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# Financing Sustainable Energy Projects in CEE

Christian Unger  
Head of Energy & Utilities  
Bank Austria Creditanstalt

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# *Agenda*

- **Project Finance**
  - **Definitions and Facts**
  - **Typical Project Structure**
  - **Advantages of Project Finance**
  - **Preparation of a Project for Financing**
- **Financing of Sustainable Energy**
  - **Situation in Central & Eastern Europe**
  - **Challenges and Opportunities**
  - **Sources of Financing**
  - **Case Studies**
- **Bank Austria Creditanstalt**

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## ***Definitions and Facts***

- **Cash flow**
- **Special Purpose Company**
- **Off-balance sheet**
- **Limited recourse**
- **Long term nature**

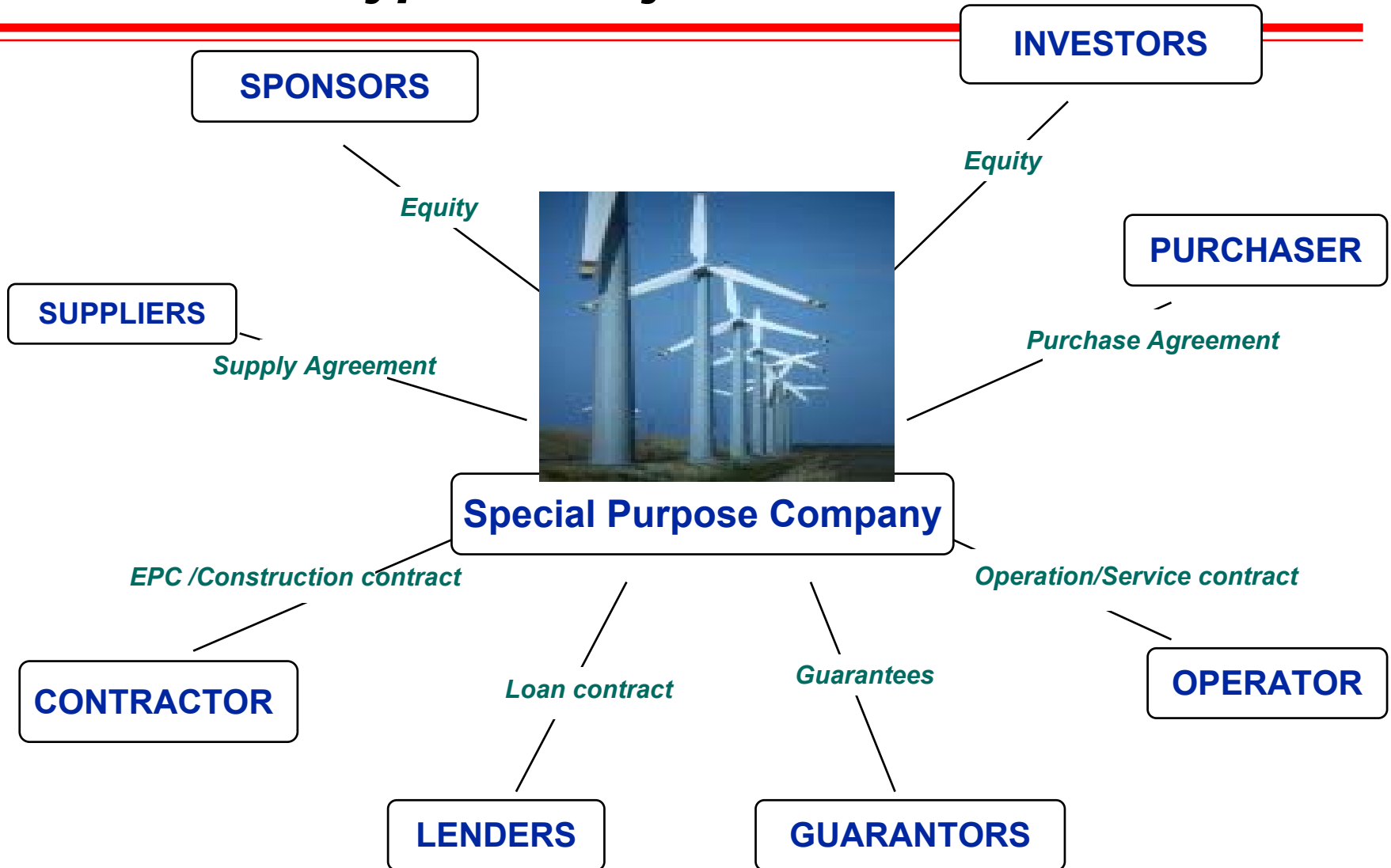
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## ***Definitions and Facts***

- **Collateral - transferable**
- **High Risk Lending - detailed due diligence, sufficient equity, sound pricing parameters**
- **Large Volume Transactions - syndication**
- **Complexity - timing**
- **EPC (engineering, procurement, construction) contract - fixed price, turnkey, date certain**

# Typical Project Structure



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## ***Advantages of Project Financing***

- **Financing transactions realized off balance and limited recourse for Sponsors, optimising the finance structure in the parent company**
- **Flexibility regarding Partners, Risk Allocation and Structure**
- **Higher flexibility in designing the terms & conditions for the financing in comparison to plain vanilla corporate loans**

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# ***Preparation for Project Financing***

- **Feasibility Study / Business Plan**
- **Reports (Independent Experts)**
  - **Market Study**
  - **Financial Model**
  - **Technical Due Diligence**
  - **Legal Due Diligence**
  - **Insurance Report**

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# ***Preparation for Project Financing***

(continued)

- **Presentation by sponsor with business plan and feasibility study**
- **Indicative offer - term sheet from banks**
- **Negotiations > committed term sheet from arranging bank**
- **Loan documentation by external lawyers**
- **Syndication (for large volumes)**
- **Financial closing**
- **Disbursement of funds according to milestones**

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# ***Financing Renewable Energy***

- **Commercial banks often have limited experience and know-how in financing sustainable energy projects**
- **Structure and approval process often too cumbersome for small financing volumes**
- **High initial investment cost versus low operational cost**
- **Innovative financing solutions (CO2 Certificates ...) and equity sources (funds ...) are key**
- **Exploit subsidies (ALTENER, SAVE, COOPENER ...)**

# ***Dependency on carbon fuels in selected new member countries***

Fuel used for generation of electricity in %

<b>Poland</b>	<b>1990</b>	<b>2000</b>	<b>2010</b>
Coal	97,5	96,2	86,4
Natural Gas	1,3	2,0	6,1
Renewable Energy	1,2	1,8	7,5
<b>Czech Republic</b>	<b>1990</b>	<b>2000</b>	<b>2010</b>
Coal	71,8	72,5	50,3
Oil	4,8	0,6	1,1
Natural Gas	1,0	4,6	7,1
Nuclear	20,1	18,7	35,5
Renewable Energy	2,3	3,6	6,0
<b>Hungary</b>	<b>1990</b>	<b>2000</b>	<b>2010</b>
Coal	32,1	25,7	26,5
Natural Gas	18,9	34,2	32,1
Nuclear	48,0	39,1	33,4
Renewable Energy	1,0	1,6	8,0

Sources: DB Research 2003, REEEP

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# ***Situation in Central & Eastern Europe***

## ***Challenges***

- **Rules and regulations, legal environment**
- **Inefficient use of energy**
- **Overcapacity in production and low energy prices**
- **Insufficient equity sources and tight public budgets**
- **Lack of experienced operators**

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# ***Situation in Central & Eastern Europe***

## *Opportunities*

- **Poland and Czech Republic (Biomass and Wind), Hungary (Biomass and Geothermal), Baltics (Wind), Slovak Republic (Hydro and Biomass), Slovenia (Biomass)**
- **Upgrade of District Heating Systems - Biomass**
- **Diversification of fuel sources (reduce dependency on carbon fuels)**
- **Local Initiatives**
- **Lobby for producers of renewable energy**
- **CO<sup>2</sup> Certificates become part of financing**

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# *Sources of Financing*

## **Equity:**

- Equity from Sponsor
- Equity Funds
- Carbon Financing (JI/CDM, CO<sup>2</sup> Certificates)

## **Debt:**

- Project finance or corporate finance from local and international commercial banks
- Export Credit Agencies (Supplier or buyer credit, risk insurance)
- Multilateral Banks (EBRD, World Bank/IFC, EIB)
- Specialized Finance Institutions or Funds (KfW, Mezzanine Fund, Carbon Funds)
- Capital Market (Bonds, Asset Backed Securities)

## **Subsidies:**

- Local or EU

# EIB - Global Loan

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- **Who can benefit from the proceeds of global loans?**

Local authorities or firms with fewer than 500 employees and having fixed assets of up to EUR 75 million

- **For what projects?**

New capital investment projects worth up to EUR 25 million, undertaken by SME's or, in the case of small infrastructure projects by local authorities

- **For what amount?**

A maximum of EUR 12.5 million and up to 50 % of the investment costs

- **What maturities?**

Between 5 and 12 years, up to 15 years in exceptional cases.

- **What security? What rates?**

To be agreed with the intermediary bank which takes the credit risk in accordance with criteria determined in cooperation EIB.

- **Disbursement and loan management?**

Through the intermediary bank.

- **How to apply?**

Directly to one of the intermediary banks and financing institutions, which operates on the national, regional or local level.

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## ***Equator Principles***

- 28 banks (including HVB Group) have adopted Equator Principles for their financing decisions
- Set of guidelines to determine and manage environmental and social risks in project financing
- Pollution Abatement Guidelines and Safeguard Policies of the IFC (International Finance Corporation)
- Projects are classified according to Screening Process (high / medium / low risk)
- Environmental Assessment is done for large project financings, including appropriate consultations with all affected parties
- Equator Banks cover over 80% of global project finance volumes

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## Case Study



### Svilosa, Bulgaria

Delivers energy to pulp and paper plant, switch from coal fired to biomass.  
Sources wood chips from own production process. Financed partly with forward sale of CO2 Certificates.

Capacity:	18 MW Steam Turbine
Investment:	USD 2,75 Mio.
Emission Reduction:	900.000 t CO <sup>2</sup>
Price per ton CO2:	USD 3
Buyer of Certificates:	Prototype Carbon Fund
Contract value CO2 Cert.:	USD 1,8 Mio.

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## Case Study



### Tsankov Kamak, Bulgaria

Expansion of existing hydro power plant with 6 turbines and construction of new dam. Power purchase agreement with NEK. Financing secured partly with forward sale of CO2 Certificates.

Capacity:	450 MW
Investment:	USD 200 Mio. (Commercial Banks: EUR 32 Mio.)
Emission reduction:	200.000 t CO <sup>2</sup> p.a.
Buyer of Certificates :	Republic of Austria

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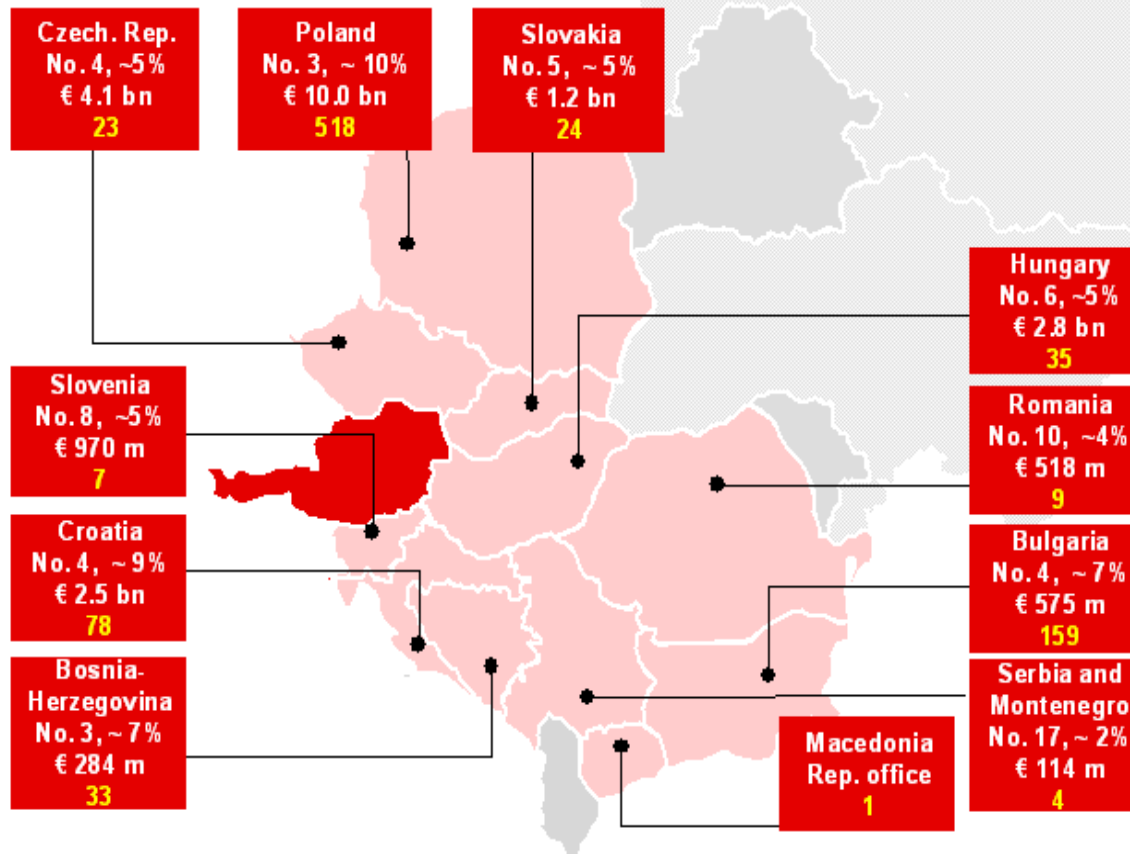
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## ***BA-CA Corporate & Project Finance***

- Among top Arrangers and Underwriters for CEE and winner of mandates for landmark transactions in the field of acquisition, project and structured corporate finance
- Concentrated on selected sectors including energy & utilities, telecoms & media, processing industries & natural resources and transportation infrastructure
- Strong execution, underwriting and placement capacity as well as extensive experience in arranging and underwriting complex financing packages
- Over 30 financing mandates (MLA) in 2003 and 2004
- Excellent relationship with EBRD and EIB (top co-financier of EBRD)

# BACA Footprint in CEE

Market position, total assets and number of offices as at 31 December 2003



## CEE region

- € 23 bn total assets
- 891 offices
- 5%-10% market share in key markets
- 17,587 employees
- 4 m customers

# International Ranking



**European Bank**  
for Reconstruction and Development

## Top Mandated Arrangers of Syndicated Credits 2003 Eastern Europe (by volume)

Rank	Group	# of Deals	Market Share
1.	Citigroup	23	11.04%
2.	BACA/HVB Group	26	7.11%
3.	BNP Paribas	14	6.56%
4.	WestLB	12	5.77%
5.	ABN Amro	13	5.32%
6.	SG	13	5.29%
7.	ING	16	5.22%
8.	KBC	10	4.54%
9.	Deutsche Bank	12	4.04%
10.	RZB	22	3.61%

Source Thomson Financial / Dealogic, January 2004

## TOP Ten Banks Participations Cumulative to 30 June 2004

1. BA-CA (HVB Group)
2. Raiffeisen Zentralbank
3. Rabobank
4. Citibank
5. ING Bank
6. CALYON
7. ABN Amro Bank
8. JP Morgan Chase International
9. Dresdner Bank
10. Nordea Bank Sweden

# Contact

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## Bank Austria Creditanstalt AG

Schottengasse 6 , 1010 Vienna, Austria

Fax: + 43 50505 - 44209

- Christian Unger
- Head of Energy & Utilities

Phone: + 43 50505 - 42865  
Christian.Unger@ba-ca.com

- Stella Klepp
- Manager

Phone: + 43 50505 - 42874  
Stella.Klepp@ba-ca.com

- Irmtraud Rieder-Fischer
- Manager

Phone: + 43 50505 - 42871  
Irmtraud.Rieder-Fischer@ba-ca.com

- Heimo Stauchner
- Manager

Phone: + 43 50505 - 42881  
Heimo.Stauchner@ba-ca.com

- Aleksander Majewski
- Assistant Manager

Phone: + 43 50505 - 42867  
Aleksander.Majewski@ba-ca.com