

STUDY-TRIP ENERGY

HOW SUSTAINABLE BUILDINGS AND SUSTAINABLE BEHAVIOUR LEAD TO SUCCESS

18.12.-20.12.2014

PROGRAM

Thursday 18.12.

Projects related to energy efficiency

| | |
|-------|--|
| 00:44 | Departure in Linz with Euronight 246 to Bludenz |
| 07:24 | Arrival in Bludenz Jakob Dietachmair from CIPRA International will meet you on the platform |
| 07:30 | Breakfast in Bludenz and Baggage drop off |
| 08:09 | Bus ride to St. Gerold Thüringerberg (Landbus 76/Landbus 77) and short program introduction (change Bus in Thüringen) |
| 08:51 | Arrival in Thüringerberg (Grosses Walsertal) |
| 08:51 | Pick-up by Albert Rinderer |

09:00-10:00



Region of Grosses Walsertal

- Introduction to the region
- Introduction to the e5 program
- The region on the way to energy autonomy

10:00-12:00



Municipality center St. Gerold, Fire Station and Kindergarten Thüringerberg

The region of Grosses Walsertal is famous for its photovoltaic systems, which are a great part of their plan to become energy autonomous. All inhabitants can invest in the systems by buying them and rent them to the community. One of the systems is installed on top of the fire station and the kindergarten.

- | | |
|-------|---|
| 12:00 | Lunch at the Gasthaus Sonne in Thüringerberg |
| 13:00 | Shuttle to Thüringen |
| 13:23 | Bus ride from Thüringen to Feldkirch |
| 14:00 | Arrival in Feldkirch and transport to hydropower station "Illspitz" |

14:20-16:00



Hydropower station "Illspitz"

In October 2014 the new hydropower station connected to the grid. With the amount of electricity produced 40% of the energy demand of the city of Feldkirch can be covered. Special attention was paid to the ecological area around the station.

- | | |
|-------|--|
| 16:00 | Train ride from Feldkirch to Dornbirn/Hatlerdorf |
|-------|--|

16:30-18:00



ZumTobel Lightning Group

The Zumtobel Group headquartered in Dornbirn, Austria, is a manufacturer of professional indoor and outdoor lighting, lighting management systems and lighting components as well as LED and OLED technology.

- | | |
|-------|---|
| 18:24 | Train ride to Dornbirn |
| Later | Check-In at Harry's Home |
| 19:30 | Dinner in Dornbirn (Friends, Bierlokal, etc.) |

Friday, 19.12.

Energy autonomy program Vorarlberg (draft)

08:00

Continental breakfast at hotel

08:30

Pick up at the hotel by Harald Gmeiner

(Mobil: 0043 699 / 13 12 02 65)

08:45 – 10:15



Energieinstitut Vorarlberg

Energy Institut Vorarlberg

The aim of the institute is to advise, educate and research into the efficient use of energy and renewable energy sources. Irina Antlinger and Harald Gmeiner will present the ideas behind the institute and the program energy autonomy.

<http://www.energieinstitut.at/?sID=3234>

10:15

Transfer to Life Cycle Tower

10:30-12:00



LifeCycle Tower One

It is the first building to use a flexible and modular construction system for sustainable buildings. The LCT One is a showpiece of the timber-hybrid construction system, which was developed throughout many years of research by a team of experts from all fields of sustainable construction.

<http://www.energieinstitut.at/?sID=3234>

12:00-13:00

Small Lunch

Noon



Primary school Mähdle

After 35 years of use the elementary school Mähdle in Wolfurt, Austria was redesigned and renovate in 2009 to meet current and future demands of everyday school life. The renovation included wide-ranged thermal energy improvements to the building envelope aimed at bringing it up to passive house standards, and an increase in the building`s compactness, something normally difficult to achieve with an existing building.

<http://www.mountee.eu/good-practice/buildings/16-a/>

16:00

Transfer to Bregenz an pick up by Jakob Dietachmair and small city tour in Bregenz (visit of the Christmas-market)

| | |
|----------|---|
| 17/18:00 | Dinner in Bregenz |
| 20:00 | Train ride to Dornbirn and Pick-up of Luggage |
| 21:56 | Departure by train Euronight to Vienna |

Saturday 20.12.

| | |
|-------|-------------------|
| 07:05 | Arrival in Vienna |
|-------|-------------------|

Evaluation report of activity

| | |
|--|---|
| Name of the activity : | Study Trip |
| Date and venue : | 18+ 19.12.2014 |
| Name of the rapporteur / organism : | CIPRA International, Jakob Dietachmair |

Main informations

| | |
|---|--|
| Number of participants | 4 |
| Target group (professionals, elected people, technicians from public institutions, etc) | Researchers and practitioners of the Xinjiang Province in China. |
| Main goal of this activity | International Exchange to support sustainable construction and energy efficiency |

Réalisation des objectifs

| | |
|---|--|
| <p>The objectives of information or education or training seem to be met?</p> <p><i>Explain why</i></p> | <p>The experiences gained in the MountEE project so far have been explained to the participants with a practical approach. By visiting pilot buildings (e.g. municipality center St. Gerold), the delegation could imagine the progress of work. A special focus was on wood as construction material and energy source. Therefore biomass-heated buildings and biomass power plants were visited.</p> |
| <p>The transfer of know how was successful?</p> <p><i>Explain why</i></p> | <p>The Chinese delegation was very fascinated by the work done in the Vorarlberg region and the high standard of the construction culture. Lots of discussion (especially on energy demand and supply) proofed that the transfer successful.</p> |
| <p>The number of participants was satisfactory in relation to your expectations and your communication?</p> <p><i>Explain why</i></p> | <p>Right from the beginning (mainly due to VISA issues) the number of 4 participants was fixed.</p> |

Quality of the activity

| | |
|---|---|
| Quality of interventions and visits (content, duration, kind of visit...) | Seen from my perspective the quality was very good. The hosts scheduled a lot of time. The oral feedback of the participants was very good, and there was no rush from one building to the other. |
| Quality of exchanges or debates | The quality of exchange was good, although the region of Vorarlberg is very advanced compared to the region of Xinjiang. |
| Quality of the organization (timeliness, accommodation services,...) | Very good |

Others informations

| | |
|-------------|--|
| Any remarks | |
|-------------|--|

Global evaluation

| | |
|---|---|
| What are the positive points of this activity? | International exchange is very important for EU-projects too. Some of the experiences they've made can be transferred to China. Especially heating systems with biomass energy can be transferred easily. |
| What are the negative points of this activity? | Sometimes language barriers. |
| What are the points to improve for a next activity? | If affordable a Chinese translator could make sense. |
| What is your personal impression? | Great and very funny exchange. The group was very interested and now they are very motivated to bring sustainable construction on their agendas. |

Photographs



Evaluation questionnaire for participants

Partners can adapt this questionnaire according to the activity

To fill by the partner

| | |
|-------------------------------|--|
| Name of the activity : | Sustainable building using renewable energy |
| Date and venue : | 18.12-20.12, 2014 |

This questionnaire aims to help the organization to improve the content of this activity for next events. Thank you in advance for taking the time to answer the questionnaire as honestly and openly as possible. You are not required to provide your name.

Name of your organism: Xinjiang Academy of Agricultural Sciences
Your Email address: zhaohui_lu_xj@sina.com

Global evaluation

On a scale of 1 to 5 (the number 1 is "unsatisfying", 5 being "very satisfying" and the letter X means "no opinion"), how do you rate the following points:

| | Unsatisfying | | | | > | | | very satisfying |
|--|--------------|---|---|---|---|--|--|-----------------|
| 1. Quality of the organization (registration, timeline, accommodation services,...) of the activity Comments: 5 | 1 | 2 | 3 | 4 | | | | 5 |
| 2. Relevance of topics Comments: 5 | 1 | 2 | 3 | 4 | | | | 5 |
| 3. Quality of interventions and visits Comments: 5 | 1 | 2 | 3 | 4 | | | | 5 |
| 4. Quality of exchanges or debates Comments: 5 | 1 | 2 | 3 | 4 | | | | 5 |
| 5. Your expectations about this activity have been achieved Comments: 5 | 1 | 2 | 3 | 4 | | | | 5 |
| 6. Quality of the handouts Comments: 5 | 1 | 2 | 3 | 4 | | | | 5 |
| 7. Quality of the venue and facilities Comments: 5 | 1 | 2 | 3 | 4 | | | | 5 |
| 7. Your global impression Comments: 5 | 1 | 2 | 3 | 4 | | | | 5 |

What will you implement in your organisation? Are you going to change your habits or make new decisions?

The four experts of the Chinese visiting group of Xinjiang are interested in what they have seen in Vorarlberg, especially in the renewable energy technology used in sustainable buildings. They will try to introduce in their application. And personally, they have great impression of very good relationship between CIPRA and local community, and also the local people's good habit of energy-saving. They like to use it in their future work and life.

How did you had the information about this activity?

We get the information from the introduction of Dr. Josef Baum of Wien University and also Mr. Juergen Richter of GIZ Germany.

What are the points to improve for a next activity?

The arrangement for the trip is very good. The only regret is that we have not so many time to see more in the places.

Others remarks or suggestions:

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Study Trip Vorarlberg 18.12.2014

| NAME | COMPANY | SIGNATURE |
|-------------------|----------------|-----------|
| Ms Feng Lei | 新疆维吾尔自治区农业科学院 | 冯雷 |
| Ms Lu Zhaohui | 新疆农垦科学院国际科技合作处 | 卢朝晖 |
| Mr. Su Yunhui | 新疆建筑科学研究院 | 苏云海 |
| Mr. Ye Kai | 新疆农业生物资源研究所 | 叶凯 |
| Dietachmair Jakob | CIPRA Int. | Jakob |

Study Trip Vorarlberg 19.12.2014

| NAME | COMPANY | SIGNATURE |
|-------------------|----------------------------|-----------|
| Ms Feng Lei | 新疆农科院农业生态研究所 | 冯雷 |
| Ms Lu Zhaohui | 新疆中科院国际研究中心 | 卢朝晖 |
| Mr. Su Yunhui | 新疆建设厅设计院 | 苏云辉 |
| Mr. Ye Kai | 新疆中科院农业生态研究所 | 叶凯 |
| Dietachmair Jakob | CIPRA International | |
| Harald Gmeiner | Energieinstitut Vorarlberg | |





Energy efficient and sustainable building in municipalities in European mountain

18.12.2014



Project summary

PARTNERS in 3 European mountain areas:

- Sweden: Dalarna County, Norrbotten E. A.
- Pyrénées: PNR des Pyrénées Catalanes
- Alps: CIPRA, ARES, RAEE, AidA

AIMS: Support municipalities to construct or renovate public buildings in a more energy-efficient way and to better use renewable energy

OUTPUTS:

- 5 regional strategies and „service packages“
- Expertise on 33 building/renovation projects
- Training activities for professional
- Improvement of funding instruments
- Transfer activities



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Background

EPBD: all new construction and existing buildings undergoing major renovation will have to meet Nearly Zero Energy Building (NZEB) standards by 2018.

MOUNTAINS: special challenges extreme climate, low accessibility, small entities, low population density and brain drain.

MUNICIPALITIES: lack of know-how, experience and funding in the building sector.

MountEE aims to give support to municipalities in three European mountain areas (Scandinavia, Alps, Pyrenees) in order to help them achieve their objectives and transform them into front runners, involving all the relevant players in the regional actions. mountEE will use existing knowledge to develop regional strategies, financial tools and to support building projects.



Objectives and main steps

OUTPUTS

- Raise awareness and initiate action of decision makers on municipal level and social building with regards to sustainability
- Facilitating change in the building habits
- Anchor a multi-level governance approach in the building sector
- Encourage the funding of ecological and energy efficient buildings

MAIN STEPS

- Analyse existing knowledge, gaps and needs in each region
- Develop and implement regional strategies for ecological and efficient building and renovation including renewable energy in 5 regions
- Select and realise 30 public/social buildings/renovation projects
- Develop and organize training activities for professional
- Evaluate and improve funding instruments
- Transfer the knowledge (communication, trainings, events, excursions)



Expected results

RESULTS

- Develop and implement regional strategies on energy efficiency, ecological building and renewable energy in 5 mountain regions, involving the relevant regional players
- Realise 30 building/renovation projects in the partner regions
- Develop and organise training activities for 650 professionals
- Evaluate and improve 50 funding instruments
- Transfer the experiences gained in the project to the main actors of the building chain in various mountain regions



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Activities

CAPITALIZATION

- Analysis of barriers and knowledge gaps in the regions
- Collection of good practice example (buildings, strategies, financial instruments)

STRATEGIC DEVELOPMENT

- Creation of regional committees with local and regional stakeholders
- Elaboration of regional strategies with pools of services for municipalities
- Analysis and proposition of improvement of financial tools



Activities

REGIONAL IMPLEMENTATION

- Selection of pilot buildings
- Elaboration of concepts of accompagnement of each pilot building

TRANSFER ACTIVITIES

- Creation of a blog and expert inputs every week
- Developement of settings and collection of material for trainings
- Organisation of events and trainings for stakeholders (craftsmen, architects, ingenieers, municipalities...)

COMMUNICATION

- Production of a film with examples of each regions
- Creation and update of the website
- Communication (newsletters, social media) and media work



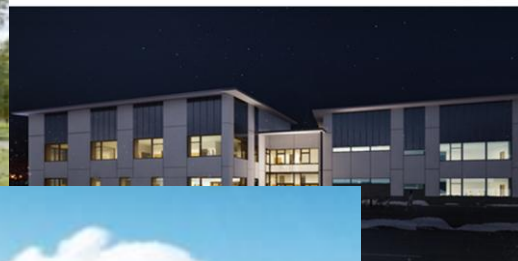
Co-funded by the Intelligent Energy Europe
Programme of the European Union



Pilot Projects realized so far:



SWECO





Partners and contacts

LEAD PARTNER/COORDINATOR:

CIPRA International, Wolfgang Pfefferkorn, Carole Piton

Contact: Im Bretscha 22, 9494 Schaan, Liechtenstein

T: +423 237 53 53, F: +423 237 53 54, Wolfgang.pfefferkorn@cipra.org
info@muntee.org

PARTNERS:

- Lansstyrelsen Dalarna, Sweden
- Nenet Norrbottens Energy Agency – NENET, Sweden
- PNR des Pyrénées Catalanes, France
- Agenzia Regionale per l'edilizia sostenibile - ARES, Italy
- Rhônealpiénergie-Environnement – RAEE, France
- Alliance in the Alps – AidA, Germany

WEBSITES: www.muntee.eu; www.blog.muntee.eu