

Agenda

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

Participants



Objectives and work programme

Deliverables and Tasks

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 D1.4 finalization + Task 1.2**

Tasks for D1.2 STSM

STSM: Short Term Scientific Mission

- Identification of correlated research in COST
- 4 STSM planned for 3rd year
- Identification of suitable STSM proposals <-> Deliverables!
- Reporting

-> What do we need for our activity?

-> Writing of short EOIs to Gilles

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
- Activities up to now?
- Who triggers the work? SK?

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

Status D1.4

- Draft of Document was produced by David Kennedy and Brian Norton April 2015
- Andreas Savvides undertook to establish architectural criteria on which to evaluate BISTS.
- Comments : mainly w.r.t. architectural and technical integration which was missing
- Proposal discussed in June 2015 by DK/BN
- Received addition of Laura Aelenei in June 2015
- Status?

Discussion on Projects Task 1.2

- Project 1 - Solar Thermal Façade System, Soteris Kalogirou:
 - Florides, Christofi, Savvides, Vassiliades, Palombo, Krstic Furundzic, Notton, Sarah, Cristofari, Norvaisiene, Almeida Manuella, Laura, Werner, Yiannis
 - Status?
 - „The above persons will be contacted by the Project leaders who will provide a list of requirements and ask them to help in any way possible. The persons should respond with suggestions. “

Large roof systems

Solar roof for row houses in Steinfurt-Borghorst, for heating + warm water, seasonal storage system with 510 m²

© ITW Stuttgart



Building integration in larger buildings

Solar Roof and Facade integration

- Reduced thermal losses of building
- Cost reduction
- Architectural improvement



Wagner & Co. Solartechnik

DOMA Facade collectors

Fassadenmontage

Referenz 02

Referenz 03

Indachmontage

Referenz 02

Referenz 03

Aufdachmontage

Flachdach/Freiaufstellung

Referenz 02

Referenz 03

Sonderlösungen

Referenz 02

Referenz 03



DOMA Solartechnik
Sonnenstrasse 1
6822 Satteins

Fassadenmontage

Aufgrund der Tatsache, dass in den Herbst- und Wintermonaten der Einfallwinkel der Sonne flacher ist, als in den Sommermonaten, bewirkt die Fassadenintegration von Solarkollektoren eine verbesserte Energieausbeute. Und das in einem Zeitraum, in dem der höchste Energiebedarf für Brauchwasser und Heizungsunterstützung verzeichnet wird. Fassadenkollektoren sind außerdem unempfindlicher gegen Witterungseinflüsse, da eine Beeinträchtigung durch Verschmutzung und Schnee beim vertikalen Einbau praktisch nicht gegeben ist.

Neben diesen wirtschaftlichen Aspekten wird der Fassadenkollektor zunehmend auch als Stilmittel zukunftsweisender Architektur gesehen.

Durch ihre vielfältigen Gestaltungsvariationen in Form, Größe und Farbgebung fügen sich Fassadenkollektoren von DOMA Solartechnik harmonisch in das Gesamtkonzept eines Gebäudes ein. So setzt Solartechnik im Gebäude optische und wirtschaftliche Zeichen und wird für Architekten und Planer ein Teil ihrer Idee.



Standort: Nenzing, Vorarlberg

Planung: Achammer & Partner
OEG

Kollektor: Holz
Großflächenkollektor

Montage: Fassadenmontage

Fläche: 12 m²

Nutzung: Brauchwasser-
erwärmung



Quicklinks

- ▣ Download Prospekt Solarthermie
- ▣ Download Prospekt Photovoltaik
- ▣ Auslegungssoftware für Flach-, Schräg- und Trapezdach
- ▣ Solarhaus Förderung 2015
- ▣ Antragsformular Energieförderung Land Vorarlberg

Other integrated facade collectors

Project Kapfenberg/A
prefabricated building elements



Project Colourface/EU
facade collectors and coloured absorbers



Project Lichtblau/D

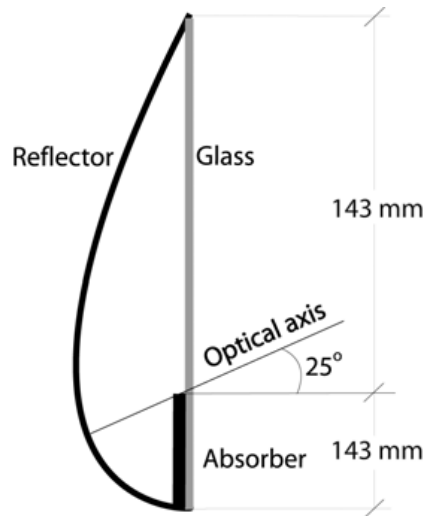
Discussion on Projects Task 1.2

- Project 2 - Hybrid PV/T/solar Thermal façade module by Mervyn Smyth"
 - Lamnatou, Palombo, Krstic Furundzic, Notton, Sarah, Cristofari, Norvaisiene Almeida Manuella, Yiannis, Laura, Istvan
 - Status?

Discussion on Projects Task 1.2

- Project 3 - Solar Plenum, Brian Norton:
 - Yiannis
 - Status?

MaReCo Concept



B. Karlsson and others, Univ. Lund, Sweden

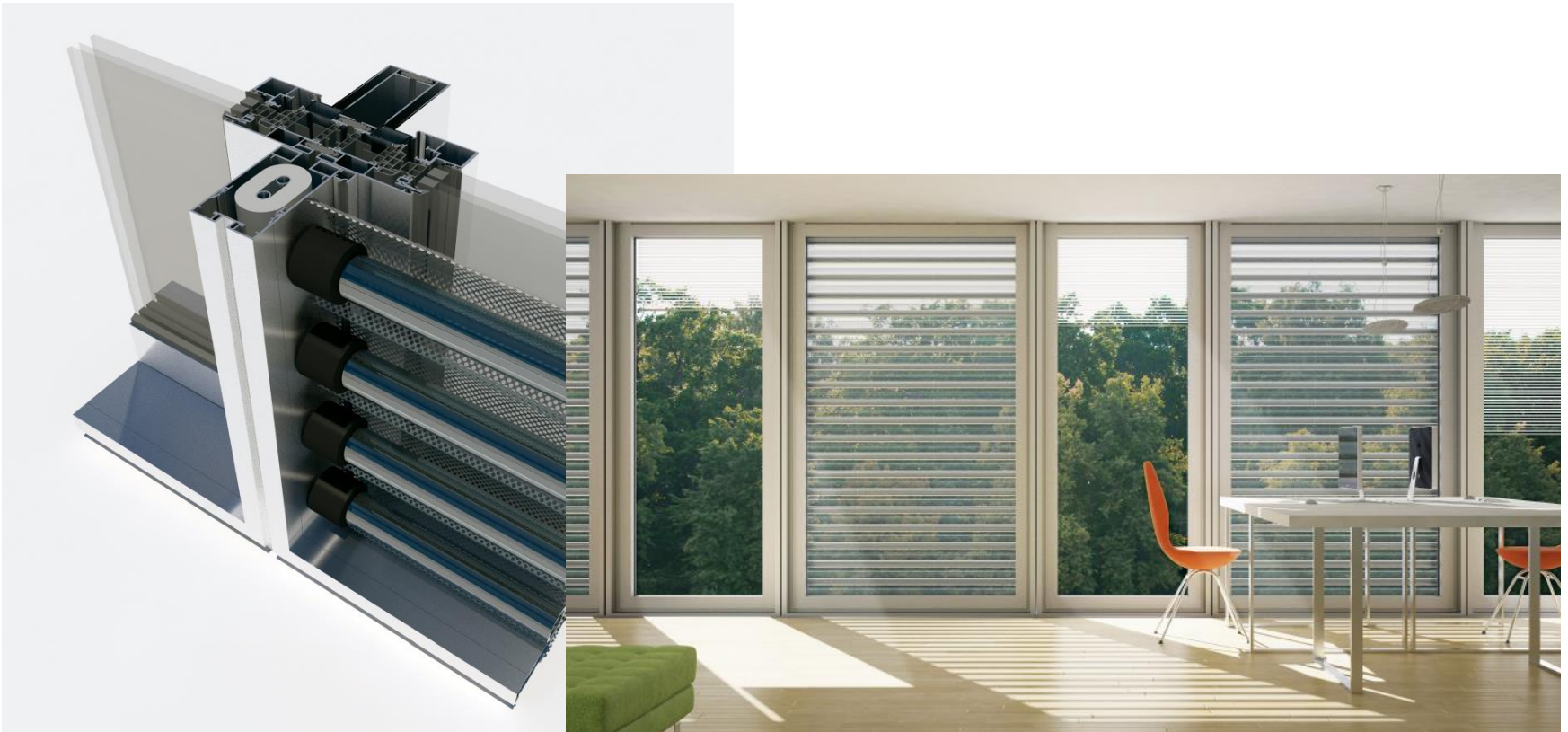
Discussion on Projects Task 1.2

- Project 4 - Concentrating PV/T Glazing:
 - Aggelos Zacharopoulos, Lamnatou, Florides, University of Minho, Savvides, Vassiliades, A. Georgiev, Aleksandra, Dorota, Yiannis
 - Status?

Discussion on Projects Task 1.2

- Project 5- Evacuated Tube Collector, Soteris Kalogirou:
 - ??
 - Status?

Vacuum Tubes in Facade



Multifunctional facade with VTC / Stuttgart

Discussion on handbook

- What is the contribution of WG1?
 - Performance characterisation! D1.4
- Coordination of WG3
- Discussion in Belfast and since last meeting in Belfast?

Discussion on handbook

- Discussion about the Handbook (HB) followed. Gilles proposed to include a chapter on orientation and climate that he will prepare.
- Legal issues, training environment, skills etc should also be included in a heading because of their importance and variety in different countries.
- It was also decided that the general HB breakdown will follow the form decided in the previous meeting and in every topic it will make reference to the five projects presented to the meeting. By giving a general introduction at the beginning and by closely analysing the various topics in respect of the five projects, general conclusions can be extracted at the end of the book.