



ENHANCING  
COMPETITIVENESS AND  
THE ENVIRONMENT

# **BIOENERGY SEMINAR**

## **Financing solutions**

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## Agenda

- NIB: About NIB
- NIB in the Baltic Countries
- Financing Renewable Energy and Biofuels
- Financial structures



## Northern Europe's International Financial Institution

- Nordic and Baltic countries as owners
- Started activities in 1976
- Baltic countries joined in 2005
- AAA/Aaa credit rating
- Lending in member countries and emerging markets
- Headquarters in Helsinki
- [www.nib.int](http://www.nib.int)





## Promoting sustainable growth



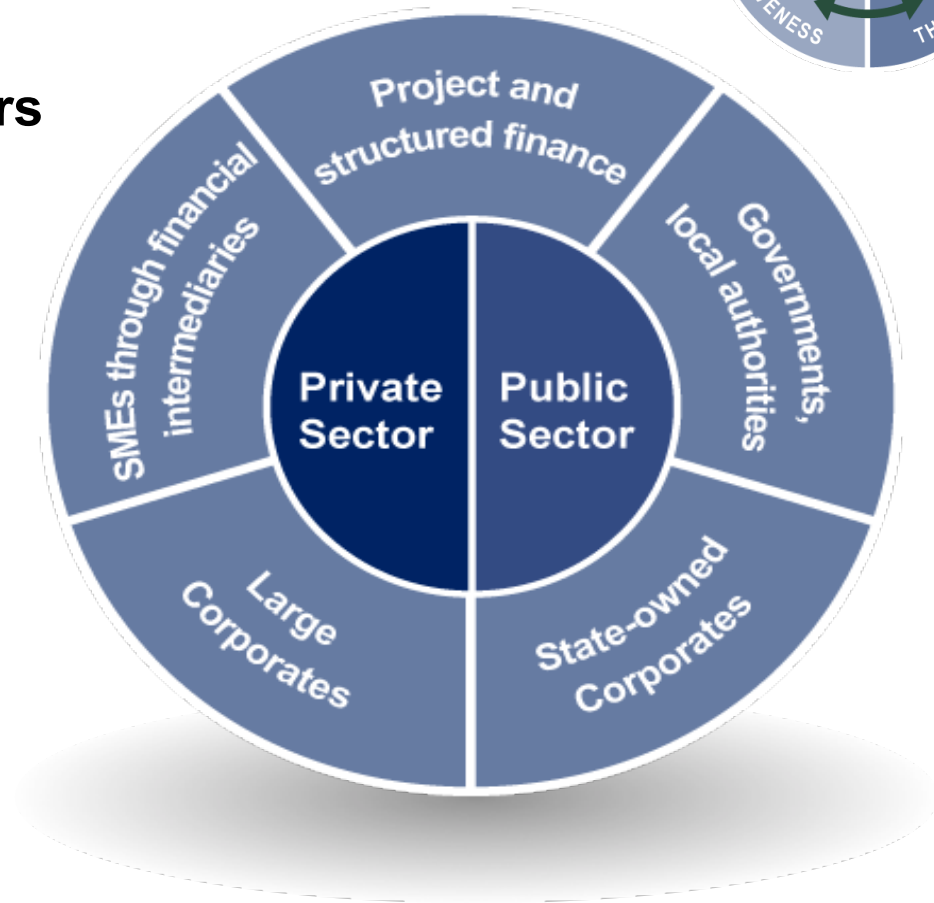


## Strengthening competitiveness



### Projects in the following sectors and areas of economy:

- Infrastructure  
incl. energy, transport, telecoms, social infrastructure
- Strategic capital investments, incl. company acquisitions
- R&D and innovation





## Enhancing the environment

- Only major IFI with an explicit environmental mandate.
- Significant business potential in the environmental sector.
- The environment is a global concern.
- All projects considered for financing undergo assessment of potential environmental impact.





## **NIB in the Baltic Countries**

- Environment
- Energy
- Infrastructure
- Social infrastructure



# Environment

- Waste water treatment plants
- Landfills
- Emission control in industry
- Energy saving measures



# ENERGY

- Traditional focus sector for NIB
- Power generation facilities
- Cross border transmission cables
- Grid investments
- Local distribution investments
- Biofuels



# INFRASTRUCTURE

- Road network
  - Via Baltica
  - Tallinn Narva Highway
  - Rural road networks
- Harbours
- Airports
- Railroads
- Municipal infrastructure
- Telecom
- Social Infrastructure: hospitals, universities



## **NIB-financed energy projects**

In total more than 200 projects, some examples:

### **Generation**

Eesti Energia, Estonia

Vattenfall, Sweden

Latvenergo, Latvia

TVO; Finland

Elektrovnia Turow, Poland

Tampere mply, Finland

Narva oil shell power plants

Hydropower

Hydropower

Nuclear power

Refurbishment, lignite fired plant

Gas fired CHP



## NIB-financed energy projects

### District Heating, CHP

PVO, Finland  
cooperation with

HNG, Denmark

Latvia

Lithuania

Russia

A large number of projects in  
industrial plants.

Gas fired CHP + pipes in Copenhagen

Rehabilitation program for small district heating  
systems

School energy efficiency program

Murmansk district heating rehabilitation



## NIB-financed energy projects

### Transmission and distribution

Estlink, Estonia

Transmission line between Estonia and Finland

Fingrid, Finland

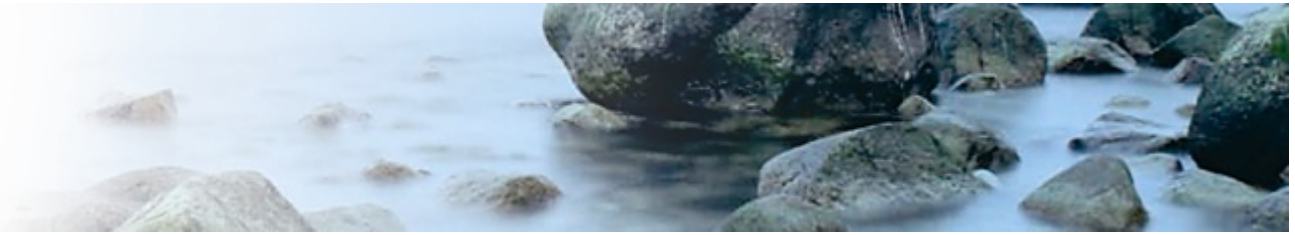
Large number of projects in development of the national grid

Energinet, DK

Transmission system between wind park and grid

Latvenergo

Upgrade of transmission and distribution networks



## Financial solutions

### Private sector

- Long term loans, maturities 5-15 years
- Flexible financial set-ups, fixed/floating rates etc.
- Flexible collateral arrangements, based on corporate risk
- Competitive market terms and conditions

### Requirements:

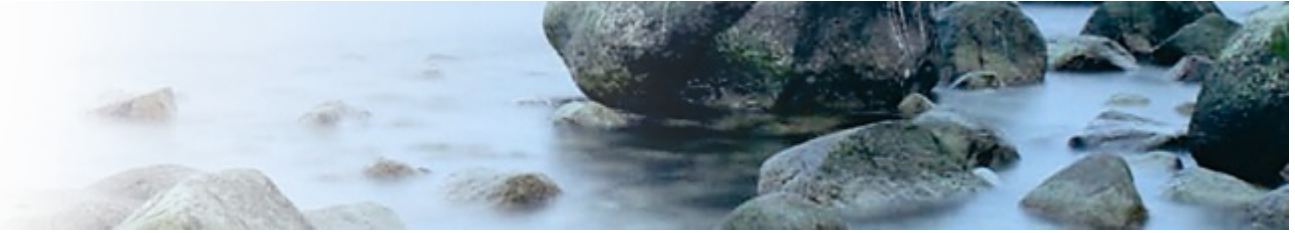
- Equity portion
- Total financing package
- Covenant structure
- Acceptable risk structure



# Financial solutions

## Public sector

- Borrower state or municipality or guarantee by state or municipality
- Long term loans, maturities up to 20 years
- Flexible financial and collateral set-up
- Plant competitiveness requirement



# Financial solutions

## Project Finance set-up

- Ownership can be private or public/private
- Project cash-flow related risk
- Strict loan agreement, covenant structure
- All assets pledged
- Repayment according to cash-flow expectations
- Thorough analysis, strict follow-up



# Financial solutions

## Public and Private sector in cooperation

### Joint Ventures:

#### Market risk the key issue

- Dominant market position > close to public risk. Ex. Fingrid and Latvenergo
- Competitive market > private corporate risk or project finance set-up, ex: Vattenfall, wind energy projects
- Tariff policies, long term off-take agreements



## Financial solutions

### Public and Private sector in cooperation The Finnish model

#### Limited liability company

- Shareholders responsible for all costs incurred by the company
- Non-profit company target: production facility of the owners
- Strictly regulated rules in the shareholders' agreement
- Enables construction of large plants through accumulation and coordination of limited single resources
- Examples: TVO, the private nuclear power company  
Pohjolan Voima, large multiplant, multifuel corporate