

# Agenda



## YOU MADE IT TO 'VIRTUAL' AIX-LES-BAINS!

Join us to discuss 2020 themes on Circular Economy, Digital Twins, BIPV, Local Energy Communities, Sustainable Digital Infrastructure and many more!



# SUSTAINABLE PLACES 2020

October 27-30, 2020

Digital Event

[www.sustainableplaces.eu](http://www.sustainableplaces.eu)



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On behalf of the organizers, sponsors, partners and organizing committee, welcome to Sustainable Places 2020. Perhaps it was easier to not have an event this year, but although our ways of working have changed in 2020, the need for our work is more pressing than ever and perhaps there is opportunity to make progress by connecting recovery efforts to renewed pledges, actions and commitments to sustainability. We're glad you are here, thank you.

This 8th edition of Sustainable Places is once again a signature event and exciting step forward as the conference continues to grow, incorporate feedback from past editions, and build upon the path that brought us together again this year – the path toward a sustainable future. The event is again inclusive of all aspects of sustainability but features focused tracks on sustainable digital infrastructure, the circular economy, digital twins, BIPV and Local Energy Communities. You'll find these themes across the keynotes, technical sessions and workshops. We are excited to again have a strong presence from the European Commission with presentations on the Green Deal, the digitalization of construction, the LIFE Clean Energy Transition sub-programme (2021-2027) and numerous project officers joining clustering workshops. This is great and made possible by the virtual forum.

In total, approximately 300 people will come together across the event to disseminate, cluster, network and make progress toward a more sustainable future. By being virtual, we'll avoid approximately 300 tons CO<sub>2</sub> by not traveling and have the ability to spread the event across a wider number of days. Over the 4-day venue, we'll welcome contributions in 34 workshops and paper sessions – an SP record! However, because we are virtual, it will be even more challenging to get attendees to all the various sessions. Do support each other and if you have questions on the virtual forum – don't hesitate to ask.

We wish you a great event and look forward to greeting each other in person next year in Milan for SP2021! Stay safe and stay sustainable.

**Thomas Messervey**, R2M Solution



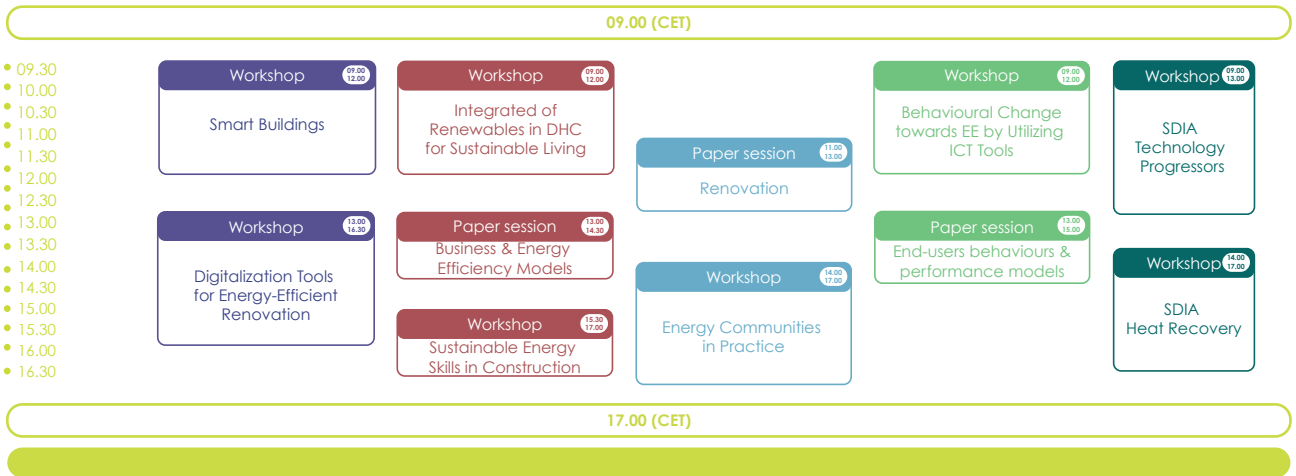
# Agenda Day 1

Tuesday, 27 October, Digital Event



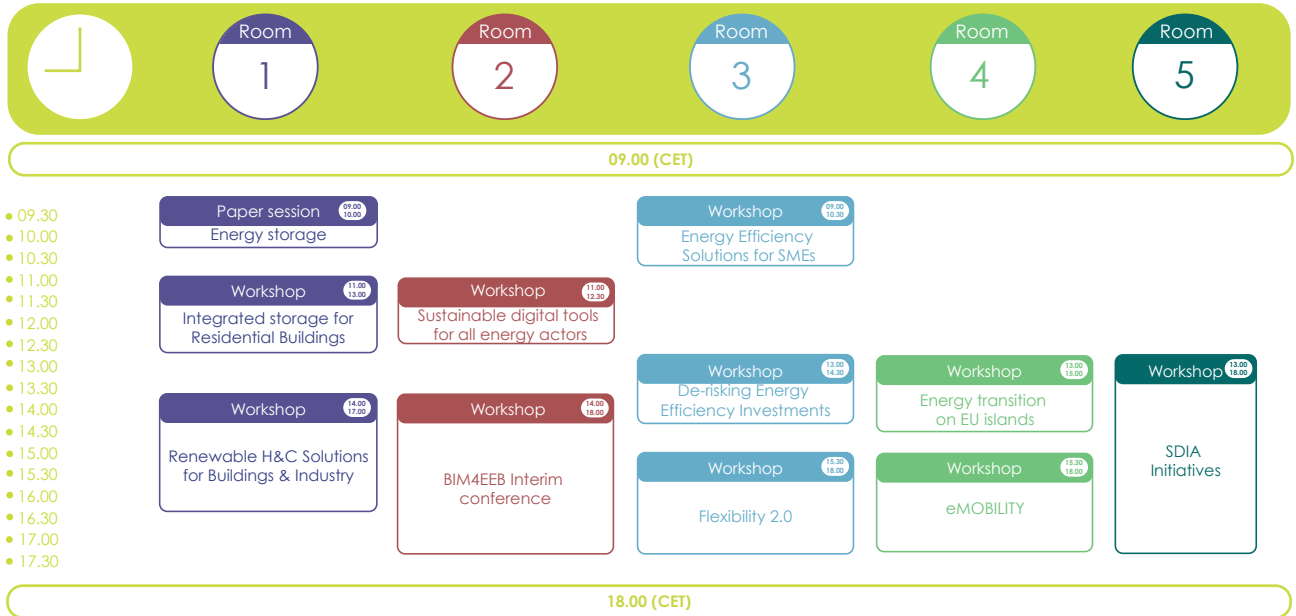
# Agenda Day 2

Wednesday, 28 October, Digital Event



# Agenda Day 3

Thursday, 29 October, Digital Event



# Agenda Day 4

Friday, 30 October, Digital Event



10.00 - 12:30

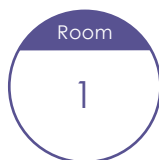
**OPENING CEREMONY**



**Welcome & Opening statement from the hosts**

- Christophe Ménézo, Université Savoie-Mont-Blanc
- Simon Perraud, CEA
- Max Schulze, SDIA. Opportunity of the Digital Economy: Decoupling economic growth from Energy & Resource Consumption
- Thomas Messervey, R2M Solution, SP2020 overview : Sponsors, overview of the sessions & workshops that will take place over the next 4 days
- EU policy context: Margot Pinault, European Commission
- Break
- Presentation of the Green Deal call - Area 4: Margot Pinault, Sylvain Robert, European Commission
- Q&A

14.00 - 17:00



**BIPV - Building Integrated Photovoltaics - workshop**

This SP2020 workshop features presentations and roundtables involving eight H2020 projects which are contributing to develop disruptive BIPV applications, to trigger the penetration of BIPV in the building sector, and to contribute to the creation of new opportunities and the diversification of the European PV manufacturing industry.

- Welcome & overview of the session: Alejandro Pérez-Rodríguez, IREC
- **How to trigger BIPV penetration in the building sector**
- BIPVBOOST: Jose Mari Vega de Seoane Lopez, tecnalia
- BeSmart: Laure-Emmanuelle Perret Aebi, EPFL
- PVadapt: Antonis Peppas, National Technical University of Athens (NTUA)
- **Close-to-market BIPV solutions demonstrated on pilot buildings in Europe**
- PVSITES: Eduardo Román , Tecnalia
- Energy Matching: Laura Maturi, EURAC
- **Next generation non-intrusive transparent BIPV solutions**
- TECH4WIN: Alejandro Pérez-Rodríguez, IREC
- SolarWin: Victor Izquierdo-Roca, IREC
- Impressive: Frédéric Sauvage, Université de Picardie Jules Vernes
- Q&A, Moderator, Régis Decorme, R2m Solution
- Wrap-up & conclusion: Alejandro Pérez-Rodríguez, IREC

14.00 - 17.00



**Circular Economy for the Built Environment** - paper session

- "Open Innovation Testbed for Bio-based Construction Products for Envelopes of nearly Zero Energy Buildings"  
Stephan Ott, Technical University Munich
- "Tools assessment for green transition", Nature4Cities: Domenico Perfido, R2M Solution
- "Interface Sustainable Strategy"
- Laetitia Boucher, Interface

14.00 - 16.00



**Integrated Home Renovation Services** - workshop

Contributing projects at this workshop aim to improve the quality of renovation services by covering the whole "customer journey" from technical and social diagnosis, technical offer, contracting of works, structuring and provision of finance, to the monitoring of works and quality assurance.

- Welcome and introduction, Rachel Desmaris, R2M Solution and Margaux Barrett, BPIE
- Introduction to the Turnkey Retrofit project, Dominique Caccavelli and Caroline Bouteloup, CSTB
- **'Tour de table': To introduce each project, their concepts, and key Unique Selling Points**
- PadovaFIT: Giovanni Vicentini
- RenoBooster: Stephan Hartmann, City of Vienna
- reModulees: Dr. Simona D'Oca, HUYGEN
- RenoHUB: Viktoria Biro, EnergiaKlub
- Opengela: Andoni Hidalgo, Euriker
- Save the Homes: Peter Op 't Veld, HUYGEN
- Q&A

14.00 - 16.00



**Smart Cities and Communities** - workshop

This SP2020 workshop aims at presenting and discussing different tools and approaches of how to improve the collaboration between different people, businesses and organisations in a smart city community when deploying innovative energy concepts like Positive Energy Districts. In addition, the question of how to account for secondary benefits against pay-back times of interventions, for public authorities or for economic actors will be discussed.



- Opening and introduction, Augusta Clérisse, R2M Solution
- How to improve the collaboration between the smart city community and the outside world? MAKING-CITY, Emilio Miguel Mitre, GBCe
- How to take into account secondary benefits against pay-back times of interventions, for public authorities, or for economic actors? MAKING-CITY, Beril Alpagut, Demir Enerji
- How can post-primary schools drive the adoption of Smart City energy concepts? ENERGE, Sander Smit, R2M Solution
- How to evaluate the PED-readiness of cities in terms of business models? MAKING-CITY, Rachel Desmaris, R2M Solution
- How to overcome regulatory and social acceptance-related barriers of heritage sites against Smart Cities solutions' deployment? POCITYF, João Formiga, EDPL
- "Smart Cities and Communities" as Innovation Hubs. How to boost and manage innovation in Smart City projects (the mySMARTLife and REMOURBAN EUR projects examples), MySMARTLife, Matthieu Grosjean
- "Energy system aspects of positive energy districts", Atelier, Mark van Wees, hva
- Wrap up of the session, Emilio Miguel Mitre
- Q&A

14.00 - 17.00

### **SDIA Finance - workshop**

This workshop will begin with the following presentations, and then continue with fruitful discussion among the participants.

- Young-jin Choi "How can we accelerate the decarbonization of the (European) built environment towards climate neutrality well before 2050?"
- Pierre Alexandre Hughes-Daly Digital Infrastructure - Market Update and Debt Financing Themes





# Detailed Agenda

## Day 2

Wednesday, 28 October 2020, Digital Event

09.00 - 12.00



### Smart Buildings - workshop

The building sector is one of the key enablers to achieve low carbon economy goals for 2050. To deliver this potential, buildings need to transform from passive isolated elements to smart buildings, able to adapt to occupants needs and act as active nodes and well integrated to the energy grids and other infrastructures and networks. The 2018 revised Energy Performance of Buildings Directive (EPBD) has started to promote the use of ICT and smart technology in buildings. Smart technologies can indeed play an essential role and can also trigger new business opportunities.

- Opening and introduction: Alexis David, ECTP
- Welcome speech: Pierre Antoine Vernon, European Commission, EASME
- Overview of EU actions in the field of digitalization of construction: Ilektra Papadaki, European Commission, DG

GROW

- SmartBuilt4EU: Alain Zarli, ECTP
  - InterConnect: David Rua, INESC TEC
  - TABEDE: Emmanuel Onillon, CSEM
  - PHOENIX: Antonio Skarmeta, University of Murcia
- Break
- domOS: Dominique Gabioud, Haute Ecole Spécialisée de Suisse Occidentale
  - Presentation of the SRI: Stijn Verbeke, VITO
  - Presentation of B-LOG: Sophie Dourlens, R2M Solution
- Q&A, Moderator: Régis Decorme, R2M Solution
- Closure of the workshop: Alexis David, ECTP

09.00 - 12.00



### Integration of Renewables in DHC for Sustainable Living - workshop

This workshop intends to exchange new ideas, lessons learnt from implementation, proposals about the integration of substantial shares of renewable energy sources in district heating and/or cooling (DHC) systems, reducing the dependency of DHC on fossil fuels and ultimately leading to a more efficient and sustainable energy system.

- Welcome statement: Daniel Maraver, European Commission
- Workshop overview: Carolina Ferrandis, Acciona

**District Heat & Cooling (DHC) Network, Renewable energy sources, Thermal storage & Waste heat recovery at low temperatures**

- WEDISTRICT: Maria Victoria Cambroner Vazquez, Acciona
- REWARDHeat: Jack Corscadden, Euroheat & Power

- RELaTED : Antonio Garrido Marijuán, TECNALIA
- TEMPO: Dirk Vanhoudt, VITO
- MATCHUP: Georg Hamann, ENSO

**Sustainable urban regeneration model development, demonstration of Smart City technologies in energy, transport and ICT**

- DRIMPAC: Marco Barbagelata, STAM
- REMOURBAN: Matthieu Grosjean, CARTIF
- REPLICATE: Nora Mendoza, Fomento de San Sebastian, Donostia Q&A
- Wrap-up and next steps: Carolina Ferrandis, Acciona
- Conclusion: Daniel Maraver, European Commission

09.00 - 12.00



**Behavioural Change Towards EE by Utilizing ICT Tools - workshop**

This workshop will present cutting-edge, ICT solutions based on innovative technologies incorporating several different aspects such as energy efficiency, smart buildings, human-centric automation etc. As the participating projects focus on behavioural change with a focus on the successful interaction with the users, the proposed approaches are dynamic and interdisciplinary further involving social and behavioural sciences. In this way, the presented solutions are structured in such a way as to foster end-user engagement & motivation while minimizing any foreseen nuisance. Participating projects: eTeacher, FEEdBACK, InBetween, MOBISTYLE, and UtilitEE.

09.00 - 13.00



**SDIA Technology Progressors - workshop**

This workshop will begin with the following presentations, and then continue with fruitful discussion among the participants.

- Anna Lyubina, Why do we need a sustainable digitalization – smart green infrastructure
- Trevor Hinkle, Bringing the Climate Impact of Electricity Back to Reality
- Chris Adams, Sustainability in the Software Layer
- Gunnar Schomaker, Gamechanger Virtualization - an innovation thriller on the data center playing field

11.00 - 13:00

**Renovation - paper session**



- "Ontology-based framework for energy-efficient renovation of existing buildings, Mohamed Elagiry, R2M Solution, Nobatek
- "A Methodology for the digitalisation of the residential building renovation process through an IDDS ready workflows" José Alberto, TEC
- "Assessing the impact of building renovation actions at the local scale: the Build Upon2 multilevel framework, Valentina Marino, GBC Italia
- "Digitalization and technologies to reduce the energy performance gap THEME: Assessing residential buildings compliance with sustainability rating systems through a BIM-based approach" Valentina Marino, GBC Italia
- "An analytic approach for the identification of technologies to be integrated in façade prefabricated unit: the case study of RenoZEB plug&play solution." Laura Vandi, FOCCHI

13.00 - 16.30

**Digitalization Tools for Energy-Efficient Renovation - workshop**



This workshop will bring together a selection of H2020 EU-funded projects involving Architects, Engineers, Contractors, Operators, Owners (AECOO) to discuss a common strategy in digitalization tools for energy-efficient renovation area. The aim is to pitch their progress, intermediate achievements and discuss the major technical and non- technical challenges they are currently facing. Not only a learning site but an indispensable resource for filling the gap between theoretical digital opportunities and the realities of on-site construction.

- BIM4Ren: Antoine Dugue, inef4, Mohamed Elagiry, R2M Solution, Bruno Fies, cstb
- BIM4EEB: Bruno Daniotti, Polimi, Cecilia Bolognesi, Polimi
- BIMSPEED: Timo Hartmann, tu-berlin
- ENCORE: Sebastian Scholze, atb-bremen
- BIMEER: Otilia Werner-Kytölä, fit.fraunhofer, Fenareti Lampathaki, suite5, Giorgos Giannakis, hypertech
- RenoZEB: Asier Mediavilla, tecnalia
- SPHERE: Mikel Borràs, idp, Eduard Loscos, idp
- BIMzeED: Larissa De Rosso, ace, Elisabeth O'Brien, lit
- DIGIPLACE: Nicolas Naville, cstb

13.00 - 14.30



**“Business and energy efficiency models” - paper session**

This workshop intends to exchange new ideas, lessons learnt from implementation, proposals about the integration of substantial shares of renewable energy sources in district heating and/or cooling (DHC) systems, reducing the dependency of DHC on fossil fuels and ultimately leading to a more efficient and sustainable energy system.

- “Experience and lessons learned from Pay-for-Performance pilots for energy efficiency” SANTINI Marion, Regulatory Assistance Project
- “Devising classes of energy efficiency measure for evaluating pay-4-performance rate that energy provider will be willing to offer in pay-4-performance scheme” Arturo Lapietra, OMNIA ENERGIA
- “Arising sector-coupling business models supporting the transition to a low-carbon economy in Europe” Andrea Schröder, FGH e.V.
- “Energy service business models and entrepreneurial skills: identifying models and patterns” Ruth Mourik, Duneworks

13.00 - 15.00



**End-users behaviours & performance models - paper session**

- “Potential on comfort enhancement and energy saving through behavioural change of energy users in real European buildings” Gloria Calleja Rodríguez, CEMOSA
- “Supporting user’s decision-making behaviour through identification of co-benefits of energy efficient heating solutions” Manuela Almeida, Department of Civil Engineering – University of Minho
- “Energy Performance Certification and schemes THEME “End-user perspectives on the next-generation Energy Performance Certificates: Findings from the X-tendo survey” Sheikh Zuhaib, BPIE
- “Consumer Behaviour Change model” Catarina Paisana Pires Costa das Neves, Nova University of Lisbon - Nova Information Management School
- “Measurement and verification approaches performance-based models of energy efficiency services” Sotiris Papadelis, HEBES Intelligence

14.00 - 17:00



**Energy Communities in Practice - workshop**

This workshop aims to deliver initial results on the above questions as they have been learnt from the experience of the below H2020 sister projects on energy islands. Participating projects: COMPILER, iELECTRIX, MERLON and MUSE GRIDS.

**Project presentations**

- COMPILER: Andrej Gubina, University of Ljubljana, Faculty of Electrical Engineering
- MERLON: Katerina Valalaki, hypertech, Vasiliki Katsiki, hypertech, Antonis Papanikolaou, hypertech, Dimitris

Papadaskalopoulos, imperial

- MUSE GRIDS: Alessandra Cuneo, RINA Consulting
- iELECTRIX: Pierre Jacques Le quellec

**Interactive discussions with the workshop participants executed in a consecutive manner**

- Social: MUSE GRIDS & iELECTRIX: Alessandra Cuneo, RINA Consulting
- Business Models: MERLON & COMPILE, imperial
- Regulatory: COMPILE & MERLON, Andrej Gubina
- Technological: iELECTRIX & MUSE GRIDS: Pierre Jacques Le quellec

**Presentation panelists**

- Bonnie Murphy, GECO GLOBAL
- Guilherme Luz, COOPERNICO/PROSEU
- Joachim Hacker, EEE

14.00 - 17.00

**SDIA Heat Recovery - workshop**



This workshop will begin with the following presentations, and then continue with fruitful discussion among the participants.

- Robert Tozer Data centre air and liquid cooling heat recovery opportunities
- Karl Rabe Integrated energy the future of HPC
- Dr. Jens Struckmeier Sustainable and secure data centers with heat recovery
- Dr Birger Ober Heat Recovery in Practice - The Journey to a Carbon Neutral Future

15.30 - 17:00

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



The objective of this new workshop is to increase the number of skilled building professionals and/or blue-collar workers across the building design, operation and maintenance value chain (designers, architects, engineers, building managers, technicians, installers, blue-collar workers including apprentices, and other building professionals), with a specific focus on the engagement of SMEs.

- Welcome statement: Luca ANGELINO, European Commission, EASME Horizon 2020 Energy Unit
  - Workshop overview, Agnieszka Kowalska, ASM, Mohaddeseh Maktabifard, R2M Solution
- Sustainable Energy Skills, Demonstrations of Skills for NZEB Construction & BIM-based Standardized Qualification**

**Across Construction Sector**

- BIMEET: Sylvain Kubicki, LIST
- TRAIN4SUSTAIN: Peter Gyuris, Geonardo
- INSTRUCT: Agnieszka Kowalska, ASM
- BUSLeague: Jan Cromwijk, ISSO
- The nZEB Roadshow: Dragomir Tzanev, Eneffect
- HP4All: Seamus Hoyne, LIT
- Discussion, wrap-up and next steps: Agnieszka Kowalska, ASM, Mohaddeseh Maktabifard, R2M Solution
- Conclusion – European Commission, EASME Horizon 2020 Energy Unit

# Detailed Agenda

## Day 3

Thursday, 29 October 2020, Digital Event



09.00 - 10.00

### Energy Storage - paper session

- "The role of storage systems in industrial and residential environments" Andreas Tuerk, Joanneum Research
- "Kinetic modelling of thermochemical energy storage reactions for storage of solar heat", Adriano Sciacovelli, University of Birmingham



09.00 - 10.30

### Energy Efficiency Solution for Small and Medium Sized Enterprises - workshop

This workshop will present four EU H2020 projects that will develop energy efficiency capacity building training for staff members of small and medium-sized enterprises (SMEs) including decision makers and other staff through various means of learning and teaching approaches. Due to Covid-19 restrictions all projects will deliver virtual (if possible onsite) training to SMEs and provide opportunities for conducting collaborative virtual training across the common pilot countries of each project. This capacity building training will help SME employees to develop technical knowledge as well as behavioural changes for enhancing energy efficiency culture within their organisation.

- Involved Projects: SPEEDIER, E2DRIVER, Innoveas and SMEmPower Efficiency
- Workshop Chair: Mariana Fernandez

Overview of EE for SMEs H2020 projects and future LIFE Clean Energy Transition sub-programme: Oronzo Daloso, European Commission, EASME



11.00 - 13.00

### Integrated Storage for Residential Buildings - workshop

Participating projects will present and benchmark their research on innovative integrated storage systems based on alternative methods, such as thermochemical materials for both existing and new residential buildings.

- Welcome statement: European Commission, Dominique Planchon, DG Research & Innovation
- Workshop overview: Inés Arias Iglesias, FEUGA
- Ministor: Carlos Ochoa, IERC
- Heat Insyde: Olaf Adam, TNO
- HYBUILD: Gabriel Zsembinszki, UDL
- InteGRIDy: Lorenzo Corghi, UNE
- Discussion, wrap-up and next steps: Inés Arias Iglesias, FEUGA & Régis Decorme, R2M Solution
- Conclusion – European Commission, Dominique Planchon, DG Research & Innovation

11.00 - 12.30



### **Sustainable Digital Tools for All Energy Actors - workshop**

The objective of this workshop is to present the ICT tools developed in these H2020 project that will increase energy efficiency and the use of renewable energies. Each project will present the digital tools developed to provide ICT services and functionalities to the different actors of the energy value chain, which will make them more sustainable and efficient.

- XFLEX: Lola Alacreu Garcia, ETRA
- HOLISDER: Milan Vukovic, BELIT
- FLEXCOOP: Antonis Papanikolaou, HYPERTECH
- SYNERGY: Luis Viguer Torres, ETRA
- FLEXGRID: Prodromos Makris, ICCS

13.00 - 14.30



### **De-risking Energy Efficiency Investments - workshop**

Three H2020 projects are developing innovative solutions and are joining forces in this workshop at Sustainable Places 2020 to tackle challenges risen from the lack of statistical data on the energy and costs savings within energy efficiency investment projects, as well as on payment default rates, results in financial institutions attributing high-risk premiums to energy efficiency investments.

- Welcome statement: European Commission
- Introduction of the overall objective of the workshop: Rachel Desmaris, R2M Solution
- EENVEST: Annalisa Andalaro, EURAC
- TRIPLE-A: Haris Doukas, NTUA
- QUEST: Stefan Plesser, SYNAVISION
- Discussion on horizontal questions
- Identification of cooperation opportunities for upcoming months, and next steps, Rachel Desmaris, R2M Solution
- Conclusion: Annalisa Andalaro, EURAC & European Commission

13.00 - 15.00



### **Energy Transition on European Islands - workshop**

From innovation to implementation: how to make the energy transition on islands a reality?

- NESOI: presentation of its first open call aimed at offering grants of up to €60k per proposal as well as up to €60K worth of Technical Assistance to help local European islands reach their energy transition ambitions



**Presentations from five H2020 demonstration projects on the innovative solutions to foster islands energy systems' decarbonisation:**

- INSULAE: PV and BESS integration on islands
- GIFT: Storage concepts and interoperability
- ROBINSON: Utilisation of local renewable resources
- SMILE: Sustainable mobility on islands
- REACT: Citizen engagement strategies

**Stimulate knowledge sharing and exchange of ideas about two cross-cutting questions:**

- How to engage islanders in the energy transition?
- How to stimulate islands' long-term energy strategy?

13.00 - 18.00



**SDIA Initiatives - workshop**

- Mohan Gandhi Digital Carbon Footprint - Bringing Transparency to the digital economy
- Max Schulze A Sustainable Digital Economy: Decoupling Growth from Energy & Resource Consumption
- Lasse Schneppenheim Sustainability in Digital Infrastructure
- Mohan Gandhi Roadmap to Net-Positive Digital infrastructure
- John Laban Call to action: Measuring Data Centre Carbon footprints and how to decarbonise through innovations in the open collaborative commons

14.00 - 17.00



**Renewable H&C Solutions for Buildings and Industry - workshop**

This workshop will bring together a selection of H2020 EU-funded projects involving 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 for buildings and industry.

- Welcome statement: European Commission, Eleftherios Bourdakis, Policy Officer, DG Research & Innovation
- Workshop overview: Andrea Frazzica, CNR ITAE

**RHC for industrial applications**

- HYCOOL: Prof. Dr. Uli Jakob, HFT Stuttgart
  - SHIP2FAIR: Guglielmo Cioni, TVP Solar
  - Friendship: Valéry Vuillerme, CEA
- Q&A

**Storage solutions for RHC support in buildings**

- HYBUILD: Gabriel Zsembinszki, University of Lleida
- SWS Heating: Claudia Fabiani, UNIPG
- Scores: Zuzana Tatakova, FENIX TNT
- Create: Samuel Knabl, AEE Intec

Q&A

Break

**Innovative solutions for RHC deployment in buildings**

- InnovaMicroSolar: Khamid Mahkamov, Northumbria University
- SolBio-Rev: Prof. Sotirios Karellas, National Technical University of Athens
- TriHP: Dani Carbonell, SPF Institute for Solar Technology
- RES4BUILD: Eise Spijker, JIN

Q&A

**Demonstration actions for RHC in buildings**

- GEOFIT, Marco Calderoni, R2M Solution
- SunHorizon: Alessandra Cuneo, RINA Consulting
- HybridBioVGE: Szabolcs Varga, Universidade de Porto
- Heat4Cool: Rossano Scoccia, Politecnico di Milano

Q&A

- Discussion, wrap-up and next steps: Andrea Frazzica, CNR ITAE & Régis Decorme, R2M Solution
- Conclusion: European Commission, Eleftherios Bourdakis, Policy Officer, DG Research & Innovation

14.00 - 18.00



**The BIM4EEB Project: a mid-term review of the BIM based tools for efficient renovation of buildings - workshop**

This workshop is the interim conference of project BIM4EEB, BIM- based fast toolkit for Efficient rEnovation of residential Buildings and is aiming to present the state of the art of the different BIM4EEB tools being demonstrated during the project: BIMeSimulator, BIM4Occupants, Connecting BIM and BACS, BIMPlanner, BIMMS, BIM Management system.

- Introduction, Cecilia Maria Bolognesi, Bruno Daniotti, PoliMi
- BIM-based toolkit for Efficient rEnovation in Buildings Bruno Daniotti, PoliMi
- The BIM Management System: an open Common Data Environment using Linked Data to support the efficient renovation in buildings, Alessandro Valra, Davide Madeddu, One team  
Poll and Q&A
- Fast Mapping for Buildings AR-toolkit, Birgitta Andersson, RISE, Per Andersson, CGI  
Poll and Q&A
- Break
- BIMcpd: A combined toolkit for constraint checking, performance evaluation and data management in building renovation projects: Andriy Hryshchenko (UCC), Brian O'Regan (IERC)  
Poll and Q&A

- Towards BIM-enhanced building construction operations management tool Markku Kiviniemi (VTT), Seppo Törmä (Visualynk), Kostas Tsatsakis (Suite5)  
Poll and Q&A
- Early stage energy refurbishment assessment tool for buildings using high-end BIM data  
Teemu Vesänen (VTT)  
Poll and Q&A
- Closure: Cecilia Maria Bolognesi (PoliMi)



15.30 - 18.00

### **Flexibility 2.0: Demand Response and Self Consumption - workshop**

This workshop will foster knowledge transfer between several EU projects, each developing innovative solutions within the field of demand response, energy flexibility and optimised synergies between actors of the built environment and the power grid. Participating projects: TABEDE, HOLISDER, eDREAM, DRiVE, ebalanceplus, AMBIENCE, NOVICE and DELTA.



15.30 - 18.00

### **e-Mobility - workshop**

This workshop aims at presenting and discussing digital tools, services, and approaches to boost smart electric mobility (e-mobility) that covers EU demands with scalable solutions. It will present how three major barriers for the deployment of electric vehicles in the EU – the high cost of vehicles, the low level of consumer acceptance, and the lack of recharging stations – can be pulled down. Designing, validating and promoting new approaches and solutions to make it more attractive for operators to install charging Electric Vehicle Supply Equipments and for potential customers to use this infrastructure.

- Participants: MEISTER, GreenCharge, UserChi, eCharge4Drivers and University of Peloponnese
- Workshop Chair: Patricia Bellver Muñoz, ETRA I+D

# Detailed Agenda

## Day 4

Friday, 30 October 2020, Digital Event



09.00 - 12.30

### **Sustainable Housing Supporting Health and Well-being - workshop**

The building stock in Europe today is still not fit to support a shift from institutional care to the home-based independent living model for the ageing population. This workshop will bring together a selection of EU-supported initiatives which are developing innovation solutions for supporting the development of investment in sustainable housing which supports health and well-being of its occupants. Projects will present their research, as well as discuss and benchmark potential challenges that they face together.

- Welcome statement: Irina Kalderon Libal, Policy Officer, European Commission
- Workshop overview: Silvia Urra, TECNALIA

#### **Housing enabler & Market analysis**

- AGE'IN: Aline Ollevier, VIVES University of Applied Sciences

#### **Innovative solutions for housing supporting health and well-being**

- TeNDER: Annelore Hermann, GATV, Universidad Politécnica de Madrid
  - SMARTWORK: Charalampos Vassiliou, BYTE
  - PHARAON: Filippo Cavalo, Scuola Superiore di Studi Universitari e di Perfezionamento Sant'Anna
- Break

#### **Supporting investment into and implementation of age-friendly housing**

- Homes4Life: Silvia Urra, TECNALIA

#### **Get involved: age-friendly housing networking and clustering**

- Smart Healthy Age-Friendly Environments – policy and implementation: Carina Dantas, Cáritas Diocesana de Coimbra
  - Q&A, Moderator, Régis Decorme, R2M Solution
  - Discussion, wrap-up and next steps: Silvia Urra, TECNALIA
  - Conclusion: Irina Kalderon Libal, Policy Officer, European Commission

09.00 - 12.00



### **Innovative Solutions Supporting the NZEB renovation - workshop**

This workshop will highlight how the renovation wave can be boosted through structured and holistic approaches which have been implemented through four different H2020 Projects with the use of specifically developed innovative solutions which will support and accelerate the NZEB renovation in Europe. All projects present not only new technological solution, but also innovative ways to address some of the known barriers for the wide implementation of renovation recommendations across Europe, especially in the residential sector.

- RenoZEB: Michele Vavallo, SOLINTEL
- Drive 0: Ana Tisov, HUYGEN
- ReCO2ST: Per Kvols Heiselberg, Aalborg University
- REZBUILD: Susana Garayoa, Zabala
- StepUP: Giulia Barbano, IES, Integrated Environmental Solution



09.00 - 12.00

### Deep Renovation Joint Workshop 2.0 - workshop

This workshop will be a unique hands-on showcase of innovative deep renovation of building solutions. One of the key objectives of the workshop is to raise awareness of the most innovative building renovation and energy-saving solutions and as well as to present and discuss altogether the main features of P2ENDURE e-Marketplace. Participating projects: P2Endure, EENSULATE and ENVISION.

- Introduction and P2Endure Project (Plug-and-Play product and process innovation for Energy-efficient building deep renovation): André Van Delft, DEMO CONSULTANTS BV
- P2ENDURE Demo Buildings: Genoa Demo, Italy – Fabrizio Tavaroli (RINA), Gdynia Demo, Poland – Agnieszka Lukaszewska (Prefasada), Warsaw Demo, Poland – Piotr Dymarski (Mostostal Warszawa SA)
- Results of P2Endure Project Project Survey – Claudia Portulano (RINA)
- ENVISION Project (a full renovation concept that, for the first time, harvests energy from all building surfaces, transparent and opaque) – Paola Robello (RINA)
- EENSULATE Project (innovative lightweight and highly insulating energy efficient components and associated enabling materials for cost-effective retrofitting and new construction of curtain wall facades) – Daniela Reccardo (RINA)
- RENZOEB Project (innovative components, processes and decision making methodologies to guide all value-chain actors in the nZEB building renovation process) – Enrico Scoditti (RINA)
- BIM-SPEED Project (innovative methodologies and tools with one central information source at its core: the Building Information Model (BIM), a digital representation of a building)– Timo Hartmann (TU-Berlin)
- Q&A

09.00 - 12.30



### Local Energy Communities - paper session

- Demand Response Optimization in Buildings and Energy Communities; a case in value stacking" George Huitema, TNO
- "Lessons Learned in Electricity Demand Forecasting in RESPOND project" Meritxell Gomez-Omella, TEKNIKER
- "Towards Energy Citizenship for a just and inclusive transition: lessons learnt on collaborative approach for the definition of Positive Energy Districts from the EU Horizon2020 Smart Cities and Communities projects" Rosamaria Olivadese, TNO, Beril Alpagut, Demir Enerji
- "Multidimensional evaluation framework for plus energy buildings and neighbourhoods" Ábel Magyari, ABUD
- "Artificial Intelligence for cooperative Demand Response programs in the residential sector" Iker Esnaola-Gonzalez, TEKNIKER
- Community Energy 2.0. Support communities towards their own future Virtual, Sylvia Breukers, DuneWorks
- 'Energy communities in the energy transition, by Anna Wiczorek, TUE
- "Introducing the NRG2peers H2020 project: Towards a new generation of EU peer-to- peer Energy Communities facilitated by a gamified platform and empowered by user-centred energy trading mechanisms and business models", Dr. Simona D'Oca, Huygen Engineers and Consultants
- "PLATOON - Digital platforms for energy" Philippe Calvez, Engie

09.00 - 12.30



### SDIA Hardware - workshop

- Deborah Andrews & Beth Whitehead Curving the Line - Circularity in the Data Centre
- Bruno Fiquet N/A

# Participating projects at Sustainable Places 2020





# Keynote presentations

Opening Session (Tuesday, 27 October 2020, 10.00 - 12.30)



## Thomas Messervey - CEO & Co-founder R2M Group

Tom Messervey has over 25 years of engineering, military and business experience, which includes military service in the US Army Corps of Engineers, industrial experience with the Italian Engineering Company, RINA, teaching excellence at the United States Military Academy at West Point, and coaching services as the EU Facilitator for the Intelligent Manufacturing Systems program. He currently serves on the executive committee of Green Building Council Italia (GBC Italia) and is a co-organizer of the Sustainable Places conference series.



## Max Schulze – Chairman of the Sustainable Digital Infrastructure Alliance e.V.

As the 4th industrial revolution – digitalization – is accelerating, we face a once in a decade opportunity. For the first time, we can decouple economic growth from resource consumption. The digital economy can be the first one that creates economic value without consuming exponentially more minerals, more energy, and other planetary resources. This keynote will introduce the various opportunities from heating districts and greenhouses with data centres, to using digital infrastructure as energy-flexibility systems and how the emerging European computing infrastructure will look like. We will demonstrate that the digital economy creates a viable & needed opportunity for sustainable digital infrastructure.



A focus on **Green Deal call area 4: energy and resource efficient buildings** will be presented by the European Commission – **Margot Pinault** (DG Energy) & **Sylvain Robert** (EASME) – in a dedicated session following the official opening of Sustainable Places. It will offer opportunities for Q&A with attendees on how to better address the expected impacts of the call.



**Margot Pinault** - Policy Officer, European Commission, Directorate General for Energy Unit C.3- Energy Efficiency Policy and Financing

Margot will outline the European funding landscape in the years 2021-2027 including the 'Clean Energy Transition' sub-programme in LIFE, the 'Climate, Energy and Mobility' cluster in Horizon Europe with the specific focus on the co-programmed R&I partnership on "People-centric sustainable built environment". Margot will highlight where we are in the current process of defining funding activities and structures that will support delivering under the ambition of the European Green Deal specifically in the buildings sector.



**Sylvain Robert** - European Commission

Sylvain Robert is policy officer in Unit Energy Efficiency of DG Energy, European Commission, where he works on energy efficiency in buildings with a focus on smart technologies (e.g. supervising the establishment of the Smart Readiness Indicator for buildings under the Energy Performance of Buildings Directive). Sylvain is also an engineer by training and a researcher by background, with an extensive experience in ICT, energy and buildings, acquired prior to joining the Commission.



**Simon Perraud** – Deputy Director, CEA Liten

How research and innovation can support the transition towards a low- carbon and circular economy?

This talk will give an overview of key challenges for achieving climate neutrality by 2050 while ensuring the availability of material resources.

# Keynote presentations

Closing Session (Friday, 30 October 2020, 13:30 - 15:30)



**Marco Caffi** - Director GBC Italia & Vice President, European Regional Network

WorldGBC's Regional Networks are powerful, collaborative platforms where Green Building Councils can effectively exchange knowledge, generate new ideas and design solutions that speed up green building across these regions, often through regional-specific projects.

Marco holds a degree in Mechanical Engineer, and a PhD in mechanics and he had been partner of an engineering company, Intertecnica, as technical director until 2016. In 2010, he established AmbienteParco: an edutainment science center dedicated to the environmental sustainability. Since 2014 he works as lecturer at the University of Brescia in Building Design Courses and MEP System Laboratory. In 2015, he became COO of the Green Building Council Italy and since 2018 he joined the Steering Committee of the European Regional Network of World GBC. In 2020 he received the role of deputy president of the Europe regional Network of World GBC.



**Christophe Ménézo** – Deputy Head of Solar Academy Graduate School

Pr. Ménézo is Deputy Vice-Chancellor of University Savoie Mont Blanc in Charge of Real Estate and Energy Transition. He is Director of the CNRS Research Federation on Solar Energy (FédESol) and in charge of the Green/smart building topic in the French/Singaporean Network on Renewable Energy (SINERGIE).

# Sponsors of **Sustainable Places 2020**



**SDIA** - Sustainable Digital Infrastructure Alliance e.V. - is an inter-industry association enabling collaboration in sustainable, zero-impact digital infrastructure that is accessible to the next generation of innovators.

**The SDIA (Sustainable Digital Infrastructure Alliance) will host a track on opportunity of creating net-positive digital infrastructure.** As one of the key topics on the European agenda, it combines the Digitalisation, Climate Protection, Data Souveranity of the new presidency. As the 4th industrial revolution – digitalization – is accelerating, we face a once in a decade opportunity. For the first time we can decouple economic growth from resource consumption. The digital economy can be the first one that creates economic value without consuming exponentially more minerals, more energy, and other planetary resources. In this track we will explore the various opportunities from heating districts and greenhouses with data centers, to using digital infrastructure as energy-flexibility systems and how the emerging European computing infrastructure will look like. We will demonstrate that the digital economy creates a viable & needed opportunity for sustainable digital infrastructure.



**ENGIE Lab CRIGEN** - part of the ENGIE Labs network, is ENGIE Group's corporate centre for R&D and high-level expertise devoted to new energy resources (hydrogen, biogas and gas liquefaction), new energy uses in towns and cities, the buildings and industries of tomorrow and emerging technologies.



**IREC** - the Catalonia Institute for Energy Research - was created to contribute to the objective of creating a more sustainable future for energy usage and consumption, keeping in mind the economic competitiveness and providing society with the maximum level of energy security.



**SolarWin** - Received a grant from the EU Fast Track to Innovation program. It is a project aiming to scale-up and validate next- generation transparent Photovoltaic windows for commercial use and mass-production by 2021.

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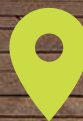




# SUSTAINABLE PLACES 2021



Sustainable Places  
is coming to  
**Milan, Italy**



We look forward to welcoming you next year in Regione Lombardia  
and the wonderful (sustainable) city of Milan!

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