ISSN: 2529-3397

CEDEFOP

From linear thinking to green growth mindsets

Vocational education and training and skills as springboards for the circular economy

POLICY BRIEF

POLICY BACKGROUND

In this section

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Without the circular economy European Green Deal targets cannot be met

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The linear 'take, make, waste' model, which took hold with the first industrial revolution and has powered economic development around the globe since then, has an enormous environmental and carbon footprint. Resource extraction, processing of materials and fuels, and food production account for an estimated 50% of greenhouse gas (GHG) emissions and are responsible for 90% of biodiversity loss and water stress (situations where water resources in a country or region do not meet needs) (European Commission, 2019). Mainstreaming and upscaling renewables to reduce the environmental footprint of energy production systems will cut 55% of current CO_2 emissions at most. Reducing the remaining 45% will require a fundamental change in how goods are made and used. The circular economy concept, which surfaced in economic circles for the first time in 1988 (Kneese, 1988), is a response to that challenge (Box 1).

Implementing circular economy principles in construction can reduce up to 61% of the materials-related greenhouse gases that buildings emit over their life cycle (European Environmental Agency, 2020). Pursuing an ambitious circularity scenario would reduce emissions from heavy industry (cement, aluminium, steel, plastics) in the EU by as much as 296 CO_2 million tonnes a year by 2050 (Material Economics, 2020). Making the food sector more circular could result in 40% less carbon emissions worldwide by 2050 (Ellen MacArthur Foundation, 2021). With only 8.6% of the EU economy operating based on circularity (PACE, 2022), mainstreaming circular economy thinking and doing has enormous potential. Practices in countries that are currently leaders in circularity (e.g. the Netherlands reuses 30% of materials) can be inspirational for countries where much progress has still to be made (e.g. Ireland and Romania reuse less than 2% of materials (Figure 2)).

As the circular economy is central to achieving the sustainability ambitions set out in the European Green Deal (EGD), it is an integral part of it. The Circular Economy Action Plan (CEAP) aims at accelerating the transition to a regenerative green growth model: by minimising waste, in part through design, and via well-functioning markets for secondary raw materials (European Commission, 2020). The recently adopted Green Deal Industrial Plan stresses the importance of net-zero technologies being based on circularity.

...**upscaling renewables** to reduce the environmental footprint of energy production systems will **cut 55% of current CO_2 emissions** at most...

...making the **food sector more circular** could result in **40% less carbon emissions** worldwide **by 2050**...

...the **Circular Economy Action Plan** (CEAP) aims at **accelerating the transition** to a regenerative **green growth model**...

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Box 1. **What is the circular economy?**

A review study (Kirchherr et al., 2017) finding over 100 circular economy definitions suggests that defining it exactly has proven challenging. Nevertheless, it is widely understood as an approach where products, parts and materials have multiple life cycles and re-entry points into the market as they are systematically recovered, repaired, reused, and remade.

The circular economy concept is based on seven principles that mutually reinforce one another (Ashraf, N. et al., 2020). Redesign, reuse, repair, recycle and recover are positioned between the starting point of rethinking and reducing production and consumption, and more sustainable disposal of resources at the end of production cycles (Figure 1).

Systematically applying all principles cumulates environmental benefits and minimises waste that will need to be disposed of.

Figure 1. **The seven circular economy principles**

01
RETHINK AND REDUCE

focuses on production processes, product availability and reducing raw material use. It links to the green growth concept and helps decouple economic growth from environmental degradation. While reducing consumption and promoting more sustainable consumption patterns is also important, its potential often remains underexploited in circular economy strategies and policies.

02
REPAIR

enables a product to continue working after it breaks by repairing or replacing defective or worn-out parts. This can be stimulated – for example, by making available repair manuals and tools and by ensuring spare parts are available at reasonable cost. It may also include updating to meet legislative requirements or standards and making older products compatible with recent technology. An example of this is enabling older personal computers to use Bluetooth or Wi-Fi.

03
REDESIGN

concentrates on 'eco design' to reduce resources use and underpins environmental benefits at other stages; for example, via product life extension. Eco-design can also incorporate data-driven technology and processes to improve product tracking (e.g. blockchain). At the design stage, the environmental impacts of logistics involved in sourcing raw materials and bringing products to markets can be mitigated – for example, by using locally available resources. Redesign is also important for services with a significant environmental footprint, as is for instance the case with mining crypto currencies. EU eco-design regulations currently in place often apply to electronic goods with already long lifespans (e.g. refrigerators), rather than fast-moving consumer electronics, such as mobile phones.

04
REUSE

focuses on increasing the use of a product beyond its first purchase (extending its life) or sharing goods or services (expanding its use). This can be accomplished by creating or expanding second-hand markets or developing and extending leasing schemes.

05
RECYCLE

involves processing and reusing product materials via acquisition or harvesting, checking/analysis, separation, processing, distribution and reselling. This process could be incentivised or made mandatory for the product manufacturer – for example, via take-back schemes involving a consumer deposit.

06
RECOVER

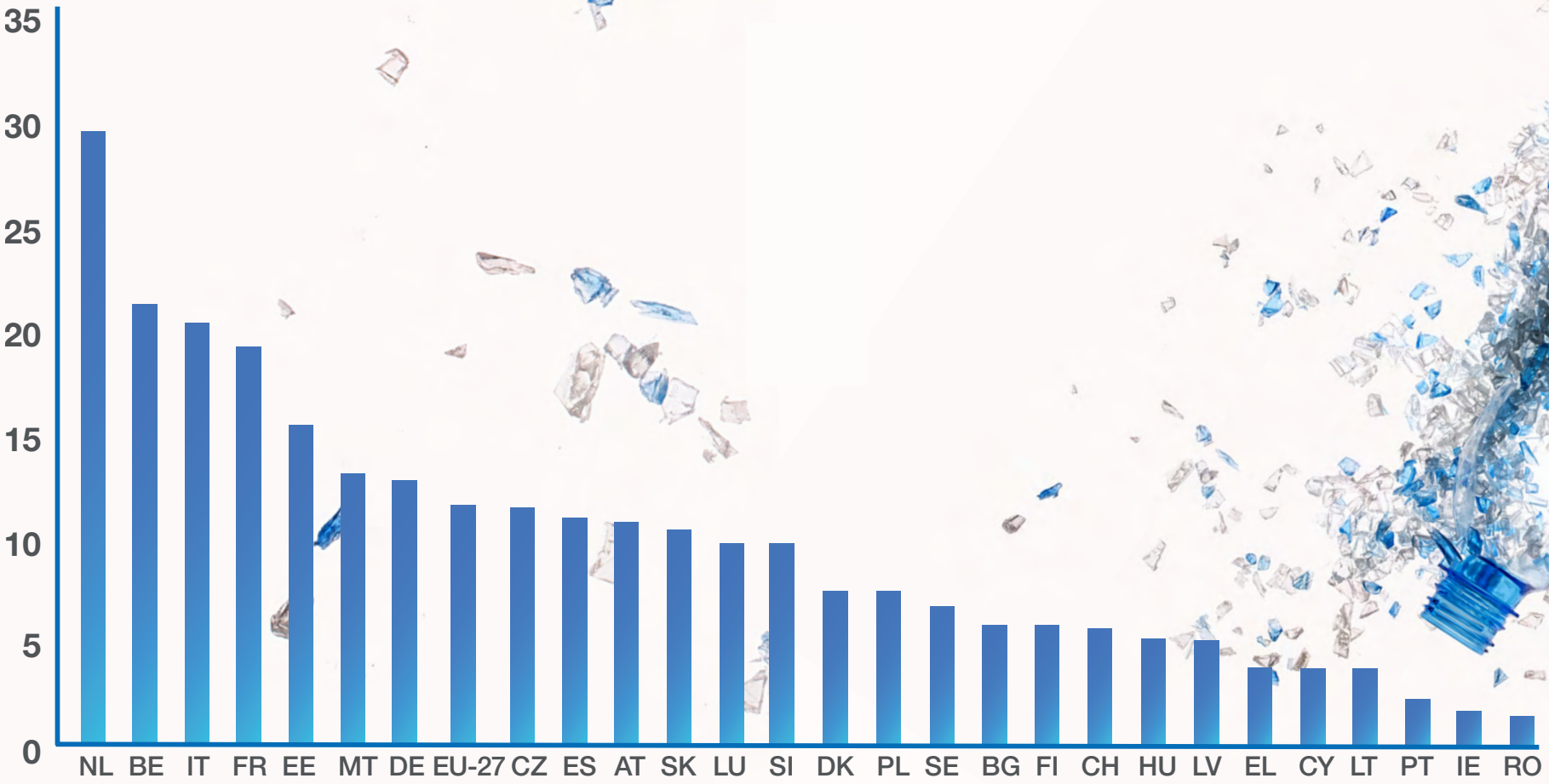
entails energy production as a by-product of waste treatment. Whether the waste is biotic (originating from living things or dead organisms) or not (abiotic) is a strong determinant of recovery possibilities and the type of technology required to exploit them.

07
DISPOSAL

refers to safe disposal of what cannot be recycled and recovered.

Source: Ashraf, N. et al. (2020).

Figure 2. **Circular material use rate by EU country (2020)**



Source: Eurostat [CEI_SRM030].

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Extending product life from the design phase onwards

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All products, even if sustainably manufactured or put together, have environmental impacts. They comprise raw materials, require energy to be made, and create waste at the end of the product life in the form of packaging. While there are many ways to reduce the environmental impact, up to 80% of it directly relates to decisions made at the design stage, which is therefore crucial (European Commission, 2021).

In circular production systems, product design features can help avoid waste and drive the reuse of resources. Raw materials should be used so that they retain their value after successive usages and in ways that help alleviate negative externalities. In today's economy, many products are designed in ways that makes reusing or recycling them difficult or even impossible. The EU 2009 Eco-design Directive regulates energy efficiency and circularity features of energy-powered and energy-related products, but there is no comprehensive framework regulating sustainable product design. The European Commission intends to broaden the Eco-design Directive, making it applicable to electronics, ICT equipment, textiles, steel, cement and chemicals, and possibly other product groups to be identified later. Expanding regulatory coverage will increase demand for analysts with expertise on the life-cycle assessment (LCA) of products.

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More circularity means changing business models

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As it leads to resource-intensive products with short lifespans, the traditional linear economy promotes unsustainable production and consumption models (Totaro, 2022). Moving towards circularity means that companies previously not accountable for the negative externalities of their actions will need to balance potentially conflicting environmental and economic demands. Their managers will need to apply business case frameworks that map environmental impacts and place them alongside economic benefits.

Gusmerotti et al. (2019) show that, in Italy, only 8% of the companies surveyed redesigned their entire value chain (from product design to providing information to consumers) according to circular economy principles. Some companies started using eco-design principles to satisfy customer expectations, providing them with information about a product's eco-credentials. Other firms introduced circularity concepts to improve production process efficiency, putting an emphasis on resource recovery through reducing waste, optimising logistics or exploiting industrial symbiosis opportunities (Gusmerotti et al., 2019).

Industrial symbiosis (IS) involves sharing management responsibility for underused assets (e.g. industrial waste/by-products) among a group of firms to achieve economic, social and environmental benefits (Ashton et al., 2022). The circular economy can also mean making accessible goods and services on a shared basis (the sharing economy) or business models based on selling products as services (the performance economy) (Taranic et al., 2016). In circular economy settings, digital platforms can facilitate information sharing between companies (Krom et al., 2022).

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Circularity shifts sectoral employment but results in net job creation

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Jobs in the circular economy include core circular jobs (e.g. in repair or waste management), enabling circular jobs (e.g. in education, design and digital technology) and indirect circular jobs (e.g. in information services and logistics) (Circle Economy, 2021a). The transition to a circular economy will change the sectoral composition of employment (European Commission, 2018) but jobs lost will likely be more than made up for. Thanks to a shift from capital-intensive industries (such as raw materials extraction and processing) to labour-intensive ones such as repair and recycling, the circular economy can result in net employment gains (Laubinger et al., 2020). Cedefop (2021) projected that employment in water supply and waste management would be 63% higher once the EGD had been implemented (relative to the baseline of greening continuing at a slower pace in line with trends that were visible before the EGD was agreed).

Construction is a good example of a sector in which circularity could lead to profound employment transformation. Circularity will shrink employment because of new business models (such as modular construction) and using existing buildings more efficiently to reduce the need for new builds (European Commission, 2018). Employment in construction will benefit from other green transition trends, such as upscaling renewable energy production capacity and renovating and upgrading buildings to improve their energy efficiency (Cedefop, 2021).

Reporting findings from a Cedefop skills foresight study on the circular economy, this policy brief reflects on the current and future skill needs that circularity requires and on how vocational education and training (VET) can be used to develop them.

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Box 2. **Cedefop foresight on the circular economy**


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Cedefop's foresight study on the circular economy explored the implications of implementing the EGD on skills and the role of VET for jobs in the sector (*). Part of a series of green foresight studies, which also covers smart and green cities, the agri-food sector and waste management. (More detailed information about the foresight study and a list of contributing experts are available here).

In the first online workshop, experts were asked to look towards the future (2030 and 2050) and to identify the occupations and skill profiles that will enable the circular economy to accommodate the changes the EGD requires. They also explored how VET can be used to help develop the identified skill sets. The results from the first workshop discussions were used to develop a two-round, Delphi-style survey. The first-round questionnaire was designed to gain more insight into the issues raised in the workshop and to assess the extent to which there was consensus around them among the experts.

The results of the first round were used to design the second round, which focused on the role VET might play in meeting the skill needs identified in the first round. In the final workshop, Cedefop reported the findings from all stages of the foresight study to the experts, who discussed and validated them. The full results will be published in a Cedefop 2023 report alongside the results of the other three foresights.

(*) The circular economy foresight study did not cover the EGD implications on waste management; Cedefop explored this in a separate foresight study (Cedefop, 2022). Spill-over effects in other sectors were not explored.

Source: Cedefop.

EVIDENCE

In this section

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Kickstarting the circular economy

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While many sectors in the EU can contribute to shaping the circular economy (Figure 3), in most of them developments are still at an early stage. Rapidly changing mindsets towards a preference for recyclable products and convincing organisations to adopt circular business models (particularly in energy and some manufacturing sub-sectors) is challenging.

It is therefore not surprising that Cedefop skills foresight experts viewed regulation as the number one lever for accelerating the transition to circularity (Figure 4). The revision of EU Directives and making product passports, supply chain tracking and product life extension mandatory will speed up change, in particular in sectors where such regulatory policies make a marked difference in how production is organised (e.g. energy, waste management, textile, agri-food and re-manufacturing). Alongside 'sticks', 'carrots' in the form of innovation funding programmes and financial incentives (e.g. for repair) play important roles.

Awareness of the challenges that put a brake on the transition to a circular economy is key to shaping it. Global supply chain disruptions due to the COVID-19 pandemic and Russia's invasion of Ukraine have caused uncertainty.

Another factor that reduces the likelihood of businesses investing in the circular economy is risk aversion, which may play a major role if businesses are not sufficiently incentivised by price signals and the legal framework. Weak innovation activity in some Member States may compromise their capability to make the shift. The views of consumers and market circumstances also matter. A preference for ownership over models where goods are shared and made available as services can be an obstacle to change, as can the widespread availability of low-cost imported products and the relatively low cost of simply replacing products rather than repairing them.

Lack of skilled workers to design repairable and reusable products and technologies may amplify producers' reluctance to start producing them.

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Figure 3. **Sectors driving the transition to a circular economy**

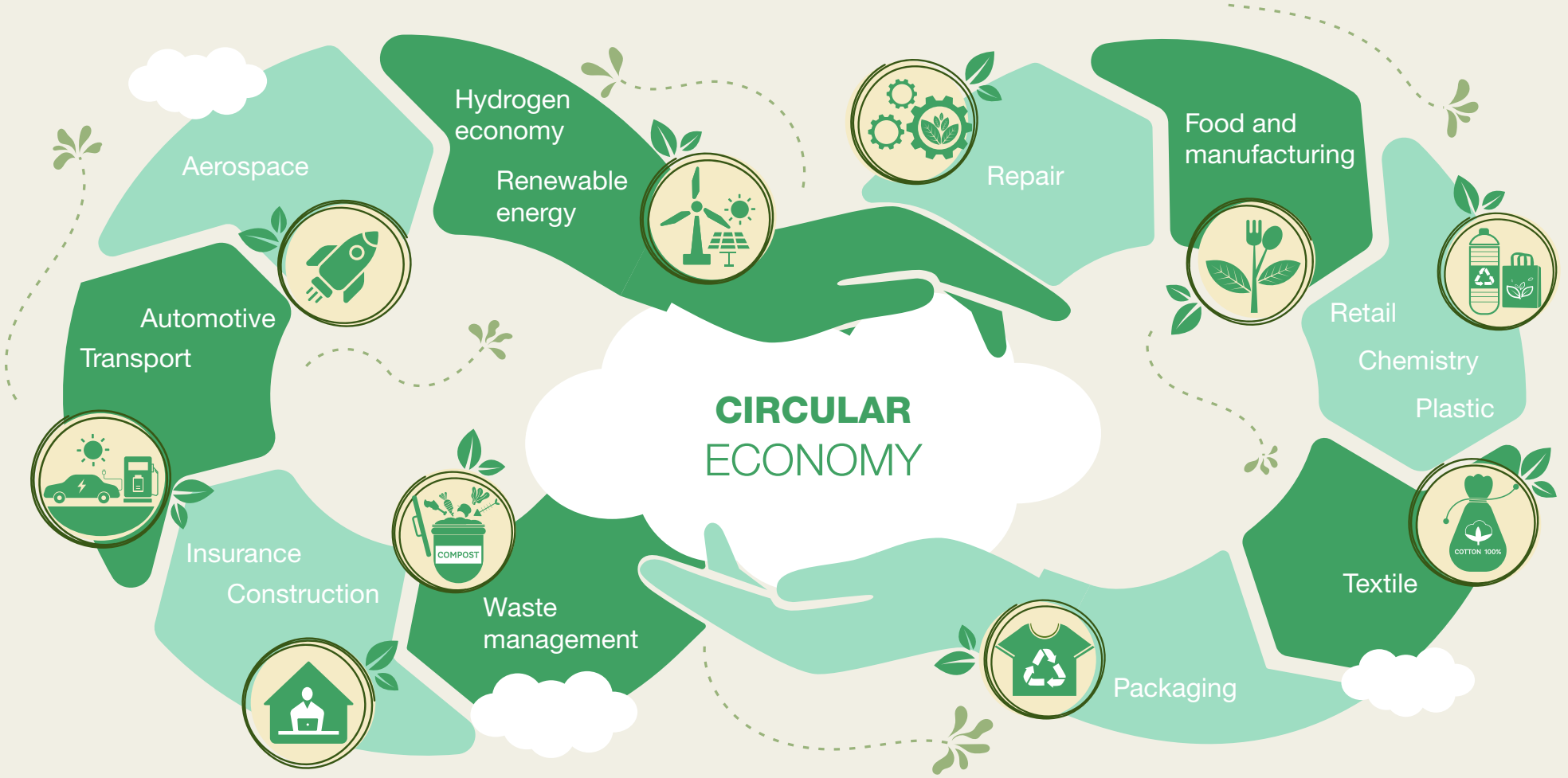

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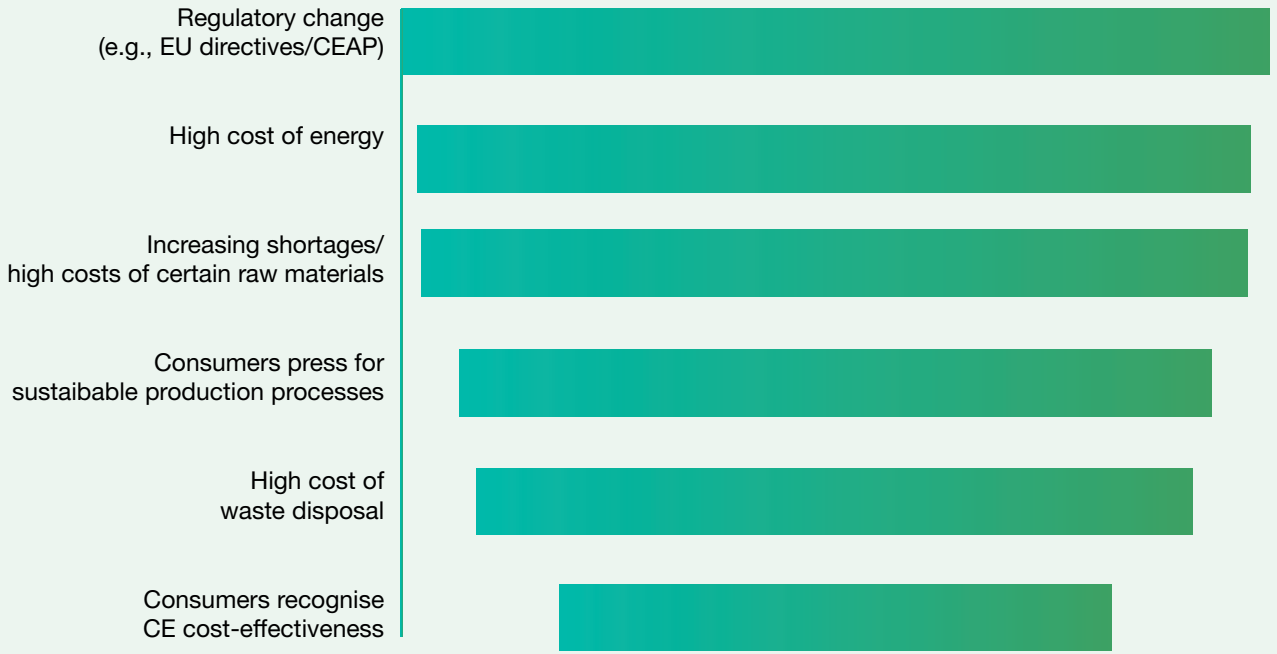
Figure 4. **What will make the circular economy take off?**
(ranking based on expert views)



Source: Cedefop skills foresight survey round 1.

Doing things differently: jobs and skills supporting circularity

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Under the assumption that a large part of the EU economy will become circular, employment trends will reflect the concentration of jobs in start-ups related to circular economy practices, R&D and innovation, and repair and recycling activities. Industrial symbiosis (IS) and other new circular economy business models and activities, such as start-ups, can help mainstream circular practices. To play its pivotal role as change facilitator, upscaling IS will 'require transversal technical skills and knowledge', alongside soft and networking skills to enable the workers involved to liaise with stakeholders and to build trust (SPIRE-SAIS, 2020).

Progress towards a circular economy might also lead to employment losses or skills obsolescence in some sectors, specifically for:

- **jobs relying on single-purpose skills:** low-skilled jobs in waste disposal operations (landfilling, incineration and mixed waste sorting), jobs in extraction industries (oil and gas, coal), and middle-skilled jobs in marketing (such as direct sales and telemarketing) and retail;
- **jobs in energy-intensive and polluting manufacturing sub-sectors with linear production processes** (such as plastics, steel and cement production), including traditional industries that source raw materials from countries outside the EU (such as metal manufacturing);
- **low- and high-skilled jobs in industrial production of new products** (rather than reusing, repairing and recycling existing ones) such as household goods, textiles, plastics, and toys; and
- **jobs in supply chains** (logistics, transportation) facilitating the import of materials from outside the EU.

Despite these trends, increasing uptake of circular economy principles will not necessarily result in significant net job losses. Change will often lead to adaptation of job profiles to accommodate circular economy processes. For example, many construction workers will increasingly be engaged in building renovation rather than new construction, which means they will need to become proficient in using new materials and techniques.

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Circular design, systems thinking and transversal skills power the circular economy

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Upskilling and reskilling play an essential part in the transition to a circular economy. Identifying and understanding 'circular' skills can guide informed policy-making. The following blend of technical, transversal, and soft skills will be essential:

- circular product design skills;
- systems thinking;
- technical skills for circular approaches;
- product and process design skills;
- skills enabling working in a multidisciplinary team;
- data analysis skills.

Transversal skills will play an important role across sectors (European Commission, 2018), for example because circularity requires collaboration with others within organisations and with stakeholders across sectors (Branca et al., 2021) and the ability to communicate and problem-solve effectively (Ethica, 2021). The type of transversal skills required may vary by role. Communication skills and empathy are needed in a range of jobs, while curiosity and creativity are particularly important for material innovation specialists. Industry 4.0 technologies, such as artificial intelligence, augmented reality and blockchain, ease the management of the circular economy. STEM professionals and engineers need basic knowledge of such digital technology to contribute to the design of eco-oriented digital systems (Ethica, 2021).

Cedefop's 2023 skills forecast suggests that employment in the EU will rapidly become more skills-intensive. Nevertheless, not all skills needed for the circular economy will be high-level ones. Sorting textiles for reuse, which will likely become a key function in a circular textile industry, will require manual skills. Design and delivery of initial skilling and training later in life will need to be adapted to match skill needs across occupation types and skill levels.

Recruiting people with the skills and qualifications that the circular economy needs to expand and become mainstream may be difficult. Obstacles on the road to a circular economy may include skill shortages and gaps in systems thinking, understanding of the implications of regulation, circular economy product and process design, and other technical skills (e.g. refurbishing phones, computers, tablets, and other IT equipment). Action to alleviate skill bottlenecks should go beyond providing suitable education or training tracks for young people. Shortages of trainers and teachers with good understanding of circular economy skills, weakly developed continuing VET, and relatively poor working conditions in repair activities would also contribute to skill shortages.

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Responsive VET paves the way to a circular economy

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While VET will be the main skills supplier in the redesign, repair and reuse economy, its role is much broader than fortifying the skills of learners and workers. VET systems can also contribute to social cohesion through local job creation and training low-skilled workers, and by helping stakeholders become aware of their potential role in the circular economy. VET can champion the circular economy by showcasing its job and business opportunity creating potential. It will need to collaborate with employers, trade unions, chambers and other skills ecosystem players to shape new education and training that address the needs of the circular economy. Several examples among the centres of VET excellence demonstrate how such approaches can be successfully implemented in practice.

VET will be expected to supply skills for core circular economy jobs in repair, agri-food, paper, mining, the energy and pulp sectors, handcraft, waste management, recycling, and construction. It will also be essential to train teachers and trainers in charge of circular economy education at all levels, and for upskilling and reskilling public sector workers. Circular economy training will also be vital for managers, as they need to understand how to integrate circularity in their company and its business processes.

To meet emerging and future skill demands, upskilling, on-the-job training and apprenticeship opportunities must be expanded. VET can promote learning through the interdisciplinary and multidisciplinary approach called for by circular strategies (Circle Economy, 2021b). National or regional mapping of VET schools specialising in different aspects of the circular economy would help align programme provision and local and corporate skill needs. Increasing VET attractiveness and making circular economy jobs more attractive should also be priorities.

To meet the skill needs of the circular economy, VET should move away from a linear view of production to the repair, recycle and reuse paradigm. Systems thinking (Box 3) and other core circular economy skills should be part of the core curriculum rather than optional add-ons. Cedefop's foresight experts also pointed to a need to harmonise basic circular economy courses nationally and across the EU.

VET can become a driver in the transition to circularity when actors that steer and govern it place an emphasis on developing new training

...**VET systems** can contribute to **social cohesion** through **local job creation** and **training low-skilled** workers...

...**circular economy training** will also be vital for **managers**, as they need to understand **how to integrate circularity in their company** and its business processes...

...**systems thinking** and other **core circular economy skills** should be **part of the core curriculum** rather than optional add-ons...

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programmes and update existing ones to prepare people for emerging circular job profiles. Enriching the curricula with circular economy skills in VET programmes for energy-intensive sectors and mainstreaming hands-on/work-based and problem-based learning throughout programmes will be crucial. It will be equally important to place more emphasis on interdisciplinarity in circular economy training, to provide training on industrial symbiosis, and to start or expand IVET programmes centred on key circular economy processes at higher EQF (European qualifications framework) levels.

Cedefop's skills foresight experts acknowledge the role of initial and continuing VET in building circular economy skills and shaping mindsets. To accelerate change, VET should prioritise courses that blend face-to-face classroom sessions and online learning, place an emphasis on short training courses or modules, and ensure that programmes lead to certification or qualification (e.g. microcredentials). Tapping the potential of CVET in upskilling and reskilling people for the circular economy requires a focus on transition-focused and practical learning, stakeholder involvement and support for learners (Figure 5).

Box 3. **Systems thinking: a foundation of the circular economy**

Systems thinking refers primarily to circular 'awareness and mindset', i.e. understanding the principles of the circular economy and why they need to be adopted. It requires people (not just producers) to consider the benefits to society of applying circular economy principles, rather than just private returns for their behaviour. Systems thinking has not yet infiltrated many professions. Not many professionals systematically apply it and few training courses address it. Systems thinking in relation to the circular economy can become a foundation and fundamental part of any VET learning process if:

- it is embedded in IVET (initial VET) and CVET (continuing VET) at all levels;
- a practical perspective is integrated in training courses (real-life examples and products) with emphasis on asking the right questions to encourage change in thinking and reasoning;
- gaming is used to demonstrate the benefits of systems thinking;
- more apprenticeship and upscaling of learner and trainer mobility is provided (e.g. via Erasmus+).

Source: Cedefop skills foresight on circular economy.

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Figure 5. **Transitioning to circularity – CVET priorities**

1

DEVELOP TRAINING FOR INTERSECTORAL TRANSITIONS
(e.g. from energy-intensive sectors such as steel to circular-based ones such as waste management) and for intra-sectoral transitions contributing to circularity (e.g. from landfilling to circular waste management)

2

INCREASE
work-based training opportunities

3

SHAPE CVET
so that it contributes to expanding learning potential (learning to learn)

4

ENSURE CLOSE LINKS AND EFFECTIVE FEEDBACK LOOPS
between CVET and employers' skill needs

5

SYSTEMATICALLY REFLECT LOCAL OR REGIONAL NEEDS
in CVET programmes and curricula

6

STIMULATE EMPLOYERS
to offer training to their staff

7

MAKE AVAILABLE FINANCIAL AND NON-FINANCIAL SUPPORT TO WORKERS
(e.g. time allowances, credit, professional development plans) to incentivise training participation

CONCLUSIONS

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Making the EU economy more circular is pivotal to achieving EGD goals and targets. Achieving it demands actions by policy-makers, social partners, the VET sector and other skills ecosystem players. Jointly, they can help ensure that the VET offer is of high quality; that employers and citizens are committed to producing, learning, living and working under the new paradigm, and that working conditions, particularly in repair and recycle jobs, are improved. Cedefop's circular economy skills foresight study and other research highlight the importance of several elements.

01 POLITICAL COMMITMENT

Regulatory initiatives, such as laws mandating eco-design for products and binding targets for use of recovered materials, tax policies, carbon-based fiscal benefits, and incentives, to motivate employers to invest in circular production processes.

02 SHAPING CIRCULAR ECONOMY CITIZENSHIP

Reinforcing circularity mindsets calls for systematically applying circular economy principles and processes in all economic activities and embedding them in all education and training programmes, curricula and courses, including early-childhood education. Making young people acquainted with circular economy jobs will contribute to making such jobs more attractive. Campaigns can increase awareness of the importance of the circular economy and the opportunities it brings.

03 ENGAGING EMPLOYERS

Adopting circularity requires systemic change in thinking and acting. It cannot be achieved by simply adding a circularity dimension to linear business models. This must be communicated to, and appreciated by, workers, employers and the wider public. Employers and learners need to be informed about training opportunities for circular economy processes. Alongside regulatory reform, guiding companies on how to implement circularity best in their business models can boost the uptake of circular approaches. This also includes revising corporate key performance indicator frameworks and financial reporting approaches not compatible with circular economy principles. Engaging small and medium-sized enterprises (SMEs) will be particularly important.

...**making the EU economy more circular is pivotal** to achieving **European Green Deal goals** and targets...

...making **young people acquainted with circular economy jobs** will contribute to making **such jobs more attractive**...

...alongside regulatory reform, **guiding companies on how to implement circularity best** in their business models **can boost the uptake of circular approache**s...

04 TURNING UNCERTAINTY INTO OPPORTUNITY

COVID-19 and the energy crisis that followed the invasion of Ukraine have disrupted supply chains. Crises can facilitate the transition to circularity. From a corporate perspective, adopting circular practices in times of crisis can become a risk mitigation strategy (i.e. real reasons for becoming circular). Soaring energy prices and increasing awareness of the fragility of global supply chains can incentivise businesses to adopt circularity practices to maintain competitiveness and to secure stable supply of materials. Difficulties in replacing goods due to shortages and high prices for materials or components can boost repair and reuse practices. The Ukraine war has uncovered dependencies on vital raw materials and energy that could jeopardise the circular transition if no action is taken. Boosting renewable energy has become an even stronger policy priority, to become less dependent on energy from third countries.

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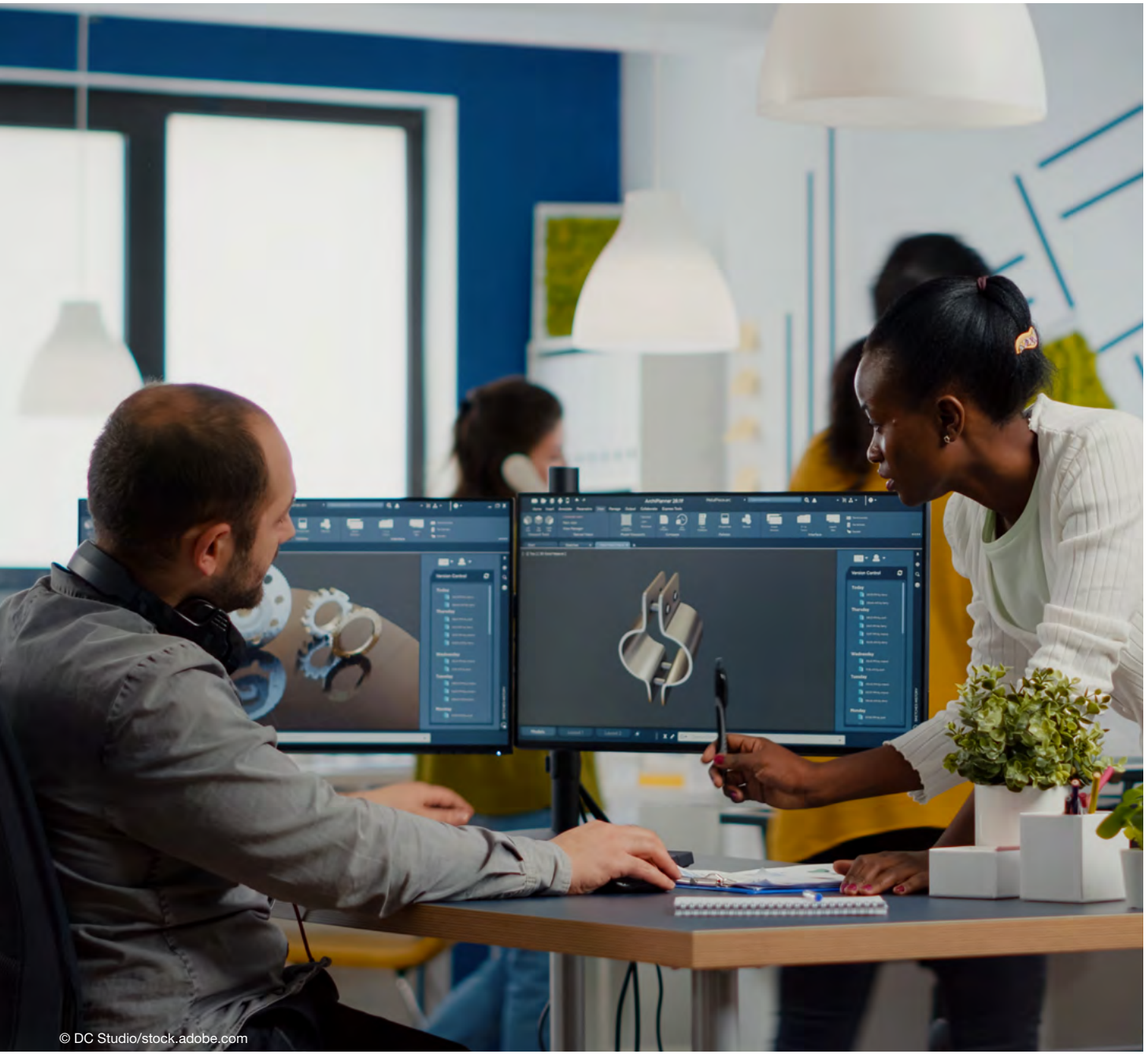
05 RECALIBRATING VET

Entails developing new programmes and integrated courses covering several successive use stages of a product and embedding circularity principles systematically in curricula to boost skills and mindsets. Lack of or weak professional development of trainers is a barrier to the take-up of circularity concepts in VET. Validation of non-formal and informal learning relevant to the circular economy and using career guidance to put repair, recycle and reuse jobs in the spotlight can become circular transition accelerators.

06 BALANCING THE SPRINT AND THE MARATHON

VET needs to address urgent skill demands in the short term (for example, via short courses) and to achieve the long-term goal of establishing a circular economy. Skills anticipation and microcredentials establishing the value of short add-on courses are crucial short-term tools. In the longer term, the marathon that VET needs to run is obvious from the major effort needed to embed the circularity concept systematically in curricula and programmes.



07 FORGING BETTER LINKS WITHIN AND ACROSS SKILLS ECOSYSTEMS APPROACH

Optimising work organisation and HR practices to make better use of skills available and creating and sustaining links with local skills ecosystems are important challenges for CVET provision that warrant attention. Sound skills intelligence giving insight into sectoral and local demand for circular economy skills and jobs can be leveraged to tailor training provision. Promoting synergies among companies and sectors that can develop technological solutions and breakthroughs is essential.

08 PROMOTING PARTNERSHIP

Skills ecosystem stakeholder cooperation in designing VET for the circular economy is essential to help learners and workers acquire the skills they need to implement and advance circularity practices in their jobs and careers. Stepping up R&D cooperation with higher education and participation in partnerships, such as centres of vocational excellence or hubs, strengthen skills governance. Such arrangements are important for meeting current and future skill needs: they broaden opportunities to develop systems thinking and entrepreneurial skills, contribute to apprenticeship quality, and help introduce or expand multidisciplinarity in circular economy training.

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Green Observatory

Cedefop Green Observatory **(Cedefop GO)** includes Cedefop's work on the **implications of the green transition on jobs and skills** across sectors and occupations in the EU

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POLICY BRIEF

From linear thinking to green growth mindsets

Vocational education and training and skills as springboards for the circular economy

Moving to a circular economy paradigm lies at the core of the European Green Deal (EGD) ambitions. Shifting to a ‘re-design, repair and reuse’ economy leads to new jobs, and brings about changhhhes in job profiles that require circular design, systems thinking and transversal skills. This policy brief reports on a Cedefop skills foresight study which looked at the occupations and skills that are essential for achieving a circular economy in the EU, and the role that vocational education and training (VET) can play in support.

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9184 EN – TI-BE-23-002-EN – doi:10.2801/813493

Publications Office of the European Union

ISBN 978-92-896-3601-8

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