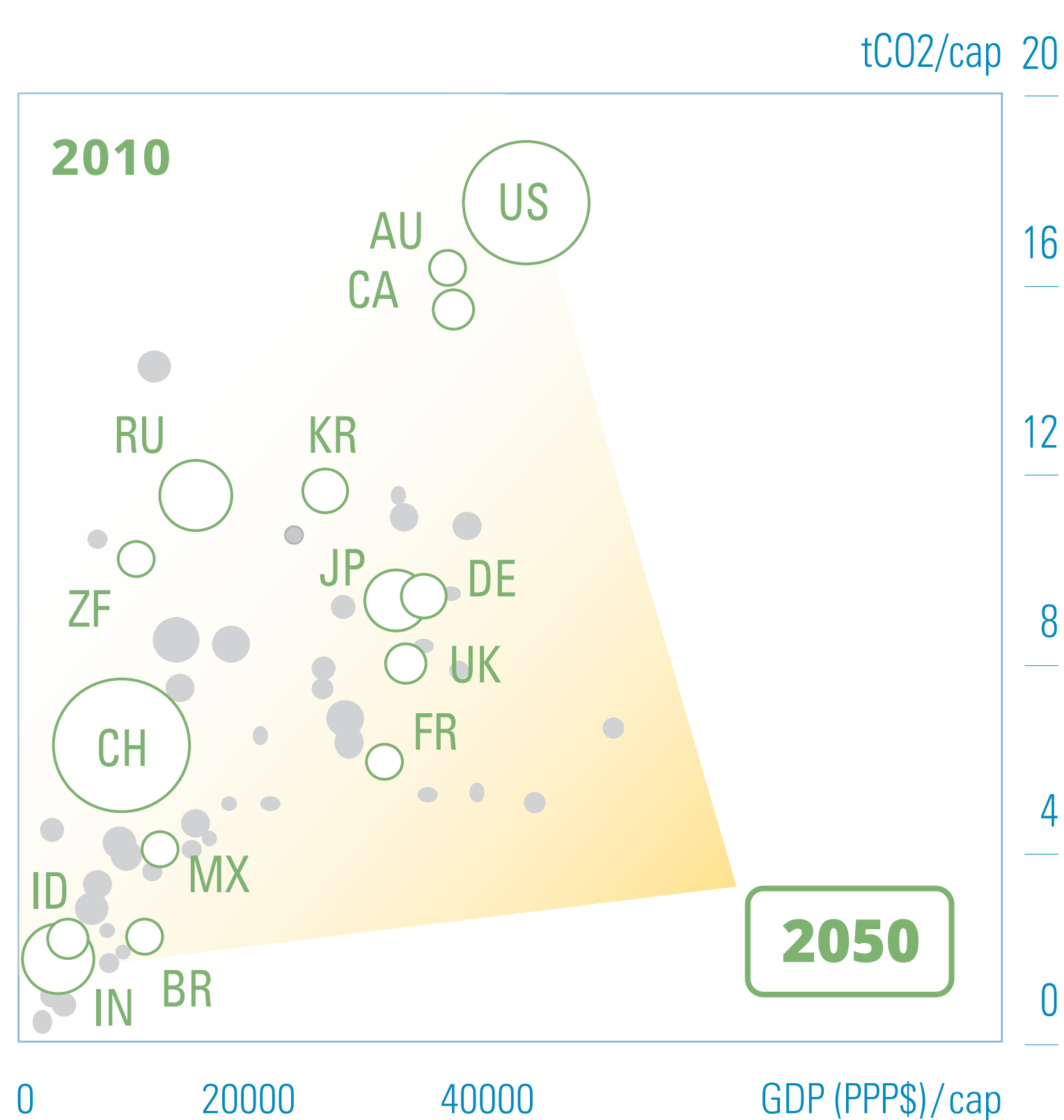


COUNTRY-DRIVEN MID-CENTURY LOW-EMISSION DEVELOPMENT STRATEGIES

METHODS AND INSIGHTS FROM THE DEEP DECARBONIZATION PATHWAYS PROJECT (DDPP)

METHODS

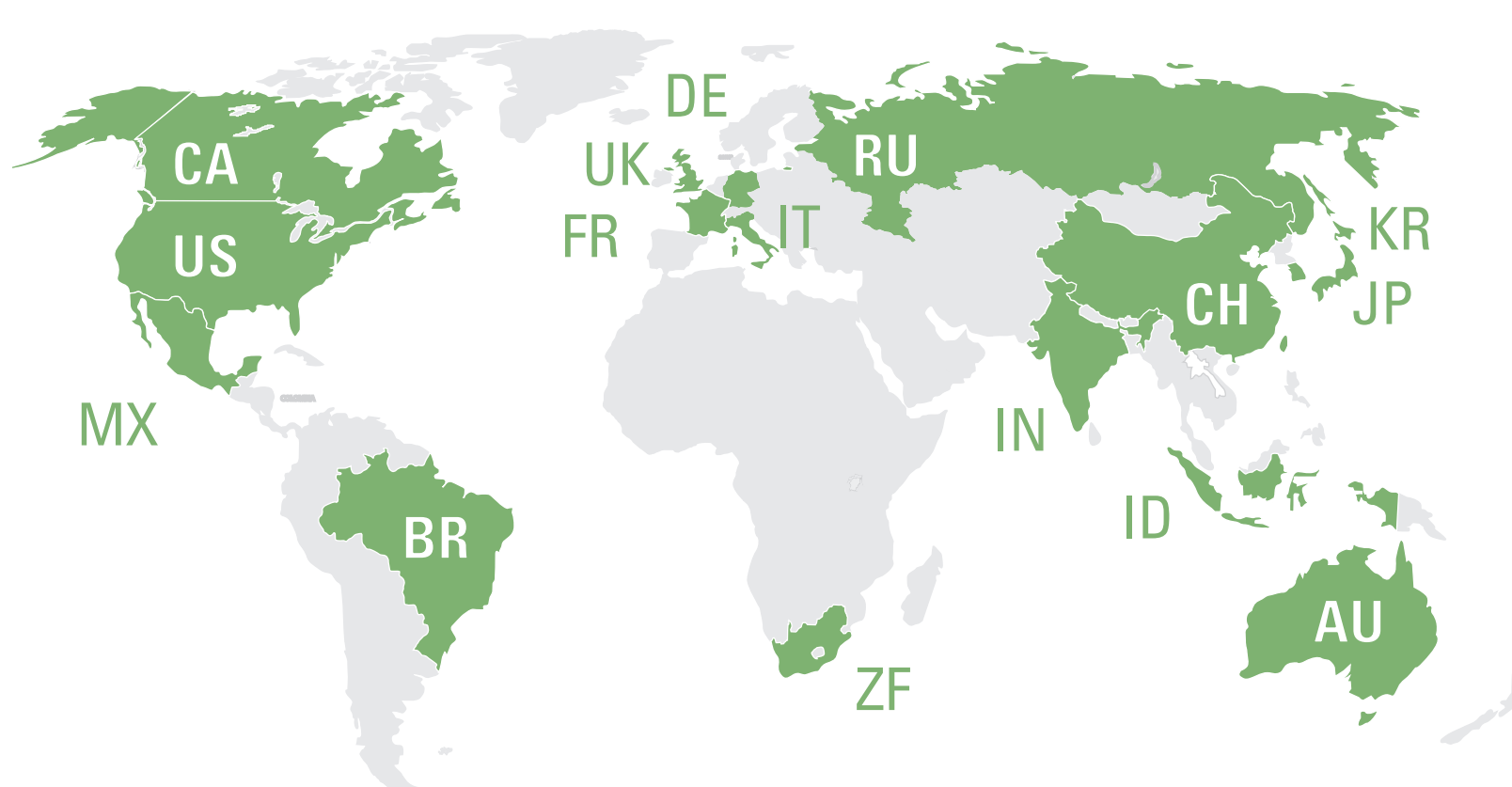
THE BACKCASTING APPROACH: COMMON ATTRACTORS



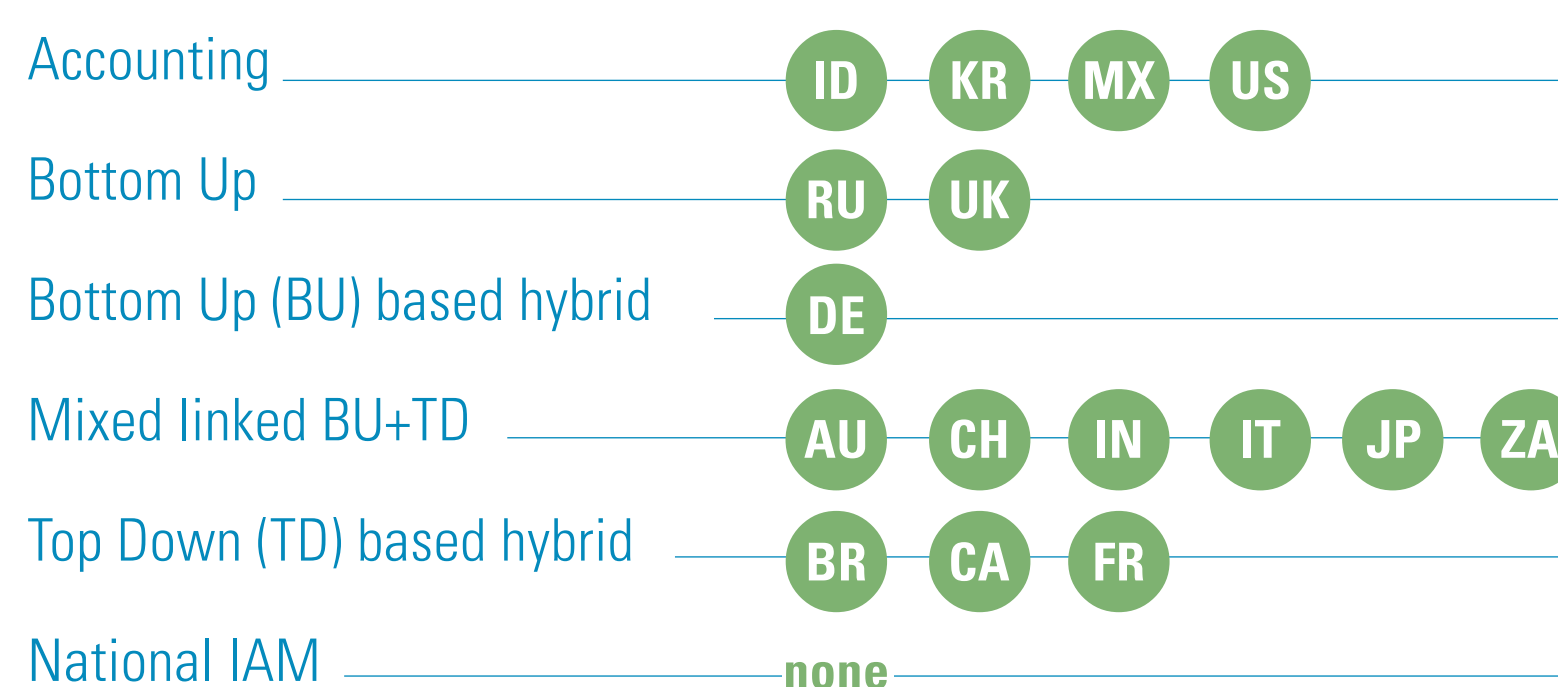
A method to develop normative scenarios and explore their feasibility and implications, connecting desirable long term future scenarios to the present situation.

Source: P. Criqui, DDPP, Gapminder Software.

16 COUNTRIES, DEVELOPED AND DEVELOPING, 3/4 OF CO₂ EMISSIONS IN 2010



COUNTRY RESEARCH TEAMS WITH DIVERSE MODELLING TOOLS



Source: Pye & Bataille (2016). Improving deep decarbonization modelling capacity for developed and developing country contexts. Climate Policy.

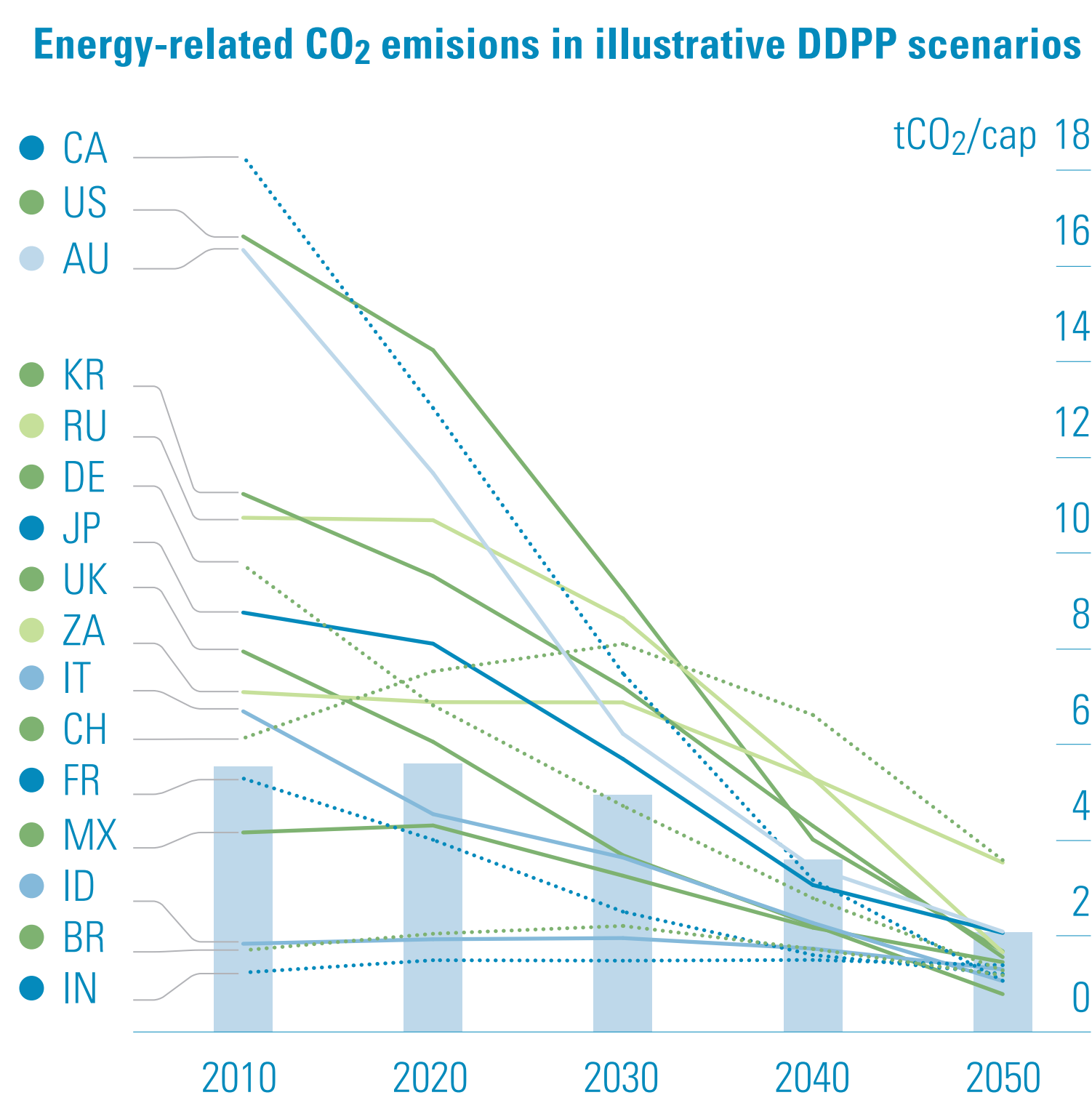
COUNTRY RESEARCH TEAMS USE A COMMON REPORTING TEMPLATE

The indicators in the "Dashboard"

		2010	2020	2030	2040	2050
Aggregate	Population					
	GDP					
	Energy					
	Emissions					
End-Use Sectors <i>Residential & Commercial buildings Passenger & Freight transport, Industries</i>	Activity level					
	Energy by fuel					
	Emissions					
Supply side sectors <i>Electricity, Liquid fuels, Gas</i>	Total production					
	Breakdown by technology					
Physical stocks	Power generation capacities, by technology type					
	Passenger vehicles by type					
	Liquid fuels generation by technology					

RESULTS

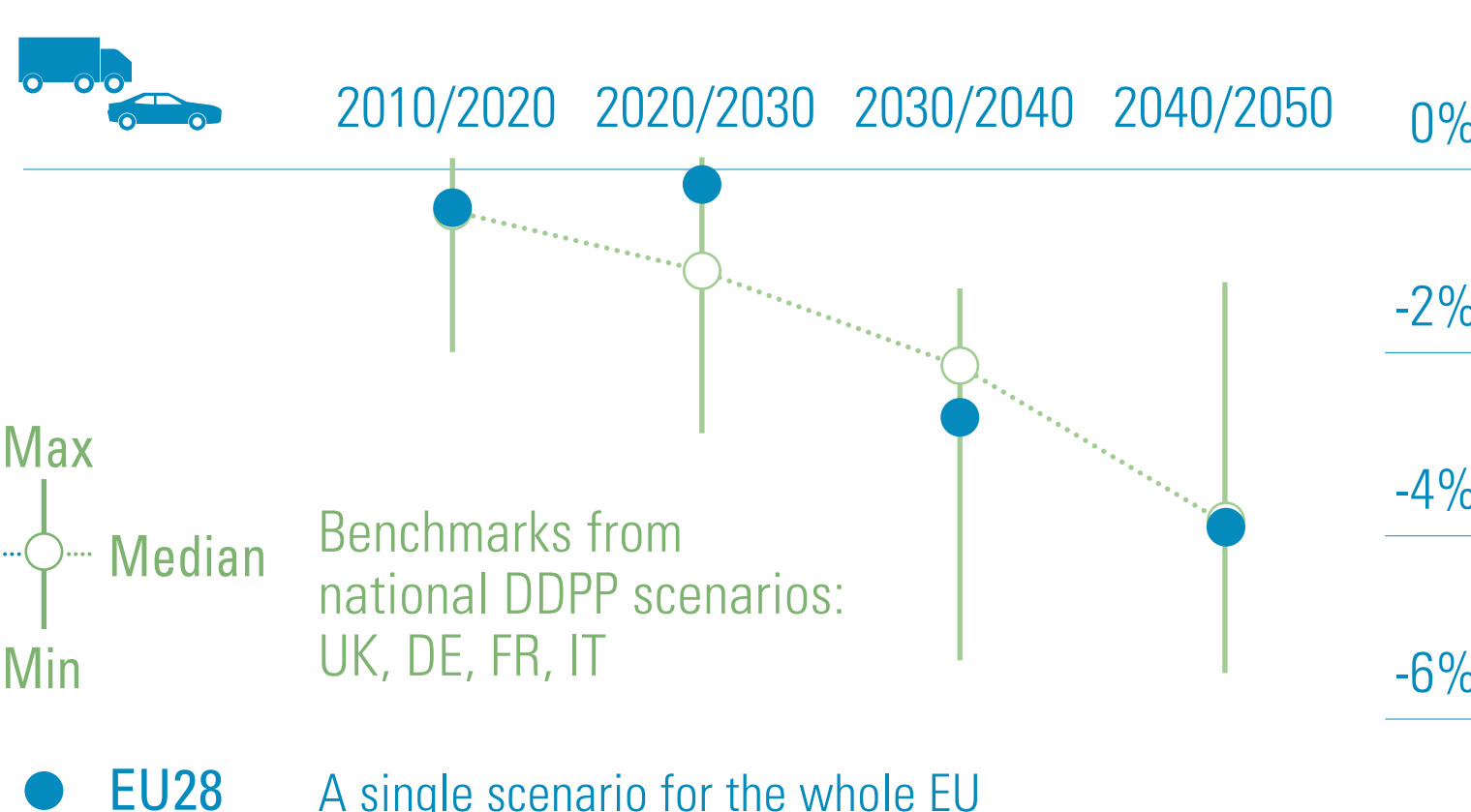
DEEP DECARBONIZATION OF ENERGY SYSTEMS COMPATIBLE WITH 2°C IS FEASIBLE IN ALL COUNTRIES



- 2 tCO₂ /capita in 2050
- 80-95% reduction of CO₂ /GDP in 2050 vs 2010
- Cumulative emissions in line with IPCC carbon budgets for 2°C with 50% likelihood

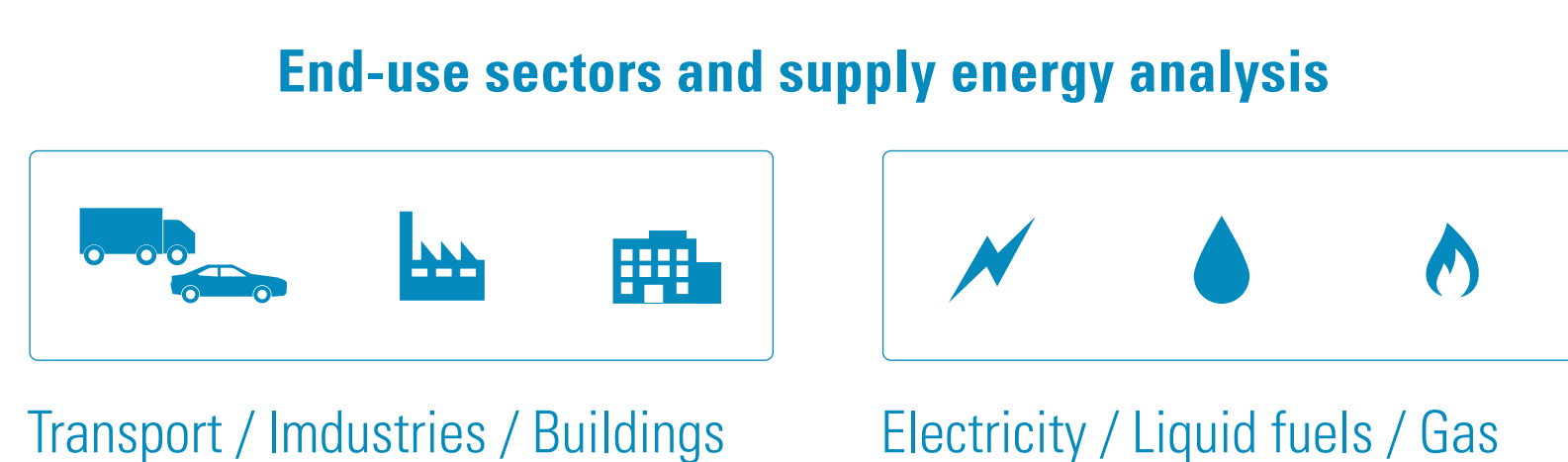
NATIONAL, LONG-TERM STRATEGIES PROVIDE BENCHMARKS FOR AMBITION

Ex: Carbon intensity of total transport, average annual change

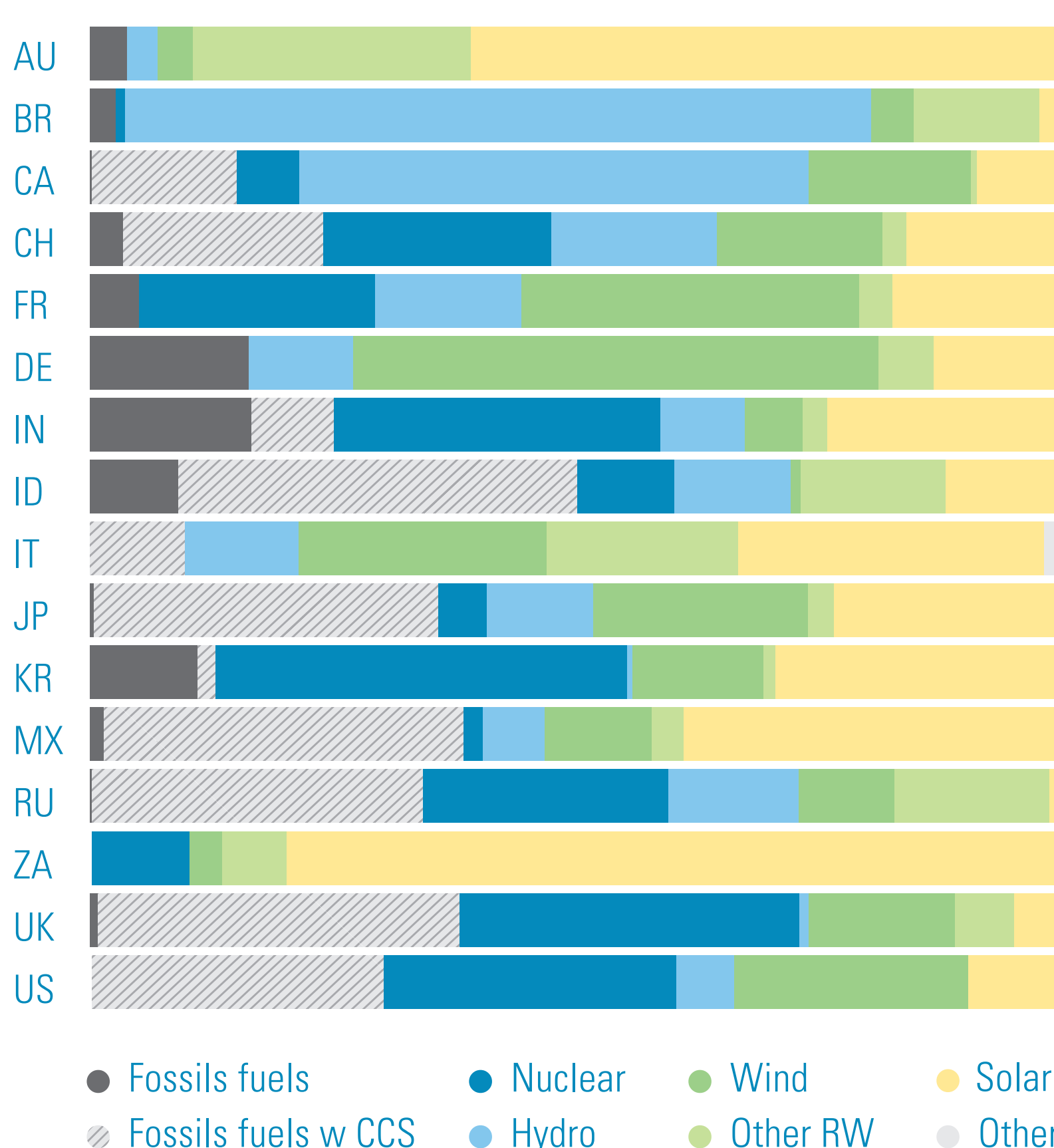


STRONG ACTION ON 3 PILLARS OF DECARBONIZATION IS NEEDED IN ALL CASES

- ENERGY EFFICIENCY
- DECARBONIZATION OF ELECTRICITY AND FUELS
- END-USE FUEL SWITCHING



COUNTRY-SPECIFIC STRATEGIES Electricity generation mix in 2050



DEEP DECARBONIZATION IS COMPATIBLE WITH DOMESTIC SOCIO-ECONOMIC IMPERATIVES

