



Bu proje Avrupa Birliđi ve Trkiye Cumhuriyeti tarafından finanse edilmektedir.

This project is co-financed by the European Union and the Republic of Turkey

Binalarda Enerji Verimliliđinin Artırılması iin Teknik Yardım Projesi  
Technical Assistance for Improving Energy Efficiency in Buildings Project

# Introduction to the Project

**October 1st, 2015**

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*Daha az enerjiyle daha fazlasını yapmak*

*Doing more with less energy*



**NIRAS**





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# Objective

## ❖ The overall aim of the EE Strategy should be to improve:

- Security of supply
- Market competitiveness
- Environmental protection
- The economic situation (employment, business opportunities, etc.)





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# Purpose

- ❖ Better design of new buildings
- ❖ Establishment of refurbishment principles for existing buildings
- ❖ Scope:
  - ❖ Public buildings (administrative office buildings, schools, hospitals)
  - ❖ Residential buildings (detached houses, block of flats, residence complexes)





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# Consortium

## ❖ Lead of consortium



- ❖ NIRAS IC Sp. z o. o. belongs to the International Division (NIC) of the NIRAS Group, a consultancy and engineering company working with worldwide donor agencies
- ❖ NIRAS has more than 1400 permanent employees with working experience from more than 85 countries in Europe, Africa, Latin America, the Middle East and Asia





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# Consortium members



**Energy Saving International AS (ENSI)** is a Norwegian company that offers local and international consulting services in the area of: capacity building on energy, energy efficiency, renewables and the environment in developing and early transition countries



**Danish Technological Institute (DTI)** was founded in 1906, DTI is an independent, non-profit institution approved by the Danish authorities to provide technological services to business and the community.



**RAST Engineering Services Ltd. Co.** established in 1994, is based in Turkey providing services in infrastructural and environmental engineering projects. It also provides services in the energy, superstructure and transportation sectors.





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# Project Team

- ❖ 5 permanent Staff
- ❖ Pool of about 20 short term non-key experts (international and local)





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# Project phases



## ❖ Phase A: Research, Analysis and Preparatory works

- ❖ Development of a strategy on energy efficiency in buildings
- ❖ Improvement of secondary legislation, building codes and standards

## ❖ Phase B: Capacity building

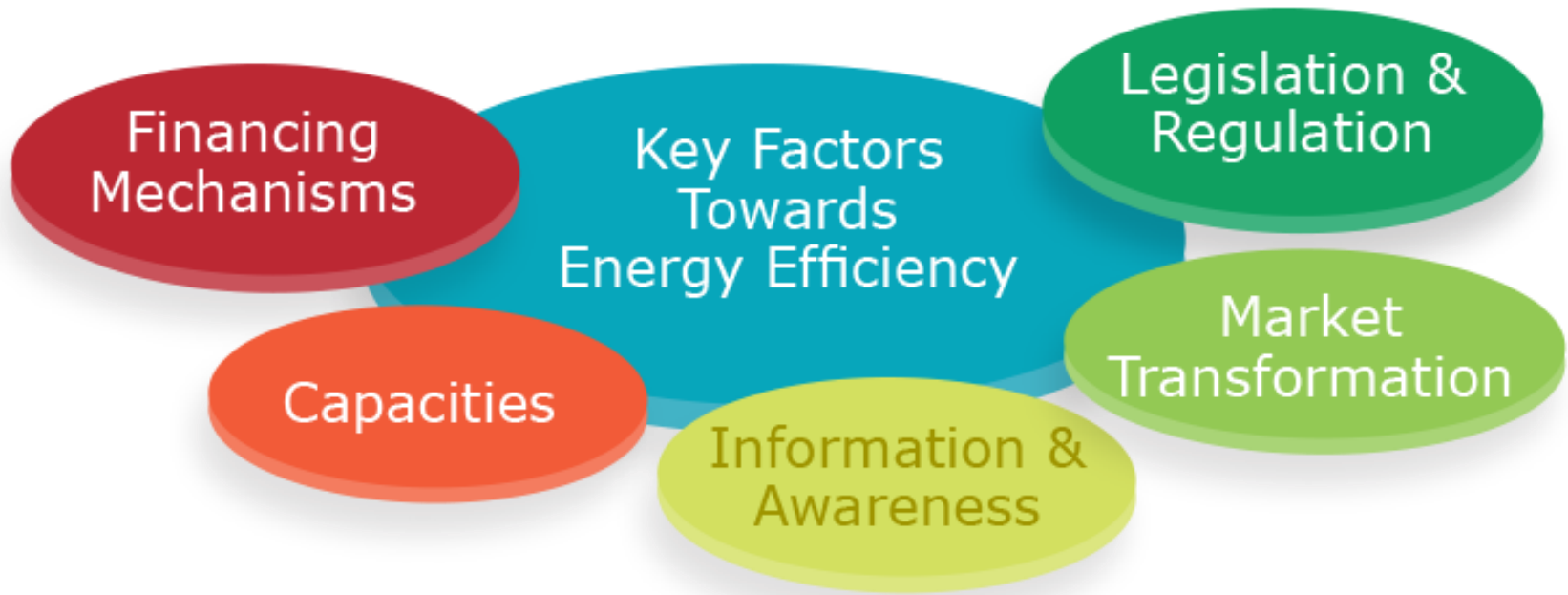
- ❖ Provision of tools and instruments to support enforcement of regulations
- ❖ Training and awareness raising





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# Implementing Energy Efficiency







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# Improving EE in Buildings

**Technical Issues**  
- standards,  
methodologies,  
typology

**Strategy Development** - legal requirements, financial instruments, institutional framework

**Capacity Building**  
- TNA, training, HR development, study visits, conferences (at all levels)

**Review of the current situation**

**Describe EU best practices**

**Identify gaps and needs**

**Consultation with stakeholders**

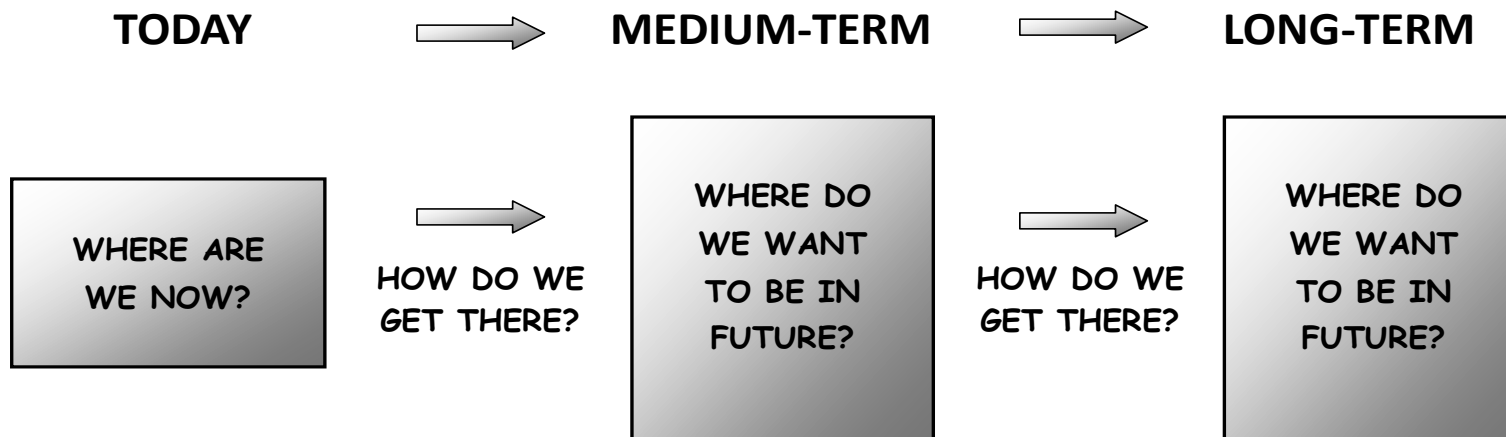
**Propose remedial actions**





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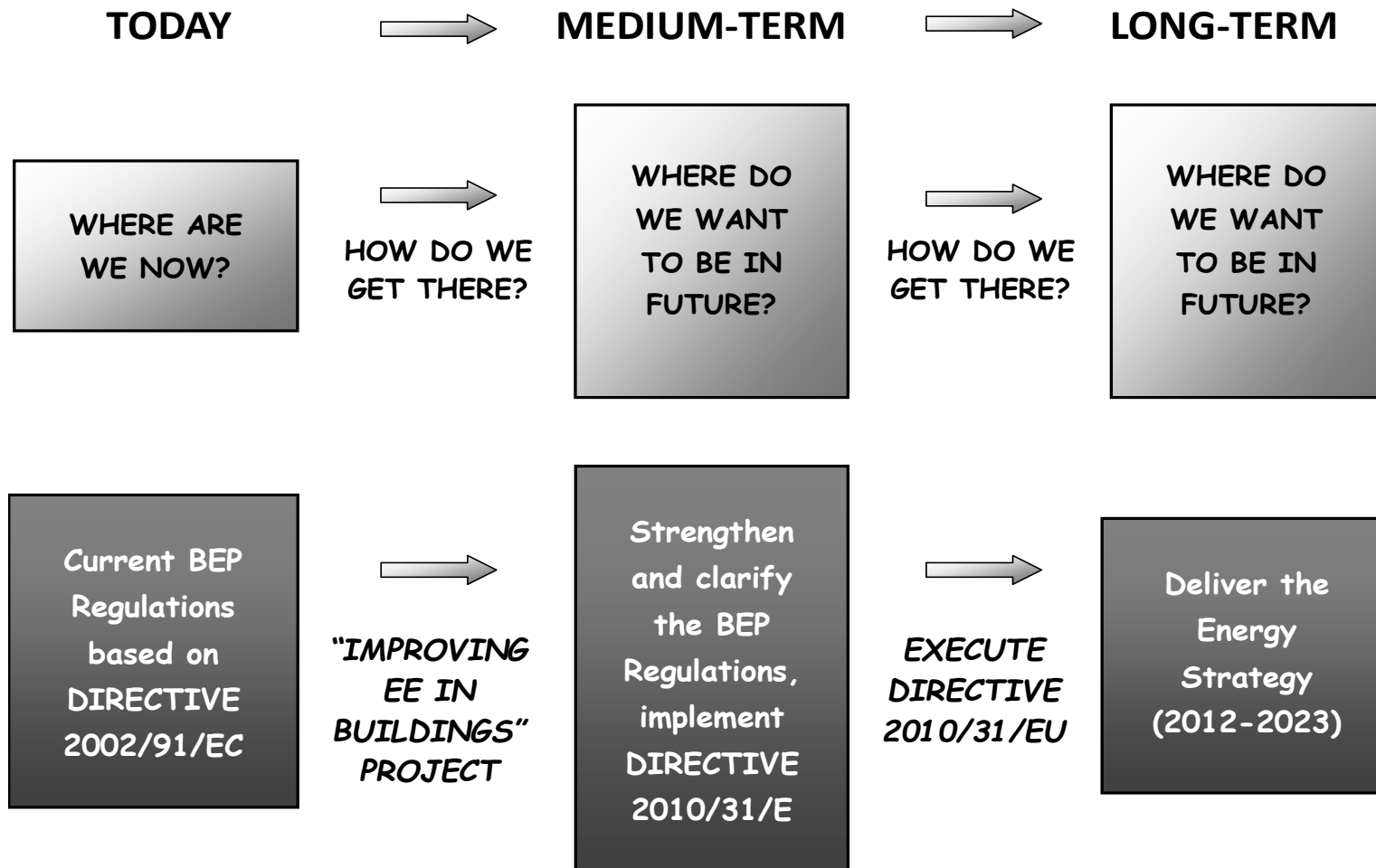
# Strategic Planning





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# Strategic Planning



Binalarda Enerji Verimliliğinin Artırılması için Teknik Yardım Projesi  
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# Energy Strategy Paper (2012 – 2023)

- **SG-01:** to reduce energy density and energy losses in industry and services sector,
- **SG-02: to reduce energy demands and carbon emissions of buildings; to generalize sustainable environment friendly buildings using renewable energy resources,**
- **SG-03:** to provide market cycle of energy-efficient products,
- **SG-04:** to increase efficiency in power generation, transmission and distribution; to reduce energy losses and hazardous environment emissions,
- **SG-05:** to reduce unit fossil fuel consumption of motor vehicles; to increase public transport share motorways, seaways and railways and to prevent unnecessary fuel consumption in urban transportation,
- **SG-06: to use energy efficiently and effectively in public sector,**
- **SG-07: to enhance institutional structures, capacities and cooperation; to increase advanced technology use and awareness raising activities; to establish financing environments**





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# BEP Strategy Objectives

The mix of measures will depend upon the Turkish Government' financial, fiscal and social policies:

**(a) Financial measures – financed from loans and credit line schemes or from multi-annual budget financing**

- Preferential loans
- Multi-annual accounting (public finance)
- Credit lines for SMEs and households
- Subsidies (from internal finance) and grants (from external finance)
- Loan guarantee schemes for private banks (external finance)
- Energy price reforms





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# BEP Strategy Objectives

## **(b) Fiscal measures – activities financed and/or stimulated by the use of tax policy**

- Carbon, energy or environmental taxes
- Tax rebates (VAT, investment incentives)

## **(c) Delivery mechanisms – dependent on the availability of specific assistance or imposition of various legal obligations**

- TA for (a) project identification and (b) preparation of loans or public procurement documentation
- ESCO market, with performance contracting and third-party financing
- Legal obligations for utilities (possibly including trading certificates)
- Energy-efficiency funds (especially revolving funds)
- Non-financial incentives/voluntary agreements





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# BEP Strategy Objectives

## **(d) Institutional arrangements – BEP activities developed/managed by public institutions**

- MoEU, MENR, Turkish Energy Efficiency Agency?
- Public ESCOs

## **(e) Technical standards and definitions**

- Definition of requirements for new buildings and implementation procedures
- Definition of principles for energy efficient refurbishment which can be quantified and verified
- Definition of typical buildings for energy performance assessment and setting up of a building data inventory (use for policy making and long term strategy)





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# Capacity Building

- Short term:

1. Training needs analysis related to the existing framework (enforcement the current BEP regulations,
2. Providing knowledge for MoEU Staff and other stakeholders.

- Long term:

Development of HR strategy in line with the overall BEP strategy.







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# Capacity Building Training for MoEU

- 1 day training for MoEU officials;
- 4 x 3 days sessions to be held in Ankara (for MoEU Staff from 4 climate zones)

*Objective: to train working staff of the MoEU (central and provincial departments) to enable them on the implementation of the BEP with particular focus on the compliance of EE standards.*





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# Capacity Building Training for Trainers (MoEU)

- 3 days session (in common with B1)
- 1 day extra training on BEP
- 2 days on didactics

## Objectives:

- *to train a group of 25 experts of MoEU to become trainers for provision of follow-up training on BEP implementation subjects.*
- *to develop highly skilled and experienced local instructors to deliver the future training for on BEP implementation.*





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# Capacity Building

## Study Visits to EU

1. Denmark/Poland
2. Italy/France (Spain)

### Objectives:

- *to demonstrate to the participants best practices in Member States in the implementation of EU EPB directive;*
- *to expose the participants to dialogue with policy makers and public institutions involved in implementing EU BEP legislation;*
- *to expose the participants to the lessons learnt in the accession countries;*
- *to explore institutional set-up and capacity building issues for implementation of EU EPB directive.*





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# Capacity Building Regional Seminars

2 days seminars in: Ankara, Antalya, Istanbul, Erzurum, Samsun, Gaziantep.

October 2016

## Objectives:

- *integrate regional stakeholders into the legislation revision process,*
- *consult local stakeholders (not only public administrations), consider their SWOT and build consensus, commitment and support.*





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# Capacity Building International Conferences

13 participants from MoEU staff participating in  
8-9 international events  
(1-2 experts at one event)

*Objective: to assist the MoEU in development and extension of international cooperation.*





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# Thank you for your attention



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