

An aerial photograph of a dense forest. A light-colored, curved path or road winds through the trees, separating a darker, more uniform forest area in the lower half from a more varied, sunlit forest in the upper half. The text is overlaid on the upper left portion of the image.

The circular transition in Danish companies

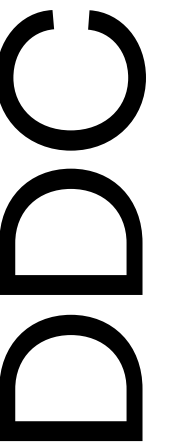
DDC

October 2022

Danish Design Center

About Design Delivers Green

- **Danish Design Center and Confederation of Danish Industry** have in 2022 conducted the survey Design Delivers Green.
- The survey is a replication of surveys conducted in 2016 and 2018 examining the **use of design** among Danish companies, but for the first time, it also includes a mapping of the circular transition in Danish companies.
- The results are collected by Epinion and are based on telephone interviews with business managers responsible for business development, product development, or innovation from **744 companies** with 10+ employees.

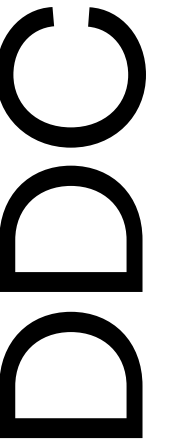


About the survey:

The results have been weighted in order to ensure an equal representation of companies across industries, number of employees, and geography.

What is circular economy?

A circular economy decouples economic growth from resource consumption, relying on **efficient resource use**. In contrast to a linear value chain, which follows a straight path from raw materials to production to disposal, a circular economy breaks with this model. Products and value chains in a circular economy are designed to **reduce resource consumption** and **increase product** lifespans. In a circular economy, resources and materials are **regenerated, reused**, and **recycled** while retaining value.



Now is the
time for *the*
circular
transition

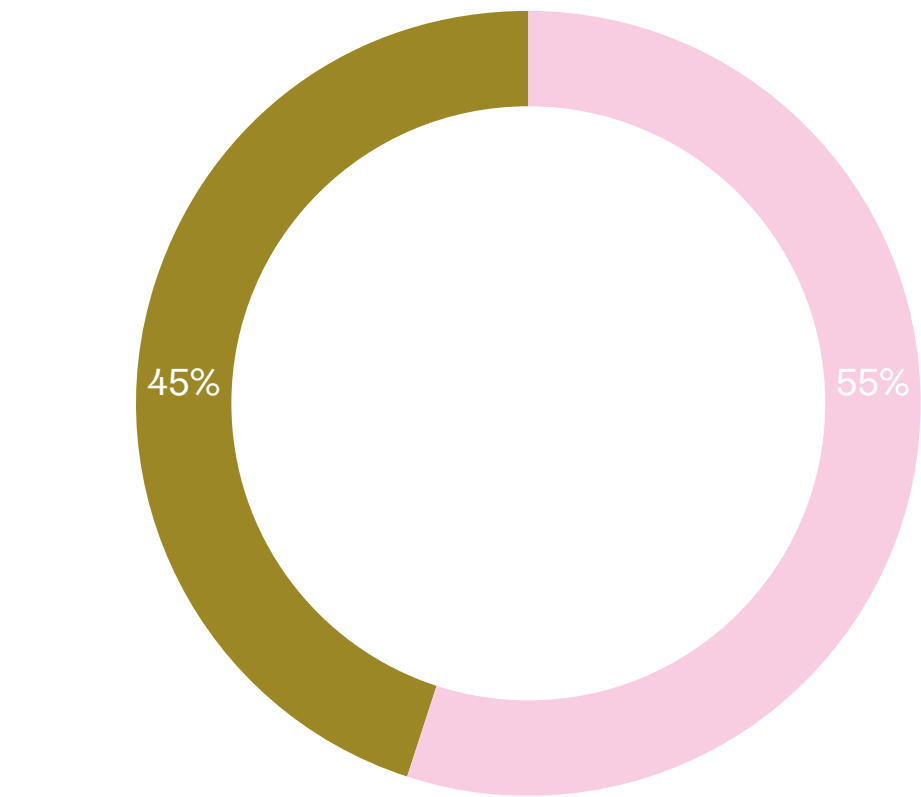
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”It’s important that companies become more circular in their production methods because we are running out of materials. Furthermore, businesses will soon be required – “ both by national agencies and international bodies like the EU – “ to rethink the way they produce and package their products.”



Tackling climate change through circular economy

Transformation to renewable energy addresses 55 % of global GHG emissions. However, if we are to reach the UN climate goals, we must address the remaining 45 % through a systemic approach: a total transformation of the way we produce and consume products.



- 45% Remaining emissions tackled through transformation of
- 55% Emissions tackled through transition to renewable energy

About the survey:
The numbers are based on research from The Ellen MacArthur Foundation: As renewables can reduce 55% of global GHG emissions, we must address the remaining 45% if we want to achieve UN climate goals. To address the 45% arising from the way we make and use products and food, we need a systemic approach to redefining value creation.

Circular solutions are a corporate responsibility

The Extended Producer Responsibility takes effect in 2025. It will apply to approximately 40.000 (13% of) Danish companies.

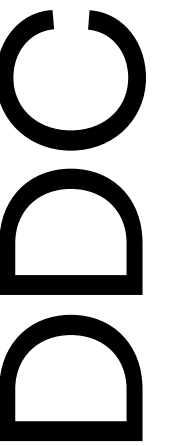
About the Extended Producer Responsibility (EPR)

App. 13 % (40.000) of Danish companies will be subject to the extended producer responsibility (EPR) for their packaging. The initiative takes effect in 2025 and applies to all EU-countries. Read more about the Extended Producer Responsibility [here](#).

When a product is subject to the EPR, the producers are responsible for the environmental costs associated with handling and disposing of the product. Each company is imposed a responsibility corresponding to the company's market share within the product category. This means that companies with large market shares have to pay a larger share of waste disposal costs than companies with small market shares.

Producer responsibility payments are also differentiated by how easily recyclable the products are. The easier a product is to recycle, the lower the fee.

In Denmark, it is the Data Centre for Circular Economy (DPA - Dansk Producentansvarssystem) that manages the extended producer responsibility.



“We need to rethink our use of packaging. The Extended Producer Responsibility basically makes the producer, not the consumer, responsible for waste management. So the easier your waste is to recycle, the lower the cost.”

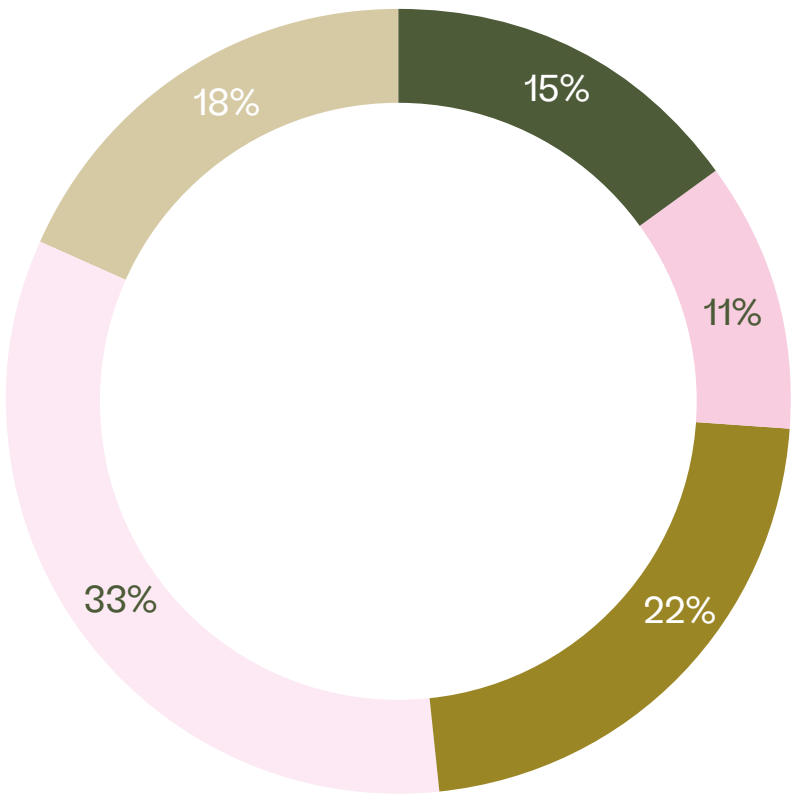


A status on the *circular transition* in Danish companies

The circular transition in Danish companies

85% of Danish companies are taking steps towards becoming more circular.

One third of them already work either to a very high or high extent with circular transition of the company.



- 11% To a very high extent
- 22% To a high extent
- 33% To some extent
- 18% To a small extent
- 15% Not at all

Illustration based on answers to the question: "To which degree does your company work with the circular transition?"

Danish companies at different stages in the circular transition

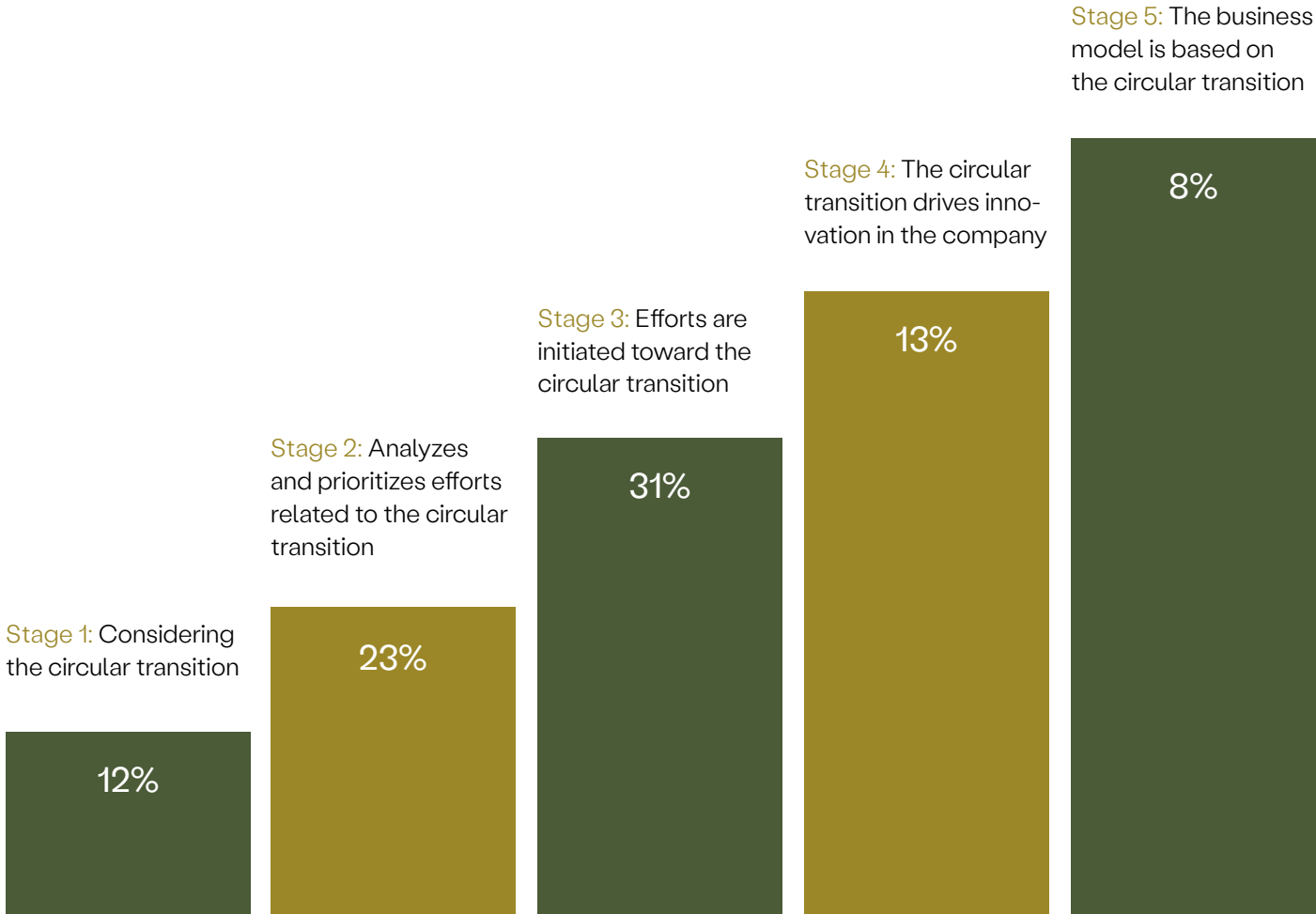
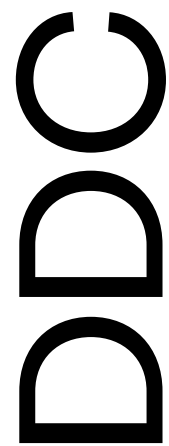


Illustration based on answers to the question: “Which of the five following stages reflects your company’s position in the circular transition?”

The stages explained:
However, companies are at different places in the transition to a circular economy. Less than one in ten (8%) consider the circular economy an integral part of the company’s business model. More than a third (35%) of the companies involved in the circular transition are still in the very early stages of the changeover, where they are considering and prioritizing their circular efforts - and have not yet started concrete initiatives.

The five stages serves as a tool to identify what initiatives the company has implemented.

Please also keep in mind that the stages towards circular economy are not linear. For example, a company can easily jump from stage 2 to stage 4.

“As an industry, we need to acknowledge that our current way of doing things is not sustainable, not now and not in 100 years. We have to design things differently. And it’s not just about industrial design, but design thinking in the form of service design and experience design.”



Mads Kogsgaard Hansen
Senior Global Product Manager, Product Circularity & Classics Program
Bang & Olufsen

Case - Bang & Olufsen: Changing the Throwaway Culture in Consumer Electronics

Read the full article [here](#).

Bang & Olufsen's new product 'Beosound Level,' is the world's first Cradle to Cradle-certified speaker, supporting the circular economy with a long-lasting electronic device. B&O aims to eliminate the throwaway culture of electronic products. Therefore, the Beosound Level speaker is designed with modular parts - from the battery to the design cover - that can be swapped for replacements, ensuring lifelong use.

The design supports a resource-efficient process. When the speaker reaches an end-of-useful-life point, the easy disassembly makes it pay off to reuse and recycle its components rather than tossing the entire speaker.

For Bang & Olufsen, the new design is only the beginning. Learnings from the Beosound Level project have ultimately contributed to a new sustainability strategy, in which the company commits to continue efforts in circularity and remanufacturing. In just three years, B&O plans to have 10 Cradle to Cradle products on the market.

A variety of approaches to the circular transition

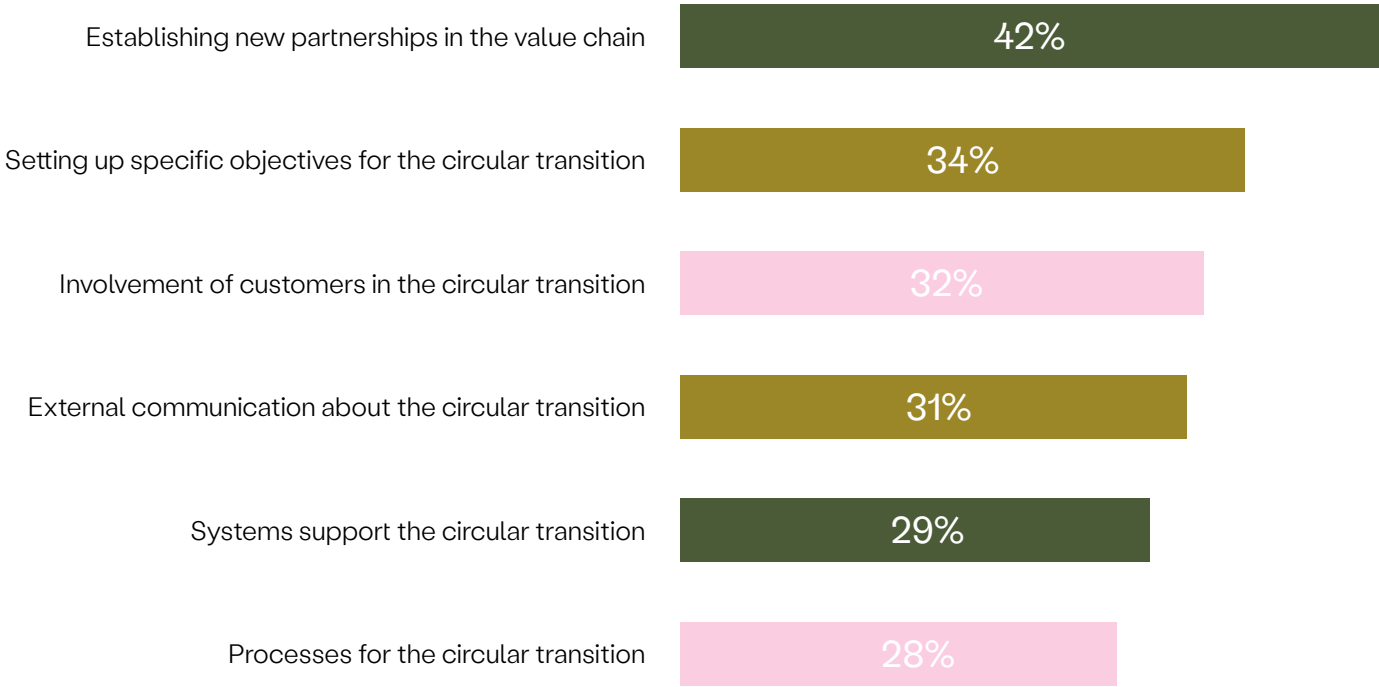


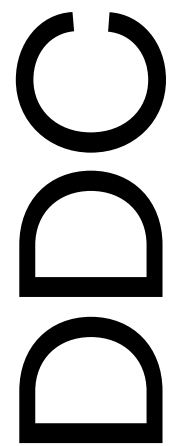
Illustration based on answers to the question: “How do you approach the circular transition of your company?”

The numbers explained:

Generally, companies approach the circular transition in several different ways. Most companies transitioning to a circular economy establish new collaborations within the value chain.

Moreover, the companies were asked: “Which chains are the most important when you establish new partnerships within the value chain to support your circular transition?”

The most common types of new collaborations are with suppliers (66%), customers (52%), and production (32%). In most companies, the Executive Board usually makes decisions regarding how and whether circular transitions should be implemented (92%).



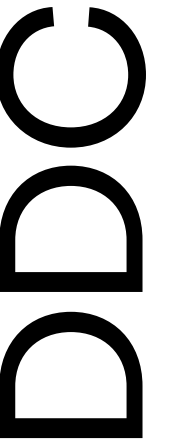
How circular economy affects the bottom line

- 17% of Danish companies say that circular restructuring of their business to a high or very high degree improves the economic bottom line.
- 17% of companies report that circular measures has a positive affect on the economic bottom line.
- 64% of companies with a fully circular business model report that going circular has had a positive impact on the economic bottom line.

Based on answers to the question: “To which degree do you consider the circular transition is positively affecting your company’s economic bottom line?”

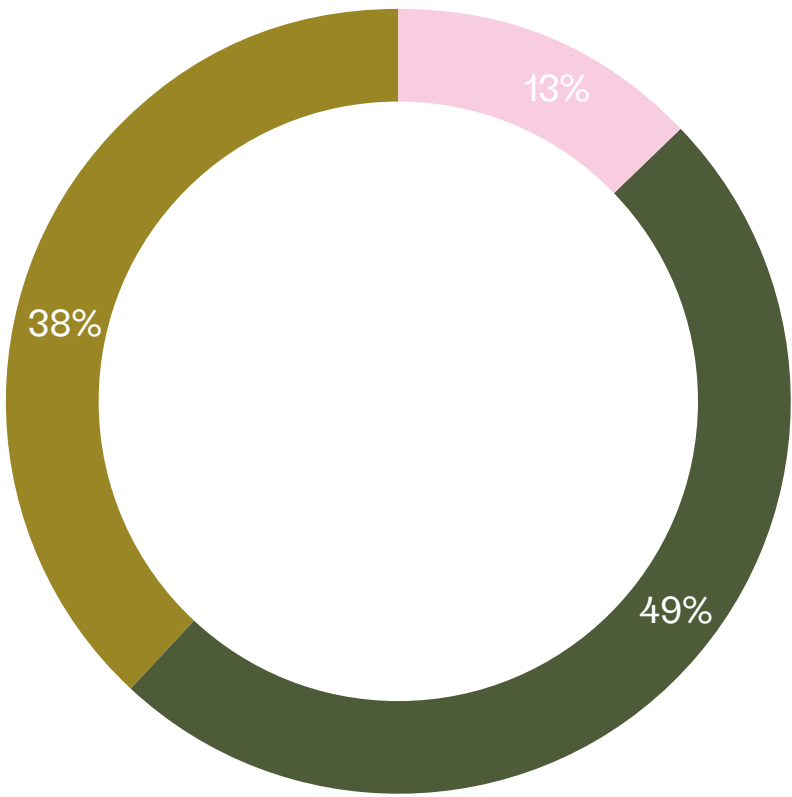
The numbers explained:

Generally, there is a wide spread of perceptions of how the circular changeover affects the company’s financial bottom line. 17% of the companies working on a circular business restructuring experience that the change has a very positive effect.



Many companies need new competencies

Less than half of Danish companies have the necessary competencies to begin the circular transition.



- 49% Have the competencies
- 38% Don't have the competencies
- 13% Don't know

Illustration based on answers to the question: "Do you have the right competencies to work with the circular transition?"

Even though 85% of Danish companies are already taking steps towards becoming more circular a lack of the right competencies can hinder the transition.

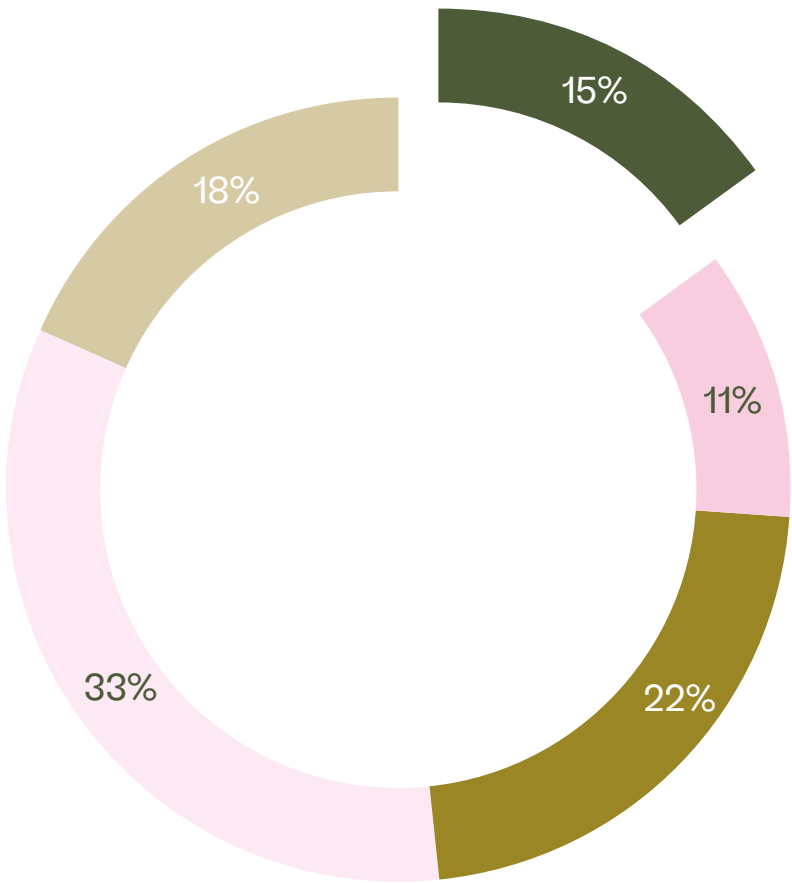


“Design competences must not and cannot be underestimated in the transition process we are undergoing these years. The ability to include and interact with the whole value chain, from invention of the materials used, to the production processes, packaging and the logistics related. It is important to see the whole picture and avoid suboptimizing – and that’s exactly what design is all about.”



The missing piece to the puzzle

While 85% of Danish companies work with the circular transition in varying degrees, 15 % still have not begun the journey towards circularity yet.



- 11% Work with the circular transition to a very high extent
- 22% Work with the circular transition to a high extent
- 33% Work with the circular transition to some extent
- 18% Work with the circular transition to a small extent
- 15% Does not work with the circular transition

Illustration based on answers to the question: “To which degree does your company work with the circular transition?”

Barriers to entering the circular transition

Among the 15% of companies not involved with the circular transition, these are the main barriers:

- Circular economy is not relevant for our business
- Not sure how to get started
- Circular economy is not relevant for the customers
- Circular economy is not considered a competitive parameter

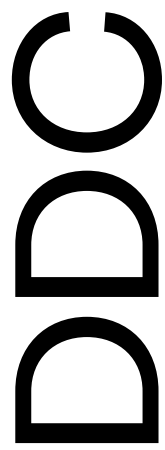
Based on answers to the question: “Why haven’t you begun the circular transition of your business?”

Respondents had the following options:

- Circular economy is not relevant for our business
- It’s not important for our customers
- We are unsure about the economic value of circular economy
- It’s difficult to meet new regulations, demands, and standards for sustainable and circular transition
- We lack capital to initiate the circular transition
- We lack resources such as time/employees to initiate the circular transition
- We are faced with opposition from our suppliers/production countries
- It’s not a competitive advantage in our industry
- We are not sure how to get started

The answers explained:

Several barriers have been identified among the companies not working with a circular economy. The most common reasons are a competitive matter, customer-based relevancy, and companies that simply do not know how to get started.



Design as a *driving force* for circular transition

Case: Plus Pack

Plus Pack is committed to become 100% recyclable in their packaging solutions. Design plays a crucial role in this transition.

“A circular economy relies heavily on design. In the design phase, essential decisions regarding shape, color, and material are made, ultimately determining the product’s lifespan. Everyday, we see how our design approach creates added value for our customers.”



Camilla Hastrup Hermansen
CEO and Founder
Plus Pack

Case: Pluspack - Designing for circularity

Read more about Plus Pack [here](#).

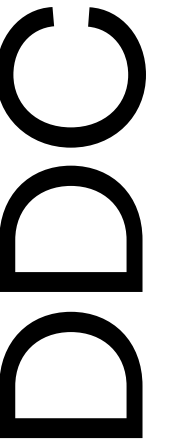
Following the UN's global goals, the Danish food packaging company Plus Pack is committed to developing sustainable and recyclable packaging solutions that contribute to a circular economy. To fulfill this commitment, they operate with a vision to establish 100 percent recyclable packaging solutions without CO2 emissions.

Their vision has already paid off with the following results:
Their vision of 100 percent recyclable products and production using recycled materials reduces CO2 emissions
Plus Pack's packaging solutions reduce food waste. This is ensured by designing solutions that focus on long shelf lives for the food, resealable solutions, and packaging in tailor-made sizes according to the end user's needs.
Aluminum contributes to the circular economy by being 100 percent recyclable. Sorting and recycling facilities are already in place and are constantly being refined.

Design skills enable the circular transition

Demand of creative competencies:

- Competencies related to a material understanding: 61%
- Knowledge of users' and customers' needs: 56%
- Competencies for developing new circular business models: 47%
- Competencies in the design and development of circular products or services: 43%
- Competencies to facilitate innovation and development processes: 41%



Based on answers to the question: "Which of the following competencies do you find relevant in the circular transition of your business?"

