Summary report Survey

Belgium



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New Skills for nearly Zero Energy Buildings

Project 101120960 — LIFE22-CET-NS4nZEBs

Summary report on the survey, based on the response of 15 stakeholders.

Inhoud

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1. Executive Summary

The aim of the survey was to examine the opinions, needs and expectations of companies and professionals involved in the renewable energy market on the state of this market in Belgium and in particular the issues related to the efficiency and quality of installation and maintenance of systems, and the skills needed to achieve efficiency and quality, as well as to identify the needs of theoretical knowledge and practical skills of specialists in RES installations in buildings, for the purpose of tackling the identified gaps and needs by improving training curricula for the target groups and upskilling them.

2. Methodology

The survey was conducted online, on the basis of questionnaire especially developed for the survey. The questionnaire was sent to 12 companies (8 of which responded), 3 policy-makers (2 responded), 16 training institutions (4 responded) 3 associations Industry (1 responded). First, the questionnaires were sent to the respective organizations (companies, institutions). The managers of the companies/contact persons in educational institutions were afterwards contacted by phone to offer further details of the survey, its aim, and the objectives of the Project as a whole.

3. Background

The use of renewable energy and digital technologies in the building sector is heavily emphasised in the relevant EUDirectives and Regulations. These technologies have an important role to play to help meet the greenhouse gas emission reduction targets, to achieve a fully decarbonised building stock by 2050, as well as to address the energy crisis in Europe. Given that background, the NS4nZEBs project aims to tackle existing mismatches between the skills the energy performance and the ones increasingly in demand and indispensable in the future, to increase the number of skilled building professionals in the fields of PVs, smart electrical systems, heat pumps and hydrogentechnologies in buildings at all levels of the building design, operation and maintenance. This will lead to an increased application of new energy efficient and renewable energy technologies for the successful uptake of (nearly) Zero Energy Buildings, the upscaling of ambitious renovation interventions, the roll-out of efficient renewable-based heating and cooling, in particular heat pumps, thus contributing to phasing out EU dependence on fossil fuels imports

Although buildings are central in the decarbonisation process of Europe, current efforts and trends are not enough to achieve carbon neutrality by 2050. The REPowerEU Plan set the proposal to raise the renewable energy target to 45% in line with the objective to cut GHG emissions of 55% by 2030. Accordingly, more ambitious concepts of new buildings as well as deep renovation for existing buildings are needed as pointed out in the recast revision of the EPBD.

All these regulations and initiatives, however, will not be implemented without the human factor.

Therefore, the goals set in the energy strategies and policies of the EU and those of the participating countries have led to changes in the labour market for specialists in RES systems in buildings.

The whole European installation sector is confronted with a complex and multi-faceted shortage of both specialists and skills.

So the purpose of the survey was to attempt to identify such skill gaps, and ways in which the problems can be tackled.

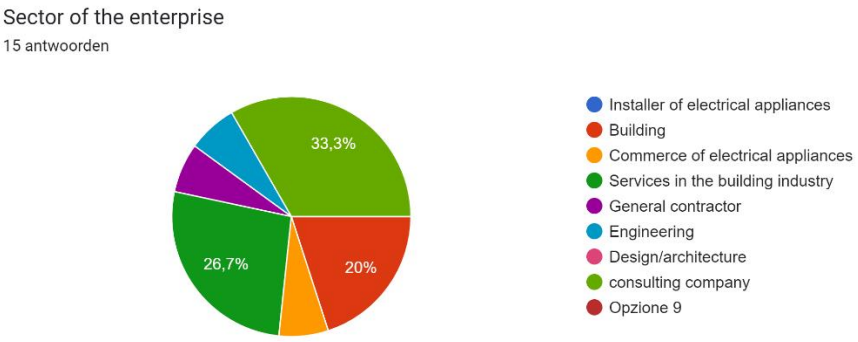
The questions in the survey were in 5 main spheres:

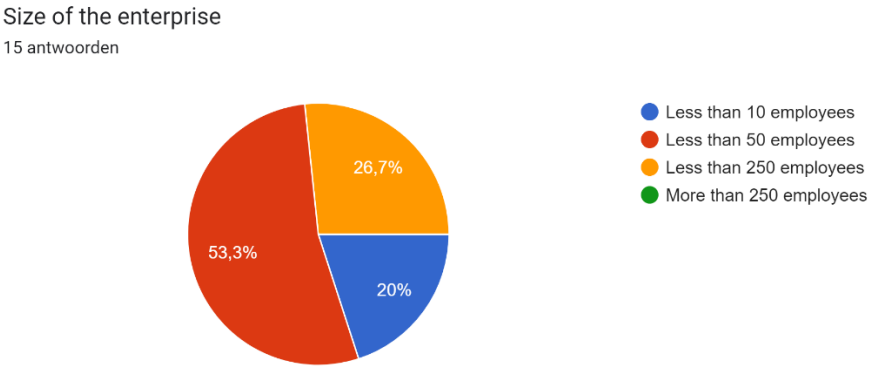
1. Data about the respondents: sphere of operation, size of the company, region of operation;
2. Interest in and use of the latest/best RES technologies in buildings; sources of information about the latest RES technologies in buildings;
3. Measures for boosting the quality development of the market;
4. Current status – quality of RES technologies in buildings;
5. Qualifications of the specialists from the whole chain; measures for improvement.

4. Results:

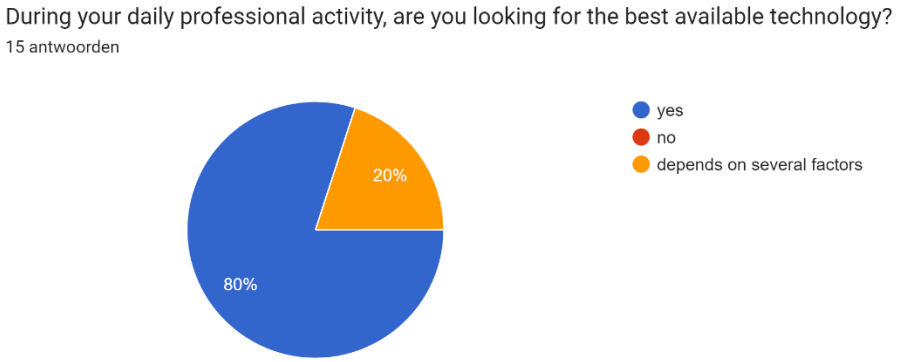
Below, we have provided the data gathered from the surveys:

4.1. Data about the respondents: sphere of operation, size of the company, region of operation:

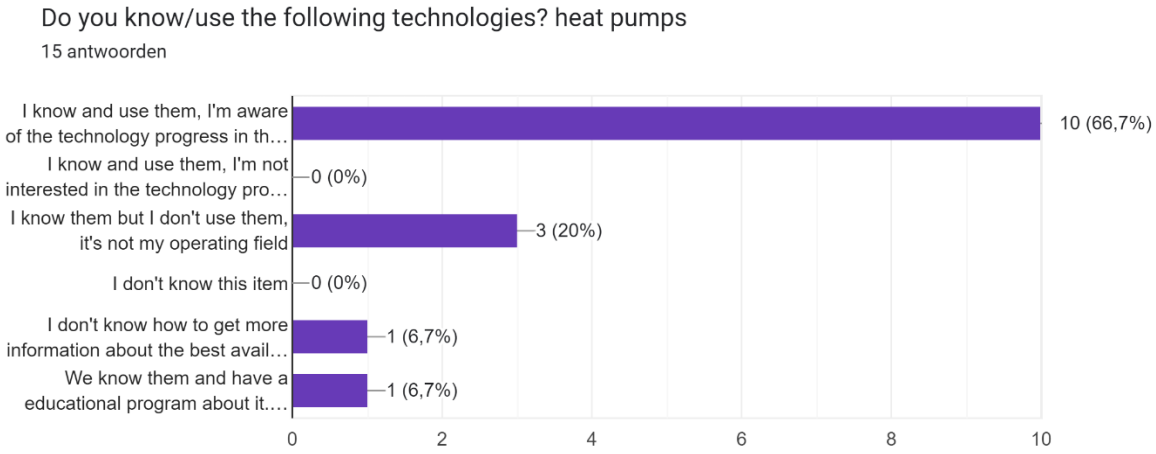




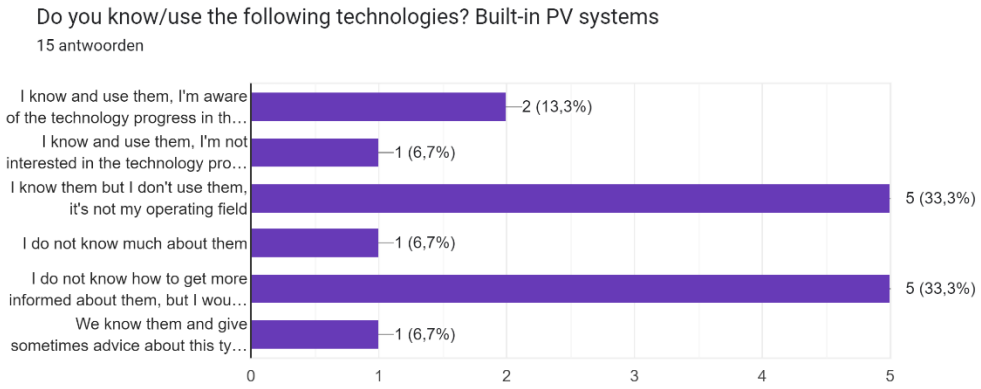
4.2. Interest in and use of the latest/best RES technologies in buildings; sources of information about the latest RES technologies in buildings;



4.2.1. Heat pumps:



4.2.2. Built-in PV-systems



4.2.3. Latest technologies in thermal insulation:

Do you know/use the following technologies? thermal insulation technologies

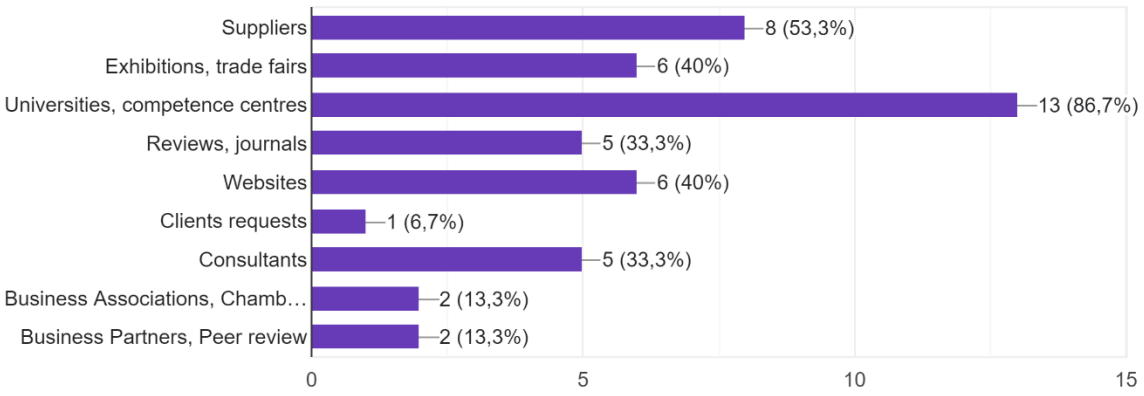
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4.2.4. Sources of information about the latest RES technologies:

Which instruments are important to know the best available technologies?

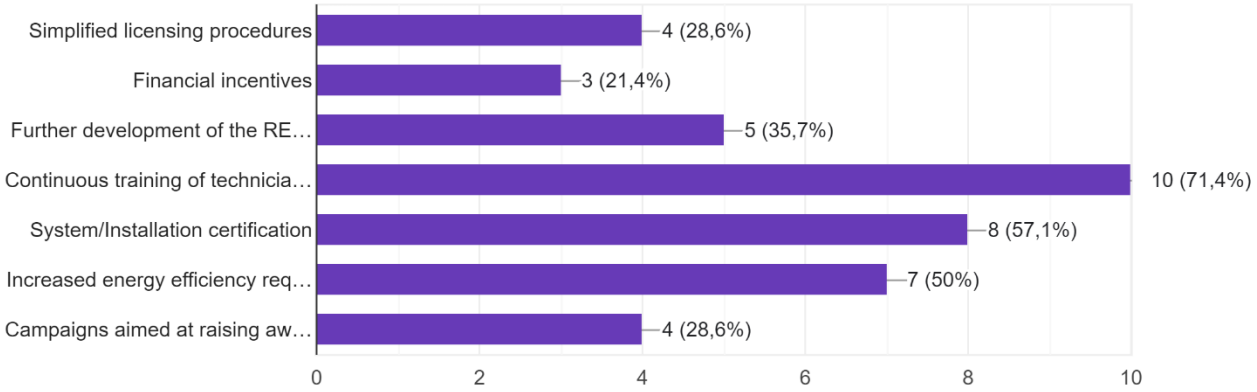
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4.3. Measures for boosting the quality development of the market:

What are the most important measures for the qualitative development of the renewable energy systems market?

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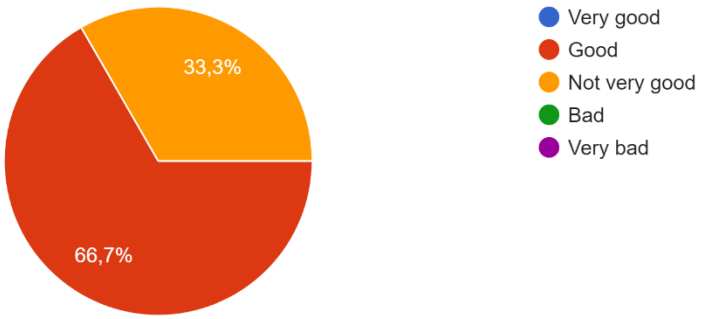


4.4. Current status – quality of RES technologies in buildings:

4.4.1. Quality of building-integrated PV systems:

What is your opinion on the number of installed PV (photovoltaic) systems in your country, considering the state of the market?

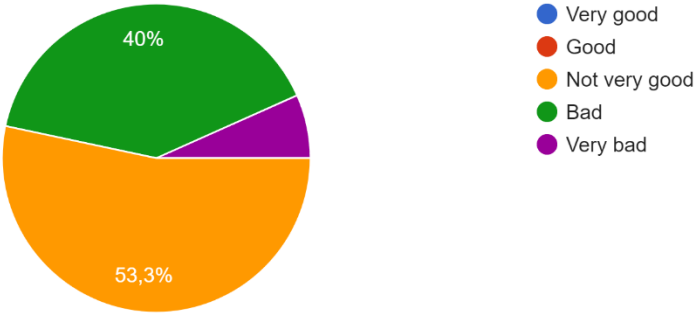
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4.4.2. Number and quality of heat-pump systems:

What is your opinion on the number of installed heatpump systems in your country, considering the state of the market?

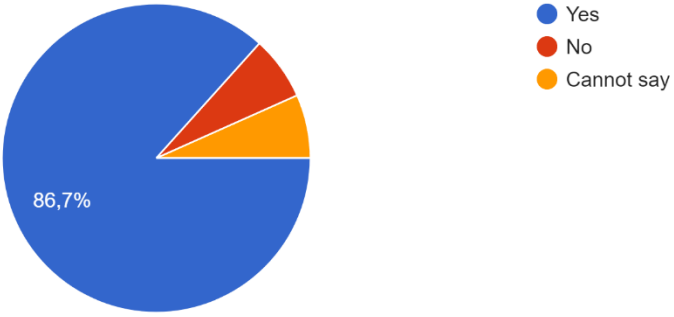
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4.4.3. Do you think it is necessary to improve the quality of RES installations (in terms of design, installation and maintenance)?

Do you think it is necessary to improve the quality of RES installations (with regard to design, implementation and maintenance)?

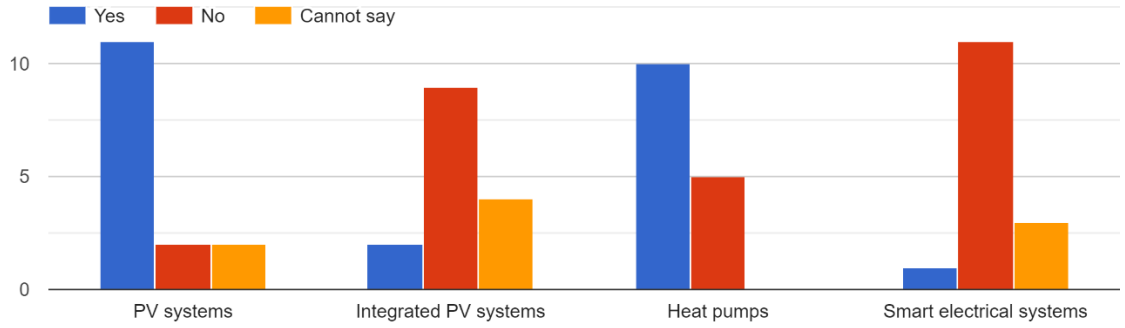
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4.5. Qualifications of the specialists from the whole chain; measures for improvement.

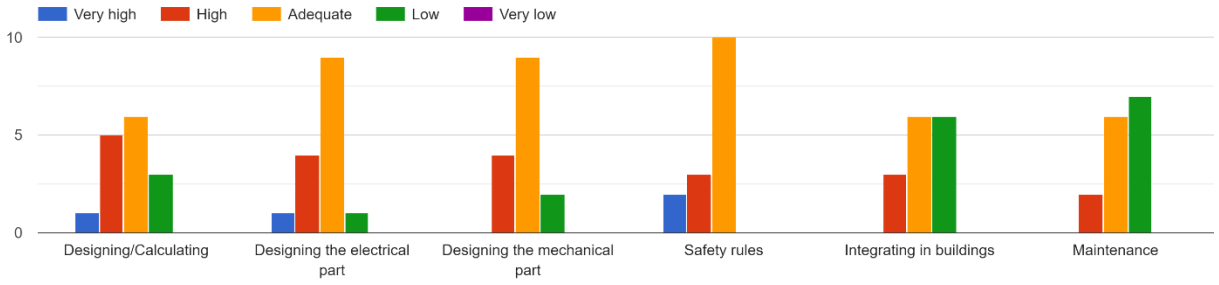
4.5.1. Is there a sufficient number of qualified staff to install and maintain the following systems?

Do you think there is adequately qualified technical staff in your country for the installation and maintenance of the following systems:

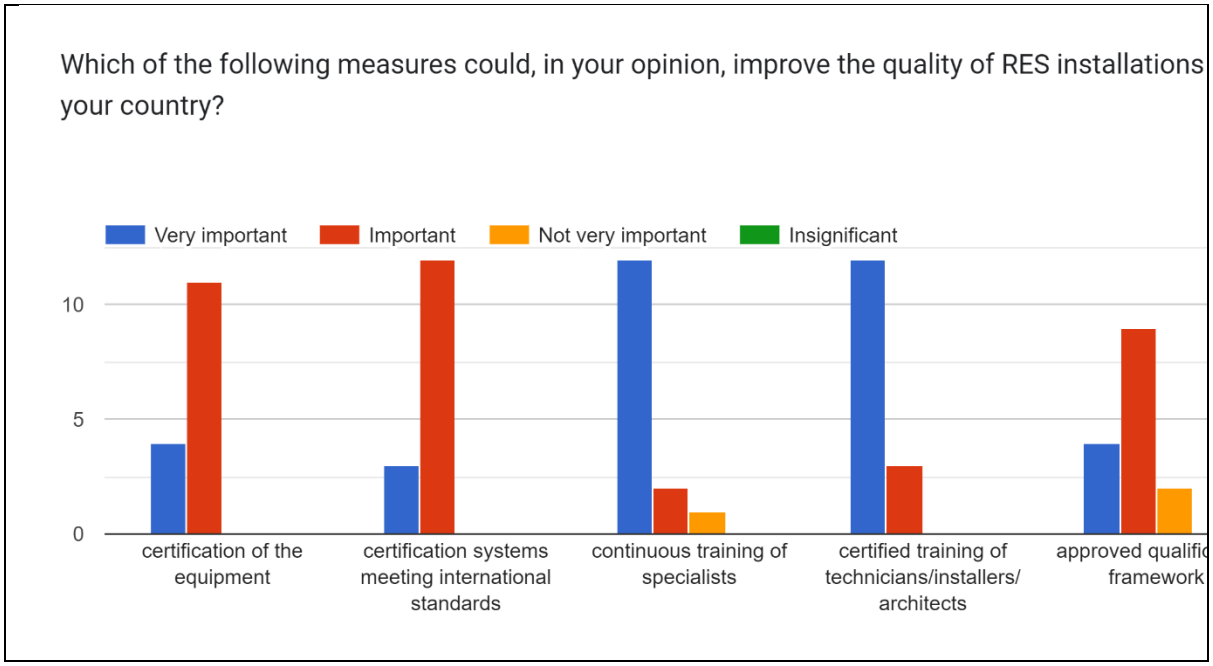


4.5.2. How do you evaluate the level of training of the staff involved in RES installations in your country?

How do you assess the level of training of technical staff for RES installations in your country?



4.5.3. Which of these measures could improve the quality of RES installations in your country?



5. Brief summary of the results:

Preliminary note.

With the 'certificate of competence' for installers of green energy systems such as solar panels, solar boilers, heat pumps, ... the Flemish government, together with the other regions, wants to increase the yield, safety and lifespan of installed installations. These certified installers are called RESCert installers.

- For a heat pump or solar boiler, you can use an installer with a 'certificate of competence'.
- If you want to have solar panels or a pellet boiler (biomass) installed, you can rely on an installer with a "certificate of competency".

There were no questions in the survey about the RESCERT certificate, yet stakeholders wanted to emphasize that the RESCERT course is very theoretical and that they expect more hands-on training from a new course.

With the RESCERT courses, the Flemish government (also the Walloon and Brussels governments) wants to comply with the European Renewable Energy Directive (2009/28/EC)

A large majority (80%)of participants are interested in using RES applications in buildings. Most participants (67 %) know the operation of a heat pump and use it frequently. They acquire their knowledge mainly from training institutions (RESCERT course - see hiring

note) and suppliers. Surprisingly, when asked about the availability and quality of heat pump installations on the market, no one responded with 'good' or 'very good'. 87% of respondents express a desire for clearer agreements on dimensioning and installation. Too many installations are carried out without proper dimensioning, with people often relying on experience rather than treating each heat pump installation as unique. There is a preference for robust and high-quality certification processes.

A similar trend is seen in the installation of PV panels. It is evident that the stakeholders we surveyed prioritize heat pumps over the placement of PV panels. Again, they gather information from the RESCERT_course and manufacturers. Remarkably, 67% are confident in the effectiveness of PV panels. However, it is noteworthy that people are dissatisfied with the integration of PV panels and heat pumps. Stakeholders strongly advocate for a smart meter system - an installation that maximizes the utilization of solar energy when available.

What is striking about this survey is that stakeholders derive little info from the Internet. Stakeholders are requesting a substantiated website with clear practical examples and sizing guidelines.

Several stakeholders are willing to have their staff undergo annual training on the use of RES in buildings

Conclusions:

Both stakeholders and policy-makers are aware of the vital role of appropriate, continuous training for all specialists throughout the chain for the future qualitative development of the RES sector. We expect that the NS4nZEBs project will tackle the identified needs.