

Travaillons ensemble à la haute performance de nos bâtiments

BUS 2 FRANCE



BUILD UP Skills EU exchange meeting 26-27 October Brussels













Diagnosis of requirements in terms of markets, jobs and skills: highlights





Diagnosis publications

All the work carried out during this diagnosis phase is compiled in a document that has been published end of September 2023 and available on the project website.

A specialized brochure summarizes the work carried out in phase 1:

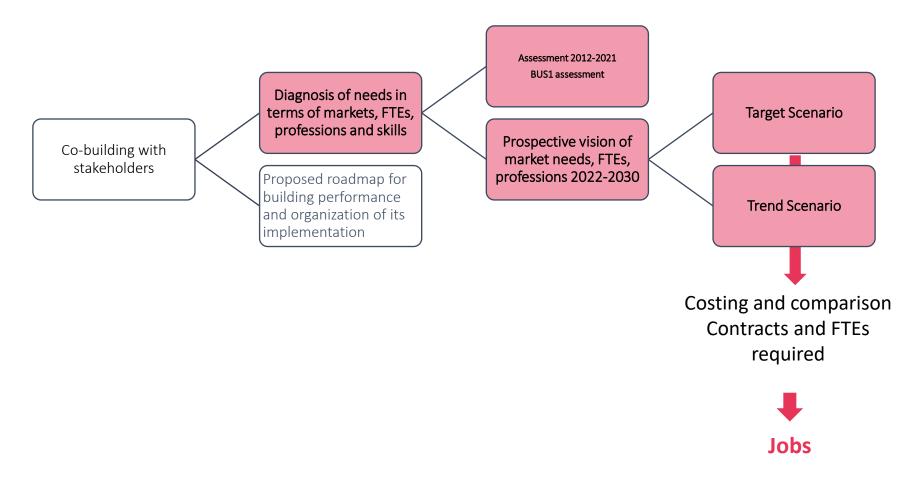
co-construire le diagnostic de BUS2 À l'échelle nationale groupes de travail participants groupes de travail 'Emploi et compétences" plénières avec s acteurs des 2 groupes entretiens DES ATELIERS DE TRAVAIL POUR APPROFONDIR DES ENJEUX CLÉS À l'échelle territoriale territoires Communauté d'agglomération du Cotentin, Pays du Cambrésis, Territoire de Aix-Marseille Métropole. Territoire de la Métropole de Lyon.

L'implication des parties prenantes pour





Introduction: the approach





What is a diagnosis of requirements?

The diagnosis presents the needs:

- Cost for the market
- In Manpower (FTE)
- in trades concerned

It covers the fields of new construction and energy renovation in the residential and tertiary sectors.

* IMPORTANT: Labour requirements are presented in full-time equivalents (FTE), a unit of measurement proportional to the number of hours worked by an employee. The number of individuals is higher than the number of FTEs, as not all of them devote full time to energy renovation, which means that more people need to be trained than the number of FTEs required.



Build Up Skills 2: an ambitious trajectory for the building industry

Target scenario: compatible with National Low-Carbon Strategy and European Fit For 55 targets for 2030 and 2050

→ ADEME's scenario ecological transition

Scope of employment: jobs in the building and technical support sectors

- Building construction
- Specialized construction work
- Architectural and engineering activities, technical testing and analysis



BUS2 vision 2022-2030 Expenses & Jobs "Energy retrofit

2022-2030 Target Scenario vs. historical trend Direct expenses and FTEs

	Average 2012-2021	Average Target scenario 2022-2030	Evolution of needs
High Energy performance renovation	Résidential: 14 000 rénovations eq. BBC/an Tertiary: 21,5 millions m² /an	Résidential: 911 000 eq. BBC/an Tertiary: 27 Millions m²/an	
	38,9 Mds €	70,3 Mds €	+ 31,4 Mds €
Residential + Tertiary	232 000 ETP	430 000 ETP	+ 197 000 FTE

Between 170,000 and 250,000 additional full-time equivalents required for energyefficient building renovation between 2019 and 2030, depending on the 3 years covered.



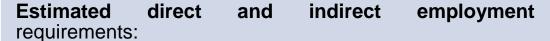
Methodology for estimating markets and jobs

Physical indicators:

- Annual installation, stock: m² renovated, housing built, number of heat pumps installed, m² of solar panels installed, etc.
- By sector: residential, tertiary By segment: new housing, renovation, etc.



- Unit costs by sector and action: renovation, new construction, equipment, waste, etc.
- Unit costs by activity: insulation work, replacement of joinery, installation of equipment, etc.



- Employment ratio [FTEs/€M]
- Local employment rate







FTEs with the necessary skills

Identification of the trades to be mobilized by activity segment (RE/CN) and by sector (R/T) according to the action to be performed (expert opinion).

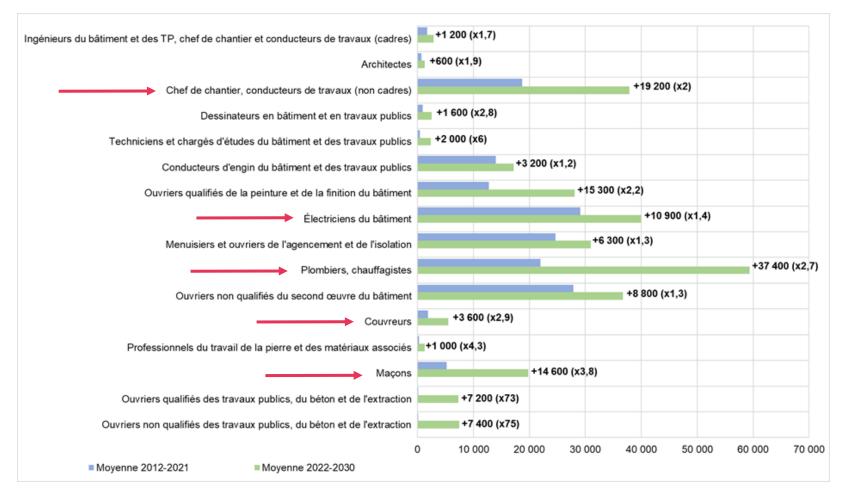
DARES FAP nomenclature: historical breakdown of BTP workforce by trade (FAP) + assumptions on the evolution of the weight of each trade up to 2030.

Breakdown o estimated direct FTEs in BUS2 by trades concerned



Vision BUS2 2022-2030

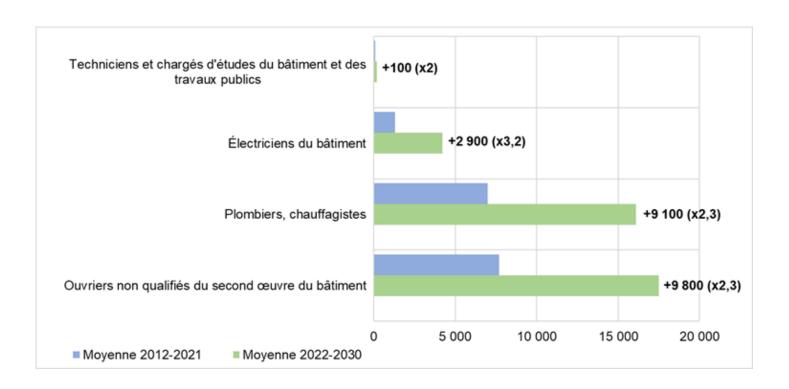
Breakdown of additional job requirements (FTE) - Energy-efficient home renovation





Vision BUS2 2022-2030

Breakdown of additional job requirements (FTE) - Maintenance of housing equipment





New and emerging professions

Energy renovation coordinator

To ensure the coordination and co-activity of the various trades involved in energy renovation projects.

Project Manager, Building Upgrades

Works on both the performance of the building envelope and the optimization/mutu alization of equipment and buildings.

Energy renovation advisor

responds to households' needs for support at various administrative, financial and social levels.

Flow economist and expert in digitalization and building operation

For post-retrofit performance monitoring



Deepening and integrating skills

Technical skills:

- related to self-checking at first level and for more in-depth training: measuring, checking, etc.
- Related to bio-sourced building materials and techniques (e.g. external thermal insulation, heat pump installation),
- Consideration of other renovation measures, knowledge of the thermal functioning of the building, interactions between the various components, etc.
- Checking that the project has been carried out correctly (energy savings).

Regulatory skills:

- · Technical and thermal, Fire safety, Accessibility
- Knowledge of legislative or incentive provisions relating to works

Cross-disciplinary skills:

- · Ability to communicate with other trades
- Ability to manage complex projects involving work on existing buildings
- Integration of eco-responsibility approaches into activities (waste recycling, health, quality/comfort of occupants)
- Ability to interact with occupants
- Extensive knowledge and consulting skills to propose global solutions

Promote high-performance, comprehensive renovations through an appropriate skills development policy*

weak adaptation of professional and certification standards

- Skills and competency frameworks currently do not take into account skills specific to renovation and energy-efficient renovation. They are beginning to be taken into account in the Construction branch's trade reference frameworks, but mainly in the envelope trades.
- ➤ Certification standards are evolving, but remain insufficient to meet the needs of high-performance, comprehensive renovation, which requires a cross-disciplinary vision of renovation techniques.

Source : France stratégie 2023





4 strategic axes of the SQA

Axe 1: To support demand for high-performance renovation

Axe 2: To encourage the recruitment and retention of workers in the sector

Axe 3: To develop training

Axe 4: To manage the roadmap

+ 12 key-messages



Overview of BUS2 key lessons

Axe 1 : To support demand for highperformance renovation

- **1.** The ecological transition of the built environment is based on a number of levers, including the efficient renovation of buildings.
- 2. Renovation must be approached from a perspective that integrates the issues at stake in private decisions and public policies.
- **3.** The ecological transition of the housing stock requires the development of support services.
- **4.** The ecological transition of the tertiary sector is mainly governed by deadlines set by regulations.

Axe 2: To encourage the recruitment and retention of workers in the sector

- **5.** Building renovation will require almost 200,000 more FTEs than at present. The various sources of recruitment for these jobs are young people, jobseekers, working people interested in retraining, and women, who are still not very present in the sector.
- **6.** The construction sector needs to make itself more attractive in order to recruit and retain workers.

Axe 3: To develop formation

- **7.** The new-build sector (companies and assets) is set to change as a result of new environmental requirements, and as it turns more towards major refurbishment and renovation, training needs to adapt.
- **8.** The ecological transition of buildings requires the reinforcement of skills (initial and continuing training). Training must be encouraged and adapted to the constraints of professionals in the building industry and related sectors such as real estate.

Axe 4: To manage the Roadmap

- **9.** National policies and measures to stimulate markets, employment and skills need to be complemented by a massification of best practice in the regions and increased communication between stakeholders.
- **10.** The future BUS2 roadmap requires 2 ministerial co-pilots until 2030: one for the ecological transition of buildings, one for employment and skills, and the mobilisation of a network of regional co-pilots.
- 11. Local ownership of the issues involved in the ecological transition of buildings requires greater coordination of decisions between the State and the regions.
- **12.** The work of deepening knowledge and comparing visions must continue, and be organised in synergy with the actions to implement the BUS2 roadmap for building performance.



Key lessons learned

- → The sector will need to recruit massively to meet this additional demand (in particular, site managers, site supervisors, electricians, heating engineers/plumbers), while at the same time compensating for the number of people living the sector each year (retirement, retraining...).
- Technical and, more broadly, financial and social support for project owners needs to be developed, and almost 8,000 FTEs are required (compared with around 5,000 FTEs today) for housing renovation.
- → Building professionals will need to strengthen their technical skills related to energy performance, as well as their cross-disciplinary skills in co-activity and co-ordination. Related professions, such as real estate professionals, also need to develop their skills.
- → The new-build sector, while complying with increasingly stringent environmental requirements, could gradually incorporate more heavy rehabilitation and associated energy renovation activities.

25/10/2023





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