



EIE Project ROSH

Development and marketing of integrated concepts for energy efficient and sustainable retrofitting of social housing

www.rosh-project.eu

Summary on regulatory frameworks and economic conditions

WP 3: Advanced Tailored Financial Schemes

Task 3.1: Analysis of existing financial mechanisms and economic conditions

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1 Introduction

1.1 The ROSH mission

ROSH – Retrofitting of Social Housing – is a European co-operation project for the development and marketing of integrated concepts for energy efficient and sustainable retrofitting of social housing in the partner regions. For the purpose of the project “social housing” comprises multi-family houses or apartment buildings for low-income households. Running from January 2006 to June 2008, ROSH supports this undertaking with information, training and communication measures as well as helpful tools and materials. Its focus is on social housing providers and on tenants. Within the scope of ROSH, guidelines for the sustainable retrofitting of less privileged houses will be developed as well as financing schemes. ROSH methods will be evaluated by means of demonstration projects.

1.2 Advanced tailored financial schemes

The major obstacle for refurbishment in social housing is well known: lack of financial means. This situation is significant for all EU Member States. The ROSH project team analysed the specific, current situation in the participating EU regions (in Austria, Germany, Ireland, Italy and Poland) in order to research, compile and assess innovative financial schemes. The starting activities have confirmed the problematic status quo but have shown some interesting approaches (e.g. contracting instruments) to improve the situation.

The main results will be presented in the guidebook “Sustainable Retrofitting of Social Housing: Financial Schemes”. The publication will describe regulatory frameworks concerning energy efficiency, subsidy schemes and advanced tailored financial schemes. In addition it will contain planning tools for and good practice examples of successful financing projects. The guidebook is intended for decision makers in housing companies and local authorities as well as energy agencies, consultants and planners and will be published in spring 2007.

This survey describes regulatory frameworks and economic conditions in the partner regions. It is based on the previous research involving experts and key actors and is the basic document for the further elaboration of new tailored financing schemes.

2 Overview on housing policy

2.1 Legal framework

country	national	regional	local
at	x		
bg	x		
de	x ¹		
ie			x
it	x		x
pl	x		

¹ The EnEG is a law that concerns the conservation of energy in general

Table 1: Overview of the housing policy in partner regions

2.2 Building codes

country	national	regional	local
at		x	
bg	x		
de	x	x	
ie	¹		x ²
it		x	
pl	x		

¹ Department of Environment and local government provide funding for the refurbishment of social housing

² Main responsibility für implementation of refurbishment

Table 2: Overview of building codes in partner regions

2.3 Subsidies for social housing

country	national	regional	local
at		x ¹	x ²
bg			x
de	x ³		
ie			x
it	x ⁴	x ⁵	
pl	x		

¹ Solar, biomass

² Solar, district heating

³ The public bank KfW offers a 10% subsidies on special loans.

⁴ Tax allowances of loan interests, tax reduction on housing sale

⁵ Distribution and control of subsidies.

Table 3: Overview of subsidies in partner regions

2.4 Building permits in case of a refurbishment

Austria:

- A building permit is needed when a new oil-boiler will be installed or the building will be expanded (e.g. attic floor) – a change of regulation is expected to come into force with the adaptations to meet the targets of the EU Directive on Energy Performance of Buildings (EPBD).

Germany:

- A building permit is always needed. Exceptions are listed in NBauO § 69 and annex 1. Maintaining building work does not need a building permission either (NBauO § 69 (5)), this includes for example wall covering and wall and roof insulation an exchange of windows and doors (NBauO § 69 (5), Annex 13.1 ff)

Ireland:

- material alteration
- Floor area of the building is extended by 40m²
- Height of the building exceeds original height
- Change of use or material

Italy:

- A building permit is needed if the volume or the area of the building are increased and if some changes in the space distribution are planned: if the room changes size or the walls are moved also in the interior space, there is need of a formal communication to the municipality, signed by an architect responsible, called DIA (Dichiarazione di inizio attività) – Declaration of start of activities.

Poland:

- The Act of Building Law of 7th July 1994 (Journal no 00.106.1126 of 2006) specifies the requirements for construction works. According to this act the construction permits are not required in case of the following works:
- refurbishment of existing buildings , except for the buildings entered in the register of historic heritage buildings when it is required, if it does not involve the change or replacement of construction parts of a building and its gas installations,
- thermal insulation of buildings of the height up to 12 m
- insulation of external walls with foamed polystyrene is allowed up to 25 m height; above only mineral wool can be applied

2.5 Regulations to improve the energy performance of buildings in case of refurbishment

Austria:

- The building law is relevant for those parts of the buildings which will be replaced (e.g. windows).

Germany:

- EnEV §§ 8: If a building shall be refurbished the thermal transfer of the exterior heat-changing surfaces is limited.
- EnEV §§ 9,11,12: refitting heating system and some insulation duties

Ireland:

- Conservation of Fuel and Energy Dwellings (2005) applies to material alterations to, or Material Changes of use of existing buildings

Italy:

- The new D.Lgs. 192/05 (19 August 2005) says that the total refurbishment of the envelope on buildings over 1000 m² floor area should apply the consumption values and the U-Value indicated for the external elements (external wall, roof, basement, windows) of new buildings. This regulation applies also in case of enlargement of a building: on the complete enlargement, if it has a volume bigger than 20 % of the existing building. Refurbishment of existing buildings has to apply some performance parameters (e.g. the substitution of a heater should respect the efficiency foreseen for the new plants). Public buildings should be cover 10 % of their energy needs with renewable energies, it is mandatory for example in case of refurbishment of heating plants. Technical or economical obstacles have to be shown in the project.

Poland:

- There are no general guidelines for thermal requirements of buildings undergoing thermal modernization. However, in case of using thermo modernisation loan it is required as following:
 - to reduce the demand for heat by at least 10% (if only the heating system is modernised) and by 25% in other cases with comparison to the initial situation before the refurbishment,
 - in case of modernization of local heat source or district heating network - reduction of annual energy losses at least 20%
 - in case of connection to district heating and liquidation of local heating source - reduction of heat cost at least 20%
 - in case of conversion of heating source into RES - no requirements.

2.6 Regulations to add thermal insulation to buildings in case of refurbishment

Austria:

- Additional insulation is in general not necessary in case of competence of the building law. A change of regulation is expected to come into force with the adaptations to meet the targets of the EU Directive on Energy Performance of Buildings (EPBD).
- But in subsidies schemes standards on the energy performance of building parts are mandatory. These standards are of higher quality than the regulations related to the building law.

Germany:

- Yes (see above 3.5)

Ireland:

- Where there are alterations to the buildings elemental U-values have to be met.

Italy:

- Only in case of total refurbishment of the envelope of the building. U-Values are indicated in D.Lgs. 192/05.

Poland:

There are no general guidelines for thermal requirements of buildings undergoing thermal modernization. However, in case of using thermo modernisation loan (according to the Act on Support of Thermo modernisation Investment of 18 December 1998 (paragraph 1121 Journal of Laws Nr 162 of 30 June 1998)) it is required to add thermal insulation which is thick enough to gain the minimum resistance for external walls, after they have been insulated, as follows:

Minimum thermal resistance $R = 4,00 \text{ m}^2\text{K/W}$ for external walls

$R = 2,00 \text{ m}^2\text{K/W}$ for ceilings over unheated basements

$R = 4,50 \text{ m}^2\text{K/W}$ for floors and roofs

Foamed polystyrene can be used for insulation that is performed up to the height of 25 m or to the level of 10th floor in buildings constructed before 1997, above this level only rock wool can be applied.

3 Main institutions and their role

Austria:

The Ministry Of Justice is regulating the housing laws (rent law, co-operative housing law and condominium law) on national level.

The regional authorities ("Bundesländer" like Styria) are responsible for building laws and subsidies. Subsidies are also granted by local authorities (municipalities).

Key actors are co-operative housing companies and property managers, both having their own associations – for the co-operatives the GBV (Austrian Federation of Limited-Profit Housing Associations) and for property managers the ÖVI (Austrian Association of Real Estate Trustees). Co-operating housing companies are generally constructing new buildings and are organising the property management of these and other existing buildings. Property managers are mainly responsible for the property management of existing buildings, some of them have also the permission to develop new buildings.

In larger cities residential buildings for poor people are managed by the public housing office. These buildings have been often developed by housing co-operatives.

A specific situation is given by the condominium law: owners of buildings referring to this law are owned by the residents. In this case the number of building owners goes in hand with the number of flats. Generally a property manager or a housing co-operative is acting for the association of owners.

Germany:

On the national level ("Bund") social housing funds are given annually by the federal government ministry (BMVBS).

The public bank KfW offers permanently refurbishments programmes to investors dealing with loans with reduced interests or even a 10% subsidy on special loans. The loans are issued on environmental (energy efficient) refurbishments or in cause of social disadvantages.

The annually given funds by BMVBS have to be redoubled by each provincial government (f.e. Lower Saxony) which then has to pour this capital into different annually social housing subsidy programmes ("Wohnungsbauförderungsprogramm"). The exact rules how to get and spend the money are set in the specific programme details. Some federal states have additional funds for energy efficient refurbishments (Lower Saxony presently not) These funds do not refer especially to social housing.

Municipalities often have special loan or subsidy programmes which often are given via the municipality –ruled ESCO. These funds even do not refer especially to social housing.

Housing cooperatives and owners have to make application for public money. They have to accomplish and to finance the refurbishment actions and in the end to verify their refurbishment success in some cases via official certified energy consultants (e.c.).

Main resource for refinancing new projects is rent as a general rule. As mentioned above, rent increase can be 11% of modernisation costs. Project financing by government is done within the scope of the rules of the subsidy programmes in social housing and KfW-bank.

Ireland:

Department of the Environment

The Department of the Environment, Heritage and Local Government is the Department primarily responsible for the formulation and implementation of policy and for the preparation of legislation in relation to housing.

The vast majority of housing services for which the Department is responsible are delivered through the local authorities. A limited range of services are provided directly to the public including grants towards the renovation and repair of thatched roofs.

Local Authorities

Local Authorities are traditionally the main providers of social housing in Ireland. People in need of permanent housing can apply to a local authority for a tenancy in a local authority house or flat. Applicants are assessed by the local authority and, if eligible, are placed on the local authority's housing list. The time taken before a tenancy is allocated will depend on the demand for housing in the local authority's area and the individual circumstances of applicants waiting for housing.

Irish Council for Social Housing

The Irish Council for Social Housing (ICSH) was formed in 1982 by housing and hostel organisations in Ireland to act as a national representative, promotional, information and advisory federation.

The ICSH now represents over 200 affiliated housing associations and other voluntary organisations involved in housing or hostel services, providing accommodation of over 15,500 homes to:

- elderly persons
- homeless and vulnerable persons
- people with disabilities and
- individuals and families on low incomes.

Housing associations now provide up to 30% of the total new social housing output each year. Since 1982 the membership of the ICSH has grown significantly and today the ICSH functions as the national representative federation for non-profit, voluntary and other social housing organisations with over 200 members.

National Association of Building Co-operatives

The National Association of Building Co-operatives is the representation, promotion, advice, information, training and development organisation for the Co-operative Housing Movement in Ireland.

The Association was formed by representatives of co-operative housing societies in 1973 and is a federated co-operative society or association of affiliated local housing co-operatives and registered co-operative housing societies.

National Association of Building Co-operatives (NABCo) Society Ltd. is a registered non-profit Industrial & Provident Society. The Association's objects are concerned with the relief of housing needs, poverty and deprivation, through the building and management of houses or apartment blocks, using co-operative organisational principles.

Italy:

The role of regions and municipalities

It is matter of each region to define the national objectives in detail and to make an own planning, to renew laws ruling the public residential sector and to grant financing funds, which may increase with the fiscal decentralisation.

The regions are expected to redefine the income levels for the access to public residential dwellings, to set a scheme for the rent level which should permit a balanced management and to develop new financing schemes. The organisation of residential housing is being modified through new laws and through the modification of the main responsible entities.

Municipalities are in charge of some of the decentralised actions:

- · definition of the suitable actions aiming to fulfil the most important needs
- identification of subjects which will locally realise the planned actions planned
- · subsidise subjects in charge of realising the planned actions
- · management and realisation of planned actions

The key actors

- IACP

After the institutional decentralisation the structure of the public sector has basically changed concerning territorial responsibility, relations with the regions and the municipalities and denomination (IACP, Istituti Autonomi per le Case Popolari).

The new denominations contain the Italian word for "company" instead of "Institute" and also the word "housing". Some examples:

Acronym	Azienda	Region
ACER	casa Emilia Romagna	Emilia Romagna
ALER	lombarda per l'edilizia residenziale pubblica	Lombardia
ARER	regionale per l'edilizia residenziale	Valle d'Aosta
ARTE	regionale territoriale per l'edilizia	Liguria
ATC	per il territorio e per la casa	Piemonte

ATER territoriale per l'edilizia residenziale

Abruzzo, Basilicata,
Friuli Venezia-Giulia, Lazio, Toscana, Veneto

In general ex-IACP are structured like a public subject under the control of the regions (or of public companies owned by municipalities in Toscana), being responsible for the construction and management of public and/or private residential housing.

The association representing all the ex-IACP is called Federcasa, which is also a member of CECODHAS.

- Municipalities

Apart from the institutional role, municipalities are also direct operators and sometimes they even compete with local IACP. Nowadays municipalities own large building stocks (over 300.000 dwellings), which is growing due to the transfer of the dwellings for the army employees.

This leads to the problem of managing these building stocks. Often IACP themselves are charged by the municipalities, in other cases private subjects are chosen with calls. IACP must therefore compete in the market with private companies, forcing them to transform into kind of enterprises.

- Cooperatives and building companies

Apart from public entities also cooperatives and building companies play a crucial role in the social housing sector. So far those subjects have been especially active in the new buildings and in the sale, but have recently shown interest for refurbishment and requalification activities and for rental activities, as well.

Poland:

Ministry of Transport and Construction is responsible for both housing policy and city development.

Municipalities – are responsible for public issues at a local level, including the assurance of collective needs of the community, such as communal housing, social care support and the supply of energy. Administrators of the municipal housing stock are obliged to take special care in its management in the respect of its use and conservation.

The municipalities are owners of so called communal housing stock and act as co-owner in home owner associations. In the communal housing stock municipalities are solely responsible for maintenance and refurbishment of buildings. As members of home owner associations the municipalities have obligation to pay the down payments for maintenance and refurbishment according to decision of assembly of home owners which is taken by majority of votes.

Housing cooperatives and home owners associations – both housing cooperatives and home owners associations are most important owners of social housing stock.

The cooperatives are working based on Cooperative law, can not work with any profit and are free at establishing of cost structure.

The home owner associations are working based on Law of ownership of dwellings from 1994. The HOAs have no legal status. HOAs can allocate the costs of (energy efficiency) investments into the rents. Increase of the rents is allowed up to the level accepted by assembly of home owners.

Central Revision Union – represents 620 members managing 1,42 million dwellings. This union is member of CECODHAS.

4 Existing subsidies and campaigns

4.1 Energy audits required for receiving subsidies

Austria:

- Small refurbishment: very simplified energy audit
- Comprehensive refurbishment: simplified energy audit

Germany:

- Values or configuration of "KfW CO2 GebSan" modernization packages MP 1-5 must be fulfilled and in case of MP 4 certified by an energy consultant or architect. Subsidy scheme two (ad): Teilschulderlass) also needs to be certified.

Ireland:

- Yes

Italy:

- No (but it depends from the specific call for tender)

Poland:

- Yes

4.2 Financial support in case of refurbishment

Austria:

- direct grant, not redeemable (subsidies: solar, biomass, district heating)
- not redeemable grant of annuities to a bank loan (subsidies: small and comprehensive refurbishment)
- redeemable grant of annuities to a bank loan (subsidies: small refurbishment for other activities than insulation)

Germany:

- Direct grant, not redeemable (subsidies: Bafa*, proKlima*, ESCO*)

Ireland:

- Direct grant, not redeemable

Italy:

- Direct grant, not redeemable (subsidies: 20 – 25 %)

Poland:

- Not redeemable grant of annuities to a bank loan (subsidies: thermo modernisation premium at the amount of 25% of the thermo modernization loan obtained from the state budget.)

5 Innovative financing schemes

5.1 Criteria for tax exemptions or tax allowances

Austria:

- There are no criteria for tax allowances.

Germany:

- Certified documents approving monument status or § 136 BauGB-area.

Ireland:

- There are no tax exemptions or tax allowances existing for refurbishment.

Italy:

- There are no tax exemptions or tax allowances existing for refurbishment (only for the private persons there is a reduction of the income taxes in the height of 36% of the costs)

Poland:

- There are no tax exemptions or tax allowances existing for refurbishment.

5.2 Influence of operating costs and energy costs on the value of a building

	market value	hypothecary value	insurance value
at	yes ¹	no	no
de	yes ²	yes ³	no ⁴
ie	no	no	no
it	no	no	no
pl	no	no	no

¹ Yes: approximate up to 20%

² Yes, because 1) maintenance costs will increase when the building is not energy efficient and 2) risk amount of not renting the inefficient flat rises (basic value 2%).

³ Yes, because h.v. is proportional to m.v. (in general ~ 80 %)

⁴ In general not because insurance i.v. refers to fire risks

Table 4: Influence of costs on different building values

5.3 Energy service companies (ESCOs)

Austria:

- up to 25 ESCOs

Germany:

- More than 50 ESCOs

Ireland:

- Up to 10 ESCOs

Italy:

- up to 10 ESCOs

Poland:

- Up to 3 ESCOs

5.4 Energy services offered by ESCOs

Austria:

- energy performance contracting (with pre-financing)
- energy performance contracting (without pre-financing)
- delivery contracting (with pre-financing)
- delivery contracting (without pre-financing)
- guarantee models (without pre-financing)

Germany:

- Third party financing, e.g. energy performance contracting and delivery contracting

Ireland:

- Delivery contracting (without pre-financing)

Italy:

- energy performance contracting (without pre-financing)

Poland:

- energy performance contracting (without pre-financing)

5.5 Realised third party financing (TPF) projects

Austria:

- more than 100 projects

Germany:

- More than 100 projects

Ireland:

- Up to 5 projects

Italy:

- Not known

Poland:

- Up to 20 projects

5.6 Special loans for energy efficiency projects

	for energy efficiency projects in general	for the social housing sector in particular
at	no	no
de	yes	no
ie	yes	no
it	no (or only rarely)	no
pl	yes	no

Table 5: Overview of special loans of banks for energy efficiency projects

6 Needs for social housing retrofitting

Austria:

- On the legal framework existing laws are obstructive to realise comprehensive refurbishments, most of all in the condominium law and in the rent law. Upcoming adaptations of building laws have to integrate the requirements of energy saving and climate protection for to boost refurbishment activities.
- Main need is on the awareness raising of building and flat owners – most of them are not aware that comprehensive refurbishments of buildings are necessary in a period of about every 30 years. This lack of awareness effects too small reserves to realise these refurbishments. Furthermore people are often not aware of new building standards.
- The lack of sufficient reserves is also a main barrier to realise refurbishments. As building owners are not used to increase payments into the reserve to cover investment costs of refurbishments and they are not aware of the needs of refurbishment activities after about 30 years building owners often do not come to a decision for comprehensive refurbishments. This barrier is linked to the previous mentioned lack of awareness.
- Clear communication to the residents: both in rented buildings as well as in ownership buildings people have to be informed about and involved in the upcoming refurbishment.
- As subsidies are a core element in Austrian policy system subsidies shall stimulate refurbishment activities of high energy performance. Currently the incentive to make refurbishments of high energetic quality is rather low.

Germany:

- Better information and transfer of KfW loans in Lower Saxony.
- Support and consultancy for private owners.
- Targeted information and training for social housing associations.
- Preparation of financing models for different retrofitting concepts and configurations, also supported by good practice solutions.
- Clarification and advice for (social disadvantaged) tenants concerning energy use and ventilation behaviour.
- Training for the responsible persons in the allocation departments of the housing offices (Vergabestellen der Wohnungsämter) concerning energy efficient retrofitting concepts.
- Changes in the law for the housing support (Wohnraumförderungsgesetz) according to sustainable retrofitting.

- Concept for integrated support materials (energy efficiency, costs, financing, structural engineering) for architects and planners.
- Training for architects and planners about the cost-effective implementation of energy efficiency measures in the housing stock.

Ireland:

Retrofitting of social housing addresses three priorities:

- combating fuel poverty
- preservation of the housing stock
- reducing emissions of greenhouses gases and air pollution caused by consumption of energy

Italy:

At national and regional level:

- Adopt EEC Directive 93/76 on TPF and promote it among financing institutions by means of facilities such as the following: the creation of a Revolving Fund, detaxation of profits, etc.
- Promote the adoption of systems aimed at guaranteeing the estimated levels of saving among insurance companies.
- Stimulate the producers of innovative plant engineering systems with a view to certifying the life of components.
- Promote the establishment of certifying bodies and energy saving control centres within Regional Authorities.
- Support the establishment of concertation forums between distributors and ESCOs.

At local level:

- Stimulate Municipal Authorities to develop energy master plans.

At community housing organization level:

- Verify the TPF allocating procedures to ESCOs (the nature of the operation, if services or works, the granting of concessions or the awarding of contracts, competitive bidding procedures, call for tenders) or the viability of establishing local ESCOs having the possibility of awarding contracts in-house.
- Check the billing procedures applied to service users and the ways of guaranteeing against defaulting.
- Try out the effectiveness of the procedures on a few concrete cases.

Poland:

The notion "social housing" has not been defined in Poland, but it is generally assumed that it includes the municipal housing stock, the housing stock owned by social housing associations (so called "TBS"), cooperative tenancy housing and em-

ployer-owned housing. Under this definition taken into consideration, the share of "social housing" amounted to 45,7 % of the total housing stock in Poland in 2002.

