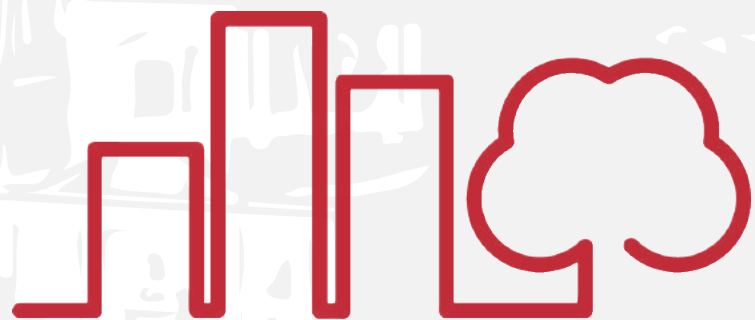


Agenda



SUSTAINABLE PLACES 2021

Sep. 28 - Oct. 1, 2021 | Rome, Italy

www.sustainableplaces.eu



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Twinning Event



On behalf of the organizers, partners, supporting entities and sponsoring organizations, welcome to Italy, to the City of Rome, to the business district of EUR and moreover welcome to Sustainable Places 2021.

This 9th edition is, once again, a signature event and exciting step forward, as the conference continues to grow, connected to research to the market, building upon the path that brought us together again this year – the path toward a sustainable future.

Last year's digital event has gathered together approximately 100 European R&D projects over the course of 20 sessions attended by 600 delegates.

This year, we will be joined by approximately 150 European R&D projects over the course of 30 sessions; a strong response and endorsement of the value of clustering, networking and scientific dissemination. Moreover, this year will introduce a sharp evolution of the program structure - the inclusion of two plenary morning workshop sessions at national and city level and roundtable discussions that deliberately seek to tie together the contributions of innovators, implementors, decision and policy makers. We are excited to add these new representative members to our audience, and to confirm that the debates are scheduled at national level in Milan early 2022.

From the beginning of planning Sustainable Places 2021, we have decided to remain hybrid, with a double format in presence and digital, while favoring an evident return in presence, to find again a more normal working condition and encourage networking.

We celebrate everyone joining us online and we are grateful for all those joining in person. We also acknowledge the generous support of our sponsors – please take a moment to learn about their innovative contributions and sustainability. Lastly, we hope to inspire you by hosting you in Rome, an occasion to take a moment to reflect and ask ourselves what would it take to make such cities truly smart, digital, energy positive, carbon neutral and zero emission?

Can we do this in time?

We wish you a great event and look forward to the discussions ahead toward a better and more sustainable built environment.

Thomas Messervey - CEO R2M Solution
Paola Pierotti, Andrea Nonni - Founders PPAN
Alberto Sasso - Chairman EUR Spa



Agenda

Day 1

Tuesday, 28 September

Virtual only



14.00 (CET)

Stage

Platform Open & Discovering Hopin

14.00
14.15



SP2021 VIRTUAL OPEN

14.15
15.30

15.30 (CET)

Session 1

Session 2

Session 3

Session 4

Workshop

Energy Community:
Business Models (1/4)

Workshop

Energy Efficient
Manufacturing

Workshop

Building Renovations

Workshop

Buildings and neighbourhoods

Workshop

Renewable Energy
Communities

Papers

Smart cities

Papers

Renovation Pt. 1

19.30 (CET)

Agenda

Day 2

Wednesday, 29 September

Rome, Italy

08.00 (CET)

VIRTUAL 1

VIRTUAL 2

Auditorium

ROOM 1 OF 4

ROOM 2 OF 4

ROOM 3 OF 4

ROOM 4 OF 4



REGISTRATION

08.00
09.00

Workshop

Buildings into Active Nodes

Workshop

Positive Energy Buildings

Workshop

DHC Networks

Workshop

Low-TRL Technologies

Papers

Smart Energy Pt. 1

Workshop

Energy Citizenship

Workshop

EPCs: Enabler SRI Pt. 1

COFFEE

Workshop

On Site Networking

Workshop

Platforms for EeB Renovation

Papers

Smart Energy Pt. 2

Workshop

Energy Community:
Technologies (2/4)

Workshop

EPCs: Enabler SRI Pt.2

NETWORKING LUNCH

12.30
13.45

HYBRID SCIENTIFIC PLENARY / HORIZON EUROPE

13.45
15.30

Workshop

Energy Skills in Construction

Workshop

Business Models for PV Solutions

Workshop

Smart Buildings

Workshop

Building Envelope Kits

Papers

Financing

Workshop

Energy Community:
Engagement (3/4)

Workshop

Projects on PEDs

Workshop

Smart Energy Services

Workshop

Finance for Energy Efficiency

Workshop

Energy Community:
Wrap-Up (4/4)

Papers

Districts

18.30 (CET)

APERITIVO / CITY TOUR

20.30
22.30

Agenda

Day 3

Thursday, 30 September
Rome, Italy



REGISTRATION

Auditorium

Onsite Public
Plenary & Roundtable

Rome Smart City

NETWORKING LUNCH

VIRTUAL 1	VIRTUAL 2	Auditorium	ROOM 1 OF 4	ROOM 2 OF 4	ROOM 3 OF 4	ROOM 4 OF 4
Workshop Heating Appliances Retrofit Planning	Workshop Multi-Vector Energy Systems	Workshop Renewable Heating and Cooling	Workshop Energy Communities Enhancement	Workshop Greening of Heritage Buildings	Workshop Community Energy Value Chain	Workshop PRIVATE SB4EU
	Papers Energy Modeling	Papers Industry 4.1	Workshop Energy Transition of Islands	Workshop Digital Twin for Construction Phase	Papers Renovation Pt. 2	Workshop Decarbonisation of Building Stock

18.30 (CET)

GALA DINNER

Agenda

Day 4

Friday, 1 October
Rome, Italy

09.15 (CET)

Auditorium

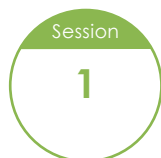
Onsite Public
Plenary & Roundtable

Cities between
Innovation and Transition.
The Point of View of the
World of Real Estate

13.30 (CET)

CLOSING SESSION

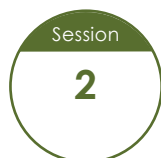
FAREWELL LUNCH



15.30 - 17.30

"European **Energy Community** Fast Track: **Business Models (1/4)**" - workshop

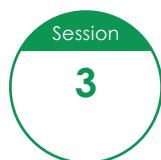
This 120-minute virtual workshop will involve the following six EU projects, and present innovative business models for energy communities: DECIDE, DRIMPAC, WHY, NEWCOMERS, PARITY, and SocialRES.



15.30 - 18.30

"Pathways to **Energy Efficient Manufacturing**" - workshop

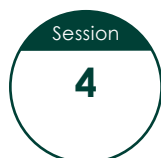
This 180-minute virtual workshop will facilitate cross project collaboration for FoF-09-2020 projects (DENiM, ENERMAN, ECOFACT, E2COMATION) to support the development of a more sustainable and energy efficient manufacturing industry.



15.30 - 18.00

"Innovative Solutions Towards **Building Renovations**" - workshop

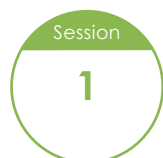
This 180-minute virtual workshop brings together five H2020 projects (RenoZEB, ReCO2ST, Rezbuild, Plug-n-Harvest, and Heart) developing modular facade retrofit solutions that integrate on-site renewable energy technologies.



15.30 - 17.00

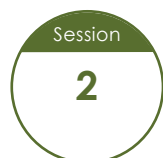
"Positive Energy **Buildings and Neighborhoods** in Europe: From Policies to Implementation" - workshop

This 90-minute virtual workshop will explore synergies between several sustainable plus energy buildings and neighborhoods (SPEN) projects and identify best practices of local implementation of SPENs across Europe.

17.30 - 19.30


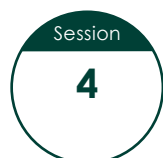
"From Technical to Regulatory Innovation: The Set-Up and Management of Renewable Energy Communities from POCITYF and Other Initiatives" - workshop

This 120-minute virtual workshop will share lessons learnt from interactions held between POCITYF partners and system operators and regulators in order to create renewable energy communities in a regulatory sandbox environment that enables the implementation of innovative features (e.g. dynamic sharing coefficients or P2P energy trading schemes).

18.30 - 19.30


"Future Smart Cities" - paper session

- *"IoT Security in the context of Smart Cities"* (Virtual delivery: Vanessa Clemente, Worldline Iberia S.A.U)
- *"Insights from MAKING-CITY project: Technology selection assistance tool and Positive Energy Balance calculations for city districts"* (Virtual delivery: Andrea Gabaldón, CARTIF; Selma Causevic, George Huitema; TNO)
- *"Sustainable cities: A KPI-driven sustainable evaluation framework for Smart Cities"* (Virtual delivery: Ana Quijano, CARTIF)

17.00 - 19.30


"Renovation Cases and Tools Part 1" - paper session

- *"Plug and Play Market Solutions for Renovation"* (Virtual delivery: Anna Batallé, Fundació Eurecat; Giulia Barbano, IES; Michele Scotton, UniSmart)
- *"Decision-making aid tool to support renovation of buildings with industrialised all-in-one technology solutions"* (Virtual delivery: Diego Sanz Almela, Instituto Valenciano de la Edificación)
- *"Influencing decision-making processes in public energy efficiency projects: wider benefits as a driver for deep building renovation"* (Virtual delivery: Sebastian Botzler, Technical University of Munich)
- *"Long term monitoring strategies for increasing EPCs reliability"* (Virtual delivery: Graziano Salvalai, Politecnico di Milano)

- *"Tools for Data Driven Renovation Design – the BIM4REN solutions"* (Virtual delivery: Giulia Barbano, IES)
- *"Framework for evaluating financial impacts of technical risks related to energy efficient renovation of commercial office buildings"* (Virtual delivery: Gabriele Fregonese, SINLOC Sistema Iniziative SpA)
- *"Energy Poverty and its policy implications in Central and Eastern Europe and the former Soviet Union republics"* (Virtual delivery: Senta Schmatzberger, Buildings Performance Institute Europe)
- *"Rehabilitation of the Citadel of Cascais- Presidential Summer Palace"* (Virtual delivery: Pedro Vaz, Presidência da República)
- *"BIM-based holistic tools for Energy-driven Renovation of existing Residences"* (Virtual delivery: Giorgos Giannakis, Hypertech)
- *"TIMEPAC: Towards innovative methods for energy performance assessment and certification of buildings"* (Virtual delivery: Leandro Madrazo, ARC Engineering and Architecture La Salle, Ramon Llull University)



09.00 - 12.30

"Data and Intelligence Sharing for Transforming **Buildings into Active Nodes** in the Future Energy System" - workshop

This 180-minute virtual workshop will explore how buildings are no longer perceived merely as depreciating assets but are transforming themselves into smart buildings which are associated with the generation of vast amounts of data.



09.00 - 10.30

"**Positive Energy Buildings** – Definition" - workshop

This 90-minute hybrid workshop defines Positive Energy Buildings (PEB) which have been discussed among three sister projects, funded under the H2020-EU.2.1.5.2/Call (Cultural-E, EXCESS, syn.ikia). To arrive at a wider agreement on the terminology and boundaries for PEBs, the three projects will discuss their findings with a bigger group of stakeholders working on PEBs or related fields.



09.00 - 10.30

"**Low-TRL Renewable Energy Technologies**" - workshop

This 90-minute hybrid workshop will bring together six low-TRL EU-funded research & innovation projects (REGEN-BY-2, SELECTCO2, CITYSOLAR, PRODIGIO, X-ROTOR, and TELEGRAM) developing the next generation of renewable energy technologies that will form the backbone of the energy system by 2030 and 2050.

09.00 - 10.30

"Smart Energy Management Part 1" - paper session

- *"Distribution grid energy flexibility: the Ebalance-Plus technologies developed for the University of Calabria Demo Site"* (Hybrid delivery: Anna Pinnarelli, University of Calabria)
- *"ModSCO. An online tool based on grey-box model to estimate energy savings in buildings"* (Hybrid delivery: Alessandro Piccinini, Federico Seri, Letizia D'Angelo; NUIG)
- *"Promoting co-creation as intermediation for household demand response solutions"* (Hybrid delivery: Aggeliki Aggeli, Aalborg University Copenhagen; Marten Boekelo, Duneworks)
- *"Data Security in Smart Grids"* (Hybrid delivery: Bushra Cannan, University of Haute Alsace France)
- *"Advances in distributed generation sources digital twins design"* (Hybrid delivery: Ivan Todorović, Ivana Isakov; Faculty of Technical Sciences)
- *"KPI Evaluation Framework and Tools performance: A Case Study of inteGRIDy Project"* (Virtual delivery: Chris Ogwumike, Teesside University; Tariq Ahmed, Lancaster University)

09.00 - 10.30

"Energy Citizenship in New Energy Concepts" - workshop

The 90-minute hybrid workshop aims at presenting and discussing the methods, strategies and expected impacts for citizen engagement applied in six different research and innovation projects (ATELIER, +CityxChange, ENERGE, MakingCity, mySmartLife, Pocityf) on positive energy districts.

09.00 - 12.30

"Building Energy Performance Certificates (EPCs): The Enabler Smart Readiness Indicator (SRI)" - workshop

This 90-minute hybrid workshop is set against the backdrop of the ongoing SRI implementation and further development (futureproofing) at both EU and national levels. The members of the Next Gen EPCerts H2020 cluster

join forces with the SmartBuilt4EU team with the main scope of providing support to the European Commission services (& contractors) and the EU's Member States in the upcoming SRI national testing and the ongoing development of the SRI.

10.30 - 12.30



"DHC Networks in European Innovation Projects" - workshop

The objective of this 120-minute virtual workshop is to share experiences and lessons learnt among different district heating and cooling (DHC) demo sites involved in European innovation projects (WEDISTRICT, REWARDHEAT, RELATED, and MATCHUP) joined to interested stakeholders who could exchange new ideas, lessons learnt, proposals, etc.



09.00 - 12.30

On Site Networking



11.00 - 12.30

"Eco-Systems and Platforms for EeB Renovation" - workshop

This 90-minute hybrid workshop is led by BIM-SPEED project which is an acronym for "Harmonized Building Information Speedway for Energy-Efficient Renovation". 'BIM for renovation of existing residential building stock' has been proven viable in innovative pilot projects by the members of BIM-SPEED consortium, among others in H2020 Smart Cities.

11.00 - 12.30

"Smart Energy Management Part 2" - paper session

- *"ECOQUBE - AI driven smart data centers"* (Hybrid delivery: Mohan Gandhi, Razi Ahmadi Khordkeili; SDIA; Cagatay Yilmaz, Lande)
- *"Smart Meter Inclusive (SMI): Artificial intelligence for proactive energy management by end users"* (Hybrid delivery: Djaffar Ould Abdeslam, University of Haute Alsace France)
- *"Practical security analysis of German smart metering systems"* (Virtual delivery: Ivan Rigoev, ivESK, Offenburg University)
- *"Smart5Grid - Demonstration of 5G solutions for SMART energy GRIDs of the future"* (Hybrid delivery: Milena Tsoleva, Krasimir Vlachkov, Daniel Shangov; ESO EAD)
- *"An innovative modelling approach based on building physics and machine learning for the prediction of indoor thermal comfort in an office building"* (Virtual delivery: Giovanni Tardioli, IES)
- *"Implementation of renewable energy and smart solution technologies to pre-existing energy system; A Cost Benefit Analysis Case Study: InteGRIDy"* (Virtual delivery: Tariq Ahmed, Lancaster University; Bjarnhedinn Gudlaugsson, Teesside University)

11.00 - 12.30

"European Energy Community Fast Track: Technologies (2/4)" - workshop

This workshop will involve the following seven EU projects presenting innovative technologies for energy communities: ELAND, IFLEX, LOCAL RES, MUSE GRIDS, SMARTBUILT4EU, ENEURON, and ACCEPT.

15.30 - 17.00


"Sustainable **Energy Skills** in the **Construction Sector 2.0**" - workshop

This 90-minute virtual workshop joins together ten EU projects (INSTRUCT, BUSLeague, TRAIN4SUSTAIN, HP4All, The nZEB Roadshow, PRO-Heritage, CraftEdu, BIMzeED, ARISE and SEetheSkills) to expose their approach (and / or results) and discuss potential synergies to stimulate future public and private investments in energy-based habitat renovation. The specific focus is to accelerate the training and certification of craftsmen in the construction and fitters' industries and allow these sectors to fully embrace innovative technologies, products, and systems in the energy for buildings field.

15.30 - 17.00


"Innovative **Business Models for European PV Solutions**" - workshop

This 90-minute virtual workshop will demonstrate how innovative European produced PV/PV related products are becoming financially competitive on the global market, particularly the solutions coming from three projects (SUPER PV, BIPVBOOST & EnergyMatching).

15.30 - 17.30


"**Smart Buildings: Defining R&I Priorities**" - workshop

This 180-minute hybrid workshop explores smart technologies in buildings as a cost-effective means to assist in creating healthier and more comfortable buildings with a lower energy use and carbon impact. Smart technologies can also facilitate the integration of renewable energy sources in future energy systems. They can also digitalize the construction phase and enhance health & safety, optimize workflow management and quality control while lowering the overall energy use.

15.30 - 18.30


"Modularity and Industrialization of Building Envelope Kits: Challenges, Propositions and Barriers Towards Deep Renovation" - workshop

This workshop elaborates a conceptual framework to assess the preconditions and KPIs that need to be met to benefit from a modular product strategy in the deep-renovation market to which industrialization and modularity are relative new concepts. Five H2020 projects (DRIVE 0, STEP UP, ProGETonE, INFINITE, PLURAL, ENSNARE) will explore these new strategies for deep renovation as a contribution to the EU Renovation Wave.

15.30 - 17.00


"Financing the Energy Transition" - paper session

- *"Data collection to support energy efficiency finance in the building sector"* (Hybrid delivery: Eddie Streng, Joule Assets Europe)
- *"The EN-TRACK energy efficiency performance tracking platform for benchmarking savings and investments in buildings. Data model development"* (Hybrid delivery: Edgar Martínez S., Stoyan Danov; CIMNE Beegroup)
- *"Extended Public-Private Partnership for Investment in Smart Energy Efficiency Projects in a Social Housing context"* (Hybrid delivery: Paola Zerilli, University of York; Angelo Giordano, Alessandra Cassisi; CiviESCO; Juergen Ritzek, EEIP; Chiara Pocaterra, Apre)
- *"Smart governance: an investigation into participatory budgeting models"* (Hybrid delivery: Sandra Treija, Uģis Bratuškins, Alisa Koroļova; Faculty of Architecture, Riga Technical University; Arnis Lektauers, Department of Modelling and Simulation, Faculty of Architecture, Riga Technical University)

15.30 - 17.00



"European **Energy Community** Fast Track: Social **Engagement (3/4)**" - workshop

This workshop will involve the following seven EU projects presenting social engagement strategies for energy communities: RENAISSANCE, COMPILE, SENDER, ECREW, LIGHTNESS, REDREAM, HESTIA.

15.30 - 17.00



"Evaluation and Learning in Complex Interdisciplinary Research and Innovation Projects – The Example of Horizon 2020 Innovation Action **Projects on Positive Energy Districts**" - workshop

This is a 90-minute hybrid workshop is led by the ATELIER project. In R&I projects, evaluation frameworks and processes (including impact assessments) are closely related to learning frameworks and processes. Currently, in the H2020 Smart Cities and Communities programs, 6 projects deal with PEDs with in total 12 Light House Cities, involvement of more than 100 other cities, and in total a few hundred partners.

17.00 - 18.30



"frESCO and SENSEI Explore the Opportunities for **Smart Energy Services** Leading to New Business Models that can Unlock the Potential of Residential Consumers and Domestic Building Stock to Contribute to Future Energy Efficiency and Flexibility" - workshop

This 90-minute virtual workshop will commence with a review of P4P (Pay-for-Performance) schemes put in place by regulators and utilities, mostly in North America, to promote energy efficiency and reduce the costs of the energy transition.

17.00 - 18.30


"Integration of **Finance for Energy Efficiency**" - workshop

This 90-minute hybrid workshop explores how investing in energy efficiency directly affects reducing energy consumption, while also improving industrial competitiveness and driving economic growth. The lack of best practices and statistical data on the actual energy and cost savings achieved by implemented energy efficiency projects and payment default rates, causes financial institutions to attribute high-risk premiums to energy efficiency investments. EEnvest, Triple-A, Quest, Launch and Citizee are the H2020 sister projects participating in this workshop.

17.00 - 18.30


"European **Energy Community** Fast Track: **Wrap-Up (4/4)**" - workshop

This workshop will provide conclusions from the previous three 90-minute sessions (i.e. business models, technologies, and social engagement) on energy communities involving various EU projects.

17.00 - 18.30


"**Districts** of tomorrow" - paper session

- "*The impact of e-mobility in Positive Energy Districts*" (Hybrid delivery: Tony Castillo-Calzadilla, University of Deusto)
- "*The Positive Energy District ATELIER project, 2 years of intense experience*" (Virtual delivery: Rudy A. Rooth, Municipality of Amsterdam; Mark van Wees, Amsterdam University of Applied Sciences)
- "*Towards positive energy districts in smart cities: A data-driven approach using aggregation and disaggregation of energy balance calculations*" (Virtual delivery: Selma Causevic, George Huitema; TNO)

- *"Online EnergyMatching Platform to support the Renewable Energy Sources harvesting in buildings and districts"*
(Hybrid delivery: Jennifer Adami, Eurac Research)
- *"Direct current microgrid to enhance sustainable local energy generation and storage in a Finnish residential district - Tigon project"* (Hybrid delivery: Alessandra Cuneo, RINA Consulting)

09.15 - 13.30



"Rome Smart City" - Onsite Public Plenary & Roundtable

The European context, the Italian PNRR (National Plan of Recovery and Resilience), the digital transition in Rome. How to move from policies to projects? Which laboratory is possible in the EUR district?

- Moderator: Paola Pierotti, PPAN Journalist
- Alberto Sasso, President EUR Spa
- Simona Bonafè, Euro MP
- Raffaele Gareri, Director of the Department of Digital Transformation of the City of Rome and co-Founder of The Smart City Association Italy
- Guglielmo De Gennaro, Agld Market Procurement and Innovation Strategies Service
- Ingrid Paoletti, Associate Professor Politecnico di Milano and author of the book "Be materialists!"
- Simone Santi, Head of Offices LendLease Italia

10.20 COFFEE BREAK

- **Keynote speaker:** Bas Boorsma, Chief Digital Officer of the City of Rotterdam and co-author of the book: "A New Digital Deal"

11.10 ROUND TABLE

Models to apply: public, private and research

- 1. Angelo Di Gregorio - Director Criet, Professor at the University of Milan-Bicocca
- 2. Valentino Sevino - Dictor of Mobility Amat Milano
- 3. Davide Rota - CEO Linkem Spa
- 4. Stefano De Capitani - President Municipia Spa
- 5. Ivan Vigolo - Head of Technology & Solutions Acea Group
- 6. Damiano Di Ciaccio - Partner and co-founder Rilo Digital Planning

BREAK 5 MIN

12.00 ROUND TABLE

From the project to the market

- 1. Stefano Stinchi - Public Sector Director Microsoft Italia

- **2.** Marco Marcatili - Nomisma Development Manager
- **3.** Leandro Aglieri – President of Laboratorio Smart City Roma
- **4.** Sam Ramadori - CEO Brainboxai
- **5.** Francois Borrelli - CEO Numana

13.00 CONCLUSIONS

- Luca Montuori, Town Planning Councillor of the City of Rome

14.30 - 17.00



"Heating Appliances Retrofit Planning: Motivating Consumers to Use More Efficient Heating Systems" - workshop

This virtual 180-minute workshop aims at raising consumers awareness to the opportunities underlying the planned replacement of their old and inefficient heating appliance. This is done by supporting the consumer in the identification of the energy (in)efficiency of their current heating equipment and the saving opportunities deriving from its replacement with a more energy efficient solution.

14.30 - 17.30



"Facilitating Local Multi-Vector Energy Systems with the E-LAND Toolbox" - workshop

This 180-minute virtual workshop explores how Local Energy Systems (LES) pose important challenges in their operation due to their weak interconnection with the bulk power system. One of the goals of the European-funded H2020 project E-LAND is to provide a synergistic solution for optimal planning and operation of multi-vector LES and isolated communities (considering electricity, gas and heat networks), through a set of advanced tools.

14.30 - 17.30



"Renewable Heating and Cooling Solutions for Buildings and Industry" - workshop

This 180-minute hybrid workshop involves experts from the biomass, geothermal, solar thermal and heat pump sectors to discuss a common strategy for increasing the use of renewable energy technologies for heating and cooling in buildings and industry. Following an introductory presentation of the RHC Projects Database by Dan Stefanica of EHPA, five clusters of EU projects shall be presented. Specifically, (i) RHC for industrial applications: HYCOOL, SHIP2FAIR, ASTEP; (ii) Storage solutions for RHC support in buildings: HYBUILD, SWS Heating, SCORES, Ministor; (iii) Innovative solutions for RHC deployment in buildings: InnovaMicroSolar, SolBio-Rev, TriHP, RES4BUILD; (iv) Demonstration actions for RHC in buildings: GEOFIT, SunHorizon, HybridBioVGE; and (v) Towards NZEB deep renovation with RHC technologies: barriers or challenges: ENSNARE, INFINITE, POWERSKIN, PLURAL, ENVISION.

14.30 - 16.00



"Energy Communities: How Tools Can Facilitate their Enhancement" - workshop

This 90-minute hybrid workshop has the aim to facilitate the interaction between the speakers and the audience to discuss how the set-up, design and management of energy communities could be facilitated by the adoption of tools from different perspectives (municipalities/users/aggregator/DSO etc..). The discussion will provide suggestions and ideas on how to improve the current set of tools already available and identified the skills each tool must have to support energy communities all over Europe.

14.30 - 16.30


"Training Craftsmen on the **Greening of Heritage Buildings**" - workshop

This 90-minute hybrid workshop is led by the PRO-Heritage project which stands for "Training craftsmen on the greening of heritage buildings." There are many historical buildings in Europe that need frequent quality conservation. Unfortunately, today, there are few craftsmen with appropriate skills and competences. To solve this, the EU-funded PRO-Heritage project will establish a permanent education resource for professionals and craftsmen providing excellent competences and skills for built heritage and support the exchange of those competences and skills across Europe.

14.30 - 17.30


"**Community Energy Systems** from the Full **Value Chain Perspective**" - workshop

The aim of this workshop is to address community energy systems (CES) from different perspectives within the commercial sector, sharing the perspectives from AECOO (Architecture, Engineering, Construction, Owner Operators) companies, businesses, and owners. This full overview of CES will have a non-technical approach focusing on financial models and regulation, and a technical approach focusing on energy management platforms, cloud aggregation and digital twinning as enabling technologies for CES projects.

16.00 - 18.30


"Clean **Energy Transition of the Islands** in H2020-Funded Projects: Present and Future Trends" - workshop

This workshop will present the point of view of the principal H2020 funded projects in the framework of clean energy transition on islands, thus consolidating their collaborative approaches and presenting new perspectives. This collaboration among all the projects aims at a cross fertilization to scale up the impact of the initiative, creating synergies and involving the different communities to take advantage of lessons learnt and already tackled issues.

Hence, this workshop will involve projects for an overall of 180 partners from all over Europe and 95 million of Euros of funding. The scope of the workshop is to present the results and the future approaches among the different areas faced during the previous webinars, increasing the awareness, and focusing on strategies and practical solutions for decarbonization and energy efficiency on islands. In parallel, information on NESOI funding opportunities and advancements will be introduced: given the innovative focus of the second call for projects, interested parties will be encouraged to acknowledge the latest advancements in term of island energy transition in Europe.

16.30 - 18.30



"The Challenges of Creating Digital Twin for the Construction Phase" - workshop

This 120-minute hybrid workshop will consist of several presentations on the chosen topic, specifically the challenges recognized by 4 EU projects: COGITO, BIMprove, BIM2TWIN and ASHVIN. Additionally, a small-scale sensor technology called SEMS (Simplified Emissions Measurement System) capable of rapidly measuring emission data will be presented by Professor Jochen Teizer from Aarhus University, Denmark. Overall challenges to be addressed during the workshop are sensing, data, people, security and privacy, process, project time overruns, project efficiency, etc.

17.00 - 18.30



"Decarbonization of the EU Building Stock: Innovative Approaches and Affordable Solutions Changing the Market for Building Renovation" - workshop

This workshop will bring together a selection of H2020 EU-funded projects that are promoting holistic consumer-centered building renovation solutions that involve the whole value chain, ensuring high levels of comfort and a high quality of the indoor environment. The workshop will be divided in two sections: (i) allowing first to present progress and intermediate results from more advanced projects (TURNKEY RETROFIT, TripleA-reno, HIROSS4all); (ii) and then those introducing some new projects that have recently started, allowing them to present their objectives and expected impacts, and potentially to identify synergies with the above group (re-Modulees, Save the Homes,

Superhomes2030).

17.30 - 18.30



"Renewable Energy Modeling" - paper session

- *"MPC for a single-family house with a heat pump and PV installation"* (Virtual delivery: Laura Zabala Urrutia, Tekniker)
- *"Assessing and Mapping the Technical Generation Potentials from Renewable Energy Sources in the Tri-national Upper Rhine Region"* (Virtual delivery: Barbara Koch, Zeina Najjar; University of Freiburg, Chair of Remote Sensing and Landscape Information Systems)
- *"Citizen energy cooperatives in the Upper Rhine Region: Commoning issues in the transition towards a decarbonised and decentralised future"* (Virtual delivery: Philippe Hamman, University of Strasbourg; Societies, Actors and Government in Europe)
- *"BUILTHUB: Dynamic Building Stock Knowledge Hub"* (Virtual delivery: Ulrich Filippi Oberegger, EURAC)

17.30 - 18.30



"Industry 4.1" - paper session

- *"The development of a digital counterpart to aid decision support on energy consumption of an active manufacturing process"* (Hybrid delivery: Liam Morris, University College Cork)
- *"Alliance 4 Energy Cooperation in European Industries"* (Hybrid delivery: Fabrizio Guarrasi, Lombardy Energy Cleantech Cluster - LE2C and Francesco Peccianti, RINA Consulting)
- *"IoTwinS- Distributed Digital Twins for industrial SMEs: a big-data platform"* (Virtual delivery: Daniele Sangiorgi, ART-ER S. Cons. p. A.)
- *"The benefit of Energy Cooperation across Europe: R-ACES project"* (Virtual delivery: Agata van Oosten, Institute for Sustainable Process Technology)

17.30 - 18.30**"Renovation Cases and Tools Part 2" - paper session**

- *"Potential for a reduction of the carbon dioxide emissions of Czechia by renovating the national building stock"* (Hybrid delivery: Antonín Lupíšek, Czech Technical University in Prague, University Centre for Energy Efficient Buildings)
- *"The development of an information-exchange framework to address the communication and coordination bottlenecks in the zero-energy renovation process"* (Hybrid delivery: Thaleia Konstantinou, Delft University of Technology)
- *"Prefabricated plug&play façade unitized for deep retrofitting: the RenoZEB case study"* (Virtual delivery: Laura Vandi, Focchi)
- *"Rehabilitation of the Sacramento Convent- former president's office"* (Hybrid delivery: Pedro Vaz, Presidência da República)

09.15 - 13.30



"Cities between Innovation and Transition. The Point of View of the World of Real Estate" - Onsite Public Plenary & Roundtable

Digital and green, how do you innovate the built environment considering products and services, buildings and facilities? Can the cities of tomorrow be an opportunity for design, manufacturing and real estate?

- Moderator: Paola Pierotti, PPAN Journalist
- Alberto Sasso, President EUR Spa
- Paolo Micucci, Head of engineering & project manager Generali Real Estate
- Gianni Massa, Vice President Vicar CNI and head editor of L'Ingegnere Italiano
- Giovanni Cardinale, Vice President CNI, member of the board Feani
- Carlo Castelli, Head of Cities Solutions Europe Jacobs
- Georgia Aves Sceek Mohamed, Head of European Financing CEF and TEN-T Ferrovie dello Stato Italiane Spa
- Gabriele Scicolone, President Oice

10.50 COFFEE BREAK

11.15 ROUND TABLE WITH STQKEHOLDERS

The Actors of Urban Transformation

- **1.** Luca Montuori - Town Planning Councillor of the City of Rome
- **2.** Andrea Vecci - Sustainability Manager Redo Sgr
- **3.** Fortunato Federici - Management and Business Development Gruppo Fresia
- **4.** Umberto Lebruto - CEO, FS Sistemi Urbani
- **5.** Alessandro Lodigiani - Country Manager Italy - R2M Solution

BREAK 5 MIN

12.10 ROUND TABLE

Between Public and Private. The Challenge of Cities' Transition

- **1.** Paolo Testa - Head of Studies and Research, Policies for Territorial Cohesion and Southern Italy ANCI

(Associazione Nazionale Comuni Italiani)

- 2. Giovanna Della Posta - CEO Invimit
- 3. Carola Giuseppetti - Sidief General Director
- 4. Alessandro De Biasio - CEO Gabetti Lab

12.50 CONCLUSIONS

- Ermete Realacci, President Symbola Foundation



Keynote presentations

Opening Plenary



"Policy & Innovation Platforms" (Virtual. Tuesday, 28 Sep 2021, 14.15 - 15.30)

In this opening plenary we will receive an update from the European Commission on R&D Opportunities in Sustainable Buildings and the Fit for 55 Package. We'll then have rapid overview presentations from associations and innovation platforms (resultant of H2020 project) that are indicative of thematic research areas (smart buildings, digitalization, open innovation) and which we believe can add value for the SP audience at large.



Thomas Messervey - R2M Solution

Opening & Moderator: "Welcome to Sustainable Places 2021"

Event opening with brief history of Sustainable Places and overview of the SP2021 program and highlights. Tom is the CEO of R2M Solution and Co-Organizer of Sustainable Places.



Sylvain Robert - European Commission (CINEA, Unit C2)

Keynote: "Horizon Europe: Opportunities for R&I in Sustainable Buildings"

Sylvain Robert is project officer in CINEA, the European Climate, Environment and Infrastructure Executive Agency. He manages research and innovation projects funded by EU programmes in the field of energy efficiency and sustainable buildings. Sylvain is an engineer by training, with a research and project management experience in ICT, smart energy, smart buildings and energy efficiency. He also spent 4 years in the European Commission as policy officer, working on sectoral EU policies for buildings, smart technologies and energy efficiency. In this talk, he will share information on R&I opportunities in sustainable buildings with a focus on Cluster 5, Destination 4 and the Built4People

Pierluca Merola – European Commission (DG ENER, Unit B2)



Keynote: "Buildings in the Fit for 55 Package and the European Green Deal: EU Energy policy update"

Pierluca Merola is a Policy Officer in the Energy Efficiency Unit of the Directorate-General for Energy of the European Commission. As part of the Energy Efficiency Financing Team, Pierluca is in charge of ensuring the coordination between the regulatory and policy developments and the implementation of different EU founding programmes in the area of energy efficiency and building renovation. Before joining the European Commission, Pierluca graduated in European Political and Governance Studies and worked in Brussels in public affairs and stakeholder organizations. In this talk, he will outline the policy context for the Fit for 55 package which sets to put the EU on track for a 55% reduction in carbon emissions by 2030 and net zero emissions by 2050.

Alain Zarli – Secretary European Construction Technology Platform and Managing Partner R2M France



Keynote: ECTP as an activator of Construction and Built environment European research and innovation

The ECTP serves as a liaison between the European Commission, industry and research performing bodies. In this talk, Alain will give update on key activities of the ECTP to include its upcoming conference, the Built4People Partnership, and the EU Smart Building Innovation Platform (SmartBuilt4EU).



Germain Adell – Deputy Director, Nobatek/INEF4

Keynote: Innovation support to building sector SMEs via metaclustering

SMEs have high potential but low capacity to bring new products and services to the market. This talk will give an overview of how Open Innovation, Innovation Partnering, Cascade Funding, Metaclustering and national construction technology platforms are playing a role in the Metabuilding and Metabuilding Labs European projects.



Eduardo Loscos – R&D Manager at IDP Engineering and President at BDTA

Keynote: Driving innovation in Digital Twins - the Building Digital Twin Association

Launched out of the Horizon 2020 project SPHERE, the Building Digital Twin Association is open to membership from all organizations seeking to advance toward full implementation of Digital Twins across real estate and infrastructure assets. The BDTA also holds an annual conference. This talk will give a brief overview of the vision, mission, activities and opportunities for engagement.

Keynote presentations

Scientific Plenary



"Innovation Trends in Horizon Europe and the Market"

(Hybrid. Wednesday, 29 Sep 2021, 13.45 - 15.30)

After a welcome from GBC Italia, this session will touch on several trends in Horizon Europe and the market at large. These include Artificial Intelligence in buildings, the Smart Readiness Indicator for building services, work on Digital Logbooks, and the role of Technical Assistance in facilitating the uptake of such innovations.



Thomas Messervey – R2M Solution (CEO)

Session Moderator: "Innovation Trends in Horizon Europe"

Session opening and moderation with an additional welcome to new delegates joining this day.



Francesco Bedeschi – GBC Italia (Member of the Executive Board - International Relationships)

Keynote: "Green Building Councils – Advocating Sustainability"

Green Building Councils across Europe and the globe represent industry, advocate policies for sustainability and participate in research projects alongside other European partners. In this talk, Prof. Bedeschi will welcome the audience to the event and highlight some key initiatives and activities within the WGBC European Network and GBC Italia.



Stijn Verbeke – Senior Researcher (EnergyVille/VITO + University of Antwerp)
– Leader of the SRI Support Team

Keynote: "Understanding the importance of smart buildings: the EU Smart Readiness Indicator"

Smart technologies can be a cost-effective means to make buildings more energy efficient, while also improving the life of the occupants and facilitating the integration of buildings in renewable energy

Keynote presentations

Scientific Plenary



"Innovation Trends in Horizon Europe and the Market"

(Hybrid. Wednesday, 29 Sep 2021, 13.45 - 15.30)

systems. This motivated the European Commission to launch a common EU instrument to assess smart buildings: the 'Smart Readiness Indicator' (SRI). In this talk, Stijn will briefly introduce the concept and methodology of this indicator. Next, he will explain the current and upcoming activities of the technical support team, which assists the European Commission and Member States in the testing and implementation of this instrument across Europe.

Sam Ramadori – Brainbox AI (CEO)



Keynote: Scaling Innovation and Artificial Intelligence in Buildings

Brainbox AI is a global leader in using AI to create value for all building users, owners and utilities across the world. Since launch in 2019, BBAI has commissioned AI on over 10 million square meters of real estate impacting sustainability and wellness in over 70 cities. To do that, BBAI has had to scale both itself as a company in parallel with the technology itself. In this talk, Sam will share how AI is changing the building services landscape, some of the challenges and opportunities along the way, and vision for the future.

Sophie Dourlens Quaranta – R2M France (Managing Partner)



Keynote: Digital Building Logbooks

The European Commission recently concluded a study on Digital Building Logbooks where Sophie served as the coordinating manager. In this talk, Sophie will share the motivation, key findings and future outlook for digital building logbooks in Europe and how they can be a driver for increased productivity, efficiency and sustainability in the building sector.

Keynote presentations

Scientific Plenary

"Innovation Trends in Horizon Europe and the Market"

(Hybrid. Wednesday, 29 Sep 2021, 13.45 - 15.30)

Andrea Martinez – SINLOC (Deputy Managing Director)



Keynote: Advisory Services as a Driver for Sustainability

SINLOC is a consulting and investment company providing advisory services, feasibility studies and direct investment in public private partnerships. This talk will focus on how technical, financial, legal and administrative support are critical functions in supporting urban area stakeholders in embracing innovation and investment to implement energy transition projects. A focus point on the European Island Facility NESOI will be provided.

Keynote presentations

Closing Session



"Call to Action" (Hybrid. Friday, 1 Oct 2021, 13.30 - 14.00)

Sustainable places will end with a call to action. In this short closing session, we'll get an update on IES' Manifesto for Saving the Planet and a view on how digital twins are making an impact via case study examples.

Don Mclean – Integrated Environmental Solutions (IES) - (Founder & CEO)



Keynote: "The Manifesto – 2 years in"

Two years ago, IES issued its "Manifesto for Saving the Planet" which looked at the challenges facing the planet and humankind as the population continues to grow and our consumption patterns continue to increase. The Manifesto was tied to a pivot point at IES toward a suite of digital twin simulation environments called "Intelligent Communities Lifecycle (ICL)" which aims to have a positive energy impact on every building on the planet in all phases of the building's lifecycle. Two years later, this talk will provide an update on the manifesto as it stands today, why its themes are more pressing than ever and how building sector stakeholders and grid operators are leveraging digital twin technologies for the design and operation of the built environment in an integrated way.



Thomas Messervey – R2M Solution (CEO / SP2021 co-organizer)

Closing Remarks: "SP2021 Rollup"

In a short set of closing remarks, Tom will rollup SP2021, urge the community to move from discussion to implementation and invite everyone to enjoy the networking lunch.



Gold Sponsor

Rilo Digital Planning (Rilo)

Rilo Digital Planning is an engineering company that provides high-value technological and innovation services to private investors, businesses and institutions. The aim of these services is to analyze and bring value to some of the best technological solutions within the built environment and the Industry 4.0. The team includes engineers and architects that work on sustainability and digital innovation in the real estate sector, with the objective of improving the efficiency of construction processes and property management. RILO DIGITAL PLANNING AND SUSTAINABLE PLACES 2021

For Rilo Digital Planning, environmental, social and energy sustainability are key to all engineering and design activities. Studying and sharing these themes represents a fundamental part of a vision of a company, where the relation between technological innovation and sustainable development is constantly deepened and valued. In this context, the encounter between academia, investors and professionals stands as an important opportunity of growth and dialogue over new development models, from the urban scale up to the building and user's dimensions. These areas are mutually enriched by a constant research process and its professional application, which are the cores and expertise of Rilo Digital Planning, both in the area of engineering design with a digital methodology, as well as in the branch of sustainability certifications. Therefore, our company invests in research and supports Sustainable Places as a gold partner, with the objective of stimulating a constructive dialogue between the various actors in the real estate business, a cardinal principle upon which a revolution of building values, and of working in general, can be based.

Gold Sponsor



Brainbox AI (BBAI)

HVAC systems consume 45% of a commercial building's energy consumption. Buildings & buildings construction combined are responsible for nearly 40% of total direct and indirect CO2 emissions. BrainBox AI, at the forefront of the green building revolution with the world's most advanced artificial intelligence technology for commercial HVAC systems, merges deep learning algorithms on existing HVAC functionality, reducing a building's carbon footprint by 20-40% & total energy costs by up to 25%.

BRANBOX AI AT SUSTAINABLE PLACES

BrainBox AI is proud to sponsor Sustainable Places 2021. The event directly aligns with BrainBox AI's mission of "using AI to create value for all building users, owners and utilities across the world." "Given the sheerscale of the challenges ahead of us in the coming years and decades, participating in events such as Sustainable Places is critical to what we do at BrainBox AI," said Sam Ramadori, President of BrainBox AI. "Exchanging on the impactful changes we will need to make in many industries, including the built environment, is critical as a catalyst of that required change. We anticipate that this event, with its blend of policy, scientific, technical, and real-world applications, will be a critical contributor to our climate change call to action." BrainBox AI's deep learning software produces a saving in total energy costs of up to 25%, a 20–40% reduction in carbon footprint and a 60% increase in occupant comfort. Building operators can also see up to a 50% extension in the service life of the HVAC equipment. Most recently, BrainBox AI was announced as one of 10 companies globally chosen to showcase at the Tech For Our Planet challenge program, an initiative at the upcoming 26th United Nations Climate Change Conference (COP26). In 2020, BrainBox AI was recognized by TIME as one of the Top 100 best inventions and by CB Insights as one of the Top 100 AI start-ups redefining industries in 2021.



Gold Sponsor

Integrated Environmental Solutions (IES)

Over 25+ years IES have built a solid reputation as the leading global innovator in integrated performance based analysis for the built environment. Our Digital Twin technology facilitates the creation of resource-efficient, healthy and cost-effective built-environments of any size or purpose. Providing data-driven insights to empower any stakeholder involved in the design, use or operation of individual or entire groups of buildings to make smarter, more sustainable decisions with confidence.

IES and Sustainable Places

IES is excited to be participating in this year's Sustainable Places in Rome. Italy is an exciting market for the company, where we have built up a strong user base with our Virtual Environment software. We are proud to have supported over 2000 Polimi students into the workforce through use of our software and, more recently, our expanded suite of digital twin tools for the built environment -the Intelligent Communities Lifecycle (ICL)- is supporting Reinventing Cities projects in the Milan area and beyond. Sustainable Places recognises that climate change objectives cannot be met without innovations capable of tackling the built environment, and its associated infrastructure, at scale. This is closely aligned to IES' approach, which recognises buildings as active elements in a complex network of services. We believe digital tools –and digital twins specifically– will be essential in navigating the route to zero-carbon, sustainable and healthier built environments. Providing a holistic, scalable solution which translates data into decision support information to support net-zero strategies and interventions. “We are delighted to be returning to Sustainable Places. At IES, we believe every building of every city in the world can be decarbonised. Our purpose is developing technology to make that happen. We look forward to joining like minded innovators who share our vision for more sustainable, resilient and decarbonised built environments.” Don McLean, Founder & CEO, IES

Sponsors of **Sustainable Places 2021**



Silver & Blue Sponsor



Matterport

Matterport is the leading spatial data company focused on digitizing and indexing the built world. Our all-in-one 3D data platform enables anyone to turn a space into an accurate and immersive digital twin which can be used to design, build, operate, promote, and understand any space.

Silver & Blue Sponsor



Axpo Energy Solutions (Axpo)

Axpo Italia was founded in 2000 during the transition to the free market and is now one of the largest players with a presence along the entire energy chain, fourth in Italy in the free market and among the top 100 Italian companies per turnover. Axpo Italia brings the international experience of the Axpo group within the national market, creating value to the entire Italian energy supply chain. Axpo Energy Solutions Italia is the Group's company specialized in energy efficiency and sustainable mobility. Both have headquarters in Genoa, and commercial and representative offices in Milan and Rome.

Silver & Blue Sponsor



GaiaGo

GaiaGo is the first Urban Tech Mobility company that integrates sustainable and shared mobility into spaces and aggregates mobility services whilst connecting them with people's consumption. The GaiaGo platform aims to simplify the complexity of the current transport ecosystem, valuing the territory and the community to stimulate shared mobility, discourage the use of owned cars, accelerate the sustainability of cities, and improve their ecological footprint. GaiaGo provides its physical and digital solutions for the real estate, corporate, and sports sector.

Silver & Blue Sponsor



GridAbility Consortium (GridAbility)

A reality of innovative companies that share a common goal: to make a contribution to the change of the energy paradigm; thanks to the skills of members compared to advanced technologies such as IA, blockchain, real time monitoring, Gridability accompanies the territories in an Energy Transition that has as its purpose the realization of Smart Grid and Citizens Energy Community. Founded in Cagliari in 2020, it has designed "turnkey" solutions, innovative hardware and vertical applications for the world of energy and especially for the new paradigms of smartgrid and zero km energy. Gridability boasts a direct staff of 10 professionals and partnerships with leading companies in the ICT, TLC, energy. It is the promoter of Energy4com, the first energy cooperative in Italy that combines socio-economic skills and technological innovation.

Sponsors of **Sustainable Places 2021**



Silver & Blue Sponsor



Artelia Italia (Artelia)

Artelia Italia is one of the most important companies in the Group for the range of services offered, business volume and workforce. It mainly operates in the fields of Building & Industry, Retail Multi-Site, Energy and Environmental Sustainability, Transport and Urban Development. Artelia Italia, 20 years in Italy, has become a leading engineering company with an annual turnover of around €38million and employing over 500 people operating in Rome, Milan, Bari, Florence and Pescara.



SUSTAINABLE PLACES 2021

Sep. 28 - Oct. 1, 2021 | Rome, Italy



Thank you
for attending **SP2021**



Next up:
The conversation continues
**National Roundtable
Discussions in Milan,
February 2022**



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sustainableplaces.eu



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