



中国教育国际交流协会
CHINA EDUCATION ASSOCIATION
FOR INTERNATIONAL EXCHANGE



Enhancement of engineering skills of students of all levels for application of evidence based sustainable renewable energy solutions in the built environment - SKYBELT

Dr. Luca Cioccolanti

Centro di Ricerca Energia Ambiente e Territorio (CREAT), Università eCampus, Via Isimbardi 10, 20060 Novedrate (CO), Italy

Email address: luca.cioccolanti@uniecampus.it

Outline

- Aim and Scope
- Consortium
- Activities
- Conclusions

Context

Transforming the global energy system to 100% renewable requires a strong workforce of professionals able to develop and promote renewable energy technologies to satisfy the energy demand in a sustainable way. As regards the building sector, it has a significant room of improvement in curbing its share of energy consumption.

Main objective

Enhancing the ***skills of engineering students at all levels*** for application of sustainable ***renewable energy solutions to be integrated into the built environment*** in several Universities of Europe and Asia

Aim & Scope

Consortium

Activities

Conclusions

University eCampus (Italy)

Northumbria University at Newcastle (UK)

Cukurova University (Turkey)

Beijing University of technology (China)

Lanzhou Jiaotong University (China)

Universiti Putra Malaysia (Malaysia)

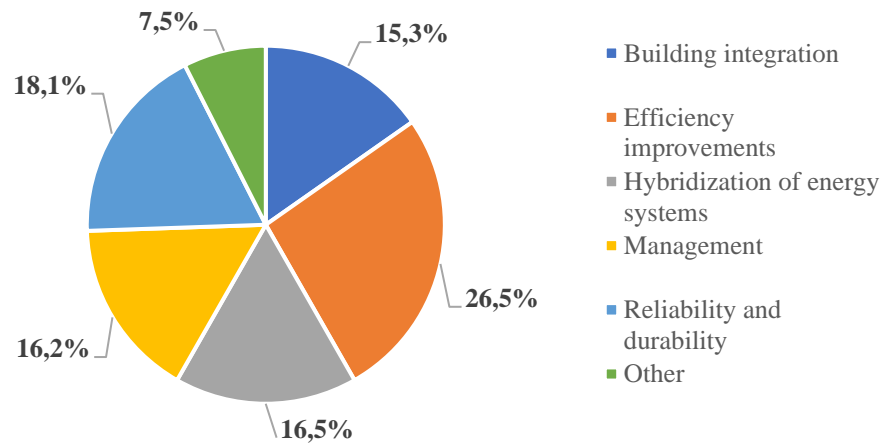
Universiti Sains Malaysia (Malaysia)

Naresuan University (Thailand)

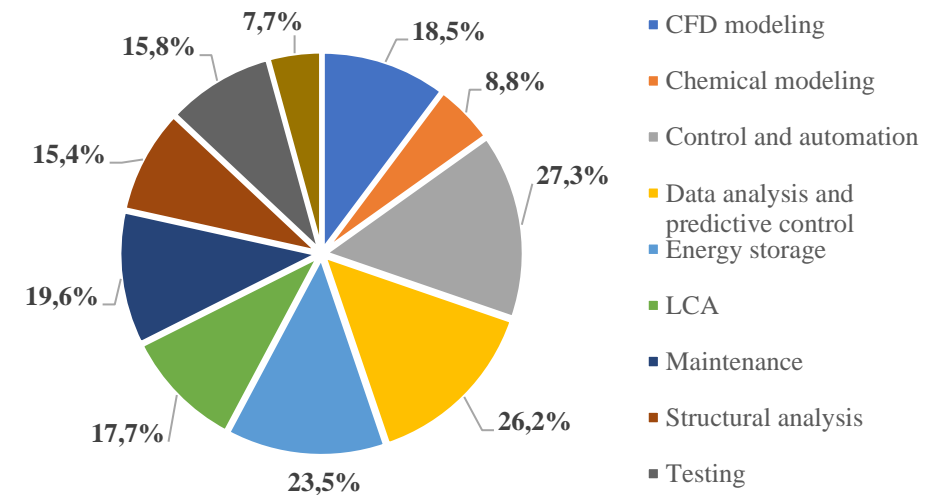
Chiang Mai University (Thailand)

+ >30 associated partners

Main challenges for Sustainable RET in the next years



Kind of expertise requested



Aim & Scope

Consortium

Activities

Conclusions

Education in Sustainable RES into the built environment

Enhancement of modules at
Bachelor and Master level and
Improvement of Skills
Development of PhD students

Modern EU level engineering education methodologies

Implementation of EU-like
standard on quality assurance and
use of novel ICT based teaching
methods

Cooperation with industries

Cooperation with national,
regional and international industry
stakeholders for internships

Aim & Scope

Consortium

Activities

Conclusions

Beijing University of Technology

Air conditioning (BA)
Heating engineering (BA)
Technologies for Green Building Design (BA)
Renewable energy utilization technology (BA)
Thermodynamic analysis of energy systems (MA)
The application of new energy in architecture (MA)
HVAC new technology (MA)
Control technology for building thermal and humidity conditions (PhD)

Lanzhou Jiaotong University

Building Cooling and Heating Source (BA)
District Supply of Urban Energy (BA)
Heating, Ventilation and Air Conditioning (BA)
Green Building and Energy-efficient Building (BA)
Application of Renewable Energy in Building (MA)
HVAC Theory and Technology (MA)
HVAC Heat Pump Technology (MA)
Energy Utilization Technology (PhD)

Aim & Scope

Consortium

Activities

Conclusions

PRO

- Very high and valuable commitment by Chinese Universities
- Very targeted on the aim of the proposal
- Responsive and effective in implementing the tasks defined at the time of the proposal

CONS

- Difficulties in communication (language)
- Restrictions have limited interactions so far



Co-funded by the
Erasmus+ Programme
of the European Union

Erasmus Plus 610258-EPP-1-2019-1-IT-EPPKA2-CBHE-JP

Thanks for your attention

Dr. Luca Cioccolanti

Faculty of Engineering, CREAT, Telematic University eCampus

Via Isimbardi, 10 - 22060 Novedrate, Italy

Skype name: luca.ciocco

Profile on academia, linkedin, orcid and researchgate