



# ACHIEVING ENERGY EFFICIENCY IN HOUSING — THE WAY FORWARD

*A needs analysis of European Social,  
Cooperative and Public housing organizations*





# CONTENTS

<b>FOREWORD</b>	<b>4</b>
The Main conclusions of the analysis	4
<b>INTRODUCTION</b>	<b>5</b>
Background	5
Countries and organisations involved in the project	5
Type of organisations covered by report	6
Organisations profiles	6
Aims and objectives	8
Method	
<b>POWER HOUSE EUROPE QUESTIONNAIRE</b>	<b>9</b>
Percentage of responses	9
Type of building stock§	9
<b>KEY FINDINGS OF THE REPORT AND POWER HOUSE RESPONSE</b>	<b>17</b>
Sources and type of information	18
Influence on decisions	18
The way forward – Finance is key	18

# FOREWORD

POWER HOUSE EUROPE is led by CECODHAS-Housing Europe and is supported by the EU-funded Intelligent Energy Europe (IEE) Programme. It is a catalyst to trigger action to achieve maximum potential energy saving in the residential sector by mainstreaming existing know-how required to refurbish and build housing with optimal energy consumption levels. Eleven organisations from eight countries representing over 14 000 Social, cooperative and public housing providers and in turn 10 million homes throughout the EU are partners in the POWER HOUSE EUROPE project. The results will be available for use by all CECODHAS Members which amounts to a potential 39,000 organisations managing 25 million homes.

The POWER HOUSE EUROPE activities began with a survey of the information and knowledge gaps on energy issues among the Social Housing providers participating in the project. The purpose of the questionnaire was both to form a base for selecting relevant results from European projects to disseminate and targeting the needs of Social Housing organisations when planning activities in the National/Regional platforms.

## THE MAIN CONCLUSIONS OF THE ANALYSIS ARE:

The surveys shows that goals for energy efficiency are more common for new buildings (> 90% report that they have a goal) than existing (< 70%). It seems that strategies for energy efficiency are in place to a great extent, however there is great room for increasing the ambition and scope of these strategies which will be the role of POWER HOUSE EUROPE.

The staff most likely to be involved in energy project-sare organisational & managerial staff and information is mainly provided by the Social Housing federations. The surveys indicates that federations have a key role to play

not only in providing information on financial opportunities and technical issues but also in raising levels of ambition and potentially coordinating increased collaboration with local authorities and other actors key to the success of the energy transition. Websites are the preferred channel of information. However, when supporting residents to adapt to new technologies, information is generally disseminated using Information Packs.

The main conclusion of the survey is that there is a need for neutral, trustworthy and targeted information with precise details on cost, maintenance and energy saving potential.

In general, Social Housing companies participating in the project are interested in information on:

### Finance

The result from the surveys shows that financing and funding issues are the top interest for all the Social Housing companies. Access to finance is perceived as the main obstacle when building beyond the building code. Information on funding and financing schemes should be a top priority for POWER HOUSE EUROPE according to the Social Housing companies.

### Technical issues

The second most important topic for training seminars is technical aspects. Many different technologies are of interest, such as management of heating operating systems, energy efficient ventilation and new heating system.

### Good Examples and experiences

The POWER HOUSE EUROPE project can play a key role in providing information on good examples and experiences and also to facilitate twinning between Social Housing organisations in different countries.

## POWER HOUSE EUROPE – THE BIG GREEN HOUSING AND ENERGY EXCHANGE

Project partly funded by European Commission – Intelligent Energy Europe Programme  
Grant agreement IEE/07/779/S12.500397

The sole responsibility for the content of this publication etc lies with the authors. It does not necessarily reflect the opinion of the European Communities. The European Commission is not responsible for any use that may be made of the information contained therein.

Project coordinator: CECODHAS – Housing Europe The European Liaison Committee for Social Housing

Sorcha Edwards, CECODHAS, sorcha.edwards@cecodhas.org  
Alessandro Cesale, CECODHAS, alessandro.cesale@cecodhas.org  
Therese Rydstedt, SABO, therese.rydstedt@sabo.se

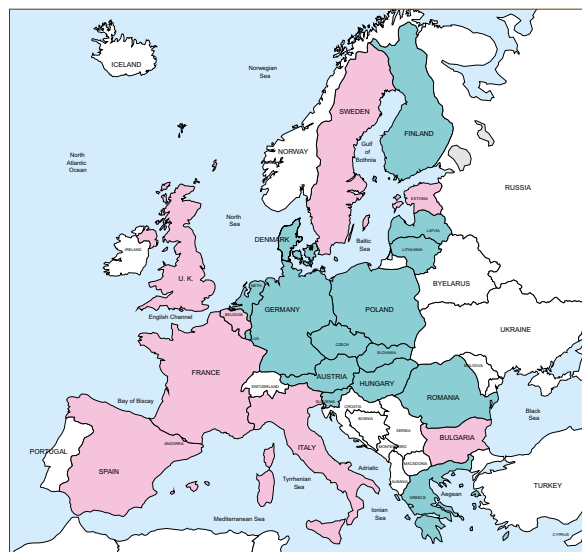
# INTRODUCTION

## BACKGROUND

POWER HOUSE EUROPE is led by CECODHAS- Housing Europe is supported by the EU-funded Intelligent Energy Europe (IEE) Programme and functions as a catalyst to trigger action to achieve maximum potential energy saving in the residential sector by mainstreaming existing know-how required to refurbish and build housing with optimal energy consumption levels. Eleven organisations from eight countries representing over 14 000 Social Housing companies and in turn 10 million homes throughout the EU are partners in the POWER HOUSE EUROPE project. The results will be available for use by all CECODHAS Members which amounts to a potential 39,000 organisations managing 25 million homes.

The first step taken in the POWER HOUSE EUROPE initiative was to ask local cooperative and Social Housing organizations throughout the EU how the POWER HOUSE EUROPE project could help them to reduce energy consumption and increase the use of renewable energy in the homes they build, own and manage. We asked them to outline who in the company is responsible for energy issues, what information is needed as well as questions on goal and strategies in this field. This was done by sending out a questionnaire by all partners within the POWER HOUSE EUROPE project to their members. Not all members answered however over 300 organizations did take the time to provide feedback.

The purpose of the questionnaire was both to form a base for selecting relevant results from European projects to disseminate and when planning activities in the National/Regional platforms within the POWER HOUSE EUROPE project This report shows the result from that



surveys and summarizes the need of information for the members of Social Housing organisations in Europe when working on energy related issues. The report shows the general conclusions for all countries. The results vary a lot between the members in different countries and each National/Regional platform will use their own results when planning the platform activities.

## COUNTRIES AND ORGANISATIONS INVOLVED IN THE PROJECT

Results from eight countries are the base for this report, see map below. As can be seen from the map, all of the major European climate zones are represented in POWER HOUSE EUROPE. Within these countries eleven organisations reported results. The organisations are:

<i>Project Partner</i>	<i>Country</i>	<i>Number of housing providers/members</i>	<i>Number of dwellings</i>	<i>Type of provider</i>	<i>Type of tenure</i>
<b>AVS</b>	Spain	164	249 339	public municipal housing	rental with option to buy
<b>BHA</b>	Bulgaria	N/A	N/A	apartment owners associations	ownership
<b>Confcooperative-Federabitazione</b>	Italy	2 751	rental: 60 000 cooperative: 243 000	housing cooperatives	freehold/rental
<b>EKYL</b>	Estonia	1 400	50 000	cooperative housing associations	ownership
<b>Federcasa</b>	Italy	115	768 000	public housing	rental
<b>HSB</b>	Sweden	3 903	rental: 20 500 cooperative: 316 000 other: 30 200	housing cooperatives	freehold/rental
<b>Legacoop Abitanti</b>	Italy	3 350	rental: 50 000 cooperative: 310 000	housing cooperatives	freehold/rental
<b>NHF</b>	England	1 223	2.5 million	not for profit housing associations	rental
<b>SABO</b>	Sweden	292	729 000	public municipal housing	rental
<b>USH</b>	France	832	4.8 million	public/not for profit / cooperative housing	rental
<b>VMSW</b>	Belgium	102	139 400	public housing	rental

## TYPE OF ORGANISATIONS COVERED BY REPORT

Below is a short description of each organisation participating in the needs analysis survey. As can be seen from these descriptions, the responses came from a diverse group of local housing providers which is in fact representative of the diversity of the Social Housing sector in the EU in terms of differences of size (they range from owner/managers of 25 to 50,000 homes). The samples coming from Sweden, England, Italy, France, Spain, Estonia and Bulgaria also represents quite effectively the different climate zones in the EU. The types of organization is also widely varied and includes condominiums of individually owned apartments, municipally owned rental apartments, housing association which engage in equity shared ownership and rental, housing companies which build affordable housing destined for private

ownership and a large proportion of cooperative housing companies. In terms of financial options available to the organizations, the range is also quite large where in some states, coffers have been opened with energy efficiency as priority while in others poor owners are left to their own devices in crumbling blocks.

The representativity of the sample means that the challenges and solutions shared between the organizations will potentially cover the whole spectrum of Europe's energy and housing issues in terms of financial resources, ownership structures, climate, stock characteristics and building traditions. The needs differ greatly between providers depending on their size, location, legal status, in-house staff profiles; however there were a number of cross-cutting issues that figured highly across Europe.

## ORGANISATIONS PROFILES



### AVS – Asociación Española de Promotores Públicos de Vivienda y Suelo

AVS – Asociación Española de Promotores Públicos de Vivienda y Suelo is a national body representing 164 public housing companies which provide social housing for owner occupation and manage a total rental housing stock of about 250.000 units. AVS aims are to urge the public authorities to provide the necessary condition to increase the productive public housing to help implement the right to housing as listed in the constitution, to boost sustainable development through sustainable urban policies such as the regeneration of historic neighbourhoods and city centres, and to promote sustainable construction and the reduction of poverty and social exclusion.



### BHA – The Bulgarian Housing Association

BHA – The Bulgarian Housing Association, established in 1994 works to participate in the implementation of the National Housing Strategy and in governmental institutional, financial and legal reforms in the housing sector, to support the establishment and further deve-

lopment of a network of non-governmental housing organizations in Bulgaria where the national level of private ownership currently stands at 97%, to promote best practice in the maintenance, management and renovation of the housing stock in compliance with the contemporary requirements and European standards and to help the homeless and vulnerable social groups.



### Confcooperative-Federabitazione

Confcooperative-Federabitazione is the National Housing Cooperatives Federation in Italy and is affiliated to the general federation of coops Confcooperative. It has over 2.751 independent, non-profit members. Some 15.000 new dwellings per year are meant to be sold or rent to low-mid families and people with special needs. Federabitazione is supporting by the Consorzio Nazionale CasaQualità for the implementation of all technical and non technical actions and has a strategy towards a growth of sustainability in housing, in a social, economic, cultural and environmental point of view, by the involvement of all the subject of the construction process.



### EKÜL – The Estonian Union of Co-operative Housing Associations

EKÜL - The Estonian Union of Co-operative Housing Associations is an organization uniting co-operative

housing associations all over Estonia. Each co-operative housing association is a self-financing non-for-profit organisation managing one multi apartment building. Membership of EKÜL is voluntary and there are more than 1.400 members of EKÜL today. Our cooperative housing stock accounts approximately 15% of the national co-operative housing stock. EKÜL represents Estonian co-operative housing associations on local, national and international level. Our partners are state institutions, municipalities, universities, private companies and NGOs.



### **Federcasa – Federazione Italiana per la Casa**

Federcasa represents 115 public corporations which, all over Italy, build and manage social housing for the low-income groups (average 770.000 rental dwellings). The Social Housing stock represents the 4% of the total Italian housing stock. The 108 associations are organised at the provincial, communal and regional levels are involved in the building and management of social housing. Federcasa participates in the definition of the objectives and instruments of housing policies. It promotes new means of intervention in the field of public residential construction supporting the quality of housing and social life. Federcasa is involved in the improvement of the efficiency of management in so far as the public housing stock is concerned and represents its member associations towards national and international organisations. In order to achieve its goals it cooperates with the governmental ministries in Italy, with various associations and institutes of research in the field of construction and urban design, local administrations and other national and international institutes and organisations.



### **HSB – The Swedish Cooperative Housing Association**

HSB - The Swedish Cooperative Housing Association was founded in 1923, formed and organised on central, regional and local level, representing 33 regional cooperative associations who in turn have 3.903 cooperative local housing societies as members. HSB-cooperative housing stock amounts to 316.000 with 20.500 rental units. Other managed housing stock amounts to 30.200. With 648 new dwellings built in 2008. HSB members

are committed to contribute to a sustainable environment and climate-smart energy consumption and usage. By doing this they intend to become the most respected actor in housing. HSB is also taking an active part in international cooperation through our membership in ICA, CECODHAS-Housing Europe and NBO. In cooperation with the Swedish Co-operative Centre we participate in housing development projects in for example South Africa and Vietnam.



### **Legacoop Abitanti**

Legacoop Abitanti is a syndicate association representing over 3.000 housing cooperatives (together with their consortiums and members) that promotes tenants, cooperation and coordinates the activities of member organisations. Legacoop Abitanti's members all together represent a total of 303.732 dwellings built, and some 30.000 dwellings still property of coops. The cooperative of inhabitants promotes the creation of construction programmes, directly and with the help of other partners. The tenants benefit from individual ownership or rental housing.



### **NHF – The National Housing Federation**

NHF – The National Housing Federation represents 1.200 not-for-profit independent housing associations and is the voice of affordable housing in England. Our members provide 2.5 million homes to 5 million people. Housing associations also provide much-needed neighbourhood services such as education and training schemes or financial inclusion services for the benefit of the whole community and are in business for neighbourhoods. The Federation supports and promotes the work that they do and campaign for better housing and neighbourhoods.



### **SABO – The Swedish Association of Municipal Housing Companies**

SABO – The Swedish Association of Municipal Housing Companies affiliates approximately 300 companies and manages some 730.000 dwelling units housing one in 4 Swedish. This is about 20 percent of the total housing stock in Sweden and about one third of all dwelling units in multi-storey houses. SABO provides expertise in different fields, exchanges experience between its members and cooperates with national authorities and organizations. SABO also arranges conferences and takes on consultancy assignments.



### **USH – L'Union Sociale pour l'Habitat**

USH– L'Union Sociale pour l'Habitat dedicates its services to the lower income families. The guiding principles of USH are solidarity and housing quality. Its main activities are construction, acquisition, management and financing of housing, urban planning, city planning and services to the local communities. USH manages 5 million homes for rent and sale and has about 850 members with various legal statutes (public bodies, anonymous societies, cooperatives), but all are non-for-profit organisations.



### **VMSW – Vlaamse Maatschappij voor Sociaal Wonen**

VMSW – Vlaamse Maatschappij voor Sociaal Wonen is mainly charged with the implementation of the Flemish housing policy priorities. It does so by planning, assisting, and financing the activities of 102 social housing companies which build, promote, construct, refurbish, let and sell social housing, both rental and ownership. It also provides technical, legal and financial assistance (VMSW operates as a bank in that it finances these operations and also grants mortgage loans to private buyers of social houses) and collects existing data in order to feed into and assist in the future policy making.

## **AIMS AND OBJECTIVES**

The purpose of the survey was both to form a base for selecting relevant results from European projects to disseminate and when planning activities in the National/Regional platforms within the POWER HOUSE EUROPE project.

An important part of the POWER HOUSE EUROPE project is to help the target group in identifying relevant outputs of completed EU projects. To do this we need to be familiar with the interests and requirements of the target group well. The questions were also designed to give input on the preparation of the POWER HOUSE EUROPE web-site and how to best communicate with the target group. How do we ensure the interest of the target group? How do we make them listen to our arguments?

National/Regional platforms are formed in each country and are the framework for disseminating information in the POWER HOUSE EUROPE project. The design of the platform differ between project partners but in general the platform contains conferences, network meeting and study visits. Results in this report are essential input when planning the activities within the National/Regional platforms. How can federations, partners of Power House Europe inform housing organisations in the best way? What media and methods should be used?

## **METHOD**

A questionnaire was sent out to each partner's members and was answered between January and March 2009. The questionnaire consisted of 15 questions. Some of the questions were answered by giving "points" to different alternatives.

The questionnaire was sent out via e-mail or regular mail. Some project partners followed up by making interviews on telephone.

The questionnaire tries to answer the following questions:

- What topics are interesting? (technical, financial, organisation etc)
- How do they (the Social Housing companies) want information? (web-site, seminars etc)
- How are they influenced in their decisions? (own strategies, building codes etc)
- What kind of staff is involved in energy projects?
- What are the barriers to energy efficiency?



# POWER HOUSE EUROPE QUESTIONNAIRE

## PERCENTAGE OF RESPONSES

There is a large variation between the answers collected by each federation involved in the project (see table below). Although the large variation, an average of 28

% of responses is acceptable and in line with the normal rate of answers that are normally expected to be received when questionnaires are sent.

	SABO	Casa-qualita	AVS	USH	Fina-bita	Feder-casa	VMSW	EKYL	BHA	NHF	HSB
Nr of answered questionnaires	45	56	38	15	7	25	46	28	13	19	33
Nr of distributed questionnaires	86	120	163	100	22	150	95	40	22	300	73
Percentage of responses	52%	47%	23%	15%	32%	17%	48%	70%	59%	6%	45%

## TYPE OF BUILDING STOCK

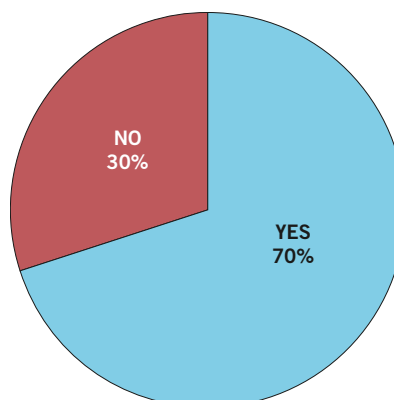
In the POWER HOUSE EUROPE project 11 organisations from 8 countries representing over 14 000 Social Housing companies and in turn 10 million homes throughout the EU are partners. The building stock is representative of the residential stock profile in the EU in that it includes multifamily housing and single family

homes while the tenure profile includes are rental cooperative and privately owned housing. The respondents are responsible for the management of existing buildings but also for new build (this differs between different partners but within the whole group both existing and new build are represented).

### QUESTION NR 1: DO HOUSING ORGANISATIONS HAVE ENERGY REDUCING STRATEGIES IN PLACE?

70% of the organisations have a strategy in place for reducing energy use. This is positive for the impact of this project. Further enquire is needed as the nature of these strategies. The difficulty in compiling data on current energy performance of existing stock was noted by a number of organisations – this data is vital for the development of an effect energy strategy.

**Does your organisation have a strategy in place to reduce energy use?**



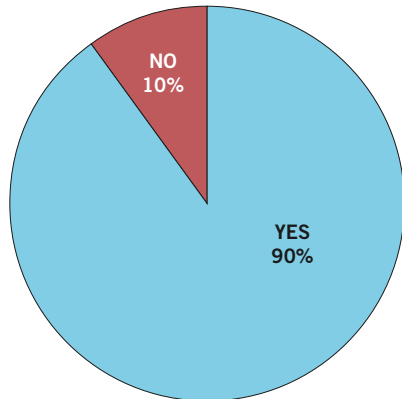
All partners except NHF answered this question.

## QUESTION NR 2: STANDARDS FOR NEW AND EXISTING BUILDINGS

All partners answered this for existing buildings. EKYL did not answer for new buildings as their members, the cooperative housing associations, do not build houses.

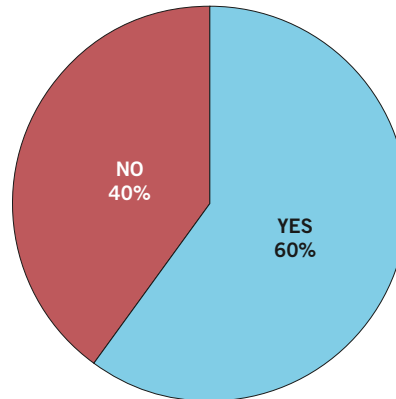
**Do you have a standard or goal to meet on energy efficiency?**

*New buildings*



**Do you have a standard or goal to meet on energy efficiency?**

*When refurbishing existing buildings*



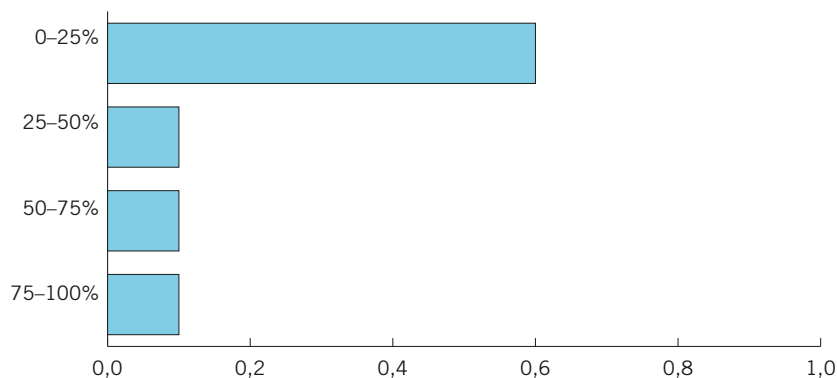
The results show that a goal for energy efficiency is more common for new buildings than existing. But even for existing buildings more than 60% say they have a goal to meet. In some cases the economic crisis and slow-down in new construction has shifted interest to refurbishment. POWER HOUSE EUROPE must work to ensure an increase in the focus on existing building as in terms of current energy waste, this is where most savings can be made.

## QUESTION NR 3:

Although so many organisations have a strategy for reducing energy use very few will build better than the building code. This emphasizes the importance of the building codes in Europe and to strengthen both the requirements and the fulfilment.

**Please estimate what % of your units in 09/10 that will be developed to a standard higher than your national building code (answers can be approximate)**

part of respondees marking the specifik option



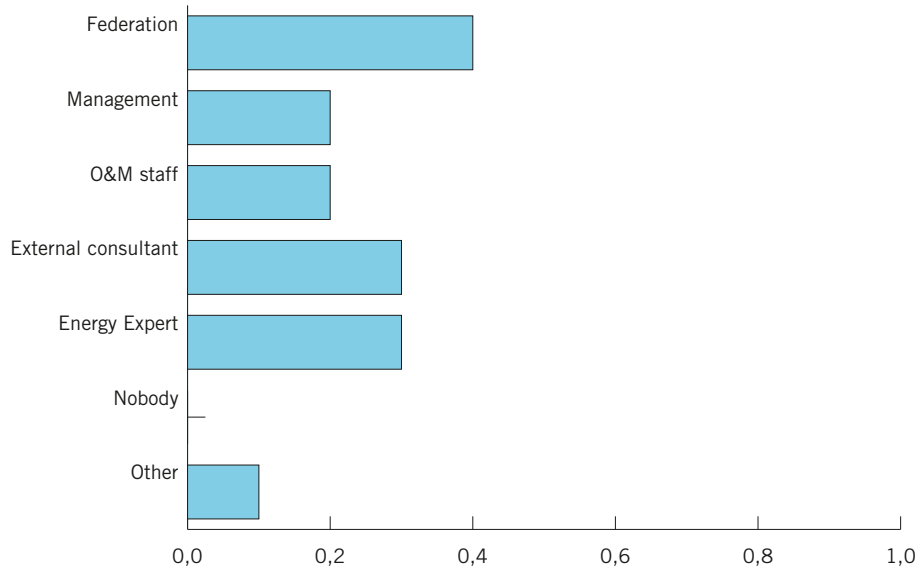
All partners except EKYL, BHA and NHF have answered this question.

**QUESTION NR 4: WHO IS RESPONSIBLE FOR PROVIDING INFORMATION ON ENERGY MANAGEMENT STRATEGIES?**

The result does not show an obvious answer. One third answer that federation is responsible for providing information on energy strategies, a little less than one third say energy expert and another part a little less than one third say external consultant.

**Who is responsible for providing information on energy management/energy strategy?**

part of respondees marking the specifik option



All partners except BHA answered this question.

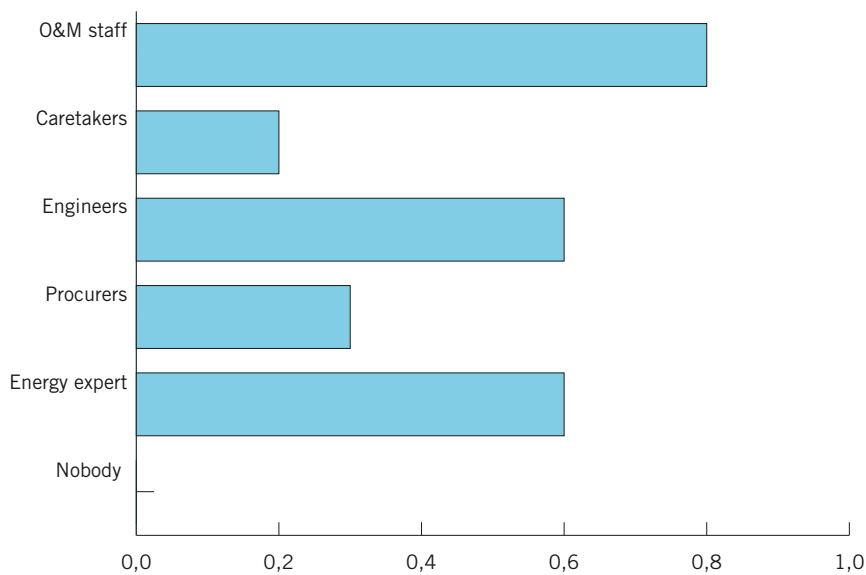
### QUESTION NR 5: WHAT STAFF CATEGORIES WORK ON ENERGY PROJECTS IN NEW AND EXISTING BUILDINGS?

Both for new and existing buildings O&M staff are the most likely category to be involved in an energy efficiency project. There is still a reliance on external energy experts which reveals the need for internal capacity building. In addition as a result of the EPBD directive, external ‘certificators’ are now also playing a role in the energy projects through their certificates and linked advice.

#### What categories of staff would be involved in a project on energy efficiency?

##### *New buildings*

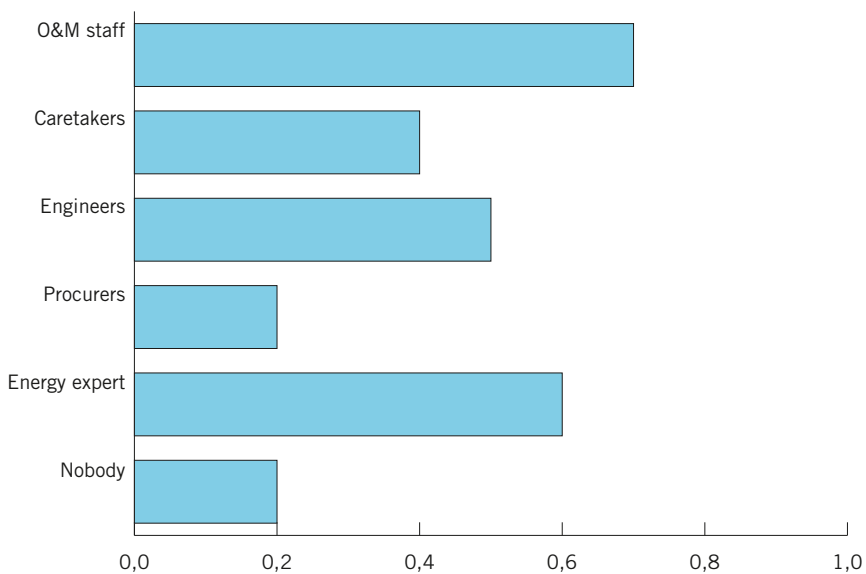
part of respondees marking the specifik option



#### What categories of staff would be involved in a project on energy efficiency?

##### *Existing buildings*

part of respondees marking the specifik option



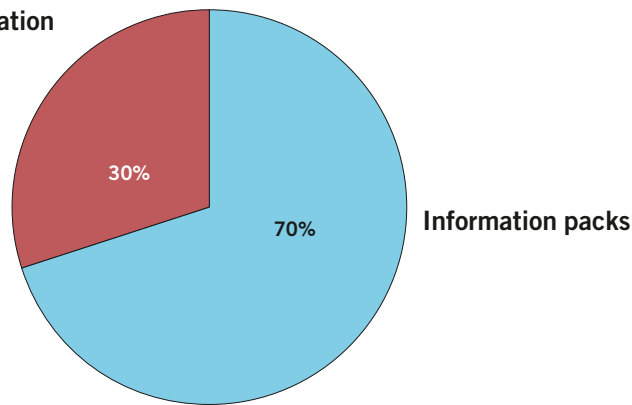
All partners except EKYL, BHA, NHF and HSB answered. The translation of different categories of personell into national language was a problem with this question. We do not all mean the same thing with for instance energy expert or O&M staff.

**QUESTION NR 6: HOW ARE YOU SUPPORTING RESIDENTS TO ENABLE THEM TO ADAPT TO NEW TECHNOLOGIES?**

Information packs are the most common way to support tenants.

POWERHOUSE EUROPE could promote a more hands-on approach to support of residents and raise awareness of the different options available and their effectiveness.

**Demonstration**



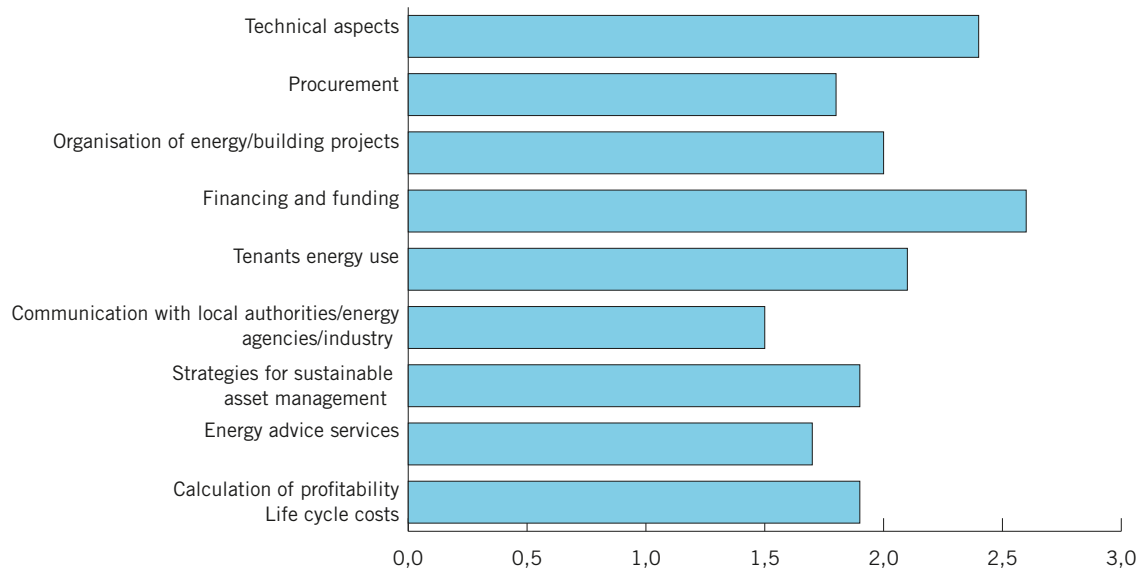
All partners answered this question.

**QUESTION NR 7: WHAT ARE THE HOT TOPICS FOR HOUSING ORGANISATIONS ?**

The response shows that financing and funding is of main interest. This confirms what we believe is that throughout the EU a great barrier for energy efficiency in housing companies, regardless of tenure, geographical location or type of housing today.

**What sorts of topics would you like to see discussed at possible regional or national training seminars?**

Mean results all countries



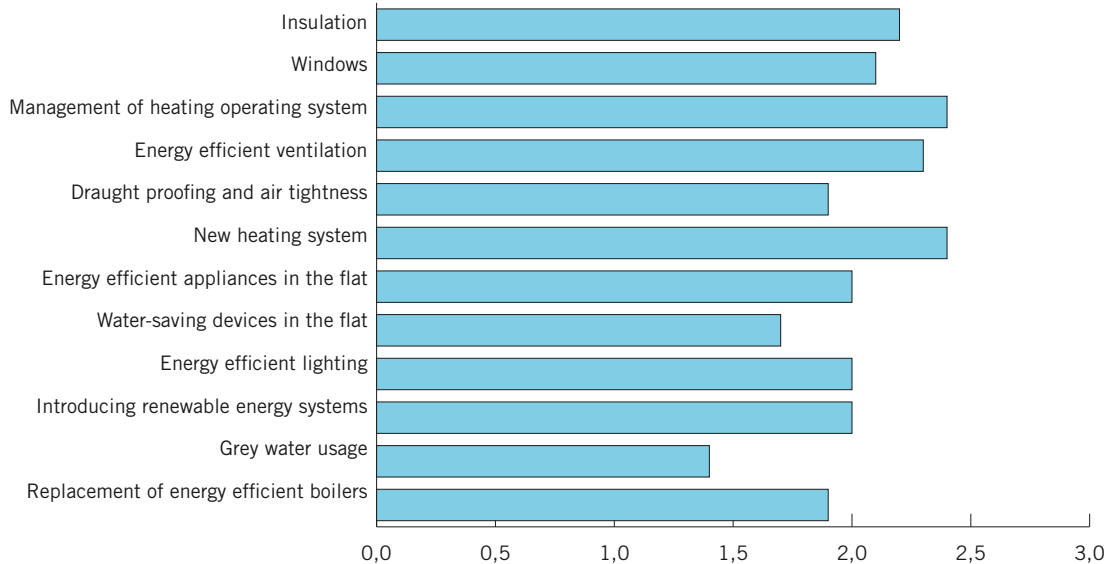
This question was answered by all partners participating in this task. The respondents was asked to fill in points for each alternative with 0 = not useful and 3 = very useful. The table shows the average result for all partners.

### QUESTION NR 8: WHAT ARE THE TECHNICAL ISSUES OF MOST INTEREST?

The main result is that almost all technical aspects suggested seem to be interesting to the social housing companies. Only grey water usage attracts less interest.

#### What technical aspects would you like to see discussed at possible training seminars?

Mean results all countries



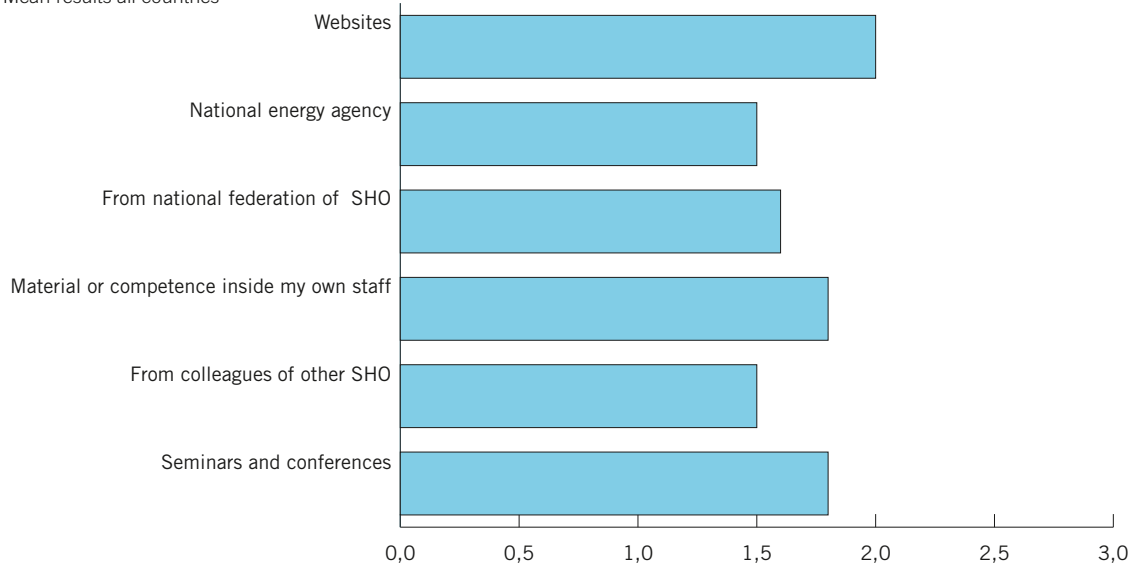
All partners answered this question except NHF. The respondents was asked to fill in points for each alternative with 0 = not useful and 3 = very useful. The table shows the average result for all partners.

### QUESTION NR 9: WHERE DO HOUSING ORGANISATIONS CURRENTLY GO TO LOOK FOR INFORMATION ON EE AND RES?

Social housing companies today find information on web sites, from their own staff or at seminars and conferences. This is essential information for the implementing face of our project.

#### What are the channels and sources of information that you use today?

Mean results all countries



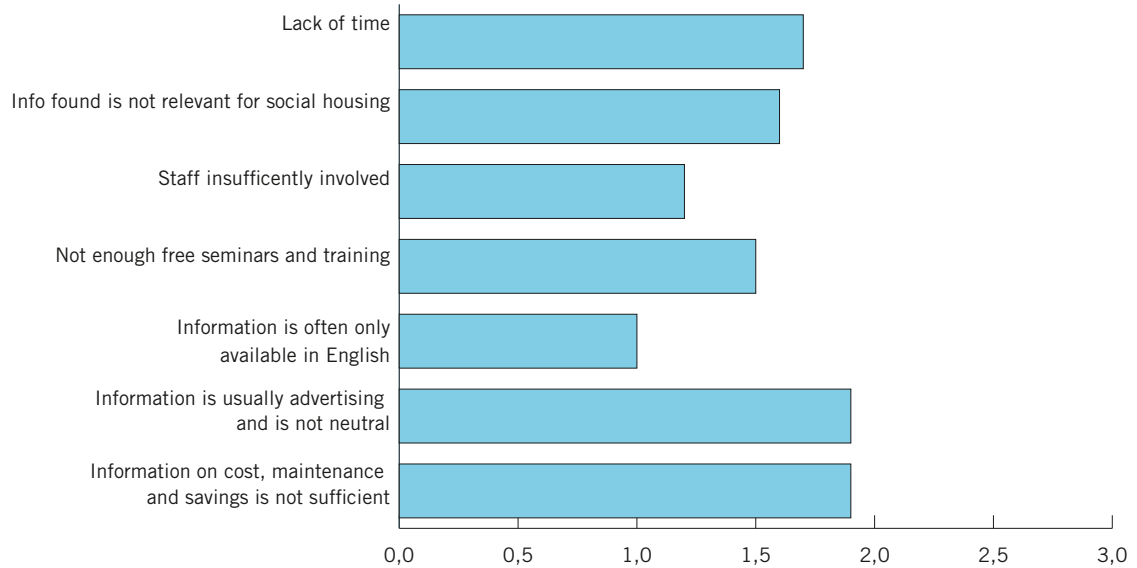
All partners answered this question except EKYL (EKYL answered without marking points. You can see from their results that seminars and the national energy agency are the most important channels for information in Estonia.)

### QUESTION NR 10: WHAT DO HOUSING ORGANISATIONS PERCEIVE AS BARRIERS TO FINDING THE RIGHT INFORMATION?

The largest barrier to find useful information is that information on cost, maintenance and savings is not sufficient and that the information is “advertising” and not really reliable. Housing Organisations are not in a position to experiment and so techniques and technologies must be tried and tested. Another barrier is lack of time. This means that the Power House Europe project have to develop a data base that is easily used and quick to search in. Federations are in the position to tailor information to the needs of their members through the POWER HOUSE toolkits.

#### What are the largest barriers to find information today?

Mean results all countries



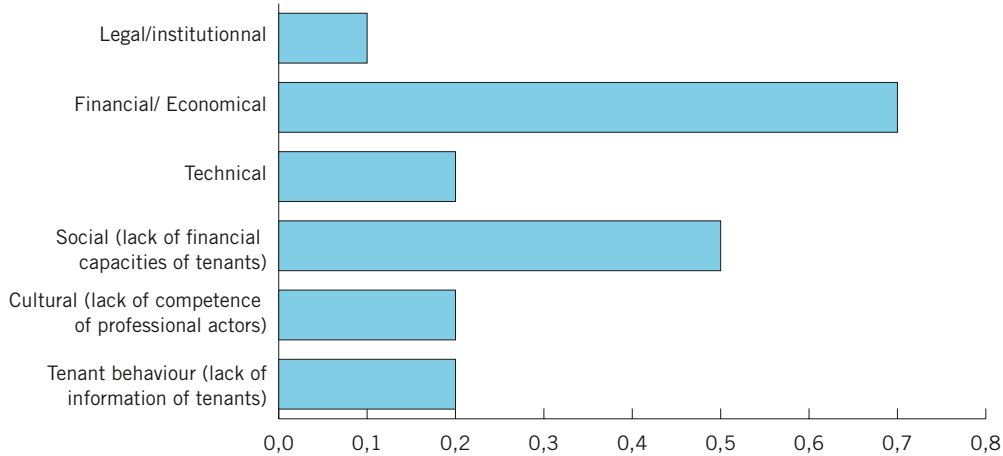
All partners answered this question except NHF. 0 = I disagree, 3 = I fully agree.

**QUESTION NR 11: WHAT ARE THE BARRIERS TO DEVELOP MORE UNITS TO A LEVEL ABOVE THE BUILDING CODE?**

It is obvious that the most important barrier is financial/economical. Also lack of financial capacity of tenants is a great barrier.

**What are the barriers to develop more units at a level above the building code?**

part of respondees marking the specifikk option

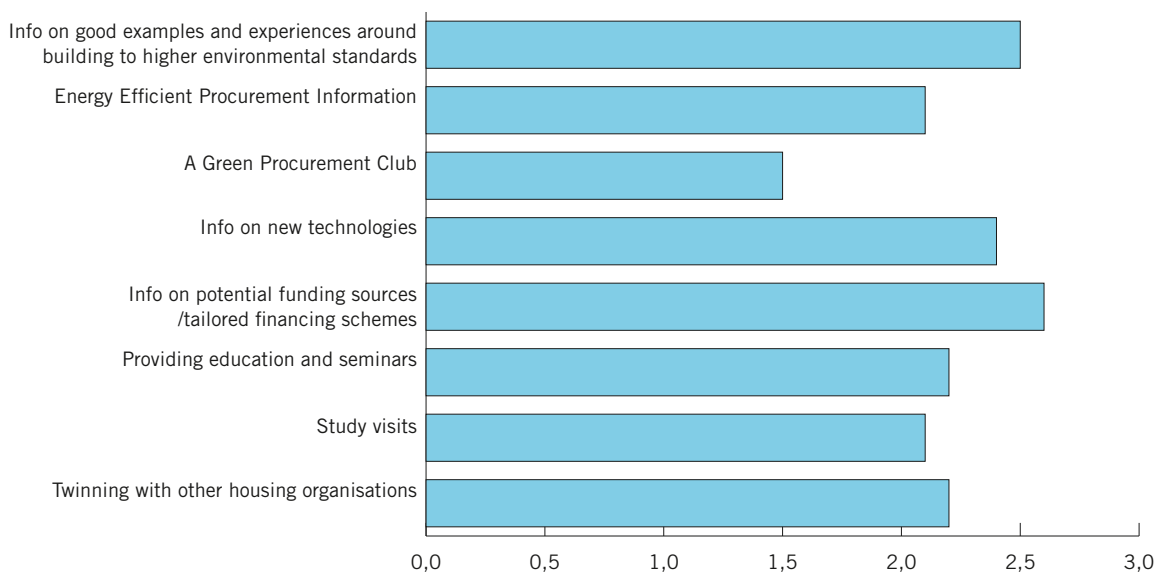


All partners except BHA gave an answer. The organisations associated with BHA are not involved in new-build projects.

**QUESTION NR 12: HOW COULD THE POWER HOUSE EUROPE PROJECT SUPPORT YOUR WORK AROUND DEVELOPING AND RETROFITTING?**

Once again financial issues are most important, followed closely by information on good examples and new technologies. The analysis also shows that the members want support in almost all the suggested areas. Green procurement attracts a little less interest.

It was noted in the results that there is also a demand for ‘bad’ experiences and mistakes and more interactive study visits where many questions can be asked. This underlines the need for a more informal forum for exchange for organisations due to the tendency to publicise only successful initiatives at conferences and in publications.



All partners answered this question. 0 = not useful, 3 = very useful.





## KEY FINDINGS OF THE REPORT AND POWER HOUSE RESPONSE

Financing and funding followed are of top interest across the entire EU. This implies that one of the roles of POWER HOUSE EUROPE and national and regional POWER HOUSE platforms will be to provide information to their members on innovative options for the mobilisation of private and public funding. We can also see that there are several technical aspects that are interesting with monitoring being of high importance.

Looking at different organisations/countries we see that information on optimal insulation materials and methods is of interest in both warm and cold countries. Energy efficient boilers are more interesting in some countries than other. For example it is not so important in Sweden, which probably is because that almost all members are connected to a district heating system. Also housing

companies in Italy and Belgium found this issue less interesting.

Also technical aspects and tenants/residents energy use are of main interest. Because technical issues are covered extensively through sites such as the new BUILD-UP initiative, potential for information sharing must be exploited. As a result a direct RSL feed between BUILD-UP and the POWER HOUSE site is considered of added value.

The results also show the need to raise awareness on the benefits of cooperation with local authorities, whose support will be vital. This cooperation could be boosted through cooperation with initiatives such as the Covenant of Mayors.

Unsurprisingly, the level of interest is largely determi-

ned by the current availability of subsidies and buildings codes in force. i.e where there are grants available for insulation, housing organisations which to learn more about this. This shows the importance of well- designed subsidy and incentive schemes. In warmer climates, draft proofing is of less interest while more information on energy efficient air conditioning and bio-climatic design is required. In cases where home owners are required to contribute extensively to improvements interest is limited to basic necessary improvements such as window replacement and insulation. The issue of split incentive in rental housing is also a considerable blocking factor.

Unless there is direct responsibility there is more interest in the building envelope than in the impact of electricity used by appliances and lighting. This is particularly true where units are for sale.

One striking common issue which has become evident is the interest throughout the EU in sharing experience in all areas of the energy refurbishment and renewables along with the need for neutral information new techniques and technologies. This exchange is a central element of the European level of the POWER HOUSE project.

#### **SOURCES AND TYPE OF INFORMATION**

On average the most important source of information is the web. There is however a variation between countries which has to be considered when planning activities within each National/Regional platform.

Another finding is that independent information is of great importance to the housing companies. Information is often found to be too commercial and not neutral. This means the information from the POWER HOUSE EUROPE project and housing federations have a great chance to really influence the Social Housing providers. It is also important to be careful presenting results from projects and analyze and describe the source of information.

Information must also include costs and savings to be useful for the housing companies. This needs to be considered when presenting “good examples”.

Bigger organisations which are part of extensive network can source information internally however smaller ones do not have this resource. Across the board there is little use made of energy agencies which may highlight the need for targeted information which can only come from within the sector. The role of the federation in provision of targeted information and a forum for exchange is key.

#### **INFLUENCE ON DECISIONS**

It seems that strategies for energy efficiency are in place to a great extent, however there is great room for increasing the ambition and scope of these strategies which will be the role of POWER HOUSE EUROPE.

#### **THE WAY FORWARD – FINANCE IS KEY**

Financial barriers are of main interest to remove according to the questionnaire; they can affect both, Social Housing providers and their tenants. Another result is that technical barriers are low. The technology is there but the organisations need funding to invest. The need for new financial mechanisms and the importance of raising awareness of existing financial opportunities at regional, national but also at European level. This will include awareness of locally available subsidies and tax incentives but also schemes such as white certificates and funds available through European Structural funds and the European Investment Bank. The potential to be exploited by ESCOs should also be communicated by federations to their members. This result made clear the need to ensure that all platform communication activities include a strong financial dimension. This financial dimension should also serve to avoid “cost misperception” and to ensure that cost recovery and life cycle considerations are considered.



## **ACHIEVING ENERGY EFFICIENCY IN HOUSING – THE WAY FORWARD**

This report shows the most relevant information for the members of social housing organisations in Europe when working on energy related issues. The report is based on the results from questionnaires sent out by all partners within the Power House Europe project. The report shows the result of all countries in average, and the results can vary a lot if you study the results country by country (see other report).

