ENERGISE - Expected Result 1

Prof. Stevens Marangi Mbogho
Ing. Jacopo Barbieri

Expected result 1

Expected result: a completed picture of the current status of education in energy engineering extended to the 3 partner countries

1.1 Comprehensive assessment study

- *Leader*: TUM
- *Participants:* POLIMI, DIT, TUK, JU, Associated Partners
- *When*: from 10 Oct 2013 to 10 Aug 2014 (month 1 – month 10)
- *Output*: a comprehensive assessment report
- *Description*: through this activity it will be possible to achieve **a complete state of the art** of the **labour market needs** in relation with **specific didactic competences** requirements. This is an essential step of the project to avoid duplication and also to promote synergies with similar programs in the Tanzania, Ethiopia and Kenya.

1.1.1 Assessment for teaching methodologies and quality

This first assessment focuses on **curricular needs**.

1.1.1.1 Evaluation and comparisons of curricula

Curricula from each partner University will be **shared and analyzed** to provide a picture of the actual state of the art. Each partner will be asked to diffuse the survey among other relevant HEIs in their own country.

1.1.1.2 Evaluation of teaching methodologies and quality monitoring systems

A set of interviews and surveys will be developed to assess which is the **perceived quality of degree courses** at the level of students, teachers and deans. Each partner will share these surveys with other relevant HEIs in each involved country.

1.1.1.3 Evaluation of the status of laboratories and other facilities

Surveys and interviews with partner HEIs' technical staff will help to define the **status of their laboratories**. A specific mission is scheduled:
2 experts will visit each involved HEI.

1.1.2 Assessment for teachers' competences

It will be defined a plan for future **teachers' training activities**.

1.1.2.1 Evaluation and comparisons of staff CV

This activity will evaluate the presence of **technical competences** adequate to cover all the scientific topics to be inserted in the curricula, the lack of capacities and skills to be developed during training activities, and adopted innovative **didactical approaches** and e-learning and e-collaboration attitudes.

1.1.2.2 On field analysis with deans, teachers and students

Deans, teachers and students will be interviewed to assess the **actual level of competences** and to benchmark the real level with the self-perception of target groups.

1.1.3 Assessment for stakeholders' needs

Definition of the most suitable conditions for the creation of a **joint network** (relationships with Bologna and Copenhagen processes).

1.1.3.1 Public Bodies consultation

In each HEI country **public stakeholders** (in particular energy and agricultural agencies) will be interviewed.

1.1.3.2 Private Bodies consultation

In each HEI country **private stakeholders** (SMEs in particular) will be interviewed.

1.1.3.3 Civil society consultation

The civil society will be asked to expose its perspective through local **NGOs and associations**, thanks to surveys and meetings.

1.1.3.4 Citizens consultation

Students will play an active role managing interviews and surveys to the **citizens**.

Expected result 1

OVIs

- Number of HEIs, within each country involved (other than HEIs partners) > 50% of the Country
- Number of Faculties involved > 50% of the total within the Country
- Number of curricula in energy engineering (or related) analyzed per country > 80%
- Number of Deputies in charge or "managing teaching" per HEIs involved > 80%
- Number of private/public Stakeholders involved in this phase per countries > 5

Critical elements/Relevant considerations

- The needed assumptions are:

  a shared vision on the relevance of a regional integration as far as energy related problems and on the basic requirement for curricula in energy engineering in the HEIs of the Countries involved, stakeholders' interest and commitment.