

# **Foreword**

This report summarizes the outcomes of the BUS-NL project [Oct 2022- Jun 2024], detailing insights into the necessary transition skills for the sustainability of the built environment from 2024 to 2030. It also clarifies the measures needed to ensure that every involved professional is sufficiently skilled to contribute effectively.

The energy transition is a huge challenge, but also an unique opportunity! Working on societal issues and making a concrete contribution as a professional is particularly meaningful and motivating.

We thank everyone who contributed to the BUS-NL research. Additionally, we thank everyone who supports the Roadmap and is willing to help implement actions from the roadmap in the coming weeks, months, and years.



















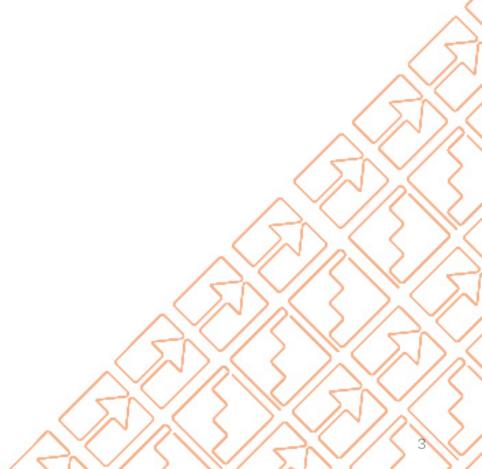


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**BUS-NL Project Results** 

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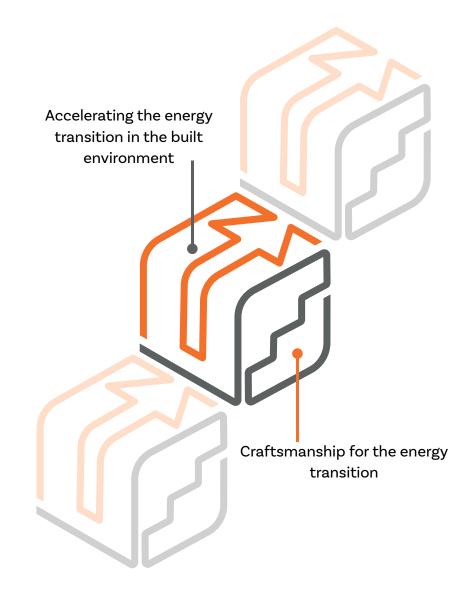
# Introduction

The transitions in the built environment involve digitization, energy, climate adaptation, nature inclusivity, biodiversity, inclusion, cultural heritage, robotics, industrialization, mobility, and circularity. These require significant impact through the collaboration of various disciplines at different scales. To achieve CO2 neutrality by 2050, it is essential to work strategically and collaborative towards this goal.

BUS-NL has mapped the essential skills needed to equip the workforce to accelerate the transition in dialogue with various stakeholders. BUS-NL also produced, in co-creation with stakeholders, a Roadmap outlining the activities needed to embed capacity building, training, and retraining into the structures and processes within the sector, as well as in relevant training programs.

#### This report includes:

- **-Evaluation of the first roadmap 2013-2020:** What has been achieved since the publication of the first roadmap?
- -The status quo: Where do we stand now, and what is still needed?
- **-Skills mapping:** What skills are needed in the value chain to realize a sustainable built environment?
- **-The Roadmap 2024-2030:** A vision for the future, elaborated in five concrete action lines.



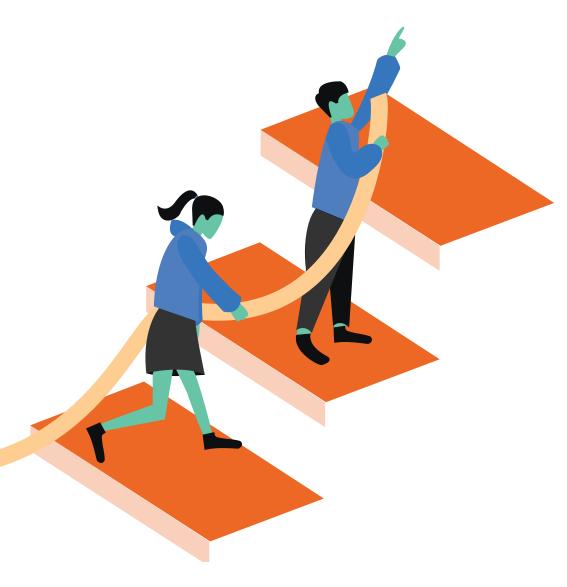
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# Evaluation of the First National Roadmap

In 2011, a roadmap for the necessary skills for the energy transition was created by many parties in the Netherlands. Twelve years ago, agreements were made with educational institutions, governments, and businesses to ensure that enough people have the proper skills to shape the energy transition. Attention was given to both initial education (particularly VET) and post-initial education (education for people already working).

Looking back, it is evident that the agreements were well met and the objectives were essentially all achieved. For instance, elective modules were introduced in VET, and a system was developed to address emerging skill needs. Additionally, a robust national system emerged for how the sector can handle innovations. This method has been embedded in curricula, exams, certifications, and market recognition.

The next steps we can take include particularly mandatory directives on sustainability and the circular economy in qualification dossiers of initial education programs and enhancing the visibility of the quality of measures for consumers.



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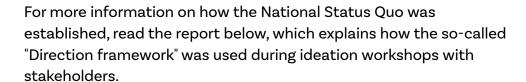
## **National Status Quo**

The Netherlands has clear objectives for shaping the energy transition in the built environment. With attention to the quality of the living environment, energy transition, circular economy, and climate adaptation.

When we look at the realization of these goals, we are making progress but are certainly not there yet. There are inspiring examples and pilots, but scaling up remains a challenge. We need to make significant progress in implementing measures.

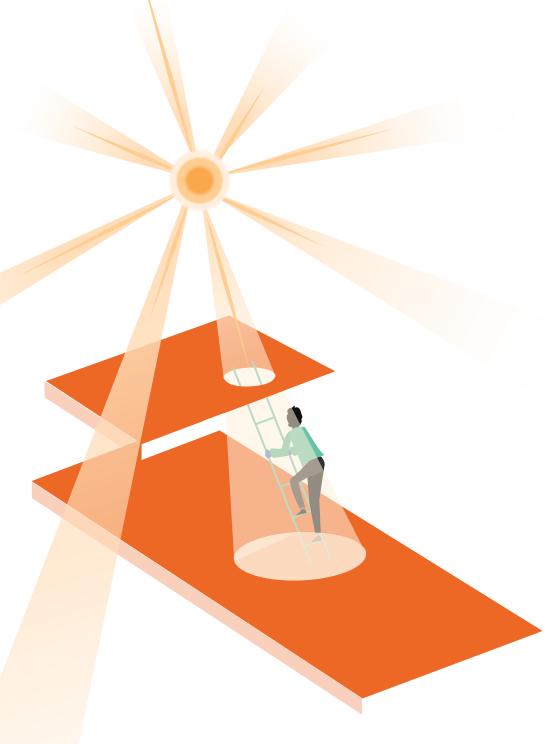
Furthermore, it appears that the various goals around circularity, biodiversity, and the energy transition often exist separately in policy and practice. For example, solar panels and heat pumps are currently not easily repairable or reusable. This requires extra attention in the coming period.

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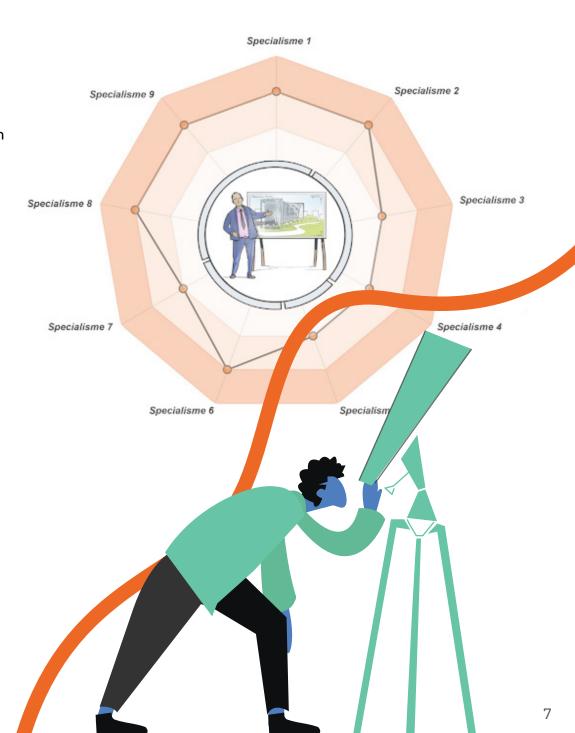
## Skillsmapping

To make our building environment energy-neutral by 2050, it is essential to have the right skills, especially concerning energy efficiency and energy transition. Therefore, a 'skills mapping' was developed within the BUS-NL project: a skills map that provides an overview of the required skills in the construction sector. This map looks at technical skills and social and transversal skills.

This "skills mapping" is based on previous research and shows more than 300 specializations and 100 professions. To keep it manageable, this number has been reduced to 25 representative professions. Project participants emphasized the importance of personal competencies.

Finally, the 'skills mapping' needs regular updates. In a rapidly changing world, continuous training and adaptation are essential. The project's findings suggest that we might need to think more in terms of tasks rather than specific professions in the future.

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This roadmap for craftsmanship in a sustainable built environment is the compass for the future of the construction sector. We outline a clear picture of what is needed to realize the transition to a sustainable built environment.

This roadmap works with action lines. The overview of the action lines helps to understand the necessary steps and the development of a suitable supply of employees with the right skills. We aim to meet the growing demand for well-trained professionals in all areas of the transition process. Each action line includes a proposal on who could take ownership to contribute to the actual realization of these actions.

Innovation

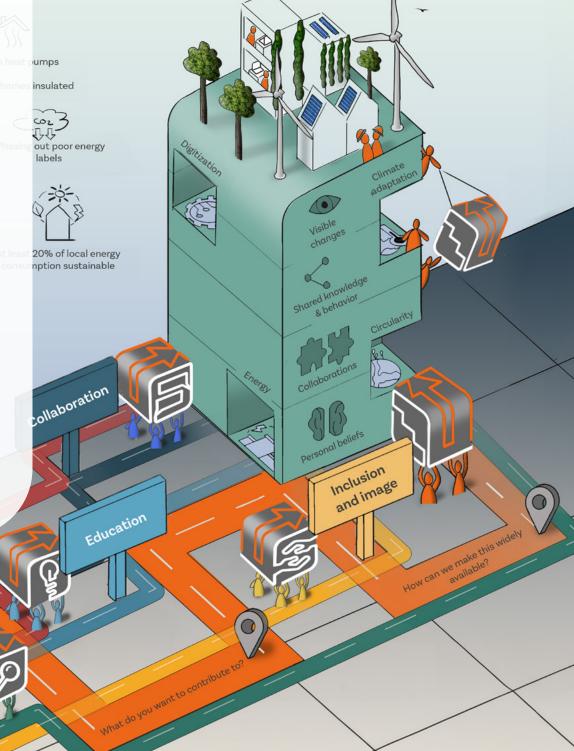
See the following pages for what each action line entails.

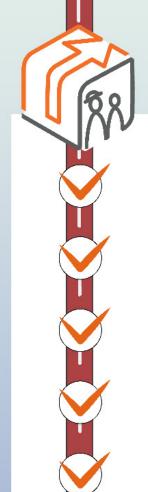
Click the button below to read the full report.

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Solutions





## Action plan Labor market 2024-2030

Map out the existing lateral entry programs (and funding) in the construction and installation technology sectors.

Identify what needs to be done to meet sustainability requirements for different professions within the construction and installation sectors.

**Research what retraining workers in the fossil fuel industry need** if they want to move into the sustainable construction and installation sectors.

Organize knowledge exchange on sustainable construction and installation methods.

Ensure **effective mentoring programs** that make it easier for people to switch to the construction and installation sectors.

**Evaluate the effectiveness** of entry and retraining programs in the construction and installation sectors.

**Ensure continuous improvement** of entry and retraining programs and publish updates on the 'Mensen Maken de Transitie' website and other relevant platforms.



## Action plan Education 2024-2030

**Integrate separate elective modules, certificates, and courses** on the energy transition into the core and profile sections of the qualification dossier.

**Support teachers** in developing the knowledge and skills they need to teach their students about the energy transition.

**Improve collaboration** between education and businesses involved in the energy transition.

Enhance the connection between preliminary education, vocational training, and lifelong learning.

Ensure that attention to the energy transition is included in the quality agendas of vocational education (mbo).

**Develop a central platform** where learning materials on the energy transition can be gathered (accessible, reusable, and maintainable).

Integrate the skills needed for the energy transition into CompetentNL.





## Action plan Inclusion & image 2024-2030

Critically examine your own recruitment and company culture.

**Determine which specific target groups you want to reach** and establish contacts with interest groups and experts familiar with these target groups. Pay special attention to language programs to assist these groups.

Explore programs available in other sectors that might be beneficial for your target groups. Be willing to cross boundaries and think inclusively.

Investigate other recruitment possibilities and learn from the experiences of others.

Adapt existing registration, guidance, and culture programs based on recent insights on reaching new target groups. Make inclusivity and diversity a permanent part of your company policy.

**Continuously monitor** the outcomes of these programs, gather relevant data, and share this information with other projects in the sector.

Regularly update and adjust the findings, and share them on a common platform.



## Action plan Collaboration 2024-2030

**Integrate the knowledge and network** related to energy transition into central platforms like 'People make Transition'.

**Develop an accessible overview** of all initiatives related to energy transition for small and medium-sized businesses.

**Establish a permanent financial structure** to maintain and keep the BUS-NL platform up-to-date, ensuring it remains relevant and valuable to all stakeholders.

Regularly update the BUS-NL platform with new initiatives, technological updates, and stories from industry leaders.

Gather feedback to measure the effectiveness of the platform.





### Action plan Innovation 2024-2030

**Identify the soft skills and specific transition skills needed** for energy transition in the built environment.

Ensure alignment of transition skills descriptions with CompetentNL standards.

**Assess whether the identified soft skills are aligned** with education and industry needs.

**Collaboratively develop a learning trajectory or modules** for acquiring these soft skills/transitional skills.

**Execute a train-the-trainer program for teachers, job coaches, and trainers** to integrate transition skills into their curricula and coaching offerings.

**Implement the development program** for transition skills in collaboration with relevant sectors and education.

**Ensure continuous improvement** of training and development programs for transition skills.



# Join us!

<u>Join BUS-NL</u>, the Dutch network of professionals committed to craftsmanship for a sustainable built environment.

How does your work contribute to craftsmanship for a sustainable built environment?

- We work on a better match between labor supply and demand in the construction and installation sector.
- We are committed to better integrating transition challenges into education.
- ✓ We help streamline initiatives to improve collaboration.
- We are committed to accelerating the application of innovations and promoting entrepreneurship.
- We work on more inclusion and improving the image of the construction and installation sector.

Increase your impact. Support <u>the roadmap</u> and show how your work contributes to one (or more) of the above points.



#### More information

http://www.buildupskillsnederland.nl/

#### Follow us

https://www.linkedin.com/company/BUS-NL

#### Colophon

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