

**APEC Workshop on Green Vocational Skills
Chengdu, 19-20 September 2024**



**Sub-theme 4: International cooperation of green
skills development**

Need for A Global (Regional) VET Architecture for Green Skill Development

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Key Points

- ❑ Need for a new global/regional VET architecture to achieve inclusive and sustainable development
- ❑ Drivers & Barriers
- ❑ Recommendations for a global VET architecture for Green Skill Development
 - ❖ Means of Implementation: **Mutual recognition framework** including accreditation or assessment of prior learning
 - ❖ **Accountability Measures**: Assessment, monitoring, tracing and reporting standards and mechanisms
- ❑ Conclusions



Point 1

NEED FOR A NEW GLOBAL VET ARCHITECTURE



National VET Architecture for Green Transition:

Fit for Purpose?

YES

Maybe

NO



A Global/Regional VET Architecture for Accelerating Green Transition:

Needed?

YES

Maybe

NO



Point 2

DRIVERS AND BARRIERS

Why do we need a global VET Architecture?



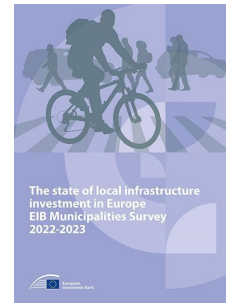
Drivers

1. Skill shortage at global scale
2. NEET crisis every where
3. Ageing society and shrinking workforces, an global phenonemon
4. Migration & Displacement
5. Green and digital transition represent **great potential** for generating **quality jobs and volume employment**
6. **Shared vision already exists**

Why do we need a global VET Architecture?



1. Skill shortage is delaying needed investment for climate mitigation, adaptation, and digital infrastructure



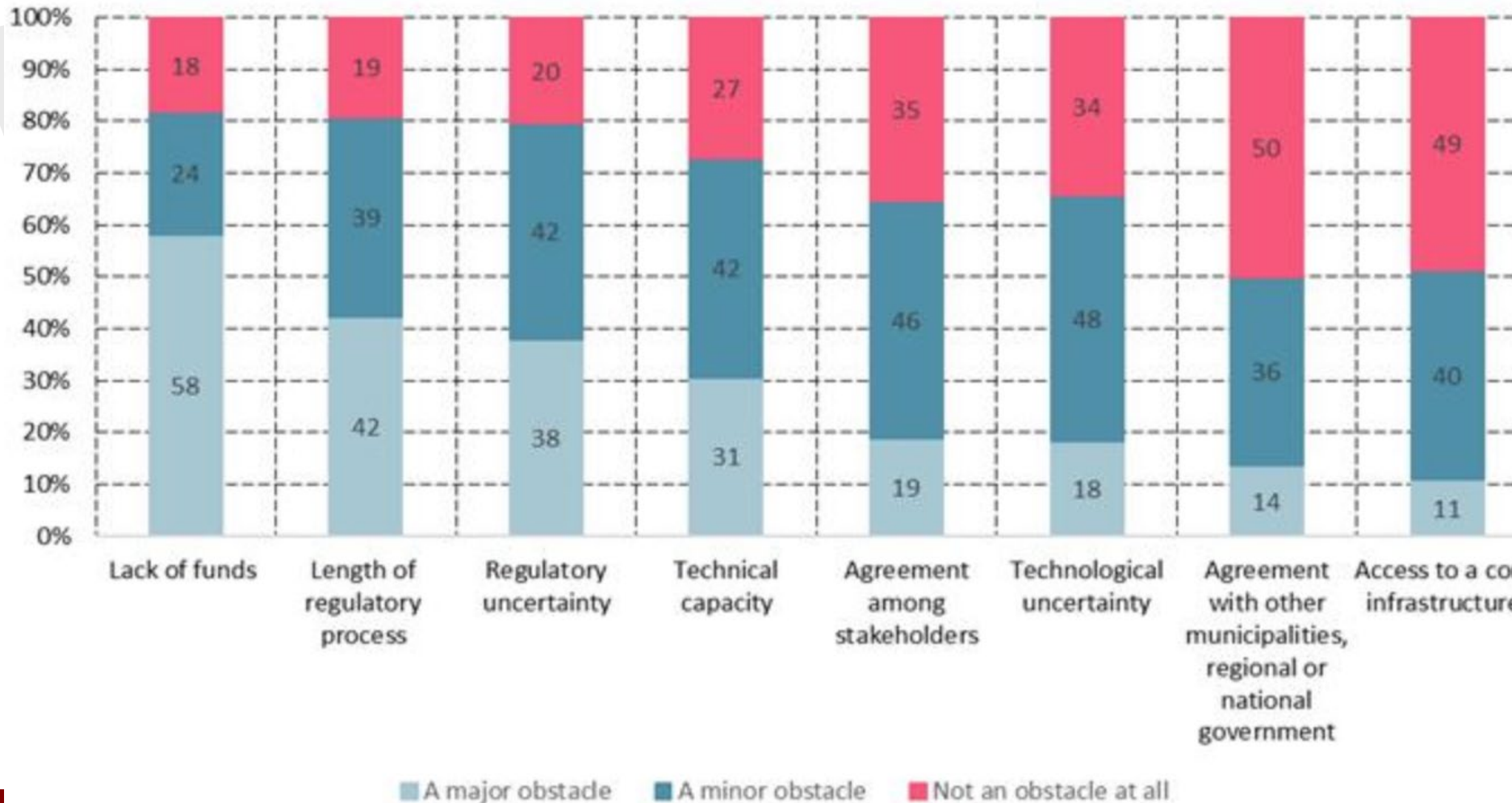
“69% of municipalities lack experts with environmental and climate assessment skills, as well as technical and engineering expertise, posing a serious problem for the implementation of local investment programmes. (N=744 municipalities across the EU)

<https://www.eib.org/en/press/all/2023-255-eib-unveils-2022-municipality-survey-findings-skills-shortage-is-delaying-the-green-transition>

Why do we need a global/ regional VET Architecture? 2



1. Skill shortage 2





“It is crucial for policymakers and stakeholders to address these gaps and prioritise sustainable and resilient investments for a greener and more digital future. **The persistent lack of skills**, including at the municipality level, must be addressed across Europe to enable the adequate implementation of regional and pan-European investment programmes,” said EIB Chief Economist Debora Revoltella.

What does NEET stand for?



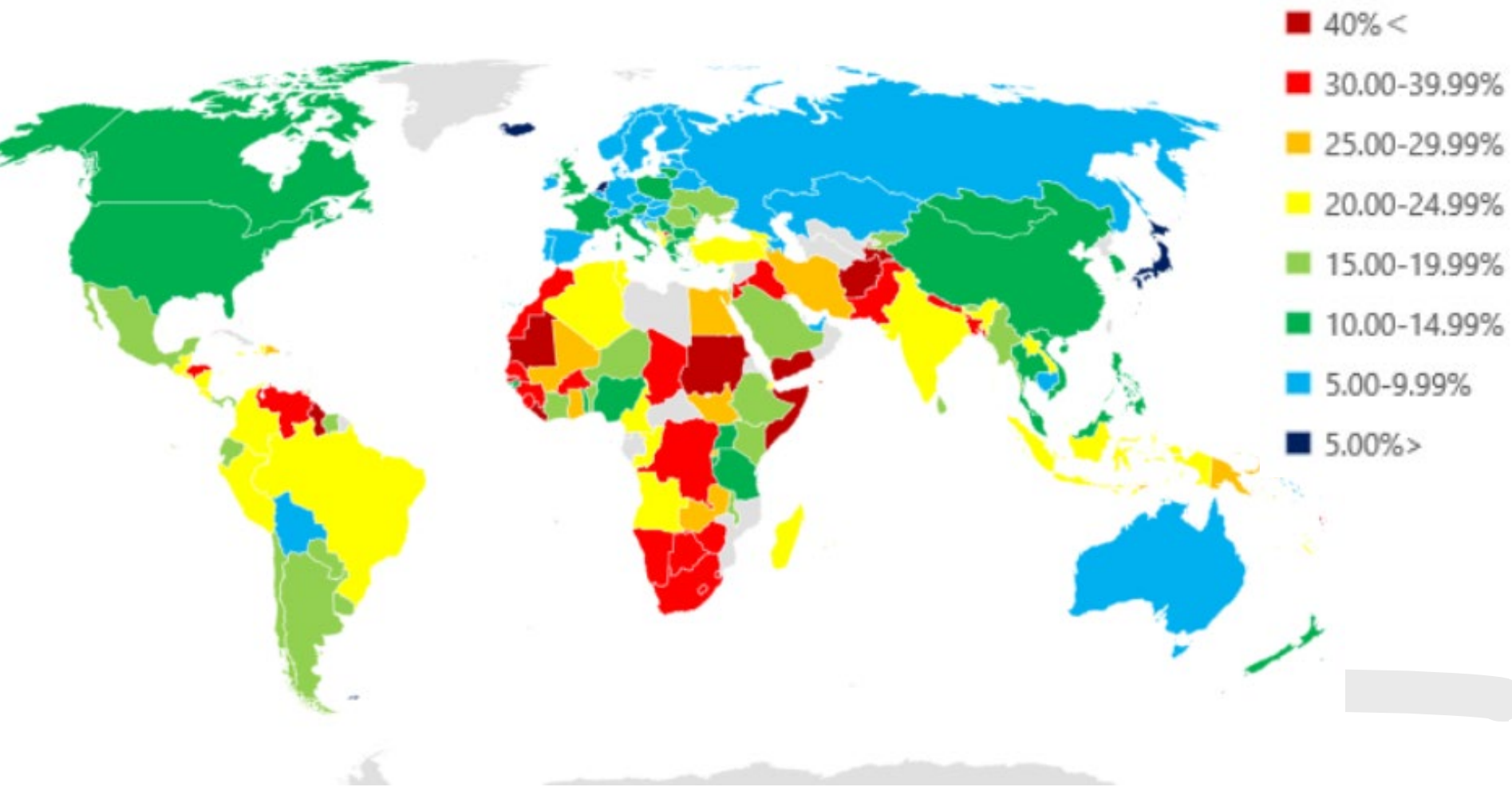
- ❑ an acronym for "Not in Education, Employment, or Training"
- ❑ The classification originated in the United Kingdom in the late 1990s, and its use has spread to other countries, including Japan, South Korea, China, Serbia, Canada, and the United States.
- ❑ "A Generation at Risk"

https://www.ilo.org/sites/default/files/wcmstp5/groups/public/@dgreports/@dcomm/documents/publication/wcms_212423.pdf



(ILO, 2022)

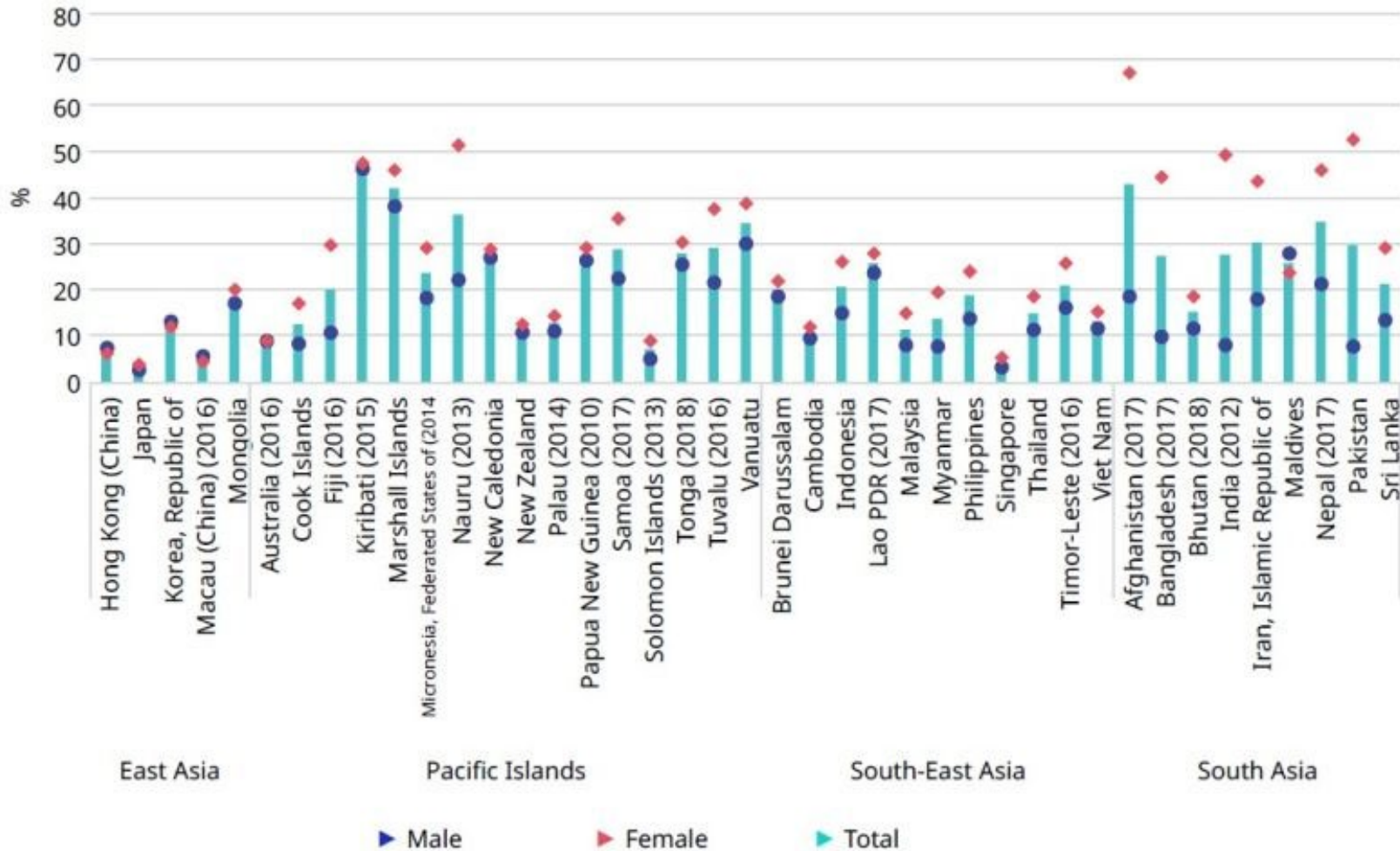
Proportion of Youth (15-24 years) not in Education, Employment, Training (Source: ILO data)



In the Region



► Figure 3: Youth NEET rates, by sex for economies in Asia and the Pacific with data, 2019 or latest year available (percentage)

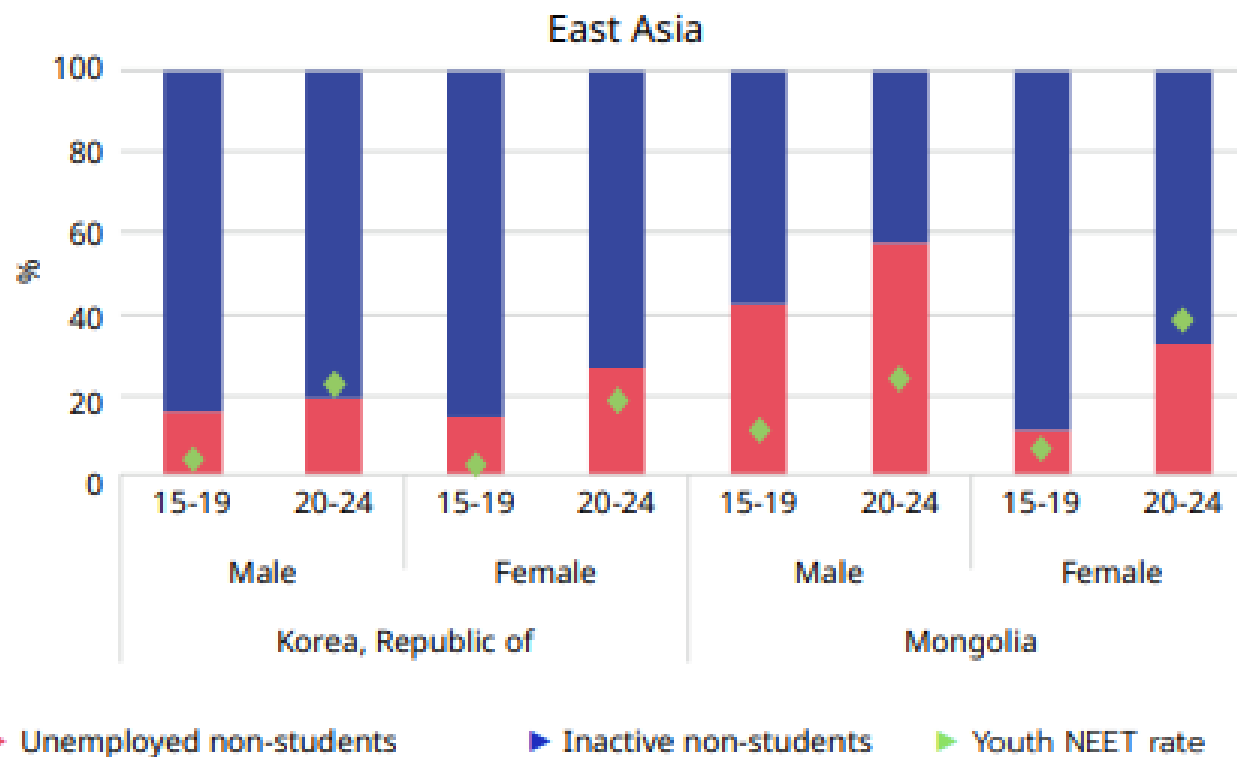


Youth NEET in APEC by age & Gender

(Source: X Youth not in employment, education or training in Asia and the Pacific: Trends and policy considerations, 2022)



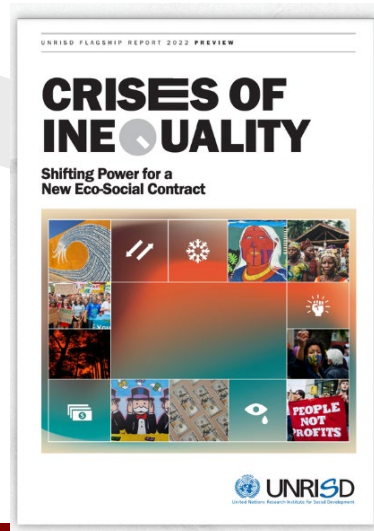
► Figure 5: Decomposition of youth NEET, by sex and age cohort for economies in Asia and the Pacific with data, 2019 or latest year available



Social-Economic Consequences



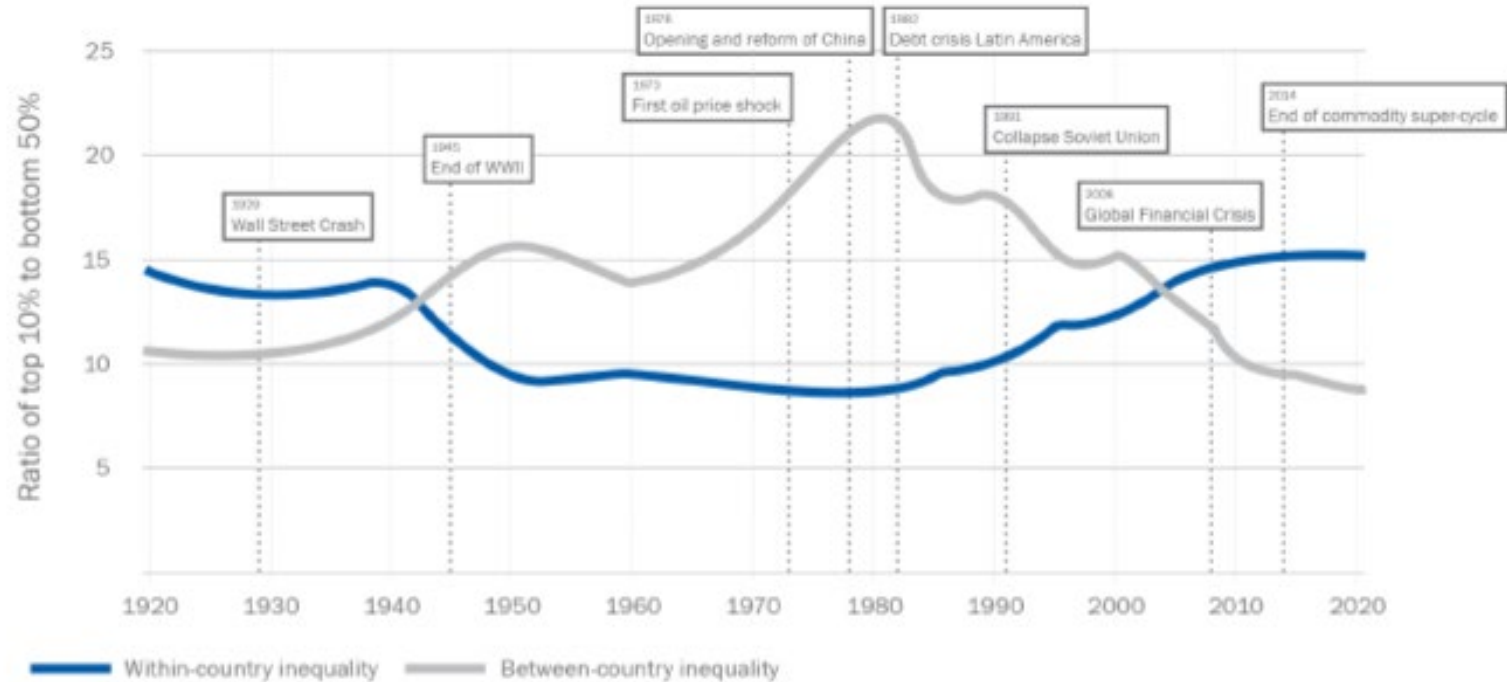
- ❑ Mis-allocation & destruction of human capital
- ❑ Sense of deprivation and alienation -> catalysing greater “Crises of inequality” and broken social contract



Income Distribution



Ratio of top 10% average income to bottom 50% average income



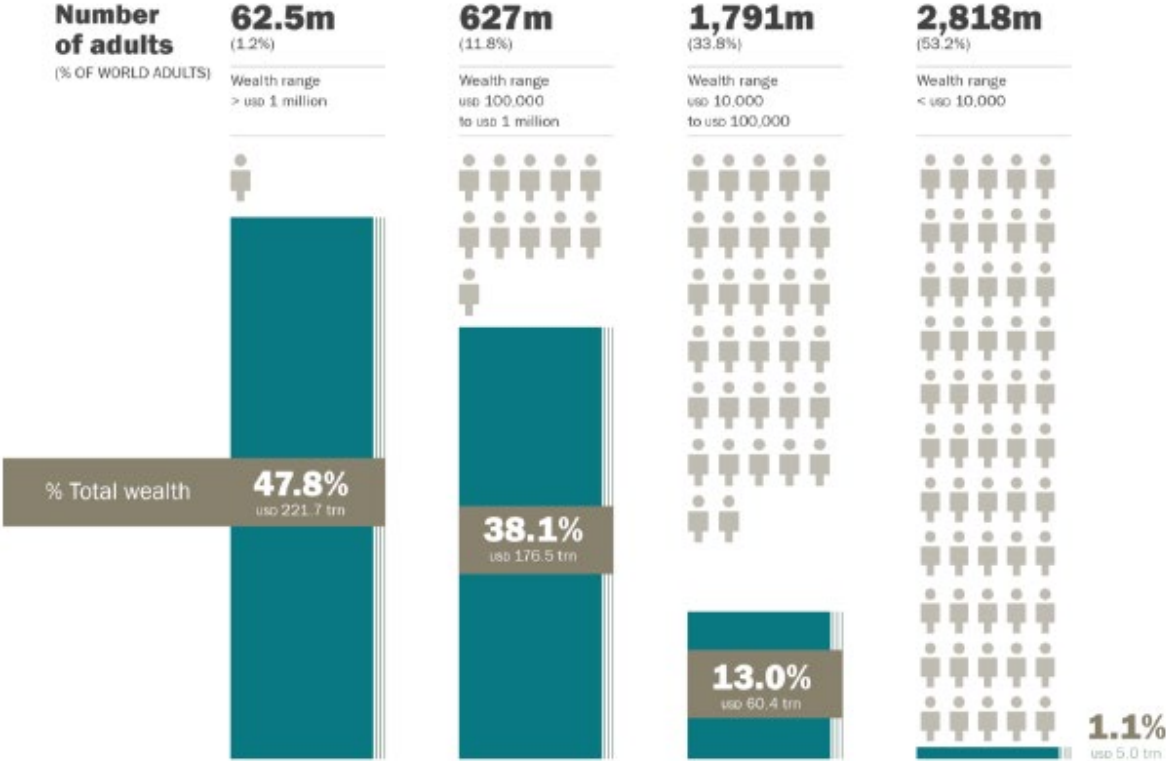
Source: based on Chancel and Piketty 2021

In the past 3 decades, the top 1% has captured nearly 20 times the amount of wealth as the bottom 50% (Oxfam 2022)

Top & Bottom of the Pyramid



1.2% of world adults own 47.8% of total wealth in 2022

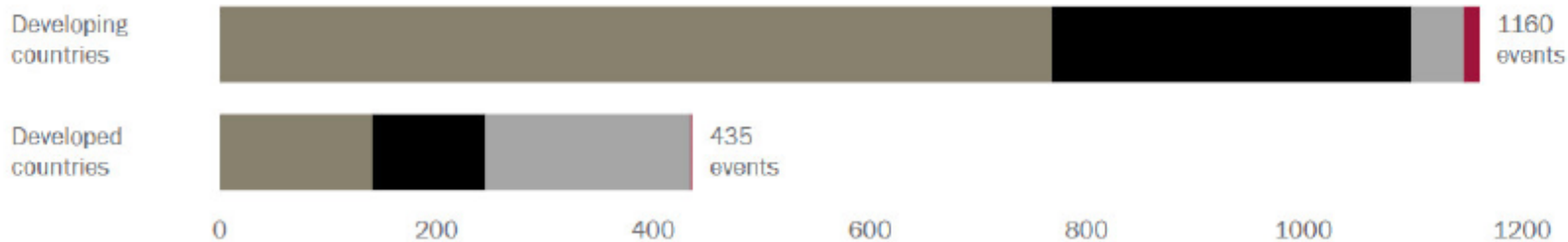


Data: Credit Suisse 2022

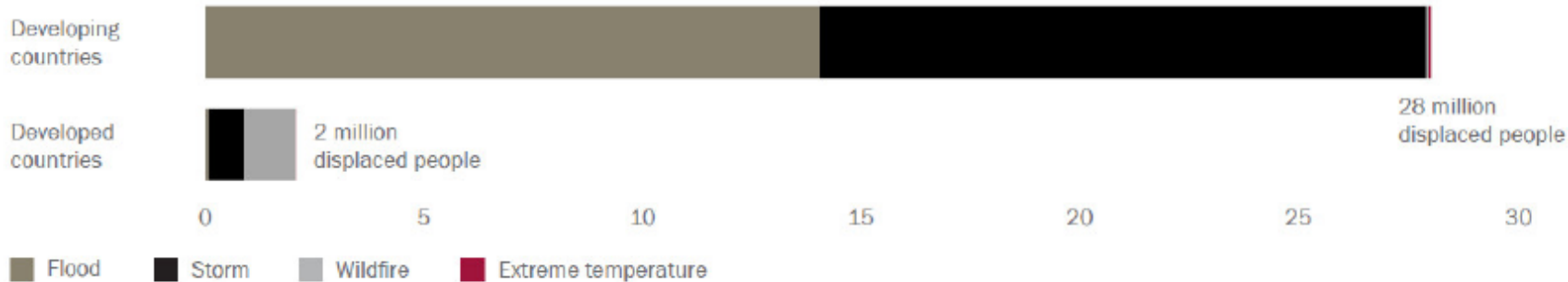
The unequal impact of the climate crisis

Weather-related disasters and internal displacement in 2020

Weather-related disasters



Internal displacement from weather-related disasters



Source: IDMC 2020.

Ageing Society and Shrinking Workforce

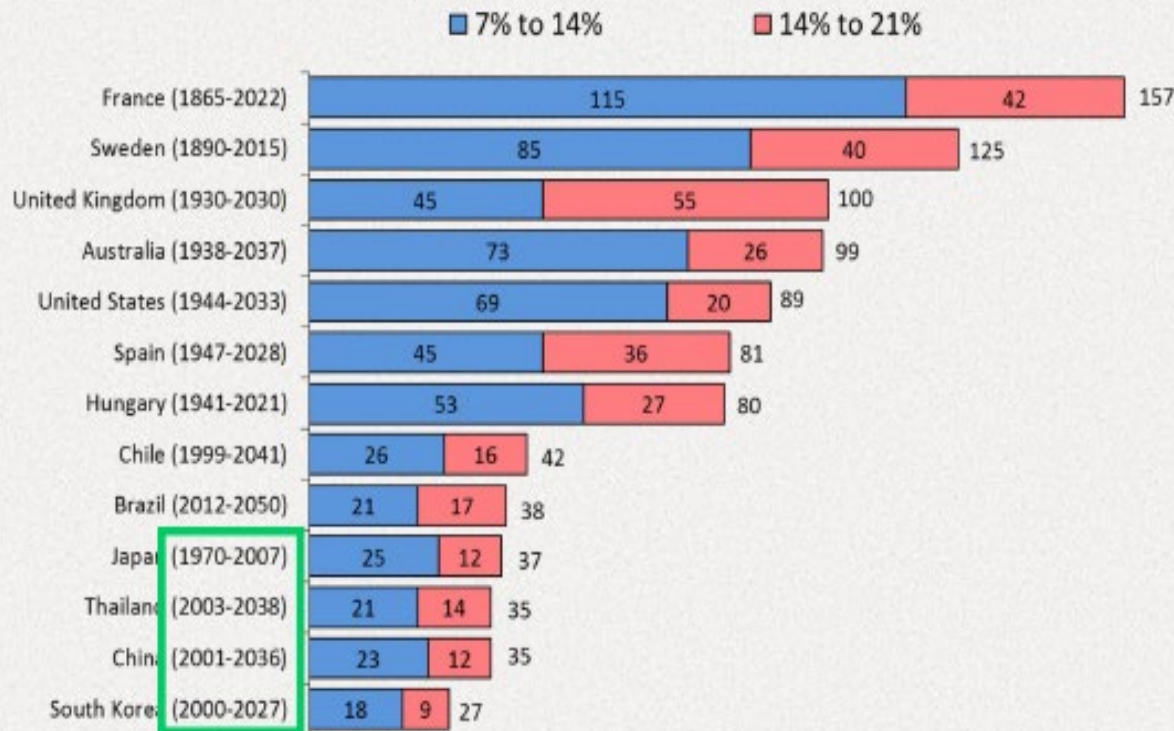


- Population ageing has become a defining trend of our times.
- Global life expectancy is rising once again after dipping during the Covid-19 pandemic.
- Fertility and mortality rates slowly converge downward.
- In some parts of the world, international migration has become a major component of population change.

Acceleration



Number of Years for Percent 65+ in Total Population to Triple (7% to 21%)

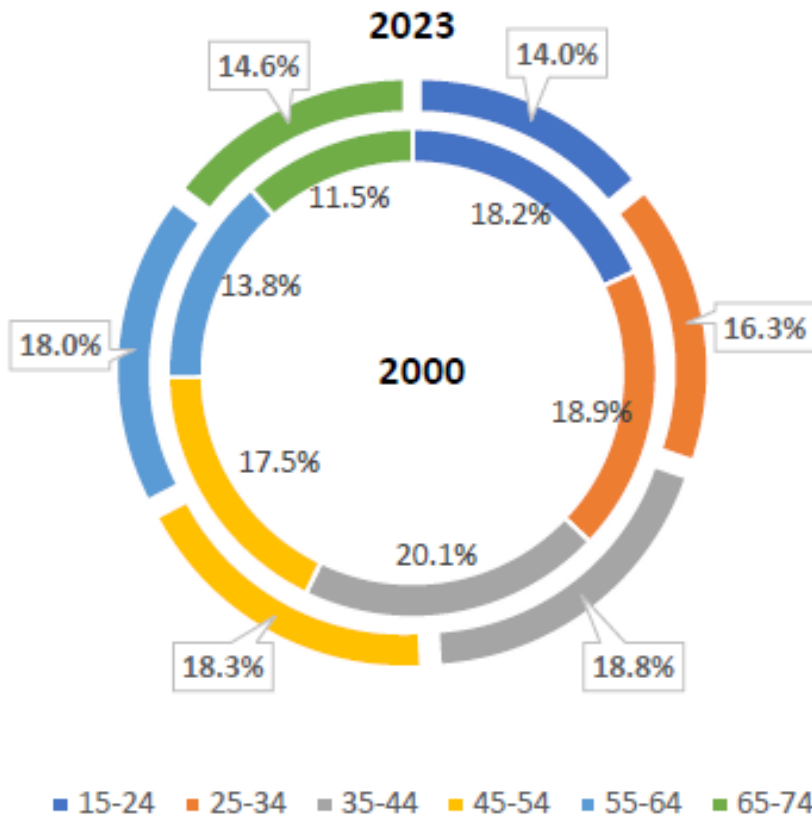


Sources: Kinsella and Gist, 1995; U.S. Census Bureau, International Data Base, 2017 release; 2017 National Population Projections.

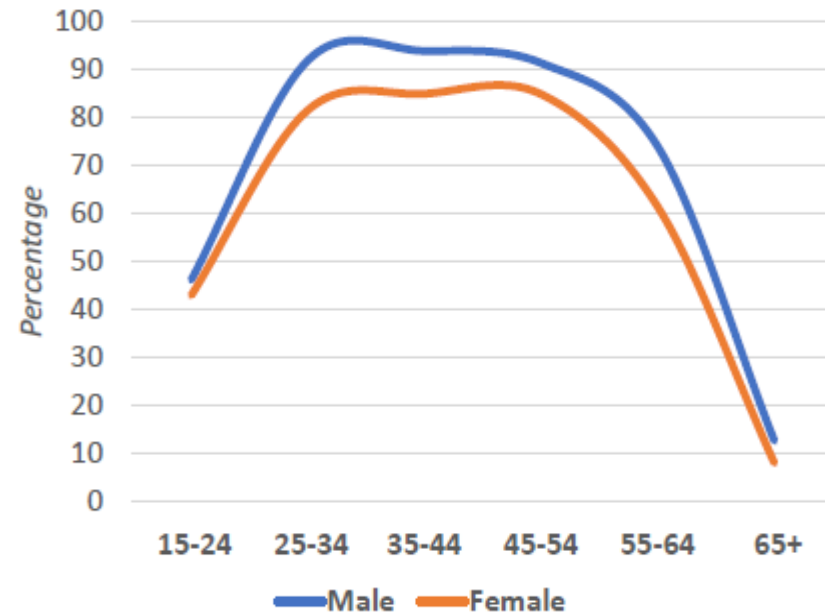
Labour Force Participation



Age structure of working age population in Europe, 2000 & 2023, estimate



Labour force participation rate in Europe, 2023, by sex



Source: ILO Data explorer: ILO modelled estimates, May, 2023

(Source: UN Population Division. World Population Prospects 2024 Revision)

Mario Draghi



“By 2040, the workforce is projected to shrink by close to 2 million workers each year. We will have to lean more on productivity to drive growth. If the EU were to maintain its average productivity growth rate since 2015, it would only be enough to keep GDP constant until 2050. **This is an existential challenge.**”

(“The future of European competitiveness Part A | A competitiveness strategy for Europe”, P.3)

Workforces in Reserve



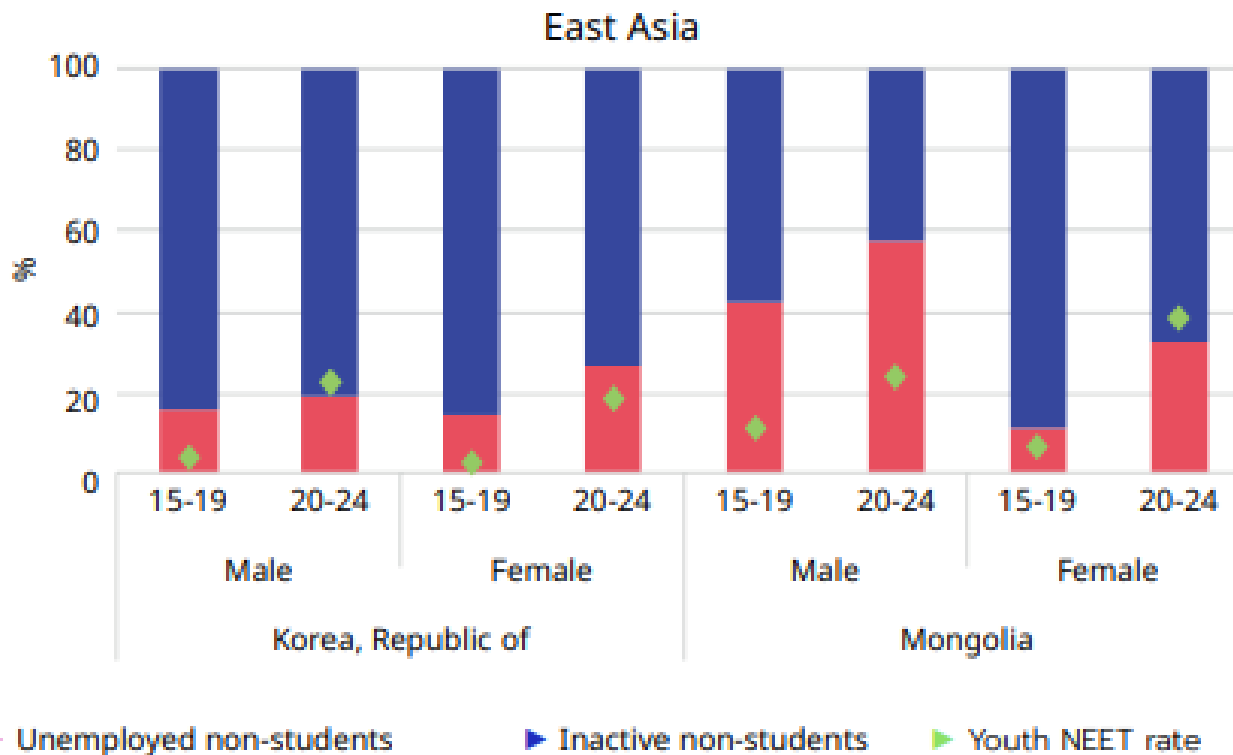
- Under utilised, women and older persons
- Yet to be considered (Untapped):
Migrants and Refugees

Youth NEET in APEC by age & Gender

(Source: X Youth not in employment, education or training in Asia and the Pacific: Trends and policy considerations, 2022)



► Figure 5: Decomposition of youth NEET, by sex and age cohort for economies in Asia and the Pacific with data, 2019 or latest year available



Common Vision & Shared Commitment



❑ Target 4.4

By 2030, substantially increase the number of youth and adults who have **relevant skills**, including technical and vocational skills, for employment, decent jobs and entrepreneurship

❑ Target 4.5

By 2030, eliminate **gender disparities** in education and ensure equal access to all levels of education and vocational training for the vulnerable, including persons with disabilities, indigenous peoples and children in vulnerable situations

❑ Target 4.6

By 2030, ensure that all youth and a substantial proportion of adults, both men and women, achieve **literacy and numeracy**

International Cooperation



□ Target 4.b

By 2020, substantially expand globally the number of **scholarships** available to developing countries, in particular least developed countries, small island developing States and African countries, for enrolment in higher education, including vocational training and information and communications technology, technical, engineering and scientific programmes, in developed countries and other developing countries

□ Target 4.c

By 2030, substantially increase the supply of **qualified teachers**, including through international cooperation for teacher training in developing countries, especially least developed countries and small island developing States

Why do we need a global VET Architecture?



Barriers for skill development - Just name a few

1. Emerging and yet-to-emerge functions and tasks -> mutual learning platforms
2. Insufficiently prepared teachers
3. Large demands for new skill acquisition, reskilling, deskilling and upskilling -> scaling up challenge
4. Funding
5. Initial conditions for VET in many countries are already lagging behind
6. Resource constraints

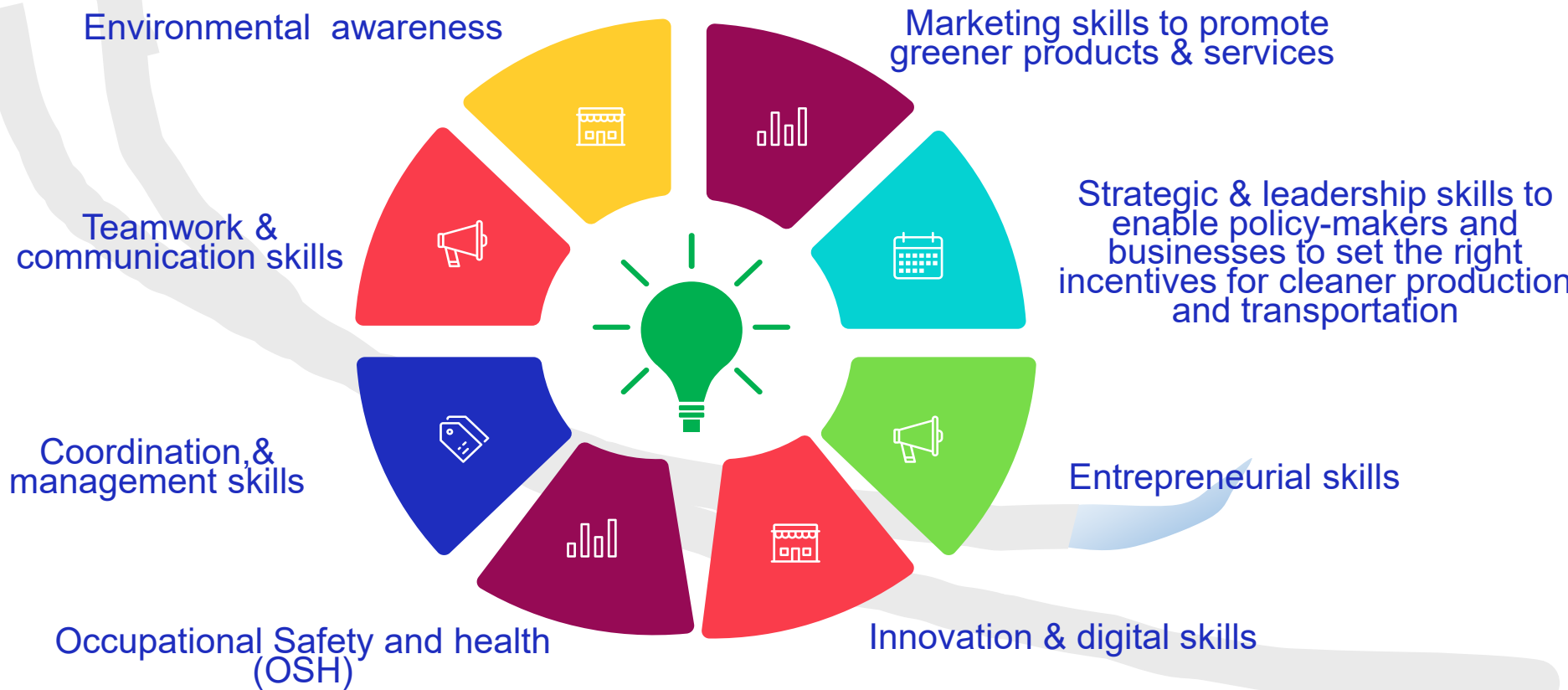
Green Skills



- ❑ A key contributor for the transition to a sustainable and low carbon economy, e.g., circular economy, green energy etc.
- ❑ Workers need to be equipped with the necessary competencies qualifications through effective VET and continued education to adapt to the green economy
- ❑ include technical, social, and environmental competencies that enable people to work in green jobs and industries.
- ❑ These skills are focused on reducing the environmental impact and promoting the use of renewable resources.

Core employability skills are essential in green and digital transition

(Source: ILO, 2024)



Partnering for Green Skill Development 1



- ❑ the VET ecosystem can partner with employers and industry associations to create:
 - ❖ apprenticeships and on-the-job training programmes & qualifications
 - ❖ joint research projects to improve and innovate in fields such as agriculture, renewable energy, and healthcare
 - ❖ industry-specific training courses
 - ❖ work experience placements

Partnering for Green Skill Development 2



- ❖ partnerships to create job opportunities
- ❖ staff placements within industry to enhance their industry knowledge and build networks.
- ❖ industry-led guest lectures and workshops
- ❖ Career fairs and networking events
- ❖ professional development opportunities for employees to upskill and meet changing industry demands



Point 3

A GLOBAL OR REGIONAL VET ARCHITECTURE FOR GREEN SKILL DEVELOPMENT

The Way Forward



- ❑ **Vision and framework** for a new global or regional Framework on VET for Green Skill Development
- ❑ Designing a new **SOP** for a responsive and innovative VET system for Green Skill Development
- ❑ From vision to action: Some pillars underpin the **implementation**





Point 3.1 Recommendation: Means of Implementation

**MUTUAL RECOGNITION
FRAMEWORK INCLUDING
ACCREDITATION OR ASSESSMENT
OF PRIOR LEARNING**

Mutual Recognition of Qualification



Mutual recognition of qualifications

“Process of official acknowledgment by one or more countries or organisations of the similarity of value of qualifications (certificates, diplomas or titles) awarded in (or by) one or more other countries or organisations, including the associated rights and duties.” [Cedefop Glossary](#)

Close concept/comparison: At its core, comparison of qualifications is about understanding how programmes and qualifications align or differ, and to what extent similarities can be observed and agreed on.



Example: EU



- ❑ EU Directive 2005/36 on the recognition of professional qualifications
 - ❖ **Rules** according to which a member state must recognise professional qualifications acquired by an EU or EEA citizen in other another member state.
 - ❖ **Central concept:** regulated profession (have to hold a specific degree to access the profession, sit special exams such as state exams and/or register with a professional body before practising it.)
 - ❖ **Three systems**
 - **General system**
 - **Automatic recognition** (harmonised training requirements): nurses, midwives, doctors, dentists, pharmacists, architects and veterinary surgeons.
 - **Recognition based on professional experience**

Lisbon Recognition Convention



- ❑ Drafted by the Council of Europe and UNESCO (1997)
- ❑ Ratified by over 50 states
- ❑ Recognition of foreign qualifications for academic purposes, i.e. further study, periods of study
- ❑ Applies also to VET in case VET gives access to higher education • Implementation supported by subsidiary texts
- ❑ Governance and (overseeing) implementation: inter-governmental committee and national ENIC/NARIC centres
- ❑ The recognition can only be refused if the qualification is substantially different from that of the host country



Need to Expend

- ❑ **Lisbon Recognition Convention focuses on Formal Education including VET**
- ❑ **Expanding the scope to fit with the LLL reality of Green Economy**
- ❑ **Including non-formal and informal education and learning**
- ❑ **Covering the current working age population and the returning of the older workers.**

Potential Benefits



- ❑ High quality VET or TVET concerning sector specific technical skills and knowledge often require higher per student investment or budget. It will be easier by adopting a spatial complementarity and division of labour approach.
- ❑ Forming different green skill development value chain focusing on environmental issues, circular economy, energy, transportation and/or digital economy.
- ❑ Through PPPs, cooperation with private businesses along existing GSCs



Point 3.2 Recommendation: Accountability Measures

COMPETENCE ASSESSMENT, MONITORING, TRACING AND REPORTING STANDARDS AND MECHANISMS

Enabling Initiatives

(adopted from CEDEFOP, 2024)

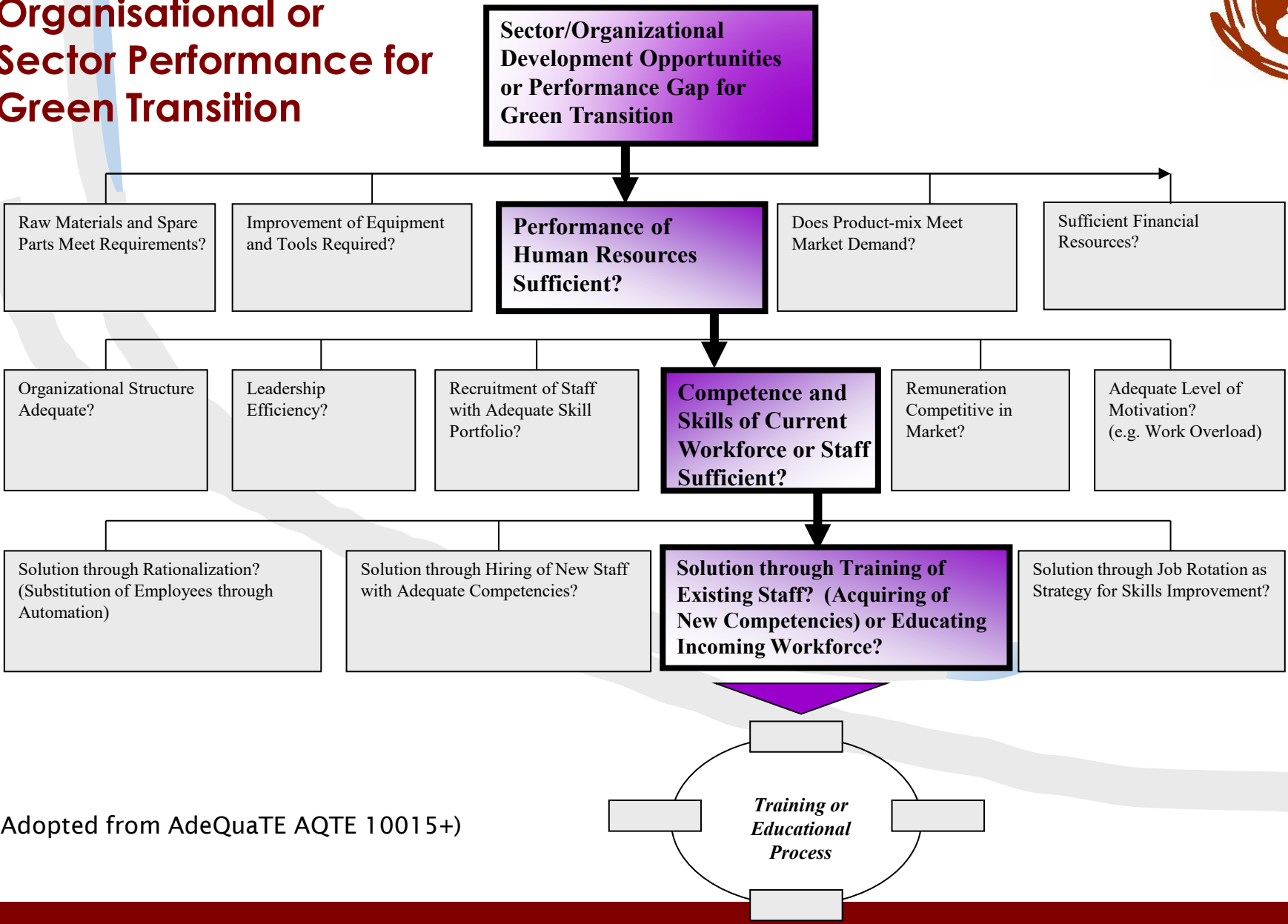


In addition to initiatives specifically focused on recognition there is a broad range of other initiatives that support recognition of skills and qualifications by promoting the use of **learning outcomes**, their **transparency**, **comparability** and fostering **trust**.





Linking Training with Organisational or Sector Performance for Green Transition



(Adopted from AdeQuaTE AQTE 10015+)



Point 4

CONCLUSION: PARTNERSHIPS FOR GREENING VET

Areas of Focus for the Future of Work in Green Economy



- **International Partnerships:**
 - **Common VET Green Skill Development Architecture: Taxonomy and Alignment with the ILO International Standard Classification of Occupations**
 - **Building Green Skills Development Capacities of the VET System**
 - **Mutual Recognition Scheme and Qualification System**
 - **Universal Education-Training-Work Continuum and Governance Mechanism**

VET & Green Skills



Areas of Focus for the Future of Work in Green Economy



VET & Green Skills



- **Public Private Partnerships for Green Skill Development**
 - **Join curricula development**
 - **Joint training implementation**
 - **Apprenticeships**
 - **Teacher training and secondment**

References



- ❑ International Labour Organization (ILO). "Skills for a Greener Future." ILO Report, 2019.
- ❑ Global Green Growth Institute (GGGI). "Green Skills Training Initiatives in Southeast Asia." GGGI Report, 2020.
- ❑ Asian Development Bank (ADB). "Green Jobs for Sustainable Development: The Role of International Cooperation." ADB Report, 2021.
- ❑ United Nations Development Program (UNDP). "India's National Green Skills Development Program." UNDP Report, 2022.
- ❑ Japan International Cooperation Agency (JICA). "Japan-ASEAN Partnership on Green Skill Development." JICA Report, 2020.

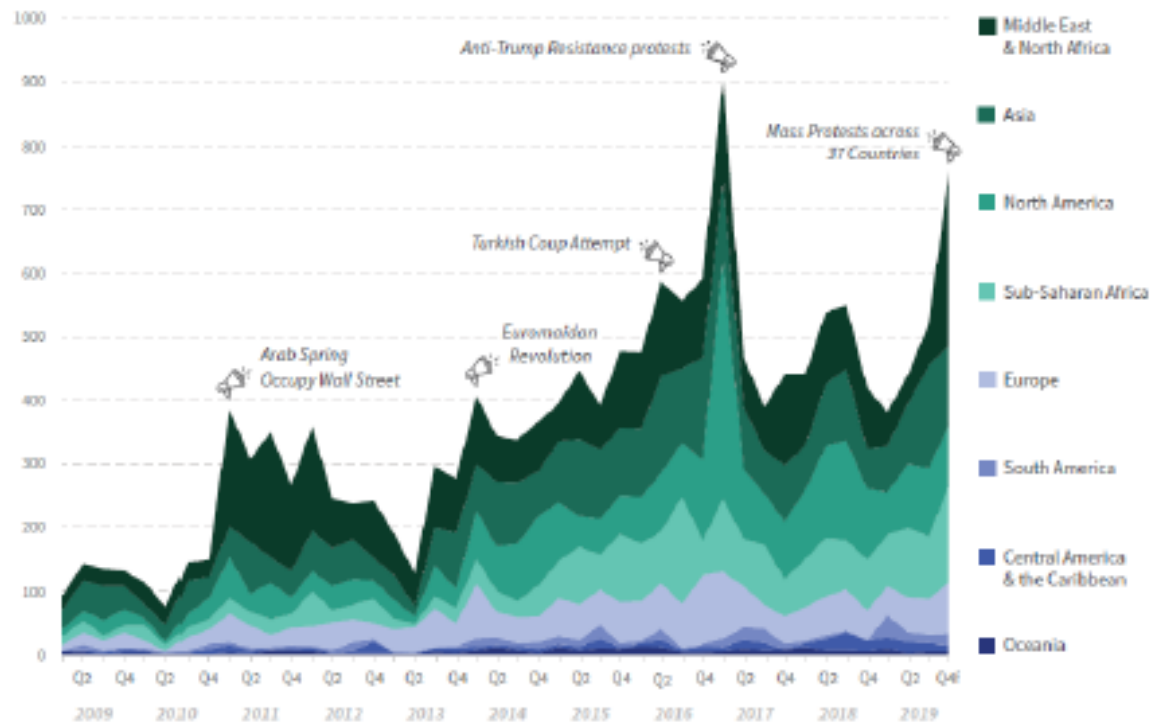


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Societal Agitation (UNRISD, 2022)



Quarterly civilian anti-government protests by region (#)



Source: Brannen et al. 2020

Refugees

(UNHCR Global Trend Report, Geneva, 13th June 2024)



- ❑ 120 million displaced people up from 65 million in 2018
- ❑ 63 million are internally displaced due to civil wars, of which 43,3 million are children (UNICEF, 2022)
- ❑ 44.3 million refugees today
- ❑ Numbers reflect war and civil war in many parts of the world



ILO Labour standards on migrants

According to ILO, 232 million migrants around the world, representing 3,1 per cent of the global population.

1. Migration for Employment Convention (revised), 1949 (No. 97), ratified
2. Migrant Workers (Supplementary Provisions) Convention, 1975 (No. 143) ratified

ILO standards on migration provide tools for both countries of origin and destination to manage migration flows and ensure adequate protection for this vulnerable category of workers.

GLOBAL COMPACT FOR SAFE ORDERLY AND REGULAR MIGRATION



- ❑ December 2018, UNGA resolution 73/195. (<https://americas.iom.int/en/global-compact-safe-orderly-and-regular-migration>)
- ❑ Consistent with target 10.7 of the 2030 Agenda for Sustainable Development.
- ❑ Objective 18: **Skills development and recognition**



Key Skill Areas for the Future

(Source: GEO-6 for Youth, UN Environment Programme, 2021)



A skilled workforce, including not only people who have scientific, engineering and management qualifications but also those who carry out traditional craft and technical jobs, is needed to support a green economy.

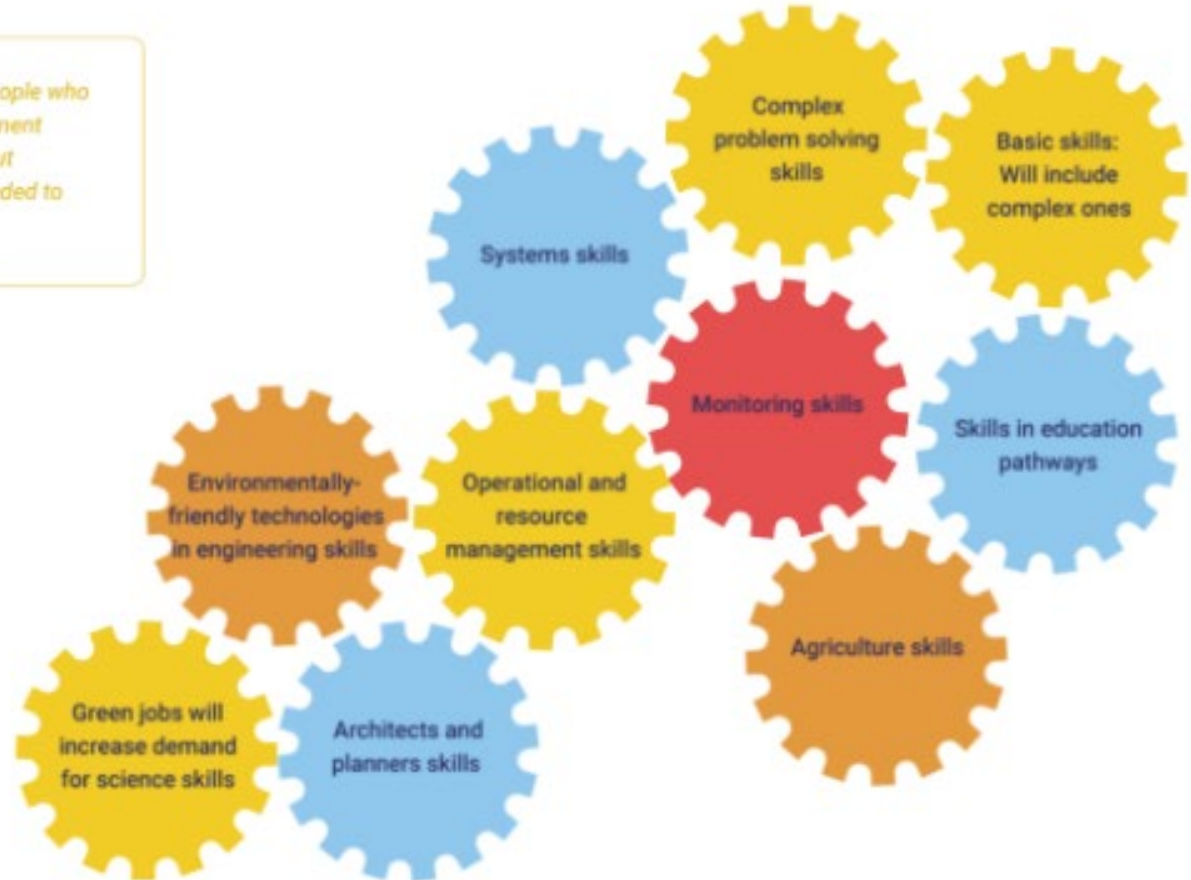


Figure 4.4 Skills needed for future green jobs. Source: Government of the United Kingdom 2011; Fedrigo-Fazio and ten Brink 2012; Cossoli 2015; Vona et al. 2015; Maclean, Jagannathan and Parth 2018; Burger et al. 2019; Occupational Information Network (O*NET Online) 2019.

Examples: Private Sector Engagement



- ❑ The **Volkswagen** Automotive Academy in Germany in collaboration with the automotive industry (automotive engineering, production, sales, and service)
- ❑ **Siemens** Professional Education in Denmark partners with businesses to provide vocational training (automation, energy, transportation)
- ❑ **Bosch** Vocational Training in the Netherlands (electronics, automotive technology, and engineering)