Why Europe cannot ignore education and skills development when addressing the long-term challenges of climate change

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Skills shortage is an obstacle to green investment

For corporates and municipalities:

- **Shortage of skilled labour** is a major barrier to (green) investment for both firms and municipalities: 81% of EU firms and 62% of municipalities report availability of skilled staff as a main obstacle to investment.
Skills important among the large capacity constraints to be overcome for effective public investment

Obstacles to local government investment (excluding financing gaps) (% municipalities reporting as an obstacle)

<table>
<thead>
<tr>
<th>Obstacle</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Length of regulatory process</td>
<td>81</td>
</tr>
<tr>
<td>Regulatory uncertainty</td>
<td>80</td>
</tr>
<tr>
<td>Technical capacity</td>
<td>73</td>
</tr>
<tr>
<td>Technological uncertainty</td>
<td>66</td>
</tr>
<tr>
<td>Agreement among...</td>
<td>65</td>
</tr>
<tr>
<td>Access to core infrastructure</td>
<td>51</td>
</tr>
<tr>
<td>Agreement across government</td>
<td>50</td>
</tr>
</tbody>
</table>

Skill gaps delaying public investment (% municipalities reporting gaps in technical capacity)

<table>
<thead>
<tr>
<th>Skill Category</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Environmental and Climate</td>
<td>69</td>
</tr>
<tr>
<td>Engineering and Technical</td>
<td>62</td>
</tr>
<tr>
<td>Digital skills</td>
<td>58</td>
</tr>
<tr>
<td>Legal</td>
<td>53</td>
</tr>
<tr>
<td>Tendering and Procurement</td>
<td>48</td>
</tr>
<tr>
<td>Financial Knowledge</td>
<td>42</td>
</tr>
</tbody>
</table>

Source: EIB Municipality Survey 2022.
What are green skills?

Fastest growing green and greening jobs globally
(Bubble size indicates share of 50+ countries where the job was growing fastest in 2016-2021)

Note: Bubble size (Smallest 5%, largest 50%). Bubble shade indicates type of job (dark: green job; light: greening job).
Source: LinkedIn Green Skills Report 2022.
Green transition requires reskilling...

- Accelerating industrial change likely to render many jobs obsolete and/or requires extensive retraining
- Transition difficult for regions with extensive coal-related and energy-intensive jobs (e.g. automotive, chemicals, steel)
- Western and Northern Europe as well as Central and Eastern Europe have particularly high employment in both sectors, making them vulnerable to the green transition

Employment in coal-related and energy-intensive industries, by development and region

Note: EU Firms. Firms weighted by value added.
Source: Alves Dias et al. (2018), Eurostat, EIB staff estimates.
And a focus on ensuring people are not left behind

- Inequalities at danger of emerging not just between regions, but also along gender, age and educational lines
- Growth in green skills faster among workers holding a bachelor’s degree or higher
- Gender gap in green skills: Globally, only 62 women for every 100 men had green skills in 2021 – a gap that has been stable since 2015
- Younger generations developing more rapidly green skills

Annual growth in the share of green skills by education level (2015 – 2021)

Source: LinkedIn Green Economy Report 2022.
Despite these challenges, firms don’t train enough...

**Skilled staff as major obstacle vs investment in training, EU**

- Perception of skills as major obstacle for firms has risen over time, but investment in staff training has remained stable

**Investment in training for firms WITH vs. WITHOUT skills as major obstacle, EU**

Source: EIBIS, different waves.
Divergence in training among regions and sectors

- Green transition exposes increasing divergence in training between and within regions and sectors
- Greener firms in developed regions and leading green sectors invest more often in training

Note: EU Firms. Firms weighted by value added.
Strong foundation for lifelong learning set early in life

**Adult participation in life-long learning low in the EU:**
- Only 11.9% of adults participated in learning (over the past 4 weeks) in the EU in 2022 on average.
- Among low-qualified, only 6.2% of adults took part in training.

**Too many not gaining a firm basis in education:**
- Almost 10% of young people aged 18-24 in EU were early leavers from education and training in 2022.

Among young people in the EU, basic skill development has on average not kept pace with economic development
(Change in PISA reading scores and GDP per capita (2009-18 in %))

Note: Figure shows the average percentage change in PISA reading scores and GDP per capita between 2009 and 2018 by European region. Regional aggregates are based on simple averages.
Source: Author’s calculations based on OECD PISA and World Bank, 2023.
And our economies need to prepare for a shrinking and ageing workforce...

Changes in population across age groups (in %), 2022-2030:

- **0-15**
- **16-24**
- **25-34**
- **35-54**
- **55-64**
- **65+**

Note: Participation rate for population aged 15-64 is kept constant as of 2022. Simple average across country groups. Based on a neutral migration assumption.
Source: Calculations based on Eurostat.

- Until 2030, the EU overall but NWE and SE in particular will experience increased ageing.

WNE = Western and Northern Europe
SE = Southern Europe
CEE = Central and Eastern Europe
How to develop skills for a sustainable future?

• Skills key for Europe’s green transition
• Wide agenda including R&D, retooling workers in current roles, retraining those in declining sectors, creating new skilled jobs, preparing people for lifelong learning (green and digital)
• Rapid economic transition requires firms to invest more in training and skills development
• Coordinated action across private sector and education/training providers needed to deliver timely and targeted training programmes tailored to sector needs
• Pay attention to groups that are already being left behind
• Embed skills development and training in public support for green investment programmes (as with U.S. Inflation Reduction Act)?
THANK YOU

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