

# Carbon and Climate Change Taxation

Chair: Tatiana Falcão

Date: 6th of September 2022

# Panel

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# Agenda

1. Definitional aspects of climate change taxation
2. Carbon pricing
3. Border Carbon Adjustment Measures
4. Multilateralism
5. Coordinated approaches
6. Internal carbon price
7. Conclusion

# Climate Change and the role of taxes

- **A premise: Climate Change, Environment, Energy, Taxes are connected issues**
  - Many of the 17<sup>th</sup> SDGs are addressing the core drivers of climate change
  - Regulation is not enough and ‘carbon pricing’ – e.g., fee or tax – very effectively encourages the shift of production and consumption choices towards low and zero carbon options that is required to limit climate change
  - ‘Carbon tax policies’ can also raise significant revenues
  - In the ‘ecological transition era’ to reach a just decarbonisation economy, new ‘green tax reforms’, the ‘double dividend theory’, the role of ‘environmental taxes’ and the use of revenues are at the core of public agendas



# International commitments

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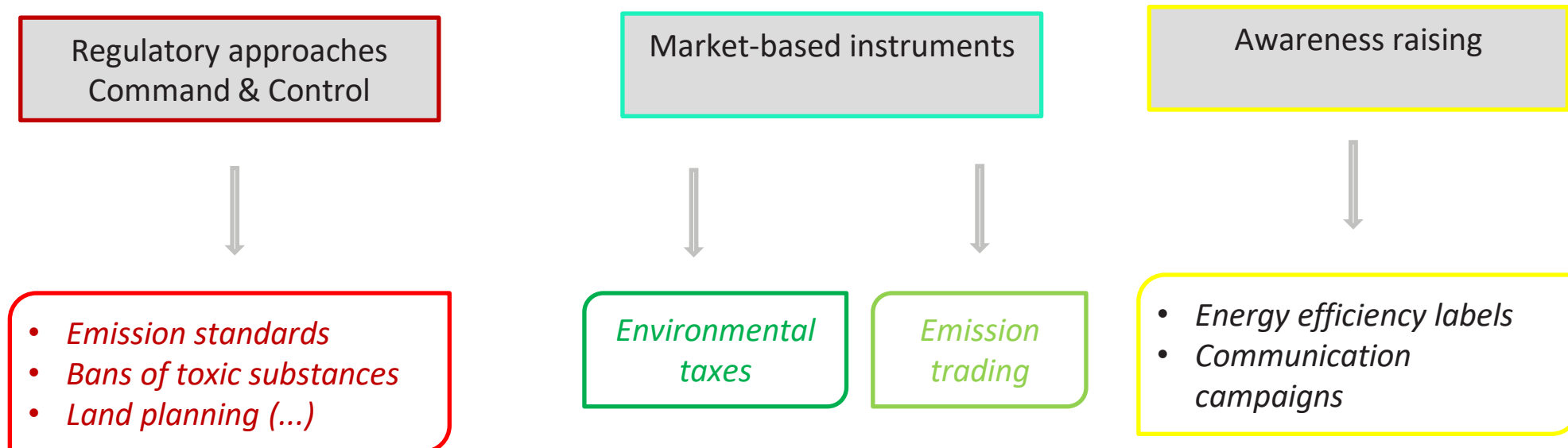
- The **UNFCCC** – recognized that Climate Change is a problem
- The **Kyoto Protocol** – GHG abatement: mitigation policies using MBIs (CDM, JI, ET)
- The **Paris Agreement** – Its goal is to **limit global warming** to well below 2, preferably to **1.5 degrees Celsius**, compared to pre-industrial levels. By 2020, countries submit their plans for climate action known as **nationally determined contributions** (NDCs)

**CJEU** *“It is thus clear that, even though the Kyoto Protocol imposes quantified greenhouse gas reduction commitments with regard to the commitment period corresponding to the years 2008 to 2012, the parties to the protocol may comply with their obligations in the manner and at the speed upon which they agree”* (**Air Transport Association of America, C-366/10, 2011, para.76**)

# Environmental policy instruments

- No single policy instrument can provide solutions to all problems, so the spectrum has broadened to address increasingly complex environmental & health related problems

Many environmental **policy interventions** combined:



Coordination and assessment are important

# Market-based instruments



## GLOSSARY OF STATISTICAL TERMS

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### MARKET-BASED INSTRUMENTS

#### Definition:

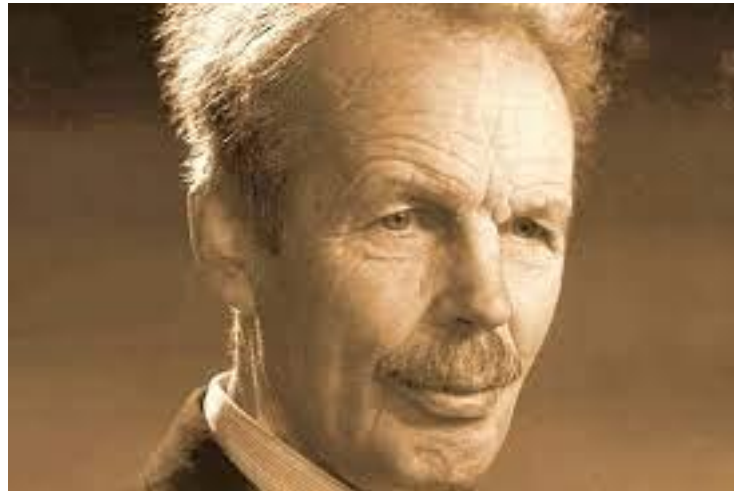
Market-based instruments seek to address the market failure of 'environmental externalities' either by incorporating the external cost of production or consumption activities through taxes or charges on processes or products, or by creating property rights and facilitating the establishment of a proxy market for the use of environmental services.

#### Source Publication:

OECD, 2007, Business and the Environment: Policy Incentives and Corporate Responses, OECD, Paris.

# Rationale

Arthur Cecil PIGOU  
*'Pigouvian taxes'*



- The need to internalise the negative environmental externalities
- The **Polluter-pays principle**

William BAUMOL – Wallace OATES  
*Cap & Trade*



- The emitters will choose the cheapest options: (i) reduce their emissions (ii) buy emissions units in the market

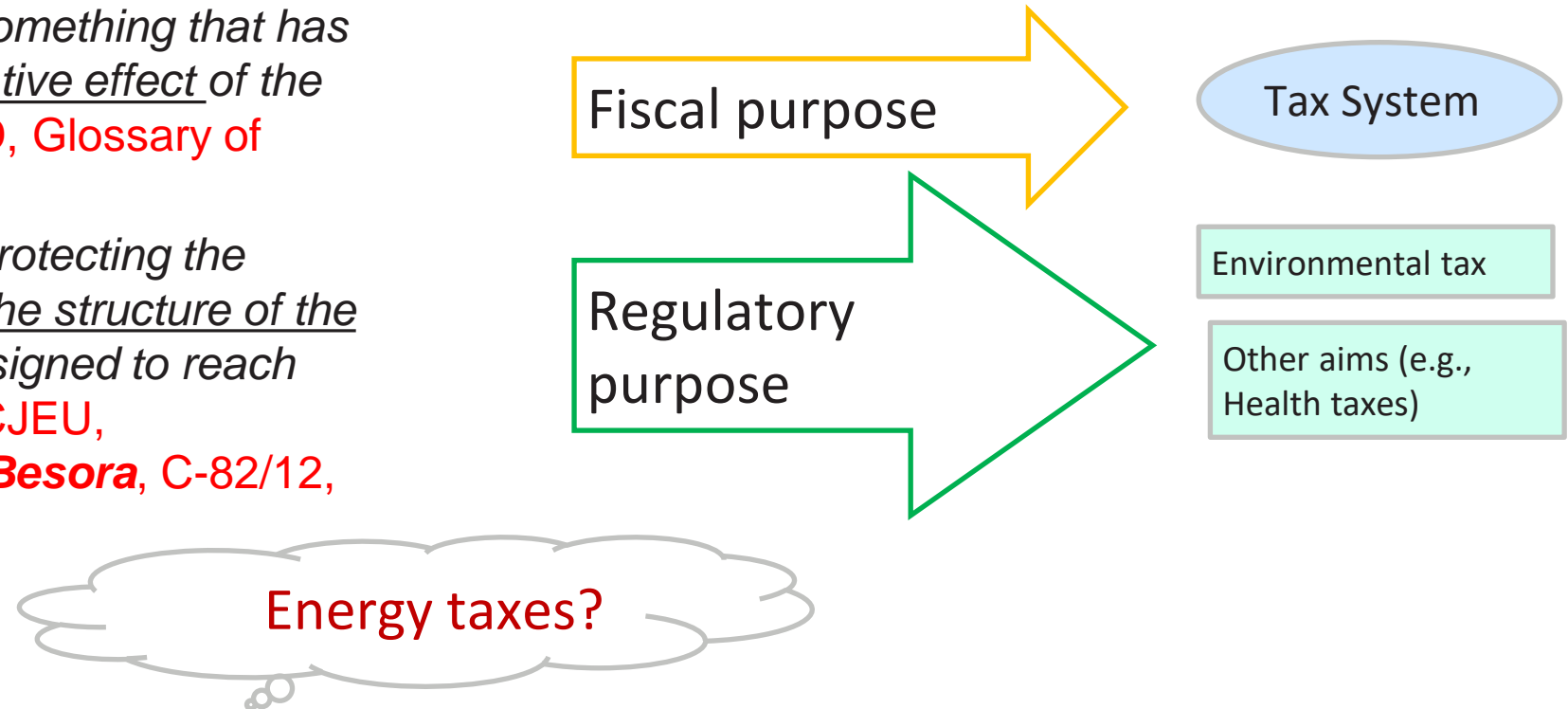


# Definitional aspects

- ENVIRONMENTAL TAX

- “Tax whose tax base is a physical unit (or a proxy of it) of something that has proven specific negative effect of the environment” (OECD, Glossary of statistical terms)
- A tax is directed at protecting the environment only if the structure of the tax is specifically designed to reach such an objective (CJEU, **Transportes Jordi Besora**, C-82/12, 2014, para. 42)

- What is the key element? *The effect matters - not only the purpose or the use of the resources – legal context also matters*



# According to Eurostat's methodology ...

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**“Energy taxation is defined as one of the four sub-categories of environmental taxation, together with transport, pollution and resource taxes. It groups together revenues from different type of taxes, namely:**

1. taxes on transport fuels (typically excises in the EU);
2. taxes on fuels for heating and stationary purposes (also excises);
3. taxes on electricity (also excises);
4. **carbon taxes;**
5. revenues from ETS; and
6. other indirect energy production taxes.

Taxes on air pollutants from energy production processes other than GHG (e.g., Nitrogen and Sulphur oxides – NO<sub>x</sub> and SO<sub>x</sub>) are not considered as energy taxes, but as **pollution taxes”**

*Source: COM, Study on Energy Taxation Indicators, 2021*

# According to an environmental legal approach ...

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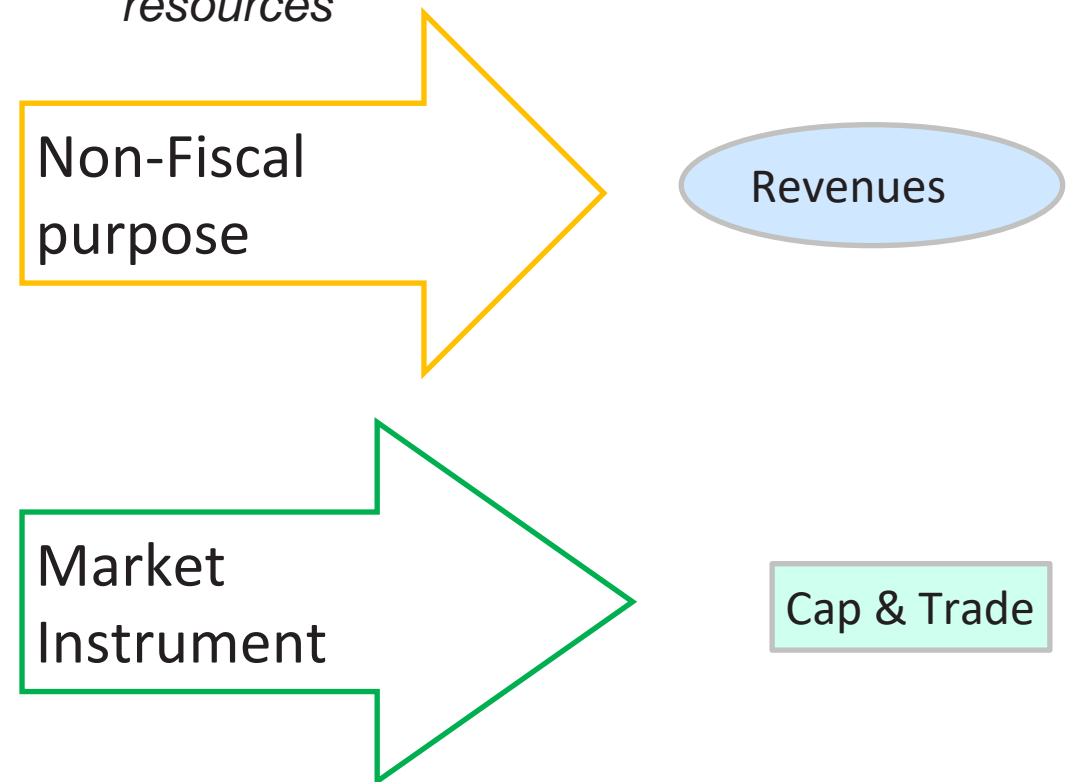
- Energy taxes are not always aligned with environmental and climate change purposes. Therefore, most of the times these are not 'environmental taxes'
- A 'carbon tax' *“directly set a price on carbon by defining an explicit tax rate on **GHG emissions** or — more commonly — on the carbon content of fossil fuels, i.e., a price per **tCO<sub>2</sub>e**. It is different from an ETS in that the emission reduction outcome of a carbon tax is not pre-defined but the carbon price is”* ([World Bank Carbon Pricing Dashboard](#))

# The logic of the ETS

- **EMISSION TRADING SYSTEM**

- *“Unlike a duty, tax, fee or charge on fuel consumption, the scheme introduced by Directive 2003/87 as amended by Directive 2008/101, apart from the fact that it is not intended to generate revenue for the public authorities, does not in any way enable the establishment, applying a basis of assessment and a rate defined in advance, of an amount that must be payable per tonne of fuel consumed for all the flights carried out in a calendar year” (CJEU, **Air Transport Association of America**, C-366/10, 2011, para. 143)*

- **What is the key element?** *The effect matters - not only the purpose or the use of the resources*



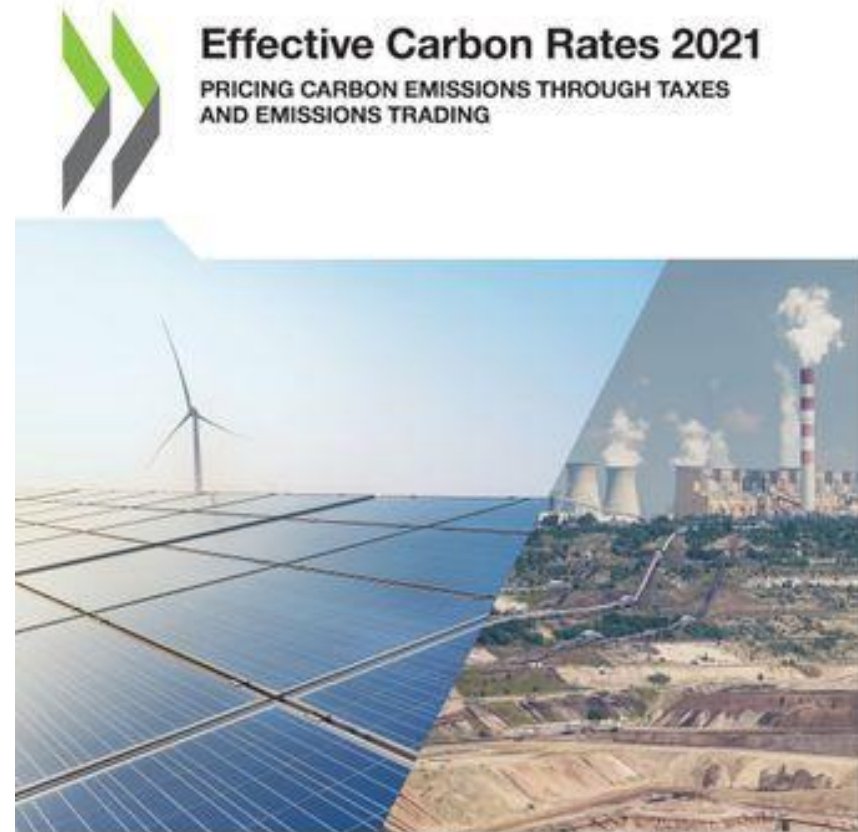
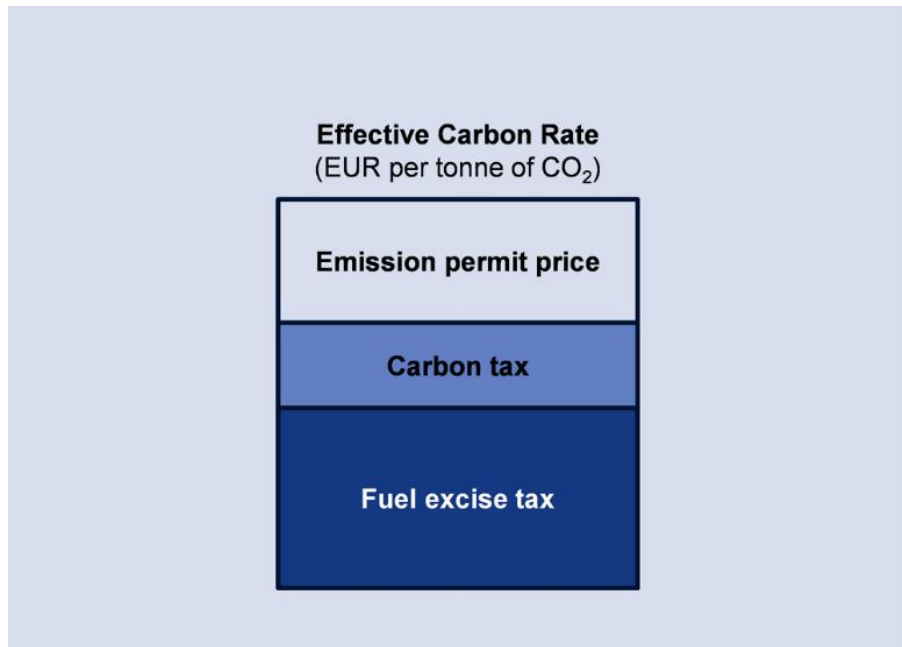
# The logic of the ETS

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**CJEU:** “*The economic logic of the allowance trading scheme consists in ensuring that the reductions of greenhouse gas emissions required to achieve a predetermined environmental outcome take place at the lowest cost. In particular by allowing the allowances that have been allocated to be sold, the scheme is intended to encourage every participant in the scheme to emit quantities of greenhouse gases that are less than the allowances originally allocated to him, in order to sell the surplus to another participant who has emitted more than his allowance” (**Air Transport Association of America, C-366/10, 2011, para. 140**)*

# What is ECR?

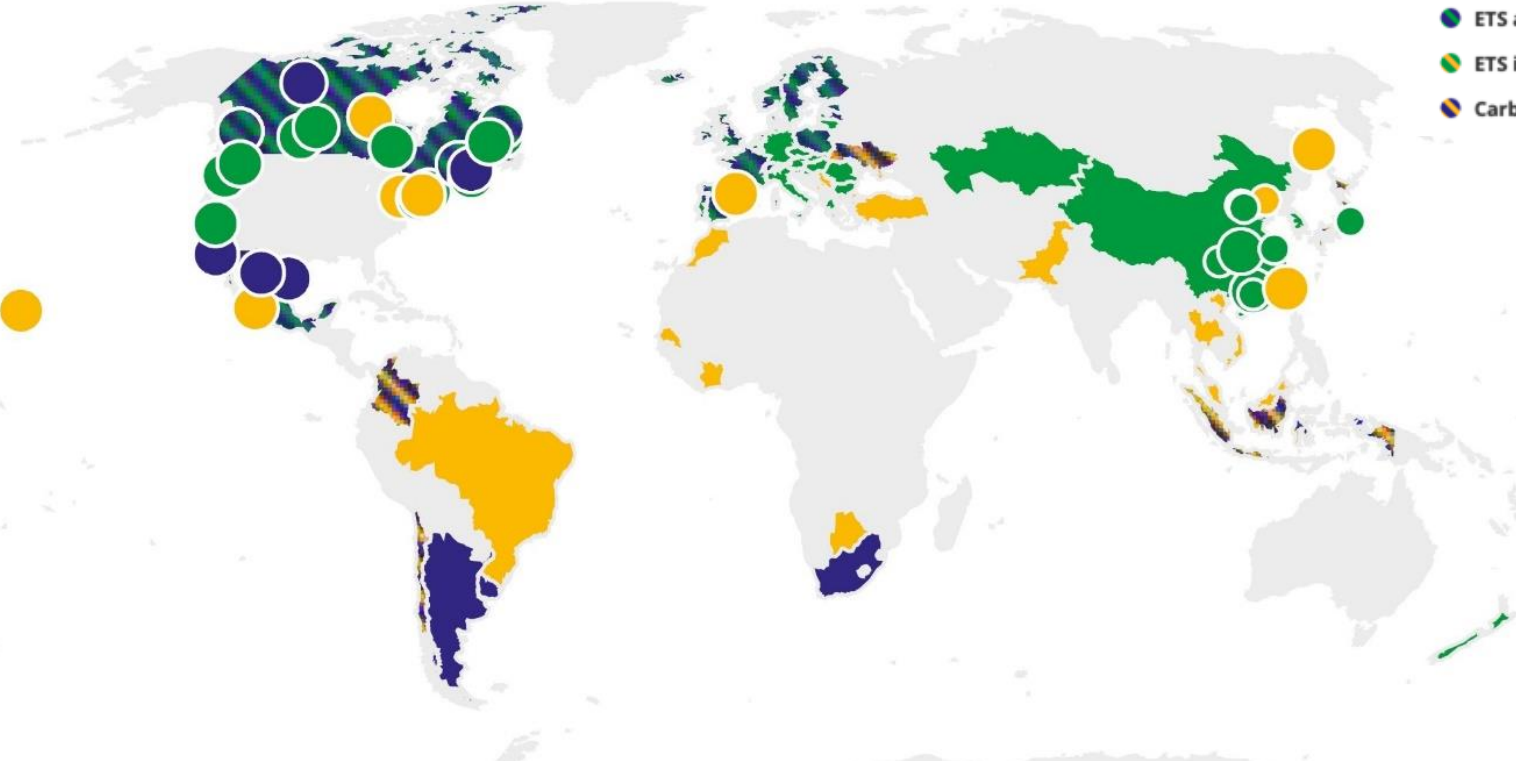
**Effective Carbon Rate:** is a measure for the (total) price of carbon emissions resulting from taxes and ETS



# Carbon Pricing Dashboard

Summary map of regional, national and subnational carbon pricing initiatives

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



Source: [https://carbonpricingdashboard.worldbank.org/map\\_data](https://carbonpricingdashboard.worldbank.org/map_data)

# What is understood by carbon pricing?

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There is no clear consensus at IO level

(+) Instruments capable of generating a clear price indicator either explicitly or implicitly

- Carbon Taxes
- Pricing through Emissions Trading System
- Energy Excise Taxes/Taxes based on energy use
- Fossil fuel Taxes

(-) Instruments that will have the effect of reducing the price

- Fossil fuel subsidies
- Exemptions and tax rate reduction
- State subvention and special regimes
- Regulatory policies which result in an implicit marginal price on carbon, such as tradeable performance standards



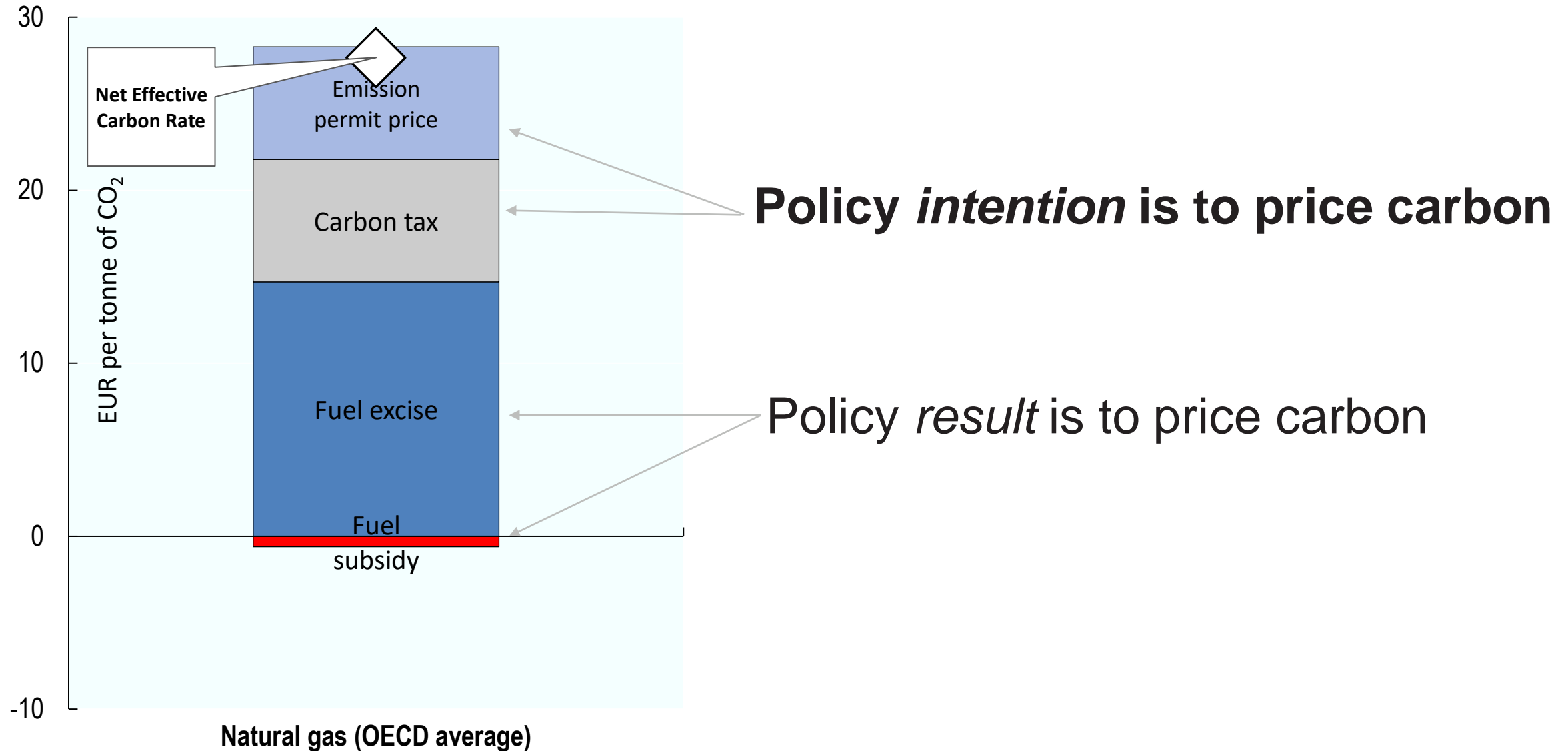
# POLL QUESTION

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**ARE YOU IN FAVOUR OF A CARBON PRICE?**



# Effective carbon rates – net effective carbon rates

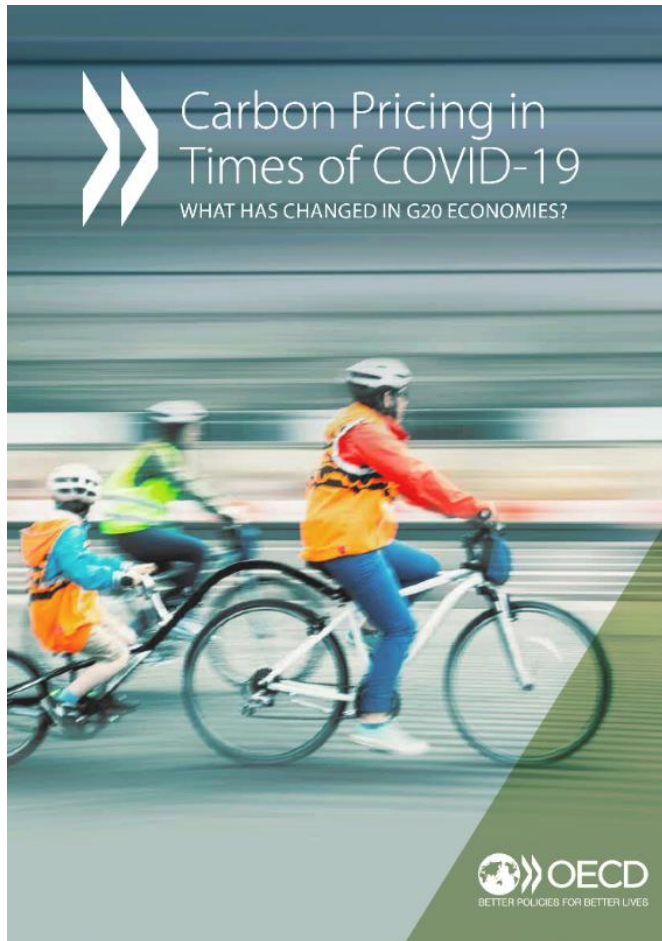


# A carbon price of EUR 30/tCO<sub>2</sub>

Energy category	Low-end carbon benchmark (EUR 30 per tonne of CO <sub>2</sub> )	
<b>Coal and other solid fossil fuels</b>	6.24 eurocent per kilogramme	+100%
<b>Fuel oil</b>	8.94 eurocent per litre	
<b>Diesel</b>	7.99 eurocent per litre	
<b>Kerosene</b>	7.58 eurocent per litre	
<b>Gasoline</b>	6.86 eurocent per litre	+5%
<b>LPG</b>	4.75 eurocent per litre	
<b>Natural gas</b>	5.13 eurocent per cubic metre	

Source: OECD (2019), Taxing Energy 2019

# Carbon pricing – where do we stand?

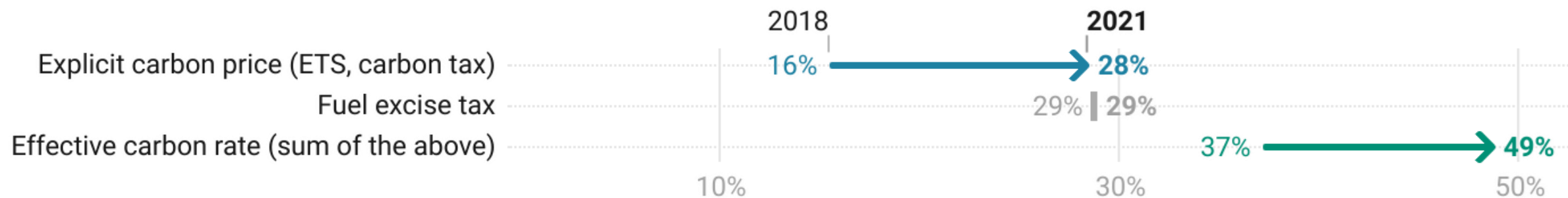


- Carbon pricing is a powerful tool that can help countries meet climate objectives and support a green recovery.
- New OECD report takes stock of how carbon prices have evolved across G20 economies between 2018 and 2021.
- It estimates carbon prices resulting from carbon taxes, emissions trading systems, and fuel excise taxes.
- G20 countries account for approximately 80% of global greenhouse gas emissions.



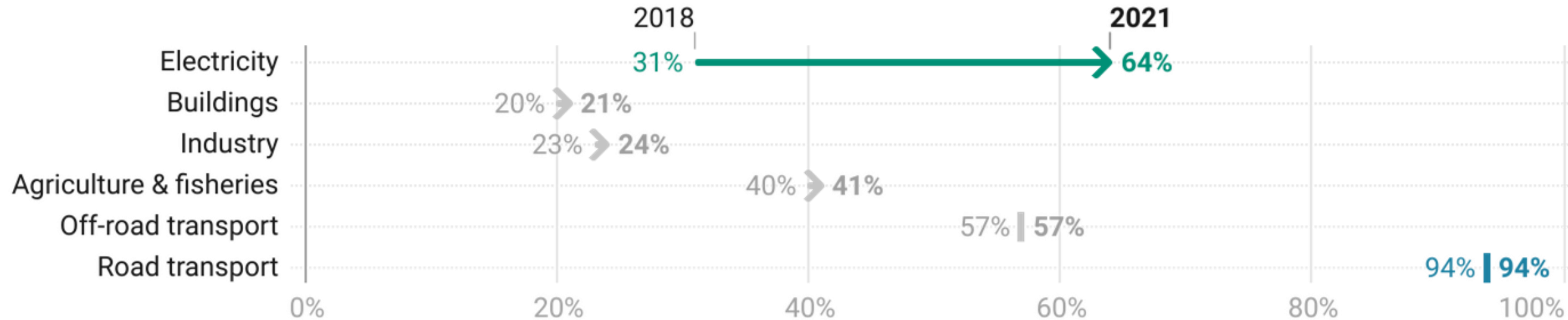
# G20 countries are increasingly using carbon taxes and emissions trading systems

Share of G20 emissions covered by carbon pricing, by instrument, 2018-2021



# Coverage changes are concentrated in the electricity sector

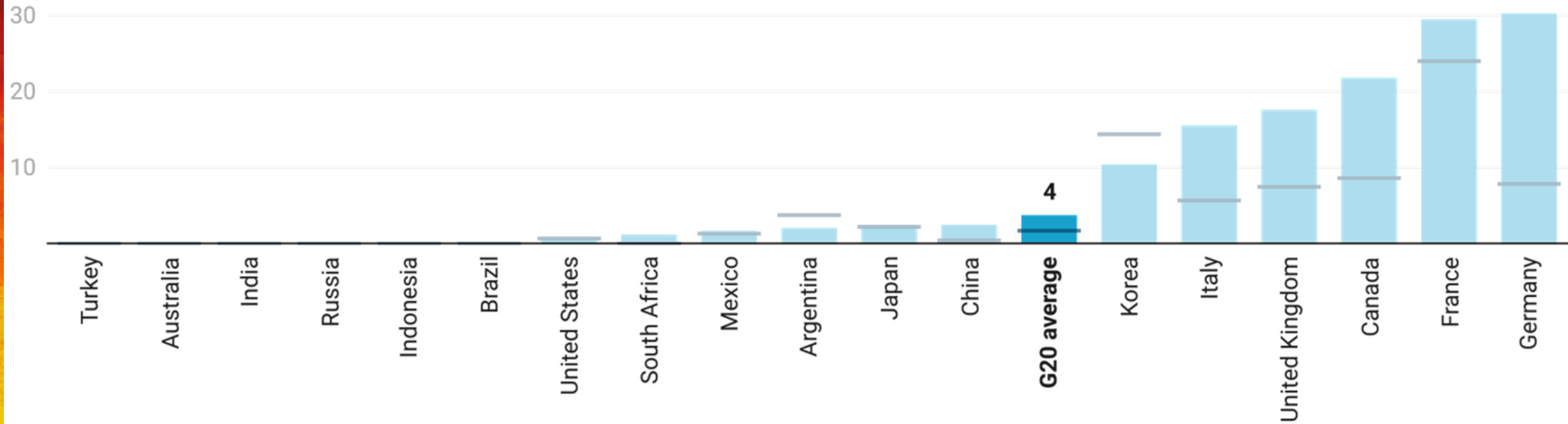
Share of G20 emissions covered by effective carbon rate, % by sector, 2018-2021



# Explicit carbon prices have doubled on average, but the variation across countries is large

Average explicit carbon price, by country, EUR/tCO<sub>2</sub>

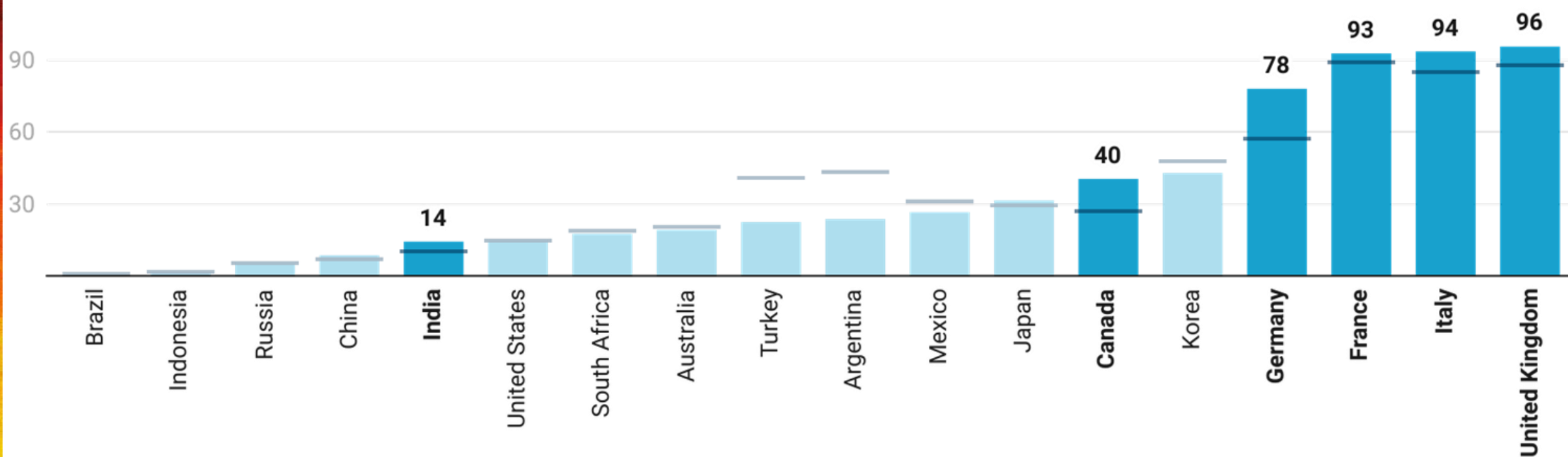
2021 | 2018



# Overall carbon prices increasingly diverge across G20 countries

Average effective carbon rate, by country, EUR/tCO<sub>2</sub>

2021 | 2018





# Energy price shocks triggered numerous policy responses

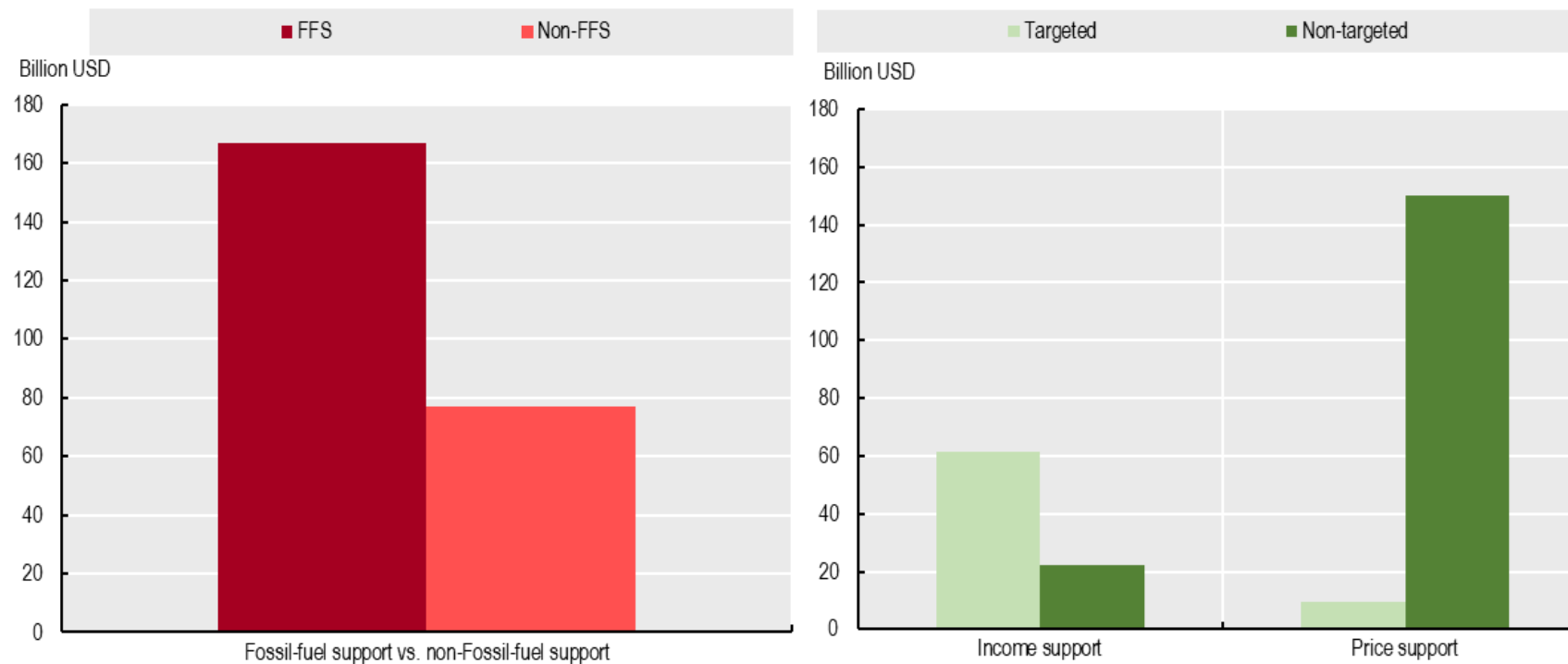
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## OECD publications:

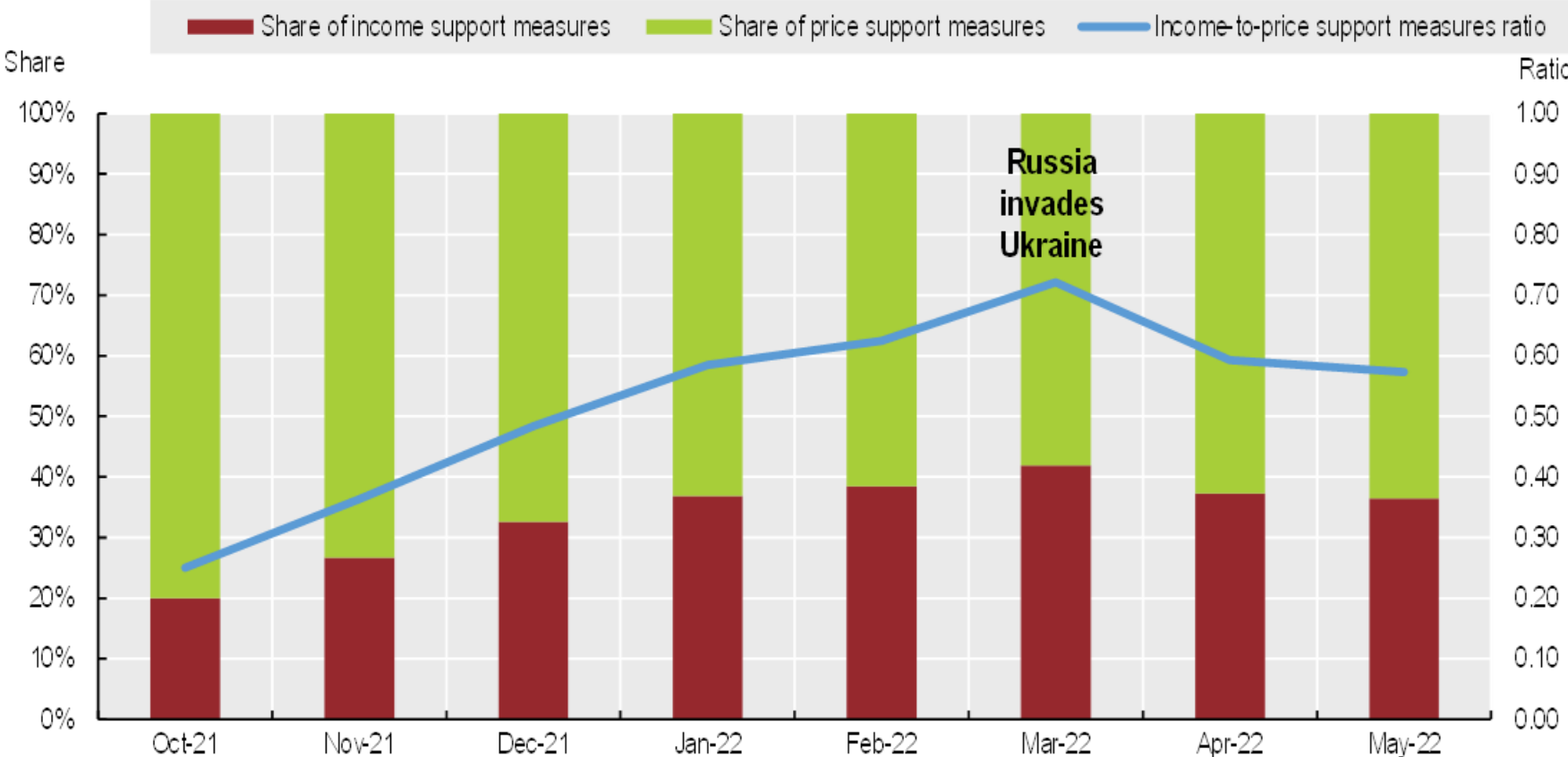
- Policy brief, June 2022, *“Why governments should target support amidst high energy prices”*
- Special feature in the report Tax Policy Reform 2022, September 2022, *“Policy responses to rising energy prices”*

# Governments have focused on non-targeted fossil fuel price support

## Government responses to the energy crisis, March 2021 to May 2022

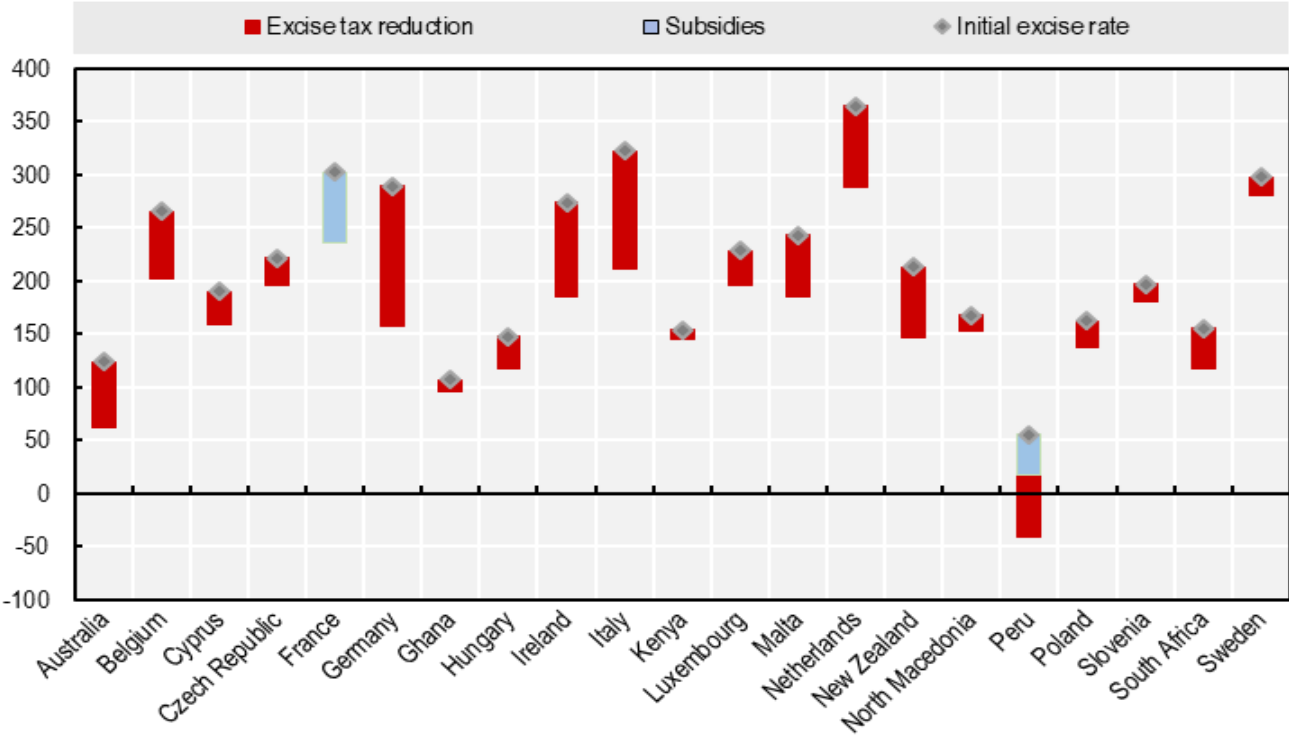


# Composition of support measures over time



# Excise tax cuts and pump rebates translate into significant reductions of carbon prices

Carbon price equivalent of excise tax reduction and subsidies in EUR / tCO2



Source : OECD (2022), Tax Policy Reforms 2022

# RESULT OF THE POLL QUESTION

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ARE YOU IN FAVOUR OF A CARBON PRICE?

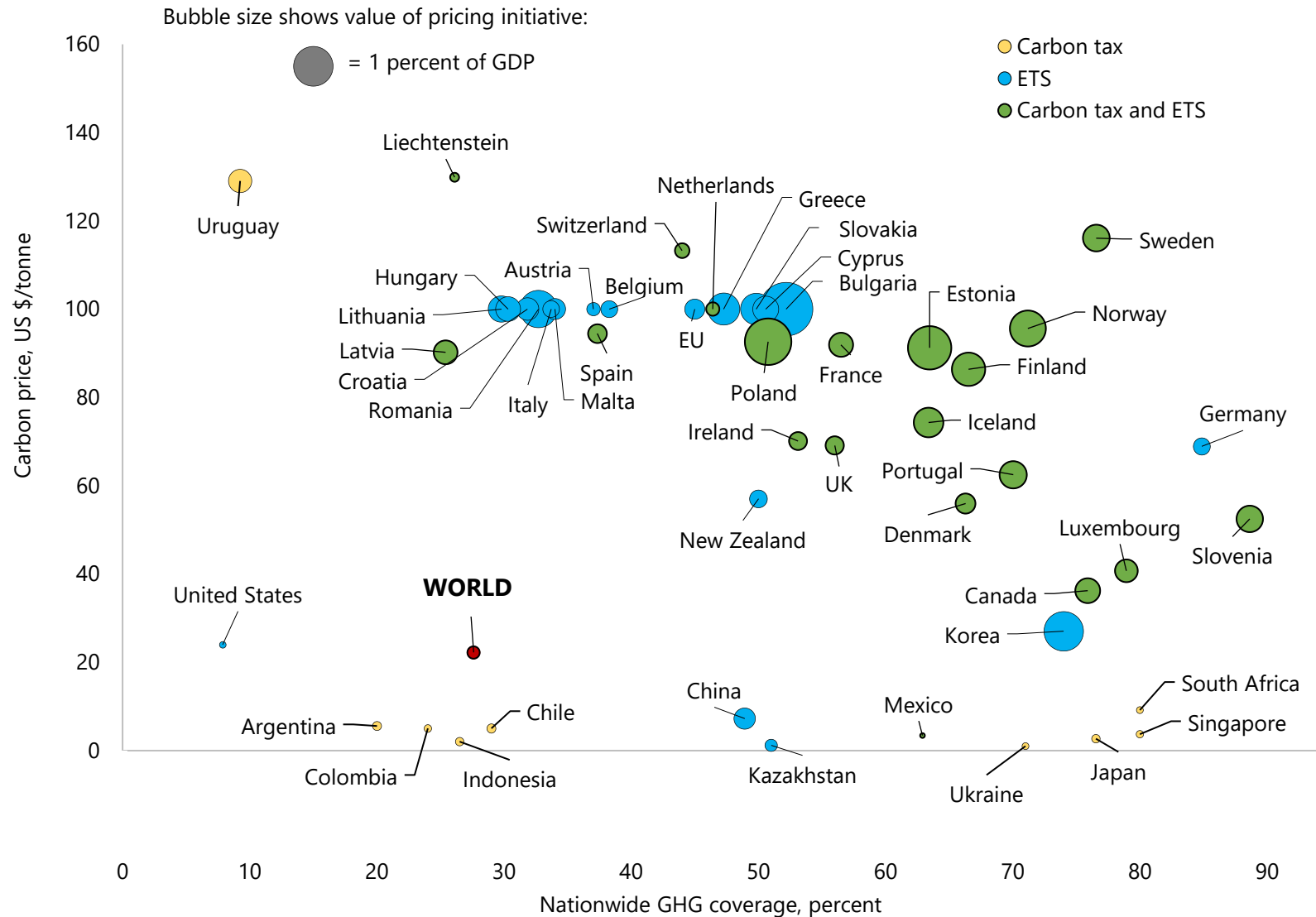


# Carbon Pricing

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- Central role in mitigation policy
  - Across-the-board incentives, cost-effective, price signal for investment, raises revenue, domestic environmental co-benefits, administratively straightforward
- Basic design details are critical
  - Cover power, industry, transport, buildings
  - Predictable and progressively rising price
  - Use revenues productively
- Carbon taxes on the carbon content of fuels are a natural carbon pricing instrument
  - Price certainty, revenues to the government, build off fuel tax collection
- Trading systems similar benefits if they include price floors, allowance auctions
  - Often confined to power/industry, not always practical (e.g., limited capacity)

# Growing momentum for carbon pricing



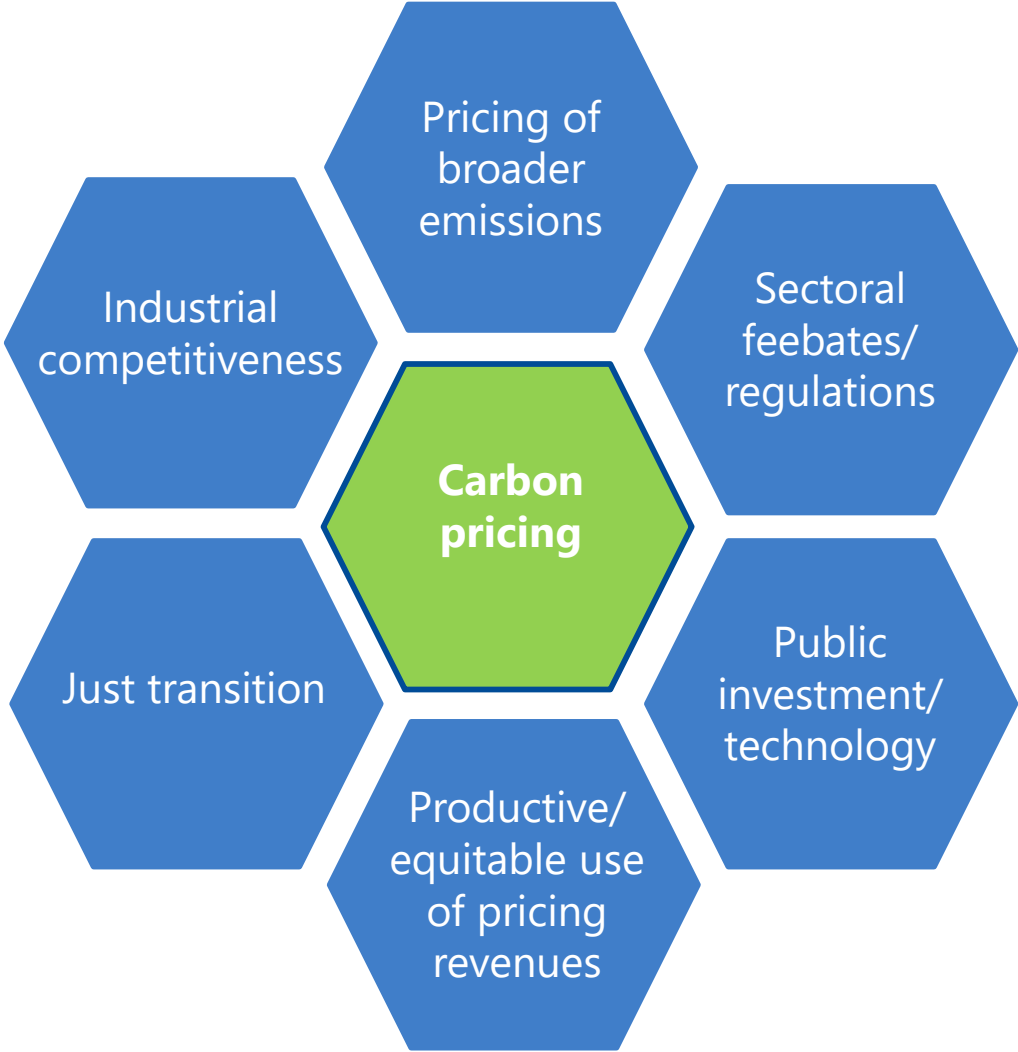
# Impact of carbon taxes on energy prices

Country	Coal		Natural Gas		Electricity		Gasoline	
	Baseline Price, \$/GJ	Price Increase, percent	Baseline Price, \$/GJ	Price Increase, percent	Baseline Price, \$/kWh	Price Increase, percent	Baseline Price, \$/liter	Price Increase, percent
Argentina	2.9	172	7.6	57	0.12	27	1.33	11
Australia	2.9	291	13.4	49	0.22	60	1.28	16
Brazil	3.9	132	7.1	19	0.17	4	1.65	6
Canada	2.1	358	5.2	107	0.11	22	1.17	17
China	5.9	80	11.0	49	0.11	42	1.09	12
France	6.5	116	18.5	26	0.15	3	1.86	12
Germany	4.2	191	17.1	32	0.27	17	1.85	11
India	1.8	137	5.0	118	0.13	40	1.25	5
Indonesia	2.6	119	10.4	15	0.10	59	0.49	33
Italy	4.4	183	16.8	36	0.24	22	1.93	12
Japan	5.3	139	20.0	22	0.20	37	1.48	14
Mexico	3.3	154	5.1	86	0.12	31	1.14	12
Russia	2.1	220	3.7	188	0.13	105	0.86	16
Saudi Arabia	8.7		8.7	57	0.10	119	0.41	91
South Africa	0.9	237	11.5	11	0.06	52	1.03	5
Korea	5.5	138	12.8	45	0.11	75	1.40	13
Turkey	3.8	127	9.6	34	0.10	38	1.18	12
United Kingdom	5.1	153	14.2	32	0.22	12	2.24	10
United States	2.8	278	5.3	94	0.12	42	0.91	22
Simple Average	3.9	170	10.7	57	0.11	39	1.29	17



# Supporting policies needed to enhance effectiveness and acceptability of mitigation strategy

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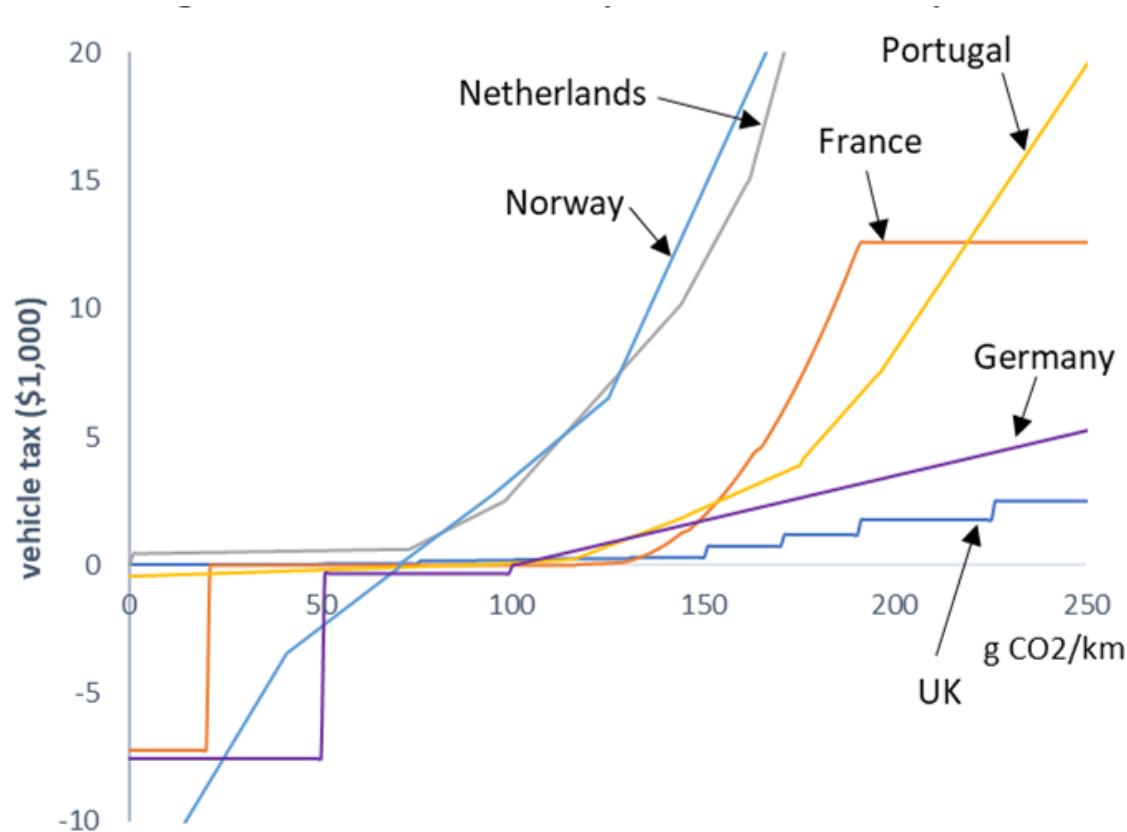
# Reinforcing sectoral instruments

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- Needed because of acceptability constraints on pricing
- Feebates (fiscal analog of regulations)
  - Revenue neutral sliding scale of fees/rebates for products/activities with  $>/<$  average CO<sub>2</sub> rates
- Attractions
  - Promote all responses for reducing emissions intensity (though no demand response)
  - Cost effective (unlike emission regulations)
  - Avoid a fiscal cost (unlike subsidies)
  - No burden on average household/firm (unlike carbon pricing)
  - Compatible with regulations

# Transport feebates

Feebates for new vehicles, various countries

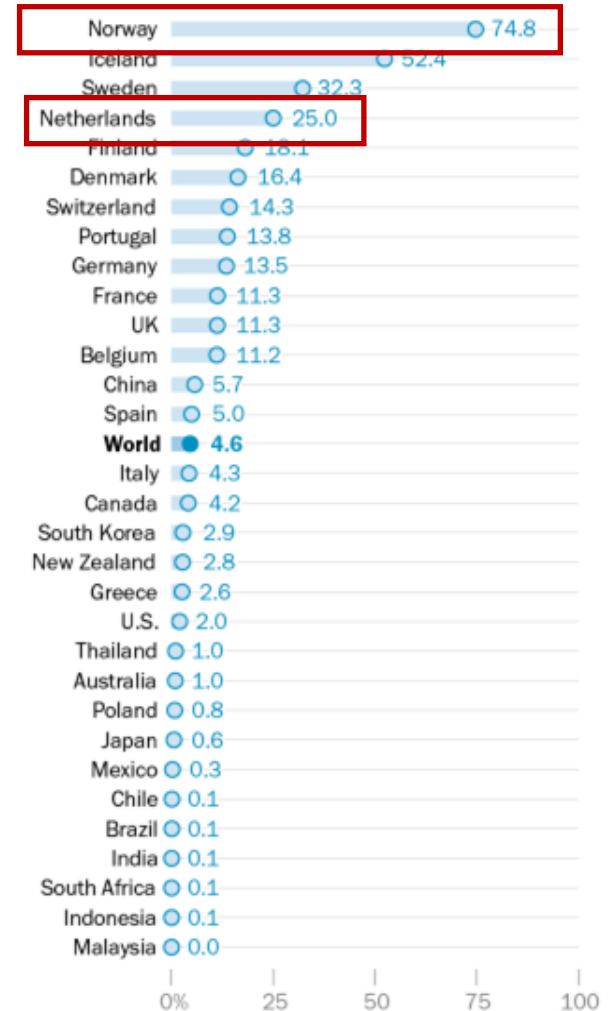


Source. ACEA (2018) and IMF staff calculations.

Note. Feebates assume on road fleet average emission rate of 115 g CO<sub>2</sub>/km. Circulation taxes for Germany are expressed on a lifetime basis assuming a 13 year life and 7 percent discount rate.

## Electric vehicles make up large share of new car sales in Northern Europe

New electric cars as share of automobile sales, globally and in selected countries, 2020



Source: International Energy Agency, "Global EV Outlook 2021."

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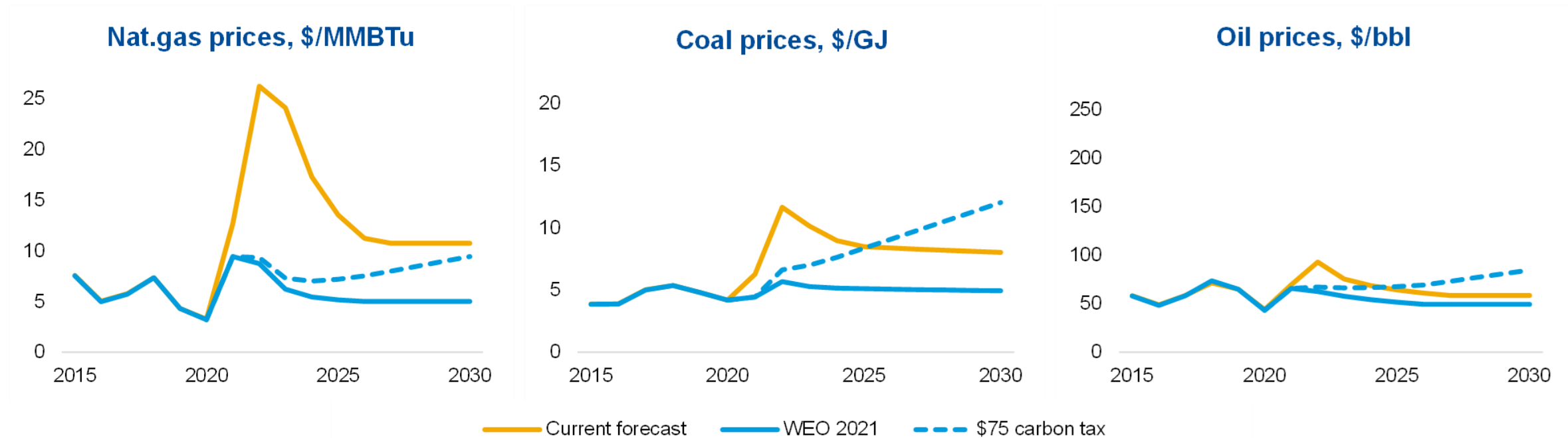
# Further applications of sectoral policies

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- Feebates
  - Reduce emission rates in power generation, industry
  - Promote clean heating systems, efficient appliances, building renovations
  - Forestry
    - Landowners:  $\text{fee} = \text{CO}_2 \text{ price} \times (\text{baseline carbon storage} - \text{current storage})$
    - Cost effectively promotes enhanced management, afforestation, reduced deforestation
- Proxy pricing
  - Extractives (methane leaks)
    - Tax fuel suppliers using default leakage rates, rebates for firms demonstrating lower rates

# Carbon pricing and surging energy prices

As prices recede from their peaks, this provides an opportune time to gradually raise carbon pricing without increasing energy prices relative to recent levels



# POLL QUESTION

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**DOES YOUR COUNTRY HAVE OR INTEND TO INTRODUCE A CARBON PRICE?**

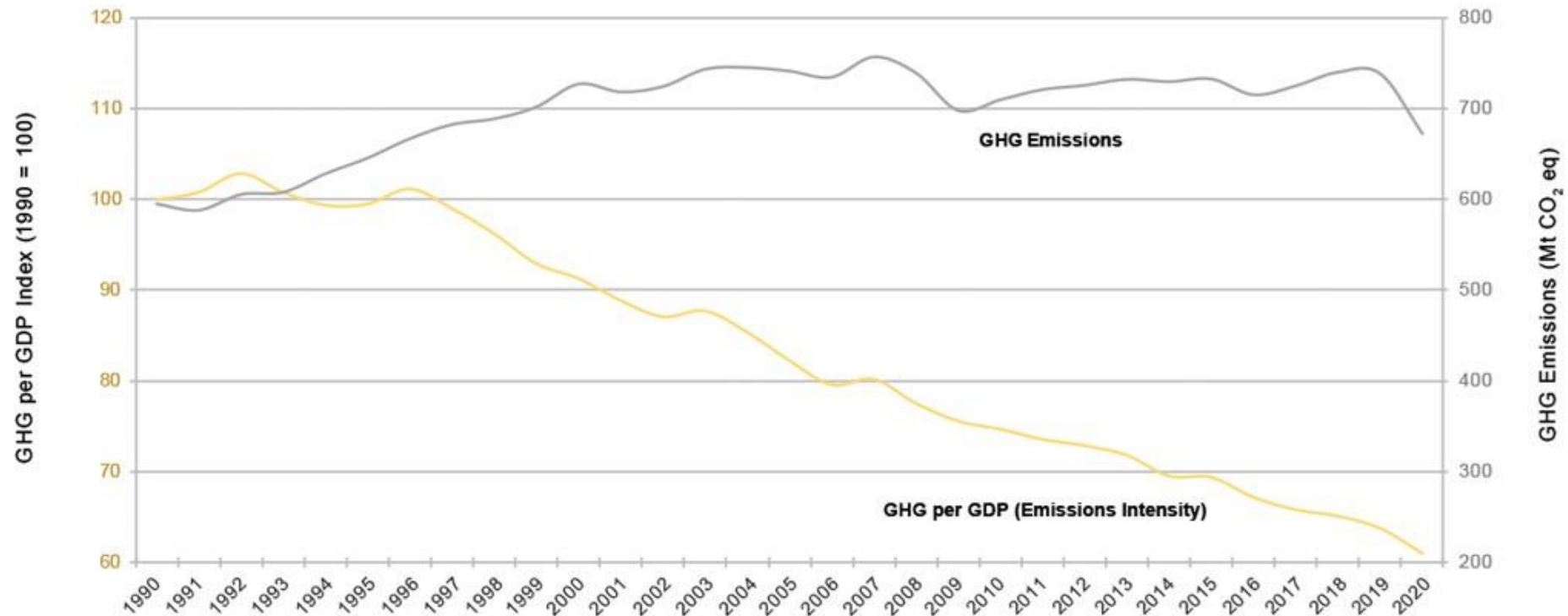


# Canadian approach to carbon pricing

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- Mostly provincial with a federal “backstop”
- Three mechanisms
  1. Carbon tax (fuel charge)
  2. Emissions trading (cap and trade)
  3. Output-based emissions pricing (OBPS) for large emitters
    - Allowance based on average emissions intensity (GHG per unit of output) with adjustment for trade-exposed sectors
    - Trading of unused allowances

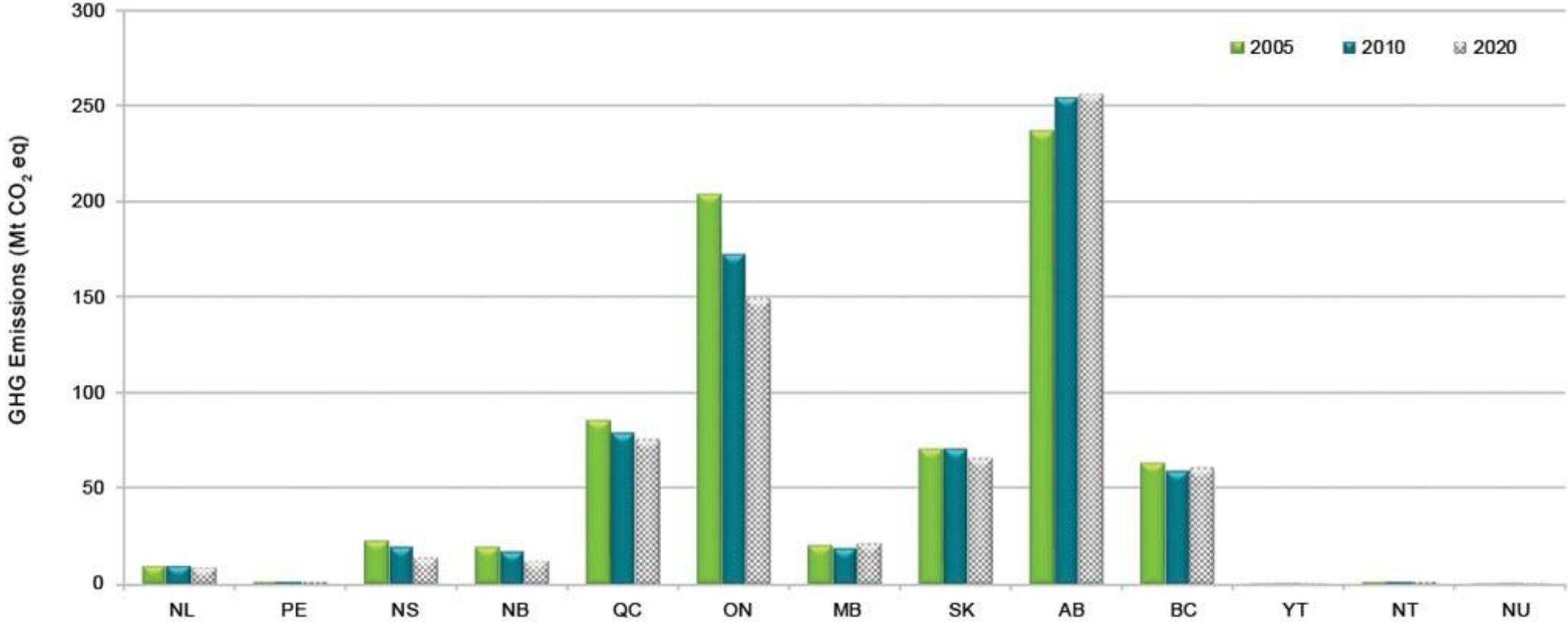
# Canada – GHG emissions, 1990-2020



- COP21 commitment – 30% reduction below 2005 by 2030 (520 Mt CO<sub>2</sub>e)
- April 2021 commitment – 40-45% reduction below 2005 by 2030 (310-440 Mt CO<sub>2</sub>e)



# Canada – GHG emissions by province



# Provincial developments in Canada (2007 – 2018)

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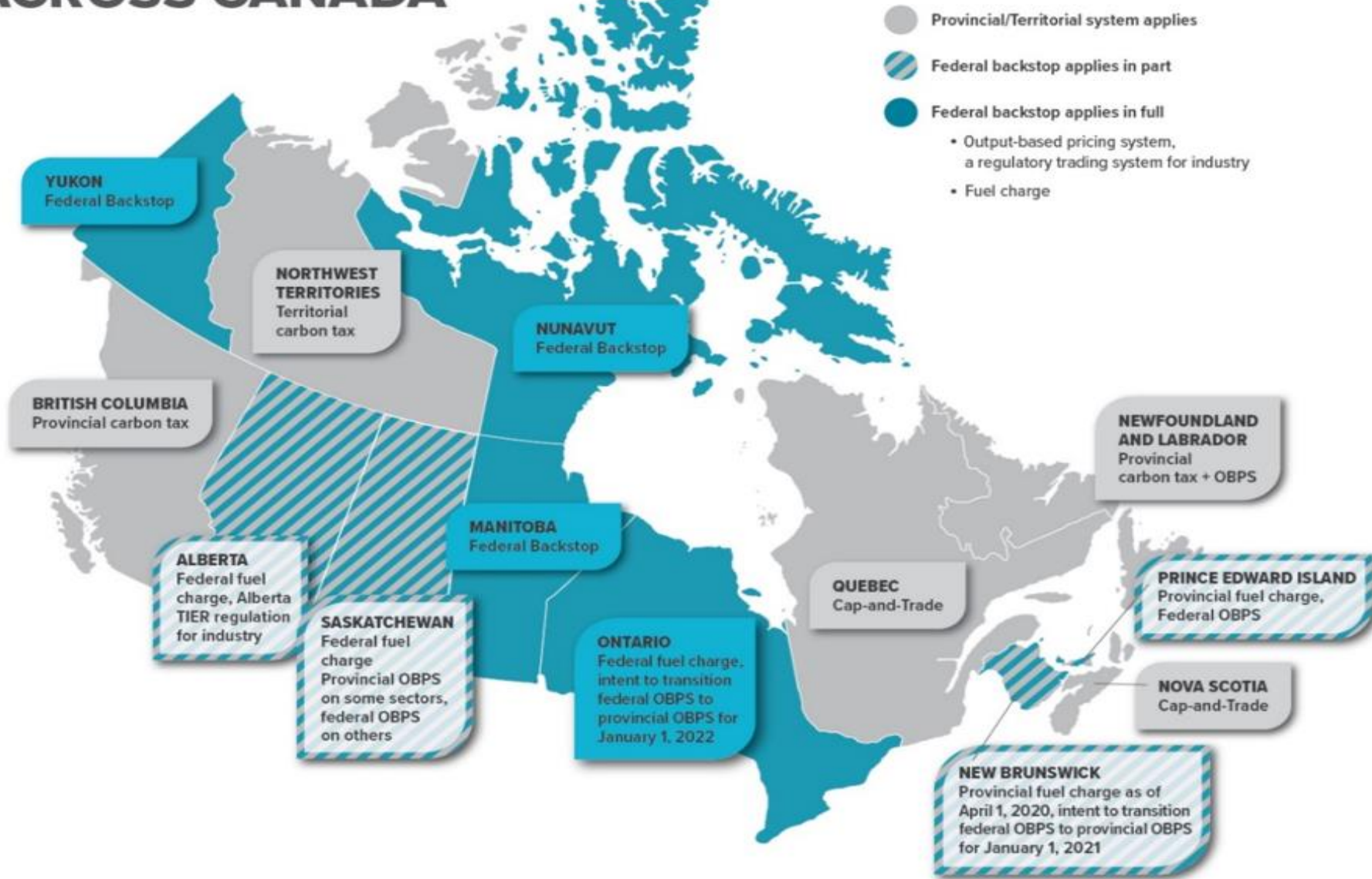
- Alberta – emissions intensity cap and trade system (2007)
- British Columbia - carbon tax (2008)
- Quebec - cap and trade (2013)
- Alberta – carbon tax (2017- 2019)
- Ontario – cap and trade (January – July 2018)

# Federal “Backstop”

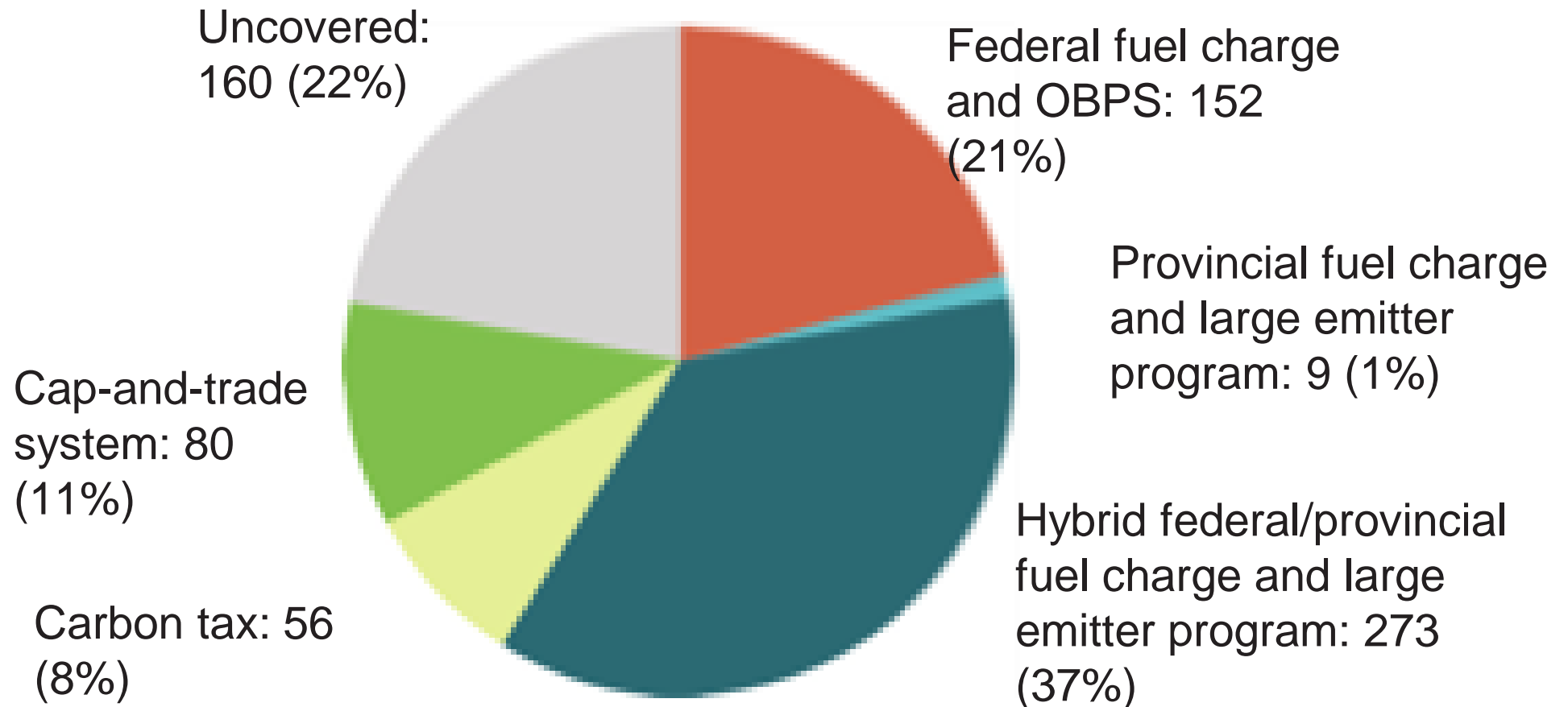
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- October 2016 - Pan-Canadian Framework
- 2018 Greenhouse Gas Pollution Pricing Act
  - Part 1 – fuel charge (\$10 rising to \$50 in 2022)
  - Part 2 – output-based pricing system (large emitters – 50,000 tonnes, election above 10,000)
- Upheld by Supreme Court of Canada (March 2021)
- Carbon price scheduled to rise \$15 per year until 2030 (\$170 per tCO<sub>2</sub>e)

# CARBON PRICING ACROSS CANADA



# GHG coverage across Canada



**2018**

**GHG emissions 729 Mt**

# RESULT OF THE POLL QUESTION

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**DOES YOUR COUNTRY HAVE OR INTEND TO INTRODUCE A CARBON PRICE?**



# Border Carbon Adjustments within the context of carbon pricing

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- A BCA is a charge on embodied carbon in products imported into a jurisdiction with carbon pricing, potentially matched by rebates for embodied carbon in exports (IMF, “Carbon pricing – what role for BCAs”, 2021)
- BCAs have been proposed in respect of:
  - Carbon Taxes (Taiwan)
  - ETSs (EU)
  - Regulatory measures (USA)
- Carbon Leakage is the greatest motivator for the application of a BCA.
- Carbon leakage is characterized by the relocation of domestic industry to a country offering a lower carbon price
- Practices aiming to avoid carbon leakage include:
  - Low carbon prices/taxes
  - An export BTA
  - Free distribution of emissions permits/allowances

# Why do we need a CBAM?

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- As the EU raises its climate ambition through measures such as the EU ETS and differences in levels of ambition worldwide persist....
- .. there is an increased risk of carbon leakage
- CBAM addresses this increased risk, as an environmental measure in support of the fight against global climate change





# CBAM in the context of EU ETS

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- The EU Emissions Trading System (EU ETS) is a 'cap and trade' system
- It caps the total volume of GHG emissions from installations and aircraft operators responsible for around 50% of EU GHG emissions
- The system allows trading of emission allowances so that the total emissions of the installations and aircraft operators stays within the cap and the least-cost measures can be taken up to reduce emissions

# Aim of the CBAM

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**Prevent carbon leakage** to ensure effectiveness of EU climate policy



Contribute to **decarbonisation** globally and to reaching climate neutrality by 2050

# And how do we do this?

## *Four key elements of design*

Mirror EU **carbon pricing** through new mechanism for imports into EU



**Comply with WTO** and be fully in line with international trade rules

Addressed at companies, not countries, based on **actual carbon content** of imported goods

Focus on **carbon intensive sectors**

# Sectors

In the first phase:



**CEMENT**



**IRON & STEEL**



**ALUMINIUM**



**FERTILISERS**



**ELECTRICITY**

**Selected on basis of 3 criteria:**

- ✓ *High risk of carbon leakage (High carbon emissions; High level of trade)*
- ✓ *Covering more than >45% of CO2 emissions of ETS sectors*
- ✓ *Practical feasibility*

# A gradual phase-in of CBAM

Gradual phase-in  
to allow businesses to  
adjust



# CBAM in practice

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In sum CBAM:

- Is **not targeted at countries** and based on actual carbon content
- Is not a tax
- Companies are subject to border adjustment only on individual merits and taking into account:
  - Actual **carbon content** of the imported good
  - Level of free allocations in the EU
  - Carbon Price effectively paid in country of production
- Country-wide exemption due to participation/linking to EU ETS is a specific case of conditions under CBAM

# CBAM - an internationally open mechanism

CBAM is open to decarbonisation efforts in third countries and favours international coordination thanks to a five-tier system:

1. **Actual Emissions** methodology – CBAM is based on **carbon content** of the imported good
2. Deduction of the explicit **carbon price paid in third countries** from the adjustment on imported products
3. Countries applying EU ETS or linked to it will be excluded
4. Special rules on electricity for countries whose electricity market is “coupled” with the Union internal market for electricity
5. The regulation foresees the possibility to conclude agreements on carbon price with third countries



# Canadian consultation on Border Carbon Adjustments

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- Announced in Federal Budget April 2021
- Consultation Paper released August 2021
- Objectives
  - To reduce the risk of carbon leakage
  - To maintain the competitiveness of domestic industries
  - To support ambitious domestic policies
  - To encourage climate action by other jurisdictions



# Canadian exports and imports by EITE Sectors

Country	Exports - 2018-2020 Average (\$ millions)	% of Total Exports from EITE sectors	Imports - 2018-2020 Average(\$ millions)	% of Total Imports from EITE sectors
United States	273,640	76.1%	155,608	57.9%
United Kingdom	16,216	4.5%	5,492	2.0%
EU	15,782	4.4%	30,821	11.5%
China	15,567	4.3%	10,686	4.0%
Japan	8,383	2.3%	7,896	2.9%
South Korea	4,281	1.2%	5,737	2.1%
Mexico	3,711	1.0%	13,266	4.9%
India	3,223	0.9%	2,421	0.9%
Other Countries	18,821	5.2%	36,723	13.7%
<b>Total EITE Goods</b>	<b>359,624</b>	<b>100.0%</b>	<b>268,651</b>	<b>100%</b>

# Challenges to Border Carbon Adjustments

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- Determining equivalency among different carbon pricing systems and regulatory measures
- Determining embedded emissions in traded goods
- International trade, developing countries, and differential commitments under UN Framework Convention on Climate Change

# Climate Clubs

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- No single cooperative framework to date
  - In 2021 Germany proposed a Climate Club type approach under the G7/G20 framework
- Countries could establish coordinating measures: blocs of regional or economic cooperation
- Advantages:
  - Avoid instituting border carbon adjustments
  - Reduced carbon leakage
  - Synergetic approach
  - Greater environmental protection

# POLL QUESTION

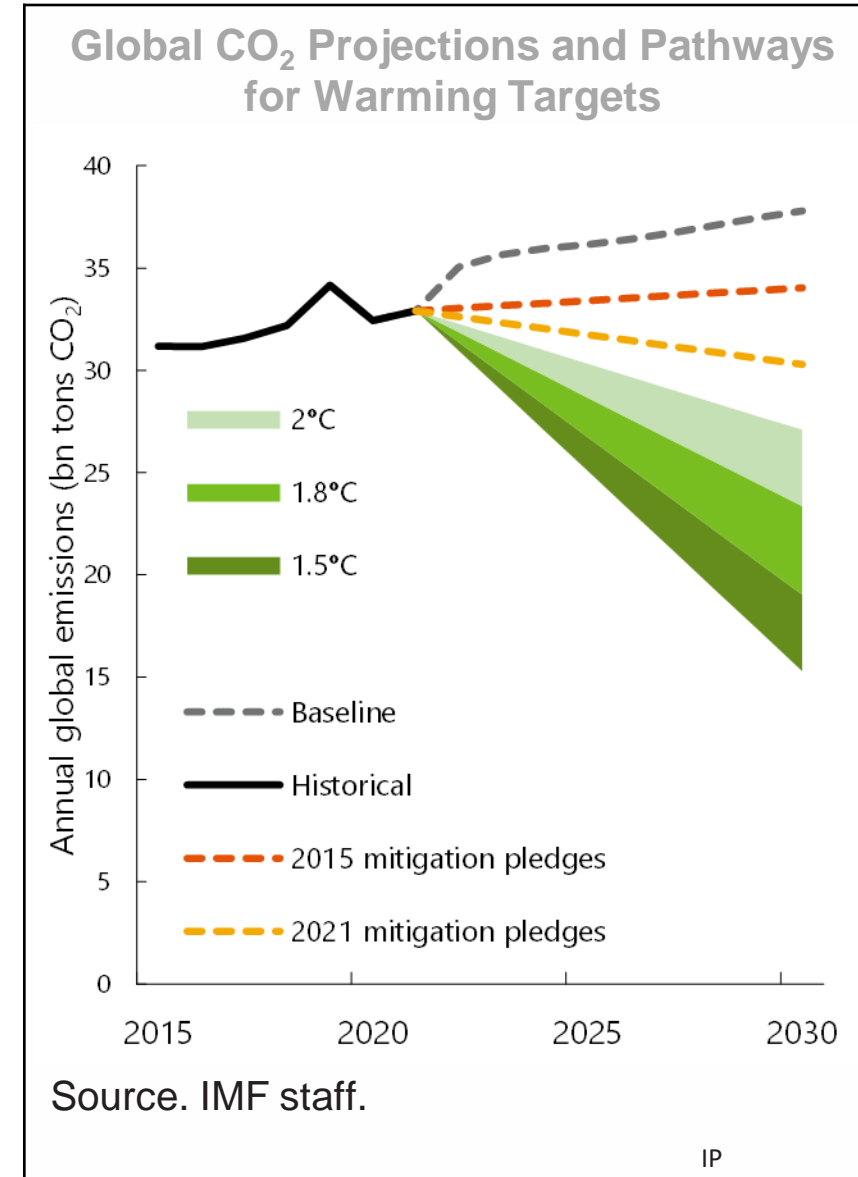
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**HAS THE POSSIBILITY OF A CBAM RAISED A CARBON PRICING DEBATE IN YOUR COUNTRY?**



# Urgency of near-term mitigation action

- Last window to keep alive 1.5-2°C is about to close
  - Unless emissions cut 25-50% below 2019 levels by 2030
  - Requires measures equivalent to > \$75/ton global CO<sub>2</sub> price (current price \$4/ton)
- Paris Agreement is working to catalyze ambition...
  - ≈ 140 countries have committed 'net-zero' emission pledges
- ...but needs reinforcing
  - Current pledges for 2030 would cut emissions by 1/3 to 2/3 of needed reductions
  - No mechanism for ensuring pledges achieved



# Urgency of near-term mitigation action

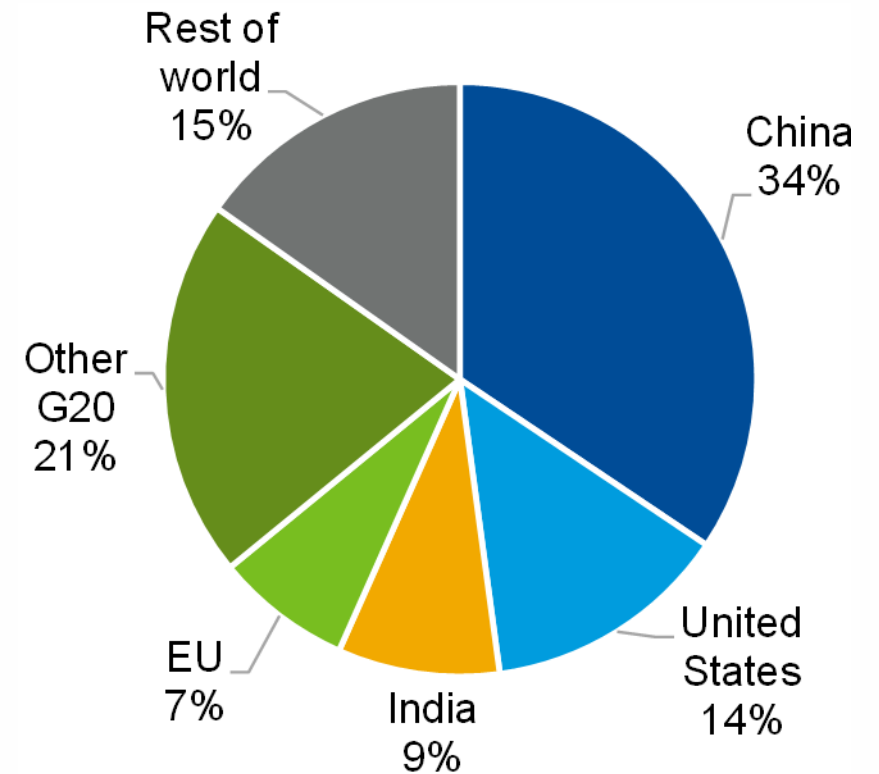
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- Obstacles to scaling up global mitigation
  - *Ambition*: Too many parties (195) and parameters (one pledge per party)
  - *Unilateral policy action*: competitiveness, uncertainty about other's actions
- The reinforcing mechanism should
  - Facilitate negotiation (small number of countries/transparent parameters)
  - Be effective (contain a concrete plan to deliver emissions reductions)

# IMF International Carbon Price Floor (ICPF) Proposal

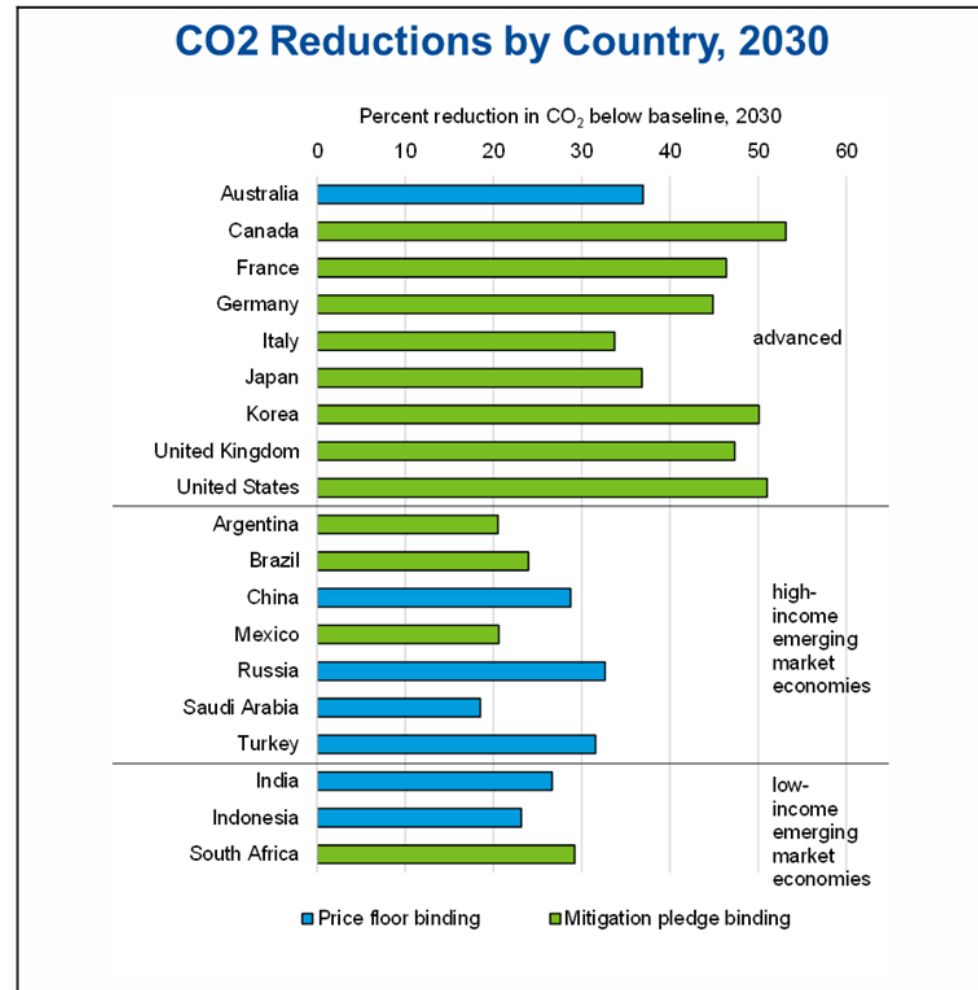
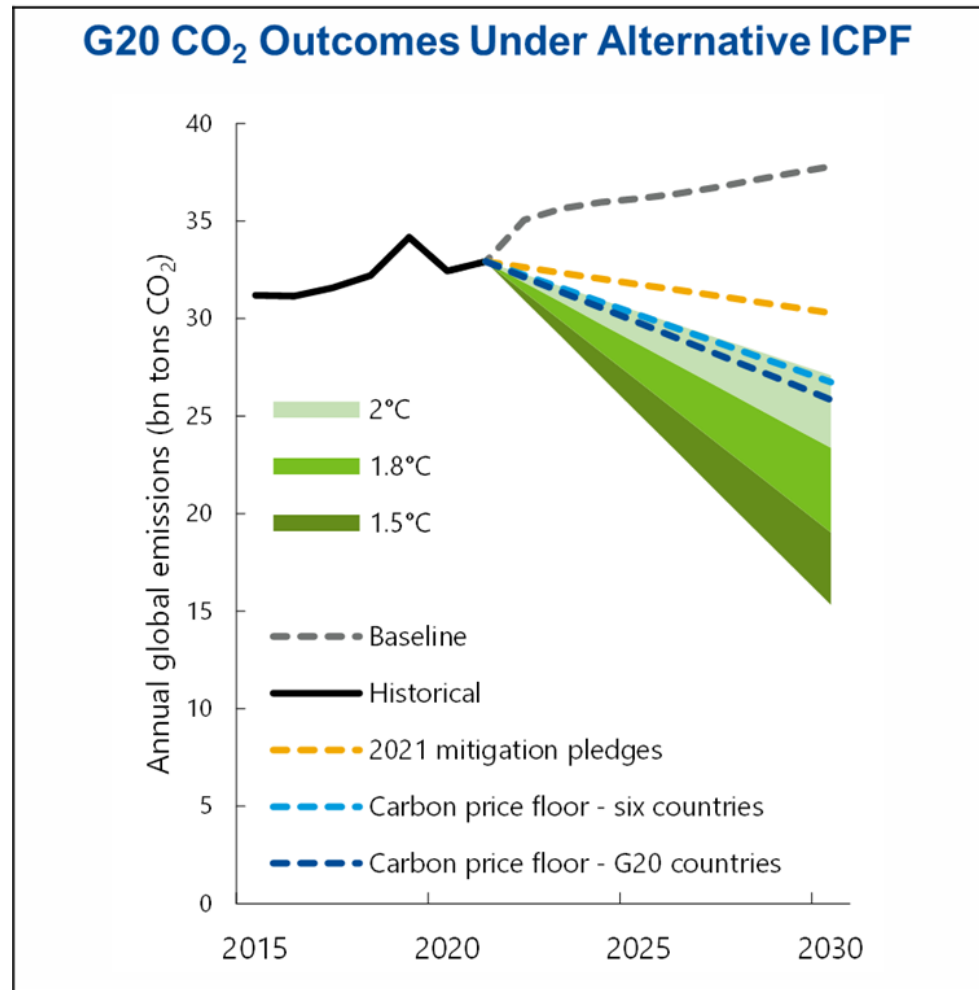
- Focus on large emitters
  - e.g., China, EU, India, US, other G20
- Focus on minimum carbon price
  - Efficient, easily understood parameter
  - Addresses competitiveness, policy uncertainty
  - Countries can set higher prices
- Pragmatic design needed
  - *Equity*: differentiated floors/transfer mechanism
  - *Flexibility*: alternative policies
  - Other issues: emission sources, monitoring

Baseline CO<sub>2</sub> Emissions, 2030



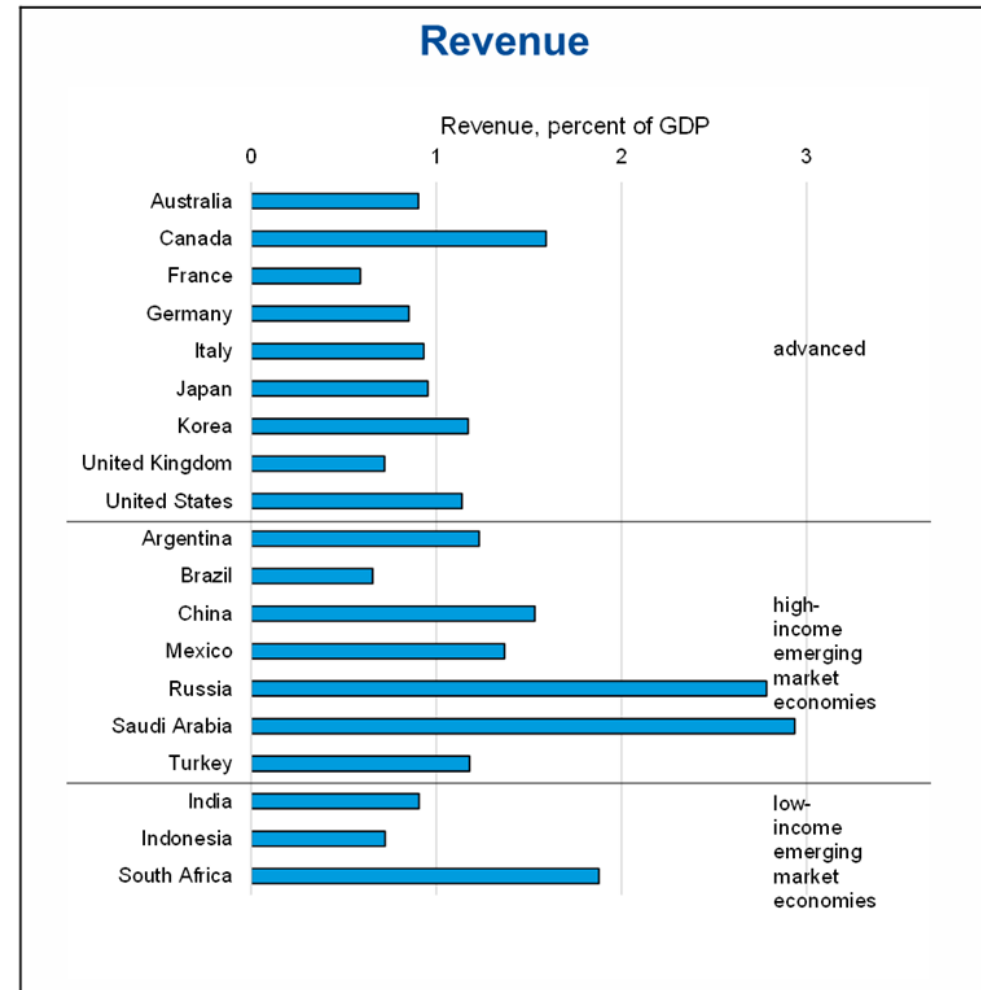
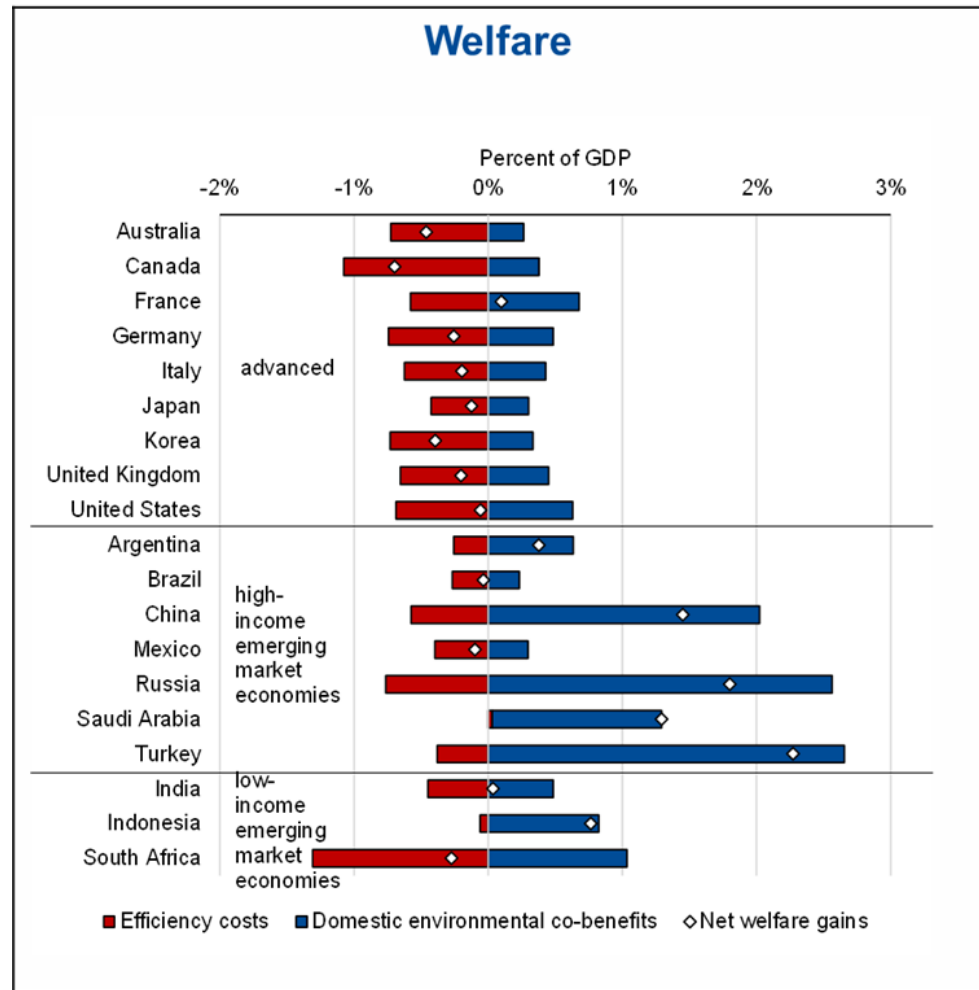
Source: IMF staff estimates.

# Effectiveness of an ICPF

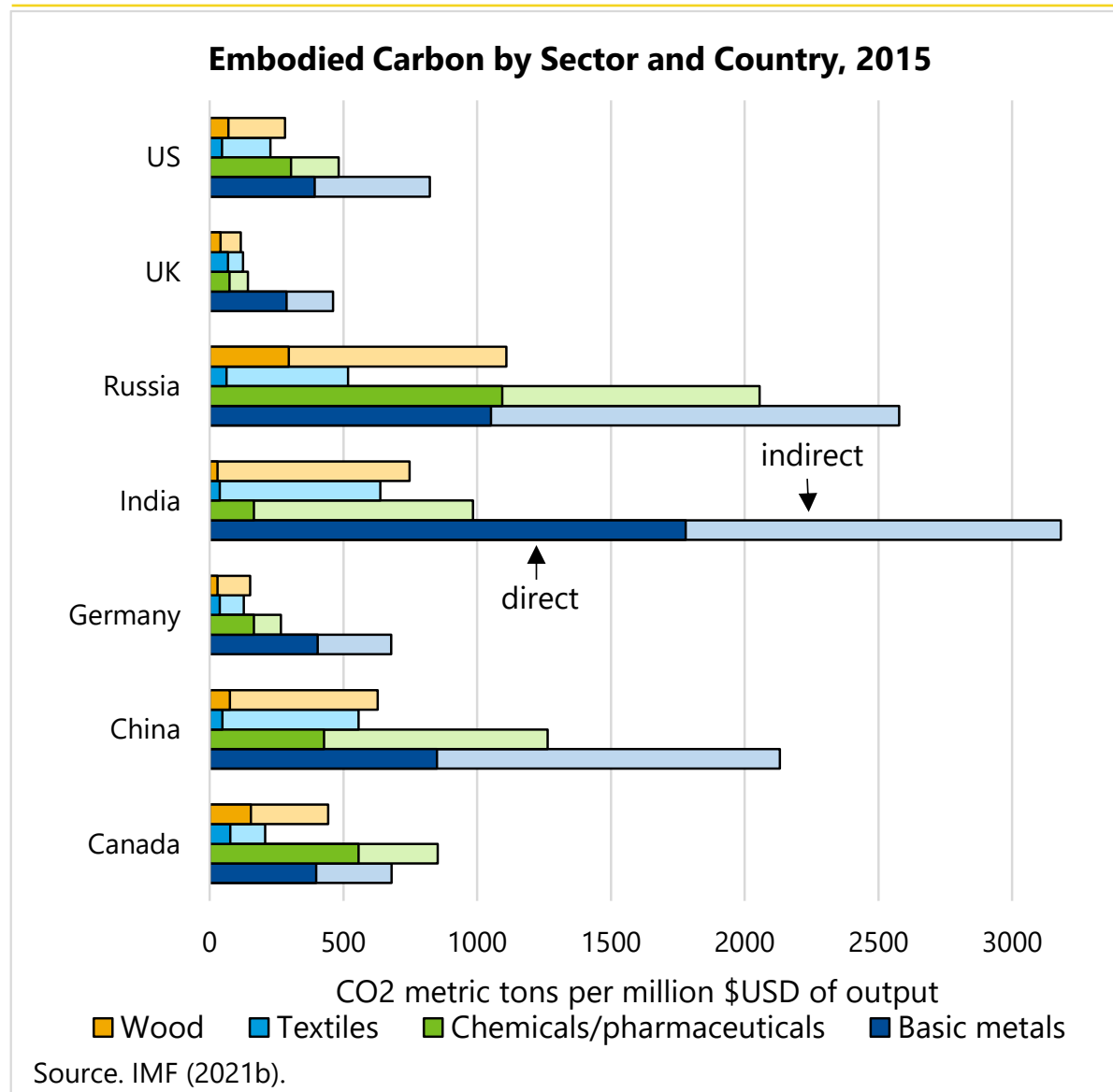




# Cost and fiscal impacts, 2030



# Trade impacts from pricing



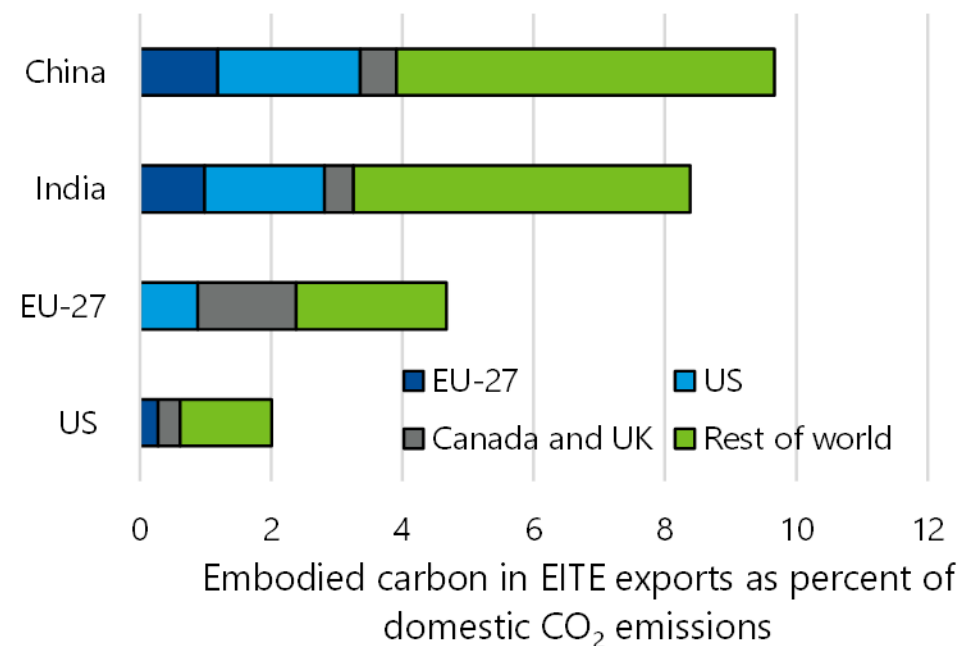
Cost increase for  
basic metals from  
price floor, %

US	9
UK	6
Russia	18
India	12
Germany	8
China	15
Canada	8

# Price floor vs. other international regimes

- Pure carbon price—cost effective but
  - Limits scope to address international equity
  - Precludes countries where pricing is difficult
- Global carbon markets
  - Must accommodate large emitters without ETSs
  - Address equity
  - Concrete trajectory of prices/caps aligned to temperature goals
- Border carbon adjustments
  - Small fraction of emissions in traded products

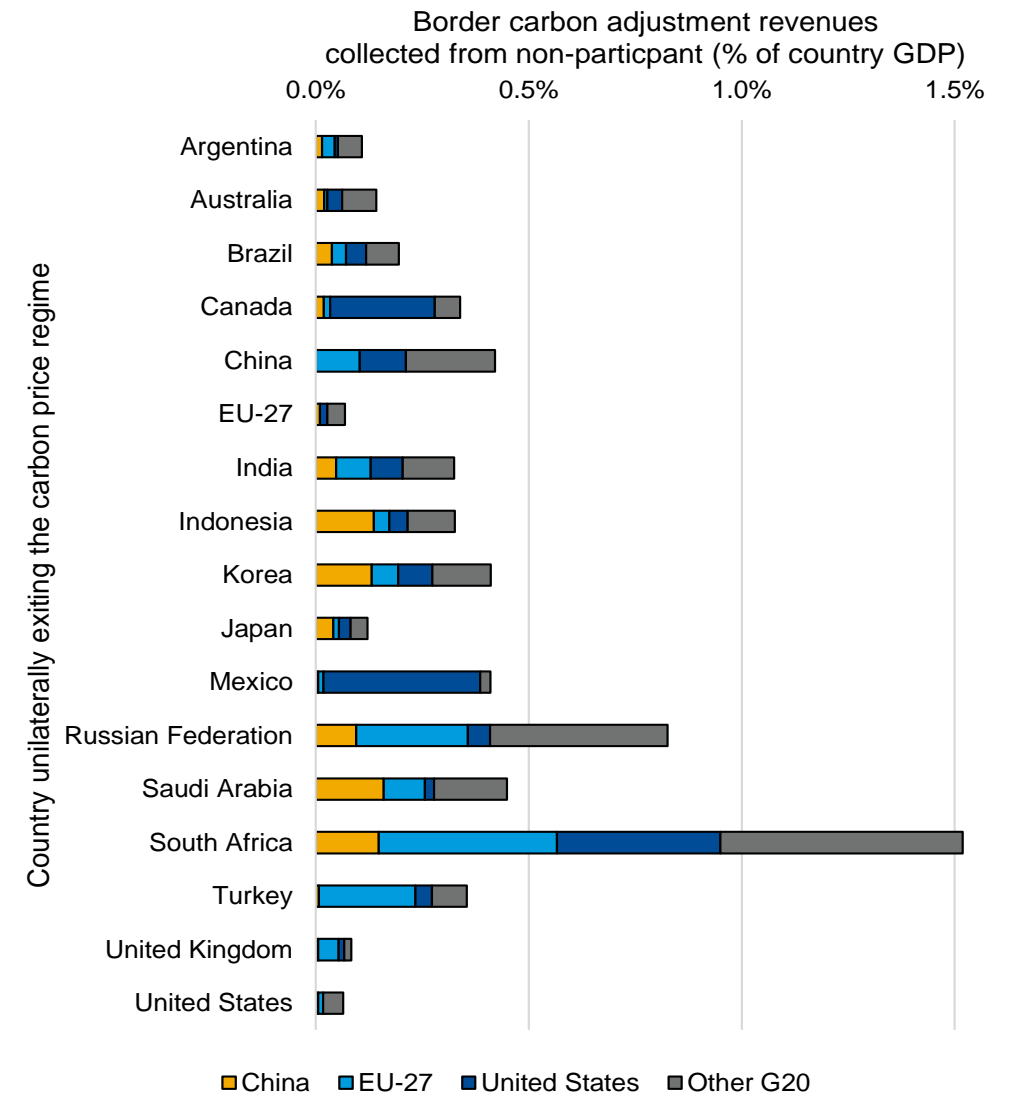
**Fraction of Domestic Carbon Emissions Embodied in EITE Exports to Trading Partners, 2015**



Source: OECD (2021). EITE = energy-intensive, trade-exposed.

# BCA as enforcement mechanism for price floor?

- BCA provides some incentive to join price floor but
  - Complicates negotiation
  - All participants would need to price industry emissions
  - Common BCA limits scope for differentiated pricing



# ANSWER TO THE POLL QUESTION

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**HAS THE POSSIBILITY OF A CBAM RAISED A CARBON PRICING DEBATE IN YOUR COUNTRY?**



# The Inclusive Forum on Carbon Mitigation Approaches

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Greenhouse gas mitigation policy approaches are diverse – ranging from pricing over technology support to regulation, etc. – and uncoordinated. Credible metrics for comparing them are lacking. This creates growing risks of negative spill-overs (trade distortions and related tensions, competitiveness implications, carbon leakage)

The challenge is to ensure the level of ambition and effort in individual jurisdictions can be lifted to the level required to reach global net zero by 2050, while maintaining to the greatest extent possible a global level playing field, avoiding counterproductive trade distortions and carbon leakage

# INCLUSIVE FORUM ON CARBON MITIGATION APPROACHES

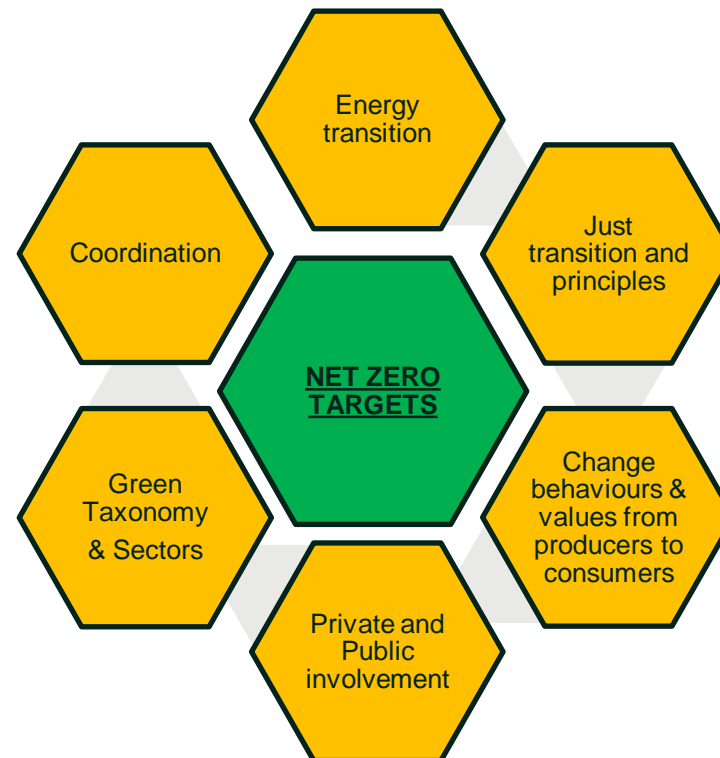
- Module 1 Stocktake and mapping of climate mitigation and climate-mitigation-relevant policies
- Module 2 Estimating the effectiveness of these policies

Project launched in June 2022 for a period of 5 years initially.

# What does it mean to be 'net-zero'?

- **Decarbonization:** “The process by which countries, individuals or other entities aim to achieve zero fossil carbon existence. Typically refers to a reduction of the carbon emissions associated with electricity, industry and transport”

Source: IPCC, Special Report: Global warming of 1.5°C, Glossary, 2021





# Carbon pricing and business tax considerations

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- Taxation of carbon and climate change – increasing relevance for business
- Climate change related tax aspects to:
  - Tax with respect to negative externality internalization (e.g. carbon taxation)
  - Tax with respect to positive externality internalization (e.g. tax incentives)
  - Changes in assumptions and tax policy due to changing external environment (e.g. loss of tax revenue)
- Traditionally most relevant to energy intensive sectors but due to increasing CO<sub>2</sub> and energy prices, more sectors may see impact

# Business and carbon pricing

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ICC Secretary General John W.H. Denton AO at COP26:

***“From a real economy perspective, we need COP26 to deliver tangible outcomes to drive harmonization of existing carbon pricing instruments – starting with robust rules to enable the trading of emissions and offsets across borders under Article 6 of the Paris Agreement.”***

***“...an essential corollary to [the need for governments to show more ambition] is the need for them to get smart in the design of policy instruments to accelerate climate action. The experience of business shows there’s significant room to enhance the configuration of carbon pricing tools to allow governments to go further and faster in their decarbonization plans.”***

***“Many other leaders this week have, quite understandably, spoken about the need to put a global price on carbon. The principles we are setting out today are, without doubt, an essential foundation for the convergence required to meet this goal. Governments need to wake up to the fact that the growing patchwork of national carbon pricing tools will only ultimately slow the pace of achieving net-zero emissions and significantly drive up the cost of doing so.”***

# Carbon pricing principles

## ICC CARBON PRICING PRINCIPLES

01



### FOCUS

on GHG emissions reduction as prime target, including the prevention of GHG leakage

02



### CREATE

a reliable, predictable overall framework

03



### PROMOTE

consistency between climate, energy, trade and taxation policies

04



### CREATE

a clear and robust transparency framework

05



### MAINTAIN

accessibility to and affordability of low-carbon and clean energy sources

06



### PROMOTE

international linking of carbon pricing instruments

07



### RECOGNISE

that there is no "one-size-fits-all" single instrument

08



### COUPLE

carbon pricing with climate change mitigation and adaptation

09



### ENSURE

international co-operation for greater consistency globally

10



### DEVELOP

mechanisms through inclusive and transparent consultation with business and other key stakeholders

# Climate change related tax aspects for business

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## Tax with respect to negative externality internalization

- Increasing use of carbon taxation
- Tax aspects to other carbon pricing mechanisms, e.g. VAT/sales tax to emission certificates, transfer pricing aspects of emission certificates or credit trades

## Tax with respect to positive externality internalization

- Tax incentives
- Tax aspects of other support schemes
- Interaction with OECD Pillar 2
- State aid considerations

## Changes in assumptions and tax policy due to changing external environment

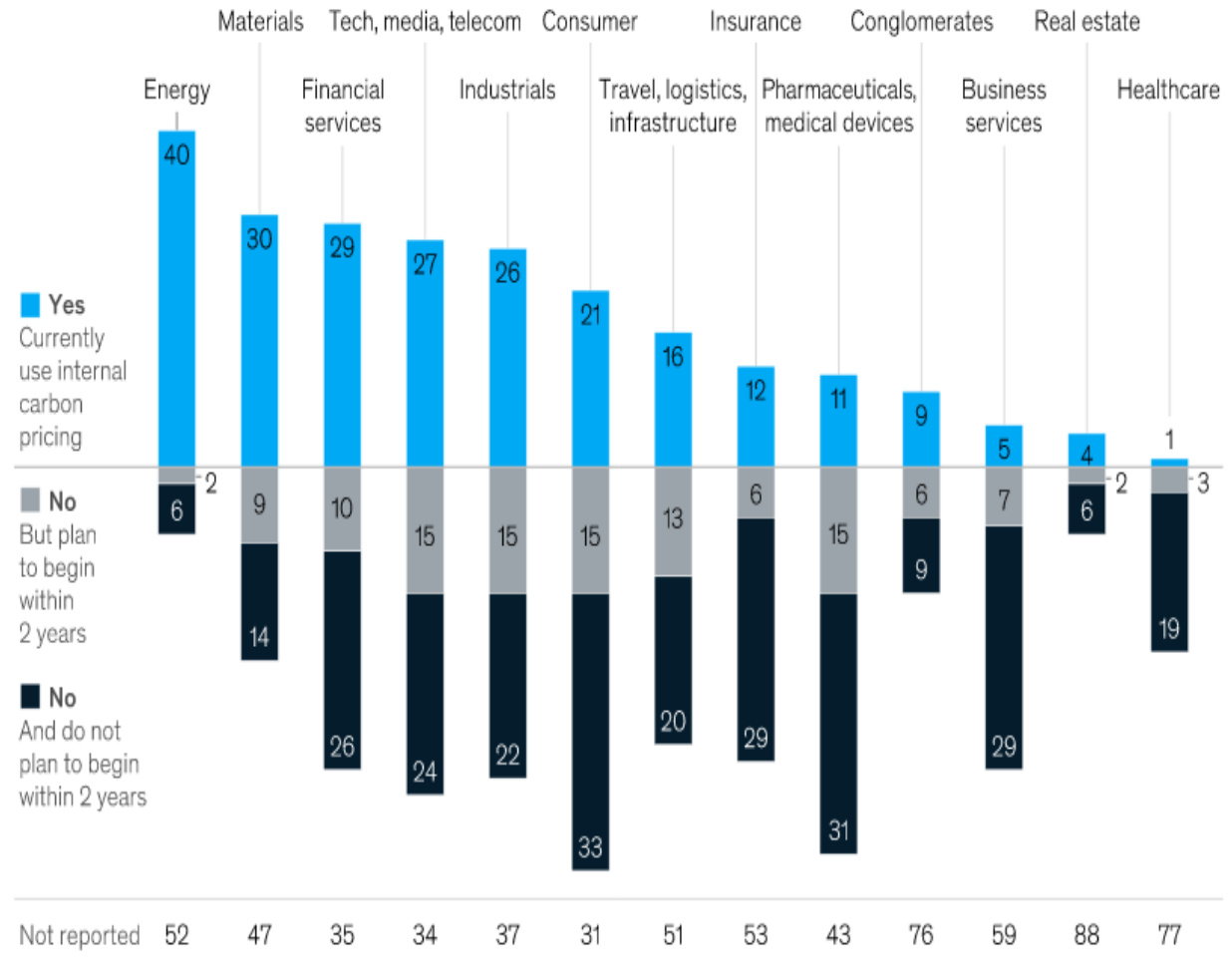
- Changes in tax assumptions to projects, business plans, investment decisions
- Tax policy considerations, on new types of taxes such as carbon taxes, CBAM, tax aspects of circularity

# Internal carbon pricing

- Used by more and more companies
- Generally voluntary
- In various sectors
- Mostly in Europe, Japan, UK, US
- To assess resilience of investment choices and risk assessment to financial statements

Internal carbon pricing is most prevalent in energy, materials, and financial-services industries.

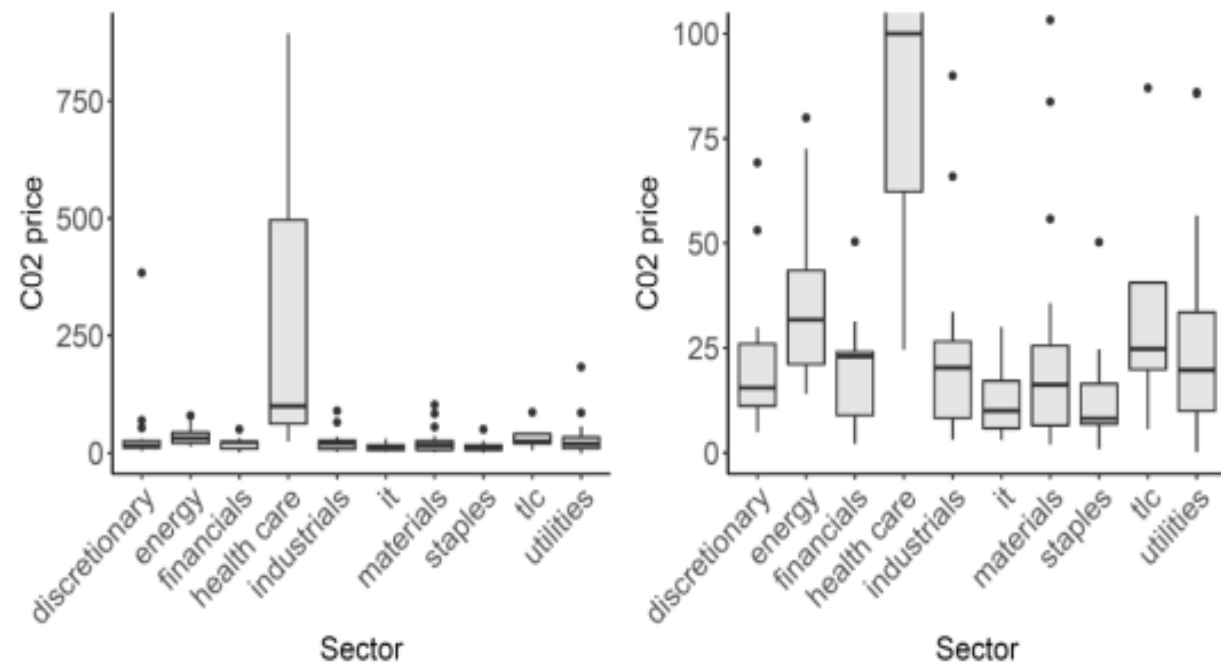
Use of carbon pricing by industry sector,<sup>1</sup> %



<sup>1</sup>Determined by a sampling of the top 100 companies ranked by 2019 revenue.  
Source: Responses from 2,600 companies reporting to the Carbon Disclosure Project (2019)

# Internal carbon pricing

- Great price variation between sectors
- Fixed proxy price or real-term estimates
- Often increasing over time
- Various uses/levels of influence
- Relevance of decarbonisation costs



**Figure 1. Internal carbon prices by sector (US\$ per ton, left-hand graph). Right-hand graph zooms in to show prices up to \$100. “it” stands for information technology and “tlc” for telecommunication services. Source: CDP, 2016.**

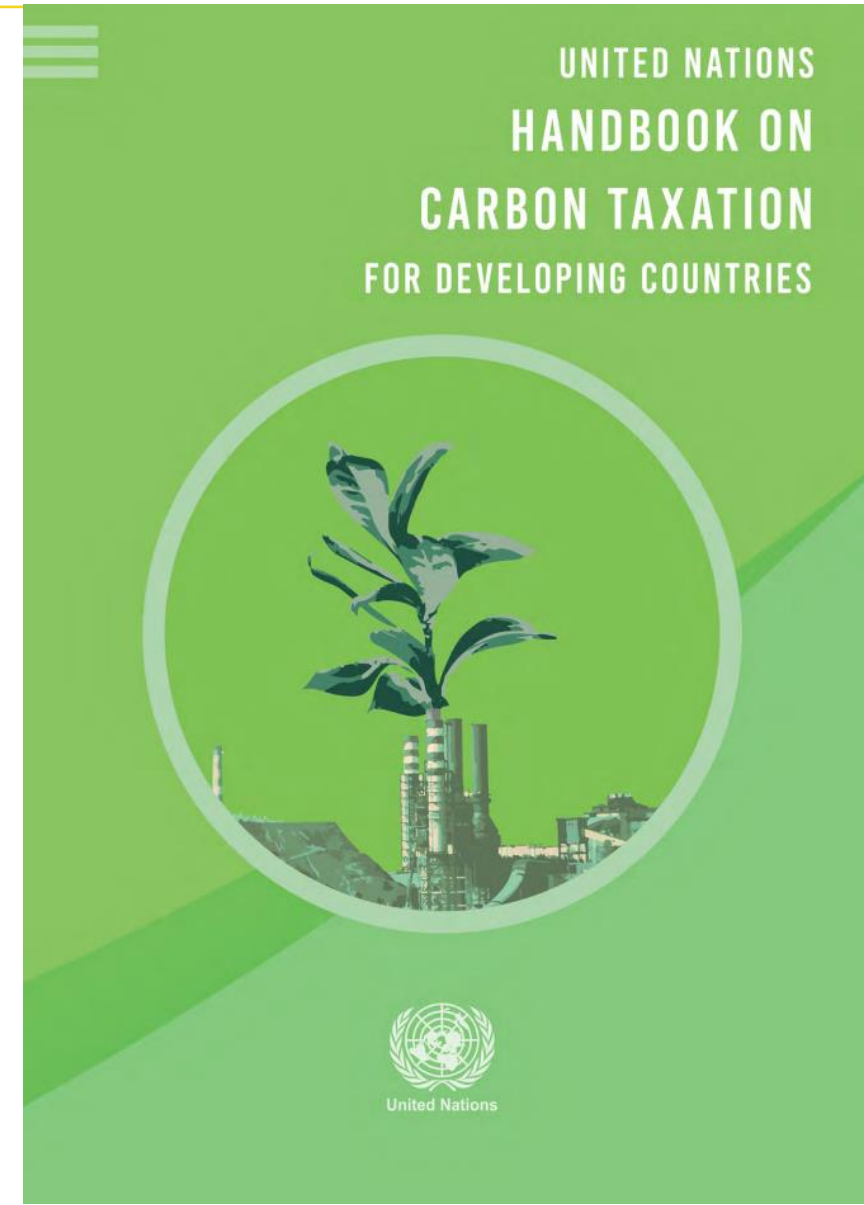
# Tax involvement carbon pricing

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- Instrument often irrelevant – carbon tax or other carbon pricing mechanisms expected or introduced does not influence carbon pricing
- Assumptions on tax deductibility can differ – generally tax deductible unless e.g. fines or with tax systems with limited list of deductible costs
- Internal responsibility: Department responsible for carbon pricing – including carbon tax – reporting and payment often not self evident
- Carbon tax reporting: Carbon emission reporting and pricing often required under available legislation – carbon tax liabilities not always tracked centrally
- Carbon tax/pricing skills

# UN Tax Committee – Subcommittee on Environmental Taxation

- Subcommittee on Environmental Taxation since 2017
- First Subcommittee produced UN Handbook on Carbon Taxation for Developing Countries
- Second Subcommittee working on various topics:
  - Energy Transition
  - Offsets and carbon credits
  - CBAM
  - Interaction with other legislation
- Subcommittee on Extractive Industry Taxation – also with workstream on Energy Transition
- Subcommittee on Transfer Pricing – transfer pricing aspects of carbon credits





# POLL QUESTION

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**AFTER THIS PANEL:  
ARE YOU IN FAVOUR OF A CARBON PRICE?**



# Paris Agreement (Article 6)



***Voluntary cooperation/Market- and non-market-based approaches*** (Art. 6) – Higher ambition is allowed. It establishes a mechanism to contribute to the mitigation of GHG emissions and support sustainable development and defines a framework for non-market approaches to sustainable development

# Dutch case study

## Object/Decision

- Injunction for CO<sub>2</sub> emission reduction
- Required to reduce CO<sub>2</sub> emissions based on global operations
  - Company's own operations (by 45% by end of 2030 compared to 2019 – Scope 1)
  - Energy suppliers (Scope 2)
  - Retailers (Scope 3)

## Legal Basis

- Climate Change is a Human Rights issue
- Companies should assess any actual or potential negative impacts on human rights from their own activities or business relationships
- Freedom to comply with the decision as the company sees fit
- Mitigate the effect of rising sea levels in the Wadden Sea, a small island region in the Netherlands

## Aspects to watch out for

- Will most likely lead to the adoption of an internal carbon price
- Potential to restrict the scope of the group's operations domestically and internationally.
- Binds the company's global operations to the environmental standards set in the Netherlands

# RESULT OF THE POLL QUESTION

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**ARE YOU IN FAVOUR OF A CARBON PRICE?**



# Final Remarks

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**The future of taxation of climate change in 30 seconds**

