

## **PATRES and PINE**

### **Two projects to promote energy efficiency and renewable energy**

Dr. Johannes Fresner, DI (FH) Christina Krenn, Sebastian Freiberger, DI Josef Bärnthaler, DI Richard Obernosterer, Eng. Fabio Tomasi, Lucca Mercatelli

#### **Abstract**

PATRES ([www.patres.net](http://www.patres.net)) is a project within Intelligent Energy Europe. The main objective of PATRES is supporting local authorities, public utilities and social housing bodies in implementing effective regulations and policies concerning minimum levels of energy from Renewable Energy (RE) sources in their building regulations and codes for new or refurbished buildings or in the public procurement for their facilities or social housing.

PINE (Promoting Industrial Energy efficiency) has a similar setup like PATRES. In seven European countries, partners from research organizations have teamed up with the chambers of commerce to promote energy audits following a common frame. The methodology used is a blend of best practice of energy auditing with elements from all over Europe.

#### **Keywords**

Energy efficiency, local authorities, regional policy, renewable energy, industry

### **The design of PATRES**

The first half year was mostly dedicated to the start-up of the project and the fine-tuning of the partnership, focusing on common objectives and coordinating individual actions. The intense discussions at this stage proved valuable to the fast progress later on during the implementation stages.

In order to achieve the objective PATRES has realized, in each of the 7 countries involved (Italy, Spain, Czech Republic, Croatia, Bulgaria, Rumania, Austria), by renowned research organizations (AREA, CIRCE, ENVIROS, University of Rijeka, University of Bucarest, STENUM) a training programme consisting of a training course, a coaching service and meetings to visit best practices were planned.

Meetings with stakeholders have been organized to substantiate the contents of the envisaged training and coaching activities. The consortium carried out also the analysis of the different legislative and operational contexts in the involved countries, developed the course-related materials, implemented international and national promotional campaigns.

### **Training of community representatives in the use of renewable energy**

The detailed training programme of the PATRES courses, produced with the aim to provide participants with knowledge and skills to develop regulations and policies addressed to the introduction of RES systems in buildings was completed and adapted by all partners to the respective national context. After the analysis of the legislative framework in each country and harmonizing PATRES activities with the activities of the Covenant of Mayors, the training programme was developed in detail. As a result of the discussion on the contents of the training programme, the issues to be dealt with were the following:

- technical introduction (3 days);
- regulations, law and policies (4 days);
- fundraising (1,5 days);
- governance and awareness etc. (1 day);
- pilot actions (0,5 days).

Everybody agreed that this subdivision needed to be adapted to each country with high flexibility and at the same time the general criteria for the transparent selection of the training course participants were defined and agreed upon by all partners.

In each country a National Advisory Group (NAG) was created, including representatives of local/regional authorities, associations or consortia of municipalities, associations or consortia of public utilities or social housing bodies, ministries of the environment and of energy and energy agencies to collect their suggestions on the training courses, procedures for the recruitment of participants and adaptation of the general training programme to national peculiarities.

However the main task (in terms of worked hours) performed was the identification of target communities in each country.

As a supporting tool to the training programme, a set of best practices were selected from the analysis made by previous EU funded projects, as well as existing training materials from previous European or national projects. These materials were made available on [www.patres.net](http://www.patres.net).

To support the PATRES training courses two databases with a selection of best practices and training materials were developed and published on the project website to provide participants (and all visitors of the website) with a set of examples to inspire their future regulations and significant data and information.

The criteria for the selection of the best practices were defined at the kick-off meeting (focusing on the use of RES for the production of energy, on sustainable energy plans, regulations and procurement rules, referring to a wide range of situations and solutions in different countries, from a different starting point involving small and large communities, with different climate conditions) and it was based mainly on the outcomes of previous IEE projects or other programmes related to the introduction of RES systems in buildings.

Each best practice and training material was summarized in a sheet available in all project languages. The databases are freely available online.

All partners contributed to the identification of the best practices and training materials investigating at a national level. Partners were also in charge for the translation of the database sheets (initially in English) into their national languages.

Month 9 to 14 of PATRES were dedicated to the training courses. They were developed in all project countries, under the constant monitoring of the project coordinator. All course-related materials have been used and national programmes respected.

To follow a table reporting starting and closing dates for training courses in each country and the initial and final numbers of participants and involved communities:

COUNTRY	STARTING DATE	CLOSING DATE	NUMBER PARTICIPANTS		NUMBER OF COMMUNITIES	
			START	END	START	END
AUSTRIA	28/02/11	15/06/11	19	14	14	10
CROATIA	01/03/11	27/05/11	23	10	12	7
CZECH REPUBLIC	03/05/11	23/06/11	9	12	8	10
ESTONIA	02/03/11	12/05/11	13	12	5	5
ITALY	02/02/11	13/05/11	28	27	20	19
ROMANIA	18/02/11	07/05/11	16	15	10	9
SPAIN	15/03/11	28/04/11	28	28	17	17
Totals			136	118	86	77

The actual number of people attending the training courses (136) at the beginning of the courses was lower than the figure reached during the registration stage in month 7 (145) and slightly lower than the target originally set (140).

This number further decreased by 18 units (13 in Croatia, 5 in Austria and 1 in Estonia, Italy and Romania, counterbalanced by an increase of 3 units in the Czech Republic).

The number of communities, however, (86 to start, compared to 87 at month 7, though reduced to 77 at the end) is still far higher than the original target (50). Seemingly, although the number of individual participants was decreased, largely due to unforeseen work commitments, a reduction in resources available to local authorities or other personal reasons, the number of participating communities was still satisfactorily high, resulting in good potential for the development of significant, wide-ranging pilot actions.

It is noteworthy that in Italy and Spain the number of applications collected in month 7 was much higher than planned. Due to budget constraints and didactical concerns the actual number of participants was reduced, resorting also to the 'equivalent person' principle, whereby up to 3 individuals could attend separate modules, as long as the attendance of one full package was guaranteed.

A preliminary analysis of the feedback (in general terms very positive) collected during the courses in each involved country has already been carried out and presented to all project partners during the fourth project meeting in Trieste (month 18). The participants number and profiles attending the training courses were in line with the project objectives, in particular the number of represented Communities participating was quite significant. The first analysis of the feedback collected was very positive, but a deeper analysis will be collected in the appropriated report that will be published at month 20.

### **Implementation of pilot actions in the participating communities**

After that 28 project works were selected (each project work includes more than one beneficiary, also from different countries).

These pilot actions will include:

- strategic energy action plans in the participating communities
- purchasing procedures favoring renewable energy in the participating communities
- introducing the use of renewable energy in the respective building laws
- commitment to the covenant of mayors

These pilot actions are currently underway. They will benefit from the coaching of the partners experts and from the visits and meetings that will be organised with a selected group of best practices.

### **Communication and dissemination**

Communication and dissemination activities were carried out respecting the communication guidelines and with a special focus to the enrolment of the relevant participants to the national courses and the involvement in the project of relevant authorities and stakeholders.

Some dissemination objectives have already been achieved as the number of visitors to the PATRES website, others needs a continuous effort by project partners as the enlargement of the Build Up community.

A common conference in Trieste brought all the about 50 participating communities together to present best practice to discuss and to network among the participants from different training courses.

The international networking conference was held in Trieste on 20th and 21st October 2011. It represented a major milestone for communication and dissemination of project results among stakeholders and it contributed to promote the project objectives and win the support of relevant authorities. The international conference was a success. The idea of structuring it in a traditional session with speakers and a more innovative one represented by the networking plaza was really appreciated (free networking and meeting with companies).

The international conference was organized earlier than originally envisaged since all countries managed to complete the training phase earlier.

The event organized over 2 days (20th and 21st October 2011) was a sheer success with approximately 160 participants with, besides training participants, representatives of local authorities, enterprises and other stakeholders from several parts of Italy.

The first day (October 20th) was organized as a traditional conference with important speakers among which Corrado Clini, currently the Italian Minister for the Environment and the Mayor of the City of Trieste (one of the cities involved in PATRES activities) Roberto Cosolini, who announced his signing of the Covenant of Mayors and further cooperation with AREA in the name of sustainability.

The programme comprised, besides the presentation of PATRES, the presentation of the Covenant of Mayors, of an Italian and a European best practice, of a cutting edge case of sustainable social housing in Trieste, myths and reality about RES and current technological trends, the presentation of 2 related European projects (PV LEGAL and ENERGY FOR MAYORS).

The whole day was also dedicated to enhancing networking opportunities, with a peak in the afternoon with the 'Networking plaza', an opportunity for participants to meet a group of selected companies dealing with RES and presenting innovative technologies and solutions and exchange ideas and experiences.

The second day (October 21st) was organized as an international "World Cafè" with participants sitting at different tables (3 rounds) with representatives of all the other

involved countries, discussing 3 topics (participative process in the drafting of a SEAP, optimal mix of incentives and legal constraints for the introduction of RES in buildings, introducing RES in buildings with a limited budget) and then reporting on the achieved conclusions in national groups.

Language difficulties (much more widespread than expected at the time of the project beginning), the major hindrance, were solved by a careful planning of the groups (each participant language skill were asked well in advance of the conference) and introducing a multi-lingual mediator for each table, assisted by participants capable of speaking other languages. In the afternoon, the Italian course participants attended a seminar on the most recent legislative and technological developments for a general update on the state of the art and to prepare for the development of pilot actions.

### **Project webpage**

The visual identity of the website is the same used for the brochures in order to present a common brand identity. The back office system (CMS – Contents Management System) allows each partner to update news and contents, add links and resources. The final publishing however can be done just by the coordinator in order to monitor the quality of the contents and minimize the risk of inappropriate publishing.

It provides information about the project, the partners and hosts the training materials and best practices databases. It is also a powerful promotional tool supporting the direct marketing activities of the partners. The web site is a work-in-progress growing with the project development. Website statistics are monitored by the project coordinator with the support of Google Analytics. From its publishing to 31st October 2011, 3.438 different visitors accessed the website on average twice each. The average length of the visit is 4 minutes and 9 seconds.

The ten countries where the most significant number of visitors came from in decreasing order:

1. Italy
2. Spain
3. Austria
4. Estonia
5. Croatia
6. Romania
7. Czech Republic
8. Germany
9. Mexico
10. United States

Despite the large majority of visitors came from Europe, there's about 3% of visitors from Asia and America. Half-way through the project the target of 3.000 visitors has already been exceeded.

From the very beginning of the project local/regional authorities at a regional and national level have been contacted to present the project, collecting suggestions for the development of the training courses, to present activities.

Several regional authorities and energy agencies gave their support in disseminating the project activities and the Italian Ministry of the Environment gave its support to the Italian training course and promoted it by means of their newsletters. For the conference in particular, several national associations promoting the use of RES technologies contributed to disseminate information. Associations and consortia of municipalities and public utilities at a regional and national level were targeted and gave their support.

A final conference will be organized in Bucharest (Romania) to present the project outputs, the best project works and the guide that will summarize the lesson learnt by the project. The PATRES programme will be further disseminated in all the involved countries lobbying national and regional authorities. At European level the PATRES model will be presented to the European Municipalities Association and to European national, regional and local authorities through European initiatives like the Covenant of Mayors.

#### **Replication of PATRES for Industry: PINE**

As PATRES progressed very well from the beginning, a similar model was designed to train industries in energy efficiency in the seven countries participating in PATRES. The proposal was accepted by IEE. Currently the fine-tuning of the programme is underway.

An auditing model is being developed on the basis of existing auditing schemes and supporting materials, which is applicable to all the participating countries and for all sectors, which work with minimum data, provides benchmarks and rules of the thumb and is result orientated.

Local teams of consultants will be formed. A variety of networking activities will provide for

- active cooperation of the national consultants
- exchange of experience, cases and results
- mutual analysis and peer feedback

By the end of 2014, the consortium plans to involve 400 companies in auditing and consecutive implementation of meaningful measures. In parallel, a business model for consultants is developed to guarantee continuity of the activities after the project end.