

ClearSupport: WP3 Financing Schemes for Building Renovation

Clearinghouse Support Kaunas

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BERLINER *nergie* AGENTUR



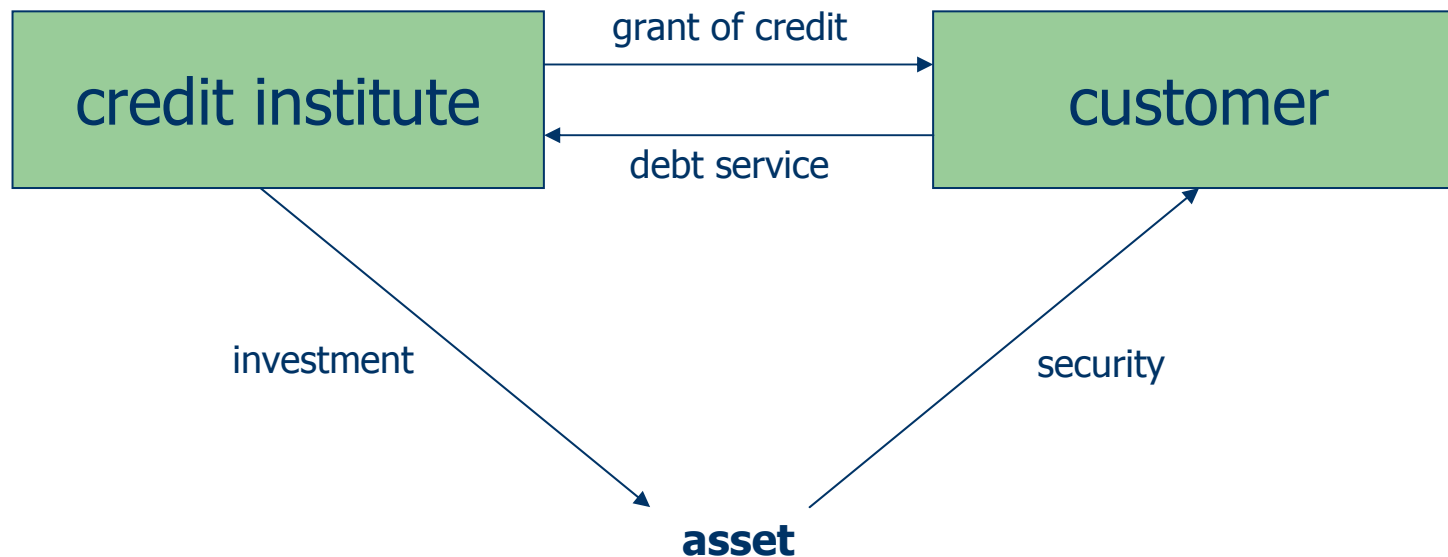
ClearSupport

Bridging RUE in Building
Project and Financing

Traditional financing instruments

❑ Credit / Loan Financing

- Negotiated between credit institute and customer



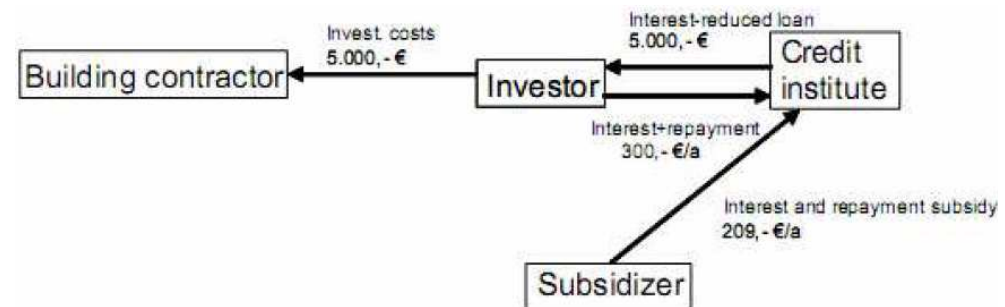
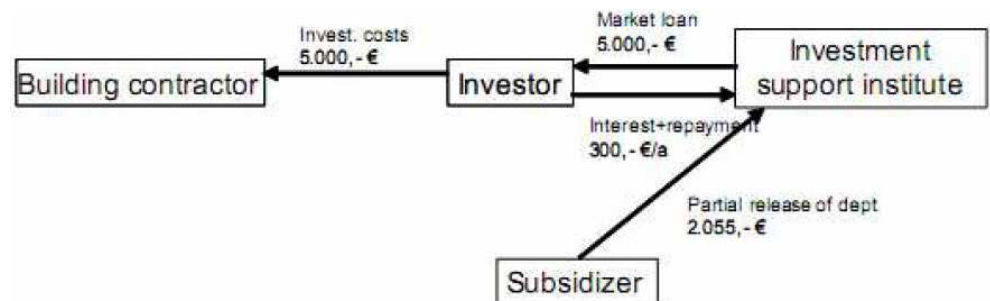
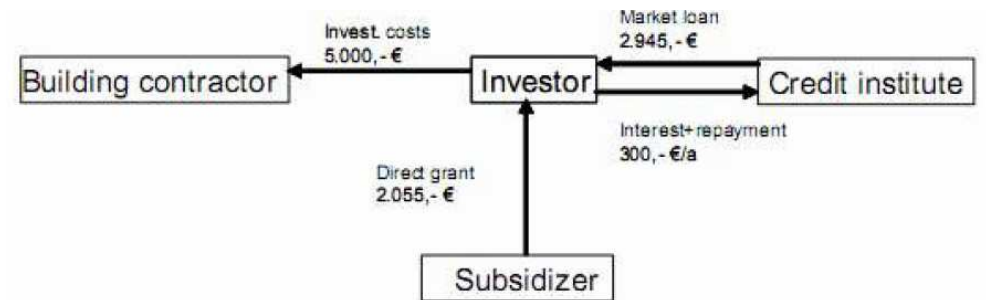
Traditional financing instruments

□ Grants

- Direct grants
 - Repayment is not required
 - Reduces total costs of investment

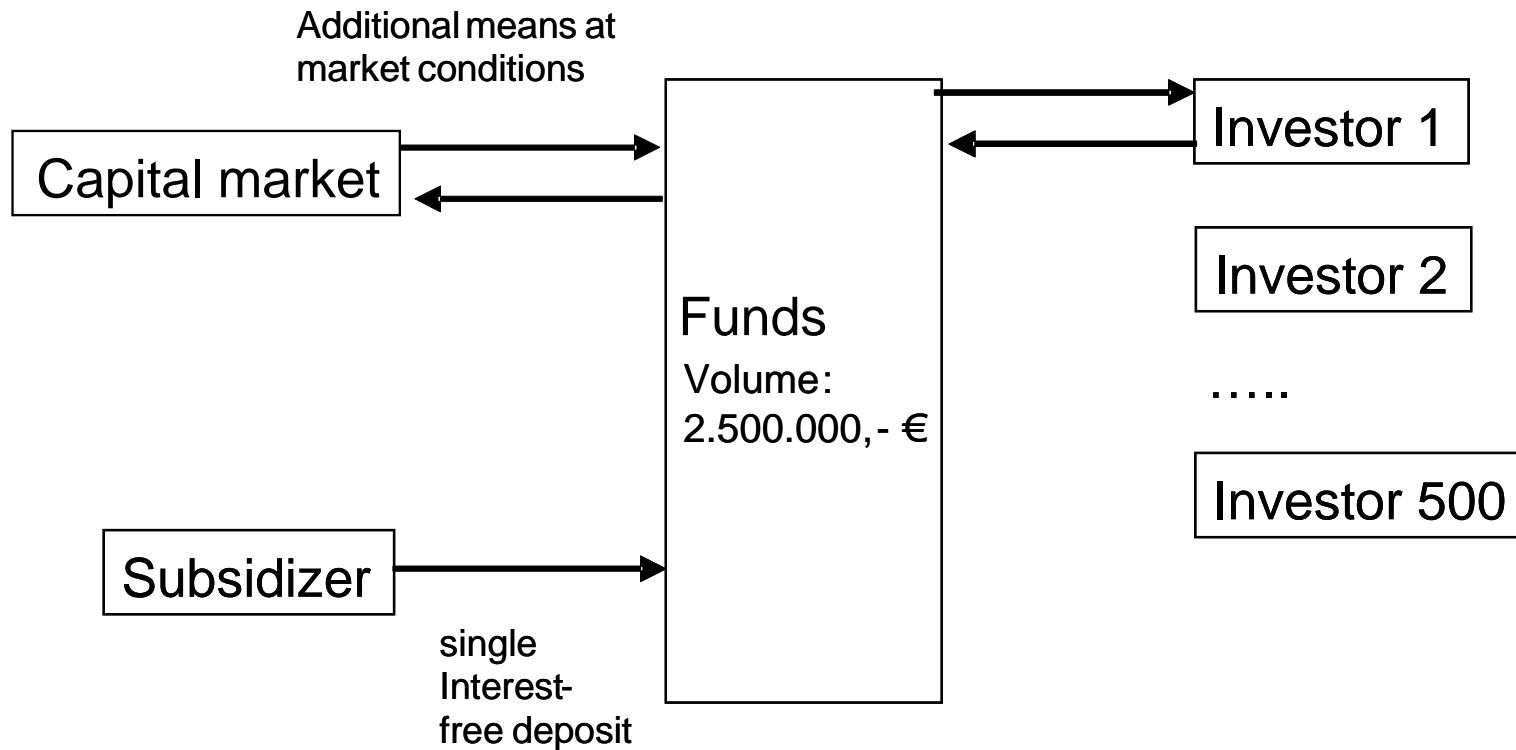
- Partial grants
 - Partial release of debt
 - Financing institute renounces a part of the repayment

- Interest subsidy
 - Subsidy payments are distributed over complete financing period



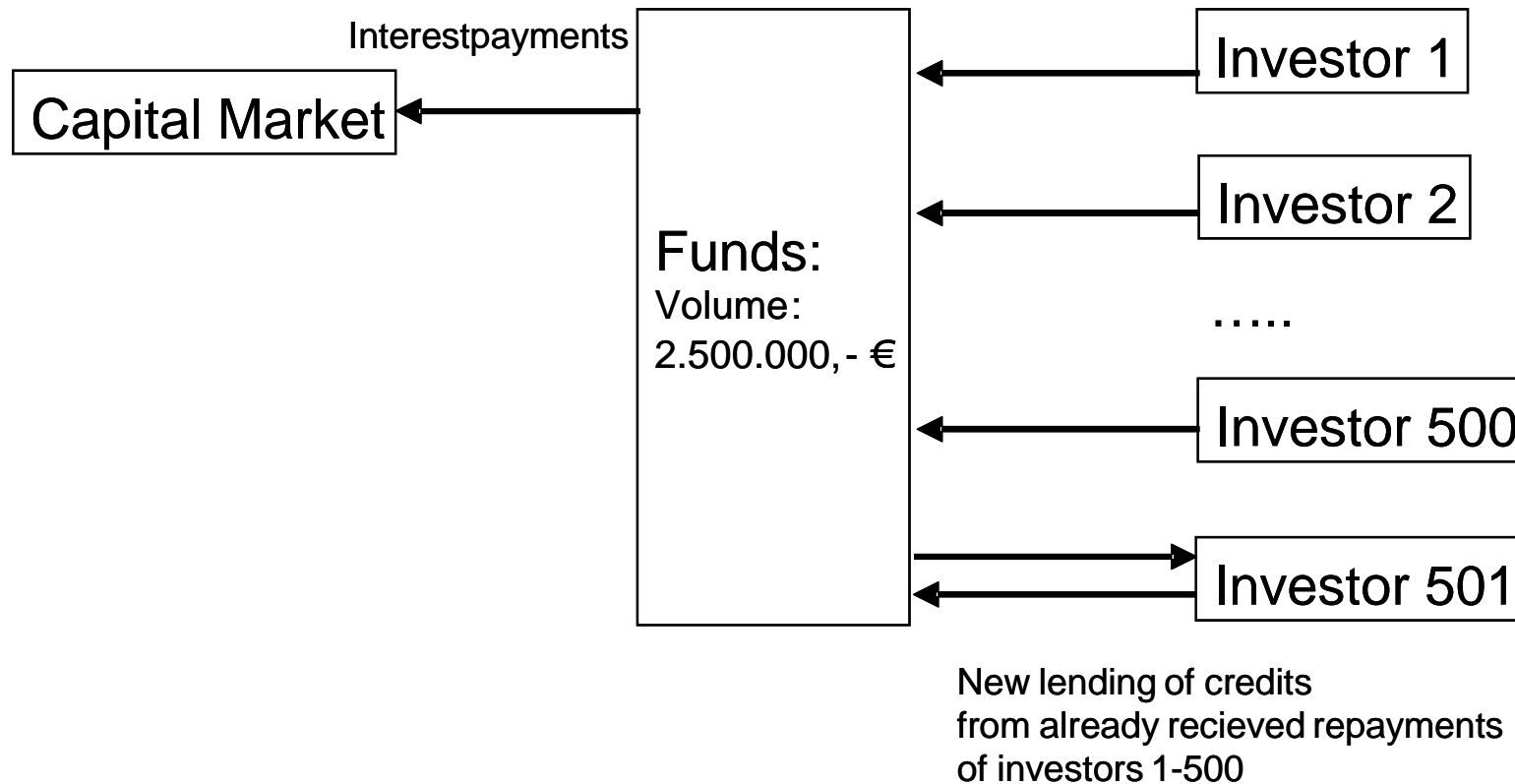
Public-Private-Partnership Financing

- ❑ Revolving funds (interest reduced loans from a fund)
 - Combination of subsidy and loans from capital market



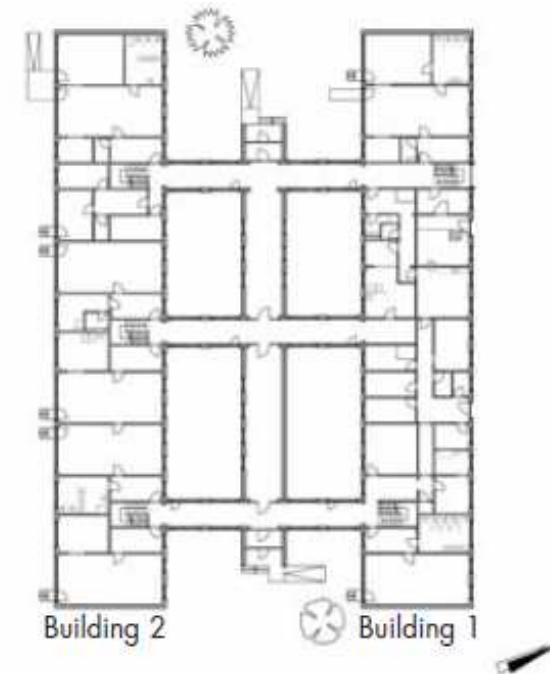
Public-Private-Partnership Financing

- ❑ Revolving funds (interest reduced loans from a fund)



Best Practice

- ❑ Building refurbishment - Children's day care centre (1)
 - Wismar/Mecklenburg-Vorpommern
 - Year of construction 1972
 - Precast concrete slabs
 - A/V (surface/volume) ratio before refurbishment 0,56
 - A/V ratio after refurbishment 0,41



Source: Bine Informationsdienst 10/2006

Best Practice

- ❑ Building refurbishment - Children's day care centre (2)
 - Final energy consumption reduced by approx. 65% in the first year after refurbishment
 - "second skin" reduces thermal bridges and insufficient insulation of many exterior building elements
 - New atrium makes building more compact and provides spacious all-weather play area
 - Financing
 - Project financed by KfW
 - Project funding by Federal Ministry of Economics and Technology (BMWi)

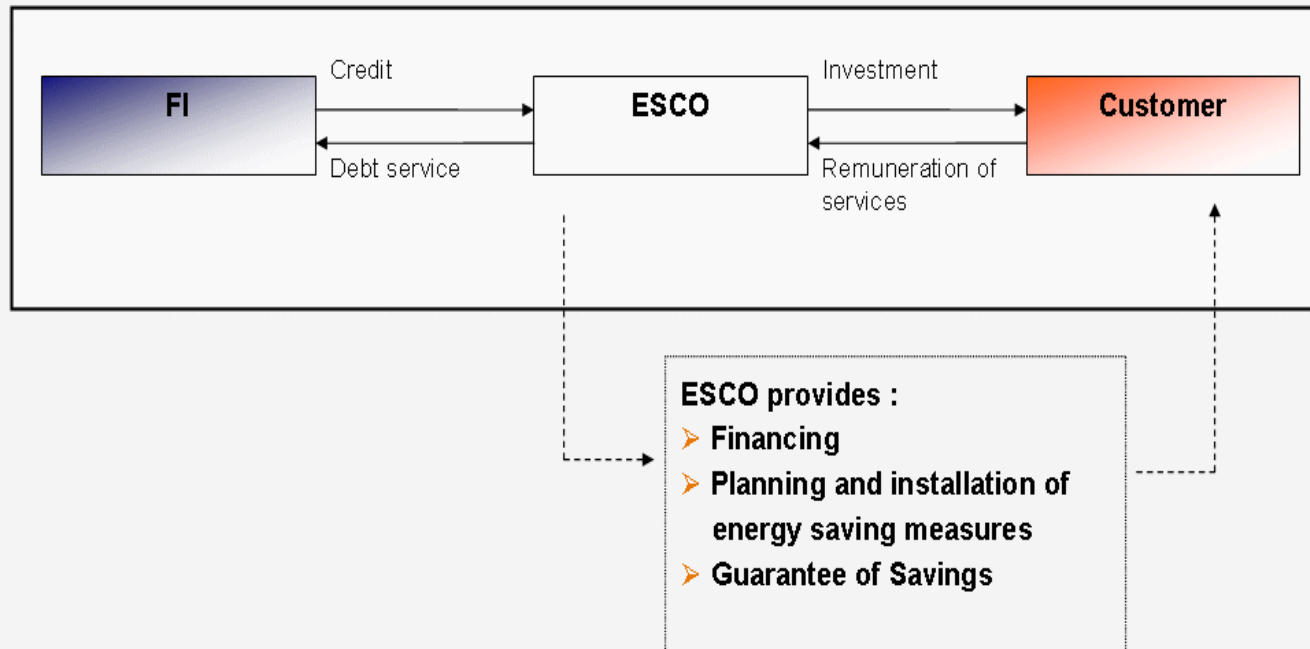


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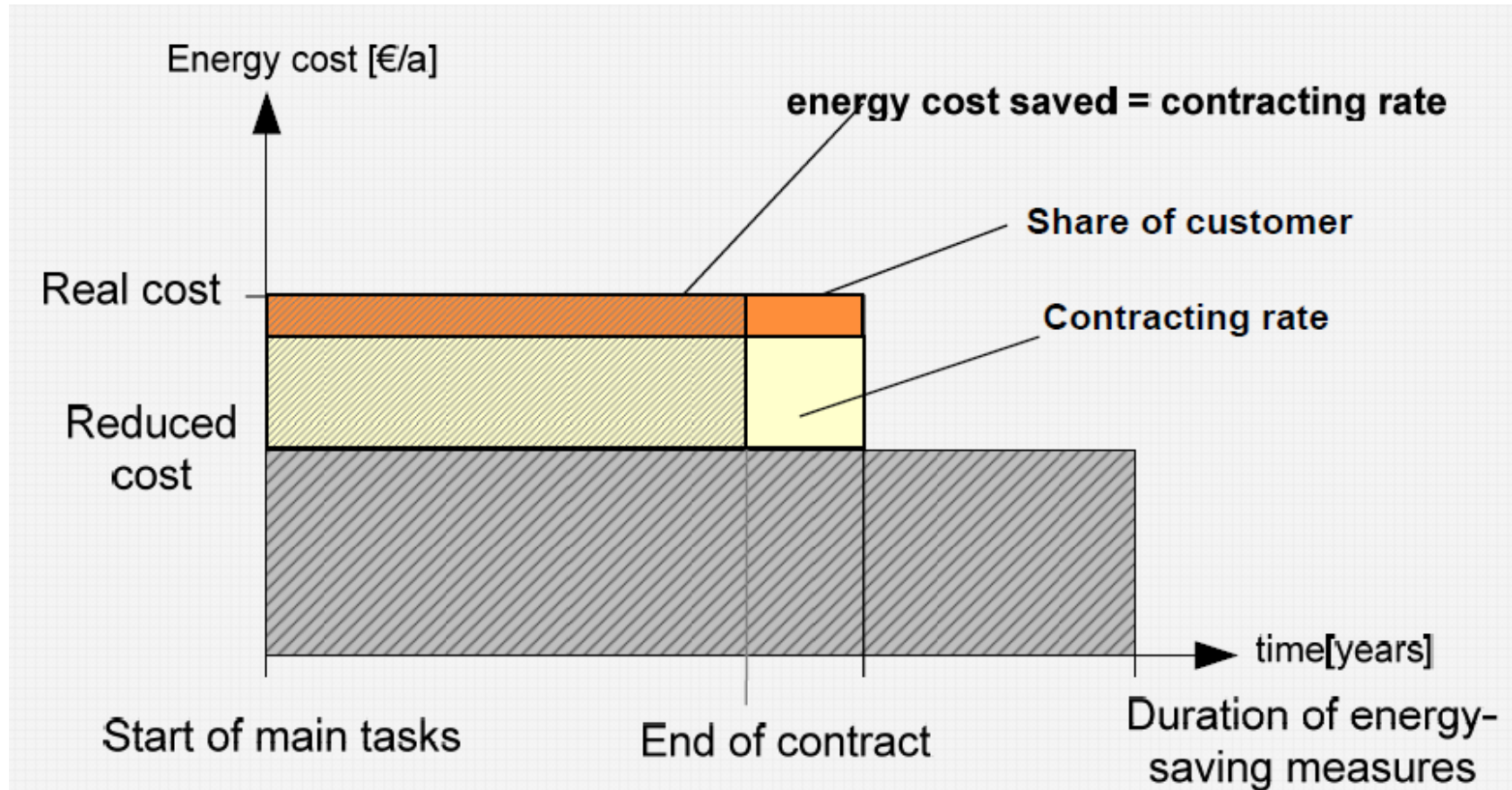
Public-Private-Partnership Financing

□ Energy Supply/Performance Contracting

Financing for Energy Services (Financing via ESCO)



Public-Private-Partnership Financing



Good Practice



Königstadt-Terrassen Schönhauser Allee
in the Berlin district Prenzlauer Berg

- ❑ Office building Immobilienverwaltungs KG (real estate management corporation)
 - Services and commercial complex, 25 retail units, in total 40,000 m²
 - Natural gas boiler running at low temperature: 1,900 kW
 - 2 natural gas operated CHP units: each 120 kW_{el}, 214 kW_{th}
 - Absorption chiller unit: 350 kW
 - Emergency current: 220 KVA
 - Start of supply: 1996

Good Practice

□ Bezirk Steglitz-Zehlendorf (Pool 19)

- Pool: 69 buildings (schools, kindergarden, gyms)
- Baseline: 1.84 Mio. €/a
- Guaranteed savings: 29,4 % = 541,679 €/a
- Invest: ca. 2.8 Mio. €
- CO2-reduction : 3,973 t/a
- Duration of contract: 14 years
- Measures: new boilers in 11 buildings, switch from coal/heat oil to gas, building automation, modernisation of lighting
100,000€ for Renewable energy technologies, e.g. solar thermal systems



Thank you for your attention!

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