What are green skills?
Making sense of the green economy

WorldSkills Conference 2019
## UNESCO-UNEVOC 5 Dimensions of Greening TVET

<table>
<thead>
<tr>
<th>GREEN Campus</th>
<th>GREEN Curriculum</th>
<th>GREEN Community</th>
<th>GREEN Research</th>
<th>GREEN Culture</th>
</tr>
</thead>
<tbody>
<tr>
<td>Managing Campus</td>
<td>Integrating ESD in Curriculum</td>
<td>Adapting Community</td>
<td>Fostering Research</td>
<td>Promoting culture</td>
</tr>
<tr>
<td>• Energy management</td>
<td>• Green technology</td>
<td>• Capacity Building</td>
<td>• Renewable energy</td>
<td>• Green values</td>
</tr>
<tr>
<td>• Water management</td>
<td>• Clean technology</td>
<td>• Renewable technology</td>
<td>• Water treatment</td>
<td>• Green attitude</td>
</tr>
<tr>
<td>• Waste management</td>
<td>• Green jobs</td>
<td>• Resource support</td>
<td>• Green innovations</td>
<td>• Green ethics</td>
</tr>
<tr>
<td>• Pollution management</td>
<td>• Greening existing jobs</td>
<td>• Unique practices</td>
<td>• Waste recycling</td>
<td>• Green practices</td>
</tr>
</tbody>
</table>
Green jobs are decent jobs that:

- Contribute to preserving or restoring the environment
- Reduce consumption of energy and raw materials
- Limit greenhouse gas emissions
- Minimize waste and pollution
- Protect and restore ecosystems
- Contribute to adapting to climate change
Circular economy scenario, 2030 (jobs in millions)

Potential job growth

**Risk of job destruction**
- 22 million jobs could be destroyed if workers are not reskilled into new occupations
- 49 million jobs could be reallocated

**Job creation potential**
- 78 million jobs need training
- 29 million new jobs could absorb laid-off workers
- 49 million jobs need reskilling and upskilling to reallocate within same occupations in growing industries
Energy transition scenario, 2030 (jobs in millions)

Potential job growth

Risk of job destruction

- 2 million jobs (7 million jobs) could be destroyed if workers are not reskilled into new occupations

Job creation potential

- 20 million new jobs need reskilling and upskilling to reallocate within same occupations in growing industries
- 5 million jobs could absorb laid-off workers
- 25 million jobs

need training
The global energy system faces a dual challenge: the need for ‘more energy and less carbon’

Primary energy demand and carbon emissions
Cumulative growth rate, 2017= 0%
2 out of 5 employees in the OECD countries are affected by skills mismatch.

Reskilling, Upskilling and Cross-skilling: an urgent need

Source: BCG Research for WorldSkills Kazan 2019
56% of the adult population have no or insufficient ICT skills

Source: OECD 2016 Policy brief: Skills for the Future of Work
It now takes the Earth 1 year and 8 months to regenerate what we use in a year.

Source: Global Footprint Network: Ecological Footprint. 2019
Humankind consumes more resources that the Earth can produce in a year.

Earth Overshoot day, fell on July 29 in 2019.

Source: Global Footprint Network: Earth Overshoot Day. 2019
The renewable energy industry: a fast-growing sector

There were 10.3 million jobs in the renewable energy industry in 2017, a 1.5 increase since 2012.

Source: IRENA Renewable Energy and Jobs, 2018 Annual Report
Greening jobs is profitable

Over 60% of enterprises pay back their investment in green products, services and processes in less than 3 years.

Source: ILO: World Employment Social Outlook 2018: Greening with jobs