



# **DRIVING THE FUTURE OF MANUFACTURING THROUGH SUSTAINABILITY AND TECHNOLOGY**

**Jonquil Hackenberg**



Bringing Ingenuity to Life  
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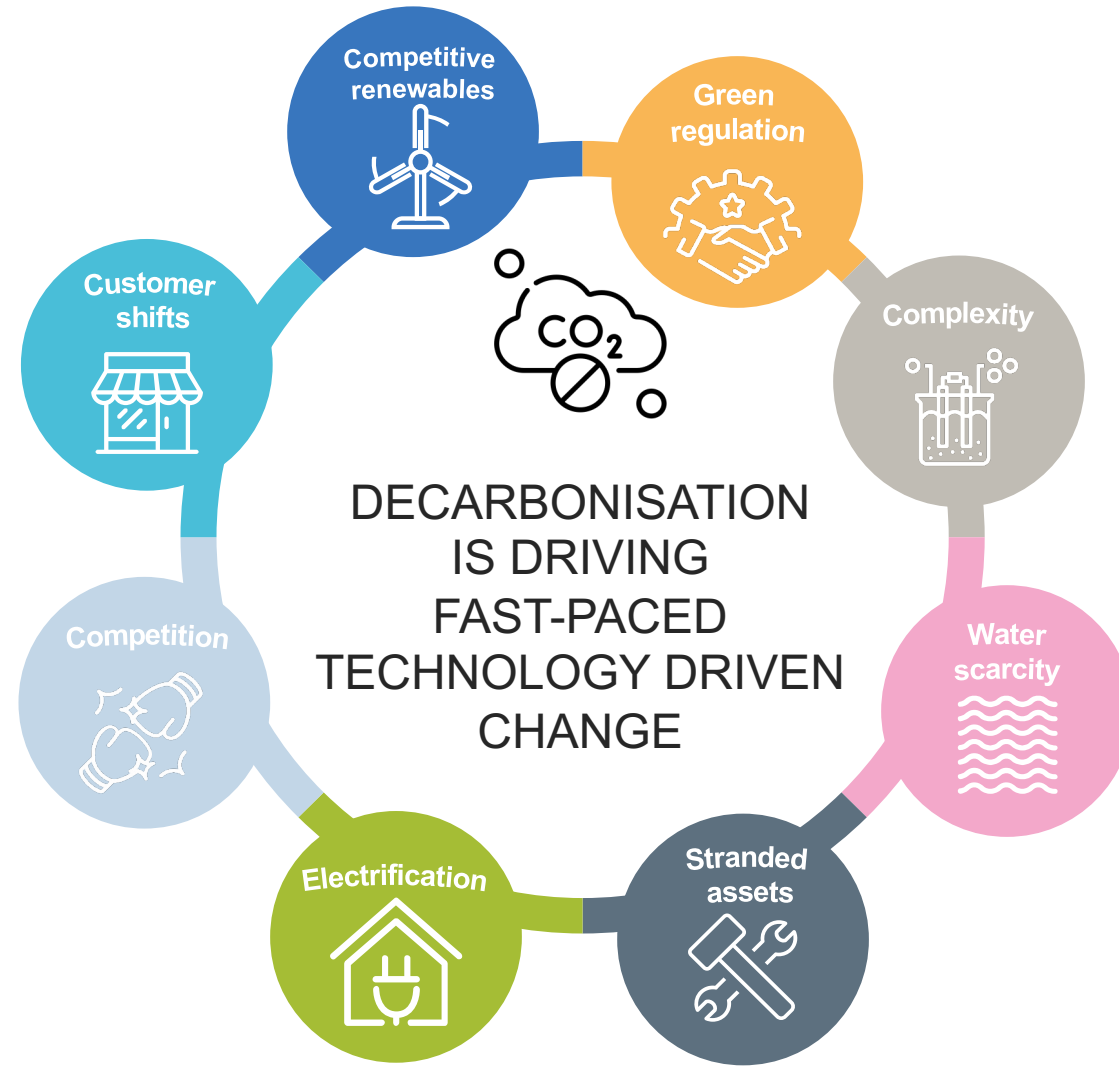


# Let's start with the basics..



**All by 2030...**

# The market dynamics influencing business strategies

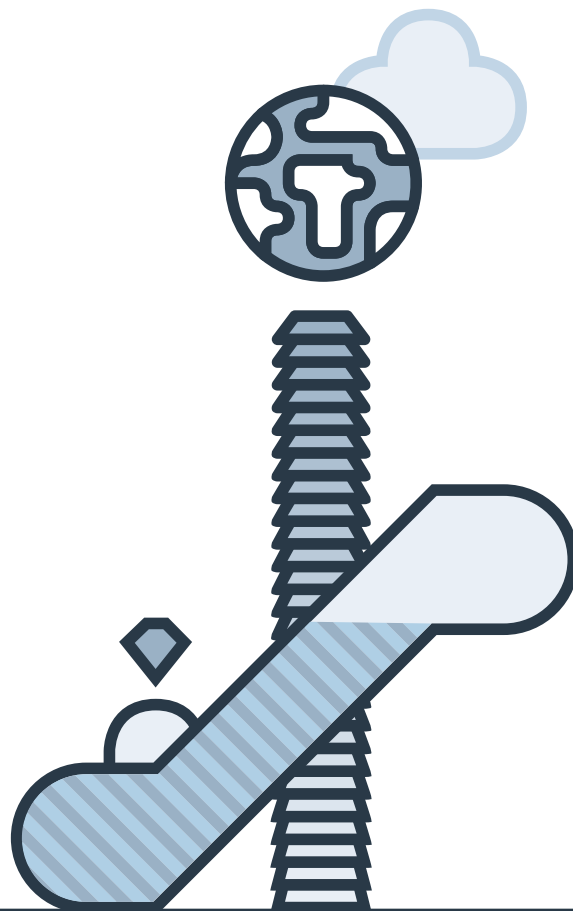




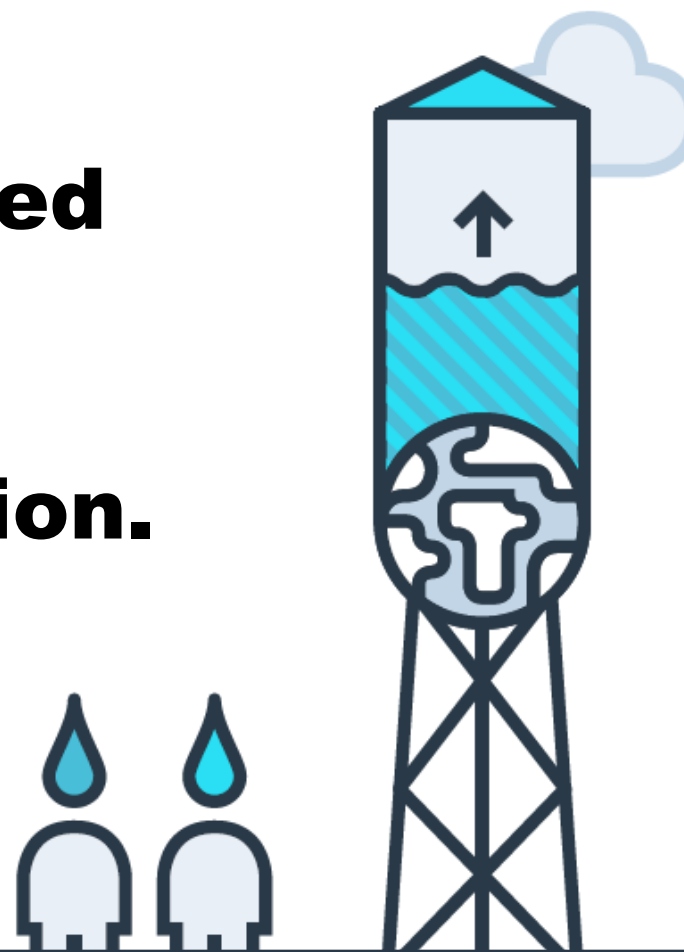
**Consumer**

**Regulation**

**Supply**



**In our near future,  
competition will be defined  
by resource scarcity  
and the risk to supply,  
not customer segmentation.**

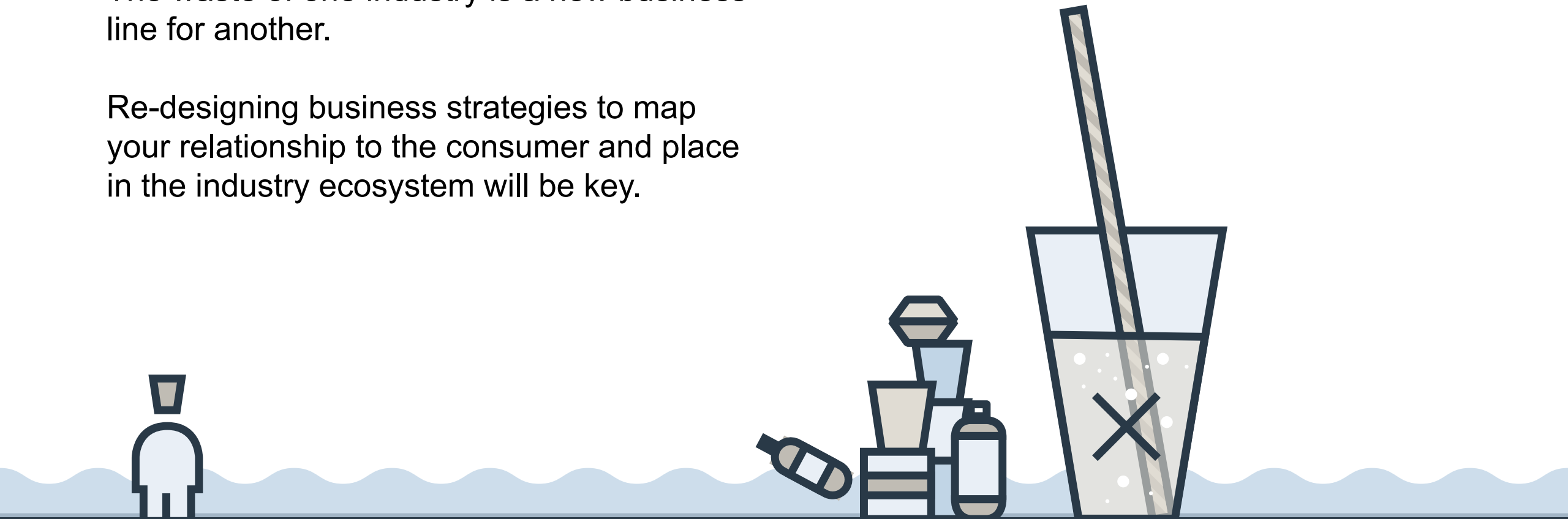


# The rise of the conscious consumer



The waste of one industry is a new business line for another.

Re-designing business strategies to map your relationship to the consumer and place in the industry ecosystem will be key.



# The wave of regulation

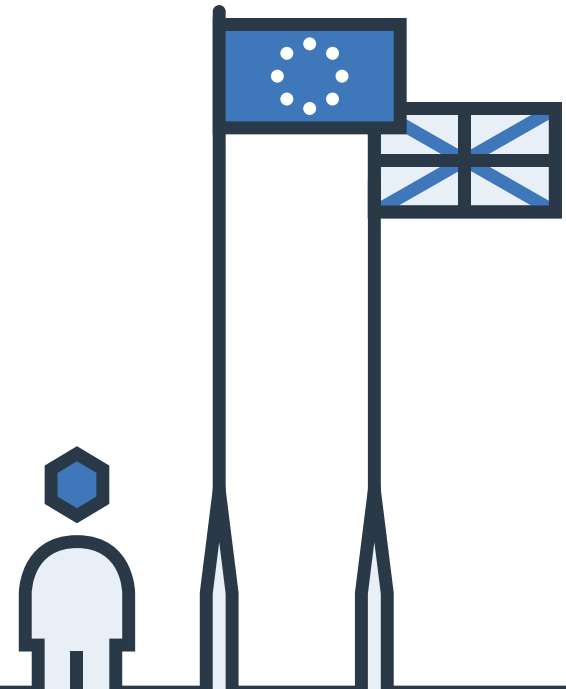
From green-washing to demonstrable action



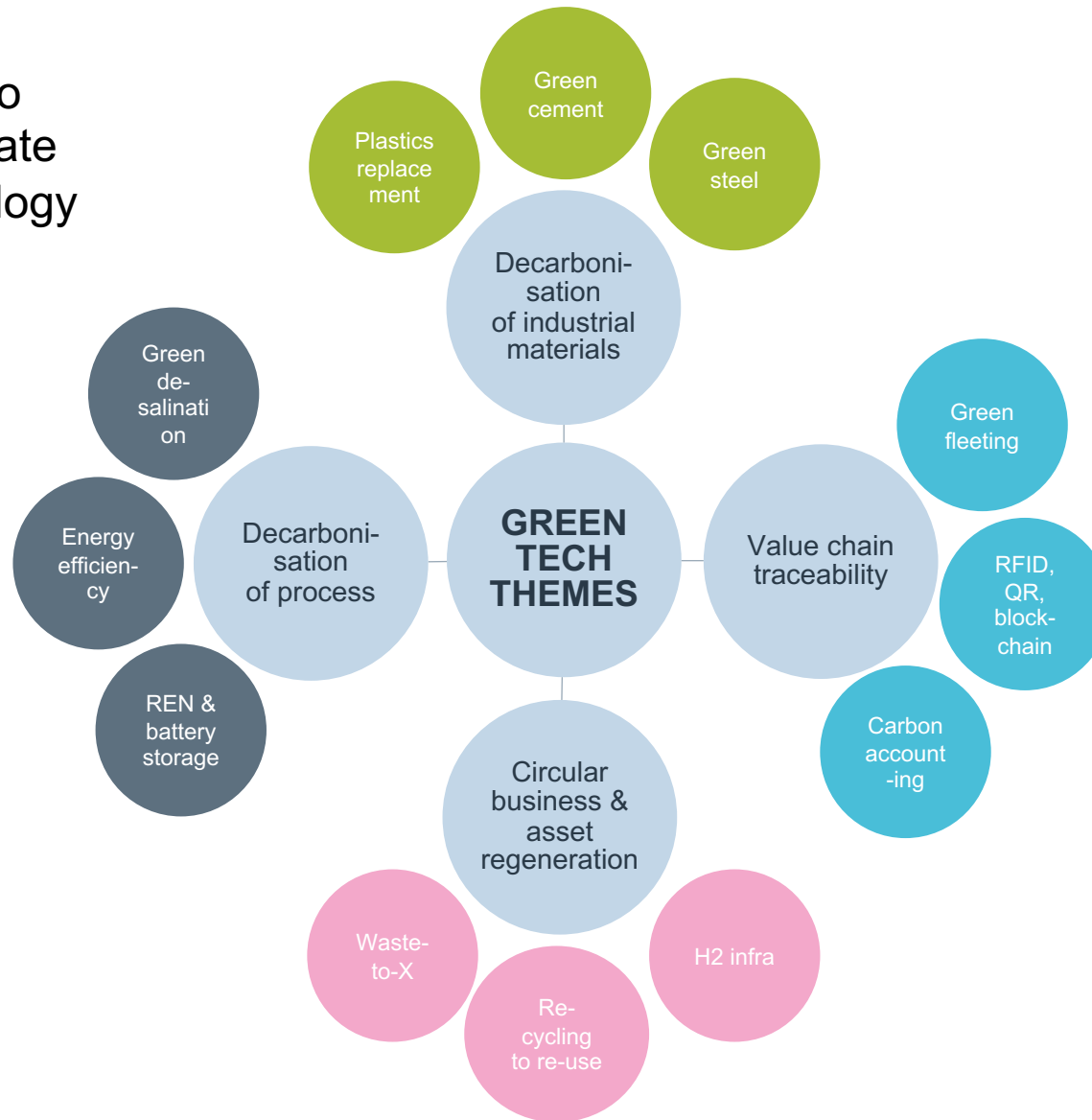
TCFD reporting from  
2022 (>£500m)

SEC ESG reporting for  
funds 2022

Green Deal 2025



Many of the answers to sustainability and climate response lie in technology innovation..



...putting manufacturing at the heart of the sustainability revolution





# Examples of start-ups paving the way



H<sub>2</sub>green steel



NEXTILES

CONTINGENT



# Businesses who are drawing lines in the sand



## SCIENCE-BASED TARGETS

JACOBS  
GSK  
HSBC  
UNILEVER  
CARGILL  
P&G  
COCA COLA  
PFIZER

## NET-ZERO

2030

**Jacobs** carbon negative  
**HSBC** net zero or by 2030 or sooner  
**GSK** net zero and net positive on nature

2040

**Unilever** net zero across Scope 1,2,3 (2039)  
**Rentokil, BUPA, P&G, LSEG** net zero

2050

**Novo Nordisk** net zero across value chain by 2045  
**Roche** net zero Scopes 1, 2  
**Thermo Scientific, Coca Cola, Nestle, Pfizer, Rolls-Royce** net zero

## B-CORP CERTIFICATION

**Danone, Nestle and Unilever** are B Corp Certified within parts of their operations and some have plans for full certification

# Industry Case Study: Rolls-Royce



Small  
Modular  
Reactors

Direct Air  
Capture

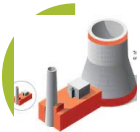
Hydrogen  
Fuel Cells

Hybrid  
and  
Electric  
Planes

Sustainab  
le Aviation  
Fuel



**From pioneering the  
exploration of the skies...**



**... to pioneering the  
decarbonisation of skies**



# ACTIONS TO TAKE



## Focus, start, share

- 1 Put sustainability central to your overarching business strategy
- 2 Determine your position and ecosystem
- 3 Landscape your themes and tap into cutting-edge tech
- 4 Do what you do well and partner for everything else

# THANK YOU

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