



IPCB's Renewable Energy Engineering Expertise and the CENEA Project: Background and Perspectives



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About IPCB

The Polytechnic Institute of Castelo Branco (IPCB) has been created in 1979. The Institute has six schools that cover scientific areas of Arts, Communication and Multimedia, Business Sciences and Law, Biological and Food Sciences, Wealth and Social Protection (Welfare), Education and Teaching, Engineering and Computer Sciences, and Tourism, Sports and Service Industries. The IPCB's mission is to train professionals with high technical-scientific skills and to promote the Institute's integration into the scientific and technological community, implementing the mobility of individuals and knowledge in the context of an increasingly globalised and international society.

These objectives require a coherent and effective organizational, scientific, and technical culture that is capable of responding creatively and innovatively to the new scenarios of a knowledge-based society and professional networks.

IPCB offers high quality teaching, graduate and master degree courses, as well as specific life-long training programs, to around 5000 students, with a teaching staff of about 350.

The research activities are developed in several R&D units and with partnerships with other institutions through participation in many national and international R&D projects and consortia, some, funded by FCT. Crucial to IPCB mission is the knowledge transfer to the Industry by applied and innovative research based on agreements with companies. Other focus issue is the promotion of entrepreneurial competences within the academia in order to economically valorise the developed scientific knowledge.

Since 1992, the IPCB has experience in coordinating educational international projects in the framework of the European Programmes, as well as experience in community funds management.

Besides the cooperation under European programmes, the IPCB has several cooperation agreements with other universities all over the world, namely with countries like Mexico, India, Brazil, Mozambique, China, and Colombia. This cooperation allows not only student's mobility but also the production of didactic materials and project development.

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Abstract

The CENEA project is A Erasmus+ Project Proposal for a Strategic Partnership in a Collaborative European Network for Energy Awareness (CENEA) aims to increase the awareness of energy issues and offer a transnational view of target groups in partner countries. The project goal is to have a positive and long-lasting impact on the project participants, as well as on their background organizations and other target groups, as it is linked to educational policy goals at national and European levels.

Located in the centre of Portugal, the IPCB is surrounded by various different Renewable Energy Harvesting Sources - namely Solar, Bioenergy, Wind and Hydro – undertaking regular studies in these different domains. Promoting regularly close cooperation with local companies - that either use or generate renewable energy and related solutions in their processes - the IPCB has been a privileged partner to carry-out the applied research projects and internships in such companies, involving IPCB students, teaching staff and researchers.

Lecturing a wide range of engineering degrees and short cycle courses, namely Renewable Energy and Industrial Engineering, as well as Short Cycle courses in Renewable Energy, the IPCB is a reference Portuguese HE Institution with a large portfolio of technical and scientific publications on national and international journals and conferences that serve as dedicated background for the participation on the CENEA Project.

About CENEA

The CENEA (Collaborative European Network for Energy Awareness) project aims to increase the awareness of energy issues and offer transnational view in increasing the awareness of target groups in partner countries (historical choices, politics, laws, citizens' views, fossil energy, sustainable energy etc.) Sharing knowledge (awareness) will be done by creating e-learning environment dedicated to Energy Awareness.

The cooperation will be promoted between higher education organizations, NGOs, public authorities and company representatives.

The outputs will be academic materials to students and higher educations and CC BY SA licensed videos targeted to public.

Companies will participate by giving authentic tasks to do and providing video presentation.

NGOs and public authorities will participate to Multiplier Events and to dissemination.

Students will participate to the project activities by studying in national and international groups to learn and solve real life tasks from the industry.

Industry visits are integral part of the CENEA project during the intensive education sessions and workshops. There will also be virtual industry visits.

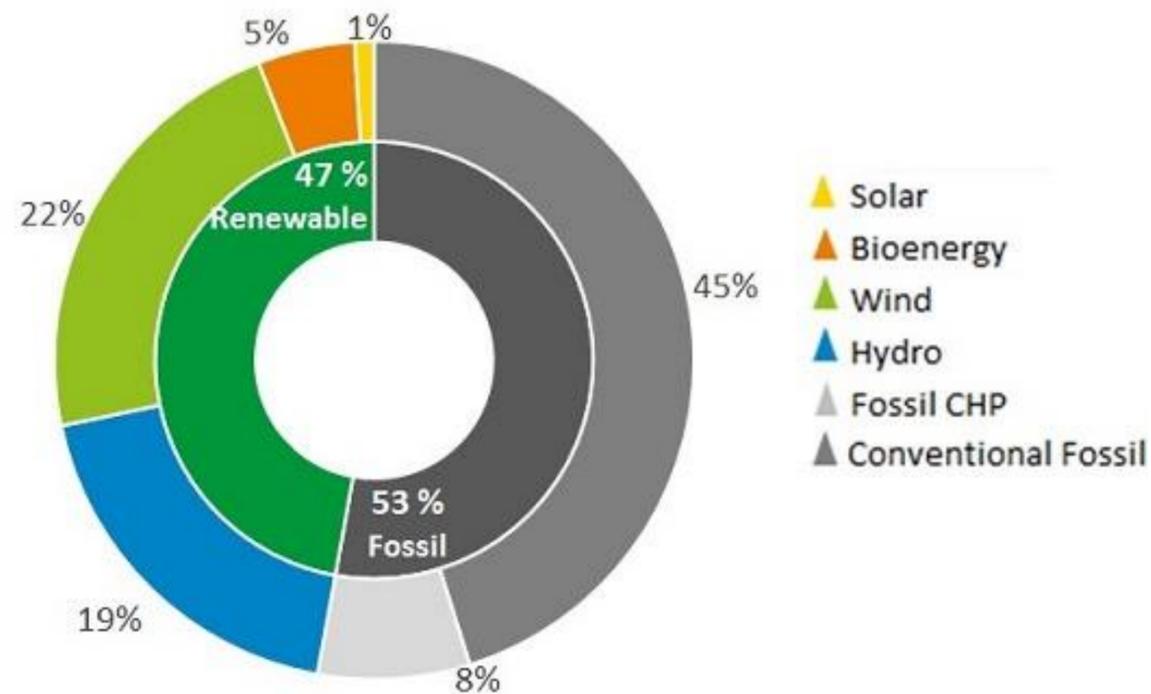
CENEA will promote internationalization by bringing together higher education partners (teachers, staff and students) and associated partners (company representatives and NGOs) from partner countries in the related fields of the project.

Awareness of energy production, consumption and distribution is very important and affects us all. During studies the attitudes can be influenced by giving knowledge.

The CENEA project goal is to have positive and long-lasting impact on project participants (teachers, staff and students) and their background organizations and other target groups, as the Project is linked to educational policy goals at national and European level.

Up to this moment, the project has not yet been fully approved by the competent mandatories.

ELECTRICITY GENERATION BY ENERGY SOURCES IN 2017



January
Portugal Mainland
Sources: REN; APREN's analysis

Figure 1. Electricity generation by energy sources in 2017 according to REN & APREN's analysis.

Acknowledgements

CENEA – Collaborative European Network for Energy Awareness (Erasmus+ Project Proposal)