

PLAN DISTRIBUTION AND ORGANIZATION OF SUPPLY AND DEMAND



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WP4

Output 4.2/D422

Plan distribution and organization of supply and demand

Project number DTP1-291-1.1

Title of the project Eco-innovatively connected Danube Region (EcoInn Danube)

Version Final

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Revised by Project partners

Date 2019

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Project "Eco-innovatively connected Danube Region (EcoInn Danube) "



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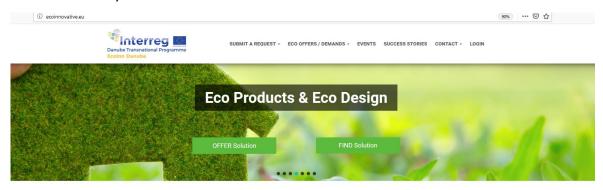


1. OVERVIEW

The Virtual Lab <u>www.ecoinnovative.eu</u> serves as an online library of eco-technologies and it enables users to upload their demands for ecological solutions and existing solutions in form of ecotechnologies.

The Virtual lab's main role is to connect demand of production sector for new solutions enabling to perform a greener production and on the other side the supply of ecotechnologies and eco solutions focused on field of renewable energy and energy saving coming from the research sector.

The lab builds upon persons and platforms of the project partners in the EcoInn Danube project to make available the services and tools, existing databases of project partners and their stakeholders in order to enable the cooperation among different parts of the ecoinnovation system



WELCOME TO THE VIRTUAL LAB FOR ECO INNOVATIONS



Figure 1: Virtual Lab library – www. ecoinnovative.eu main page

The virtual lab wishes to contribute to improve the ecoinnovation performance in the Region. Ecoinnovative.eu contributes to introduction of new environmental technologies focused on the energy saving solutions. Contributes to reinforce the capacity of research infrastructure in order to improve ecoinnovation conditions, to foster and support development of a more widespread ecoinnovation culture.



2. HOW WE SUPPORT DEMAND FOR ECOINNOVATIONS

The aim of the plan is to ensure the usability of the virtual lab developed within the project Ecolnn Danube and keep the demand side of the market for ecotechnologies up to date by:

- Providing information the ecoinnovative.eu platform provides room to provide receive comprehensive information on national specifics for implementation of ecotechnologies in the DR, it provides dozens of examples of ecotechnologies, as well as studies, success stories and databases of experts and institutions dealing with ecofriendly technologies in the DR. All this with purpose to provide information to users, who can directly raise their requirements within the lab and thus provide the researchers with areas that needs solutions in practice.
- Building awareness the platform itself builds awareness on existing ecotechnologies and ecosolutions as well as existing requirements and real cases of implementation of ecotechnologies into practise with aim to increase the interest of companies to join the ecosolutions movement. The platform from its nature provides transnational contents and therefore builds awareness of companies on state of the art in eco technological resolutions in the DR.
- Enable cooperation and networking with aim to support transitional cooperation the
 platform provides opportunity for those who demand for ecosolutions to directly
 approach the inventors, experts and institutions or using contact points (contacts of
 responsible employees for communication on the platform) and get in touch with
 potential counterparties.

3. ANALYSIS OF TARGET GROUPS AND USERS OF THE VIRTUAL LAB

The virtual is in use for two years and so far it was able to collect dozens of demands for solutions that fall in the area of ecoinnovation and energy efficiency. The virtual lab is a laboratory of products, thoughts, information and experts and stakeholders in one place dealing with area of ecoinnovation and ecologically friendly solutions mainly from technology part of view. The target groups of the virtual lab are:

- Researchers
- Companies
- Policy makers
- NGOs in area of environment and technology



- Municipalities
- Education institution
- General public

So far the ecoinnovative virtual lab hosted more than 3000 users with bounce rate (viewing only single session – meaning that user only opens the page and lives) only $10 \%^1$. The users of the virtual lab according the countries are:

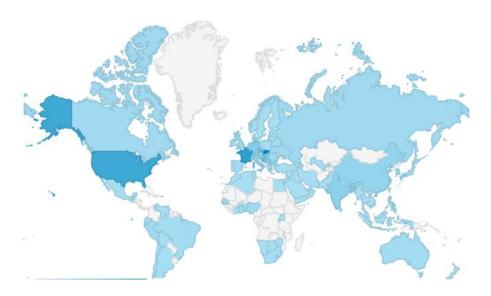
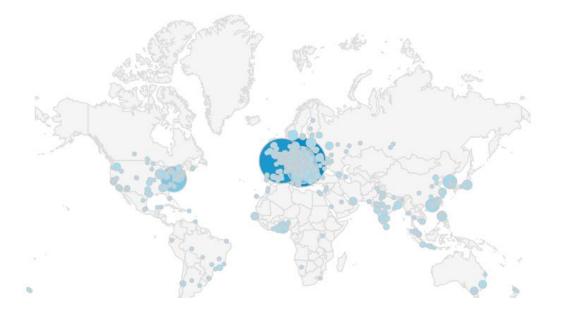


Figure 2: User of the ecoinnovative.eu by countries, resource: Google analytics

The following figure shows that the users of the virtual lab are coming from bigger cities, mainly from Europe.



¹ Google analytics



Figure 3: Users of the ecoinnovative.eu by cities, Recource: Google analytics

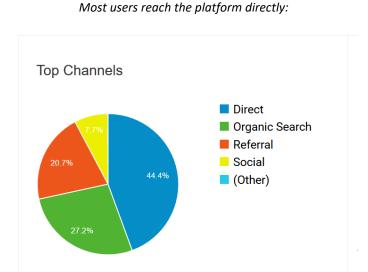


Figure 4: Users of the ecoinnovative.eu by channels used to reach the platform

Target group

The Virtual Lab platform is visited by a diverse group of users, among those are: innovative companies, research organizations, universities, start-ups, municipalities, non-governmental organizations and regional agencies. They are interested in finding current eco-technology and eco-innovation demands and also in publishing their own demands for specific eco-innovative inventions and solutions. Thus, the Virtual Lab creates a unique space where the most useful information from a dynamically growing field of technology can be found. Virtual lab is a tool supporting matches and enabling cooperation in the area of implementation of ecoinnovations. At the platform a demand form can be found, that companies, researchers and institutions or anybody with their demand request for eco-technology or eco-solution to their problem can fill in and publish. Each request needs to have contact person that agrees to sharing and publishing their information to interested partners for match.

4. TOOLS IN THE VIRTUAL LAB AND THEIR ROLE TO ORGANIZE AND DISTRIBUTE THE DEMAND FOR ECOTECHNOLGIES



The portal www.ecoinnovative.eu targets innovative companies, research organizations, start-ups, representatives of municipalities, representatives of NGOs and regional agencies searching or offering eco-technologies and eco-innovation. By publishing an offer or demand of a particular eco-technology the portal enables establishing connections among relevant customers, buyers or new business partners for a development of business, whether in the private or public sector.

For the purpose of boosting the demand for ecotechnologies or eco-solutions the virtual labs' tools are in place and will be used to support this search and inform/inspire companies on new and environmentally friendly products.

The demand for ecological solutions is on one hand driven by legislation, cost efficiency and need for "new" products that could be attractive to consumers. Companies can therefore use the virtual lab, to express their needs or requirements for solutions.

Tools within the virtual lab include:

- 1. Collector of demand backed by partner institution
- 2. Collector of ecotechnologies also backed by partner institutions
- 3. Success stories of implemented ecotechnologies into practice
- 4. Events collector
- 5. Expert database who are able to provide services to boost the innovation process
- 6. Interactive map of potential partners in business, research or policy makers
- 7. Study corner to search for recommendations based on actual experience, eco-studies and country specific information
- 8. Library composed of 2 parts: solutions and demand
- 9. Network joining (invitation to events, including to interactive map, exchange of knowledge, newsletters)

For the purpose to support the dissemination of demand for ecotechnologies these tools are used and will be further adjusted.

The organization and distribution of demand is organized in library dedicated to collection of needs and requests for solutions by companies, or requests for cooperation by institutions active in research. Entries in this session can use own contact information or use contact information of contact point, which will intermediate the first contact.

4.1 TOOLS USAGE AND THEIR ROLE TO SUPPORT DEMAND

4.1.1 COLLECTION AND PROCESING OF DEMAND ENTRIES



In order to publish a demand a user fills in a pre-defined form, each demand request is processed and published by one of the contact point – their contacts are available on ecoinnovative.eu

ECO-INNOVATION DEMAND FORM Please let us know details of the eco-technology you look for! * Povinné E-mailová adresa * Vaša e-mailová adresa Company / institution * Vaša odpoveď Country: * Vaša odpoveď Website: * Vaša odpoveď Collecting demand and expressing needs for ecotechnology requests Contact point * and interests for cooperation in Vaša odpoveď particular field by target groups Agreement for sharing contact information Contact person agrees to share his/her contact information and pu ecoinnovative.eu Contact person agrees to share his/her contact information, but wants the company to be anonymous on ecoinnovative.eu

Do you need eco-friendly solution to help in your company? Fill in our form!

Figure 5: Form to collect demand

The demand for ecosolutions is available in the library session demands with option to use own contacts or contact of one of the contact points who will further inform you on interests to cooperate by potential counterparties.

The demand requests remain in the library of the ecoinnovative.eu platform without time limitation and are available to all interested parties. Users can find the request also using various keywords, or combination of keywords.

To increase the potential of finding a match, information on entries in Virtual lab are distributed to partner institutions and also shared on events that partners organize, attend and contribute to.

4.1.2 EVENTS COLLECTOR



The session covers events that are concerned with circular economy, eco-innovations, environment, sustainable technologies, biotechnologies and related themes. The aim of the event calendar is to provide companies and industry with options to find suitable counterparties in concerned topics in the Danube region.

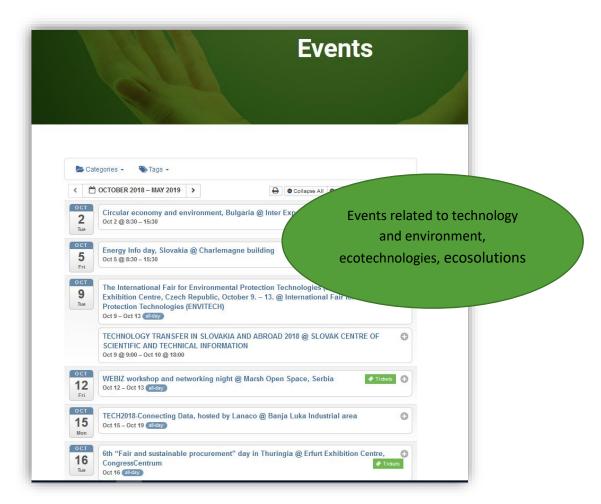


Figure 6: event collector

4.1.3 EXPERT DATABASE

The virtual lab ecoinnovative.eu provides the users with more than hundred experts from Danube region ready to provide their services (counselling, lab tests, and technical assessments) to customers. Currently the direct contact is available through contact points. The database contains areas of search or specialization of the expert and of his/her scope of activities in concerned field. With aim to increase the demand for ecotechnologies, experts can support the companies and industry in 10 country on national requirements or restrictions. The expert services are provided outside the virtual lab and are not funded by the virtual lab or its providers. Companies and industries can consult applicability of ecosolutions, their intellectual protection, national specifics (e.g. legislation), this process can help to better formulate demand requests to research organizations or apply specific solution into practice.



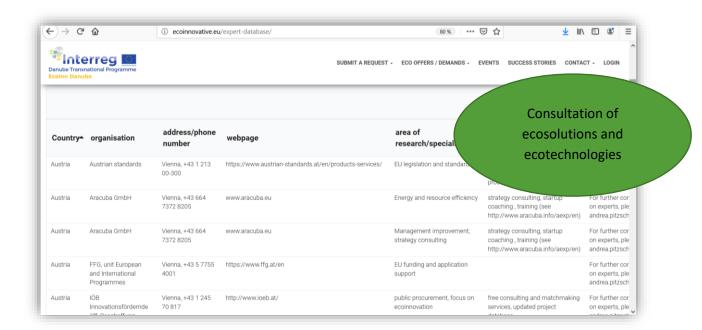


Figure 7: Expert Database

4.1.4 INTERACTIVE ECOINNOVATION STAKEHOLDERS MAP

The stakeholder map is a visual interactive representation of eco-innovation actors from the Danube region. The main purpose of the stakeholder map is to empower users to:

- View the organizations that are involved in eco-innovation in their country and within the region
- Understand the role and purpose of each organization (how they impact ecoinnovation)
- Access to contact points within these organizations/interest groups

The tool is designed to be expanded with additional contacts. A comprehensive guideline is available for users of the virtual <u>stakeholders map</u>.

The tool is developed with the intent to provide information about relevant organizations actively taking part in innovation of ecologically attentive products and services in the area of the Danube region, as either a producer, supporter, facilitator or potential beneficiary. The tool is meant to support the creation of new networks of relevant organization, which can together advance the framework of eco-innovation and commercialization of developed products across the EU.

The stakeholders map enables users to quickly find a counterparty for cooperation in the region, by showcasing the institutions and companies active in environmental research, protection or business.



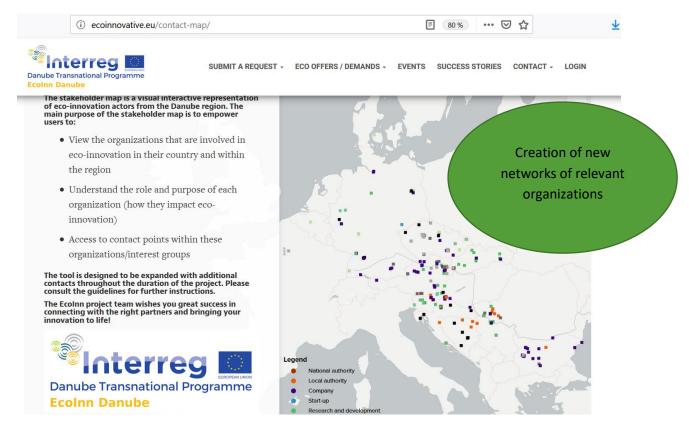


Figure 8: Interactive stakeholders map

4.1.5 STUDY CORNER

The study corner provides users with different set of knowledge sharing experience, this session includes:

- Recommendations based on actual experience, including a guidebook on national requirements for implementation of ecotechnologies
- Eco studies coming from DR
- Country specific information, such are state of art analysis, policies, swots.



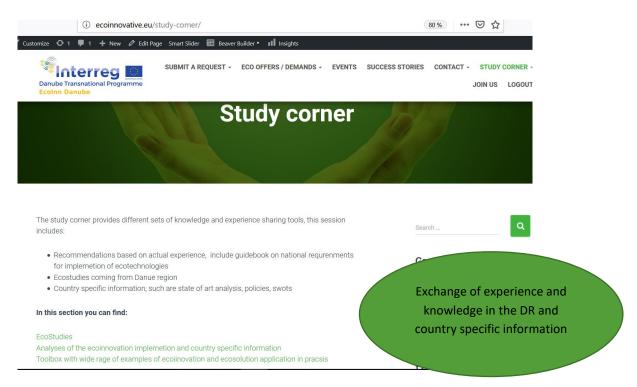


Figure 9: Study corner in ecoinnovative.eu

4.1.6 LIBRARY OF DEMANDS

The library itself serves as a complete list and description of ecotechnologies and requests for them. Two libraries are created with the aim to support the matchmaking in demand and supply for ecotechnologies:

- 1. Library with demands for ecotechnologies
- 2. Library with supply for ecotechnologies

The library provides space to call for ecosolutions creating targeted demand for particular needs of industry and companies not only active in eco technology business but with need to resolve production problems and become more energy, waste or material efficient.



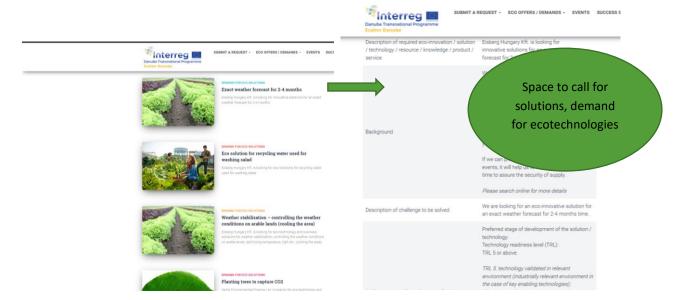


Figure 10: Library with demands for ecotechnologies



5. TOOLS IN THE VIRTUAL LAB AND OFFER OF ECOTECHNOLOGIES AND THEIR APPLICATION INTO PRACTISE

For the purpose to boost the supply of ecotechnologies or eco-solutions the virtual labs tools in place are and will be used to support this with opportunity to provide space for showcasing the ecoinnovation technology or ecosolution.

Tools within the virtual lab include:

- 1. Collector of demand backed by partner institution
- 2. Collector of ecotechnologies also backed by partner institutions
- 3. Success stories of implemented ecotechnologies into practice
- 4. Events collector
- 5. Expert database who are able to provide services to boost the innovation process
- 6. Interactive map of potential partners in business, research or policy makers
- 7. Study corner to search for recommendations based on actual experience, ecostudies and country specific information
- 8. Library composed of 2 parts: solutions and demand
- 9. Network joining (invitation to events, including to interactive map, exchange of knowledge, newsletters)

For the purpose to support the focus of research and development on ecotechnologies tools in the virtual lab provide space to showcase developed technology and find counterparty for further cooperation or business.

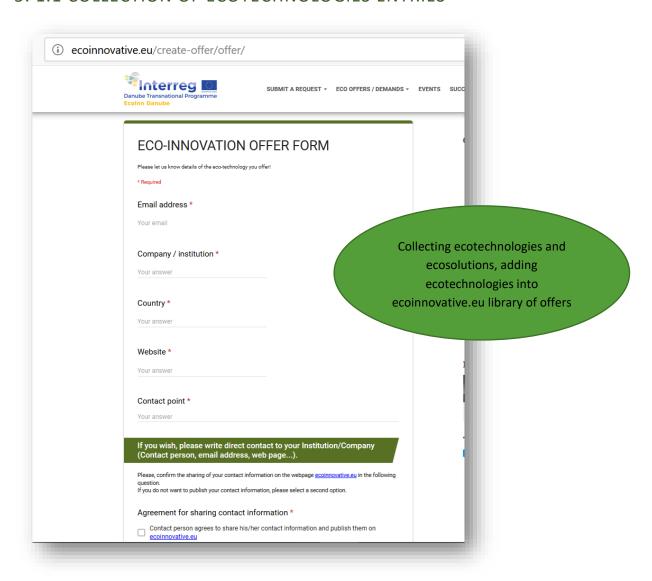
The aim of the plan is to ensure the purpose of the virtual lab developed within the project Ecolnn Danube and boost the supply side of the market for ecotechnologies up to date by:

- Providing information on market needs demands for solutions by companies, or demand for cooperation by other research institutions. This tool helps to better focus the applied or in some cases the basic research of R&D institutions
- Advertisement of technologies pitch the developed technology or idea of solution of environmental problems, energy saving products or material reuse, cost saving solutions friendly to environment.
- Enable cooperation and networking (experts, events,) showcase your research
- Provide support services (feasibility, assessment, pitch...) follow the experience and practice in toolbox, guidebook guidelines



5.1. TOOLS USAGE AND THEIR ROLE TO SUPPORT SUPPLY OF ECOTECHNOLOGIES

5. 1.1 COLLECTION OF ECOTECHNOLOGIES ENTRIES



Filled in forms are received by partners of the project EcoInn Danube and published by contact points on www.ecoinnovative.eu, contact points can contact author of the request for additional information or clear up inconsistencies.

Published technologies are shared also through partners' network to possible partners.



The portal <u>WWW.ECOINNOVATIVE.EU</u> targets innovative companies, research organizations, start-ups, representatives of municipalities, representatives of NGOs and regional agencies searching or offering eco-technologies and eco-innovation. By publishing an offer or demand of a particular eco-technology the portal enables eshablishing connections among relevant customers, buyers or new business partners for a development of business, whether in the private or public sector.

In the virtual lab in general we can find more offers (supply side) of ecotechnologies then demands. The supply significantly outnumbers the demand. The demand for ecosolutions coming from industries are very particular and call for particular solutions of problem popped up from real environment. On the other hand, even though there is plenty of technologies offered for sell or licensing they seems to have trouble to get their opportunity for implementation. Whether this situation happened due to mismatch of needs of industry and academia (e.g. orientation on basic research) or this situation is simply effect of more challenging requirements and cost efficient solution from practice the development and further application of ecosolutions should be supported with aim to achieve positive impact on environment.

The virtual lab tools therefore supports the creation, showcasing and generation of the new ecoinnvoations technologies.

5.1.2 SUCCESS STORIES

Success stories session is available for providing inputs by all users and with aim to support the demand and application of ecotechnologies into practice, it offers examples of already applied resolutions and latest research products and are ready to be used in industry. This session supports the existing research and showcases to companies the results of their research.

Very common problem in the application of ecosolutions developed in academia our in research centers is that it receives very little media attention or opportunity for showcase. The problem is also too complicated explanation of the developed product to business and industrial customers, therefore in the session success stories, users and interested parties are invited to show their solutions in more easy or narrative way.



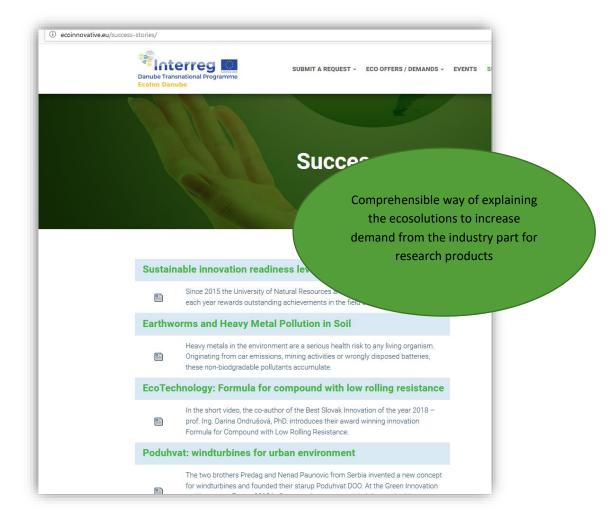


Figure 6 : Success stories session in lab: http://ecoinnovative.eu/success-stories/

5.1.3 EVENTS COLLECTOR

The session covers events that are concerned with circular economy, eco-innovations, environment, sustainable technologies, biotechnologies and related themes. The aim of the event calendar is to provide companies and industry with option to find suitable counterparties in concerned topics in the Danube region. Research institutions and academia are welcome to add here events and advertise their activities such conferences or workshops to invite participants from industries or general public.



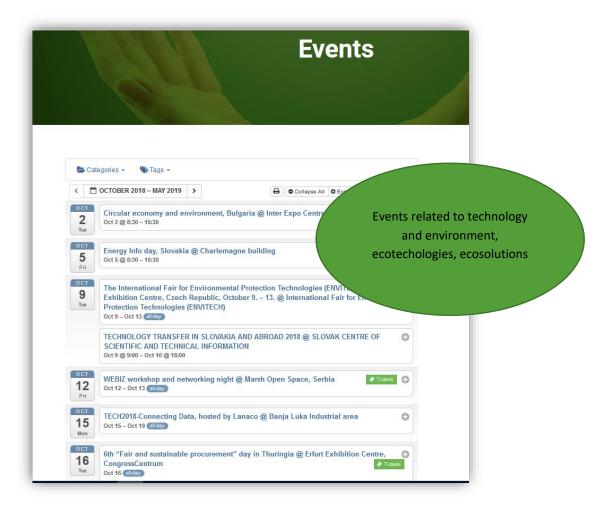


Figure 7: event collector

Events organized by project partner

5.1.4 EXPERT DATABASE

The virtual lab ecoinnovative.eu provides the users within more than hundred experts from Danube region ready to provide their services (counseling, lab tests, and technical assessments) to customers. Currently the direct contact is available at contact points. The database contains areas of search or specialization of the expert and of his/her scope of activities in concerned field.

Experts from the field of ecoinnovations, ecotechnology, or other support services in transfer of technology are invited to join the expert database and establish transactional connections and cooperation to those who ask for their support services.



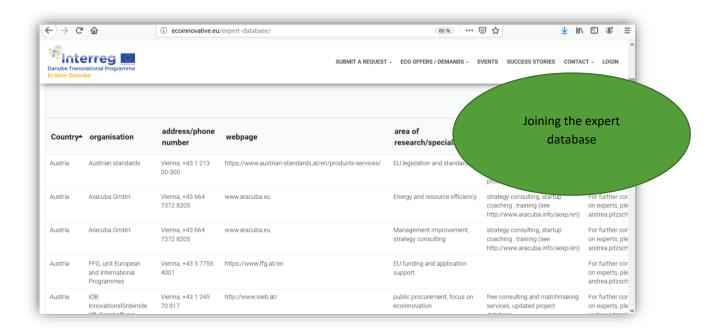


Figure 8: Expert Database

5.1.5 INTERACTIVE ECOINNOVATION STAKEHOLDERS MAP

The stakeholder map is a visual interactive representation of eco-innovation actors from the Danube region. The main purpose of the stakeholder map is to empower users to:

- View the organizations that are involved in eco-innovation in their country and within the region
- Understand the role and purpose of each organization (how they impact ecoinnovation)
- Access to contact points within these organizations/interest groups
 The tool is designed to be expanded with additional contacts. A comprehensive guideline are available for users of the virtual <u>stakeholders map</u>.

The general aim of the stakeholders map is to involve all kinds of organizations active in ecoinnovations. Institutions involved in the stakeholders map can support the research with their services or provide national specific information. Exchange of knowledge of between different types of institutions can support the further research as well as to find possible funding.



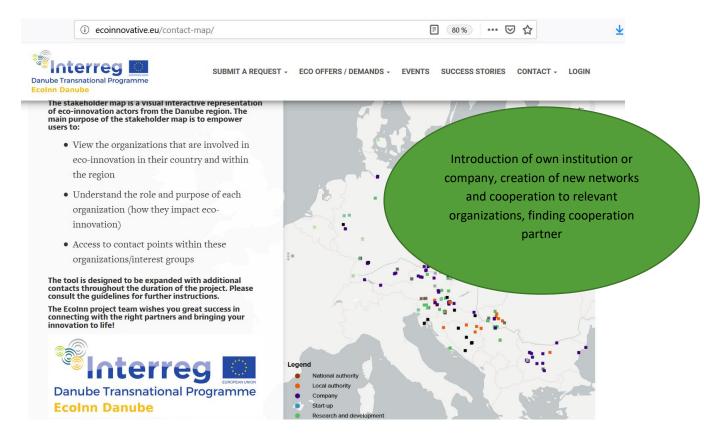


Figure 9: Interactive stakeholders map

5.1.6 LIBRARY WITH ECOTECHNOLOGIES

The library itself serves as a complete list and description of ecotechnologies and requests for them. Two libraries are created with aim to support the matchmaking in demand and supply for ecotechnologies:

- 1.Library with demands for ecotechnologies
- 2. Library with supply for ecotechnologies

The library provides space to show, advertise and pitch ecosolutions creates targeted demand for particular needs of industry and companies not only active in ecotechnology business but with need to resolve production problems and become more energy, waste or material efficient.



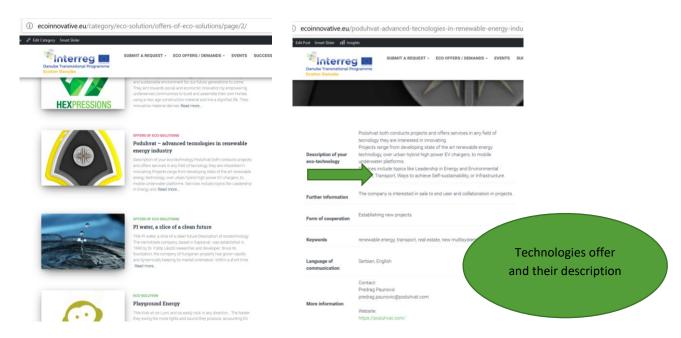


Figure 10: Library with offeres of ecotechnologies

6. CREATING NETWORK FOR ECOINNOVATION AND ITS ROLE TO BOOST ECOINNOVATION SUPPLY AND DEMAND FOR ECOTECHNOLOGIES

The network of ecoinnovators as a natural continuation of the project activities with aim to further build awareness and support the cooperation of different parts of ecoinnovation system. The network itself is established in the ecoinnovative.eu webpage and newcomers can join the network via filling in a form under section join us!

- The creation of ecoinnovators network is coordinated by the Slovak center of Scientific and Technical Information, Lamačská cesta 8/A, 811 04 Bratislava
- Project partners of the Ecoinn Danube project are member of the network
- The network provides to its new member:
 - Inclusion of your institution to contact stakeholders map
 - Inclusion of your experts and expertise into expert database
 - Advertising your events
 - Adding your success story to the webpage
 - Regular information from partners on events, workshops, and other cooperation opportunitie
- The network plans to provide in order to support the supply, generation and development of ecotechnologies and ecosolutions:



- Capacity building events (summer schools, innovation forums in the area of ecoinnovation, these will be listed in event calendar)
- Information sharing, Knowledge exchange and contact for stakeholder and institutions in the field of interest
- Support services offered by EcoInn Danube partners is form of their own service portfolio (including opportunity to pitch ecoinnovative idea, receive information on business opportunities in DR, receive information of regional support systems, counseling in area of intellectual property, creative lab in Slovakia)
- Space to advertise ecoinnovative products and ideas
- Space to call for cooperation in demand session in the particular field of R&D

Applicants and member of the network are welcome to provide suggestions for improvements of the network and contribute to better functionality of tools supporting the supply for ecoinnovation.

6.1 FURTHER ACTIONS PLANNED TO DEVELOP THE NETWORK TO BOOST THE DISTRIBUTION OF SUPPLY

- Develop a code of conduct
- Organize yearly meetings of the network member
- Secure financial support and volunteering actions for official establishment and further continuation of the network
- Bring the ecoinnovations closer to communities of companies and industrial association
- information to policy makers cooperation, strategies municipalities (exchange of information in the DR), future structural finding
- Creating session with profiles of researchers in the field of ecoinnovation.