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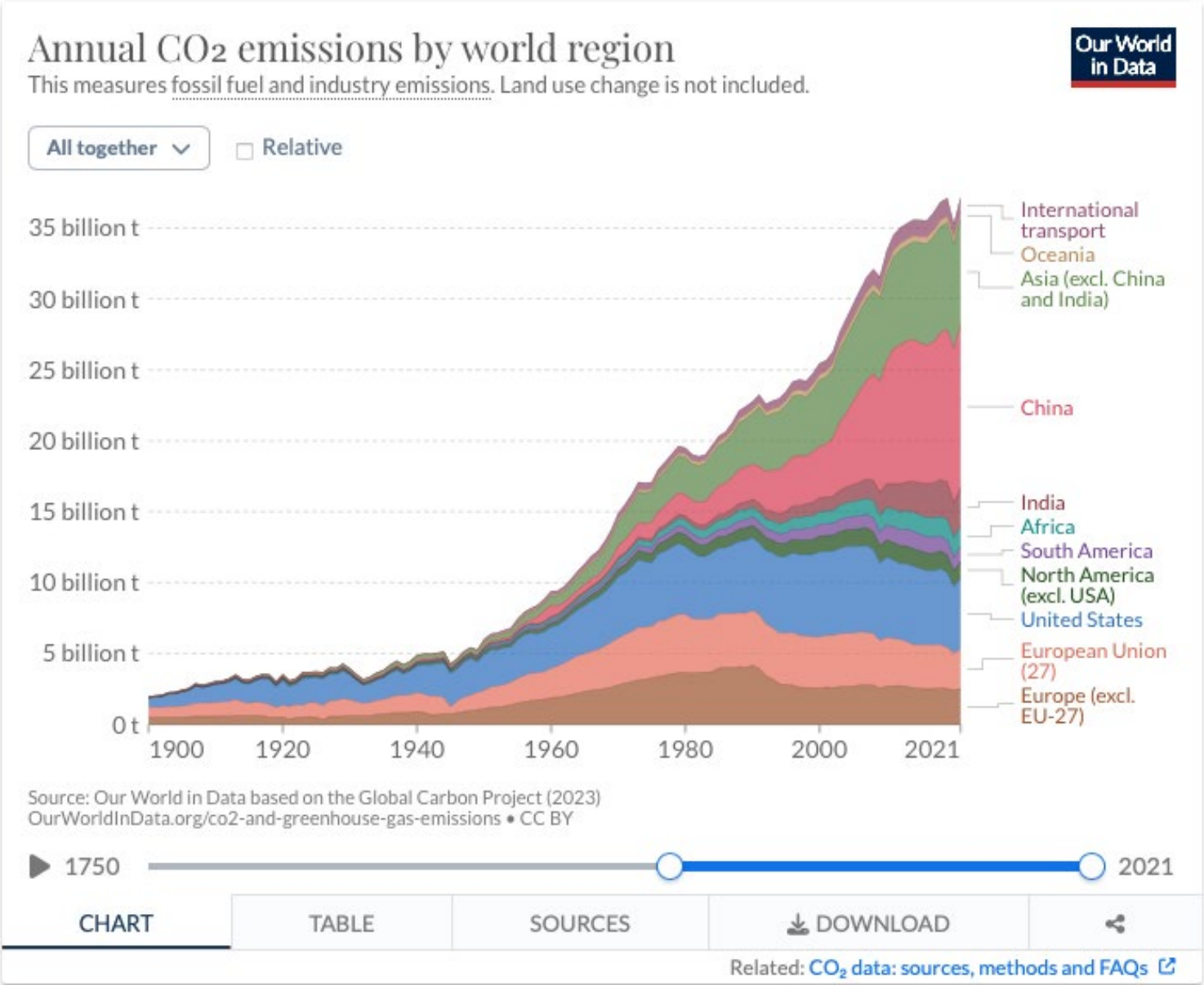
Energy security, Competitiveness And Decarbonization

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CEPR



Global CO2 emissions from have not peaked



The remaining budget - A global common:

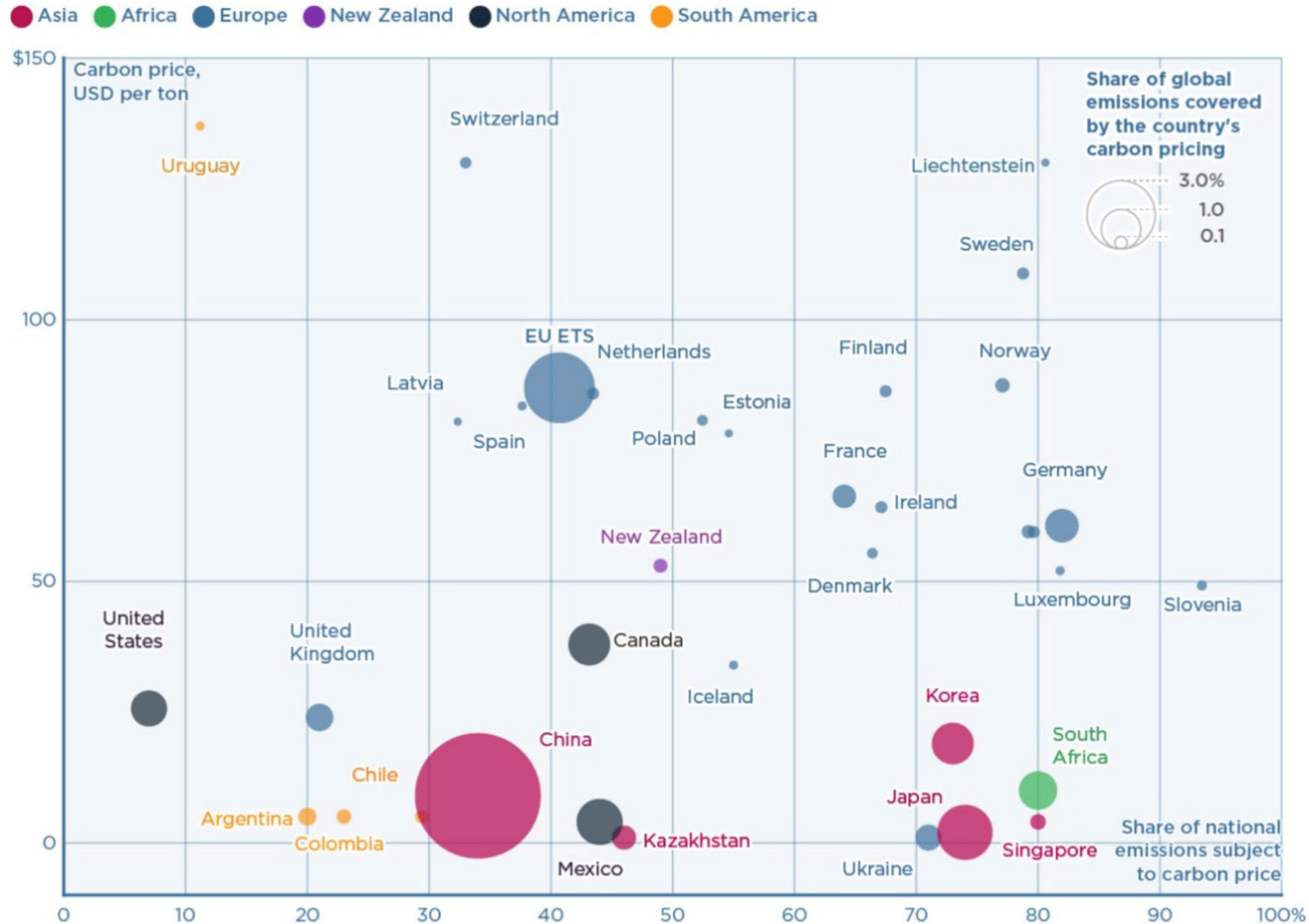
“used” up **2400 GtCO₂** , how much left?

Approximate global warming relative to 1850–1900 until temperature limit (°C)*(1)	Additional global warming relative to 2010–2019 until temperature limit (°C)	Estimated remaining carbon budgets from the beginning of 2020 (GtCO ₂)				
		<i>Likelihood of limiting global warming to temperature limit*(2)</i>				
		17%	33%	50%	67%	83%
1.5	0.43	900	650	500	400	300
1.7	0.63	1450	1050	850	700	550
2.0	0.93	2300	1700	1350	1150	900

IPCC 2021, Table SPM.2

Climate mitigation : Carbon taxes are first best but

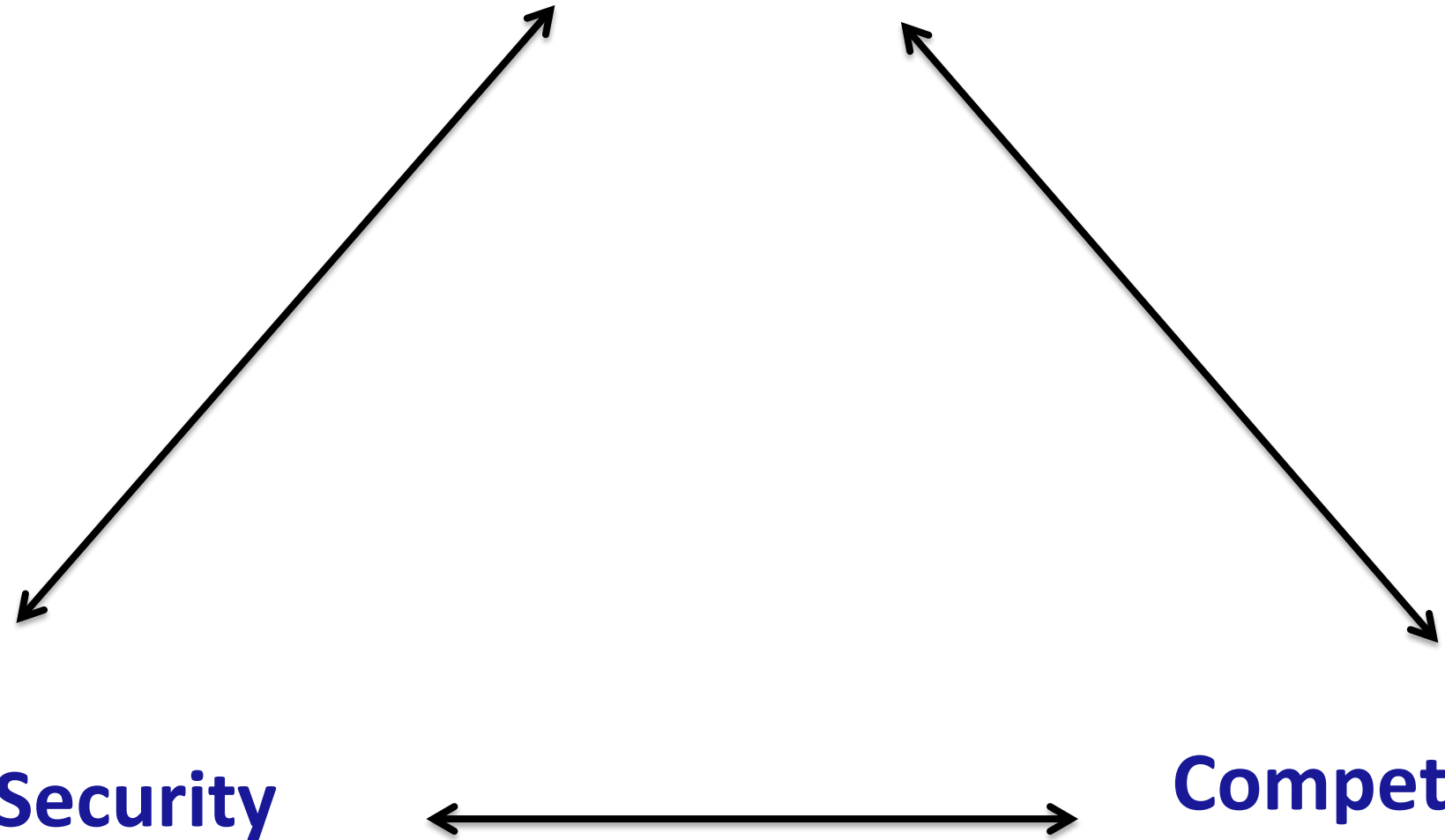
Figure 1: Carbon Pricing Coverage and Price Level by Jurisdiction



Climate Change Mitigation

Energy Security
Resilience

Competitiveness



Climate Change Mitigation

CO₂ Pricing

cost of energy

Energy Security
Resilience

Competitiveness

+ / -

CDAM

Climate Change Mitigation

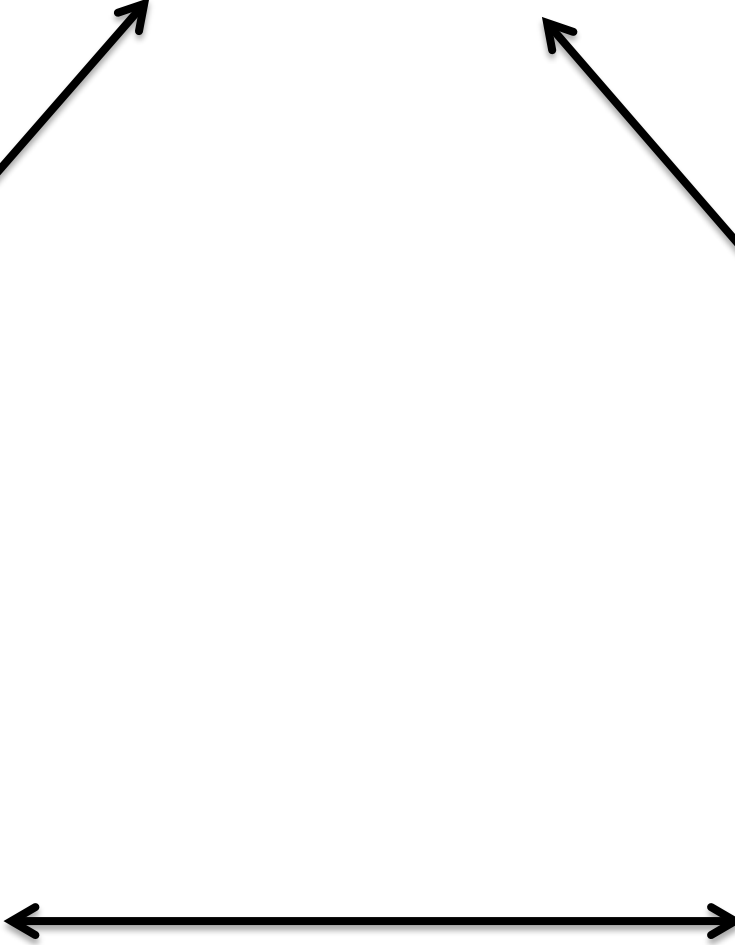
IRA
→ clean prod. subsidy
+ local content

Energy Security
Resilience

Competitiveness

?

+



Instruments and goals

INSTRUMENT	CLIMATE	Resilience /	COMPETITIVENESS
Carbon Pricing <i>(ETS)</i>	Yes <i>(but is not popular)</i>	Yes (long term)	NO <i>(short term)</i>
Prohibition <i>(DE Wärmepumpe)</i>	Yes <i>(but could not be enforced)</i>	Yes	No
Clean tech subsidy	Probably	Maybe	Yes <i>(short term)</i>
Domestic content requirements <i>(IRA, NZIA)</i>	No	Possibly	Probably not
R&D funding	Yes <i>(long term)</i>	Maybe	Yes (long term)

Problem : most of the instruments cannot ensure that the global carbon budget will not be exceeded.

Thank you

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