

***The Biofuels TP SRA/SDD –  
How can the EIB contribute to  
their implementation?***

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# The European Investment Bank

## 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
- Support for six EU priority objectives which include energy and environmental sustainability
- As a AAA-rated borrower, EIB can offer its partners advantageous loan rates and longer loan maturities
- EIB will support projects which are risky, economically sustainable and environmentally sound

# Access to EIB funding

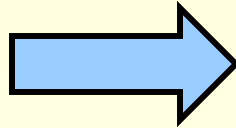
- Private promoters
- Public promoters
  - Local authorities
  - Regional governments
  - Central governments
- Investments requirements for a period up to 4 years can be considered within one project
- Combination with other EU or national funds / programs is possible

# Long-term lending institution

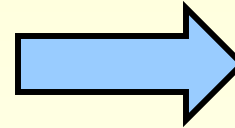
EIB lends to public and private sector

Participation is limited to 50% of a project's cost

Capital  
markets



AAA  
rating



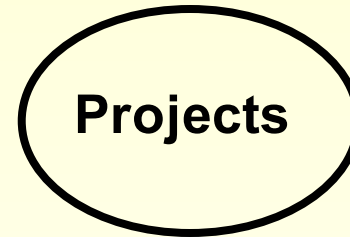
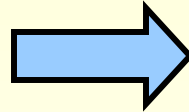
Projects

Borrow at finest  
conditions

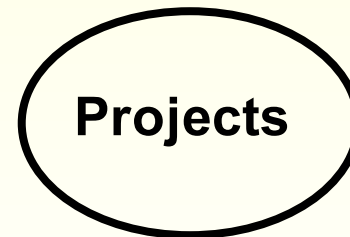
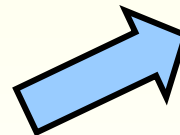
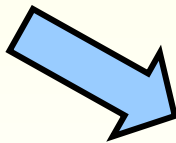
Pass on benefit  
Provide long maturities  
Allow flexible grace  
support EU policies

# Direct and Global Loans

Large projects ( > 25 million Euro total investment cost)



Smaller projects ( < 25 million Euro total investment cost)



Local intermediary financial institutions

# Promoter - initiator

Project components have to be eligible for long-term EIB financing  
The promoter must have borrowing capacity and repayment potential

A mix of varieties in ownership structures is possible:

100 % public

SPV

100 % private



Each type has important issues to keep in mind!

**Supporting the EU  
Bioenergy Action Plan and the EU  
Climate Change Programme**

# EU Biofuels Policy

- The Energy Policy for Europe (European Council 8/9 March 2007) including the Action Plan 2007-2009 for energy put emphasis on climate change and security of supply, renewable energies and biofuels in transport fuel.
- A 10% binding minimum target is to be achieved by all Member States for the share of biofuels in overall EU transport fuel (gasoline and diesel) consumption by 2020.



# EIB Energy Policy: Sustainable, Competitive and Secure Energy

**EIB Energy policy has five core areas:**

- Renewable Energy
- Energy Efficiency
- Research, Development and Innovation in energy
- Security and diversification of internal supply
- External energy security and economic development (Neighbour and Partner countries)

# Renewable energy and biofuels in EIB lending

EIB may fund up to 75 % of investment costs when key policy objectives are met in this sector:

## **Lisbon Strategy for Growth and Employment**

- RDI projects promoting 2nd generation biofuel technologies

## **Climate Change Financing Facility**

- supporting production capacities in competitive low carbon technologies

*EIB can offer finance through structured finance – its funding reaches a wider set of companies, accelerating projects*

# Risk Sharing Finance Facility

## Sources and Rationale



### Direct Lending

1

#### Extend Debt Capacity

Corporate Finance

Project Finance

Subordinated Debt/Mezzanine

Interest Contingent Loan

#### Sector Specific Products

Corporates

Universities

SPVs, JTIs,  
PPPs

### Indirect Lending / Financing

2

#### Extend Lending Capacity of Financial Intermediaries

Risk Sharing Facilities

Co-financing

3

#### Investment Funds Renewable and Clean Energy

4

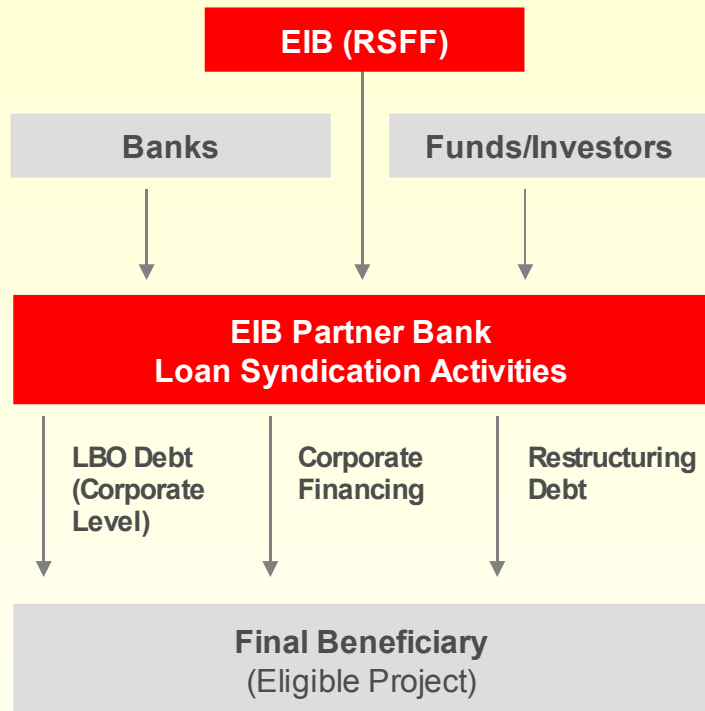
#### Collaboration with EIF

Banks

Funds

# Strategic Collaboration

## A new Source of Debt Capital



- Low/Sub Investment Grade (BBB to B)
- Sufficient RDI activities (min. EUR 5m per year)

- EIB RSFF funds complement other sources of debt capital available for low/sub investment grade RDI intensive corporates
- EIB RSFF funds are highly attractive for potential beneficiaries because of:
  1. Highly attractive terms & conditions (AAA rating and non-for-profit pricing)
  2. Long maturities of up to 10 years
  3. Direct EIB participation of up to EUR 200m per transaction (depending on rating)
  4. Strong technology/industry expertise
  5. EIB does not sell assets on the secondary market (buy and hold strategy)
  6. No cross selling (just long-term lender)
  7. Signalling Effect: EIB as a quality stamp

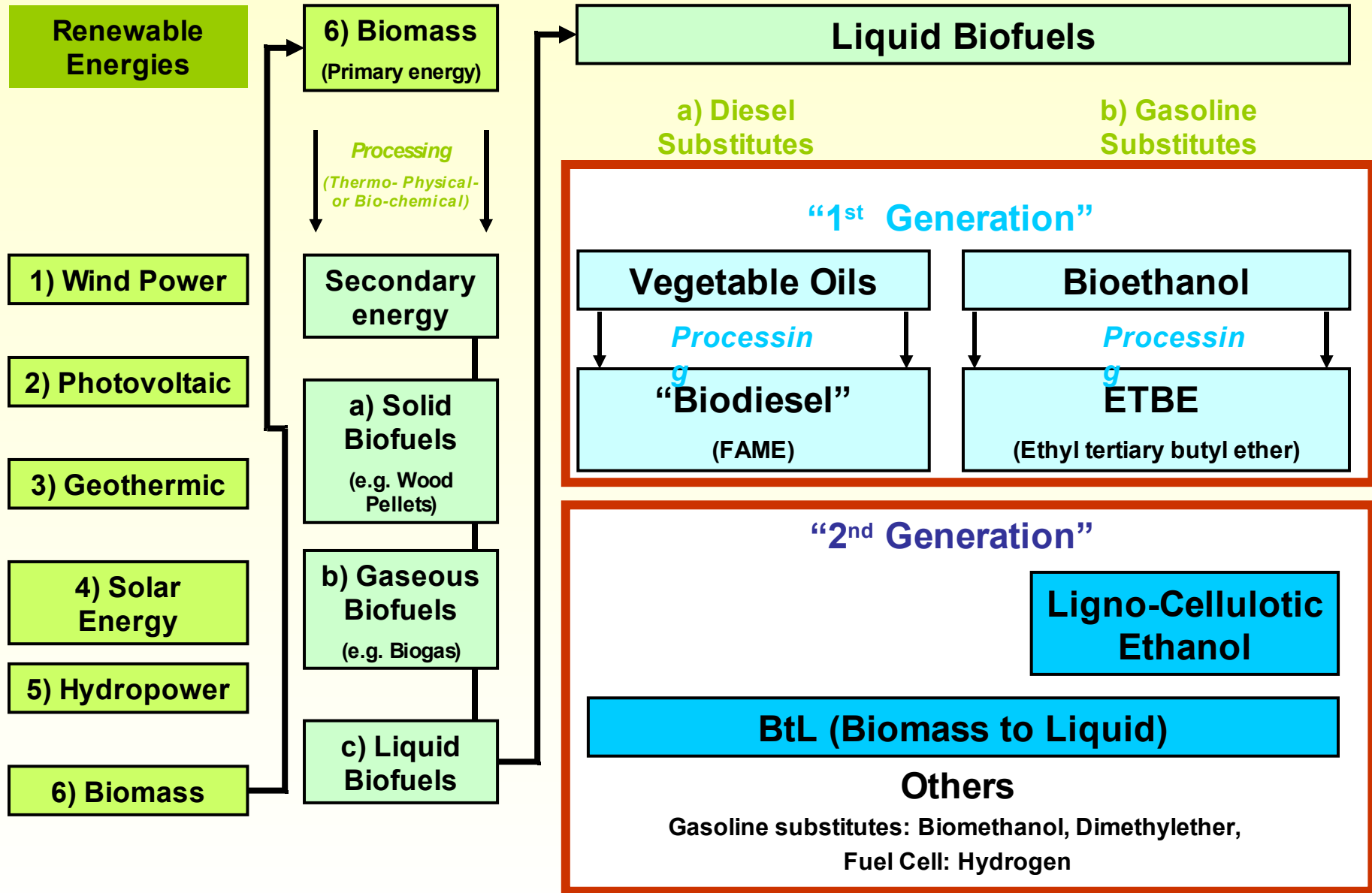
# **Selection Criteria including Contributions to EU Policy**

# The EIB project cycle



EIB project cycle

# Classification of Renewable Energies



# Preliminary Screening Criteria for Biofuel Projects

## Environment and Climate Change

- Greenhouse Gas Emission savings
- Other environmental effects such as reduction of desertification etc
- Agricultural practices

## Different Policies at Different Levels

- Country's, EU's and EIB's renewables energy policy
- Domestic regulation, taxation in place for biofuels blending
- Other policies



# First and/or Second Generation?

## EIB's assessment of 1<sup>st</sup> Generation

- **Best feasible technical process at industrial scale => the only realistic alternative to achieve EU 2010 biofuel targets**
- **High quality feedstocks needed**
- **Co-product sales crucial for sustainable project cash flow**
- **Low conversion costs vis-à-vis 2<sup>nd</sup> generation**

# First and/or Second Generation?

## **EIB's present strategy;**

- Support of sustainable and viable 1<sup>st</sup> generation projects
- Support of RDI for 2<sup>nd</sup> generation biofuels
- Avoidance of “White Elephants” and of creation of overcapacities

## **As EU policies are reviewed;**

- Support of best strategy to achieve 2020 targets
- Support of viable technologies for 2<sup>nd</sup> generation production plants

# ABF Biofuels (UK)

(First biofuels renewable energy project of the EIB)

**Project:** 2 New Bioethanol plants based on sugar beet and wheat

**Annual capacities:** 70 m l bioethanol from sugar beet  
420 m l from 1.1 m t of wheat

**EU Biofuel Target:** 5.75 % in 2010 (stands for 1.6 bn l in UK)

**Product usage:** Individual transport sector

**Contribution to EU policy objectives:**

- Reduction of CO<sub>2</sub> emissions
- EU Biomass Action Plan
- Diversification of energy supply
- Displace fossil fuels use
- CAP reform on diversification and rural employment

# German Pellets (DE / FI)

**Project:** New and expansion of wood pellet production based on sawdust and forest residues

**Annual capacities:** 420 k t in Germany (expansion)  
160 k t in Finland (new plant)

**Product usage:** Individual domestic heatings and industrial use

**Contribution to EU policy objectives:**

- Cost efficient CO<sub>2</sub> reduction measure
- EU Biomass Action Plan
- SME
- Diversification of energy supply

# Indirect Lending Support for Biogas (EU)

**Project:** >2000 small decentral biogas plants based on different feedstocks

Investment costs: 0.3 – 2 m EUR per facility

**EIB contributed to investments:** >1 bn EUR since 2004

**Product usage:** Electricity and increasingly CHP production

**Contribution to EU policy objectives:**

- Reduction of CO<sub>2</sub> emissions
- EU Biomass Action Plan
- SME
- Diversification of energy supply
- CAP reform on diversification and rural employment

# Issues for Design and Implementation

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- **Market / Supply & Demand**
- **Location of the Plant**
- **Capability of Promoter**
- **Innovation – Know-how Generation- Demonstration**
- **Other indirect effects**

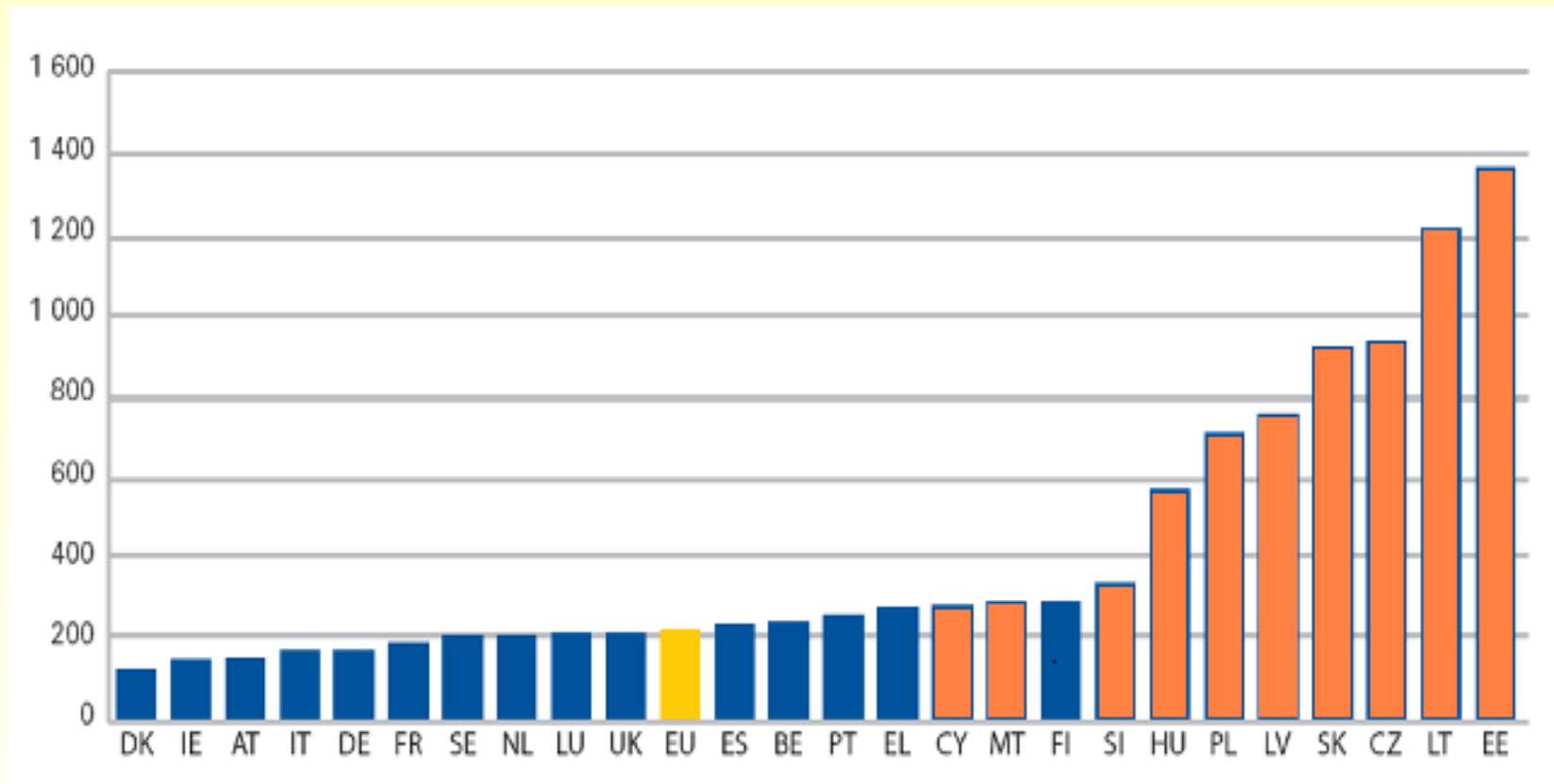
# Extra Opportunities Interesting in CEE

*Can CEE jump to first best ?*

- **Urban Renewal**
- **Waste water modernisation**



# Energy Intensity



Energy intensity in 2003 (in toe/million EUR of GDP at 1995 market prices) in EU-

25 Source: Enerdata (calculations based on Eurostat data)

[http://ec.europa.eu/energy/efficiency/doc/2005\\_06\\_green\\_paper\\_book\\_en.pdf](http://ec.europa.eu/energy/efficiency/doc/2005_06_green_paper_book_en.pdf)

(Green Paper on Energy efficiency)

# Conclusions

- **The EIB is a policy-driven EU finance institution for long-term lending**
- **Renewable Energy recently included in EIB lending priorities**
- **Biomass / Bioenergy projects are eligible under Environment**
- **For eligible projects:**
  - **75 % of project costs not as usual 50 % at finest rates, provided viable project and solid guarantee**
  - **RDI also up to 75 % for sound projects**

# Conclusions

- **The CEE region provides considerable potential to bring energy intensity down to average EU levels**
- **1<sup>st</sup> generation biofuels used as transport fuel are so far the best feasible technical process at industrial scale**
- **2<sup>nd</sup> generation RDI crucial to widen feed stock range and to reduce cost**
- **EIB's Project Directorate is asked to avoid financing "White Elephants"!**

# For more information...

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