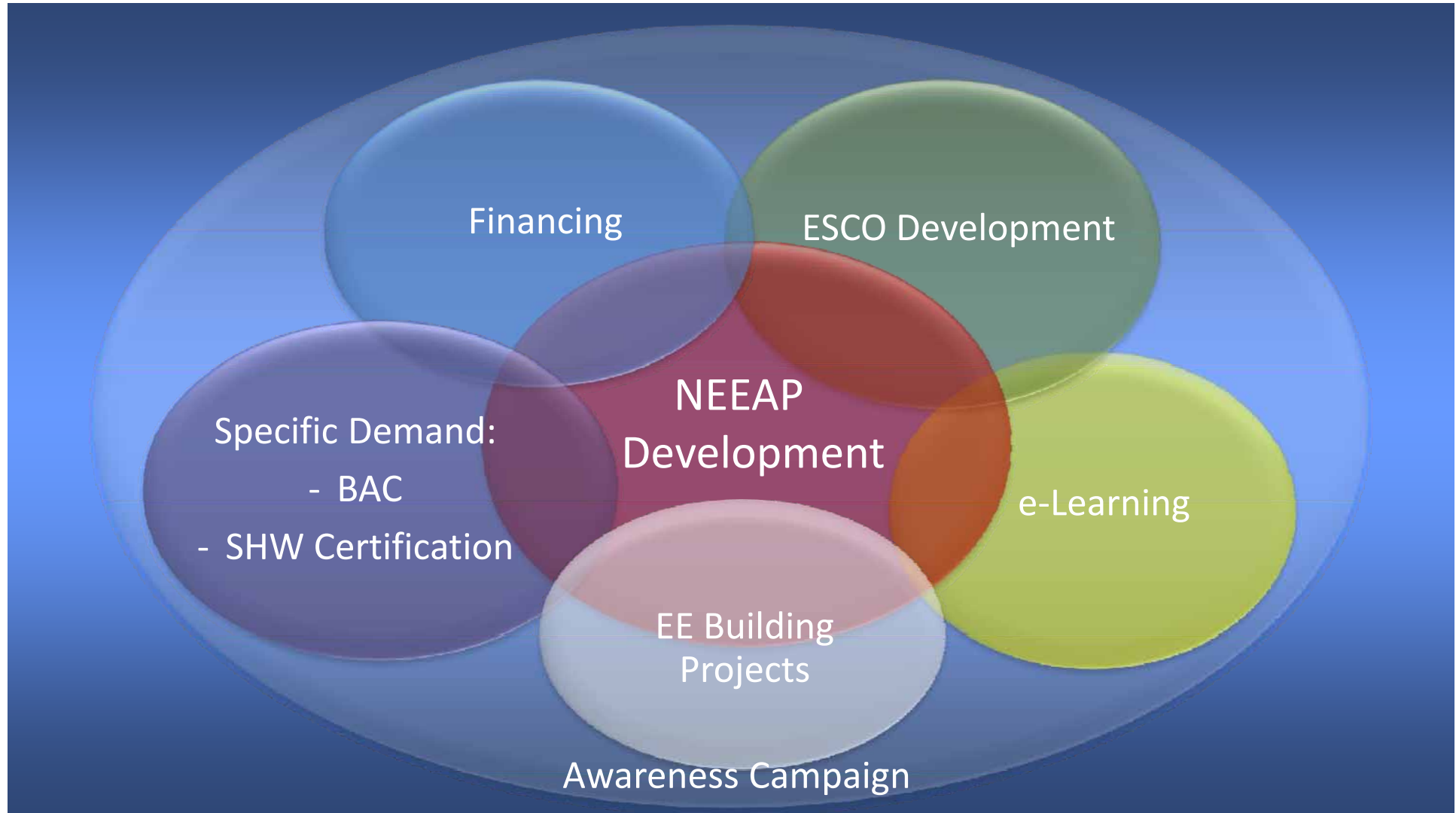


Energy Efficiency in the Construction Sector in Mediterranean Countries



June, 1 st 2011

Dr. Kurt Wiesegart, MED-ENEC Team Leader



- Political Framework
- Sufficient Energy
 - Enough energy to meet the energy demand.
 - Energy Security (Lebanon)

Solutions:

- > Supply side
- > Demand side.

最略色的能源 是 省下来得能源

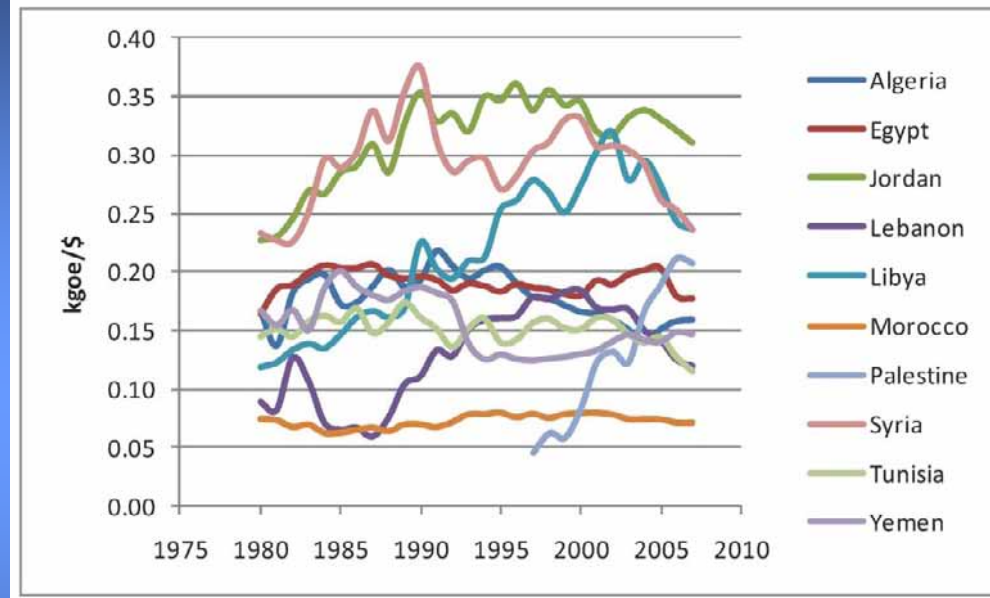
Energy Intensity

> rising in MENA region

Negative results

- Pollution of the environment
- High incremental costs for the state subsidies
- Impediments for modern advanced technologies
- Restricted exports access

Figure 1 Energy intensity kgoe/\$ GDP at market prices in US\$ (2005)



Source: RCREEE, 2010

Reduce Impact of fossil Energies > Renewable Energy

Lebanon 12% in 2020

- PV, Wind, Hydro, Geothermal - Electricity Generation
- PV And Wind Applications - Residential & Commercial Sectors
- SWH

Reduce Impact of fossil Energies > Renewable Energy

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Environmental Effects of Renewable Energy

- Wind
- Biomass
- Solar Energy (PV and CSP)
- Geothermal /
- Sea Tide

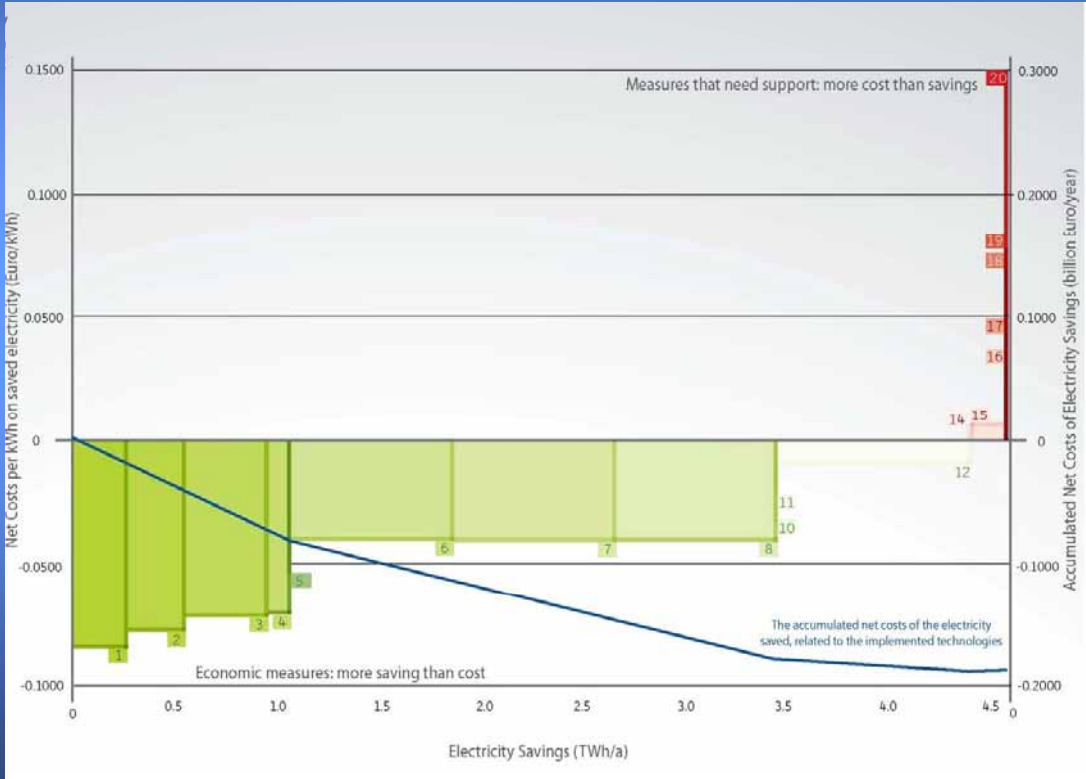
Demand Side



This project is funded by the European Union

Energy Saved > Cheapest Energy

- 1- CFL
- 2- Public lighting – LED
- 3- Programmable thermostats
- 4- EE compressed air
- 6- Low energy buildings



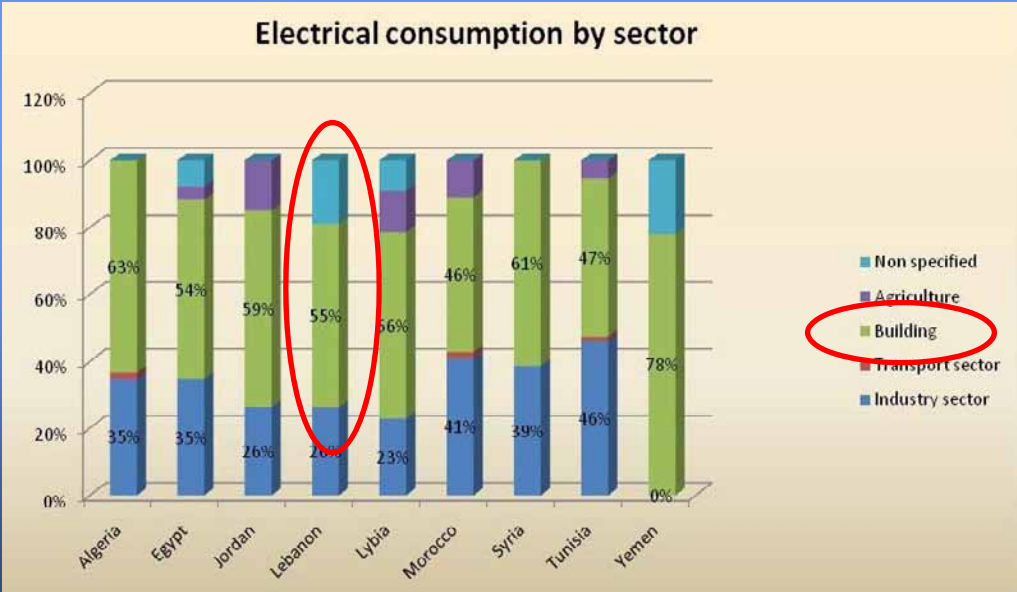
Source: LCEC, 2010

Demand Side



This project is funded by the European Union

Building Sector



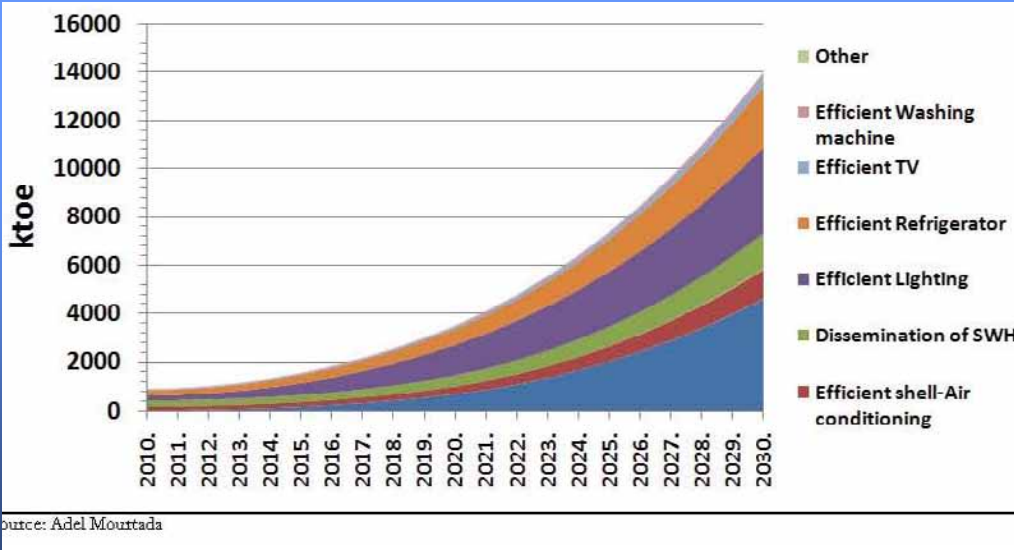
Demand Side Potential



This project is funded by the European Union

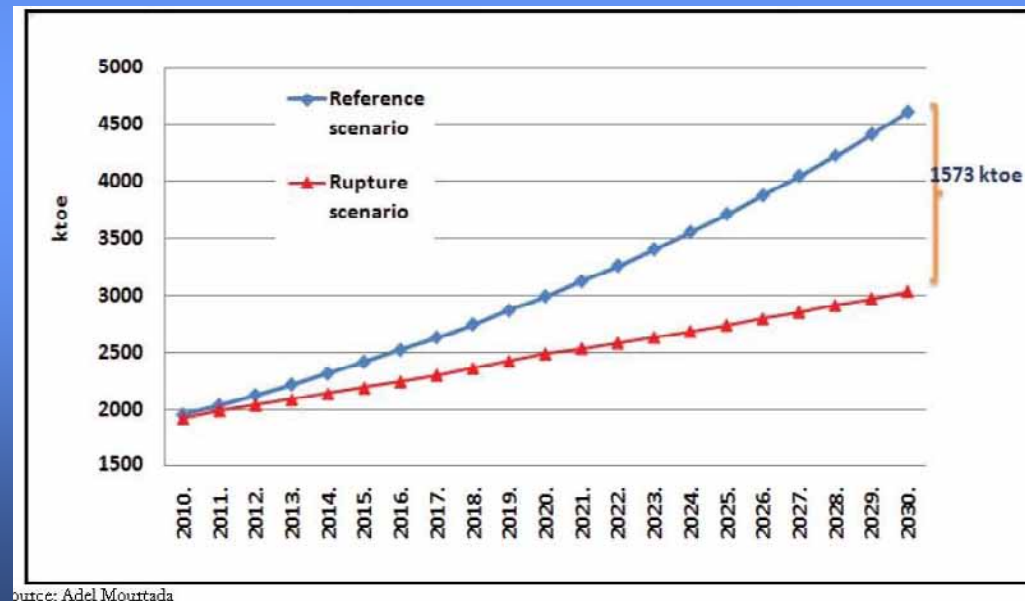
Building Sector

- Insulation (Roof & Walls)
- Double Glazing
- Shading
- Natural Lighting
- EE Lighting (CFL)
- EE Appliances
- SWH
- Efficient HVAC Systems



Building Sector Lebanon

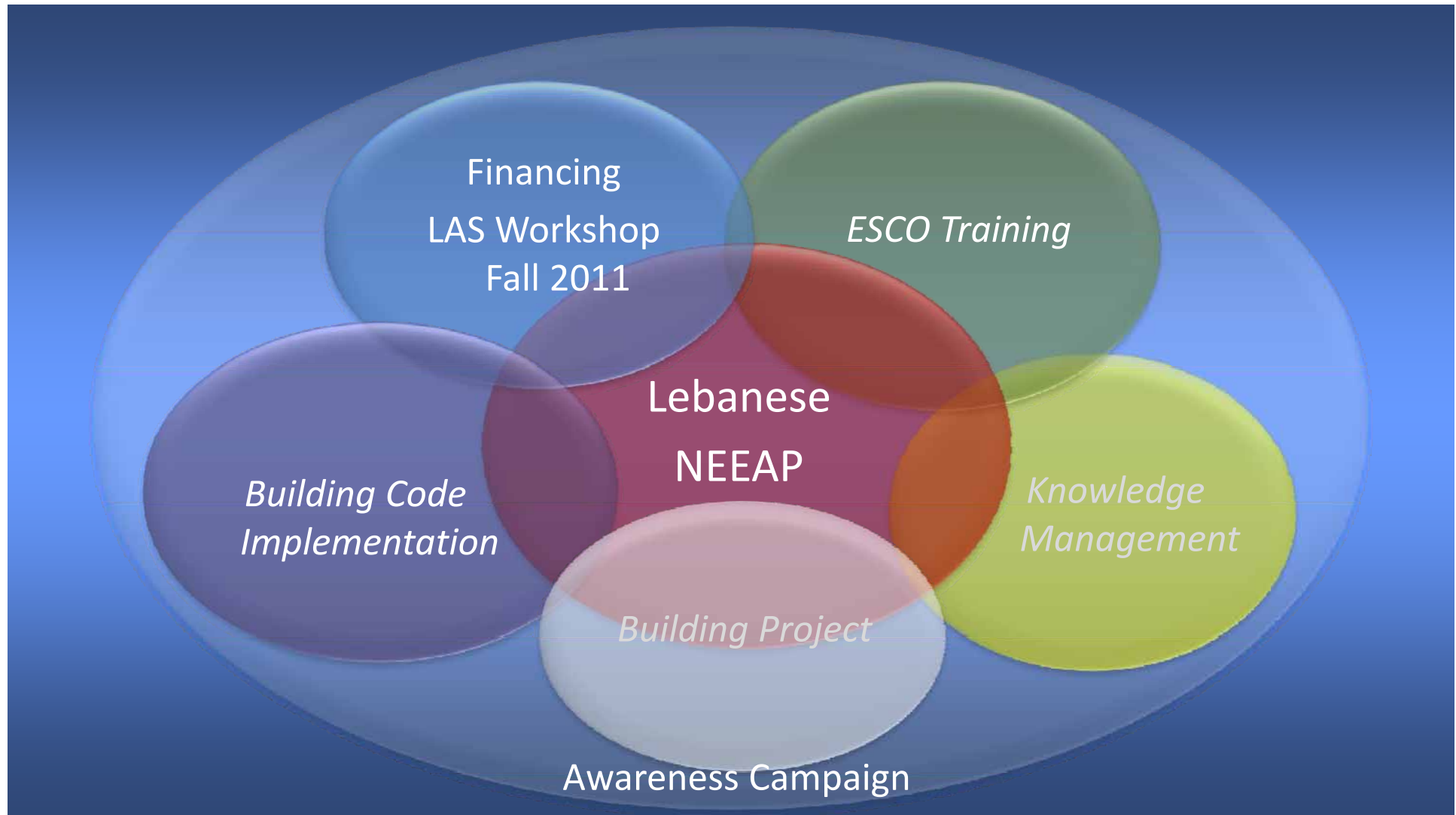
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- Double Glazing
- Shading
- Natural Lighting
- EE Lighting (CFL)
- EE Appliances
- SWH
- Efficient HVAC Systems



Source: Plan Blue, 2010

NEEAP

- Overall strategy on Energy Efficiency
- Organize and settle all work on Energy Efficiency in a systematic way
- Identify major processes, applications, sectors and cross- sectorial activities of relative and highest impact
- Identify economic and sustainable solutions
- Step into a process of continual improvement



Recent Developments in the field

www.med-enec.eu/ee-developments/neeaps

- Pilot projects
- Events
- Documents
- Business Database
- Finance Database
- Awareness materials



The screenshot shows the MED-ENEC website interface. At the top, there is a navigation bar with the MED-ENEC logo, the slogan "FACING THE ENERGY CHALLENGE", and the European Union flag with the text "This Project is funded by the European Union". Below the navigation bar, there are links for Home, Contact, News, FAQ, Links, Helpdesks, Registration, and Login. A search bar is also present. The main content area features a "MED-ENEC" section with a description of the project, an "Upcoming Events" section listing "Egetica-Expoenergetica/Ecoconstruction" from 16.02.2011 to 18.02.2011, and a "Welcome to MED-ENEC.com" section. A large image of a roof with solar panels is also visible.

Dr. Kurt Wiesegart

MED-ENEC II Team Leader & Expert Policy Dialogue

giz International Services

Thank you very much!

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