

# repowermap

Renewable energies and energy efficiency in your neighbourhood

**A European map for promoting renewable energies and energy efficiency**  
Achievements in building up the repowermap.org initiative within the framework  
of the Intelligent Energy Europe Programme



[www.repowermap.org](http://www.repowermap.org)



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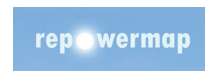
Slovak RE Agency  
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# Acknowledgment

The project partners would like to thank the EU/EASME for their financial support to this initiative. It has allowed to build up a map where everyone can add and view examples for the use of renewable energies and energy efficiency, as a motivation to action. The map has become the common map of a broad network of organisations, regions, local authorities, companies, climate action communities and individual energy actors. Our gratitude is therefore expressed on behalf of all these energy actors who appreciate the map to raise awareness and

facilitate information exchange by making the energy revolution visible. Getting with the initiative to the point where we are now would have been impossible without the active participation and support of a multitude of individuals, organisations, local authorities, regions, companies, and other energy actors. We would like to thank everyone who has made so far a contribution to the initiative – every contribution has been important and a key to make this bottom-up initiative happen to promote renewable energies and energy efficiency.



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# 1 Executive Summary

## What is this initiative about?

The objective of this action is to promote renewable energies and energy efficiency by making concrete examples visible in each person's neighbourhood on an interactive online map. The idea is to encourage people, companies and local authorities to get inspired by these examples, and to facilitate information exchange for these technologies at local level and across borders. The initiative intends to create synergies between organisations and energy actors with the same goals of promoting renewable energies and energy efficiency by raising awareness and facilitating information exchange with a common map, made known jointly by a broad network of organisations, regions, local authorities, companies and other energy actors. The map can be integrated easily and free of charge into the websites of organisations and energy actors participating in this initiative. They are thereby supported in gathering and presenting examples for sustainable energy use and related local information on their own websites.



Figure 1: An example for a renewable energy installation shown on the map



Figure 2: Examples of organisations that have integrated the map on their websites: WWF Europe (left), Climate Alliance (center), and European Geothermal Energy Council (right) ([http://www.wwf.eu/what\\_we\\_do/climate/renewables/repowermap/](http://www.wwf.eu/what_we_do/climate/renewables/repowermap/), <http://www.climatealliance.org/repowermap.html>, <http://egec.info/projects/repowermap>)

## What is the impact of the initiative?

The map has on the one hand a local impact, by showing individuals information and facilitating information exchange in their immediate neighbourhood. Studies show that examples from the neighbourhood are particularly effective in activating individuals to use renewable energies or energy efficiency measures. On the other hand, the initiative has a regional, national and international impact by allowing comparisons and know-how transfer across borders. The map thereby facilitates the understanding for and the spread of innovative technologies. The map will highlight more and more also the European and the global dimensions of using renewable energies and energy efficiency, by bringing together on a single map examples and related information from a wide variety of regions and countries.

## What targets have been set?

In qualitative terms, the target is to raise awareness and facilitate information exchange for renewable energies and energy efficiency. The main tool that is used for that purpose is an interactive online map which is made known jointly by a large network of organisations and energy actors and which aims to make visible examples for the use of renewable energies and energy efficiency in each person's neighbourhood.

In quantitative terms, the following targets were set for building up the repowermap.org initiative within the framework of the Intelligent Energy Europe Programme:

- 40'000 project examples documented on map
- 300 local authorities on map
- 4000 site visit events shown on map since start of project
- 1000 projects on map with labels for highly efficient renewable energy systems
- 6000 certified renewable energy service providers on map
- 1000 unique internet users seeing map per day
- 40 local authorities and 100 organisations having integrated the map into their website

## What activities have been undertaken?

The long-term vision of the initiative, to make visible examples for the use of renewable energies and energy efficiency in each person's neighbourhood, is highly ambitious, as the information about the use of these technologies is dispersed. The initiative can therefore only be successful if a large number of energy actors are participating. Continuous efforts were undertaken to bring together organisations and energy actors to overcome this challenge and build up a large-scale initiative, getting more and more support. For carrying out the initiative, a mapping tool has been developed with an interactive Web 2.0 approach, connections to social media and possibilities for mobile access.

## What results have been achieved?

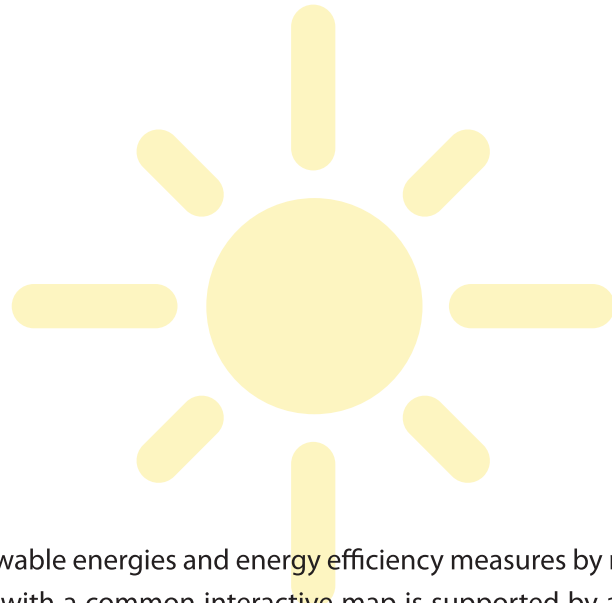
The result of these activities is that a broad network of organisations, regions, local authorities, companies and other energy actors are participating by now in the initiative. The more examples have been put on the map, the higher has become the interest of organisations, regions and local authorities to participate by integrating the map into their website. The higher the visibility of the map has become in this way as a common map, the more energy actors have become interested to add information onto it. These two dimensions of the initiative reinforce each other. The initiative has become a large and broadly supported grass-roots action carried out by a multitude of energy actors who share the common objective of promoting renewable energies and energy efficiency. It profoundly supports awareness raising and exchange of information at local level while also promoting related action at European level.

The quantitative targets were mostly reached. The following table provides details:

Indicator	AT	BE	BG	DE	FI	FR	IT	LI	PL	SK	Other EU	All	Targets
Project examples on map	4889	4781	477	13342	1287	5998	4770	154	5118	1955	557	<b>43'428</b>	<b>40'000</b>
Local authorities and regions on map	51	-	-	375	1	2	6	4	-	1	-	<b>440</b>	<b>300</b>
Site visit events on map since start of project	206	27	-	3448	31	403	76	-	29	42	n. q.	<b>4263</b>	<b>4000</b>
Projects on map with labels for highly efficient RES-systems	-	106	-	691	-	-	-	-	3342	283	-	<b>4422</b>	<b>1000</b>
Certified renewable energy service providers on map	1008	1414	30	3098	17	768	136	5	39	49	-	<b>6564</b>	<b>6000</b>
Unique internet users seeing map per day (peak day / monthly average)	152 99	42 41	7 10	213 340	14 15	109 69	41 64	1 1	79 69	1690 61	275 72	<b>2623</b> <b>841</b>	<b>1000</b>
Local authorities + regions that have integrated map	10	1	1	28	1	4	4	4	1	2	-	<b>56</b>	<b>40</b>
Organisations that have integrated map	8	15	10	18	6	25	9	2	13	9	n. q.	<b>115</b>	<b>100</b>

Table 1: Overview on progress regarding performance indicators. Where the contribution from other countries in the EU has not been quantified, this is indicated with "n. q.". For unique visitors seeing the map per day, the peak day refers to 30 September 2014, the monthly average to October 2014.





## What lessons were learnt?

The following lessons were learnt:

- The idea to motivate people to use renewable energies and energy efficiency measures by making visible examples in their neighbourhood with a common interactive map is supported by a broad network of organisations, regions, local authorities, companies and other energy actors.
- To create such a common map which is supported by energy actors both from the public sector and the private sector, significant communication efforts are necessary; yet the more energy actors participate, the higher are the synergies and the easier it is to get support from more energy actors.
- The map has multiple benefits for different key actors: e.g. local authorities and regions use it as a tool to motivate people in their own area to use renewable energy and energy efficiency measures, to make visible own achievements and front-runner activities, or to organize and promote regional event campaigns.

## How does the initiative continue in the long-term?

From the start, the initiative has been intended to be a long-term action, continuing and extending beyond the results achieved within the framework of the Intelligent Energy Europe Programme. Several important measures were taken to ensure this: From the beginning, both the Association [repowermap.org](http://repowermap.org), which had founded the initiative, and the Association [repowermap.eu](http://repowermap.eu), which was created to advance the initiative in Europe, guaranteed the long-term continuation of the initiative and its non-profit character. Both associations are non-profit organisations officially recognized as charities. As the mapping initiative is by now supported by a broad network of organisations and energy actors, a continuous high visibility of the map is ensured. Users can add information to the map or integrate it into their own websites to make it known in their area. To manage the back-end quality control in the long-term, a network of administrators is being built up, to share the workload of checking submitted examples and providing support to users. On the one hand, the initiative advances further in the countries on which the main focus has been put by the activities within the Intelligent Energy Europe programme; on the other hand, the initiative is planned to be built up more and more also in other European countries, and beyond. The initiative aims to reach a global level in the long-term.

## 2 Introduction

### 2.1 Background to the project

The use of renewable energies is often no longer prevented by a lack of technology, financial incentives or regulations, but by a lack of confidence in these technologies and a lack of examples and experience with renewable energies at local level.

Examples for the use of renewable energy systems in a person's immediate neighbourhood are particularly effective in promoting renewable energies<sup>1</sup>. However, while renewable energy installations can sometimes be seen from the outside of buildings in case of solar energy systems on rooftops or are sometimes mentioned in the media, most renewable energy systems used in buildings can't be seen just by walking around in a given area. The same is true for energetic renovations of buildings. Accordingly, there is a lack of visibility of positive examples and front-runners as well as of positive effects from EU, national or regional government programs. Many people underestimate the spreading of renewable energies or energy efficiency measures. If they were more aware of actual examples in their neighbourhood, they would be more motivated and more confident to use renewable energies and energy efficiency measures. By mapping examples of the use of renewable energies, finding examples in each person's neighbourhood is facilitated. This gives a collective motivation to use renewable energies as well, as people feel no longer alone in

their action and instead a "me-too"/"Yes in my frontyard"-effect is created.

Renewable energy technologies and energy efficiency measures are continuously being developed, and innovations are being made. Initiatives that facilitate the information exchange about such new technologies contribute to the spreading of best practices. Furthermore, apart from knowledge about the technologies themselves, such information exchange is also useful for spreading knowledge about specific framework conditions in a given area.

Information exchange is also useful in order to find companies who are active in this field. When building owners contact planning and installation companies, they are sometimes confronted with negative opinions on renewable energies or energy efficiency measures from companies that still prefer to install fossil energy based heating systems or who have prejudices about renovation of the building envelope. This may even be true for companies that are listed in directories of renewable energy installation companies. The possibility for building owners to see what kind of companies exist in their neighbourhood that have already constructed renewable energy installations, may therefore facilitate contacts between potentially interested building owners and companies that are truly interested in installing renewable energy systems.

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<sup>1</sup>See for example Bollinger B and Gillingham K (2012) Peer Effects in the Diffusion of Solar Photovoltaic Panels, Yale School of Forestry & Environmental Studies; Nolan et al. (2008) Normative Social Influence is Underdetected, Pers Soc Psychol Bull 2008; 34; 913

Based on this background, in 2008 the non-profit repowermap.org initiative was founded. It was first developed in Switzerland, where it has been a successful initiative in making visible examples for the use of renewable energies and energy efficiency, attracting interest from a broad network of organisations, regions, local authorities and companies to participate in the initiative.

In 2012, a proposal submitted under the Intelligent Energy Europe (IEE) programme for funding the extending of this initiative in Europe was accepted. Since then the initiative has been built up successfully in the European Union and other countries of the European Economic Area. The IEE action focused primarily on ten European countries: Austria, Belgium, Bulgaria, Italy, Finland, France, Germany, Liechtenstein, Poland, and Slovakia.

The project partners who have been part of the Intelligent Energy Europe project team are renewable energy associations, NGOs, networks of local authorities, research institutes and companies who are highly experienced in the promotion of renewable energies and energy efficiency. The action has been coordinated by Association repowermap.eu, which had been specifically founded to advance the initiative in Europe beyond the country where the initiative was originally created and maintain it in these countries in the long term.

## 2.2 Objectives

The objective of this action is to promote renewable energies and energy efficiency by making concrete examples visible in each person's neighbourhood on an interactive online map. The idea is to encourage people, companies and local authorities to get inspired by these examples, and to facilitate information exchange for these technologies at local level and across borders. The initiative intends to create synergies between organisations and energy actors with the same goals of promoting renewable energies and energy efficiency by raising awareness and facilitating information exchange with a common map, made known jointly by a broad network of organisations, regions, local authorities, companies and other energy actors. The map can be integrated easily and free of charge into the websites of organisations and energy actors participating in this initiative. They are thereby supported in gathering and presenting examples for sustainable energy use and related local information on their own websites.

## 3 Applied approach

The principle of the chosen approach is illustrated in the following figure:



Solar installations, geothermal heat pumps, hydrothermal heat pumps and aérothermal heat pumps, wood heating systems, wind turbines, biogas plants, hydropower plants, or any other renewable energy installation, as well as energy efficient buildings are added onto an interactive map. Everyone can view which examples are on the map in their area and add examples. The map aims to make visible examples for the energy revolution in each person's neighbourhood.



A broad network of organisations, regions, local authorities, companies, and other energy actors, which have the same objective of promoting renewable energies and energy efficiency, participate in this initiative. The map is made known in common. This increases the effectiveness of the map and creates synergies. As many organisations and other energy actors participate in this action, the chances that people become aware of the map and examples around them is increased.

The long-term vision of the initiative, to make visible examples for the use of renewable energies and energy efficiency in each person's neighbourhood, is highly ambitious, as the information about the use of these technologies is dispersed. The initiative can therefore only be successful if a large number of energy actors are participating by creating a common map. Accordingly, all people are given the possibility to bring together on this interactive map their own inputs, and all type of energy actors can participate by having the common map also on their websites.

Besides being a smart investment on its own, each entry on the map works as a source of inspiration for other people in the area. By making visible an example, people around it are becoming aware that they are not alone when investing in these technologies and they are encouraged to do that, too. It is also a good opportunity to pass on any experiences that have been made, making it easier for others to get started.

Each example on the map becomes part of a powerful statement towards politicians by those who have already acted for climate protection. The examples illustrate that action on climate change is possible anywhere. The initiative therefore contributes to the adoption of stronger climate change protection targets and support for related measures at political level.

The initiative thereby has on the one hand the function to trigger local action in response to the global challenge of climate change and related targets set at global, international or national level. On the other hand, it helps to make the case for the adoption of such strong climate protection targets. These two functions are illustrated in the following figure:

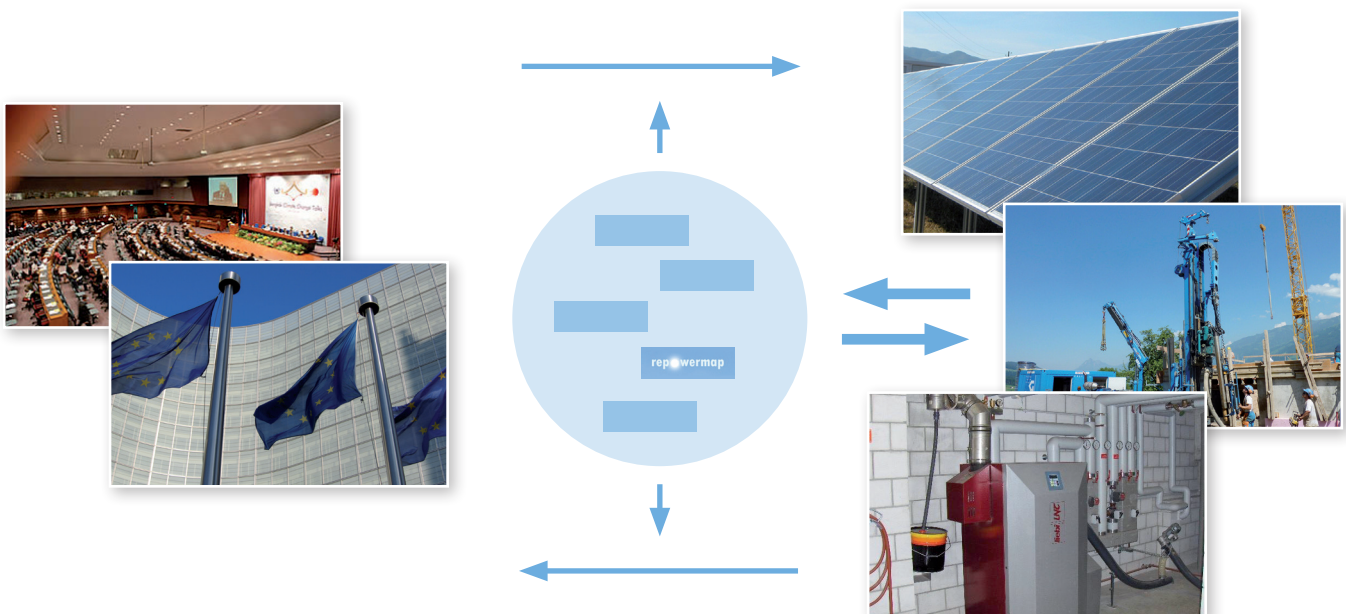


Figure 3: The function of the initiative to translate top-down challenges and targets into local action, and the function to support the adoption of international or national commitments to climate protection by examples of local action

The open approach for adding information to the map is accompanied by a quality control system and a network of administrators to make quality checks. Because of the open approach, like on wikipedia, a complete accuracy of all information anytime cannot be guaranteed; however, with appropriate quality checks and control by users, the high quality of the platform overall can be ensured.

Organisations can include on their websites also a registration form to add information to the map. The registration form is an attractive tool that organisations can use to involve their members, inviting them to add their own examples to the map. Participating organisations get administrator access to monitor information that has been added onto the map through their website. For each example that is added onto the map through the website of a participating organisation, on the general website repowermap.org the example is accompanied with a link to that organisation's website, giving also visibility to that organisation.

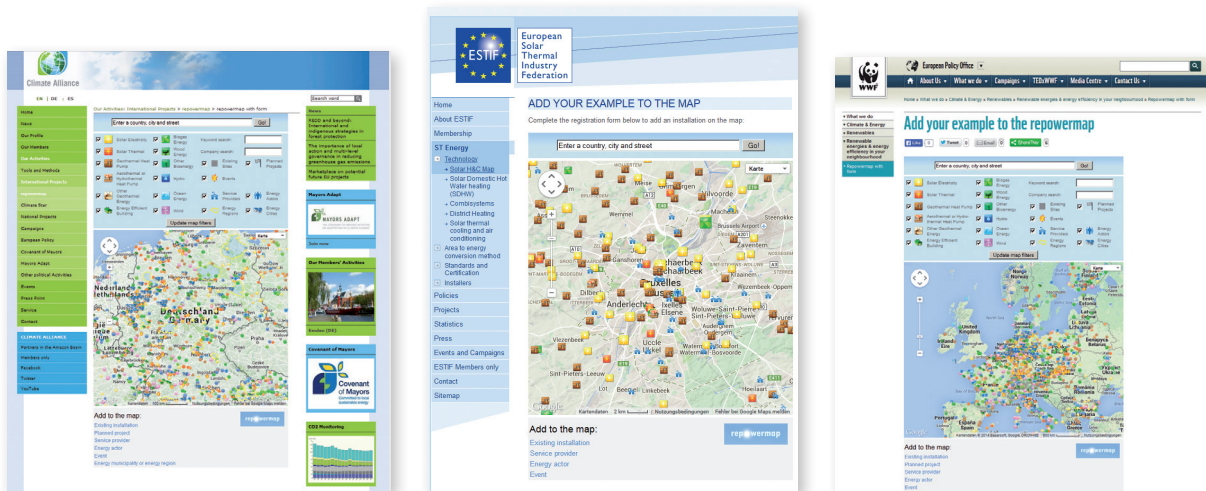


Figure 4: Examples for websites of organisations where also registration form is integrated: Climate Alliance, European Solar Thermal Industry Federation, WWF Europe

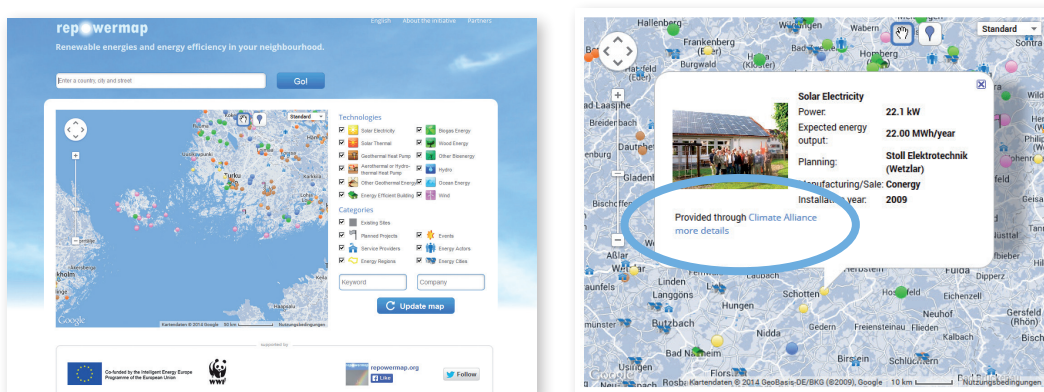


Figure 5: On the general website of repowermap.org, a link is provided to the organisation through the website of which the example has been added to the map.

For the mobile access to the map, applications for iOS and Android have been developed. In the following figures, screenshots are shown.

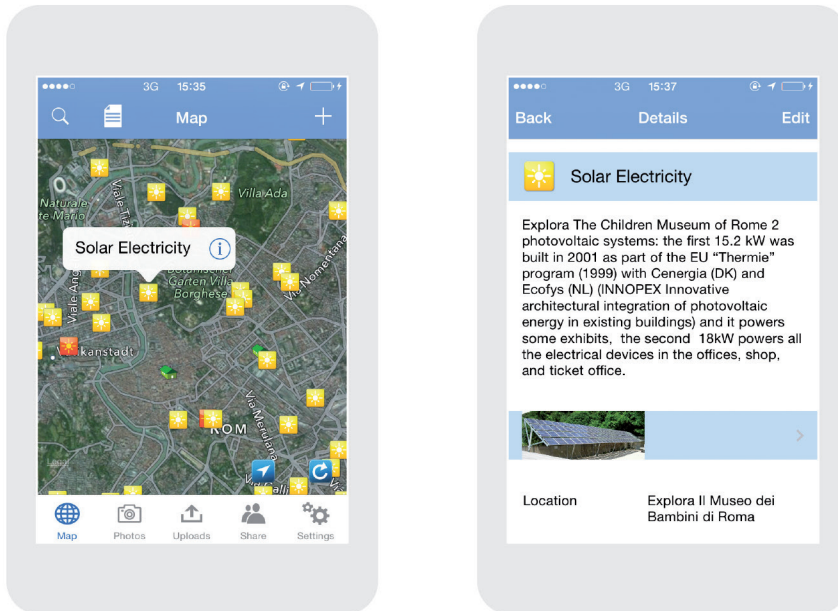


Figure 6: Screenshots of the mobile version for iOS

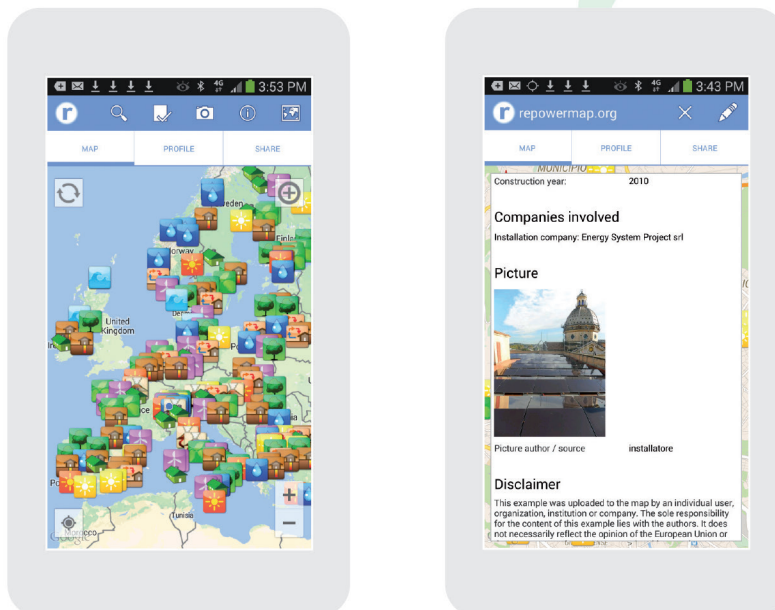


Figure 7: Screenshots of the mobile version for Android



## 4 Results, findings and impacts achieved

At the beginning, the task looked immense: To give inspiration for climate action to everyone by visualising examples for the energy revolution in each person's neighbourhood across Europe on a common interactive online map. The related information is so dispersed, that bringing it together on a single map is a huge challenge. With the action in the framework of the Intelligent Energy Europe programme, important results were achieved to move further towards implementing that vision.

A broad network of organisations, regions, local authorities, companies and other energy actors are participating by now in the initiative. The more organisations and energy actors participate in the initiative, the bigger are the synergies. The initiative has become a large grass-roots action carried out by a multitude of organisations and energy actors who share the common objective of promoting renewable energies and energy efficiency.



Figure 8: Pictures of examples on the map

Anyone who has installed a renewable energy system or who has constructed an energy efficient building can add it to the map. The map works therefore in a decentralized way, as the energy transition itself.

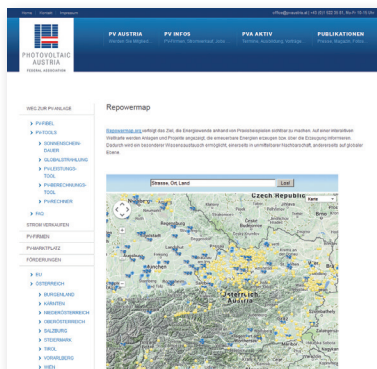
43'428 examples for the use of renewable energies or energy efficient buildings were added to the map through the action. 440 local authorities were made visible on the map. 4'263 site visit events have been shown on the map. 4'422 installations on the map have a label for being highly efficient renewable energy systems. 6'564 certified companies active in this field are shown on the map. On a monthly basis 841 unique users are seeing the map per day, with levels of 2'623 unique visitors having been reached during peaks of communication activities. 56 local authorities and regions have integrated the map into their website, as have 115 organisations.

The map has thereby become a strong tool to promote the use of renewable energies by awareness raising and facilitating information exchange. Cooperations were built up with a broad variety of organisations and energy actors.

On the following pages, some examples for the cooperations having been built up are given. Only a small number of related cooperations are highlighted here for illustration purposes, there are many more cooperations for which the space available in this report is not enough, and all of them are important.

## Associations

Associations for renewable energies or energy efficiency can integrate into their website technology-specific maps. They can then encourage their members to add examples to it, contributing thereby to awareness raising and information exchange for the related technologies.



### Photovoltaic Austria

The federal association Photovoltaic Austria is the largest and most successful federation in the field of photovoltaics in Austria. The federal association works together with companies and its function is to give information to member companies, to do advisory work, and they are in charge of public relation on national and European level for Austrian companies. The participation of Photovoltaic Austria in the repowermap.org initiative has motivated people and companies to participate in the initiative as well and to add reference examples to the map. It also encour-

aged them to use the map as a tool on their own to motivate private persons to become interested in renewable energies. As a result, many photovoltaic installations were added to the map in Austria. With the high visibility of the map an important impact for motivating people to use renewable energies could be achieved.



### ESHA

The European Small Hydropower Association (ESHA) represents the interest of the hydropower sector by promoting the benefits and opportunities of hydropower at EU level. For their website, a special Hydropower Map was provided based on the map of the repowermap.org initiative. The Hydropower Map is a map showing examples of existing small hydropower installations. The idea is to encourage people to use renewable energies and energy efficiency measures by making visible examples on the map in each person's neighbourhood. The map also intends

to facilitate information exchange at local level and across borders. The map thereby contributes to the understanding for small hydropower and illustrates its role in the energy transition. Hydropower installations can be added to the map directly on ESHA's website. By being connected to the repowermap.org initiative, a large amount of examples for hydropower could already be made visible on this map; in addition, each example newly added on the map has a high impact for awareness raising and information exchange, as it is then also made known through other organisations participating in the repowermap.org initiative.

**assoRinnovabili**

assoRinnovabili (the Italian Renewable Energy Producers Association) joined the initiative especially aiming at offering a useful service to their associates and at increasing their visibility in the field of renewable energies. They integrated the map into their website - they also added a guideline for the implementation of the map - and promoted repowermap among their associates.

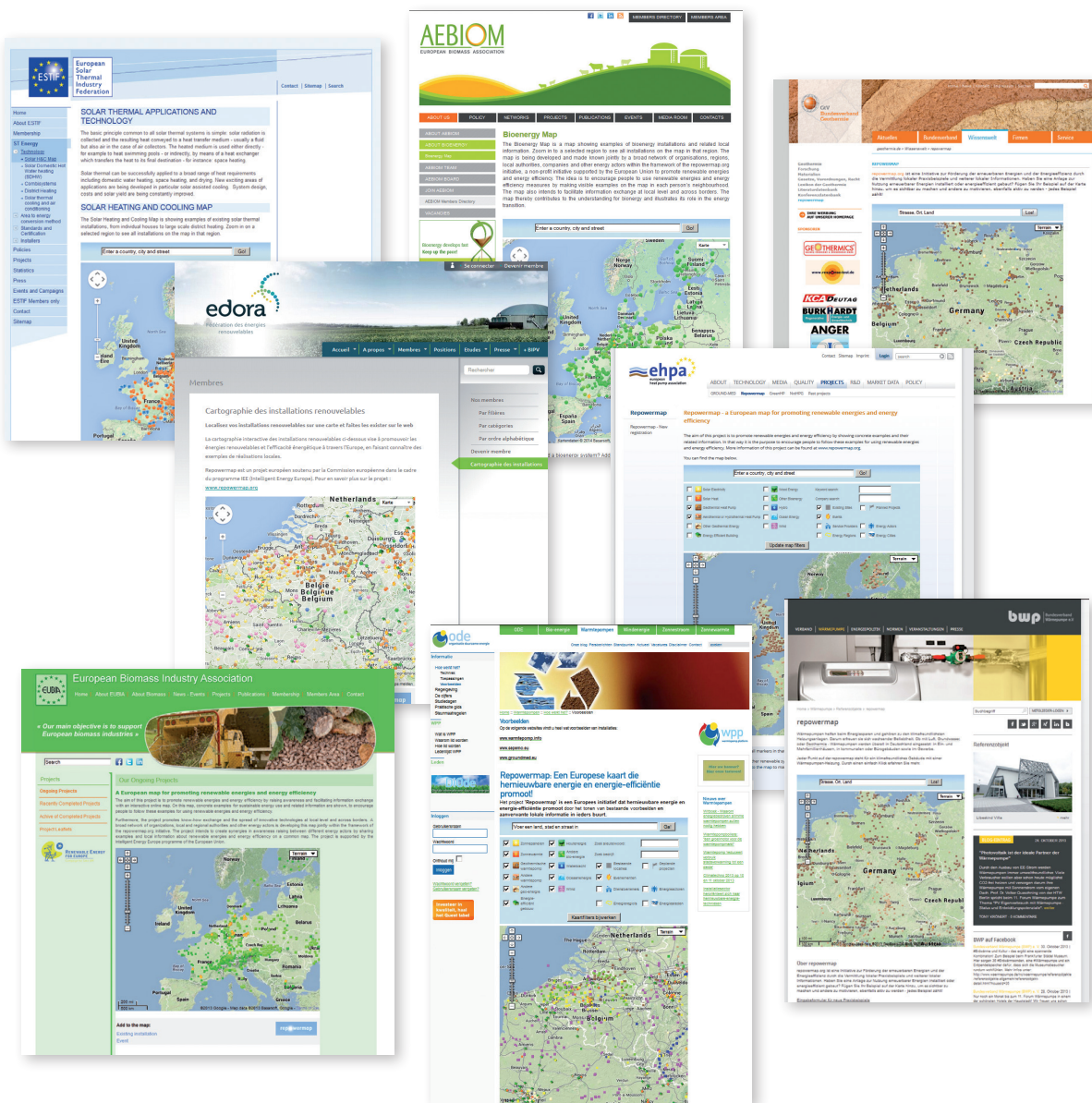


Figure 9: Examples for websites of associations that have integrated the map.

## Non-profit organisations

Non-profit organisations who aim to promote the use of renewable energies and energy efficiency can make use of map on their websites to show local information in an interactive way and encourage people to become active.



### WWF Europe

WWF Europe contributes to the achievement of WWF's global mission by leading the WWF network to shape EU policies impacting on the European and global environment. On their website, they have integrated repowermap. They encourage visitors to add examples, with the text: "Have you installed a solar energy system, a geothermal heatpump, or other renewable systems yourself? Or have you insulated your building to make it more energy efficient? Add your example to the map to make it visible and inspire others to take action as well. Each example is important!". The website of WWF Europe also contains a registration form; visitors of their website can thereby add examples to the map directly through their website.



Figure 10: Examples for websites of non-profit organisations that have integrated the map (continued on next page).



## Regions

Many energy regions have already made use of repowermap and take part in the initiative by integrating the map in their website and encouraging people of their region to add their examples. Energy regions, apart from integrating the map, can also be shown on the map with their boundaries to gain more visibility and strengthen the regional vision of their energy activities.



### Klimaschutzatlas Nordfriesland

Gunnar Thöle is the climate protection manager for the district of North-Frisia. This district is a long-standing member of Climate Alliance and since 2012 an important supporter of the repowermap.org initiative. The following is a shortened interview with him carried out by Climate Alliance:

**Climate Alliance:** What advantages do you see for using repowermap in the district of North-Frisia?

**Gunnar-Thöle:** North-Frisia aims to be Germany's climate friendliest district by 2020. Yet, we will only know whether we

have reached this goal, if we make our efforts visible. Apart from benchmarks, a map showing existing installations is a good tool. We used repowermap to replace a previous map developed by ourselves, which had the disadvantage that it was confined to the district of North-Frisia. With the repowermap we want to contribute to a European initiative, which does not stop at district borders.

**Climate Alliance:** How are you and the district of North-Frisia making use of the map?

**Gunnar-Thöle:** We included the map in our website [www.klimakreis.org](http://www.klimakreis.org). This was no big challenge technically and has the advantage that you can choose the section of the map which appears first (in our case North-Frisia). Additionally, and this is quite important, the district of North-Frisia thus contributes to the dissemination of the repowermap. The more often the map is included in different websites, the more people will share their examples via repowermap.

**Climate Alliance:** Moving on to a final question: What do you think is the biggest advantage of the repowermap for Germany?

**Gunnar Thöle:** The map most notably visualizes the course of the climate and nature friendly modification of the energy provision and visualizes many important local and regional projects, irrespective of politics and decisions, which are made by the politicians in Berlin.

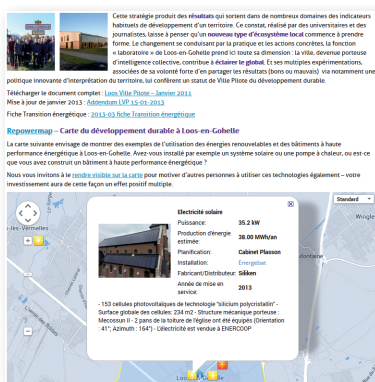
**Climate Alliance:** Thank you very much for the interview.





## Local authorities

Local authorities can contribute to making known local examples for the use of renewable energies and energy efficiency in their own territory by integrating a local map on their website. People are thereby motivated to use these technologies as well and the local dialogue and information exchange is facilitated. Local authorities can make visible on the map their own actions they have undertaken, and can invite energy actors from the private sector to add their examples as well to the map. By participating in the action, local authorities also highlight their important role for the energy transition.

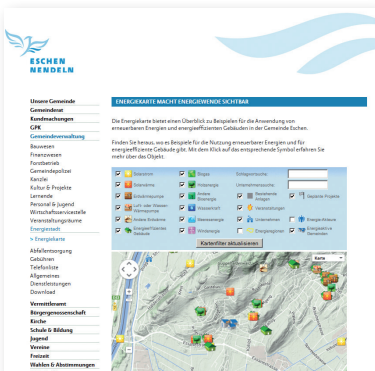


### Loos-en-Gohelle

Loos-en-Gohelle is a pilot city for sustainable development in France. They integrated the map into their website, added an own installation and started contacting private citizens to invite them to add their examples to the map. Loos-en-Gohelle is highlighted on the map as an energy active city.

### Paprotnia

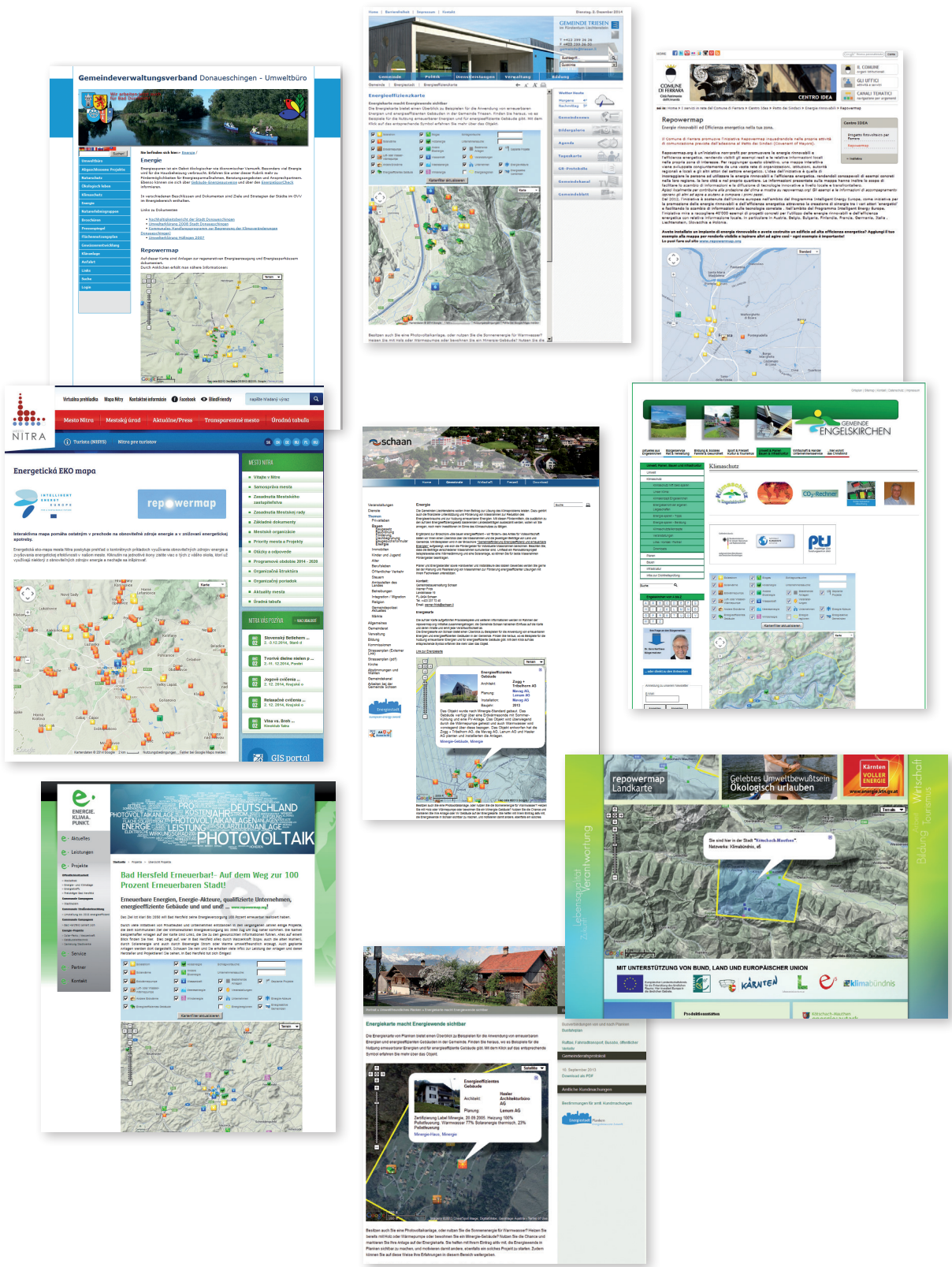
The commune of Paprotnia is one of the communes in Poland which participated in an investment project by the European Union to promote regional development with renewable energies. 1321 solar thermal installations were installed in the Siedlce and Sokołów Podlaski county. Paprotnia integrated the map in their website, to make the success of that programme more visible and give inspiration to others to use solar thermal as well.



### Eschen

The commune of Eschen in Liechtenstein actively supports the use of renewable energies and energy efficiency. One of several measures the commune has taken was to integrate the map in their website. They invite thereby citizens to make their examples visible, in order to encourage other people to use renewable energies and energy efficiency measures as well.





Figur 12: Examples for websites of local authorities that have integrated the map.

## Energy Agencies

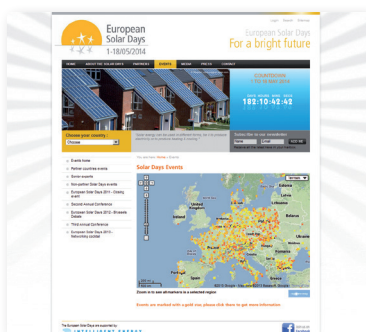
Energy agencies have made use of the map as a tool to provide information and advice to people in their area and to make known related events. It is an ideal tool for them to carry out their own networking activities with the help of the map. Many have also actively invited energy actors to add examples to the map.



Figure 13: Examples for websites of energy agencies that have integrated the map with a regional focus.

## Site-visit campaigns

Successful cooperations have been carried out with the European Solar Days, the Passive House Days, EUSEW and other event campaigns to make known site visit opportunities and other events related to renewable energies and energy efficiency.



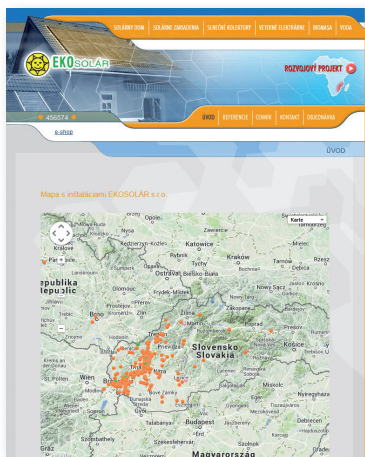
### European Solar Days

The European Solar Days are the widest European awareness-raising campaign on solar energy, supported by the Intelligent Energy Europe Programme. A highly successful cooperation has been built up since 2010. An interactive map was provided to the European Solar Days website that shows the events taking place in the participating regions, aggregating and indicating links back to the event information in the countries participating in this campaign. Event information from the different national partners of

the campaign were processed and brought onto the European map. The map on the website of the European Days has highlighted then the European dimension of that campaign and has allowed visitors to zoom in and have a closer look at what is happening where and when.

## Companies

Many companies have added reference examples to the map. They can also integrate a customized map into their website showing only their reference installations, in order to give inspiration for people about renewable energies and energy efficiency.



### Ekosolar

During the direct contacting of installing companies and inviting them to join the initiative and add their reference examples, we have met Mr. Korvin, a founder of the company Ekosolar. Mr. Korvin is a big fan of renewable energy and has been in this business for over 10 years, during which he installed many thousands of square meters of solar collectors on houses and other buildings, and has more than nine hundred satisfied customers. We explained to Mr. Korvin the initiative and he liked it very much. Not only as a chance for him to promote his work within the interactive online map which is shared by a large network of organisations, but also personally, as a supporter of the idea to repower

the world with green energy. As a result of this, over 300 project examples have been added on the map. Mr. Korvin also gained a customized reference map for his own website and visitors of that website got plenty of inspiration from this.

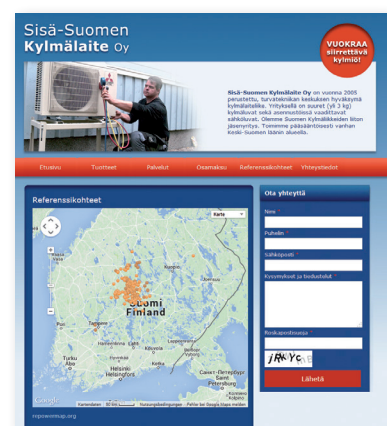


Figure 14: Examples for websites of companies that give inspiration with a map showing their reference installations.

## Cooperations with other energy actors

Numerous cooperations have been built up with energy actors of other types than mentioned so far. For example with the IEE project REScoop 20-20-20 an interactive map has been created which makes visible specifically examples for citizen projects. In cooperation with the FP7 project SUNSTORE4 a map has been developed which shows specifically examples for renewable energy based district heating systems. For the IEE project MOUNTEE a specific map of pilot buildings being part of that project has been created.



Figure 15: Examples for websites of projects with which cooperations were made to create specific maps.

Cooperations have also been built up with energy actors who have databases such as thewindpower.net, BDPV, the Passive House Institute, or specific projects such as the IEE project FABBIOGAS which have aggregated data and have provided information on concrete examples for renewable energy installations or energy efficient buildings for the common map. The information shown on the map is limited. When more information is available in specific databases on an example, for such information to these databases is referred, and links are provided to related energy actors.

Furthermore, many cooperations have been made with news portals who also show the common map on their websites, as well as with research institutes and Universities.



“Let’s create a common map to make visible the energy revolution with a multitude of local examples, providing motivation and inspiration for climate action in each person’s neighbourhood!”



# 5 How can you participate?

You are....

## ... an individual

- Have you installed a renewable energy system? Or have you made your building energy efficient? Make your example visible on the map to inspire people in your neighbourhood! Share your experiences to help them get started!
- Post a story on Facebook or Twitter about the initiative.
- Spread the word about the initiative to your colleagues, friends, ...

## ...an organisation

- Integrate a customized map into your website! You can choose from a number of filters to fit your needs such as geographic start view, technologies, categories, and special filters on request.
- If you want, get also the registration form to allow visitors to add examples directly to the map through your website!
- Add on the map any energy related events you are carrying out to make them known.

## ... a local authority or region

- Integrate a customized map of your territory into your website.

- Make visible on the map front-runner activities by your local authority or region.

- Invite citizens and other private actors to add their examples as well, for example by mentioning the initiative in a local magazine, a newsletter or through direct contacts.

## ... a company

- Add your reference examples to the map to inspire people in your neighbourhood!
- Get a customized map showing only your examples for your website.

## ... a funding institution

- For the continuation of the initiative and for extension to more countries we are looking for funding opportunities and opportunities for partnership. Please do not hesitate to get in touch with us!

## ... a news portal

- Integrate a customized map into your website and invite your readers to add examples to it!

## ... an experienced user of repowermap

- You may become a regional administrator for monitoring content of the map in a specific area.

# 6 Conclusions

## Lessons learnt

The following lessons were learnt:

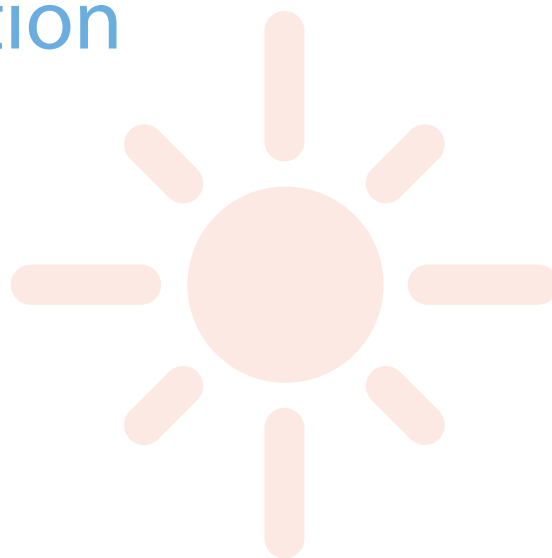
- The idea to motivate people to use renewable energies and energy efficiency measures by making visible examples in their neighbourhood with a common interactive map is supported by a large network of organisations, regions, local authorities, companies, and other energy actors.
- To create such a common map which is supported by energy actors both from the public sector and the private sector, significant communication efforts are necessary; yet the more energy actors participate, the higher are the synergies and the easier it is to get support from more energy actors.
- The map has multiple benefits for different key actors: e.g. local authorities and regions use it as a tool to motivate people in their own area to use renewable energy and energy efficiency measures, to make own achievements visible, or to organize and promote regional event campaigns.

## How does the initiative continue in the long-term?

From the start, the initiative has been intended to be a long-term action, continuing and extending beyond the results achieved within the framework of the Intelligent Energy Europe Programme. Several important measures were taken to ensure this: From the beginning, both the Association [repowermap.org](http://repowermap.org), which had founded the initiative, and the Association [repowermap.eu](http://repowermap.eu), which was created to advance the initiative in Europe, have guaranteed the long-term continuation of the initiative and its non-profit character. Both associations are non-profit organisations officially recognized as charities. It has turned out that such a long-term orientation does not only make sense given the results achieved and the usefulness of the map, but has also been a condition for many energy actors to start participating at all. The main idea has always been to establish the map as a common map shared by a large network of organisations, regions, communes and other energy actors, to be maintained and continued indefinitely. As the mapping initiative is by now supported by a broad network of organisations and other energy actors, a continuous high visibility of the map is ensured. Users can add information to the map or integrate it into their own websites to make it known in their area. To manage the back-end quality control in the long-term, a network of administrators is being built up, to share the workload of checking submitted examples and providing support to users. On the one hand, the initiative advances further in the countries on which the main focus has been put by the activities within the Intelligent Energy Europe programme; on the other hand, the initiative is planned to be built up more and more also in other European countries. The initiative also aims to extend beyond Europe. Related activities are carried out by Association [repowermap.org](http://repowermap.org) whose objective it is to advance the initiative at a global level.



# 7 Contact information



**More information on the website:**

<http://www.repowermap.org>

**Contact person(s) in your country:**

<http://www.repowermap.org/partners.php>

**Coordinator of the Intelligent Energy Europe project:**

Roman Bolliger, Association [repowermap.eu](http://www.repowermap.eu), [roman.bolliger@repowermap.eu](mailto:roman.bolliger@repowermap.eu)



## 8 Statements of support



„Ich finde das Projekt repowermap.org sehr interessant, denn nur durch konkrete Beispiele werden die Leute auch wirklich angesprochen!“

**Simone Niggli-Luder**, was 23 times world champion in orienteering, best orienteering athlete of all times; her plus-energy building produces more energy with photovoltaics than the the building's energy need.



„Penso che una mappa interattiva online, sia il modo migliore per far conoscere la realtà e mobilitare la cittadinanza, anche sui temi dell'energia. La gente deve capire che fa parte di un territorio e una mappa fa più di cento discorsi. La stessa etimologia di ambiente significa quello che ci sta d'intorno... bravi!“

**Lorenzo Bigagli**, researcher at the National Research Council of Italy (CNR) - Geospatial services, Information Technology department.



“Nell'era della comunicazione, in cui siamo collegati in rete e abbiamo il mondo a portata di mano con uno smartphone, E' indispensabile potersi collegare su una mappa interattiva online per conoscere la realtà delle energie pulite per promuoverne l'utilizzo a tutta la cittadinanza. Quando presentiamo nelle scuole elementari e medie con il nostro format educativo „Il Sole in Classe“, per diffondere questi temi a partire dalle nuove generazioni, essendo già molto predisposti ad internet, a scambiarsi immagini, a condividere le proprie passioni, da oggi potremo fargli vedere la reale diffusione delle fonti rinnovabili sul proprio territorio ... a portata di mano! Complimenti a tutti.“

**Antonio Rancati**, Board of ANTER Associazione Nazionale Tutela Energie Rinnovabili



„repowermap.org visualizes the diffusion of renewable energies and those interested in setting up a new generation unit can find examples in their neighbourhood. This is an important precondition for a future with renewable energies.“

**Renate Schubert**, Professor for Economics; Head of institute, Institute for Environmental Decisions (IED), ETH Zürich; Member of the German Advisory Council on Global Change (WBGU)



„The availability of energy from our own resources is still an actual issue. It really does matter whether the energy which we are able to produce at home will be produced there on our own or whether we will have to buy it abroad. It is always important if „the energy money“ will run our Slovak economy or an economy somewhere else. This energy map of Slovakia must be expanded. Domestic sources of energy mainly fulfil the requirement for the security of energy supply and consequently ecological and socio-economic requirements. It is important how much money from the energy sector will go into the Slovak economy and how much will go out. Today, this money is leaving Slovakia. To help keep the money for energy at home and show the local examples is one of the objectives of this initiative.“

**Stanislav Janiš**, for ten years a member of National Council of the Slovak Republic (2002-2012) and a former chairman of the Parliamentary Committee for Economy, Construction and Transport; senior expert in the field of energy and regulations; a chief editor of the energy portal oEnergetike.sk.

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