



WP3 - D.3.2

Energy Angels

User Manual



H2020-EE-2015-3 Market Uptake · Project nr: 696112 · Coordinator: ITCL



WP3 - Energy Angel Network

Deliverable D.3.2 - Energy Angels User Manual

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Abstract :	This document provides information to any Energy Angel or to any potential one concerning its role, rights and obligations with being part of the Energy Angel Network.
Status:	<input checked="" type="checkbox"/> PU - Public <input type="checkbox"/> PP - Restricted to other programme participants (including the Commission Services) <input type="checkbox"/> RE - Restricted to a group specified by the consortium (including the Commission Services) (please specify the group) <input type="checkbox"/> CO - Confidential, only for members of the consortium (including the Commission Services)

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I. Objective of the Energy Angel Network.

The Energy Angel Network was founded in the framework of the EnergyWater project (<http://energywater-project.eu>) with the objective of creating a network of experts in energy efficiency in order to remove barriers for project implementation in European manufacturing industries.

There are three overarching aims:

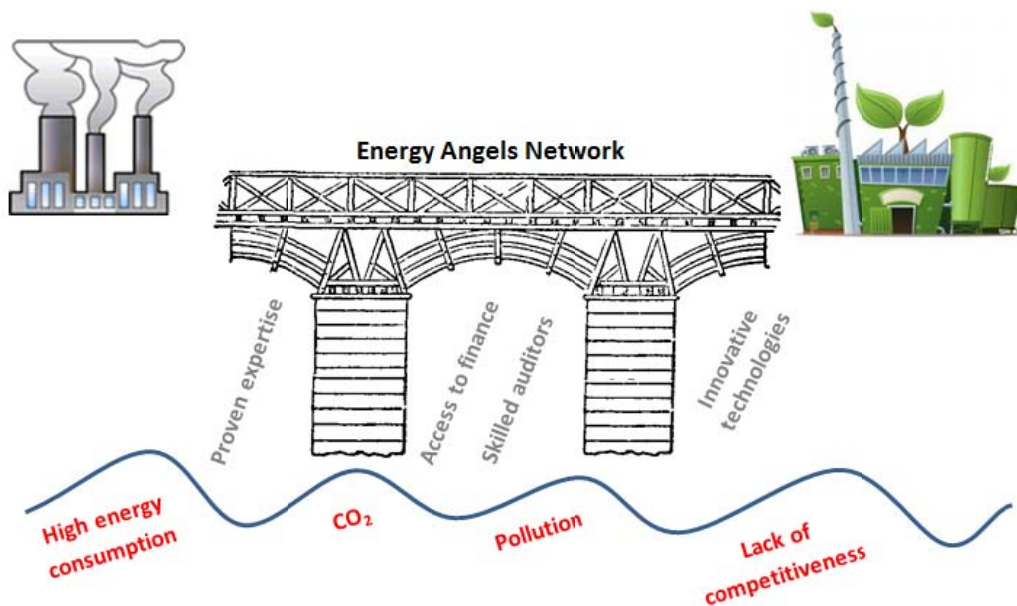
- i. Support industry across the European Union to identify and implement energy efficiency measures across industrial water processes.
- ii. Bring together energy efficiency stakeholders, including energy efficiency experts, ESCOs, technology suppliers, energy managers and energy auditors throughout the whole of Europe.
- iii. Facilitate contact between industry and skilled experts with the objective of providing them with support for the implementation and financing of their energy efficiency projects.

To enable these aims, we would like to gather energy experts (Energy Angels) from all around Europe to ensure the network has the capacity to respond to energy efficiency challenges regardless of regulatory and language differences across the EU. The 10 partners of the EnergyWater consortium are the first angels of the network and we are looking to grow rapidly to respond to the growing market needs.

Towards achieving its objectives, the network shall:

- Facilitate contact with skilled energy auditors and managers, suppliers, funders, and industry professionals with an interest in energy efficient use of water.
- Provide high-quality services in technical, financial, legal and management aspects associated with energy efficiency in water use.
- Maintain the Energy Management Self-Assessment (EMSA) web tool, including collecting and updating data to facilitate benchmarking and identification of best practice.
- Exchange experience and information on relevant EU environmental legislation and make recommendations on proposed legislation.
- Develop best practice strategies to increase energy efficiency through different processes in industry.
- Provide expertise on innovative technologies on energy efficiency.
- Support the implementation of new energy efficiency projects and facilitate networking for Research and Development (R&D) proposals.
- Provide training and support for Energy Angels.

The Energy Angel network will work as a bridge, removing market barriers to increase energy efficiency in industry.



II. Benefits of joining the Energy Angel Network

1. **Access to an innovative energy efficiency self-assessment web-tool (EMSA Web-Tool) that will increase industrial energy efficiency in water processes across European countries.** The Energy Management Self-Assessment (EMSA) web tool is a free and anonymous tool that European manufacturing industries can use to compare and benchmark their energy performance in industrial water processes. Following a company's self-assessment, the tool will provide guidelines with tailored measures to improve energy performance.



The EMSA web tool is 100% confidential and anonymous. Nobody will have access to company data except the Energy Angel and contact chosen by the company. Any result used for benchmarking with other companies will be anonymised. This confidentiality is predicted to be vital in providing an attractive and low-risk proposition for companies.

When a company inputs their data anonymously into the tool, it displays the potential energy savings in water processes and the position of the company relative to other companies with the same processes. The evaluation and ranking process will be based on quantitative and qualitative data from both management and technical processes:

- Quantitative processes: Number and type of equipment, water flow, work temperatures and pressures, costs, water consumption, etc.

- Qualitative Processes: Internal functioning of the company, Plan-Do-Check-Act Method, CAF Method, etc.

The EMSA web tool will produce the following results:

- A company ranking position by sector, country, process, etc.
 - General recommendations for improvements.
 - A list of Energy Angels that are providing services in the area of reference.
- 2. Become part of a European wide database that is freely available to industry.** Through the Energy Angel Network, companies will have access to a dedicated database of energy efficiency experts. They will be able to choose an Energy Angel based on a number of characteristics (e.g. language, location, reviews from previous clients and field of expertise). Once an industrial company has agreed to work with an Energy Angel, they will collaborate with each other to enter data into the web tool and thereafter identify energy efficiency opportunities. The online nature of the tool allows the energy expert - company interaction to happen either face to face or remotely. The tool allows the company to grant permission access to the chosen energy angel to assist them with entering data into the tool and interpret the results, as required, to formulate potential saving opportunities.
 - 3. No participation costs.** The project is mission driven and looking to drive impact across the European market. There are no cost to participate in the project. Access to the EMSA web tool and training sessions will be free until the end of the project (31-01-2019).
 - 4. Build long-term commercial relationships by being automatically recommended to companies using the EMSA tool. Your work will be scored and validated, ensuring equal opportunities for all Energy Angels.** The goal of the Energy Angel Network is to promote continuous action on behalf of the industry. Thus, Energy Angels will be able to foster long-term commercial relationships with clients.



Improved exposure to industry. It is expected that up to 1.000 companies will use the EMSA tool by early 2019. The database will increase the visibility of Energy Angels for companies engaging with the tool. Having been validated as an Energy Angel, SMEs will have greater confidence in contacting Energy Angels to pursue business opportunities. Furthermore, several workshops and meetings will be organised within the Network. These events are a great opportunity to share perspectives, focus on innovations and foster partnerships with other Energy Angels. This will be a great opportunity for Energy Angels to stay up to date on recent industry developments.



III. Network Services and Structure.

During 2017 and 2018 (the project inception phase) the network will be managed by a board formed by the 10 members of the EnergyWater consortium (http://cordis.europa.eu/project/rcn/200074_en.html).

Once the network is consolidated (2019 and beyond) it is expected that a **non-profit association will be constituted in order to form a legal entity with all the companies that are offering services related with the Energy Angel network.**

The services that the Energy Angel network will provide through these associates are the following:

Icon of the service.	Number , name and description of the service.
	<p>Service 1: EMSA tool support.</p> <p>The EMSA web tool is an Energy Management Self-Assessment methodology that allows any industrial company to input data and receive an initial energy efficiency evaluation. This evaluation will be based on quantitative and qualitative data about their water processes. Results obtained include:</p> <ul style="list-style-type: none"> - Initial energy efficiency assessment. - Benchmarking and ranking position between industrial companies by sector, size, country, etc. - List of improvement actions. - List of related Energy Angels with required knowledge. <p>The Energy Angels will provide the companies not only with advertising but also with an understanding of the EMSA web tool and guidance to input data after a short training session.</p>
	<p>Service 2: Energy audits and consultancy.</p> <p>Expert advice on energy management and identifying energy-saving opportunities.</p> <p>This service is related to the necessity of informing manufacturing companies about their potential implementing energy efficiency measures.</p> <p>Information about specific regulatory requirements linked to energy efficiency will be provided. The EU has mandates in place for each of the member states to have energy efficiency legislation in place. In addition, there may be further country-specific regulations requiring additional action for companies.</p>

	<p>Energy audits could be provided as the most effective way to identify energy-saving opportunities.</p> <p>The Energy Angels network will provide a quality mark to the companies with recognised accreditations for energy audits, ESCOs' services, etc.</p>
	<p>Service 3: Implementation and innovation support.</p> <p>Each Energy Angel will provide advisory services in fields such as:</p> <ul style="list-style-type: none"> - Advising on suitable technology providers. - Highlighting possible innovative solutions. - Facilitating contact with ESCOs and other relevant providers.
	<p>Service 4: Provider of financial advice.</p> <p>One of the main barriers to implementing energy efficiency measures is availability of finance. Energy Angels will provide advice about different financial options, contact with financial entities, as well as financial incentives in each geographical area.</p>

IV. Who does the Network target?

The target group for the Energy Angel Network will be those who will benefit from its use. Energy Angels will **benefit any industrial manufacturing company** and any actors that are related to development, implementation and maintenance of equipment installed on water related processes (wastewater or process water) including engineering and consulting companies.

Thus, services provided by the Energy Angel Network will be targeted towards:

- **Manufacturing companies:** We have identified a number of manufacturing sectors that the network will cover, as outlined below. The network are expected to target technical experts, company executives, manufacturing process supervisors and maintenance supervisors, as these individuals will ultimately make decisions regarding the implementation of the EMSA tool.

Manufacturing sectors covered by the network are:

- Paper Industry
- Packaging industry
- Food industry
- Chemical industry
- Metallurgical industry
- Pharmaceutical and biotechnical industries
- Textile industry
- Oil industry

- Automotive industry
- Electronic industry
- Natural stone manufacturing
- Leather Industry
- Industrial laundries
- Metal recovery plants

- **Engineering Companies:** Engineering companies should be aware of the services provided by the Network. They will then be able to request relevant services for both new and existing projects in the water management sector.

- **Technical & Financial Consultants:** Technical and financial consultants will promote and require Energy Angels support, for the implementation of the most efficient practices in projects related to industrial water processes.

- **Industrial Associations:** Industrial Associations are the voice of the sector and also advise companies within their sector on a multitude of topics including: finance, business planning and technical assistance. Thus, Industrial Associations could offer Energy Angel services as a pioneering approach for energy efficient management of water.

- **Public entities:** Energy Angels should consider Europe-, State-, Provincial- or Municipal-level entities. Although these entities will not use Energy Angels directly, the impulse given by public entities regarding policy implementation should be aligned with Energy Angels services. To achieve a common European approach, decision makers at each level need to be reached.

- **ESCOs:** ESCOs will ask for Energy Angels services in order to provide the best options available and perform studies targeted to improve energy efficiency in different industrial sectors.

V. Energy Angel Network membership rules

V.1.Pre-requisites

One of the main goals of the EnergyWater project is the creation of an accessible network where anyone can enter and become an Energy Angel.

In any case all new members participating in the Energy Angel network have to meet the following requisites:

- Be legally constituted as a legal person.
- Demonstrate experience working on energy efficiency related to the services provided.
- “Service 1: **EMSA tool support**” can only be provided after participating in a specific training session organised by the network.

V.2. Organisations eligible to join and expected services

Any organisation working within energy efficiency and providing one of the services listed in section “III. Structure and services of the Energy Angel Network” can become part of the Energy Angel network.

The possible profiles of Energy Angels could be:

- **Professionals working in the manufacturing sector.**

Professionals that are responsible for areas such as: Quality Assurance, Maintenance, Environment, Management, and Energy could become part of the Energy Angel Network.

- **Technology providers.**

Technology providers of any kind could benefit from joining the Network. If a company needs new equipment, a technology provider will help perform the best improvement actions.

- **Consultants/Energy Auditors.**

Professionals working as consultants will also be valuable for the improvement actions depending on the actions proposed; the company may be interested in a more detailed study of the whole company.

The studies that can be proposed as improvement actions will vary in topic from energy efficiency to financial and legal. In order for companies to be able to provide all improvement actions proposed, specialist consultants in different fields should be included in the project.

- **Energy services providers and ESCOs.**

Energy services providers who also provide certifications to companies will enrich the project, as some of the companies will go through the assessment procedure as a pre-energy audit.

- **Professional Associations.**

Associations providing information about potential energy services providers, informing about legal and administrative requirements, or updating companies with financial incentives information could be part of the network.

V.3. Obligations for Participation

The main obligations of an Energy Angel Network member are to:

- Act in fair and transparent manner at all times. All Energy Angels will act in the highest degree of trust and good faith when interacting with industry and the EnergyWater project partners
- Provide companies only with the services you are able to offer effectively. If you are not able to provide a specific service, you may contact an Energy Angel able to do so and develop a partnership.
- Collaborate with EnergyWater partners in order to improve the structure of the network as well as the functionality of the EMSA web-tool.
- Respect confidentiality of data obtained from companies and commit not to divulge or use data for personal gain.
- Supply EnergyWater project partners with a concise report of your engagements in January 2018 and December 2018. We do not want to burden Energy Angels and therefore we only request that Energy Angels provide a brief summary of their engagements and key findings from their interaction with industry based on the EMSA web tool.

Additionally, **Energy Angels providing “Service 1: EMSA tool support”** must:

- Promote the tool and support companies in entering data into the tool. In gaining access to the tool we expect you to promote the tool within your network and support interested parties in entering data into the tool.
- Validate data. We expect Energy Angels to validate as far as possible the integrity of the data that is being inputted into the tool.
- Energy Angels should keep updated company data within EMSA during the time of engagement.

V.4. Participation in training sessions

Energy experts who are looking to use the tool and support companies in entering data and understanding the yielded results are required to follow at the minimum the basic level EMSA web-tool training. Training will also be available in topics such as industrial water equipment and energy efficiency. Several training sessions will be organised in order to improve the knowledge and capacity of future Energy Angels.

The topics that will be covered in the training are the following:

- CAF methodology.
- EMSA web tool guidance.
- Industrial water processes and their principal equipment.
- Energy management.
- Water resources management and policy.

- Efficient use of equipment.
- Energy and financial savings techniques.

Furthermore, some specialised training will be provided depending on the preferences of the audience about topics like:

- Energy audits.
- Energy audit software.
- National and international regulations.
- Financial advising (searching methods, historical background, existing and future ones).
- Financial services (provide loans, tax rebates and grants).
- Legislation (legal procedures that a company should follow internally as well as external ones).
- Specialized equipment for every water process.
- Advanced Energy Management.

Training sessions will be organised:

- 1. On-site.** Until 2018 five training sessions will be planned in Belgium, France, UK, Spain, Italy and Poland.
- 2. On-line.** A Massive Open Online Course (MOOCs) will be ready for 1st 2018 quarter.

All Energy Angels participating in the on-site training will be validated to provide Service 1: EMSA web-tool support.

VI. Signing up to and leaving the Network

VI.1. Signing up to the Network

To sign up as an Energy Angel: All entities interested in participate in the Energy Angel Network should sign-up in the following link <http://energywater-ems.eu/index.php/angelsignup>



Energy Angels Sign Up Form


Name
Please provide your Name

Username
Username can contain any letters or numbers

E-mail
Please provide your E-mail

Password
Password should be at least 4 characters

Password (Confirm)
Please confirm password

Human verification No soy un robot 
Please verify that you are human

Once the sign-up is done, each potential Energy Angel has to provide some specific information about:

- Contact details.
- Previous experience and knowledge.
- List of services that they are interested in providing.

All the recorded data will be reviewed by an EnergyWater project partner in order to verify their authenticity.

Once an Energy Angel registration has been validated, their data will appear in the ESMA web-tool as Energy Angels providing different services (from those in “Section II. Structure and services of the Energy Angel Network”).

Energy Angels are allowed to use the trademark in commercial materials by mentioning the following note: “Energy Angel network is part of the EnergyWater project that has received funding from the European Union’s Horizon 2020 research and innovation programme under grant agreement No. 696112”.

VI.2. Leaving the Network

An Energy Angel may leave the Network for two main reasons: either they wish to leave, or the Network Administration Board wishes the Angel to leave. The leaving process is different in either case.

Energy Angel wishes to leave.

If a former Energy Angel wishes to leave the network, the leaving protocol will be activated and the Energy Angel must follow the following steps:

The first step is to request to leave the network. To make that request, the Energy Angel do so in the “My Profile” tab in the EMSA web tool.

Once this option has been selected and saved, the leaving protocol will start. Initially a notification is sent to the consortium members, and subsequently over a period of 3-5 working days, the Energy Angel will receive confirmation of leaving the network.

The Energy Angel will no longer be able to access to the information regarding his clients or previous assessments, as well as information regarding best practices and improvement actions. The profile will disappear from the EMSA tool and the Energy Angel will be unavailable to companies engaging with the project.

In the case that the Energy Angel has paid an annual fee to be part of the Network, this money will not be refunded, and will be used in improving the Network.

Once the Energy Angel has left the network, they will be able to join the Network again whenever desired according to the normal joining process.

Network Administration Board wishes the Angel to leave.

If the Administration decides that an Energy Angel should leave the Network, this is likely because it has been deemed that the duties are not being fulfilled satisfactorily.

The Administration Board may decide that an Energy Angel should leave the Network if:

- Answers completed by the candidate in the initial questionnaire are found to be false.
- The Energy Angel fails to follow confidentiality guidance.
- The candidate doesn't respect the project time periods.
- The Energy Angel completes two or more assessments incorrectly.
- The Energy Angel receives very low score ratings from several companies.

- The Energy Angel provides poor or incorrect improvement advice to assessed companies.
- The Energy Angel acts in an unprofessional manner towards companies engaging with the project, or the Network Administration Board.

The above list is non-exhaustive and subject to change during the duration of the project. The Network Administration Board will make the ultimate decision on the status of an Energy Angel.

In the case that the Network Administration Board decides that an energy Angel should leave the network, the Energy Angel's account will be frozen and the Energy Angel will receive an email notification of dismissal. After a period of 3-5 working days the Energy Angel profile will be removed from the EMSA web tool.