

# A Vision for Next-Generation Manufacturing Business Models

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World Economic Forum



**New Business Models for the  
Manufacturing of the Future**

27TH - 28TH NOVEMBER 2023  
SDF | Treviglio (Bergamo)

**Innovative**

**Resilient**

**Sustainable**

Innovative

Resilient

Sustainable

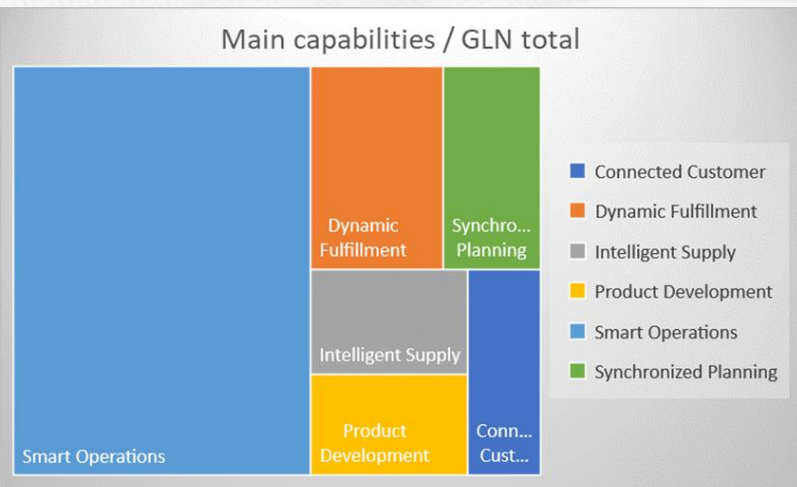
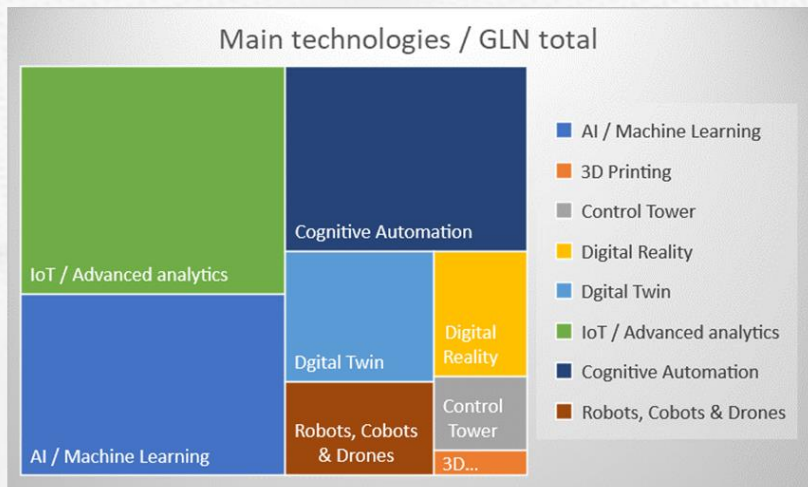
# The Global Lighthouse Network includes 132 sites where 4IR technology is successfully deployed at scale



To date, 132 Lighthouses, of which 13 Sustainability Lighthouses, have been identified from across different industry sectors and they have all joined a unique cross-company learning journey to share insights and experiences, and incubate new potential partnerships

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## Overview of Lighthouse use cases



**Global Lighthouse Network:**







- Collected 650+ use cases
- AI, Automation and Analytics cover 70% of applications
- Largest capability is Smart Operations

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## Current global developments are triggering a rethink of global manufacturing systems

Trend	Emerging technologies	Climate change	Geopolitical tension			
Global development	TECHNOLOGY STEP-CHANGES	ENVIRONMENTAL CONSIDERATIONS	SHIFTING DEMOGRAPHICS	GEOPOLITICS SHIFTS	ECONOMIC UNCERTAINTY	CHANGES IN GOVERNANCE
						
	<ul style="list-style-type: none"> <li>– Adoption of <b>Technology at scale</b> has the potential to unlock sustainability, inclusiveness and resilience in supply chains</li> </ul>	<ul style="list-style-type: none"> <li>– Imperative to reach <b>Net-Zero</b> through pledges and regulation in scopes 1-3</li> <li>– Advent of <b>circular value chains</b> to increase resource efficiency</li> </ul>	<ul style="list-style-type: none"> <li>– Shifts in <b>consumer preferences</b></li> <li>– Need for <b>digital skills</b> in the workforce and new value proposition to attract workers</li> </ul>	<ul style="list-style-type: none"> <li>– Re-building of trade blocs and increase in trade barriers affects availability of resources</li> <li>– Government incentives for “local manufacturing”</li> </ul>	<ul style="list-style-type: none"> <li>– Commodity <b>price volatility</b> and <b>inflation</b> for manufacturing input factors</li> <li>– Potential <b>reduction of long-term investment</b> in manufacturing assets</li> </ul>	<ul style="list-style-type: none"> <li>– Governments rethinking industrial policies</li> <li>– Reduction of <b>political stability</b> for specific markets affects sourcing and investments</li> </ul>

## Five new priorities for manufacturing & supply chain leaders





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## The “No Excuse” Framework to Industry Net Zero

Co-developed with our community to inform strategic decisions, and foster business collaboration around Industry Net Zero

**Stage I**  
Build the foundations



- 1 Build the net-zero Corporate strategy
- 2 Set the capability for carbon footprint monitoring

**Stage II**  
Change the game internally



- 3 Accelerate energy efficiency in operations and transport and decarbonize energy sources
- 4 Pursue material efficiency in operations
- 5 Re-think product design and business models
- 6 Develop carbon capture solutions and offset mechanisms

**Stage III**  
Drive systemic collaboration



- 7 Drive scope 3 value-chain decarbonization (upstream and downstream)
- 8 Mobilize ecosystems for net zero infrastructure and innovation
- 9 Address net zero data and digital standards

**Stage IV**  
Make it simple, inclusive and exciting

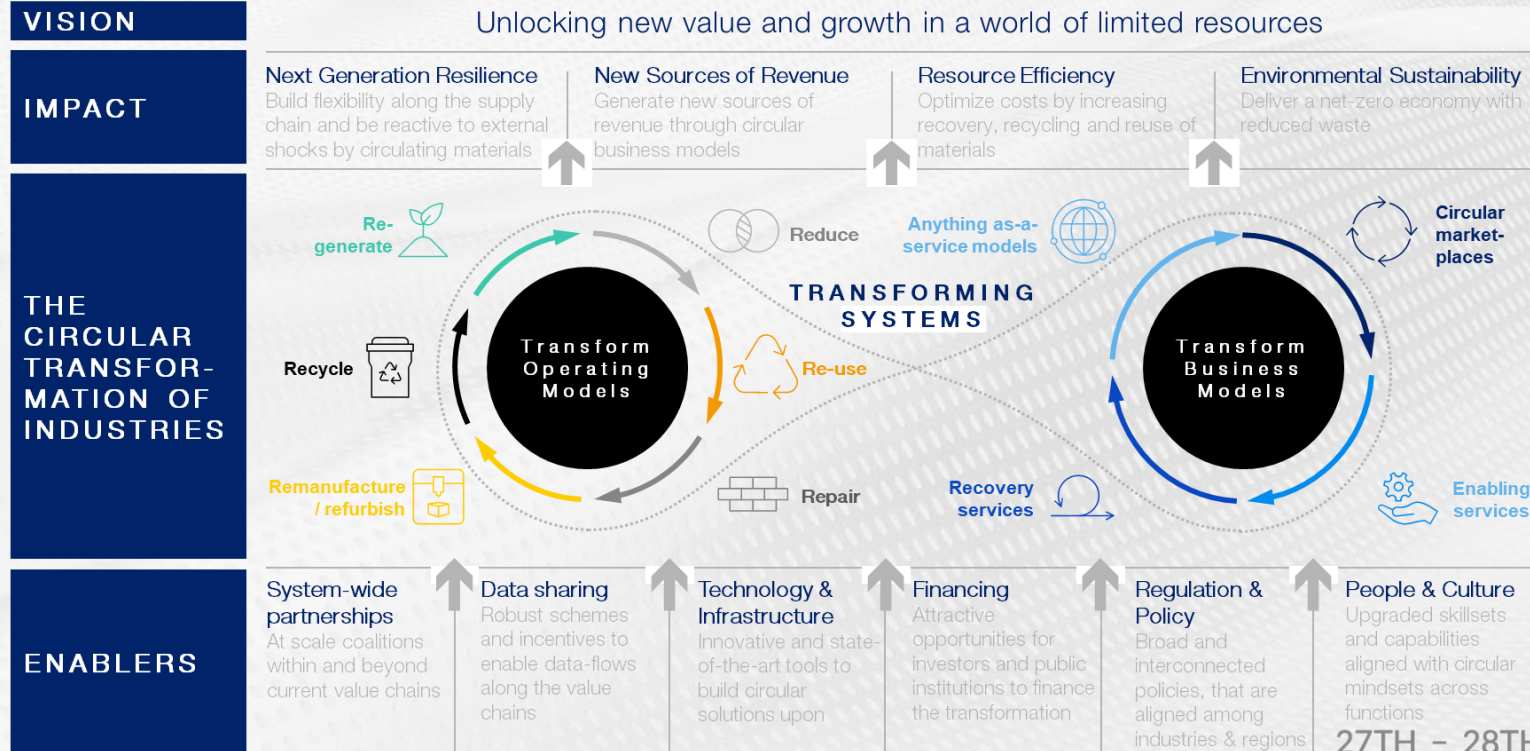


- 10 Implement and drive net - zero culture and practices

**To inspire leaders and inform decisions, the initiative will continue to:**

- Collect & share practical use cases from industrial companies across Scope 1, 2 & 3 emission reduction
- Develop the initiative's digital knowledge repository where insights and use cases can be stored, accessed, and shared with community

## What is needed and what will it deliver?



# INCLUSIVE



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