

Introducing training to support the green transition

POLICY DEVELOPMENT

PRACTICAL MEASURE/INITIATIVE

 LUXEMBOURG

Timeline

2019 Implementation 2020 Implementation 2021 Implementation

2022 Implementation 2023 Implementation 2024 Implementation

ID number 44948

Background

With the increasing global concern for climate change and the need for sustainable development, and the commitment to the European Green Deal, green skills are becoming increasingly important to guarantee the economy's resilience and a sustainable economic growth. Integrating green skills into initial vocational education and training (IVET) programmes and broadening continuing VET (CVET) helps ensure that the workforce is equipped to address environmental challenges and that individuals are skilled to tackle the twin, green and digital, transition.

Objectives

Adapting the VET offer to the needs of the green transition through increasing and promoting CVET offer, introducing new green IVET programmes and occupation-specific green skills in the existing programmes; piloting transversal skills, e.g. circular economy.

Description

The National Centre for Continuing Vocational Training (CNFPC) has modernised its infrastructure (workshops, labs, training spaces) and offer to include new courses focusing on Industry 4.0 and green skills, such as Waste management, Circular economy, Building engineering, Energy efficiency and Forestry.

Some new IVET programmes in green and digital occupations have been introduced, such as the technician diplomas, Smart buildings and energies (EQF 4) and Smart technologies (EQF4). In addition, an internationally recognised certificate in safety handling of climate hazardous gases is now part of IVET programmes, Heating and sanitation installer and refrigeration technician.

2019 Implementation

Since 2019, five secondary schools have offered the 4-year technician diploma, Smart technologies. After the first 2 years, learners can specialise in several fields of study, such as infotronics' renewable energies, robotics and automation, smart energy, and e-

controls, for the last 2 years.

The Technical Secondary School of Ettelbruck (Lycée technique d'Ettelbruck) offers a programme, Renewable energies, with an emphasis not only on production (wind turbines, solar panels, hydraulic installations), but also on energy storage, one of the major challenges of the future.

The Lënster Secondary School in Junglinster (Lënster Lycée) offers a programme, Smart energy, with emphasis on the planning, connection and operation of 'intelligent networks' (smart grids) or storage systems (energy clouds), and some courses.

The Secondary School Arts et Métiers offers a programme, Infotronics, that covers the basics of robotics, automation, applied computing, renewable energies, electromobility and telecommunications.

The Secondary School Guillaume Kroll (Lycée Guillaume Kroll) offers a programme, Robotics and automation, with an emphasis on robotics, smart home, renewable energies, electromobility and internet of things.

The private secondary school Emile Metz offers a specialisation in e-control.

2020 Implementation

Implementation of the 4-year technician diploma, Smart technologies, in five schools continued.

2021 Implementation

In 2021, the technician diploma, Smart buildings and energies, was introduced. The four-year programme includes such subjects as electrical installation techniques, heating, air conditioning and ventilation, home automation, renewable energies, energy advice, and three internships of four weeks each.

CNFPC introduced various short courses in transversal green skills addressed to both the private sector and local and regional authorities, in partnership with public agencies responsible for the promotion of sustainability and climate action, public and private training providers and a regional circular economy hub. Courses are: Waste and resource management (*Abfall- und Ressourcenmanagement*); Circular economy for municipalities (*Kreislaufwirtschaft für Kommunen*), Sustainable digitalisation - Measures for a sustainable use of the internet, hardware and software (*Nohalteg Digitaliséierung - Mesurë fir een nohaltegen Ëmgang mam Internet, Hardware a Software*), the path to a CO₂-neutral organisation (*Der Weg zur CO₂ - neutralen Organisation*).

2022 Implementation

CNFPC introduced courses on transversal green skills for staff of public administrations and employees in the private sector, such as Construction and installation of insect nesting aids (*Bau- und Anlage von Insektennisthilfen*), General introduction to nature protection legislation, and General introduction to legislation on waste and resources and classified establishments.

2023 Implementation

The House of Training, in partnership with the House of Sustainability and Solvay Brussels Economics and Business School, offers a certifying course "Luxembourg Sustainability Management Series - LSMS" addressed to executives and students enrolled in the Chamber of Commerce's MBA programmes. The training sessions aim to introduce participants to the major issues of sustainable development and their concrete application in a company's strategy. It is organised in 11 modules; The diversity of the speakers and concrete case studies allow the participants to acquire theoretical knowledge but also to benefit from field

experiences.

The National Institute for Sustainable Development and Corporate Social Responsibility (INDR), in collaboration with the House of Training offers a training cycle in Corporate Social Responsibility (CSR) three times per year. It consists of four specific modules devoted to CSR strategy, governance, and social and environmental aspects. Target audience are Directors, HR managers, sustainable development and CSR managers, quality managers, ESR-Responsible Enterprise coordinators, designated workers and any employee of a company involved in the ESR-Responsible Enterprise labelling process.

The University of Luxembourg's Competence Centre offers a University Certificate (1-year programme, 20 ECTS) on Sustainable Development and Social Innovation.

2024 Implementation

CNFPC launched an online survey to gather expectations and training needs related to the circular economy.

The Luxembourg Life-long Learning Centre (LLLC) offers, in partnership with the French Institute of Technology Lorraine (IUT Lorraine), a higher education programme leading to a *Bachelor Universitaire de Technologie* (B.U.T.) diploma - Occupations in Energy Transition and Efficiency. It focusses on designing, sizing, auditing, and recommending solutions to optimise the energy and environmental performance of buildings and industrial utilities. The course encompasses 361 hours; the third year of the programme is organised over a period of two years as continuing education and offers a blend of lectures and practical workshops.

Faced with the ecological transition and the growing importance of sustainable development, the Chamber of Skilled Crafts and Trades (CdM) offers a full catalogue of training courses to help craftspeople prepare for today's current challenges related to Energy and Efficiency, in the framework of the EU co-funded FSE+ programme 'Investir dans le futur' (2021-2027).

Projects preparing for the challenges of the green transition in the crafts sector are:

Nohalteg an d'Zukunft + (NANZ+)

Continuing education cycle on the construction of sustainable and energy-efficient buildings. The aim of this programme is to guarantee high quality during the construction and renovation of these buildings and to integrate sustainability aspects into the work. It is certified by a Label.

Sustainability

Training cycle to prepare employees of craft businesses for the new challenges in business management (circular economy, sustainable purchasing, carbon footprint measurement, CSRD (Corporate Sustainability Reporting Directive) reporting, etc.)

Heat pump technology training modules (Pompe à chaleur (PAC))

The Competence Centre of the building sector, CDC-GTB developed training modules relating to heat pump technology, and delivers the courses to employees of heating and sanitation companies. The target audience for the PAC training courses are employees of Luxembourg heating and sanitation companies who plan, install, troubleshoot and maintain heat pumps in buildings.

Bodies responsible

- VET Department of the Ministry of Education, Children and Youth (SFP)
- National Centre for Continuing Vocational Training (CNFPC)

- Chamber of Commerce
- Chamber of Employees
- Chamber of Skilled Trades and Crafts
- University of Luxembourg
- House of sustainability

Target group

Learners

Learners in upper secondary, including apprentices
 Young people (15-29 years old)
 Adult learners

Other stakeholders

National, regional and local authorities

Thematic categories

Modernising VET offer and delivery

Modernising VET standards, curricula, programmes and training courses
 Integrating green transition and sustainability in VET curricula and programmes

Supporting lifelong learning culture and increasing participation

Providing for individuals' re- and upskilling needs

Subsystem

IVET CVET

Further reading

[Technician programme, smart buildings and energies and Smart technologies](#)

[Ministry of Education, Children and Youth](#)

[CNFPC offer - nature protection legislation](#)

[House of Training: Courses CSR and Sustainability management](#)

[LLLC- Bachelor Universitaire de Technologie \(B.U.T.\) diploma - Occupations in Energy Transition and Efficiency](#)

[University of Luxembourg: Certificate Sustainable Development and Social Innovation](#)

[Chamber of Skilled Crafts and Trades: NANZ +](#)

[Centre de Compétences GTB: Transition énergétique artisanat+](#)

[CdM: Course catalogue Energy and Efficiency](#)

[Centre de Compétences GTB:](#)

“ … ” **Cite as**

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<https://www.cedefop.europa.eu/en/tools/timeline-vet-policies-europe/search/44948>