



# EIB INVOLVEMENT IN GREEN GROWTH



# EIB Financing in the Water Sector

**1.**

**Effects of Climate Change**

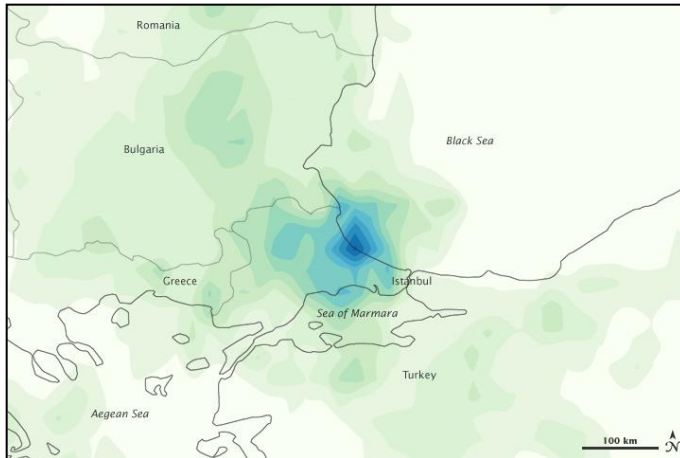
2.

EIB Lending in Renewable Energy

3.

EIB Lending in the Water Sector

# Climate Change Impacts on Turkey



- According to a World Bank Study, Turkey is among the top three countries in the European and Central Asian Region to experience greatest increases in climate extremes by the end of the century;
- More than 30m people live in coastal areas that are potentially vulnerable to sea level rise (at present 4-8mm p.a. as measured by Sea Level Observatory);
- Coastal erosion and flooding is already affecting Turkish shorelines, particularly at the Black Sea, Northern Aegean Sea and Eastern Mediterranean;
- Increasing extraction of groundwater for irrigation, industry and domestic use is further lowering aquifer water tables and leads to sea water intrusion;
- Landslides, droughts and floods are likely to increase in frequency with expected high economic losses.

# Turkey's National CC Strategy



- Turkey is party to the UN Framework Convention on Climate Change (UNFCCC) and has ratified the Kyoto Protocol;
- Ministry of Environment and Forestry is responsible and co-ordinates with State Planning Organisation, other line ministries, Universities and NGOs;
- National Climate Change Strategy (NCCS) was published in 2009, addressing the needs for GHG reduction and adaptation;
- Turkey's Ninth Development Plan 2007-13 include strategies for cc mitigation and adaptation;
- First National Climate Change Action Plan (NCCAP) is being developed with support from UNDP and Spanish Government;
- Pilot project in Seyhan River Basin to increase resilience of communities



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.

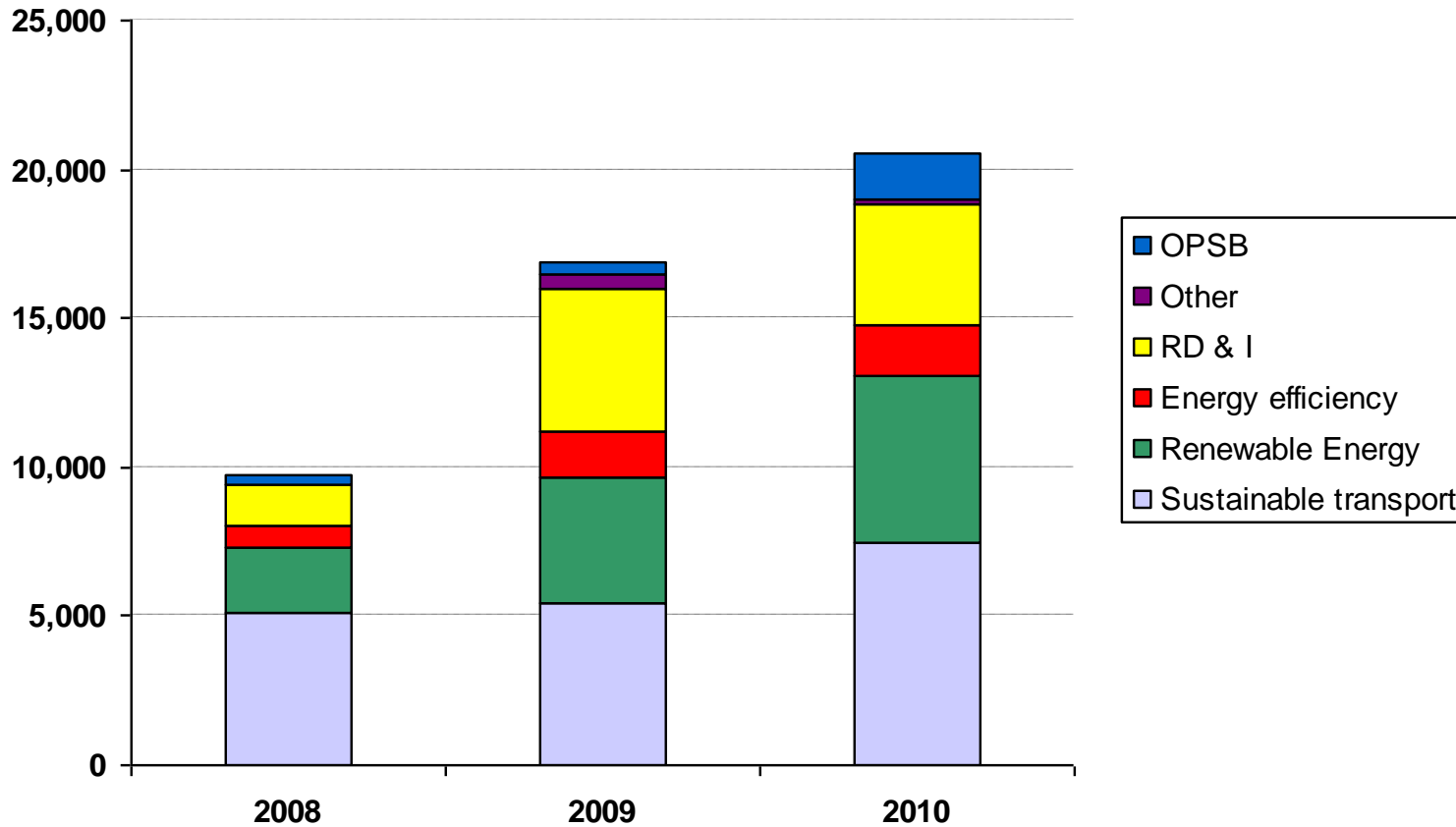
Loans of EUR 20.5bn in 2010 for:

- ❖ energy
- ❖ transport
- ❖ water, wastewater, solid waste
- ❖ forestry
- ❖ research, development and innovation (RDI)



# EIB Climate Change action

Climate change is a growing course of action for the EIB:





# RDI and Climate Change



- ❖ The EIB is scaling up support to accelerate the development, commercialization and diffusion of cost-effective early-stage **low-carbon technologies** such as:
  - ❖ Photovoltaics
  - ❖ Off-shore wind
  - ❖ Concentrated solar power
  - ❖ 2nd generation biofuels
  - ❖ Carbon Capture and Storage
  
- ❖ Recent further emphasis to RDI activities such as;
  - ❖ Engine and fuel technologies which reduce emissions from cars and airplanes
  - ❖ Energy-efficient smaller cars
  
- ❖ Lending for CC-related RDI has grown considerably and reached about € 4.7bn in 2009



## Suggestions for the way forward...

- Closely work with the Treasury, SPO and line ministries to better understand priorities of CC strategies in Turkey;
- Collaborate with UNDP, EC, other financiers, Academia and NGOs to sharing knowledge, using synergy effects and developing appropriate co-financing options;
- Pro-actively support the identification and development of projects improving climate resilience, also through dissemination of good practices;
- Use technical assistance (CCTAF) to support final beneficiaries in integrated climate risk assessment
- Increase the capacity of beneficiaries to absorb and allocate adaptation funding effectively



## Climate Action = Growth Opportunities

"Climate change is a result of the greatest market failure the world has seen. The evidence on the seriousness of the risks from inaction or delayed action is now overwhelming. We risk damages on a scale larger than the two world wars of the last century. The problem is global and the response must be a collaboration on a global scale."

R. Stern



# EIB Financing in Turkey

1.

Effects of Climate Change

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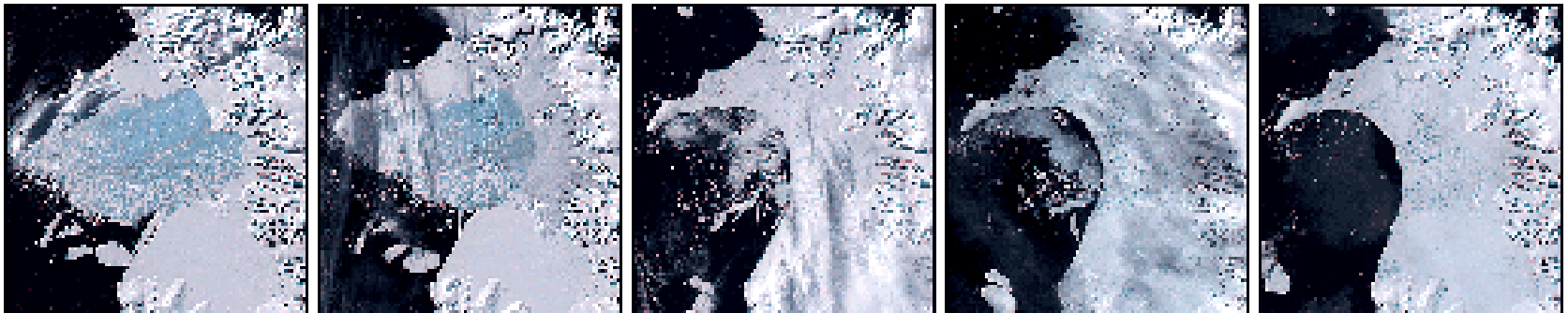
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# Sustainable energy supplies

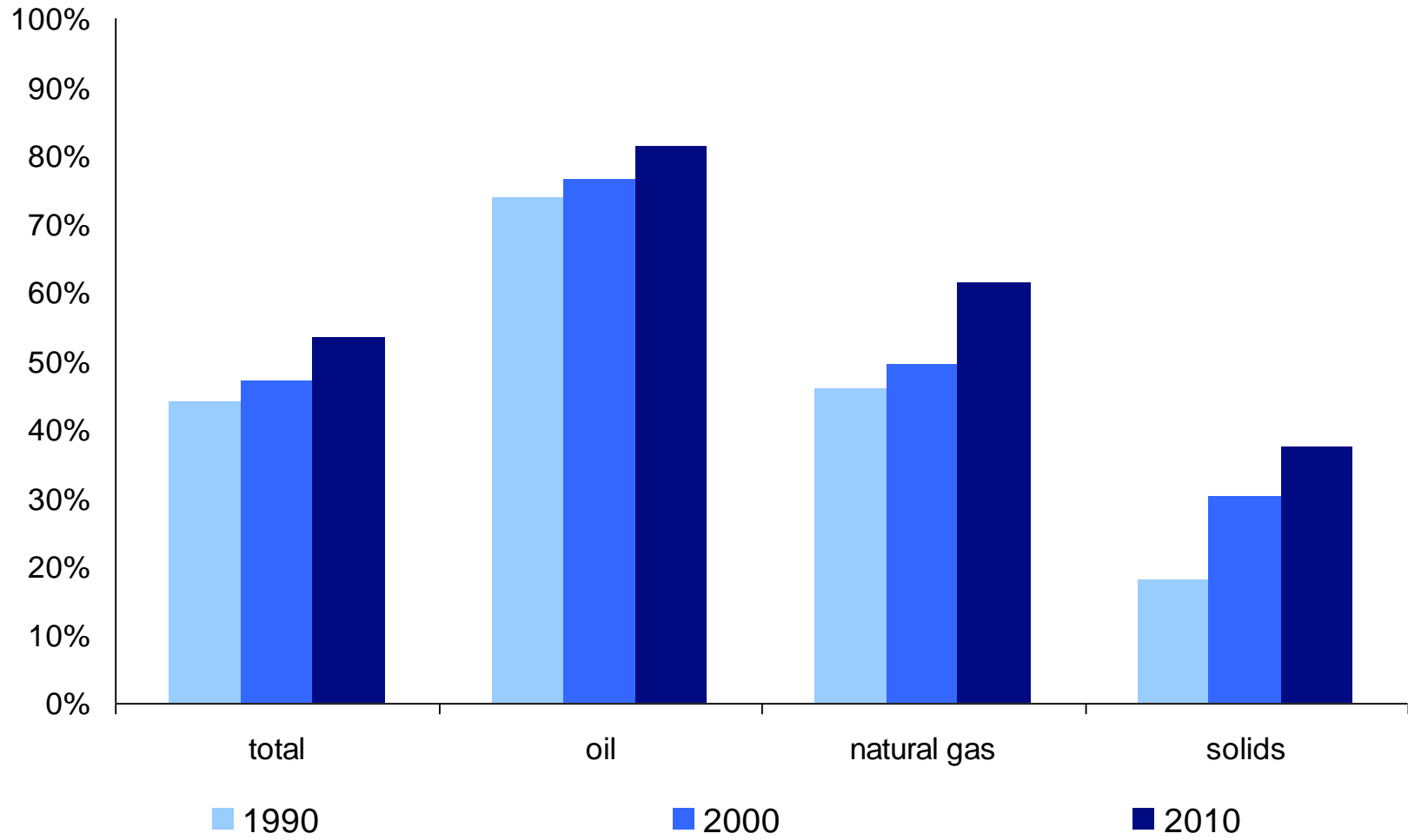
- ❖ EU 2020 targets:
  - ❖ 20% less greenhouse gas emissions compared to 1990
  - ❖ 20% renewable energy
  - ❖ 20% less energy consumption through energy efficiency
  - ❖ 10% share of bio fuels in gasoline and diesel





# Secure and reliable energy

## EU Energy Imports





# EIB involvement in Financing renewable energy



## Key criteria for EIB eligibility:

- ❖ Environmental impact assessment study
- ❖ Transparent and competitive procurement procedures
- ❖ Government support for tariffs
- ❖ Strong sponsor commitment
- ❖ Effective legal environment for Project Finance



# Renewable Energy, the EIB & Turkey



- **ENERJISA HYDROPOWER PROJECT**
- Eight hydropower plants of around 955 MW in total
- EUR 135 million loan
- **ENVIRONMENT & ENERGY FRAMEWORK LOAN**
- EUR 200 million loan with TSKB and TKB
- hydropower, wind and geothermal project pipeline
- **OSMANIYE WIND FARM**
- EUR 30 million loan
- windfarm



# EIB Financing in Turkey

1.

The EIB Group

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**EIB Lending in the Water Sector**

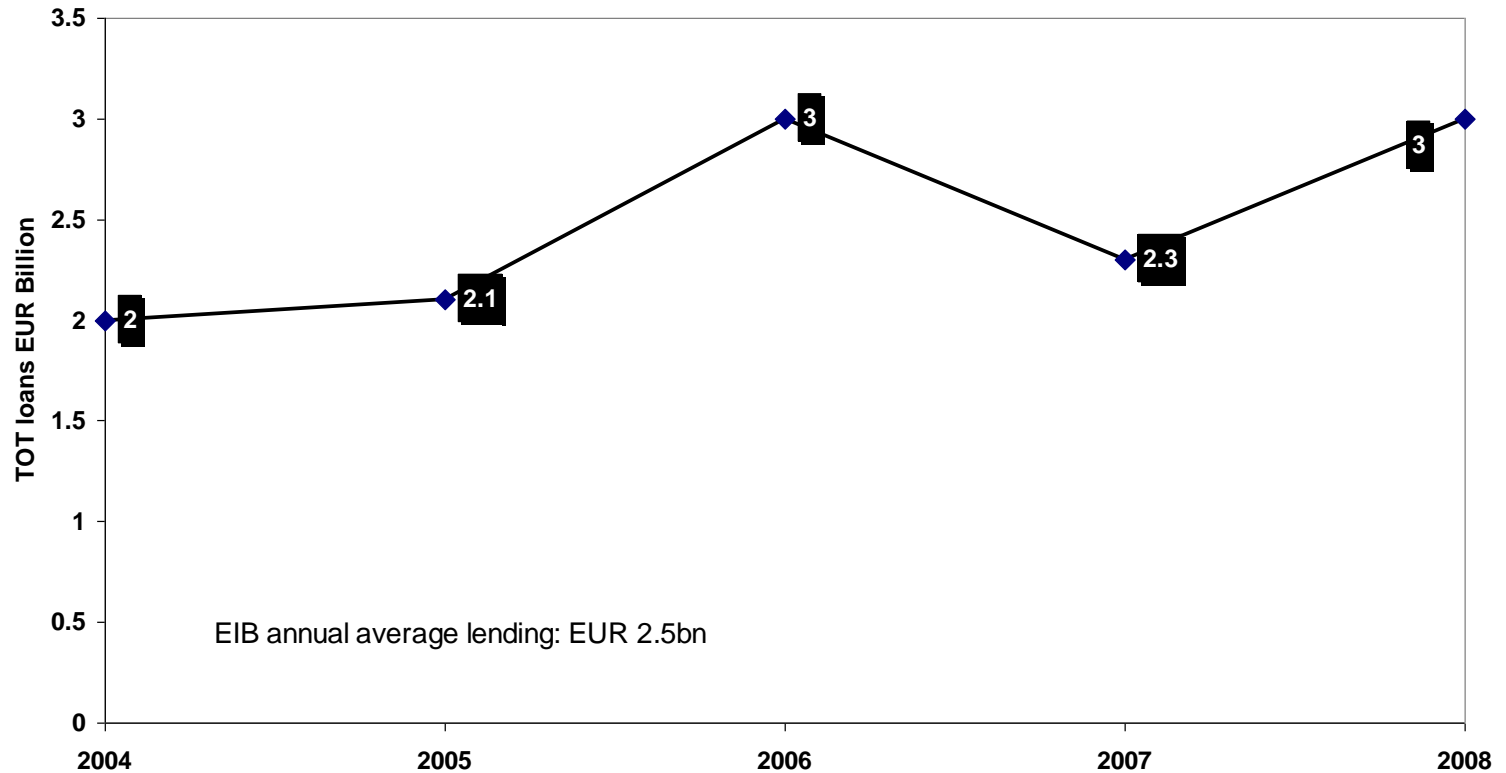


# Key challenges facing the water sector

- ❖ The Past : Investment backlog, poor services, inefficiency
  - ❖ High inefficiency/wastage of resources
  - ❖ Deteriorating infrastructure due to lack of funds
- ❖ The Present & Future: Increasing CAPEX, competition, risks
  - ❖ More demanding environmental/service quality objectives
  - ❖ Economic growth & urbanisation (water for food, energy...)
  - ❖ Adaptation to climate change
- ❖ The challenges: Gaps within financing, project quality and capacity
  - ❖ Grants limited by budget, tariffs by politics, loans by risk
  - ❖ Poorly prepared projects cannot attract enough funding
  - ❖ Weak regulatory, absorption and implementation capacity



# EIB Lending in the Water Sector

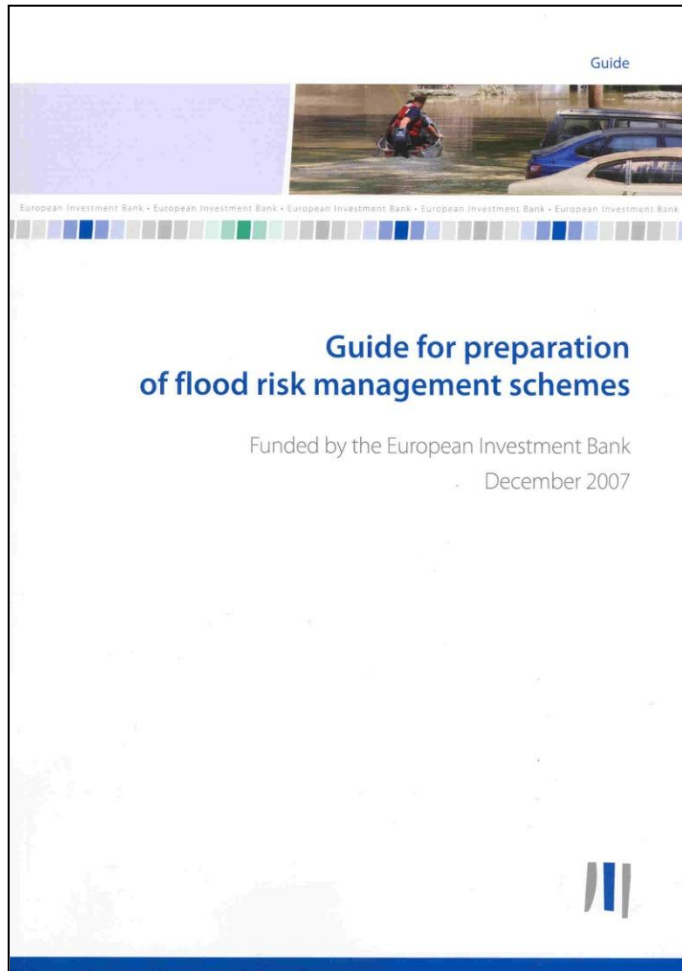




# Definition of Water Efficiency

- ❖ efficiency of water use by the consumer (household, industry, agriculture, and hydropower);
- ❖ efficiency in allocation across different users;
- ❖ efficiency of the utility in managing the system;
- ❖ efficiency of the systems itself.

# EIB Financial Instruments and Support



- ❖ Loans for sovereign, sub-sovereign, and corporate clients;
- ❖ Long tenors and adequate grace periods;
- ❖ Funding of 50 (-75)% of total project cost;
- ❖ Co-funding with Commission, IFIs, commercial banks;
- ❖ Facilitation of PPP models;
- ❖ Loan due diligence on the basis of technical, financial, environmental, and social criteria. Support to client throughout the project cycle.
- ❖ Dissemination of “best practice” documents



# Constraints

- ❖ Legal and regulatory framework
- ❖ Incentives structure
- ❖ Commercialisation of services
- ❖ Transparency
- ❖ Budgetary issues
- ❖ Appropriate strategies
- ❖ Human, technical and financial resources
- ❖ Dissemination of best practice



Thank you

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EIB Turkey