

# Alternative futures for the Circular Economy and its effects on Occupational Safety and Health in 2040

**Workshop 1: Vulnerable workers within society**  
**9 March 2022**

## Summary Report

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## Introduction

The European Agency for Safety and Health at Work (EU-OSHA) has for several years been applying foresight approaches as part of its mission to contribute to safer and healthier working conditions in the EU. Its foresight approach looks at changes that may take place in the future and considers what their consequences could be for occupational safety and health (OSH), with the aim of supporting policymaking and raising awareness to reduce work-related accidents and ill health.

Within EU-OSHA's 3rd foresight cycle,<sup>1</sup> work is focused on the circular economy (CE) and its effects on OSH, primarily within the European context. This project is carried out against the background of an EU policy shift towards more environmentally sustainable practices, with several policy initiatives driving efforts in the CE arena.<sup>2</sup> These initiatives, and indeed the CE as a whole, are widely considered to be critical and influential developments that will be beneficial to the action against climate change and will ultimately have impacts on jobs and on OSH.

Initiated in 2020, Phase 1 of the project explored different ways in which future jobs may be impacted by efforts towards implementing a CE, and what consequences this may have for OSH in the future. This was realised through the development of four macro-scenarios focused on the CE and its effects on OSH, drawing strongly also from previous foresight work undertaken by EU-OSHA. Phase 2, the current project phase, focuses on the dissemination and tailoring of the macro-scenarios developed in Phase 1, via stakeholder engagement.

Through a series of four workshops, the macro scenarios developed in Phase 1 are being disseminated in order to strengthen and maximise the impact of the overall foresight study, and to dive deeper into sectoral and stakeholder perspectives. This is being realised, in part, via the tailoring of the Phase 1 macro-scenarios through the development of micro-scenarios focussing on the specific target groups present at each of the workshops. The resulting micro-scenarios will be presented in a final report at the conclusion of Phase 2 of the project (ca. end of 2022).

This workshop summary report provides an overview of the outputs from the first workshop held on 9 March 2022, which focussed on implications from the macro-scenarios for vulnerable workers in society.

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<sup>1</sup> Previous foresight cycles completed by EU-OSHA used scenario-building to explore future risks related to work in 'green' jobs and related to digitalisation.

<sup>2</sup> The key related policy initiative is the European Green Deal initiative, which has the overarching aim of making Europe climate neutral by 2050 (see [https://ec.europa.eu/info/strategy/priorities-2019-2024/european-green-deal\\_en](https://ec.europa.eu/info/strategy/priorities-2019-2024/european-green-deal_en)). Alongside the Green Deal initiative sits the Commission's 2015 CE package, comprising - an EU action plan for the CE ('Closing the Loop') with 54 concrete actions to achieve a CE, many with significant policy and regulatory implications for the EU's waste and recycling sector (see <https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX%3A52015DC0614>).

## Workshop aims, expected outputs and agenda

### Workshop aims

- To provide participants with an understanding of what foresight is and its function in enhancing policy making (on a European, national, sectorial and/or company level) (i.e. anticipatory governance)
- Introduce participants to the scenarios and the likely implications these may have for OSH in the future (i.e., diving into stakeholder and sectorial perspectives)
- Enable participants to think about what these implications might mean for vulnerable workers

### Expected outputs

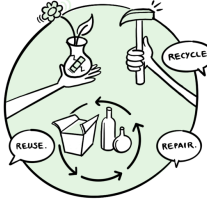
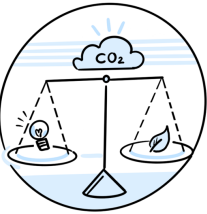
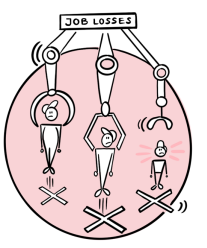
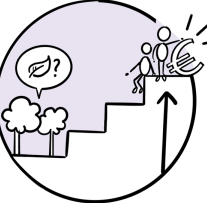
- Dissemination of the Phase 1 macro-scenarios in a clear and memorable way
- Strengthen and maximise the impact of the overall foresight study (while positioning EU-OSHA as an inclusive, forward-thinking and solution providing organisation)
- Content-wise, collect insights and input for the development of the micro-scenarios, here focussing on implications for vulnerable workers

### Agenda

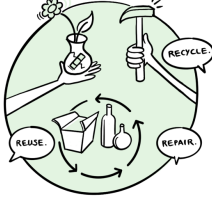
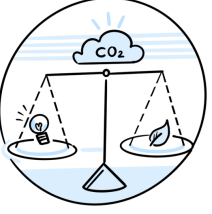
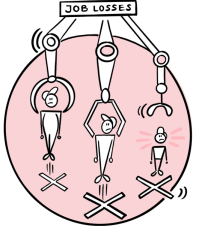
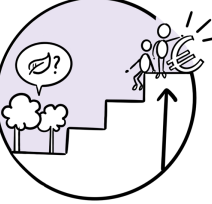
<b>Opening Remarks &amp; Intro to Workshop and CE and OSH Scenarios – Plenary</b>	
09:30 – 10:15 CET	William Cockburn (EU-OSHA): Short Intro & Welcome Cornelia Daheim (Future Impacts): Intro to foresight process and the four macro-scenarios All: Q&A
<b>Working Session 1: Implications from CE for vulnerable workers until 2040 – Group work</b>	
10:15 – 11:00 CET	Guiding question for the group work: What changes could the different scenarios bring about for vulnerable workers? (incl. which different groups (or types of workers) will be affected, and how?)
<i>Short Break</i>	
<b>Working Session 2: Implications from CE for vulnerable workers until 2040 - Part 2 – Group work</b>	
11:15 – 12:00	Guiding question for the group work: What changes could the different scenarios bring about for vulnerable workers? (incl. which different groups (or types of workers) will be affected, and how?) (Continued)
<i>Lunch Break</i>	
<b>Working Session 3: Road-mapping / (OSH) levers for protecting vulnerable workers – Plenary / Group work</b>	
13:00 – 13:45	Guiding question for the group work: What could be done to improve perspectives for vulnerable workers (with a focus on CE/OSH)? Which actors and stakeholders play a key role in this? What are key levers, i.e., most important measures?
<b>Sharing Results, Final Reflections &amp; Next Steps - Plenary</b>	
13:45 – 14:30	All: Key insights from group discussions All: Any final comments and reflection / Q&A Annick Starren (EU-OSHA): Wrap-Up, Next Steps and Closing Remarks
<b>Workshop End</b>	

## Overview of the results from the working groups

### Key changes from the scenarios for vulnerable workers to 2030

	<p><b>The roaring 40's – fully circular and inclusive</b></p> <ul style="list-style-type: none"> <li>• Safer jobs: Increased digitalisation leads to more individual digital monitoring (implications for data privacy/protection)</li> <li>• Increased employment security with regulation safeguarding workers</li> <li>• Better representation: Higher rates of worker union membership, and higher involvement of unions in decision making process.</li> <li>• Focus on reskilling/life-long learning and adequate (OSH) training, as well as training on soft-skills</li> </ul>
	<p><b>Carbon neutrality – of a hazardous kind</b></p> <ul style="list-style-type: none"> <li>• Large reskilling effort required for workers to join rapidly-expanded renewables sector</li> <li>• Increased skills gap between tech-savvy and lower-skilled</li> <li>• Such a rapid transition (technologies, sectors, energy base) may lead to OSH and CE practices quickly becoming outdated</li> <li>• Regional inequalities in application of energy transition may lead to unequal protections for vulnerable workers</li> </ul>
	<p><b>Staying afloat – amid economic and environmental crises</b></p> <ul style="list-style-type: none"> <li>• Reduced social dialogue with work managed through technological tools. Digital platforms may also lead to exploitation of workers</li> <li>• No budget for product innovation to reduce risks or for upskilling workers</li> <li>• Reduced public income leading to less public money to spend on social policies</li> <li>• Risk of social unrest as a result of economic / environmental / etc. crisis</li> </ul>
	<p><b>Regional Circularities – with European Divides</b></p> <ul style="list-style-type: none"> <li>• Large informal economy: More workers in precarious and exploitative working conditions</li> <li>• Increased competitiveness: Poor working conditions are more likely to be tolerated</li> <li>• Erosion of social protection: Less social infrastructure due to platform and informal work arrangements</li> <li>• Large regional inequalities with i.e. vulnerable workers in economically weaker parts of Europe exposed to higher risks</li> </ul>

Key implications from the scenarios for OSH (esp. for vulnerable workers)

	<p><b>The roaring 40's – fully circular and inclusive</b></p> <ul style="list-style-type: none"> <li>• Improved working conditions supports risk-reduction</li> <li>• Automation and other technologies increase safety, but could lead to issues of data security, data protection, and ethical considerations</li> <li>• Workers able to influence OSH regulation (via increased union representation)</li> <li>• OSH regulations more fully incorporated by industries as the nature of work becomes human and environmental centred</li> <li>• Standardisation within CE makes reskilling easier and safer – thus improving OSH outcomes</li> </ul>
	<p><b>Carbon neutrality – of a hazardous kind</b></p> <ul style="list-style-type: none"> <li>• Rapid transition: Legislation (including Risk Assessment) may struggle to keep pace with emergence of non-known (and invisible) risks</li> <li>• Heightened OSH risks in repair work and emerging sectors</li> <li>• OSH skills quickly become outdated for new types of employment</li> <li>• Less collective bargaining via unions or OSH representatives decreases working conditions and protective measures</li> </ul>
	<p><b>Staying afloat – amid economic and environmental crises</b></p> <ul style="list-style-type: none"> <li>• Overall higher risks and more negative OSH outcomes for all workers</li> <li>• More precarious work will likely lead to increased psychosocial risks (incl. stress and anxiety)</li> <li>• Shift towards individualisation of OSH with all responsibility placed on the worker</li> <li>• Re-emergence of 'old risks' (e.g. use of chemicals with no 'green alternative') plus emergence of 'new risks' (e.g. recycling of lithium batteries)</li> </ul>
	<p><b>Regional Circularities – with European Divides</b></p> <ul style="list-style-type: none"> <li>• High OSH risks in the informal economy, especially in repair and waste industries</li> <li>• Increased occupational health inequalities within and across countries in Europe, and 'outsourcing of risks'</li> <li>• Increased human-machine interaction and automation exacerbate psychosocial risks</li> <li>• Increase in precarious work in the waste sector may lead to both occupational and environmental health challenges</li> </ul>

## Key needs and priorities for action and policy (i.e. OSH levers)

### Levers for protecting vulnerable workers – across the scenarios

#### Integration of OSH and environmental policies (incl. in CE):

- Green and just public procurement: include demands for OSH management
- Include OSH in all the social aspects of the CE from the very beginning
- Applying a ‘polluters pays principle’ directly to a greater extent to OSH issues
- Include a fair label for products (in addition to the circular eco-label introduced by the EU) to ensure that the work from design to manufacturing (including repair work) is safe for workers
- Establish a link to environmental partners: Integrate OSH and ecological policies by cooperating with environmental agencies

#### Training, upskilling, and reskilling:

- Make workers (and OSH representatives) fit for CE and facilitate transition process (e.g., from coal to renewable) with OSH issues integral to the reskilling process.
- Ensure OSH is an integral part of any industrial training and upskilling (even in formal education (university, apprenticeships etc.))
- Ensuring access to retraining and up-skilling, also for those in informal employment, people with disabilities etc. (barrier-free, inclusive training opportunities, making it comparable across EU)
- Additional efforts to make upskilling/reskilling comparable across EU (policy, education providers, etc.)

#### Collaboration:

- Improve collaboration between different EU organisations and stakeholders (social and environmental, policy and research)
- Increase cooperation and agreements between social partners to promote safe, secure, and sustainable employment and appropriate OSH standards both at the workplace and industry level
- Improvement and link between European Institutions (EEA and EU-OSHA)

#### Broaden coverage of OSH:

- It might also mean trying to reach for broad coverage of OSH and to extend it to workers that are today excluded
- Provide OSH information to the informal economy<sup>3</sup> via e.g. partnering with social partners and setting up local structures and networks

#### Increase worker representation:

- Strengthen the role of union health and safety representatives
- Protecting informal workers & working with organisations representing informal workers
- Scale-up worker participation in unions / representation, also for self-employed / precarious workers

#### Worker-centric approach:

- Need to guarantee that new technologies and automation are developed and deployed at the workplace with a worker-centric approach (i.e. participation of workers and their representatives in the choice and implementation of these new technologies, and its impact at the workplace)

#### Need for continuous and more punctuated research:

- Harmonise EU data on OSH (e.g., from national health registries), share research data and encourage participation (e.g., open data approach), sex-disaggregate data, improve research on precarious work and the recycling sector.

<sup>3</sup> “All economic activities by workers and economic units that are – in law or in practice – not covered or insufficiently covered by formal arrangements.” See: [https://ec.europa.eu/home-affairs/pages/glossary/informal-economy\\_en](https://ec.europa.eu/home-affairs/pages/glossary/informal-economy_en)

## Discussion and conclusions

The group exercises and discussions at the workshop focussed on identifying key changes from the macro-scenarios for vulnerable workers in 2040, as well as specific OSH implications. It found that across all four scenarios, both positive and negative repercussions will likely be felt by all future workers, with particular consideration placed on the role that digitalisation and automation will play for the future health and safety of vulnerable workers. Importantly, the pace of any future transition to a CE was one of the key variables in how well future workers were likely to fare, with acknowledgement that too rapid a transition would leave health and safety research and regulation (as well as training providers) unlikely to keep pace, and ultimately unable to keep workers safe.

While this workshop was only the first in a series of four workshops to be completed in 2022, it's possible to already draw some initial conclusions on key actions and policy initiatives needed to support vulnerable workers under the conditions of the four macro-scenarios. Across the working groups, seven key policy levers were identified by the workshop attendees, these included:

- A call for the **integration of OSH and environmental policies**, such as ensuring 'Just' requirements in public procurement alongside sustainability criteria, i.e. integrating a systemic approach into future policy-making
- Improve collaboration between different EU agencies and between agencies and stakeholders to ensure 'no one is left behind' in the transition to a CE.
- The need to recognise (and prioritise) the **vital role training, upskilling, and reskilling** must play to support workers in the coming years to ensure that they are equipped for future workplaces and the ever-changing job landscape.
- **Broaden the reach and coverage of OSH** information and training to those workers currently excluded (including those within the informal economy), through setting up local structures and networks in collaboration with social partners.
- **Increase worker representation** through expanding the coverage and strengthening the role of Union health and safety representatives. Especially for those in self-employment or within the informal economy.
- Adopt a **worker-centric approach** in the development and deployment of new technologies aimed at enhancing sustainability.
- The need to open-up and harmonise EU health and safety data while **increasing support for research** focussed on jobs and workplaces undergoing significant changes in the transition to a CE.

In looking ahead to upcoming project steps, the focus will remain on disseminating the macro-scenarios to key stakeholder groups while simultaneously identifying and collecting a wide-range of varied perspectives on what the implications of any shift to a CE may be for workers and workplaces of the future. The final project report (likely to be published around the end of the 2022) will bring together the key insights from across all four workshops, while highlighting upcoming challenges (and opportunities) for OSH for key stakeholders based on potential CE developments. As a key outcome of this project phase, the final results will also discuss the needs for research, policy and action that emerge across the stakeholder workshops, as well as putting forward recommendations and highlighting gaps for future actions and research to improve the health and safety of workers in the future.