

Building Energy Efficiency for
Massive market Uptake

2014



Tenant involvement strategies in retrofitting projects



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BEEM-UP

Building Energy Efficiency for Massive market Uptake

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Deliverable description

This report (protocol) is part of the work carried out within the BEEM-UP project concerning tenant involvement for energy savings. The report is a protocol of tenant involvement strategies in retrofitting building projects. This incorporates how the interaction with the tenants is carried out before, during and after the retrofitting process. Special focus is given to energy efficiency aspects. Note that the work is related very much to rental apartments.

The target group of this report is building owners that have the intention to interact with tenants when retrofitting their building stock. Chapter 2, 3 and 4 of the report present some incitements why tenant involvement is important, as well as some guidance of what aspects to consider in the process, especially before you actually get started! Chapter 4 also include highlights, in boxes, from BEEM-UP pilot projects. The following Chapters, 5 and 6, give short descriptions of experiences and references from other renewal and renovation projects.

The information and strategies presented in this report can be adapted to local conditions and serve as a basis for further retrofitting projects across Europe. **A shorter version and a PowerPoint presentation are also available in Dutch, French and Swedish.**

The case studies, described in Chapter 5, constitutes of the BEEM-UP pilot projects:

- Cotentin Falguière in Paris, France (ICF Novedis is the building owner)
- Van der Lelijstraat in Delft, the Netherlands (Woonbron is the building owner)
- Brogården in Alingsås, Sweden (Alingsåshem is the building owner).

The overall goal with the tenant involvement in the BEEM-UP project is to ensure that retrofitting projects are successful also from a social point of view and to encourage energy saving behaviour by the tenants.

The work presented in this report has mainly been divided between the partners as follows; SP Technical Research Institute of Sweden has compiled this report with great input from OTB Research Institute for Housing, Urban and Mobility Studies at Delft University of Technology. The building owners have contributed with valuable descriptions of how the tenant involvement is carried out in the BEEM-UP pilot projects and they have given their experiences of communication with residents.

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Chapter 1 Objectives

The objective of this report is to propose strategies of tenant involvement in retrofitting building projects. This incorporates how the interaction with the tenants is carried out before, during and after the retrofitting process. Different methods, stakeholders and experiences will be presented. Special focus will be given to energy efficiency aspects.

The target group of this report is building owners that have the intention to interact with tenants when retrofitting their building stock. The strategies presented can be adapted to local conditions and serve as a basis for further retrofitting projects across Europe. Note that the work is related very much to rental apartments.

Key issues are:

- **That the final building meets occupants' needs.**

The aim is to get to know the tenants and pay attention to their needs and ideas about their living conditions.

- **That the retrofitting projects are accepted among tenants.**

Based on the tenants' views and preferences, ways to get acceptance of, support of and/or involvement in retrofitting projects and for energy saving changes should be developed and introduced in the building projects. A question that could be raised is how the forthcoming renovation affects the tenants and what they can gain on a renovated, more energy efficient, building?

- **That social sustainable qualities will be established and maintained.**

The overall goal with the tenant involvement in the BEEM-UP project is to ensure that retrofitting projects are successful not only from a technical point of view but also from a social point of view. To encourage energy saving behaviour by the tenants is also a goal.

In addition to the general strategies of tenant involvement, the report also include how the tenant involvement is carried out in the three BEEM-UP pilot projects as well as experiences from other building projects.

Chapter 2 Why tenant involvement?

There are different perspectives on why the involvement of tenants in a renewal/renovation process of a housing area is important. A minimum level is the legal requirements, but in addition to this there could be a number of reasons for the society as a whole, and of course for the building owner and the tenants to why the tenants should be involved in the process. In this chapter some fundamental reasons are highlighted.

2.1 Legal requirements

Any prevailing legal requirements are the minimum level for tenant involvement. These are specific for each country. The strategies for tenant involvement presented in Chapter 4 regard tenant involvement above the minimum level set by the legal requirements.

2.2 Society perspectives

The municipality can for social as well as economic reasons listen to its citizen, especially citizens living in segregated parts of the city. Some fundamental reasons and goals could be [1]:

- To have a successful city development - The use of the tenants' knowledge and experiences is presumed to improve the prerequisites for a successful city development.
- To increase the integration in society, i.e. to decrease the differences between different housing areas - The involvement and commitment in one's own housing estate is presumed to lead to increased integration in society.
- To increase the status of rental apartments.



All these aspects contribute in increasing the attractiveness of a municipality, which of course is an overall goal.

2.3 Building owner's perspectives

Many different reasons could exist for building owners to involve the tenants in the development/renewal of a housing area. For example, the reasons could be:

- That the number of satisfied tenants could increase.

If the tenants feel that they are listened to, if they identify themselves with their housing area and if they take responsibility for the area it increases the prerequisites for satisfied tenants. Commitment, solidarity and increased safety will also lead to satisfied tenants [1].

This leads to social sustainability in a housing area, which could be defined as neighbourhoods that can deal with problems without losing a positive perspective.



- That a well-functioning housing area is more likely [1].
- That the value of the buildings/housing areas increases and that the rental losses decrease (economic reasons) [1].
- Contribute to a smoother process for any forthcoming changes (including energy efficiency measures).

To obtain the approval, acceptance or understanding from the tenants could be crucial for housing owners dealing with sustainability and energy related issues. In some countries tenant approval is needed when measures are taken to raise the quality of a building – including energy efficient measures. In other countries this is not the case but in order to gain the full effect of the measures, it could be very beneficial if the tenants have some level of understanding of how the technical systems operate.

2.4 Tenant's perspectives

The reasons for the tenants to get involved are surely differentiated. To get control of one's everyday life/situation could be one fundamental reason [1]. Economic issues concerning a refurbishment is an example of an area which many tenants worry about and want to know about early on in a renovation project.

Several of the gains listed above for the society and building owner's perspectives are surely in the interest for most tenants as well. For example, if there is a dialogue with the housing owner the tenants feel that they are listened to and if the tenants participate in the renewal of their housing area they are more likely to take responsibility of the area which often leads to increased safety of the neighbourhood. Participation give tenants the opportunity to meet neighbours, to have fun together and to develop a personal identity with the housing area.



Chapter 3 Degree of tenant involvement

There are different degrees of tenant involvement. Which degree of involvement that should be chosen for a renewal/retrofitting project has to be reflected on before the interaction with the tenants begins. The housing owner has to consider whether to “just” have information activities or to have “real” involvement of the tenants, and which consequences this has for the renewal/retrofitting process. Which messages that are conveyed to the tenants regarding the degree of involvement is also really important as the expectations of the tenants might differ from that of the housing owner.

The tenants’ influence depends on where the physical boundaries of the retrofitting process are drawn. Normally, the tenants have the most influence over their own apartments, less influence over the building as a whole and even less over the building area and the town district/neighbourhood. The role and the responsibility of the tenants shift with these boundaries, from an individual perspective to a shared or communal perspective with the whole neighbourhood’s interests at heart.

The level of activities concerning tenant involvement depends very much on the organisation level of the neighbourhood and on the trustful relation between a tenant committee, the whole tenant group and the housing association. A renovation project has major impact on households and requires for that reason a well organised participation procedure. If the renovation plan is welcomed by the tenants, the level of communication for trust building and for guidance of the social process can be lower than if the tenant perception is negative and still many hearts have to be won for the renovation.

Furthermore, the involvement could be different at different phases of the process and could be different depending on what issue is on the table. At some phases of the retrofitting process a one-way approach could be most appropriate and in other phases two-way activities may be more suitable. Typically, in an introduction phase there could be one-way information from the building owner to the tenants that inform about that a renewal process is about to start. This introduction phase could then be followed by a phase where a more open dialogue is encouraged.

The degree of involvement could be illustrated as shown in the figure below.

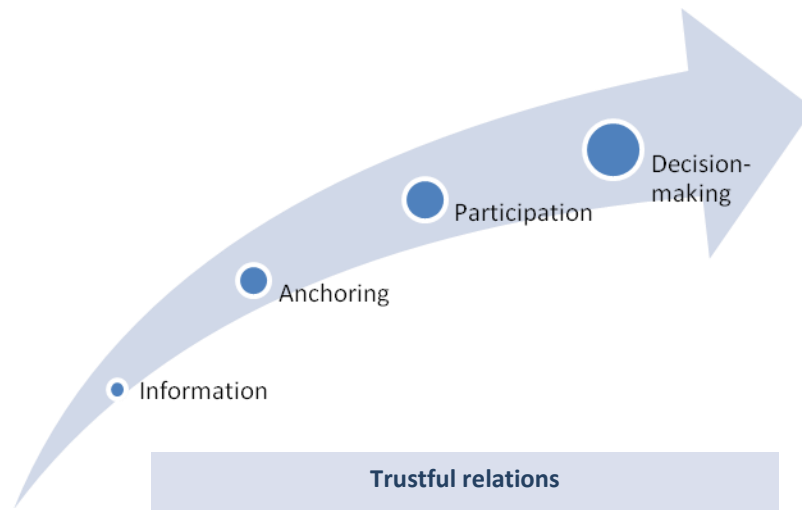


Figure 1 Different degrees of tenant involvement

The different levels could shortly be described as follows:

1. **Information** to the tenants about forthcoming changes
2. **Anchoring** - the tenants can give their opinions about the suggested changes
3. **Participation in planning** - the tenants participate in the development of the proposal of the changes and the tenants' knowledge and experiences are input to the process
4. **Decision-making** – the tenants participate in the decisions about investments and/or in design or have the right to make decisions in certain questions.

Regardless of degree of involvement the process must be based on “trustful relations” between the housing owner and the tenants as well as between the tenants [1].

Chapter 4 Strategies for tenant involvement

In this chapter aspects and strategies of tenant involvement in the retrofitting process will be described. The focus is on tenant involvement above any legal requirements. The chapter covers the main aspects but is by no means covering all levels of details regarding tenant interaction, such as psychological aspects, e.g. underlying incentives and attitudes.

The purpose is to outline the different steps that can be taken when involving tenants in a retrofitting process, including before, during, after the retrofit. Which parameters to investigate, what methods to use and what stakeholders to involve are described. The purpose is to present strategies for building owners that are about to initiate tenant involvement in the renewal process of their existing building stock. Renovation projects with an energy focus are of special interest. The main steps described in this report are illustrated in Figure 2.

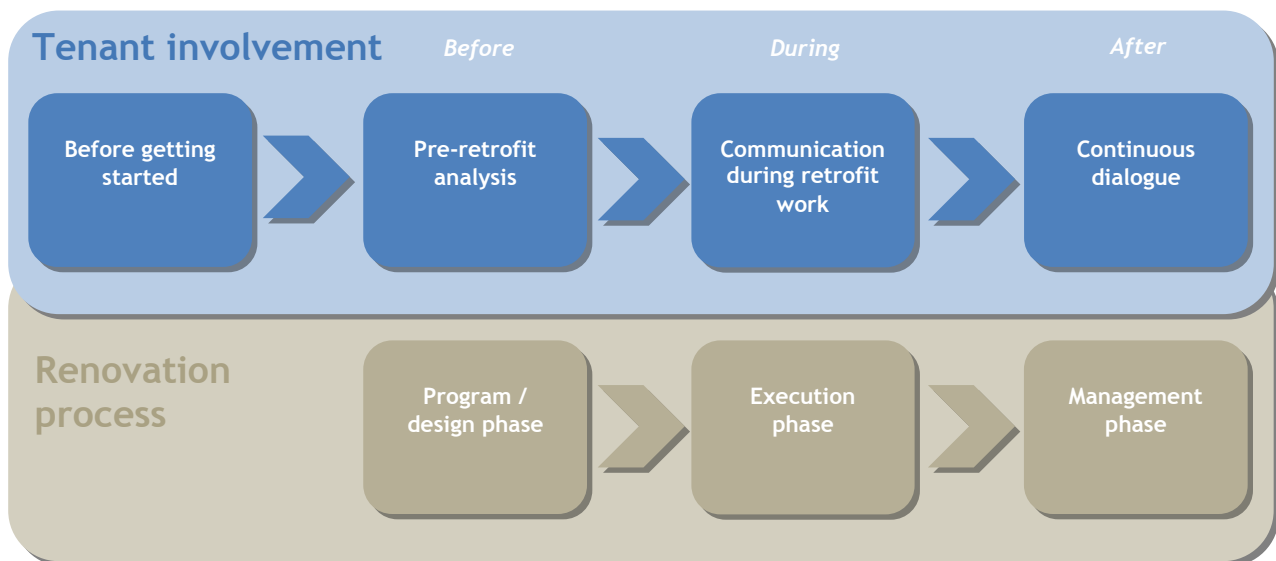


Figure 2 The main steps of tenant involvement described in this report and the corresponding steps of the renovation process

This general protocol on how to go about tenant involvement/interaction can form the basis in a retrofit process, but for the specific project the approach needs to be adjusted to national conditions as well as to specific requirements of the project and the client.

4.1 Introduction to tenant involvement

4.1.1 Goals and advantages with tenant involvement

To involve the tenants at an early stage and all through the retrofit process could have many advantages and goals, such as [2]:

- It contributes with a learning process for the involved participants – design team, building owner and tenants – that establish feedback loops where e.g. expectations could be compared with outcomes [2].
- The prerequisites to meet the tenants' needs are improved.
- Tenants tend to gain a better understanding of the retrofitting process and of the retrofit measures, which can lead to the tenants' acceptance, support and even show enthusiasm for the renewal project. To understand somewhat about the purpose of the measures/technologies implemented and how the operation of the systems works will surely improve their impact.
- If energy issues are included in the interaction with the tenants, it increases the awareness of the tenants for these issues.
- Housing owners could use the lessons and experiences from one housing area to launch a retrofitting programme with tenant involvement across their housing stock.
- The tenants have an intimate knowledge of the area that the owners often lack. Their insight into how the area is actually used can prove important in a refurbishment project. In addition to this we need to see the project from the costumers' perspective – after all they are the ones who will pay for the operations in the long run.
- Tenant involvement is part of a maintenance policy toward social sustainable neighbourhoods, in which social and physical problems are dealt with successfully.
- The ultimate goal is that people can help themselves and others, by being well educated, social active citizens who take care of the environment.

4.1.2 Methods and approaches of tenant involvement

There are a number of methods and approaches that could be applied when interacting with tenants. Experiences show that many different methods are used and tested in renewal projects. The local conditions and also personal experiences of responsible persons influence the methods chosen [1].

The renewal of a housing area is a process and tenant involvement can be done differently at different phases of the process. As outlined in Chapter 3, the degree of involvement could differ throughout this process, depending on which phase of the process is considered, which issue is

on the table, which physical unit is discussed (the individual apartment, the building, the building area or the town district/neighbourhood). In most projects a multitude of approaches and methods are employed simultaneously in order to gather information resulting in a more complete description of the housing area as well as to reach out to a greater number of people.

The choice of approach, how many investigations and activities that can be carried out, as well as the degree of tenant involvement, depends upon what time and resources (personal, economic, know-how, etc.) that are available within the building company. The purpose, the number of dwellings, information already available, the extent of occupant engagement and the extent of potential benefits to various stakeholders could also influence how comprehensive the study will be [2]. Although it could be of interest to gather a lot of information and do extensive investigations, it is experienced in a UK preresurbishment study by Gupta and Chandiwala [2] that "...it is essential that a preresurbishment occupant feedback approach is kept pragmatic, focusing on 'need to know' rather than 'nice to have' factors, keeping cost and time to a minimum...". To estimate these factors before getting started is of course necessary.

Depending on the choice of methodology, there might be issues like the tenants' integrity to consider, especially if a lot of personal data is to be collected. How to sustain the interest of people for a sufficient amount of time if a method requires active participation over a period of time, is another aspect to take into consideration.

Examples of some common methods are listed in Table 1.

Table 1 Examples of common methods [1, 3]

Method	Phase/topic	Remarks
Information meeting	First introduction of project vision	Discussion on goals and strategies must be possible. Participation and good atmosphere could be a challenge.
Open houses	Before delicate decisions and during execution	Gives opportunity to discuss renovation plans and ask questions in informal way, preferably in a show apartment. Open consult hours by main contractor during execution could be a good idea.
Questionnaires /interviews	Specially at the start of the project, but also after renovation	To gather information about the dwellings and the tenants, such as preferences and satisfaction.
Individual talks/home visits/ inspections	When delicate decisions or information are needed by all tenants	Personal relations are established. Time-consuming (the area cannot be too large and extra staff is needed) Necessary in case of evacuation during renovation.
Workshops/smaller gatherings	Any time	Can be more effective than general meetings. Easier to say your views in smaller groups. Consider how the groups are formed. Any workshop can be successful, when a clear agenda and program is guided by professionals and the chosen target group is participating.

Table 1 continues...

Continuation of Table 1...

Method	Phase/topic	Remarks
Information material	During all phases, when need is felt.	Could be folders, letters, newsletter, websites. Is part of information exchange, but effect should not be overrated and never replace direct communication.
Personal contacts (informal)	At early stage and during all phases	Usually necessary that housing owner designate representative to be contact person in relation to the tenants. Important to be accessible and “to be seen in the housing area” for informal conversations. Could be decentralised management with local offices and landlords.
Common meeting place	Before and during renovation. Could be permanent place in management phase.	Located in the housing area. During the renovation this could be a show apartment. Formal and informal meetings could take place.
Walks	When suitable	Walks where tenants locate good and bad - often unsafe - places

There are many additional methods that could be applied such as focus groups, discussion forums on internet, training sessions and social gatherings.

4.1.3 The tenants

The tenants of a housing area are not a homogenous group of people with the same ability to get their voice heard. There are also those that are willing to participate in big changes while others do not have much interest. This must of course be respected. At the same time the opportunity for involvement should be offered to all tenants, where the housing owner might



have to be creative to reach all groups of people [1]. Some experiences show that it can be difficult to engage people and to get them to turn up at meetings. Often there is a sense that there are specific groups that are not reached. One way to reach out is to establish personal contacts with the tenants. This can be done through decentralised management with local offices and landlords, with small-scale meetings, with outreaching activities or through home visits to individual households [1]. There might be a need to think of less traditional actions and channels, such as the usage of internet. By being accessible and visible and by creating many forms of interacting with tenants, it increases the possible of reaching more people/groups [1]. On the other hand, it could also be the case, that activities may be aimed for a certain groups, e.g. youngsters or school children.

Another interesting way to better reach the tenants of a housing area is for the housing company to actually employ tenants from the housing area. This might be done as part of labour market measures. The role and tasks of tenants working for the housing owner can be significant for how well this “solution” turns out.

People do not only differ regarding their attitudes towards tenant involvement, they are also different regarding their attitudes toward their homes. For example, for some people their dwelling is very important, not least in an aesthetic perspective. While others have a more practical view of their home and dwelling, because they focus on other things in life that they think is much more important. To increase the understanding of why different people look at their homes in such different ways, projects in Sweden and in the Netherlands were developed on “household lifestyle profiles”. By letting tenants answer a number of questions related to different dimensions of living, it is possible to deduce which household lifestyle profile they identify with. The experience from the Netherlands is that very often, the tenants are happy

with this label. It gives them identity, easier contact with neighbours and a social environment that could function better. The goal is to have a housing block with occupants who might fit into a certain atmosphere and life style. Of course, this goal will be achieved after a period of households changing place, or when the renovation is combined with outplacement and relocation.

In Sweden, the purpose with the household lifestyle profiles, are that the new knowledge will help housing owners in their communication with their tenants - both in how to interpret feedback and how to adapt different communication strategies to reach different groups of people.

To reach all groups or to have traditional representation might not be a feasible aim for a housing company. One might argue that it is more important to utilize the interest and enthusiasm that are shown from some willing tenants and keep inviting others that might participate in the course of time [1].

It is important to keep in mind that the expectations created when arranging activities with the tenants and inviting them to give feedback, might differ from that of the housing owner. To invite the tenants to meetings can create expectations about what they can influence and make decisions about that differs from that of the housing owner, who might have other expectations and purposes with the activities. In addition, it must be taken into account that people living in a housing area are acting as tenants, i.e. as private persons, and are in this role not acting as professionals. This is in total contrast to the role of a housing owner and landlord. That the tenants can act somewhat unpredictable during the process is something that the housing owner has to take into consideration [1]. A written procedure that includes the conditions for involvement, the roles, time schedule, availability of information and expertise etc can serve as a social contract and is one way to clarify the different roles, responsibilities and expectations in advance.

Sometimes the housing association needs to deal with non-renovation issues first, before tenants are willing to discuss energy and renovation issues. If the housing area for example is marked with social problems, the expectations on the degree of tenant involvement and feedback must be on a reasonable level. If fundamental aspects of a housing area such as safety or basic maintenance are neglected, housing owners cannot expect tenants to engage in other issues such as energy and environmental questions, before more acute problems are dealt with.

To sum up, the following can be highlighted:

- Explain as clearly as possible what the tenants can influence and investigate/listen to what the tenants' expectations are. Be clear about in which phase and for what issues the tenants can influence.

- It is important and really valuable to get to know the tenants of a housing area – already at an early stage of a renewal process - and to realise that different communication strategies might be useful in order to reach different groups of people.
- A “contract” that outlines the procedure of the renovation plan and the tenant involvement activities can be recommended.
- It must be acknowledge that fundamental aspects of a housing area must be worked on before any further actions are launched.

4.1.4 Actors involved

Not all issues that are raised by the tenants might be the responsibility of the housing owner. Cooperation with the municipality, with police department, with health and social care institutions may be needed, especially when other issues are a barrier for an open minded discussion on renovation plans. It could also be relevant to involve the local employment office and organisations such as sport and other leisure organisations as well as local schools. In addition, the presents of local politicians could be very beneficial and of great symbolic value in some renewal processes. It could strengthen the process if many actors get involved at the same time.

In many European countries there is a national Union of Tenants that promotes good housing at a reasonable cost. For example, the Union negotiates rent levels. The local Union of Tenants or (if not a member of the Union) the local tenant committees (formal/informal groups) can play an important role in the dialogue with the tenants. A social contract including what the tenants can influence in the housing area could be developed, together with the Tenant Union.

Another channel to reach out to the tenants is through a house-keeper who lives in the building. This person can also give information about the building and any known complaints. To have a house-keeper is common in some countries, e.g. France, especially in social housing companies. In other countries there are staffs who are dedicated to specific housing blocks in a street or area. Even though these managers do not live in the same building/street, they do fulfil many of the tasks associated with the housekeeper role.

During a retrofitting process where substantial renovation is taking place, it is normal to involve the building contractor in the dialogue with the tenants. The contractor can directly inform the tenants on how the retrofitting work is proceeding, and can communicate directly in case of any disturbances for the tenants.

To summaries, examples of stakeholders could be:

- Representatives of the housing owner:

General manager, project leader for the renovation, communication officer, affected landlords, other service personnel

- Representatives of the tenants:
The local Union of Tenants, formal or informal groups of tenants, house-keepers
- Representatives of the renovation project team:
Project leader of the design phase (e.g. the architect), the contractor, experts on specific topics discussed
- Representatives of society:
The municipality, the energy company, insurance offices, the police, the employment office, sport and other leisure organisations, local schools, local businesses

4.1.5 The kinds of renovation/measures

The kinds of renovation or measure that are planned affect the selection of tenant involvement strategy. A very comprehensive renewal of the building and building area obviously differs compared to measures carried out in individual apartments.

Normally, the tenants have the most influence over their own apartments, less influence over the building as a whole and even less over the building area and the town district/neighbourhood. The role and the responsibility of the tenants shift with these boundaries, from an individual perspective to a shared or communal perspective with the whole neighbourhood's interests at heart.

If the tenants have to move out of their apartments during the renovation is also an issue to consider for the housing owner; which consequences this has for the tenants and for the communication process.

Different aspects of tenant involvement are described in Table 1, considering different kinds of renovation/measures. Table can be a guideline when selecting tenant involvement strategies.

Table 2 Kind of renovation/asures and a number of parameters of tenant involvement - affecting the selection of tenant involvement strategies

<i>PARAMETERS defining TENANT INVOLVEMENT</i>	<i>THE KINDS OF RENOVATION/MEASURES</i>		
	<i>Total renewal of housing area</i>	<i>Collective measures in building</i>	<i>Measures in individual dwellings</i>
Period of promoting tenant involvement	Years of investment in cooperation needed	Short period of involvement, can be intensive	Short single communication activity
Level of tenant influence	Cooperation needed from start - “contract” about topics of influence	Specific topics can be influenced	Face-to-face negotiation - transparency about options
Tenant organisation	Stimulation and facilitation of dynamic and open organisation	Focus group - tenant group active in information exchange on specific topics	Low needs, but active group of ambassadors can be helpful in communication
Relationship between tenants and housing owner	Trustful relation essential. To be established before building works start	Short period of investment in trustful relationship can work out	Acknowledge profile of individual tenant
Level of rent increase	In sustainable buildings, a discussion about a rent increase will be balanced with the possibility to save energy for the tenants. Better indoor comfort is also an argument. Early indication of rough estimation of rent increase needed.	The same kind of discussions as for the case of “total renewal of housing area”	The same kind of discussions as for the case of “total renewal of housing area”

Table 2 continues...

Continuation of Table 2...

PARAMETERS defining TENANT INVOLVEMENT	THE KINDS OF RENOVATION/MEASURES		
	Total renewal of housing area	Collective measures in building	Measures in individual dwellings
Quality of information / communication*	Early on, two-way communication, repeated, transparent, updated. Different languages if needed. Using parallel communication channels Tenants must be able to check and use information	One-way could be satisfactory. Information is key to involvement	Reliable information in individual contract
Resources of housing owner (time and personnel)	Dedicated contact person for tenants. Initially much time – pay off with smoother process, especially during execution.	Dedicated contact person for tenants.	Individual meeting needed by staff
Stakeholders	Strength to involve many different stakeholders for the diversity of issues raised	Representatives of housing owner and tenant committee.	Representatives of housing owner needed and tenant.
Methods	Using parallel communication channels included personal informal meetings and social media to formal methods. Show apartment can form an important meeting place.	Using some different methods such as letter, meeting, notice board and website.	Individual meeting
Social interactions	Neighbourhood interaction and bottom-up initiatives are encouraged.	Neighbourhood interaction and bottom-up initiatives are positive	Not relevant

*In addition: Very practical and detailed information needed during execution phase and in case of evacuation.

The BEEM-UP pilot projects, briefly described in Chapter 5, are related to Table 2 in the following way. The Swedish pilot project is a *total renewal of the housing area*. The French pilot

project has elements of both *collective measures in building* as well as *total renewal of housing area*, while the Dutch project has more of *measures in individual dwellings* together with components of *collective measures in building*.

The table indicates that for some, but not for all types of renovation it is relevant to set up a participation procedure.

4.1.6 Important factors for successful tenant involvement

From Swedish and Dutch experiences of tenant involvement in renewal processes some important factors for successful projects have been identified (e.g. [1]):

1. That the housing owner draw up a plan for how to take care of and maintain the commitment mobilized during the renewal process.
2. Involvement early on in the process can be significant for how the tenants perceive the participation process as a whole.
3. There must be an honest interest in a dialogue with the tenants, where the housing owner is prepared to consider incoming ideas and comments. (Listen to acute problems. It is about building trust.)
4. That the housing owner gives continuous feedback on incoming proposals and remarks, whether they could be met or not, i.e. there needs to be clarity on what issues that can be affected.
5. The renewal should, on the one hand, be characterised by a long-term perspective and endurance, but on the other hand it can be pedagogically important to provide fast results.

IMPORTANCE OF (EARLY) INFORMATION

Swedish pilot project

A trust problem did arise early in the project, when details about an upcoming renovation leaked out to the press and other stakeholders before the tenants knew anything about these plans. The final straw was probably when the Swedish prime minister visited the site while the tenants were still ignorant of the plans. Understandably, the tenants felt sidelined. It took a while to regain the trust, but since then Alingsåshem has been very careful to keep the tenants informed.

Additional factors are:

6. It might be useful to employ many channels in parallel to reach out to different groups (to have staff with knowledge of immigrant cultures and languages is an asset).
 7. To provide accessible and informal means of interaction, such as decentralised management, can enhance the dialogue. (the importance of personal contact)
 8. It is usually more effective to arrange smaller meetings than larger ones.
 9. To pursue traditional representation is not necessary – it is better to focus on – and start with - enthusiastic people.
 10. It strengthens the process if several actors can participate at the same time.
- Finally, it is important to remember that tenant dialogue is a continuous process!

4.2 Tenant involvement – issues to be considered by the building owner “before getting started”

Prior to involving the tenants of a housing area the building owner has to consider the kind of tenant involvement that is desirable and appropriate. A project that involves a variety of interests needs a good process management. A start-up document supports the communication process. Issues to be considered are:

1. Legal requirements

What are the legal requirements on tenant involvement?

2. Owner directives

Are there any directives, policies or such like from the owners regarding tenant involvement? What policies does the housing company itself have in this regard?

3. Objectives - Benefits and difficulties

What is the aim of the involvement? What are the benefits, and possible difficulties, of tenant involvement for a particular housing area? Consider any trust issues between any actors.

4. Scope

The scope of the tenant involvement needs to be clear. The scope could be defined regarding:

a. The physical environment

Is the boundary the apartment, the building/s, the housing area, the town district/neighbourhood?

b. The degree of tenant involvement

Which degree of involvement would be useful/is aimed for? Is the intention that the interaction will be to inform the tenants, to anchor the process, to ask for an active participation or to invite the tenants to actually make decisions about certain issues?

c. Different issues and stages of the process

LEGAL REQUIREMENTS **The Netherlands**

There is a need for 70% of the tenants of a block/on an estate to support improvements in the dwellings that go beyond maintenance and major repair, and will be subject to a rent increase for the current tenants.

OWNER'S DIRECTIVE **Swedish pilot project**

The directive of the owner (municipality) states that Alingsåshem is required to offer attractive, safe and comfortable living suitable for everyone. Focus should be on economic, ecological and social sustainability.

BENEFITS AND DIFFICULTIES **French pilot project**

The benefits are that the tenants better accept the works because it is more adapted to the tenants' needs and they know what to expect. One drawback of this approach is that sometimes it is difficult to explain to people that they cannot decide about every item of the project even if they are consulted.

The degree of involvement could vary depending on the topic discussed or at different stages of the renewal/renovation process.

Consider which issues that the tenants could be involved in and which issues that call for further expertise.

Consider the different stages of the process and how the involvement can be designed at each stage.

5. Time and resources

What kind of time and resources (personal, economic, know-how etc) do the building owners have to guide and support the tenant involvement?

Consider how resources will affect the interaction regarding choice of approach, methods and how comprehensive the work will be.

6. Target groups

The target groups of the tenant activities need to be defined. Are all the tenants of the housing area the target group? Are there any specific target groups? What do you know about the targets groups/the tenants? How can you “get to know” different groups of tenants? How can groups that are usually not reached be contacted?

7. Stakeholders involved

Selection of and contact actors who it would be useful to establish collaboration with in the renewal process of the housing area. Is there already an established cooperation with organisations that will be valuable in the interaction with the tenants? Which actors should be invited to the tenant interaction activities and at what stages of the process? This activity can result in a “social map” of the area and can include social active tenants.

TIME AND RESOURCES

Swedish pilot project

Alingsåshem is a too small company to invent models on its own. We do not have enough resources to "reinvent the wheel". Therefore, we always look at what has been done before by others, and put these experiences in new contexts.

STAKEHOLDERS INVOLVED

French pilot project

A caretaker/housekeeper living in the apartment by the entrance has a key role in the communication with the tenants. A specific person at the housing company was assigned to be the tenants' contact person.

STAKEHOLDERS INVOLVED

Dutch pilot project

The housing owner has had discussions with an informal tenant group of five volunteers.

METHODS

Swedish pilot project

The show apartment has proven to be an important meeting place. Here open houses to see a renovated apartment and to ask questions have been arranged. The show apartment has also been used for weekly meetings mainly organized by the Union of Tenants but Alingsåshem usually take part as well. In the next renovation project, a show apartment will be used again.

Stakeholders can meet to discuss ambitions and responsibilities, and to understand the boundaries of the project.

8. Methods

Which activities and information channels will be used to interact with the tenants? This also includes how to actually consider incoming ideas and comments and how to give feedback back to the tenants. Consider that different communication channels might be appropriate for different groups of tenants. A programme for tenant involvement needs to be developed, alongside, and at decision points integrated in the project planning of the renovation.

ACUTE PROBLEMS

Dutch pilot project

There were acute technical problems with the buildings, such as ice deposition on the inside window frames, leading to bad indoor climate. To take care of this and install new window frames has been needed and a very important step towards building up a good relationship with the tenants.

9. Acute problems

Are there any big acute problems in the housing area? Consider if there are any social problems or safety issues of the area. Consider if there are any major complaints about the performance of the building. These problems cannot be disregarded and must be handled before any other topic is discussed.

HANDLING PROBLEMS

Swedish pilot project

Lesson learned after a false rumour circulated that the renovation was discontinued; do not assume that people have picked up the information just because it has been readily available for more than four years. Do not assume that people read information just because it is about their own homes and safety. Never relax, never go lazy. The same effort must be put into the project during the entire project-time. The same effort must be put into the last flat, as was put into the first flat.

10. Specific focus of the project – energy issues

Are there any specific issue/s that are focussed on in the project and how can they be addressed? Are there any specific kinds of information from the tenants that is of interest? In the BEEM-UP project energy issues are in focus.

How can energy issues can be highlighted is therefore of particular interest. For example, how could the tenants benefit from a renovated, more energy efficient, building (better indoor environment, lower energy/electricity/gas bill etc.)? How will the message concerning the energy benefits be conveyed to the tenants? How can energy efficient behaviour be stimulated? What do the tenants consider needed in order to stimulate energy efficient behaviour?

11. Management phase

Issues regarding the management phase might have to be taken into account “before getting started”, e.g. rent increase, relocation, how the maintenance of the apartments and common areas will be affected, how the tenant involvement process will continue after the completion of the renovation work. There might be a need/request for a (permanent) meeting place which has to be planned for in the design phase of the renovation.

ENERGY ISSUES

Dutch pilot project

Besides the energy measures paid for by the housing owner, the tenants could choose to invest in a selection of measures such as a solar hot water system, an efficient heater and the installation of floor insulation. This was communicated and demonstrated to the tenants in different ways.

12. Monitoring (Follow-ups)

Already “before getting started” the parameters for the reference case “description” and the follow-up monitoring must be selected. Comparison of a before and after situation is needed when the impact of certain efforts/measures are evaluated.

PRE-RETROFIT ANALYSIS

Swedish pilot project

The housing owner work with household lifestyle profiles as an important instrument. The profiles are based on that housing means more than just somewhere to live, and means different things to different persons. The profiles are of help in offering different types of housings as well as in the communication with the tenants.

13. Other issues

Consider any other issues that needs to be taken into account. There could be special national or local goals or conditions that need to be considered. There could be a specific project related situation to regard. There could be multi-cultural aspects, including various languages, within the housing area that has to be addressed. The renovation can provide the opportunity to solve social issues, to improve the service level of the area or to modernise the outdoor environment.

PRE-RETROFIT ANALYSIS

French pilot project

People's preferences will be taken into account to a certain extent in the program phase. Nevertheless, it is not a personalized retrofit - all the apartments will be retrofitted the same way. Parameters considered regarding tenants' interaction in the project will be participation, acceptance and satisfaction, i.e. participation in workshops, acceptance of the construction work and satisfaction after the renovation.

Notice that these items may be differently significant for different projects, especially considering the size of the project/refurbishment operation.

4.3 Pre-retrofit analysis of tenant retrofit priorities - Before the retrofitting process

The objective of a pre-retrofit analysis is to investigate the tenant priorities and expectations before the renovation. “To get to know the tenants”, including what issues that are important to them, identifying their needs and what their perspectives are on their living area is of great value in order for the retrofitting projects to be successful also from a social point of view. To gather knowledge about the housing area, buildings and the tenants at an early stage of the renewal process will be valuable all through the renovation phase as well as in the succeeding management phase. To also gather the tenants’ perspectives on energy issues are useful for any energy saving campaigns.

How to use the results of the pre-retrofit analysis, including any ideas and comments from the tenants, must be planned for. Ideally the results will feed into the retrofitting design phase of the renovation project to hopefully have an impact on the priority of changes to be chosen. It was found in a UK pre-refurbishment study by Guptaa and Chandiwala [2] that the pre-refurbishment evaluation acts an important “reality check” for any energy modelling of a building before the actual design phase is started.

An evaluation of the pre-retrofit results can also be used together with a post-retrofit study to make a comparison of the before and after situations.

4.3.1 Background description of the renovation project

To compile basic background information about the housing area and technical building data, as well as any performance data is of course valuable early on in the renovation process. The current and, where possible, planned, status of the project could be gathered regarding a number of issues. Changes that will affect the tenants are of particular interest. To gather energy data prior to the renovation in order to be able to compare it afterwards will be really valuable.

PRE-RETROFIT ANALYSIS

Dutch pilot project

For the Dutch housing company Woonbron, the individual approach towards tenants is gradually taking over the position of large meetings that were used previously. In this pilot project, inspections of individual dwellings and questionnaires were combined with open houses in show apartment. These activities gave the opportunity to get to know the tenants, inform about renovation plans and answer tenants’ questions.

4.3.2 The tenant interaction activities

Much of the issues to consider regarding the actual tenant interaction activities are outlined in Chapter 4.2 *Tenant involvement – issues to be considered by the building owner “before getting started”*. It is need to decide on which parameters that is of interest to investigate.

There are a number of activities that can be carried out when performing a pre-retrofit analysis. The most suitable depends partly on which parameters that will be investigated. How the activities align/coordinate with building renovation plan also needs to be considered. Depending on the choice of approach - how many investigations and activities that will be carried out – the following are examples of activities that can be carried out:

- Letters to tenants, open houses or smaller meetings/workshops to introduce the renewal project
- Questionnaires to get to know the tenants
- Inspections, measurements and documentation of building status
- Interviews with key actors about building status
- Monitoring, e.g. monitoring of thermal environment or detailed metering of energy use
- Home visits including interviews with tenants
- Longitudinal surveys including diaries or log sheets of thermal comfort, energy behaviour, other tenant activities etc.
- Further meetings with tenants to get feedback/input to the renewal process. Could be in the form of focus groups meetings.
- Pre-retrofit party - The end of the preparation phase and the actual start of the execution can be highlighted with a party that involves all stakeholders.

4.4 Communication with tenants during the retrofit work

During the pre-retrofit phase the dialogue between the housing owner and tenants was started and some

PRE-RETROFIT ANALYSIS

French pilot project

Individual interviews were made with results such as:

- *Some of the identified advantages of the housing area were the convenience of the location and the brightness of the building.*
- *Some of the disadvantages of the homes included noise problems, improperly installed windows and unsatisfied temperature levels (problems with the heating system).*
- *Additionally, there were high expectations on the renovation and the improvement of the residence.*

COMMUNICATION DURING

RETROFIT WORK

French pilot project

It is stated in the building contract that the contractor must dedicate one person to communicate with the tenants. This is important, so there is an ongoing dialogue during the whole renovation, including issues on likely disturbances for the tenants.

communication channels were established. By the time of the renovation phase these established channels could be used to continuously update the tenants of the status of the renovation process as well as to offer them the opportunity to give feedback.

New communication channels – particularly suitable for the renovation phase – could of course be established. For example personal visits may be necessary in the design phase and even early on in the renovation phase if an evacuation is needed or if the tenants have to make individual choices regarding their new apartments. During the renovation phase, there is a need for an effective dissemination of the latest information about the progress of the renovation and in particular if there are any changes or disturbances affecting the tenants. Continuous updates on websites, frequent newsletters or regular open houses at a showcase apartment are some ways of reaching the tenants. The showcase apartment serves as a meeting place during the renovation where the design and technical systems of the renovated apartments can be demonstrated. Other ways of reaching the tenants are notices in staircases, e-mails and local landlords' offices (i.e. decentralised management).

During the renovation phase the building contractor might play a large role in the communication with the tenants and take direct part in the dissemination of information. The contractor should be available for tenants who have personal questions or complaints, e.g. about the creation of noise – preferably dedicating a specific person for this purpose. The role of contractors in regards to the tenants could be formulated in the contract between the housing owner and the contractor. The contractor could update the tenants by posting the latest information on the website or by writing in a newsletter. To take the concerns of the tenants seriously and to act in a professional manner is very important to keep up the good dialogue with the tenants and to

**COMMUNICATION DURING
RETROFIT WORK**

Dutch pilot project

Challenges:

- *New “renovation team” of housing owner not known to the tenants.*
- *Technical details were different from expected, which created miscommunication towards the tenants.*
- *Lack of reliable information and transparent decision making process about planned measures and financial agreements to all partners, including the tenant groups.*

To meet the challenges: *Strategy on social interaction where problems were acknowledged, the attempt to repair damages was visible and there was a goal of building a functional social community.*

**COMMUNICATION DURING
RETROFIT WORK**

Swedish pilot project

A newsletter, produced by the local Union of Tenants, addressing everything that might be relevant during the renovation was distributed to all tenants at Brogården. The contractor used this information channel as well.

keep building on the trustful relations that was started in the pre-retrofit phase [3]. Support and guidance from the housing owner or from the Union of Tenants could prove useful.

4.5 Continuous dialogue – After the retrofitting process

4.5.1 Handing over of the building after renovation

A good “handing over of the building” do not only involve a good handing over of the apartments, building and housing area to the management/maintenance staff but to the tenants as well. To communicate any information on how the apartment actually works after the renovation will be essential in order to reach the full potential of the implemented measures and to obtain a “smooth” operation of the building. The timing and manner of the tenants’ encounter must be considered. Judging from experience, if the tenants are moving to a new dwelling, too much information at the time of the actual moving in is not suitable as people might not be very receptive at that point. To let the tenants settle in before tenants’ instruction consultation takes place - where the tenants get acquainted to any new technical systems in their apartments - is probably more successful. A second visit by the building management some time after moving in, to make sure that everything is ok and to provide an opportunity for asking questions etc., might also be well worth the time [4]. All the information about the apartments, building and housing area should also be collected in a folder and handed to the tenants. In addition, this information can be available on the housing company’s website, where any updates of the information can be published.

If there is a showcase apartment, which is still available after completion, it can also be used as a means to interact with the tenants after completion of the renovation/moving in order to give tenants further opportunities to ask questions. Another example of a creative activity is to offer all tenants two hours’ carpenter assistance for mounting of shelves etc. in order to avoid perforation of the air tight layer.

HANDING OVER

Swedish pilot project

In this project the tenants were evacuated and when the tenants move in to the newly renovated houses a “Key day” is arranged. Staff from the building owner answer questions and show the tenants how features in the apartment work. The information includes how to handle a passive house dwelling and tips on how to save energy.

4.5.2 Management phase

A follow-up/post occupancy study

An evaluation study before and after the retrofit can give valuable information on the actual effect of efforts/measures carried out. A post occupancy study is suggested to take place one year after the retrofitting is completed, asking the tenants to give feedback regarding their housing situation and the results of the retrofitting as well as the retrofitting process itself. A comparison on specific parameters before and after the retrofit could be carried out, e.g. perception of comfort/indoor environment, satisfaction of dwellings/building/housing area, behaviour regarding energy issues, expectations with retrofitting or cost aspects.

**POST OCCUPANCY STUDY
Dutch pilot project**

A post-occupancy study is performed about how the renovation is perceived by the tenants using interviews and focus group discussions. Financial issues, the quality of the process and how goals are met that were set up prior to the renovation will be discussed.

A post occupancy study could also include an investigation on how people interact with their homes and the technical systems, and in particular the energy saving solutions. To follow-up how people actually (want to) use their homes and how the tenant behaviour can influence the final performance of the building is of interest. If monitoring has been carried out in the building a comparison on how the tenant experience coincides with the technical data could be done.

Other activities could include the usage of the showcase apartment to arrange meetings where neighbours can share experiences of the renovation and the technical systems. It is advisable that the showcase apartment remains open sometime after the completion of the renovation - a year perhaps. After this time there might be a need/request for the establishment of a (permanent) meeting place.

Finally, the post occupancy study could comprise an evaluation of the tenant involvement in general and which lessons could be learnt from the interaction. To make a comparison with other housing areas of the housing owner where no/little tenant interactions have been made will be useful for the housing owner in order to assess the gains of the activities and of the time and resources used by the owner. The experiences could thereafter be implemented in the next renovation project.

Some general questions that the housing owner could include in the evaluation of the tenant involvement are (based on questions in [1]):

- In what ways have the tenants been able to influence the renovation process?
- For what changes have the tenants taken part in the decision-making?

- What are your experiences of your approach regarding tenant involvement? Benefits? Disadvantages? Problems?
- How would you like to do it next time?
- How have energy issues been communicated to the tenants? What are your experiences regarding your energy related activities?

Preferably, these questions are asked to the tenants, but also to different actors of the project such as the project manager, housekeeper, local managers, building contractor etc.

Continuous dialogue

The follow-up/post occupancy study described above is a one-off activity. How the dialogue and interaction with the tenants could continue after the completion of the retrofitting project is, on the other hand, an ongoing activity. To maintain established relations between the housing owner and the tenants as well between the tenants is a continuous process.

Some issues that can be considered, to keep “the dialogue alive”:

- How existing channels, established during the design and renovation phase, can continue to be used - or if there is a need for adjustments.
- In order to keep the participation and interest alive there is a need for constant new ideas and activities – these could be either social or building related, or both.
- Common spaces and meeting places are needed for interaction.
- The role of the tenants in the maintenance of the apartments, buildings and housing area.
- How to collect and handle feedback from the tenants – both new ideas and complaints.
- To regularly send out questionnaires to measure the tenants’ satisfaction. This should result in an action plan to deal with the results.
- How to introduce new tenants.
- Special campaigns could be launched, e.g. educational packages on energy saving tips (see below)

CONTINUOUS DIALOGUE

French pilot project

The established relation between the housing company and the caretaker of the building will be a good prerequisite for the continuous dialogue with the tenants. Energy use will be followed up and communicated through a display in each apartment, but this service can also be used for other types of information.

4.5.3 Energy saving activities in the BEEM-UP project

In the BEEM-UP project energy issues are in focus with the aim of the project as a whole to retrofit existing buildings so that the energy consumption is drastically reduced. The goal is to decrease the total energy consumption and to specifically decrease the space heat energy use by 75%. The contribution from the tenants in this reduction of energy use is essential, which includes both how tenants handle energy saving solutions as well as their every-day energy related behaviour. Hence, it is included in the project to study the interaction with the technical systems as well as to stimulate behavioural changes.

How to communicate energy issues to tenants is an important issue. The property owners can work with their tenants to reduce their individual and collective energy use. Sometimes this benefits the owner, and sometimes it benefits the tenants, but the environment always benefits!

When communicating energy issues to tenants a number of success factors can be pointed out, e.g.:

- Give tailored information based on tenants' values and interests.
- Visualise energy use and give personalised feedback.
- Consider the effect of neighbours' behaviour (social norms).
- Find and offer motivators.
- Build trustful relationships.
- Use many different communication channels.

More useful information and tips on energy communication have been compiled in a general brochure "LET'S TALK ABOUT ENERGY How to communicate energy issues to tenants", produced within the BEEM-UP project. The brochure also aims at creating interest for energy issues for property-owners, tenant associations, consultants, authorities, etc. The overall goal is to encourage energy savings through tenant commitment and energy efficiency awareness. The brochure is available at www.beem-up.eu, in English, Dutch, French and Swedish.

ENERGY SAVING ACTIVITIES

Swedish pilot project

After the renovation the tenants will have individual metering of household electricity and domestic hot water. This will create incentives for energy savings as the tenants can influence the energy bill themselves.

ENERGY SAVING ACTIVITIES

Dutch pilot project

A smart display is being used. It is working as a programmable thermostat and presenting historical energy data and information about outdoor and indoor temperatures, heat and power consumption as well as the weather forecast. The service comes from the energy company and the house owner is facilitating the first two years of use.

Chapter 5 Case studies – tenant involvement in BEEM-UP pilot projects

In this chapter, short summaries of the tenant involvement in the BEEM-UP pilot projects in France, the Netherlands and Sweden are given – i.e. in Cotentin Falguière in Paris, Van der Lelijstraat in Delft and Brogården in Alingsås. In previous chapters, highlights from the same projects are given in text boxes.

Generally it can be said, that the type of renovation activities differ very much in the three projects and this results in quite different approaches and focus in regards to the tenants.

5.1 Brogården in Alingsås, Sweden

The Brogården project involves a total refurbishment of 300 flats that are distributed over 16 houses. The houses were stripped down to the frame and rebuilt using passive house techniques. While doing this the layout of the flats have been slightly changed to assure a better accessibility and provide an increased number of large flats that suits the modern way of living better than the old layout. This means that all tenants have been evacuated during the renovation of their house, and it also means that no part of the residential area have stayed unaffected by the refurbishment. To keep a good



Figure 3 Architect Kerstin Nilsson shows the change in spatial dispositions for some tenants at an Open House in the show apartment at Swedish pilot site.

dialog running with the tenants has been crucial – both since it affects their homes (and therefore their daily lives) and because it is essential that their input are taken into consideration when planning the actions to be taken with the houses. The building owner Alingsåshem, has worked from the premise that no one knows the area better than those living there. Only by involving the tenants and ensure that their needs are met can the project be “anchored” in the area and create the right conditions for a socially sustainable neighbourhood. To involve the tenants in the process also means that there is a better chance at achieving an

ecologically sustainable area. The passive houses in themselves ensure that the need for heating is decreased by 75%, even without tenants being more energy conscious than before, but their behaviour are still very valuable in the effort to save energy. Before the renovation, domestic hot water and household electricity were collectively paid for through the rent. After the refurbishment both hot water and household electricity are individually metered and billed. The tenants are themselves able to influence their costs by their behaviour. Alingsåshem has helped them by providing an energy efficient climate envelope, water efficient fittings and low energy fittings in the common areas.

5.2 Van der Lelijstraat in Delft, the Netherlands

The Van der Lelijstraat project started off by focusing on one major goal of the tenants: to replace the window frames. Other improvements in the “collective” envelope of the building have been chosen “top down”, to improve the energy standard to C label at least. Because the improvement of the roof and change of window frames needed approval of 70% of the tenants, this measure was proposed without rent increase. Further energy saving measures was being proposed with investments meaning rent increase. These measures were within the dwelling, so an individual approach and free choice of extra measures were possible. This strategy was chosen, because a collective



Figure 4 Woonbron arranged open house meetings for tenants in vacant dwelling in the Van der Lelijstraat pilot project in Delft, the Netherlands (held in March 2011)

approach was deemed to fail, due to not reaching a 70% support level of the relatively low income group on this estate. This implicates that tenant involvement focused on promotion of energy saving measures, both through behaviour change and individual investments as well as through the housing association with measures that lead to rent increase, but energy savings and better comfort. This interaction was also for the community, but mainly for individuals, as the goal was to have a maximum participation in individual measures such as floor insulation, high-efficient boilers, domestic solar hot water systems etc. These circumstances combined with that the tenants were staying in their dwellings during the renovation and with the outlook that tenants have the option to buy their rental house were the conditions for tenant involvement. The pay-back period of working on energy-awareness, higher motivation and acceptance of

investments is one-two years and will have a peak at the moment of decision making for massive execution. The role of the housing association has been to help people out and making a campaign to promote the extra measures. The outcome was mainly in the hands of the tenants.

5.3 Cotentin Falguière in Paris, France

The Cotentin project in Paris is again very different from the two other projects. The tenants in this mega-city have traditionally little social bondage with the neighbourhood and the house. The motivation to renovate the building was both to take away complaints concerning the condition of the building, to adapt the building to modern standards and to give to the building a better property value, making it fit for the market needs. The project would also contribute in reinforcing the residential appeal of the building by improving the comfort of the building including its energy efficiency.



Figure 5 General information meeting for the tenants about the plans of the renovation project in Paris, held in October 2011

The aim of involving the tenants in the renovation process was to reach an improved end result of the renovation with a building that was better suited after the tenants' needs and would be accepted among the tenants. ICF Novedis is governed by private law and its building stock is not defined as social housing. This means that tenant involvement is not mandatory as it is for the social housing sector. A tenant involvement process is nonetheless preferable in order to facilitate the dialogue with the tenants of the two top floors as they are being moved out because of the project.

Social sustainability is less an issue than in the Swedish pilot project but the underlying idea is nonetheless to create better opportunities to meet neighbours and create a more pleasant collective outer area around the building. However, the tenants of this house have very little ongoing daily interaction as a majority is employed by the national railway company, which means shift work.

ICF Novedis decided to have the tenants involved in the planning process, because of the drastic changes in the aesthetics of the block and the changes in the differentiation of the dwellings. For ICF Novedis it was clearly a great opportunity to use examples of best practices of the social housing sector to employ new processes and better involve the tenants in the renewal projects.

References and further reading

References

1. Boverket, *Boendeinflytande i praktiken (in Swedish)* 2010.
2. GUPTAA, R. and S. CHANDIWALA, "*Understanding occupants: feedback techniques for large-scale low-carbon domestic refurbishments*". *Building Research & Information*, 2010. **38**(5): p. 530 - 548
3. KARNER, A., "*Improving the Social Dialogue for Energy Efficient Social Housing (ISEES)*". 2007.
4. SQUARE (A System for Quality Assurance when Retrofitting Existing Buildings to Energy Efficient Buildings), "*Final report from the Swedish pilot project Brogården*", (*The project was co-funded by the European Commission, supported by its Programme Intelligent Energy Europe (IEE)*), The report is available at <http://www.iee-square.eu> 2010.

Further reading

OTB's experiences

One of the research themes of OTB Research Institute for the Built Environment at Delft University of Technology in the Netherlands, is occupant behaviour and energy use in buildings, energy saving in refurbishment projects and involvement of the residents. A number of publications for further reading can be recommended:

- COWAN, D. AND A. MARSCH, 2004. "Community, Neighbourhood, Responsibility: Contemporary Currents in Housing Studies", *Housing Studies*. 19(6): p. 845-853.
- IDEA BREWERY, as in <http://www.ideeenbrouwerij.nl/wp-content/uploads/2011/03/verslag-Bruispunt-Gouda-Oost-12-oktober-2011-met-bijlagen.pdf> (downloaded May 8, 2012).

Swedish experiences on "Tenant influence in practice"

The Swedish National Board of Housing, Building and Planning (Boverket – Myndigheten för samhällsplanering, byggande och boende) has compiled Swedish experiences on tenant influence in projects that are working with the development of housing areas. Special focus is given to housing areas characterised by segregation.

- BOVERKET, 2010. "Boendeinflytande i praktiken" (in Swedish)

ISEES - Improving the Social Dialogue for Energy Efficient Social Housing

ISEES was an EU IEE project focused on social housing in Bulgaria, Czech Republic, Lithuania, Slovak Republic and the United Kingdom. It ended in 2007. The purpose of the project was that through social dialogue influencing the energy use of pilot buildings and introducing renewable energy measures. During the retrofit process, the dialogue involved tenants/owners of dwellings, housing associations, municipalities and energy service providers.

- KARNER, A., 2007. "Improving the Social Dialogue for Energy Efficient Social Housing (ISEES)".

Vauban in Freiburg, Germany

The Vauban project constituted a new-built residential area with focus on sustainability and resident involvement. There was extensive participation of the future tenants. The aim was "to implement a city district in a co-operative, participatory way which meets ecological, social, economic, and cultural requirements" and that all buildings should have at minimum a low energy standard of 65 kWh/m² (heating), but passive houses and plus energy houses were also

built. Area was developed from a non-governmental organization (Forum Vauban) of volunteer citizens, who wanted a socially and environmentally sustainable residential area.

- GOUDA BRUIST, as in <http://www.ideeenbrouwerij.nl/wp-content/uploads/2011/03/Verslag-stadsbrouwerij-Gouda-bruist-16-februari-2010.pdf> (downloaded May 8, 2012).

Augustenborg in Malmö, Sweden

The project was called “the eco-city Augustenborg” and was partly funded from the Swedish Environmental Protection Agency (as a Local Investment Program, LIP). The overall aim of the project was to develop the residential area to a socially, economically and ecologically sustainable area through eleven sub-projects. One goal was to engage the residents in this transition.

- NATURVÅRDSVERKET, 2005. "Att länka miljöeffekter och sociala effekter - Utvärdering av LIP-finansierade Bostadsförnyelseprojekt", Rapport 5511 (in Swedish).

“Flexible participation model” – Study by IFF/IFZ in Graz, Austria

In a study by Suschek-Berger (at Inter-University Research Center for Technology, Work and Culture (IFF/IFZ) in Graz, Austria) and Ornetzeder (at Center for Social Innovation (ZSI) in Vienna, Austria), many approaches in energy efficient renovation projects were collected and evaluated. The study resulted in a flexible “method”, written down in models.

- SUSCHEK-BERGER, J. AND M. ORNETZEDER, 2006. "Kooperative Sanierung. Modelle zur Einbeziehung von BewohnerInnen bei nachhaltigen Gebäudesanierungen", IFZ, Graz, Haus der Zukunft 54.

Stadtwerk Lehen, in Salzburg, Austria – “Energy efficiency through community development”

The project Stadtwerk Lehen focuses on creating support from a range of stakeholders including different user groups in the area, both in new developments, in renovated buildings and existing houses and urban areas.

- STRASSL, I., 2010. "Sozialorganisatorische Begleitmassnahmen im Stadtumbau; Energieeffiziente Wohnquartiere durch Community Organising" (Energy efficiency through community development). Salzburg, SIR Salzburger Institut für Raumordnung und Wohnen.

CADDIES

The EU project CADDIES stands for Creating Attractive Developed and Dynamic Societies together with Inhabitants and the main objective is to find out how to encourage residents to participate in the development of and to take responsibility for their own building/block/neighbourhood. The partners are Hyresbostäder i Norrköping AB, Sweden, Helsinki Neighbourhoods Association (HELKA), Finland and Riga City Council Housing and Environment Department, Latvia – which all are active in neighbourhood developments in the cities of Norrköping, Helsinki and Riga. The project ended in 2011.

- CADDIES (Creating Attractive Developed and Dynamic Societies together with Inhabitants), www.caddiesproject.eu.

Eco-buildings in Poptahof, Netherlands

This is an ongoing refurbishment project by Woonbron, which has a tenant, city and energy-focus. The refurbishment in Poptahof is part of the European project SESAC, which is included in the EU CONCERTO initiative. In the buildings in Poptahof, the tenant's heat and electricity use has been monitored for a year and from these measurements energy coaches explain energy behaviour in the newly refurbished buildings. In March 2011 (one year of occupancy), Woonbron organised an energy-evening for the tenants and owners. There were presentations on the SESAC project but also on energy efficiency measures and on energy saving behaviour. After the evening about 30 house-visits of approximately 1 hour took place by a special energy advisor.

- POPTAHOF, www.poptahof.nl
- SESAC, www.concerto-sesac.eu

Vrouwe van Landlust of housing association Eigen Haard, in Amsterdam

This deals with professional guidance of participative planning in the renovation process of the building complex "De Koningsvrouwen van Landlust" in Amsterdam. There are 246 dwellings in the complex and it is part of what is referred to as the primary housing stock. It is characterised by massive, non-insulated brick facades. To reach high energy ambitions set by the housing cooperation Eigen Haard, this project needed tenant support. An expert consultant was hired to set up and guide a participation process, which ended in success.

Hovsjösatsningen, Sweden

The so called "Hovsjösatsningen" has been evaluated from a socio-economic perspective in the report "The impossible just takes a little longer". The report describes the process and way of working in this segregated housing area in Södertälje. In short, it means that housing owner Telge Hovsjö uses resources for building renovation to build the area's social capital as well.

- Nilsson, I. and E. Lundmark, 2012. *Det omöjliga tar bara något längre tid. Hovsjösatsningen ur ett process- och socioekonomiskt perspektiv.* <http://www.telge.se/Om-Telge/Nyheter/Socioekonomisk-utvardering/>

The Swedish National Board of Housing, Building and Planning

Guidance together with a compilation of experiences of tenant involvement has been made by the Swedish National Board of Housing, Building and Planning (published in Swedish on their website). It includes best practices for property owners who are interested in involving the tenants when refurbishing and development of residential areas.

- <http://www.boverket.se/sv/boende/for-dig-som-bor-i-hyresratt-eller-kooperativ-hyresratt/boendeinflytande1/>