

Skills for green and just transitions in South-Eastern Europe: **Challenges and potentials**

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Structure

- ▶ **Key definitions**
- ▶ **Challenges in the Western Balkans**
- ▶ **Potential in the Western Balkans**
- ▶ **How do we make TVET and Skills Development “greener”?**
- ▶ **Examples**
- ▶ **ILO Resources**

▶ Key Definitions



Who we are 3.

International
Labour
Organization



- ▶ UN agency for the world of work
- ▶ Brings together governments, employers and workers from 187 member states (Tripartism, Social Dialogue)
- ▶ Sets and monitors international labour standards
- ▶ Advisory services to constituents and stakeholders
- ▶ Implementation of Development Cooperation
- ▶ Over 600 technical cooperation projects worldwide



Subregional Office Central and Eastern Europe: 19 countries covered

Focus countries

- ✓ Albania
- ✓ Bosnia and Herzegovina
- ✓ Georgia
- ✓ Kosovo*
- ✓ North Macedonia
- ✓ Republic of Moldova
- ✓ Montenegro
- ✓ Serbia
- ✓ Ukraine

*as defined by the UN Security Council Resolution 1244.



Terms and concepts: What do we mean by ...?

- ▶ 1. Green jobs
- ▶ 2. Green economy
- ▶ 3. Skills for the green economy
- ▶ 4. Just Transition



Definition and concept of green jobs

- ▶ There are many definitions of what constitutes green activities and green jobs.
- ▶ **Green Jobs** are decent jobs that **contribute to preserving or restoring the environment**. They can be found in traditional sectors like manufacturing and construction, as well as in emerging green sectors such as renewable energy and energy efficiency.
- ▶ Green jobs help improve energy and raw materials efficiency, limit greenhouse gas emissions, minimize waste and pollution, protect and restore ecosystems, and support adaptation to the effects of climate change
- ▶ **ICLS guidelines** provide international standards on the **definition of employment in the environmental sector**.



Green economy is vehicle to achieve SDGs

▶ A green economy is defined as “**low carbon, resource efficient and socially inclusive**. In a green economy, growth in employment and income are driven by public and private investment into such economic activities, infrastructure and assets that allow reduced carbon emissions and pollution, enhanced energy and resource efficiency, and prevention of the loss of biodiversity and ecosystem services” (UNEP)

▶ Sustainable development is development that **meets the needs of the present without compromising the ability of future generations** to meet their own needs (defined by the Brundtland Commission and multilaterally agreed by the UN Conference on Environment and Development – Rio 1992).



ILO definition of skills for green economy

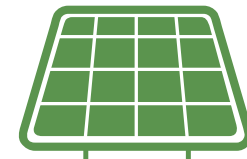
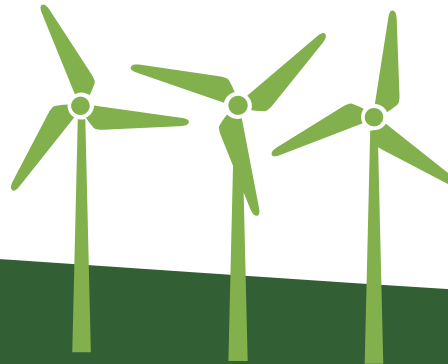
- ▶ Skills that are **necessary to successfully perform tasks for green jobs and to make any job greener**. The term includes both **core skills and technical skills** and covers all types of occupations that contribute to the process of greening products, services and processes, not only in environmental activities but also in other sectors.

Green skills?

Green technology skills?

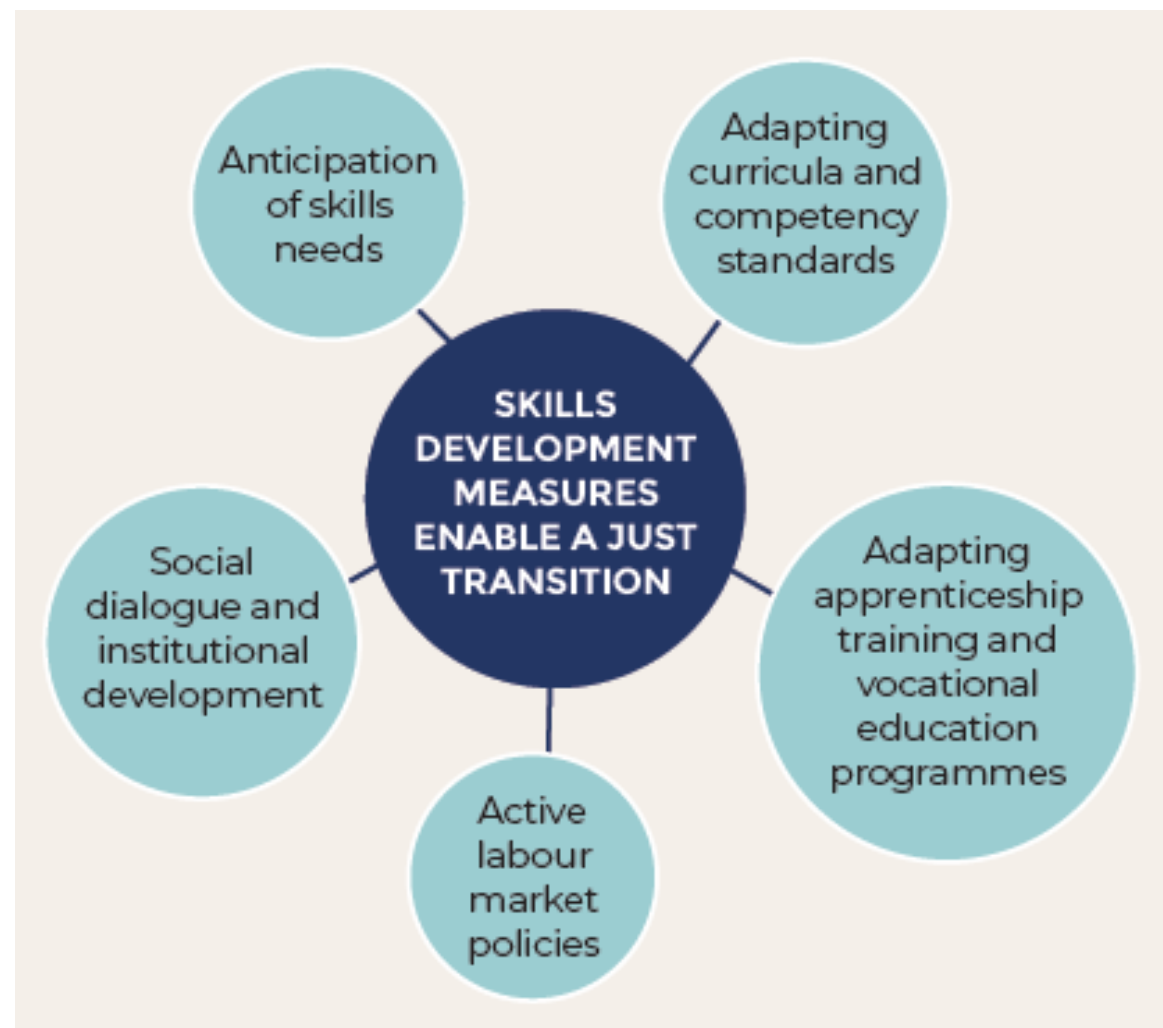
Environmental awareness?

Environmental sustainability skills?



ILO definition: Just Transition is the process of:

- ▶ Greening the economy in a way that is fair and inclusive to everyone involved.
- ▶ Creating decent work opportunities and ensuring that no one is left behind.
- ▶ Achieving environmental sustainability while also promoting social equity and economic growth.



Investments in re-training and up-skilling

Energy transition Scenario for 2030

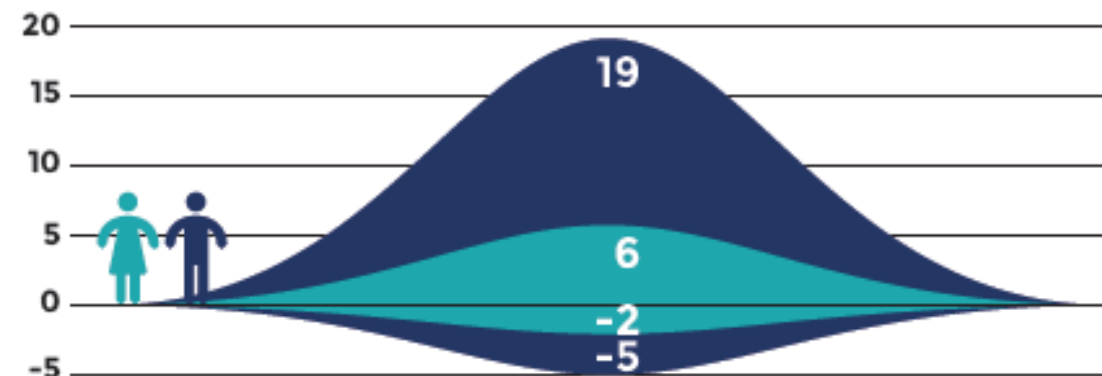
Job growth by occupation

- 3.8 Building and related trades workers, excluding electricians
- 3.2 Labourers in mining, construction, manufacturing and transport
- 1.5 Metal, machinery and related trades workers
- 1.4 Market-oriented skilled agricultural workers
- 1.3 Science and engineering associate professionals
- 1.2 Electrical and electronic trades workers
- 1.1 Drivers and mobile plant operators
- 1.1 Sales workers
- 1.1 Stationary plant and machine operators
- 0.8 Science and engineering professionals
- 0.7 Subsistence farmers, fishers, hunters and gatherers
- 0.7 Agricultural, forestry and fishery labourers
- 0.6 Assemblers
- 0.6 Business and administration associate professionals
- 0.5 General and keyboard clerks
- 0.5 Production and specialized services managers
- 0.5 Refuse workers and other elementary workers
- 0.5 Personal service workers
- 0.4 Numerical and material recording clerks
- 0.4 Business and administration professionals

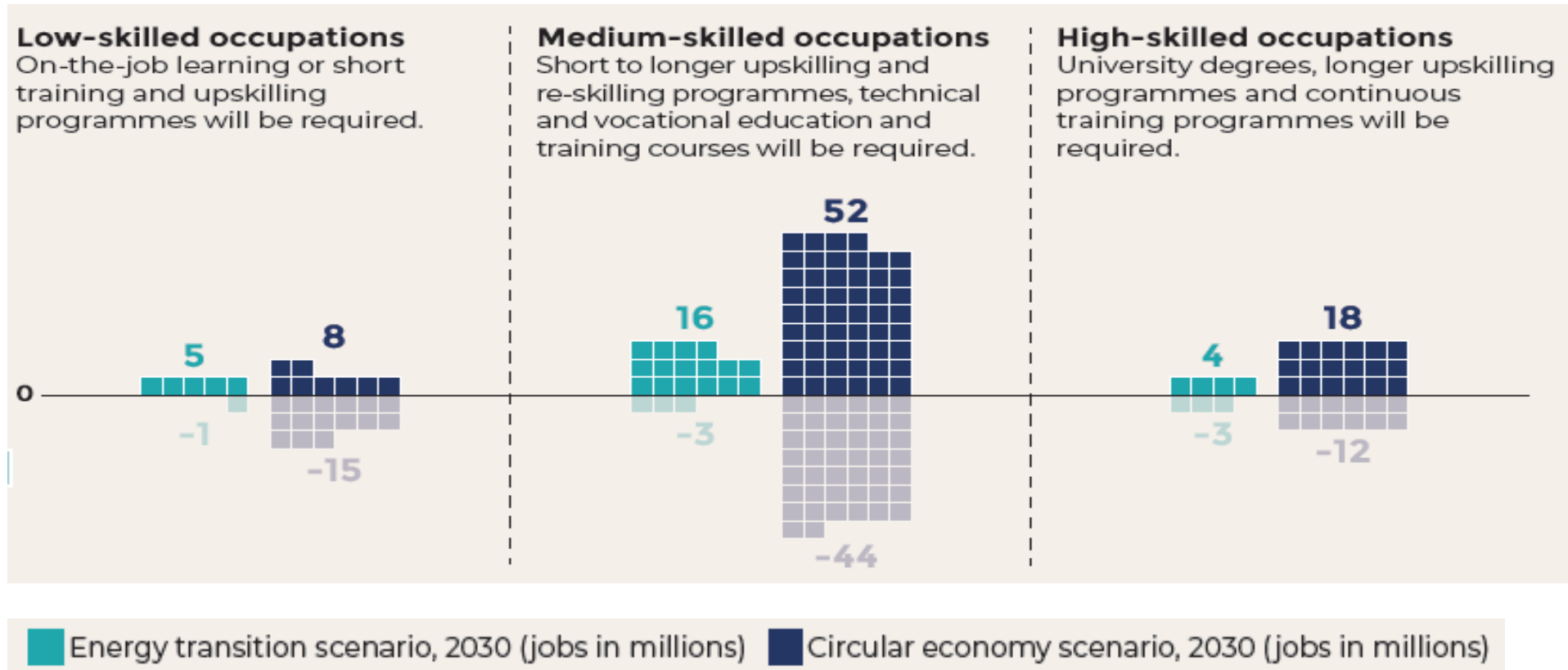
Potential job growth



Job change by gender



Which skills are needed for the just transition?



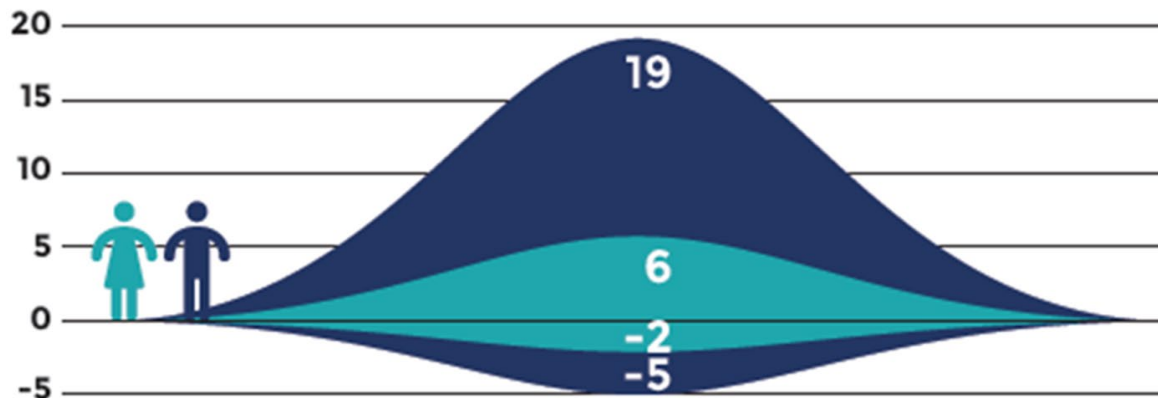
How will the just transition affect women and men?

Key messages

- Green transition is not gender-neutral
- Women will benefit only a fraction of job creation
- Targeted skills measures are needed for women

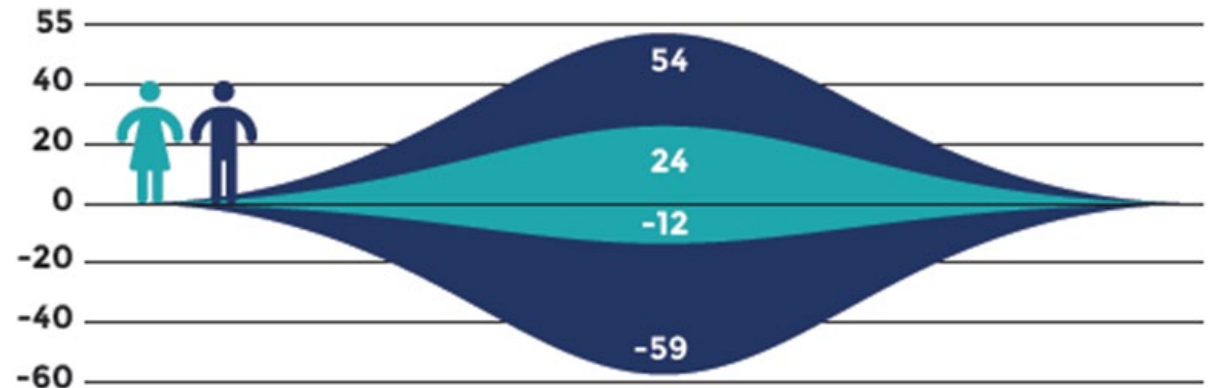
► Energy sustainability scenario, 2030

Job change by gender



► Circular economy scenario, 2030

Job change by gender

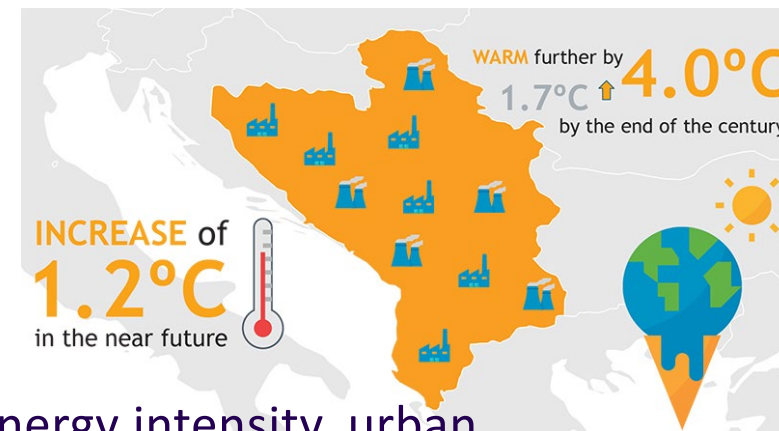


Source: ILO (2019) Skills for a Greener Future. Infographic.

▶ Challenges in the Western Balkan Countries (WB6)

**Albania, Bosnia and Herzegovina, Kosovo*, Montenegro,
North Macedonia, Serbia**

* All references to Kosovo should be understood in the context of United Nations Security Council Resolution 1244 (1999).



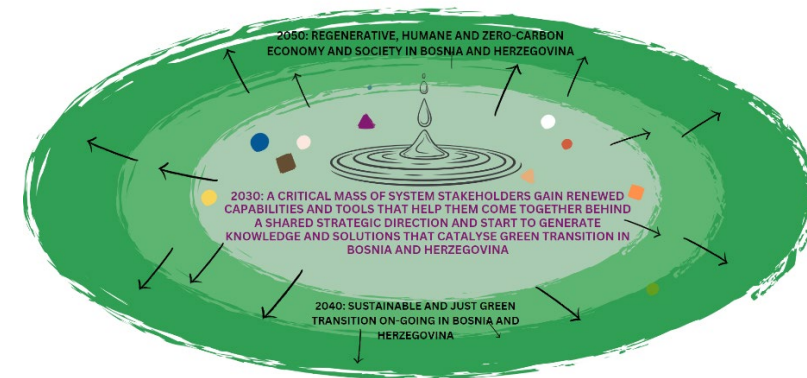
WB6 is in a Climate Crisis

- ▶ **Similar challenges** (Air pollution, demographic decline, high energy intensity, urban sprawl, labour market challenges, constraints on fiscal space).
- ▶ **Dependency on coal** (except for Albania)
- ▶ **Temperature Rise:** Average temperature up 1.2°C since 1961-80, with a 0.2% drop in precipitation.
- ▶ **Health Impact:** Heat-related deaths to rise by 5-10% by 2100.
- ▶ **Intensifying Hazards:** More wildfires, flash floods, landslides.
- ▶ **Increased Vulnerability:** Urban expansion, geological factors increase landslide.
- ▶ **Waste Management Issues:** Poor waste management
- ▶ **Localized Impact:** Vulnerable communities, particularly marginalized groups like the Roma, face heightened risks.

Key Findings of the Western Balkans 6 (WB6) Country Climate and Development Report (CCDR)

- ▶ **Investment Needs:** Urgent investments of \$37 billion required for climate adaptation, with a strong return on investment (\$4 for every \$1).
- ▶ **Climate Neutrality:** Achieving net-zero emissions by 2050, in line with EU objectives, requires additional \$32 billion.
- ▶ **Skills Transformation:** One in six workers need upskilling for green jobs; costs up to €2.4 billion.
- ▶ **Education System Reforms:** Long-term changes needed; teacher training estimated at \$25 to \$76 million.

► Potentials in the Western Balkans



A new, circular growth model

- ▶ **Transform Key Sectors & circular economy:** Modernise agriculture, remodel cities, and transition power sector to clean energy.
- ▶ **Just Transition for Coal:** Ensure reskilling, support economic diversification for affected communities.
- ▶ **Energy Efficiency:** Boost efficiency in buildings, decarbonize transport through urban design, incentives.
- ▶ **Limit Harmful Subsidies:** Reduce energy, transport subsidies that hinder clean tech.
- ▶ **LNOB:** Address specific local needs, particularly in vulnerable communities.

Greening TVET Initiatives in the Western Balkans

- ▶ **Regional Challenge Fund (RCF):** Increase work-based learning, youth employability and boost competitiveness of enterprises through cooperative training models, incl. elements of sustainability and green skills development.
- ▶ **Green Agenda for the Western Balkans:** commitment at Sofia Summit, 2020. **Alignment with EU climate targets**, measures to integrate sustainability into various sectors, including education and training.
- ▶ **UNESCO-UNEVOC** supports TVET institutions in the region to integrate sustainability into their curricula, e.g. developing green skills and promoting sustainable practices.
- ▶ **EU / ETF (European Training Foundation):** IPA, Accession: alignment with EU standards
- ▶ **Bilateral donors / UN support:** technical advice, Development cooperation projects
- ▶ **National Strategies: E.g. Serbia:** incorporate renewable energy and environmental management into TVET. **North Macedonia:** Sustainable agriculture and green technologies in TVET

*Donor-driven & project-based
Skills Development is not part of industrial strategies*

Greening Western Balkan economies: Skills need to be integral part of sectoral and Industrial growth.

- ▶ **Energy:** Less fossil fuels, more renewables (solar, wind, hydropower)
- ▶ **Transportation:** Sustainable transportation infrastructure, electric vehicles, public transit systems,
- ▶ **Agriculture and Food:** Sustainable agriculture, improved food systems, incl. organic farming, efficient water use.
- ▶ **Manufacturing industry:** Energy efficiency and cleaner production technologies.
- ▶ **Forests and Land Use:** Forest protection and restoration, sustainable land use to sequester carbon and preserve biodiversity.
- ▶ **Buildings and Cities:** Improving energy efficiency, smart city initiatives.

Buzzer quizz:

2 presential groups: consult and “buzz” once you can give an answer

Online participants: write in the chat

Please give one example of an occupation / job for the green transition per area:

- ▶ Energy Efficiency & Energy-Efficient Construction
- ▶ Renewable Energy
- ▶ E-Mobility
- ▶ Circular Economy
- ▶ Waste Management (including Hazardous Waste)
- ▶ Green Chemistry (e.g. reducing hazardous substances in products or manufacturing processes)
- ▶ Biodiversity Conservation & Restoration
- ▶ Carbon Sequestration (storage and absorption of carbon dioxide in forests, porous materials)
- ▶ Nature-Based Infrastructure (nature-based solutions to climate change, involves the protection, restoration, improved management or creation of natural and semi-natural ecosystems to provide services relevant to the functioning of physical infrastructure.)

▶ **Examples:**

Energy Efficiency & Energy-Efficient Construction

- ▶ Occupations: Energy Auditors, Building Inspectors, HVAC Technicians, Energy Engineers
- ▶ Skills: retrofitting buildings, insulating homes, installing energy-efficient windows and doors, conducting energy audits, knowledge of energy-efficient technologies, building codes and standards, project management, analytical skills, critical thinking

Renewable Energy

- ▶ Occupations: Solar Panel Installers, Wind Turbine Technicians, Geothermal Engineers, Biomass Plant Operators
- ▶ Skills: Installing and maintaining solar panels, wind farm construction and maintenance, geothermal plant operation, managing biomass production, management of renewable energy systems, electrical knowledge, mechanical skills, safety protocols, critical thinking

▶ How to make TVET and Skills Development “greener”?

How “greening” affects different occupations

Existing occupations

- ▶ Workers need new technical knowledge and skills
 - ▶ e.g. use of new green materials in construction occupations
- ▶ Requires reskilling and upskilling

New occupations

- ▶ Emerge where sets of work tasks require new bundles of skills
- ▶ Comparatively rare ...
- ▶ Tend to emerge at higher skill levels, e.g. solar-panel installers or wind-turbine technicians
- ▶ Requires initial TVET and reskilling

Occupations in traditional industries

- ▶ that are being phased out owing to their reliance on fossil fuels
 - ▶ e.g. coal-mining
- ▶ Needs reskilling and upskilling to transition into new jobs

All occupations

- ▶ Require core skills for the green transition
 - ▶ e.g. recycling, waste management
- ▶ Also need broader green attitudes and behaviours
 - ▶ e.g. problem solving, critical thinking

Approaches to greening TVET

MACRO

- ▶ Policies and strategies
- ▶ Governance: tripartite Social Dialogue
- ▶ Industrial development strategies
- ▶ Occupational and Qualification Standards
- ▶ Transversal competences and microqualifications
- ▶ Funding

MESO

- ▶ Curricula
- ▶ Training programmes
- ▶ Teacher Training
- ▶ Sectoral (industry) approaches

MICRO

- ▶ Schools (ESD: Education for Sustainable Development)
- ▶ Teachers, Directors, Students
- ▶ Equipment, Facilities
- ▶ Work-based learning, apprenticeship
- ▶ Community engagement



Example 1, TVET: Skills for an Environmentally Sustainable Transition in Moldova

Funding: Austria, Liechtenstein, Implementation: ILO

TRAINING STANDARDS AND PILOTING

- Occupational & Qualification Standards
 - Curriculum Development
 - Teacher training
 - Piloting
- A Transversal training Module to mainstream sustainability into all occupations

GREENING TVET SCHOOLS

- Greening TVET schools
- “Green Minds” competition: innovation
- Education for Sustainable Development (ESD)

NATIONAL DIALOGUE

- A series of interconnected events
- Bringing institutions from different disciplines together
- Visibility and public awareness
- Skills foresight for the Renewable Energies Industry

ATTITUDES OF YOUNG PEOPLE

- Career guidance (gender sensitive)
- Campaigns
- Educational online game
- Young multipliers

Example 2: Coal transition in Bosnia and Herzegovina (BiH)

SITUATION

- ▶ BiH: Committed to close mines and coal-fueled energy production
- ▶ No alternative energy plan or just transition policy
- ▶ Politically sensitive:
 - Coal mines as a “social peace” instrument
 - Coal miners as a voting force
 - Continued public transfers to non-profitable mines
- ▶ ILO Study: Decarbonisation and the Just Transition: Possible Impacts and policy options in Bosnia and Herzegovina
- ▶ Round Table discussions with representatives of Government institutions,

FINDINGS

- ▶ Important local vulnerabilities,
- ▶ Potential industries to absorb displaced workers?
- ▶ Anticipating skills needs, investing in skilling, reskilling, upskilling for green jobs.
- ▶ Not all workers can be retrained and find alternative jobs.
- ▶ Social protection + LLL + Active Labour Market Policies + investment into infrastructure + local economic diversification
- ▶ Further analysis and dialogue are needed to assess the right just transition policy mix.

MYTH BUSTING

„Green transition will lead to the net positive creation of jobs“

YES, BUT ...



For different
skill profiles

In different
geographical
areas

With different
labour
intensity

In different
value/supply
chains

Coal miners are not going to simply become solar panel installers

Over-simplification leading to policy auto-pilot mode

Diversify away from coal - Structural change in Germany's Ruhr Valley

- Steel
- Coal



- Logistics
- Transport
- Health and Care industry
- Tourism / Culture / Hospitality



▶ ILO Resources on Greening TVET

(free and downloadable)

ILO “Greening TVET and skills development: A practical guidance tool”

Aims

- ▶ Provides practical ‘how-to’ guidance
- ▶ For policy-making and delivery
- ▶ From national to local level
- ▶ Relevant to everyone involved:
 - ✓ Policy-makers
 - ✓ Social partners
 - ✓ Employers
 - ✓ School leaders
 - ✓ Teachers and trainers
 - ✓ Civil society



ILO knowledge products and tools on skills for a greener future

Skills for a Greener
Future: A global
view



Anticipating skill needs
for green jobs: A practical
guide

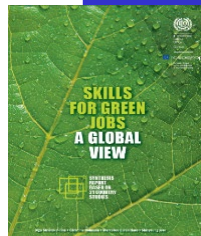


Skills and Occupation Needs
in Renewable Energy

Skills and Occupation Needs
in Green Building



Skills for Green Jobs:
A global view



Policy Brief: Challenges
and enabling factors to
achieve a just transition



Comparative analysis of
methods of identification of
skills needs on the labour
market in transition to the low
carbon economy



Greening TVET and skills
development: A practical
guidance tool



Just Transition Policy Brief:
Skills development for a
just transition



More information:

skills@ilo.org

ILO SKILLS - <https://www.ilo.org/skills>

Global KSP -
<https://www.skillsforemployment.org/skpEng>

**Thank you for your attention!
Do you have any questions?**

