SKILLS 4 CIRCULARITY

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Upskilling and reskilling the textile industry sector to face the challenges in recycling, traceability and certification of recycled products

Prioritizing Urgent Skills Gaps and Defining Learning Outcomes

COLOPHON

Prioritizing Urgent Skills Gaps and Defining Learning Outcomes

Project acronym	SKILLS4CIRCULARITY
Project full title	Upskilling and reskilling the textile industry sector to face the challenges in recycling, traceability and certification of recycled products
Grant agreement no.	101243978
Programme	Erasmus+ · Alliances for Sectoral Cooperation on Skills (Blueprint)
Responsible partner	IVGT
Contributing partners	PIN · UPC / Tèxtils.CAT
Duration / consortium	November 2025 – October 2029 · 21 partner organisations across 12 countries
Total number of pages	29
Version	1.2
Language	English
Publication date	9 April 2026
Website	skills4circularity.eu

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Contents

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REFERENCE

Abbreviations and Acronyms

ABBREVIATION	FULL NAME
AI	Artificial Intelligence
Cedefop	European Centre for the Development of Vocational Training
DPP	Digital Product Passport
EACEA	European Education and Culture Executive Agency
EGE	Ege University
EPR	Extended Producer Responsibility
ESCO	European Skills, Competences, Qualifications and Occupations
ESPR	Ecodesign for Sustainable Products Regulation
GDPR	General Data Protection Regulation
IoT	Internet of Things
ISCO-2	International Standard Classification of Occupations (2-digit level)
IVGT	Industrieverband Veredlung – Garne – Gewebe – Technische Textilien
KPI	Key Performance Indicator
LCA	Life Cycle Assessment
LO	Learning Outcome
MOOC	Massive Open Online Course
MS	Milestone
PIN	Fondazione PIN – Polo di Prato Università di Firenze
STAS	Skills Trends Analysis System
UPC	Universitat Politècnica de Catalunya
WP	Work Package

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SECTION 1

Agreed Prioritized Skills Gaps List

MODULE 1 · RECYCLING TECHNOLOGY

CORE	Legislation, Regulation, Preparation and Sorting
RESERVE	Mechanical recycling, Chemical recycling (other), Biochemical recycling, Chemical recycling (cellulose), Thermomechanical recycling

MODULE 2 · ECO-DESIGN FOR THE CIRCULAR ECONOMY

CORE	Legislation and regulation, LCA and Ecological footprint, Traceability
RESERVE	Refurbish, Repurpose (Upgradability), Repairability, Reusability, Reliability, Product durability, End-of-life criteria, Proportion of materials and recycled raw materials, Recycling capability, Presence of harmful substances, Traceability, Life cycle assessment and ecological Footprint, Legislations, Regulations

MODULE 3 · SUSTAINABLE MANUFACTURING

CORE	Legislations, Regulations, Efficient production, Waste-free, waste-reduced production
RESERVE	Utilisation of by-products, Certification of products and processes, Social responsibility, Integration of the entire supply chain, IoT Internet of Things and AI Artificial Intelligence, Digitization, Use of resources (energy, water, materials), DPP (Digital Product Passport)

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SECTION 2

Agreed Learning Outcomes

- 12 learning outcomes approved (4 per module). See details in the following table.

LO#	LEARNING OUTCOME	WHAT YOU'LL DO (PRACTICE)	OUTPUT	STATUS
RECYCLING TECHNOLOGY				
LO1	Identify main legal requirements for textile recycling and list key compliance actions	Review your country's regulations + create action list	1-page compliance action list	Approved
LO2	Design a basic workflow for receiving, preparing, and sorting textile waste	Map intake – sorting – batching with quality checkpoints	Process map with decision points	Approved
LO3	Evaluate which recycling technology is suitable for different textile types	Compare mechanical/chemical/biochemical for real samples	Technology comparison table	Approved
LO4	Identify coordination problems in recycling chain and propose solutions	Map value chain + find bottlenecks	Partnership improvement plan	Approved
ECO- DESIGN FOR THE CIRCULAR ECONOMY				
LO1	Identify eco-design regulations and translate into design specifications	Review ESPR/DPP requirements	Design requirement checklist	Approved
LO2	Read LCA results and use them to choose materials/processes	Compare environmental footprint of 2-3 options	Decision note with justification	Approved
LO3	Decide what traceability information to collect at each stage	Map product journey + identify data points	Traceability plan	Approved
LO4	Apply end-of-life thinking to product design	Redesign one feature for circularity	Before/after design comparison	Approved
SUSTAINABLE MANUFACTURING				
LO1	Identify legal requirements for production and create compliance procedures	Review production vs. regulations	Compliance procedure checklist	Approved

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LO2	Choose efficiency KPIs and set up monitoring system	Measure current performance + set targets	KPI dashboard with baseline	Approved
LO3	Find waste points and create reduction action plan	Walk production line + identify waste	Waste reduction action plan	Approved
LO4	Identify data needed for sustainability reporting/DPP and propose first step	List current vs. needed data	Data readiness plan	Approved

NOTES

- Learning outcomes approved during MS1 workshop on 28 January 2026
- Format: Observable + assessable + suitable for online delivery
- Each module = 12 hours total (reactive masterclass format)

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SECTION 3

Workshop Details

GENERAL

- Date: 28 January 2026
- Time: 10:00 – 12:00 o'clock
- Chair: IVGT — Stefan Schmidt
- Supported by: All partners

EXPECTED OUTPUTS

- Agreed prioritised skills gaps list (Core + Reserve per module)
- Agreed Learning Outcomes (4 LOs per module, 12 total)

PARTICIPANTS

- Total participants: 31
- Partner organisations represented: 15 (UPC, Tèxtils.CAT, CITEVE, TUIASI, HB, PIN, NTT, CS-POINTEX, UL, STA, CLUTEX, TUL, IVGT, DENIZLI ABIGEM, EGE, TECHTERA and TUS)

AGENDA

Opening	Welcome and attendance check · MS1 objectives and expected outputs (WP Leader EGE)
Evidence base recap	IVGT survey results (completed responses of total 183) · IVGT interview synthesis (22 interviews) · PIN job ads desk research (supporting signal) · Note: All percentages based on completed respondents (n=183)
Module 1: Recycling Technology	Review ranked skills gaps (8 items) · Confirm Core Top 3 or propose changes · Discussion with all partners → MOOC add-ons · Review and approve Learning Outcomes (4 draft LOs)
Module 2: Eco-Design for the Circular Economy	Review ranked skills gaps (12 items) · Confirm Core Top 3 or propose changes · Discussion with all partners → MOOC add-ons · Review and approve Learning Outcomes (4 draft LOs)
Module 3: Sustainable Manufacturing	Review ranked skills gaps (11 items) · Confirm Core Top 3 or propose changes · Discussion with all partners → MOOC add-ons · Review and approve Learning Outcomes (4 draft LOs)
Closing & next steps	Confirm workshop report compilation and timeline · Confirm handover to Task 1.2 (WP Leader EGE)

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SECTION 4

Evidence Base

4.1 Industry Survey (IVGT lead)

- Survey period: 1 December 2025 – 13 January 2026
- Total responses: 183 completed
- Target: Minimum 10 textile companies per partner country (11 countries)
- Focus: Immediate skills shortages in recycling technologies, eco-design for circular economy, and sustainable manufacturing
- Method: Multi-select questions on urgent training needs per thematic area

For MS1 analysis and prioritisation, all percentages are calculated as:

$$\% = (\text{count of respondents selecting the item} / 183 \text{ completed responses}) \times 100$$

This approach ensures that selection rates reflect genuine priority among respondents who answered the full questionnaire.

KEY FINDING

"Legislation/regulations" appeared as the highest-priority skills gap across all three modules (Recycling: 57.9%, Eco-design: 60.7%, Manufacturing: 60.1%). Each module will address regulations within its specific context.

4.2 Focused Interviews (IVGT lead)

- Total interviews: 22
- Target: At least 2 per partner country (HR managers and technical experts)
- Focus: Qualitative validation of survey results and identification of systemic barriers
- Key findings: Main obstacles include skills gaps, systemic integration challenges, data availability, standardisation needs, and value-chain coordination requirements

KEY FINDINGS — DOMAIN-SPECIFIC BARRIERS IDENTIFIED IN THE INTERVIEW SYNTHESIS

- **Recycling:** Contamination, sorting infrastructure, technology readiness
- **Eco-design:** LCA data availability, traceability systems, harmful substances compliance
- **Manufacturing:** Resource monitoring, waste reduction implementation, digitisation gaps

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4.3 Desk Research – Job advertisements (PIN lead, with UPC)

- Method: AI-powered web scraping of online job advertisements (LinkedIn, Indeed, sector-specific platforms)
- Scope: Textile and fashion industry job postings across partner countries
- Use in MS1: Supporting signal to triangulate survey and interview findings
- ESCO alignment: Skills extracted and mapped to ESCO taxonomy for later submission to ESCO Committee (WP6)

Note: Cedefop STAS (Skills Trends Analysis System) was used as additional framing to contextualise short-term skills demand trends at ISCO-2 level.

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Method & Decision Rules

WORKSHOP FORMAT

The workshop was conducted as a plenary-only session (no breakout rooms) with decision-making supported by a shared Sheet displayed on screen. Partners discussed each module sequentially and recorded decisions in real time.

DECISION RULES

For each thematic module (Recycling Technology / Eco-design / Sustainable Manufacturing), skills gap items were classified as:

CORE (12h)

Must-have content in the 12-hour masterclass module

- Default: Top 3 items by survey ranking
- Adjustable only with strong justification and consortium agreement

RESERVE

Near-tied items (close survey scores)

- Developed as optional MOOC add-on units
- Keeps the 12-hour masterclass focused on Core priorities
- Provides access to near-tied skills gaps for interested participants

OUT

Not prioritised for this reactive training phase

AGREEMENT RULE

A decision is "agreed" when no partner raises a blocking objection during discussion.

WORKING METHOD

- Chair (Stefan Schmidt, IVGT) facilitated discussion and managed time
- All participants could view the shared Sheet in real time
- Decisions were recorded as each module was discussed
- Final decisions locked at end of workshop

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6.1 Module 1: Recycling Technology

EVIDENCE SUMMARY

The survey identified 8 priority skills gaps in recycling technology. The top items were:

#	SKILLS GAP ITEM	COUNT	% (N=183)
1	Legislation, regulations	105	57.4
2	Preparation for recycling	84	45.9
3	Sorting	65	35.5
4	Mechanical recycling	61	33.3
5	Chemical recycling (other)	47	25.7
6	Biochemical recycling	39	21.3
7	Chemical recycling (cellulose)	35	19.1
8	Thermomechanical recycling	34	18.6

(See Annex C for full evidence table with MS1 decisions)

CORE ITEMS (TOP 3)

Item 1: Legislation, Regulation · **Item 2:** Preparation for recycling · **Item 3:** Sorting

RESERVE ITEMS

Reserve item(s): Mechanical Recycling — as Item 4 is close to the Item 3, in the workshop the partners agreed to consider this as an addition to the Top 3 core items.

Placement: MOOC add-on unit (default for all Reserve items)

Rationale: Since the module is called Recycling Technology, also the further recycling technologies listed should be covered in the module.

INTERVIEW KEY FINDINGS FOR RECYCLING

The qualitative interviews complemented the quantitative results and led to the following key findings:

- Recycling is not a core process in any of the companies surveyed, but is organised at most as a sub-activity or external cooperation.
- The dominant approach is external mechanical recycling; internal recycling is mainly limited to the reuse of production waste.
- Material heterogeneity (mixed fabrics, fibre blends) was identified as a major technical obstacle.
- Sorting – both internal and external – is a critical bottleneck.

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- Cooperation structures with external partners already exist, but these are not systematically integrated into company processes.

One special case (Belgium) was discussed in which a recycler operates as a spin-off of a textile company. However, this case confirmed the basic assumption that recycling is not part of the core business of traditional textile companies. The case was assessed again after the meeting based on the information provided in the interview file.

RESULTS OF DESK RESEARCH — FOCUS RECYCLING (PIN)

The AI-supported analysis of job advertisements showed a high degree of consistency with the survey and interviews:

- High demand for skills in: Reporting, Life cycle analysis (LCA), Environmental legislation, System understanding of circular processes.
- Technical detail knowledge of individual recycling processes is less frequently explicitly requested than cross-process and regulatory skills.

The desk research of job ads confirms that companies need application-oriented, decision-relevant skills in the short term for their operations.

LEARNING OUTCOMES

Status: All 4 draft LO are approved as final by the partners during the workshop. See Annex D for full Learning Outcomes matrix with assessment and suggestions for practice activities.

Summary of approved learning outcomes:

LO1 Identify main legal requirements for textile recycling and list key compliance actions

LO2 Design a basic workflow for receiving, preparing, and sorting textile waste

LO3 Evaluate which recycling technology is suitable for different textile types

LO4 Identify coordination problems in recycling chain and propose solutions

Edits/Changes: Companies need guidance on EPR, LCA and the prioritisation of waste streams (pre- vs. post-consumer). The aim should be to enable companies to assess which recycling technology is suitable for which types of textiles and how this can be implemented organisationally.

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6.2 Module 2: Eco-Design for the Circular Economy

EVIDENCE SUMMARY

The survey identified 12 priority skills gaps in eco-design. The top items were:

#	SKILLS GAP ITEM	COUNT	% (N=183)
1	Legislation, regulations	111	60.7
2	Life cycle assessment & ecological footprint	106	57.9
3	Traceability	92	50.3
4	Presence of harmful substances	91	49.7
5	Recycling capability	90	49.2
6	Proportion of materials & recycled raw materials	82	44.8
7	End-of-life criteria	79	43.2
8	Product durability	73	39.9
9	Reliability	59	32.2
10	Reusability	55	30.1
11	Repairability	49	26.8
12	Refurbish/Repurpose (Upgradability)	42	23.0

(See Annex C for full evidence table with MS1 decisions)

CORE ITEMS (TOP 3)

Item 1: Legislations, regulations · **Item 2:** Life cycle assessment and ecological footprint · **Item 3:** Traceability

Rationale (if any adjustment from survey ranking): The following areas are prioritised for the further development:

- Legislation, Regulation
- Understanding and Interpreting LCA
- Traceability
- Handling hazardous substances
- Integrating end-of-life aspects into product development

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RESERVE ITEMS

Placement: MOOC add-on unit

Item 4: Presence of harmful substances · **Item 5:** Recycling capability

Rationale: The focus is clearly on decision-making and assessment skills.

INTERVIEW KEY FINDINGS FOR ECO-DESIGN

The interviews supplemented the survey results with practical insights:

- In many companies, eco-design is not organisationally anchored, but distributed across design, purchasing, production and quality management.
- Life cycle analyses are increasingly being used, but are often interpreted incorrectly or too simplistically.
- In some cases, production processes have a greater impact on the ecological footprint than the material itself (e.g. energy use in finishing).
- Traceability back to the fibre or raw material source is considered increasingly mandatory by regulators, but very challenging from an operational perspective.
- Many companies have individual knowledge but lack an integrated understanding of the system.
- The interview results for eco-design made it clear that the greatest need for expertise lies not in the 'what', but in the 'how to decide'. For the textile industry, eco-design is above all:
    - An integration tool,
    - a regulatory navigation tool,
    - and a strategic basis for recyclable products.
- Eco-design thus provides a central link between recycling, production processes and regulatory compliance.

RESULTS OF DESK RESEARCH — FOCUS ECO-DESIGN

AI-supported desk research confirmed the relevance of eco-design topics:

- Job advertisements increasingly require skills in: Circular product design, Eco-design principles, Sustainable textile product development, Understanding of regulatory requirements and LCA.
- Eco-design is predominantly addressed across functions, not as an isolated design role.

These results show a high degree of consistency between labour market needs and the skills gaps identified in the online survey as well as skill gaps mentioned in interviews.

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LEARNING OUTCOMES

Status: All 4 draft LO are approved as final by the partners during the workshop. See Annex D for full Learning Outcomes matrix with assessment and suggestions for practice activities.

Summary of approved learning outcomes:

LO1 Identify eco-design regulations and translate into design specifications

LO2 Read LCA results and use them to choose materials/processes

LO3 Decide what traceability information to collect at each stage

LO4 Apply end-of-life thinking to product design

Edits/Changes: As with the recycling module, companies need guidance with LCA as well as traceability and with the integration of eco-design thinking on all levels of the organisation.

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6.3 Module 3: Sustainable Manufacturing

EVIDENCE SUMMARY

The survey identified 11 priority skills gaps in sustainable manufacturing. The top items were:

#	SKILLS GAP ITEM	COUNT	% (N=183)
1	Legislation, regulations	110	60.1
2	Efficient production	100	54.6
3	Waste-free / waste-reduced production	98	53.6
4	DPP (Digital Product Passport)	89	48.6
5	Use of resources (energy, water, materials)	88	48.1
6	Digitization	84	45.9
7	IoT Internet of Things and AI Artificial Intelligence	80	43.7
8	Integration of the entire supply chain	79	43.2
9	Certification of products and processes	69	37.7
10	Social responsibility	69	37.7
11	Utilization of by-products	51	29.9

(See Annex C for full evidence table with MS1 decisions)

CORE ITEMS (TOP 3)

Item 1: Legislations, Regulations · **Item 2:** Efficient production · **Item 3:** Waste-free, waste-reduced production

Rationale (if any adjustment from survey ranking): Focus on implementation and system expertise. Sustainable manufacturing primarily addresses: Implementation of existing technologies, process integration, organisational anchoring of sustainability.

RESERVE ITEMS

Reserve item(s): Certification as a cross-cutting issue · **Placement:** MOOC add-on unit

Rationale: The discussions during the workshop showed that certifications cannot be treated in isolation but must be integrated into production and compliance processes. Based on this, it was agreed that IVGT would also extend its analysis to include the results of the survey responses 'not urgent' and 'not relevant', enabling the partners to make solid decisions regarding the items chosen for the key information provided by the companies regarding their type of operation should be included in this report as Chapter 8.

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INTERVIEW KEY FINDINGS FOR SUSTAINABLE MANUFACTURING

The interviews provided in-depth insights into the operational reality:

- Sustainable production approaches are often fragmented and not consistently integrated into all stages of production.
- Technical know-how exists, but process structures, responsibilities and key performance indicator systems are lacking.
- Sustainability is often implemented on a project basis rather than as a continuous production standard.
- There is a particular need for training in the following areas: Implementation of regulatory requirements · Linking sustainability targets to production key performance indicators · Translating strategic guidelines into operational measures

A recurring finding was that sustainability in the production environment fails not because of a lack of technology, but because of a lack of organisation and qualifications.

RESULTS OF DESK RESEARCH — FOCUS SUSTAINABLE MANUFACTURING

AI-supported desk research confirmed the results of the survey and interviews:

- Job advertisements are dominated by requirements such as: Waste management, Environmental legislation, Sustainability reporting, Assessment of environmental impact.
- Production-related sustainability roles increasingly require hybrid skill profiles combining technology, regulation and management.

The consistency between the labour market analysis and the project findings was explicitly highlighted in the workshop.

LEARNING OUTCOMES

Status: All 4 draft LO are approved as final by the partners during the workshop. See Annex D for full Learning Outcomes matrix with assessment and suggestions for practice activities.

Summary of approved learning outcomes:

LO1 Identify legal requirements for production and create compliance procedures

LO2 Choose efficiency KPIs and set up monitoring system

LO3 Find waste points and create reduction action plan

LO4 Identify data needed for sustainability reporting/DPP and propose first step

Edits/changes (if any): Sustainable manufacturing forms the practical implementation level of the concepts developed in eco-design and the circular approaches identified in recycling. The qualification requirements for sustainable manufacturing focus on:

- system understanding,
- regulatory certainty,
- process control and reporting,
- and cross-organisational integration.

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SECTION 7

Key Information given by the Survey Participants

NUMBER OF SURVEYS BY COUNTRY

NAME OF YOUR COUNTRY	NO.
BE – Belgium	18
CZ – Czechia	13
DE – Germany	26
ES – Spain	17
FR – France	32
IE – Ireland	0
IT – Italy	14
PT – Portugal	14
RO – Romania	14
SE – Sweden	3
SL – Slovenia	8
TR – Turkey	13
Austria	6
Unknown	5
SUM	**183**

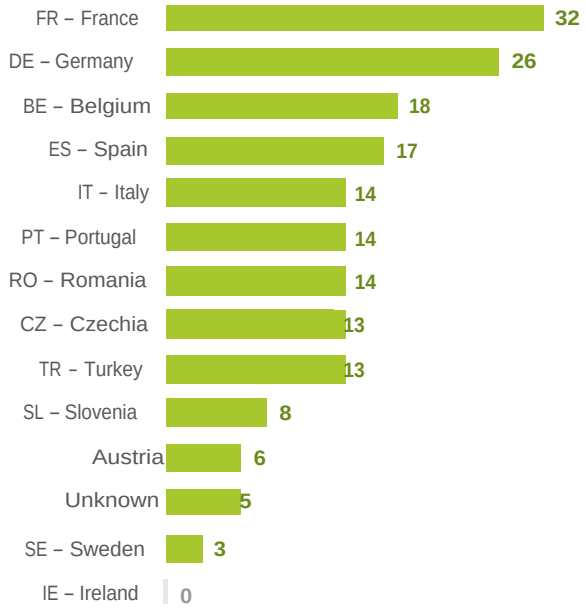

FIGURE 1: NUMBER OF SURVEYS BY COUNTRY OF TOTAL 183 PARTICIPANTS

It was agreed that the partners from Ireland would not participate in the online survey. Other project partners would conduct more surveys in their countries as far as possible. A similar arrangement was agreed for Sweden and Romania. The 'unknown' field shows the number of surveys for which the person entering the data did not indicate the country in which the company or organisation operates.

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SIZE OF COMPANY OR ORGANISATION PARTICIPATING IN THE SURVEY

SIZE OF YOUR COMPANY OR ORGANISATION	NO.
Micro: up to 9 employees or up to €2 million in annual revenue	29
Small: up to 49 employees or up to €10 million in annual turnover	46
Medium: up to 249 employees or up to €50 million in annual revenue	36
Large: more than 250 employees or more than €50 million in annual turnover	41
Unknown	31
SUM	**183**

The field marked "unknown" shows the number of surveys where the person entering the data did not indicate the size of the company or organisation.

TEXTILE TECHNOLOGIES USED BY THE COMPANIES OR ORGANISATIONS

WHAT TEXTILE TECHNOLOGIES DO YOU USE? (MULTIPLE ANSWERS POSSIBLE)	NO.
Textile finishing	52
Woven fabric production	49
Yarn production, thread production	46
Making-up (cut-sew-trim)	46
Flat- and circular-knitting production	18
Fibre production	15
Warp-knit production	12
Nonwoven production	10
Braiding production	5
SUM	**253**

The four textile processes most frequently mentioned by the survey participants are:

- Textile Finishing — 52 (20.6%)
- Woven Fabric Production — 49 (19.4%)
- Yarn production, thread production — 46 (18.2%)
- Making-up (cut-sew-trim) — 46 (18.2%)

For this question, survey participants could specify several processes that exist in their company.

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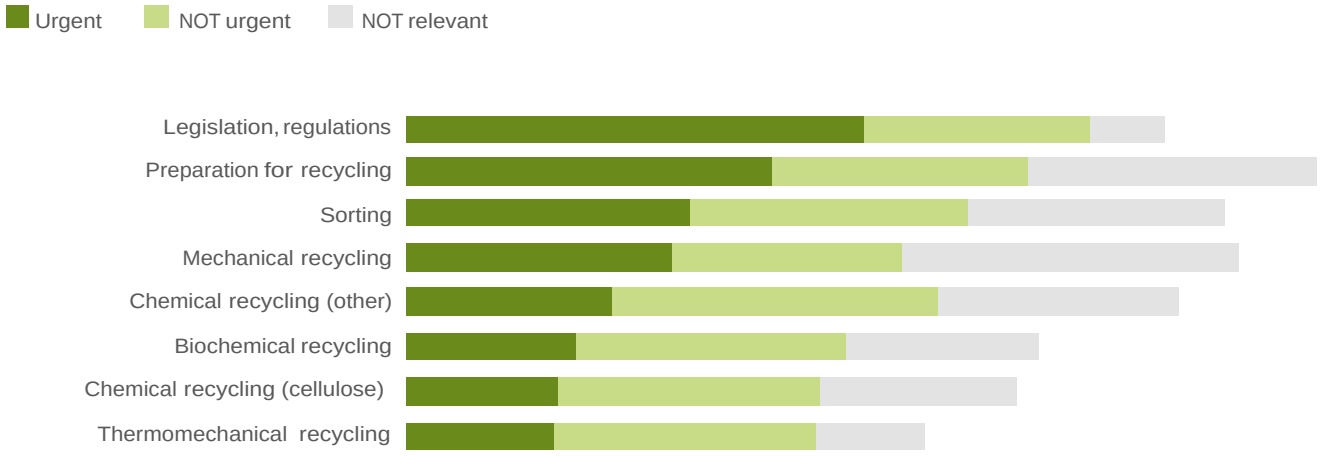
TARGET MARKET OR CUSTOMER GROUP OF THE SURVEY PARTICIPANTS

WHICH TARGET MARKETS OR CUSTOMER GROUPS DO YOUR PRODUCTS APPEAL TO?	NO.
Technical textiles	97
Clothing textiles, fashion	92
Home textiles	71
Sum	**260**

In response to this question, survey participants could specify the consumer markets or customer groups with which they are working.

Extended Analysis of Module 1: Recycling Technology

FIGURE 2 : THEMOSTURGENTNEEDSACCORDINGTHECOMPANIESFORRECYCLING TECHNOLOGY (% OF 183 SURVEYS)



	URGENT	NOT URGENT	NOT RELEVANT
Legislation, regulations	57.4	28.4	9.3
Preparation for recycling	45.9	32.2	36.1
Sorting	35.5	35.0	32.2
Mechanical recycling	33.3	29.0	42.1
Chemical recycling (other)	25.7	41.0	30.1
Biochemical recycling	21.3	33.9	24.0
Chemical recycling (cellulose)	19.1	32.8	24.6
Thermomechanical recycling	18.6	32.8	13.7

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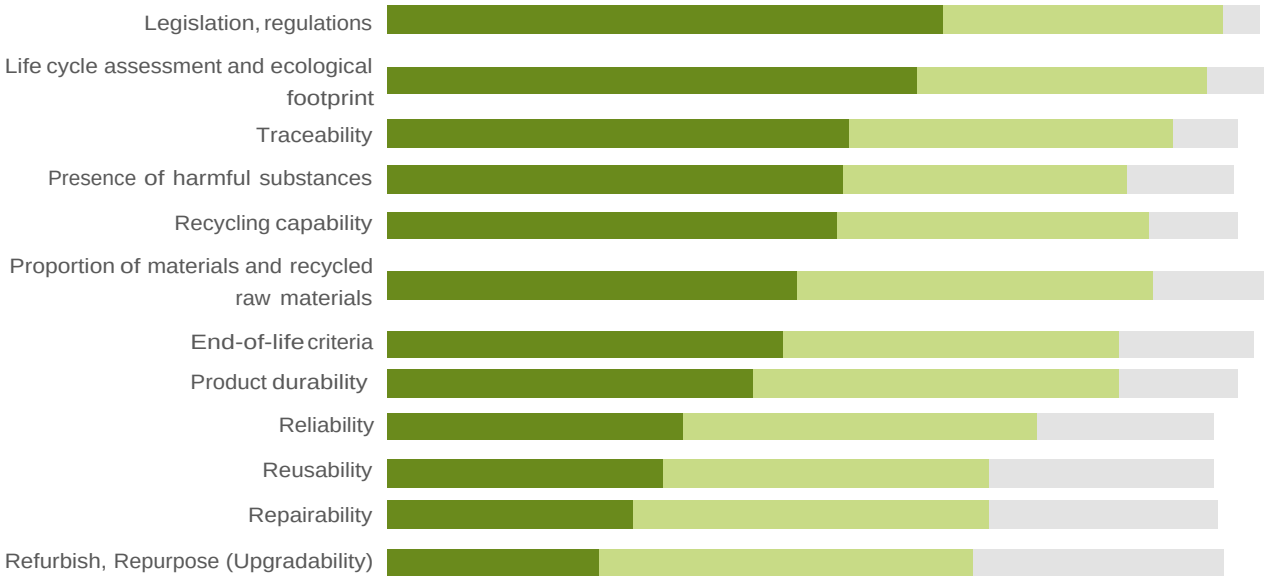
Extended Analysis of Module 2: Eco-Design

FIGURE 3 : THEMOSTURGENTNEEDSACCORDINGTHECOMPANIESFOR ECO-DESIGN FOR THE CIRCULAR ECONOMY (% OF 183 SURVEYS)



ITEM	URGENT	NOT URGENT	NOT RELEVANT
Legislation, regulations	60.7	30.6	3.8
Life cycle assessment and ecological footprint	57.9	31.7	6.0
Traceability	50.3	35.5	7.1
Presence of harmful substances	49.7	31.1	11.5
Recycling capability	49.2	33.9	9.8
Proportion of materials and recycled raw materials	44.8	38.8	12.0
End-of-life criteria	43.2	36.6	14.8
Product durability	39.9	39.9	13.1
Reliability	32.2	38.8	19.1
Reusability	30.1	35.5	24.6
Repairability	26.8	38.8	25.1
Refurbish, Repurpose (Upgradability)	23.0	41.0	27.3

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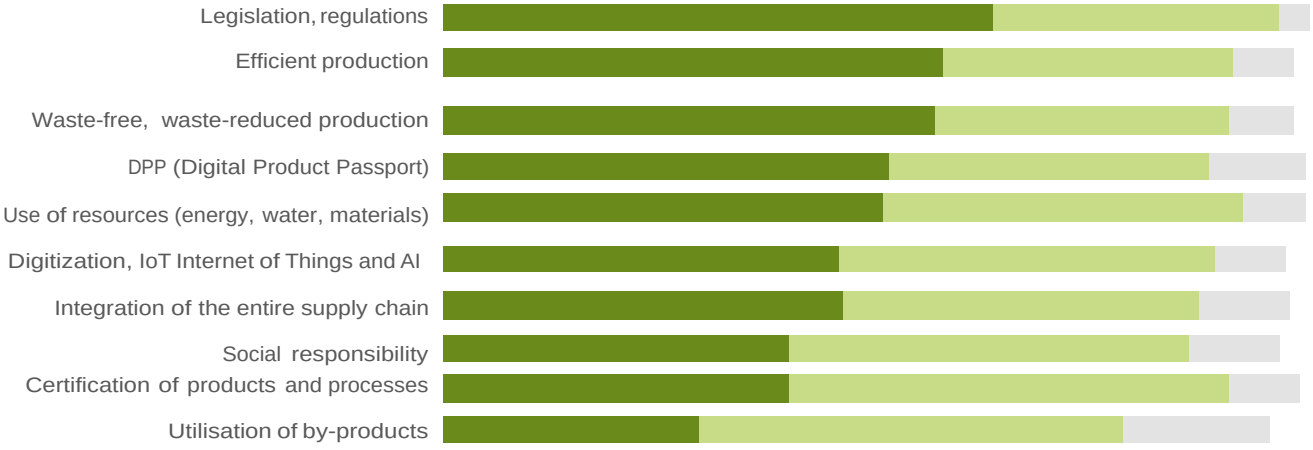
Extended Analysis of Module 3: Sustainable Manufacturing

FIGURE 4: THE MOST URGENT NEEDS ACCORDING THE COMPANIES FOR SUSTAINABLE MANUFACTURING (% OF 183 SURVEYS)



ITEM	URGENT	NOT URGENT	NOT RELEVANT
Legislation, regulations	60.1	31.1	3.3
Efficient production	54.6	31.7	6.6
Waste-free, waste-reduced production	53.6	32.2	7.1
DPP (Digital Product Passport)	48.6	35.0	10.4
Use of resources (energy, water, materials)	48.1	39.3	6.6
Digitization	45.9	37.7	8.7
IoT Internet of Things and AI Artificial Intelligence	43.7	38.8	9.8
Integration of the entire supply chain	43.2	41.0	7.7
Social responsibility	37.7	43.7	9.8
Certification of products and processes	37.7	48.1	7.7
Utilisation of by-products	27.9	46.4	15.8

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Full Skills Gaps Evidence Tables

TABLE 1: FULL SKILLS GAPS EVIDENCE WITH MS1 DECISIONS

SKILLS GAP ITEM	COUNT	% (N=183)	DECISION
MODULE 1: RECYCLING TECHNOLOGY			
Preparation for recycling	84	45.9	Core
Sorting	65	35.5	Core
Mechanical recycling	61	33.3	Reserve
Thermomechanical recycling	34	18.6	Reserve
Chemical recycling (cellulose)	35	19.1	Reserve
Chemical recycling (other)	47	25.7	Reserve
Biochemical recycling	39	21.3	Reserve
Legislation, regulations	105	57.4	Core
MODULE 2: ECO-DESIGN FOR THE CIRCULAR ECONOMY			
Product durability	73	39.9	Reserve
Proportion of materials and recycled raw materials	82	44.8	Reserve
End-of-life criteria	79	43.2	Reserve
Life cycle assessment and ecological footprint	106	57.9	Core
Repairability	49	26.8	Reserve
Refurbish, Repurpose (Upgradability)	42	23.0	Reserve
Reusability	55	30.1	Reserve
Reliability	59	32.2	Reserve
Legislation, regulations	111	60.7	Core
Traceability	92	50.3	Core
Presence of harmful substances	91	49.7	Reserve
Recycling capability	90	49.2	Reserve

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MODULE 3: SUSTAINABLE MANUFACTURING			
Use of resources (energy, water, materials)	88	48.1	Reserve
Efficient production	100	54.6	Core
Waste-free, waste-reduced production	98	53.6	Core
IoT Internet of Things and AI Artificial Intelligence	80	43.7	Reserve
Digitization	84	45.9	Reserve
Utilisation of by-products	51	27.9	Reserve
Integration of the entire supply chain	79	43.2	Reserve
Certification of products and processes	69	37.7	Reserve
DPP (Digital Product Passport)	89	48.6	Reserve
Legislation, regulations	110	60.1	Core
Social responsibility	69	37.7	Reserve

LEGEND

Core = Must-have in 12-hour masterclass

Reserve = Optional MOOC add-on unit

Out = Not prioritised for reactive training phase

Decisions finalised during MS1 workshop on 28 January 2026

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Upskilling and reskilling the textile industry sector to face the challenges in recycling, traceability and certification of recycled products