



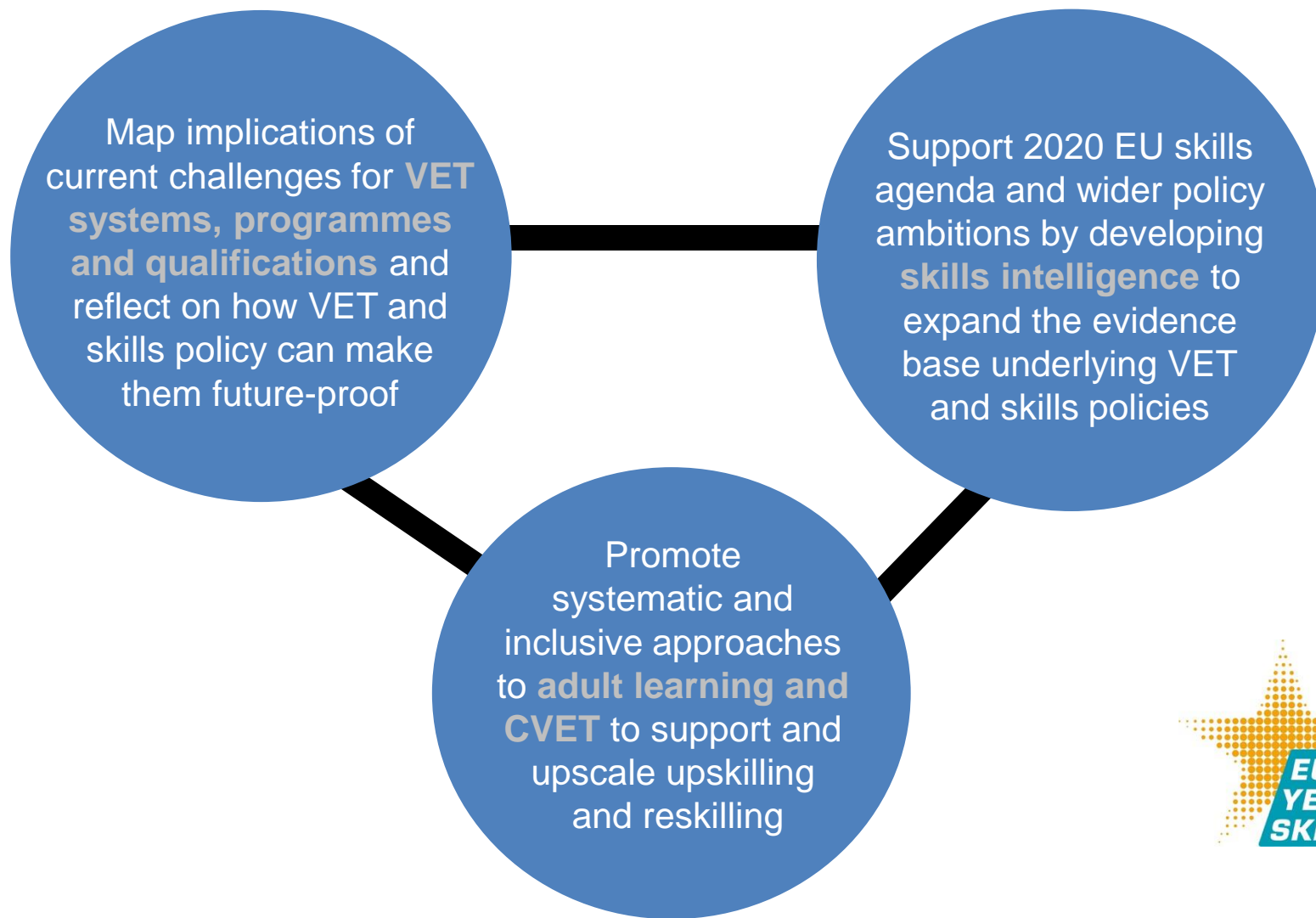
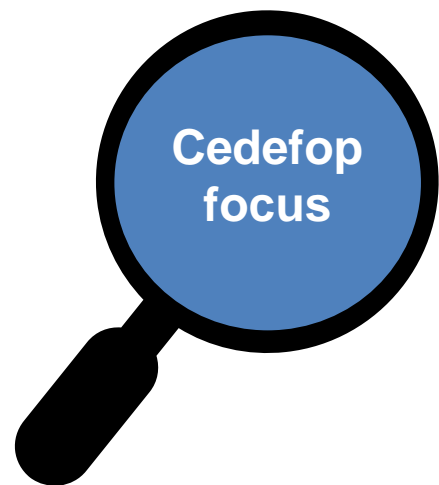
Unleashing a European skills revolution for a just future of work

Dr. Jasper van Loo
Coordinator Cedefop department for VET and Skills

Upskilling and reskilling in the age of AI and big blur
Special session 1 at the Global HR forum in Seoul

November 1, 2023





Cedefop vision for VET *Through proactive VET, people continuously acquire the skills and qualifications they need to shape their work, lives, economies and societies*

Cedefop strategic areas of operation

Shaping VET and qualifications

Valuing VET and skills

Informing VET and skills policies

Developing sound skills intelligence means blending insights



Long-term trends

Future skills demand and supply
Understanding megatrends



Matching skills and jobs

Skill demand, utilisation and learning
Skills (mis)matches/tensions



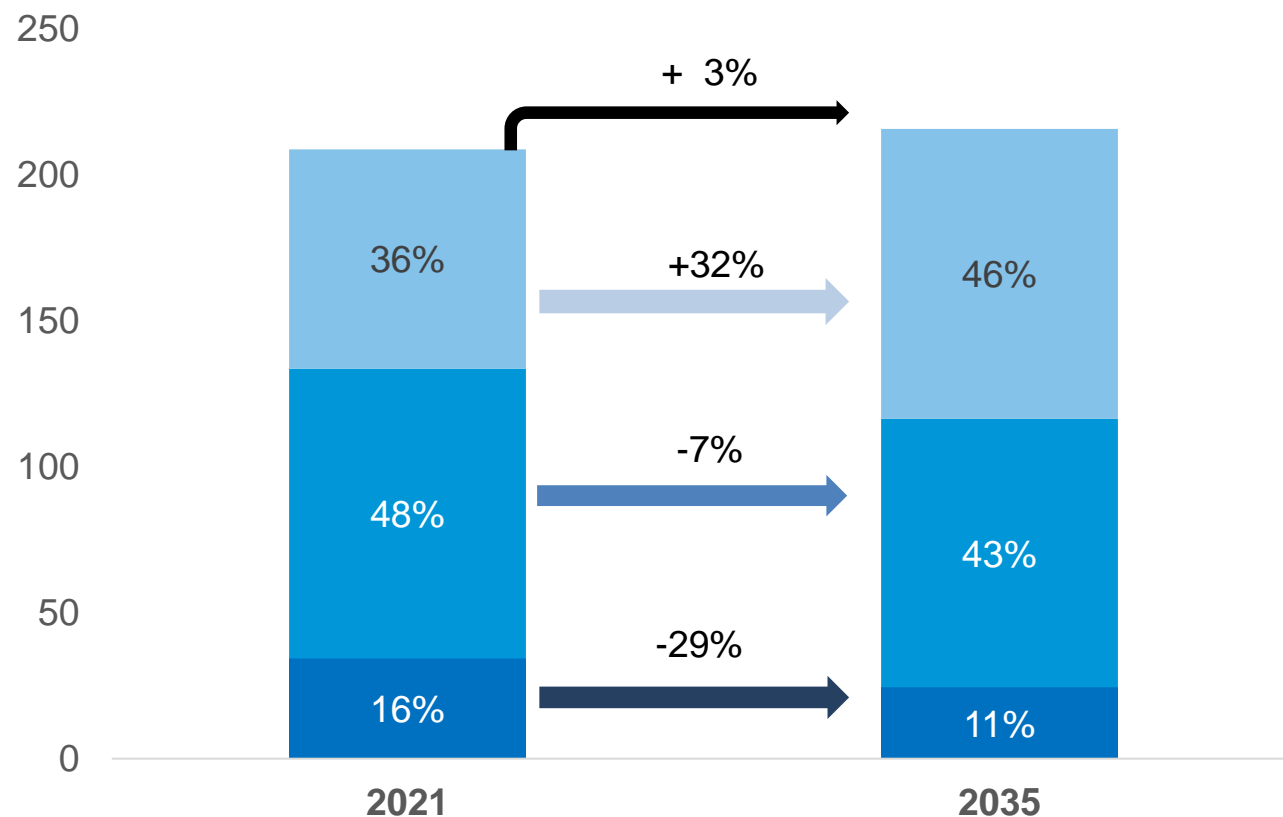
Immediate skills needs

Demand for occupations
Emerging skills trends

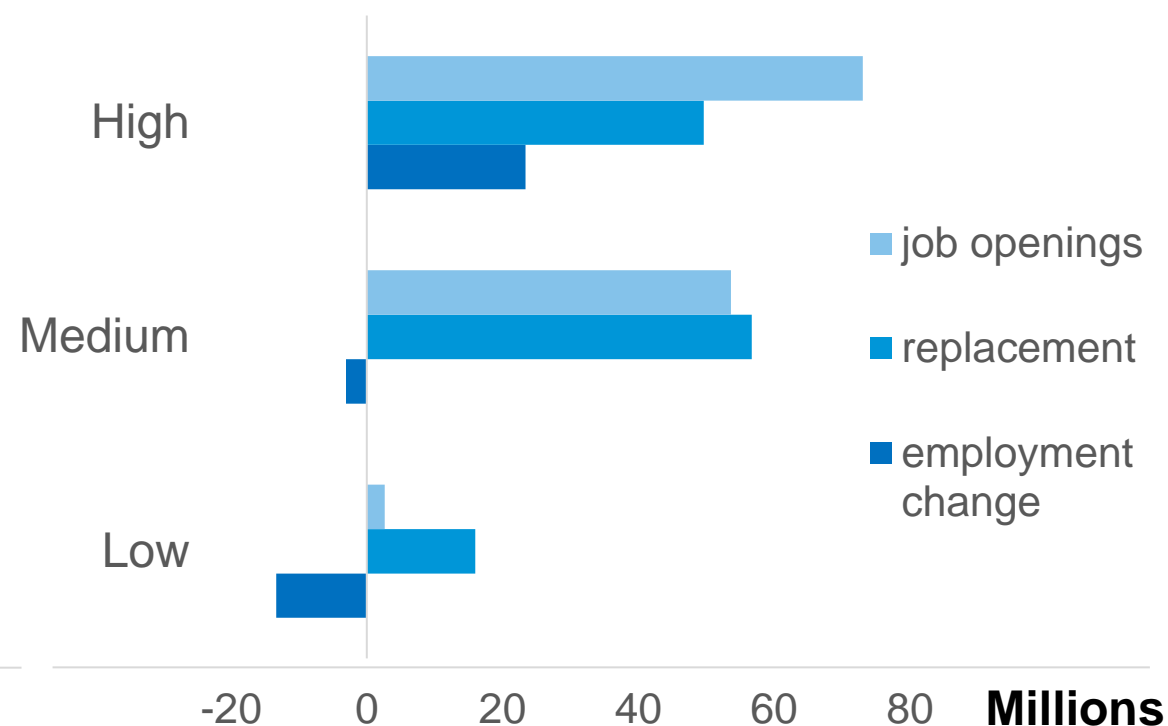
Up to 2035 EU jobs will become much more skills intensive

Millions

Jobs by skill level

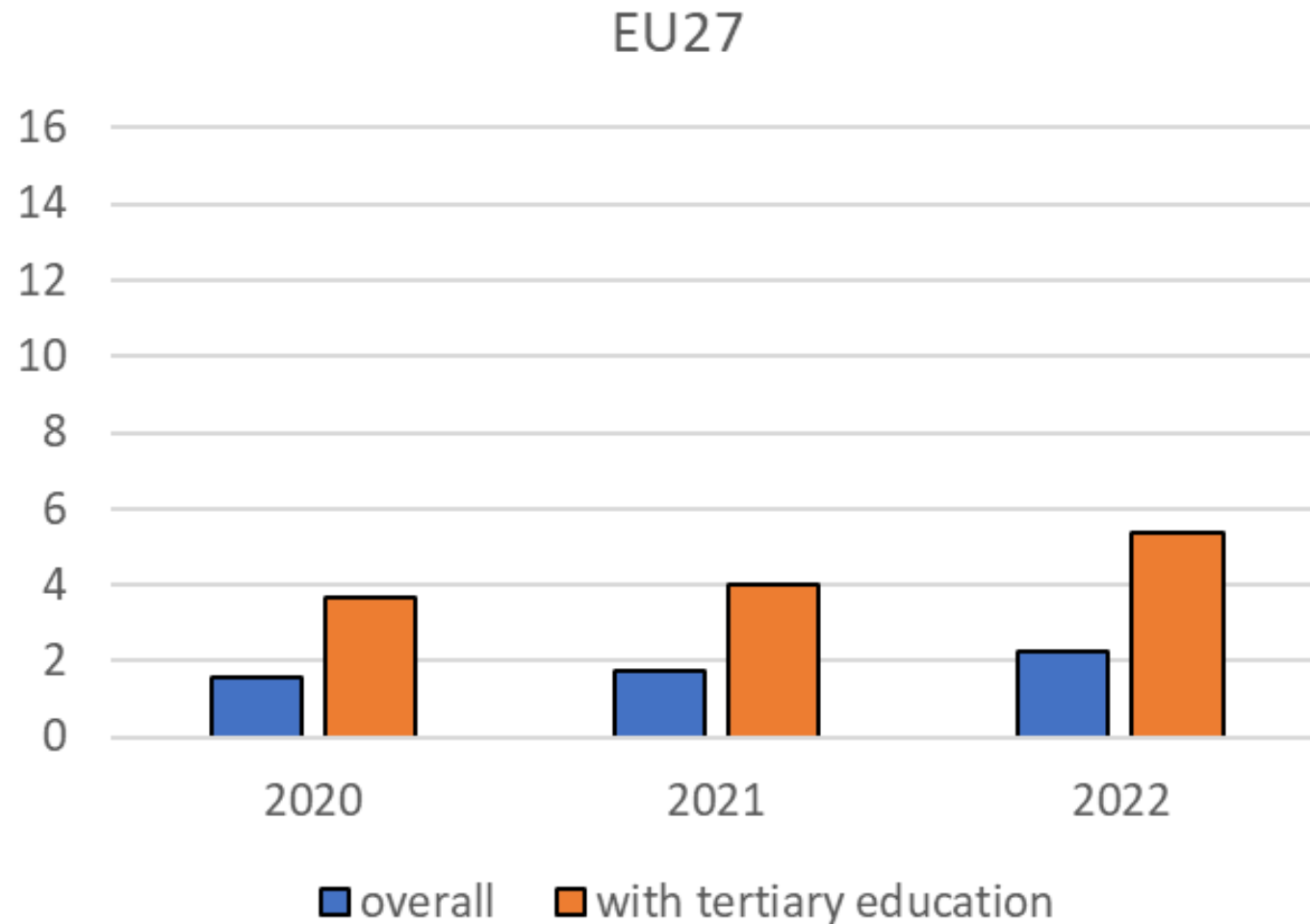


Job openings in 2021-35



Source: Cedefop skills forecast 2021-35

Labour market tightness has risen post Covid-19

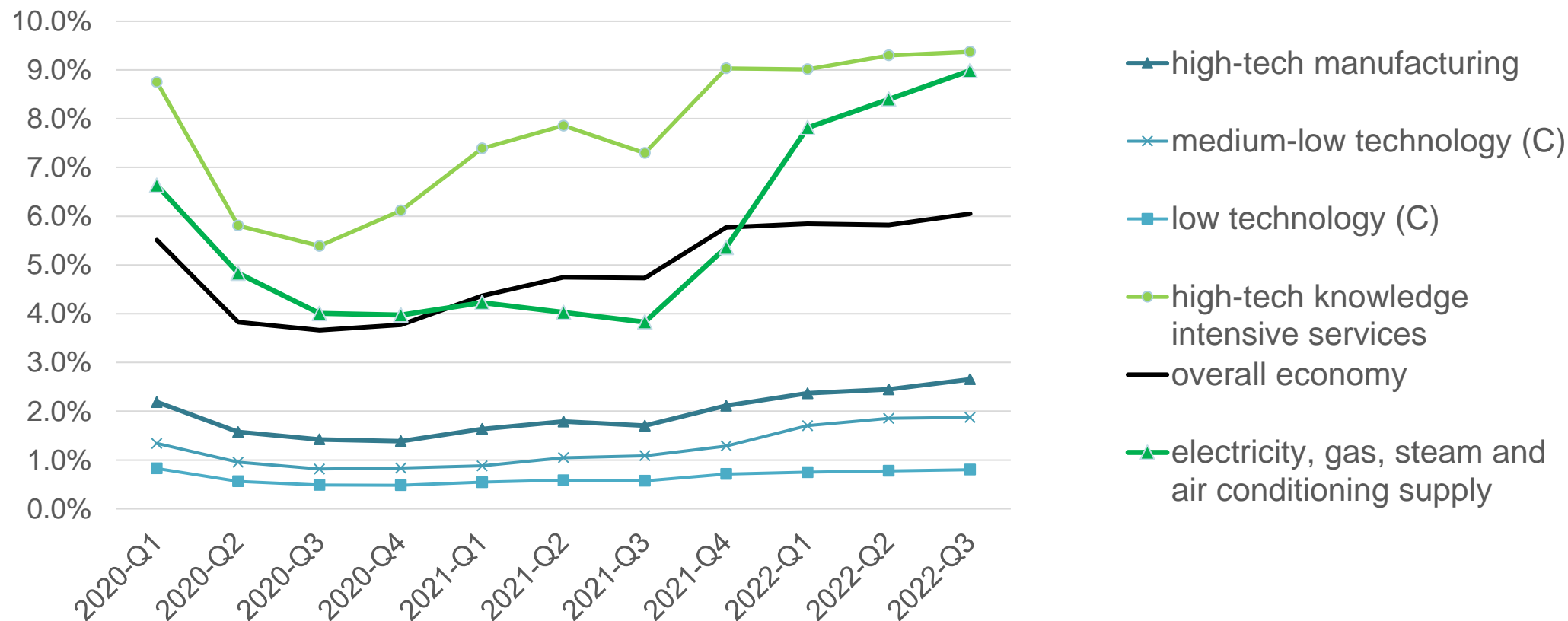


Source: own calculations based on LFS, JVS and WIH-OJA database



Covid rebound to high tech services and energy sector

Job vacancy rates in selected sectors (Q1-2020 until Q3-2022)



NB: For better visualisation sectors that followed the same trends as the overall economy are not included.

Source: WIH-OJA data, Eurostat LFS LFSQ_EGAN22D.

Green transition **creates more EU jobs than it destroys**

European Green Deal skill forecast scenario

- About 2.5 million additional jobs by 2030
- Employment benefits in most sectors, some negatively affected (e.g., coal mining)
- Indirect employment benefits mainly for service-based sectors (e.g. ICT, real estate)

Up-/reskilling for all workers:

- Targeted policy for 'key' and 'thyroid' occupations
- VET for workers' transitions in 'brown' sectors (e.g. conventional electricity)
- IVET to prepare future workers for green(er) jobs

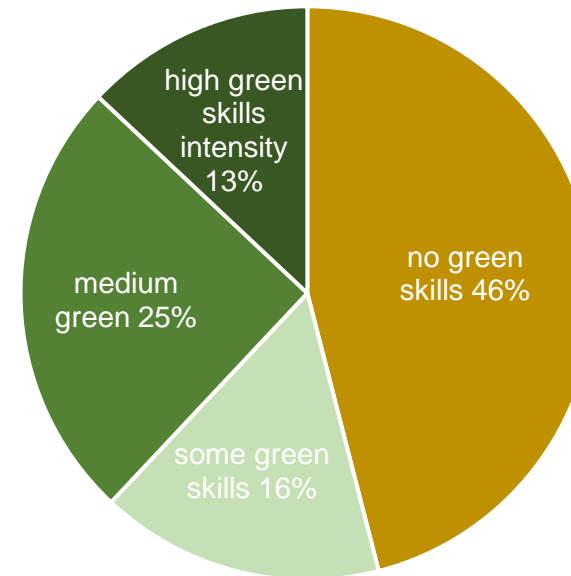
[Cedefop \(2021\) The green employment and skills transformation](#)

Jobs driving green transition

Frontline green jobs Greentech specialists
Green transition managers Digital specialists
Green 'hearts and minds' professionals

[Cedefop foresights in cities, waste management, agri-food, circular economy](#)

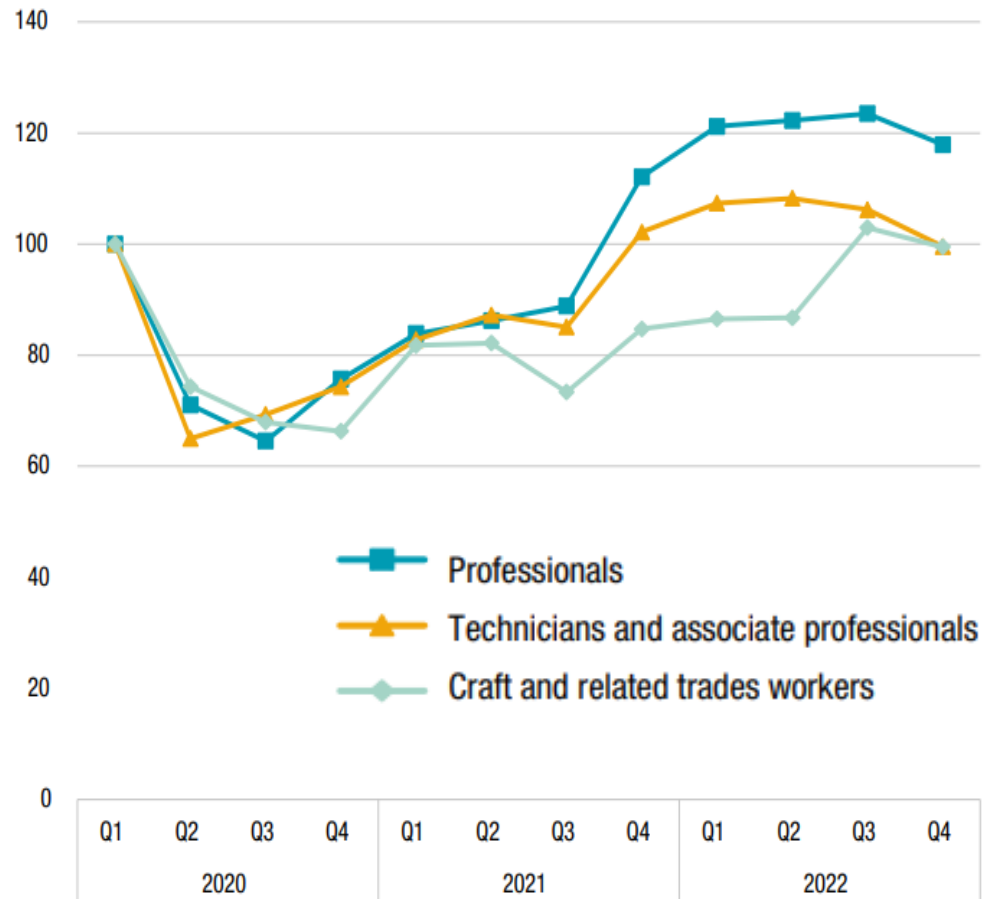
Online job advertisements by 'greenness' (averages for Q1 2020 - Q4 2022)



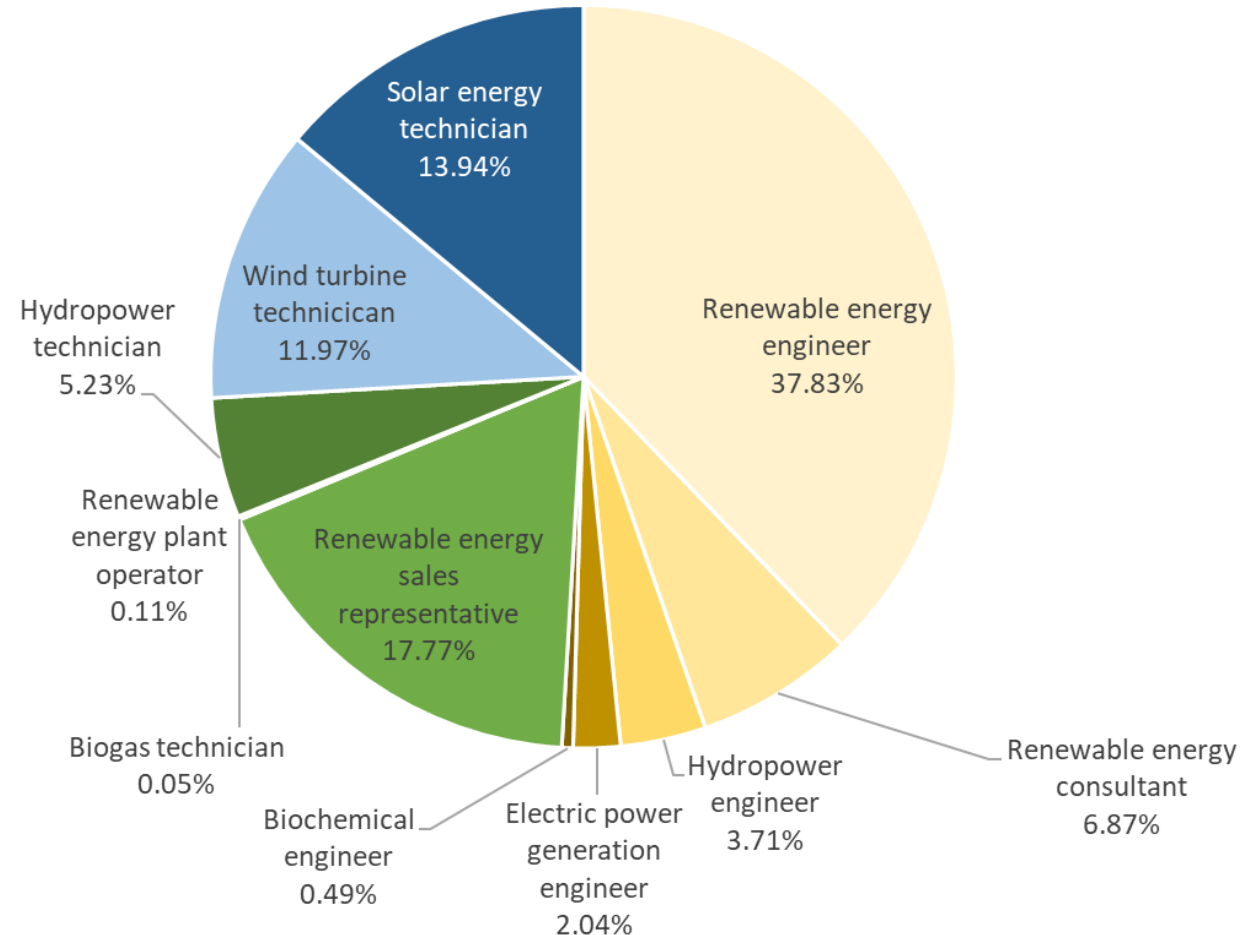
Source: WIH-OJA

High trained people set green transition in motion...

Growth in online job ads for renewable energy occupations (ISCO, Q1 2020 = 100)

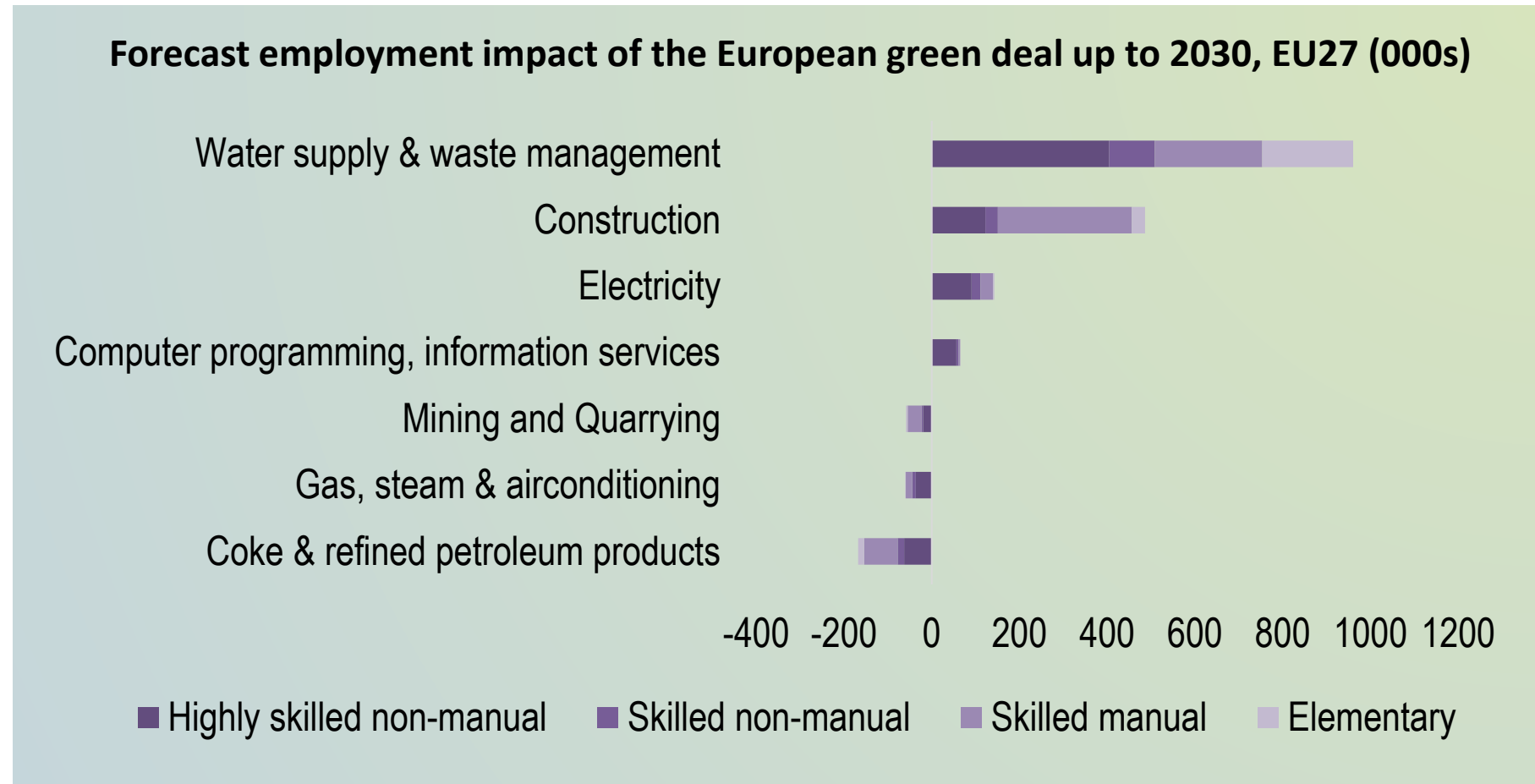


Demand for renewable occupations, Q1 2023, EU27



...but middle & low-skilled workers **also contribute to greening**

- *Technical profiles*, e.g., builders/construction workers
- Decreased demand for *low-skilled jobs*, but still relevant for frontline green jobs: e.g., in waste management
- *Social innovation*: jobs relevant to retrofitting can enable the transition for vulnerable groups (e.g., early education leavers, migrants)



Source: Cedefop (2021). [The green employment and skills transformation: insights from a European Green Deal skills forecast scenario](#).

The Covid19 pandemic **accelerated digital transformation**

Covid 19

pandemic and the
digital transformation

*Compared to pre-pandemic,
more use of...*

46%

Digital communication tools

39%

Digital technologies for some
work tasks

36%

Online job-related learning



87%

Adult EU+ workers **using
digital devices** at work

39%

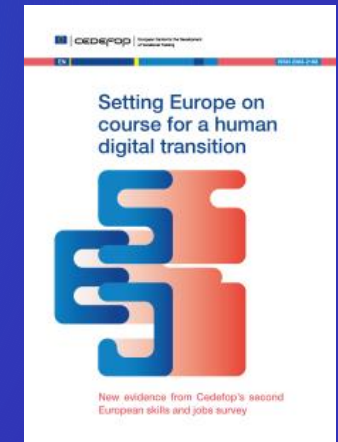
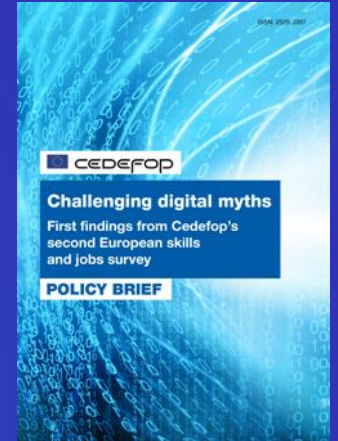
Adult EU+ workers
work away from
employer's premises

44%

New digital technology
introduced in 2020-21

35%

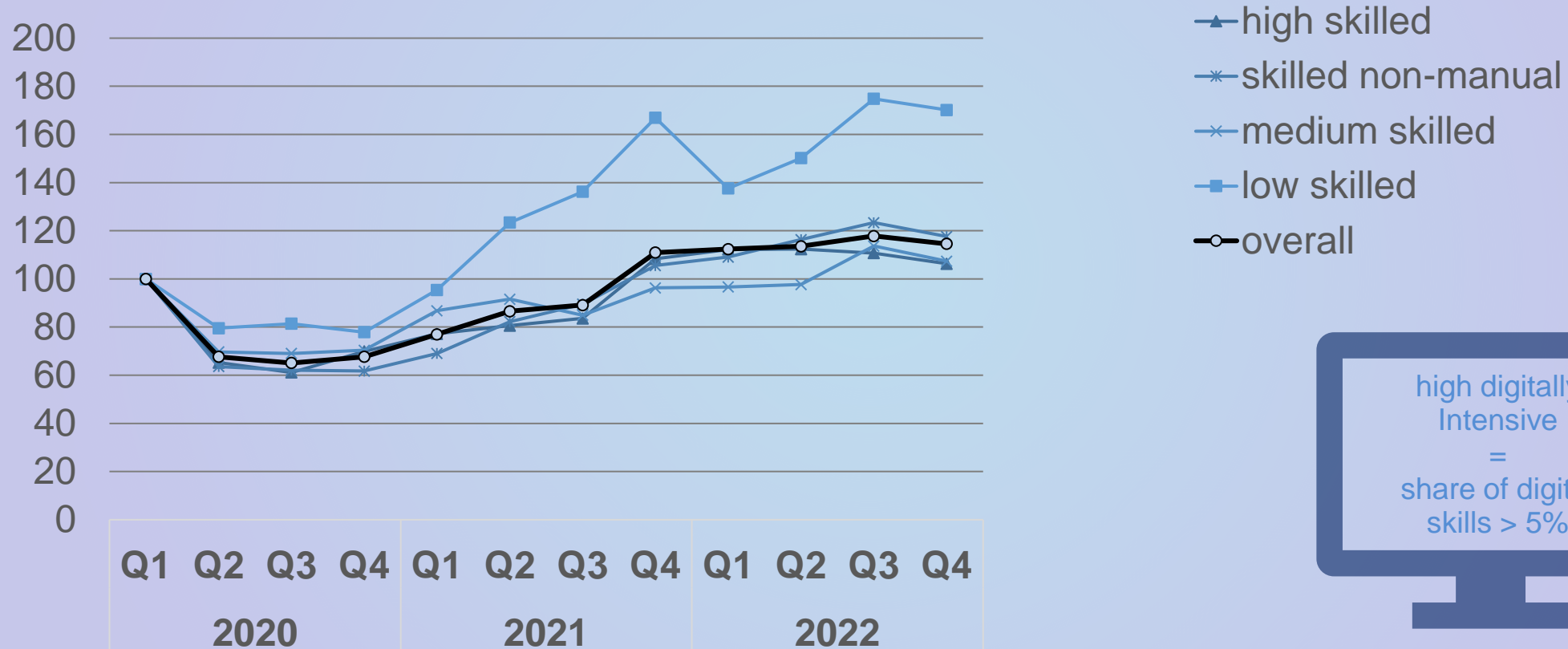
Digital upskilling to sustain
job performance



Source: Cedefop 2nd European Skills and Jobs Survey (2021)

Digital transition today **is fastest in lower skilled jobs**

Growth in online job advertisements for highly digitally intensive occupations
by skill level of occupation (Q1 2020 =100)

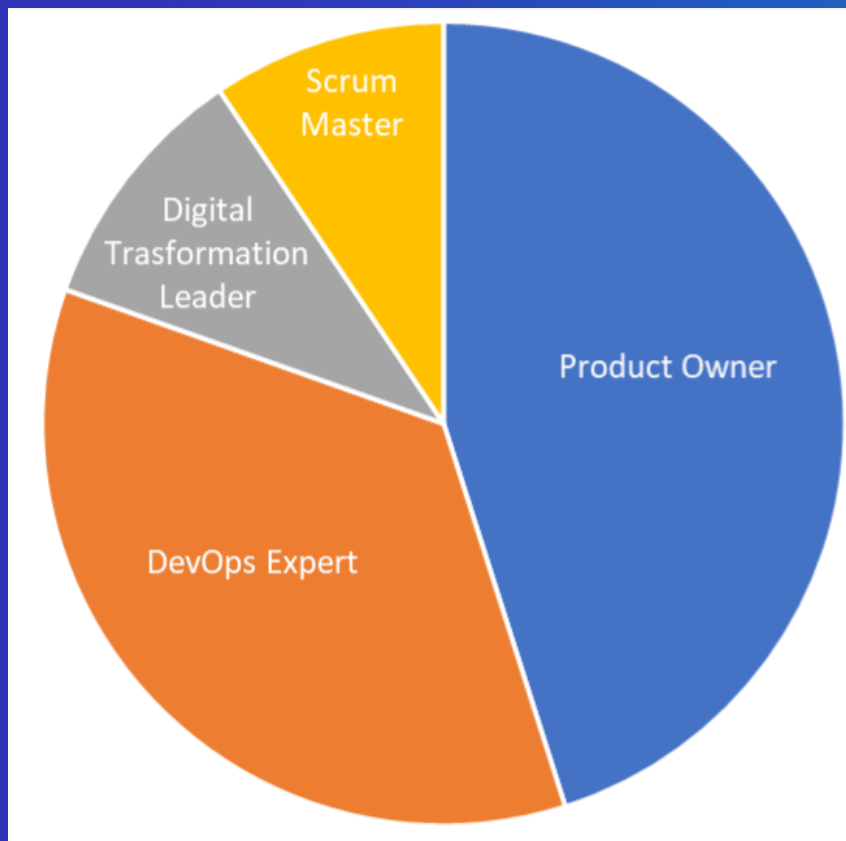


NB: For better visualisation, sectors that followed the same trends as the overall economy are not included.

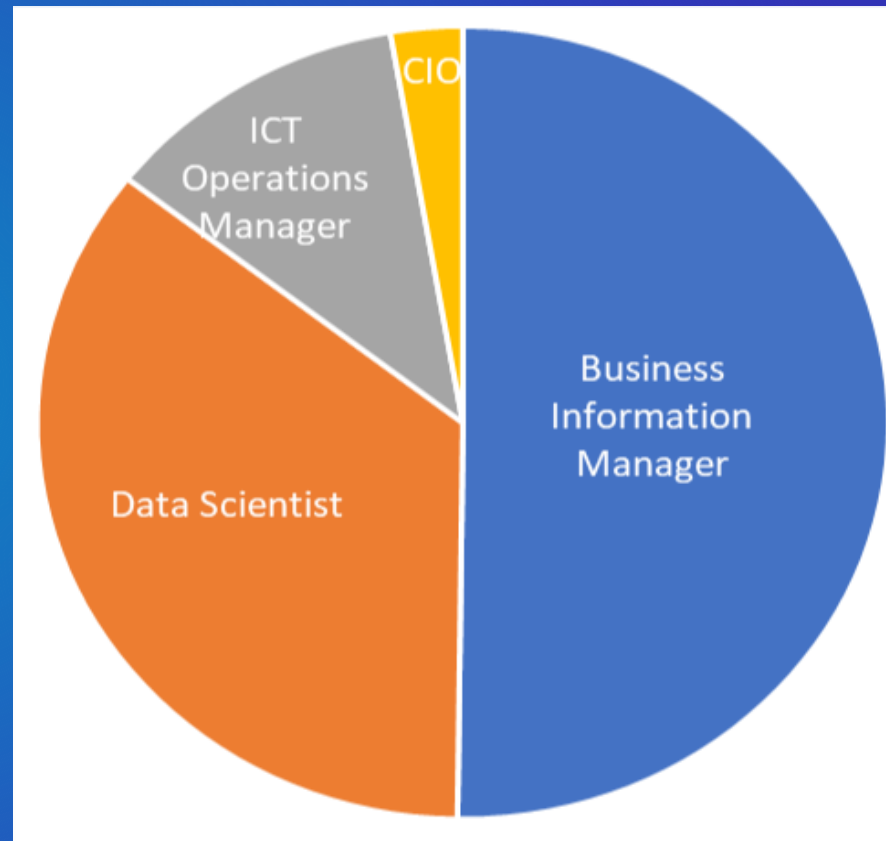
Source: Cedefop (2023). Skills in transition.

Process development and business ICT roles **are gaining ground**

Contribution (%) of ICT profiles to growth in the number of online job advertisements for process improvement and business ICT professionals (Q3 2018 - Q4 2022)



process improvement

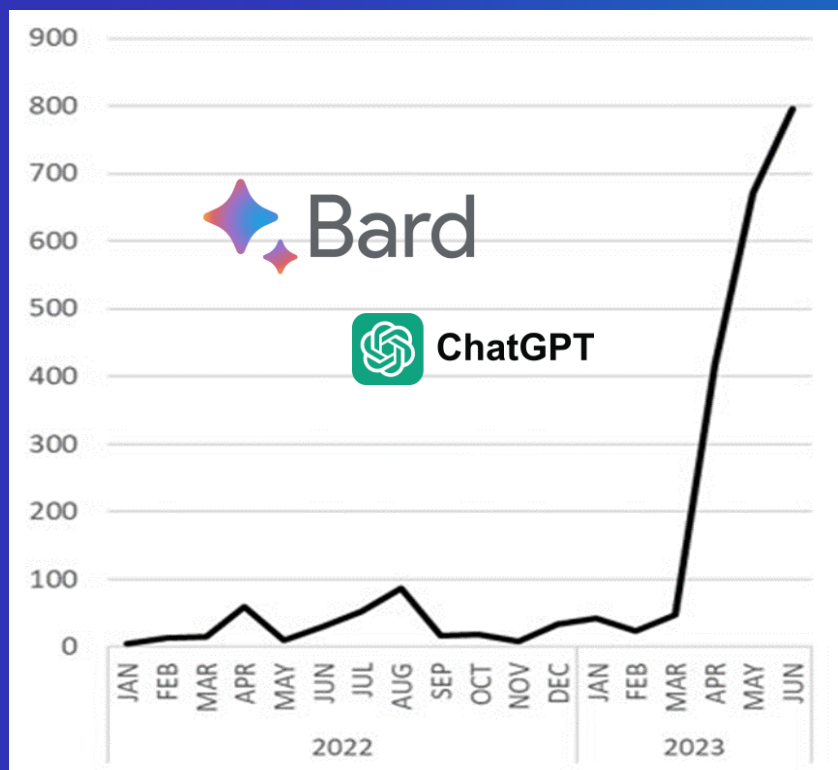


business ICT professionals

Note: data classified according to the European Committee for Standardization (CEN) ICT occupation profiles
Source: WIH-OJA

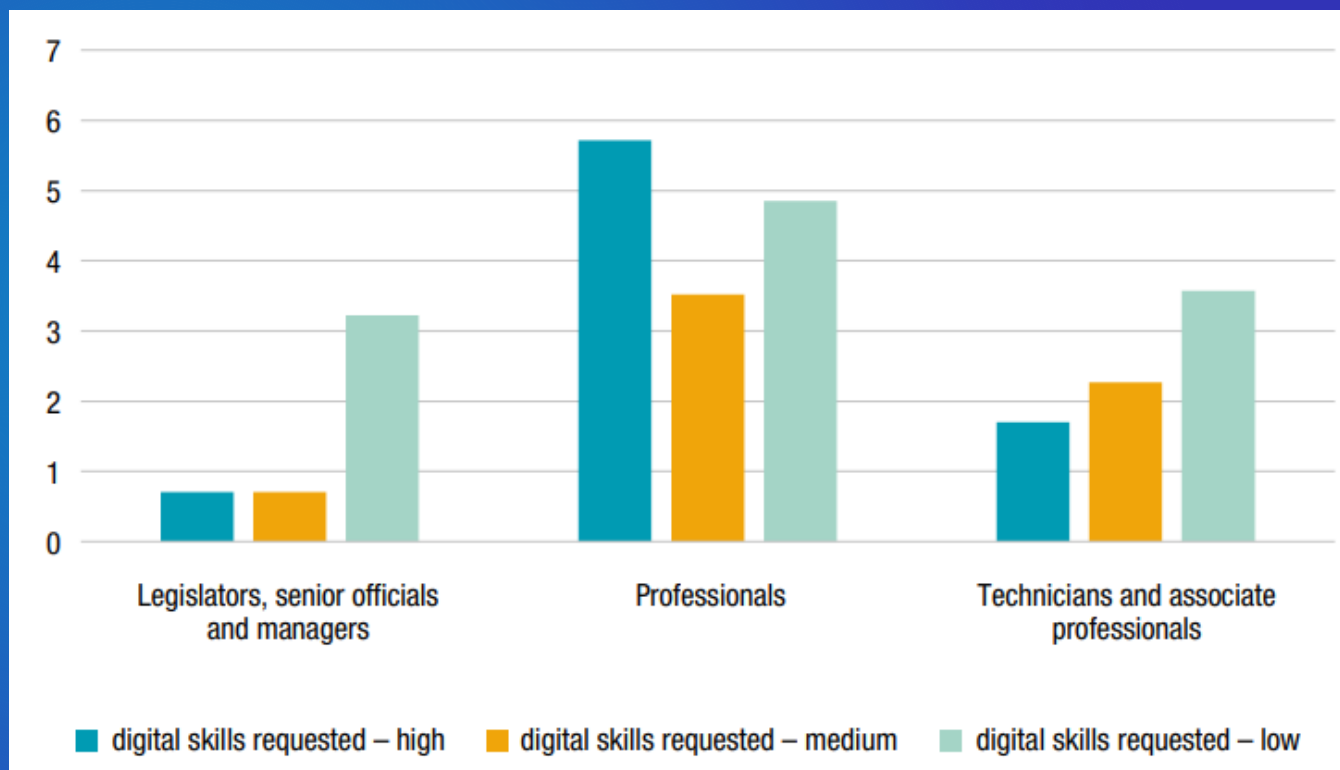
AI driving productivity makes **digital skills essential for non-IT professionals**

Mentions of *generative ai, chat gpt & google bard* in EU online job ads



Source WIH-OJA database

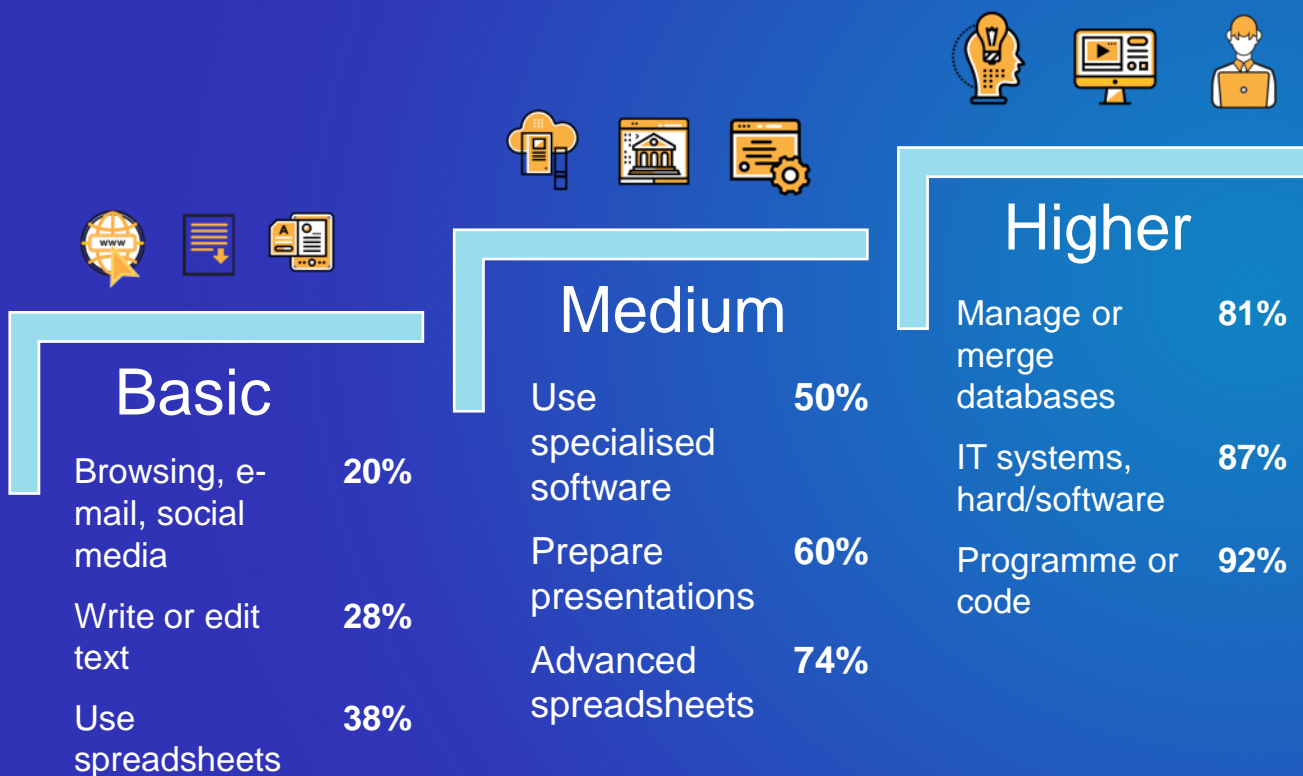
Online job ads for high-skilled **non-IT** occupations (ISCO 1 digit) by level of digital skills requested



Source: [Skills in transition](#)

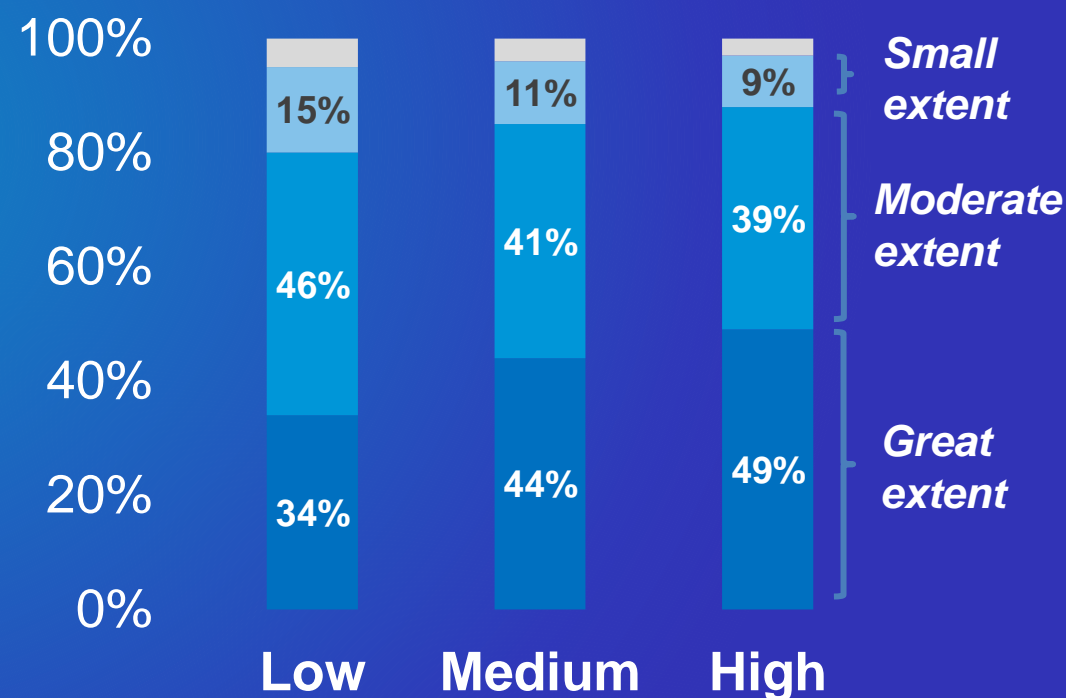
Just digital transition means up and reskilling people...

Learning potential in digital activities (% adult workers)



...and upgrading jobs

Use of knowledge and skills in EU+ jobs by qualification level in 2021



Source: Cedefop 2nd European Skills and Jobs Survey (2021)

Steps towards an inclusive skill revolution supporting twin transition



	Upscaling VET & adult learning	Innovation in governance	Better matching skills and jobs
Policy level	1 Time to move When making adult learning a reality for all, actions speak louder than words	2 Bring everyone on board Successful policy design and implementation require trust-based partnerships rather than silo thinking	3 Make permaskilling the norm Investing in skills and upgrading jobs go together
Systemic level	4 Make VET flexible and inclusive Flexible, inclusive, age-neutral and learner-centred VET is the only way forward	5 Skills thrive best in ecosystems Via better skills utilisation, companies, in particular MSMEs, can play a more active role in skills ecosystems	6 VET fuels the twin transition VET is best placed to deliver higher-level skills for the digital and green transitions
Implementation level	7 Foster CVET for all Employer engagement drives the development, expansion and reach of CVET programmes	8 Support learners Coordinated support measures will engage people in up- and reskilling	9 Turn skills intelligence into action User-centred skills intelligence helps translate trends and policy aims into actionable learning and matching opportunities



Thank you

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