Circular Business Models from the Client's perspective

RISE Circular Business Lab

Josefina Sallén

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Josefina Sallén:
Transition to sustainable and profitable business models

Superpower:
Talk into action


VIDDE


NEW OFFER
PAY PER KM


SCANIA


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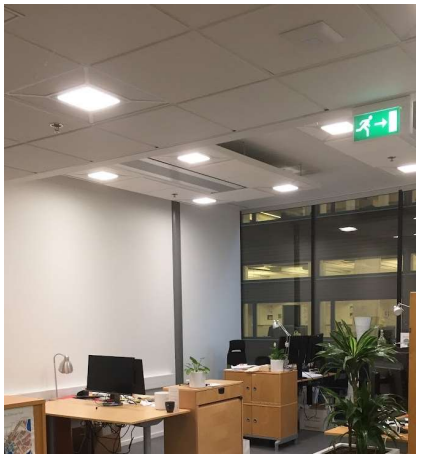
by accus




BLIZ


Volvo Truck Center
Testhall
ELECTRIC

Today

1. Why is circular economy important? Why now?
2. -Resources will be the new Black ☺ Not a question of if but how
3. (Climate, supply, digi/AI, legal)
4. What is it? AND what is a circular business model? And why is that important?
5. Value preservation. The CBM create, capture and preserve value. A shift of focus fo after the X.
6. And why is it relevant to be a ”circular client”?

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45%

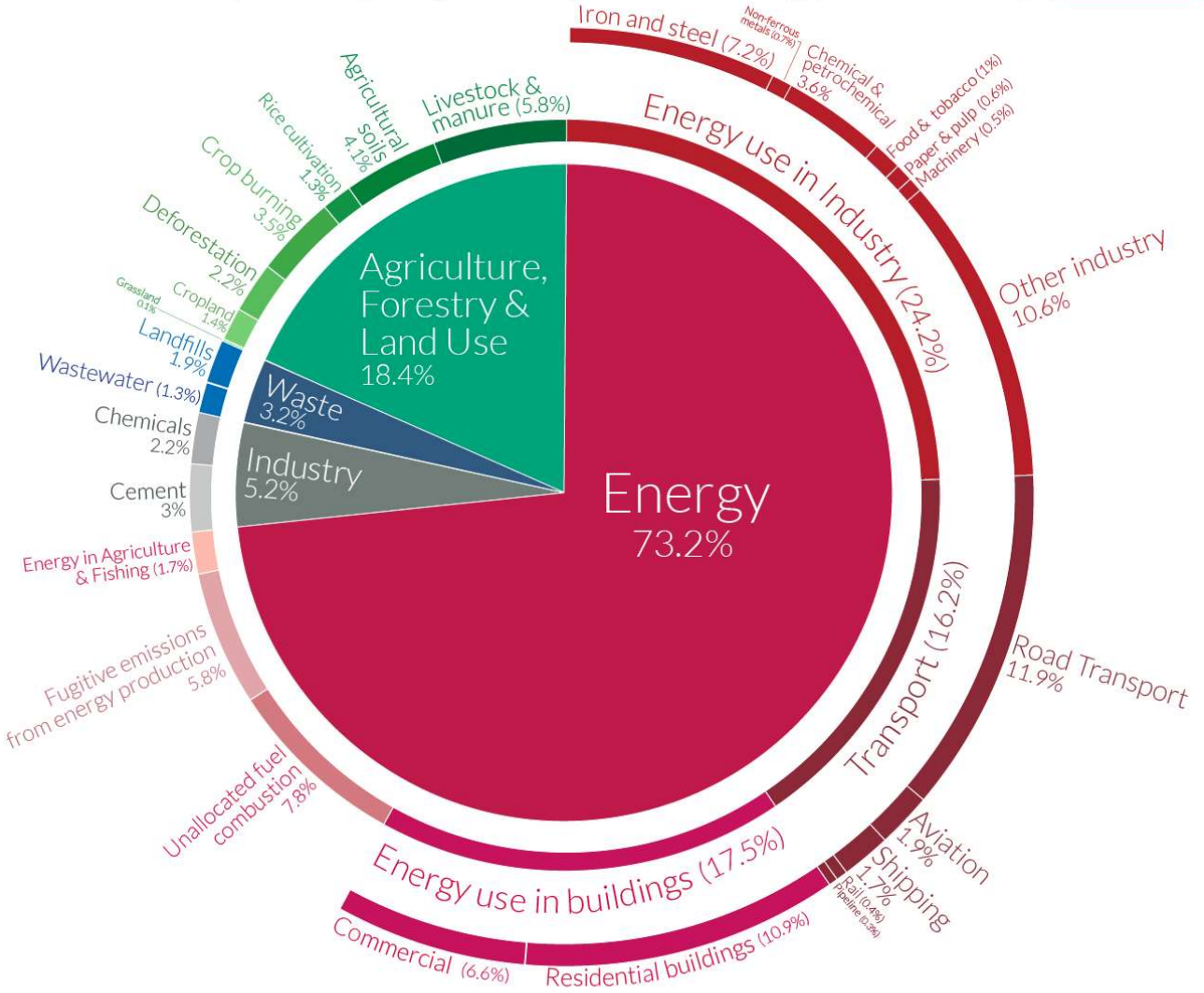
55%

Källa: Global Resources Outlook 2024

Global greenhouse gas emissions by sector

This is shown for the year 2016 – global greenhouse gas emissions were 49.4 billion tonnes CO_2eq.

Our World in Data



OurWorldinData.org – Research and data to make progress against the world's largest problems.

Source: Climate Watch, the World Resources Institute (2020).

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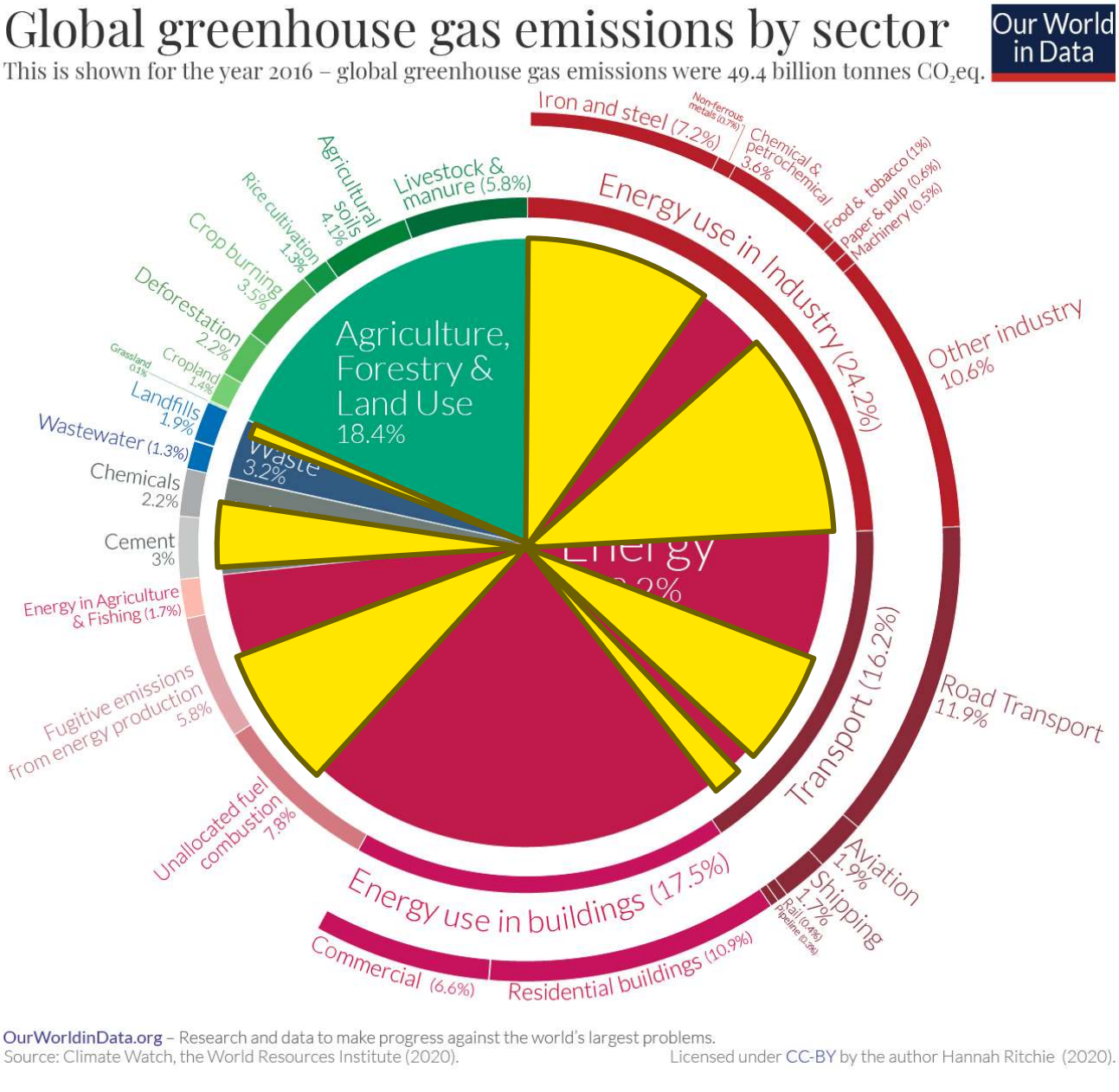

Half is energy embedded in physical artifacts = **products**

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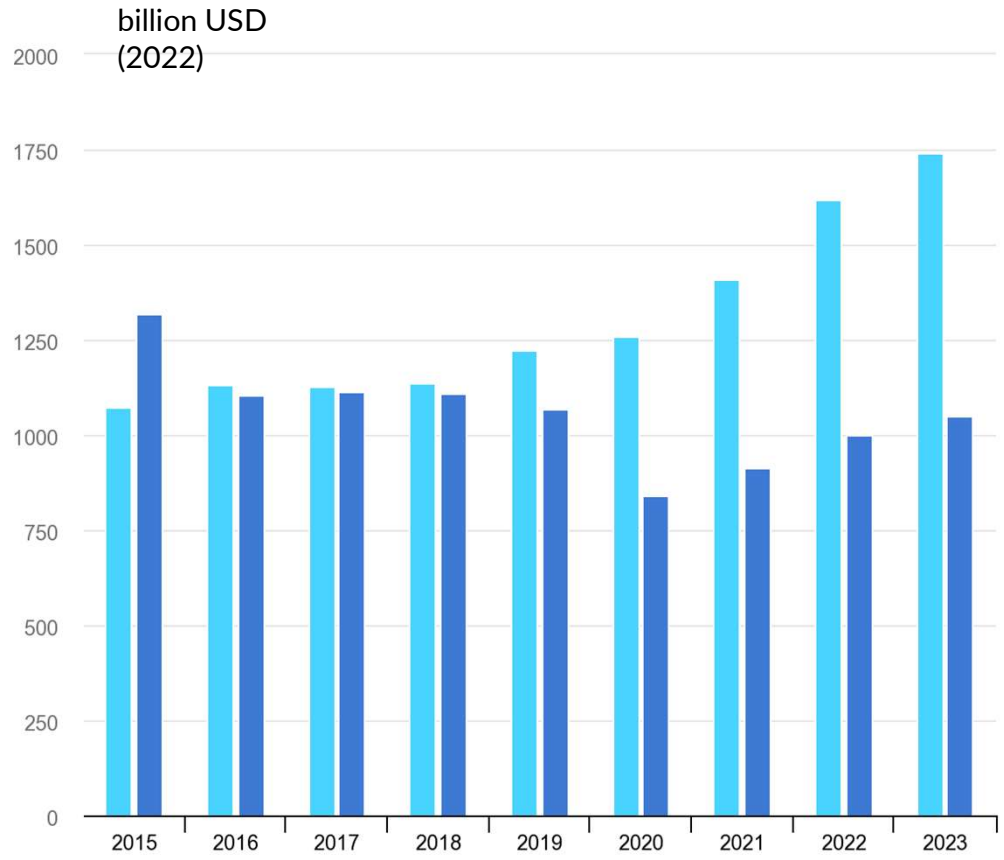
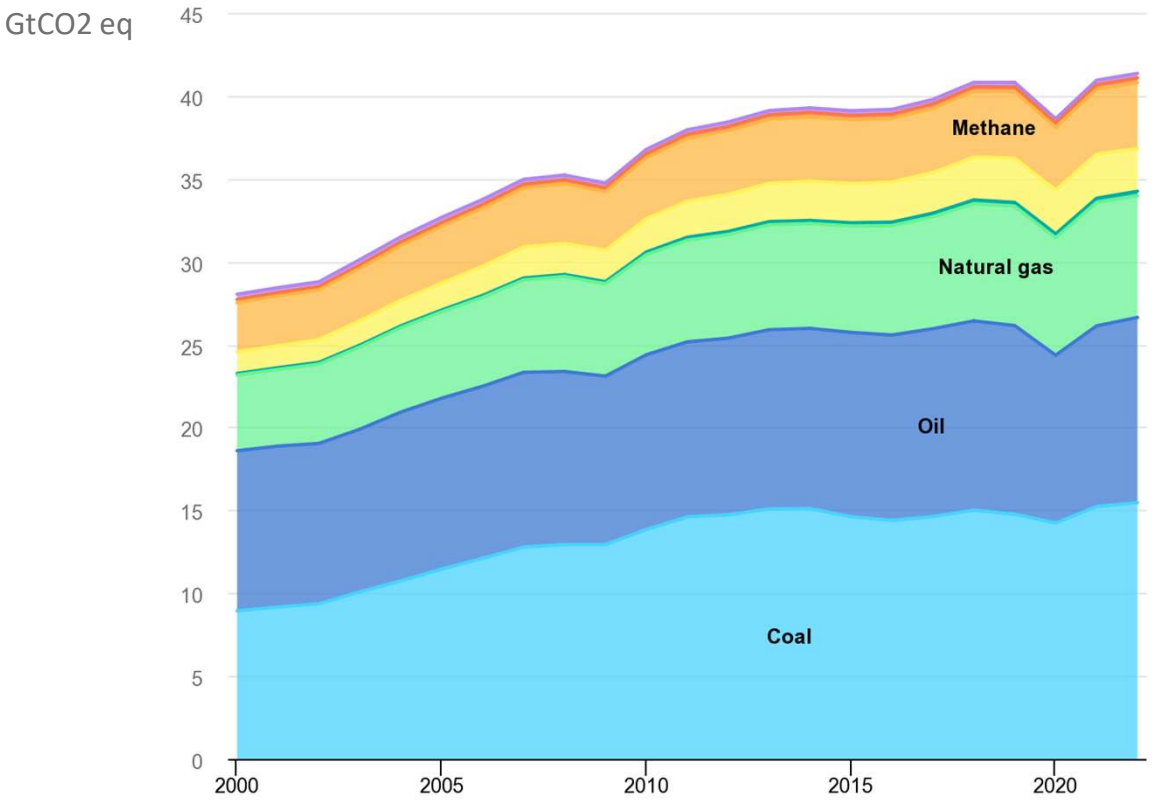
Global investments in clean energy surpasses the ones in fossil fuels since 8 years



IEA, Global energy investment in clean energy and in fossil fuels, 2015-2023, IEA, Paris https://www.iea.org/data-and-statistics/charts/global-energy-investment-in-clean-energy-and-in-fossil-fuels-2015-2023, IEA. Licence: CC BY 4.0

Despite 10 000 billion USD investments, during the past 8 years, GHG emissions continue to increase



IEA, Global energy-related greenhouse gas emissions, 2000-2022, IEA, Paris https://www.iea.org/data-and-statistics/charts/global-energy-related-greenhouse-gas-emissions-2000-2022, IEA. Licence: CC BY 4.0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A look at resource usage

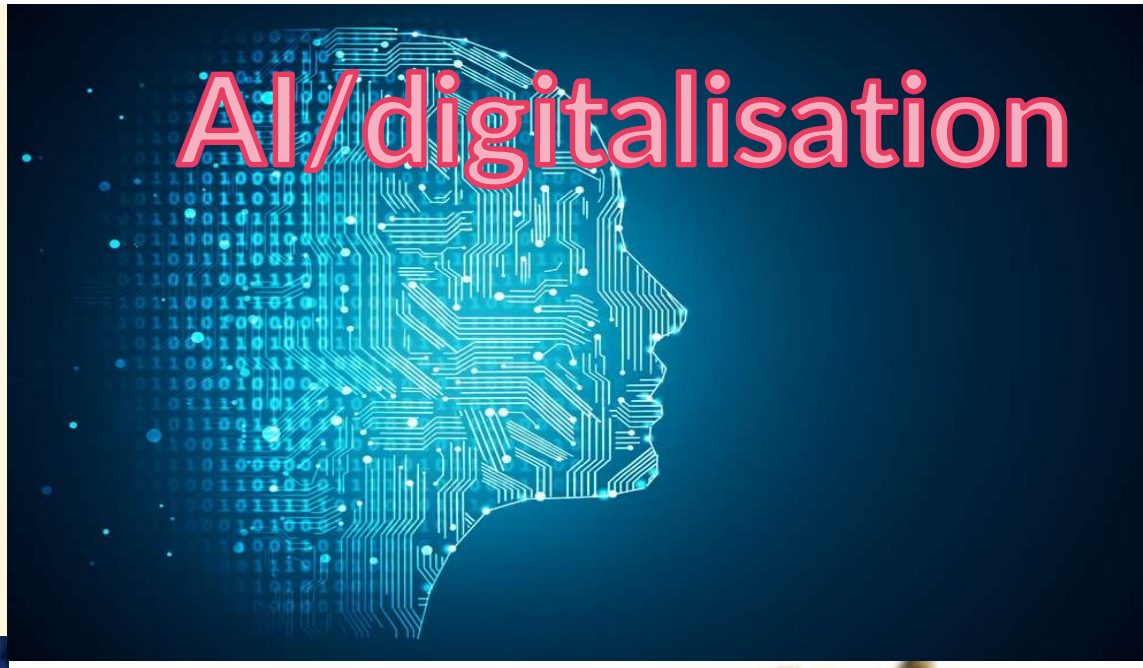
The triple planetary crisis

55% GHG
40% particle emissions
90% loss of biodiversity

Extraction of resources 3X since 1970…

…while productivity is on a constant level

8


AI/digitalisation

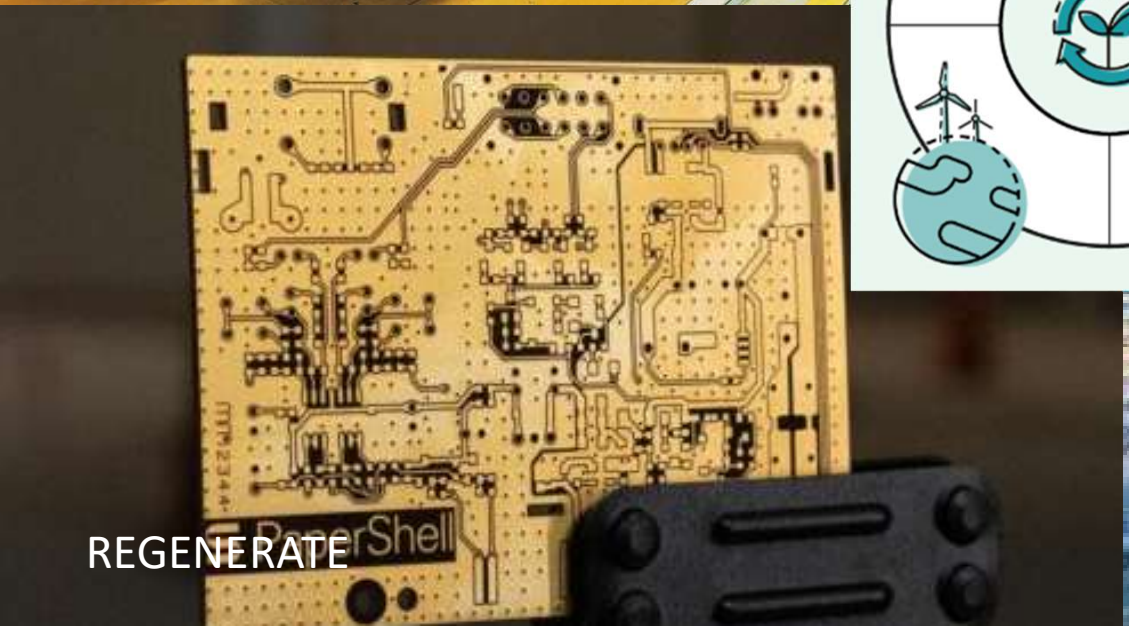

Resilience


Regulations


Value preservation


REDUCE


PROLONG AND
USE


REGENERATE


RECIRCULATE

Airconditioning – an illustration on how we use the world's resources

- By 2050, it is expected that there will be 1 billion air conditioning units in India alone. Worldwide installations could increase from 2 to 6 billion.
- Fans and air conditioning account for 20% of global electricity consumption, with Mumbai at 40%.
- Air conditioning is responsible for 9% of global GHG emissions – today.
- These systems often underperform due to poor management, with a global average of 20-40%.
- Not unusual with 35-50% of installations never used because the need was overestimated.

Climate change, increased prosperity, and poor use of IoT/AI for management and forecasting lead to drastically poor resource utilization and strain on global resources.

Source: IEA, EMF, INSEAD

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A circular business model

Generates revenue through preserving value over time, and encourage high usage of the resources

Eg PAAS, take-back, subscription, sharing

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From the client’s perspective

Simplicity

- Hassle free ownership
- Service offering better, easier, better organised (because the company owning the product WANT it to be served and WANT the interaction with the user)

Down time reduction

- Key components
- Data collection and advanced analysis
- Close collaboration

Flexibility

- Modifications over time
- Technical development over time
- Variation in need/use over time eg seasonal variations

Short contracts

- Subcontractors that have contracts that might alter over time
- Need to move equipment around
- Varying volymes of equipment required

Avoid investment – Capex to Opex

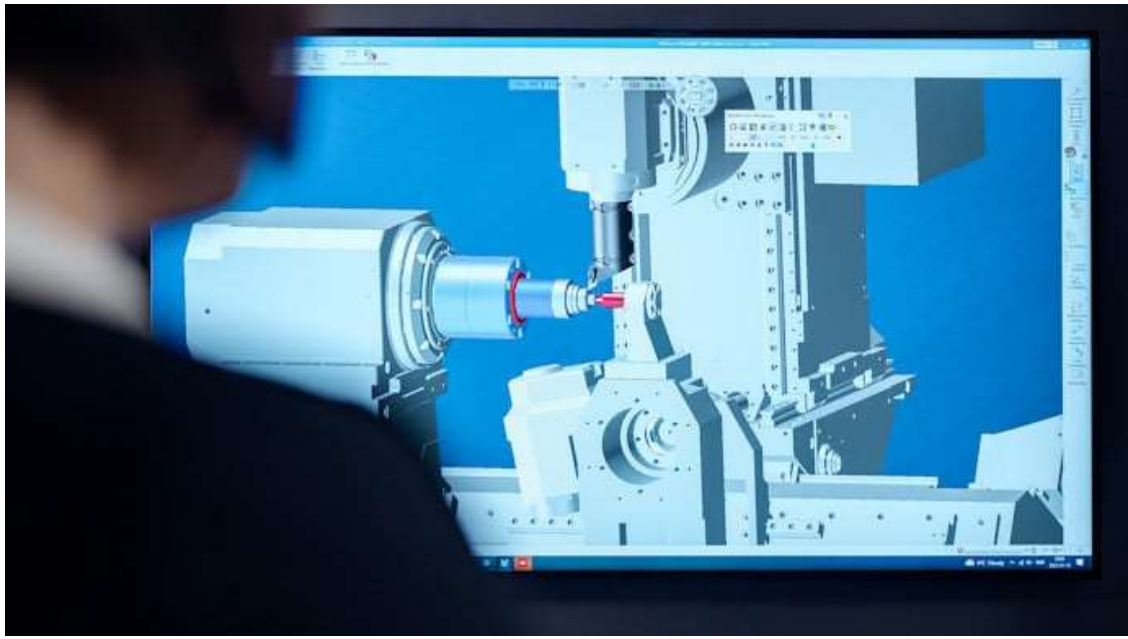
- Limited access to financing
- Targets
- Reduce balance sheet
- Access – not possible to buy

Innovations and new technology

- Risk reduction with possible fast development
- Test new usage and surrounding work procedures

Usage optimisation

- Data collection
- Adaptive learning over time for optimised usage



Some examples of successful circular business models

Kompressorer som tjänst

M-Use

- Elevator as a service
- Replace the initial high investment cost with a defined running annual fee
- Reduced risk for high renovation costs

Mitsubishi Elevator


90% cirkularitet som mål
Skärstål som tjänst
SANDVIK
SE – Research Institutes of Sweden

Philips
25% of revenues from circular offerings 2025

Our ambitious circular economy objectives for 2025

We have set ourselves a number of challenging targets for 2025

- Generate 25% of our revenue from circular products, services and solutions
- Close the loop by offering a trade-in on all professional medical equipment, and taking care of responsible repurposing.[1]
- Further embed circular practices at our sites[2] and send zero waste to landfill

Sustainable coffee machines - Scanomatic

Umesläp – Subscriptions of long lasting high quality horse carriages


Truck as a service
TOYOTA
MATERIAL HANDLING
CAUTION
AUTOMATIC
VEHICLE
TOYOTA

When to go for a circular offer – pay for value

Flexibility

- Modifications over time
- Technical development over time
- Variation in need/use over time eg seasonal variations

Hassle-free

- Service, support etc included
- Modify when needed

New technology/innovation

- Risk reduction in uncertainties eg fast product development
- Test/try out solution

From Capex to Opex

- If you can not afford the investment to buy eg equipment, apartment, car

Optimised use

- When data of usage is captured and the equipment can be optimised for the use

Josefina Sallén

Josefina.sallen@ri.se

+46 72-208 93 60