- and long-term impact of the project activities, from policy to practice, and across the whole building life cycle. The workshop will show how these projects will contribute to existing and/or the development of new technical standards.

#### ONLINE PAPER SESSION - "Urban Renewal"

"Urban planning methodologies: Lessons learned in the definition of replication plans" Ana Quijano, CARTIF (MATCHUP project)

2) "Sustainable public lighting: a collaborative and multidisciplinary approach to designing territory and context-related outdoor lighting infrastructures" Agathe Pharel, ENGIE Laborelec (INHABIT project)

## 09:00 – 12:30 **WORKSHOP** – "Exploiting Untapped Potential of Industrial Solar Heat: SHIP2FAIR Final Event"

SHIP2FAIR, the EU-funded project that aims to foster the integration of solar heat in industrial processes (SHIP) for the agro-food industry, will present lessons learned about the current solar heat technologies available and how to integrate them into industrial plants. SHIP2FAIR partners will also provide relevant examples of solar thermal installations used at an Italian spirits distillery and a Spanish winery, including feasibility studies of ten industrial sites, best practices detected after the implementation of the project, and the roadmap for EU industrial solar heat deployment will be presented.

# WORKSHOP – "Energy Communities Track Part 1: Technologies, Services, and Regulations"

This workshop explores the renewable energy technologies, guidelines and regulation frameworks unlocking the penetration of energy communities in Europe. Presentations will be delivered by the FEDECOM, POCITYF, REACT, DE-RISK, BECKON, CREATORS, MASTERPIECE and LocalRES projects.



## WORKSHOP – "District Heating and Cooling in the Future Energy System"

Led by the HYPERGRYD project, this workshop brings together several EU-funded projects (e.g., Bio-FlexGen, Connectheat, REWARDHeat, SENERGY NETS, and WEDISTRICT) to present their contributions toward 100% renewable district heating and cooling (DHC) networks. The Green Deal Support Office will also join the workshop, providing their overall view on DHC in the framework of the Green Deal.

#### 11:00 – 12:30 PAPER SESSION – "Renovation"

- 1) "Using digital simulation and visualisation tools to conduct a feasibility study for deep renovation at a district scale" Amisha Panchal, IES Ltd. (STEPUP project)
- 2) "The re-MODULEES Project: an innovative vision for the effective deep renovation of the European building stock" Ana Sanchis Huertas, IVE and Giulia De Aloysio, Certimac soc.cons.ar.l. (RE-MODULEES project)
- 3) "Boosting energy renovations experience and results from CZ and SK" Václav Šebek, SEVEn The Energy Efficiency Center (GREENDEAL4BUILDINGS project)

# WORKSHOP – "Digital Tools to Increase Flexibility and Sustainability of our Energy System"

The Horizon 2020 project X-FLEX will organise and chair this workshop together with other H2020 projects such as Synergy and e-Balance+, to present the ICT tools developed and demonstrated to increase the penetration of renewable energies in the European energy system, improving the sustainability and resilience of the grid. In this context, the replication synergistic roadmaps will be presented for scaling-up of the project solutions to be applied on a large scale and in different real-world settings.

# WORKSHOP – "Smart Readiness Indicator: Collaboration for Efficient and Sustainable Buildings"

This workshop will include presentations of projects funded under the SRI LIFE-2021-CET-SMARTREADY topic, followed by in-depth discussions, debates, and knowledge transfer to encourage collaboration and provide a platform for stakeholders to exchange ideas on the implementation of the Smart Readiness Indicator, a tool helping to ensure that buildings can operate efficiently using digital technologies while interacting with their occupants and environments to reduce the overall energy consumption.

#### ONLINE PAPER SESSION - "Energy Transition"



- 1) "Energy Transition in Northern Netherlands: seeking a balance between top-down and bottom-up initiatives" Ifigenia Psarra, Hanze University of Applied Sciences Groningen (MAKING CITY project)
- 2) "A framework for measuring stakeholder engagement in energy transitions projects" Carmen Valor, Universidad Pontificia Comillas (ACCEPT, BRIGHT, COMPILE, ECREW, ENERGICA, FEVER, ELAND, FLEXIGRID, IELECTRIX, SINERGY, STIP SNET, PARITY, REACT, REDREAM, SENDER, SERENE, SUSTENANCE projects)

#### 14:00 – 15:30 PAPER SESSION – "Building Energy Performance"

- 1) "Optimising operational energy performance of EU buildings through Augmented Intelligence Dashboards. The End-User Experience" Beatriz Fraga De Cal, IES Ltd. (AUTO-DAN project)
- 2) "Improving the energy performance of an office building with a virtual building management system" Simone Buffa, R2M Italy and Dimitrios Ntimos, IES R&D (iBECOME project)
- 3) "A simulation-based platform to design high-performance buildings that use phase change materials" Facundo Bre, TU Darmstadt

#### WORKSHOP - "Africa Initiative"

The projects taking part in this workshop leverage the deep cooperation between African and European entities to address local issues and provide long-term solutions. Topics range from climate change, rural innovation, sustainable food systems and sustainable energy. The action is not limited to the projects' lifespan, but aims at promoting sustainable growth and jobs, green transition, digital transformation, and a renewed mobility.

# WORKSHOP – "Solar Energy in Industrial Processes: How to Meet the Expectations of the European Commission"

In this workshop, two sister projects (ASTEP and FRIENDSHIP) funded under the call H2020 LC-SC3-RES-7-2019 dedicated to Solar Energy in Industrial Processes, will give an update on the development of industrial solutions with limited installation, maintenance, and operation requirements. They will present solar thermal energy for industrial process deployments, and openly discuss the future potential of this sector within the SPIRE Roadmap.

#### ONLINE PAPER SESSION - "Renewable Energy Technologies"

- 1) "GreEnergy project a breakthrough sun energy harvester" Avi Ginzburg, AMO GmbH (GREENERGY project)
- 2) "BIM & digitalisation for renewable energies: BIM to Make Renewable Energies More Sustainable" Chiara Butera and Marco Zanolini, Enel Green Power; Giacomo Bergonzoni, Capgemini Engineering (iBECOME project)



# 14:00 – 17:30 WORKSHOP – "Energy Communities Track Part 2: Citizen and Consumer Engagement"

This workshop will explore the opportunities and limitations of engaging citizens and consumers in energy communities. Methodologies and tools will be presented by the COMMUNITAS, HESTIA, LIGHTNESS, NEON, REACT, RESCHOOL, and DE-RISK projects.

## WORKSHOP – "Renewable Heating and Cooling Solutions for Buildings and Industry: 4th Edition"

This workshop is a continuation of three previous iterations (SP2020 – SP2022), bringing together a selection of H2020 EU-funded projects involving experts from the biomass, geothermal, solar thermal, waste heat recovery, and heat pump sectors to discuss a common strategy and next steps forward.

### 16:00 – 17:30 WORKSHOP – "Climate Neutrality and Positive Energy Districts"

Abstract TBD. Projects NeutralPath, Pocityf, and RESPONSE.

#### WORKSHOP - "Low-TRL Renewable Energy Technologies: 3rd Edition"

This workshop is a continuation of previous workshops organised at SP2021 and SP2022 dealing with the challenge of researching, developing and demonstrating innovative, efficient, flexible, cost-competitive and environmentally safe technologies, which are still at a low Technological Readiness Level (TRL 3-4). The workshop will involve experts on new renewable and low-carbon-emission energy generation, conversion, and storage technologies. The participating projects are invited to present their progress and achievements to date, followed by an interactive discussion which will give them the opportunity to identify potential cooperation on cross-cutting issues to maximise their expected impacts.

#### PAPER SESSION - "Citizen Empowerment"

- 1) "SINERGY: Three living laboratories strengthening research capacity in smart energy management" Luis Miguel Blanes Restoy, University of Galway (SINERGY project)
- 2) "How to engage citizens to participate in local climate action: the Las Rozas-Madrid case study" Sven Kallen, Life Terra Foundation (LAS ROZAS project)
- 3) "Crowdlending EE Measures in Super-Heero: Results of the first campaign and investor feedback" Thomas Messervey, R2M Italy (SUPER-HEERO project)



- 4) "Redream The experience of a user centered energy system" Carlos Becker, Stemy Energy (REDREAM project)
- 5) "Natural hazards and cascading impacts: an innovative approach for climate change mitigation" Jairis Arllen Alvarez Trujillo, RINA Consulting (MEDiate project)

#### ONLINE WORKSHOP – "Building Energy Management and Optimisation"

This workshop brings together three Horizon 2020 EU projects (PHOENIX, BEYOND, BuildHub) aiming to utilise the energy data coming from smart buildings. Approaches and tools developed in the three projects addressed to various stakeholders that can benefit from building data will be presented.

**16**<sup>th</sup> **JUNE** 09:00 – 10:30

## WORKSHOP - "Digital Building Logbooks"

This workshop will transfer knowledge and devise long-term clustering strategies that will leverage thematic synergies and unique competencies to advance the state of the art in Digital Building Logbooks (DBLs) towards 2030 and beyond. The participants will exchange experiences and best practices, and the result will be a joint publication with a mapping of user acceptance and technology adoption challenges for the EU-wide deployment of DBLs.

#### PAPER SESSION - "Advanced Materials"

- 1) "Bio-based components for curtain wall façade: preliminary insight of Basajaun project" Laura Vandi, Focchi Spa Unipersonale (BASAJAUN project)
- 2) "Development of Numerical Models for Predicting Thermal Performance of Materials with Improved Ecological Footprint as Alternatives to Standard EPS" Joana Araujo, CENTI (STEPS project)
- 3) "Advanced Thermal Energy Storage for sector coupling power-heat" David Verez, ARCBCN (HYSTORE project)
- 4) "EASI ZERo Project: low impact envelope material system for zero energy buildings and renovation" Etienne Wurtz, CEA-INES (EASI ZERo project)

### PAPER SESSION – "Energy Communities"

- 1) "eNeuron Project Optimising the design and operation of local energy communities based on multi-carrier energy systems" Jesus Fraile Ardanuy, Universidad Politécnica de Madrid (ENEURON project)
- 2) "Positive Energy Districts on heritage sites: biggest challenges and lessons learned" Magui Lage and João Cravinho, EDP (POCITYF project)
- 3) "Enabling distributed Semantic Interoperability, Privacy, and Discovery for Smart Communities based on standards" Andrea Cimmino Arriaga, Universidad Politécnica de Madrid (AURORAL project)

#### ONLINE PAPER SESSION - "Cultural Transformation"



- 1) "Co-design of green public space in vulnerable context: social and environmental sustainability to boost Inclusive Urban Health and Wellbeing" Isotta Mac Fadden, University of Cordoba (INHABIT project)
- 2) "Toward harmonious business" Christian Felices, University of Wales Trinity Saint David
- 3) "Emergent Themes in the Study of the Transformation of Sustainability Leaders" Laura James, University of Wales Trinity Saint David

#### ONLINE PAPER SESSION – "Sustainable Construction"

- 1) "Construction Waste as a Resource" Plamena Nenkova, Glavbolgarstroy Holding AD and Roberta Stankeviciute, European Construction Industry Federation (MOBICCON-PRO project)
- 2) "Toward sustainable construction by acting with a 3V approach on energy skills" Lihnida Stojanovska-Georgievska, Ss. Cyril and Methodius University in Skopje (SEETHESKILLS project)

09:00 - 12:30

# PLENARY (free event) – "Leveraging EU funding to drive the energy transition in Spain"

The energy transition is nowadays a reality that most municipalities must face. One way or another, they need to be prepared and armed with the right tools to navigate their areas towards a more sustainable future. This session will be showcasing the different options available to the public sector to obtain much needed expert support in the preparation for the energy transition. The session will include, among others with the participation of the European Investment Bank presenting the ELENA funding, GNE Financing presenting the European Cities Facility, and Ecorys presenting the Rural Energy Communities Advisory Hub. These are all mechanisms that target the provision of support for the energy transition.

## WORKSHOP – "EU Geographical Islands as Leaders of Green Energy Transition: 5th Edition"

This workshop, in its fifth edition (SP2019 – SP2022), looks to reinforce the synergies already created among the H2020 sister projects dealing with island decarbonisation and clean energy transition (i.e., NESOI, IANOS, INSULAE, VPP4ISLANDS, REACT, ROBINSON, MAESHA, and GIFT). Presentations will address experiences with EU bodies, financial schemes, and technical outcomes. In the workshop, opinions of the audience will be collected aimed at investigating barriers, opportunities, and requirements for islands to become the leaders of EU's Green Energy Transition.



### 11:00 – 12:30 PAPER SESSION – "Smart Homes and Buildings"

- 1) "Decoupling infrastructure and services in smart buildings: the domOS approach" Dominique Gabioud, University of Applied Sciences Western Switzerland (DOMOS project)
- 2) "Enabling Smart Home Energy Responses" Niall Byrne and Niall Buckley, IES Ltd., Rene Peeren and John Dalton, TU Dublin (ESHER project)
- 3) "Smart Readiness Indicators as an interactive tool" Tristan Emich, Karlsruhe Institute of Technology

### PAPER SESSION - "Nature-Based Solutions and Geology"

- 1) "Outdoor Health and Well-being Digital Interface" Niall Buckley, IES Ltd. (VARCITIES project)
- 2) "How to start and deepen your business around nature-based solutions" Lucia Hörner, Steinbeis Europa Zentrum (NETWORKNATURE project)
- 3) "A Human-centred Internet of Things Platform for the Sustainable Digital Mine of the Future" Diego Grimani and Lorenzo Bortoloni, Ro Technology

### PAPER SESSION - "Digital Twins"

- 1) "A Behaviour Digital Twin for Residential Demand Response Modelling intention and motivation to improve the prediction of the likelihood of reaction to behavioural triggers" Julia Blanke, Munster Technological University
- 2) "TwinAIR: Leveraging Digital Twins to Digitise and Optimise Indoor Air Quality for Occupant Health and Wellbeing" Niall Byrne and Dimitrios Ntimos, IES Ltd. (TWINAIR project)
- 3) "Representing Digital Twins and their information resources with WoT" Salvador González Gerpe, Universidad Politécnica de Madrid (COGITO project)
- 4) "Digital Twins for continuous and accurate energy audits" Gloria Calleja Rodríguez and Noemi Jiménez Redondo, CEMOSA

### ONLINE PAPER SESSION – "Citizen Engagement"

- 1) "Recommendations for engaging and supporting local energy communities in alignment with justice principles evidence from seven citizen engagement trajectories in Spain, the Netherlands, Poland, Italy and France" Razia Jaggoe and Jordan Young, DuneWorks (LIGHTNESS project)
- 2) "Participatory approaches involving citizens to address urban issues: case studies from Global South and Global North" Liubov Bauer, City Interaction Lab

ONLINE WORKSHOP – "The integrated initial assessment from three EU projects: DISTENDER, KNOWING and NEVERMORE"



This workshop will present preliminary results and discuss potential synergies of three projects funded under the EU Call "Climate sciences and responses (HORIZON-CL5-2021-D1-01)": DISTENDER - Developing STratEgies by integrating mitigation, aDaptation and participation to climate changE; KNOWING - Framework for defining climate mitigation pathways based on understanding and integrated assessment of climate impacts, adaptation strategies and societal transformation; and NEVERMORE - New Enabling Visions and tools for End-useRs and stakeholders thanks to a common MOdeling fRamework towards a climatE neutral and resilient society.