

UNIVERSIDADE DE COIMBRA

UNIVERSITY OF COIMBRA



ENERGIA para a SUSTENTABILIDADE

ENERGY for SUSTAINABILITY • EfS | UC

Encontro EfS ♦ Empresas

Investigação e Desenvolvimento

Centro de Investigação do Território, Transportes e Ambiente,

3 dezembro 2014

Summary

University of Coimbra

EfS Initiative

Purpose and objectives

Overview

R&D units

Projects

Publications

Events

To come

The University of Coimbra

The oldest and one of the most prestigious universities of the portuguese speaking world, part of the UN World Heritage List:

More than 20 000 students, 1500 professors e 1000 workers

Organized in 8 faculties and 4 other units

Graduation and post-graduation in a great number of areas:

Engineering, Arts and Humanities, Law, Medicine, Basic Sciences, Earth and Life Sciences, Psychology and Education, Economics, Sports, Pharmaceutical Studies, Sociology, Management



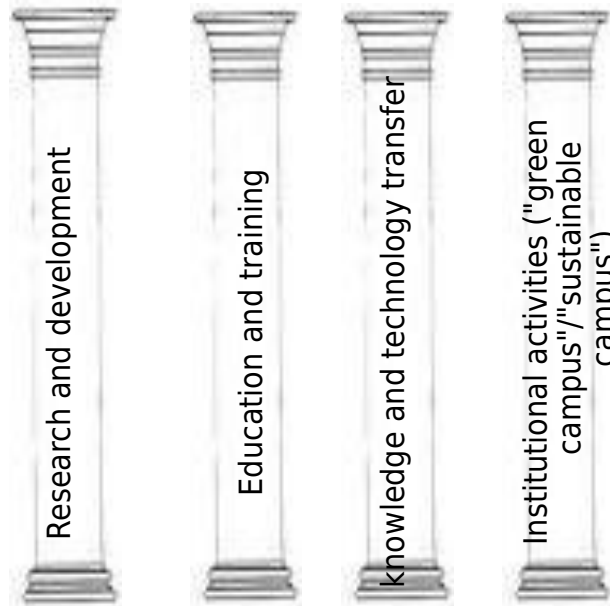
EfS Initiative started in 2007[6]

To promote cross-fertilization in research, knowledge transfer and educational activities within the broad area of **energy resources for sustainable development**

Objective: Organize interdisciplinary answers to challenges in the study, design, operation and regulation of systems for:

Production, Transport
and Use of energy

in 4 pillars:



EfS broad areas of activity and competence

Energy Systems and Policies

Sustainable Built Environment

Sustainable Mobility

Overview

A multidisciplinary set of units

Researchers affiliations:

- 14 R&D Units
- All the five Engineering Departments
- Departments of Architecture, Life Sciences and Earth Sciences
- Faculty of Economics (economics, management, sociology)
- Faculty of Psychology and Educational Sciences
- Faculty of Law

Research and development – R&D units (1)

More than 100 PhD researchers and professors

ADAI – Associação para o Desenvolvimento da Aerodinâmica Industrial

INESCC – Instituto de Engenharia de Sistemas e Computadores de Coimbra

ITeCons – Instituto de Investigação e Desenvolvimento Tecnológico em Ciências da Construção

ISR – Instituto de Sistemas e Robótica

CES/CCArq – Centro de Estudos Sociais / Centro de Arquitetura

CFE – Centro de Ecologia Funcional

CG – Centro de Geociências

Research and development – R&D units (2)

More than 100 PhD researchers and professors

CITTA – Centro de Investigação do Território, Transportes e Ambiente

CIEPQPF - Centro de Investigação em Engenharia de Processos Químicos e Produtos da Floresta

CISUC – Centro de Informática e Sistemas da Universidade de Coimbra

GEMF – Grupo de Estudos Monetários e Financeiros

IJ - Instituto Jurídico

IMAR – Instituto do Mar, Coimbra

IPCDVS – Instituto de Psicologia Cognitiva, Desenvolvimento Vocacional e Social

Research and development – projects (1)

13 projects starting in 2014 funded by EU | private companies | FCT:

BEs – Energy Efficient Schools

BioHeavy - Extended “well-to-wheels” assessment of biodiesel for heavy transport vehicles

Consulting in the **Plan for the Promotion of End-Use Efficiency**

EMSURE - Energy and Mobility for SUsustainable REgions

Energy Box – Development and implementation of a demand-responsive energy management system

GALP-Fuels Implementation of methodologies to evaluate the performance of fuels



Research and development – projects (2)

13 projects starting in 2014 funded by EU | private companies | FCT:

GerAPlanO - Automated generation of Floor plan designs with thermal performance optimization

GROUND-MED - Advanced ground source heat pump systems for heating and cooling in Mediterranean climate

Life Cycle Assessment of biodiesel in Portugal

EDIL: EcoDesign and Environmental Impact Labelling for the manufacture of automobile plastic components

Sustainable mobility: Perspectives for the future of biofuel production

ECODEEP - Eco-Eficiência e Eco-Gestão no sector Agro-Industrial

Research and development - publications

Numerous publications in leading international journals, international conferences, books and book chapters

In 2013:

5 books,

12 book chapters

100 Papers in international journals

122 Papers in conferences



Events (1)

16 events organized in 2014

January, 31: ITeCons | “Promoção da Eficiência Energética de Edifícios, Sustentabilidade e Conforto Interior – Optimização de Soluções Construtivas”

March, 14: Palestra – Dr. Roy Baria | Engineered Geothermal Systems – state of the art

March, 19: Conferência de apoio à realização da Dissertação de Mestrado | Prof. Luis Adriano Oliveira

April, 7: Workshop | Discussion Forum on Industrial Ecology and Life-Cycle Management

April, 28: Palestra "Sustentabilidade em Biocombustíveis: Recentes Abordagens" | Prof. Fausto Freire

Events (2)

16 events organized in 2014

April, 30: Seminário | Eficiência Energética no Setor Agropecuário e Agroindústrias

May, 21: Lecture (Palestra) | Velocity-Vorticity Based Les/Urans Methods for the Simulation Of Turbulent Flows | Prof. Leopold Skerget

June, 27: 4th MIT Portugal Program Conference | 2014

September, 17: EfS Opening Lecture – Sustainability of Biofuels in Brazil | Prof. Suani Coelho

October, 10: Palestra "Solving the problem of small data set in energy: A maximum entropy econometric approach" | Prof. Blanca Moreno Quartas

Events (3)

16 events organized in 2014

October, 29: Palestra “Robust decision making in life-cycle assessment of vehicles: the need for uncertainty propagation” | Dr. Maarten Messagie

October, 27-30: International Conference VPPC 2014 - IEEE Vehicle Power and Propulsion

November, 19: Palestra "An economic framework for remuneration of smart grids actors" | Prof. Paulo M. de Oliveira de Jesus

December, 3: VIII Encontro Iniciativa Energia para a Sustentabilidade (EfS) - Estudantes e Empresas, 2014

Events (4)

Still to be:

December, 5: Palestra "Adaptação das Empresas Elétricas a um setor em profunda mudança" | Eng. Nuno Ribeiro da Silva

December, 16 – 19: 40th IAHS (International Association for Housing Science) World Congress | IteCons (Madeira)

To come in May 2014

ENERGY for SUSTAINABILITY 2015

Sustainable Cities: Designing for People and the Planet | May 14-15, Coimbra, Portugal



IMPORTANT DATES

Short paper submission
15th December 2014

Acceptance notification
22nd January 2015

Final paper submission
15th February 2015

**Final paper confirmation
of acceptance**
28th February 2015

Early registration
10th March 2015

Efs 2015 Web Site
<http://efs2015.uc.pt>

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