



Project

Promotion of efficient heat pumps for heating  
( ProHeatPump)

EIE/06/072 / S12.444283

**Deliverable N° 4**

**Short report on the findings of the expert workshop**

**swb**

Work Package 1  
Management

Intelligent Energy  Europe

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## **Introduction**

Task of WP 1.5 was the establishing of an expert group from experts of various Heat Pump related EU projects in order to involve experiences that have been made by other projects supported by the IEE programme on successful (and also less successful) information channels/material on heat pumps. E.g. experience in EU Certified Heat Pump Installer (EUCERT), Extend Accredited Renewables Training for Heating (EARTH), etc.

The project coordinators of relevant other projects should be contacted to avoid double work and increase the impact of the information tools/material to be developed. It was intended in the application that exchanged lessons should be learned when preparing information material/tools. To ensure a good information flow it was foreseen to organise an expert workshop (1/2 day) with key personnel of the other projects and representatives of relevant organisations (Heat pump centre / European Heat pump Association / etc.).

The workshop was thought to be organised accompanying an IEE conference/info day following the project start. It was intended to integrate the results of the expert workshop into the strategy for information channels/material subsequently to the expert meeting.

### **1<sup>st</sup> attempt; Cooperation with GroundReach**

The broadest overlapping was expected with the GroundReach project. Thus involving the Ground Reach project in the work shop and to clarify the interfaces between both project was given priority. Unfortunately representatives of the GroundReach project did not attend the IEE Info day in February, this event could not, as originally planned, taken as the starting point to implement the envisaged workgroup. For this reason a meeting with representatives from the GroundReach project took place in Unterhaching / Munich on Friday 1<sup>st</sup> of June to discuss the options for cooperation between both projects.

GroundReach was presented during the meeting by the project coordinator, Mr. Dimitros Mendrinou (CRES, Athens) and Dr. Burkhard Sanner (European Geothermal Energy Council, Brussels). The meeting took place in a friendly and cooperative climate. In the beginning the goals of the ProHeatPump project were introduced by the author who explained the approach and the goals of the ProHeatPump project. Items of common interest could be identified easily on the basis of the work paper (Synopsis of both projects) set up by the previous ProHeatPump coordinator Stefan Foerster in March 2007 (see annex of this document).

Dr. Sanner strongly recommended to involve the relevant organisations dealing with heat pumps in Germany into the project as early as possible and to use them as dissemination partners for project results. Such relevant organisations are the Bundesverband Wärmepumpe in Munich ([Http://www.waermepumpe-bwp.de](http://www.waermepumpe-bwp.de)) and the Geothermische Vereinigung in Geeste (<Http://www.geothermie.de>).

Further on he mentioned the activities of the European Renewable Energy Council (EREC), the umbrella organisation of the leading European renewable energy industry, trade and research associations active in the sectors of photovoltaic, wind energy, small hydropower, biomass, geothermal energy and solar thermal ([www.erec.org](http://www.erec.org)). Especially the K4RES-H project could be interesting for ProHeatPump since it is also a promotion project ([http://www.erec-renewables.org/projects/proj\\_K4\\_RES-H\\_homepage.htm](http://www.erec-renewables.org/projects/proj_K4_RES-H_homepage.htm)).

In detail the following agreements were taken:

- GroundReach will send the actual project schedule as a basis for common planning of activities. ProHeatPump will send the Annex 1 of the application to CRES and Dr. Sanner.
- GroundReach outputs will be checked by ProHeatPump on the basis of the WEB site data. Especially the best practice data base could be useful for ProHeatPump.
- Both project WEB sites should contain links to the other project.
- For the remaining part of the project implementation mutual presentations of results on public project conferences of both projects should be envisaged.
- GroundReach results should be introduced into WPs 2,3 and 4 as far as it seems to be useful.
- Results of regional case studies from ProHeatPump should be made available as best practice cases for the GroundReach data base.

Dr. Sanner offered to ProHeatPump to check the correct spelling and terminology in project outputs in English language. Further the Annex 1 of GroundReach application shall be made available for ProHeatPump. He further on informed about some upcoming events which might be interesting for ProHeatPump partners. Information on these events was given to all ProHeatPump partners.

Further arrangements concerning synergies between the two projects have been done by the French project partner GRETh. For the requested case studies it was agreed to use the templates from the GroundReach project and to make available the ProHeatPump case studies not only on the project WEB-site but also to add the information to the GroundReach database of best practice. Each partner should deliver a few complete case studies.

The goal to establish a workgroup could not be achieved so far. In this sense this deliverable had been submitted with the Progress Report stating a preliminary character of the document. It was agreed with the desk officer, to use the IEE contractors meeting on 8<sup>th</sup> and 9<sup>th</sup> of November 2007 for further processing on this issue. During this meeting a meeting with the Ground Reach coordinator took place. The idea came up, to participate in the next Ground Reach conference in Greece in January 2008 and to report about the ProHeatPump project. Due to the short preparation time and a lack of travel resources it was not possible to realize the participation in the event.

Missing communication between both projects in the following months led to the result, that the final opportunity to arrange the workshop during the IEA Heatpump conference in Zurich in May 2008 has not been used. Zurich was at the same time the final event for GroundReach which ended in May 2008. From a retrospective point of view Zurich would have been a good option for the workshop since both projects were present with a couple of partners.

## **2nd attempt: Creation of an expert group with EHPA members**

During an extraordinary ProHeatPump meeting in Boras in Sweden in November 2008 and several monthly Skype conferences the idea was born to set up an expert group in junction with the international ProHeatPump conference in Varna, Bulgaria in March 2009. The project partners contacted various stakeholders from the European heatpump scene to join such a workgroup.

The idea was to create something like a virtual work group which might communicate by Skype conferences.

The idea was further, to arrange two official meetings of the workgroup. A constituting meeting shall be arranged during the event in Bulgaria, a final meeting combined with the presentation of our project results in May in Brussels. For the latter one we might also invite a representative of the IEEA. Travel budgets should be adjusted in order to enable such meeting.

This work group should be very close to the membership of the project consortium in order to create a solid base for cooperation. Members should come from the European Heat Pump Association (EHPA) and national heat pump associations. As one candidate Thomas Nowak from EHPA was suggested. The EHPA was involved in the Groundreach project and also in a new, recently launched project funded by IEEA as well as in EU- Cert. Having an expert of this organisation in the expert group promised to get a lot of insight into other projects on European level and a good dissemination of ProHeatPump knowledge.

Jörg Rummeni from RWE who was delegated by his employer to the German Heatpump Association should introduce the point of view of this organisation to the work- group and hence introduce the ProHeatPump findings there. Roger Nordman from SP nominated Monika Axell for the IEA Heat Pump Centre and Martin Forsen, CEO of the Swedish Heat Pump Association. Stewart Russel nominated David Matthews, CEO of the UK Ground Source Heat Pump Association. From DLAEM in Varna the suggestion was to invite Nikolay Nikolov from the Bulgarian Energy Agency and member of the Ground Reach implementation team. From the ProHeatPump team Ulrich Müller (swb), Jörg Rummeni (RWE), Roger Nordman (SP) and Stewart Russel (UEdin) agreed to participate.

All nominated persons were invited to attend the planned workshop in Varna which was scheduled for the 27<sup>th</sup> of March 2009. Unfortunately only the Bulgarian expert could finally arrange to be present in Varna and had to leave sharply before the meeting. On the spot the project partners decided to make a last attempt for the workshop in May 2009. The idea came up to take benefit from the annual conference and assembly of the European Heat Pump Association on 19<sup>th</sup> and 20<sup>th</sup> of May in Linz / Austria and to arrange the meeting on the eve of this event on the 18<sup>th</sup> of May.

### **Expert meeting in Linz / Austria on 18<sup>th</sup> of May 2009**

The meeting was held under following agenda:

1. Welcome and introduction of work group members
2. Introduction and discussion on the task of the expert group
3. Presentation of ProHeatPump Results and draft of policy recommendations
4. Introduction of results actually or recently carried out under participation of EHPA (Ground Reach and others)
5. Discussion with the ProHeatPump partners Roger Nordman (SP, Sweden), Jörg Rummeni (RWE, Germany) and Ulrich Müller (swb, Germany) about the lessons learned in the project and experiences in EU projects.



Jörg Rummeni presents the recommendations from the ProHeatPump project to the expert group meeting in Linz

The meeting was attended by:

Martin Forsen	Chairman SVEP	
Ulla Lindberg	EHPA /SP IEA HP Centre	
Thomas Nowak	EHPA	
Brigitte Bach	Arsenal Research Vienna	Part time present
Karl Ochsner	President EHPA	Part time present
Gerald Lutz	Ochsner Wärmepumpen GmbH	Part time present
Ulrich Müller	swb Netze Bremerhaven	ProHeatPump Team
Roger Nordmann	SP	ProHeatPump Team
Jörg Rummeni	RWE Energy / BWP	ProHeatPump Team

Ulrich Müller welcomed the experts and the present ProHeatPump project members, He gave a short presentation about the ideas of the ProHeatPump project and explained the intentions to have this expert meeting. Especially he underlined that one goal for the expert work group has been to avoid overlapping between EU funded projects and thus waste of money. Especially with the GroundReach project therefore early contacts had been built up.

Thomas Nowak from the European Heat Pump Association, who had been involved in the GroundReach project said, that he would not see significant double work in both projects. GroundReach has been focussing especially on the CO2 reduction by using heat pumps whereas ProHeatPump had a clear focus on marketing mechanisms especially in the selected target regions. It would be easy to recognize this by looking how the Ground Reach project defended their measures.

Next Jörg Rummeni introduced the findings from the ProHeatPump project in form of a presentation of policy recommendations (see Annex 3).

In the following discussion the main items were:

- Why did ProHeatPump not analyze the market for gas absorption heat pumps?  
The speaker clarified, that the heat pump size for gas absorption heat pumps would have been generally larger than needed in single family houses on which the main focus of the project was laid.

- What could be the role of utilities in HeatPump marketing?

Rummeni explained that there would be a strategic alliance between industry and utilities. Relevant would be, the core business of utilities in specific market regions. In the case of a strong focus on gas sales it would be difficult to get strategic support for promoting heat pumps. The impact might be, that in regions with strong gas supply heat pumps often are hindered by special higher tariffs for heat pumps. On the other hand utilities with a focus on electricity sales promote heat pumps with special tariffs in order to fix the customer and to avoid that he leaves to cheaper providers.

- Which country specific findings made ProHeatPump?

An interesting observation was that Bulgaria is a well developed heat pump market. At least in the cities air to air split units seem to be very popular and vastly spread. One reason is the low electricity price of 0,07€, the other one is the option to use the technology also for cooling. A high share in the market are split machines from East Asia. Ground source heat pumps are sparsely common in Bulgaria in spite of excellent ground source heating potential. Main reason is the high price which is about 75% of the average annual income. In the Varna area restrictions for drilling and high prices for used thermal water from the ground are hindering the development of a ground source heat pump market.

The awareness of using electricity for heating purposes differs greatly. From country to country the project considered a very different view on the value of electricity. Relevant for spreading heat pumps is the acceptance of electricity for heating which has often a very specific history (e.g. cheap “green” electricity from hydropower in Sweden, relatively cheap CO2 neutral nuclear produced electricity in France). Both countries are leading in heat pump installations in Europe.



ProHeatPump team members Jörg Rummeni (RWE energy) and Roger Nordman from Swedish SP

Relevant for heat pump installations is also the quality of the buildings, especially in the retrofit market. In UK often the quality of insulation is so bad, that houses are better reinsulated first before installing a heat pump. Also single phase electricity gives problems with currents. Boundary conditions differ a lot between countries, which leads to different insights.

- Heat pumps as RES

The recognition of heatpumps as RES in the new EU RES directive is important for the marketing of heat pumps. In the past heat pumps often were used for heating the building whereas solar thermal collectors were used for heating the drink water. This

is changing. A lot of comparable customers are now buying hot water heat pumps. This is also a result of increased usability of the equipment. Simplicity is important to sell heat pumps. The producers need to approach the customer's gut feelings. This has been done for example in the "nibe" case where they let a group of women design the unit interface.

- Prices for heat pumps:

Another discussion has been if the price level for heat pumps compared to traditional heating systems is not too high actually. The return of invest for a ground source heat pump in the German market is between 8 to 10 years. Industries would rarely effort investment with such long ROI period. Why should private house owners, especially older customers do so, for example in the retrofit case?

Thomas Nowak argued that with increasing number of sales due to economy of scales prices would go down. On the other hand the return on invest is much shorter with state subsidies. In the French market in 2008 more than 150.000 heat pumps have been sold due to an effective subsidy programme. At the moment manufacturers have no relevant stock piles. Finally marketing would be the key problem if sales go down. Naturally a change of paradigm is necessary when manufacturers have all sorts of heating products. There is the need to phase out in right timing. We need economic incentives to have the big shift! Not by subsidies.

- Missing heat pump "culture":

A problem is that there are no heat pump communities yet in general. The installer is the front man in selling the products, there should be shared risks with producers. The unifying requirement in the decision level towards heat pumps, is the lack of qualified people at all stages in the chain. We need an education system that transports the information to the right messengers.

- Qualification and Certification:

Qualification and certification were seen as crucial factors to increase heat pump sales and trust of customers in the technology. EUcert plus existing product training were seen as necessary basic offers. Anyhow additional training suitable to the needs of the installers is missing. In Sweden training schemes took off when it was introduced to manufacturers. Installers were afraid of going to university. The inroad to vocational training is hard, so there is a need to have training centres.

Another problem in some countries is the policy of the guilds. The heat pump issue is cross professional: It is part of the electrician crafts and of the climate and refrigerating professions and heating installers. Guilds don't want interference in their systems. They have the inherent tendency to occupy a new technology as their own domain. This is hampering the introduction of the heat pump subject into vocational training in many countries where there are strong guilds.

It can also be stated that beside contradictory interests of guilds there is still a lack in training facilities and qualified trainers for heat pumps in the vocational training system. Promotional HP units (supplied by manufacturers) to use in vocational training could help.

Certification based on a two tier system, products and installers, where both should be

approached simultaneously is indispensable. Anyhow, in practise it is not so easy though.

As a conclusion of the discussion it was stated that heat pumps are still faced with technical, economical and policy barriers. It will be necessary to show ways to overcome these barriers. In this context also expectations were set in the ProHeatPump project and the project report. The project representatives stated that work is under way and the input from the workshop will be taken into account.

For the report it was seen as important to address the differences in awareness and the maturity of the markets in the different countries. The hint was given to provide information suitable to the countries' level of development on the S-curve.

Generally the project should not try to answer all questions on policy and give too many answers. It would be better to restrict to certain target groups where information can have the largest impact, and focus on them (the groups might not be the same in all countries?!). The project should use the Russian puppet tactic: How can the successful sale of a heat pump from an installer be described as a contribution to the successful market development?



After the end of the meeting the discussion was continued during a common dinner.

## **Annexes to Deliverable 4:**

### **Annex 1**

#### **Proposal for the clarification of redundancies and differences between the IEE projects GroundReach (GR) and ProHeatPump (PHP)**

##### **1. Introduction**

Both projects are basically aimed to bring the dissemination of heat pumps within the EU forward by

- Studying of countries with a higher market penetration
- Presenting of market barriers/obstacles
- Deducing measures for a better market penetration
- Communicating project results by direct measures (direct contact to target groups in workshops, conferences etc.) and indirect measures (website, brochures, leaflets)

GR has started 11 months earlier than PHP, the duration is 36 months (PHP: 30 months).

GR involves 21 partners from 16 countries (PHP 7 partners from 5 countries).

The concrete and numerous intersections/overlaps between the projects and their working packages result from the resembling targets. See the detailed analysed and marked Annex 1 of GR.

To disintegrate the number of overlaps the following approach is done:

- Pointing out the differences between the projects and the unique selling points of PHP
- Sharpening of the basic profile and the unique selling points of PHP (and GR) as well as „decartelisation“ of the projects so that redundancies will dissolve itself.

##### **2. Differences between the projects**

The following proposals need to be discussed and particularised in common with GR.

###### **2.1 In principle**

Both projects should not act as competitors or as rivals but to bundle its strengths for a common thing. Thereby the quality and the depth of the result may be increased significantly without breaching the interests of the project partners. Without a decartelisation of the projects an uncertainty will be caused to the target groups, as differences in the way of the presentations and in the results itself cannot be avoided. A continuation of the projects without measures of equalisation is counterproductive and possibly counters the approach to bring heat pumps forward.

Measures:

- The unique selling points and differences of both projects should be strengthen
- Duplication and redundancies are to be avoided, both projects are to be decartelised.
- On the initiative of measures, in case of doubt a coordination with the partner project should be done
- Results should be exchanged (non-restrictive)

###### **2.2 Geographical approach (local vs. national)**

GR has a more national/EU wide approach, PHP is targeted more locally. 5 of 21 partners of GR are working in an european or international context. That means, analysis and measures of GR are more “broadly based”, more people are addressed but local/regional special features cannot be answered. PHP however, is concentrated on typical regions and their special features, is working more in depth, is able to deal with practical and concrete problems.

Measures:

- Arrange with GR that PHP will attend to its target areas exclusively. GR will not become active in the target areas, will concentrate more on a general EU-wide initiative.

- PHP increases the depth of penetration in the target areas, national approaches are to be avoided.
- Data collection of GR is more width, of PHP more deep. Data are exchanged.

### **2.3 Subjects of the contents**

GR focusses on other emphasis than PHP, especially on

- Potentials on the reduction of CO<sub>2</sub>-Emissions
- Demonstration of best practise
- Appropriate technologies of heat pumps
- Market barriers/obstacles

PHP concentrates particularly on the subjects

- Commercialisation and Marketing of heat pumps
- Renewable Energies and heat pumps
- Market barriers and policy context

In GR „Commercialisation/marketing“ is rather one of many subjects. „Renewable Energies/Heat Pumps“ is not a (substantial) subject. Problematically, however, is the fact that market barriers/policy context mean a significant main focus for GR as well as for PHP.

Measures:

- Arrange with GR that PHP will work out the three subjects „Commercialisation / Marketing“, „Renewable Energies / Heat Pumps“ and „policy context“ exclusively. Therefore, GR should demand the three main focus subjects „CO<sub>2</sub>-Emissions“, „best practise“ and „Technologies“ for itself. The websites could refer to the corresponding partner project.
- By analysing the market barriers GR should concentrate on the technological/economical subjects and PHP on the non-technological subjects (policy, legislation, marketing).
- Guidelines for target groups (e.g. supporting planners, architects etc.): Also here should be aimed a decar-terisation, e.g. GR concentrates on the „technical“ target groups like architects, planners and installers and PHP on the „non-technical“ as policy-makers, communes etc.

### **2.4 Publication of result**


The tools for the publication are very similar, partially equal. The publications therefore should be coordinated.

Measures:

- GR and PHP should coordinate the contents of all medias like web sites, leaflets etc.
- The participation and execution of conferences and workshops should be coordinated
- The contacts should be kept transparent

Stefan Foerster  
 CREA Center für rationelle Energieanwendung GmbH  
 16. März 2007

## Presentation of ProHeatPump Project



# ProHeatpump

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Promotion of efficient heat pumps for heating

*Duration: 12/2006 – 05/2009*  
*Contract N°: EIE/06/072*

**Project Presentation expert workshop Linz**  
**Ulrich Müller**

*Version 18th May 2009*

### Summary

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#### **What we do**

Overall project goal is promote energy efficient heat pumps for heating for the residential sector and SMEs. Promotion of heat pumps will be done in defined target areas by the means of improved and steady information on heat pumps of the target groups end users and installers as well as policy makers. Another important project topic is the investigation and evaluation of combinations of heat pumps and renewables.

#### **Framework**

Lead partner of the project is the swb Netze in Bremerhaven (Germany) which carries out the project in cooperation with rwe Energy (Germany), University of Edinburgh (UK), SP and the South East Sweden Energy Agency (Sweden), GRETh (France) and DLAEM (Bulgaria)

#### **What we expect to achieve**

- Increase the number of heat pump installations in selected target areas.
- Creation of suitable and practical information material for each target group (installers, end users and policy makers) on heating by the means of heat pumps.
- Development of improved marketing strategies to promote heat pumps countries with low market penetration but high potential for heat pumps.
- Presentation of favourable conditions for the combination of heat pumps and renewables

## *Background*

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About 40% of the energy consumption in Europe is used for buildings and the lion's share of this energy is consumed for heating preponderating by the use of fossil fuels. Heat pumps produce an adequate and eco-friendly heat supply with 75% geothermal power or environmental heat and 25% electricity.

Key objective of the project is to show how to reduce the use of fossil fuels for heating by the use of efficient heat pumps. Thereby the availability of raw materials for energy production will be increased and the dependence on world energy markets as well as the production of CO<sub>2</sub> decreased.

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12.07.2009

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## *Objectives and main steps*

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- To achieve a further reduction of the use of fossil fuels technological and economical aspects of heat pumps in relation with renewable energies are investigated.
- To promote innovative technologies with low market shares it is not sufficient to inform experts. It is necessary that policy makers produce a „positive climate“ for this technology. In a first step of the project available information are examined and communicated to the target groups (SME, enduser and installers). For this reason Political measures and its effects as well as marketing strategies for promoting heat pumps will be evaluated and recessed for different countries.
- Adequate, practical information materials are developed, the evaluated results are communicated to the target groups (enduser, SME, installer, policy etc.). The web serves as media, but mainly also direct communication with the target groups, workshops and conferences.

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12.07.2009

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## Expected Results

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- Increase the number of heat pump installations during the project time on selected target areas.
- Suitable and practical information material for each target group (installers, end users and policy makers) on the possibilities and the advantages of heating by the means of heat pumps.
- Improved marketing strategies to promote heat pumps in European countries with low market penetration but high potential for heat pumps, based on experiences from countries with high market share
- Presentation of favourable conditions for the combination of heat pumps and Renewables

## Work Progress WP 2

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- What has been done so far ?
  - The consortium has agreed on specific target regions in Bulgaria, France, Germany and the UK for which regional market potential has been assessed and summarised.
  - The market potential for heat pumps has been specifically analysed for buildings constructed from year 1980 on. Current heat supply for the determined buildings and sectors has been examined (number of heat pumps installed, types and sizes of heat pumps installed, average price for kWh heat (respectively cooling) generated by heat pumps as well as the market volume of the heating and cooling market relevant for small brine/water and air/water heat pumps.
- What was the most important finding?
  - Heat pump use depends mostly from the gas grid penetration of the analyzed areas. Condense gas boilers are the most relevant competitors for heat pumps. Predestinated for heat pump sales are new residential buildings with state of the art insulation standard and low temperature (ground) heating.
  - The retrofit sector seems to be a very sensible market since heat pump installation often is hampered by insufficient insulation and heat distribution

## Work Progress WP 3

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- What has been done so far ?
  - Former or existing marketing strategies for promotion of heat pumps in Bulgaria, France, Germany, Sweden and the UK have been analysed under the scope of : market incentives established by the public body and incentives established by private companies, e.g. energy utilities and heat pump manufacturers. The successfulness of marketing tools has been assessed via interviews with sales managers, energy agencies and energy consultants working in heat pumps field.
  - In Bulgaria and the UK market actors have been additionally be asked about their opinion on the applicability of the results within their region in round table meetings. Further on in these countries training courses for local companies on marketing of heat pumps have been organized
- What are the results?
  - Comprehensive evaluation of successful and non-successful marketing tools and strategies to assist market actors in countries with low market penetration of heat pumps to decide on the most appropriate tools/strategy for their country.

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12.07.2009

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## Work Progress WP 4

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- What has been done so far ?
  - An analysis of relevant policy documents under the scope of policy measures targeted to increase the uptake of heat energy policy pumps in Sweden, Norway and UK, focusing on the role of heat pumps within broader energy policy
  - An analysis of (national/regional/local) campaigns initiated by government and associated institutions in Europe to promote heat pumps
  - Interviews with key actors in each country to assess their understanding of success of current policy initiatives, systemic barriers hindering a more proactive role of policy in promoting heat pumps and their suggestions to improve policy aid
  - For Bulgaria and the UK suggestions on appropriate policy measures and market incentives have been developed and discussed with a interdisciplinary group of experts.
- What are the results?
  - Report analysing the policy context related to energy conservation, building and housing policy in Sweden, Norway and the UK.
  - Short reports including specific proposals for appropriate policy interventions in countries with relatively low market penetration of heat pumps will be distributed to key actors.
  - Specific proposals for appropriate policy interventions in countries with relatively low market penetration of heat pumps.

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12.07.2009

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## *Work Progress WP 5: Heat Pumps and Renewables*

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- What has been done so far ?
  - Information on heat and gas driven heat pumps have been collected, and the potential coupling with biogas or solar heat has been evaluated.
  - Examples of heat pumps coupled to solar heat have been collected.
- What are the results?
  - A report on heat and gas driven heat pump has been issued.
- What was the most important finding?
  - Several examples of the coupling of heat pumps with renewable have been found, but for most of the case they are limited to demonstration operations.
  - There are very limited commercially available systems.
  - The main barrier to the widespreading of such technologies is the investment cost.
- The next steps until the end of the project
  - Fact sheets on heat pumps coupled with renewables will be issued
  - A workshop will be organised in France
  - Two technical-economic studies will be performed (Bulgaria and UK)

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12.07.2009

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## *First Results*

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- It can be stated that a developed gas grid seriously hampers the promotion of ground source heat pumps. The high cost of HP units and of drilling boreholes puts the price of a heat pump installation at between two or three times that of a state-of-the-art gas boiler. Owners of newly constructed houses are reluctant to take out additional loans to finance a more expensive heating system even if in the longer term it would be much more cost effective.
- Installing HPs in the renovation of old houses is problematic, as a serious energy audit often indicates that for a heat pump to be economic and effective, expensive additional measures like insulation of roof and wall cavities or a new heat distribution system would be required.
- The explosion in energy prices however seems to have a clear impact on the attractiveness of investment in heat pumps, and market growth is likely to be much faster with the new energy prices.
- The heat pump market comprises two distinct segments with quite different structures and distribution channels. One is the private residential market with largely standard industrially produced systems; the other is for public or business facilities which use bespoke systems designed and assembled by specialist companies. Enhancement of marketing strategies must consider this as a starting point.

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12.07.2009

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Presentation Rummeni “Recommendations”



# ProHeatpump

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Promotion of efficient heat pumps for heating

***Recommendations for a better promotion of heat pumps***

*Expert Workshop*  
*Linz, 18th. May 2009*

## Content

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- Recognition of Heatpumps as RES - Adaptation of member state's policies to RES Directive
- Incentives and grant schemes (general remarks and country specific hints)
- Easier Planning
- Pricing of Heatpumps, especially under the scope of retrofit market and demographic development
- Marketing & PR
- Research & Development
- Qualification
- Certification / Accreditation

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12.07.2009 2

## 1. Recognition of Heatpumps as RES

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- Recognition of Heatpumps as RES - Adaptation of member state's policies to RES Directive
- EU set SPF up to 2,875
- This SPF should be the requirement for national legislation
- Higher SPF in national legislation will hinder a broaden approach of heat pumps
- A higher SPF could be required to receive grants or subsidies
- Especially in countries with a low HP penetration requirements should be not to high to encourage the market development

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12.07.2009

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## 2. Incentives and grant schemes

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### Incentives and grant schemes (general remarks and country specific hints)

- Grant schemes should be simple and technology open
- Grant schemes should not consider the heat source but only the SPF
- The amount of grants could be in correlation to SPF
- Grants schemes should focus especially to the retrofit market (biggest market potential)
- HPs a niche product in the new building sector
- No obstacles for Air to Air HPs

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12.07.2009

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### 3. Easier Planning

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#### Easier Planning

- Drilling permission on the basis of preference regions (traffic signal maps)
- No discrimination thru Carbon Capture and Storage (CCS) regions
- Drilling regulations should be national wide consistence

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12.07.2009

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### 4. Pricing

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- Break even point of HPs should be reasonable
- But price fluctuations of oil and gas could be not the basis of production planning
- Another argumentation is needed (life cycle value)
- Problems with utilities if gas and electricity supplier.
- Price spread between electricity and fossil energies, especially in countries with non-liberalized energy markets

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## 5. Marketing & PR

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- Marketing
  - Industry does marketing through brochures and Internet, etc.
  - But most end consumer contacts does have utilities
  - Target area Osterholz-Schermbek vs Rhein-Erft
    - Osterholz: 1,7 HP / Inhabitant
    - Rhein-Erft: 7,7 HP / Inhabitant
  - Building strategic partnerships between industry, installer and utilities
- PR
  - Use of testimonials of satisfied customers
  - Importance of mouth to mouth propaganda
  - Establishing of a PR network with relevant mags and news
  - Improving and implementing quality standards for transparency of HP, installers, drillers, etc.

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## 6. Research & Development

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- **Research & Development**
  - System integration in retrofit and existing houses
  - Reducing of drilling costs
  - Alternative solutions like "Cold District Heat"
  - Monitoring of HP to improve permanently the system efficiency
  - Development of new HP components with higher efficiency

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## 7. Qualification

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- Qualification
  - Improvement of dissemination of EU- Cert scheme
  - Development of basis curricula for vocational training and further education of different professions of installers (electricians, heating installers) based on EU- Cert quality standards
  - Adequate technical equipment for vocational schools
  - Recruitment / training of accredited specialists for teaching

## 8. Certification and Accreditation

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- Certification and Accreditation
  - Industry
  - Driller
  - Installer