D5.2 Recommendations for Furniture Sector Stakeholders

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SUMMARY TABLE

1. RECOMMENDATIONS FOR ADVANCING THE CIRCULAR ECONOMY IN THE EU FURNITURE INDUSTRY

Transitioning to a Circular Economy (CE) presents a unique opportunity for the EU furniture industry to enhance resilience, competitiveness, and sustainability. The following recommendations are drawn from insights gathered from 20 experts and stakeholders during the **Experts' Validation Workshop of the FurnCIRCLE Project – Circular Economy Guidelines and Tools for Application in the EU Furniture Sector (27th March 2025**). These recommendations aim to assist the sector in overcoming barriers, developing the necessary skills and knowledge, and adopting innovative business models. We encourage furniture companies, policymakers, educators, and industry networks to take these actionable steps and drive the transformation forward.

1.1 Overcome Cultural and Consumer Awareness Barriers

Transitioning to a circular economy (CE) commences with **cultural transformation within organisations and raising awareness among consumers.** Internal resistance can be lessened through structured awareness campaigns and training sessions that clearly **explain the tangible benefits of CE,** such as long-term cost savings, environmental responsibility, and enhanced brand value. Leadership must actively champion circularity, **embedding it within corporate values** and strategic objectives. Demonstrator projects and pilot initiatives are key to showing how circular economy strategies can work in real life, helping organisations within the furniture sector understand their potential to drive change and make a real impact.

Externally, **consumer education is vital**. Marketing strategies should highlight the durability, reparability, and reusability of circular products. Behavioural nudging, gamification, and community-based incentives can increase consumer engagement and trust. The development of standardised and informative circularity labels can empower consumers to make sustainable choices. Public initiatives such as circular furniture design awards can celebrate achievements and stimulate broader interest in sustainable practices.

1.2 Address Financial and Technical Barriers

For small and medium-sized enterprises (SMEs), adopting circular economy practices often presents financial and technical challenges. To alleviate the financial burden of initial investments, businesses should explore opportunities to secure sustainability grants and EU-funding. Such financial support can significantly reduce entry barriers and provide a buffer during the early stages of CE implementation. Furthermore, it is essential to **highlight the return on investment (ROI) of CE practices** wherever possible, as tangible economic benefits can help convince stakeholders of their long-term value.

Beyond direct funding, forming **partnerships with industry associations** can enhance access to the necessary technological tools and infrastructure, such as waste recovery and recycling facilities. In this context, shared investment models—wherein regional clusters or sectoral groups jointly fund essential equipment or services—can help distribute costs and promote collaboration. The feasibility of adopting approaches similar to True Cost Accounting, as used in the food sector, should also be explored. Such economic system reforms would involve making the real costs of supply chains—including environmental externalities—more transparent, which could further motivate the adoption of circular strategies.

To ensure affordability, SMEs can begin by using freemium CE tools or leveraging low-cost versions of existing platforms. Comprehensive training on how to use these tools is key, allowing businesses to incorporate circular practices without overextending their budgets. The use of ESPR-compliant communication (in line with the forthcoming Substantiating Green Claims Directive) can also strengthen marketing strategies, enabling companies to communicate their sustainability claims credibly and legally.

In addition to funding and tools, **knowledge-sharing plays a crucial role**. Peer learning environments, especially those formed by small, interactive groups of SMEs within the furniture sector, can facilitate the **exchange of practical experiences and solutions**. These networks allow companies to discuss specific challenges and identify collaborative strategies, such as shared logistics or material reuse. Technical understanding should be supported by showcasing practical examples—such as those found in the FurnCIRCLE Guide—that clearly illustrate how circular principles can be applied in real-world business settings. These **examples can serve as inspiration and provide concrete models for replication.**

Ultimately, **emphasising both the economic and competitive advantages of CE**—including its ability to address hidden externalities—can help drive widespread adoption. When SMEs see that circular practices lead not only to environmental benefits but also to cost savings, market differentiation, and long-term resilience, the transition **becomes a strategic imperative rather than a regulatory burden.**

1.3 Build Strategic Partnerships and Circular Ecosystems

To effectively implement circular economy (CE) practices, companies must **work collaboratively across the entire value chain.** Circularity represents a systemic shift, and no single business can

achieve it in isolation. Establishing strong partnerships with designers, manufacturers, logistics providers, recyclers, and other stakeholders is essential for **co-developing practical CE solutions**. These partnerships allow for the integration of sustainability principles from the design phase through to end-of-life recovery and reuse. **Collaboration should also extend beyond traditional boundaries.** Even among competitors, there is value in sharing infrastructure, knowledge, and innovative technologies. Fostering this kind of industry-wide cooperation helps accelerate the adoption of CE by lowering costs, pooling resources, and spreading best practices. Regional clusters and cross-sectoral initiatives offer a particularly effective framework for co-investing in circular initiatives, launching pilot programmes, and developing shared facilities. Such ecosystems provide the trust, scale, and specialisation needed to make circularity a viable reality for all players involved.

1.4   Strengthen Circular Culture and Communication

A **strong internal culture rooted in circular principles** is critical for lasting transformation. Companies should **integrate CE values into their mission statements,** operational practices, and corporate culture to ensure sustainability becomes a consistent strategic priority. This internal alignment not only drives engagement but also empowers employees at all levels to contribute to circular goals.

Clear and credible communication is equally important. Marketing teams should be equipped with the tools and training necessary to comply with the European Sustainable Product Regulation (ESPR) and the Green Claims Directive. These frameworks ensure that sustainability messages are transparent, substantiated, and legally compliant, reducing the risk of greenwashing. To build trust with consumers, companies should develop engaging, consumer-facing initiatives. Tools like circularity labels can help people make informed purchasing decisions by identifying products that are durable, repairable, and recyclable. Behavioural nudges and gamified incentives further encourage sustainable choices by making them both appealing and rewarding.

Promoting real-world success stories—such as demonstrators or pilot projects—can reduce perceived technical risks and inspire wider adoption. By showcasing what is already working, businesses can lead by example and contribute to a broader cultural shift. Additionally, fostering a collaborative spirit within the furniture industry, including among competitors, reinforces the collective effort needed to scale circular economy models effectively.

1.5   Prioritise Lifelong, Inclusive, and Purpose-Driven CE Education

Achieving a meaningful transition to a circular economy requires education systems that are lifelong, inclusive, and purpose-driven. Circular thinking must be embedded across all levels of formal education—from secondary schools to vocational education and training (VET), and higher education (HE)—to ensure that learners are equipped with the knowledge, values, and practical skills needed to thrive in a circular society.

Educational programmes should be **designed for flexibility and accessibility. Modular learning formats**, such as short intensive courses ranging from 8 to 24 hours, enable upskilling across various career stages and learning profiles. These modules should include **both conceptual and hands-**

on content, combining eco-design, systems thinking, and product lifecycle awareness with repair, remanufacturing, and practical technical skills. Financial incentives may also play a role in encouraging companies to hire CE-trained professionals and invest in continuous learning for their workforce.

Importantly, CE education must extend beyond the production departments, beyond the sector. A successful circular transition involves actors across the entire value chain—including logistics, IT, software, and administrative services—who need tailored training to understand their specific role within a CE ecosystem. Business administration programmes should also integrate CE models into their curricula to ensure that future leaders can make sustainability-driven strategic decisions.

To truly move away from linear thinking, e**ducation must not only provide skills but also nurture purpose**. Engaging students in conversations about their talents, aspirations, and potential impact within the CE transition can foster a deeper sense of contribution and motivation. Reinforcing the idea that transitions take time, and that every contribution matters, builds resilience and long-term commitment. Pilot projects that connect students directly with industry—co-developing real products and solutions—can reinforce this purpose while offering valuable hands-on experience.

Active learning methods should be central to CE education. Circular challenges, simulations, games, site visits, and interdisciplinary real-life projects can all stimulate deeper engagement and encourage creativity. A **culture of learning** should be supported through incentives and recognition for innovation and sustainability achievements, helping to normalise circular values in both educational and professional environments.

Language accessibility is also essential. All CE training materials should be made available in national languages to reach the widest possible audience, ensuring that linguistic barriers do not hinder participation or understanding.

International and cross-sectoral collaboration will further enrich learning and accelerate knowledge exchange. Programmes that encourage exchanges between students, teachers, and professionals across borders and disciplines help to build networks of shared expertise. **Joint projects between clusters, sectoral associations, VET institutions, and universities** can foster innovation and promote the practical application of CE knowledge. Initiatives such as Erasmus for Young Entrepreneurs also provide valuable opportunities for entrepreneurial learning across Europe.

Scaling Circular Economy Ambassador Programmes across Europe. The Circular Economy Ambassador Programme (CAP) is a leadership and advocacy initiative designed to empower individuals—often professionals, educators, students, or community leaders—to become ambassadors of circular thinking in their organisations, regions, or sectors. These programmes aim to promote awareness, drive behavioural change, and support the implementation of circular practices through peer influence and local engagement. While these CAPs Programmes have emerged in selected EU countries as effective tools for raising awareness, fostering leadership, and embedding circular principles at the grassroots level, their geographic and sectoral coverage remains fragmented. Therefore, to ensure that all regions and education systems benefit equally from this transformative model, we propose a coordinated effort to extend CAPs to every EU member state.

Finally, CE education must not exclude the consumer. Future initiatives could explore **community-level learning** that empowers individuals fostering cooperative circles and deepening public engagement with CE. Education in circularity should be seen not just as professional development but as a cultural shift—one that will take root when learners of all ages, sectors, and roles feel included and empowered.

1.6 Develop Flexible and Role-Specific Learning Modules

To mainstream CE within companies, **training must be delivered in a flexible, modular, and role-specific format**. Programmes should be designed around worker "personas", aligning content with their specific responsibilities, departments, and levels of experience. This ensures relevance and encourages uptake. For example, short learning modules (+/- 1 hour) can be accessed individually without disrupting daily operations, allowing employees to integrate new knowledge into their workflows in a manageable way.

These learning modules should cover foundational CE concepts, systems thinking, eco-design, and product lifecycle management. Introductory awareness sessions can help leadership, managers, and workers understand the business relevance of circularity and foster a shared mindset. More advanced topics, such as Life Cycle Assessment (LCA) tools, should be included to empower staff in evaluating environmental impact. Training marketing teams to communicate CE benefits transparently and in line with the Green Claims Directive and ESPR can help mobilise consumer support and avoid greenwashing. Employees should also receive training on digital tools that support sustainability initiatives, such as LCA software for measuring environmental impact.

An effective training programme combines theoretical knowledge with experiential learning. Simulations, serious games, site visits, and participation in real-world projects can create memorable learning experiences. **Multidisciplinary group challenges and cross-over collaborations**—for instance, between furniture makers and interior designers—can reveal innovative solutions by combining different perspectives. Education formats should remain dynamic and iterative, **with periodic updates** that reflect evolving industry practices and regulatory changes.

To target consumer awareness, marketing teams can be educated to highlight CE benefits and drive consumer support.

1.7 Develop Circular Skills and Support Workforce Transformation

As the sector shifts towards circular models, **workforce development must become a strategic priority**. Regular assessments of skills gaps—through barometers, surveys, and stakeholder feedback—are essential to ensure **training initiatives remain relevant and targeted**. Funding at the EU, national, regional, and sectoral levels should be allocated to support the development, delivery, and accessibility of CE training. These public investments can be complemented by

financial incentives for businesses that hire CE-trained professionals or reward employees for circular innovations.

To prepare workers for circular transformation, **training must equip them with hands-on technical skills** such as repair, remanufacturing, reuse, and disassembly. At the same time, digital literacy should be enhanced to include cutting-edge technologies such as AI, blockchain, and 3D modelling. These competencies enable the creation of product passports, smart tracking, and material traceability systems—key enablers for circular supply chains. Data analytics and systems integration also play a vital role in optimising material flows and minimising waste.

Funding at the EU, national, and regional levels is crucial to develop and sustain these training programmes. Resources should be directed not only at curriculum development but also at partnerships between education providers and industry, leadership training, and the establishment of role models—such as an "EU Leaders for Circular Economy" platform—to highlight exemplary practices and pathways to demonstrate what is possible in the sector, motivating others to follow their lead. Recognising and celebrating best practices—at both the company and individual levels— can **foster a culture of continuous learning and transformation.**

1.8   Implement Effective Training Systems

Designing effective training for the circular economy (CE) requires a careful **balance of accessibility, adaptability, and relevance**. Programmes must combine core, foundational content with customised **modules tailored to the needs of different roles** and departments within the furniture companies. This dual approach ensures that learners acquire both a general understanding of CE principles and the specific skills needed to apply them in their own context.

To make training widely accessible, the format should be **modular, flexible, and time-efficient**. Short, focused programmes—ideally between 8 and 24 hours per module—allow participants to learn without disrupting their daily responsibilities. These formats can be offered on demand or **"just-in-time",** enabling workers and students to engage when it's most relevant for them. Learning should not be seen as a one-time event; it must be repeated, updated, and integrated over time to reflect emerging innovations, regulations, and challenges. Instructional methods should **favour experiential and active learning** approaches, as these are proven to increase engagement and knowledge retention. Simulations, games, and immersive experiences like virtual reality (VR) can vividly demonstrate CE concepts in action. Combining these digital methods with site visits, real-life project participation, and circular design challenges enhances the connection between theory and practice. For example, case studies from successful CE projects in the furniture sector can provide concrete, relatable models for learners. Where relevant, sub-modules should focus on specialised topics, such as design for remanufacturing, product traceability, or reverse logistics.

Training should also address the growing demand for **digital and data-driven competencies**. Skills in AI, blockchain, 3D modelling, and smart tracking systems are becoming essential to optimise material flows, support the development of product passports (DPP), and enhance material traceability. These technologies, when embedded in CE systems, make circular practices measurable, efficient, and scalable.

In addition to content, **learning mobility and cross-border collaboration** are critical for expanding perspectives and fostering innovation. Short-term, on-site training sessions, exchange programmes between VET schools across Europe, and joint industry-university projects allow learners to explore different contexts and share best practices. These initiatives also support the development of a European-wide CE learning culture. Programmes should encourage **cross-sectoral interaction**, particularly between disciplines such as furniture making and interior design, to stimulate creative thinking and problem-solving. Furthermore, **training must go beyond the workforce to include the consumer's role** in the CE.

Finally, the design of CE training programmes can benefit from existing competency frameworks such as the GreenComp (for sustainability) and DigComp (for digital skills), which offer structured guidelines for curriculum development. These can be complemented by reflections on broader values and organisational transformation goals—such as those articulated in the Inner Development Goals (IDGs)—to align learning outcomes with a deeper sense of purpose and sustainability-driven leadership. By combining theoretical knowledge, practical experience, digital skills, and human-centred learning, CE training can become a transformative driver of systemic change across industries and regions.

1.9   Monitor and Evaluate for Continuous Improvement

To support a thriving and resilient circular economy (CE), **monitoring and evaluation mechanisms must be embedded** into the fabric of sectoral transformation. Skills and strategy assessment tools should evolve from static surveys into **dynamic, data-driven instruments** capable of tracking progress across the industry. Such tools would not only identify areas for improvement, but also highlight which strategies are being widely adopted, which remain underutilised, and where new knowledge or training is needed. By turning assessments into real-time barometers, policymakers and industry leaders can make evidence-based decisions that guide strategic investments.

The sector should also consider **recognising and celebrating excellence through CE awards and recognition programmes**. These initiatives raise visibility, showcase best practices, and inspire others to adopt circular approaches. Keeping the FurnCIRCLE guide alive as a digital, evolving resource can ensure it remains relevant in a fast-changing regulatory and innovation landscape. This living guide could be updated regularly with new policy developments, technical solutions, project outcomes, and educational resources, becoming a go-to reference for stakeholders at all levels.

To ensure the workforce remains aligned with the evolving needs of the CE transition, businesses and industry bodies should **regularly evaluate skills and competencies.** These assessments help identify gaps and mismatches, enabling the timely updating of training programmes and the targeted reskilling of employees. In particular, **continuous assessment** is key to keeping older workers engaged and equipped with up-to-date knowledge through **lifelong learning programmes**. **Benchmarking practices** across companies, regions, and even internationally can reveal valuable insights into successful CE strategies. Comparing workforce capabilities with those of sector leaders—including those from other countries—allows organisations to align with best practices and

avoid stagnation. Industry-wide benchmarking can also extend to educational institutions such as business schools and universities, helping identify which curricula effectively integrate CE principles and which areas need reform. Data from assessments can also feed into broader analytics efforts. By leveraging databases of past training participants or stakeholders, organisations can send regular surveys and pulse checks to monitor shifting needs. The creation of a "**Circular Skills Gap Barometer**" could become a strategic tool to visualise and prioritise future learning investments, serving both industry and education policymakers.

1.10 Cross-Cutting Recommendations and Future Outlook

As the CE transition advances, a number of cross-cutting considerations should inform future actions. **Sharing best practices across countries and sectors**—through site visits, transnational collaborations, or international exchanges—remains vital for mutual learning and adaptability. These experiences help contextualise strategies and allow for the adaptation of successful models to local conditions.

Stronger linkages between the circular economy and industrial competitiveness should also be emphasised. CE should not be viewed merely as a compliance issue or environmental goal, but as a lever for innovation, resilience, and long-term market leadership. In this context, it's important to prioritise skills development strategically, recognising that not all skills have the same urgency or impact. While digital and technical competencies are essential, strategic foresight, leadership, and system thinking must also be embedded across functions.

Governance structures should be examined to ensure they support sustainability. For example, **integrating circularity into a company's leadership structure or decision-making processes** should be included in assessment tools. Furthermore, exploring **intersectoral connections**—such as synergies between the furniture industry and the broader wood or construction sectors—can reveal collaborative opportunities and shared infrastructure.

Lastly, while language skills are important in many contexts, they should not overshadow the core mission of CE training and transformation. The focus should remain on **sustainability-oriented learning outcomes** (LOs), such as those outlined by the United Nations for the **Sustainable Development Goals (SDGs)**, and how these can be adapted to the furniture sector.

Above all, the FurnCIRCLE guide has been praised for its clarity and usefulness. By evolving it into a dynamic online resource that incorporates ongoing updates, the industry can ensure it continues to serve as a valuable compass for all stakeholders.

2. CONCLUSION

The ten key recommendations outlined in this report provide targeted guidance for advancing circular economy practices across the EU furniture industry. These include tackling cultural resistance and increasing consumer awareness, resolving financial and technical obstacles faced by SMEs, fostering strategic partnerships and building circular ecosystems, promoting a strong circular culture and effective communication, prioritising lifelong and inclusive CE education, designing adaptable and role-specific learning content, nurturing circular skills and workforce transformation, implementing robust training programs, establishing systems for monitoring and continuous improvement, and incorporating cross-cutting themes to inform future policy and action.

Ultimately, the aim is to empower furniture manufacturers, policymakers, educators, and industry networks to collaboratively build a more resilient, competitive, and sustainable future through the widespread adoption of circular economy practices. By acting on these recommendations, the EU furniture sector can position itself as a global leader in circular innovation. The time to act is now—this report offers a clear, actionable framework to initiate or accelerate the circular transformation journey.

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