State of circularity in the Nordics

A RAMBOLL SURVEY REPORT

RAMBØLL

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Introduction

Objective of the study

Evaluating Nordic companies' readiness and strategic priorities for the transition to a circular economy.

Objective of the study

This study evaluates Nordic companies' readiness and strategic priorities for the transition to a circular economy. There is a specific emphasis on the ability to apply the European Sustainability Reporting Standard for Resource Use & Circular Economy (ESRS E5) and the EU Taxonomy for the transition to a Circular Economy.

The transition to a circular economy faces numerous challenges and barriers including definition, metrics, and consistency of interpretation across sectors. Both ESRS E5 and an EU Circular Economy Taxonomy are essential for solving such challenges.

But how aware are Nordic companies of ESRS E5 and the EU Circular Economy Taxonomy and how deep is their understanding?

What is the overall level of understanding of the benefits and financial opportunities that circular economy can bring to companies across the Nordics? How can both ESRS E5 and the Taxonomy be used to accelerate the transition to a circular economy? What do companies intend to prioritise in their work with the circular transition, ESRS E5 and the EU Circular Economy Taxonomy in the coming years? These are just some of the questions that this study seeks to answer.

Approach

It is important that the overall approach and results are meaningful and allow one to compare certain sectors. To ensure meaning and comparability, the approach entails an assessment of five specific sectors with relevant economic activities listed in the EU Circular Economy Taxonomy.

This serves two distinct purposes: a) it keeps the study focused and b) ensures that the sectors have a meaningful relationship with circular economy, i.e., the sectors are actually relevant for the circular transition.

Five sectors selected for the study*

- Plastic packaging and electronics manufacturing (referred to as 'Manufacturing')
- Water supply, sewage, waste management and remediation activities (referred to as 'Utilities')
- Construction and real estate
- Information and communication (ICT)
- Services

*sectors included in the EU Taxonomy for the transition to a circular economy

Empirical data for the study comes from a survey of Nordic companies in the five relevant sectors and follow-up interviews with several of the respondents. The survey consisted of 22 questions, designed to provide concrete evidence to enable key conclusions to be drawn with respect to the readiness of the selected sectors for the transition to a circular economy and the ability to apply the European Sustainability Reporting Standard for Resource Use & Circular Economy (ESRS E5) and the EU Taxonomy for the transition to a Circular Economy.

The study results are firstly presented as overall findings across the entire sample of companies and subsequently in individual sections for each of the five focus sectors.

Focus topics

The study focuses on five key topics, under which several sub-topics are elaborated upon.

1. Awareness and understanding: The objective under this topic is to assess companies' understanding of the requirements in CSRD ESRS E5 and the EU Circular Economy Taxonomy.
2. Circular economy progress and financial benefits: This section analyses the circular economy topics where companies have made the most progress, which internal and/or external factors have influenced their progress, and whether they have experienced financial benefits from their initiatives.
3. Future circular economy topics and drivers: Here companies' expectations about their future strategic priorities and drivers are compared to their current ones.
4. Barriers and key challenges: This topic contains an evaluation of the main barriers to circularity and the most challenging topics.
5. When is compliance/alignment expected? This section evaluates when companies expect to comply with the disclosure requirements of ESRS E5 and align with the technical screening criteria of the EU Circular Economy Taxonomy.

ESRS E5 and EU Circular Economy Taxonomy explained

Regulatory context

The European Green Deal consists of a series of major policy proposals that aim to achieve a carbon neutral Europe by 2050, where economic growth is decoupled from resource use and no one is left behind. The proposed policies are, among others, supported by the EU Sustainable Finance Strategy.

The EU Sustainable Finance Strategy and the related Action Plan for Financing Sustainable Growth support the European Green Deal by directing investments and raising finance for activities that support the sustainable transition.

A key element in the strategy is the EU Taxonomy, as a common language for sustainable economic activities. A second cornerstone in the EU Action Plan is the Corporate Sustainability Reporting Directive (CSRD) and its ten topical European Sustainability Reporting Standards (ESRS).

The EU Taxonomy and the CSRD contain extensive regulatory requirements regarding circular economy that companies will need to comply with and integrate into their strategies.

The Corporate Sustainability Reporting Directive

The Corporate Sustainability Reporting Directive (CSRD) requires companies to report on the impact of their activities on people and the environment, as well as the risks and opportunities arising from social and environmental issues.

The aim of the CSRD is to provide investors and other stakeholders with more relevant, transparent, and harmonised sustainability information across companies.

Key aspects of the CSRD include:

- A broader set of large companies, as well as listed SMEs, will now be required to report on sustainability. In total, 50,000+ companies will be subject to the CSRD.
- The CSRD introduces the ESRS, which consists of two cross-cutting and ten topic-specific standards defining how to report environmental, social, and governance (ESG) issues.

European Sustainability Reporting Standard for Resource Use & Circular Economy (ESRS E5)

ESRS E5 includes disclosure requirements on qualitative and quantitative data points. These can be grouped into three types of disclosure requirements:

01 How has the company determined whether they have related impacts, risks, and opportunities and whether they are material? This requires describing the process to identify and assess resource use and circular economy related impacts, risks, and opportunities.

02 To what extent can the company be described as circular? This requires describing the company's status quo regarding resource use and circular economy, including the quantification of the companies' resource inflows and outflows.

03 How will the company manage and improve its circularity related impacts, risks, and opportunities? This includes the company's policies to manage circular economy impacts, risks, and opportunities as well as its targets and the actions and plans to achieve its targets.

> In summary, ESRS E5 standardises how circular economy impacts, risks, and opportunities are identified, managed, and reported on.

The EU Taxonomy

The EU Taxonomy is a classification system that defines a list of economic activities with particularly high potential for contributing to the EU's climate and environmental goals.

The aim of the EU Taxonomy is to direct investments to the economic activities that are most needed for a sustainable transition, in line with the objectives of the European Green Deal.

Key aspects of the EU Taxonomy:

- The activities included in the EU Taxonomy (so-called 'eligible activities') must comply with specific environmental and social criteria to be classified as sustainable. Only when meeting all applicable criteria can companies claim that the activity is 'aligned with the EU Taxonomy'.
- The EU Taxonomy Regulation requires companies to calculate and report which share of their revenue, capital expenditure (CAPEX) and operating expenditure (OPEX) stems from activities that have the potential to contribute to the sustainable transition.

The EU Taxonomy has six environmental objectives. These are: 1) climate change mitigation 2) climate change adaptation 3) sustainable use and protection of water and marine resources 4) **transition to a circular economy** 5) pollution prevention and control and 6) protection and restoration of biodiversity and ecosystems.

EU Circular Economy Taxonomy

Currently, the EU Circular Economy Taxonomy identifies 21 economic activities that have the potential to substantially contribute to the transition to a circular economy. The 21 activities are grouped into five specific sectors:

01 Manufacturing: Plastic packaging goods, electrical and electronic equipment.

02 Water supply, sewerage, waste management and remediation activities: Waste collection and transport, sorting and material recovery of non-hazardous waste, phosphorous recovery from wastewater etc.

03 Construction and real estate activities: Construction of new buildings, renovation of buildings, use of concrete in civil engineering etc.

04 Information and communication: Provision of IT/OT data-driven solutions supporting the circular economy.

05 Services: Repair, refurbishment, remanufacturing, sale of spare parts, marketplace for trading second-hand goods etc.

> The Taxonomy gives clear guidance in the technical screening criteria for each of the 21 identified economic activities, as to what companies need to do to make a substantial contribution to the transition to a circular economy and what it means to do no significant harm.
>
> The Taxonomy is also a transparency tool, requiring relevant companies and investors to disclose their share of Taxonomy-aligned activities in terms of revenue, CAPEX and OPEX. The disclosure of the proportion of Taxonomy-aligned activities allows for a comparison between relevant companies.

Executive summary

Introduction

This study evaluates Nordic companies' readiness and strategic priorities for the transition to a circular economy with a specific emphasis on the ability to apply the European Sustainability Reporting Standard for Resources Use & Circular Economy (ESRS E5) and the EU Taxonomy for the transition to a Circular Economy.

The transition to a circular economy faces numerous challenges and barriers including definition, metrics, and consistency of interpretation across sectors. Both ESRS E5 and an EU Circular Economy Taxonomy are essential for solving such challenges.

The aim of the CSRD is to provide investors and other stakeholders with more relevant, transparent, and harmonised sustainability information across companies. The CSRD includes Sustainability Reporting Standards (ESRS) of which ESRS 5 Resource Use & Circular Economy is one.

The EU Taxonomy is a classification system that defines a list of economic activities with particularly high potential for contributing to the EU's climate and environmental goals.

Approach

It is important that the overall approach and results are meaningful and allows one to compare certain sectors. To ensure meaning and comparability, the approach entails an assessment of five specific sectors with relevant economic activities listed in the EU Circular Economy Taxonomy. This serves two distinct purposes a) it keeps the study focused and b) ensures that the sectors have a meaningful relationship with circular economy i.e., the sectors are actually relevant for the circular transition.

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AWARENESS AND UNDERSTANDING

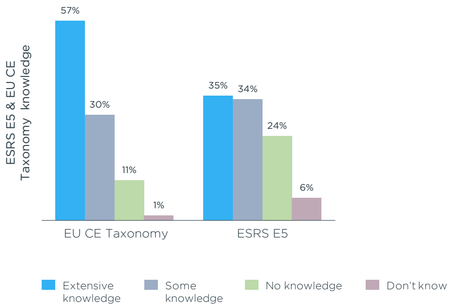
Detailed understanding of circular economy requirements is lacking across all sectors and countries

Awareness and understanding 01

Most companies across sectors and countries are aware of the applicability of ESRS E5 to their business, but detailed understanding of the requirements is lacking. Awareness and understanding of the EU CE Taxonomy is similarly limited.

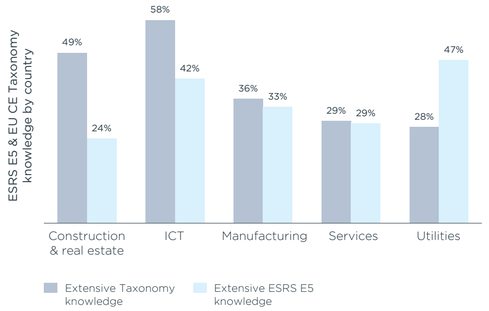
Overarching insights

Most companies in the sample are aware they have eligible activities for the EU CE Taxonomy and will also need to report on the CSRD standard for resource use and circular economy (ESRS E5). Working with the requirements will first and foremost require an in-depth understanding. To date, about 30% of the affected companies report extensive knowledge of ESRS E5 and slightly more than half report it for the EU CE Taxonomy.



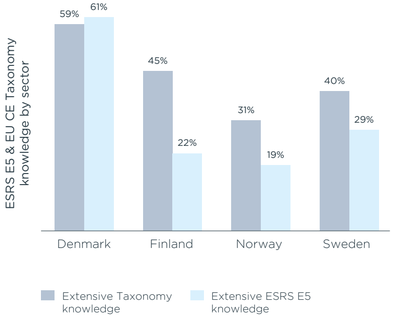
Sector insights

Utilities in the sample have most knowledge of ESRS E5, and construction and real estate companies have the least. For the EU CE Taxonomy, ICT companies have the most extensive knowledge, and the utilities have the least.



Country insights

Danish companies in the sample have the most extensive knowledge of both ESRS E5 and EU CE Taxonomy. Norwegian companies have the least extensive knowledge of ESRS E5 and the EU CE Taxonomy.



CIRCULAR ECONOMY PROGRESS AND FINANCIAL BENEFITS

Current circular economy progress revolves around waste management and reducing GHG emissions

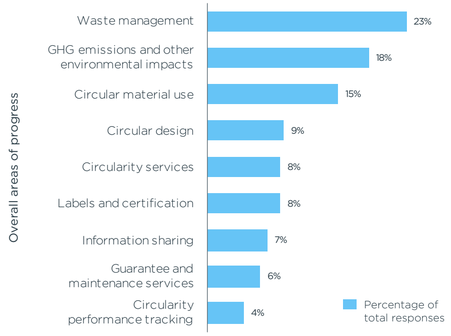
Circular economy progress and financial benefits

02

Most progress so far is within waste management and mitigating GHG emissions and other environmental impacts. About 60% of companies are not yet able to monetise on circular economy initiatives.

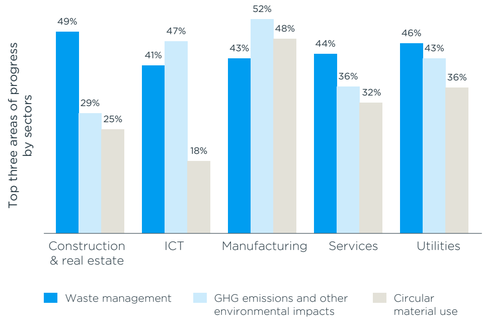
Overarching insights

The companies surveyed are making the most progress on waste management, mitigating GHG emissions and other environmental impacts, and circular material use. The primary drivers for their circular economy efforts are regulatory requirements, their own strategic priorities, and customer pressure. 40% report financial benefits from their CE efforts, for 28% of this group, the financial benefits are extensive.



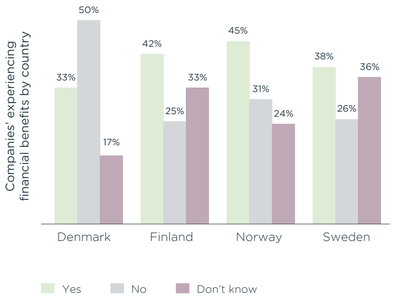
Sector insights

Across all sectors, companies report waste management or mitigating GHG emissions as one of their top three areas of progress. This is followed by circular material use, with some variation across sectors (48% of companies from the manufacturing sector and 18% from the IT sector). The largest shares of companies to report financial benefits are in the service sector and utilities sector.



Country insights

The top three areas of progress do not differ significantly across countries. Mitigating GHG emissions and other environmental impacts is the main area of progress across the respondents from all countries. The largest share of companies reporting financial benefits is among Norwegian respondents.



FUTURE CIRCULAR ECONOMY TOPICS AND DRIVERS

Future circular economy topics and drivers reflect that companies will work with more topics

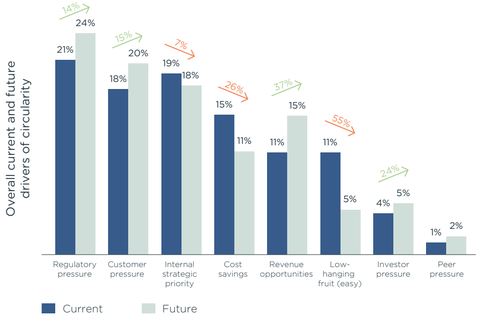
Future circular economy topics and drivers

03

Companies' circular economy priorities are limited and focused on waste management. In future, new priorities such as circularity performance tracking and information sharing become increasingly important. Most companies expect regulatory and customer pressure to drive circular economy progress.

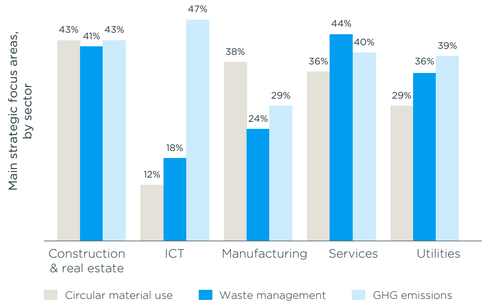
Overarching insights

Future circular economy topics continue to be circular material use, mitigating GHG emissions, and waste management. However, the work on circular economy is expected to include more topics, such as circularity performance tracking. While regulatory pressure, customer pressure and internal strategic priorities continue to be the main drivers, revenue opportunities, investor pressure and peer pressure grow in importance.



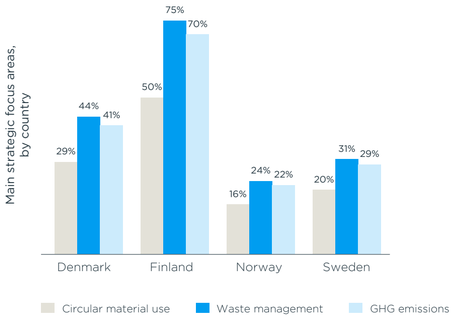
Sector insights

Future focus topics differ by sector, reflecting the sectors' main environmental and circularity challenges. Companies from the construction and real estate sector concentrate their focus on the three top overall priority areas. For the manufacturing sector, circular material use stands out as a key future priority area, waste management for the service sector, and reducing GHG emissions for the ICT sector.



Country insights

Country differences are less prominent. Waste management is the top priority across all countries, followed by reducing GHG emissions and circular material use. Companies from Norway and Sweden plan to work on a broader range of topics. In Denmark and Finland, future efforts seem more concentrated on the top three priority areas.



BARRIERS AND KEY CHALLENGES

Knowledge and skills are needed in all sectors to drive progress in challenging circular economy topics

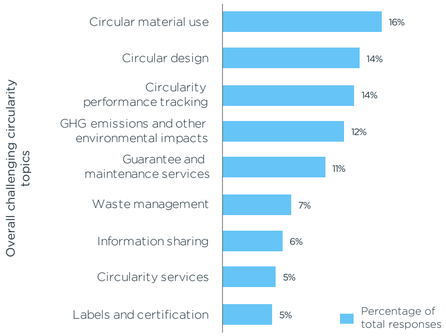
Barriers and key challenges

04

A lack of knowledge and skills is the key barrier to progress, hindering what companies perceive to be the most challenging circular economy topics: circular material use, circular design, and circular performance tracking.

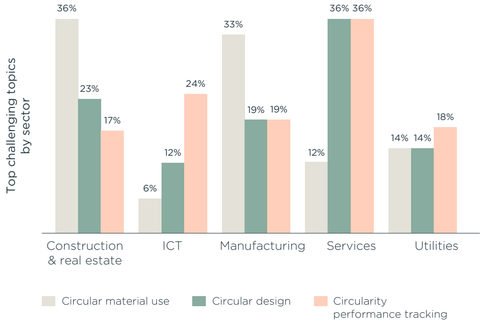
Overarching insights

A lack of knowledge and skills stands out as the key barrier to progress in circular economy topics, with regulatory barriers and customer preferences following closely. Circular material use is the most challenging topic for Nordic companies, followed by circular design and circular performance tracking.



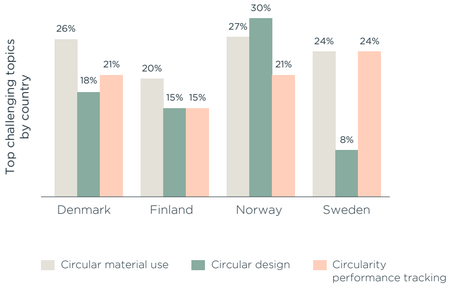
Sector insights

Knowledge and skills is reported to be the most important barrier across almost all sectors, with only the utilities sector regarding regulation as the primary barrier. Circular material use is most frequently selected as the most challenging topic by those in the construction and real estate and the manufacturing sectors. Circular performance tracking to facilitate further decisions and improvements is also a key challenge, mostly reflected in the responses from the ICT, services, and utilities sectors.



Country insights

There are no major country differences for key barriers. Circular material use and circular performance tracking are selected by a similar share of companies across the different countries. Circular design is selected by a slightly higher percentage of Norwegian respondents (30%) and by quite a low percentage of Swedish respondents (8%).



WHEN IS COMPLIANCE/ALIGNMENT EXPECTED?

Nordic companies have clear ambitions to apply ESRS E5, but are more uncertain when it comes to the EU Circular Economy Taxonomy

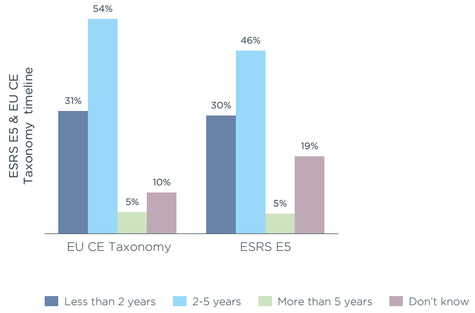
When is compliance/ alignment expected?

05

Most companies expect that it will be feasible to disclose the requirements of ESRS E5 within 2-5 years. However, most companies are uncertain about their ambition to align with the technical screening criteria for the circular economy objective of the EU Taxonomy.

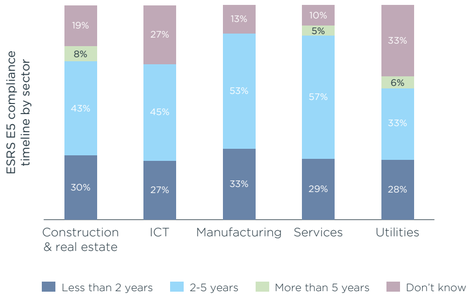
Overarching insights

Most of the surveyed companies expect that they will be CSRD compliant and applying ESRS E5 within 2-5 years. About 30% expect to be ready in less than 2 years. 70% of the respondents are unsure whether they want to comply with the applicable EU Taxonomy criteria on circular economy. If the ambition exists, most aim for compliance within the next five years.



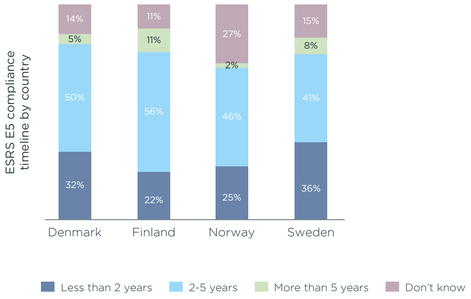
Sector insights

There are no major sector differences with regards to ESRS E5 readiness. The share of companies with an ambition to align with the EU CE Taxonomy criteria is highest in manufacturing.



Country insights

There are no major differences between countries with regards to ESRS E5 readiness, nor are there significant differences between countries when to comes to the ambition to align with the EU CE Taxonomy criteria.



Sector analysis – key take-aways

Construction and real estate

70% of companies expect to apply ESRS E5, while only 24% have extensive knowledge of the standard. Most companies expect it is feasible to comply within 2-5 years. Half of respondents have business activities relevant to the EU Circular Economy Taxonomy, but only 25% have a clear ambition to comply with the technical screening criteria – and nearly 40% are uncertain.

Material use is the most challenging topic and the strategic focus for construction and real estate companies. Rigid or outdated regulation, mainly for quality and safety standards, is seen as the largest barrier to progress.

Manufacturing

The manufacturing companies participating in the survey have the least knowledge of both the ESRS E5 and the EU Circular Economy Taxonomy, when compared to other sectors. 38% of the respondents 'don't know' about the materiality of ESRS E5, with 48% choosing 'don't know' in answer to the question about the relevance of the Taxonomy. In the case of the Taxonomy, this may be explained by the narrow scope of activities that are currently included in the criteria, namely the manufacturing of plastic packaging and electronics.

Material use is the most challenging topic for this sector and is also a current and future strategic focus area. Quality requirements are the biggest concern for circular material use, with focus in particular on electronic components, with companies often opting for new materials due to the high standards needed.

Services

Most service sector companies expect to apply ESRS E5 in their CSRD reporting (88%), and most will do so within 2-5 years. Fewer companies know if the EU Circular Economy Taxonomy is relevant, and only 32% have a clear ambition to comply with the technical screening criteria.

Many service sector companies have experienced financial benefits from circular services (52% of respondents), but they still face a barrier when it comes to the quality and speed of service delivery expected by customers. In the future, companies offering circular services expect to focus much more on performance tracking, an area which they find to be the most challenging.

Utilities

Almost all the surveyed utility companies (78%) understand that ESRS E5 is material to them, and over half already have extensive knowledge of its criteria. However, a third are not sure about when they expect to comply.

As with other sectors, far fewer companies (54%) say that the EU Circular Economy Taxonomy is relevant to them and only 28% have extensive knowledge of its requirements.

Utility respondents see the mitigation of GHG emissions and other environmental impacts as the most challenging topic, and this is also the area of their current and future strategic focus.

Information and communication

Surveyed ICT companies are knowledgeable of both ESRS E5 and the EU Circular Economy Taxonomy, although most do not yet have an ambition to align activities with the technical screening criteria. Most surveyed companies expect to fully comply with ESRS E5 already within the next two years.

Circular economy performance tracking and information sharing are the most challenging topics, according to surveyed respondents.

Circular economy services is a topic that is expected to become much more relevant in the future, with strategic focus already beginning to focus on this.

Conclusion

Key conclusions

Several key conclusions can be drawn from the study, ranging from a lack of understanding and a need for upskilling to emphasis being placed on regulation both as a driver but also a barrier. These do not come as a surprise. However, the study does shine a light on some issues that perhaps were less obvious, such as the overall attitude in relation to the EU Circular Economy Taxonomy.

Awareness and understanding

Awareness of the ESRS E5 and the EU CE Taxonomy exists, but there is an evident lack of understanding of the disclosure requirements and criteria that they entail. ESRS E5 and the EU CE Taxonomy are only in force since the 1st January 2024 and listed companies are currently grappling with both, creating a somewhat chaotic sustainability landscape.

Waste management

The circular economy is still very much linked to waste management for most of the companies involved in the survey, and moving away from this perception is a challenge. Understanding and including the comprehensive range of circular economy topics will be critical in the future.

Maturity imbalance

All the companies surveyed have eligible economic activities as part of the EU CE Taxonomy and the vast majority are in scope of the CSRD with ESRS E5 as a material disclosure topic. However, the level of circular maturity differs vastly from company to company, indicating the challenge that exists to place circular economy at the centre of a company's sustainability and business strategy.

Climate change mitigation

Only 18% believe the circular economy's role in mitigating GHG emissions to be a strategic priority. That means there is still a lot work needed to raise awareness and to educate companies about the link between circular economy and climate change mitigation.

Monetising circular economy

Monetising the circular topics and associated actions as well as clearly illustrating the benefits in financial and monetary terms is still a challenge for about 60% of companies, making it a significant barrier.

Taxonomy confusion

For the EU CE Taxonomy, the study illustrates a clear lack of understanding as well as confusion about the Taxonomy's overall purpose and worth.

Moving forward

Both the European Sustainability Reporting Standard for Resource Use & Circular Economy (ESRS E5) and the EU Circular Economy Taxonomy are only in force since the 1st January 2024. This means that the entire associated sustainability landscape is still somewhat chaotic. Nevertheless, both ESRS E5 and the EU Circular Economy Taxonomy are here to stay.

Embrace them as an opportunity

It is advisable to embrace both and see them as a real business opportunity, not only a compliance exercise.

Taxonomy definition

The Taxonomy finally provides clarity and defines what circular economy is for all included sectors and at company level, removing the abstract nature of the concept.

Access to finance

Companies that prioritise taxonomy alignment can enhance their ability to attract investment and gain access to finance, as it creates trust in financial market participants and encourages investment into the green transition.

Circular strategy

In essence, ESRS E5 requires a circular economy strategy. The companies that recognise this earlier will not only have stronger disclosures but will also have a clear circular economy pathway.

Financial risks and opportunities

Understanding financial risks and opportunities as well as material dependencies is critical to the overall business strategies of all companies under the EU CE Taxonomy and CSRD ESRS E5.

Resource flows

An understanding of the total resource flows in and out of companies' organisations is essentially absent. This needs to change, as it will be fundamental to understanding and managing the real sustainability impact.

Competitive advantage

The EU CE Taxonomy and ESRS E5 enable companies within a particular sector to be directly compared with one another, based on the same language and metrics. Companies that understand this will adapt to the resulting market changes in the next 2-3 years and react accordingly, gaining a competitive advantage.

Market needs

Both the ESRS E5 disclosure requirements and EU CE Taxonomy criteria are seeping into procurement and are increasingly transforming value chains. Being able to deliver products, services, and data for the circular economy will be essential to respond to the upcoming market needs

Study results

Awareness and understanding

Circular economy progress and financial benefits

Future circular economy topics and drivers

Barriers and key challenges

When is compliance/alignment expected?

STUDY RESULTS

Awareness and understanding

ESRS E5 awareness and understanding

The CSRD includes the standard ESRS E5 Resource Use and Circular Economy. Surveyed companies were asked whether ESRS E5 would be applied in their reporting and, if yes, how well they know the details of the standard.

Most of the respondents in the sample fall within the scope of the CSRD and expect to apply ESRS E5 in their reporting. Close to 80% of the total survey respondents expect to be required to report according to the CSRD within the next three years. Of those expecting to report on CSRD, 73% expect to apply ESRS E5. In other words, most of the respondents see 'resource use and circular economy' as being material to their business.

However, there is significant uncertainty among the respondents, and 23% are not sure about the materiality of ESRS E5 to their business.

The respondents lack extensive knowledge and understanding of how to apply ESRS E5. Most of the respondents are aware of the standard, but only 35% consider themselves to have extensive knowledge. Between countries, Danish respondent companies stand out as having the most extensive knowledge (61%), in stark contrast to Norwegian companies who have the least (19%).

Dividing respondents between sectors, the surveyed utilities companies have the most extensive knowledge (47%). This makes sense as these companies are the ones where ESRS E5 is most explicitly material to the business model.

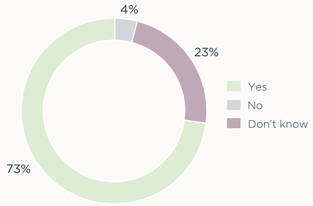
Surveyed companies are at various stages of ESRS E5 awareness and understanding. In interviews, companies who are at an early stage see how extensive the standards and requirements are as being a major challenge to an in-depth understanding. Those that have already conducted a double materiality assessment appear to be the most knowledgeable. These companies emphasise that understanding the standards is a long process, where the double materiality assessment is the first step.

In an interview, a service company in Denmark mentioned their eagerness to see how other companies in the industry approach the reporting process to guide their own understanding. Several other companies, that already collect data on many of the relevant KPIs, mention that they will attempt to report on their material topics before they are required to do so and use this as a learning experience to understand where their gaps are. Some companies have engaged external advisors to support their process with outside expertise.

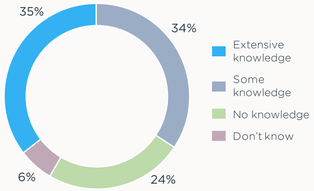
> "We are curious as to how other companies within our sector interpret the disclosure requirements and find ourselves quite challenged with defining and setting up the required datapoints.

Kristian Sannemand Lund Kristensen
Head of Sustainability & Network development, Semler Gruppen A/S

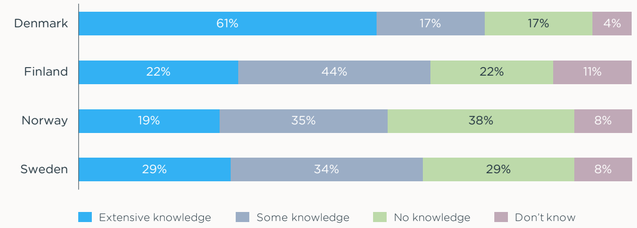
Applicability of ESRS E5
(% of respondents)



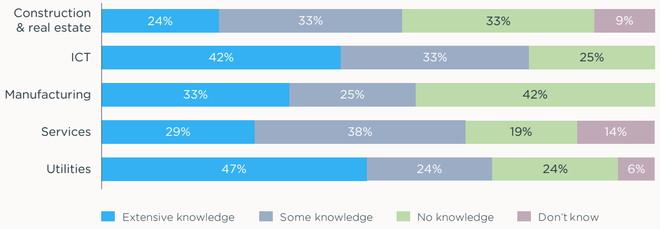
Knowledge of ESRS E5
(% of respondents using it)



Knowledge of ESRS E5 (% of respondents using it from each country)



Knowledge of ESRS E5 (% of respondents using it from each sector)



Benefits of applying ESRS E5

Surveyed companies were asked to select up to three key benefits of applying ESRS E5 to their sustainability reporting.

The key perceived benefits of applying the standard are the guidance it provides for a structured approach to sustainability, regulatory compliance, and the chance to demonstrate a competitive advantage. These three collectively account for 70% of the respondents' selected benefits of reporting and applying ESRS E5.

1. Opportunity and guidance for more structured ESG management

Surveyed companies recognise that the CSRD and accompanying ESRS standards broaden the scope of sustainability, providing them with a structured approach to integrating a wider range of sustainability considerations. 24% of the selected top three benefits included opportunity and guidance for more structure ESG management. Interviewees across countries and sectors reflect that they have previously not been sure which topics to approach and how to approach them. Where they previously might only have been considering climate and emissions as the most important environmental topic, ESRS E5 provides a broader framework for circular economy that they can integrate into their company strategies.

2. Regulatory compliance

Regulatory compliance is the second most selected benefit (23%). Companies recognise, and reflect on in interviews, that they understand the need for compliance and will dedicate the appropriate resources to do so. Several of the smaller companies, regardless of sector, mention that they acquire outside expertise to support with understanding and implementing CSRD requirements. Companies, big and small, are dedicating significant resources towards regulatory compliance.

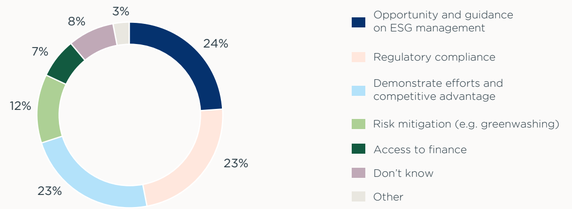
3. Demonstrate efforts and competitive advantage

Selected in 23% of responses, the chance to demonstrate a competitive advantage was reflected in interviews, particularly by companies that are very advanced in their efforts. For some companies, ESRS E5 is very welcome because circularity is already a key part of their business. The CSRD provides them with the opportunity to demonstrate their efforts publicly, thus gaining a competitive advantage. A Swedish company offering circular services in the textile sector emphasised that they are pleased that the common framework helps them demonstrate how extensive their circularity efforts are.

> **Guided by our double materiality analysis, circular economy will become more concrete and touch upon more topics, in addition to waste management.**

Aleksander Probst Otovic
Head of Sustainability,
MT Højgaard

Expected benefits of applying ESRS E5 among companies expecting to use the standard (% of respondents)



EU Circular Economy Taxonomy awareness and understanding

Surveyed companies were asked whether their economic activities are eligible for the EU Circular Economy Taxonomy and, if yes, how well they know the applicable criteria.

Most of the survey respondents know that they have business activities included in the EU CE Taxonomy, but a significant portion of the respondents are unsure about their eligibility.

Approximately half (49%) of the total respondents are aware that their company's economic activities are included in the EU CE Taxonomy, approximately 34% are not sure, and the remainder responded that they are not Taxonomy eligible.

Across the four countries and five sectors, this distribution between eligible, ineligible and unsure respondents is roughly the same. These results indicate that there is a significant knowledge gap about the relevance of companies' own business activities to Taxonomy requirements.

The respondents with EU CE Taxonomy eligible business activities lack knowledge of the technical criteria.

57% responded that they have extensive knowledge of the criteria, with the remaining 43% believing they have insufficient knowledge.

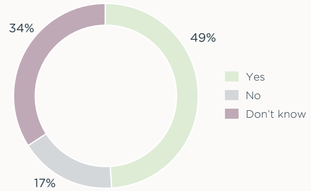
From the sector perspective, respondents from the ICT sector are found to have the most extensive knowledge on the EU CE Taxonomy (58%) and respondents from the utilities sector the least (28%). Comparing countries, results show that surveyed Danish companies most often indicate extensive knowledge (59%), and Norwegian companies least (31%).

The vast knowledge gap is also reflected in interviews, where interviewees often indicated that they have started to investigate the EU CE Taxonomy requirements but are very early in the process. Many are seeking knowledge from external experts, through their business networks, or by looking at other companies in their industry.

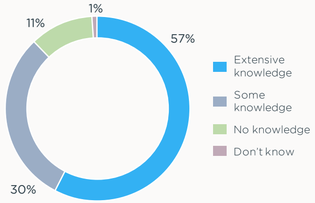
> **We use external consultants to help us define what activities are Taxonomy eligible and aligned for us – as part of our preparations for new sustainability reporting requirements. We want to have the knowledge internally, but as we are a small team, we need external help as well. We have also started internal work on sharing information on the Taxonomy and its implications for our company.**

Guro Steine
EVP Group Director Communications & Sustainability, GK Gruppen AS

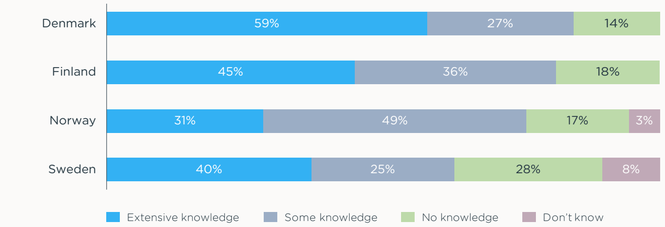
Eligibility for the CE Taxonomy (% of respondents)



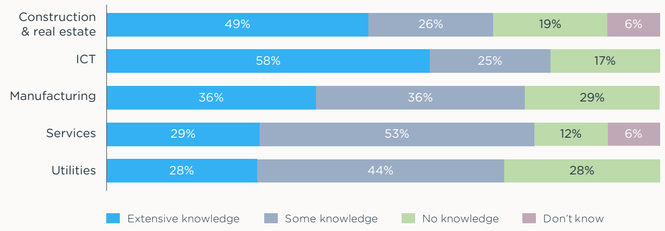
Knowledge of the applicable criteria (% of eligible respondents)



Knowledge of the applicable criteria (% of eligible respondents from each country)



Knowledge of the applicable criteria (% of eligible respondents from each country)



Benefits of alignment with the EU Circular Economy Taxonomy

Surveyed companies were asked to select up to three key benefits of aligning with the criteria of the EU Circular Economy Taxonomy.

Aside from regulatory compliance, confirmation that sustainability efforts are on track, competitive advantage and risk mitigation stand out as the most prominent benefits of aligning with the EU CE Taxonomy.

1. Confirmation that sustainability efforts are on the right track

Accounting for 19% of responses, the second most important benefit is believed to be the fact that the Taxonomy provides confirmation that sustainability efforts are on track. This positions the Taxonomy as an important guide for sustainability strategies. In the follow-up interviews, several interviewees highlighted that the Taxonomy serves as a useful benchmark, allowing them to determine the sustainability of their business choices and actions.

2. Competitive advantage

Many of the respondents also view Taxonomy alignment as a source of competitive advantage. In an interview, a construction company mentioned that a significant benefit is that all customers will be asking for the same data, so the ability to collect and share good quality data with their potential customers would be an advantage in future.

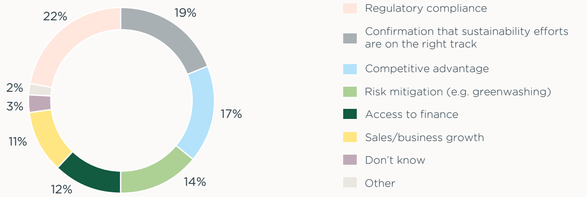
3. Risk mitigation

Some respondents recognise that the Taxonomy is beneficial for risk mitigation. For example, one interviewee from the services sector highlighted that by aligning with the CE Taxonomy, their circular economy efforts would be expressed in clear financial terms, minimising the risk of perceived greenwashing. Aligning with the Taxonomy is also beneficial for risk mitigation in companies' supply chains. Procuring reused or recycled materials can minimise their reliance on virgin materials that may come from non-EU countries where human rights and related risks are usually more prominent.

> **With the EU Taxonomy, we now have a common framework to use as a benchmark. The benefits are that it creates clarity about what needs to be done, not just for us and our operations, but also in terms of demands we need to make of actors along the value chain.**

Dennis Fredin
Reponsible for Quality, Environment and Working Environment, Kålltorps Bygg

Expected benefits of alignment with the EU CE Taxonomy with eligible economic activities (% of respondents)



STUDY RESULTS

Circular economy progress and financial benefits

Circular economy progress

To understand companies' current priorities, they were asked to select up to three topics where have made the most progress.

The top areas of progress are waste management, mitigating GHG emissions and other environmental impacts and circular material use. Findings show that much less progress is made on topics with higher circular economy impact, e.g., circular design. Waste management constitutes 23% of all answers, mitigating GHG emissions and other environmental impacts 18% and circular material use 15% of all answers.

Least progress is reported on circularity performance tracking (4%), indicating that surveyed companies have very little knowledge of how to monitor and assess their circular economy efforts.

Progress on circular economy topics differs with country and sector. For instance, mitigating GHG emissions and other environmental impacts and circular material use are especially prominent among companies in the manufacturing sector. Here, 52% and 48% of all participants from the manufacturing sector consider the two circular economy topics as top progress areas. Several manufacturing companies highlighted in the interviews that work with circular material use was key to reducing their GHG footprint and environmental impacts.

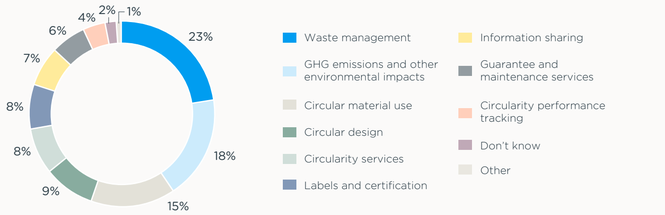
In contrast, circular material use is reported as a progress area by only 18% of companies from the ICT sector and by only 11% of Norwegian companies.

The service sector stood out as the only sector, where circular services are a top progress area (48%). Reducing GHG emissions and other environmental impacts and waste management are priority areas, especially for Finnish and Danish companies.

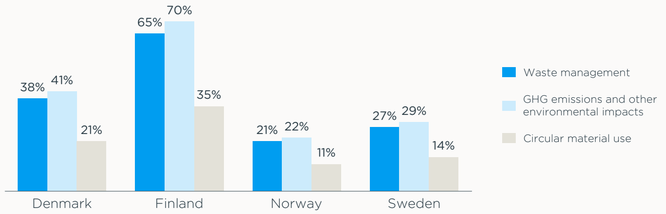
> "Emission reduction across all three scopes is our main target and circularity is an important step to reach those goals. We are encouraging our suppliers to source more recyclable materials and enable reuse in the products we use to become more circular.

Guro Steine
EVP Group Director Communications & Sustainability, GK Gruppen AS

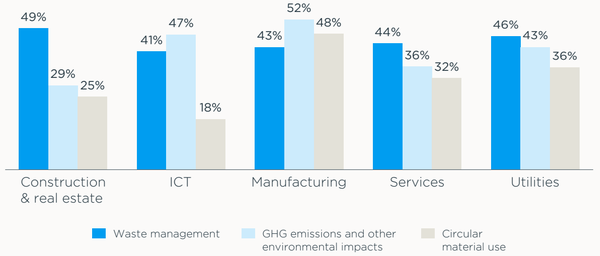
Overview of top circular economy progress topics
(in % of total responses)



Top three topics of circular economy progress, country perspective
(in % of respondents from each country)



Top three topics of circular economy progress, sector perspective
(in % of respondents from each sector)



Drivers of circular economy progress

Surveyed companies were asked to select up to three drivers of their circular economy progress.

Across the Nordic countries, regulatory requirements, companies' strategic priorities, and customer pressure are the key drivers that determine companies' focus areas. Regulatory requirements make up 20% of all answers, companies' strategic priorities 19%, and customer pressure 17%.

Interviews showed that the key drivers are also heavily interlinked. Several interview participants shared that they are actively pushing for regulatory requirements as it enables a level playing field and helps them progress on circular economy topics together with their company ecosystem and value chain.

Hence, it becomes more common for companies to experience that their customers ask for more circular solutions or that they themselves make demands to their suppliers.

The three key drivers are felt most strongly among Danish companies, whereas drivers are very diverse for the Finnish companies. 50% of the Danish companies indicate regulatory pressure as a key driver, but only 30% and 31% of Finnish and Swedish companies. Customer pressure is ranked as a top three driver by 41% of Danish companies, but only by 15% of Finnish companies.

One of the Finnish interview partners shared that customers were hesitant to buy recycled materials due to the higher price and that they were still lacking a market for recycled materials. In their case, recycled materials also affected the quality and durability of their products.

Especially for service sector companies, regulatory requirements are a dominant driver (48% of companies from that sector). Internal strategic priority is the most common driver in the manufacturing sector (48%). Customer pressure scores similarly across sectors (24%-33%).

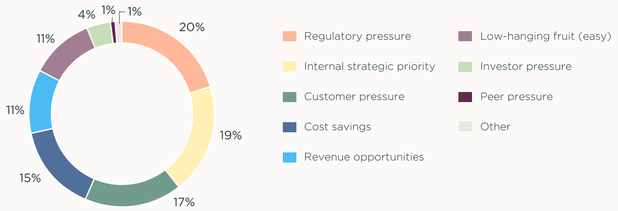
A Danish manufacturing company in the construction sector, for example, shared that their customers are starting to demand EU Taxonomy documentation and materials with high recycled content. Consequently, recycled content and take back programmes are a key internal strategic priority.

This also illustrates how the top three circular economy drivers of regulatory requirements, customer pressure, and strategic priorities are highly interlinked and trigger change towards the circular economy throughout the whole value chain.

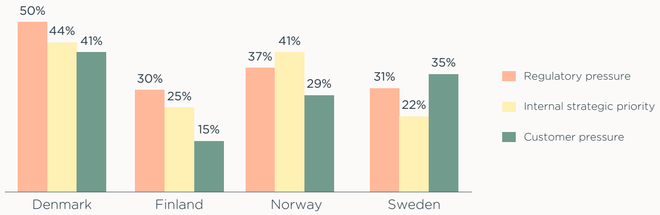
> "Our stakeholders are pushing for circularity concepts which eventually leads to new business opportunities.

Kristian Sannemand Lund Kristensen
Head of Sustainability & Network development, Semler Gruppen A/S

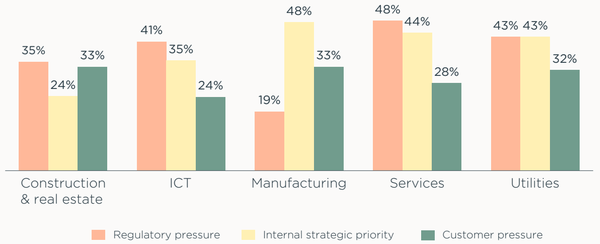
Overview of drivers of circular economy progress
(in % of responses)



Top three drivers of circular economy progress, country perspective
(in % of respondents from each country)



Top three drivers of circular economy progress, sector perspective
(in % of respondents from each sector)



Financial performance of circular economy efforts

Surveyed companies were asked if they have experienced financial benefits from their circular economy efforts. If yes, they were asked to indicate the size of these financial benefits.

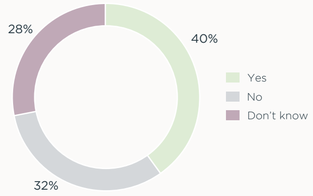
Financial benefits of circular economy efforts are dependent on the sector and business model. Almost half of the surveyed companies report financial benefits from CE efforts. However, half of these companies report that these are minor benefits. In total, 40% of surveyed companies report financial benefits from their circular economy initiatives. 52% of those companies rank them as 'some' or 'extensive financial benefits'. These financial benefits primarily arise from cost savings, for example where products can be reused, and new revenue streams where products are transformed into higher value products.

Financial benefits are especially prominent for companies operating in the service sector (52%) and in utilities (47%). Here, companies often have business models based on circular economy principles. A good example of this is a Danish collector of biowaste that was interviewed for this study. By collecting organic materials and transforming them into higher value products, the company taps into new business opportunities and revenue streams. Other interview participants, however, highlighted the extra costs connected to recycled material or reuse, especially in the construction and manufacturing sector.

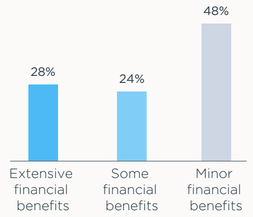
> **We experience cost-savings when our clothes and textiles can be repaired and reused. Durability and efficient maintenance are key for the cost effectiveness.**

Ulla Luhtasela
Sustainability Director, Lindström

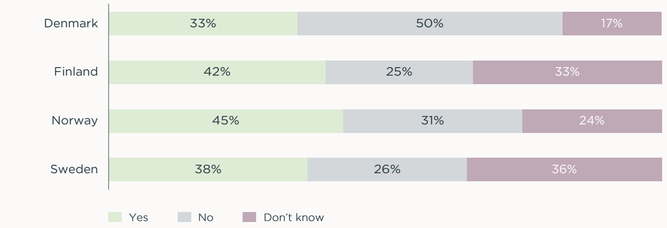
Existence of financial benefits (% of respondents)



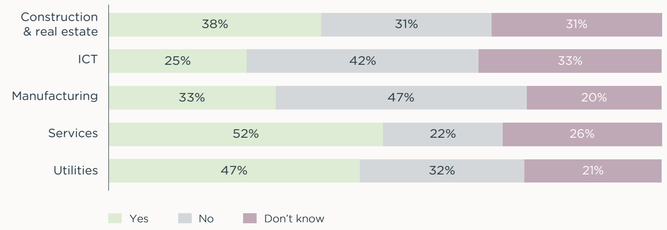
Size of financial benefits (% of respondents with benefits)



Existence of financial benefits, country perspective
(% of respondents from each country)



Existence of financial benefits, sector perspective
(% of respondents from each sector)



STUDY RESULTS

Future circular economy topics and drivers

Future circular economy topics

Surveyed companies were also asked to select the top three topics they will focus on in the next five years. Their answers were compared to those made in response to the question about their current strategic focus areas.

The circular economy topics for which companies reported most progress, namely reducing GHG emissions and other environmental impacts, waste management, and circular material use, continue to act as strategic priorities in the future, but with a larger number of topics ranked as being important. A few game changers, including information sharing and circularity performance tracking, grow in importance. Other circular economy topics increasing in strategic importance include circularity performance tracking (76%), information sharing (43%), circular material use (21%). Labels and certification, guarantee and maintenance services, and waste management are found to decrease in strategic importance compared to current priorities (-45%, -23% and -20%, respectively).

Future strategic priorities differ by sector, reflecting the sectors' main environmental and circular economy challenges. In particular, companies from the construction and real estate sector report focus on the three top priority areas (41-43% of all surveyed companies from that sector).

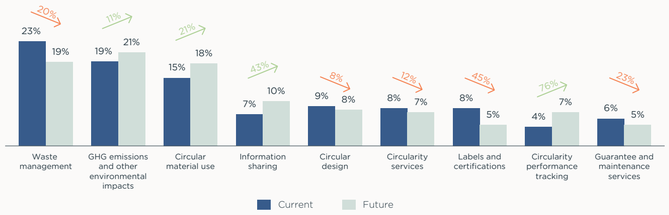
For the manufacturing sector, circular material use stands out as a key future priority area (38% of all surveyed companies from that sector), waste management for the service sector, and reducing GHG emissions and other environmental impacts for the information and communication sector.

An interviewed participant from the ICT sector mentioned Green IT and Green Code Methods as future initiatives to drive circular economy progress in the open answers of the questionnaire. Manufacturing companies name the development of recyclable materials and products and collaboration with the downstream value chain to increase recycling as important initiatives for the coming years.

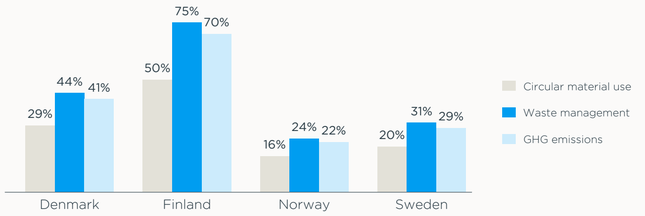
> "We bought the largest repair service in the Nordics. This was a strategic choice. It is about how we as an electronics retailer will make money, also in 2030 and 2040.

Camilla Gramstad
Head of Sustainability, Elkjøp

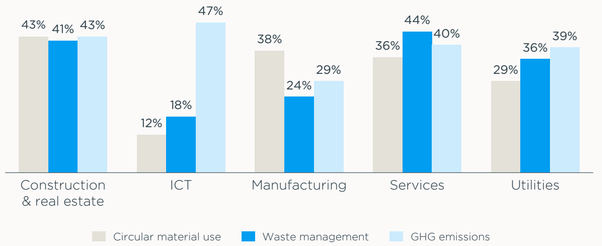
Overview of current and future circular economy focus topics (% of responses)



Overview of top three future circular economy focus topics, country perspective (% of respondents from each country)



Overview of top three future circular economy focus topics, sector perspective (% of respondents from each sector)



Drivers of future circular economy progress

Surveyed companies were asked to select up to three key future drivers for circular economy progress.

The main reported drivers behind future circular economy efforts are identical to the current main drivers: regulatory pressure, customer pressure and internal strategic priority. Regulatory pressure makes up 24% of responses, customer pressure 20%, and internal strategic priority 18%. Drivers of regulatory pressure and customer pressure are perceived to be even more important in future and increase with 14% and 15%, respectively. Also, revenue opportunities are more often selected as a future driver compared to current drivers (+37%).

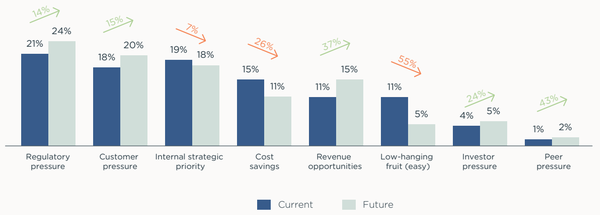
Even though only 5% and 2% of surveyed companies selected investor pressure and peer pressure as the top three drivers for their work with circular economy, these also appear to grow in importance.

Top drivers for future efforts differ by sector. While regulatory and customer pressure are indicated as key drivers in the construction and real estate sector, customer pressure and internal strategic priority dominate in the other four sectors. One of the interviewed construction companies mentioned that being first on the market with a circular solution can drive revenue. However, customer ambitions are also rated highly, so it is considered crucial to find the right timing for new offers.

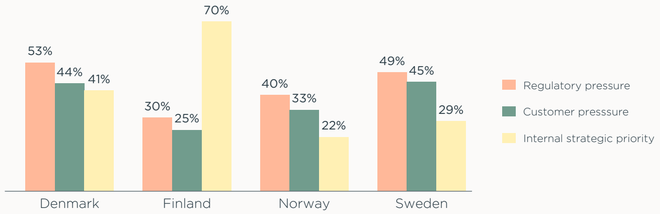
> **Circularity is also linked back to emissions because we know that purchased goods and services are a major part of our emissions. In the future, emissions will be costly, so increased circularity is also cost saving.**

Ulla Luhtasela
Sustainability Director, Lindström

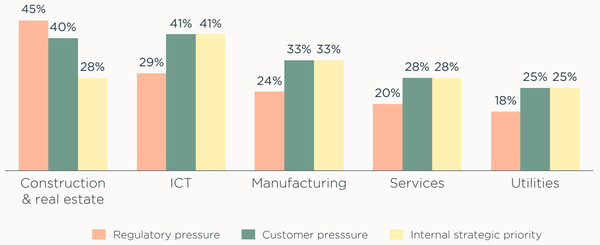
Overview of current and future drivers of circular economy progress (% of responses)



Overview of current and future drivers of circular economy progress, country perspective (% of respondents from each country)



Overview of current and future drivers of circular economy progress, sector perspective (% of respondents from each sector)



Barriers and key challenges

Barriers to circular economy progress

Surveyed companies were asked to select up to three of the most important barriers to circular economy.

Lack of knowledge and skills stands out as the key barrier to circular economy progress, with regulatory barriers and customer preferences following closely.

1. Knowledge and skills

At both the country and the sector level, knowledge and skills stands out as the key barrier to circular economy progress. The service sector stands out in particular, where knowledge and skills is selected by 60% of the respondents. Reflecting on this challenge, some interviewees describe a fundamental uncertainty about what circular economy means in practice and how to drive it within their organisations.

2. Customer preferences

Customer preferences for new or non-circular products is also considered to be an important barrier.

In comparison to the other barriers, customer preferences are the most important barrier to progress in the services sector (44%).

Interviewees provide further insights as to why this may be. The relevant customer preferences are related to price, quality, or speed of delivery for a product or service. Recycled or reused products can often take longer to procure, have lower quality, and may even be more expensive. This makes it difficult to offer circular products or services in a competitive manner.

3. Regulation

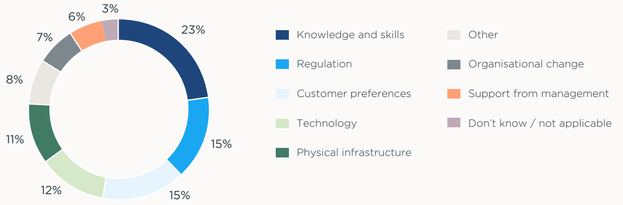
Regulation, and more specifically the fast pace of regulatory changes, is considered a key barrier. This stands in contrast to respondents also perceiving regulation as beneficial to circular economy. Respondents from Danish companies (35%) are those who most consider regulation as a barrier, compared to 10% of Finnish respondents. At the sector level, companies from the utilities sector find regulation to be a main barrier (43%), compared to just 8% of the respondents in the services sector.

Interviewees express the difficulty of keeping up to speed with the pace of regulation. They suggest that the time and resources required to understand the broad scope of new regulations takes resources away that might otherwise be invested in developing more circular business models. Additionally, interviewees mention that quality, purity or safety regulations and standards in construction and manufacturing are often barriers that prevent customers from using recycled materials.

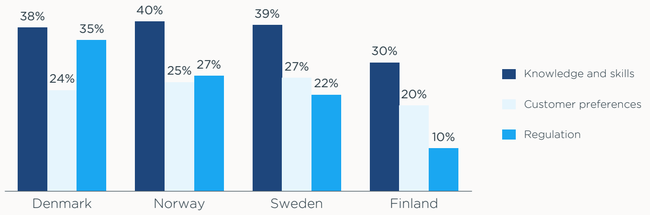
> **On the one hand, reporting requirements are an opportunity to create ownership and understanding in management, and they also make it more difficult to greenwash. On the other hand, extensive regulation can be challenging, because the reporting takes a lot of time and effort, which takes time away from new ideas and projects.**

Katrine Monge
Head of Sustainability,
Felleskjøpet Rogaland Agder

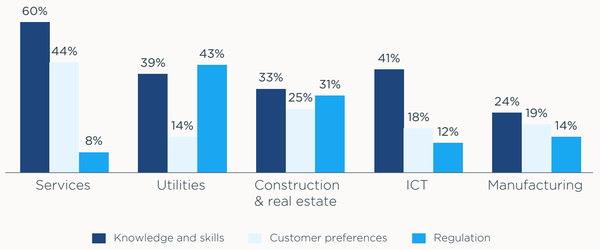
Overview of top barriers to circular economy progress
(% of responses)



Top three barriers to circular economy progress, country perspective
(% of respondents from each country)



Barriers to circular economy progress, sector perspective
(% of respondents from each sector)



Challenging circular economy topics

Surveyed companies were asked to select up to three of the most challenging circular economy topics.

Circular material use is the most challenging topic for Nordic companies in the survey, followed by circular design and circular performance tracking.

44% of responses focused on these three barriers. There is little variation between countries.

1. Circular material use

Circular material use is challenging, particularly in the construction and real estate and manufacturing sectors. Circular material use requires companies to use materials that are biobased, recycled, recyclable, or compostable. It also includes substituting hazardous materials. Interviewees shared that quality requirements and high prices were barriers to using more circular materials, with regulation setting minimum quality requirements sometimes acting as a barrier.

Some interviewees optimistically expressed that quality concerns will be improved in future with better sorting facilities.

2. Circular design

Circular design is the second most selected challenging topic across the respondents, particularly in the service sector. For companies that do not have full control over the design of their product, this topic is particularly challenging. One of the interviewed companies also shared that the business case for repair of their textile products is still challenging.

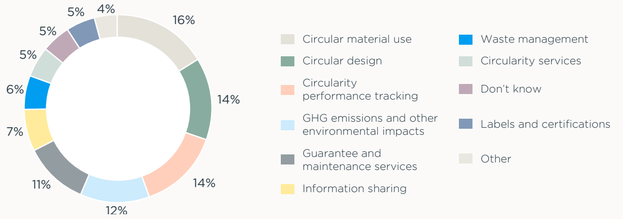
3. Circularity performance tracking

Monitoring and assessing circularity performance to track process and improve decision-making is also a key challenge, particularly in the ICT and utilities sectors. Circularity performance tracking makes up 14% of all responses. As the survey results reveal, progress on this circularity performance tracking is limited and capacity as well as data is lacking across companies.

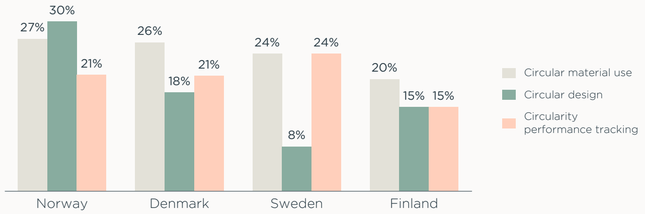
> **One of the most captivating topics that we are currently working on is determining how to measure the circularity of our products and their design.**

Sabine Pauquay
Head of Circularity, Velux

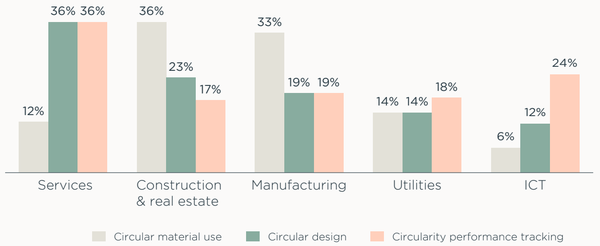
Overview of top challenging circular economy topics
(% of responses)



Top three challenging circular economy topics, country perspective
(% of respondents from each country)



Top three challenging circular economy topics, sector perspective
(% of respondents from each sector)



When is compliance/ alignment expected?

Feasibility of applying ESRS E5 requirements

Surveyed companies were asked when they expect it will be feasible to report on all applicable disclosure requirements in ESRS E5.

Most surveyed companies expect that they can report on all applicable disclosure requirements in ESRS E5 within 2-5 years. Close to half of the survey respondents expect to disclose on ESRS E5 within 2-5 years, and about 30% expect to accomplish this in less than 2 years. A remaining 20% are still uncertain about when they will fulfil all disclosure requirements of the standard. Very few companies (5%) expect it to take more than 5 years.

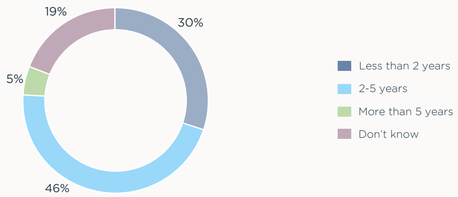
Between countries, companies that expect to disclose in less than 2 years range from 36% of the respondents in Sweden to 22% of the respondents in Finland.

The utilities sector has the greatest number of companies expressing uncertainty. Here, 33% of companies responded that they are unsure about their timeline for disclosure.

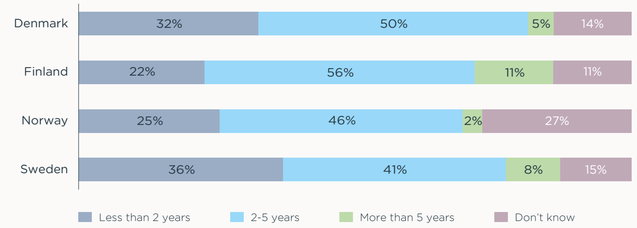
Interviewed respondents are already preparing to fulfil the requirements of ESRS E5 by collecting data on the metrices required by ESRS E5. Businesses that have been concerned with circular economy in their strategy for many years already have much of the necessary data. Some are planning to release trial reports soon to better understand their gaps to full disclosure. Many are also looking into starting the process for a double materiality assessment. The more advanced companies have conducted the double materiality assessment already.

> **In the 2023 report, we have worked to align our sustainability reporting with the applicable ESRS requirements. We will work on closing the gaps and report in compliance with ESRS in the 2024 report.**
>
> **Manufacturing Sector Company**
> Norway

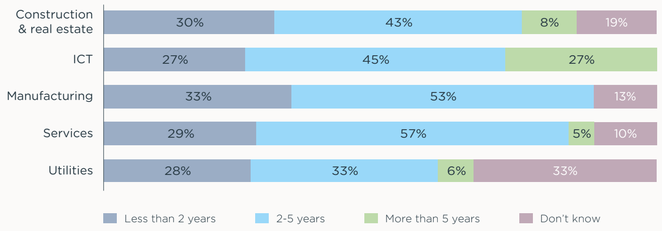
ESRS E5 application timeline of companies using the standard (% of respondents)



ESRS E5 application timeline of companies expecting to use the standard, country perspective (% of respondents from each country)



ESRS E5 application timeline of companies expecting to use the standard, sector perspective (% of respondents from each sector)



Feasibility of alignment with EU Circular Economy Taxonomy criteria

Surveyed companies were asked if they have an ambition to align with the EU Circular Economy Taxonomy screening criteria and, if yes, when they expect it will be feasible.

A high degree of uncertainty regarding companies' ambitions and abilities to align with the Taxonomy screening criteria exists. Approximately 70% of the total respondents indicate 'Don't know' when asked about their ambitions to align with the technical screening criteria (TSC) for the circular economy objective of the EU Taxonomy. Only 23% of respondents state that they have an ambition to align with the criteria.

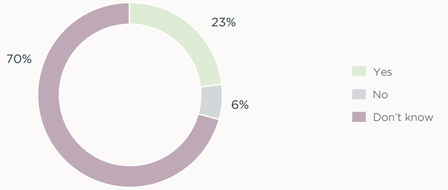
In interviews, several of the respondents stated that they are very early in the process and are not yet sure which of the technical screening criteria are relevant to them. The uncertainty expressed in the survey and interviews is consistent across sectors and countries.

The companies that have ambitions to align with the technical screening criteria expect to be able to align in the next five years. A majority (54%) of these respondents expect to align within 2-5 years. About 30% expect to align already within less than 2 years.

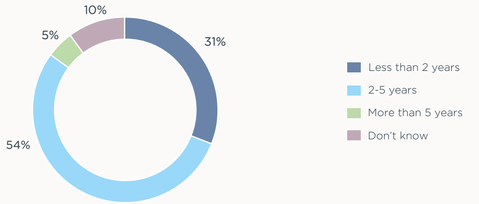
> "In relation to the EU Taxonomy, we recognise that reuse represents a low-hanging fruit for us. However, systematically measuring the benefits is proving to be more challenging at the moment.

Dennis Fredin
Reponsible for Quality, Environment and Working Environment, Kålltorps Bygg

Ambition to align with the EU CE Taxonomy screening criteria among companies with eligible economic activities (% of respondents)



Expected timeline of aligning with the EU CE Taxonomy screening criteria among companies with an ambition to align (% of respondents)



Sector Deep dives

Construction and real estate

Manufacturing

Services

Utilities

Information and communication technology (ICT)

Deep dive: Construction and real estate

CONSTRUCTION AND REAL ESTATE

Awareness and understanding in the construction and real estate sector

ESRS E5

Only a quarter of companies for which ESRS E5 is applicable have extensive knowledge of the standard. 69% of participants from the construction and real estate sector indicate that their company is required to report sustainability information according to the CSRD, of which 69% expect that they will also be required to apply the ESRS E5 standard. Only 24% indicate that they have extensive knowledge of the standard.

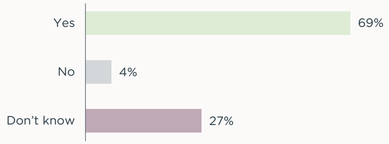
Companies see benefits in using the standard, for example, guidance for more structured ESG management. Gaining a competitive advantage was also reported as a key benefit.

EU Circular Economy Taxonomy

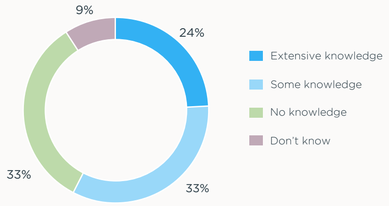
A third of the respondents do not know if they have eligible economic activities for the EU Circular Economy Taxonomy. 49% of the respondents from the construction and real estate sector have activities that are included in the circular economy part of the EU Taxonomy. Of the companies that have relevant economic activities, 26% indicate some knowledge and 49% extensive knowledge.

The most common, expected benefits are regulatory compliance and competitive advantage. Expected benefits that are mentioned most by the respondents are regulatory compliance and competitive advantage. An interview participant working for a construction contractor shared that clients have so far only demanded Taxonomy-related data on the EU climate Taxonomy, indicating that circular economy is still a new territory for many industry actors.

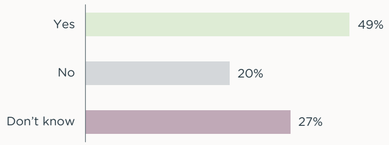
Applicability of ESRS E5 for companies
(% of respondents)



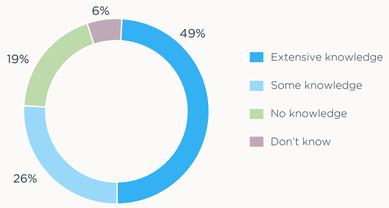
Knowledge of ESRS E5 among companies using the standard
(% of respondents)



Respondents with economic activities in the EU CE Taxonomy
(% of respondents)



Knowledge of the criteria of the EU CE Taxonomy
(% of respondents)



CONSTRUCTION AND REAL ESTATE

Circular economy progress and financial benefits in the construction and real estate sector

Circular economy progress

Half of the surveyed companies are making most progress on waste management, followed by mitigating GHG emissions and other environmental impacts, and circular material use. A respondent from the construction sector shared that their efforts regarding waste management are primarily a task of aligning with national legislation. Here, not only regulatory compliance, but also customer demands are a key driver. Similarly, an interview participant working for a contractor company shared that they only work with the EU Circular Economy Taxonomy if it was requested by clients in tenders.

Topics with higher circularity potential (e.g., circular services and circularity performance tracking) are rarely reported as top progress areas.

Financial benefits

38% of companies report financial benefits from circular economy efforts, of which 57% experience extensive financial benefits. 31% of companies report that they do not experience financial benefits, and 31% do not know.

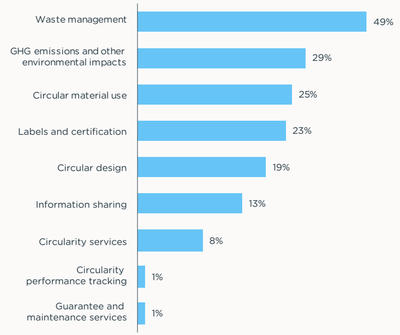
An interview participant from a manufacturer of construction products shared that they have a unique process for recycling and thus an advantage over competitors.

An interview participant from a Norwegian construction contractor shared that they are positive about the EU Taxonomy and CSRD as it guides investment into circularity and gives clarity on how to report.

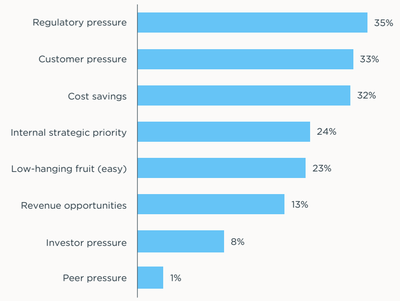
> **We have a unique process for recycling our products. There is certainly a business case, and the market has just woken up for it.**

Christian Kofod
Sustainability Manager
Nordics, Rockwool

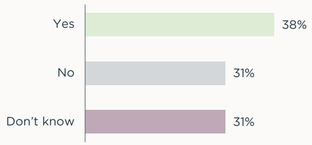
Overview of top circular economy progress topics
(% of respondents)



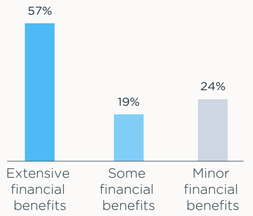
Overview of drivers behind circular economy progress
(% of respondents)



Existence of financial benefits
(% of respondents)



Size of benefits among companies experiencing financial benefits
(% of respondents)



CONSTRUCTION AND REAL ESTATE

Future circular economy topics and drivers in the construction and real estate sector

Future circular economy topics

Over the next five years, circular material use is expected to be as much of a priority as reducing GHG emissions and waste management. Of all the companies surveyed from the construction and real estate sector, 43% selected circular material use as one of the top three priorities, 43% selected mitigating GHG emissions and other environmental impacts and 41% selected waste management. In the future, information sharing and circular performance tracking will have more strategic focus than they have now for more companies.

In the open questions of the survey, one company shared that they work on the data-driven measuring of circularity. This is used to calculate Environmental Product Footprints to produce reports on environmental data for customers and to support internal decision-making.

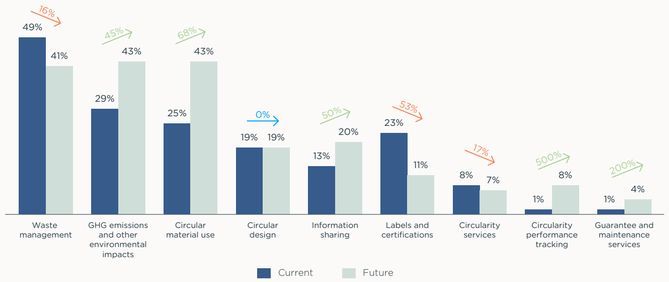
Future drivers

Over the next five years, regulatory pressure is expected to be the main influence on companies' work on circular economy, followed by customer pressure. Regulatory pressure was selected as one of the top three future drivers by 45% and customer pressure was selected by 40% of companies. 28% of companies from the construction and real estate sector expect internal strategic priority to be one of the top three future drivers. 23% of companies expect cost savings and revenue opportunities to be one of the top three future drivers.

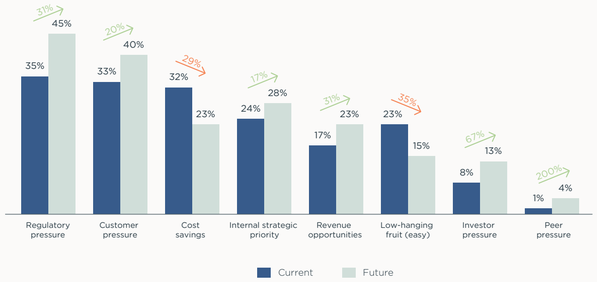
> **"Reuse of construction products and materials is a great focus area, in which we invest a lot.**

Dennis Fredin
Reponsible for Quality, Environment and Working Environment, Kålltorps Bygg

Overview of current and future circularity priorities (% of respondents)



Overview of current and expected future drivers behind circularity priorities (% of respondents)



CONSTRUCTION AND REAL ESTATE

Achieving a circular economy in construction and real estate

Barriers to circular economy progress and most challenging topics

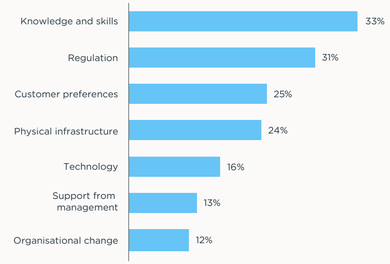
A lack of knowledge and skills to enable circularity progress is identified as being the primary barrier, while circular material use is considered the most challenging circularity topic. According to the respondents, the most common barriers to progress are knowledge and skills (33%), regulation (31%) and customer preferences (25%), while the most challenging circularity topics are circular material use (36%), circular design (23%), and reducing GHG emissions and other environmental impacts (20%).

Feasibility and timeline for EU Circular Economy Taxonomy alignment and ESRS E5 compliance

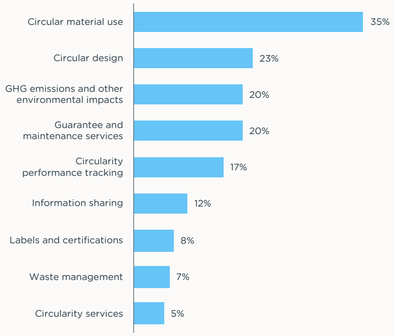
Most of the construction and real estate respondents expect to disclose all ESRS E5 requirements within 2-5 years, but companies are uncertain about their ambition level to align with EU CE Taxonomy criteria. For the ESRS E5, 30% of the respondents state that they expect to be ready to report on all applicable disclosure requirements of ESRS E5 in less than two years. 43% believe they will be prepared within 2-5 years and 8% more than five years.

For the EU CE Taxonomy, 8% do not have an ambition to align with the technical screening criteria outlined under the CE objective in the EU Taxonomy, and 67% of the respondents do not yet know whether their company has an ambition to align with the technical screening criteria. For the 25% that have an ambition to align with the technical screening criteria, the timeline was indicated by 26% of companies as less than two years, by 53% of companies as 2-5 years, and by 5% as more than five years.

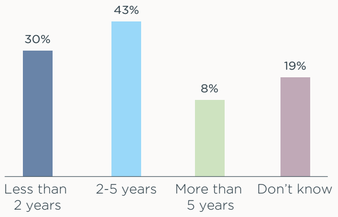
Barriers to circular economy progress
(% of respondents)



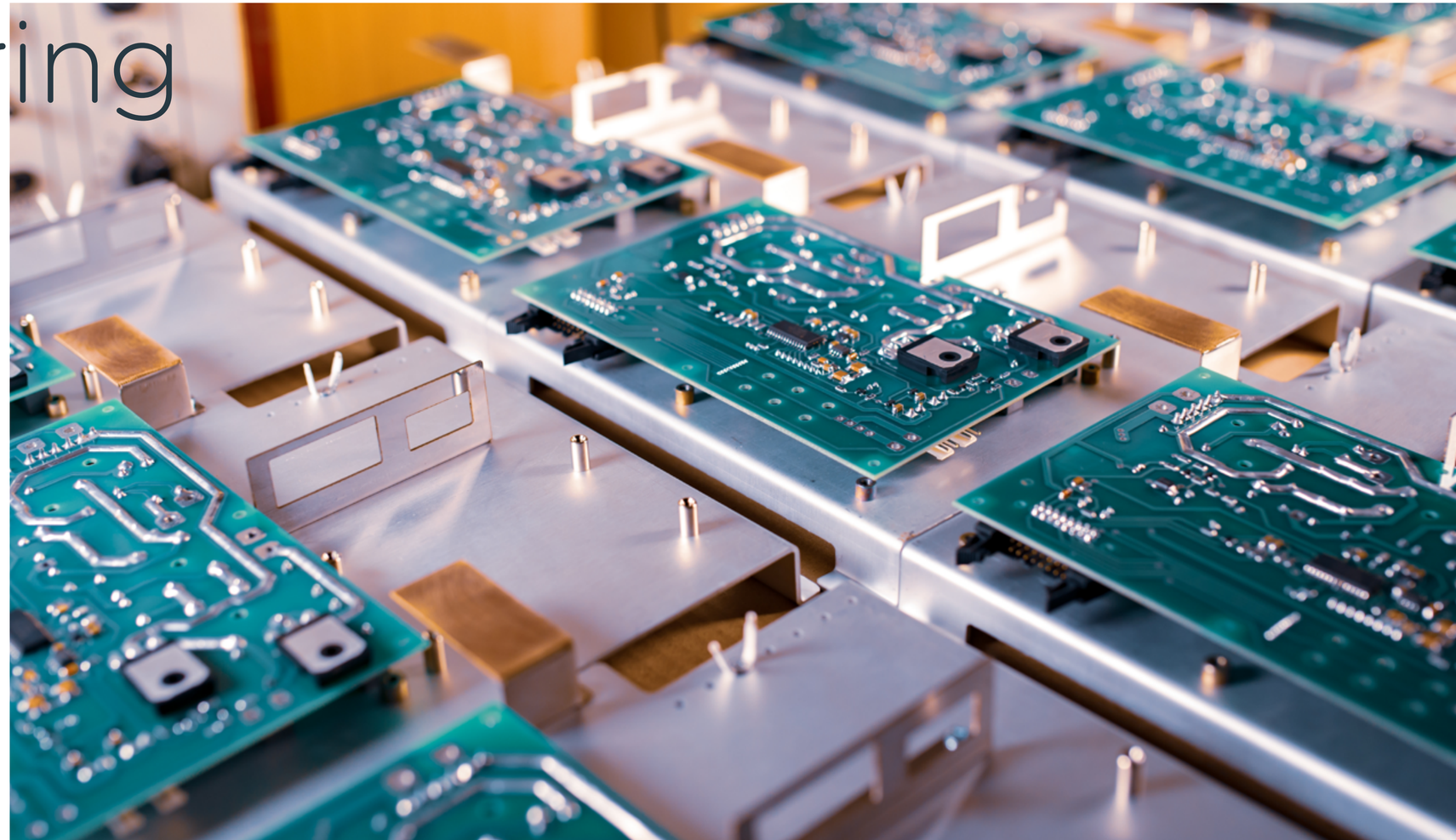
Most challenging circularity topics
(% of respondents)



ESRS E5 disclosure timeline for companies expecting to use the standard
(% of respondents)



Deep dive: Manufacturing



MANUFACTURING

Awareness and understanding in the manufacturing sector

ESRS E5

Manufacturing companies are highly uncertain about the applicability of ESRS E5 to their CSRD reporting, and most of the respondents who assess ESRS E5 to be material to their business lack extensive knowledge of its requirements. 62% believe that ESRS E5 is material and will be applied to their CSRD reporting and 38% 'Don't know'. The majority of respondents in this sample have little to no knowledge of the standard, despite knowing it is material to their business.

A manufacturing company based in Norway expressed that an initial double materiality assessment has provided them with their understanding of the ESRS standards, allowing them to produce a trial report later this year.

The primary benefit of ESRS E5, according to the respondents in this sector, is the opportunity to demonstrate a competitive advantage. A Danish manufacturing company stated that the CSRD had been useful for the company to set a strategic direction and to demonstrate many of the efforts towards increased circularity that the company had already made.

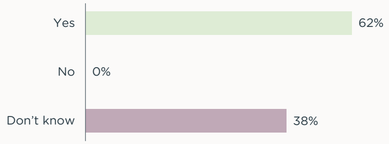
EU Circular Economy Taxonomy

Manufacturing companies also are uncertain about their eligibility for the EU Circular Economy Taxonomy, as well as their understanding of it, with close to half choosing 'Don't know' in response to the knowledge of their eligibility. Of the companies eligible for Taxonomy compliance, only 36% perceive themselves as having extensive knowledge.

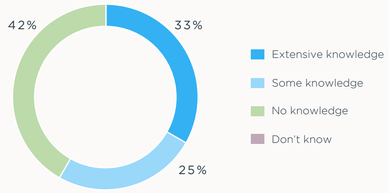
Interviews indicate that manufacturing companies in the Nordics are early in the process of understanding the EU Circular Economy Taxonomy, which may explain their uncertainty.

Other than regulatory compliance, the main benefit of Taxonomy alignment in this sector is competitive advantage.

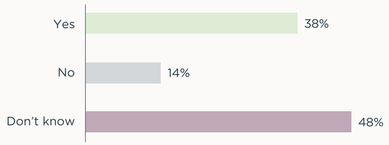
Applicability of ESRS E5 for companies
(% of respondents)



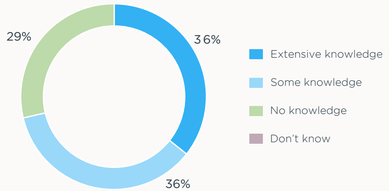
Knowledge of ESRS E5 among companies using the standard
(% of respondents)



Respondents with economic activities in the EU CE Taxonomy
(% of respondents)



Knowledge of the criteria of the EU CE Taxonomy
(% of respondents)



MANUFACTURING

Circular economy progress and financial benefits in the manufacturing sector

Circular economy progress

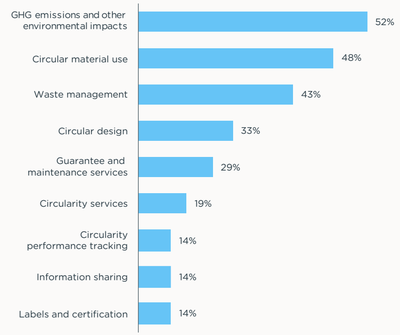
Manufacturing companies in the sample are making most progress with reducing GHG emissions, circular material use and waste management. 52% of manufacturing companies in the survey believe reducing GHG emissions and other environmental impacts to be their main progress area, followed by circular material use (48%) and waste management (43%).

The main drivers of success for manufacturing companies in the circular economy are internal strategic priorities, revenue opportunities and customer pressure. Internal strategic priorities are the clear top driver according to 48% of the respondents, with 33% of companies choosing revenue opportunities and customer pressure. These three factors are likely interconnected, where customer pressure for more circular products is key for revenue priorities, thus shaping internal strategic priorities.

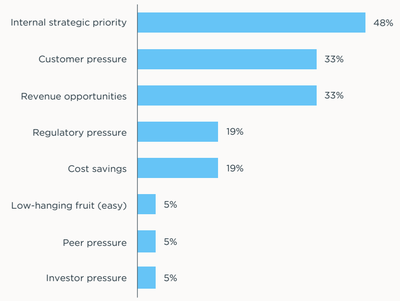
Financial benefits

According to their survey responses, manufacturing companies experience substantial financial benefits from their circular economy efforts, with 33% experiencing financial benefits and 80% of these respondents believing the financial benefits to be extensive. In the deeper interviews, companies producing electronic equipment expressed that the extensive financial benefits arose from directly reusing some of the electrical components rather than purchasing new ones. In general, take-back schemes and reuse where possible are where manufacturing companies have experienced financial benefits.

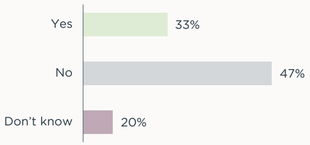
Overview of top circular economy progress topics
(% of respondents)



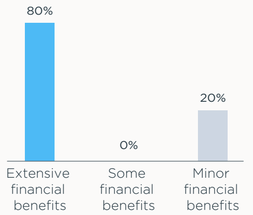
Overview of drivers behind circular economy progress
(% of respondents)



Existence of financial benefits
(% of respondents)



Size of benefits among companies experiencing financial benefits
(% of respondents)



MANUFACTURING

Future circular economy topics and drivers in the manufacturing sector

Future circular economy topics

The strategic priorities of manufacturing companies will remain roughly the same in the future, focusing on circular material use, reducing GHG emissions and waste management. The overall percentages for the question of future priorities are lower for this sector than for current priorities, because most companies only selected one future priority as opposed to three current priorities. This may indicate that they are uncertain about their most important circular economy topics going forward, or it may be that future strategies will become very focused on just one topic. Circular material use will nonetheless remain the most important priority, according to 38% of the respondents.

Future drivers

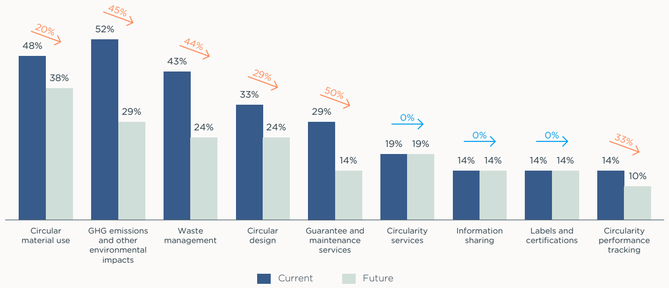
The surveyed manufacturing companies have a clear expectation that regulatory pressure will be the most important driver of circularity efforts in the future. Although only 19% of the respondents choose regulatory pressure as the most important current driver, 52% believe it will be the most important future drivers. This is likely due to the impact of extensive regulatory requirements, including those in ESRS E5 and the EU Circular Economy Taxonomy.

Internal strategic priorities, revenue opportunities and customer pressure remain relatively important, although only customer pressure appears to increase in importance in the selection rate (+29%). Thus, the manufacturing companies in the survey foresee the changes in regulation to be the biggest push for their circular economy efforts in the next few years, while the current drivers are maintained.

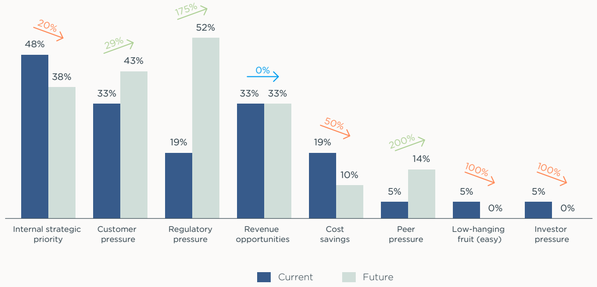
> **Our circularity efforts are driven by an internal desire to be an industry leader on the topic. We have very dedicated colleagues.**

Sabine Pauquay
Head of Circularity, Velux, Denmark

Overview of current and future circularity priorities
(% of respondents)



Overview of current and expected future drivers behind circularity priorities (% of respondents)



MANUFACTURING

Achieving a circular economy in manufacturing

Barriers to circular economy progress and most challenging topics

The manufacturing sector's specific barriers to circular economy progress are knowledge and skills, followed by physical infrastructure, technology and customer preferences. The results reflect a concern in the sector that the necessary knowledge to apply circularity in practice is lacking, with 24% of the respondents selecting knowledge and skills as the most pressing barrier. 19% of the respondents chose physical infrastructure and technology, likely linked to the necessary changes to physical assets, such as machinery, to improve rates of recycling and reuse or to process circular raw materials.

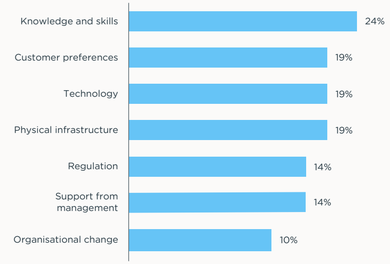
The most challenging topics selected by the respondents are circular material use, circular design, circularity performance tracking and reducing GHG emissions. Circular material use is the most challenging topic, according to 33% of the respondents. In the deeper interviews, manufacturing companies highlighted the difficulties in quality requirements. An electronic parts manufacturer explained that progress in their industry on this topic was severely challenged by high quality requirements, leading them to prioritise new rather than recycled materials.

Feasibility and timeline for EU Circular Economy Taxonomy Alignment and ESRS E5 compliance

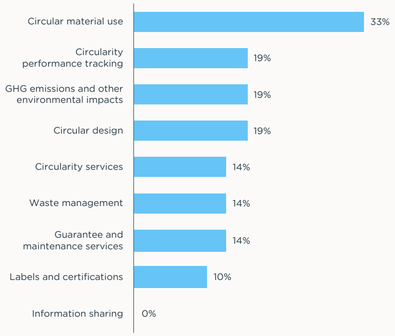
For the application of ESRS E5, most of the manufacturing sector respondents expect to disclose within 2-5 years. 53% of the manufacturing respondents expect to disclose in 2-5 years, while 33% already expect to do so in less than 2 years. Interview insights indicate that companies in this sector already collect data related to the KPIs in ESRS E5, so they need to fill in the gaps during the next few years.

A very small percentage of manufacturing companies in the sample (10%) express an ambition to align with EU Circular Economy Taxonomy screening criteria, meaning no clear trend can be observed regarding their timeline. This is likely related to the narrow scope of manufacturing activities that are currently included in the EU Taxonomy on circular economy. Only plastic packaging and electronics manufacturers have clearly defined criteria.

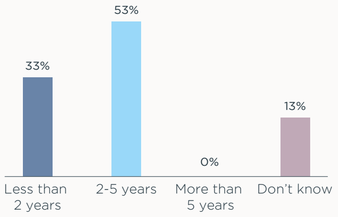
Barriers to circular economy progress
(% of respondents)



Most challenging circularity topics
(% of respondents)



ESRS E5 disclosure timeline for companies expecting to use the standard
(% of respondents)



Deep dive: Services

SERVICES

Awareness and understanding in the services sector

ESRS E5

Most service sector companies expect to report under the ESRS E5 standard on Resource Use and Circular Economy. 88% of respondent companies from the service sector expect to be required to report sustainability information according to the CSRD within the next three years. 65% of these companies expect that the CSRD will require them to apply the new reporting standard ESRS E5 on Resource Use and Circular Economy. Of these companies, 67% indicate that they already understood the ESRS E5 standard with 38% indicating some knowledge and 29% indicating extensive knowledge. 19% of the service companies who expect to apply the ESRS E5 standard believe that they do not yet have any knowledge of the standard's criteria.

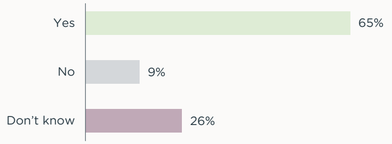
The majority of service sector companies see the standard as an opportunity for improved ESG management. Service sector companies anticipate several benefits from reporting under the ESRS E5 standard. 68% of all service sector companies see it as an opportunity for better ESG management. Regulatory compliance (48%), demonstrating efforts and competitive advantage (48%), as well as risk mitigation (36%), e.g., greenwashing, are other key benefits

EU Circular Economy Taxonomy

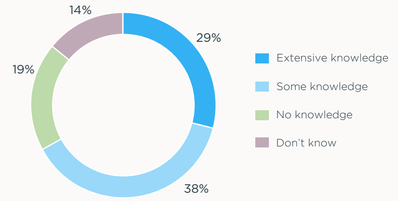
Almost half of the companies from the service sector include some of their business activities in the circular economy part of the EU Taxonomy, of which a third expects benefits in terms of sales and business growth. Only 12% of the respondents from companies with business activities included in the circular economy part of the EU Taxonomy have no or little understanding of the criteria. 53% believe to have some knowledge and 29% have extensive knowledge.

Most important benefits of the Taxonomy are the confirmation that sustainability efforts are on the right track (56%) as well as potential sales and business growth (36%).

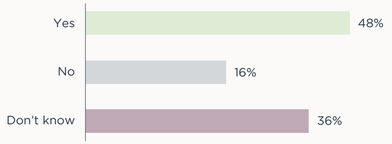
Applicability of ESRS E5 for companies
(% of respondents)



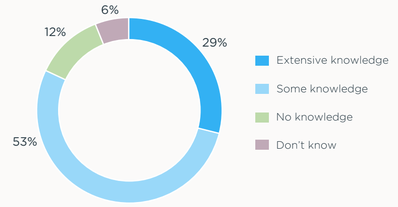
Knowledge of ESRS E5 among companies using the standard
(% of respondents)



Respondents with economic activities in the EU CE Taxonomy
(% of respondents)



Knowledge of the criteria of the EU CE Taxonomy
(% of respondents)



SERVICES

Circular economy progress and financial benefits in the services sector

Circular economy progress

Circularity already has significant business potential for the service sector. Top progress areas in the service sector are reported to be circularity services and waste management. These two circularity topics are named by 48% and 44% of all companies from the service sector.

Circularity performance tracking is mentioned as the area experiencing least progress (8%). This might be explained by the relative immaturity of tools for circularity tracking and the absence of guidelines or standards, as well as lacking integration into companies' accounting systems.

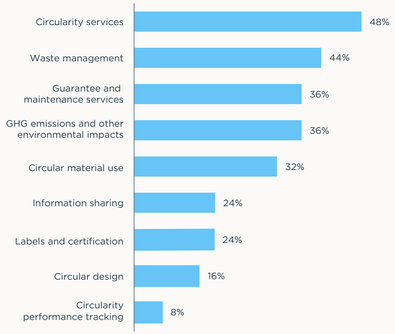
Financial benefits

About half of the companies from the service sector experience financial benefits from circularity, of which two thirds report extensive financial benefits. 22% of the respondents report no financial benefits and 26% did not know. Interviewed companies reported that they were able to develop new services to maintain the value of products. For example, a respondent working in a company producing vehicle components and dismantling old cars shared that they found new customers for material streams that had previously been treated as waste.

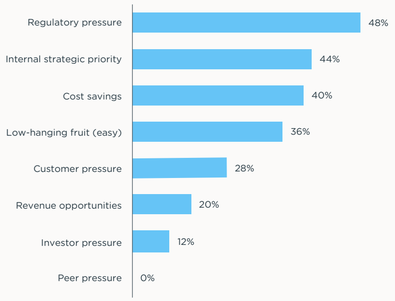
> **We started selling used phones, which is a new market for us. We're not the first to do this, but we want to become the market leader, and can for instance offer warranties on used phones which other second-hand service providers cannot.**

Camilla Gramstad
Elkjøp Nordic, Electronics Retailer, Norway

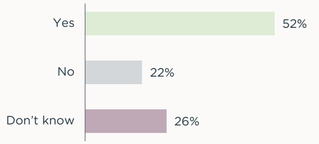
Overview of top circular economy progress topics
(% of respondents)



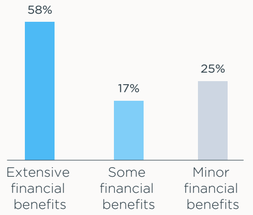
Overview of drivers behind circular economy progress
(% of respondents)



Existence of financial benefits
(% of respondents)



Size of benefits among companies experiencing financial benefits
(% of respondents)



SERVICES

Future circular economy topics and drivers in the services sector

Future circular economy topics

While waste management remains the most important priority, priorities regarding the other circularity topics are changing, such as the rise of circularity performance tracking. Circularity performance tracking is mentioned by 36% of companies from the service sector as one of the three future strategic priorities, compared with 8% of companies that found circularity performance tracking to be a key progress area today. So, while tools for circularity tracking are absent or immature today, service companies expect to prioritise them in the coming five years.

Perhaps unsurprisingly, circularity services is a priority selected by 36% of companies. In one of the open answers of the survey, companies mention circular services such as leasing as key initiatives for the years to come.

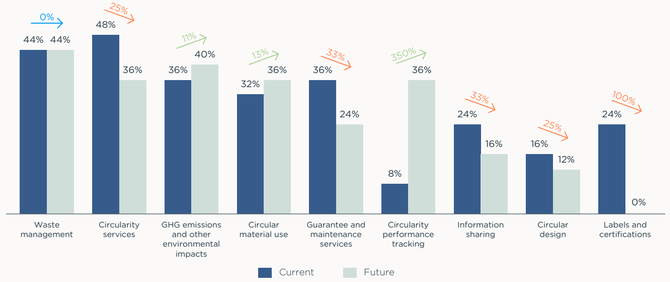
While labels and certification is named by 24% of service sector companies as a key progress topic, none of the participants select it as a priority for the coming years.

Future drivers

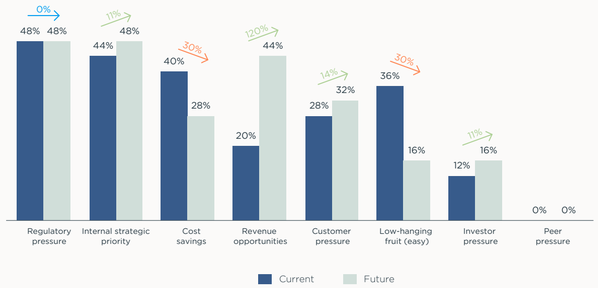
Regulatory pressure and internal strategic priority continue to be the main drivers for service companies' circular economy efforts, with revenue opportunities increasing in importance. Regulatory pressure and internal strategic priority are selected as being one of the top three future drivers by 48% of companies from the service sector, with 44% of companies choosing revenue opportunities.

One of the interviewees shared that they have already developed KPIs to help track their circularity progress.

Overview of current and future circularity priorities
(% of respondents)



Overview of current and expected future drivers behind circularity priorities (% of respondents)



SERVICES

Achieving a circular economy in the services sector

Barriers to circular economy progress and most challenging topics

Circularity performance tracking and circular design are perceived as the most challenging CE topics, while knowledge and skills, customer preferences and technology are reported to be the main barriers. 60% of companies from the service sector believe that knowledge and skills is one of the top three barriers, and 44% choose customer preferences and technology.

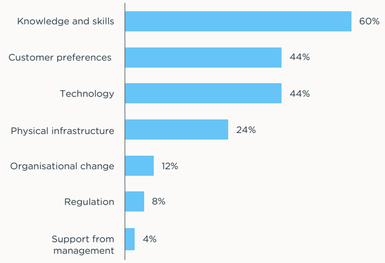
Regulation and support from management is the least mentioned. The circularity topics of circularity performance tracking (36%), circular design (36%) and mitigating GHG emissions and other environmental impacts (24%) are perceived as most challenging by companies from the service sector.

Feasibility and timeline for EU Circular Economy Taxonomy alignment and ESRS E5 compliance

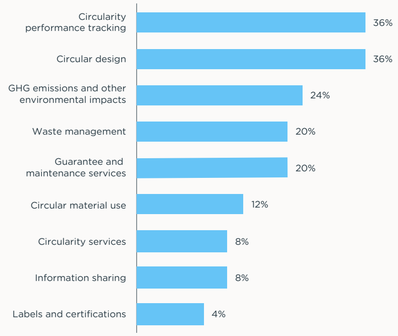
Of the companies aiming to align with the technical screening criteria of the CE EU Taxonomy and fulfil the disclosure requirements of ESRS E5, more than half of them expect to be able to do so within the next 2-5 years, and about a fourth in less than two years. Regarding the disclosure requirements outlined in ESRS E5, 57% expect they will be able to report on all applicable disclosure requirements in the next 2-5 years. 30% expect to be able to report within less than two years, and 5% in more than 5 years. Overall, 32% of companies from the service sector aim to align with the technical screening criteria of the EU Circular Economy Taxonomy. Of these companies, 63% expect to align in 2-5 years, 25% in less than two years, and 13% in more than two years.

> **We are highly affected by customer preferences. If a customer wants the car repaired on the same day, there is no time for a specific used spare part to arrive from the warehouse. These have 2-3 days delivery. Used spare parts must compete with the delivery time of new car parts which get delivered almost two times a day from the car manufacturer.**
>
> Service company

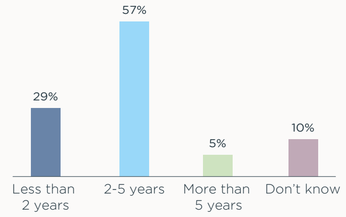
Barriers to circular economy progress
(% of respondents)



Most challenging circularity topics
(% of respondents)



ESRS E5 disclosure timeline for companies expecting to use the standard
(% of respondents)



Deep dive: Utilities

UTILITIES

Awareness and understanding in the utilities sector

ESRS E5

Utility companies within the scope of the CSRD will apply ESRS E5, although many companies lack an understanding of its requirements. 78% of the respondents in this category expect to apply ESRS E5 and 22% select 'Don't know' as their answer. In this sector, the nature of companies' business models makes it very likely that all of the respondents will apply ESRS E5. The 22% that are uncertain probably do not have enough knowledge of the standard to respond definitively. Of the respondents who know they will apply ESRS E5, 47% have extensive knowledge of its details, leaving a significant proportion of respondents with insufficient knowledge to fulfil them.

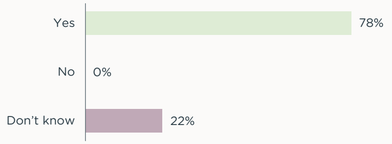
Apart from regulatory compliance, the most important benefit from applying ESRS E5 is that it provides guidance for more structured ESG management and the opportunity to demonstrate circularity efforts.

EU Circular Economy Taxonomy

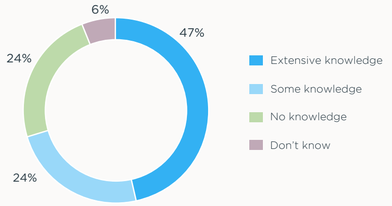
Most of the respondents in the utilities sector are eligible for the EU Circular Economy Taxonomy, but a large proportion of the respondents are uncertain. About half (54%) of the companies have economic activities that are eligible for Taxonomy alignment under the circular economy objective. However, only 28% of these companies have extensive knowledge of the criteria. This means that there is a knowledge gap preventing utilities companies from aligning with the Circular Economy Taxonomy criteria.

Apart from regulatory compliance, the largest proportion of the respondents in this sector see benefits from Taxonomy compliance as being confirmation that sustainability efforts are on the right track.

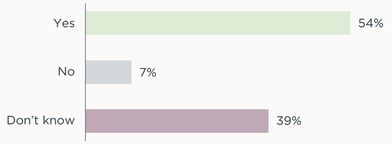
Applicability of ESRS E5 for companies
(% of respondents)



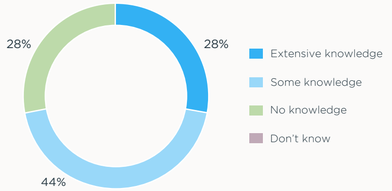
Knowledge of ESRS E5 among companies using the standard
(% of respondents)



Respondents with economic activities in the EU CE Taxonomy
(% of respondents)



Knowledge of the criteria of the EU CE Taxonomy
(% of respondents)



UTILITIES

Circular economy progress and financial benefits in the utilities sector

Circular economy progress

Waste management, reducing GHG emissions and improving circular material use are the top circularity topics where utility companies believe they have made the most progress. This sector includes waste management companies, so as it might be expected, Waste management is selected by the most (46%), a topic central to their business models. 43% of the respondents see progress on the topic of reducing GHG emissions and 36% with circular material use.

The main drivers for progress in this sector, according to the surveyed companies, are regulatory pressure and internal strategic priority, followed by customer pressure. Internal strategic priority and regulatory pressure are selected by 43% of companies and customer pressure by 32%. Peer pressure (4%) and investor pressure (0%) are the least important drivers for utilities' efforts.

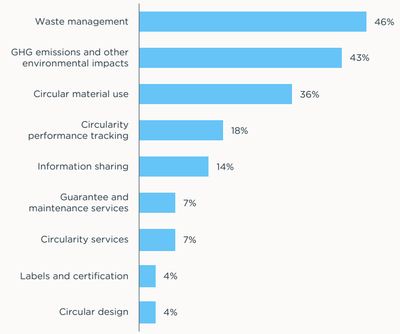
Financial benefits

Close to half of the utility companies in the survey experience financial benefits from their circularity efforts, although these have mainly been moderate benefits. 47% of the surveyed respondents report to have gained financial benefits, 56% of those companies selecting some financial benefits and 33% selecting minor benefits.

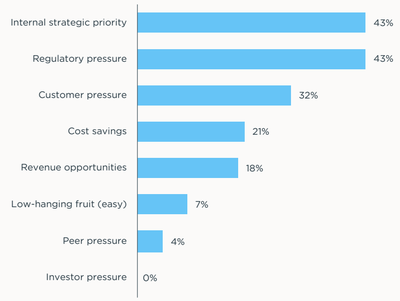
> **Circularity is essential for our business model, as our core business is to give back nature's resources by converting organic by-products and residues into feed ingredients, fertilizer and bioenergy.**

Rikke Klitgaard Friis
Director, Business Development & Sustainability, Daka Denmark

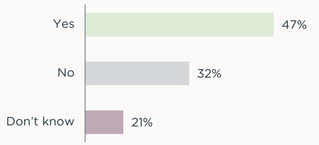
Overview of top circular economy progress topics
(% of respondents)



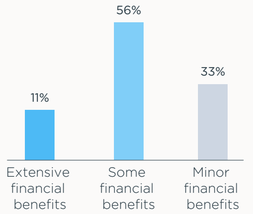
Overview of drivers behind circular economy progress
(% of respondents)



Existence of financial benefits
(% of respondents)



Size of benefits among companies experiencing financial benefits
(% of respondents)



UTILITIES

Future circular economy topics and drivers in the utilities sector

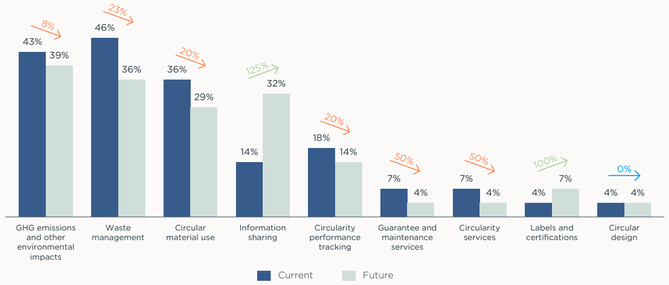
Future circular economy topics

The most evident change in future strategic priorities for utilities is a shift in focus to information sharing. Reducing GHG emissions and waste management remain the most important priorities, selected by 39% and 36% of the respondents respectively. With 32% of the respondents selecting Information sharing, this is the priority expected to grow the most when compared to companies' current priorities. This is likely due to customers increasingly requiring data about how their waste is handled to prepare their own sustainability reporting and better understand their own circularity performance.

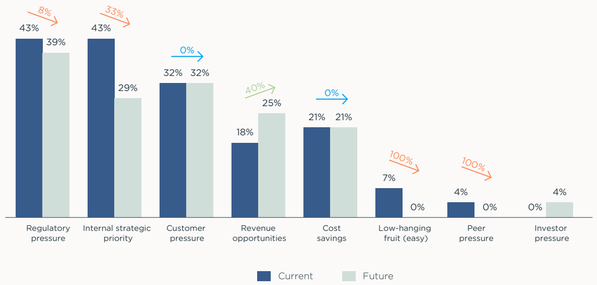
Future drivers

The most important drivers of circularity efforts in future are the same as the current drivers, namely regulatory pressure, customer pressure and internal strategic priorities. Regulatory pressure remains the most important driver, selected by 39%, followed by internal strategic priority (29%) and customer pressure (32%). Additionally, the respondents foresee revenue opportunities to become a more important driver, selected by 25% as a future driver, compared to only 18% selecting it as a current driver.

Overview of current and future circularity priorities
(% of respondents)



Overview of current and expected future drivers behind circularity priorities (% of respondents)



UTILITIES

Achieving a circular economy in the utilities sector

Barriers to circular economy progress and most challenging topics

Regulation stands out as the key barrier to progress on circularity, followed by knowledge and skills. With 43% of the respondents selecting this option, it is interesting to consider why regulation might be considered a barrier to circularity when the respondents from this sector also believe it to be a driver of their efforts. A biowaste management company in Denmark mentioned in an interview that its internal resources were strained due to the extent of regulatory requirements. This suggests that the breadth of regulatory sustainability requirements may be a barrier to progress for companies with limited resources.

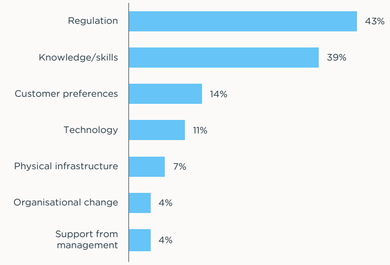
The most challenging circularity topics are also some of the topics that companies expect to prioritise. Mitigating GHG emissions and other environmental impacts is selected by 21% of the respondents, making it the topic that most companies view as challenging. It is also the topic most companies believe will be their future strategic focus. This reflects a key challenge in this sector to ensure that waste is not disposed or incinerated, resulting in high emissions.

Feasibility and timeline for EU Circular Economy Taxonomy alignment and ESRS E5 compliance

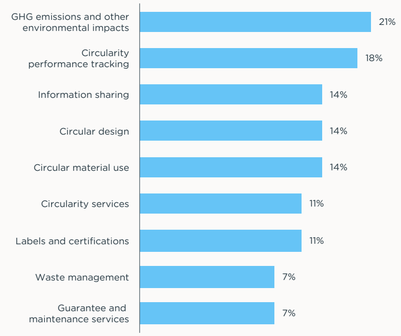
Utility companies in the survey are expecting to fulfil the disclosure requirements of ESRS E5, with an even spread between companies expecting to report in less than 2 years and in 2-5 years. About 33% of the respondent utility companies expect to be compliant within 2-5 years and 28% expect to accomplish it already in less than 2 years. 33% of the respondents are not sure when they will be compliant.

A small proportion of utility companies in the sample expresses an ambition to align with Taxonomy screening criteria. 25% of the respondents express that they aim to align with the technical screening criteria and of these, 71% express that they expect to do so within 2-5 years. This sample size is small, but it nevertheless indicates the timeframe expected by companies planning to align.

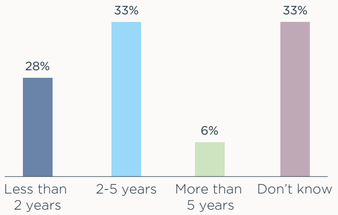
Barriers to circular economy progress
(% of respondents)



Most challenging circularity topics
(% of respondents)



ESRS E5 disclosure timeline for companies expecting to use the standard
(% of respondents)



Deep dive: Information and communication technology (ICT)

INFORMATION AND COMMUNICATION

Awareness and understanding in the information and communication sector

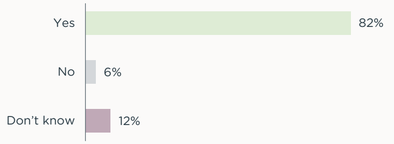
ESRS E5

Of the surveyed ICT companies that will be reporting on the CSRD, 82% will apply ESRS E5. A total of 75% of these companies have knowledge of the criteria in ESRS E5, and 42% consider this knowledge to be extensive. Regulatory compliance is seen as the most important benefit of compliance along with the opportunity/guidance for more structured ESG management.

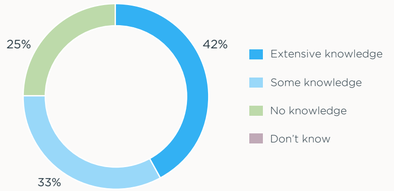
EU Circular Economy Taxonomy

Most of the ICT sector respondents are eligible for Taxonomy alignment, and over half of the eligible respondents have extensive knowledge of the criteria. 59% of the respondents in this sector report that they are Taxonomy eligible. 24% understand their business not to be Taxonomy-eligible and a remaining 18% are uncertain. Thus, most of the respondents in this sector are certain. Over half of Taxonomy-eligible information and communication companies have extensive knowledge of the criteria, meaning the majority will likely be able to fulfil the criteria. 58% of these report having extensive knowledge, leaving 42% with some knowledge. The primary benefit from applying Taxonomy alignment, according to the eligible respondents, is a confirmation that sustainability efforts are on track.

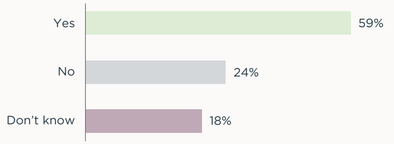
Applicability of ESRS E5 for companies
(% of respondents)



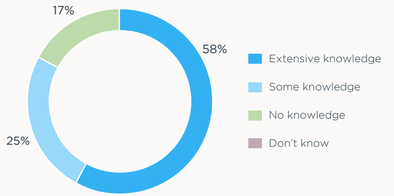
Knowledge of ESRS E5 among companies using the standard
(% of respondents)



Respondents with economic activities in the EU CE Taxonomy
(% of respondents)



Knowledge of the criteria of the EU CE Taxonomy
(% of respondents)



INFORMATION AND COMMUNICATION

Circular economy progress and financial benefits in the information and communication sector

Circular economy progress

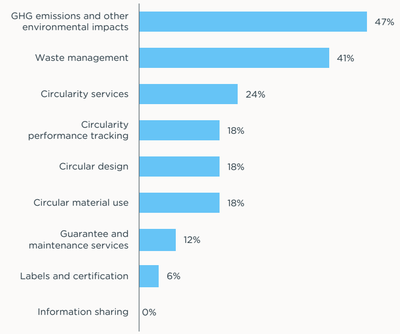
The main areas of progress in this sector are reducing GHG emissions, waste management and circularity services. Mitigating GHG emissions and other environmental impacts is selected as one of the top areas of progress by 47% of the respondents in this sector, followed by waste management (41%) and circularity services (24%).

Regulatory pressure, internal strategic priority and customer pressure are driving circularity progress in the ICT sector. Regulatory pressure is selected by 41% of the ICT respondents, making it the most important driver of circularity progress. Internal strategic priority is selected by 35% of the respondents, indicating that companies themselves have voluntarily chosen to make circularity a key part of their strategy. Peer pressure (6%) and cost savings (0%) are the least important drivers of circularity.

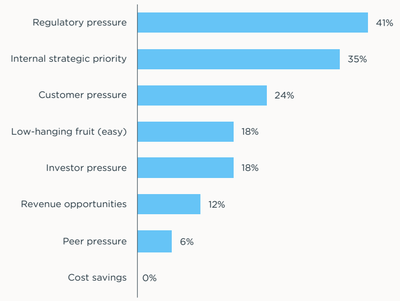
Financial benefits

Most of the ICT sector respondents do not see financial benefits from their circularity efforts. 42% of surveyed companies report not seeing any benefits, while 33% are unsure, and only 25% experience financial benefits. Even when the respondents see financial benefits, they have primarily been minor. 67% of these companies respond that they have experienced minor financial benefits and 33% select some financial benefits.

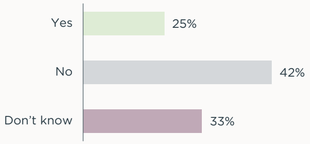
Overview of top circular economy progress topics
(% of respondents)



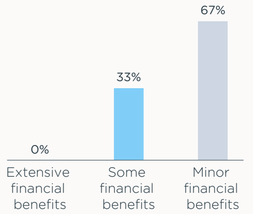
Overview of drivers behind circular economy progress
(% of respondents)



Existence of financial benefits
(% of respondents)



Size of benefits among companies experiencing financial benefits
(% of respondents)



INFORMATION AND COMMUNICATION

Future circular economy topics and drivers in the information and communication sector

Future circular economy topics

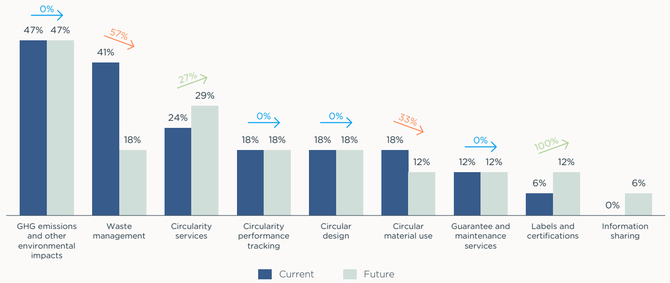
The ICT sector respondents expect some changes in their main strategic priorities, including a shift towards circularity services. Mitigating GHG emissions and other environmental impacts is selected by 47% of the respondents and is thus the most important future priority for the sector. Waste management, which is selected as one of the top current priorities for 41% of companies, is only selected by 18% of companies as a top future priority. Perhaps this is due to ICT companies having already made much progress on the topic. Circularity services has more responses for future priorities, meaning more companies in ICT expect to focus on providing services that extend the life of products.

Future drivers

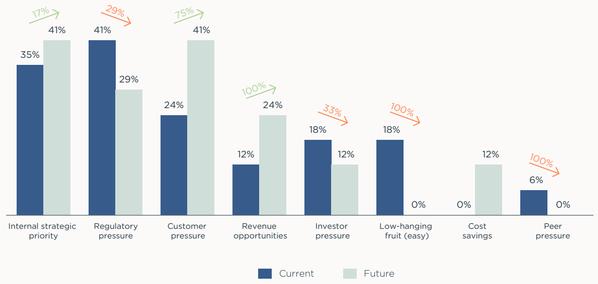
The future top drivers of circularity efforts in ICT, according to the respondents, will still be internal strategic priorities, regulatory pressure and customer pressure, although customer pressure is foreseen to become even more important than it is currently. Internal strategic priority and customer pressure are both selected by 41% of the ICT respondents as being among the top drivers of circularity for their companies in the future.

Elaborating on internal strategic priority, a company mentioned that an internal focus on innovation and developing a competitive advantage is a driver of circularity. The fact that customer pressure is a factor of growing importance for this sector seems aligned with the cross-sector challenge of circularity performance tracking. Another company mentioned the development of 'Green IT' and 'Green code methods' as a priority in its strategy because these can significantly reduce environmental impacts.

Overview of current and future circularity priorities (% of respondents)



Overview of current and expected future drivers behind circularity priorities (% of respondents)



INFORMATION AND COMMUNICATION

Achieving a circular economy in the information and communication sector

Barriers to circular economy progress and most challenging topics

Knowledge and skills are the most prominent barrier to circularity progress in the ICT sector, followed by organisational change and customer preferences. This is a sector in which working with the circular economy is not the most obvious part of the business model. 41% of the respondents see knowledge and skills as a barrier, with organisational change selected by 24% of the respondents. This indicates that internal factors are challenging, and that the industry may be short of the competencies needed to drive circularity progress.

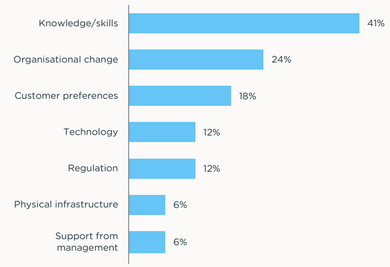
Circularity performance tracking and information sharing stand out in this sector as the most challenging circularity topics. Circularity performance tracking is selected by 24% of ICT companies and information sharing by 18%. These topics will require companies to gather data and monitor progress for their own use and for others in the value chain.

Feasibility and timeline for EU Circular Economy Taxonomy alignment and ESRS E5 compliance

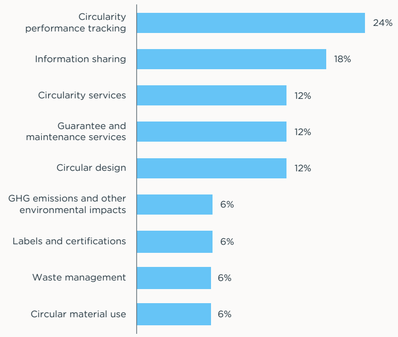
ICT companies applying ESRS E5 expect to be compliant within the next few years. 45% of the respondents already expect to report in less than 2 years, 27% of the respondents expect to accomplish it in 2-5 years and 27% expect to do so in more than 5 years. None of these respondents answer that they 'Don't know', suggesting they all have a relatively clear strategy for how and when they will disclose.

Few ICT companies have a clear ambition to align with the Taxonomy screening criteria. Only 18% state they they have a clear ambition and the rest 'Don't know'. This is perhaps an indication that ICT companies find it difficult to identify their activities in the Taxonomy and are unsure how to make sense of the screening criteria.

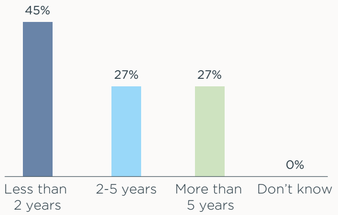
Barriers to circular economy progress
(% of respondents)



Most challenging circularity topics
(% of respondents)



ESRS E5 disclosure timeline for companies expecting to use the standard
(% of respondents)



Conclusion and recommendations

Introduction

This study delivers an in-depth evaluation of Nordic companies' readiness for the transition to a circular economy, thus delivering upon its overall objective.

Key to such a survey is to ensure a scope that provides meaningful results. To achieve this, the scope was narrowed to the economic activities within the EU Circular Economy Taxonomy. This decision resulted in an extra benefit: if a company has the ability to substantially contribute to the transition to a circular economy, ESRS E5 is material to them.

As well as sending a survey to the companies in scope, the study included follow-up interviews with several of the respondent companies to add further depth and nuance to the survey answers. This enabled the study to include explanations for trends observed in the survey data.

In some instances, companies' lack of knowledge created a limitation in the study. For some questions, the volume of responses selecting 'Don't know' was so large that the responses for follow-up questions were significantly reduced. This is particularly evident in the question about companies' ambition to align with Taxonomy screening criteria.

Overall observations

The survey and subsequent follow-up interviews focused on five primary topics. Outlined herein are overall observations per topic.

Awareness and understanding 01

Most companies are primarily aware of both the ESRS E5 and the EU Circular Economy Taxonomy, but this does not necessarily translate into an in-depth understanding.

Many companies across all sectors have not yet familiarised themselves with ESRS E5 or the EU Circular Economy Taxonomy, with the majority acknowledging a lack of understanding. Circa 70% of companies do not have extensive knowledge of ESRS E5 even though it will invariably be deemed to be material for them.

Although a detailed understanding of both may be lacking, in contrast there is an awareness of the benefits that both ESRS E5 and the EU Circular Economy Taxonomy will bring.

Circular economy progress and financial benefits 02

Most companies clearly see circular economy through the prism of waste management and a means to mitigate GHG emissions and environmental impacts. As a result, progress is measured via both.

It is evident that key circular principles such as circular design are still immature with just 9% of respondents illustrating progress.

Financial benefits, although circa of 40% respondents claimed to experience some, remain minor with respect to circular economy topics and their implementation.

Future circular economy topics and drivers 03

Most companies still have somewhat limited circular economy priorities and expect to focus on waste management, mitigating GHG emissions and other environmental impacts, and circular material use.

However, information sharing and circular performance tracking see notable increases with respect to future relevance. Other key topics such as circular design remain a non-priority.

Companies expect their circular economy progress in the future to be influenced by regulatory pressure and customer pressure, both a consequence of extensive sustainability regulatory requirements.

Barriers and key challenges 04

A lack of knowledge and skills is evidently the most important barrier to the transition to a circular economy. Companies do not know enough about what it means and how to implement it. This is detrimental to their progress on the most challenging circularity topics e.g., circular material use and circular design.

Regulation and customer preferences are also seen as key barriers. It follows that regulatory and customer requirements can benefit and limit circularity progress in equal measure.

When is compliance/ alignment expected? 05

Most companies have a clear ambition to provide the necessary information to comply with ESRS E5 within the next 2-5 years.

Approximately 70% of the total respondents indicate ‘Don’t know’ when asked about their ambition to align with the technical screening criteria (TSC) for the circular economy objective of the EU Taxonomy.

Sectoral take-aways

The study analyses the overall readiness of Nordic companies and assesses any difference in sector or country. While there were no meaningful country differences, unique sector characteristics are salient.

Construction and real estate

70% of companies expect to apply ESRS E5, while only 24% have extensive knowledge of the standard. Most companies expect it is feasible to comply within 2-5 years. Half of respondents have business activities relevant to the EU Circular Economy Taxonomy, but only 25% have a clear ambition to comply with the technical screening criteria with nearly 40% uncertain.

Material use is the most challenging topic and the strategic focus for construction and real estate companies. Rigid or outdated regulation, mainly for quality and safety standards, is seen as the largest barrier to progress.

Manufacturing

Surveyed manufacturing companies have the least knowledge of both the ESRS E5 and the EU Circular Economy Taxonomy, compared to other sectors. 38% don't know about the materiality of ESRS E5 and 48% don't know about the relevance of the Taxonomy. For the Taxonomy, this may be explained by the narrow scope of activities that are currently included in the criteria, namely manufacturing of plastic packaging and electronics.

Material use is the most challenging topic for this sector and a current and future strategic focus area. Quality requirements are the biggest concern for circular material use. Electronic components, in particular, require such high-quality materials that companies prefer new materials.

Services

Most service sector companies expect to apply ESRS E5 in their CSRD reporting (88%), and most will do so within 2-5 years. Fewer companies know if the EU Circular Economy Taxonomy is relevant, and only 32% have a clear ambition to comply with the technical screening criteria.

Many service sector companies have experienced financial benefits from circular services (52% of respondents), but they still face a barrier with respect to customer preferences for quality or speed of service delivery. In the future, companies offering circular services expect to focus much more on performance tracking, which they find most challenging.

Utilities

Almost all the surveyed utility companies (78%) understand that ESRS E5 is material to them, and over half already have extensive knowledge of its criteria. However, a third are not sure when they expect to comply.

As with other sectors, far fewer companies (54%) are certain that the EU Circular Economy Taxonomy is relevant and only 28% have extensive knowledge of its requirements.

Utility respondents see mitigation of GHG emissions and other environmental impacts as the most challenging topic, but also their current and future strategic focus.

Information and communication

Surveyed ICT companies are knowledgeable of both ESRS E5 and the EU Circular Economy Taxonomy, although most do not yet have an ambition to align activities with the technical screening criteria. Most surveyed companies expect to fully comply with ESRS E5 already within the next two years.

Circular economy performance tracking and information sharing are the most challenging topics, according to surveyed respondents.

Circular economy services is a topic that is expected to become much more relevant in the future, with a strategic focus now being placed on this.

Key conclusions

Several key conclusions can be drawn from the study, ranging from a lack of understanding and a need for upskilling to emphasis being placed upon regulation both as a driver but also a barrier. These do not come as a surprise. However, the study does shed light on some issues that perhaps were less obvious, such as the overall attitude in relation to the EU Circular Economy Taxonomy.

Awareness versus understanding

Although the level and depth of understanding varied from country to country and from sector to sector, it is evident that there is a knowledge void. Awareness exists but not real understanding. Companies are being overwhelmed with ESRS (10 topical standards in total) and the EU Taxonomy for Climate Change Mitigation has dominated thoughts. The ability to digest is an issue, but also, in some instances, a lack of real and deep guidance is a key barrier to understanding. It is recommended to read in detail, which may seem obvious, as well as discuss and debate both ESRS E5 and the Taxonomy to garner a clear understanding of how it impacts each individual company.

EU Circular Economy Taxonomy

Prevalent throughout all topics contained in the study is an overall lack of understanding of the Taxonomy, as well as confusion. The study illustrates the scale of the journey that lies ahead with respect to the EU Circular Economy Taxonomy becoming truly meaningful and applicable. Approximately 70% of the total respondents indicate 'Don't know' when asked about their ambition to align with the technical screening criteria. It is evident that the challenge goes beyond reading and understanding the Taxonomy, but rather understanding it's overall purpose and worth. It has a purpose and worth, and this needs to be clearly articulated and communicated.

Data and information

Information sharing and circularity performance tracking are acknowledged as growing in strategic importance in the coming years. Companies, albeit still at a relatively slow pace, are beginning to recognise the importance of data, data which ultimately emanates from an ability to measure circularity and track performance. Dedicating resources to defining metrics, monitoring, tracking, assessing, and communicating circular data will be central to a company's ability to transition to a circular economy.

Link to GHG emissions reduction

In the region of 20% of companies surveyed see circular actions' role in mitigating GHG emissions as a strategic priority. It is important that this link is made as an ability to illustrate GHG reduction is key to the pace at which companies will transition to a circular economy. However, it is important to note that it is "only" 20%. This illustrates that there is still much work to do with respect to raising awareness and educating companies on the link between resource extraction, production and use with climate change mitigation.

Going beyond waste management

It is evident that moving away from waste management as the dominant topic of circular economy is still a challenge. One could argue that, indeed, the emphasis placed upon waste management illustrates an underlying lack of overall understanding of circular economy. That only 8% of all respondents see circular design as a future strategic priority illustrates this point further. It is crucial to understand that circular economy includes a much more comprehensive range of topics. The EU Circular Taxonomy and ESRS E5 should be used as guidance to help determine which topics are most important to your business and indeed how the circular economy can be defined sector by sector.

Monetising circular economy

The study illustrates the difficulty that exists to monetise circular economy topics and associated actions and to clearly illustrate the benefits in financial and monetary terms. When asked if current circular practices have a financial benefit, circa. 60% responded "no" or "do not know". An ability to monetise circular actions and articulate benefits in financial terms is critical to get company management buy-in. Investment into circular economy topics needs to illustrate a return on that investment. It is clear that an inability to monetise circular actions and illustrate return on investment is a particular challenge across most sectors and, as a result, a significant barrier.

Maturity imbalance

All companies surveyed as part of the study likely have eligible economic activities as included in the EU Circular Economy Taxonomy, but not all of them are aware of this. The vast majority are in scope of the CSRD and will have ESRS E5 as a material disclosure topic. However, the level of circular maturity is vastly different from company to company and not necessarily a difference with a clear pattern across countries or sectors. This further illustrates the challenge that exists to place circular economy at the centre of a company's sustainability and business strategy.

Customer preferences

Customer preferences is both a significant barrier for many companies but also an opportunity. Customer preferences for new, non-circular products that can be procured and delivered quickly are still dominant. Price is also another key factor. Understanding customer behaviour and preferences and adapting circular solutions accordingly is an overlooked but highly important topic.

Moving forward

Both the European Sustainability Reporting Standard for Resource Use & Circular Economy (ESRS E5) and the EU Circular Economy Taxonomy are only in force since the 1st January 2024. It is also important to note that it is listed companies that are currently grappling with both as they need to disclose in 2025 for the financial year 2024. Taking this into consideration and coupled with the overall pace at which regulation is currently moving, some responses should come as no surprise.

Nevertheless, both ESRS E5 and the EU Circular Economy Taxonomy are here to stay, and it is advisable to embrace both and see them as a real business opportunity and not only a compliance exercise. Both can and should be key enablers to a company's circular economy transition.

1. **Clarity of definition:** Like it or loathe it, the Taxonomy provides a definition of what circular economy is for all sectors included in this survey. The Taxonomy is not perfect, but it is necessary. It is key to accept and embrace this definition. It is recommended to use the definition to provide a more concrete description of what the circular economy means to a particular company, removing the abstract nature of what the circular economy is to the different sectors included in the survey. A tangible definition of what the circular economy is for each sector is now available, and this definition should be applied and communicated.

2. **Access to finance:** The overall purpose of the Taxonomy is to provide clarity of definition to create trust for financial market participants, in order to encourage investment into the green transition and particularly, the circular transition. Both investors and commercial lenders are using the Taxonomy as a definition of what a sustainable investment or loan is. Companies that prioritise taxonomy alignment can enhance their ability to attract investment and access to finance.

3. **Strategy and Planning:** The CSRD and ESRS E5 require companies to measure resource flows, set targets, draft policies, and develop clear actions. These requirements are the core components of a circular strategy illustrating that the ESRS E5 is much more than a compliance exercise. The companies that recognise this earlier will not only have stronger disclosures, they will have a clear circular economy pathway.

4. **Financial risks and opportunities:** The CSRD mandates a double materiality assessment which entails an assessment of financial risks and opportunities as well as an overview of dependencies. For companies within scope of both ESRS E5 and the EU Circular Economy Taxonomy, this is critically important. Understanding financial risks and opportunities as well as material dependencies is critical to the overall business strategies of all the companies that took part in this survey.

   Additionally, a deeper understanding of the financial risks and opportunities related to resource use and circular economy makes the much needed business case for investing in circular actions more evident.

5. **Resource flows:** Very few companies fully understand the overall movement of resources into and out of their organisations. Yet to have a real sustainability impact this knowledge is fundamental, especially for the sectors included in this survey. The circular transition cannot accelerate product by product or building by building, but company by company and sector by sector. This can only happen by fully understanding resource flows in and out of companies

6. **Competitive advantage:** Both the Taxonomy and ESRS E5 enable apples to be compared with apples. As the definitions of the Taxonomy are sector specific and ESRS E5 requires disclosures in relation to actions and targets, companies in specific sectors can and will be compared with one another. The companies that see how all of this is going to unfold in the next two to three years, and react accordingly, will gain competitive advantage. Both ESRS E5 disclosure requirements and EU Circular Economy Taxonomy criteria will seep into procurement. Indeed, this is already happening.

The above outlines just some of the reasons why companies are recommended to prioritise the application of ESRS E5 and alignment with the EU Circular Economy Taxonomy.

This study illustrates that, although awareness is high, understanding of both is low. This study further illustrates that both can be used to break down the barriers that have been identified as part of this study to truly accelerate the circular transition of all companies included in this study.

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