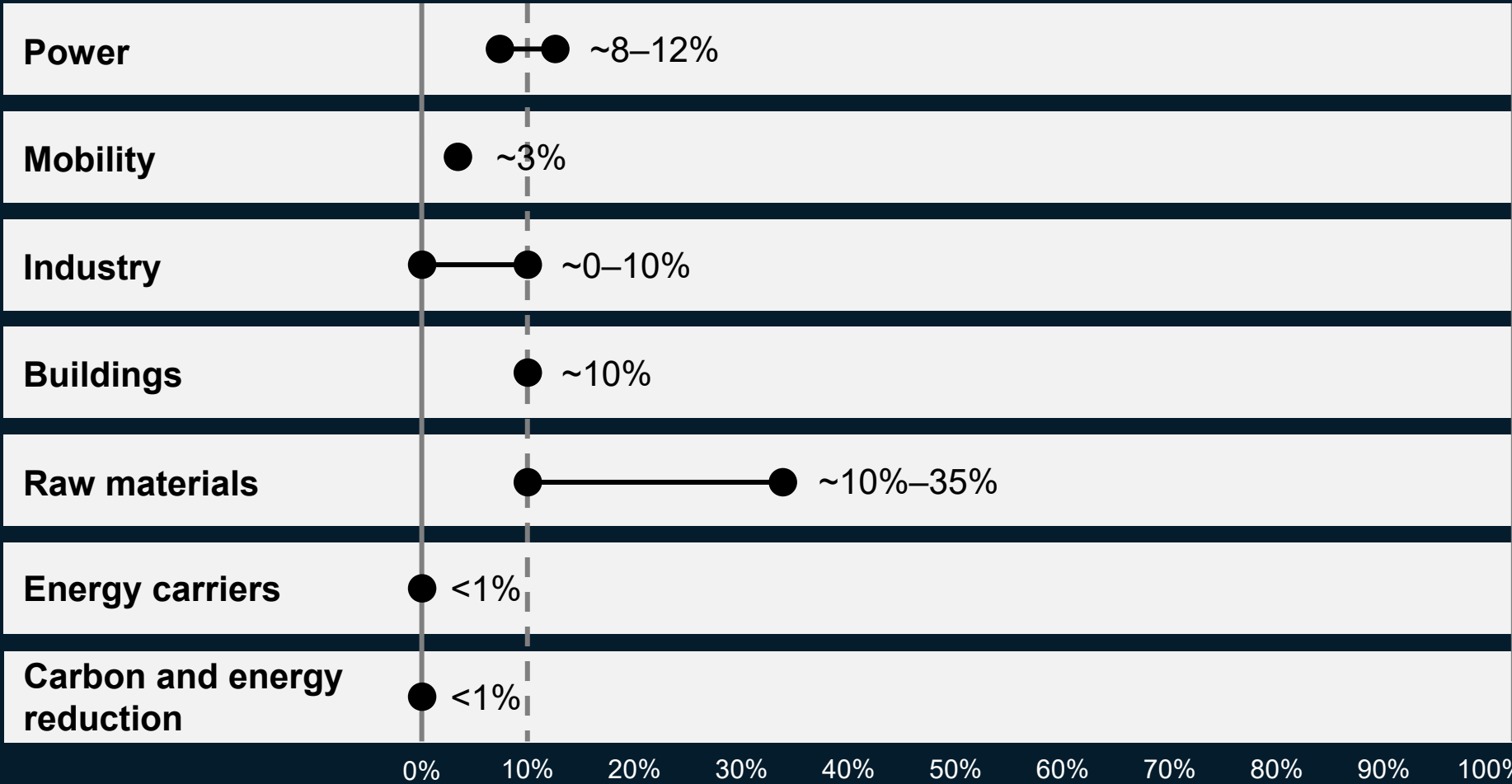


Across domains, ~10% of low-emissions technologies that would be needed to meet commitments by 2050 are in place

2023 McKinsey Achieved Commitments scenario



2050 deployment

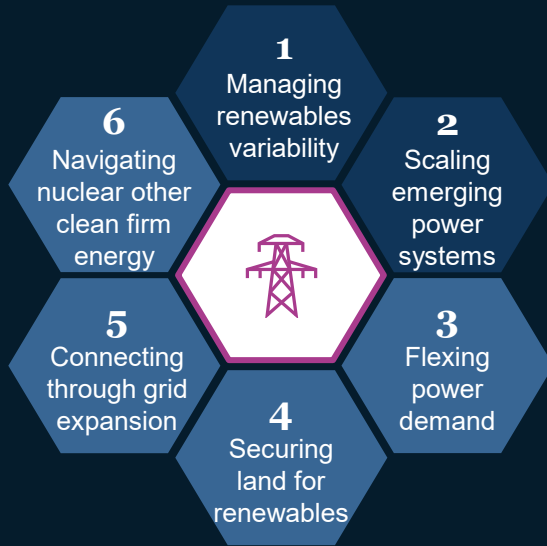


Source: McKinsey MineSpans; *Global energy perspective 2023*, McKinsey; Energy Institute; International Energy Agency; McKinsey Global Institute analysis; *The hard stuff: Navigating the physical realities of the energy transition*, McKinsey Global Institute, August 2024

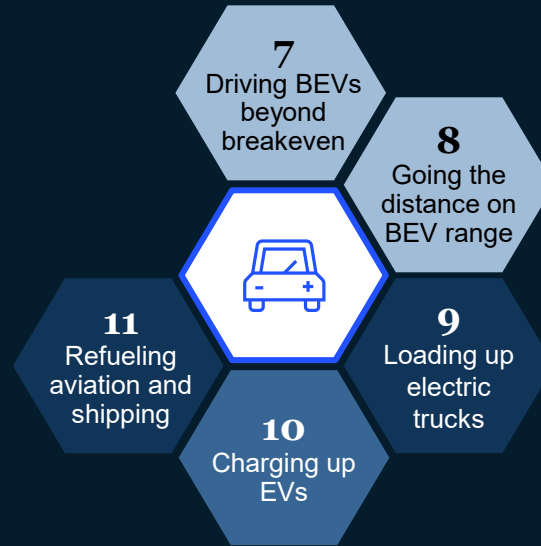
The 25 physical challenges

Domains Level 1 Level 2 Level 3

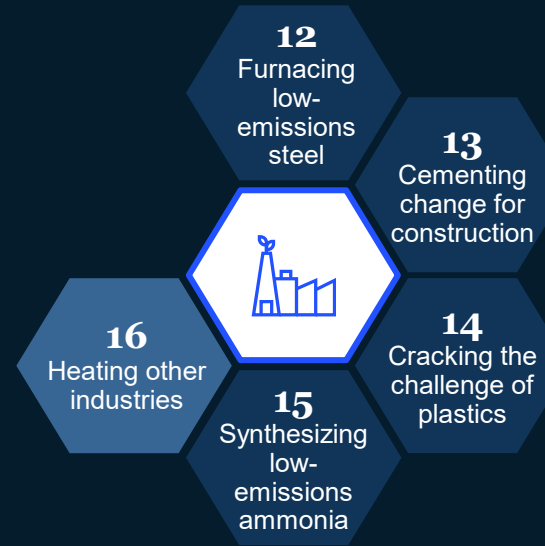
Power



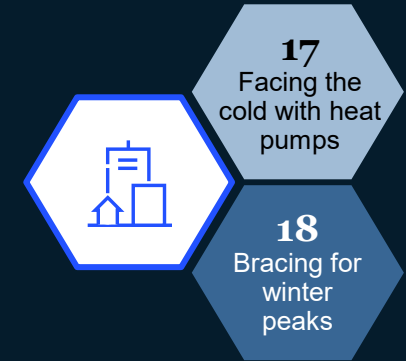
Mobility



Industry



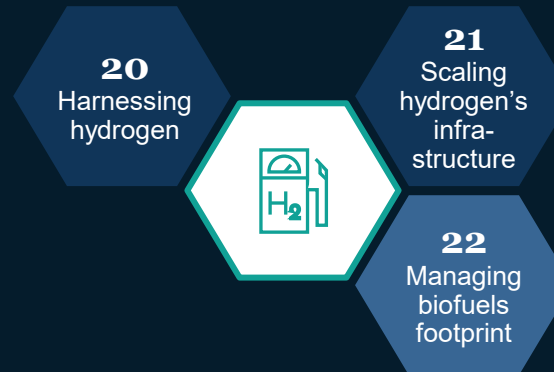
Buildings



Raw materials



Hydrogen and other energy carriers



Carbon and energy reduction

