

How can environmental risk management policies minimise operational risks for the bank as well as for the environment – The case of brownfields revitalisation

Bank Austria
Creditanstalt

Banking for success.



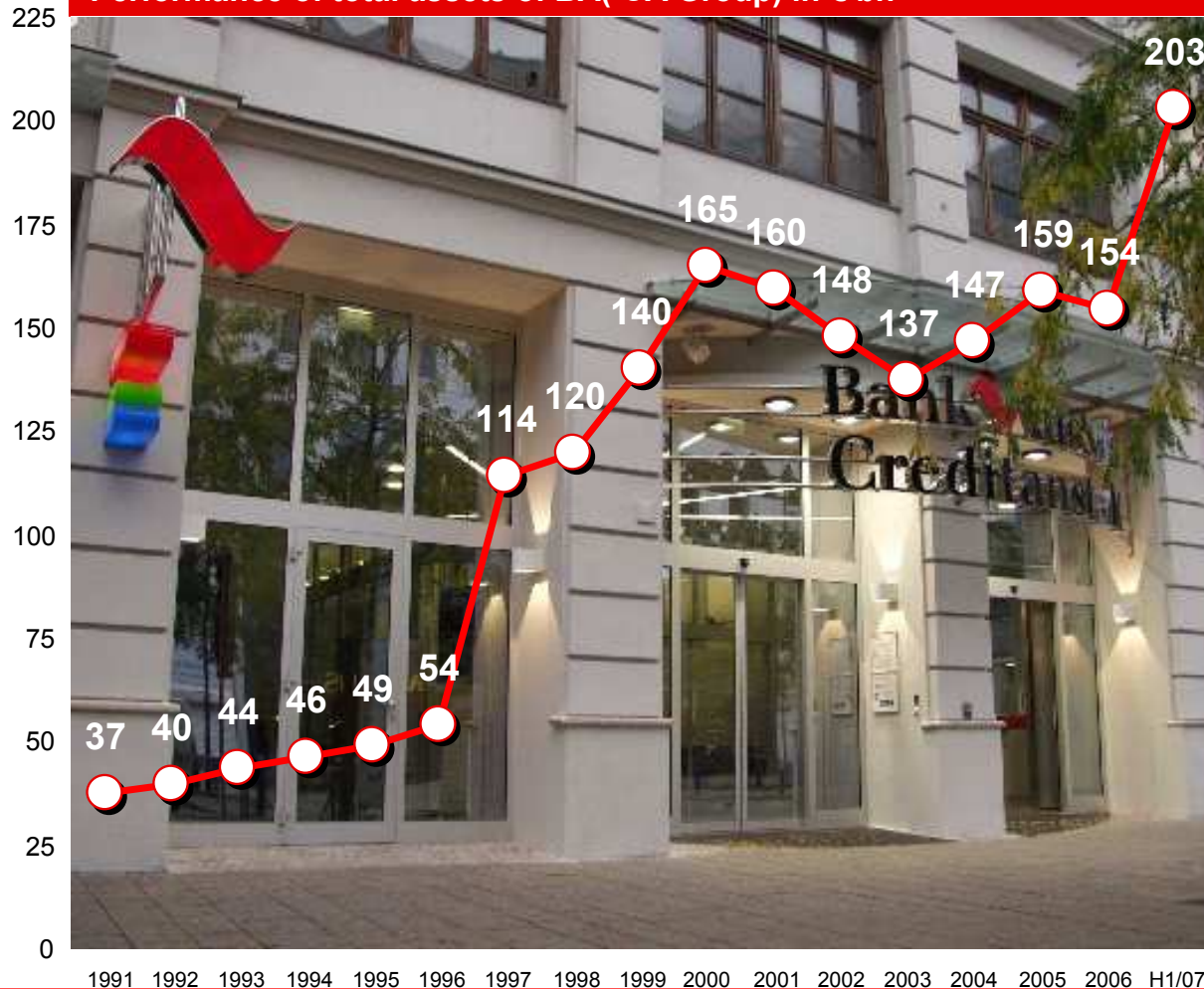
UNEP Finance Initiative
Innovative financing for sustainability

***EU Environmental Regulations
Risk or Opportunity for the Finance Sector?***

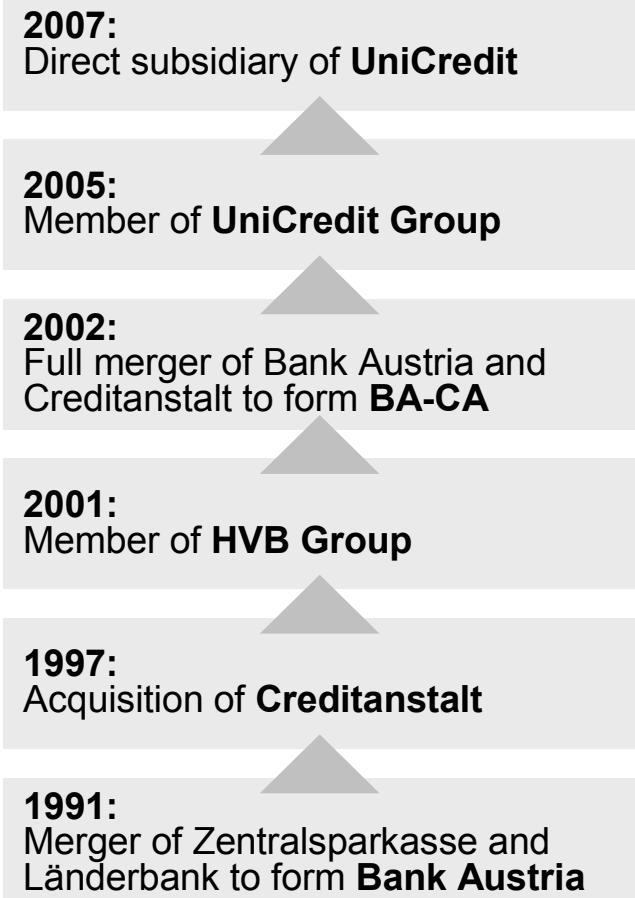
11.10.2007, Sofia
Sultana Gruber

Bank Austria arose in 1991 due to the merger of Zentral-sparkasse and Österreichische Länderbank

Performance of total assets of BA(-CA Group) in € bn



Merger-history of BA-CA



Bank Austria Creditanstalt at a glance

The most extensive banking network in Austria and CEE



As a sub-group of UniCredit, Bank Austria Creditanstalt is the **market leader in the Austrian banking sector**



About **1.8 million customers in Austria**



About **18% market share in Austria**, in know-how-intensive business up to 2/3



Market **leadership position** enhanced in qualitative and quantitative terms



Growth-oriented Group strategy in Central and Eastern Europe

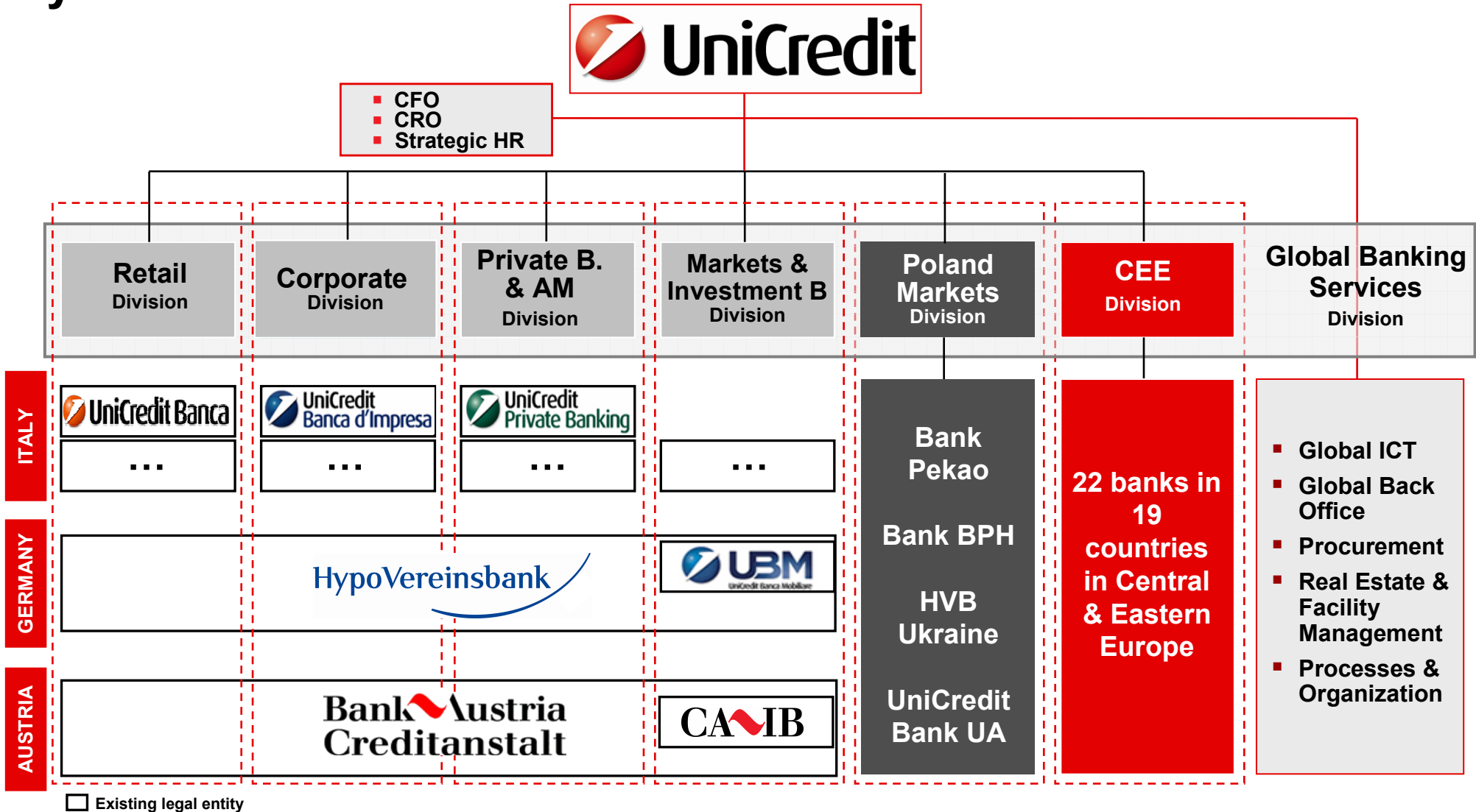


Leading banking group in CEE with a presence throughout the region and **21 million customers** (incl. recent acquisitions in Kazakhstan and Ukraine)



Most extensive network of about **400 branches in Austria** and about **2,400 outlets in CEE** (incl. recent acquisitions in Kazakhstan and Ukraine)

UniCredit Group: consistent organisational approach driven by divisional focus



The new BA-CA network in Central and Eastern Europe

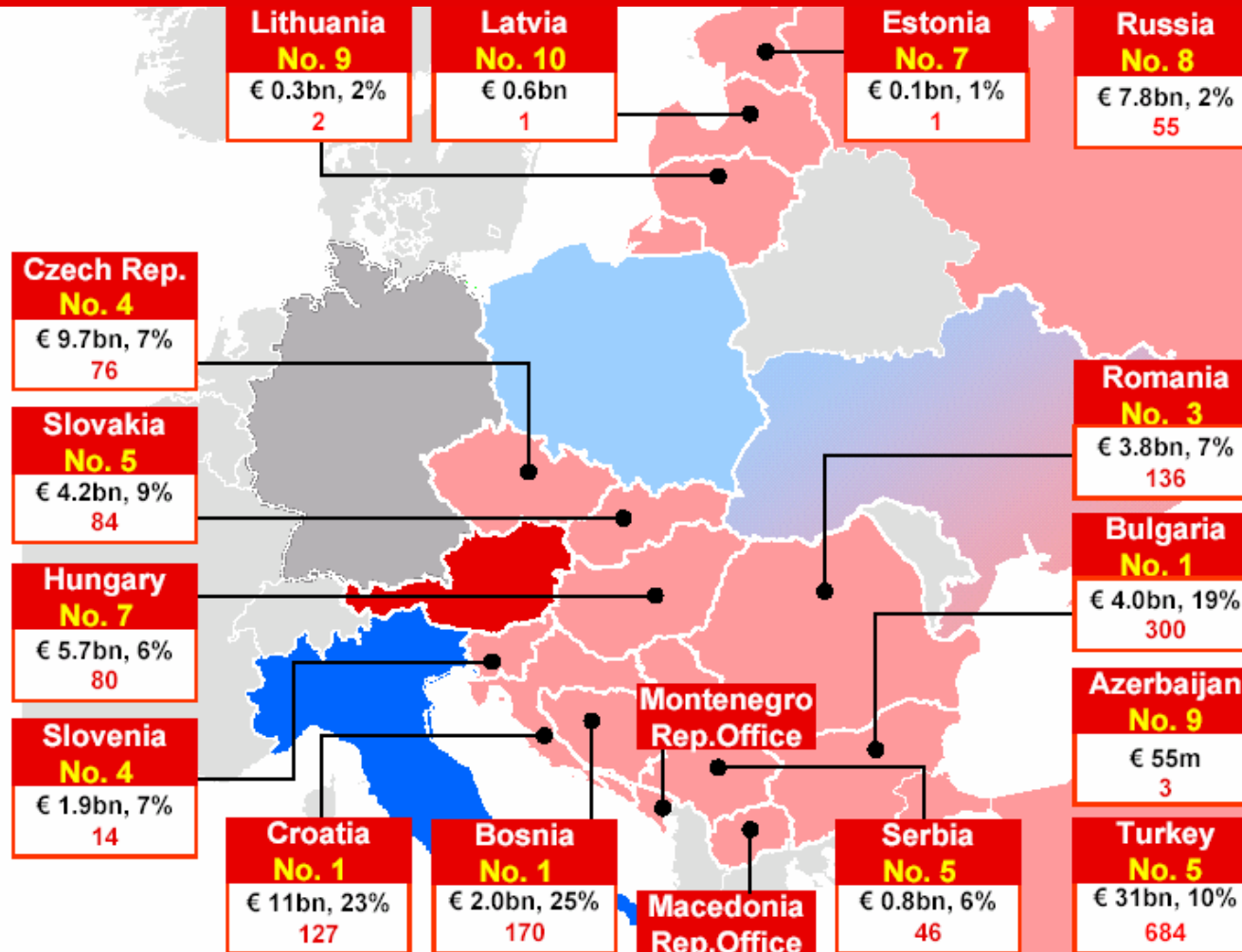
| BA-CA country responsibility | |
|------------------------------|--|
| Current presence: | |
| ⊖ Austria | |
| ⊖ Azerbaijan | |
| ⊖ Bosnia-Herzegovina | |
| ⊖ Bulgaria | |
| ⊖ Croatia | |
| ⊖ Czech Republic | |
| ⊖ Hungary | |
| ⊖ Kazakhstan | |
| ⊖ Kyrgyzstan | |
| ⊖ Macedonia | |
| ⊖ Montenegro | |
| ⊖ Romania | |
| ⊖ Serbia | |
| ⊖ Slovakia | |
| ⊖ Slovenia | |
| ⊖ Estonia | Countries without existing units: |
| ⊖ Latvia | ⊖ Albania |
| ⊖ Lithuania | ⊖ Armenia |
| ⊖ Russia | ⊖ Belarus |
| ⊖ Tajikistan | ⊖ Cyprus |
| ⊖ Turkey | ⊖ Georgia |
| ⊖ Ukraine** | ⊖ Moldova |



* under management of UCI
 ** recent acquisition Ukrsofsbank under management of BA-CA

BA-CA banking network in Central and Eastern Europe as of June 2007

Ranking, (combined) total assets, number of offices and market share (Dec. 2006) by total Assets



All Countries at 100%

CEE Division:

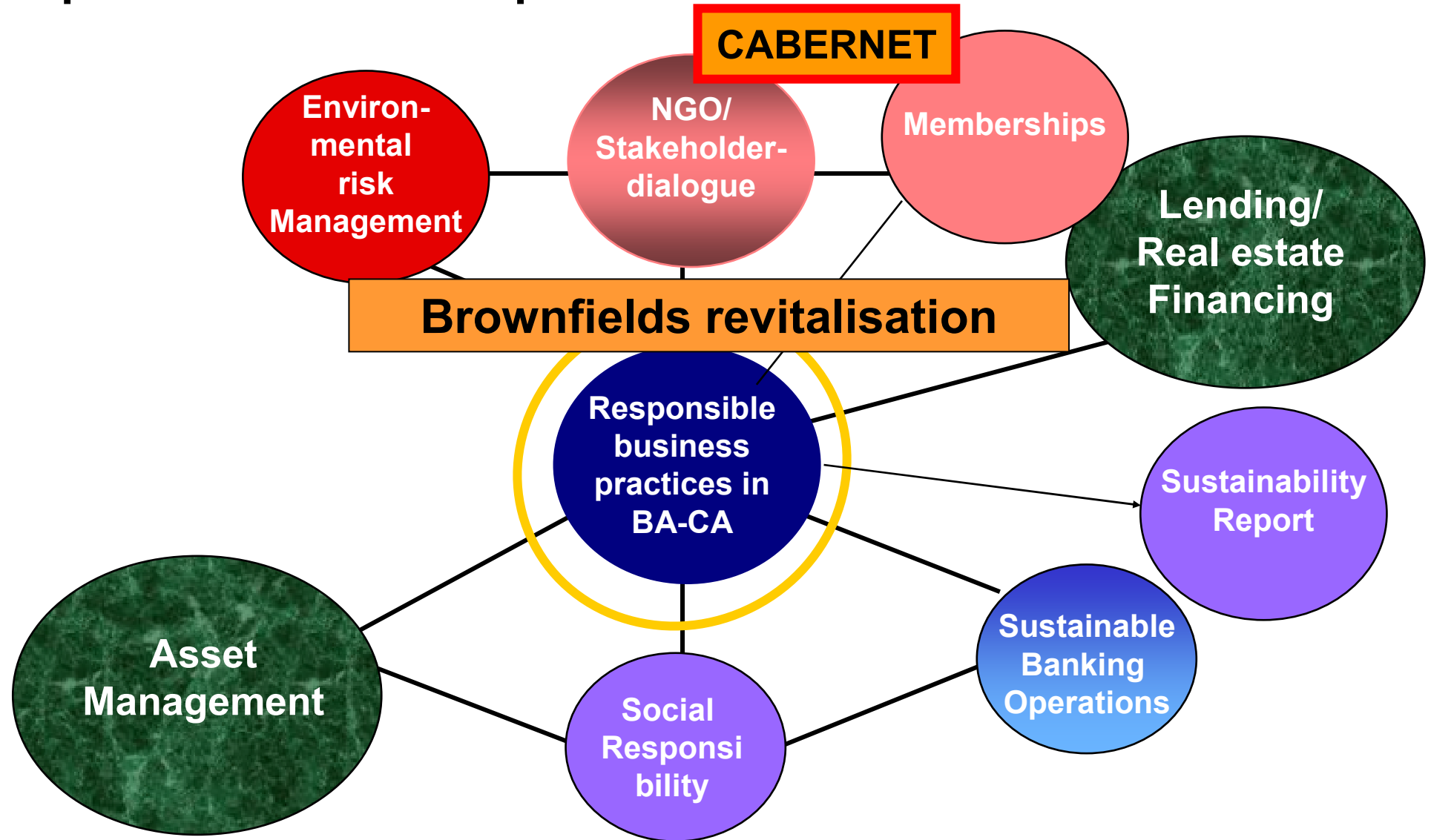
€ 82 bn total assets
1,800 offices
37,000 employees
19m customers

Including recent acquisitions in Kazakhstan and Ukraine:

Kazakhstan and Ukraine:

€ 92 bn total assets
2,400 offices
51,000 employees
21m customers

Implementation of Responsible Business Practices



Sustainable banking products

Lending

World Bank standards/
Equator Principles

Project finance
water & renewables

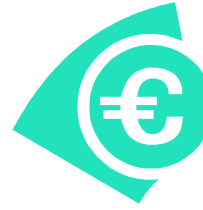
EIB global loan for
Environmental protection

Carbon finance /
Kyoto mechanisms

Real estate
financing operations

Monitoring
environmental and
social risks

Asset Management



UniCredit Group:

Pioneer funds:

Global Ethical Equity

Corporate Ethical Eurobonds

PIA Ethic Fund

PIA – Eco Guarantee

.....

Brownfields revitalisation

Brownfields (CABERNET definition*)

(CABERNET definition) are sites which

- have been **affected by former uses** of the site or surrounding land;
- are **derelict or underused**;
- are **mainly** in fully or partly developed **urban** areas;
- **require intervention** to bring them **back to beneficial use**; and
- **may** have real or perceived **contamination** problems



According to their original use, brownfields can be categorized as:

- Industrial buildings
- Deserted military objects
- Former shops or production facilities
- Unused railway facilities and surroundings
- Former mining districts
- Vacant blocs of residential buildings
- Abandoned or inappropriately used agricultural property
- Deserted public premises such as hospitals or schools

Brownfields result from...



■ **...changing patterns of industry and development** in many regions. The **loss of the industry**, the resulting **unemployment** and the **reluctance of new investors to take** on the technical problems and **liabilities** associated with brownfield sites, **affect the economic prosperity of the region**, particularly in urban locations.

■ **Municipalities** are often **unable to revitalise** brownfields from their own resources, and their city centres and environs remain degraded and under-utilised.

Globalisation, Growth and limited resource soil



- **Growth** is inevitable and it is an integral part of our economy.
- **Unmanaged growth** can have **unwanted environmental and economic consequences**.
- **Expansion:** how should society grow in consideration of **future generations** and **resources**?
- **Growth** cannot be stopped, but it can be **channelled and directed**.
- From a global perspective, infinite growth on a planet with **finite natural resources** e.g. **soil** is clearly impossible.
- Recognising that there are **physical limits** to the amount of **available space**, the **efficient use** of this space is extremely important.
We not only must **reuse brownfields**, but we must practice sustainable development in order to ensure that we do **not create more** of them.

"...in every case they made the ground to suit their plan, and not the plan to suit the ground."

Mark Isambard Brunel -Engineer (1769-1849)

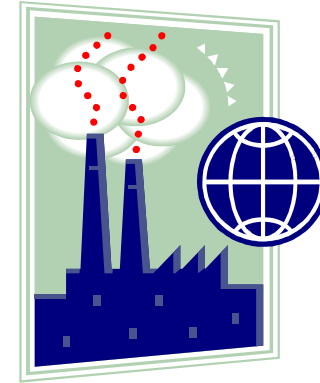
CABERNET



- **CABERNET (Concerted Action on Brownfield and Economic Regeneration Network)** is the European Expert Network addressing the complex multi-stakeholder issues that are raised by brownfield regeneration
- The Network's aim is to **enhance the rehabilitation of brownfield sites** within the context of sustainable development of European cities, by sharing experiences from across Europe, **providing new management strategies, innovative tools, and a framework for coordinated research activities.**
- **BA-CA is a member of CABERNET**
- The 2nd International Conference on Managing Urban Land was in April 07 in Stuttgart

www.cabernet.org.uk

Brownfields Revitalisation Risks and Opportunities for FI's



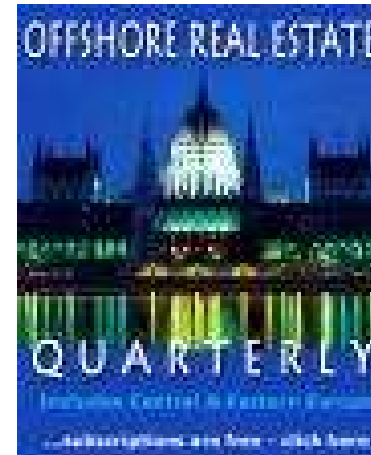
■ Risks

- Considering environmental aspects in the **credit evaluation rating system, BASEL II**
- Check-lists, training programs, site inspection, external experts: lawyers and consultants

■ Opportunities: Innovating products and Stakeholder Dialogue

- CABERNET Membership
- Member of Austrian Society for Brownfield Management
- Member of the Task Force for Brownfields in The Austrian Standards Institute
New Standard about: "Recording and assessment of environmental status in the course of real estate evaluation- subsequent use and cost determination of brownfields" in preparation
- **Protection of greenfields**, recycling, open space preservation ...
- Contribution to **sustainable and economic development**

Brownfields and the CEE – SEE Countries



- Also **CEE** countries are **faced with enormous legacy in terms of contaminated land** (consequences of previous economic centrally planned economy – return of market economy, **factories** became uncompetitive; similar effects with **army, rail, institutional and agricultural sites**)
- On the other side there are significant **opportunities**, because in CEE countries there is a **larger proportion of former industrial derelict land** in city centres or closed to major conurbation. (25-35% of industrial land use!) and brownfields are now re-entering the real estate market.
- As many companies moving to **CEE countries** prefer green-field sites, a **process of rethinking** will be necessary to change this situation.

Costs and Risks in case of Contamination

■ Costs:

The mere suspicion can increase the loan transaction costs: Information, EDD, environmental site assessment, removal of the contaminated soil, ornamental planting-backfill, demolition or renovation,...

■ Risks (legal and financial):

- Liability risk
- Claims by third parties, restriction of the rights of use
- Cleanup costs liability (even if borrower is not the polluter)
- Collateral risk: if we have to foreclose at a later date: lower value of our collateral or lose the full collateral value
- Will the full **economic potential** of site reuse be **achieved**?
- **Market risk**: Demand of properties, viability of the revitalisation project



Risk Assessment versus Risk Management and Decision Making



■ Risk assessment:

is the process **evaluating** the **likelihood** of an **adverse effect**. Risk assessment does not determine **what level of risk is allowable or acceptable**.

■ Risk Management:

Determining what we will be allowed or accepted is a part of *Risk Management*

■ Decision Making- *Risk-Benefit Analysis*

Balancing costs and benefits is also a very important factor in decision making. *Risk-Benefit Analysis*: to **measure** or quantify the level of **risk** and the level of **benefit associated** with a particular **regulatory decision**.

*Balancing costs and benefits, cost effectiveness, driving forces of the project, future use, economic viability, involving stakeholders, managing uncertainties, feasibility study, legal framework and sustainable development are important issues in the **risk based land management and financing** of brownfields redevelopment.*

The Brownfields Redevelopment Process

- **Site identification:** find a location which has profit potential and lower risk
- **Initial site assessment (Phase I assessment):** technical consultant to assess the contamination, the remediation and the costs associated therewith
- **Economic Assessment: Value of the brownfield:** The real estate needs to be profiled and valued as if it were clean. Then clean-up costs must be assessed. Is there any voluntary clean-up program? **Future use?**
- **Detailed Site Assessment: (Phase II)** including sampling and analysis to develop an “accurate” cost estimate
- **Project Development and Finance** Once a remediation plan is developed and approved, bank financing can be obtained.
- **Clean-Up Planning and Execution** Legal assistance is required here to negotiate and document the state and federal contractual agreements.
- **Redevelopment of the Property** site clearance or demolition and construction of a new project or resale to the ultimate user.

EU legislation with effects on sustainable urban land use

- Strategy on Sustainable use of Resources
- Landfill Directive
- IPPC Directive
- Framework Directive on Environmental Liability
- Water Framework Directive
- Ground Water Directive
- Thematic strategy for the marine environment
- Directive on Environmental noise
- EU Thematic Strategy on Urban Environment
- ERDF Regulation (EC) 1080/2006
- Guidelines for State Aid
- Habitat and Birds Directive
- Seveso II Directive
- Directive on Environmental Impact Assessment
- Directive on Sewage Sludge
- Waste Framework Directive
- Strategy on Waste prevention and Recycling
- **EU Soil Framework Directive**
forces member states to develop national *remediation strategies for contaminated sites*
- **EU thematic strategy for soil protection**
encourages member states to *reduce sealing* and use land more efficiently

The **seventh Framework Programme** for research and technological development (2007-2013) contains a chapter on support for **research into soil functions** and **soil protection**.

Brownfields Revitalisation: Approach - Solutions

Due to its **multidisciplinary** nature brownfield revitalisation should be solved by

- **cross-institutional**
- **cross-departmental**
- **cross-professional**

integrated approaches.

Brownfields Revitalisation should become one of national, regional and local priorities.

- **Innovative approaches** (new forms of financial engineering)
- **new strategies** (marketing, community consultation)
- **pilot actions** and
- **best practice** examples

are urgently needed.

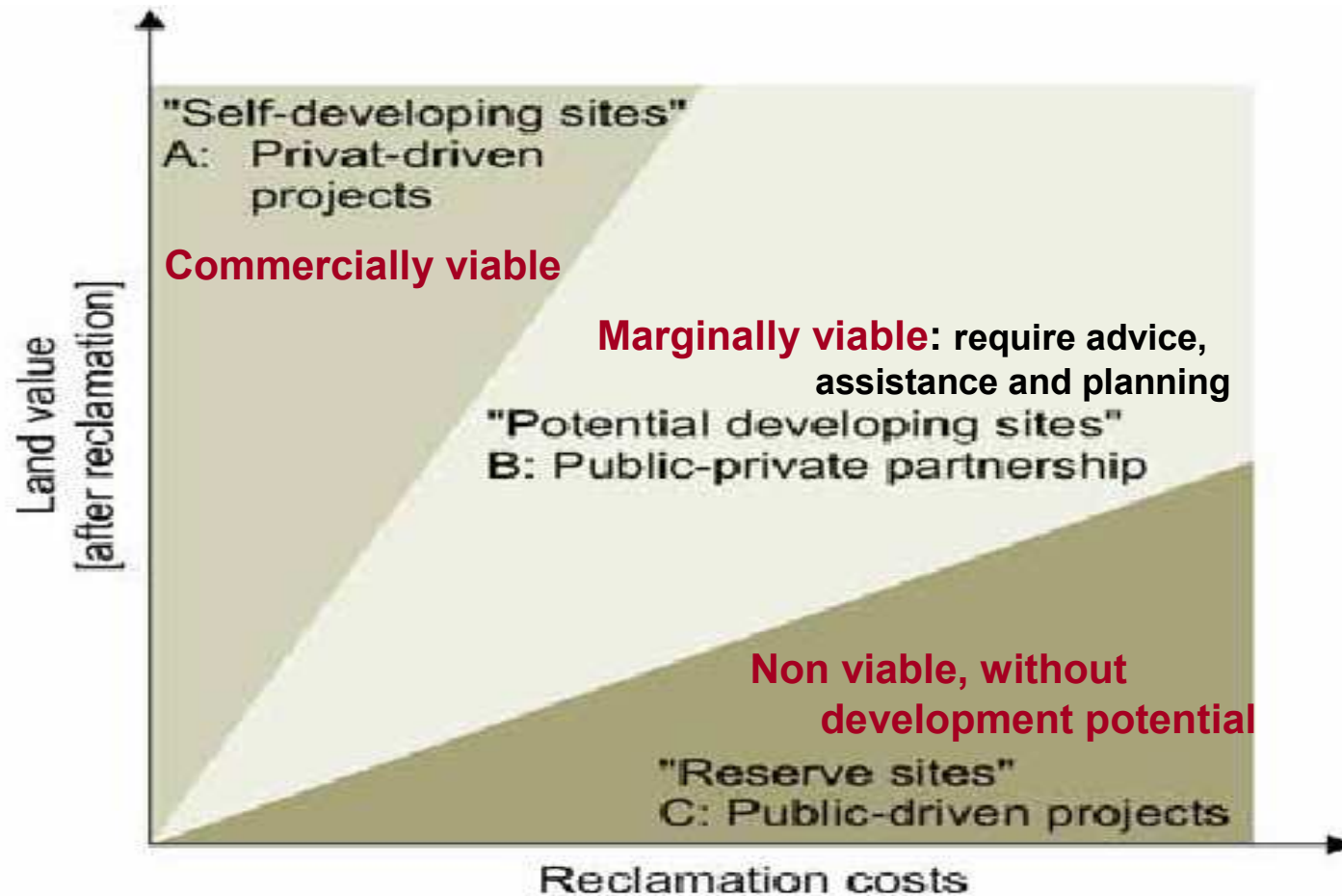
Problem

- **More costly** and involves **more risks** than greenfields redevelopment
- **Negative image** of brownfield areas

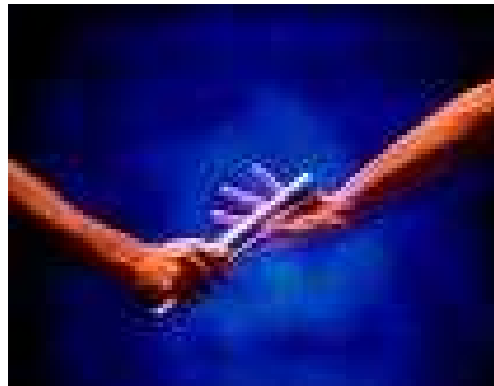
Solution

- Looking at the financial issue **in a broader perspective** and considering the **cost saving effects** like existing infrastructure, transportation and other public services. Positive effects: Collective benefits, environmental benefits, improved neighbourhoods, preserved workspace, preservation of greenfields and lessening public health impacts
- New **marketing** techniques, **awareness raising**, **information on the positive effects** of redevelopment

A B C Sites and Land Value



Alleviation of the Risks



- **Environmental assessment, due diligence**
- **Consulting environmental lawyers and engineering experts**
- **Co-operative** working relationship with **environmental regulators** helps to communicate concerns and develop a **clear understanding** and expectations
- **Avoiding delay** (additional costs: new regulatory changes and unplanned events and change of circumstances have an impact on the initial aims)
- **Additional assurances**, indemnification, escrows

Additional Assurances



- Ask for **another mortgage**, inventory and equipment
- **Cash flows**, personal **guarantees**, **insurance products**
- **Constructing** the buildings in **several phases** to make funds available for the latter phases
- **Subdividing into smaller parcels** (while the seller cleans up the contaminated section, the buyer can redevelop the clean parcels)
- **Agreements** in the **purchase contract** (seller-buyer)
- **Joint-ventures** (seller has a share in the financial returns from the redevelopment)
- **Purchase options**: buyer holds the right to purchase the property, but does not take title until the site is clean

Financing Instruments for Brownfield Redevelopment

- Collateral loan
- Project finance
- Municipal infrastructure finance
- PPP (Private Public Partnerships):
to promote and co-ordinate the equity participation of government,
NGO's, for-profit developers, banks and investors
- Investment (supply of equity capital)
- Public funds (revolving funds)



Elements of Project Finance Plans

| Construction Item | year 1999 | | | | year 2000 | | | | year 2001 | | | | year 2002 | | | | | | | | | | |
|---|-----------|---|---|---|-----------|---|---|---|-----------|----|----|----|-----------|---|---|---|---|---|---|---|---|----|----|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 |
| Tower | | | | | | | | | | | | | | | | | | | | | | | |
| Excavation (Up method) | | | | | | | | | | | | | | | | | | | | | | | |
| Structural Steel (NSC) | | | | | | | | | | | | | | | | | | | | | | | |
| Superstructure Concreting | | | | | | | | | | | | | | | | | | | | | | | |
| Substructure Concreting | | | | | | | | | | | | | | | | | | | | | | | |
| Exterior Finishing (Outer walls) | | | | | | | | | | | | | | | | | | | | | | | |
| Interior Finishing | | | | | | | | | | | | | | | | | | | | | | | |
| Podium | | | | | | | | | | | | | | | | | | | | | | | |
| Excavation (Top-down) | | | | | | | | | | | | | | | | | | | | | | | |
| Structural Steel (NSC) | | | | | | | | | | | | | | | | | | | | | | | |
| Superstructure Concreting | | | | | | | | | | | | | | | | | | | | | | | |
| Substructure Concreting | | | | | | | | | | | | | | | | | | | | | | | |
| Exterior Finishing (Outer walls) | | | | | | | | | | | | | | | | | | | | | | | |
| Interior Finishing (exclude construction phase 2) | | | | | | | | | | | | | | | | | | | | | | | |
| Landscaping | | | | | | | | | | | | | | | | | | | | | | | |
| Elevator and Escalator Installation | | | | | | | | | | | | | | | | | | | | | | | |

- **Project description** -property location, ownership, developer
- Copies of **completed similar projects - evidence**
- Planning and **predevelopment** work -existing improvements
- **Finance plans**
- **Documents** proving **site** control (soil or groundwater **contamination**)
- **Architects plans**, description of the firm
- **Letters of interest from other founders**
- **Market study** showing **demand** for the service offered on the brownfield site



EU Funding Programmes and Policies

■ Structural Funds

- **ERDF** European regional development fund

ERDF- DG Regio*) (Jessica and urban development funds -UDF- and Holding funds – EIB acts as a fund manager):

PPP or other projects with a need of a **business plan** (target market, operational budget, ownership structure, exit and winding up provisions)

- **ESF** European Social Funds

- **Cohesion funds** Cohesion Policy 2007-2013 (urban development)

■ INTERREG III B (past funding programme)

■ URBACT - URBAN

■ LIFE + supports the implementation of the 6th Environmental Action Plan

■ FP 6&7

(7th Research Framework Programme (Env. Research, sustainable management of resources and env. Technologies, mitigation and remediation of the env. damage)

In general, **these funding programmes** offer considerable scope for action in the area of sustainable land use and encourage Member States to **use strategic and integrated approaches** and **support networking and exchange of experience.**

*) Regional Development and Management of Structural Funds

Legal Basis within Regulations

- **General structural funds regulation** (Art. 3 § 3; 27 § 4b; 37 § 4a/6a):
 - Sustainable urban development part of regional development
 - Integration in National Strategic Reference Framework (NSRF)
 - OP: urban priorities or measures wanted, information on approach, list of funded urban districts and procedures for sub-delegation

- **Urban development:** Support to participative, integrated and sustainable strategies for disadvantaged urban areas; physical environment (brownfield, heritage), entrepreneurship, employment, community work and services (**ERDF**, Art. 8)

- **Brownfield regeneration** eligible (Art. 4, 4 / Art. 5, 2 a, Art. 8)

- **Housing** eligible only for new member states (Art. 7 ERDF)

The Jessica initiative

- responds to the request by several Member States and the European Parliament to **give special attention to the need for regeneration of urban areas,**
- is based on a perceived market failure in the urban sector or, more specifically, on the lack of investment funds **to finance integrated regeneration projects in pursuit of more sustainable urban communities.**
- Initiative of the European Commission (DG REGIO) launched at end of 2005, and supported by EIB www.eib.org

Urban Regeneration: a sustainability issue

Sustainable urban environments require a spatial planning approach.

Main challenges arise and have to be solved in an urban context, rather than in rural areas:

- **Energy efficiency**
- **Transport policy**
- **Social Integration**

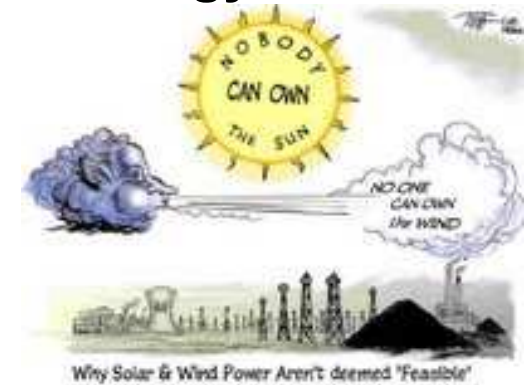
***Projects forming part of an integrated plan for sustainable urban development
are eligible for Jessica funds:***

recovery, transformation and re-use of land and buildings, urban utility networks, urban transport and traffic management schemes community facilities, housing, brownfields (wider eligibility scope)

Brownfields in the context of Climate Change: Redeveloping Brownfields with renewable Energy **Brightfields**

Concept that addresses

- **urban revitalization**
- **toxic waste cleanup** and
- **climate change**
- The term "brightfields" refers to **the conversion of contaminated sites into usable land** by bringing
- **pollution-free solar energy** and
- **high-tech solar manufacturing jobs** to these sites, including the **placement of photovoltaic arrays** that can **reduce cleanup costs**, building integrated **solar energy systems** as part of redevelopment, and **solar manufacturing plants on brownfields**.



Brownfields revitalisation: Macro- and Micro-Economic Benefits



- **Efficient use of land and existing infrastructure** (community, economic)
- **Removes unproductive “holes” and unlocks value of undervalued/underused assets** (economic sustainability)
- **Additional jobs** and new tax revenues for cities and towns (macroeconomic, social)
- **Quality of life** and the **environment** (risk reduction of human health)
- Approach of **flood alleviation** and **prevention of mud slides** (social, environment)
- Revitalisation of deteriorated **neighbourhoods** (economic, social)
- **Solving problems** like **liability** for past contamination, **inadequate financing**, **weaker market conditions** (economic, social)
- **Reduced development pressure on greenfields** (environmental, economic, social)
- **Potential for exceptional returns on investment for developers and lenders** (economic)

An Austrian Example: Gasometer



"The time has come,
The time of surveillance is past.
The time of waiting for paradise is past.
The time of fruitless talking is past.
The time of action has come."



Hundertwasser - Austrian Painter and Architect (1928 - 2000)



Thank you for your attention!

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