



Energy in SEE  
- focus on RE and EE  
- EIB contribution

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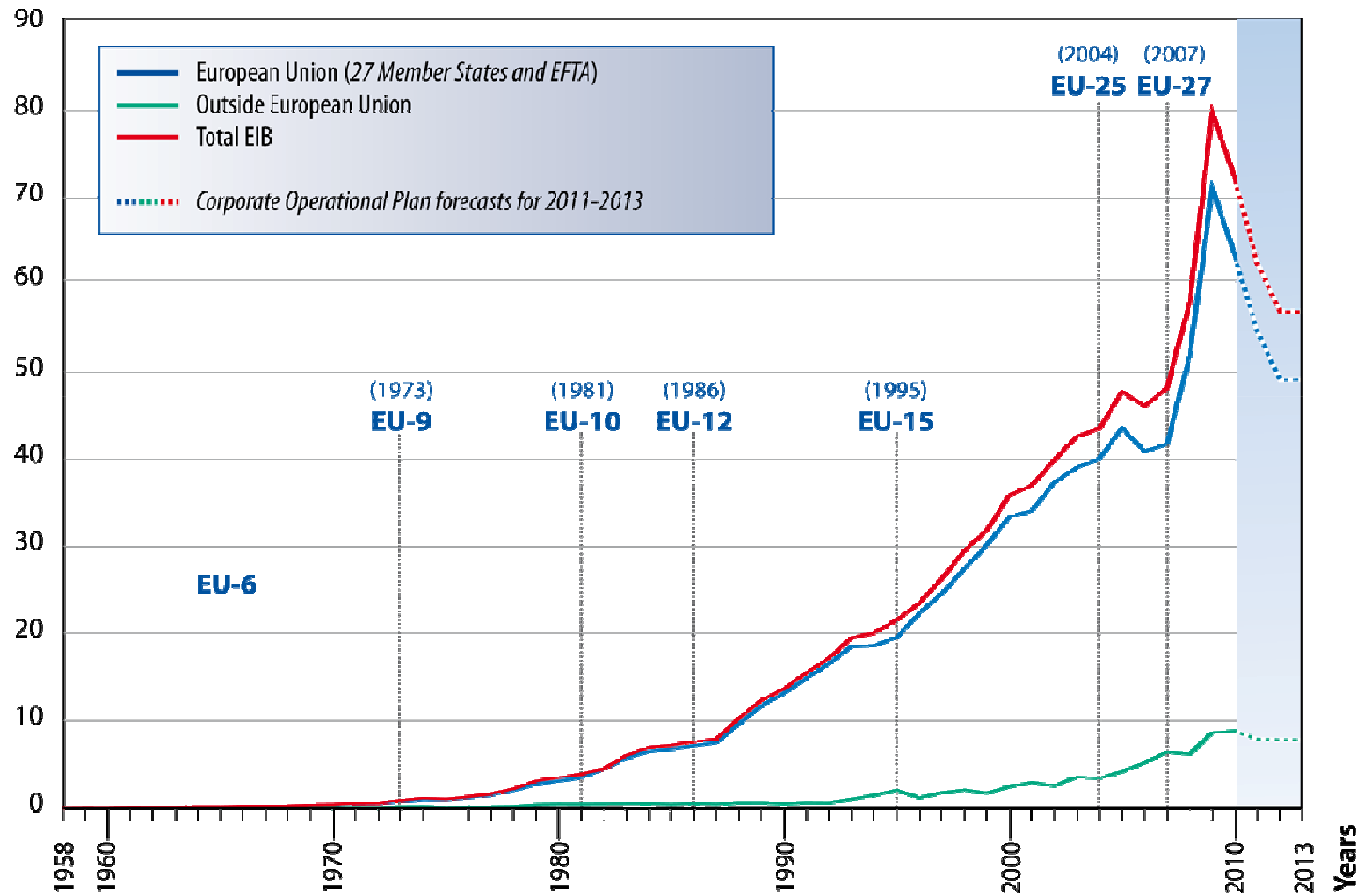
## The European Investment Bank (EIB)

Long-term finance promoting European objectives

- European Union's long-term lending bank set up in 1958 by the Treaty of Rome.
- Shareholders: 27 EU Member States
  
- Outside EU, under EU Mandates:
  - Pre-Accession
    - Candidate Countries: Croatia, Turkey and Former Yugoslav Republic of Macedonia
    - Potential Candidate Countries – Western Balkans

# EIB Signatures 1958-2010

EUR bn





### The EIB's climate action focuses on:

- low-carbon investments that mitigate greenhouse gas emissions
- climate-resilient projects that improve adaptation to climate change impacts.
  
- Loans of EUR 20.5bn in 2010 for:
  - energy,
  - transport,
  - water, wastewater, solid waste,
  - forestry,
  - research, development and innovation (RDI).



## Value added

- ❖ Value added of the Bank's lending activities:
  - ❖ Support for EU priority objectives
  - ❖ Project quality and soundness
  - ❖ Financial benefits of EIB funds
  - ❖ Technical assistance - VA through project assessment



## Instruments: Financial



- Broad range: from senior loans to equity
  - Loans to large individual projects: i.e. off-shore wind
  - Global & Framework loans to finance small-medium sized projects
  - Outside the EU: EU mandates and sustainable energy facility
  
- Specific instruments:
  - RSFF, Marguerite, NER300, carbon funds, GEEREF, Energy Efficiency Finance Facility (WB and Turkey), Green for Growth, etc.



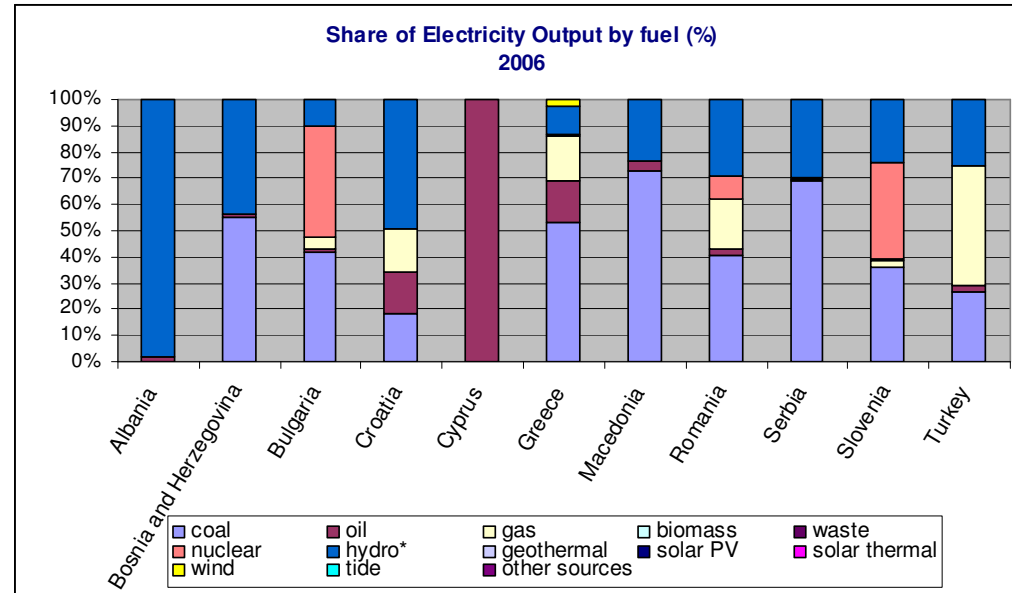
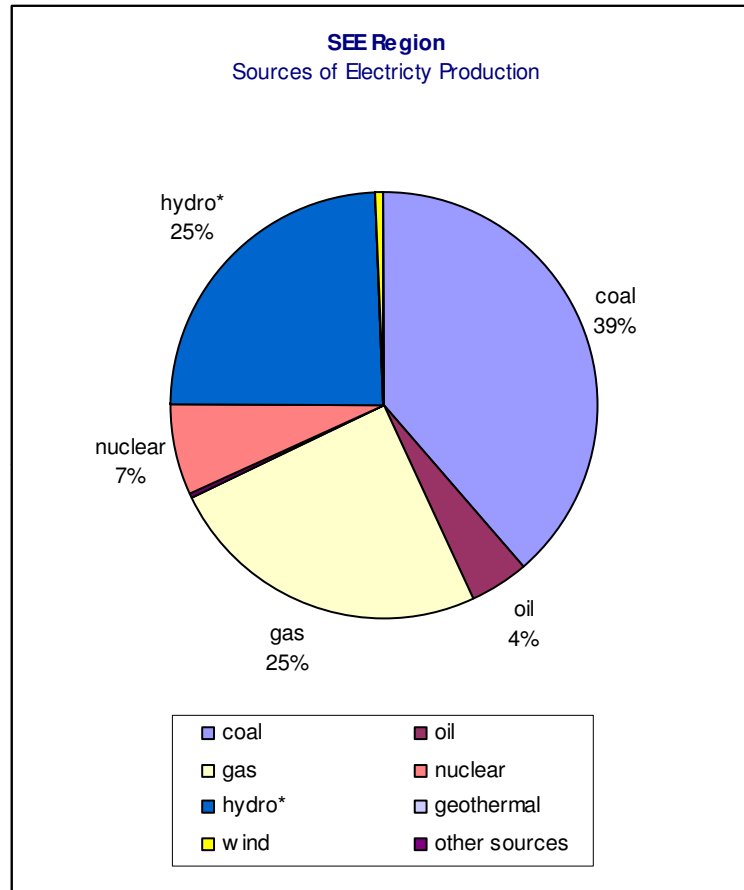
## Instruments: Advisory services



- Fast expansion of advisory services
  - Jessica: urban funds using structural funds
  - Elena: EE&RE in the urban environment
  - Jaspers: project preparation for EU structural funds
  - Other TA (mainly outside the EU) e.g. Mediterranean Solar Plan, WBIF



# SEE – diversity in electricity generation structure

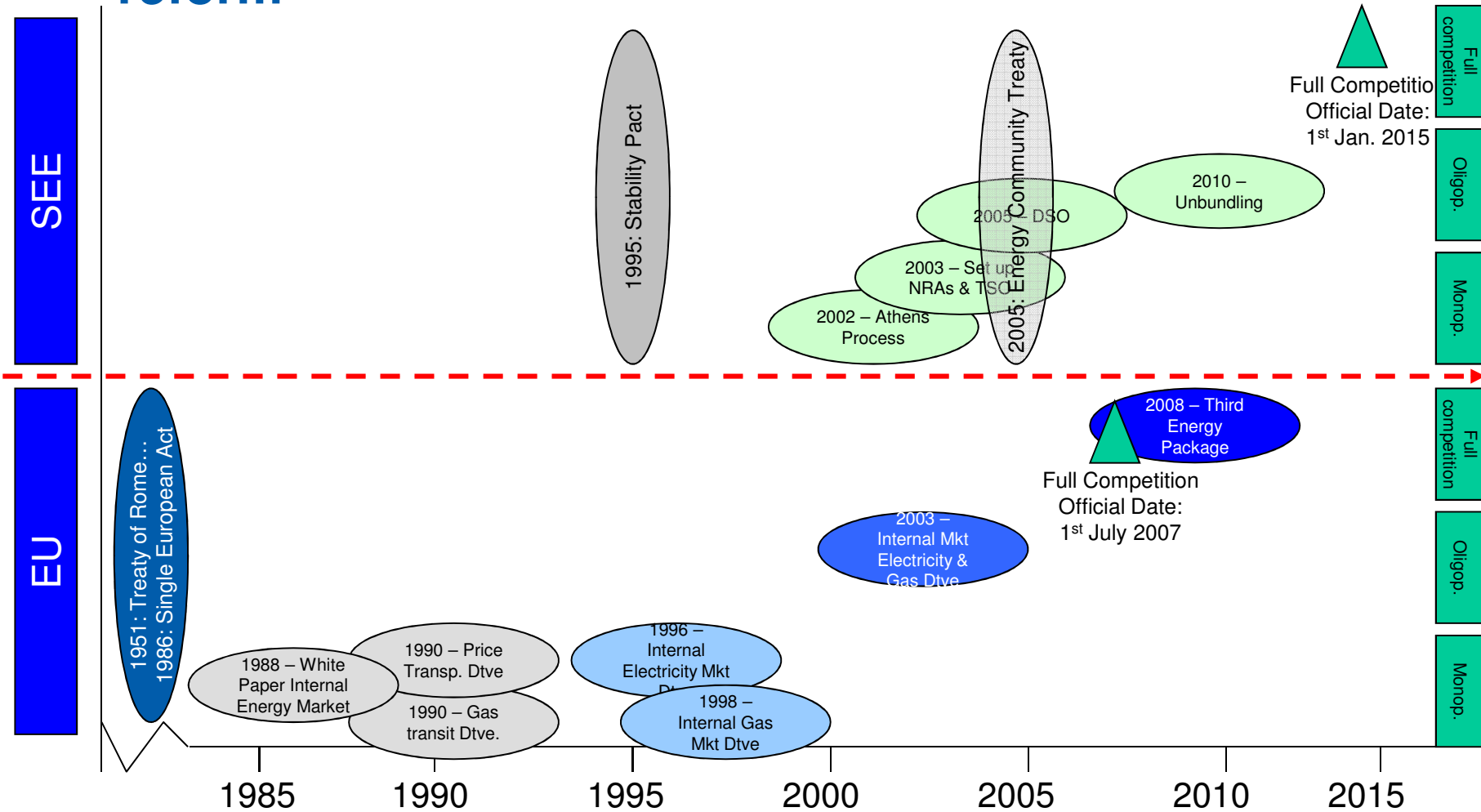


- ✓ There is considerable diversity across countries.
- ✓ Compared to EU the region as a whole is dependant on imported energy, larger share of coal and hydro, less nuclear and RE
- ✓ Very low share of renewable sources of energy other than hydro





# The region is behind EU in the energy market reform





## Benefits from a Regional Energy Market



### Security of Supply

- ❖ Diverse resource endowments and generating technologies across the region will offer greater resilience to external shocks provided there is adequate interconnection capacity.

### Prices and improved services

- ❖ Regional markets also typically support the development of competitive services and cost-reflective prices by reducing market concentration enjoyed by national incumbents.

### Environmental sustainability

- ❖ Regions relying heavily on coal generation could import from States with surplus power generated from renewables while providing reserve capacity, thus minimising CO2 emissions.

### Investment Certainty

- ❖ A regional and coordinated approach, with sufficient institutional capability, could contribute to transparency and market certainty.

Energy is crucial for future growth and development so transition to a regional energy market should be the path to follow



## SEE need to comply with the EU energy policy

- The EU policy defines a transition path to a more sustainable, competitive and secure energy system;
- Developing renewable energy and energy efficiency main way to achieve these objectives;
- Increased energy investment required particularly in the electricity sector;
- **EU 2020 targets:**
  - 20% less greenhouse gas emissions compared to 1990
  - 20% energy consumption from renewable energy
  - 20% reduction in primary energy compared with projected levels using energy efficiency
  - 10% renewable share in transport sector (inc. from EV)



## EIB in supporting the EU energy policy



- ✦ Five priority lending areas:
  - Renewable energy
  - Energy efficiency
  - RDI in energy
  - Diversification and security of internal supply (inc. TEN-E)
  - External energy security and economic development
  
- ✦ EIB substantial experience in energy technologies
- ✦ Broad range of financial products
- ✦ Technical Assistance available for project preparation, mainly outside EU



## How can EIB support SEE to EU energy objectives

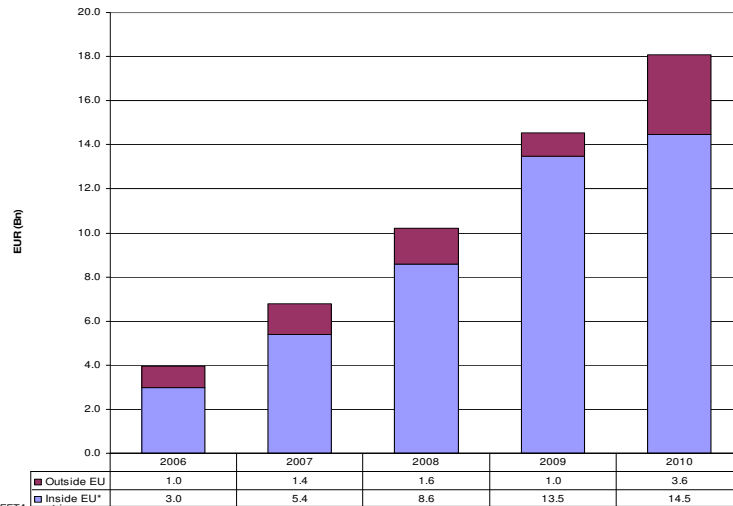
- Competitive financing
- Ensure project quality (environment, procurement, economic, etc.)
- Expertise to support development of priority projects or initiatives
- Support to national RE and EE Action plans
  
- EIB 2008-2010 energy lending in SEE: cca. 3 billion EURO
  - RE cca. 350 million
  - EE cca. 200 million
  - Rest for conventional generation and T&D projects



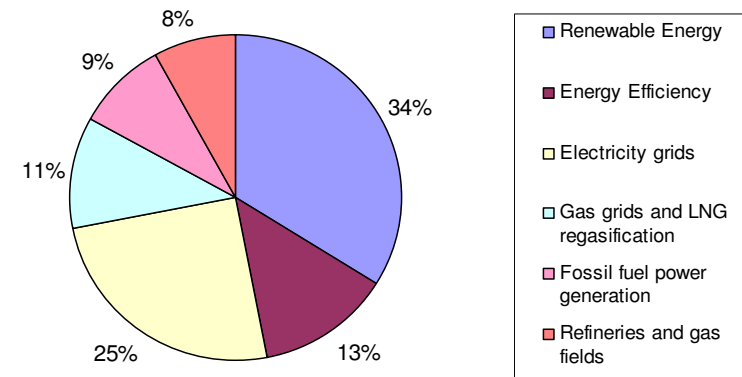
# Some statistics – EIB energy lending



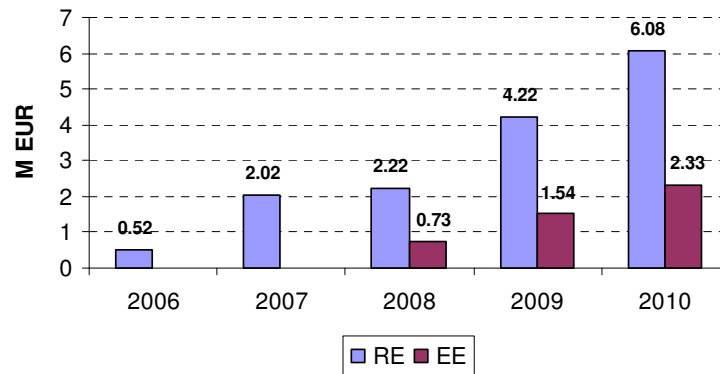
**EIB Energy lending 2006-2010: inside and outside the EU**



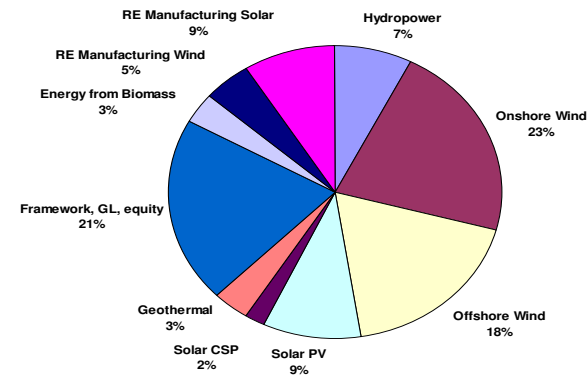
**EIB energy lending by sector in 2010**



**EIB financing of RE and EE 2006-2010**



**Renewable Energy lending by technology 2008-2010**





## Project requirements



Projects must:

- Meet at least one of the EIB's objectives
- Be technically sound
- Be financially viable
- Show an acceptable economic return
- Comply with environmental protection and procurement regulations



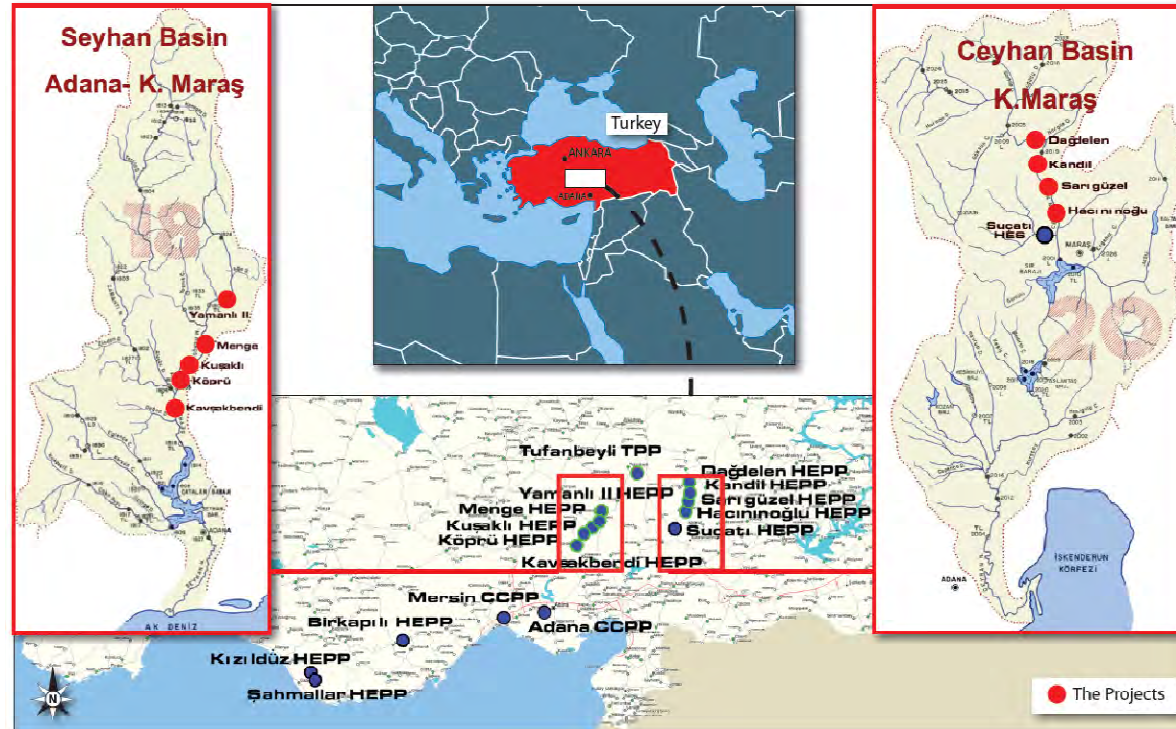
## Examples of EIB participation in financing RE and EE projects in SEE

- ❖ 8 hydropower plants (955MW) in Southeastern Turkey with associated reservoirs and dams
- ❖ Smaller run-of river and pump storage hydropower plants in Slovenia
- ❖ Large 82 MW wind farm in Cyprus
- ❖ Improving EE of residential buildings in Bucarest, Romania





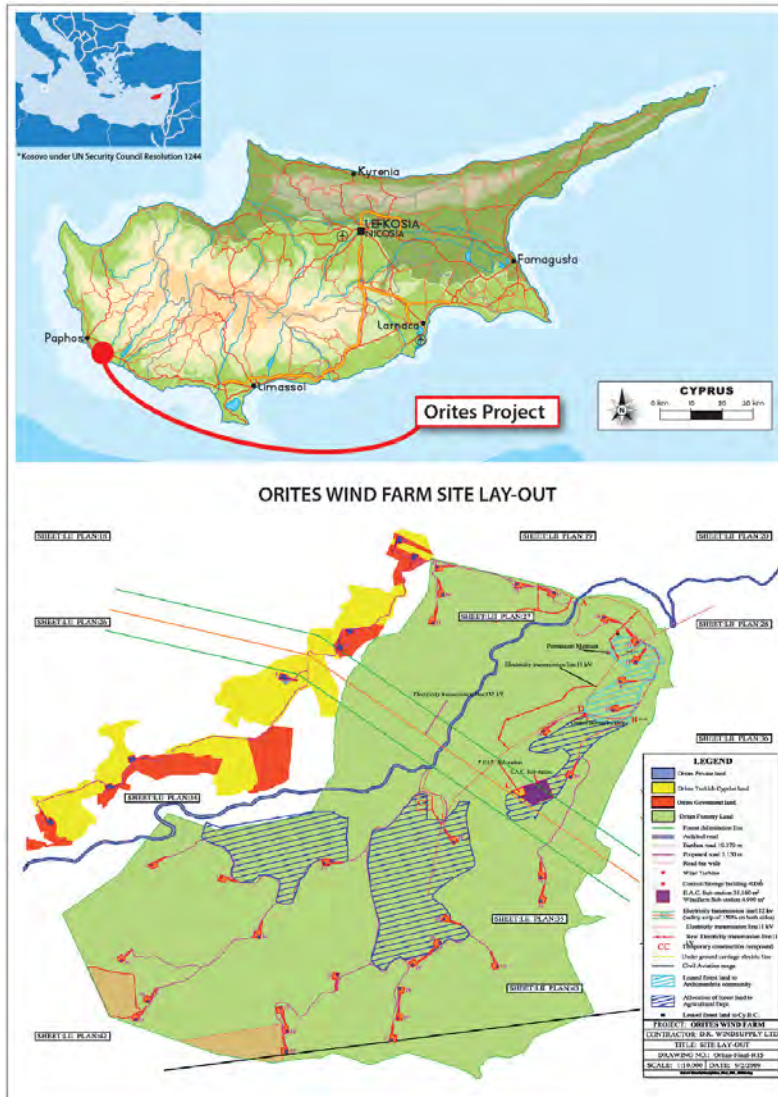
## EIB project example – Hydropower plants in Turkey



- ❖ Construction of 8 hydropower plants (955MW) in Southeastern Turkey with associated reservoirs and dams.
- ❖ Hydropower currently represents 20% of the electricity in the country and still has a high potential.
- ❖ The project aims to make a substantial contribution to sustainability and security of energy supply.



## EIB project example – Cyprus wind farm



- ❖ The project concerns the construction and operation of an 82 MW wind farm in Cyprus
- ❖ The project supports national and European targets for renewable energy and consequently also contributes to environmental objectives.
- ❖ Cyprus is relying mainly on wind to increase its current 2.9% share in RES to the 2010 target of 6% and the 2020 target of 13% proposed by the EU Commission.



# EIB project example – Thermal rehabilitation of residential apartments in Romania



Project: BUCHAREST S6 THERMAL REHABILITATION - Romania



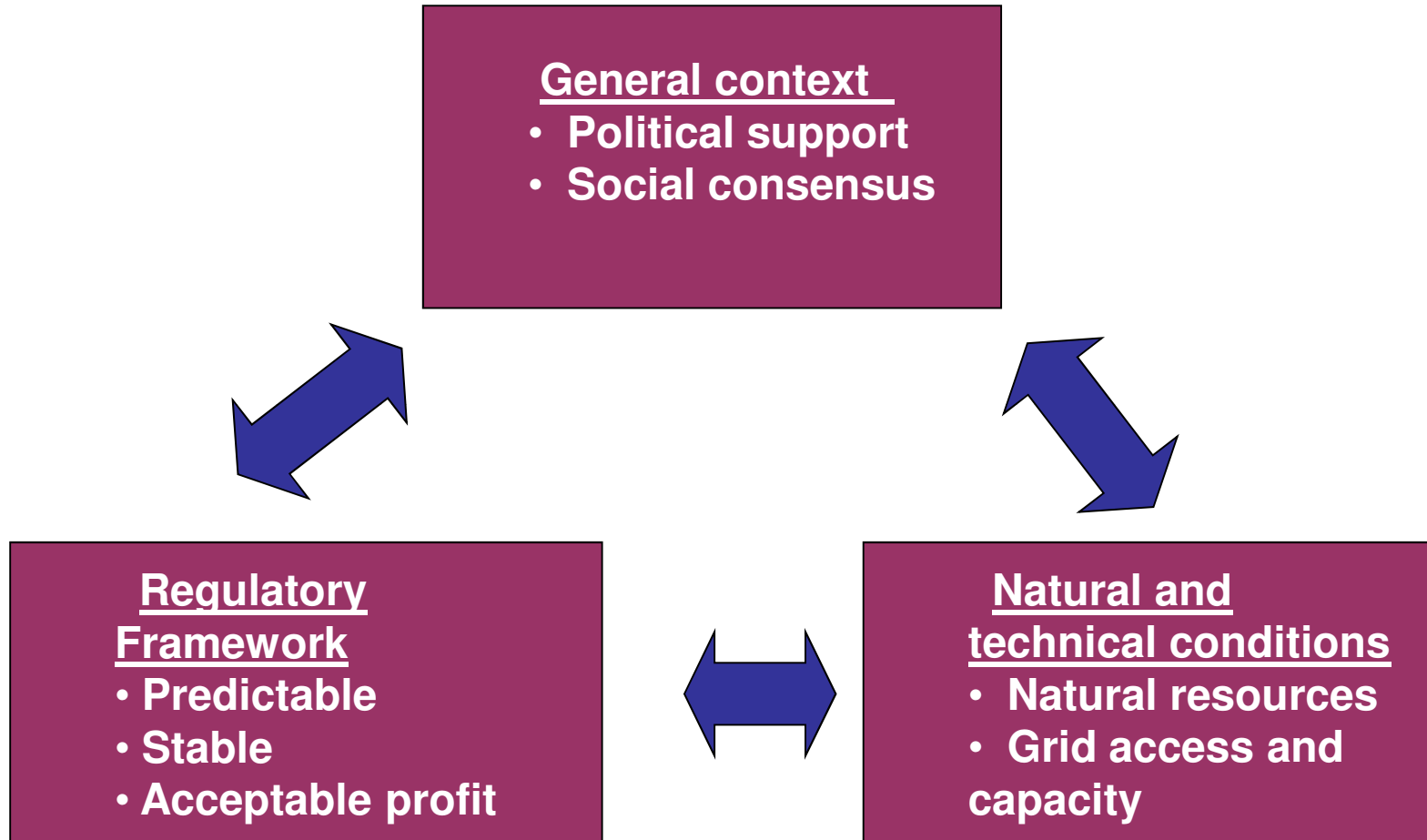
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European Investment Bank - Graphic Workshop - 1348 - RGR/701 11/2009

- ❖ The objective of the project is to renovate 270 buildings (23000 apartments) from 2010 until 2012.
- ❖ The project is expected to reduce the energy consumption of the buildings by around 50%.
- ❖ The project supports national and European objectives related to improving energy efficiency and climate change and security of energy supply objectives.



## Investment drivers





## Concluding remarks

- Large potential for investments in RE and substantial potential to improve EE in SEE
- Significant investments needed to renovate and integrate energy systems
- Energy market integration to be continued according to EU energy objectives
  
- EIB playing an important role
  - Competitive finance
  - Supporting renewable energy technologies
  - Supporting energy efficiency (EEFF, GfG)

