Workshop on Managing Transitions For sustainability
Egypt, 16th-20th April 2018
ENEPLAN ACTIVITIES till Cairo 2018

Prof. Dr. Hoda Soussa
Dr. Fareed Abuela
Introduction to ENEPLAN

The ENEPLAN project falls under the Capacity Building in Higher Education program. Hence, its main goal is to develop skills in Higher Education institutions in the Mediterranean region in the field of integrated energy planning.
Objectives

1. Apply Open Educational Resources based on the tool of collaborative Concept maps, in the field of integrated energy planning;
2. Modernization of higher education in integrated energy planning;
3. Relevance of learning to the labor market;
4. Relations between HEI and the wider socio-economic environment;
5. Establishing a network among Mediterranean Universities.
## Partners

<table>
<thead>
<tr>
<th></th>
<th>University/Institution</th>
<th>Country</th>
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</thead>
<tbody>
<tr>
<td>1</td>
<td>Universitàdeglistudi Roma Tre</td>
<td>Italy</td>
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<tr>
<td>2</td>
<td>Universitàdeglistudi di Siena</td>
<td>Italy</td>
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<tr>
<td>3</td>
<td>Universitàdeglistudi di Camerino</td>
<td>Italy</td>
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<td>4</td>
<td>Malta Intelligent Energy Management Agency</td>
<td>Malta</td>
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<td>5</td>
<td>Universidade do Algarve</td>
<td>Portugal</td>
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<tr>
<td>6</td>
<td>Universidad Pablo de Olavide</td>
<td>Spain</td>
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<tr>
<td>7</td>
<td>American University of Beirut</td>
<td>Lebanon</td>
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<td>8</td>
<td>Lebanese University</td>
<td>Lebanon</td>
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<tr>
<td>9</td>
<td>Association Libanaise pour la Maitrise de l'Energie et l'Environnement</td>
<td>Lebanon</td>
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<td>10</td>
<td>Medgreen</td>
<td>Lebanon</td>
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<tr>
<td>11</td>
<td>Zewail City of Science and Technology</td>
<td>Egypt</td>
</tr>
<tr>
<td>12</td>
<td>Ain Shams University</td>
<td>Egypt</td>
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<tr>
<td>13</td>
<td>Al-Balqa' Applied University</td>
<td>Jordan</td>
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<tr>
<td>14</td>
<td>Jordan University of Science and Technology</td>
<td>Jordan</td>
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<tr>
<td>15</td>
<td>Princess Sumaya University for Technology</td>
<td>Jordan</td>
</tr>
<tr>
<td>16</td>
<td>University of Jordan</td>
<td>Jordan</td>
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<tr>
<td>17</td>
<td>Petra Education Company</td>
<td>Jordan</td>
</tr>
<tr>
<td>18</td>
<td>Royal Scientific Society</td>
<td>Jordan</td>
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</tbody>
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Outputs

1. State of the art and case studies report
2. Cmap web platform
3. WebGIS platform and geodatabase
4. Cmap 1.0 - basic conceptual map OER in English
5. Cmap 2.0 – upgraded version of the basic Cmap incorporating the results of the thematic workshops on energy planning and GIS tools; environmental and landscape assessment; RES new technologies; Life cycle analysis and energy potential; innovation, applied research and relationships with SMEs
6. Cmap 2.0 – final release (in English and in Arabic)
7. Final conference proceedings (guidelines for integrated energy planning)
1. **State of the art and case studies report**

1. **ITALY**
   - Legal framework on energy planning ................................................................. 1
   - Integration with spatial planning and the environmental sector .......................... 9
   - Offer of educational courses and use of IT learning tools .................................. 10

2. **MALTA**
   - Legal framework on energy planning .................................................................. 14
   - Integration with spatial planning and the environmental sector .......................... 19

3. **PORTUGAL**
   - Legal framework on energy planning .................................................................. 24
   - Integration with spatial planning and the environmental sector .......................... 27
   - Offer of educational courses and use of IT learning tools .................................. 29

4. **SPAIN**
   - Legal framework on energy planning .................................................................. 32
5. LEBANON

Legal framework on energy planning ................................................................. 41
Integration with spatial planning and the environmental sector .......................... 45
Offer of educational courses and use of IT learning tools .................................. 45

6. EGYPT ............................................. 54

Legal framework on energy planning ................................................................. 54
Integration with spatial planning and the environmental sector .......................... 57
Offer of educational courses and use of IT learning tools .................................. 61

7. JORDAN ........................................ 65

Legal framework on energy planning ................................................................. 65
Integration with spatial planning and the environmental sector .......................... 67
Offer of educational courses and use of IT learning tools .................................. 68
2. Cmap web platform

E-LEARNING

WEBGIS

The ENEPLAN database and webgis bring together both existing datasets provided by project partners, and other open geo-data on energy potentials and renewable energy installations, providing an educational support to the students and the teachers participating in the project activities. Visit the ENEPLAN Webgis.

INTRODUCTION TO CONCEPT MAPPING

What is a concept map

A “concept map” is a diagram and a graphical tool depicting concepts and their relationships. It can be used in any sector or discipline in order to organise ideas and structure knowledge. Concepts are represented as boxes or circles and are mutually
3. WebGIS platform and geodatabase
4. Cmap 1.0 - basic conceptual map OER in English

- Rational use of resources
- Sector programming/planning
- Spatial planning
- Impact assessment

INTEGRATED ENERGY PLANNING must take into account
5. Cmap 2.0 – upgraded version of the basic Cmap incorporating the results of the thematic workshops on energy planning and GIS tools; environmental and landscape assessment; RES new technologies; Life cycle analysis and energy potential; innovation, applied research and relationships with SMEs
Cairo Workshop Organizers

1. Ain Shams University
2. Zewail City of Science and Technology
Ain Shams University

- ASU created the first undergraduate program in Energy and Renewable Energy Fields in 2009, with 60% electric courses and 40% mechanical courses.
- One group already graduated (35 students) and 440 students are currently enrolled in the program.
- In this program there are two courses that incorporate energy planning taking into consideration environmental management and safety.
- The graduation projects are designed to tackle real life problems that include design, application, financial, and economic.
Zewail City of Science and Technology

- Founded by Ahmed Zewail, first intake of students in fall 2013
- Includes University, Research Centers, Technology Pyramid, Strategic Studies Center, Talaat Harb Center for Economic Development
- Four science programs and four engineering programs, including Renewable Energy Engineering and Environmental Engineering
- Dedicated to interdisciplinary education and research
- First graduating class in science in 2017, first engineering graduates anticipated in 2018
Cairo workshop

• The theme of our workshop is **managing transitions for sustainability.**
  • To new technology
  • To a new stage of economic development
  • From student to working professional
  • From education that isolates technical development from planning and sustainability to education that integrates these skills.
Cairo workshop

• The theme of our workshop is managing transitions for sustainability.

• Each partner country will present a case study—a new system in energy, water, or the environment or in education.

• Each case study should exemplify a means of incorporating sustainability during a transition.
Workshop Agenda

Day 1 – Monday

16.00-18.00
- Opening and Welcome
- Presentation of the workshop contents and objectives – Prof. Dr. Hoda Soussa and Dr. Fareed Aboul-ela

Day 2 – Tuesday

9.30 - 10.30
- Introduction and overview of workshop activities and presentation by Egyptian students of projects involving transitions, renewable energy, and sustainability
- Coffee Break

10.30-11.00
- Egypt presentation: Managing the transition from fossil fuel to renewable technologies in a manner that is technically, economically, and environmentally sustainable.—ASU – Dr. Walid El-Khattam
- Countries’ 30 minute presentations concerning “Managing Transitions For sustainability”, including the presentation of one significant case study/example per country—(Use of CMAP is welcome, at least a slide) All Countries*

*Please see attached description of four potential subthemes for the case studies
- Speech by the respective Deans from ASU and ZC

13.00 - 14.00  
Lunch break

*Please see attached description of four potential subthemes for the case studies
- Speech by the respective Deans from ASU and ZC
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14.00 - 17.00 Partners’ presentations (continuation) - ALL PARTNERS

Day 3 – Wednesday

9.30 - 11.30
- Finalizing CMAP2.0 integrating concepts related to the management of the transition to sustainable energy (group work) – Moderated by ASU

11.30 - 11.45 Coffee break

11.30 - 13.00
- Plenary discussion on the lesson learnt by the students’ workshop - Particular contribution is kindly asked to the coordinators/tutors of students groups in Amman-moderated by Zewail City and ROMA 3
- Presentation of the preliminary version of the C-Map 2.1 – ROMA 3

13.00 - 14.30 Lunch break

14.30 - 17.30
- Finalizing CMAP2.1 based on the results of the AMMAN training workshop: adding external resources, annotations and links to enrich the teaching/learning experience (group work divided by disciplines) – Moderated by ROMA 3
### Day 4 – Thursday

<table>
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<tr>
<th>Time</th>
<th>Activity</th>
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<tbody>
<tr>
<td>9.30 - 11.15</td>
<td>Steering committee meeting: finalizing outputs; Technical and Financial review; Next workshop in Lebanon and final report and deliverables, role and responsibilities of partners – Moderated by ROMA 3</td>
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<tr>
<td>11.15 - 11.30</td>
<td><strong>Coffee break</strong></td>
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<td>11.30 - 13.00</td>
<td>Quality board meeting – Moderated by JUST</td>
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<td>13.00 - 15.00</td>
<td>Lunch break, Poster exhibition of the students work</td>
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<td>15.00 - 18.00</td>
<td>Exchange of experiences on the educational activities implemented so far, with a focus on any problem encountered by the partners: how many students did they involve in their local activities, which course/year, how many hours, if the students received credits for their participation, how was student performance assessed, what if any, elements are to be permanently incorporated into the curriculum, etc. Moderated by ROMA 3, with input from ALL PARTNERS</td>
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<td>Discussion on how to ensure project outputs sustainability and opportunities to make use of ENEPLAN Open Educational Resources to improve the teaching/learning experience</td>
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### Day 5 – Friday

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<th>Time</th>
<th>Activity</th>
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<tbody>
<tr>
<td>9.30 - 11.00</td>
<td>Visit to Zewail City Campus (at 6th October city)</td>
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