SKILLS AND QUALITY JOBS IN CONSTRUCTION IN THE FRAMEWORK OF THE EUROPEAN GREEN DEAL AND THE POST-COVID RECOVERY

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POLICY GUIDANCE NOTE
JTC-ITUC and EFBWW commissioned a comprehensive report related to the new set of policies and investments in Europe to renovate and expand the built fabric, in the realm of the Renovation Wave and other relevant EU climate-law targets. The aims were to identify:

- the needs for upskilling and reskilling of construction workers,
- how many new workers need to enter and remain in the sector,
- how many will be sustained through EU funds,
- and other opportunities related to the EU Resilience and Recovery Facility.

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Approved in 2020, the EU Green deal is a set of policy initiatives by the European Commission with the overarching aim of making the EU carbon neutral by 2050. To arrive at this target, the EC established a new target: to reduce by 55% the level of Greenhouse Gas Emissions (GHG) by 2030, with respect to GHG Emission levels of 1990. The aim of the Renovation Wave is to reduce buildings’ GHG Emissions by 60%, their final energy consumption by 14% and energy consumption for heating and cooling by 18%. Today the weighted average rate of energy renovation is only 1% per year. The Commissions’ target is to at least double this rate by 2030, while increasing the average gains in terms of energy efficiency.

More than 220 million building units, representing 85% of the EU’s building stock, were built before 2001. Yet 85–95% of the buildings that exist today will still be standing in 2050. EC projections are for a 1% annual energy renovation rate for 2021–2022, an increase to 1.2% a year in 2023–2025 before stabilising at at least 2% per year in 2026–2029.

**THE STAKES AT PLAY**

**ADDED VALUE OF THE REPORT**

In a nutshell, the European Commission calculated that the Renovation Wave would entail the rehabilitation of 35 million buildings and the creation of 160,000 jobs until 2030.

This study concludes that financing of the €275 billion funding gap would require employing between 486,600 and 1,549,000 more construction workers. EU investments of Energy-Efficient building renovations under the Recovery and Resilience Plans alone, will sustain 2.3 M direct jobs, 7.5 M indirect jobs and 4.6 M induced jobs across the EU.

Across Europe, 18 direct jobs are created for every 1 M € invested in Energy-Efficient Renovations, and 1 € invested in the EU construction sector generates 2.2 € in other sectors – making EE Renovations an optimum public investment.
NOTE OBJECTIVES AND RESEARCH APPROACH

The present Note provides the essence of recommendations of the Report. Trade Unions and other interested actors are provided with information to support their advocacy and negotiations to create more and better jobs related to the EU opportunities mentioned before. For detailed information, please refer to the main report.

The report analysed secondary data, especially from the EU and related documents. It also included primary data to calculate employment creation, worker upskilling, re-skilling, recruitment and retention needs. The report calculated employment effects according to three scenarios:

- estimation under the current agreed EU Recovery and Resilience financing;
- 2% energy renovation and pre-crisis job creation, and
- 2% energy renovation and CEDEFOP\(^1\) forecasted job creation.

The most important types of training needs relevant to the Renovation Wave are specialised energy efficiency, basic climatic literacy, and occupational safety and health. Three distinct ad hoc methodologies were used.

The findings of the report led to the policy recommendations. TABLE 1 presents the titles of all the recommendations, with their rationale explained. The table is followed by the recommendations themselves.

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\(^1\) European Centre for the Development of Vocational Training.
Establishing ambitious EU-level strategies and legislation packages transposed to national legislation is an important aspect of delivering the EU Renovation Wave. Given the fact that changes in construction have been happening fast and are due to continue, a constant mechanism of social dialogue should remain in place. The goal is to co-govern the green transition by implementing transversal action plans.

There will be many new jobs in the next years. Additional workers will be needed in the buildings construction and renovations sector between 2023 and 2030. Other job posts will need to replace the ageing of the workforce in the same period. The Renovation Wave will also require OSH managers and labour inspectors.

It is important to make the best of the opportunity. E.g. improvement of quality, local content, training.

This is important because policies related to the Renovation Wave do not include training needs estimates. Skills needs assessments are seldomly updated and there are no consistent EU wide methodologies to calculate them. Consistent information at the EU level is required to formulate EU-wide policy recommendations. In the first quarter of 2023, further information was published by the Construction Blueprint Observatory and CEDEFOP Skills Forecast survey. National skills needs assessments under the Build Up Skills programme will be updated in 2023.

National programmes remain targeted to specific training areas. Despite their importance, upskilling and reskilling financing have not been addressed in a scaled manner in the Recovery and Resilience Facility Plans nor other EU financing streams.

Considering the workers that will retire between 2022 and 2030, job advertisements should focus more on replacement, not only on new demand. Attracting youth is important to deliver the Renovation Wave. Approaches to VET for LEC vary considerably. Deep integration of energy literacy into existing occupational profiles, curricula or syllabi at all levels is preferable to just adding LEC-related topics onto international VET programmes. Continuous VET for LEC presents a challenge, particularly in the short term, as courses and a range of delivery methods are needed, catering to different existing training and qualifications levels.

The construction industry is changing rapidly to address environmental and other challenges (such as demographic growth) and at the same time to incorporate the evolving digital technologies. Changes in the industry will create new demands for VET.

There are many good practices, in addition to the ones presented in the main Report. There are some programmes to upskill and train workers (noted throughout the Report and annexes). There is scant information about how many green jobs will be created and whether they are new jobs or replace non-green jobs.

There is definitely a business case for energy efficiency in construction. Trade Unions and other organizations interested in green construction and its positive impact on labour can use this for advocacy. Business cases include existing positive incentives for green construction, taxes for non-green, market choices (clients who would choose green), corporate image.

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**TABLE 1. RATIONALE FOR THE RECOMMENDATIONS**

<table>
<thead>
<tr>
<th>TITLE OF THE RECOMMENDATION</th>
<th>RATIONALE</th>
</tr>
</thead>
<tbody>
<tr>
<td>EU AND NATIONAL POLICY</td>
<td>Establishing ambitious EU-level strategies and legislation packages transposed to national legislation is an important aspect of delivering the EU Renovation Wave.</td>
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<td>GOVERNANCE AND SOCIAL DIALOGUE</td>
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</tr>
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<td>NEW JOBS</td>
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</tr>
<tr>
<td>CALCULATIONS ON TRAINING NEEDS</td>
<td>This is important because policies related to the Renovation Wave do not include training needs estimates. Skills needs assessments are seldomly updated and there are no consistent EU wide methodologies to calculate them. Consistent information at the EU level is required to formulate EU-wide policy recommendations. In the first quarter of 2023, further information was published by the Construction Blueprint Observatory and CEDEFOP Skills Forecast survey. National skills needs assessments under the Build Up Skills programme will be updated in 2023.</td>
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<td>FINANCING UPSKILLING</td>
<td>National programmes remain targeted to specific training areas. Despite their importance, upskilling and reskilling financing have not been addressed in a scaled manner in the Recovery and Resilience Facility Plans nor other EU financing streams.</td>
</tr>
<tr>
<td>TRAINING</td>
<td>Considering the workers that will retire between 2022 and 2030, job advertisements should focus more on replacement, not only on new demand. Attracting youth is important to deliver the Renovation Wave. Approaches to VET for LEC vary considerably. Deep integration of energy literacy into existing occupational profiles, curricula or syllabi at all levels is preferable to just adding LEC-related topics onto international VET programmes. Continuous VET for LEC presents a challenge, particularly in the short term, as courses and a range of delivery methods are needed, catering to different existing training and qualifications levels.</td>
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<td>CHANGES IN THE INDUSTRY</td>
<td>The construction industry is changing rapidly to address environmental and other challenges (such as demographic growth) and at the same time to incorporate the evolving digital technologies. Changes in the industry will create new demands for VET.</td>
</tr>
<tr>
<td>GOOD PRACTICES / CASE STUDIES</td>
<td>There are many good practices, in addition to the ones presented in the main Report. There are some programmes to upskill and train workers (noted throughout the Report and annexes). There is scant information about how many green jobs will be created and whether they are new jobs or replace non-green jobs.</td>
</tr>
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<td>There is definitely a business case for energy efficiency in construction. Trade Unions and other organizations interested in green construction and its positive impact on labour can use this for advocacy. Business cases include existing positive incentives for green construction, taxes for non-green, market choices (clients who would choose green), corporate image.</td>
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2 Vocational and Educational Training for Low Energy Construction.
EU and national policy

Trade Unions can advocate for the reduction of clauses diluting the ambitious goals set by the directives, focusing on the governments that are most opposed to an ambitious agenda. Practical options include:

- advocate for a more ambitious Energy Performance of Buildings directive and Energy Efficiency directive, regarding renovation targets of public and private buildings, health and safety protection, and social issues such as energy poverty and building leakages;
- advocate and build partnerships with other civil society organizations to promote greater buy-in of national governments.

Governance and social dialogue

Trade Unions should have clear policies, action plans and trainings that focus on:

- appointing supporting TU green representatives at company and national levels;
- set up Environmental Committees. Forums can be integrated into different structures with membership criteria and operational procedures;
- negotiate an environmental agreement or policy. Build alliances that strengthen the needs of workers to the climate and wider social agenda – at the national, regional and local levels and areas of intervention;
- support smaller companies (where worker representation is lacking) with adapted strategies and (when available) good practices.
- promote local social dialogue to address specific local issues which cannot be grasped at the national level.

New Jobs

An important recommendation is that policies should take into consideration that real figures are higher than existing European Commission estimations. The EU Recovery and Resilience financing alone (First Scenario) will have big employment creation effects in the sector (See Figure 1). This has different implications, for example:

- Trade Unions should plan their awareness raising and advocacy campaigns taking into consideration the actual number of entrants in the industry;
- training needs should take into consideration not only upskilling and reskilling, but also the entrants;
- the 2023 Status Quo analysis to be conducted by the Building Up Skills programme should be accurate in quantifying Energy Efficiency, Circularity and training needs. There are established institutions, which can cross-reference and support this (e.g. ITEC, labour-oriented university departments, etc.);
- campaign to the creation of local, inclusive, and decent work (no outsourcing).
FIGURE 1.
FIRST SCENARIO – MINIMUM, AVERAGE AND MAXIMUM DIRECT JOBS IN ENERGY EFFICIENT RENOVATIONS SUSTAINED BY NATIONAL RECOVERY AND RESILIENCE PLANS (NRRPS), 2021–2026

[Diagram showing minimum, average, and maximum direct jobs sustained by NRRPS in national recovery plans for several countries, with values ranging from 3,240 to 464,400.]

Source: Authors’ own calculations.
Calculations on training needs

Bear in mind such points when planning, discussing and negotiating training programmes:

- Existing assessments do not quantify training needs for the different work profiles. Existing surveys provide ad hoc methodologies to quantify skills needs;
- all workers in the buildings construction and energy renovations sector require basic climatic literacy, energy efficiency and circular economy trainings. This also includes higher dependency and coordination between occupations and hierarchical levels in businesses.

**TABLE 2** includes data on training and recruitment needs produced by the report.

<table>
<thead>
<tr>
<th>TABLE 2.</th>
<th>SUMMARY OF TRAINING AND RECRUITMENT NEEDS OF THE RENOVATION WAVE</th>
</tr>
</thead>
<tbody>
<tr>
<td>SECOND SCENARIO:</td>
<td>2% Energy Renovation and pre-crisis job creation</td>
</tr>
<tr>
<td>Building Construction and Renovations Employment, 2030</td>
<td>10,085,026</td>
</tr>
<tr>
<td>Employment needs from the Renovation Wave</td>
<td>1,549,000</td>
</tr>
<tr>
<td>Employment needs from worker retirement</td>
<td>1,259,647</td>
</tr>
<tr>
<td>Total recruitment needs</td>
<td>2,808,647</td>
</tr>
<tr>
<td>NUMBER OF WORKERS TO BE TRAINED IN BASIC CLIMATIC LITERACY, ENERGY EFFICIENCY AND CIRCULAR ECONOMY TRAININGS</td>
<td></td>
</tr>
<tr>
<td>100%</td>
<td>100%</td>
</tr>
<tr>
<td>10,085,025</td>
<td>9,022,488</td>
</tr>
<tr>
<td>NUMBER OF WORKERS TO BE TRAINED IN SPECIALISED EE TRAININGS</td>
<td></td>
</tr>
<tr>
<td>35%</td>
<td>45%</td>
</tr>
<tr>
<td>3,529,759</td>
<td>4,538,262</td>
</tr>
<tr>
<td>45%</td>
<td>45%</td>
</tr>
<tr>
<td>3,157,871</td>
<td>4,060,120</td>
</tr>
<tr>
<td>WORKERS TO BE TRAINED PER YEAR (2023 TO 2030)</td>
<td></td>
</tr>
<tr>
<td>504,251</td>
<td>648,323</td>
</tr>
<tr>
<td>451,124</td>
<td>580,017</td>
</tr>
</tbody>
</table>

Authors’ elaborations based on sources mentioned in the final report.
Financing upskilling

- Advocate for policies which finance upskilling and reskilling along the entire construction sector value chain.
- Study ways to take opportunity of different finance mechanisms from the EU [FIGURE 2] and others.

Training

There are factors which hinder VET for LEC development and to achieve an integrated construction process need addressing. Recommendations for action include:

- update the list of specific professions for VET, related to energy efficiency improvement and the use of renewable sources.
- mainstream in educational requirements by professions of new knowledge, skills and competences, related to the energy efficiency renovations. E.g. waste management in construction sites, the use of innovative materials and technologies for thermo-modernisation of buildings;
- involve Trade Unions and companies in training plans and programmes for schools and vocational training centres;
- start from basic education.

Changes in the industry

- to keep abreast of the ever-changing industry
- dialogue with VET institutions to make sure that they are aligned.

FIGURE 2. EU FINANCING INSTRUMENTS TO DELIVER THE RENOVATION WAVE

| FOR DIRECT INVESTMENTS | • Recovery and Resilience Facility  
| | • Cohesion Policy Funds (ERDF, ESF, EU-REACT) |
| FOR RESEARCH AND INNOVATION | • Horizon Europe  
| | • Built4People  
| | • EGD Calls  
| | • Smart Cities |
| TO LEVERAGE PRIVATE INVESTMENTS | • InvestEU  
| | • Private Financing 4 Energy Efficiency  
| | • European Energy Efficiency Fund |
| TO ADDRESS MARKET BARRIERS | • LIFE – Clean Energy Transition  
| | • EU City Facility  
| | • PDA Facility  
| | • LIFE – Circular Economy & Quality of Life |
| FOR TECHNICAL ASSISTANCE AND ADVISORY | • ELENA Facility  
| | • Technical Support Instrument  
| | • Technical Support Cohesion Policy |

Source: Authors’ elaboration utilizing several EC sources. A more detailed overview of the funding instruments is available in Annex 2 in the Report.
THE POLISH ASBESTOS REMOVAL PLAN includes mapping, disposal infrastructure and funding. This could be mainstreamed with specific provisions in Energy Performance of Buildings Directive, the approval of a European Strategy for the Removal of All Asbestos (this was proposed by some political groups in the EU Parliament but did not go through).


THE CraftEdu PROJECT created a national qualification and training scheme for energy efficient renovation in Czechia using an e-learning platform, aimed both at existing and future construction practitioners.

MALTA DEVELOPED THE SKILLS BUILDING INITIATIVE in the construction sector: by 2025, the government will develop a scheme to train and certify professionals and tradesmen of various levels in order to obtain a mandatory skill card which would need to be presented to work in the respective sectors. Certification will be extended to installers of several technologies and a life-long-learning approach will be adopted through regular training sessions addressed to skill card holders

BOX 1.
EMBEDDING LOW ENERGY AND CLIMATE LITERACY INTO THE GERMAN VET (VOCATIONAL EDUCATION AND TRAINING)

Germany’s approach rests on a statutory framework, social partnership, recognised qualifications, comprehensive, broad, and recognised VET programmes, multi-dimensional competence, occupational capacity and knowledge, general and civic education, permeability, and educational standards related to curriculum content. This is called an “occupational” approach, as opposed to a ‘skill-based’ approach. Germany, has the advantage of a stepped programme of gradual specialisation, helping trainees to understand the building envelope as a unit, as well as covering climate change relating to different occupations in the first year. Trainees then specialise in the second year into finishing, building or civil engineering, and only concentrate on a particular occupation in the third and final year.

VET for LEC is based on the principle that LEC-related competencies are incorporated or mainstreamed into existing occupational profiles and curricula of each occupation.

BOX 2.
EXAMPLES OF GOOD PRACTICES

THE POLISH ASBESTOS REMOVAL PLAN includes mapping, disposal infrastructure and funding. This could be mainstreamed with specific provisions in Energy Performance of Buildings Directive, the approval of a European Strategy for the Removal of All Asbestos (this was proposed by some political groups in the EU Parliament but did not go through).

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SPAIN AND FINLAND have also introduced the use of sector cards, but more linked to OSH.

SELECTED EXAMPLES of Energy efficient renovation programmes included in National Recovery and Resilience Plans:

SPAIN will support more than half a million energy renovation actions in residential buildings by 2026. These renovations will achieve on average a primary energy demand reduction of at least 30%. The investments are complemented by a coherent package of reforms, including tax incentives and renovation offices (“one-stop-shops”) to facilitate renovations.

THE RRP OF BELGIUM will stimulate energy efficient renovations of buildings with a total support of over EUR 1 billion. The wave of renovation will concern more than 200,000 private and social housing units and will cover more than one million m² of public buildings. Belgium faces important renovation needs to meet climate objectives.
Good practices / case studies

• consult the good practices, which can serve as inspiration (with the necessary adaptations); **BOX 1** includes good practices in Germany. **BOX 2** mentions briefly practices in other countries. The main report provides further information.

• bear in mind that to obtain existing and detailed data about case studies would entail finding institutions which have such appropriate information. Trade Unions could also advocate to set up new one(s).

• if the Trade Unions in a given country do not have the necessary information, they can either set up a way to obtain it via a partnership and/or to refer to additional sources.

Business case

• consider disseminating the business case to possible uninformed entrepreneurs,

• bear in mind that there is a specific business case for occupational safety and health, applicable to this context.

**A HOLISTIC APPROACH**

**LOW ENERGY CONSTRUCTION** needs a transformation not only of VETs but also of the mainstream education systems to encompass deeper knowledge of energy efficiency, higher technical and precision skills and, above all, a holistic approach so that the building envelope is conceived as a single thermal unit and the social interaction of different occupations is understood. Climate literacy is tied to social equity and climate justice, comprising affirmation of the social contribution and responsibility of construction workers, their Trade Unions, and the industry to reduce emissions and the influence they have in determining policy direction.

There are opportunities to create more and better jobs, pushing for a holistic approach, in the new set of policies and investments in Europe to renovate and expand the built fabric, related to the Renovation Wave and other relevant EU climate law targets.
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