Build Up Skills
NL

D4.3 Updated Roadmap BUS-NL

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D4.3 Roadmap BUS-NL

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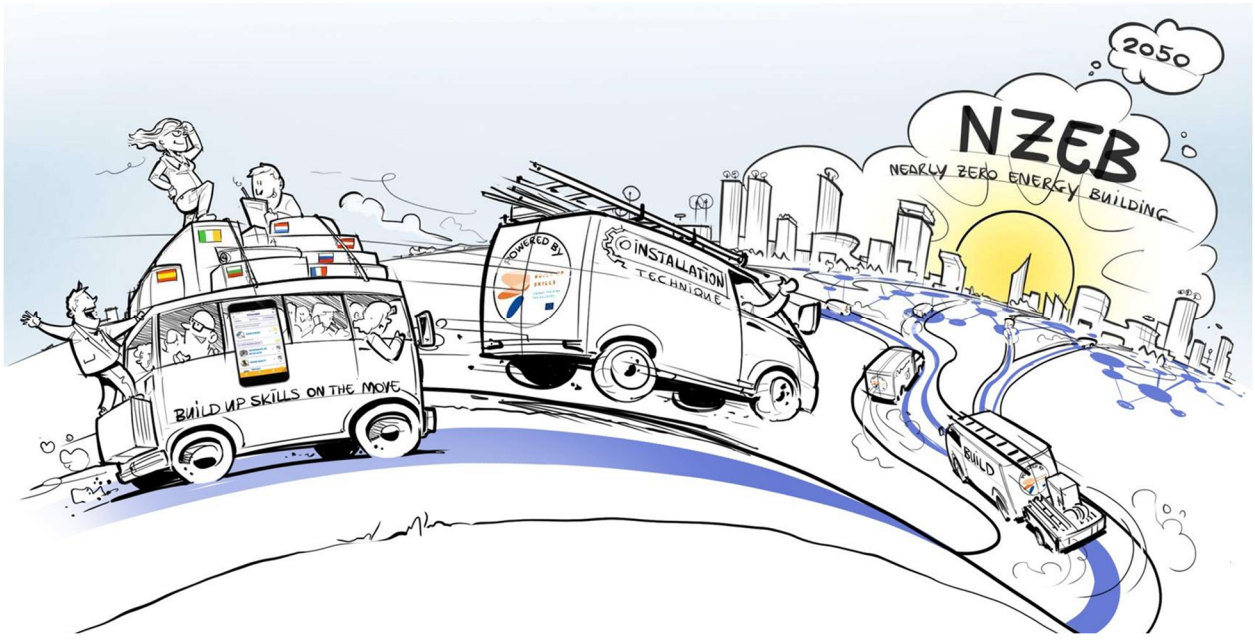

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Foreword

In front of you is the Roadmap Report for the development of transition skills for the sustainability of the built environment. This report contributes to the capacity building needed for the successful sustainability transition of the built environment. It takes into account other important transitions that will impact the construction and installation sectors in the coming years, such as the material transition, climate adaptation, and digitalization. The roadmap for the period 2024-2030 provides guidance for anyone who wants to orient themselves from a broad perspective and focus on the necessary skill development. This is to connect and accelerate in collaboration.

This roadmap works with action lines. The overview of the action lines helps to gain insight into what is needed to offer a suitable workforce with the right skills or the ability to develop them. We aim to meet the growing demand for well-trained professionals at all stages of the transition process. Each action line includes a proposal for who could take ownership and contribute to the actual realization of these actions.

A broad network of organizations and professionals was involved in the creation of the action lines. One thing has become clear during the creation of this document: realization can only be achieved through the collaboration of many different parties, the willingness to learn from each other, and to utilize each other's insights and results.

We therefore thank everyone who has contributed to the creation of this Roadmap and everyone who supports this Roadmap and wants to help realize it in the coming years.

Jan Cromwijk (coordinator of BUS-NL)

Summary

This ***Roadmap report from BUS-NL*** provides guidance for all stakeholders in the Dutch construction and installation sector who wish to contribute to the EU's goal of achieving CO2 neutrality by 2050. The roadmap was developed by the BUILD UP Skills Netherlands team with funding from the EU LIFE program. It calls on educational actors, policymakers, and professionals in the construction and installation industry to collaborate on the energy transition.

The roadmap outlines the goals that must be achieved to have a climate-neutral built environment by 2050. These include improving the energy efficiency of buildings, transitioning to sustainable heating solutions, and increasing the use of renewable energy sources within the built environment. Upgrading building insulation, striving for better energy labels, and the widespread adoption of sustainable installations are also identified as key conditions.

To achieve these goals, it is necessary to reduce the shortage of well-trained professionals. The roadmap structures the path to solving this shortage around five strategic directions, providing a clear and methodical approach. These directions involve adjustments in the labour market, improvements in education and training, enhancements in collaboration, stimulation of innovation, and the improvement of inclusivity and the sector's image. Each strategic direction is elaborated with an evaluation of ongoing projects and a detailed action plan.

Key insights and outcomes (from 1.3.2 Framework for the Roadmap 2024-2030)
Within the BUS-NL network, we operate within a complex playing field. There is a lot happening, with numerous initiatives, projects, and programs. However, many stakeholders are unaware of each other's activities and objectives. This fragmentation makes it difficult for successful experimental initiatives to scale up and increases the risk of repeating efforts. A major desire expressed in all workshops, interviews, and during the working conference is for BUS-NL to make initiatives visible within the ecosystem, share knowledge, and collaborate more closely. This has been explicitly used as a starting point in drafting the roadmap action lines. The roadmap itself was created in collaboration with a wide range of stakeholders, who were involved through interviews, workshops, and co-creation events. This ensures that the strategic directions in the roadmap are supported by the sector. Key actors are linked to the five action-lines of the roadmap.

1. Labor Market
The current labour market cannot meet the demand for skilled professionals who can contribute to the energy transition of the built environment. To promote inflow, in addition to increasing new students, it will be necessary to target new groups (such as career changers of lateral inflow). This includes reaching out to employees in the oil and gas industry who can and want to make the transition. To maintain a clear understanding, it is important to continuously monitor the required qualifications and skills and update the skills mapping annually. This responsibility lies with the joint parties in the construction and technical sectors, and subsequently with the industry training funds (O&O-fondsen). There are already many initiatives in the labour market for career changers, such as

the ‘Technology Attack Plan’ (Techniek Aanvalsplan) and ‘People Making the Transition' (Mensen Maken de Transitie), which can be strengthened. The labour market potential is much larger if approached from a broader perspective, focusing on both inclusion and talent (see action lines 3 and 5).

2. Education and Training

Over the past 10 years, a lot of educational material has been developed for training and retraining. However, this reaches only a limited part of the current workforce. Collaboration between education and the business/environmental sectors regarding the energy transition can be improved, as well as the development/guidance of a sufficient number of competent teachers. It is necessary to work on integrating developed (partial) courses, learning environments, and optional modules into the (mandatory) core curriculum, and improve the alignment between pre-education, vocational training, and lifelong learning. Additionally, it is important for participants and teachers to think beyond the boundaries of their own disciplines and to adopt an integrated learning approach. We see an active role here for organizations such as Npuls, the VET Council, and the cooperative Learning for Tomorrow (Leren voor Morgen), which are already active in this field. They can support and advise vocational education to collaborate and develop in the aforementioned areas.

3. Collaboration within the work domain

There are many initiatives that are not yet aligned or are only European, national, or regional in scope. Using a consistent skills language (linked to the nationally developed standard CompetentNL) is essential. Additionally, it is important to recognize, and value developed transition skills (micro credentials). Increased exchange of information and a willingness to learn from each other are also crucial. The CoILs established in this BUS project can also have a structural place in this, enabling us to work together on topics collectively. As a sector in transition, it is important to collaborate collectively to establish new accepted standards and methodologies. Several parties in the sector are already working on this, such as the Centraal Register Techniek, Competent NL, Passport4Work for raising awareness of labour potential in construction & technology, and Volandis with the Digital Skills Passport. However, the coordinating role has not yet been fully realized in the area of skills-based work. This is necessary to make connections and continue to challenge the sector to address issues of collective importance. O&O funds from the construction and technology sectors can play an important role in this, as well as knowledge organizations like ISSO and implementation agencies in the field of skills frameworks. The BUS programs themselves can also be attributed to this effort.

4. Innovation

Technological innovations are gradually finding their way into the curriculum and are increasingly being integrated through a task-oriented approach. Key areas of focus include collaboration between disciplines, the impact of digitalization, and the necessity to work more circularly. Currently, techniques are often trained separately and specifically for individual professional practices. Social innovation is receiving more attention but is still not consistently translated into skills. Particularly, skills needed for transition thinking, taking social responsibility, integral thinking, and collaboration between different parties and disciplines. These aspects deserve more attention in skill development programs, whether it's for demolition, maintenance, or new construction at both executive and

managerial levels. Organizations in the field of social innovation in construction and installation technology can collectively take the lead here. Initiatives such as Building Changes and Learning for Tomorrow provide an indication of which transition skills are involved. We invite organizations and networks active in human capital and specifically social innovation to assess this against their practice of change. There are opportunities for parties like GideonsTribe, Wise-Up, Crossover, Cirkelstad, Digi-Go, Techniek Campus, and the 4 regional hubs of the Construction and Technology sector, as well as 'People Making the Transition'. These organizations can also ensure a strong connection with key themes: climate adaptation, energy transition and grid congestion, circular economy, and digitalization (see Chapter 2).

5. Increasing inclusivity and improving the sector's image

Access to the labour market for women, youth, and individuals with non-Dutch backgrounds is challenging. Measures aimed at unlocking opportunities and improving their position are more than welcome. The image of the construction and installation technology sector among women, youth, and individuals with non-Western backgrounds can be significantly enhanced. However, improving the sector's image alone is not sufficient; the current work culture (from social norms to working hours) in the sector must also change to attract and retain these individuals. We recommend aligning efforts with the Technology Attack Plan (Aanvalsplan Techniek) and collaborating where possible with parties possessing knowledge and expertise in this area, such as Duneworks and Crossover.

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1. Introduction

1.1 Introduction

To achieve CO2 neutrality by 2050, all countries in the European Union (EU) must make their building stock completely carbon-free. This transition to CO2 neutrality in the built environment presents numerous challenges. It involves not just one transition, but a combination of transitions in areas such as digitalization, energy, climate adaptation, nature inclusivity, biodiversity, inclusivity, cultural heritage, robotics, industrialization, mobility, and circularity. Consequently, there is still a great deal of uncertainty and frequent conflict about which (technological and social) pathways will lead to the desired future. Leadership in this complex and uncertain landscape seems to be everywhere and nowhere. Additionally, there is an ongoing quest to determine the knowledge, skills, and attitudes (competencies) required for these transitions and from whom.

In 2011, the European BUILD UP Skills initiative was established to the skills of professionals involved in the energy transition. In the Netherlands, various actions were undertaken to improve these skills up to the EQF4 educational level (VET level 4). The platform 'BUILD UP Skills Netherlands' was established with the parties involved at that time. The focus was strongly on actors such as training funds, knowledge centres, and Regional Training Centres (ROCs) that are involved in educating and training professionals in the energy transition. This was based on the EU's observation that many member states were failing to adequately support this group with in-service training. The assumption was that every professional would need to make choices within the broad spectrum of energy transition techniques, such as PV panels, heat pumps, underfloor heating, and insulation measures. And these skills are certainly necessary, including all the new competencies that come with them.

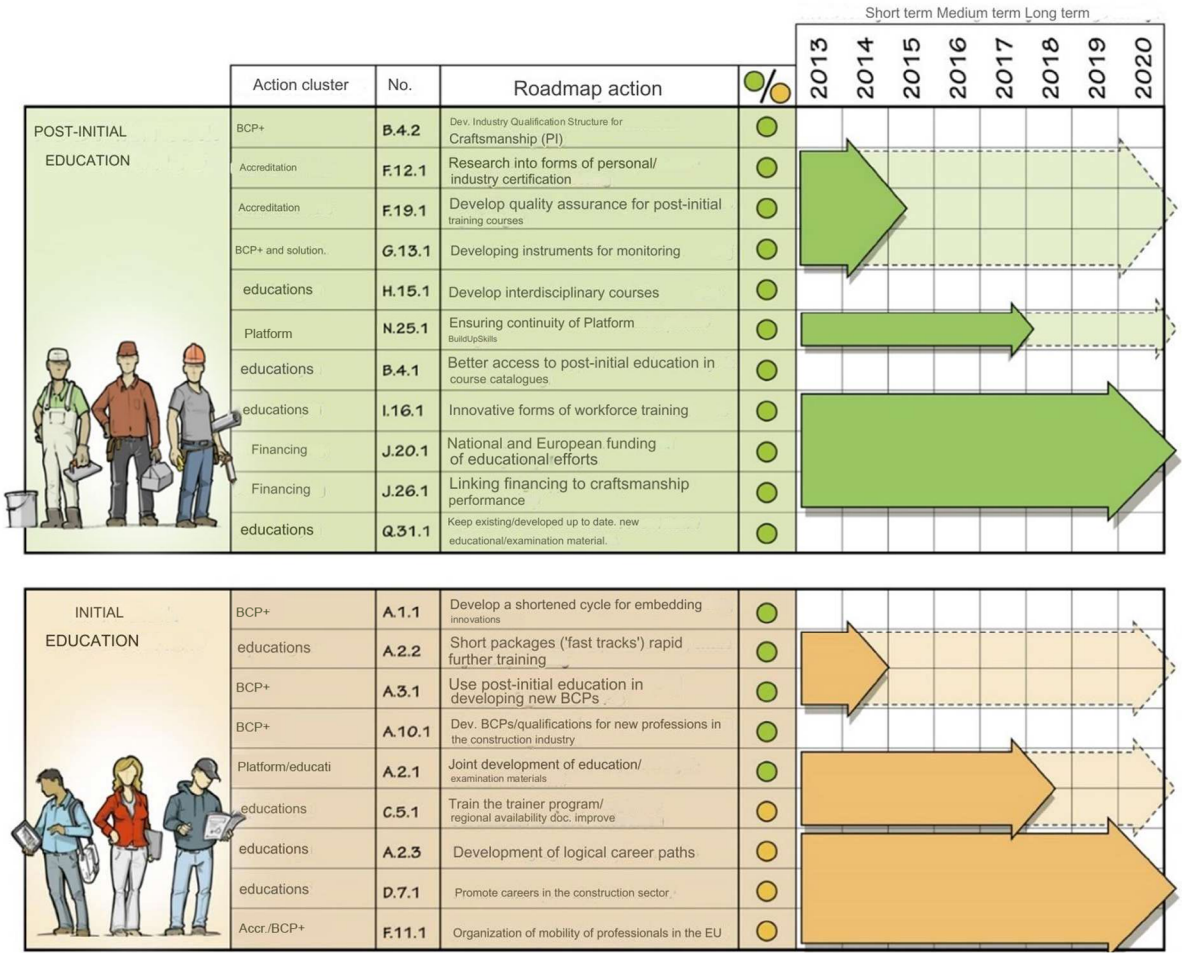

Figure 1 BUS-NL 2011 Roadmap

In the period from 2011 to 2013, various parties in the Netherlands, under the name BUILD UP Skills Netherlands (BUS-NL), developed a roadmap to identify the skills needed for the energy transition. Now, over 10 years later, we have reviewed the activities mentioned in the roadmap and the agreements made with educational institutions, governments, and businesses. These activities focused on ensuring a sufficient number of qualified personnel to shape the energy transition, with particular attention to both initial education (mainly VET) and post-initial education (education for those already in the workforce).

Looking back, it appears that most of these activities have been successfully implemented. For instance, elective modules have been introduced in VET programs, and a system has been developed to handle rapid innovations. An effective national system for knowledge agenda-setting and development has been established in the installation sector, determining how this sector manages relevant innovations. This system is integrated into education, exams, certifications, and is recognizable in the market.

The next steps we can take involve more emphasis on sustainability and the circular economy in the qualification dossiers of initial education programs and enhancing the recognition of certified professionals and the desired quality of implementation for consumers.

During the implementation of the actions from the 2013 published roadmap, it became clear that the entire value chain must actively contribute to the transition of the built environment, including actors who work beyond just the energy transition. This includes municipal officials working on urban renewal and architects who can design integrated sustainability solutions (including climate adaptation, nature inclusivity, and future resilience). It also involves housing association staff who need to understand new values and manage different forms of ownership and commissioning. Additionally, energy coaches and ambassadors, biomimicry experts, poverty specialists, educators, and process supporters are required.

In summary, a highly diverse network of actors, each with their own skills, is needed to make the built environment sustainable and CO2-neutral by 2050. These actors in the value chain of the built environment will need to collaborate on an unprecedented scale in the coming years. They must align and reinforce their activities, creating a cooperative framework that connects local, regional, and national levels to enable maximum acceleration. This requires new skills related to dealing with uncertainty, multi-level governance (steering across all layers), new leadership, innovative collaboration forms, and new value chain organization. Identifying these necessary skills has been comprehensively addressed in the skills mapping conducted by BUS-NL.

One challenge addressed in this document is identifying supported actions for further capacity building. This aims to ensure that the necessary skills are embedded in education, training, job profiles, and professional recognition over the coming years. Together with stakeholders, a roadmap for the period 2023-2030 has been developed to facilitate and accelerate capacity building. The goal is for a variety of actors to broadly support the implementation of these actions, enabling real acceleration in the transition.

The EU's LIFE program has largely funded the development of this roadmap. From this role, Europe has provided several key principles:

- The construction and renovation sector must become more attractive to women and young people.
- Some workers in the fossil fuel industry will need to be retrained for relevant jobs in construction and installation technology, especially in regions where this need is significant.
- It is important for young talents to find their way into the involved sectors.
- Additionally, the roadmap must align with:
    - The EU Construction Blueprint.
    - The Pact for Skills in construction, part of the European Skills Agenda.
- Each proposed training/qualification, per profession, must specify the EQF level.

This is intended to strengthen the roadmap and ensure alignment with the roadmaps being developed in fifteen other EU member states.

1.2 Reader's guide

This document begins with a brief summary of relevant background information. Here, the main data and information from the status quo analysis conducted by BUS-NL are reported, as this forms the basis for developing the national roadmap. Next, we describe the national progress made within the BUILD UP Skills initiative (i.e., during the period 2012-2022). This is followed by an overview of the identified barriers to achieving the 2030 objectives. Finally, the new roadmap for 2024-2030 is presented.

1.3 Background information for the roadmap

1.3.1 Principles and current situation in the construction & installation sector

The European Commissions 'Fit for 55' package, launched on July 14, 2021, aims to adjust EU legislation to achieve climate neutrality by 2050 (a proposal to revise the EU climate and energy framework). It targets a 55% reduction in greenhouse gas emissions by 2030 compared to 1990. The energy transition in the built environment is crucial for achieving these goals, with skilled professionals being vital. The Dutch Ministry of Economic Affairs and Climate Policy (EZK) has translated these objectives into policies for the Netherlands.

Therefore, the BUS-NL roadmap works based on the EZK's 2030 goals:

- Insulate 2.5 million homes with an emphasis on phasing out poor energy labels (E, F, and G): 1.5 million owner-occupied homes and 1 million rental homes will be insulated to the Standard for home insulation.
- Phase out poor energy labels in utility buildings: By 2027, improve the 15% of buildings with the worst energy performance, energy label G according to the new classification, to at least energy label C (60,000 buildings). By 2030, improve buildings with energy label F according to the new classification to at least energy label C (60,000 buildings).
- Switch to sustainable installations or district heating: Install 1 million (hybrid) heat pumps in existing buildings. Create 500,000 new connections to a district heating network in existing buildings (in housing equivalents).
- Reduce the environmental impact of energy renovations by using circular principles such as reducing the use of scarce and energy-intensive materials and extending lifespan.
- At least 20% of local energy consumption is sustainably generated within the built environment.
- Increase the use of sustainable sources: Blend 1.6 BCM of green gas, equating to a 2.9 M ton CO_2 reduction by 2030.

To achieve a safe, healthy, and future-proof living environment by 2050, the design, construction, and technology sectors face even more significant challenges. These challenges are best addressed in conjunction with the tasks of the energy transition. Therefore, the existing Mission B for the built environment is expanded to Mission B+ with the following additional objectives:

- Replace and renovate tens of thousands of bridges, viaducts, and tunnels.
- Construct 900,000 new homes by 2030.
- Significantly reduce greenhouse gas and nitrogen emissions by 2030.
- Achieve a 50% reduction in the use of primary raw materials by 2030.
- Make the built environment climate-resilient by 2050.
- Establish a construction economy that is almost entirely circular by 2050.

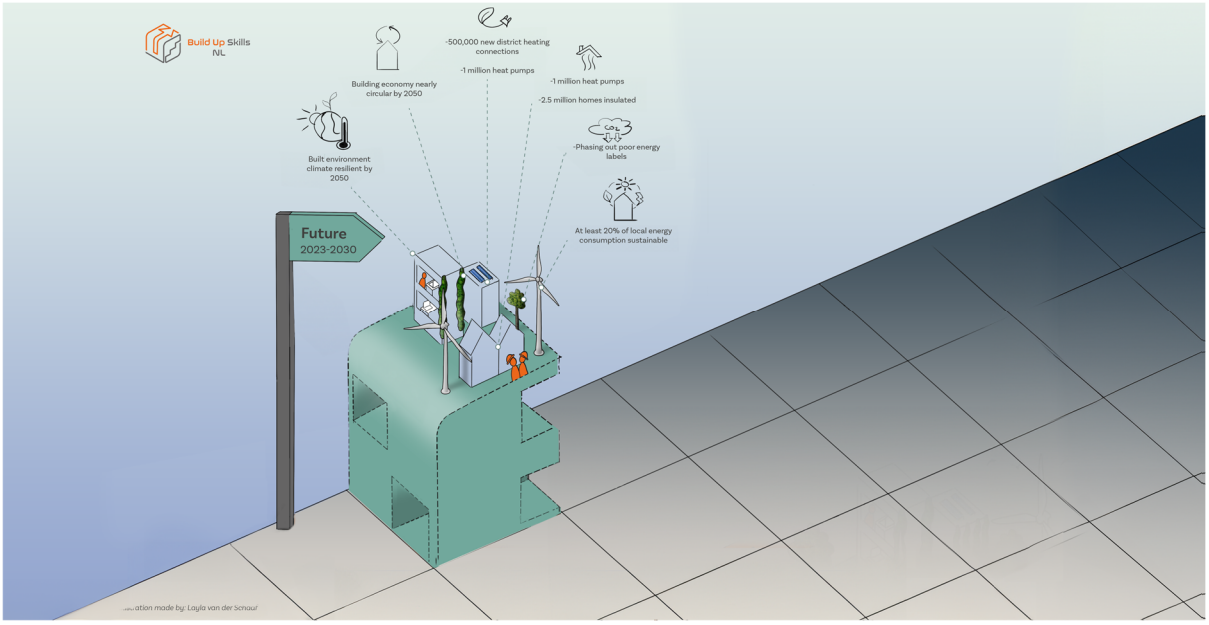

Figure 2 BUS-NL starting point 'current situation and objectives BZK'

The Status Quo analysis identified barriers and skills gaps between current skills and future needs, with a focus on energy-efficient renovations and energy-neutral buildings. It also described the policies related to energy transition, climate, biodiversity, and the circular economy in the Dutch construction sector. This provides insight into the required craftsmanship and the associated challenges for the education system.

Key findings:

- In the Netherlands, there are clear objectives for shaping the energy transition in the built environment, with attention to quality of life, energy transition, circular economy, and climate adaptation. While progress is being made towards these goals, there is still much to be done. There are promising examples and pilot projects, but scaling up remains a challenge. The key question is how to train skilled professionals to achieve more and be more effective. Additionally, the goals related to circularity, biodiversity, and the energy transition often remain disconnected in both policy and practice. For instance, solar panels and heat pumps are currently difficult to repair or reuse, which requires extra attention moving forward. This report describes the status quo as of 2023, providing a clear understanding of the challenges for the next seven years. In 2020, 579,000 people were employed in the Dutch construction

sector, with an increasing trend since 2015, especially in specialized construction sectors. Predictions indicate a stagnation from 2025 to 2035, possibly influenced by changes in the retirement age. The available labour potential is not expected to increase rapidly; rather, it may decrease due to the anticipated departure of older employees.

- Energy consumption in the built environment, including households and services, has decreased by 11% since 2010 due to better insulation and more efficient heating systems. The increase in self-generated energy, such as through heat pumps and solar panels, has reinforced this trend. This highlights the necessity of transitioning to new installations and their applications, and the need for trained professionals to implement these installations.

- The goals for 2030, including a 55% reduction in CO2 emissions and the transition of 7 million homes and 1 million buildings away from natural gas by 2050, require 1.5 million sustainable homes by 2030. The focus is on replacing poor energy labels and installing hybrid heat pumps. This places a significant demand on the existing labour market potential, both quantitatively and qualitatively. Predictions for 2030 vary between 140,000 and 175,000 new workers needed in construction, depending on economic growth. Current expected inflows are substantially lower without interventions, indicating an anticipated quantitative shortfall. There is limited data on the needs within the various subsectors of construction and installation technology from the Status Quo Analysis. Consequently, the specific needs of SMEs are not well understood.

- Vocational education (VET) programs address the transition at various levels and in different ways. Higher education programs such as associate degrees, bachelor's, and master's degrees focus significantly on sustainability in the built environment. Training providers are open to further curriculum adjustments and the provision of lifelong learning opportunities. Their focus is mainly on training new entrants rather than upskilling those already employed, who constitute the largest group. There is a growing demand for reskilling and upskilling. Existing vocational and higher education programs are expected to meet only part of this demand.

This summary of figures and developments illustrates the challenge facing Dutch society in achieving the energy transition in the built environment. The necessity of skill development and flexible training is essential to achieving the set goals for a sustainable, climate-resilient construction sector in the Netherlands.

1.3.2 Framework for the Roadmap 2024-2030

To develop the roadmap for 2024-2030, a 'directions framework' was utilized. This framework served as the basis for dialogues surrounding the roadmap. During these dialogues, stakeholders collaborated to formulate concrete and supported actions for inclusion in the roadmap.

This was structured around four building blocks:

1. Working from **personal convictions**
2. **In collaboration** with other stakeholders
3. Based on **shared knowledge and behaviour**
4. In order to create **visible changes**

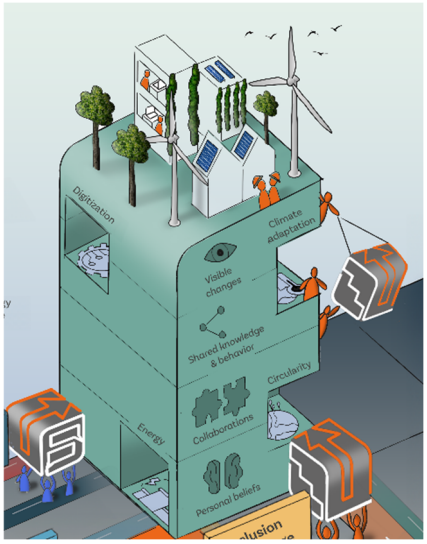

Figure 3 4 Building Blocks

The following steps were taken in compiling the draft roadmap for 2024-2030: The starting point was an analysis of the previous roadmap and reflection on its actual results. Subsequently, qualitative one-on-one interviews were conducted with relevant stakeholders representing various aspects of the industry involved in the energy transition and skills development. This provided a comprehensive overview of implemented initiatives and ongoing developments, highlighting the need for specific initiatives to bridge the gap in the energy transition within the built environment. Following the individual interviews and evaluation sessions, our first co-creation event took place. Here, more than 50 individuals collaborated to contribute various inputs for the roadmap. This event was part of the CoIL approach, activating small groups of engaged co-creators to collaborate with us via the BUS-NL platform as a 'Community of Innovative Learners'.

The next step was to set up seven different ideation workshops. To engage stakeholders as effectively and personally as possible, a Directions Framework was established. This visual tool made it easier to understand the process towards a balanced roadmap for the energy transition in the built environment. It was used in each ideation workshop. In total, seven ideation workshops were held with various stakeholders. Subsequently, coherence was examined, and the outcomes were incorporated into a comprehensive mind map that encompasses all discussed areas (see screenshot below of one of the session outcomes).

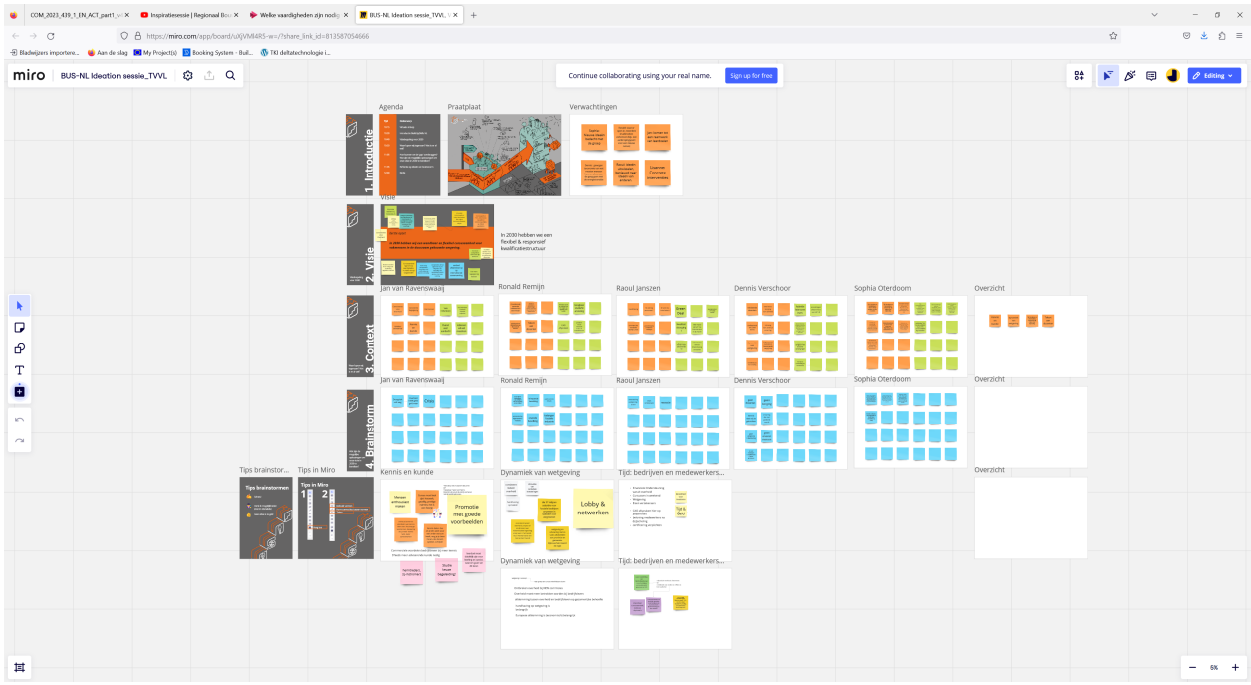

Figure 4 Outcome of one conducted ideation workshop

The above mind map formed the basis for the draft roadmap.

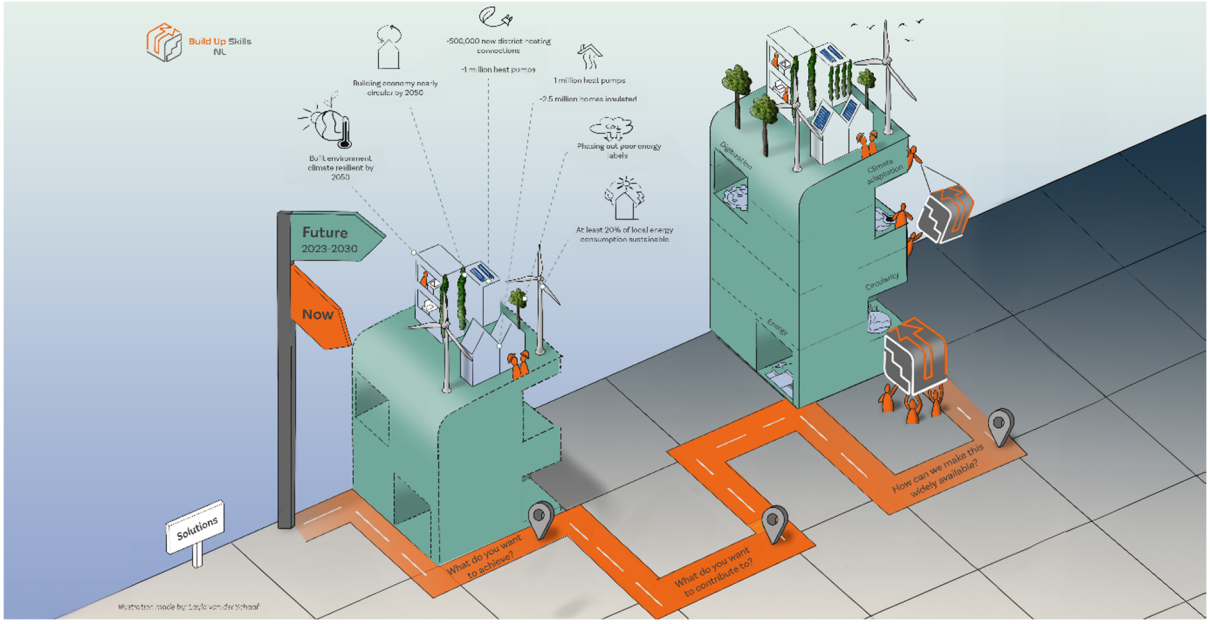

Figure 5 Directions Framework for the ideation sessions

The outcomes of the mind map are organized around five barriers. The directions for solutions are then categorized into 5 themes related to these barriers:

a) Labor market - bridging the gap between supply and demand and improving the match.
b) Enhancing alignment of education and training
c) Enhancing collaborations
d) Stimulating innovation
e) Increasing inclusivity and improving the sector's image

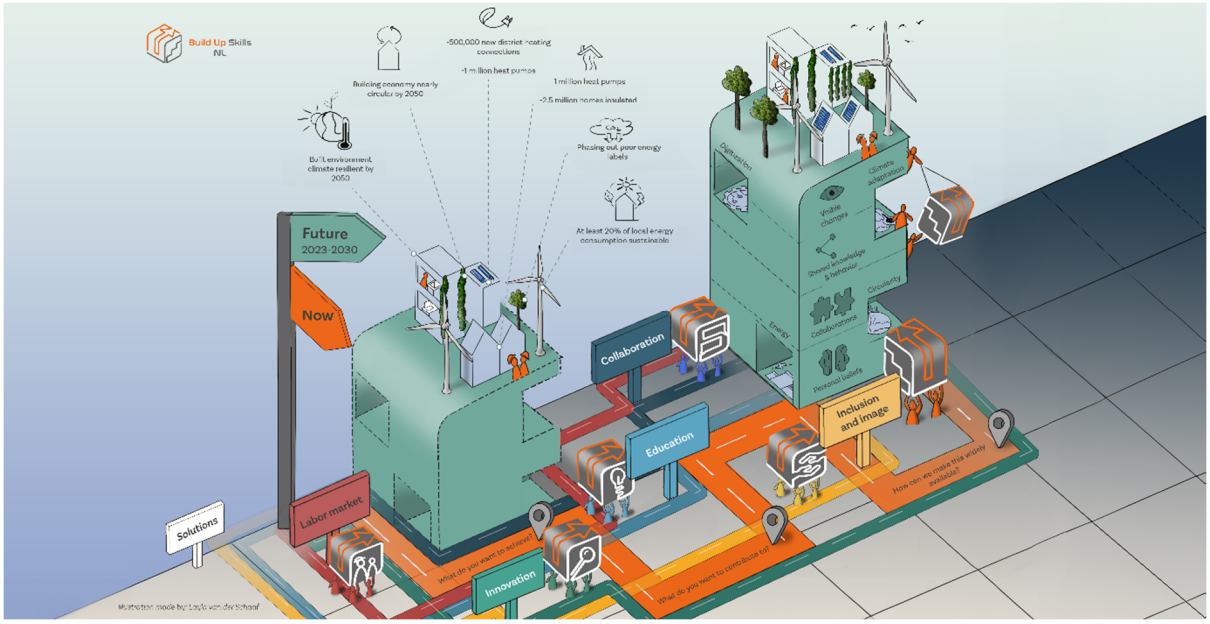

Figure 6 Directions framework for ideation sessions: result of 5 lines of solution

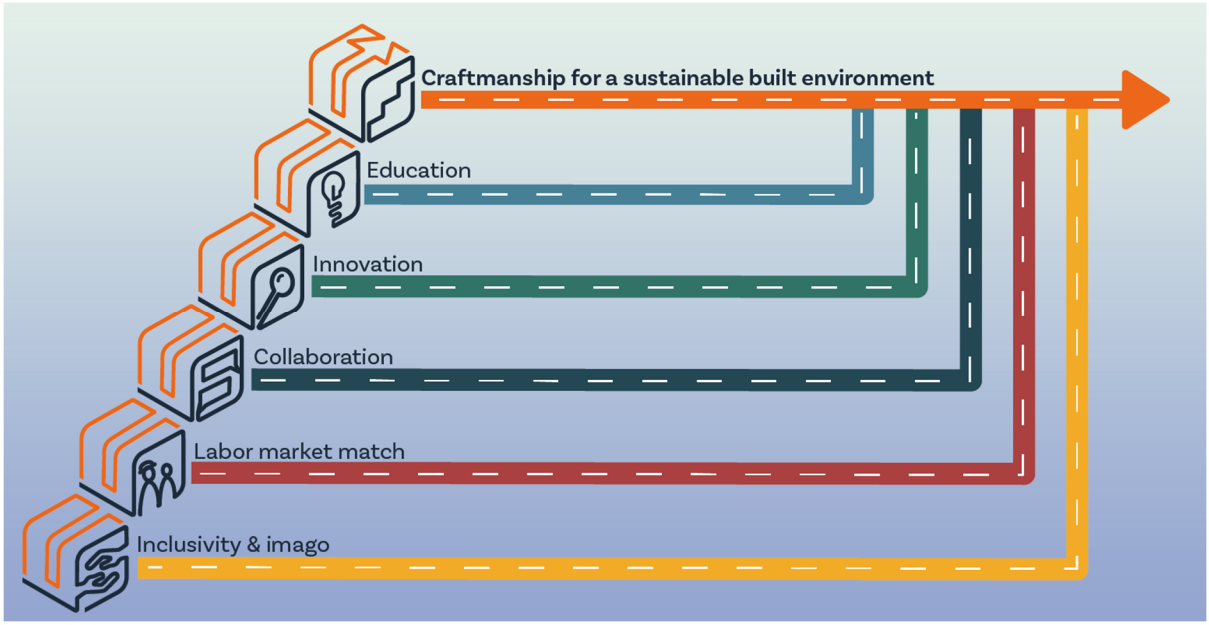

Figure 7 Overview of the 5 lines of solutions for the roadmap

Below, the lines of solutions are further elaborated per barrier:

1. Labor Market

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We see an active role here for organizations such as Npuls, the VET Council, and the cooperative Learning for Tomorrow (Leren voor Morgen), which are already active in this field. They can support and advise vocational education to collaborate and develop in the aforementioned areas.

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Several parties in the sector are already working on this, such as the Centraal Register Techniek, Competent NL, Passport4Work for raising awareness of labour potential in construction & technology, and Volandis with the Digital Skills Passport. However, the coordinating role has not yet been fully realized in the area of skills-based work. This is necessary to make connections and continue to challenge the sector to address issues of collective importance. O&O funds from the construction and technology sectors can play an important role in this, as well as knowledge organizations like ISSO and implementation agencies in the field of skills frameworks. The BUS programs themselves can also be attributed to this effort.

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2. Qualification of needs and skills gaps in the built environment

To achieve the goals and align with developments in the EU, according to the status quo analysis, good coordination is necessary in four main areas:

- **Climate Adaptation**

The focus should be on scaling up new initiatives: OSKA, Platform KAN, National Roofs Plan.

- **Energy Transition & Grid Congestion**
  - Existing investment patterns need to be disrupted. Legislation still needs to be adjusted in many places.
  - The collaboration between grid operators and the installation and construction sectors can be significantly improved. The issue list (visible at 'People Making the Transition') illustrates this.
- **Circular Economy**

Legislation inadequately stimulates development, and there is an insufficient supply of circular products and services.

- **Digitalization**

It is essential to align with already initiated programs, such as the digiGO program Digivaardig and the digiDeals GO.

The skills mapping conducted by BUS-NL makes clear that for core professions, several specializations are increasingly important, yet the required skills are far from sufficient, both qualitatively and quantitatively. Qualitatively, we have established the norms, but determining how many employees the construction and installation sectors will need in the coming years and identifying the skills barriers at the company or subsector level requires in-depth research to be updated annually or at least biennially.

To achieve a clear and organized overview, professions have been categorized into seven categories. Relevant transition specializations are indicated within these categories. This provides a clear starting point for defining goals for skills development in the coming years. For each profession, an indication of the desired skill levels has been provided for each category, based on experiences from leaders in the transition.

A specific determination of needs per target group and per subsector in construction and installation technology, and the distribution between blue-collar and white-collar workers, has not been clearly defined. Further research among various sectors and the entrepreneurs and employees they represent is needed to clearly delineate the required skills development per sector. The defined professions and specifications in the skills mapping can serve as a starting point for this. Soft skills in the context of technical craftsmanship have proven to be a crucial success factor.

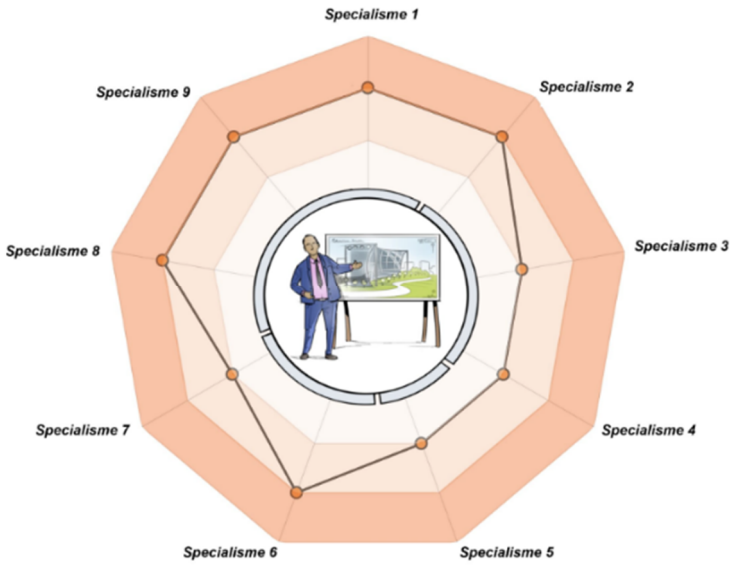

Figure 8 Desired skills-levels

3. Roadmap

In this chapter, the roadmap is presented in table format, followed by the elaboration of the 5 solution directions for the barriers.

Table 1 Roadmap 2024-2030

	Q3 2024	Q4 2024	Q1-2 2025	Q3-4 2025	2026 - 2030
Labor market	Inventory existing lateral entry programs and secure funding for programs.	Specify the involved professions and organize existing action lines accordingly	Assess outflow / reskilling opportunities from the fossil industry	Organize a conference for information exchange and mutual learning	Adjust ongoing lateral entry and mentoring programs based on initial inventory
Education and training	Inventory current initiatives and further explore and examinate the coherence of proposals with action lines from the 'Technology Attack Plan'	Prioritize actions for Education and Training and organize consensus among stakeholders (education and industry)	Approval of a comprehensive action plan for training and education of workers in the energy transition, alignment of education and labour market, competence of teachers, etc.	Establish steering group and governance, develop platform for accessing educational materials, find structural funding for the actions	Implement Education and Training action plan
Collaboration	Establish a solid foundation with clear agreements to ensure all knowledge gained from BUS-NL is integrated across various platforms.	Create an accessible overview of all initiatives around the energy transition for SMEs.	Organize a process where all consortium partners' constituencies can find a solid foundation in one or more platforms.	Organize structural funding to keep the platform up-to-date and relevant for all stakeholders.	Adapt the platform and expand it with new initiatives and technological updates, storytelling from pioneers, etc.
Innovation	Inventory relevant soft skills and clearly describe them as transition skills.	Align these skill descriptions with CompetentNL.	Testing of the 1st result with subsectors and an education and training expert panel.	Develop a learning path/module for these transition skills.	Implement the Train-the-trainer program for teachers, coaches, and trainers, and

					deploy development programs.
Image and inclusion	Inventory existing (lateral entry) and culture programs tailored to specific target groups.	Identify gaps for the relevant professions and align them with specific target groups and culture-specific aspects.	Inventory program possibilities from other sectors.	Organize a conference for information exchange and mutual learning.	Adjust ongoing entry & support programs based on the initial inventory.

3.1 Solution direction 1: Labor market

General strategy

The current labour market cannot meet the demand for skilled professionals to contribute to the energy transition in the built environment. To maintain a clear understanding of the required qualifications and skills, it is essential to continuously monitor and annually update the skills mapping. This responsibility lies with the joint industry parties in construction and technology, and subsequently, with the O&O (Training and Development) funds. In this action line, we focus on improving the success rates of lateral entrants and retaining these employees in the sector by enhancing their sustainable employability. Specifically, we target professions with skills central to the four transition components: 'digitalization,' 'materialization,' 'climate adaptation,' and 'energy.' A number of ongoing projects that can achieve results and provide learning experiences include:

- Skills-based recruitment, selection, and development (lessons from projects where this is already applied, e.g. Passport for Work / House of Skills).
- Improve real-world view of occupations and tasks (providing a clear view of occupations, e.g., the construction professions menu card project in Gelderland).
- Task-oriented lateral entry opportunities, utilizing the Digital Skills Passport (DSP) for the construction sector.
- Results of current lateral entry projects in the labour market (e.g. 'From Bank to Construction').
- The role of HR in the construction sector -example project by CrossoverNL in the province of Gelderland.
- Guiding new employees in construction and installation technology companies.

MMT 'People Making the Transition' notes contain important considerations for successfully retaining lateral entrants. A robust Sustainable Employability policy also contributes to this, aligning with the national MDIEU program of the sectors.

Identification of priority measures

- Provide a fair and transparent view of the identified professions and task areas.
- Maintain up-to-date insights into possible vacancies at the regional level, aligned with the occupations from the skills mapping or its updates.
- Focus on guidance within companies by training the mentors, specifically for the identified professions and specifications.
- Better position the HR function to support the internal operational organization in the inflow and progression of the respective groups of employees.
- Align with other focus initiatives (Education, image, and inclusivity).

- Engage the entire supply chain (Construction & Installation Technology BNL, TechniekNL, architects (BNA), procurement parties (Hibin), etc.).

Table 2 Action plan for implementing the proposed measures (1: Labor Market)

Nr.	Action	Involved parties	Timeline
1	Identify existing lateral entry programs and find funding for program.	All subsectors	Q3-2024
2	Specify the involved professions and organize the existing action lines accordingly.	Working group	Q3-2024
3	Inventory outflow / retraining opportunities from fossil industry.	Working group in collaboration with oil and gas industry parties	Q3/Q4-2024
4	Organize a conference for information exchange and mutual learning.	All parties involved in lateral entry	Q4 2024
5	Adjust ongoing lateral entry and support programs based on initial inventory results.	Program/project teams	2025-2030
6	Monitor implementation results and collect measurement data.	Working group coordinators of sector programs	2025-2030
7	Periodically update, adjust, and publish results on the 'People Making the Transition' website.	Working group	2024-2030

Required resources

A small portion of the budget from' various programs should be reserved for knowledge sharing, information exchange, and alignment with the desired professions. Implementing this program will require an annual budget of at least 100,000 to 200,000 euros, depending on the ambitions. Execution of the program will increase the likelihood of successful inflow and progression. It is expected that receiving parties will also want to allocate budget for this. An example is the 'Housing Action Plan' from various provinces, which includes financial space for the program. There are also regular subsidy opportunities for such programs from national and municipal governments. In addition to finances, a working group is needed to coordinate the actions and undertake part of the implementation.

Financial mechanisms

The program can demonstrate its effectiveness by measuring the successful inflow and progression of skilled workers into the sector and the successful outflow and retraining from the fossil fuel industry. These metrics can be used to allocate a budget for investing in the program.

Accompanying measures

In addition to tracking successful placements and career progression, it is important to regularly measures the specific professions and task areas in demand and adjust the intake profiles accordingly.

Intended certification and accreditation

Companies that successfully implement lateral entry can receive a certificate or accreditation. Additionally, lateral entrants can build a skills profile within one of the existing systems, demonstrating their progress in developing their craftsmanship.

Structural measures

From a technical and professional standpoint, it is crucial to regularly update the specific skills gaps and emerging needs. This requirement applies to all action lines in the roadmap.

Monitoring

Annual monitoring by the working group should focus on the following results:

- Number of placements
- Mid-term outflow
- Reasons for outflow
- Progression results (growth in employees' knowledge and skills)
- Evaluation of internal support by job coaches/mentors
- Quality of facilitation by HR
- Quality of project organization for lateral entry programs in the sector.

Figure 9 Labor market action plan

3.2 Solution direction 2: Education and training

General strategy

Between 2011 and 2021, the availability of (modular) courses on energy transition and circular transition in vocational education significantly increased. As of November 2021, there were 39 complete programs and 140 elective modules in vocational education (VET) focused on energy transition and/or a circular economy. In higher professional education (HBO), there were 28 programs and 123 minors. While the growing attention to these subjects in vocational education represents an improvement compared to 2011, these figures also indicate that these topics are still largely offered as electives within the curriculum. This approach reaches only a limited portion of current professionals. Strong integration into regular programs and integration across disciplines and educational levels is often lacking. Structural changes in vocational education are needed to prepare future professionals for the clean energy transition in the built environment. We specifically focus on skills essential for the four transition components: 'digitalization,' 'materialization,' 'climate adaptation,' and 'energy.'

Five key focus points can be identified:

1. The collaboration between education and the business sector/environment concerning the clean energy transition.
2. The number of competent teachers who can guide the development of skills for the clean energy transition.
3. The structural integration of developed elective modules and courses into relevant programs. Learning about the energy transition becomes mandatory instead of optional.
4. The alignment between prior education, vocational education, and lifelong learning.
5. Encouraging participants and teachers to think beyond their own disciplines and to learn integrally.

Several ongoing projects that can achieve results and provide learning experiences are:

Table 3 Ongoing projects (2: Education and training)

Initiative	Description	Status	Organisation and contact
Scaling Up Public-Private Partnerships	In this NGF program, existing PPPs are being scaled up, including at least 5 PPPs focused on the energy transition and/or circular economy.	Conditional funding granted in April 2022, scaling up started in summer 2023	Platform Talent for Technology, Katapult program https://www.wijzijnkatapult.nl/groeifonds/
LLO Catalyst	In this NGF program, LLO solutions are being developed	Pilot focused on energy and resource	Organization LLO Catalyst https://llokatalysator.nl/

	for the region, allowing organizations to professionalize in order to develop and offer LLO programs.	transitions started in 2023. First and second application rounds open between April 1 and 15, 2024	
Sustainability Skills	With support from the Ministry of Infrastructure and Water Management and the Goldschmeding Foundation, this program works on regional solutions for responsive vocational education for local sustainability transitions.	Started in 2019, open for participation	Cooperative Learning for Tomorrow https://lerenvoormorgen.org/programma/sustainability-skills/
Technical Action Plan	Strategic collaboration between technical sectors and social partners to resolve structural staff shortages	Started in 2022	https://aanvalsplantechniek.nl/

Identification of priority measures

- Intensify collaboration between education and industry in the energy transition, for example through public-private partnerships, regional consortia, and transition houses.
- Train teachers with the right pedagogical and didactic skills, in addition to substantive knowledge about the energy transition.
- Integrate ongoing initiatives and successful pilots in education (such as hybrid learning environments, challenges, and regional collaborations).
- Include elective modules, certificates, and other optional curriculum components on the energy transition in the basic curriculum, thus making them mandatory.
- Develop continuous learning pathways from pre-vocational secondary education (pre-VET), secondary vocational education (VET), higher professional education (HEI), and lifelong learning (LLL), as is being done in some projects of Strong Technical Education.

Table 4 Action plan for implementing the proposed measures (2: Education and training)

Nr.	Action	Involved parties	Timeline
1	Integrate elective modules and certificates on the energy transition into the core and profile parts of the qualification dossier.	Market Segments TGO (S-BB), Practorates Platform 'Energy Transition'	Q4-2024 (start)
2	Enhance teachers' ability to guide students in developing skills for the energy transition.	Teacher Trainers (initial and post-initial), Association of Universities of Applied Sciences	Q4-2024 (start)

3	Strengthen collaboration between education and industry in the energy transition.	Platform 'Talent for Technology', Cooperative 'Learning for Tomorrow'	Q4-2024 (start)
4	Improve alignment between preparatory education, vocational education, and lifelong learning.	LLO Catalyst, VET Council, Association of Universities of Applied Sciences	Q3-2025 (start)
5	Emphasize the energy transition in VET quality agendas; assess and discuss these agendas in the sector chamber.	Sector Chamber TGO, Industry Group TGO	Q4 – 2024 (start)
6	Develop a widely supported platform for accessing and sharing learning materials on the energy transition.	Npuls/VET Digital	Q4 – 2024 (start)
7	Integrate skills for the energy transition into Competent NL.	Competent NL	Q4 – 2024 (start)

Required resources

- Regional Hubs. These will emerge from Regional Investment Fund (RIF) projects and LLO Catalyst projects. Additionally, several hubs are already collaborating through the TKI Construction and Technology region HCA approach.
- The industry sector will provide 1,000 extra (hybrid) teachers for all education levels starting in 2023. [Involved training funds and industry organizations].
- Companies organize guest lectures, company visits, technology coaches, hybrid teachers, and practical assignments. They also contribute to career orientation through serious gaming, practical challenges, and virtual reality.
- Industry organizations and companies have been investing in promoting technology for a long time. They will further boost this investment by designing and implementing a new program focused on promoting technology in primary and secondary education.
- The government supports collaboration between education and industry and enable companies to establish Technology Centres. [Economic Affairs, Climate and Energy, Education, Culture and Science, and Social Affairs].

Financial mechanisms

Through existing schemes such as SIA-Raak, the Regional Investment Fund (RIF), and the LLO Catalyst. We request the government to provide a targeted competency module for hybrid technology teachers so they can start quickly. Additionally, we ask for assistance in matching supply and demand and financial support for employing these teachers. The practical training subsidy will be retained, as it is essential for BBL (apprenticeship) and dual learning, including in the third learning pathway.

Accompanying measures

Coordination and communication are crucial. A specific plan must be developed to build on what has already been achieved in the first roadmap.

Intended certification and accreditation

A certification and accreditation policy already applies to specific programs. This policy can be adhered to.

Structural measures

From a technical content perspective, it is important to regularly address specific skill gaps and new needs. However, this applies to all action lines in the roadmap.

Monitoring

Monitoring must take place annually by the steering committee and working groups based on results. These results will be specifically derived from the action plan, which includes all mentioned actions prioritized over time.

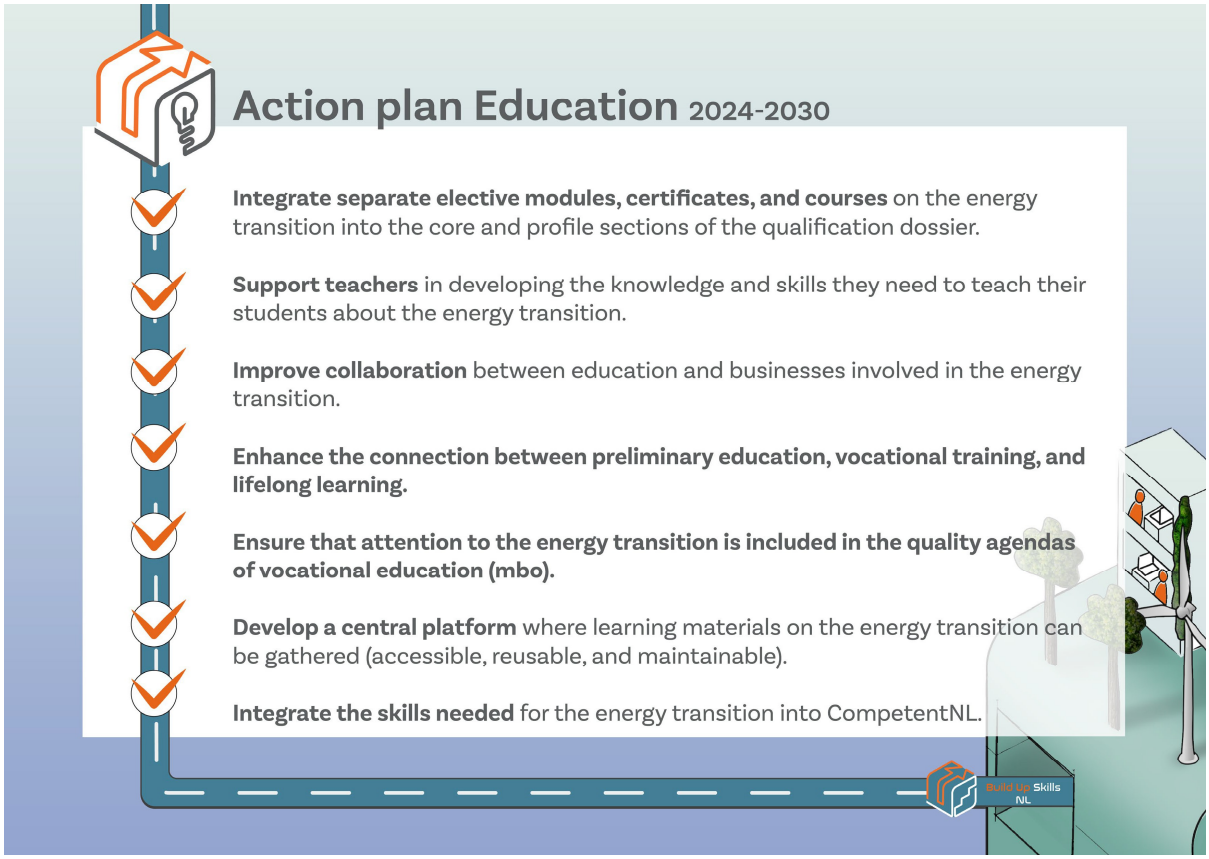

Figure 10 Education action plan

3.3 Solution direction 3: Collaboration

General strategy

There are many initiatives that are not yet aligned or that operate only at the European, national, or regional level. Using a unified skills language (linked to the nationally developed CompetentNL standard) is essential. Additionally, it is important to recognize, and value developed skills (micro credentials). Frequent information exchange and a willingness to learn from each other are also crucial. The CoILs established in this BUS project can play a structural role in this, allowing us to work together on various topics. As a sector in transition, it is important to collaborate to establish new accepted standards and methodologies. Our goal is to prepare our current workforce not only for the energy transition but also for the materials transition, climate transition, and digital transition. By effectively collaborating with existing successful initiatives and platforms, we create a multiplier effect. The leadership role in skills-based work has not yet been defined. This role is necessary to create connections and continuously challenge the sector to address matters of collective importance.

From extensive analyses, interviews, and various sessions, it became clear that many participants encounter the issue of numerous different initiatives in skills development for the energy transition. The problem lies in the high degree of fragmentation and the lack of a unified overview. People often can't see the forest for the trees.

Even the government, with its various programs, seems insufficiently facilitating in this regard. Having a comprehensive overview of all initiatives in one place to prevent fragmentation and allow people with similar initiatives to collaborate and achieve synergy is currently a pressing necessity. Due to fragmentation, more money is spent on development than necessary. A clear and organized schema of completed initiatives and ongoing projects would ultimately save money and time.

Moreover, the urgency to facilitate the energy transition is widespread, as evidenced by the numerous platforms gathering groups to address this issue. Reactivating the BUS-NL platform to operate alongside all other existing platforms does not seem the right approach at this stage. This would only add to the fragmentation, whereas there is a stronger need for synergy, overview, and simplification.

A significant amount of national funding has already been invested in facilitating various platforms. We could save money by collaborating with an existing platform and directing supporters of BUS-NL to that platform. The choice of a platform has not yet been made.

Identification of priority measures

- Our analysis reveals that everyone has a limited view of the available tools but is aware that many people are actively working on various initiatives that could be very useful to them, provided they have a clear overview and know where to look.
- The average SME owner does not have the time to subscribe to numerous newsletters to stay updated on the latest (knowledge) developments that could help their business and employees in this transition. Therefore, there needs to be an accessible and recognizable place where they can quickly and effectively obtain information.
- What ambition do we want to project? We expect that by this approach, a significant portion of SMEs will have been reached by 2030 and will have utilized an available initiative to further train their people.
- What will we do? Collaborate with the 'People Make the Transition' platform and create an accessible overview of all existing reusable initiatives for SMEs.

Table 5 Action plan for implementing the proposed measures (3: Collaboration)

Nr.	Action	Involved parties	Timeline
1	Establish a solid foundation with clear agreements, ensuring that the knowledge gathered by BUS-NL is integrated into a recognizable platform. Investigate the necessary requirements for such a platform.	Working Group / BUS-NL and MMT	Q3-2024
2	Create an accessible overview of all energy transition initiatives for SMEs and incorporate this into a platform.	Working Group	Q4-2024
3	Organize a process in which all consortium partners' supporters find a solid foundation in a national platform, making BUS-NL redundant as a platform.	Working Group / CoILs Contacts	Q4-2024
4	Organize a sustainable form of funding to keep the platform up-to-date and relevant for all stakeholders.	Working Group & Industry Organizations BNL and TNL	2025
5	Update the platform and expand it with new initiatives and technological updates, stories of frontrunners, etc.	Program/Project Teams	2025-2030
6	Monitor implementation results and collect measurement data.	Working Group in collaboration with Sector Program Coordinators	2025-2030
7	Periodically update and adjust and publish results on the "People Make the Transition" website.	Working Group	2024-2030

Required resources

The actions in 2024 will be largely funded by the hours contributed by consortium partners within the BUS-NL project. In 2025, a small portion of the budget from various existing platforms will need to be reserved for knowledge sharing and information exchange in the joint platform. Implementing this program will require a minimum of €100,000 to €200,000 annually, depending on the ambitions. This implementation increases the likelihood of successful entry, progression, and engagement of SMEs.

Additionally, training and development funds might be able to contribute financially. The national government regularly offers subsidies for such programs. There may be an opportunity to align with the human capital agenda of TKI Construction and Technology.

Besides funding, a working group or organization is needed to coordinate the actions and manage part of the implementation. Additionally, a lead partner is necessary to act as the driving force and coordinator. This role could also be filled by a consortium or cooperative of organizations.

Financial mechanisms

The program can demonstrate its value by measuring the participation of various parties and initiatives, as well as the number of active users of the platform and its related products and services.

Accompanying measures

Effective communication with involved initiatives, industry organizations, knowledge partners, and SME users is crucial to ensure the platform serves as a cohesive hub with a comprehensive overview of all initiatives and action agendas. Aligning with other major collaborative initiatives, such as Collect2030 and the 'Technology Action Plan', is also important.

Intended certification and accreditation

Not directly applicable at this time.

Structural measures

From a technical perspective, it is important to regularly address specific skills gaps and emerging needs. This applies to all action lines in the roadmap. Regular updates and revisions are essential to keep the platform organized and user-friendly.

Monitoring

Annual monitoring should be conducted by the working group to assess results, including:
Number of participating initiatives

- Number of users
- User satisfaction with the platform and supporting organization
- Need for human facilitation, process guidance, and "connection officers"
- Quality of facilitation by HR organizations, career transition projects, and knowledge partners (e.g., Skills) within the sector
- Quality of project organization

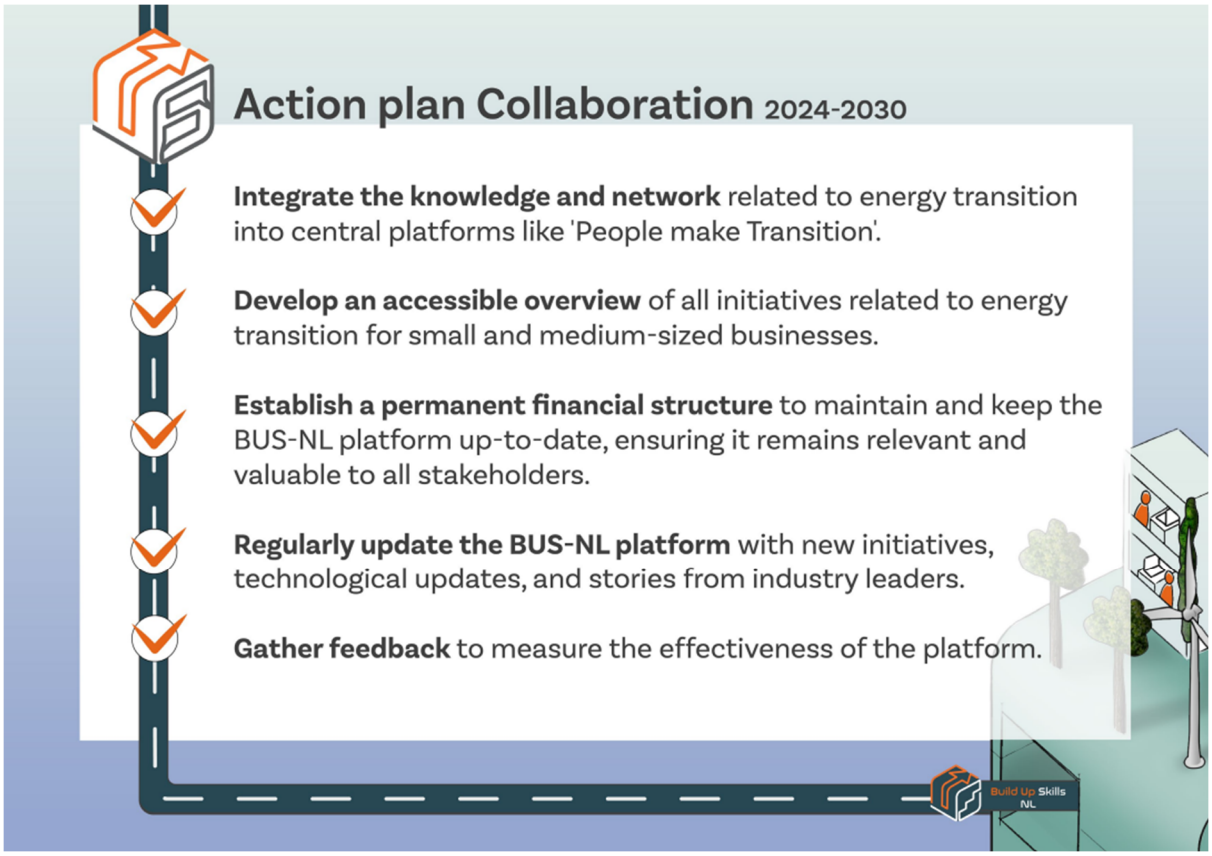

Figure 11 Collaboration action plan

3.4 Solution direction 4: Innovation

General strategy

Technological innovations know their way into the curriculum reasonably well, but social innovation, especially soft skills development, as well as the specific soft skills needed in transitions still need much more attention and integration in skill development programs, whether it is for demolition, management and maintenance, or new construction at the operational or managerial level. In particular, skills are needed for transition thinking, taking social responsibility, thinking in an integrated way, and collaborating between different parties and disciplines.

The integration of AI applications can also be included in this program. Organizations in the field of social innovation in the construction and installation sector can take the lead in this together. The skills mapping clearly shows that a number of skills are considered very important for making the energy transition in the built environment a success. The soft skills listed below are explicitly mentioned as applicable to all professions and specifications from the skills mapping:

- Speaking each other's language
- Webbing (connecting and networking)
- Research skills
- Listening
- Knowledge of other professions, understanding each other's roles
- Informing and communicating
- Being curious
- Staying learning and developing

Besides the importance of soft skills, it is also important to consider the context in which a skill is applied and the experience that someone has already gained in a similar task in a different context. The extent to which the person has or can develop soft skills also determines the speed and ease with which they can master new skills. More insight into this and the integration of soft skills development into learning and development programs can accelerate the transition process. We call this, for convenience, the development of transition skills.

It is therefore important to link up with insights from transition thinking and skills that come from, for example, agility thinking (imagination, change capacity, connecting thinking, realization capacity, and reflective capacity). As far as is known, there are still few ongoing projects that have focused on this. Learning for Tomorrow and Building Changes have some experience and knowledge in this area and therefore want to play a pioneering role.

Aligning with Technology Attack Plan

In addition to the soft skills/transition skills program, it is also important to stay aligned with the more technical developments and the industrial transformation and ample scope for human-centred technology mentioned in the 'Technology Attack Plan' (Action Line 4 and Action Line 5).

Identification of priority measures

- A clear and distinct overview of relevant soft skills and designate them as transition skills.
- Describe these skills in line with the skills language of CompetentNL.
- Develop generic explanations of the development path for these skills so that they can be applied in the various sectors involved in the energy transition.
- Train teachers, job coaches, HR, and trainers to make these skills part of their curriculum and coaching offerings.
- Align with the other focus initiatives (Education, Labor Market).
- Involve the entire chain (Construction & Installation Technology BNL, TechniekNL, architects (BNA), Purchasing parties (Hibin), etc).

Table 6 Action plan for implementation of the proposed measures (4: Innovation)

Nr.	Action	Involved parties	Timeline
1	Inventory of applicable soft skills and clearly describe them as transition skills.	Working group	Q3-2024
2	Align this skills language with CompetentNL.	Working group	Q3-2024
3	Test the first result with subsectors and the education and education expert panel.	Working group	Q3/Q4-2024
4	Develop a learning path/development module for these transition skills.	Learning for Tomorrow	Q4 2024
5	Train the trainer program for teachers, coaches, trainers.	Learning for Tomorrow	2025-2030
6	Implement and roll out the transition skills development program.	Learning for Tomorrow/Building Changes	2025-2030
7	Monitor implementation results and collect measurement results.	Working group with coordinators of sector programs	2025-2030
8	Periodically update, adapt, and process results on the website of People Make the Transition.	Working group	2024-2030

Required resources

Implementing this program will require a minimum of between 200,000 and 300,000 euros per year, depending on the ambitions. After that, it can be part of the various ongoing programs and also an integral part of existing skills languages. Implementing the program increases the chance of successful inflow and outflow. The expectation is that receiving parties will also want to make budget available for this. There are also subsidy options for such programs from the national government, possibly it can be part of an LLO catalyst program. For the implementation phase, it may also be possible to use

R&D funds. It may also be useful to start a PPS under the wings of Katapult and to group this approach under it. In addition to the finances, a working group is also needed that coordinates the actions and takes on part of the implementation.

Financial mechanisms

The program can prove itself by measuring the successful inflow and outflow of professionals in the sector on the one hand and the successful outflow and retraining from the fossil industry. This can be measured and on this basis an amount can also be reserved for investment in the program.

Accompanying measures

In addition to measuring successful placements and outflow, it is particularly important to measure the quality and acceptance of the identified skills and the extent to which employees can also develop them and what the result is in the work. Skills development can become part of the HR cycle and thus also be better integrated into performance cycles and systems that are focused on this. In addition, it is important to measure the quality of the train the trainer programs and the developed learning materials.

Intended certification and accreditation

Companies that successfully implement lateral entry can receive a certificate or accreditation for this. In addition, lateral entrants can build up a skills profile in one of the existing systems, thus also showing that they are successfully working on their craftsmanship. The transition skills are part of this.

Structural measures

From a technical point of view, it is important to pay attention to the regular adjustment of specific skills gaps and new needs. From time to time, adjustments will have to be made or new behavioural indicators will be needed, or new transition skills will have to be described. The most important adjustments are probably in the context. However, this applies to all action lines in the roadmap.

Monitoring

Each year, the working group will have to monitor the results:

- Quality and acceptance of transition skills descriptions.
- Quality and acceptance of train the trainer programs.
- Quality and acceptance of learning materials.
- Quality of support by the project organization of the transition skills development program.

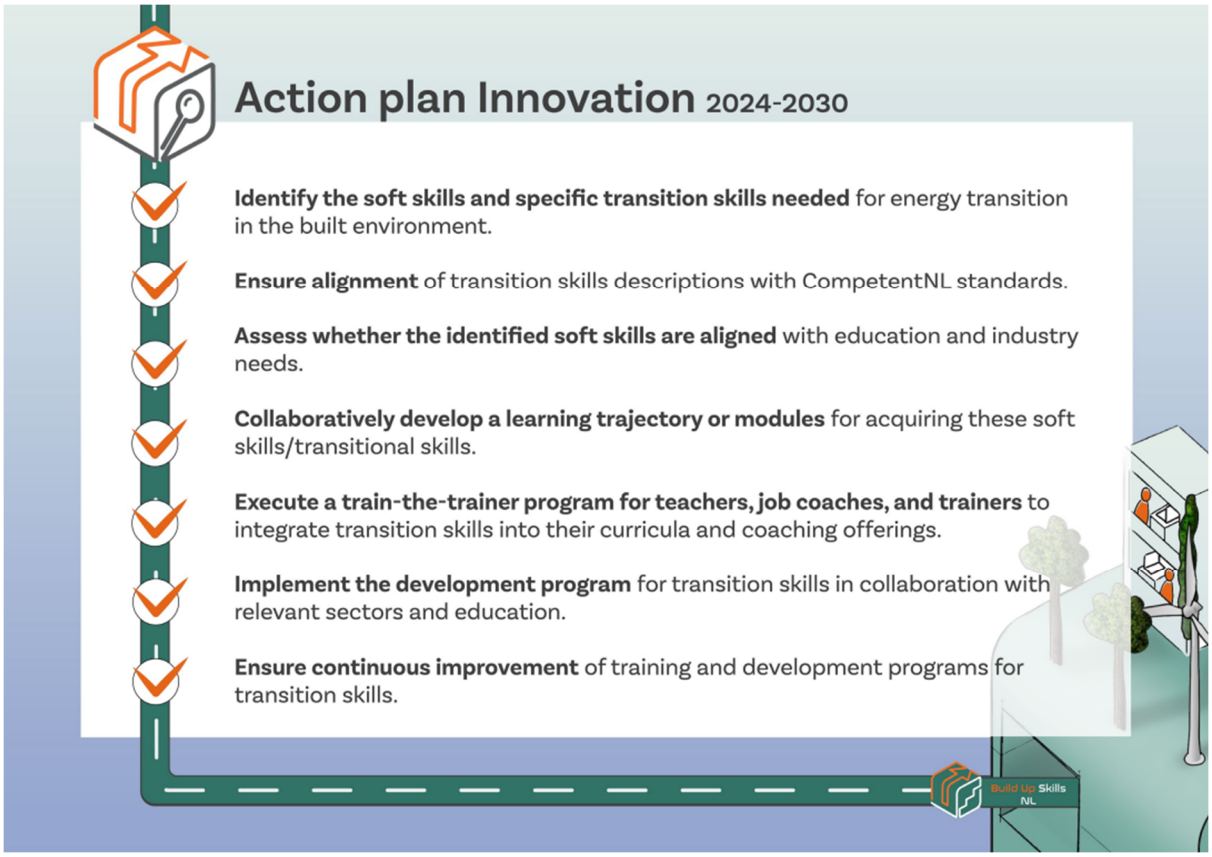

Figure 12 Innovation action plan

3.5 Solution direction 5: Image and inclusion

General strategy

Access to the labour market for women, young people, and people with a non-Dutch background is difficult. Measures aimed at unlocking the potential and improving the position of these target groups are more than welcome. Actions in this area are closely linked to the image of the sectors, which is often unattractive to people from these target groups. The image of the construction and installation technology sector among women, young people, and people with a non-Western background can be greatly improved. Image improvement alone is not enough; the current work culture (from manners to working hours) in the sector will also have to change to attract and retain these people.

The Technology Attack Plan is an existing initiative that can serve as an example for other sectors and can thus make an important contribution to the action agenda for the coming years. We therefore recommend that we join forces with the Tech Attack Plan and, where possible, work together with parties with knowledge and expertise in this area, such as Duneworks and Crossover.

Various studies show that recruitment and selection procedures are often unconsciously not inclusive, which means that mainly people with a similar background and characteristics as the current staff are attracted[1]. Minority groups such as people with a migration background are therefore more likely to fall by the wayside. This may be because general reporting puts people in an undeservedly negative light, or because groups of citizens are not part of the profiling of institutions.[2]

In recent years, various organizations have paid attention to the development of guidelines for inclusive recruitment and appropriate communication. For example, the SER Diversity in Business has published the charter document 'Diverse Recruitment and Selection' (on the steps that companies can take to recruit with a greater focus on diversity and inclusion) and the Guideline Inclusive Recruitment & Selection, aimed at SMEs. There have also been various studies [3, 4, 5, 6] and toolkits[7] developed that focus on this.

The measure we propose aims to further drive these initiatives to address the labour shortage and specific skills gaps of people with a migration background in the built environment transition. To achieve this, an inclusive recruitment strategy is necessary, in addition to other factors.

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[1] https://www.ser.nl/nl/thema/diversiteitinbedrijf/kennisplatform/werven-en-selecteren
[2] https://www.kis.nl/artikel/voor-inclusieve-communicatie-hoef-je-het-niet-met-elkaar-eens-te-zijn
[3] https://www.movisie.nl/sites/movisie.nl/files/2022-06/Waardevol_werken_de_stand_van_zaken.pdf
[4] https://www.movisie.nl/sites/movisie.nl/files/2018-09/Wat-werkt-bij-de-bevordering-van-arbeidsparticipatie-van-statushouders.pdf
[5] https://www.kis.nl/sites/default/files/2022-06/kompas-voor-inclusieve-communicatie.pdf
[6] https://www.verwey-jonker.nl/wp-content/uploads/2022/08/221330_Inclusieve_Communicatie_Arnhem.pdf
[7] https://www.eur.nl/media/2021-04-nl-inclusive-rs-toolkit-1612202000

Identification of priority measures

- Critically review existing recruitment policies.
- Determine who takes ownership to make recruitment more accessible.
- An inclusive communications strategy.
- Reflect/ Peer review
- Mutually exploit the development of an ongoing, sustainable relationship with representatives of stakeholder groups.
- Utilize religious texts to address the importance of sustainability in information or recruitment.
- Match language lessons to employment prospects, motivating people to learn Dutch and work.
- Align with Action Line 3 of the Tech Attack Plan: New Groups for Technology, Construction, and Energy:
    - There are now many groups of people underrepresented in technology, such as women, people with a non-Western background, and people with disabilities. To attract these groups to our sectors, innovation in employers is needed, with room for professionals, flexible working hours, a different way of working and organizing work (including open hiring, job carving).
    - But also, modern remuneration and "money for time" or working more hours. We are tackling this together with a campaign and program aimed at employers in our sectors.
    - Recruit differently: open hiring or being present in the places and at the times where this target group is (schoolyards, community centres, mosques, youth centres); Also connect collaborate with Handyman Companies and EnergieFixers.
    - Organize work differently to make it fit the candidate: other tasks, task division (job carving), working hours or scheduling;
- Align with Action Lines 6 and 7 of the Tech Attack Plan: more opportunities for status holders and temporary skilled workers from outside the EU.
    - We want to offer more opportunities to people from outside who have a residence status in our sectors. They can get started in technology, construction, and energy through retraining programs with work-based learning.
    - We want to recruit skilled workers from outside the EU in a targeted and temporary manner by setting up a "Roemer-proof" Dutch talent pool, where we offer a job, income, and housing.

Table 7 Action plan for implementation of the proposed measures (5: Image and inclusion)

Nr.	Action	Involved parties	Timeline
1	Inventory existing programs for specific target groups and ongoing funding opportunities for programs in the field of culture and labour market image for these target groups.	All subsectors	Q3-2024
2	Specify gaps for target groups and the needs for cultural programs and connect them to the topics of the other action lines.	Working group	Q3-2024

3	Inventory program possibilities from other sectors.	Working group	Q3/Q4-2024
4	Organize a congress with information exchange and learning from each other.	All stakeholders in the field of lateral entry	Q4 2024
5	Adapt ongoing inflow & guidance and cultural programs based on the first inventory.	Program/project teams	2025-2030
6	Monitor implementation results and collect measurement results.	Working group coordinators of sector programs	2025-2030
7	Periodically update, adjust, and process results on a joint platform.	Working group	2024-2030

Required resources

Allocated hours (personnel costs) to organize inclusive recruitment. This depends on the size of the organization. For example, is there a recruitment committee or is recruitment carried out by a few individuals? Small organizations may want to collaborate with each other to exchange knowledge and experience. More time (money) will be needed in the start-up phase than in the implementation phase. The following preconditions were identified in the Tech Attack Plan:

The government can make this possible by allowing experiments to adapt the current knowledge migrant scheme to a skilled worker scheme. Providers of the Tech Attack Plan propose to adjust the knowledge migrant scheme for specific professions (skilled worker scheme). In this way, they want to solve shortages at sector and occupational level for which it is clear in advance that there is no priority supply available. And a pool is created for which skilled workers from third countries who meet the qualifications can register. Standards are set in advance for temporality and guaranteed return.

Business guarantee:

a) compliance with new regulations such as the certification system for employment agencies (only do business with certified lenders);
b) guarantee two months' wages to foreign skilled workers on the basis of collective bargaining agreements, or otherwise guarantee that people do not come here under false representation of employment status, such as a check with the lender;
c) an active check for registration of the foreign skilled worker in the municipal basic register;
d) offer as much relevant information as possible in a language that the foreign skilled worker in question has a sufficient command of (mother tongue, English, French, as appropriate);
e) adequate accommodation for foreign skilled workers that meets SNF/AKF quality mark requirements.

Financial mechanisms

The program can prove its worth by measuring the successful inflow and outflow of new professionals from the target groups into the sector on the one hand, and the successful outflow and retraining from other sectors, perhaps also the fossil fuel industry. This can be measured and based on this, an amount can also be reserved for investment in the program.

Accompanying measures

In addition to measuring successful placements and outflow, it is particularly important to measure the quality and acceptance of the new employees and how they feel accepted in their new working environment. Additional support may also be needed.

Intended certification and accreditation

Companies that successfully apply lateral entry can receive a certificate or accreditation for this. In addition, lateral entrants can build up a skills profile in one of the existing systems and thus also show that they are successfully working on their craftsmanship. The transition skills are part of this. This is in line with the generic approach as described under labour market.

Structural measures

From a professional and technical point of view, it is important to pay attention to the regular adjustment of specific skills gaps and new needs. From time to time, adjustments will have to be made or new behavioural indicators will be needed, or new transition skills will have to be described. The most important adjustments are probably in the context and the extent to which companies are open to new target groups.

Monitoring

The working group will have to monitor results every year:

- Number of placements
- Mid-term outflow
- Reasons for outflow
- Outflow results (growth in knowledge and skills of employees)
- Assessment of internal support by job coaches/mentors
- Quality of facilitation by HR
- Quality of project organization of lateral entry programs of the sector.

Figure 13 Image and inclusion action plan

More information about the project

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Colophon

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