



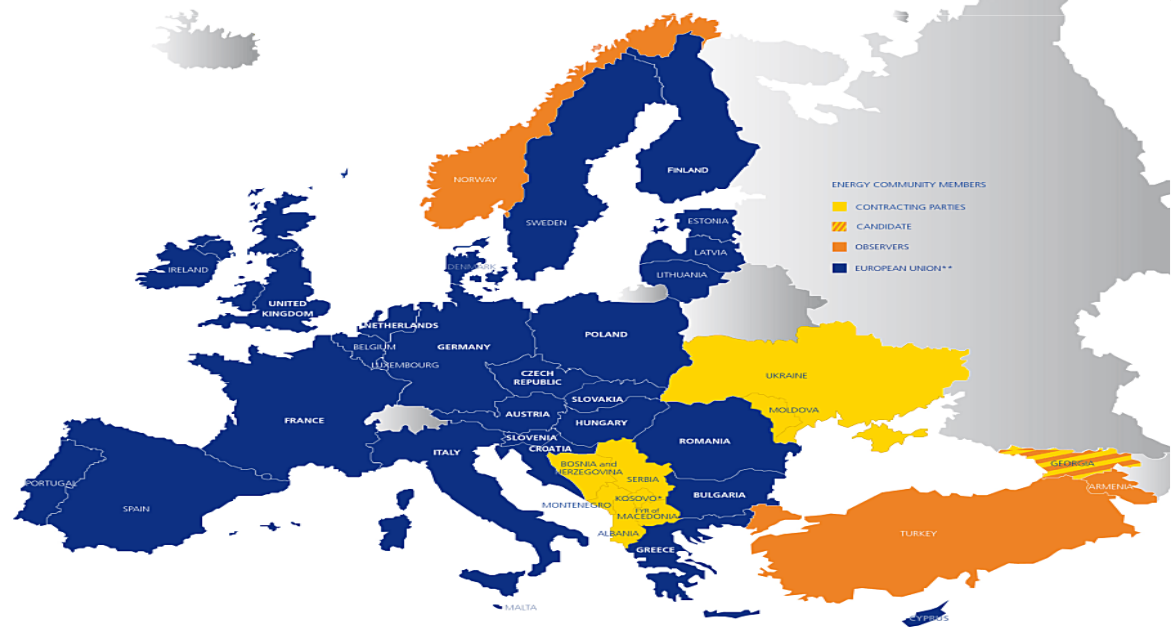
# Perspectives for EIB Renewable Energy lending in the Energy Community



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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: 28 EU Member States
- ❖ Policy driven bank – not profit driven
- ❖ Funds its operations by borrowing on the capital markets
  - ❖ Total lending volume in 2013: EUR 71 billion – EUR 64 billion in EU and EUR 7 billion outside (this includes EU Candidate and potential Candidate countries)
- ❑ Major funder of energy projects
  - 14% of the Bank's financing was for energy projects of which EUR 4.8 billion for RE



## Benefits of an EIB loan



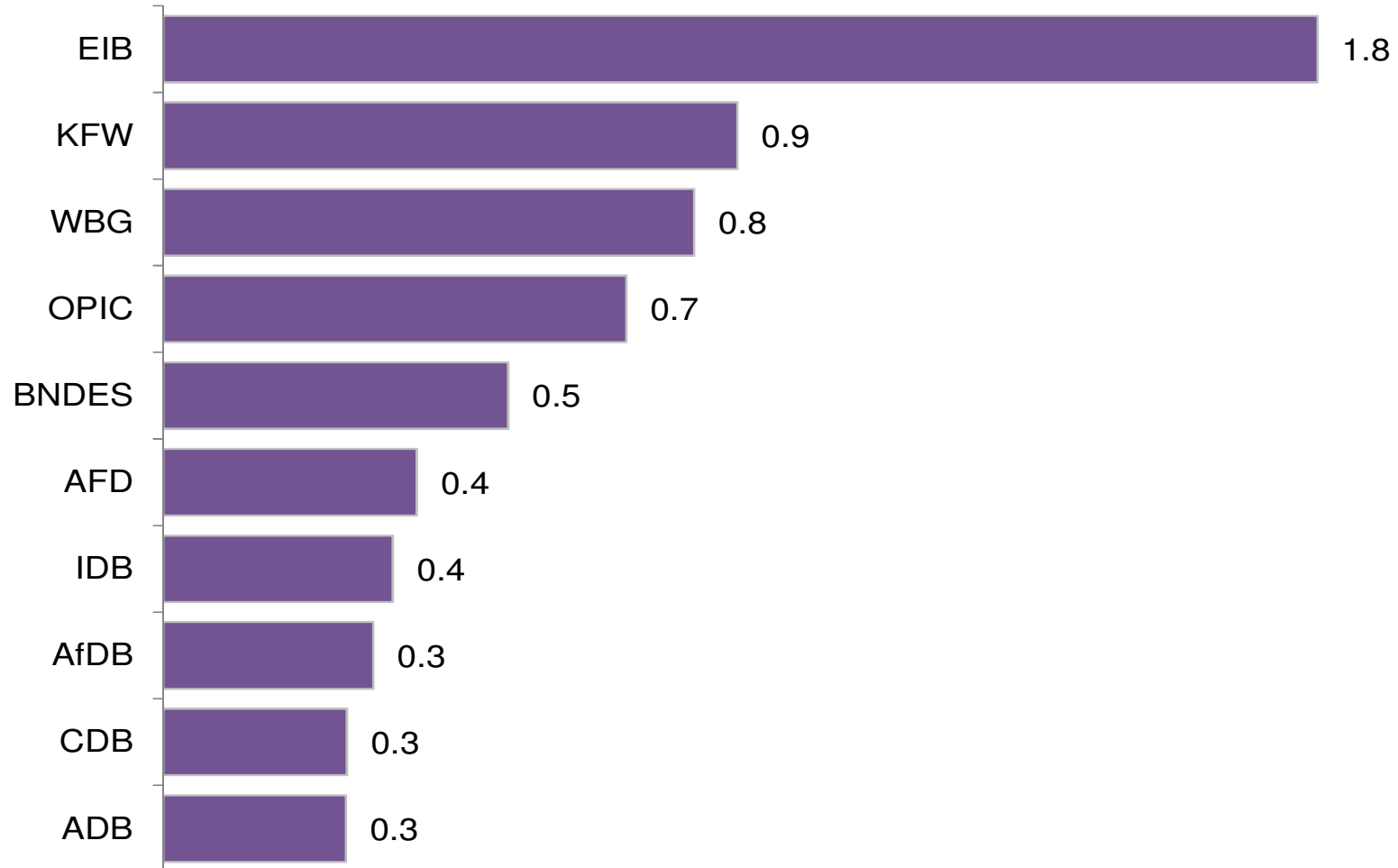
- Benefits of low cost of funding passed on to clients:
  - Large amounts
  - Long maturities
  - Attractive interest rates
  - Catalyst for participation of other banking or financial partners



- ❖ Loans to large individual projects
- ❖ Global & Framework loans to finance small-medium sized projects
- ❖ Specific instruments: RSFF, Marguerite Fund (TEN-E and RE), Green for Growth fund (EE), etc.
- ❖ TA Advisory services: Western Balkan Investment Framework (WBIF)



## Development bank Top lenders for new build renewable energy projects, 2013 (\$bn)



Source: Bloomberg New Energy Finance



## **EIB 2013 Energy Review and Lending Criteria** **Fully aligned with EU energy and climate policy**



Following extensive public consultation, EIB published a revised Energy Review in June 2013. EIB will support the development of clean, affordable and secure energy by:

1. Prioritising energy efficiency, energy networks, renewable energy and energy RDI projects (“No Regrets” Sectors)
2. Adopting an emission performance standards for fossil fuel generation consistent with EU climate policies



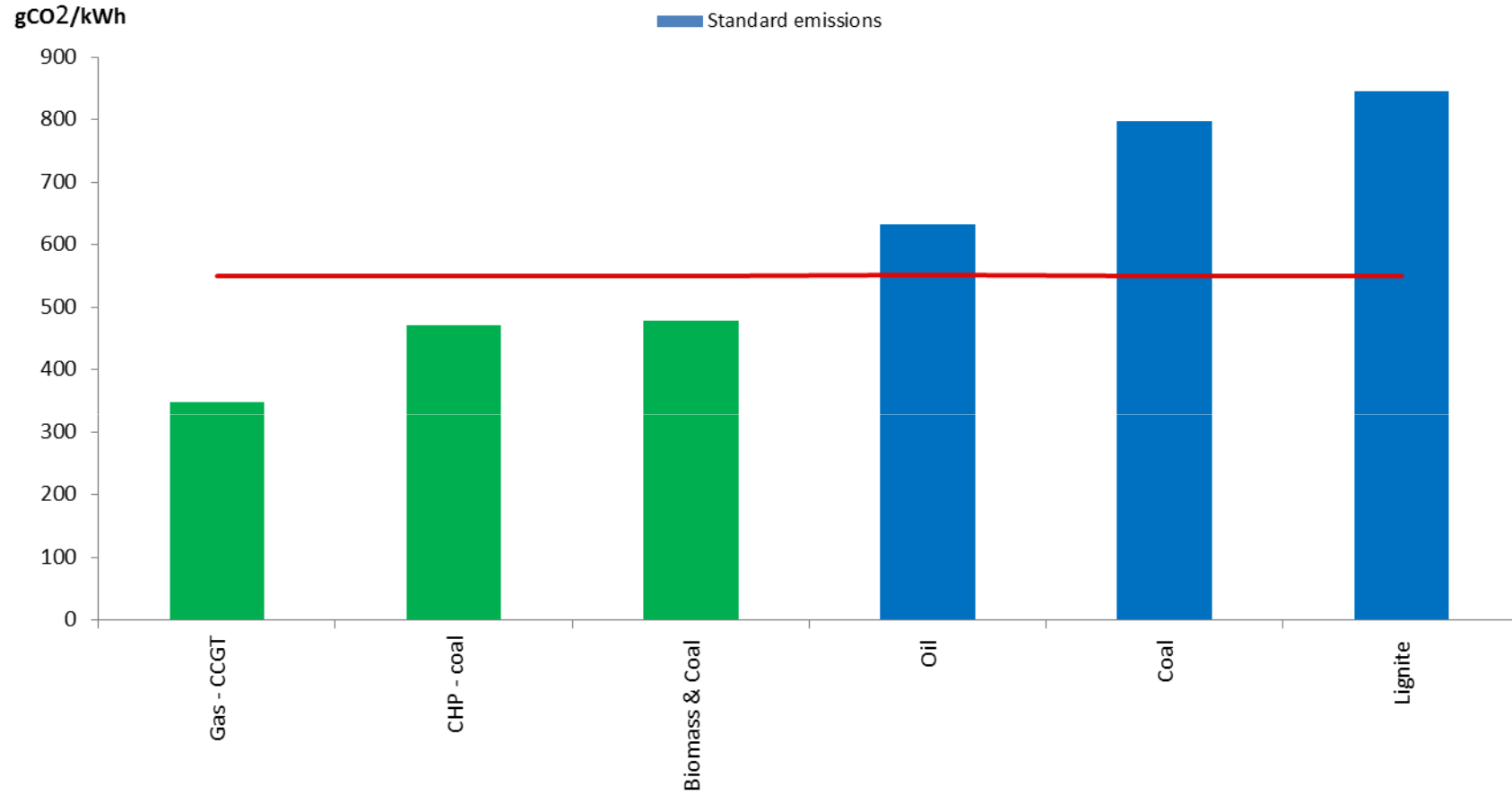
## EIB 2013 Energy Review and Lending Criteria concerning RE



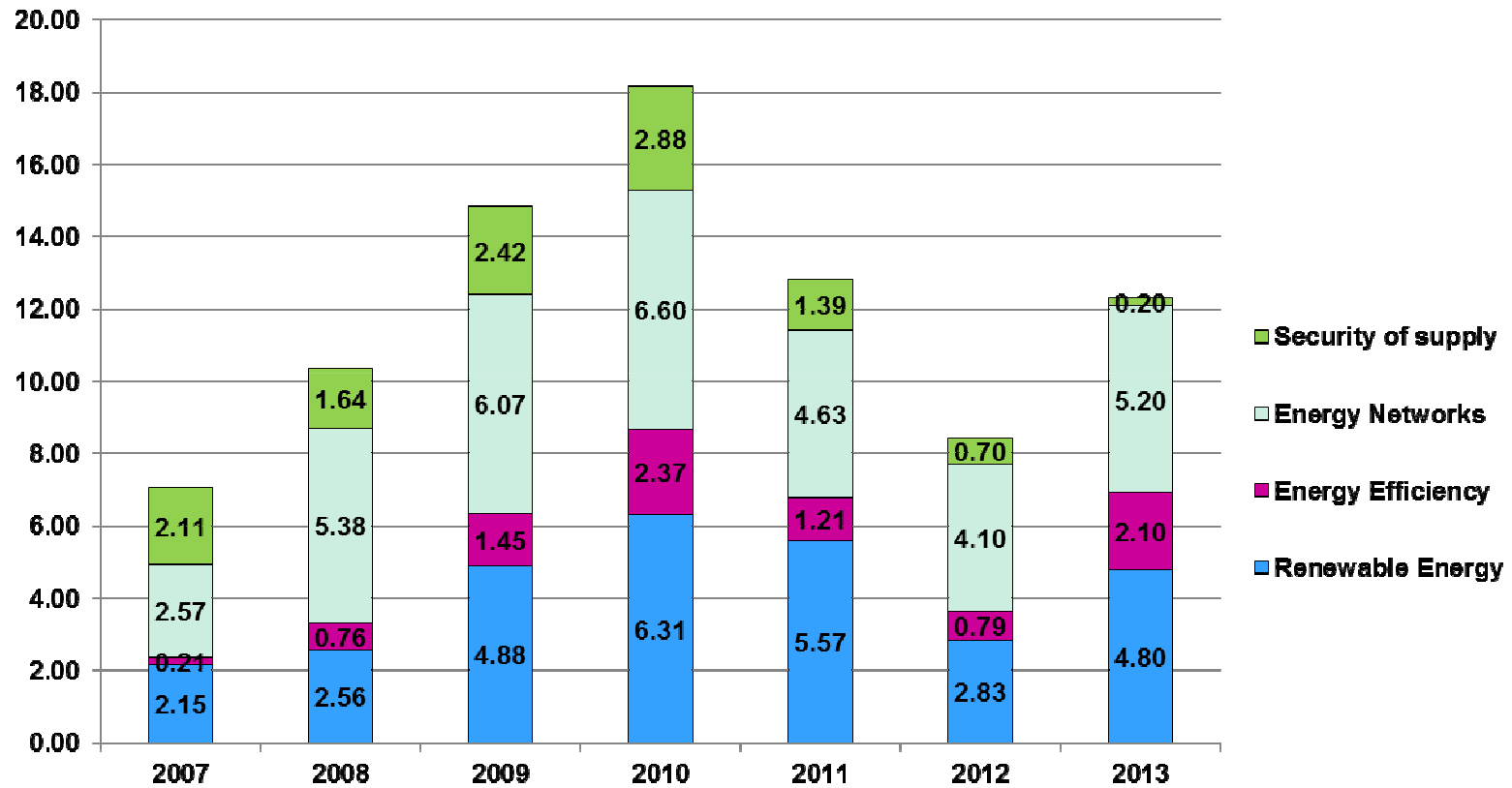
- ❖ Distinction between:
  - ❖ - Mature technologies : like onshore wind, hydro, geothermal and solid biomass
  - ❖ - Emerging technologies : like PV, CSP (Concentrated Solar Power), 2<sup>nd</sup> generation bio-fuels and offshore wind
- at global and EU level renewable energy (RE) is established as an essential part of power production. This trend is expected to continue with renewables becoming the world's second largest source of power generation by 2015 and accounting for a third of production by 2030. In the context of the current economic crisis, the key challenges for the EU over the coming years will be to:
  - **improve the affordability of RE for Governments and final consumers by reducing the cost of RE production;**
  - **fully integrate RE into energy markets; and**
  - **maintain investment at levels consistent with the 2020 EU climate objectives**



# Emission Performance Standards Fossil Fuels

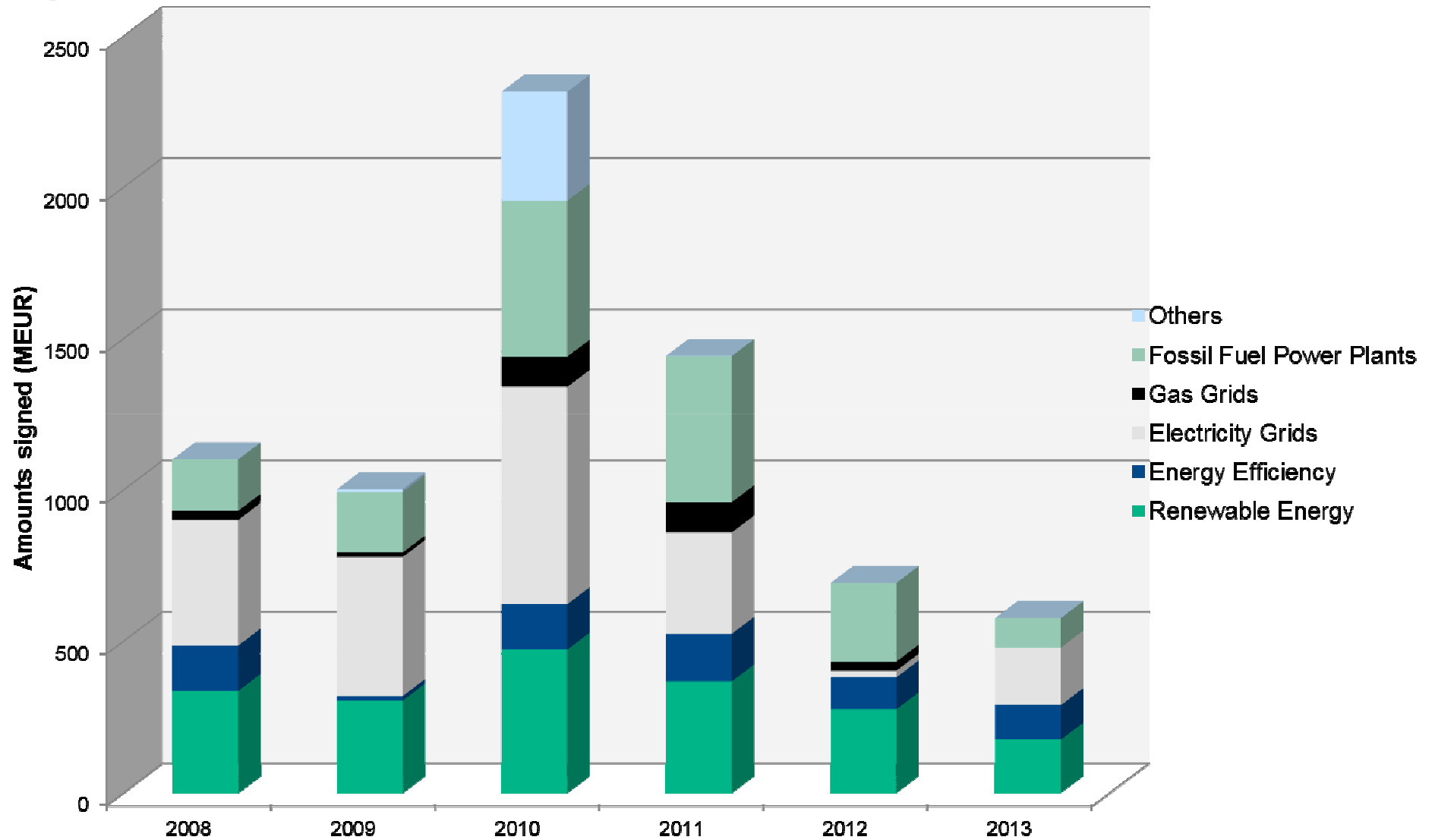




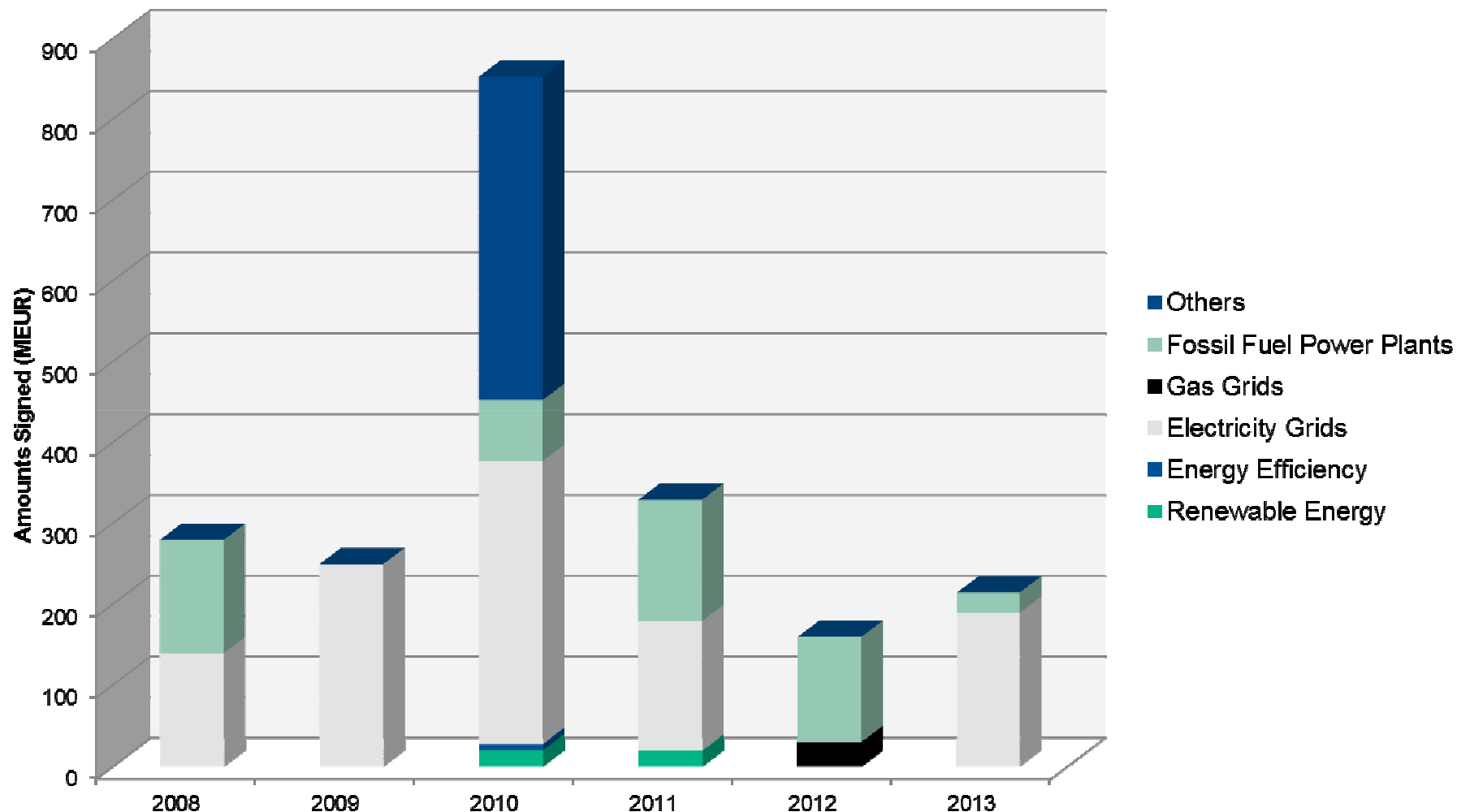


- 90% of EIB financing in RE / EE and gas / electricity networks

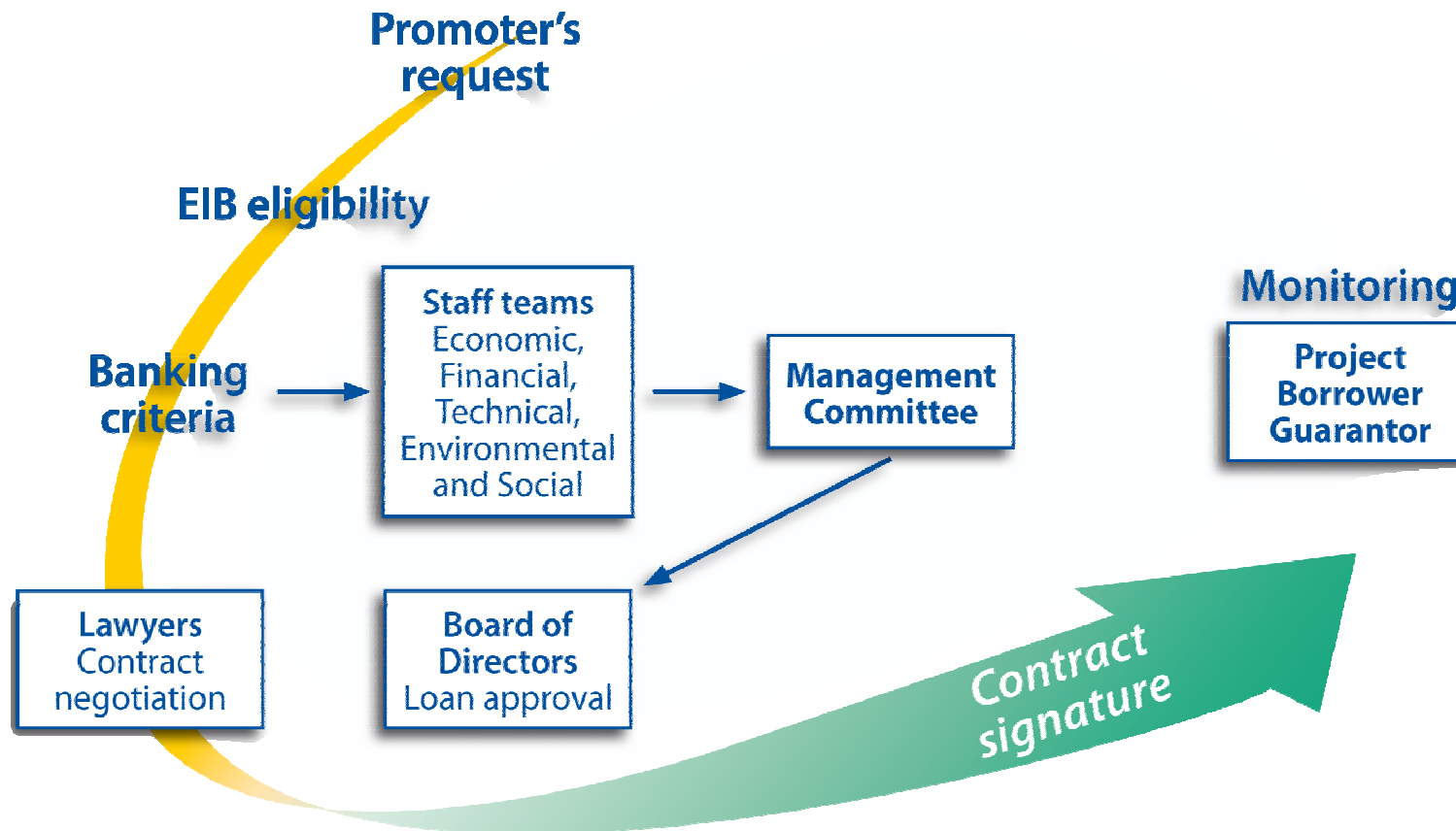
# EIB Energy Lending in SEE



# EIB Energy Lending in Greece



# The EIB project cycle





## Project requirements



Projects must:

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



## Typical EIB Technical Due Diligence for RE projects



Aspects typically covered are the following:

- Promoter/borrower: capacity, track record, creditworthiness, shareholders, strategy, project rights
- Project Site: location, ownership rights, purpose of land use, local permits
- Regulatory: regulatory framework, incentive scheme, grid connection/dispatch, PPA
- Technical aspects: technology, project design, resource study, grid connection
- Environment: EIA, screening decision, Natura 2000, cumulative impacts
- Contractual structure: supply, construction (EPC) and O&M contracts, procurement process, capacity of counterparts, guarantees and warranties of suppliers and main contractors, etc
- Project timing: permits and authorization plan, construction schedule, commercial operation date
- Financing: financing plan, equity participation, commercial banks participation, debt/equity ratio, debt service cover ratio, etc

Main project documentation that is normally assessed includes *inter alia*:

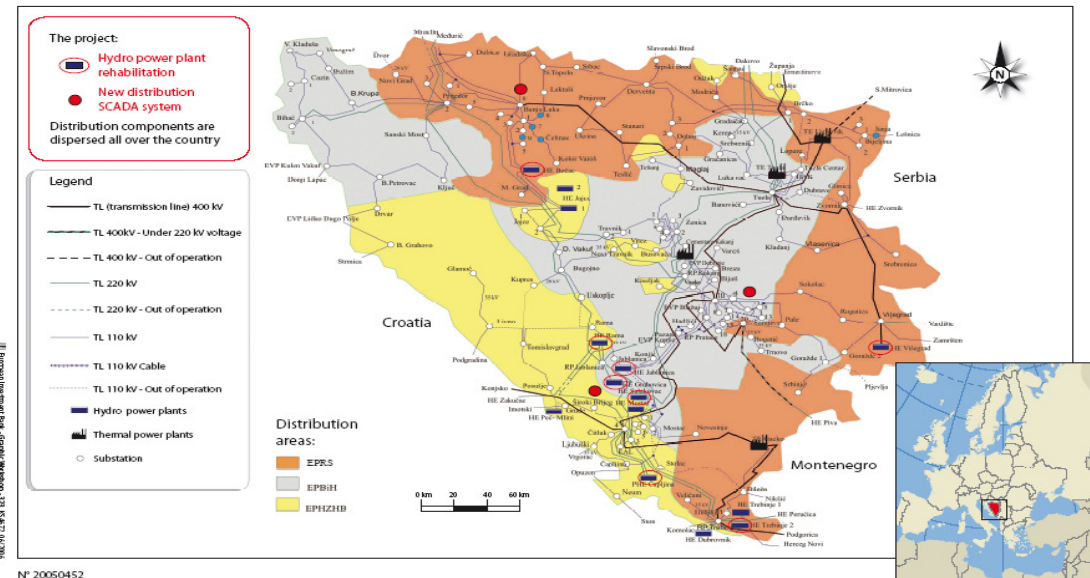
- Feasibility Study
- Project Information Memorandum
- Resource Assessment Study ( e.g. hydrology, wind or irradiation)
- Environmental Impact Study
- Project Permits
- Project Contracts (e.g. EPC, O&M)



# Projects example – Electric Power II Rehabilitation of HPPs and distribution facilities in BiH



Project: ELECTRIC POWER II - Bosnia and Herzegovina



## Rehabilitation of 9 hydropower plants in BiH

- ❖ repairs to address leakages at the hydropower dams of Rama, Trebinje II, Visegrad, Grabovica and Salakovac, and rehabilitation of the Kukovi landslide at the Jablanica HPP;
- ❖ augmentation of spillway capacity at the Bocac dam;
- ❖ rehabilitation or replacement of supporting equipment at the HPPs of Capljina, Rama, Visegrad, Bocac, Grabovica, Salakovac and Jablanica;
- ❖ rehabilitation of technical monitoring systems at the HPPs of Visegrad, Bocac, Jablanica (including for the Kukovi landslide), Grabovica and Salakovac;
- ❖ Hydropower currently represents around 50% of the electricity generation in 2013 and still has a high potential for development



## Projects example – HPP Vranduk in BIH



- Construction and operation of the new run-of-river, diversion type HPP on river Bosna in BIH with capacity of 20 MWe and
- Associated infrastructure including the connection to the national grid
- Comprehensive Environmental and Social Action Plan to ensure that project meets EIB E&S standards
- International PIU consultant to assist with project implementation
- The project is co-financed with EBRD with the aim to make significant contribution to sustainability and security of energy supply.





## Projects example – Green for Growth Fund Southeast Europe (GGF)



- ❖ **Financing Small-Scale Renewable Energy Projects** in the **Southeast Europe** region including **Turkey** and the **Eastern European Neighbourhood** region.
  - ❖ Hydro Power (<30 MW)
  - ❖ Wind farms (<30 MW)
  - ❖ Solar (thermal and photovoltaic)
  - ❖ Biogas / Biomass (no food-crops)
  - ❖ Geothermal Projects

## Projects example – TA under Western Balkan Investment Framework (WBIF)



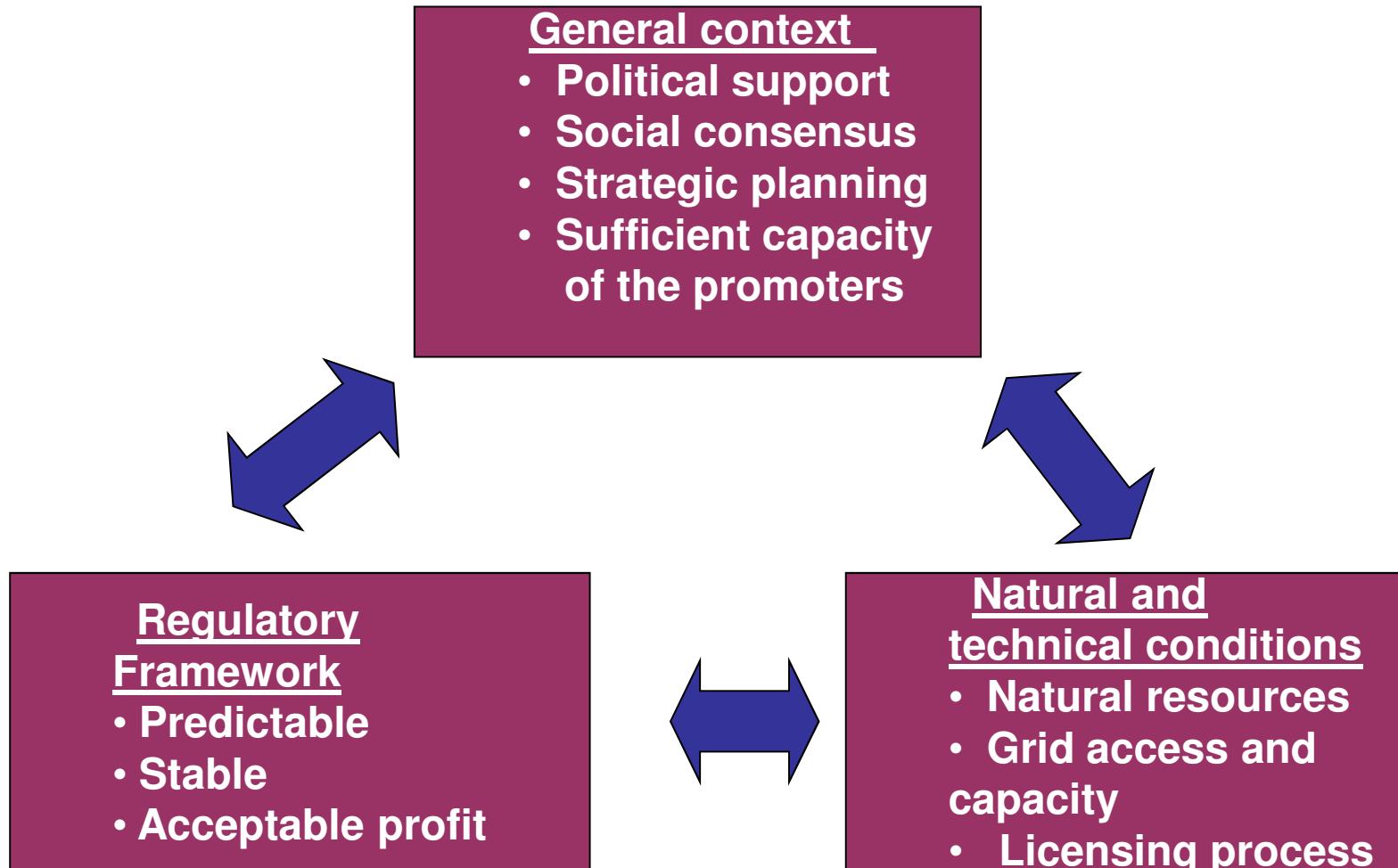
- ▣ TA for financing preparation of Feasibility study including Technical Design, Environmental and Social Impact Assessment and Tender documentation for construction works

### Examples of TAs for projects:

1. Irrigation and Hydroelectric Power Scheme Zletovica, HS Zletovica, FYROM;
2. Wind farm Poklecani EPHZHB Bosnia and Herzegovina;
3. Hydroelectric Power Plant Caplje, EPBIH, Bosnia and Herzegovina;
4. Hydroelectric Power Plant Krusevo, EPBIH, Bosnia and Herzegovina;
5. Wind Farm Vlasic, EPBIH, Bosnia and Herzegovina etc.



## Investment drivers



## || concluding remarks



- ❖ Large potential for investments in RE in SEE
- ❖ Significant investments needed to renovate and integrate energy systems
- ❖ Energy market integration to be continued according to EU energy objectives
- ❖ Adequate regulations should attract substantial capital and financing
- ❖ RE (with exception of HPP) will move from marginal to mainstream in the medium term: How will regulations change to accommodate it?
- ❖ Facilitate bankability: guarantees, standard contracts, scale
- ❖ EIB playing an important role in supporting EE&RE in SEE
  - ❖ Competitive finance
  - ❖ TA (WBIF and EEFF)

