



D4.2 Database and search engine which connects SMEs to relevant energy service providers

GEAR@SME: GENERATE ENERGY EFFICIENT ACTING AND RESULTS AT SMALL & MEDIUM ENTERPRISES



Gear@SME
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Project Factsheet

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Abbreviations

EEM	Energy Efficiency Measures
ESS	Energy Supply Side
MO	Multiplier Organization
SME	Small and medium-sized enterprises
TP	Trusted Partner
UC	Use Case
UCL	Use Case Leader
WP	Work Package
dena	Deutsche Energie-Agentur (German) German Energy Agency (Eng)
BfEE	Bundesstelle für Energieeffizienz (German) Federal Energy Efficiency Center (Eng)
EGE	Esperto in Gestione dell'Energia (Italian) Energy Management Expert (Eng)
ESCO	Energy Service Company
ANRE	Autoritatea Națională de Reglementare în domeniul Energiei (Romanian); National Authority for Energy Regulations (Eng)
MDLPA	Ministerul Dezvoltării, Lucrărilor Publice și Administrației (Romanian) Ministry of Development, Public Works and Administration (Eng)
BMWi	Bundesministerium für Wirtschaft und Klimaschutz (German) Ministry for Economic Affairs and Energy (Eng)
BAFA	Bundesamt für Wirtschaft und Ausfuhrkontrolle (German) Federal Office of Economics and Export Control (Eng)
KfW	Kreditanstalt für Wiederaufbau (German) Development bank (Eng)
ARERA	Autorità di regolazione per energia reti e ambiente (Italian) Regulatory Authority for Energy, Networks and Environment (Eng)



Executive Summary

This report (Deliverable D4.2 of the GEAR@SME project) presents an overview of existing databases and search engines used in Germany, Italy, the Netherlands, and Romania, to provide information concerning energy service providers. The main target groups of these databases and search engines are Trusted Partners (since they are advisors to SMEs in selecting suppliers) and SMEs themselves.

This deliverable relates to Task 4.4 of the GEAR@SME project. The initial phase of this task focused on the search, identification and selection of the tools already available for the purpose. It was found that databases and search engines are already made available by official sources (e.g. Energy Agencies or Ministries themselves) in each of the above-mentioned countries. The tools analysed are already widely used by companies and other stakeholders and regularly updated. As a consequence of these findings, the Consortium decided not to develop new databases, but rather to use this report to present relevant existing databases and make available a set of instructions/useful information for their use (e.g. type of experts/services contained in the lists, search fields, weaknesses and strengths of the existing search engines).

The use of existing databases/search engines does not require a dedicated plan for updating the search engines and their related databases that would have needed to stretch beyond the project lifetime, thus providing users with a significant advantage.

The information collected will be made available through the online portal www.energyefficientsme.eu



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1 Introduction

1.1 Background

The GEAR@SME project aims to substantiate the role of a local Trusted Partner (TP) who supports Small and Medium-sized Enterprises (SMEs) in implementing Energy Efficiency Measures (EEMs). The Trusted Partner is a neutral actor, or a group of actors, trusted by the SMEs and able and willing to drive the development of energy collectives and collective energy projects. The Trusted Partner supports SMEs in energy efficiency topics, amongst others, by acting as intermediary between SMEs and Energy Service Suppliers (ESS). The Trusted Partner is supported by the GEAR@SME methodology, which aims to catalyse the implementation of energy efficiency measures by taking a local, collective approach based on multiple benefits, tailored to each country's specific peculiarity.

The GEAR@SME project supports the activities of the TP by providing it with the GEAR@SME methodology. This does not only mean producing written guidelines, but also providing effective instruments and tools that support the TP and the SMEs in the implementation of the GEAR@SME methodology and in dealing with energy efficiency, in general.

An analysis of the needs carried out in WP2 allowed the Consortium to identify the gap between demand and offer of energy services (i.e. between SMEs and ESSs), and needs to be bridged in order to achieve a wider implementation of energy efficiency measures in SMEs. In this framework, not all the SMEs know where to turn when it comes to getting services such as energy audits and the design/implementation of energy efficiency measures. While the TP can help, it can sometimes also be difficult for them to provide useful advice. Therefore, Task 4.4 and this deliverable are aimed at addressing this need, and, more specifically, the potential of the existing search engines and databases that can be used by SMEs and TPs so as to find information on ESSs to contact for the services needed.

1.2 Objectives

The report provides information about existing databases and search engines and explains the approach employed to evaluate the databases available in each country. The existing databases, the list of functionalities and the available search fields were collected in this report on the basis of the specific situation of each country. The main objective is to help TPs to use these tools to find the right provider that can identify and implement energy efficiency measures. The materials produced are presented in the form of guidelines or comprehensive lists.



This document, and the materials produced, are part of the toolset to support the GEAR@SME methodology. Hence, the guidelines on using local search engines will be made available through the GEAR@SME online portal: www.energyefficientsme.eu.

1.3 Structure of the deliverable

Following the introductory section, the deliverable is structured as follows:

- **Section 2** presents an overview of existing search engines in the different countries where the use cases are located. In each country, the available search engines, other useful tools and databases that can be used by SMEs and TPs to identify potential ESSs are described.
- **Section 3** presents the actions undertaken in the project to help find appropriate ESS.
- The Annexes **show** the functionalities of the single databases in detail.

2 Analysis of existing search engines

This section of the deliverable contains information on the existing search engines available in each of the four GEAR@SME use case countries (Germany, Italy, the Netherlands, and Romania).

In the initial phase of GEAR@SME, it was assumed that there was a need to develop a suitable search engine in order to facilitate finding appropriate ESS. However, during the research of existing tools, it became clear that current search options provide a good insight into available suppliers. The Consortium concluded that making a new search engine within the project would most likely not provide sufficient added value to justify the effort. The two main considerations in this conclusion were:

1. In general, existing search engines generate suitable results;
2. A new Gear@SME search engine would probably not be sustainable because it would be very difficult to find parties that would want to invest in keeping the Gear@SME search engine up-to-date.

The following table presents the results of the detailed analysis concerning the databases currently existing in each use case country. As shown, the different evaluation categories were divided into three main subgroups:

- Available search possibilities: What are the filters that can be used to limit the search?
- Available parameters in search results: What information can be obtained from the database?



- Filter options for search results: What additional filters can be used to further limit the number of search results?

A colour code is used (green for “yes”, i.e. feature available, red for “no”, i.e. feature not available) for a clearer understanding of the results.

Summary of the results of the search engine analysis				
Country	Netherlands	Germany	Romania	Italy
Name of the database	Techniek Nederland	EnergieeffizienzExperten	Ministry of Energy	Accredia
Available search possibilities				
Location	yes	yes	yes	no
Service	yes	yes	yes	no
Energy efficiency is a possible service search item	no	no	no	no
Sustainability is a possible service search item	yes	no	no	no
Certification for specialized work	yes	no	yes	yes
Name supplier	yes	yes	yes	yes
Available parameters in search results				
Name supplier	yes	yes	yes	yes
Website	yes	yes	no	no
Phone number	yes	yes	yes	no
Address	yes	yes	yes	no
E-mail address	yes	yes	yes	no
Certifications	yes	no	yes	yes
Rating	yes	no	no	no
List of services	no	yes	yes	no
Date of expiration for authorization	no	no	yes	no
Filter options for search results				
Relevance	yes	no	no	no



Rating	yes	no	no	no
Name	yes	yes	no	yes
Distance	yes	yes	no	no

The results highlight that the situation is quite satisfactory for the Dutch, German and Romanian cases: the existing search engines and databases provide most of the desired features, both in terms of search selection criteria, information available and search results filtering options. The system currently in place in these three countries seems sufficiently performant so that any additional efforts from the GEAR@SME project partners can be avoided. The existing databases in these countries will therefore be listed and the main characteristics, fields of research and target users will be indicated.

The situation is different in the case of Italy, where the existing databases have comparably fewer desired features. The most extensive database, Accredia, is designed as a way to verify the validity of certifications, rather than as a search engine, and this is shown by the limited amount of information available. It was not developed as a search engine for services. The situation is however mitigated by the availability of other search engines or databases, with different functionalities, that can help SMEs in identifying suitable ESSs.

The following paragraphs provide information on available search engines per country. The original versions of these documents will be capitalized in the GEAR@SME portal, so that they can be used by the TPs and SMEs who search for information on the portal.

2.1 Germany

In Germany, several “official” databases already exist listing energy experts for planning and consulting (dena list, see first bullet point below) and providers of energy services, energy audits and other energy efficiency measures (BfEE list, see the second bullet point below).

Existing databases with key features are shown below, while a detailed description of each database and its related guidelines is presented in Annex 1:

- <https://www.energie-effizienz-experten.de>: List of independent advisers for Energy consulting & energy planning and construction supervision. The list is from the German Energy Agency (dena).
- <https://elan1.bafa.bund.de/bafa-portal/bfee-suche/>: List of energy services from the Federal Office for Energy Efficiency (from the Federal Office of Economics and Export Control).



- <https://www.energie-experten.org>: this database offers the possibility to look for experts entering a postal code and type of expertise (energy consulting, as well as providers are listed in this database).

2.2 Italy

In Italy there are several databases of Energy Management Experts (EGE) and Energy Service Companies (ESCO). Accredia is the only national accreditation body appointed by the Italian Government in compliance with the application of the European Regulation 765/2008, attesting the competence, independence and impartiality of certification, inspection and verification bodies, as well as testing and calibration laboratories. Within the Accredia website it is possible to find:

- The list of Experts in Energy Management (EGE) certified according to UNI CEI 11339 is available in the Accredia databanks;
- The list of ESCOs certified according to the UNI CEI 11352:2014 standard is available in the Accredia databanks.

The Italian partners involved the developers of Accredia to evaluate the possibility of making additional data on EGEs or certified ESCOs available. The objective of the Accredia database is to collect professionals verifying their compliance with the current legislation and making available some data including name, surname, certification body and certification sector (for EGE). The opportunity to make additional data available is left to the individual certification body. Some certification bodies provide a search engine that allows identifying certified professionals on the basis of specific criteria such as geographic area of activity and list of competencies in the field of energy efficiency thus enabling the selection of the most suitable professional according to the relevant needs.

Besides Accredia, other systems to search for EGEs and ESCOs are available online. There are also several portals that allow searching energy efficiency products and services.

In particular, an interlocution has also been activated with the regional Head of the Association of Energy Management Experts. Moreover, the association has its own database that allows users to search for member experts by filtering by name, surname, sector, city. Furthermore, it directly provides the link to the LinkedIn page to allow users to conduct a more in-depth search.

Regarding the provision of energy efficiency products and services, the PagineGialle portal is available and can be used to request free quotes from suppliers. Small businesses can easily use ARERA's Offers Portal to compare electricity and natural gas offers in an immediate, clear and free manner.



More details on the different search engines and databases identified in the Italian context are made available in Annex 2.

2.3 Netherlands

In the Netherlands, the “Techniek Nederland” (<https://www.technieknederland.nl>) database and search engine allow finding many different types of ESSs and filtering them on the basis of their location, services, and certifications. This is the most usable one and contains the most relevant and significant information for TPs and SMEs who are looking for ESSs in the Netherlands.

The search also included two less relevant, but still useful databases, more relevant for smaller suppliers: the Dutch Yellow Pages (<https://www.detelefoongids.nl/>) and the website for receiving supplier offers Offerte.nl (<https://offerte.nl/>).

The combination of these three search engines was deemed sufficient to meet the needs of the TPs and SMEs. Additional details on the aforementioned databases and search engines are provided in Annex 3.

2.4 Romania

In Romania, three main bodies have the most relevant search engines/databases which are regularly updated and publicly available: two of them are represented by different Government bodies, i.e., the Ministry of Energy, Energy Efficiency Department and the Ministry of Development, Public Works And Administration (MDLPA) and the other one is represented by the National Authority for Energy Regulations (RO: Autoritatea Națională de Reglementare în domeniul Energiei – ANRE).

In this regard, the existing search engines will be used within the task, without creating any new one as a searchable database is available and includes several useful specifications, which will be presented in Annex 4 where each search engine/database will be described on the basis of the body which is responsible for.

3 Results

The work done within Task 4.4 highlighted the different situations that exist in the four countries where GEAR@SME’s use cases are located. Below are summarised the main conclusions of the aforementioned analysis, the evaluation of the use of existing databases and the main actions that will be taken by partners to capitalise on what has been done. As it can be seen, while differences exist in the quality and completeness of the databases available in the four use case countries, the main conclusion of the work of Task 4.4 was that the existing tools available in the four countries are sufficient, and that SMEs and TPs can be supported by the GEAR@SME project by facilitating the access to the existing tools.



3.1 Germany

The experts list provided by dena is well acknowledged nationally, kept up to date and gives sufficient qualification standards. SMEs who want to get founded for energy efficiency services must turn to a dena list expert. The searching function of the BfEE does not entirely fit the requirements identified within the project, but can still be used as a complement. In addition, another database listing suppliers is mentioned, also to be used as a complement.

The project partners therefore deemed sufficient to provide a useful description, which includes practical usage guidelines, on how to consult the dena expert list. This content is shown in Annex 1 of this deliverable, and it will be uploaded on the project portal to be available for consultation to all interested parties (SMEs, ESSs, TPs, MOs, etc).

3.2 Italy

On the basis of the work carried out and described in Section 2.2, it was concluded that in the Italian panorama there are currently multiple opportunities for SMEs to find an expert in energy management or a certified ESCO. In order to provide a support tool for companies in the Italian scenario, the main databases with their search capabilities, were collected and made available in Annex 2. Users will be able to verify, from time to time, which tool is the most suitable for their needs and will be able to benefit from the tools already available which are operational and updated.

3.3 Netherlands

There are several databases concerning ESS which are operational in the Netherlands. The Techniek Nederland database is certainly the most relevant for the scope of Task 4.4 of the GEAR@SME project, as it allows searching for certified operators by selecting them on the basis of the services offered, location and certificates; on the other hand, the Techniek Nederland database can be integrated by the other two searchable databases identified: the “Yellow Pages” for small suppliers and installers and “Offerte.nl” for tenders. Therefore, it was concluded that there is no added value in creating an extra database within the GEAR@SME project. A full description of the different databases and search engines is provided in Annex 3 and will be uploaded on the project portal.

3.4 Romania

In the case of Romania, the Consortium partners did an extended research to identify the most suitable search engines for suppliers of energy efficiency services in the context of the use case. Servelect and the Technical University of Cluj-Napoca identified relevant needs among the SMEs engaged within the use case and started to engage a group of energy service suppliers through the associations entitled Romanian Society of Energy Auditor and energy managers. In this context, the effort to identify relevant search

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engines was completed and will be used to advertise among SMEs and Trusted Partners. These lists are well known among large companies, especially those who are obligated by the law to assign a certified energy manager and for the potential Trusted Partners which are also energy suppliers in their park. The GEAR@SME local partners will be responsible for advertising the existing search engine among SMEs and triggering further improvements of these lists by the responsible bodies, which are also potential stakeholders of the GEAR@SME project.



4 Conclusion

This deliverable presents the results of Task 4.4 of the GEAR@SME project. More specifically, it covers the need for support, identified for both the TPs and SMEs, in finding the right energy service supplier to meet their needs of implementing energy efficiency measures. The work presented consists of:

- the analysis of the national context with regards of existing databases and search engines for energy service suppliers in each of the use case countries (Germany, Italy, Netherlands, Romania),
- the resulting information to be included in the project portal, which mostly consists of descriptive summaries of the existing tools, and, where needed, of clear manuals on how to use them.

The original aim of the task was to develop a database of energy service suppliers and to make it accessible through a dedicated search engine that would make it easy for TPs and SMEs to find who they were looking for. The grant agreement states that one of the activities to be performed in Task 4.4 is:

The incorporation of an effective search engine for finding consultants and experts in the field of energy efficiency. To this end, service providers will be listed in a searchable database, including a number of useful specifications (e.g. location, area of expertise and certification, but preferably also contain the actual, documented experiences in performing the actions of interest).

This plan was primarily made on the hypothesis of the absence of existing tools or resources in the context of the countries where the project's use cases are located. In this framework, the first step of the task consisted in verifying this hypothesis. This analysis led to the observation that in two of the four countries (Germany and the Netherlands) databases sufficiently clear, extensive and usable are already available. In the other two use-cases (Italy and Romania) we observed that existing databases are not fully up to the identified needs, but that creating new tools would not be a viable solution, since it would be too difficult to make sure to populate them with energy service suppliers and to make widely adopted and consulted by TPs and SMEs.

Following the "embed" principle of the GEAR@SME methodology, we then focused on the development of material that could ease the access to the existing databases, search engines and tools, so that users could be guided through what exists out there that they could find of use, what they can expect to find there, and how to use them.

The documentation which was collected as part of the activities of Task 4.4 related to the databases (Annexes 1 - 4) will be made available on the project portal. Within the Use

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Cases, partners will be able to recommend and sponsor the use of the databases and search engines identified and available in each country.



5 Annexes

5.1 ANNEX 1: Guidelines for German Databases

5.1.1 Energy efficiency experts – dena list

In 2011, the Federal Ministry for Economic Affairs and Energy (BMWi), the Federal Office of Economics and Export Control (BAFA) and the KfW (development bank in Germany) decided to list qualified energy efficiency experts in a nationwide database to ensure the quality of subsidized energy consultations and energy-efficient new construction or renovation measures. The list is compiled and maintained by the German Energy Agency (Deutsche Energieagentur - dena). The list can be consulted and searched through a dedicated website (<https://www.energie-effizienz-experten.de/>). More than 4,000 experts whose expertise is relevant for SMEs are now registered in the energy efficiency expert list (**energy experts mostly for planning and consulting**).

This list ensures uniform qualification standards throughout Germany as part of the federal government's funding programmes and is now considered a generally recognized seal of quality for efficiency experts. It provides reliable orientation for companies deciding on a professional advisor for their project. The approval criteria for energy experts can be found in German here: https://www.bafa.de/DE/Energie/Energieberatung/Energieberatung_Nichtwohngebaeude_Kommunen/sanierungskonzept_neubauberatung_node.html.

Companies can search for an expert in their area using their postcode and can select the different funding schemes applicable:

- consulting for non-residential buildings, installations and systems (see number 1 in Figure 1)
 - o energy audit DIN EN 16247,
 - o energy consulting for non-residential buildings DIN V 18599 (BAFA),
 - o contracting orientation consulting,
- Federal funding for energy and resource efficiency in the economy (Energy-related optimization of plants and processes) (see number 2 in Figure 1)
- federal funding for efficient buildings - non-residential buildings (efficiency buildings (KfW) and individual measures) (see number 3 in Figure 1)
 - o efficiency buildings (KfW)
 - o individual measure: Thermal insulation
 - o individual measure: Windows, doors, sun protection
 - o individual measure: Ventilation and air conditioning
 - o individual measure: Heat and cold
 - o individual measure: Lighting



Suchoptionen 4190 Experten

Postleitzahl: Umkreis:

▼ Erweiterte Suchoptionen

Bitte geben Sie mindestens 3 Zahlen im Feld "Postleitzahl"
oder 3 Zeichen im Feld "Ort"
oder 2 Zeichen im Feld "Name oder Firma des Experten" ein.

Energieberatung für Nichtwohngebäude, Anlagen und Systeme 1

- Energieberatung DIN 16247 (Energieaudit)
 - Technologieschwerpunkt: Abwärme
 - Material- und Ressourceneffizienz
- Energieberatung DIN 18599
- Contracting-Orientierungsberatung

Bundesförderung für Energie- und Ressourceneffizienz in der Wirtschaft 2

- Energiebezogene Optimierung von Anlagen und Prozessen

Bundesförderung für effiziente Gebäude: Nichtwohngebäude* 3

- Effizienzgebäude (KfW)
- Einzelmaßnahmen
 - Wärmedämmung
 - Fenster, Türen, Sonnenschutz
 - Lüftung und Klima
 - Wärme und Kälte
 - Beleuchtung

Bundesförderung für effiziente Gebäude: Nichtwohngebäude Denkmal*

- Effizienzgebäude Denkmal (KfW)

Figure 1: Filter function for the expert search on <https://www.energie-effizienz-experten.de/>

The result of the search (see Figure 2) shows and provides the name of the expert with its company details (email address, phone number and internet page). Experts can enter themselves the type of service they offer, their sector and technology focus. In the results, also a summary of the funding programmes for which the expert is called upon to advise is provided.



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+ Planung und Beratung für Wohngebäude				
- Planung und Beratung für Nichtwohngebäude				
Energieberatung für Nichtwohngebäude, Anlagen und Systeme		Bundesförderung für effiziente Gebäude: Nichtwohngebäude*		
<input checked="" type="checkbox"/> Energieberatung DIN 16247 (Energieaudit)		<input checked="" type="checkbox"/> Effizienzgebäude (07V)		
<input checked="" type="checkbox"/> Energieberatung DIN 18599		<input checked="" type="checkbox"/> Einzelmaßnahmen		
<input checked="" type="checkbox"/> Contracting-Orientierungsberatung		<input checked="" type="checkbox"/> Wärmedämmung		
		<input checked="" type="checkbox"/> Fenster, Türen, Sonnenschutz		
		<input checked="" type="checkbox"/> Lüftung und Klima		
		<input checked="" type="checkbox"/> Wärme und Kälte		
		<input checked="" type="checkbox"/> Beleuchtung		
		Bundesförderung für effiziente Gebäude: Nichtwohngebäude Denkmäl*		
		<input checked="" type="checkbox"/> Effizienzgebäude Denkmäl (07V)		
- Art des Unternehmens und unserer Leistungen				
<input checked="" type="checkbox"/> Architektur-/Ingenieurbüro				
<input checked="" type="checkbox"/> Planungs- und Beratungsbüro				
Die Angabe zur Art des Unternehmens ist eine eigene Auswahl des Experten/der Expertin und wird von der dena nicht überprüft.				
- Selbstangabe des Experten				
Energieberatung DIN 16247 (Energieaudit)				
Technologieschwerpunkte				
<input checked="" type="checkbox"/> Abwärme				
<input checked="" type="checkbox"/> Material- und Ressourceneffizienz				
<input checked="" type="checkbox"/> Energiebezogene Optimierung von Anlagen und Prozessen				
Branchenschwerpunkte				
<input checked="" type="checkbox"/> Bauliche Gebäude				
<input checked="" type="checkbox"/> Handwerksbetriebe:				
<input checked="" type="checkbox"/> Verarbeitendes Gewerbe (Industrie):				
<input checked="" type="checkbox"/> Handel				
<input checked="" type="checkbox"/> Gesundheits- und Sozialwesen				
<input checked="" type="checkbox"/> Gastgewerbe				
<input checked="" type="checkbox"/> Sonstiges				

Figure 2: Example of expert information on the dena list

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5.1.2 Federal Agency for Energy Efficiency (BfEE) list

The BfEE maintains a public list of providers of **energy services, energy audits and other energy efficiency measures** operating throughout Germany on the basis of Section 7 of the Energy Services Act (EDL-G). List available at:

<https://elan1.bafa.bund.de/bafa-portal/bfee-suche/>

In addition to more detailed information on the individual providers (e.g. contact details (see number 8 in Figure 4), company description, sector and number of employees – see numbers 1 & 2 in Figure 4), the list contains detailed information on the energy services offered. In particular, the type of service and area of application (see number 3 & 4 in Figure 4), the target groups (see number 5 in Figure 4), the focus of the work (see number 6 in Figure 4), the qualifications, the experience or number of reference projects are presented (see number 7 in Figure 4). This information is entered by the company itself. The company signs a declaration at the time of registration, proving its reliability and expertise.

The search with the postcode does not seem to work properly and a multi-criteria advanced search function is not possible. The results specify whether the providers are independent of energy companies according to EDL-G (marked with a black X).



Ergebnisse der Anbietersuche

Ihre Suche ergab 21 Treffer.

Erläuterungen zur Spalte "Unabhängig": Die mit einem schwarzen X gekennzeichneten Anbieter sind unabhängig von Energieunternehmen nach §2 (13.) EDL-G. Weitere Erläuterungen hierzu finden Sie in den FAQs zur Anbieterliste unter www.bfee-online.de.

Wichtiger Hinweis: Die Anbieterliste basiert auf eigenen Angaben der eingetragenen Firmen. Für die Richtigkeit und Vollständigkeit wird seitens der Bundesstelle für Energieeffizienz (BfEE) keine Gewähr übernommen. Die Eintragung stellt für sich genommen weder Gütesiegel noch Leistungsgarantie dar. Die Qualität der Angebote unterliegt weder der Kontrolle, noch einer Bewertung durch die BfEE.

Ergebnisse pro Seite: 5 10 20 50


Firmenname ▾	Firmensitz ▾	Unabhängig	Details
Öko-Haustechnik inVENTer GmbH	07751 Löberschütz	X	weitere Details
Energiebuendel Unabhängiges Ingenieurbüro Dipl.-Ing. Friedemann Stelzer	72764 Reutlingen	X	weitere Details
Gross Systemtechnik Daniel Groß	45661 Recklinghausen	X	weitere Details
Fa.Zeh02 Timo Zeh	55430 Oberwesel	X	weitere Details
OET Kälte & Wärme GmbH	48607 Ochtrup	X	weitere Details
Verbraucherzentrale Bundesverband Energieberatung	10969 Berlin	X	weitere Details
Meyer Haustechnik GmbH	31582 Nienburg	X	weitere Details
ratioenergie GmbH & Co KG	18211 Ostseebad Nienhagen	X	weitere Details
INGENIEURBÜRO YA-TEC MANAGEMENT Energieberatung . Erneuerbare Energien . Haustechnik . Gebäudemanagement	64853 Otzberg	X	weitere Details
Combitherm GmbH	70736 Fellbach	X	weitere Details
Flottmann & Sohn GbR	49214 Bad Rothenfelde	X	weitere Details
Energieservice Westfalen Weser GmbH	32278 Kirchlengern		weitere Details
Scholdra PBN Scholdra Scholdra	50226 Frechen	X	weitere Details

Figure 3: Example of results for the expert search on <https://elan1.bafa.bund.de/bafa-portal/bfee-suche/>



Details zu systemplan gmbh (Anbieter-Nr. 1023435)

Kontakt 1

	systemplan gmbh Wagnerstraße 14 76448 Durmersheim DEUTSCHLAND www.systemplangmbh.de Telefon: 07245915720 Fax: E-Mail: info@systemplan.endress.com	Branche: Energieeffizienz Fachverbände: keine Angabe Anzahl Mitarbeiter: 6 - 25

Firmenprofil 2

Die systemplan gmbh als Spezialist für hersteller- und vertriebsneutrale Energielösungen bietet Beratungsservices und Dienstleistungen zur Optimierung Ihres Energieverbrauchs und Ihrer Energieversorgung an. Diese Kompetenzen bieten wir in allen Medien wie Dampf, Kälte, Druckluft, Strom oder technische Gase. Wir unterstützen Sie bei der Einführung eines Energiemanagementsystems und bei der Ausführung von Energieaudits basierend auf ISO 50001 und EN 16247.

Energieeffizienzmaßnahme(n)

3

1. Maßnahme: Energiemanagement Anwendungsbereich: <ul style="list-style-type: none"> • Gebäudehülle • Heizung • Beleuchtung • Informations- und Kommunikationstechnik (TV, PC, Bürogeräte) • Industrielle Anlagen (Maschinen, Prozesse) • Druckluft • Pumpensysteme • Kälte- und Kühlwasseranlagen • Wärmeversorgung • Lüftungsanlagen 	4	Ansprechpartner: Name: Herr Michael Reindl Telefon: +49 7245 9157228 E-Mail: michael.reindl@systemplan.endress.com
Adressierter Sektor: <ul style="list-style-type: none"> • Gewerbe • Industrie 	5	Referenzprojekte: keine Angabe
Arbeitsschwerpunkte: Sämtliche Querschnittstechnologien und -medien. Gelisteter BAFA- Sachverständiger Kälte- und Klimaanlage, Zugelassener Schulungs-Referent für den IHK-Kurs Europäischer Energiemanager.	6	8
Mitarbeiteranzahl: 20 Angeboten seit: 1998 Anzahl der im Vorjahr durchgeführten Projekte: 125	7	

Figure 4: example on firm information on the BfEE list

5.1.3 Supplier database and professional quotation system

The website <https://www.energie-experten.org/> provides a regionally and subject-specifically differentiated provider database with almost 3000 active participants. A professional quotation system is also included, with which anyone interested can contact experts from their immediate environment and ask up to 5 quotes simultaneously for free from different providers.

The research is done by postal code and subject area (Electric heating, CHP, Insulation, Gas heating, Heating optimization, Air conditioning, Heat pump, Photovoltaics, Advice on funding programmes) or type of provider (Architect, Electrician, Energy consultant, etc.).

The registration is free for any company. They can add reference projects and a paragraph describing their philosophy (optional) and give their areas of expertise (see number 3 in Figure 5). The results of the search give a list of enterprises with name and



address. A direct contact form is linked when opening the company page (see number 2 in Figure 5). There is no information about particular qualifications.

Hamburger Gesellschaft für Sanierungen

Fordern Sie jetzt Ihr persönliches Angebot von uns an 1

Hofweg 7
22085 Hamburg

Referenzen 2

Herr Nachname

PLZ 2

Ort

Telefonnummer

E-Mail Adresse

Fachgebiet auswählen

Beschreiben Sie hier kurz ihr Vorhaben

Ich frage für mein Projekt an und willige in die projektbezogene Kontaktaufnahme ein (Datenschutzbestimmung)

Dies sind unsere Fachgebiete 3

- Wärmepumpe
- Solarthermie
- Stadezimmer
- Energieberater
- Bodenlegerarbeiten
- Entsorgung

Wir bieten auf Wunsch auch kostenpflichtige Kurz-Beratungen an.

PRO ENERGIE WENDE

CLIMATE MITZIAL

+1,5°C

Figure 5: Example of results for the expert search on <https://www.energie-experten.org>



5.2 ANNEX 2: Guidelines for Italian Databases

5.2.1 Database of Experts in Energy Management (EGE)

The EGE certification attests to the skills of the professional figure who deals with the efficient management of energy use.

In Italy, 1,674 Energy Management Experts are certified under accreditation. There are 16 bodies accredited by Accredia to issue certifications according to UNI CEI 11339.

Accredia is the body appointed by the Italian government to certify the competence, independence and impartiality of the bodies and laboratories that verify the conformity of goods and services to the standards.

The list of Experts in Energy Management (EGE) certified according to UNI CEI 11339 is available in the Accredia databanks on the page dedicated to professional figures (https://services.accredia.it/fpsearch/accredia_professionalmask_remote.jsp?ID_LINK=1749&area=310), by selecting the relevant entry in the "Certified Professionals" field (Figure 6).

It should be noted that the Italian Legislative Decree 73/20 also established that the figure of the energy auditor coincides with that of the EGE for the activities provided for by the decree itself in relation to the performance of energy audits.



ACCREDITIA
CENTRO ITALIANO DI ACCREDITAMENTO

DOCUMENTS → DATABANKS →

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ACCREDITIA / DATABANKS / CERTIFICATIONS / CERTIFIED PROFESSIONALS /

Databanks

ACCREDITATIONS ↓
CERTIFICATIONS ↑

- Organizations with certified management system
- Certified products and services
- Certified professionals**

STATISTICS ↓

Certified professionals

Select desired criteria and click on the Search button.

Search professionals

Certification body

Name

Fiscal Code

Professional person

Certificate number

Standard

RESET **SEARCH**

Databank of certified professionals

Accredia is responsible for processing data on certified professionals, on their certifications issued by accredited bodies.

[For official information on certification status of the professionals, please refer directly to the relevant certification body.](#)

For the correction of any errors relating to professionals' data, please send an e-mail directly to the certification body that issued the certificate.

The quality of the published data is the responsibility of the single certification body that autonomously manages the upload of certifications. For each of them the update date is indicated.

Figure 6: Accredia query mask dedicated to the search for professionals.



The query mask has 6 fields:

- Certification body
- Name
- Fiscal code
- Professional person
- Certificate number
- Standard

Select desired criteria and click on the Search button. If the user wants to use the database in order to search for a certified EGE, s/he just needs to select "Energy manager (EGE)" in the field "Professional person". The search returns the following result:

The screenshot shows the Accredia website interface. At the top, there are social media icons and language options (IT | EN). The main navigation bar includes 'DOCUMENTS' and 'DATABANKS'. Below this, a breadcrumb trail reads 'ACCREDITA / DATABANKS / CERTIFICATIONS / CERTIFIED PROFESSIONALS /'. The main heading is 'Databanks' and the sub-heading is 'Certified professionals'. A sidebar on the left contains a menu with 'ACCREDITATIONS', 'CERTIFICATIONS', and 'STATISTICS'. The main content area shows 'Results 3076' and a disclaimer: 'The quality of the data published is the responsibility of the individual Certification Body which handles the uploading of the certificates.' Below this, there is a pagination control showing '1' and a right arrow. Two search results are visible, each with a table-like structure:

N.Certificate:	Professional person
[Redacted]	[Redacted]
Issued on 09-02-2016 Expire date 08-02-2026	Energy manager (EGE)
by Accredited body: TÜV Italia S.r.l.	Standard: UNI CEI 11339:2009 - Law Decree n. 102 of 04.07.2014, Inter-directorial Decree of Ministry of Economic Development and Ministry for the Environment and the Protection of Land and Sea dated May 12, 2015 Accreditation sectors: CIVILE, INDUSTRIALE
Data updated by the Body on 23/12/2021	

N.Certificate:	Professional person
[Redacted]	[Redacted]
Issued on 09-12-2013 Expire date 08-12-2023	Energy manager (EGE)
by Accredited body: KHC - Know How Certification S.r.l.	Standard: UNI CEI 11339:2009 - Law Decree n. 102 of 04.07.2014, Inter-directorial Decree of Ministry of Economic Development and Ministry for the Environment and the Protection of Land and Sea dated May 12, 2015 Accreditation sectors: CIVILE
Data updated by the Body on 15/02/2022	

Figure 7: EGE search result on Accredia databanks.

The alphabetical list of certified EGEs is given. The available information is:

- Name of the EGE
- Number of the certificate with the date of issue and expiry



- Accredited body that issued the certification
- List of Standards
- Accreditation sector: “civil” (competences are addressed to civil and public administration uses), “industrial” (competences are addressed to industrial applications and production processes).

The list returned by the search does not allow to identify the EGE according to the territorial area of activity and especially according to the competences developed by the professional.

The quality of the data published is the responsibility of the individual Certification Body which handles the uploading of the certificates.

Almost every certifying body has its own database of certified figures and provides a search engine with different search fields.

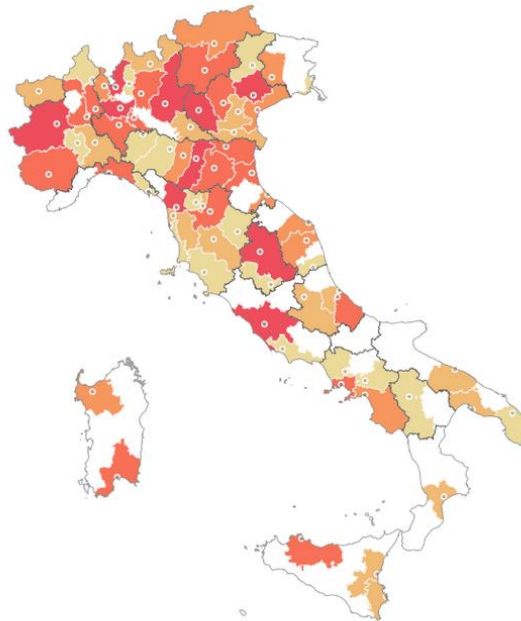
An example is the case of a certification body that provides a search engine to help match supply and demand by specifying the type of service required from the certified professional.

SECEM, the ISO 17024 accredited personnel certification body which since 2010 has been certifying Energy Management Experts according to the requirements of the UNI CEI 11339:2009 standard, provides a search function (<http://www.secem.eu/trova-un-ege-2/>) for SECEM certified EGEs which are identified on the basis of:

- Region and sector of accreditation
- contact information: phone number, e-mail address
- professional skills developed in energy efficiency, offering a virtual space for matching supply and demand.



Trova Un EGE



In questa sezione è presente il database degli EGE suddivisi per regione e settore di attività.

Sono inoltre elencate, per ogni soggetto certificato, le competenze e i contatti. Uno spazio virtuale di incontro tra domanda e offerta.

📌 Compilando i seguenti tre campi e premendo il pulsante "Cerca", verranno mostrati, in ordine casuale, gli EGE aventi le caratteristiche selezionate. **Tutti i campi richiesti sono obbligatori.**

Nota: per "Area di intervento" si intende:

- nord-est (Friuli Venezia Giulia, Trentino Alto Adige, Veneto, Emilia Romagna solo zona ROMAGNA)
- nord-ovest (Valle d'Aosta, Piemonte, Liguria, Lombardia, Emilia Romagna solo zona EMILIA)
- centro (Toscana, Marche, Umbria, Lazio, Abruzzo)
- sud (Molise, Campania, Basilicata, Puglia, Calabria)
- isola (Sicilia, Sardegna)

Area di intervento Settore di interesse Attività richiesta

Figure 8: SECEM database of EGEs subdivided by region and sector of activity.

The search is carried out by filling in three fields:

- Geographical area
- Sector of interest
- Service required



and pressing the "Search" button, the EGEs with the competences that match the required ones will be shown in random order. All required fields are mandatory.

The following is an example of a search using the following criteria:

- Area of intervention: north-west
- Sector of interest: industrial
- Service required: energy diagnosis in the industrial sector - UNI CEI EN 16247-3 compliant

Compiando i seguenti tre campi e premendo il pulsante "Cerca", verranno mostrati, in ordine casuale, gli EGE aventi le caratteristiche selezionate. **Tutti i campi richiesti sono obbligatori.**

Nota: per "Area di intervento" si intende:

- nord-est (Friuli Venezia Giulia, Trentino Alto Adige, Veneto, Emilia Romagna solo zona ROMAGNA)
- nord-ovest (Valle d'Aosta, Piemonte, Liguria, Lombardia, Emilia Romagna solo zona EMILIA)
- centro (Toscana, Marche, Umbria, Lazio, Abruzzo)
- sud (Molise, Campania, Basilicata, Puglia, Calabria)
- isole (Sicilia, Sardegna)

Area di intervento: Nord-ov...
Settore di interesse: Industriale
Attività richiesta: diagnosi energetiche settore industriale - conforme UNI CEI EN 16247-3

Cerca

Figure 9: Input form in the SECEM search engine

The search returns the name and contact details of the professional (e-mail address, phone number(s)) and the municipality in the area of intervention (in the figure this information has been hidden).

Trova un EGE

Risultati della ricerca EGE per l'area 'Nord-ovest', settore 'Industriale' ed attività 'diagnosi energetiche settore industriale - conforme UNI CEI EN 16247-3' (l'ordine è casuale)

Cognome, Nome	e-mail	Telefono/i	Comune
[redacted]	[redacted]	[redacted]	Torino
[redacted]	[redacted]	[redacted]	Modena
[redacted]	[redacted]	[redacted]	Spoleto
[redacted]	[redacted]	[redacted]	Modena

Figure 10: Result of a search on the SECEM EGE search engine.



“Geographical area” of intervention means groupings of Italian regions:

- north-east: Friuli Venezia Giulia, Trentino Alto Adige, Veneto, Emilia Romagna (Romagna area only)
- north-west: Valle d'Aosta, Piedmont, Liguria, Lombardy, Emilia Romagna (Emilia area only)
- centre: Tuscany, Marche, Umbria, Lazio, Abruzzo
- south: Molise, Campania, Basilicata, Apulia, Calabria
- islands: Sicily, Sardinia

An interesting feature is the search function available for the criterion 'activity required', which allows the professional to be selected on the basis of a variety of skills.

The list of professional competences in the field of energy efficiency is very comprehensive and allows the identification of the professional with the appropriate skills for the request:

- energy system analysis
- plant operation and maintenance
- energy consultant
- analytical energy accounting, evaluation of savings
- contracting: analysis of energy supply and transfer contracts; definition of technical specifications concerning the energy aspects of the implementation of interventions and/or for the supply of goods and services; preparation of FTT and EPC contracts; preparation of tender contracts
- construction of the Baseline Emission Inventory (BEI)
- energy audits in the civil sector, compliant with UNI CEI EN 16247-2: large-scale retail trade; public administration; offices;
- energy audits in the industrial sector, compliant with UNI CEI EN 16247-3: logistics infrastructures; processes.
- energy audits in the transport sector, compliant with UNI CEI EN 16247-4: fleets; infrastructures;
- development of activity plans and programmes
- energy manager in accordance with Law 10/91
- energy audits, management of authorisation procedures, maintenance, design, feasibility studies for RES plants (biomass, wind, photovoltaic, hydroelectric), cogeneration and district heating
- project management
- implementation of energy policy
- identification and implementation of programmes to raise awareness and promote efficient energy use



- monitoring, measurement and verification
- energy system planning
- financial planning of activities
- planning, management and control of energy systems
- reporting
- design: automation and domotics, buildings, lighting, electrical installations, thermal installations (HVAC, heating/cooling), energy requalification interventions, thermal recovery
- project manager
- implementation of an environmental management system in accordance with ISO 14001, EMAS
- implementation of an energy management system in accordance with ISO 50001
- drafting of Energy Performance Certificates (APE)
- drafting of Law 10
- thermographic services: buildings, thermal installations
- feasibility studies
- use of incentives: obtaining and managing the “Conto Termico” (Thermal Account), obtaining and managing TEE (White Certificates), tax deduction practices

Another alternative is related to the database of the Association of Experts in Energy Management (AssoEGE): <https://www.assoege.it/>

EGEs certified according to UNI CEI 11339:2009 by a third party, according to a procedure validated by ACCREDIA, can voluntarily join AssoEGE.

The EGE members operate as professionals or within energy service companies and energy managers of major national groups active in the industrial, commercial and local public services.

AssoEGE makes available the updated list of members starting from the home page and selecting the option "Our Members" and then "List" of ordinary members.

D4.2 Database and search engine which connects SMEs to relevant energy service providers



Gear@SME
Saving energy together

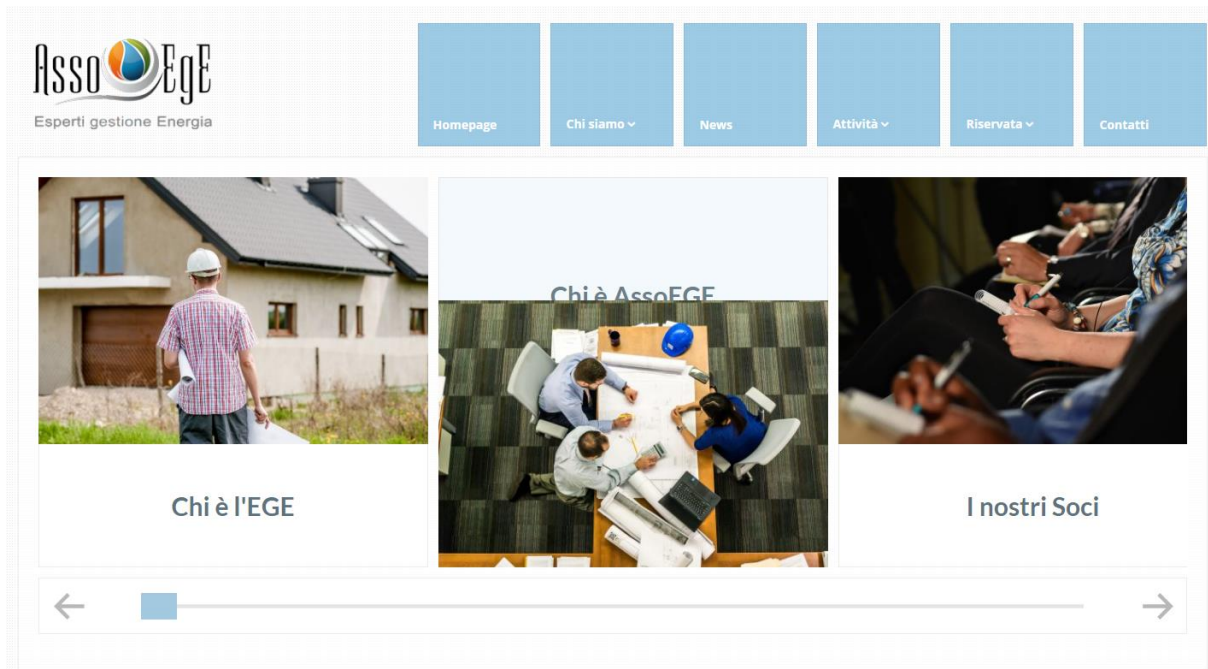


Figure 11: AssoEGE homepage.

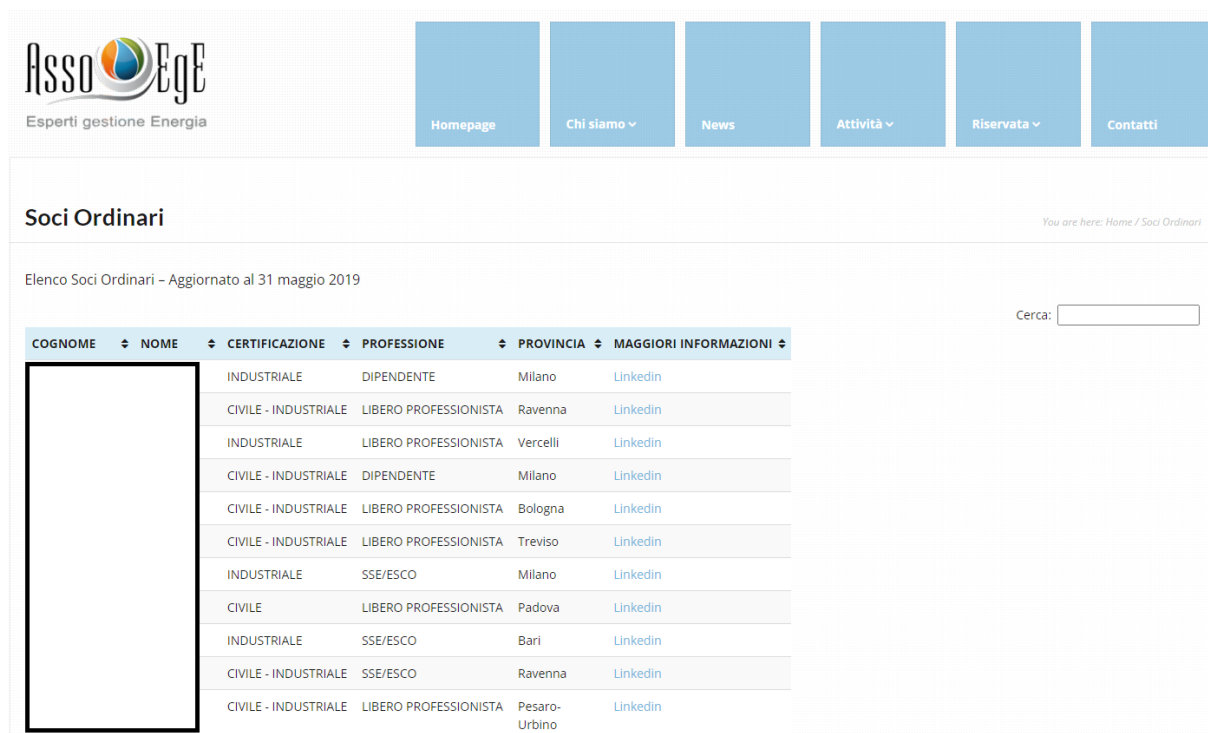


Figure 12: List of ordinary members of AssoEGE

Inside the portal it is possible to search by:

D4.2 Database and search engine which connects SMEs to relevant energy service providers



Gear@SME
Saving energy together

- name
- certification sector
- city

A LinkedIn link is also available for most of the experts present in order to provide further information regarding the expert's field of experience.

5.2.2 Database of Energy Services Companies (ESCO)

The list of ESCOs certified according to UNI CEI 11352:2014 is available in the Accredia databases on the query mask dedicated to ESCOs:

https://services.accredia.it/prsearch/accredia_prdmask_remote.jsp?ID_LINK=2026&area=310

Data are published of ESCOs in possession of a valid certificate issued by accredited certification bodies. Search can be done by using the query mask (see Figure 13).



The screenshot shows the Accredia website's search interface. At the top, there is a navigation bar with the Accredia logo and links for 'DOCUMENTS' and 'DATABANKS'. Below this is a secondary navigation bar with links for 'HOME', 'ABOUT US', 'ACCREDITATION', 'ACCREDITED SERVICES', 'OTHER ACTIVITIES', 'COMMUNICATION', and 'CONTACTS'. The main heading is 'Databanks', with a sub-heading 'Products and services'. A sidebar on the left contains a menu with 'ACCREDITATIONS' and 'CERTIFICATIONS' expanded. The main content area is titled 'Products and services' and contains a search form with various input fields and dropdown menus. The search form includes fields for 'Certificate number', 'Issue date' (with a date range selector), 'Company/Firm', 'VAT/fiscal Code', 'Scope', 'Product name', 'Country', 'Region', 'Province', 'City', 'Accredited body', and 'Technical standard / Private scheme'. There are 'RESET' and 'SEARCH' buttons at the bottom of the form.

Figure 13: Accredia query mask dedicated to the search for products and services.

Search results can be filtered for:

- certificate number
- issue date
- company/firm
- VAT/fiscal code
- Scope
- Country, Region, province, city
- accredited body
- technical standard/private scheme

Data of certified products and services are uploaded on Accredia website by the competent certification bodies; they are responsible for the quality and updating of information.



Select desired criteria and click on the Search button. If you want to search for a certified ESCO, just select "ESCo - UNI CEI 13352" in the "technical standard/private scheme" field. The search returns an alphabetical list of ESCOs with the information specified above (Figure 14):

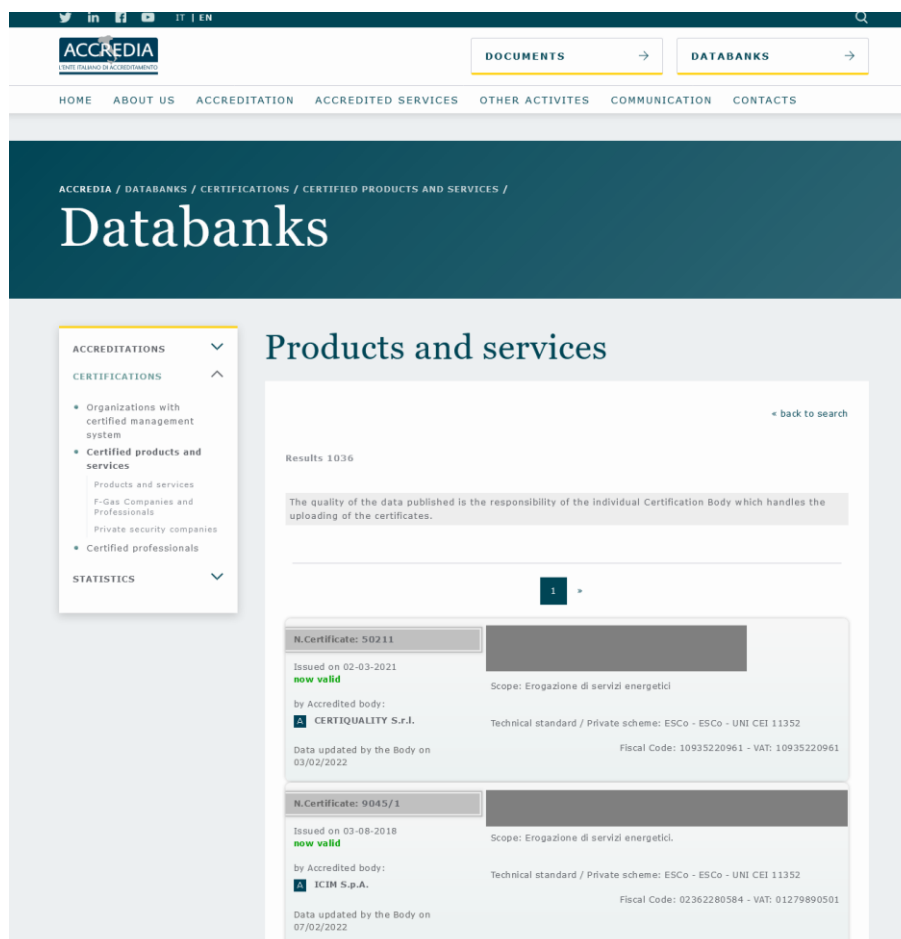


Figure 14: Result of ESCO query on Accredia database.

The quality of the data published is the responsibility of the individual Certification Body which handles the uploading of the certificates.

To search for ESCOs you can consult the search engine of the members of **Federesco**, association of energy service companies at the following link: <https://www.federesco.org/it/associated.php>

The Italian ESCOs associated with Federesco are indicated by their geographical location on a map. The search criterion is therefore to identify the ESCO by geographical location.

The limitation of this service is in the number of ESCOs loaded on the map, i.e. the ESCOs associated with Federesco.

D4.2 Database and search engine which connects SMEs to relevant energy service providers



Gear@SME
Saving energy together

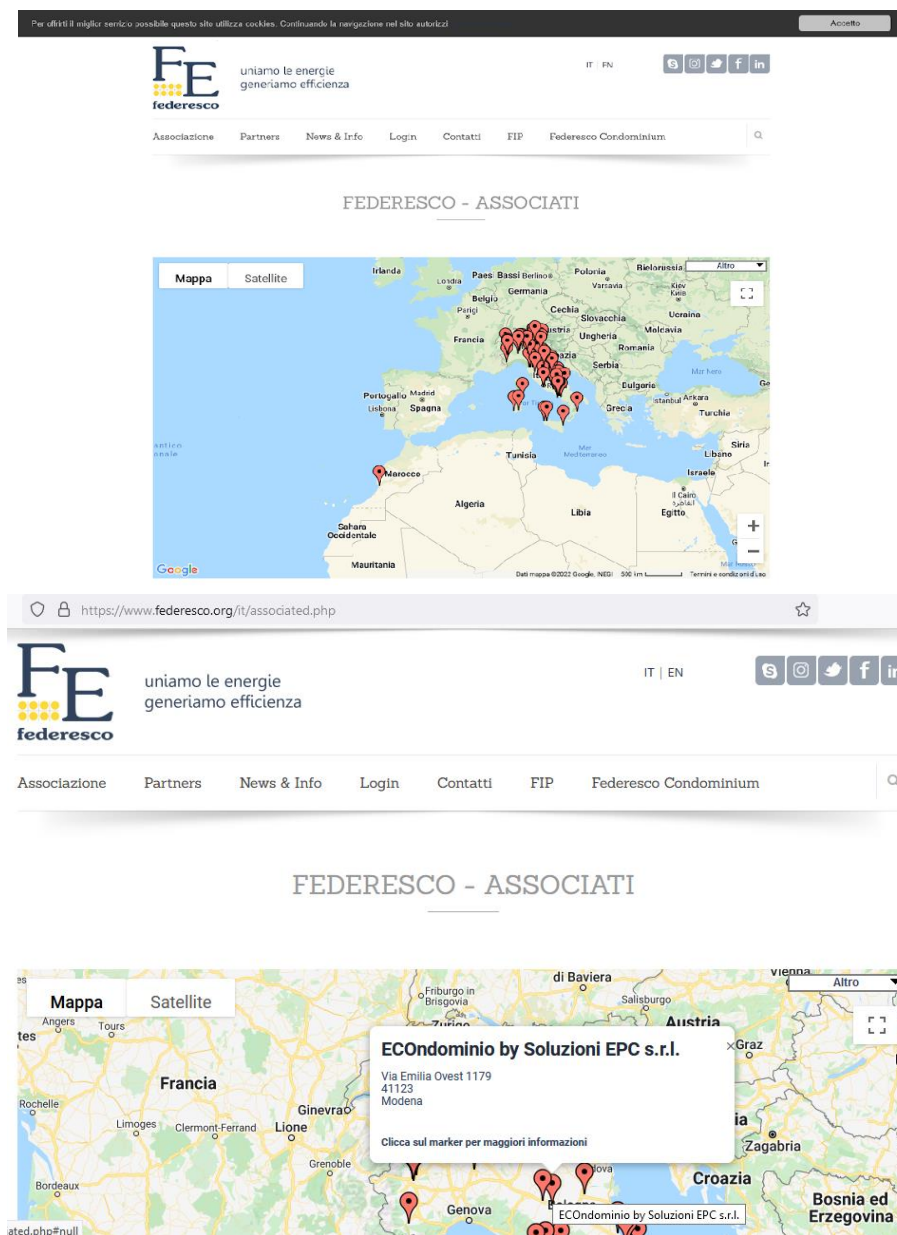


Figure 15: example of an ESCO search on the Federesco member map.

5.2.3 Other product and service search systems

Further search systems for energy efficiency products and services include those provided by organisations and trade associations that offer lists of suppliers of energy products and services.



Impresa Energia - Assolombarda

Assolombarda, an association that brings together companies in some provinces of Lombardy, provides Impresa Energia, a dedicated portal, a Business Network, a place where supply and demand meet and grow together. The search engine for suppliers of energy products and services is based on the following criteria:

- energy service
- product
 - o air conditioning
 - o insulation
 - o motors and inverters
 - o photovoltaics
 - o solar thermal
 - o storage
 - o electronic devices for power factor correction
 - o lighting
 - o consumption monitoring systems
 - o cogeneration and trigeneration

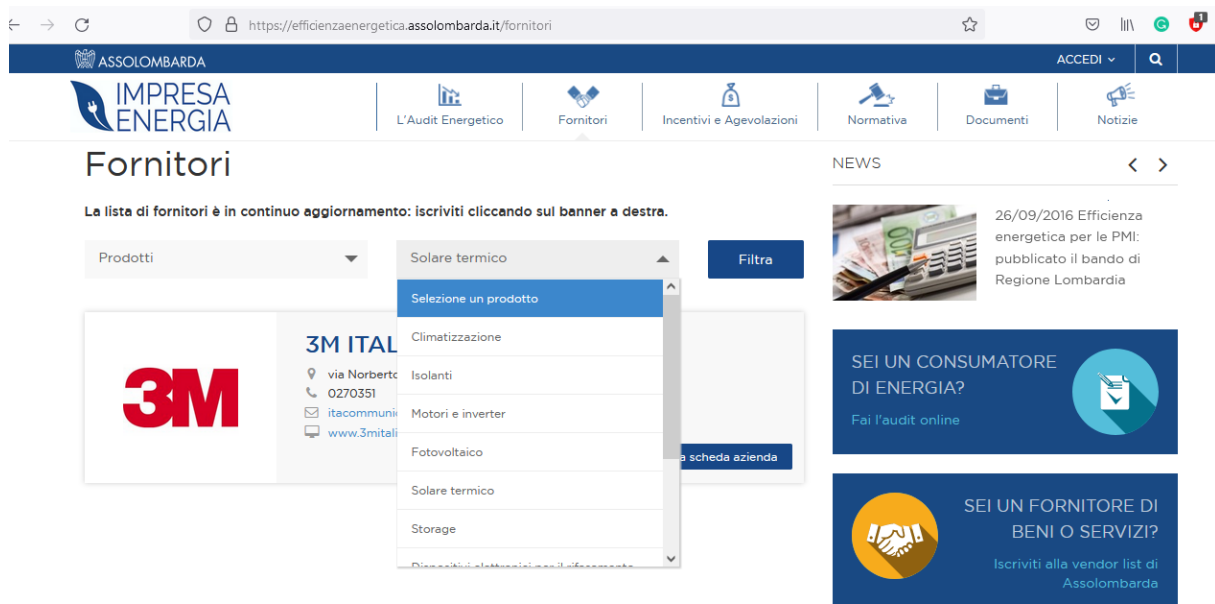


Figure 16: query mask to search for suppliers of energy products and services (Assolombarda web site).

The result of the search is a list of companies supplying energy products and services, of which the following information is shown in a box:



- company name of the company
- address
- phone number
- e-mail address
- website

By clicking on the "vai alla scheda azienda" button in the in-depth description of the company, providing the following information:

- company description
- head office address
- website
- e-mail address
- phone number
- number of employees of the local office / employees in Italy
- average turnover of the last 3 years
- territorial area of activity
- core business
- energy efficiency services
- certifications obtained and standards
- further certifications obtained

For example, Figure 17 shows a screenshot of a supplier's card in which it is possible to view for the selected company a description of the company's core business, a complete and detailed overview of the services offered for energy efficiency, the certifications obtained and the standards. applied.

The screenshot shows a web interface for 'ASSOLOMBARDA' with a search bar and 'ACCEDI' button. The main navigation includes 'L'Audit Energetico', 'Fornitori', 'Incentivi e Agevolazioni', 'Normativa', 'Documenti', and 'Notizie'. The company profile for 'IMPRESA ENERGIA' is displayed, showing it has been active for 'tre anni' and operates in 'Italia, Lombardia'. The 'Core Business' is described as 'Consulenza e sviluppo di servizi energetici di efficientamento per imprese, industrie, pubbliche amministrazioni, condomini'. The 'Servizi per l'efficienza energetica' section lists various services such as energy audits, energy performance contracts, and energy management systems. The 'Certificazioni ottenute e norme applicate' section lists standards like UNI CEI EN 50001:2011, UNI CEI 11339:2009, and UNI CEI EN 16247-1.

Figure 17: Screenshot of company data sheet with details of the services offered for energy efficiency.



In the case of the Assolombarda search engine, it appears that some companies have an agreement with Assolombarda to support member companies in carrying out services covered by Lombardy Region calls for tenders on energy efficiency.

PagineGialle

A further system to search for suppliers of energy efficiency products and services covering companies active in Italy is PagineGialle <https://www.paginegialle.it/>

With more than 3.8 million companies, professionals, shops and businesses divided into categories and locations, PagineGialle directories have been the meeting point between demand and businesses for 50 years.

PagineGialle is managed by Italiaonline S.p.A. is an Italian company active in the whole chain of digital marketing and online communication solutions.

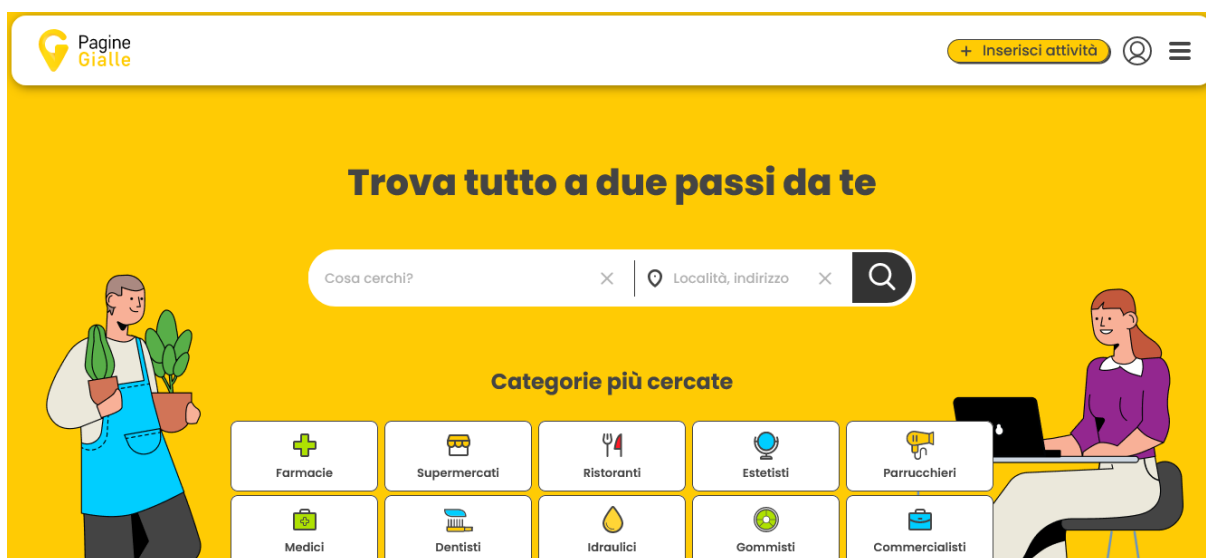


Figure 18: homepage of the PagineGialle website.

To search for suppliers of energy products and services, simply enter keywords in the search fields "Cosa cerchi?" (What are you looking for?) and "Località, indirizzo" (Location, address).

An example is shown of a product search in the category "heat pumps" and location "Bologna". The search returns a list of possible suppliers.

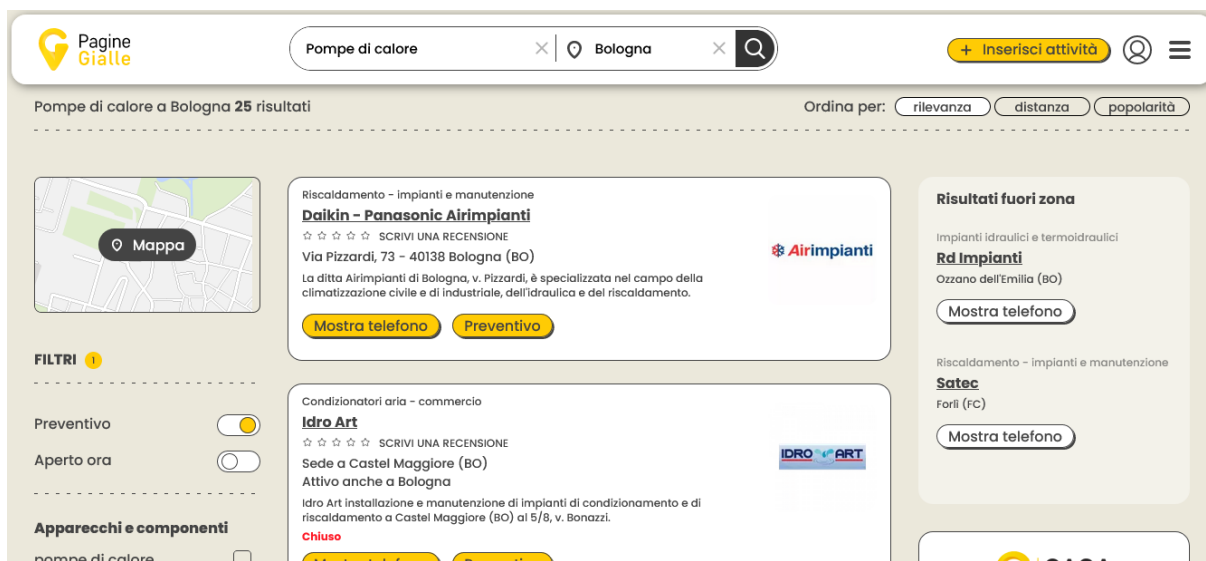


Figure 19: Example of a search on the PagineGialle website.

In the left-hand area, the option 'filters' allows you to search for companies that also offer a quotation. In the "equipment and components" section you can refine your search by specifying the type of equipment or components.

The companies resulting from the search are listed in a series of boxes.

Each box contains the two buttons "show phone" and "quote".

Clicking on "quote" takes you to a page where you are asked to specify the type of service for which you are requesting a quote (e.g. "air conditioning systems" in the example considered in Figure 19).

You are then asked to enter the location where the service is required.

Further questions are asked of the requester depending on the type of product or system. The request for quotation ends with the (optional) insertion of documents or images, the selection of the timeframe within which the work is to be carried out, the contact details of the person requesting the quote and the e-mail address to which the request should be sent, as well as the phone number.

In the case of the example in Figure 19, the request for quotation involved a request for the supply of an "air conditioning system". The information requested from the user through a series of questions are:

- postcode of the location where the service is needed;
- the type of air conditioner to be installed: mono-split / dual split / tri-split / multi split / heat pump air conditioner / other;
- system is or is not prepared to install the air conditioner;



- the heat pump has already been purchased or not, in which case professional advice is desired;
- the distance between the outdoor unit and the indoor splits;
- the place of installation of the outdoor unit: balcony / roof / façade / other;
- the area to be air-conditioned (in m²): less than 50 m²/ between 50 and 100 m²/ between 100 and 150 m²/ over 150 m²;
- further details required: you may briefly describe the intervention required;
- attach documents or images you consider useful for the request for an estimate;
- timing of work execution: as soon as possible / 15 to 30 days / 1 to 3 months / more than 3 months.

The advantages of this type of research are:

- the possibility to send free requests for a quote by answering a few short questions about the desired service and providing your contact details;
- possibility of receiving up to 5 personalised quotes;
- You can choose from the best quotes and the professional (consultant, installer, etc.) that best suits your needs.

The disadvantages of this type of service are that:

- the request form may lack the indication of the service for which the quotation is requested and therefore it is not possible to request the quotation;
- it may happen that requests for estimates are not processed within the desired timeframe or that no estimate is offered at all.

Portale offerte - ARERA

The Portale offerte (ilportaleofferte.it), provided for by the 2017 Competition Law, makes electricity and gas offers available for easy and immediate comparison.

The Portal is managed by ARERA, the Italian Regulatory Authority for Energy, Networks and Environment (ARERA) carries out regulatory and supervisory activities in the sectors of electricity, natural gas, water services, waste cycle and district heating.

The Portal is the public website where domestic customers, families and small businesses can compare and choose electricity and natural gas offers immediately, clearly and free of charge.

The portal offers a user-friendly search engine and provides information on the functioning and expected developments in the electricity and natural gas markets.



ARERA
Autorità di Regolazione
per Energia Reti e Ambiente

AU
Acquirente
Unico

portale offerte
luce e gas

SCOPRI ▾ CONFRONTA TRASPARENZA ▾ 🔍

HOME > CONFRONTA

Confronta le offerte

1 Tipo di offerta 2 Caratteristiche dell'offerta 3 Elenco delle offerte

Che tipo di offerte vuoi confrontare? ⓘ

Oppure accedi alle offerte senza il calcolo della spesa

Inserisci il CAP della tua fornitura

Quali offerte vuoi visualizzare? ⓘ

Figure 20: Portale offerte ARERA

The structure of the query mask and how to use it are illustrated below using a search example.

Type of offer ("tipo di offerta")

- "Che tipo di offerta vuoi confrontare?" (what kind of offer do you want to compare?). You can select the type of offer you need:
 - Electricity
 - Gas
 - Dual fuel
- "Inserisci il CAP di fornitura" (enter delivery postcode)
- "Quali offerte vuoi visualizzare?" (Which offers do you want to view?)
 - Fixed price
 - Variable price



The screenshot shows the ARERA 'portale offerte luce e gas' website. The header includes the ARERA logo and the 'AU Acquirente Unico' logo. Below the header, there are navigation links: 'SCOPRI', 'CONFRONTA', and 'TRASPARENZA'. The main content area is titled 'Confronta le offerte' and features a three-step process: 1. Tipo di offerta, 2. Caratteristiche dell'offerta, and 3. Elenco delle offerte. The current step is 'Tipo di offerta', which includes the following fields:

- Che tipo di offerte vuoi confrontare?** with buttons for 'Energia elettrica' (selected), 'Gas', and 'Dual Fuel'. A note below says 'Oppure accedi alle offerte senza il calcolo della spesa'.
- Inserisci il CAP della tua fornitura** with a text input field containing 'Bologna'.
- Quali offerte vuoi visualizzare?** with buttons for 'Prezzo fisso' and 'Prezzo variabile' (selected).
- Dove vuoi attivare l'offerta?** with buttons for 'Casa' and 'Altri usi' (selected).
- A quale servizio di tutela hai diritto?** with a dropdown menu showing 'Non so'.

An 'Avanti' button is located at the bottom of the form.

Figure 21: Portale offerte ARERA – query mask “type of offer”, search example.

Offer characteristics (“caratteristiche dell’offerta”)

- Desired power level
 - Type of price
 - price per band
- monorail tariff
- Share of electricity from renewable sources
- annual consumption
- additional selection criteria (optional)



The screenshot shows the ARERA 'portale offerte luce e gas' website. The header includes the ARERA logo and the 'AU Acquirente Unico' logo. The main navigation bar contains 'SCOPRI', 'CONFRONTA', and 'TRASPARENZA'. The page title is 'Confronta le offerte'. A progress indicator shows three steps: 1. Tipo di offerta, 2. Caratteristiche dell'offerta (current step), and 3. Elenco delle offerte.

The search form contains the following fields and options:

- Che livello di potenza desideri?** (Dropdown menu): Altro
- Sei interessato a un prezzo per fasce orarie di consumo oppure a un prezzo monorario?** (Dropdown menu): Fasce
- Solo energie rinnovabili?** (Radio buttons): Si, No (selected)
- Inserisci il tuo consumo annuo** (Text input): Totale kWh (chilowattora) 1000000
- Fascia 1** (Text input): 440000 kWh
- Fascia 2** (Text input): 240000 kWh
- Fascia 3** (Text input): 320000 kWh

At the bottom of the form, there is a '+ Aggiungi criteri di selezione' link and two buttons: 'Indietro' and 'Confronta'.

Figure 22: Portale offerte ARERA – query mask “offer characteristic”, search example.



list of offers (“elenco delle offerte”)

The screenshot shows the ARERA 'portale offerte luce e gas' website. At the top, there are logos for ARERA and AU Acquirente Unico. Below the navigation bar, the page title is 'Confronta le offerte'. A progress indicator shows three steps: 1. Tipo di offerta, 2. Caratteristiche dell'offerta, and 3. Elenco delle offerte. A box titled 'CARATTERISTICHE DELLA RICERCA' contains search criteria: Commodity: Energia elettrica, Data: 27/02/2022, Tipo di offerta: Variabile, Prezzo: Fasce, Livello di potenza: 200 kW, Consumo annuo: 1.000.000 kWh, Tipo cliente: Altri usi, CAP: Bologna. Below this, there are filters for 'MODIFICA LA RICERCA' and 'SONO STATE TROVATE 4 OFFERTE'. The offers are sorted by 'Offerta fissa' and 'Ordina per...'. A list of four offers is displayed, each with a company logo, name, price, and a 'Vai al dettaglio' button. The offers are: 1. Hera Comm S.p.a. Prezzo Netto Impresa Luce P2 (223.808,81 € annui), 2. Hera Comm S.p.a. Prezzo Netto Impresa Luce P3 (224.282,27 € annui), 3. Hera Comm S.p.a. Prezzo Netto Impresa Luce P1 (225.352,41 € annui), and 4. SINERGAS S.P.A. ENERGIA PIU' SOLIDALE ASSOCIAZIONI MULTIORARIA (341.392,44 € annui).

Figure 23: Portale offerte ARERA – list of offers.

The Figure 23 shows:

- a box with a summary of the characteristics of the search
- the number of offers identified
- a sorting function by
- type of offer: fixed or variable
- annual expenditure and energy provider in alphabetical order



5.3 ANNEX 3: Guidelines for Dutch Databases

The main database / search engine for technical support in general, and ESSs for what concerns the interests of this project, is Techniek Nederland. This is the main database identified in this work.

5.3.1 Techniek Nederland

The database “Techniek Nederland” has 6000 enlisted companies. The website is <https://www.technieknederland.nl>

An important focus of this list is companies that have one or more certifications like the ones in the table below:

label	dutch title	translated title
DE	Duurzame energie (centraal register techniek)	sustainable energy certification based on the directive 2009/28 “Renewable Energy Sources”
BRL 9500	Beoordelingsrichtlijn Energieprestatie	Certified for labeling energy efficiency of buildings All new buildings and existing buildings that change owner need an energy label A...G to indicate the energy effectiveness of the building.
BRL 6000	Beoordelingsrichtlijn voor ontwerpen en installeren van installaties	Criteria for companies that are designing and installing installations

Search example

In Figure 24 you can see an example of a search on certified large Solar Power system suppliers.



The screenshot shows a web browser window displaying the search results on the Techniek Nederland website. The search criteria used are: 'Opracht of bedrijfsnaam' (Opdracht of bedrijfsnaam) set to 'Zoek op opdracht of bedrijf', 'Locatie' (Location) set to 'Vul uw plaats of postcode in', and 'Certificaten' (Certificates) set to 'InstalO-erkenning Zonnestroomsystemen - 3 Groot'. The search results show two suppliers:

- Eneco Installatiebedrijven Groep B.V.**
www.enecoinstallatiebedrijven.nl | info@enecoinstallatiebedrijven.nl | 0888955955 | Marten Meesweg 5, ROTTERDAM
- Perlot Installatie B.V.**
www.perlotinstallatie.nl | info@perlotinstallatie.nl | 0773904594 | groethofstraat 101, VENLO

Each supplier entry includes a 'Geef beoordeling' (Give rating) button and a 'Certificering' (Certification) section with social media icons and a '+3' indicator. The search results are sorted by 'Waardering' (Rating).

Figure 24: Search example for certified solar PV systems suppliers

For a selected supplier all relevant certificates can be shown as indicated in Figure 25.

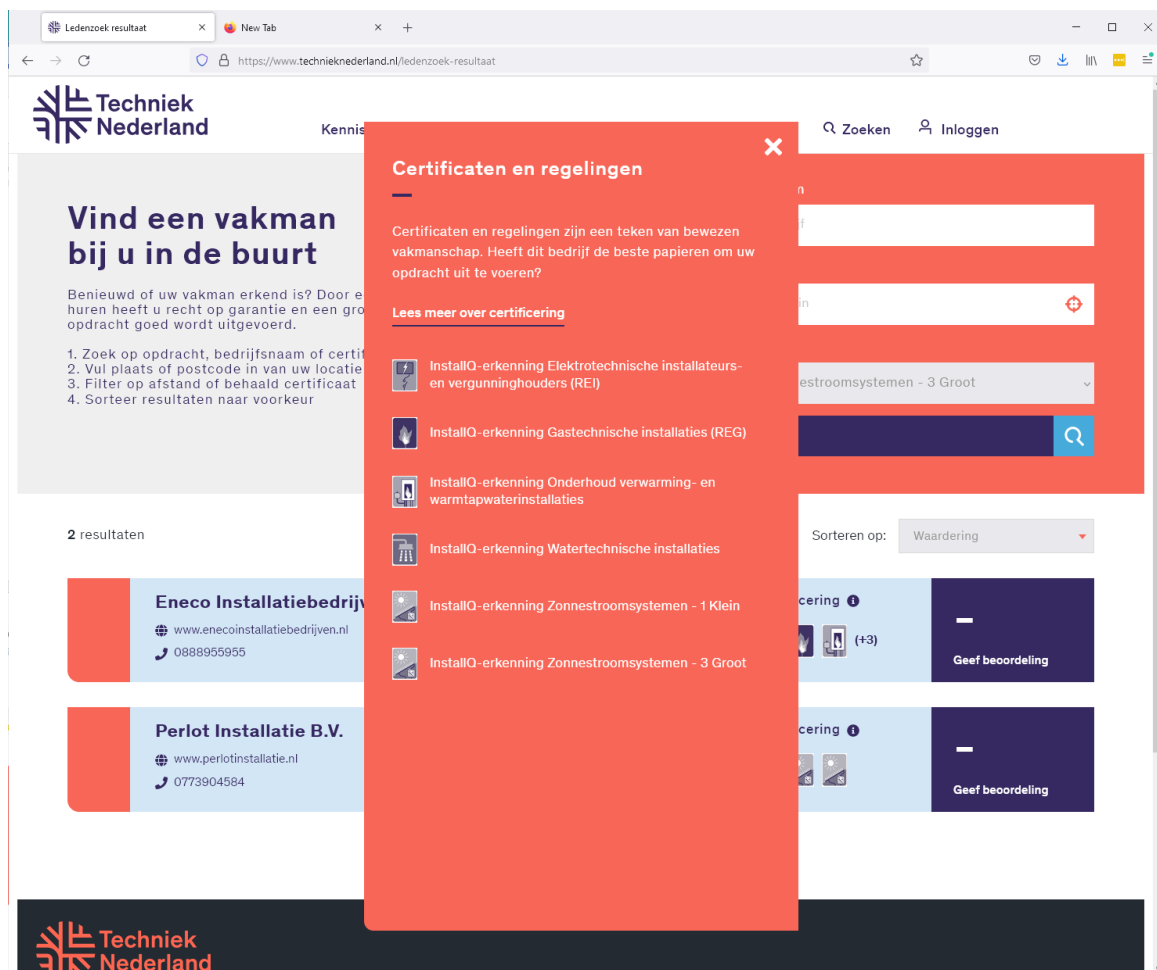


Figure 25: Relevant information and certifications for a selected supplier

In this case the company has 6 different certificates on

- InstallQ- Electro installation
- InstallQ- Gas installation;
- InstallQ- Heating and tap water
- InstallQ- Water installation
- InstallQ- Small scale solar power installation
- InstallQ- Large scale solar power installation

Driven by government, insurance companies and contractors there is a tendency towards certification of professionals and organisations. This process is in progress now. At this moment it is not very clear as yet as to what warranties the certifications offer for customers. Most of these certifications imply a cost for the companies that want/need to be certified. This could well be a reason for many companies not to participate in the certification scheme.

It is a reasonable assumption that these certification programmes will have increased relevance in the coming years. For instance the SCIOSCOPE 12 certification is nowadays



often required by government and/or insurance companies or order for suppliers to be allowed to deliver PV systems on roofs.

Geographic location

If one enters a postal code the search engine can select suppliers in several distance categories:

< 5 km

< 10 km

< 20 km

< 50 km

whole country (default value)

There seem to be no companies in the database that do not have an office in the Netherlands.

As a relevant example, in Figure 26 we show the results obtained when searching for water/water heat pumps. The search resulted in more than 2000 companies in the whole Netherlands. When limiting the search to a 10 km distance from a random postal code (in this case, 7396), the number of results was limited to only 36 companies.



The screenshot shows the search results page on the Techniek Nederland website. The search criteria used are: 'Opdracht of bedrijfsnaam' (Task or company name) set to 'Bodemwarmtepomp' (Geothermal heat pump), 'Locatie' (Location) set to '7396' with a radius of 'Tot 10 km', and 'Certificaten' (Certificates) set to 'Selecteer kwaliteitsregeling'. The results are sorted by 'Afstand' (Distance). Three results are visible:

Company Name	Contact Info	Address	Certification	Action
Instain Groep B.V.	www.instain.nl 0570617088 info@instain.nl	Vollehandsweg 2, TERWOLDE	Certificering ⓘ	Geef beoordeling
Instain B.V.	www.instain.nl 0570617088 info@instain.nl	Vollehandsweg 2, TERWOLDE	Certificering ⓘ (+1)	Geef beoordeling
Kok Installatietechniek B.V.	www.kokinstalleert.nl 0571298379 info@kokinstalleert.nl	Veilingstraat 30, TWELLO	Certificering ⓘ	Geef beoordeling

Figure 26: Example search results for water/water heat pumps

Techniek Nederland limitations

Not all existing companies are a member of the “Techniek Nederland” organization. So for specific searches that cannot be met by this database and alternative search options should be used.

For instance the database currently finds only a small percentage of engineering companies active in renewable energy.

5.3.2 Alternative search systems: Yellow Pages

The company listings in Yellow pages are a very complete database on all companies in the Netherlands. Their website is <https://www.detelefoongids.nl/>. The companies can enter keywords that they can be found on in this registry.

In Figure 27 an example of a search on Solar PV on Yellow pages is provided. The information available on found companies include the following:



- Company name
- Address info
- Phone number
- Website
- Chamber of commerce number
- Link to chamber of commerce information (partly behind paywall)

The screenshot shows a search results page for 'Zonnepanelen 7396' on the Dutch Yellow Pages website. The page features a search bar with 'Zonnepanelen' and '7396', a filter button, and a list of three results. The first result is 'MVS Installatie Techniek' with a 5-star rating and 1 review. The second is 'Zonduurzaam B.V.' and the third is 'Zonneakker Voorst BV'. A map on the right shows the location of the results in the Twello area.

Figure 27: Example of search results for PV panels on Dutch Yellow Pages



5.3.3 Alternative search systems: Offerte.nl

The commercial website <https://offerte.nl/> offers its visitors the option to write a concise spec of their tender. Some of the categories they offer are:

- Solar panels
- Heat pumps
- Isolation
- Electric car loading stations

They send the tender to associated companies and promise to select 3 offers that are suitable for the requirements.

To test this site, a request for a heat pump offer has been made. The internet site responded within 24 hours that none of the connected suppliers had an interest in providing an offer. This probably is an indication that heat pump suppliers nowadays have ample work.

In Figure 28 a screenshot of the first page of a request for a proposal on insulation of buildings is shown.

The screenshot shows the Offerte.nl website interface. At the top, there is a navigation bar with the logo and several statistics: 350.000 tevreden gematchte klanten, 47 aangesloten isolatiebedrijven, and a contact number 085 - 808 82 47. The main content area is divided into two columns. The left column contains a form titled 'Offerte.nl betrouwbaar en snel' with a sub-heading 'Vind een isolatiebedrijf die bij jou past'. The form has three steps: 'Wensen invullen', 'Gegevens invullen', and 'Ophang offertes'. The 'Wensen invullen' step is active and contains three sections: 'Soort aanvraag' with radio buttons for 'Particulier' and 'Zakelijk'; 'Type isolatie' with radio buttons for 'Spouwmuur isolatie', 'Vloer isolatie', 'Bodem isolatie', and 'Dak isolatie'; and 'Uitvoerdatum' with radio buttons for 'Zo snel mogelijk', 'Binnen 3 maanden', 'Binnen 3 tot 6 maanden', and 'Binnen 6 tot 12 maanden'. The right column contains a 'Waarom offerte.nl?' section with three points: 'De laatste aanvraag was 1 minuut geleden', 'Deze website en uw gegevens zijn veilig', and 'Bekend van' with logos for AD, VERONICA, and HOUWRAAD. Below this is a Trustpilot rating of 3.9 based on 1,737 reviews, and a testimonial from Mejam Kramer.

Figure 28: Example of the first page of a request for a proposal for building insulation on Offerte.nl webpage



5.4 ANNEX 4: Guidelines for Romanian Databases

5.4.1 Energy auditors and energy managers

Starting from 2020, the Ministry of Energy, Energy Efficiency Department, took over the responsibility of energy auditor and energy managers certification from the National Authority for Energy Regulations – ANRE, and sustain a database for:

- [Energy Auditors – Individuals](#)
- [Energy Auditors – Legal Entities](#)
- [Energy Managers for Industry](#): individual or legal person providing energy services, certified in accordance with the law, whose object of activity is the organization, management and managing the energy processes of a consumer
- [Energy Managers for Local communities](#): provide energy management for urban communities with more than 20,000 inhabitants. Local public administration authorities in municipalities with a population of more than 20,000 inhabitants are obliged to appoint an energy manager, certified according to the legislation in force or to conclude an energy management contract.
- [Energy service companies](#)

The information is available publicly on the [Ministry’s website](#), in PDF form under the section “II. Information on energy auditors and managers”. In the following table a list of information can be found for each category listed. The last update of the list was made in January 2022. The lists are regularly updated based on the (re)certification sessions organized by the Ministry.

Information	Energy Auditors - Individuals	Energy Auditors – Legal Entities	Energy managers for industry	Energy managers for local communities	Energy service companies
Name (and surname) / Name legal entity	X	X	X	X	X
Office address		X	X	X	X
City	X	X	X	X	X
County	X	X	X	X	X



Name of manager			X	X	X
Number cert.		X	X	X	X
Class		X			
Number of certification	X				
Certification issuer	X	X	X	X	X
Type of audit (Complex, Electro, Thermo)	X	X			
Type of certification (Industry / Local communities)			X	X	X
Expiration date	X	X	X	X	X
Status certification	X	X	X	X	X
Phone number	X	X	X	X	X
Email address	X	X	X	X	X

5.4.2 Energy auditors for buildings

An energy auditor for buildings differs from those performing in industry or local communities. An energy auditor for buildings is a certified individual who is entitled to carry out energy audits and to prepare energy performance certificates for buildings.

The Ministry of Development, Public Works and Administration is the responsible government body for certification of the energy auditors for buildings. On the [ministry's](#)



[website](#) there is available a public list in Excel form in which the following information are available and searchable via the Filter & Sort option of Excel:

- Name and Surname of the auditor
- County
- Address & relevant information (City, Street & no., Phone number, E-mail address)
- Serial number and certification number
- Date of issue of the certificate
- Expiration date
- Class (I or II)
- Type of certification (Construction, Installation, Construction & Installation)

The disadvantage of the database is that it cannot be filtered/sorted via city as the information is included in a single cell. The Excel form of the database represents an advantage for the user. The current list has been updated in March 2021 and it is regularly updated based on the certification sessions organized by the governmental body.

5.4.3 National Authority for Energy Regulations database

Even though the Ministry of Energy has been taking over the certification of energy auditors and energy managers, the National Authority for Energy Regulations is still in charge of certification of electricians and for keeping up to date their search engine available on the [ANRE portal](#). The portal offers the possibility to search based on different parameters such as:

1. Name of electrician
2. Status of the document
3. Exam session
4. Number registry
5. County
6. Authorization: Authorization of electricians, accreditation of green certificates, authorization of project verification, technical manager with execution, quality and extrajudicial technical expert
7. City
8. Certification Type: IA, IIA, IIIA, IVA, IB, IIB, IIIB, IVB, IA + IB



Figure 29: Search engine available for electricians on the ANRE portal

The portal allows showing results directly on the website's interface or to export Excel files based on the categories applied.

Advantages	Disadvantages
Allows searching based on multiple filters	Includes those people whose certification has expired
	Do not include information regarding services provided e.g. Photovoltaic system installation

The ANRE portal includes other useful lists. For example, within the portal, there are lists of companies operating in the electricity and gas sector. In the section of the portal dedicated to "Licenses and authorizations" (divided by electricity and gas), the user can search through the following parameters: Name, Type of authorization, City, Province, Certification status (Available / Expired). It is also possible to filter the list according to the type of activity carried out by the supplier. For electricity the activities listed are: Energy Distributor, Supplier, Dispatch, System Service Provider, Commercial Activity, Efficiency, Aggregation.

For natural gas there are activities such as: production, transport, distribution, supply, gas storage, LNG, LPG and biogas plants, commercial activity, centralized market administration.