

SMRs for industrial demand: What can we achieve by 2050?

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The Need for Energy



Global
Growth



Industrial
Expansion



Energy
Security



Energy
Independence



Climate
Commitments

The Nuclear Advantage

Low
Carbon Output

High
Energy Density

Reliable
Base Load

Compact
& Scalable

Industrial
Integration

Fast
Deployment

Nuclear energy with the deployment of SMRs can be crucial for meeting rising energy demand, enhancing energy security, and achieving net zero.

Methodology & Approach

Overall goal: Independent view of future SMR market needs, under different scenarios



11 industries representing ~80% of industrial energy demand in **Europe** and **North America**

First movers with high growth	Early movers with high demand	Later movers with high demand
• Upstream oil and gas • Military applications • Data centers	• Chemicals • District energy • Refining oil and gas • Food and beverage	• Coal repowering • Synthetic aviation fuel • Synthetic maritime fuel • Iron and steel

Methodology & Approach

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Focus Industries & Countries



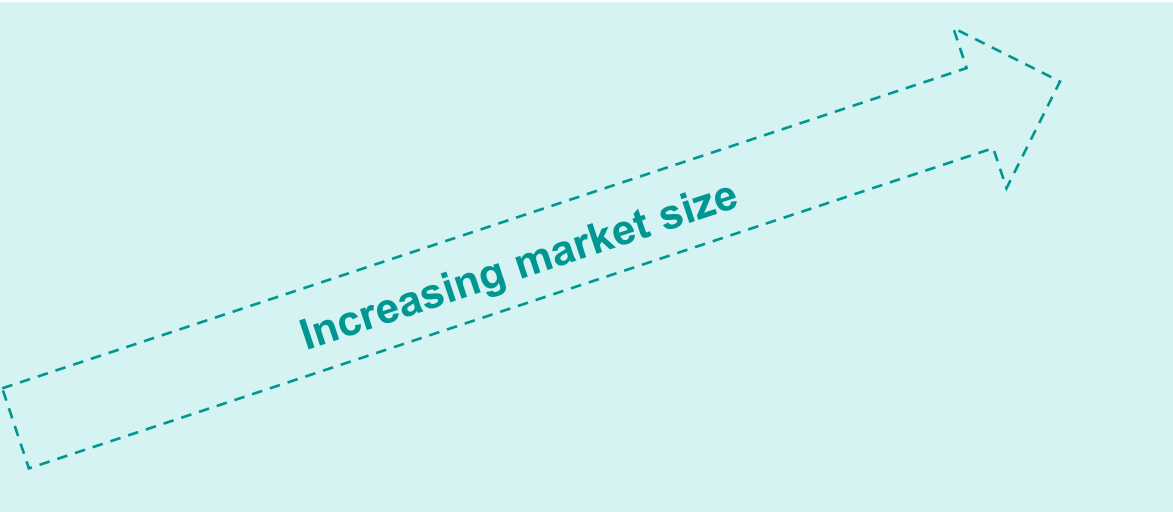
Supply & Demand Scenarios



Market Sizing

4 SMR supply scenarios for manufacturing development

4 Energy demand scenarios with different assumptions on energy policy and user needs

		Supply Scenarios			
		Current	Programmatic	Breakout	Transformation
Energy Demand Scenarios	Decarbonization NZE				
	Decarbonization APS				
	Energy Security				
	Energy Cost				

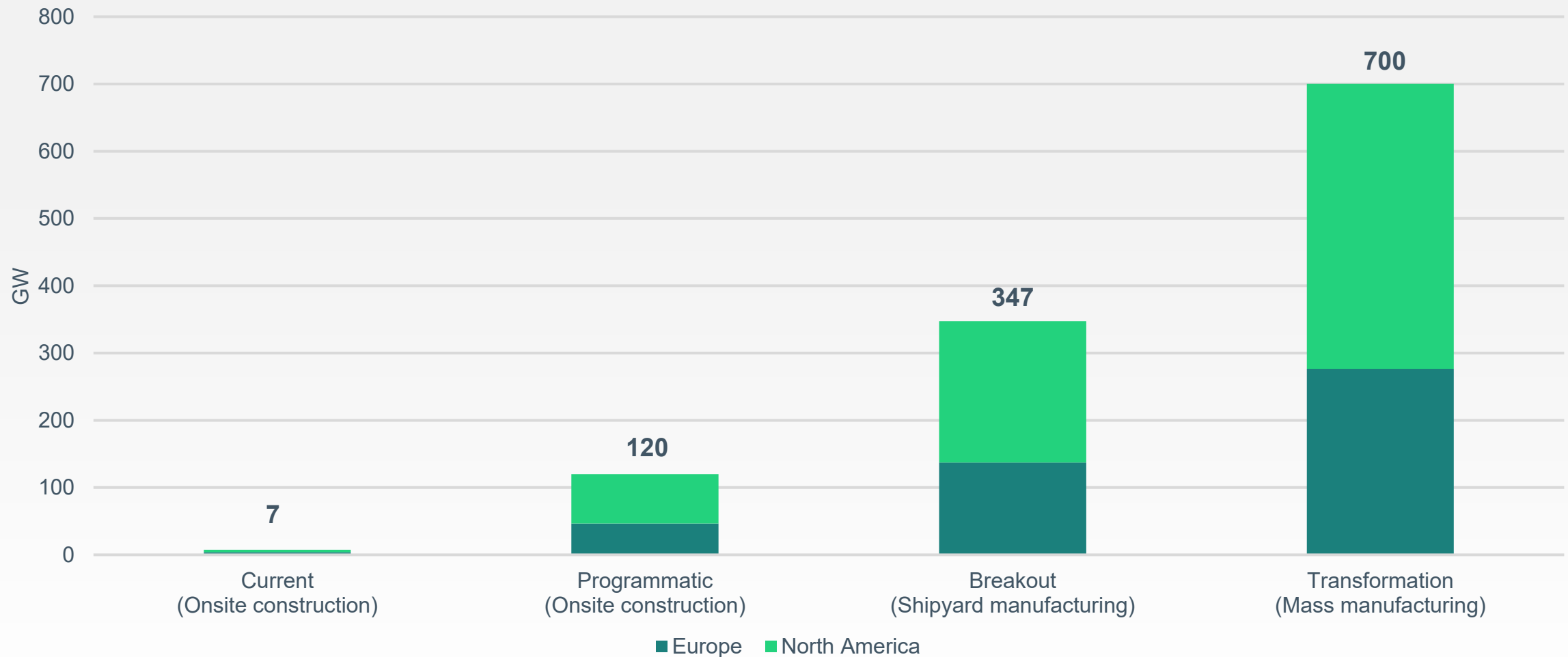
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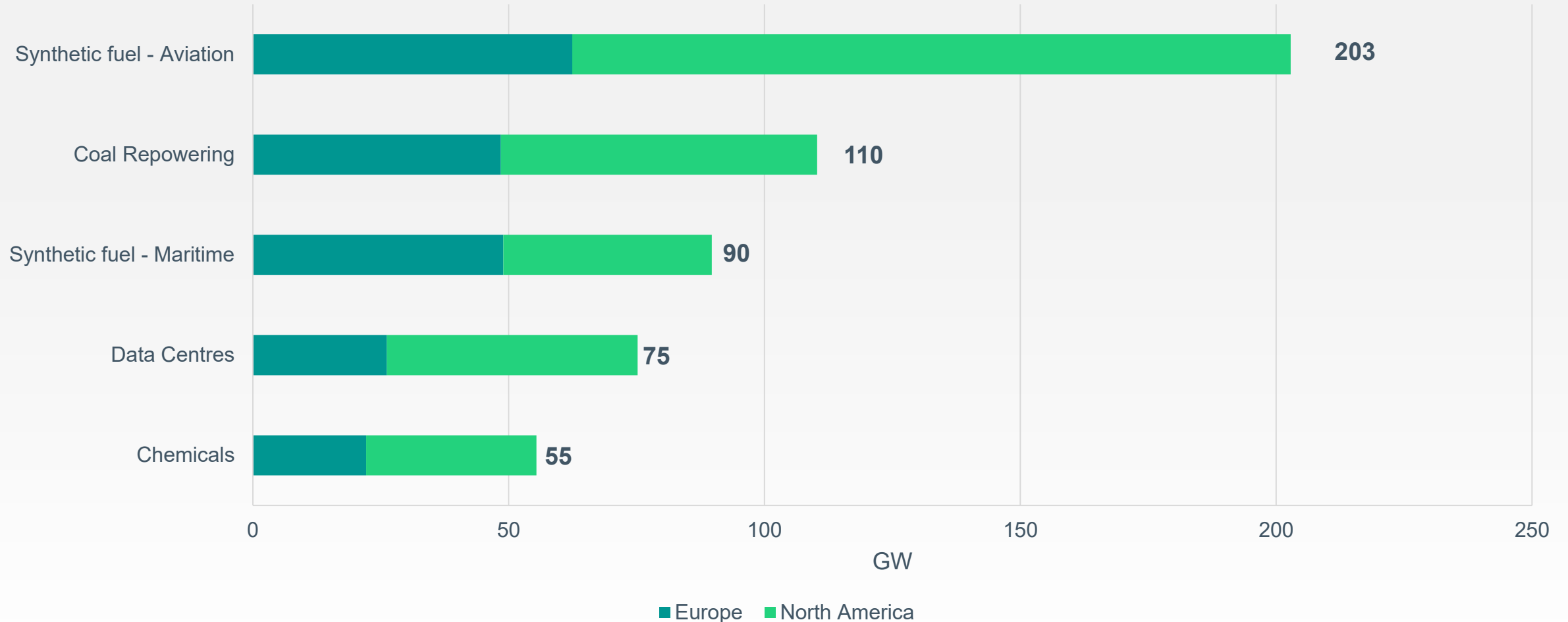
Key finding: Massive – but uncertain – potential for SMRs

Accessible SMR market by supply scenario and region, Announced Pledges Scenario, 2050



Key findings: 5 industries represent >500 GW Nuclear Opportunity in 2050

Accessible SMR market by supply scenario and region, Announced Pledges Scenario, 2050



What would it take to reach this potential?

Simultaneous improvement to 6 drivers:



We all need to contribute to making this potential for 700 GW by 2050 a reality.

Q&A

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