

# Drivers of sustainability in industrial real estate

Case study on corporate real estate of a manufacturing company


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# Impact of the built environment

**21%** of global GHG emissions

IPCC, 2022



# Importance of sustainable growth



# Industrial real estate



An aerial photograph of a city, likely Los Angeles, with a red overlay. The image shows a mix of urban buildings, green spaces, and infrastructure. The red overlay is semi-transparent, allowing the city details to be visible through it.

**Well-researched topics**

Commercial real estate

Corporate sustainability

Corporate real estate management

**Less researched topics**

Industrial real estate

Sustainability in real estate

Sustainable corporate real estate  
management





# Problem statement

Sustainability has become an important topic also within the built environment but the research focuses on residential and offices. There is little mention of industrial real estate.

This research focuses on what drives sustainable development of industrial real estate in the European context.



# Research questions

**What are the external and internal drivers of sustainability in corporate real estate management of a manufacturing company?**



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- 03** What is the role of European and national regulations in sustainability implementation in industrial corporate real estate management?



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- 01** Who are the most important stakeholders driving the sustainable change in corporate real estate management?
- 02** What are the financial reasons for sustainable implementation in industrial corporate real estate management?
- 03** What is the role of European and national regulations in sustainability implementation in industrial corporate real estate management?
- 04** Is double materiality taken into account in the aspect of climate change risk management?



# Content

- 01 Introduction
- 02** Theoretical background
- 03** Research methods
- 04** Findings and discussion
- 05** Conclusion and key takeaways
- 06** Limitations and recommendations

# Theoretical background

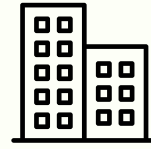
on Corporate Real Estate and Sustainability



# Corporate real estate

What is corporate real estate?

# Corporate real estate



## CRE

real estate necessary  
to conduct a business



## Industrial real estate

manufacturing  
facilities, warehouses,  
logistic centers



## CRE management and added value

balancing between  
business and real  
estate; internal and  
external actions



## IRE in literature

- in supply chain
- in CSRD
- it is owner-occupied

# Corporate real estate



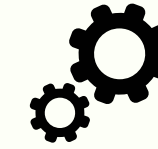
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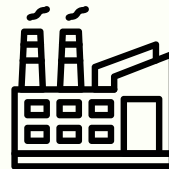
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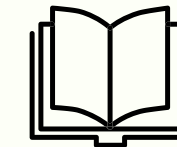
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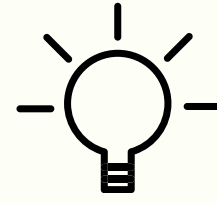
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# Sustainability

What is sustainability?

# Sustainability



## Triple bottom line

environmental, social  
and economic  
sustainability



## Sustainability reporting

Green Deal, EU  
Taxonomy, CSRD and  
many, many more



## Sustainable transitions

and paradox perspective  
in corporate sustainability



## Double materiality

How do we affect the  
world but also how does  
the world affect us?

# Sustainability



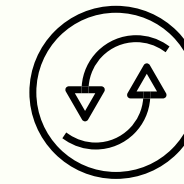
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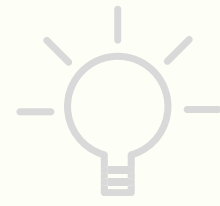


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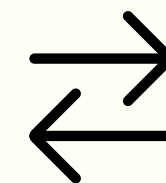
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# Theoretical framework





# Research methods

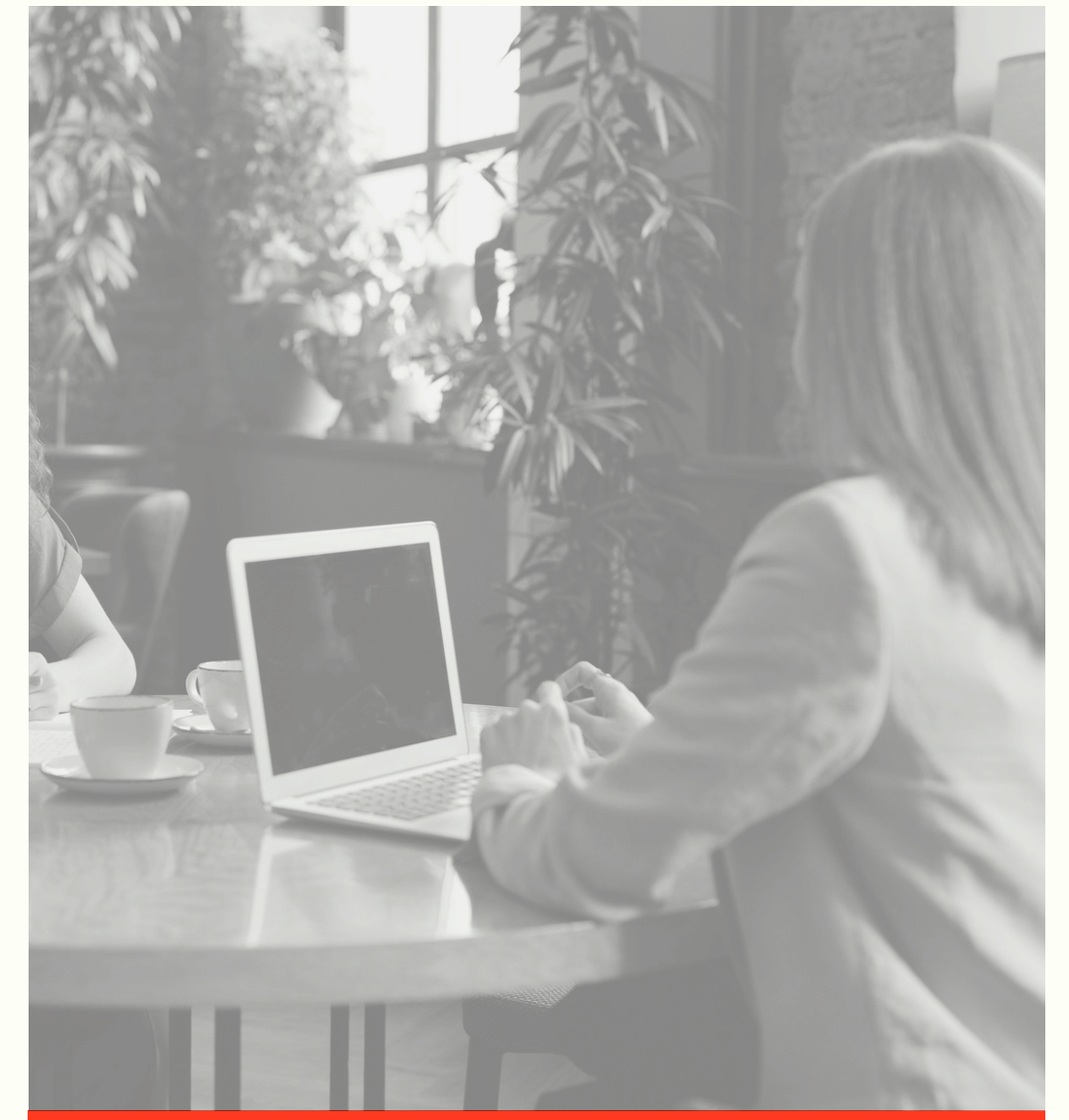
## Single case study



## Documents



## In-depth interviews



# Wacker Neuson



## Single case study



## Documents



## In-depth interviews



## Single case study



## Documents



## In-depth interviews





# Research phases

1

## Preparatory phase

market and  
literature research

2

## Fieldwork phase

interviews and  
documentation

3

## Theorizing phase

data analysis and  
conclusion

A hand holding a pen pointing to a bar chart on a document. The background is a solid red color with a faint, semi-transparent image of a hand holding a pen pointing to a bar chart on a document. The text "Findings and discussion" is overlaid in white.

# Findings and discussion



# Stakeholders

*“It has to start always in the C-level”*  
(Interviewee 4)

*“the CEO is very active in the  
sustainability project and in former times  
the others were just looking for the  
numbers and how much does it cost to  
improve something”*  
(Interviewee 3)

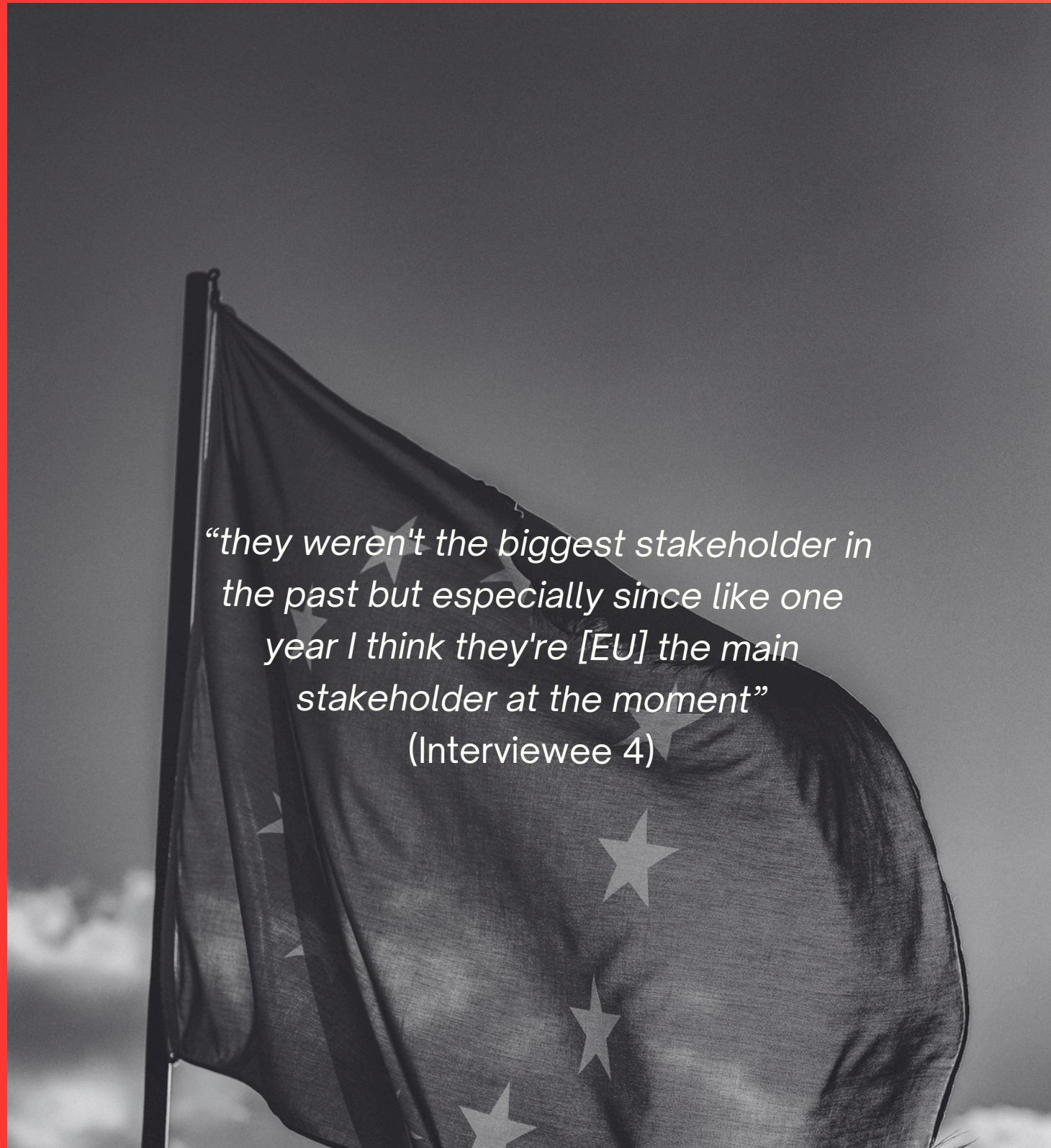


## CEO and the executive board




*“employees should be interested in or  
are usually interested in that topic  
[of sustainability]”  
(Interviewee 4)*

- 1 CEO and the executive board
- 2 Employees



*“they weren't the biggest stakeholder in the past but especially since like one year I think they're [EU] the main stakeholder at the moment”*  
(Interviewee 4)

- 1 CEO and the executive board
- 2 Employees
- 3 The EU



*“I think it's driven by various stakeholders,  
I think it's customer driven so it's the  
customers that require and demand from  
us to be more sustainable [in general]”  
(Interviewee 13)*

1

CEO and the executive board

2

Employees

3

The EU

4

Customers



- 1 CEO and the executive board
- 2 Employees
- 3 The EU
- 4 Customers
- 5 Competition



| Source of information [interviewees]: | Internal stakeholders                                    | External stakeholders                    |
|---------------------------------------|--|--|
| <b>Management</b>                     | Executive board, CEO, employees, shareholders            | EU, the government, customers, investors |
| <b>Managing directors of plants</b>   | Executive board, CEO, management, employees, the society | EU, the society                          |
| <b>CRE</b>                            | Executive board, employees, shareholders, CEO            | Customers, competitors, EU               |
| <b>Facility management</b>            | Employees, executive board, facility management          | Competition, customers, suppliers        |



# Financial drivers

# Financial drivers



**Not recognized as a  
main driver**

in the first answers

# Financial drivers



**Not recognized as a  
main driver**

in the first answers



**Prevalent economic  
language**

*“It's always important in the end that it should pay out. If I take the solar panels as an example: this was calculated really hard”*

(Interviewee 15)

# Financial drivers



## **Not recognized as a main driver**

in the first answers



## **Prevalent economic language**

used for evaluation of investments



## **Prioritisation**

sustainable investments are evaluated together with other types of investments

# Financial drivers



## **Not recognized as a main driver**

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## **Prevalent economic language**

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## **Prioritisation**

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## **Savings**

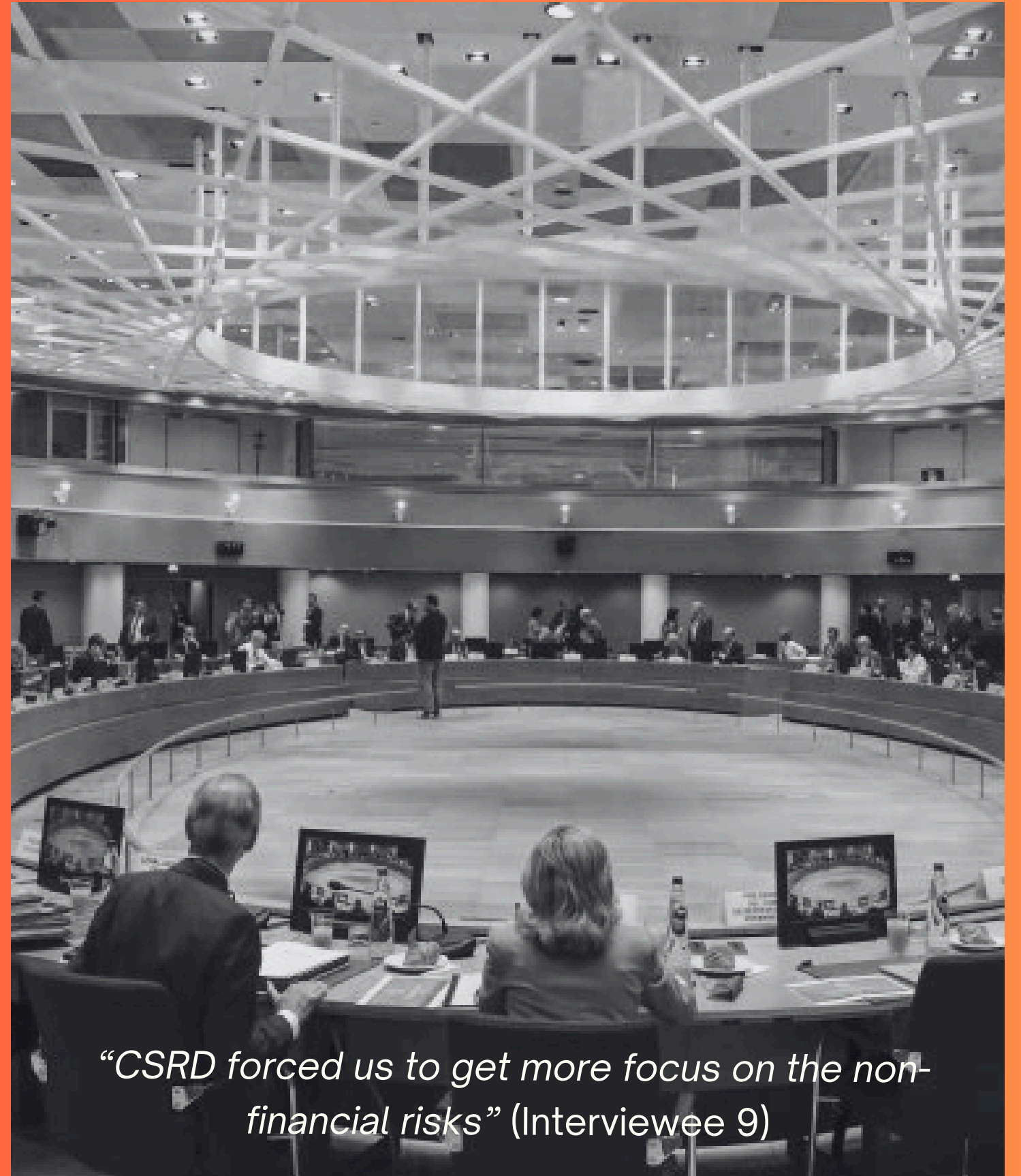
“Of course it is a financial cost savings [implementing PV]” (Interviewee 2)



# Regulatory drivers

1

## Corporate Sustainability Reporting Directive



*“CSRD forced us to get more focus on the non-financial risks” (Interviewee 9)*



1

Corporate Sustainability Reporting Directive

2

Other regulations: ISO on energy and environment



1

Corporate Sustainability Reporting Directive

2

Other regulations: ISO on energy and environment

3

Relevance dependent on employees





# Risk management

# Climate change related risk management



**Not yet recognized**

unknown concept of double  
materiality

# Climate change related risk management



## Not yet recognized

unknown concept of double  
materiality



## Focus on client base

“but if you look a little bit more  
in detail it will affect our  
customers base [the climate  
change]” (Interviewee 12)

# Climate change related risk management



## Not yet recognized

unknown concept of double  
materiality



## Focus on client base

focus on effect of climate  
change on clients and thus  
the main business



## Assessment and quantification

it should start with  
assessment which should  
move away from financial  
language

# Climate change related risk management



## Not yet recognized

unknown concept of double materiality



## Focus on client base

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it should start with assessment which should move away from financial language



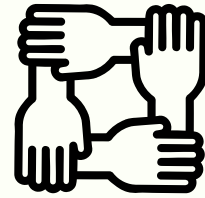
## Role of regulations

such as the EU Taxonomy

# Emergent topics



# Emergent topics



**Local  
communities**



**Energy  
security**



**Communication  
and transparency**

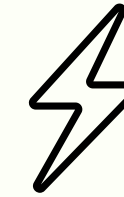


**Time**

# Emergent topics



Local  
communities



Energy  
security



Communication  
and transparency



Time

# Emergent topics

“It's also a bit of an image - of course we don't want to be seen as the environmental polluters in the district” (Interviewee 1)



Local communities



Energy security



**Communication and transparency**



Time

# Emergent topics

“because we are always driven by pain,  
something must happen before we react”  
(Interviewee 9)



Local  
communities



Energy  
security



Communication  
and transparency

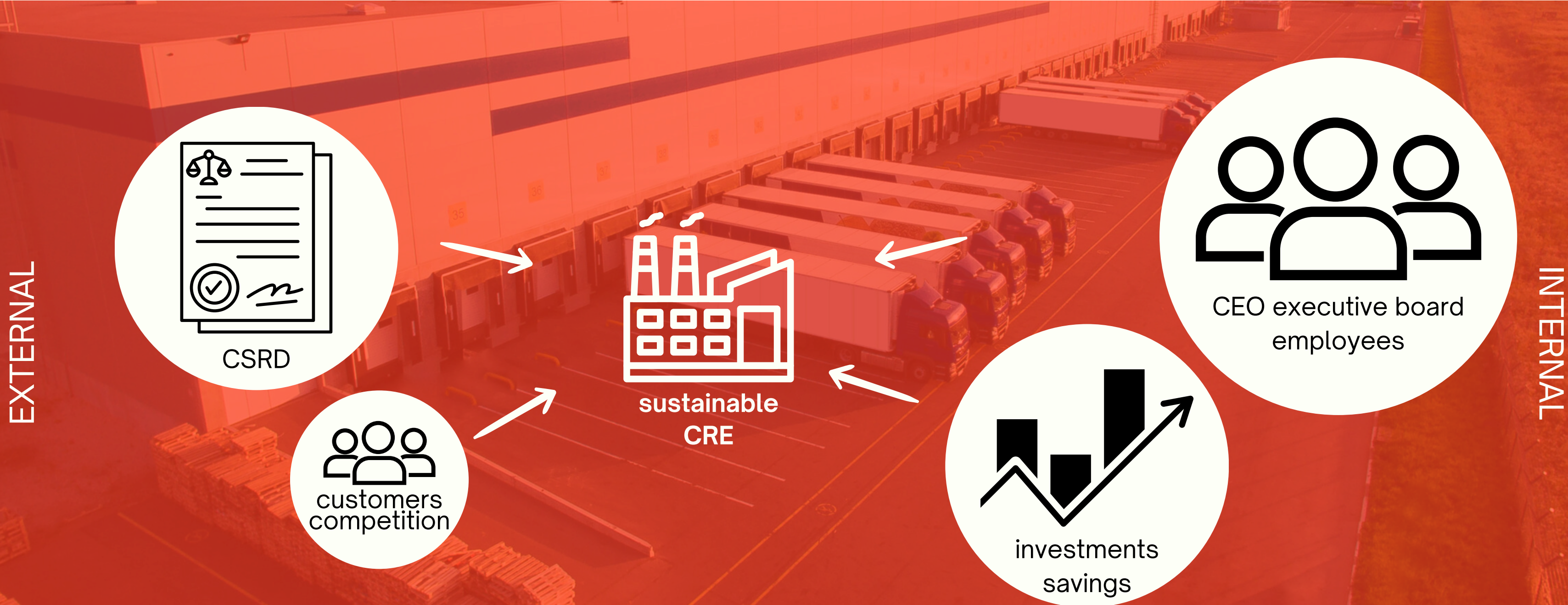


**Time**



# Conclusion

# What are the external and internal drivers of sustainability in corporate real estate management of a manufacturing company?



# IRE vs commercial real estate



# What's next?

For sustainable growth at  
Wacker Neuson





# What's next?

For policy making



# Limitations

# Limitations



## Method

Single case study method

# Limitations

1

## Method

Single case study method

2

## Interviews

Limitations of semi-structured interviews

# Limitations

1

## Method

Single case study method

2

## Interviews

Limitations of semi-structured interviews

3

## Limited literature

Lack of literature on industrial real estate

# Recommendations

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## Multiple organisations

Conduct research at multiple organisation within the same sector

# Recommendations

1

## Multiple organisations

Conduct research at multiple organisation within the same sector

2

## Research on regulations

Follow and research the ongoing regulations



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1

## Multiple organisations

Conduct research at multiple organisation within the same sector

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Follow and research the ongoing regulations

3

## Beyond the EU context

Further research going beyond the EU context

# Thank you for your attention

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