




European Cooperation in the field of Scientific and Technical Research

Building Integration of Solar Thermal Systems – TU1205 – BISTS

Working Group Presentation 1

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Agenda

- Welcome to WG1 participants
- Adoption of agenda
- Objectives and work programme
- Deliverables Distribution of tasks
- Time-table of work

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Participants

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Building Integration of Solar Thermal Systems – TU1205 – BISTS

- Alexandra Krstic, WGL (dep.)
- Werner Platzer, WGL
- Lamnatou Chrysovalantou
- Keys Donal
- Cristofari Christian
- Koroueos Christopher
- Miletic Ivan
- Buhagiar Vincent
- Aelenei Laura
- Savvides Andreas
- Florides Georgios
- Kalogirou Soteris
- Kennedy David
- Norton Brian
- Notton Gilles
- Smyth Mervyn
- Tripanagnostopoulos Yiannis
- Dorota Chwieduk
- Others?


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Objectives and work programme

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WG1. Development and characterisation of new BISTS

- The **objectives** for WG1 are:
 - Perform a literature review to determine the state of the art technological developments published in the area
 - To develop new novel BISTS solutions
 - To develop standardised methodologies to characterise and classify BISTS performance
 - To evaluate methods for improving BISTS performance (overcoming problems such as over temperature, thermal resistance of the building component, rain and fire protection, noise etc.)
- These objectives will be fulfilled through the following tasks:
 - **Task 1.1 Review of the state of the art**
 - **Task 1.2 Development of new BISTS solutions**
 - **Task 1.3 Characterisation of BISTS developed in Task 1.2**

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Deliverables and Milestones – WG1

- **Deliverables** include:
 - D.1.1. Review of current STS and identification of problems associated with their building integration. This review will also be submitted as a joint partner publication in a peer reviewed journal (Month 12)
 - D.1.2. Annual STSM on BISTS development and characterisation for PhD students and Early-stage researchers (Month 6, 18, 30, 42)
 - D.1.3. Annual Training School for dissemination of expertise on BISTS development and characterisation techniques and new architectural solutions to PhD students and Early stage researchers (Month 18, 30, 42)
 - D.1.4. Report on the evaluation technologies available for BISTS characterisation (Month 24)
- **Milestones:**
 - 1.1: Development of new and novel BISTS solutions
 - 1.2: Characterisation of new BISTS for use in RES


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Deliverables and Tasks

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Deliverable Coordination – WG1:


- D.1.1. Review of current STS and identification of problems associate with their building integration. This review will also be submitted as a joint partner publication in a peer reviewed journal (Month 12): ☒
- D.1.2. Annual STSM on BISTS development and characterisation (Month 6, 18, 30, 42): **STSM manager** ☒
- D.1.3. Annual Training School for dissemination of expertise on BISTS development and characterisation techniques and new architectural solutions (Month 18, 30, 42): **SG** ☒
- D 1.4. Report on the evaluation technologies available for BISTS characterisation (Month 24): **BN + DK + ISE?** ☐


→ This meeting mainly to discuss D1.1 finalization and D1.4



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Tasks for D1.1 Review


A review of current STS will be undertaken to determine the state of the art technological developments published in the area and the most suitable options for building integration RES applications


- Literature reviews of different aspects of BISTS ☒
- Structure of review chapter ☒
- Review document writing ☒
- **Publication (not identical with deliverable)** ☐



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D1.1. Literature review

- Projects and Project reports
- Journal papers
- Building integration aspects
 - Technical (hydraulics, special systems, ...)
 - Architectural aspects (aesthetics, user, function, ..)
 - Legal and regulative issues
- Citavi data base (titles but not papers)

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D1.1. Standards review

- Standardization has been left out in D1.1
- Training School has given good overview
- European scope: YES
- Certification of building products also presented in Training school
- Proposal: D1.4 Document chapter

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D1.1 Review document

- Content structure
- Specifications and Definitions
- Architectural integration classification
- **Installed projects/Case studies
(could be extended document)**
- Innovative ideas

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BISTS Case Studies

- 90 case studies submitted
 - 60 of direct relevance
 - Performance evaluation, quantitative assessment of potential?
 - Integration quality?
 - Compilation and classification?
 - Ambiguity of nomenclature (air heating etc.)
 - Presentation of case studies? (Link-Document?)

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BISTS Case Studies


- Improve classification/terminology?
 - Air / ventilation / cooling
 - Passive
 - Heat pump system needed?
 - Combined air/water facade?
 - PVT / BIPVT?
- Collectors -> system groups?
- Several applications?
- Rating for different climates?



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Tasks for D1.2 STSM

STSM: Short Term Scientific Mission

- Identification of correlated research in COST
- Check of work plans
- Identification of suitable STSM proposals
- Reporting


-> What do we need for our activity?


-> Writing of short EOIs to Gilles



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Tasks for D1.3 Training Schools

Annual Trainings schools (month 18, 30, 42)

- Analyse 2014 presentations and training materials
- > Proposals for programme of schools next meeting
- > Comments on different presentations

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Tasks for D1.4 Evaluation

Document on characterization methods for evaluating BISTS solutions

- Overview of approaches and methods existing
- Levels and scope of methods
- Comparison of pros and cons, limitations
- Geographic specific evaluation
- Comparison using examples
- Reporting

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Discussion on handbook

- What could be the contribution of WG1
- Do we want a printed handbook? PDF?
- Possible content?



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