

Housing renovation measures and implementation experience in Estonia

Lauri Suu KredEx 09 November 2011



KredEx Foundation: Enterprises, Export, Housing

- A self-sustaining and nonprofit guarantee fund that offers:
 - Business loan guarantees
 - Mezzanine financing
 - Long term funding for commercial banks
 - Export guarantees
 - Housing financing and loan guarantees







Solid foundation

- Founded in 2001
- Under the jurisdiction of the Ministry of Economic Affairs and Communications
- State guarantee limit for:
 - Business Ioan guarantees
 - Export guarantees
 - Housing loan guarantees
- Fully accredited for using ERDF and SF
- Member of AECM, NEFI, IUHF, IFHP
- Number of staff: 40





Housing stock

- Estonia: 1,4 million inhabitants
- ~17 000 apartment buildings
- ~95% housing stock is in private ownership:
 - ~60% of the housing stock
 has been built in 1960-1990
 - ~30% before 1960
- ~ 75% population living in multi-apartment buildings
- Low quality and low energy efficiency
 - Average energy consumption per year in buildings which have not been renovated 200-220 kWh/m²
- Energy used in buildings ~ 40%







Previous measure – grant scheme

2003-2007 state grants all over Estonia:

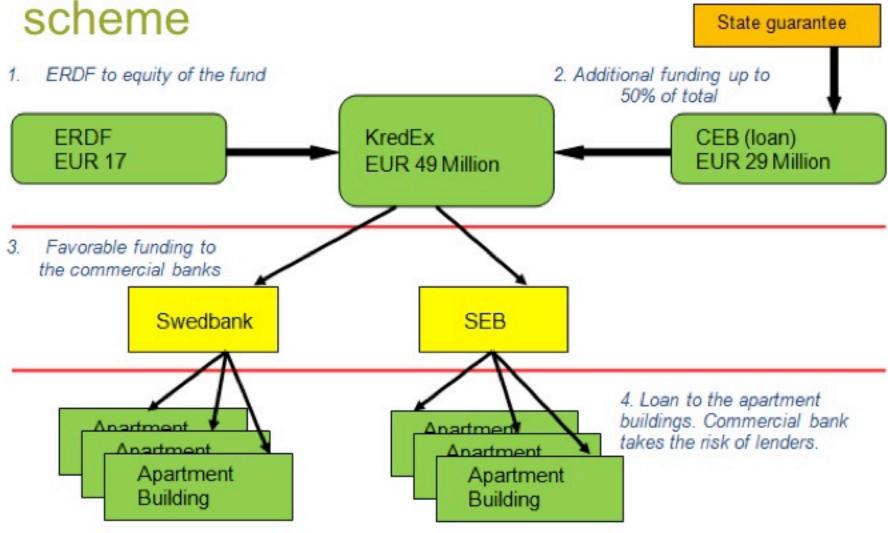
- For energy audits, building design documents and technical expertise 50% of the costs (since 2003) –
 - Supported 5 000 buildings
 - Totally 1,5 million €
- For renovation, 10% of the costs
 - Supported 3 200 buildings
 - 17 million m², totally 11 million €
- Problems:
 - · Insufficient funding
 - Singel works
 - Grant available after payments







Low interest rate loan - revolving fund scheme







From renovation grants to revolving fund – why?

- Opportunity for re-usage of the funds
- Funds stay in state
- Support scheme (10% support) versus loan scheme (state support is even bigger)
- Loan is needed for reconstruction anyway
- Opportunity also to smaller buildings
- Easier to administer, lower administrative costs
- End-beneficiary is used to take loan
- Innovative scheme





Credit to apartment buildings

- Main purpose energy efficiency measures:
 - to save at least 20% of energy in buildings up to 2000 m², 30% in bigger buildings
- Self-financing 15% (now grant)
- Energy audit is obligatory
- Loan period: up to 20 years
- Interest rate: up to 4,4%, fixed for 10 years
- Credit is given against cash flow no collateral from building is needed.
- In case of higher risk bank can use guarantee from KredEx





Selection of eligible works

- Thermal insulation:
 - of the roof
 - of the walls/facade
 - of the cellar/roof ceiling
- New windows/outdoors
- New heating system/renovation of the heating system
- Renovation of the ventilation system/new ventilation system
- Installation renewable energy devices







Obligations of end beneficiaries

 To report energy consumption (3 years before + loan period) (via internet)

 To present all building contracts, design projects and reconstruction budget

- KredEx can do the spot verification
- Information about using ERDF funds in stairhalls
- Other loan obligations







Renovation loan vs usual loan

Renovation loan

- Interest:
 - Fixed for 10 years
 - Between up to 4,4%
 - Interest on 64 000 € loan
 4,2% 10 years 14 480 €
- Contract fee:
 - 0,5% from loan amount
- Maturity:
 - Up to 20years

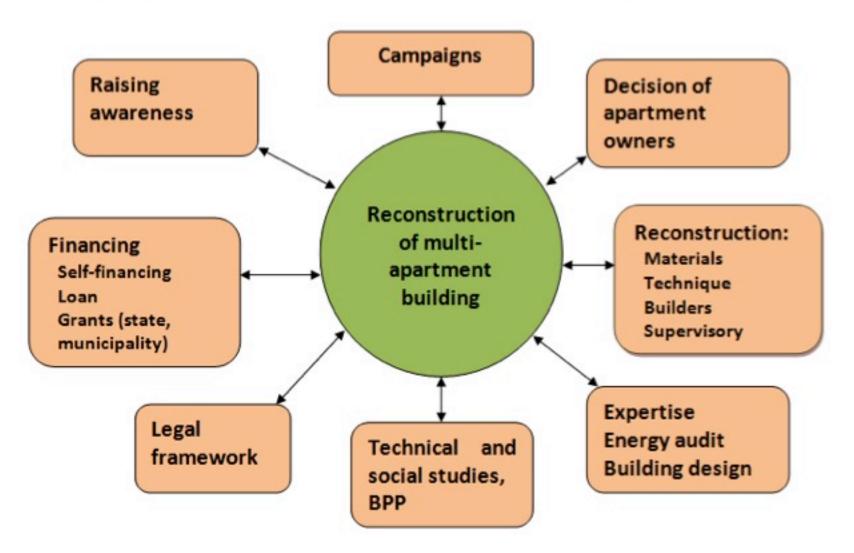
Usual commercial loan

- Interest
 - Fixed for 5 years or floating
 - Interest ~ 7-10%
 - Interest 64 000 € Ioan 7%
 10 years 25 137 €
- Contract fee :
 - Up to 1% from loan amount
- Maturity:
 - Average 2008: 11,8 years





Key for success: all-round approach







Combination of national and municipal funding schemes

- State grant from KredEx for:
 - energy audit 50%, max 700 €
 - technical inspection 50%, max 700 €
 - building design documents 50%, max 4 000 €
- GIS Grant
- Tallinn city reconstruction grant 10% for apartment buildings using renovation loan
- Credit guarantee from KredEx if needed, maximum 75% from the loan amount, state guarantee





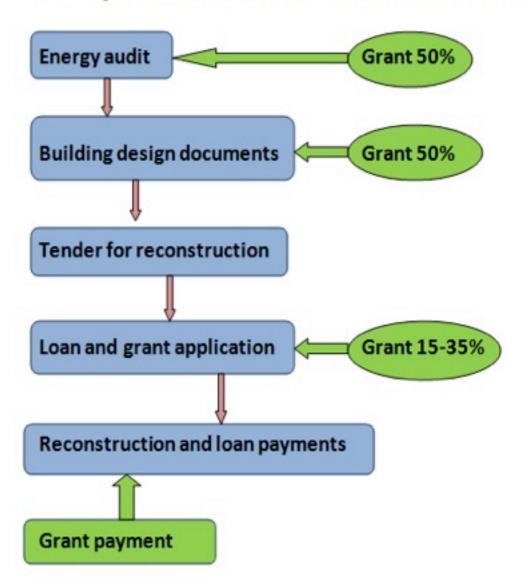
GIS grant - Luxembourg

- Grant rate:
 - Saving 20/30% grant 15%
 - Saving 40% grant 25%
 - Saving 50% grant 35%
- Documents:
 - Decision in General Assembly
 - Energy audit for the building
 - Building design documents, building permit
 - Contracts with builders
 - Credit from banks (if necessary)
- Grant payment after works are submitted





Steps for end-beneficiary





Results so far

Loan

- Start 24.06.2009
- By 10.10.2011:
- 330 buildings
- Apartments 12 600
- Ca 823 300 m²
- Total 28,6 mln €
- Average 88 140 €
- Saving 35,4%

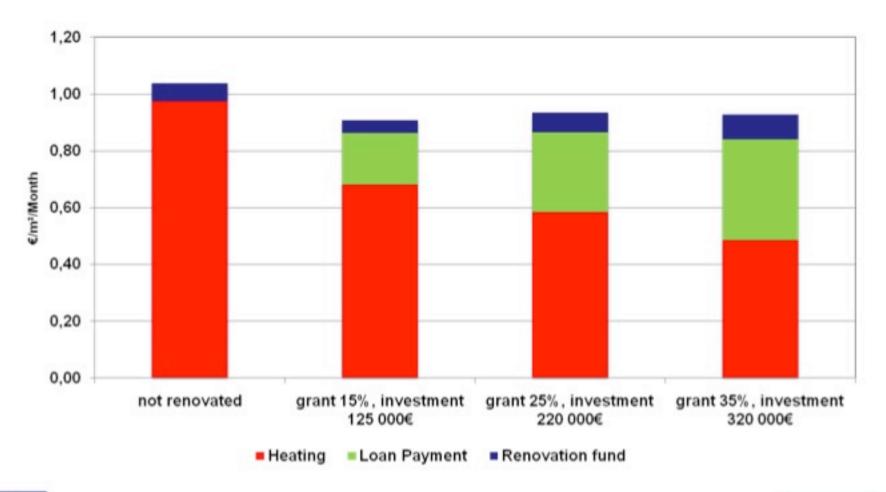
Refurbishment grant

- Start 30.09.2010
- By 01.11.2011:
- 265 applications/245 buildings
 - 6,8 mln €
- 224 pos decisions (6 neg)
 - 6 mln €
 - 15% 2 mln €
 - 25% 2,4 mln €
 - 35% 1,6 mln €
- Ca 520 000 m²
- Ca 8500 apartments
- Average 30 000 €





Burden of payments — building 2000 m², interest 3,8%, loan 20 years







Information to market participants

- Press-conference in public media
- Infodays/seminars/workshops to end beneficiaries, builders, energy auditors, project designers, local municipalities
- Advertisements in newspapers/magazines
- Internet (website, banners, news, articles)
- Campaigns
- Direct mails
- Leaflets/booklets





10 campaigns since 2006









From 10% Grant to present

- Building reconstruction is unavoidable
- 2 years for preparations (revolving fund) long period
- Economical conditions changing constantly
- Scheme has great future (low interest, high energy efficiency) – combined with grants in Estonia now best financial terms over history
- All-round approach awareness raising, promotion, state and local support, legal and financial framework – is the key for success





"Healthy and Sustainable home" – Sõpruse 244, Tallinn

Summary (Study of similar buildings - Tallinn University of Technology)

- Main constructions in good shape
- Very bad indoor climate
- Thermal bridges
- Average heat consumption of similar buildings 190 kWh(m²/a)
- Renovation is necessary and complex approach is the best choice







Renovation goals

- Complex renovation Optimal solution
 150 mm wall insulation (new balconies)
 300 mm roof insulation
 Old windows replaced (U≤1,10 W/(m2K))
 New heating system with allocators on every radiator
 Ventilation system with heat recovery
- Average heat consumption below 100 kWh/m2
- Better living environment and people pay less Preparation and building design documents 04.2010-05.2011

Recontrucion period 06.2011-11.2011





Budget

	Renovation work	tööde maksumus, EUR
1	Roof reconstruction	119 200
2	Wall insulation with replacing old windows	126 000
3	Balconies	52 800
4	Heating system	34 400
5	Ventilation system	105 600
6	Heat cost allocators	12 000
		450 000
	All subsides	220 000
	Loan with reserv	242 000





Without other subsides

- 60 apartments, closed neto 2687 m²
- Complex renovation investment cost 450 000 €
- Kredex 35% subsidy 157 500 €
- Loan 292 500 €
- Loan monthly payment (intrest rate 4,07%, period 20 y.)
 0,66 €/ m² per month
- Renovation fund for future investments 0,32 €/m² per month (at the moment)
- Heating cost 484 MWh per year (0,94 €/m² per month)
- Loan payment with 15% reserv (renovation fund for future investments) 0,77 €/m² per month – investmentcost growth 0,45 €/m² per month





Without other subsides

Payment cost - average apartment (45 m²)

- Loan payment with 15% reserv 34,65 €/per month (0,77*45)
- Savings of heating cost 50% 0,47 €/m² (0,94*0,5) –
 21,15 €/per month
- Renovation payment rise 0,45 €/m² (0,77-0,32) 20,25
 €/per month,
- Cost decrease 0,9 € per apartment per month
- Energy price rise of 20% helps to save extra 4,2 €/per month per apartment. Ivestment cost is fixed for 10 years and may rise only a bit after 10 years.











Thank you!

Lauri Suu lauri.suu@kredex.ee

Hobujaama 4 10151 Tallinn, Estonia www.kredex.ee Tel: +372 6 674 100

Fax: +372 6 674 101



