

 Federal Ministry
Republic of Austria
Education, Science
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Green Transition in VET –Schools in Austria

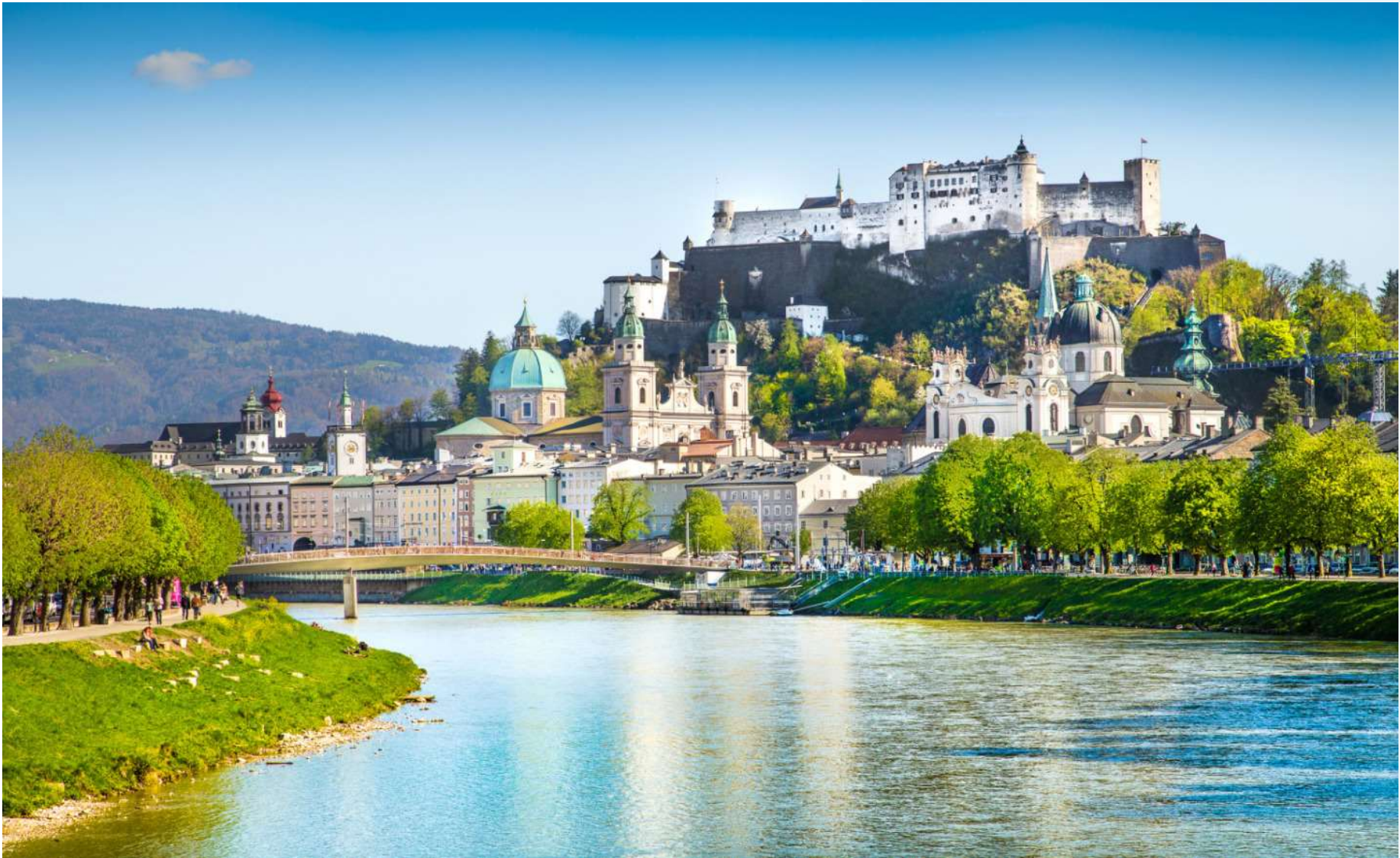
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Austrian Federal Ministry of
Education, Science and Research

Stakeholder Conference of
EUSDR Priority Area 9 "People &
Skills", 23 May 2024



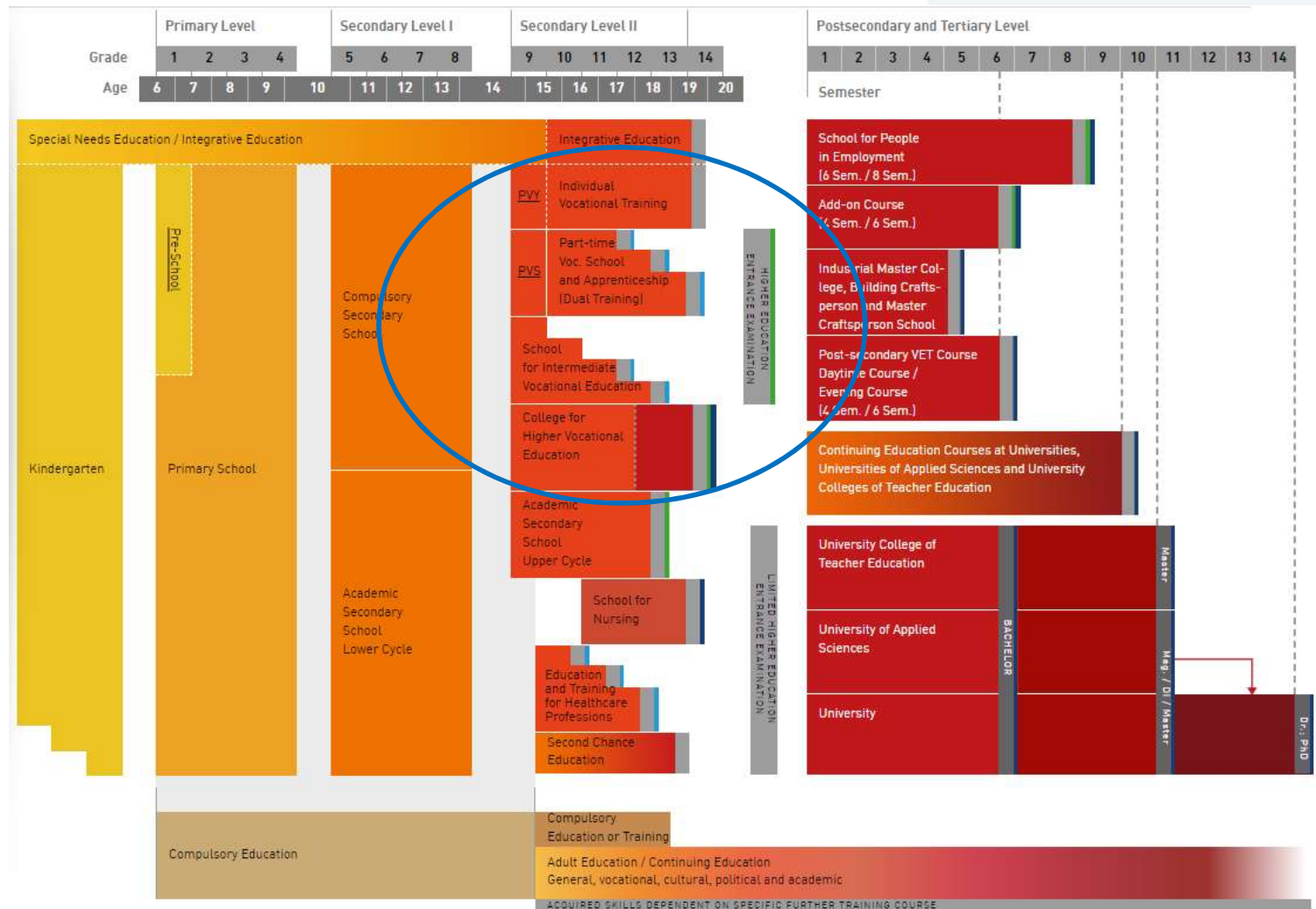








The Austrian Education System



The Austrian National Qualifications Framework



National Implementation Plan Austria (NIP) 2022

- Austrian view: plan that summarizes measures and goals for the implementation of the Osnabrück declaration and VET recommendation
- Core goals: stronger cooperation between ministries at DGVT level, European synergies, work on megatrends that influence VET

Main steps in Austria

- Transmission of the document beginning of June 2022 to EC
- Focus on **6 topics** (Skills Change, **Sustainability – green Jobs**, Digitalisation, Social Dimension, Internationalisation, Institutional Change)
- **3 systemic areas**: dual system (apprenticeship), full time VET schools, CVET
- **Result: 28 measures in 6 topics**

PW1



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6
 Topics

Sub-segments of vocational education and training			
	Dual VET	School-based VET	CVET
Skills change	Development of dual VET qualifications	Curriculum reform	Career orientation
Green transition/ sustainability	Sustainability as cross-sectional issue	Green transition in VET schools and colleges	
	"Green" dual VET qualifications	Competence centres „Green Skills“	
		Greenovet project	Greenovet project
Digitalisation	DigiComp-CERT	Basic skills digitalisation in VET schools	Digital career orientation
	Digitalisation in dual VET programmes	Upskilling in digital production	
	Digital learning paths		
Social dimension	Equity in dual VET	Social innovation	Social innovation
	Programme "Lehre statt Leere"*		Increasing employability
Internationalisation	Transnational mobility for dual VET students	Transnational cooperation for diploma thesis	Participation in international skills competitions
		Support structure for the internationalisation of VET schools and colleges	
Institutional change	Duale Akademie**		Education paths
	Making dual VET programmes more attractive	Higher VET	Higher VET
	Validation (summative)		QA of master craftsperson qualifications
			Validation – formative
			Transval project

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3 VET
 Areas

NIP Projects related to the Green Transition

- **Green transition in vocational schools**
- Establishment of Austrian competence centres for the promotion of green skills in vocational schools
- Strengthening regional cooperation in the area of green skills between secondary and tertiary educational institutions - GREENOVET project

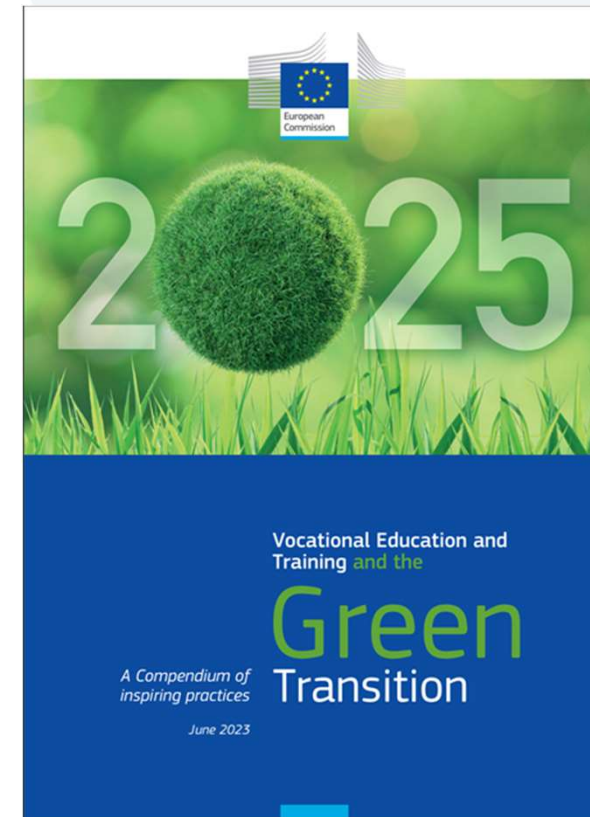
Green transition in vocational schools

- Regularly curriculum adaption process has been started
- Strong focus on digital and green transition
- Green transition
 - Greening of Curricula
 - Green Curricula
- Adaption on two levels
 - General Level concerning transversal green skills
 - Occupation related level concerning technical skills

Green Skills Definition

*"Transversal skills for the green transition that can be applied across all occupations, e.g. in saving energy and recycling and also broader transversal skills which **help to develop greener mindsets and behaviours**. Many of these core green skills are not new. Indeed, for some time they have been seen as essential for modern working life (e.g. 21st century skills). **But the green transition is bringing a fresh and strong imperative for their development – and a new need for them to be strengthened within VET qualifications and programmes**" (European Commission 2023, 25).*

<https://data.europa.eu/doi/10.2767/183713>



Educational Objective

- **Transversal green skills** promote sustainable and therefore future-proof thinking and action in corporate, social and private contexts.
- They contribute to an understanding of the impact of one's own actions on the world and to responsible decision-making with regard to ecological, social and economic aspects of professional behaviour.
- Graduates should be enabled to think critically, act responsibly and collaborate across disciplines.

**Through a balanced
competence development
in the areas of:**

environmental awareness
sustainability
circular economy
green innovation

Educational & Learning Tasks

Environmental awareness

The students

- reflect on their own values and attitudes against the background of climate change.
- can explore environmental education topics such as energy and resource conservation, waste avoidance and biodiversity conservation by gathering information and analysing data.
- draw conclusions for their professional and private actions in terms of environmental compatibility by reflecting on their own values and attitudes.
- motivate others to help shape a sustainable present and future.

Project „ReBusk“ - Findings of the status Quo Analysis

- **Competences for increasing energy efficiency and the use of renewable energies**
Already well anchored in curricula and syllabuses across all education sectors or covered by existing further education programmes
- **Skills for carrying out comprehensive thermal building renovations and decarbonising the energy supply in existing buildings**
only partially anchored in most education sectors to date
- **Expertise for increasing resource efficiency and recyclability**
still not sufficiently mapped in all areas
- Competencies for the **consideration and optimisation of greenhouse gas emissions** are already established, but there is **potential for development through a stronger focus on the building life cycle**



Covered in the curriculum
Extension of existing content in the curriculum
New content in the curriculum

Mapping with the current Curriculum

Resource -Efficiency

	Wocheinheiten	2. Ressourceneffizienz			
		Lebenszyklusbasierte Nachhaltigkeitsbewertung (LCSA)	Umweltproduktdeklarationen	Materialien	Rückbau und Zerlegbarkeit
A. Allgemeinbildende Pflichtgegenstände					
1. Religion	10				
2. Deutsch	11				
3. Englisch	10				
4. Geografie, Geschichte und Politische Bildung	8				
5. Bewegung und Sport	8				
6. Angewandte Mathematik	11				
7. Naturwissenschaften	10				
8. Angewandte Informatik	4				
	72				
B. Fachtheorie und Fachpraxis					
1. Baukonstruktion	15 - 19				
2. Tragwerke	16 - 19				
3. Baubetrieb und Baumanagement	13 - 19				
4. Darstellung und Gestaltung	12 - 16				
5. Infrastruktur	9 - 16				
6. Bauplanung und Projekt	11 - 15				
7. Baupraxis und Produktionstechnik	19 - 19				
8. Schwerpunkt	6 - 8				
1. Hochbautechnologie (1.8)					
2. Ingenieurbau (2.8)					
3. Bauprojektentwicklung (3.8)					
4. Ingenieurholzbau (4.8)					
5. Umwelttechnologie (5.8)					
	111				
C. Verbindliche Übung					
Soziale und personale Kompetenz	2				

Each of these subject areas has now been compared with the current curriculum to see which competences are covered in the current curriculum and to what extent

Definition of new curriculum descriptions Related to the area resource efficiency and recyclability

1. Life cycle analysis (LCA):

- Introduction to the concepts and phases of LCA.
- Methods for data collection and evaluation in an LCA.
- Application of LCA to different building products and processes.
- Interpretation of LCA results and their significance for construction planning and execution.

2. Environmental product declarations (EPDs):

- Definition and purpose of EPD's.
- Definition of an EPD.
- Interpretation of EPD data and information.
- Comparison and evaluation of EPDs of different building products.

Thank you for your attention!

