

Investment in human capital in the context of green and digital transformations

1st meeting of the G7 Employment Working Group
Tokyo, 8-9 February 2023

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Interconnected digital and green transitions

- ▶ Some immediate technology-induced job losses may be partially compensated by decarbonisation measures
- ▶ Greening of economy can create new space for application of technologies and drive new innovation

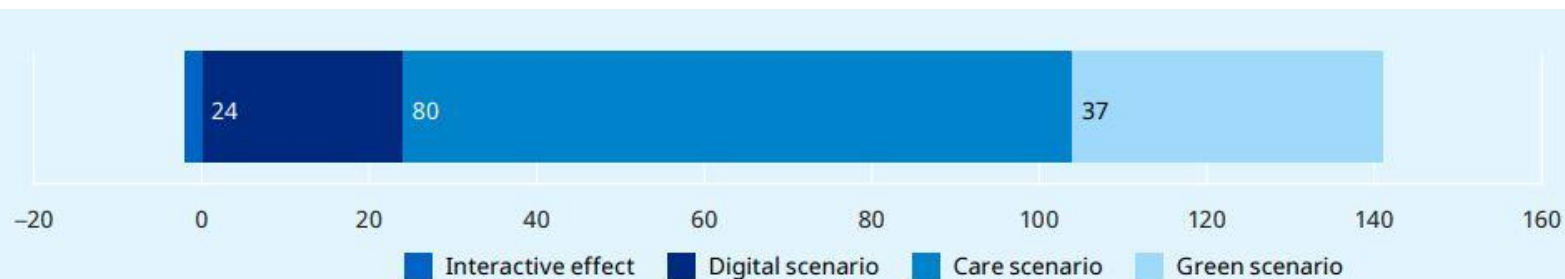


- ▶ Development and application of green technologies can speed up the green transformation process
- ▶ Digitalization can facilitate more equitable access to skills development opportunities, supporting the skills base for green and digital economies.
- ▶ Teleworking and digitalisation of learning may decrease carbon footprint

Green and digital projections



Contribution to the increase in global employment under the combined scenario, 2030 (millions)

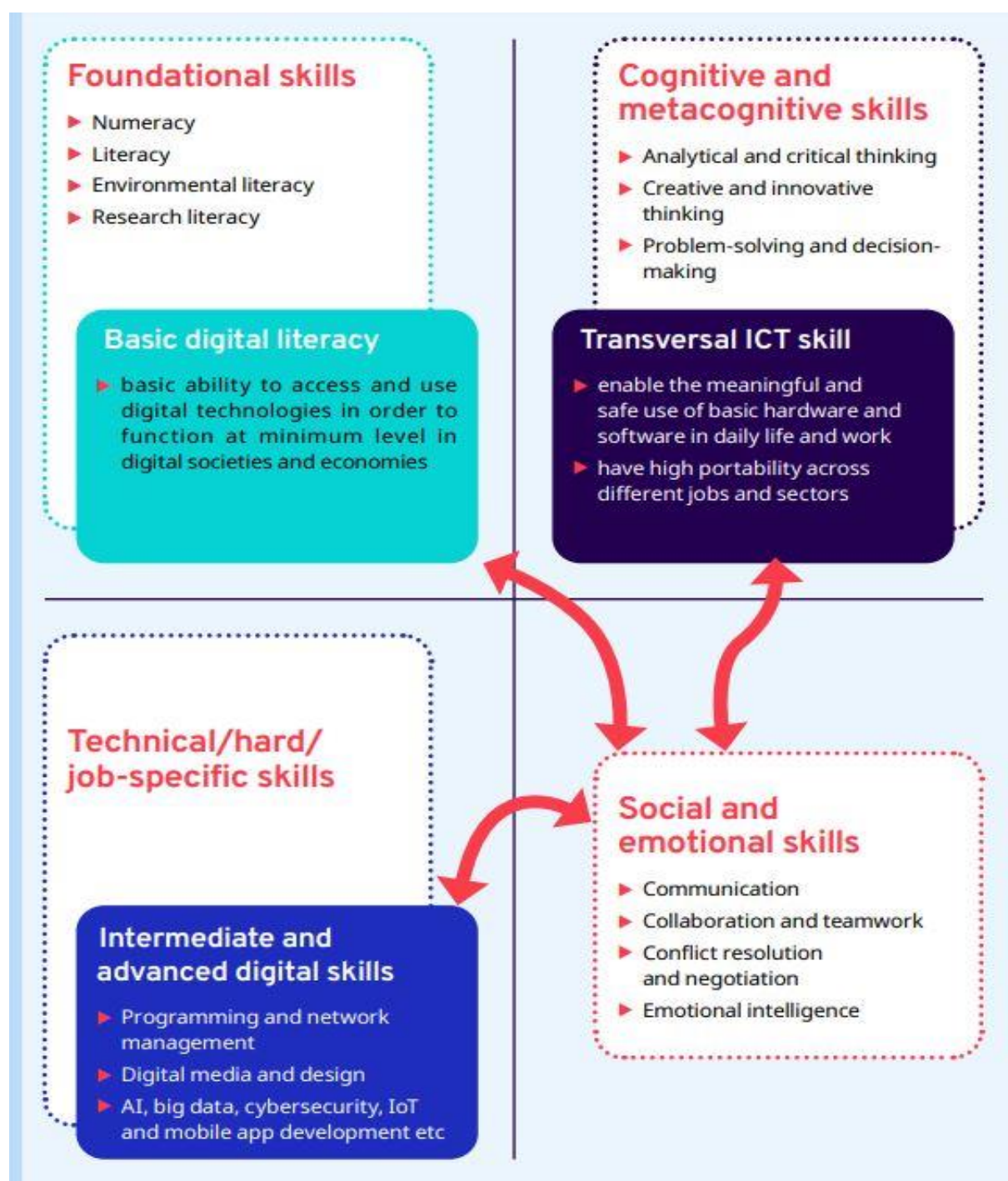


Source: ILO, based on the E3ME model of Cambridge Econometrics.

Digital skills as a subset of skills for digital economies



Sources: ILO (2021), Changing demand for skills in digital economies and societies



Technological change and digitalization: Opportunities & Challenges

Opportunities



Efficiency and **productivity** gains



Innovation



Empowerment and **augmentation** of the workforce's capabilities



Potential **employment creation** and opportunities

Challenges



Digital divide within countries & across countries



Gender - employment segregation



Displacement risk for manual routine-based jobs



Skills gaps

Digitalisation of TVET and skills development systems

Impact of COVID-induced digitalization on skills development



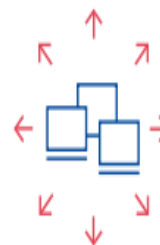
► Skills development in the time of COVID-19:

Taking stock of the initial responses in technical and vocational education and training

Key findings

- **uptake of distance learning solutions has accelerated** since the COVID-19 outbreak in TVET
- **opportunity to promote and further mobilize human and financial resources for expanding tech-enabled teaching and learning**

Five technologies driving digital transformation in skills delivery



UBIQUITOUS COMPUTING

Access to computing power any time, anywhere



COLLABORATION TECHNOLOGIES

Ability to collaborate with anyone in real time



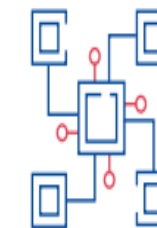
EXTENDED REALITY

Ability to digitally simulate reality and to integrate digital and physical worlds



ARTIFICIAL INTELLIGENCE

Ability for machines to learn on their own, and interact in a human-like manner



BLOCKCHAIN

Ability to use computers with guarantees as to privacy and security

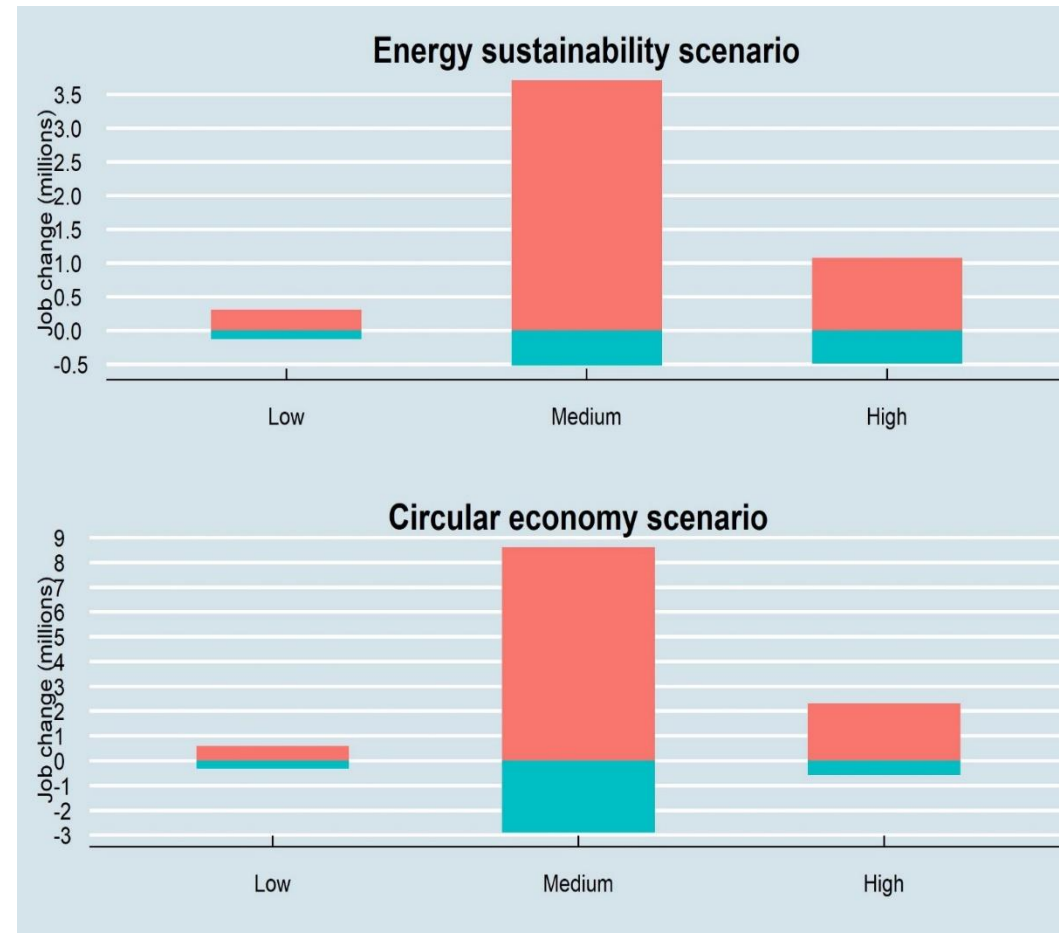
► Employment impact of greening the economy by skill level: G7 and the EU

Energy sustainability scenario

- 5.1 million jobs could be **created**
- 1.1 million jobs could be **destroyed**
- over 90% of workers at risk of losing jobs will be able to **reallocate**

Circular economy scenario

- 11.5 million jobs could be **created**
- 3.8 million jobs could be **destroyed**
- over 80% of people at risk of losing jobs will be able to **reallocate**



Around **10-20%** of workers will require reskilling into new occupations

▶ Greening TVET and skills development is essential



- ▶ Greening TVET offers opportunities to equip the current and future workforce with the skills to **be active agents of change** for the green transition
- ▶ Greening education and training are **normative and policy processes** that **require clear, holistic and systematic approaches**
- ▶ It contributes to **upgrading structures and processes more widely**, such as social dialogue mechanisms that can lead to a more demand-driven approach to skills development
- ▶ **Mainstreaming skills for the green transition** in the development and upgrading of competency standards, curricula, assessment as well as professional development of teachers and trainers is essential

► Policy recommendations

- Aligning skills development and lifelong learning policies with other policies, policy coordination and social dialogue
- Anticipation of skill needs for the green and digital transitions, and sensitization of youth on new occupations and skills
- Targeted measures for disadvantaged groups, and for the development of critical skills for digital and green transitions
- Innovative mechanisms for financing of lifelong learning to incentivise access to and participation in training
- An integrated approach with other policy measures such as career guidance, job matching, social protection and ALMPs, RPL, and incentives to digital and work-based learning
- Support to enterprises, particularly MSMEs, and industries through the involvement of social partners and for the improvement of HR practices, staff planning and skills utilization

Thank you for your attention!

