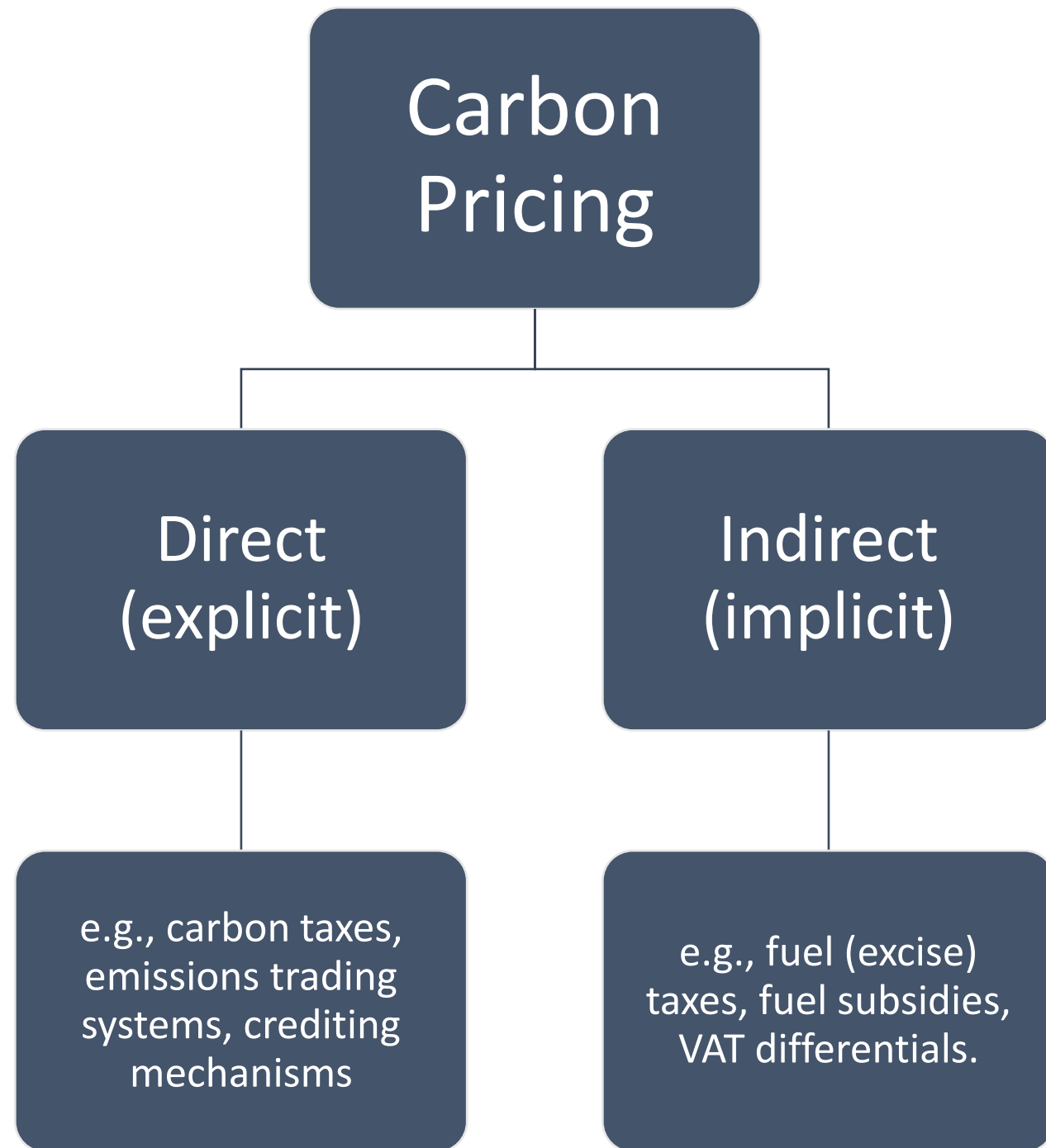




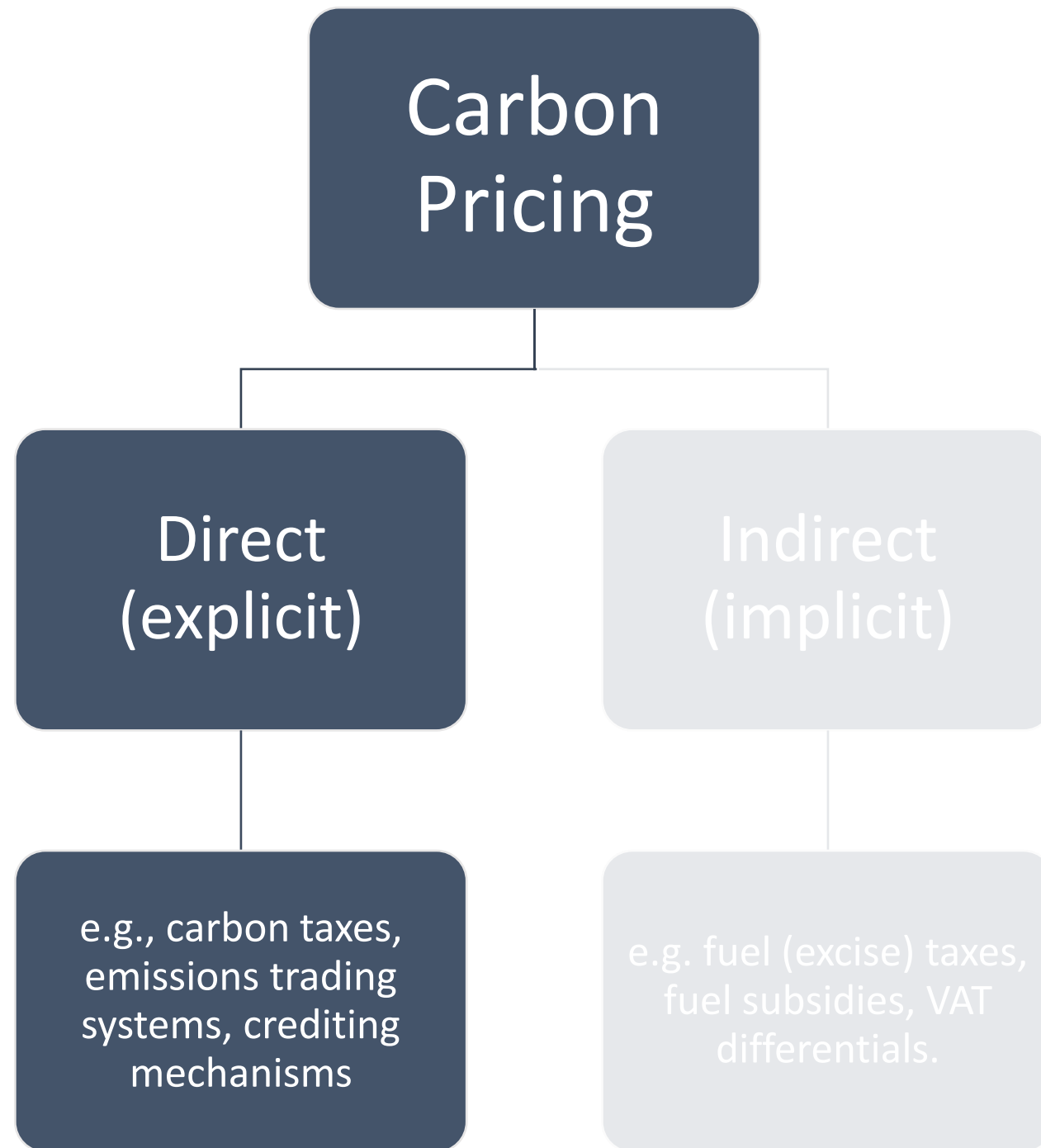
Carbon pricing in transport

Joseph Pryor
Senior Climate Change Specialist
Climate Change Group

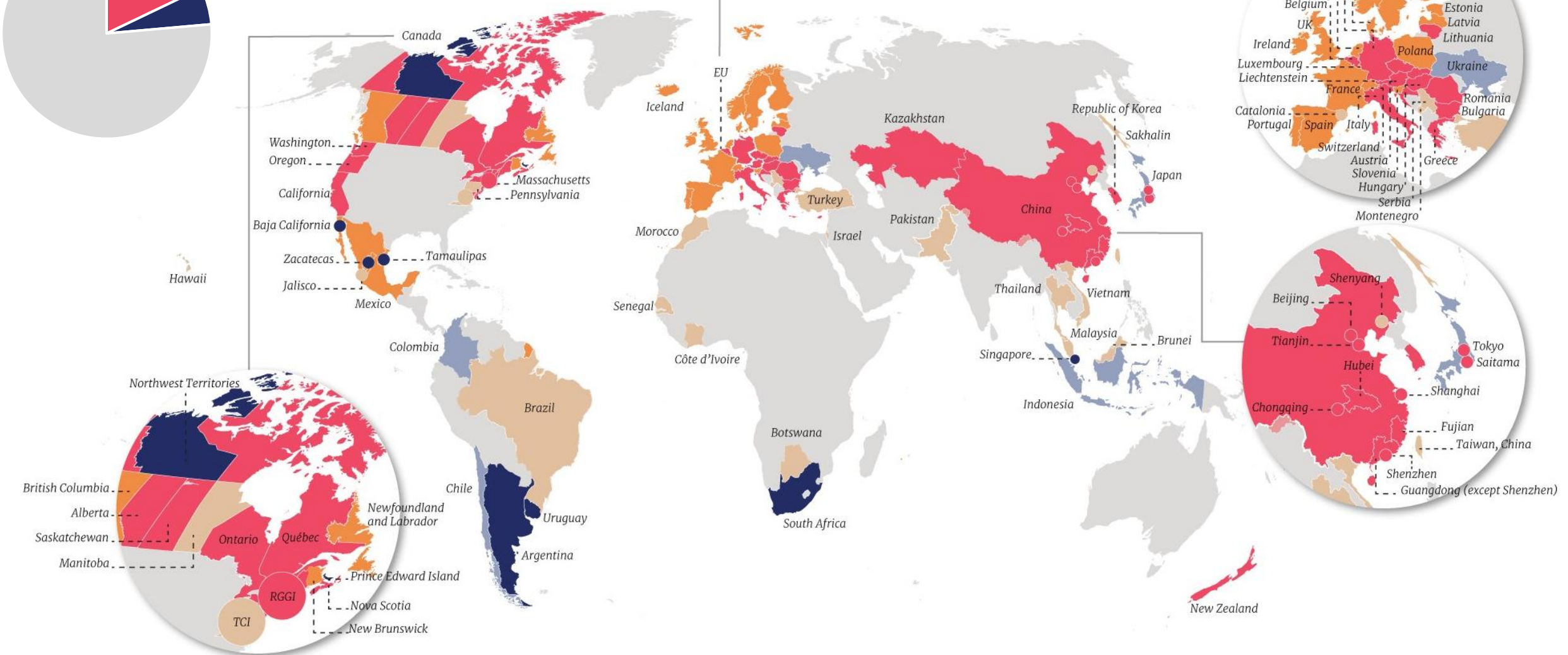
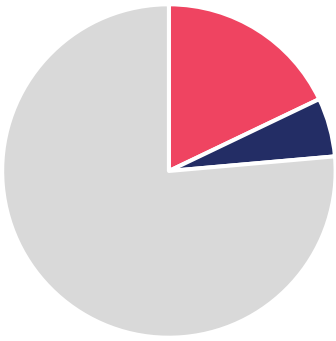
What is
carbon
pricing?



What is carbon pricing?

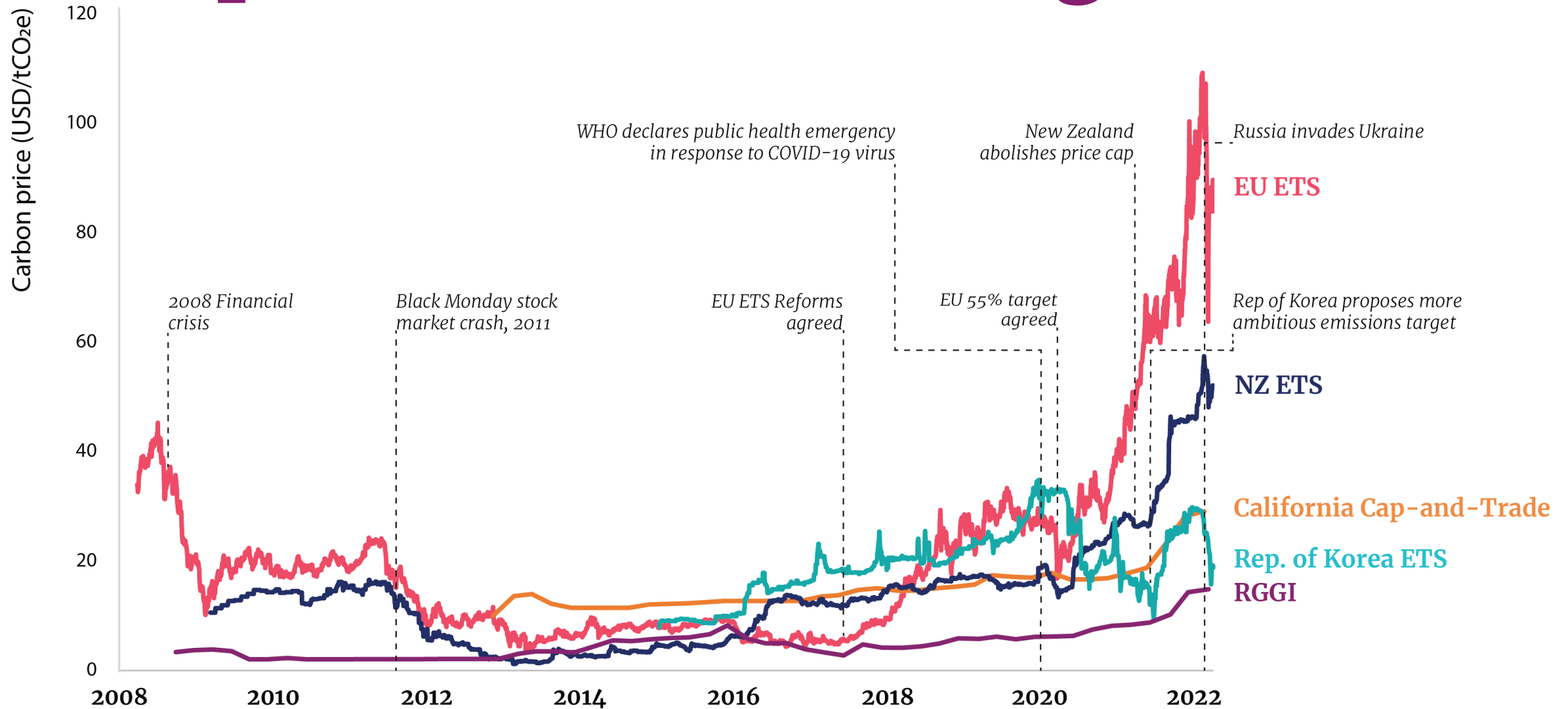


**23% of global
GHG emissions
covered**

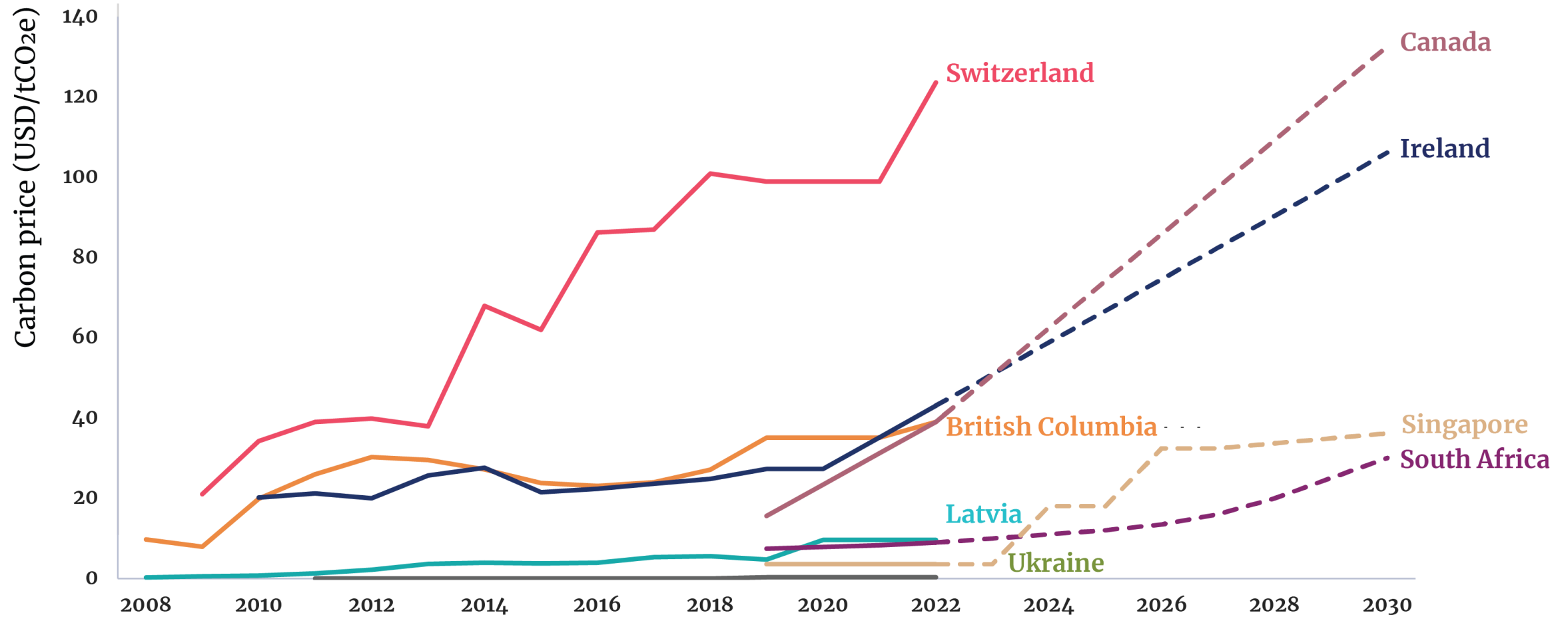


- ETS implemented or scheduled for implementation
- Carbon tax implemented or scheduled for implementation
- ETS and carbon tax implemented or scheduled
- Carbon tax implemented or scheduled, ETS under consideration
- ETS or carbon tax under consideration

ETS prices hit record highs

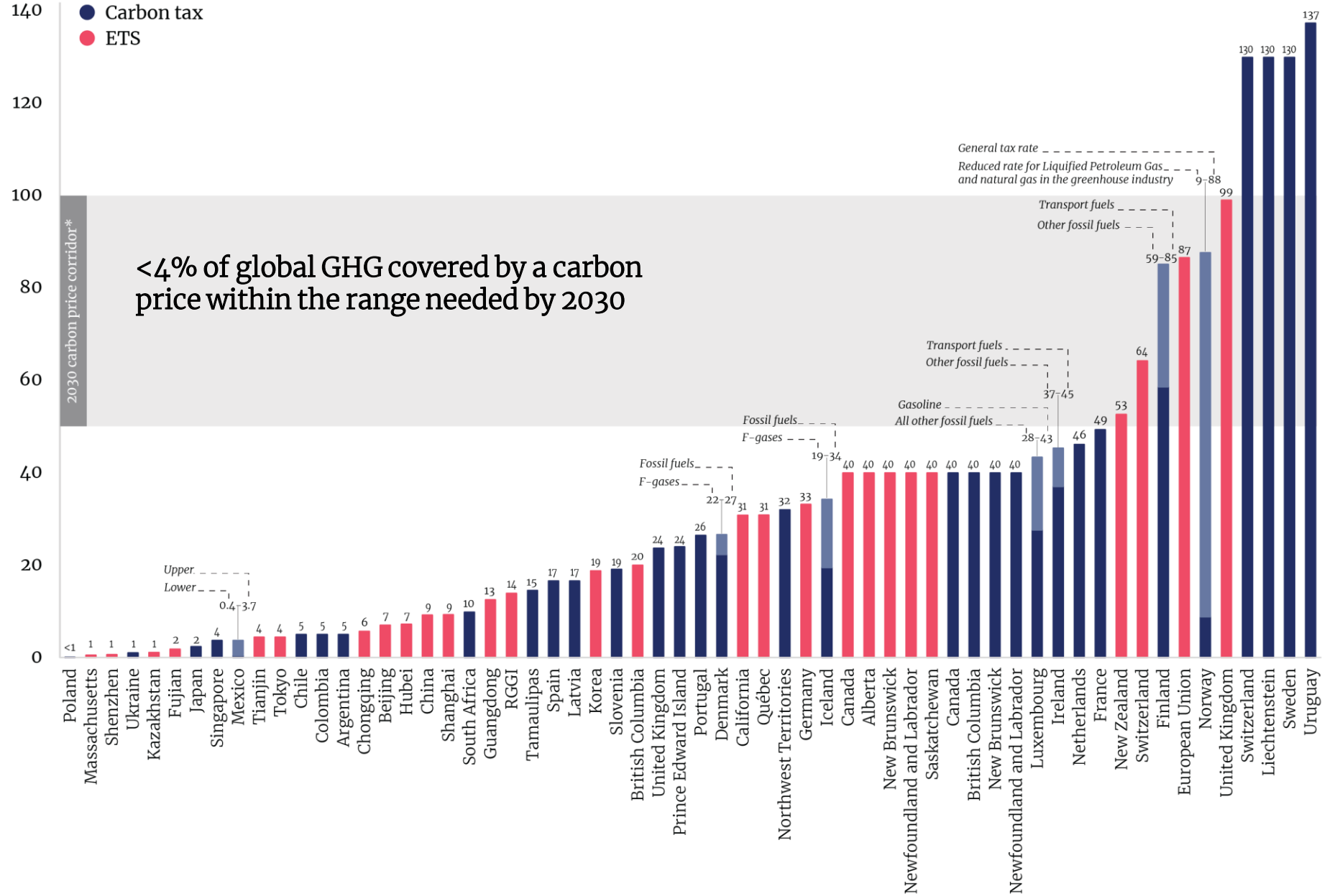


Tax rates also increasing



...but prices remain below the levels needed

Carbon price (USD/tCO_{2e})



Most carbon taxes cover transport

Carbon taxes are often charged via carbon content on fuel.

Europe

- Denmark, France, and Ireland

Latin America

- Argentina, Mexico, and Colombia

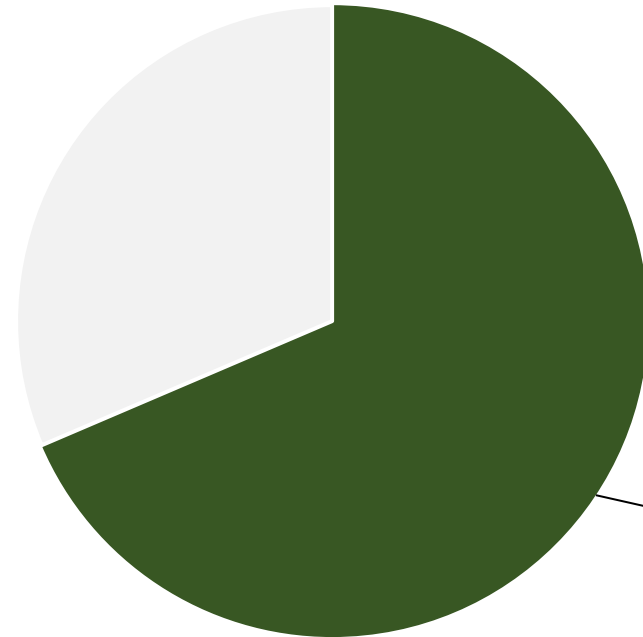
East Asia Pacific

- Japan, Singapore*

Africa

- South Africa*

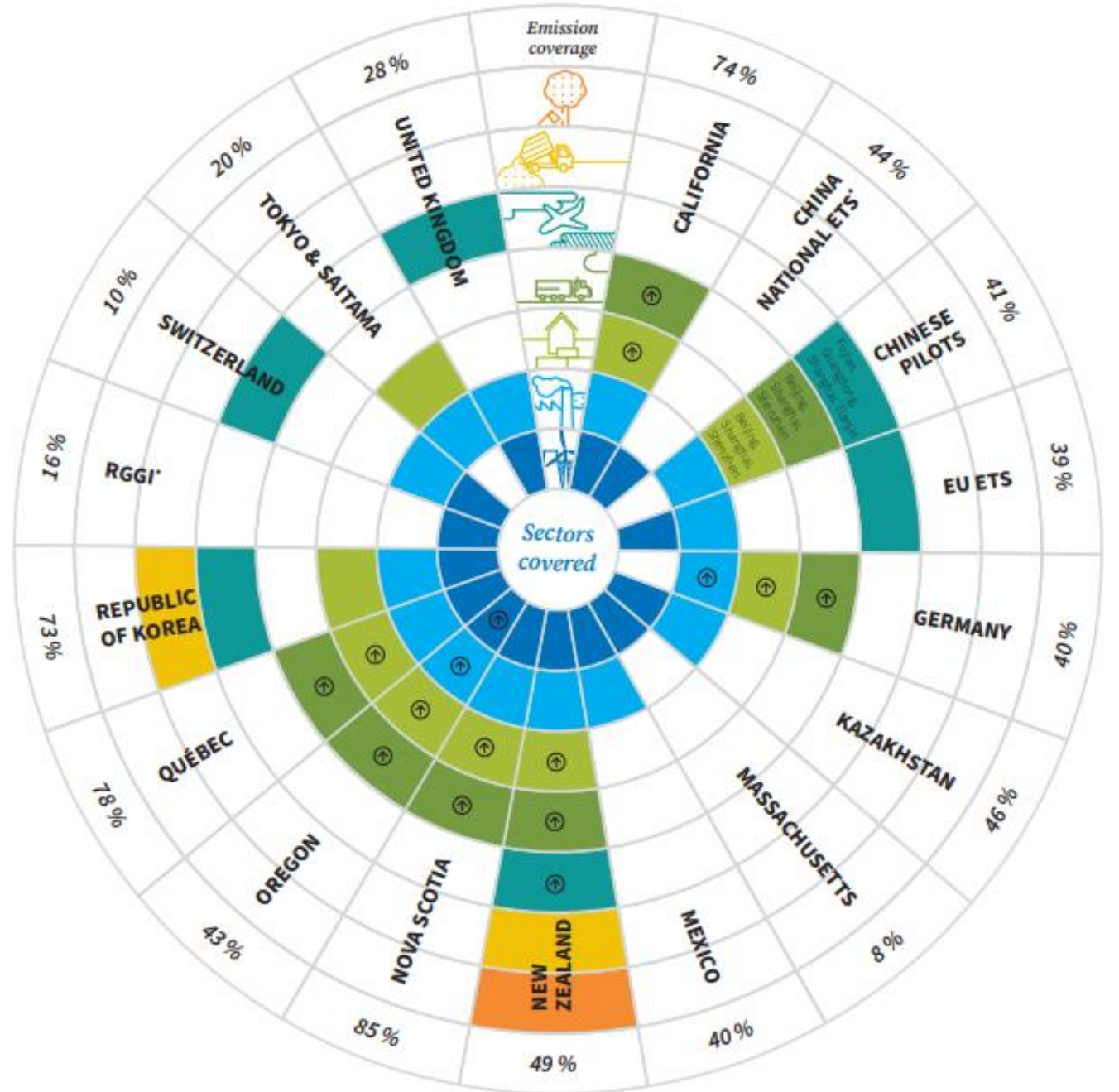
*includes liquid fuels at covered installation



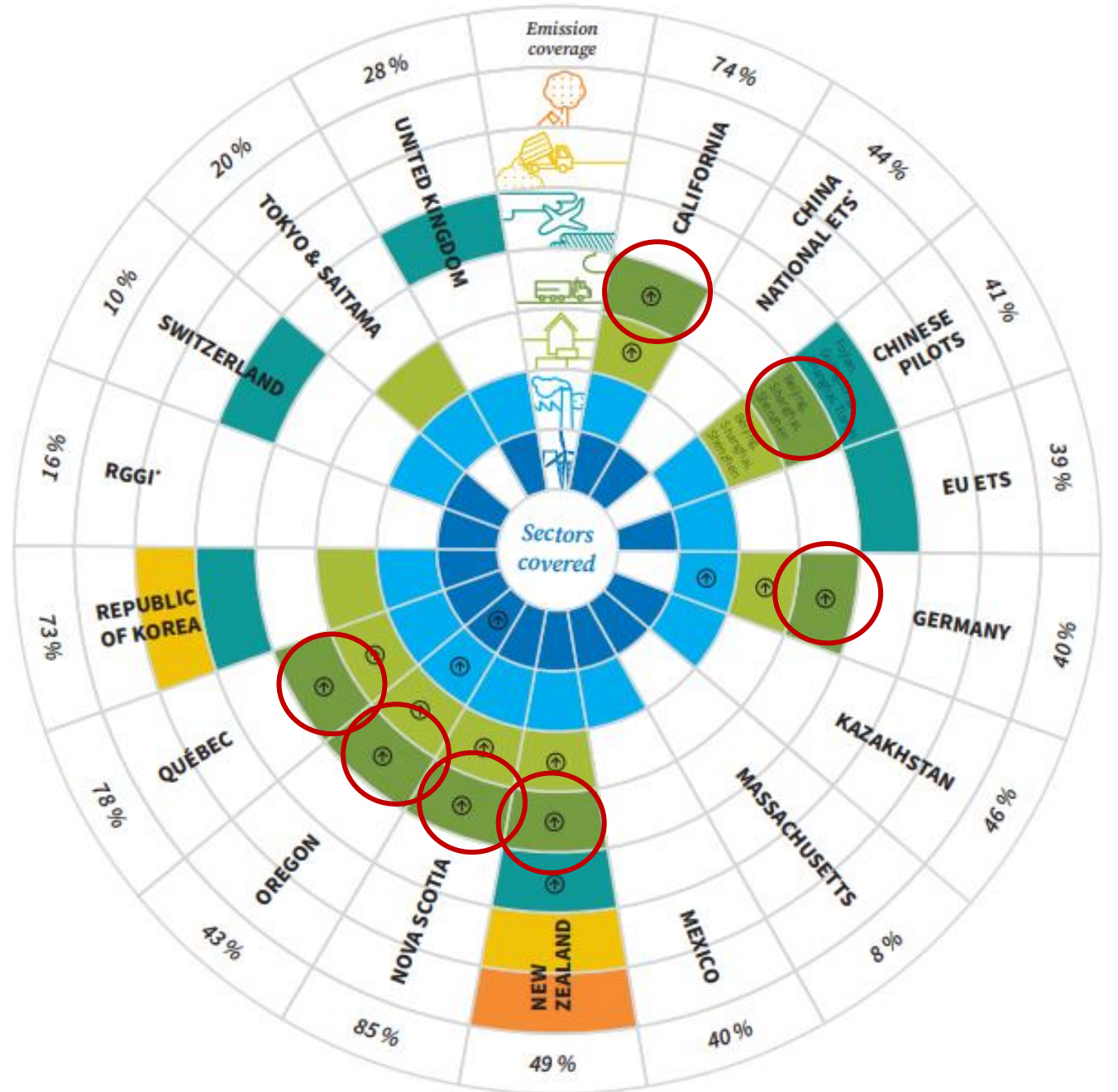
Proportion of implemented carbon taxes covering road transport (24 out of 35)

Based on World Bank internal analysis

ETSs also cover road transport




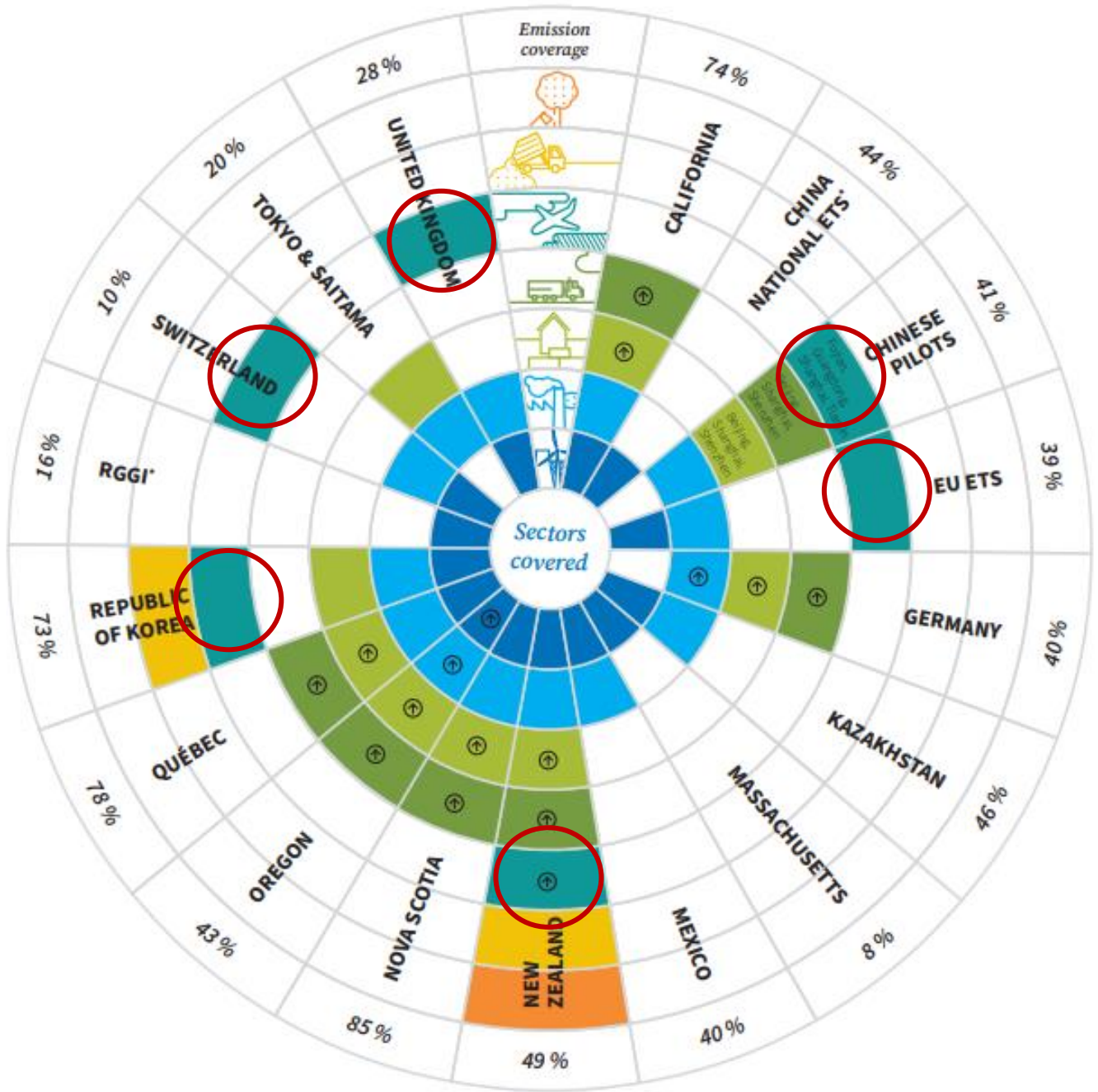
ETSs also cover road transport



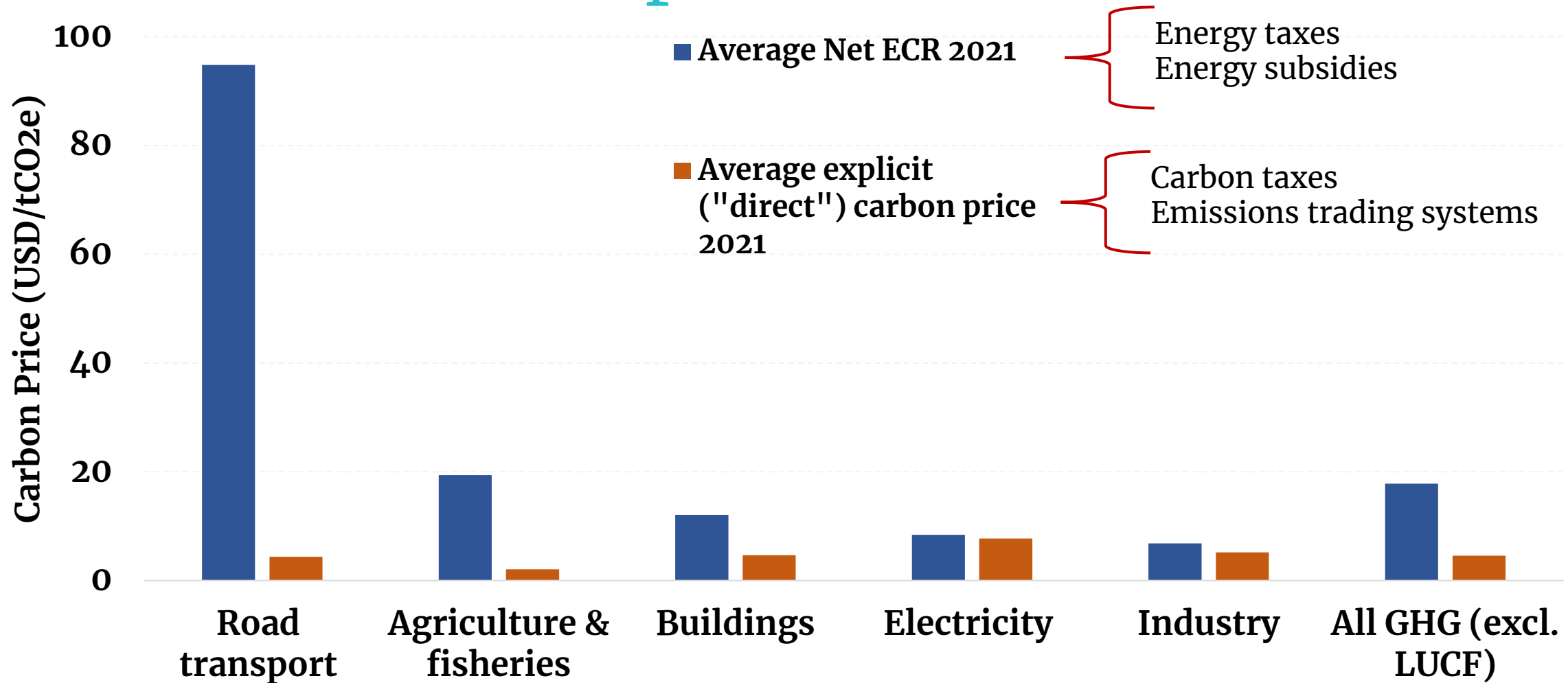
And domestic aviation

- Forestry 
- Waste 
- Domestic Aviation 
- Transport 
- Buildings 
- Industry 
- Power 

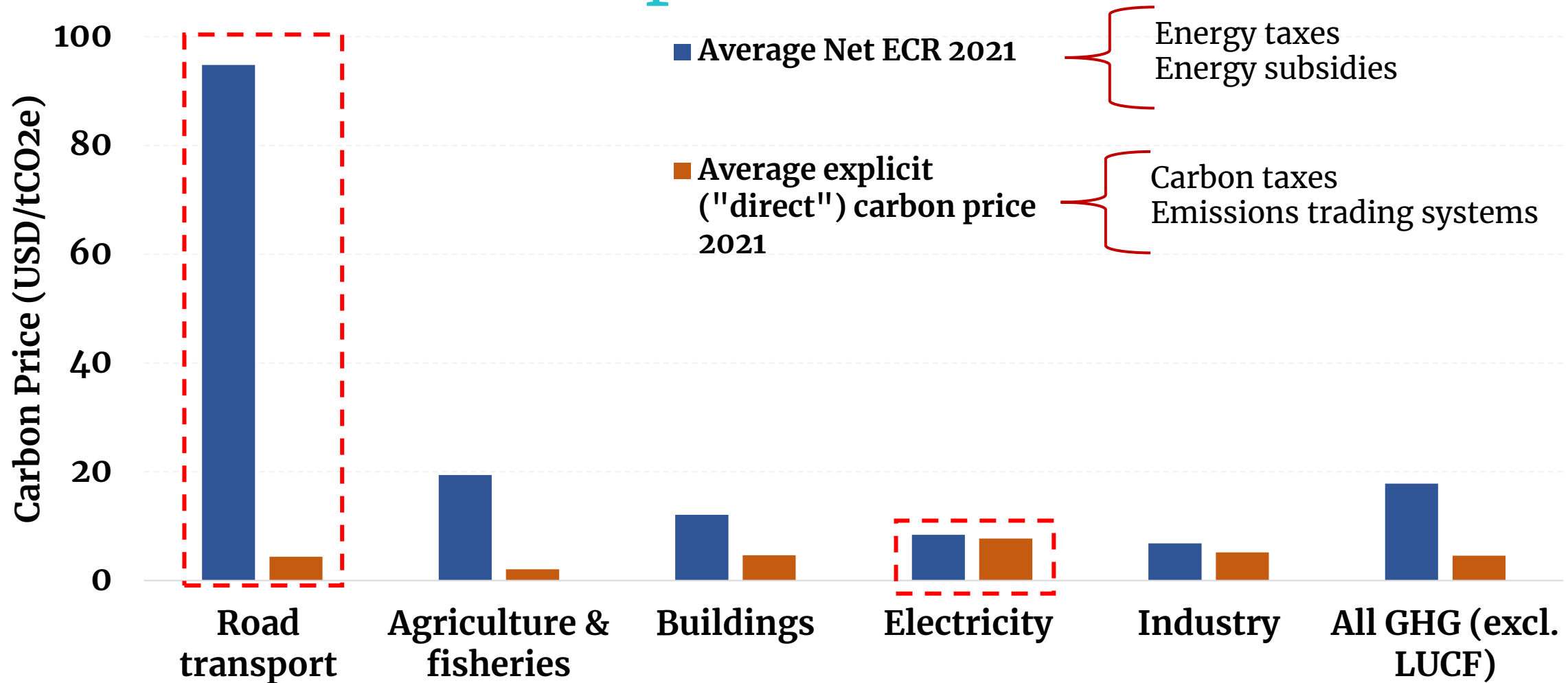
 indicates which sector represents upstream coverage



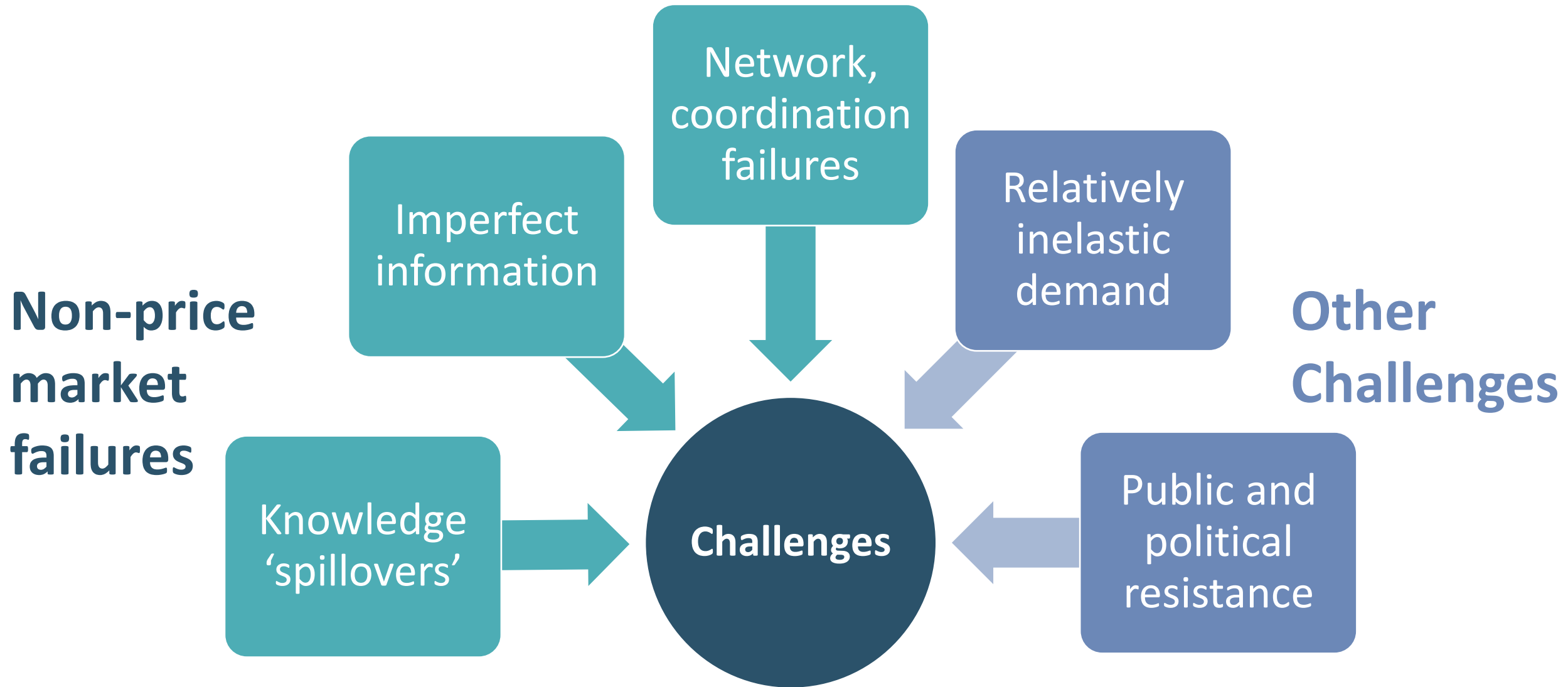
“Indirect” carbon pricing can play an important role



“Indirect” carbon pricing can play an important role



Challenges extend beyond unpriced carbon externality..



Carbon Pricing is just one tool

		AVOID	SHIFT	IMPROVE	
Policy category	Policy examples	Activity reduction	Modal choice	Energy intensity	Fuel carbon intensity
Economic/pricing	Carbon price (ETS or tax)	●	●	◐	◐
	Vehicle pricing policies (e.g., Feebates, taxes on inefficient vehicles, and tax credits for fuel-efficient vehicles)	◐	◐	●	◐
	Activity pricing policies (e.g., tolls, congestion pricing, PAYD insurance/registration rates)	●	◐	◐	◐
Regulatory	Vehicle efficiency standards (fuel consumption or CO ₂ based)	◐	◐	●	◐
	Fuel standards (low carbon or renewable)	◐	◐	◐	●
Research, information, infrastructure and planning	RD&D initiatives (e.g., Research grants)	◐	◐	●	●
	Modal shift policies (e.g., access to, or subsidies for, public transport, new infrastructure)	●	●	◐	◐
	Urban Planning (compact development, green planning)	●	◐	◐	◐
	Improving existing system efficiency (e.g., education, HOV lanes)	◐	◐	◐	◐