International Carbon Action Partnership

Emissions Trading – Concept and Theory

ICAP Regional Webinar

21 July 2026 | online

Speakers:
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Jonathan Gardiner, Ecologic Institute

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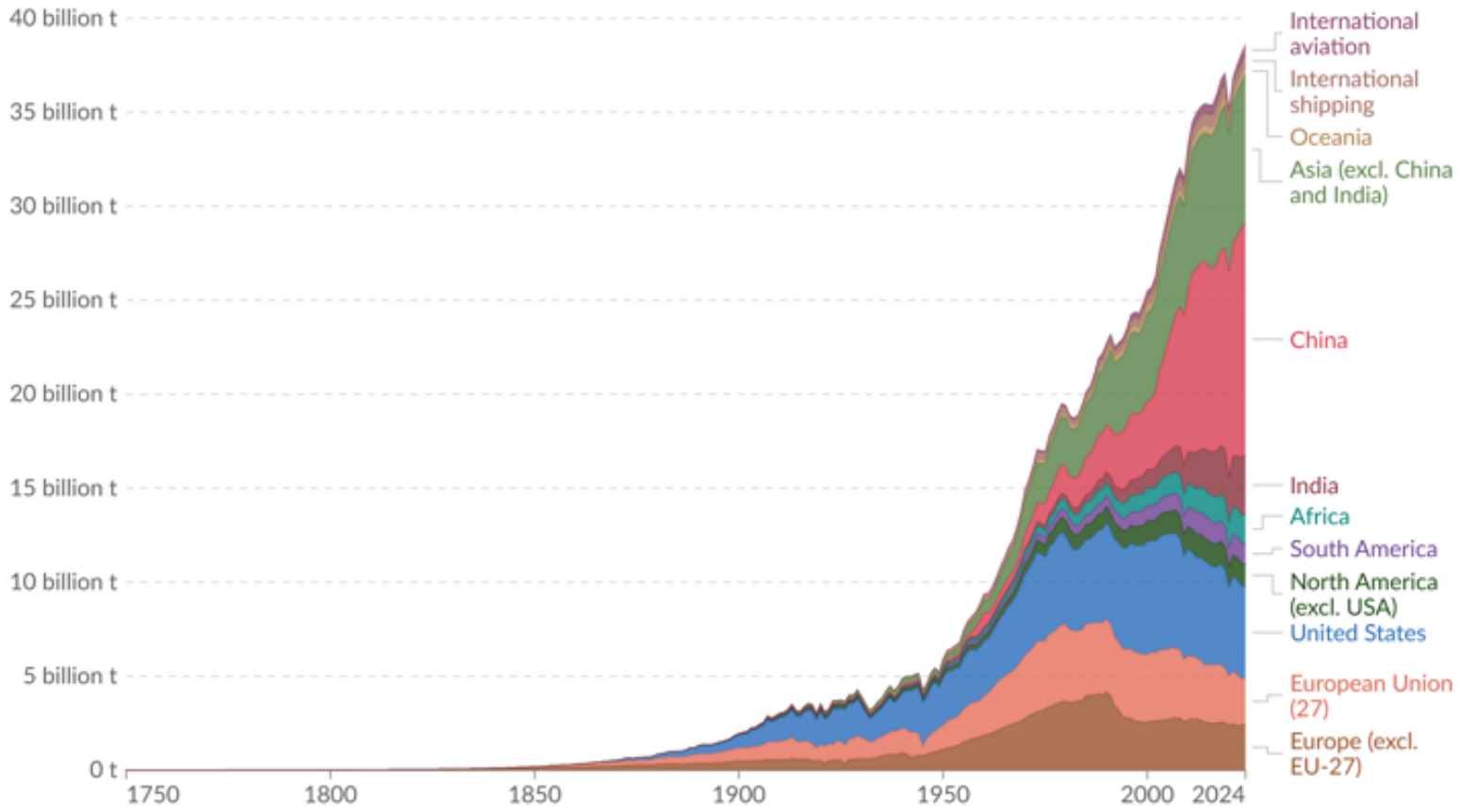
CO_2 Emissions 1750-2024

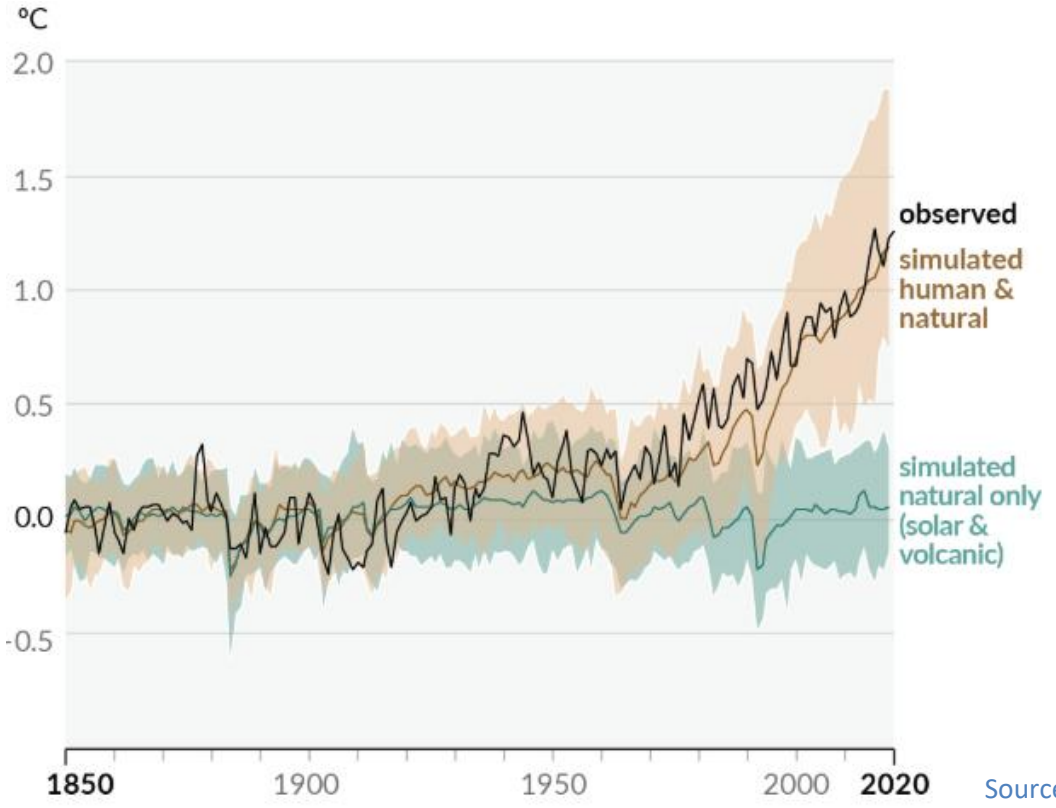


Source: Our World in Data, 2025

Data Source: Global Carbon Budget, 2025

Scientific Consensus – IPCC

Graph: Changes in global surface temperature (1850-2020): Three lines showing: 1) observed warming, 2) simulated with human and natural factors, and 3) simulated with natural factors only.



Source: IPCC AR6, 2021

- **Rapid warming** of the global climate, driven by emissions from **human activities**
- Climate change impacts are already affecting every inhabited region across the globe
- Every tonne of **CO_2 emissions further increases climate change**

How can policy help to mitigate climate change?

Policy Responses to Climate Change

Main types of climate policy instruments	
	**Regulatory measures:** bans, technology and performance standards
	**Economic instruments**: taxes, emissions trading, fees and charges, tradable certificate schemes
	**Support measures**: grants and subsidies, loans and loan guarantees, and public procurement
	**Voluntary agreements and initiatives**
	**Information and labelling measures**
	**Enabling measures**: E.g., R&D; infrastructure, capacity building

Today's focus

Policy Responses to Climate Change

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	**Information and labelling measures**
	**Enabling measures**: E.g., R&D; infrastructure, capacity building

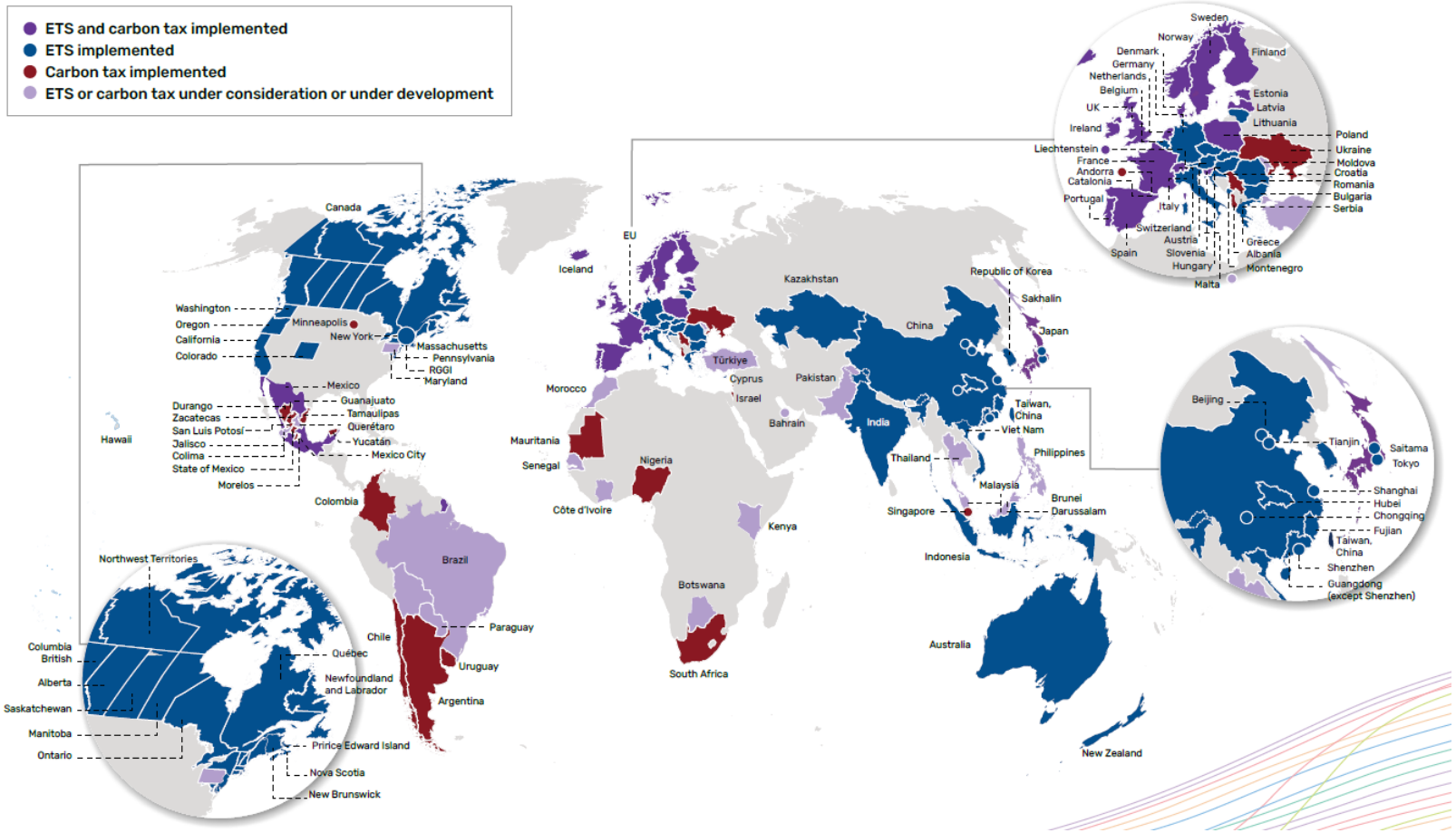
Today's focus

Unlike regulatory measures ("command and control"), economic instruments change incentives through price signals, leaving actors with greater compliance flexibility

***Carbon pricing** is a key economic instrument for climate change mitigation*

Widespread Adoption of Carbon Pricing

2026: 87 carbon pricing instruments, covering 29% of global emissions



Source: [World Bank, 2026]

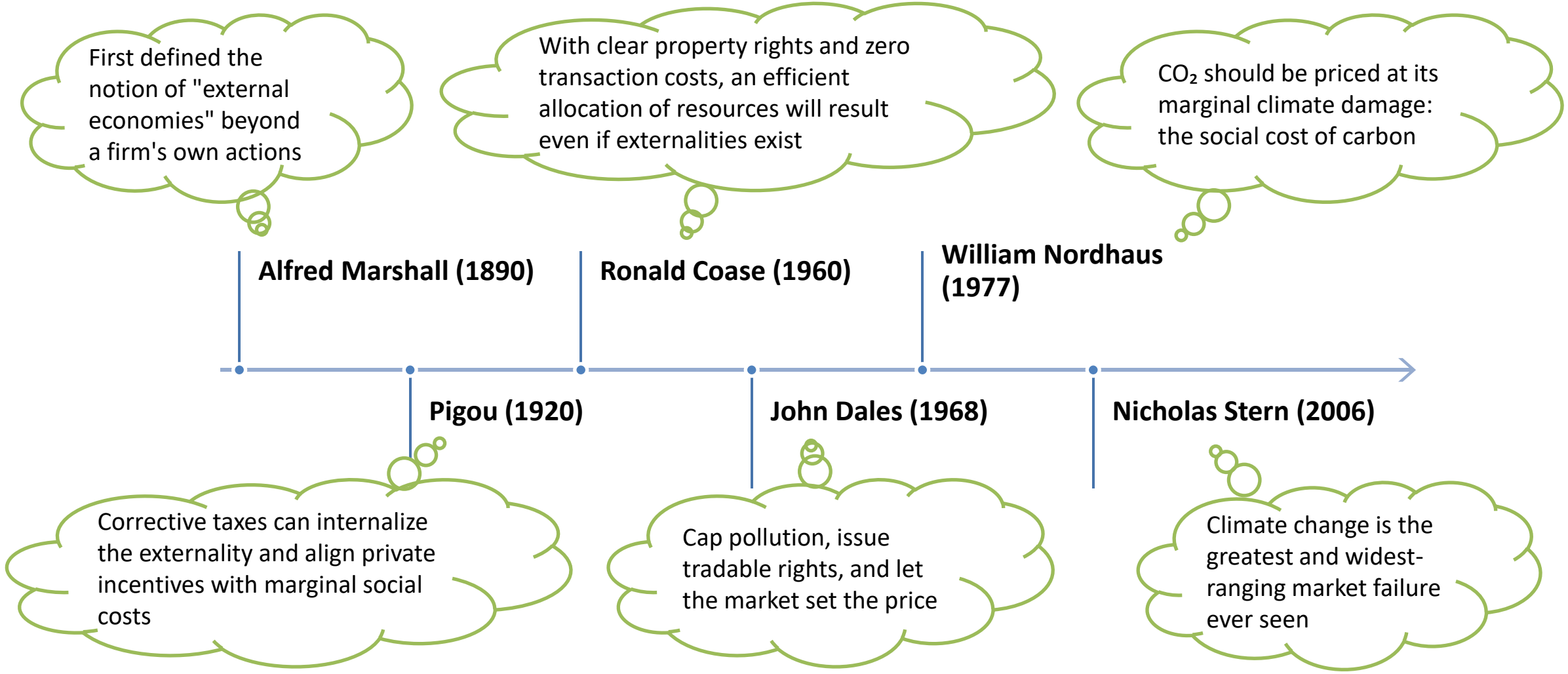
Rationale of Carbon Pricing

Current prices do not tell the whole truth

- In a market economy, prices signal scarcity and shape consumption and investment, but they often exclude wider social costs, including climate damages

  → goods and services are cheaper because the climate damage is not priced in
- As a result, individually rational choices can cause harm to society in a way that exceeds their social benefit, resulting in a **market failure**
- Carbon pricing helps **correct** this failure by "internalizing" the social externality
- Carbon pricing thus does **not create costs** – rather, it makes them **visible** and **allocates** them. The key question is: **who should pay?**

From market failure to externality pricing



What is carbon pricing?

- **Carbon pricing** is any policy that creates a price on carbon dioxide and/or other greenhouse gases (GHGs) emitted or contained in fuels or material inputs
- **Variants** of carbon pricing:
  - **Explicit carbon price**: a carbon price generated by a carbon tax, emissions trading system or other policy that reveals a price → the focus of today's webinar!
  - **Implicit carbon price**: other policies (e.g., fuel taxes, standards) that impose a cost per tonne without stating a price
  - **Internal carbon price**: organisations can introduce a (real or virtual) price in their operations and planning processes

Emissions Trading and Carbon Taxes

Two main approaches to set an explicit carbon price

1. **Emissions Trading System (ETS):** governments set a quantitative limit on total GHG emissions from covered sectors or emissions intensity of covered entities. This limit is translated into units (usually "allowances") that can be traded in the market. The carbon price in an ETS is revealed dynamically by supply and demand and scarcity in the market
2. **Carbon tax:** governments set the carbon price by levying a tax, charge, fee or other form of fiscal measure on GHG emissions; here, the price is not revealed by the market, but decided politically

Additional examples:

- **Voluntary Carbon Market (VCM):** businesses and individuals voluntarily purchase units, often to claim progress towards “net zero” emissions
- **Article 6 of the Paris Agreement:** provides the accounting framework for countries to trade mitigation outcomes with each other, enabling a global carbon market

Why carbon pricing?

How would you rank these objectives of carbon pricing in terms of importance?

To provide your answer:

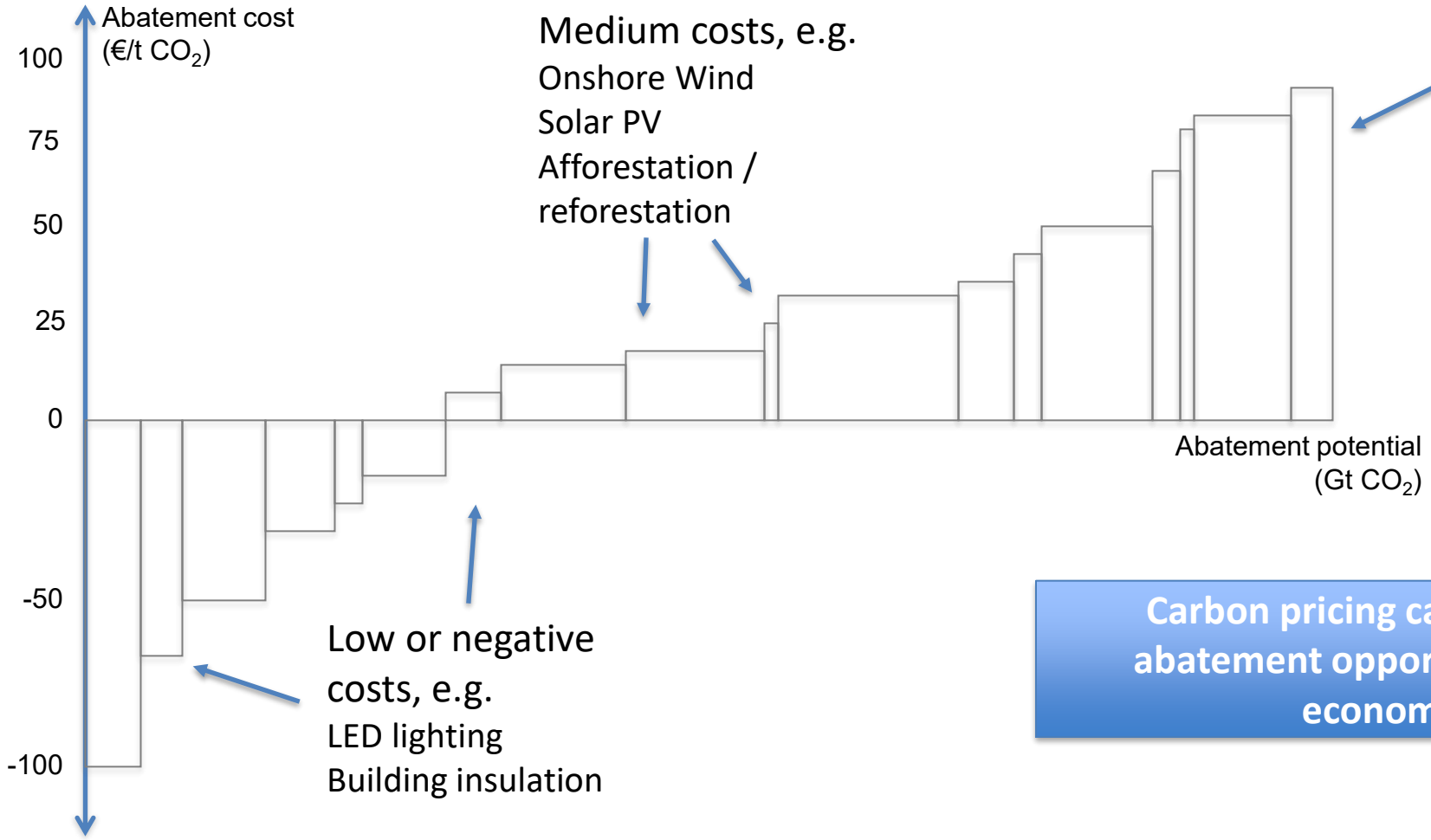
Scan the QR code with your phone or head to **menti.com** and enter the code **8933 5969**

Why carbon pricing?

- A carbon price makes the **polluter pay** for the cost of emissions, helping internalise the negative externality
- At the same time, by **leveling the marginal costs of emissions** across covered emitters (and thereby promoting a Pareto-efficient outcome), carbon pricing ensures greater **cost-effectiveness** in achieving mitigation outcomes
- A cost on pollution creates a **flexible incentive** for firms to decide when and how to abate, and to account for the cost of their emissions when making operational and investment decisions
- Carbon pricing is **technology-neutral**, revealing abatement options that more targeted policies (such as performance standards or subsidies) might miss
- A carbon price signal helps spur **innovation** by shifting investment towards low-carbon technologies
- Carbon pricing **revenue** creates a new **source of income** for governments to advance desired policy objectives
- **Empirical evidence:** Studies on the US Sulfur Dioxide Programme show that emissions trading can reduce compliance costs by 13-50% compared to command-and-control policies (Burtraw and Mansur, 1999; Cramton, 2000; Keohane, 2003); *ex ante* estimates suggest similar benefits – 40-60% cost reductions – for the use of carbon trading under the Paris Agreement (Edmonds et al., 2021; Piris-Cabezas et al., 2023)

Heterogeneity of abatement options

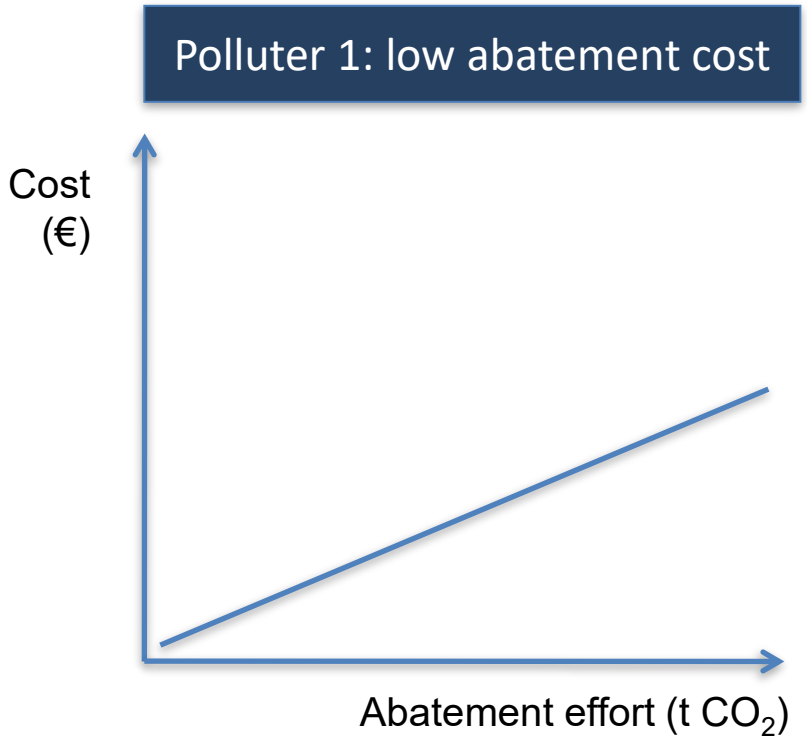
Abatement costs differ across technologies

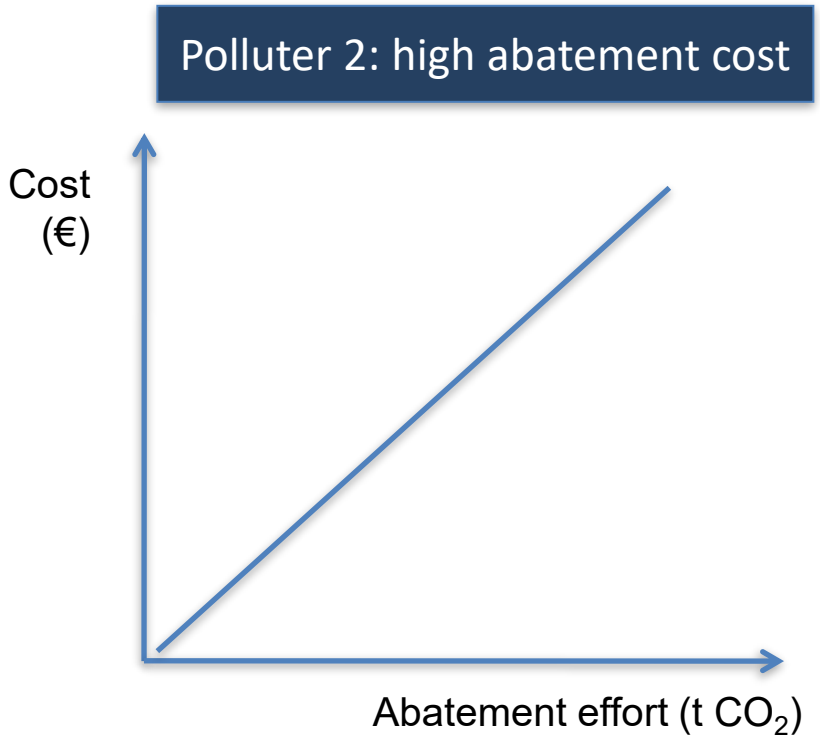


Carbon pricing can help make abatement opportunities more economical

How does carbon pricing reduce total compliance costs?

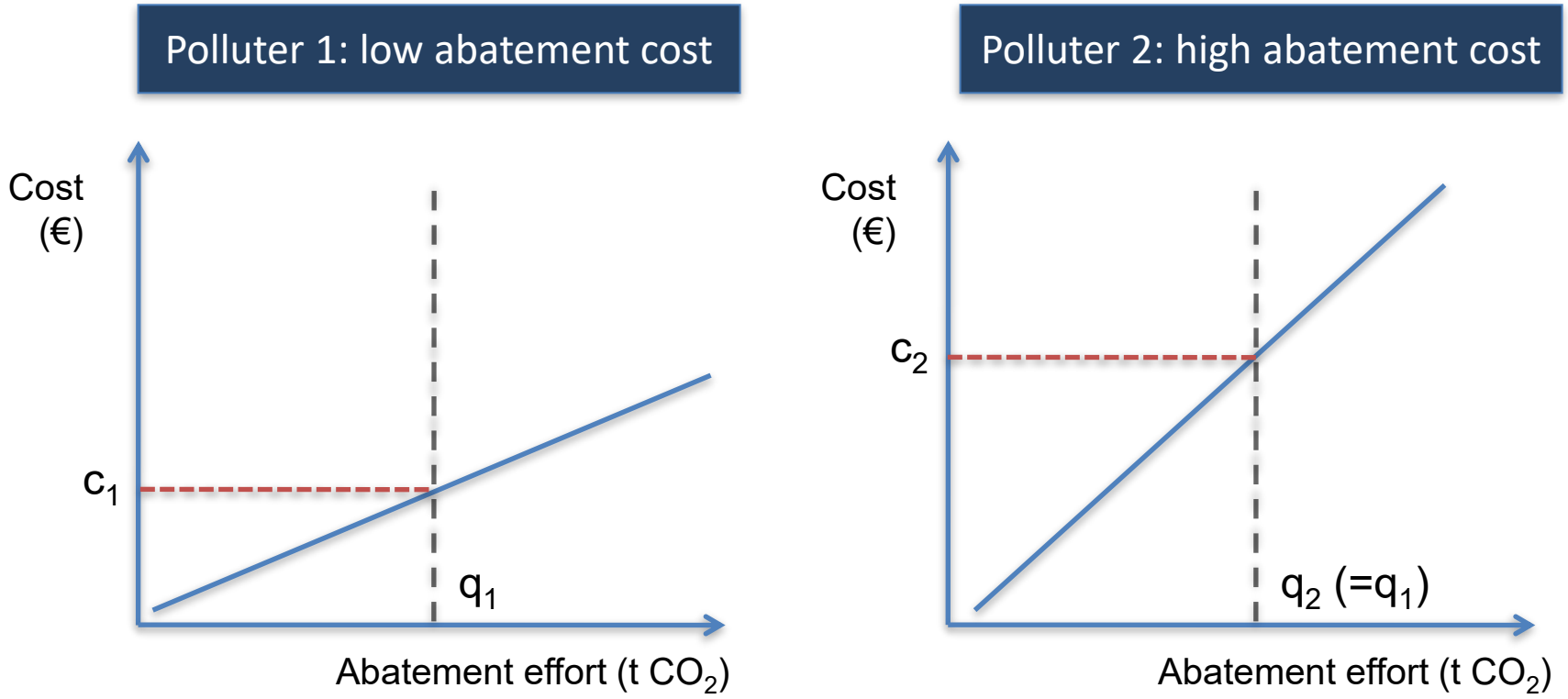
Advantage of Carbon Pricing: Cost Efficiency





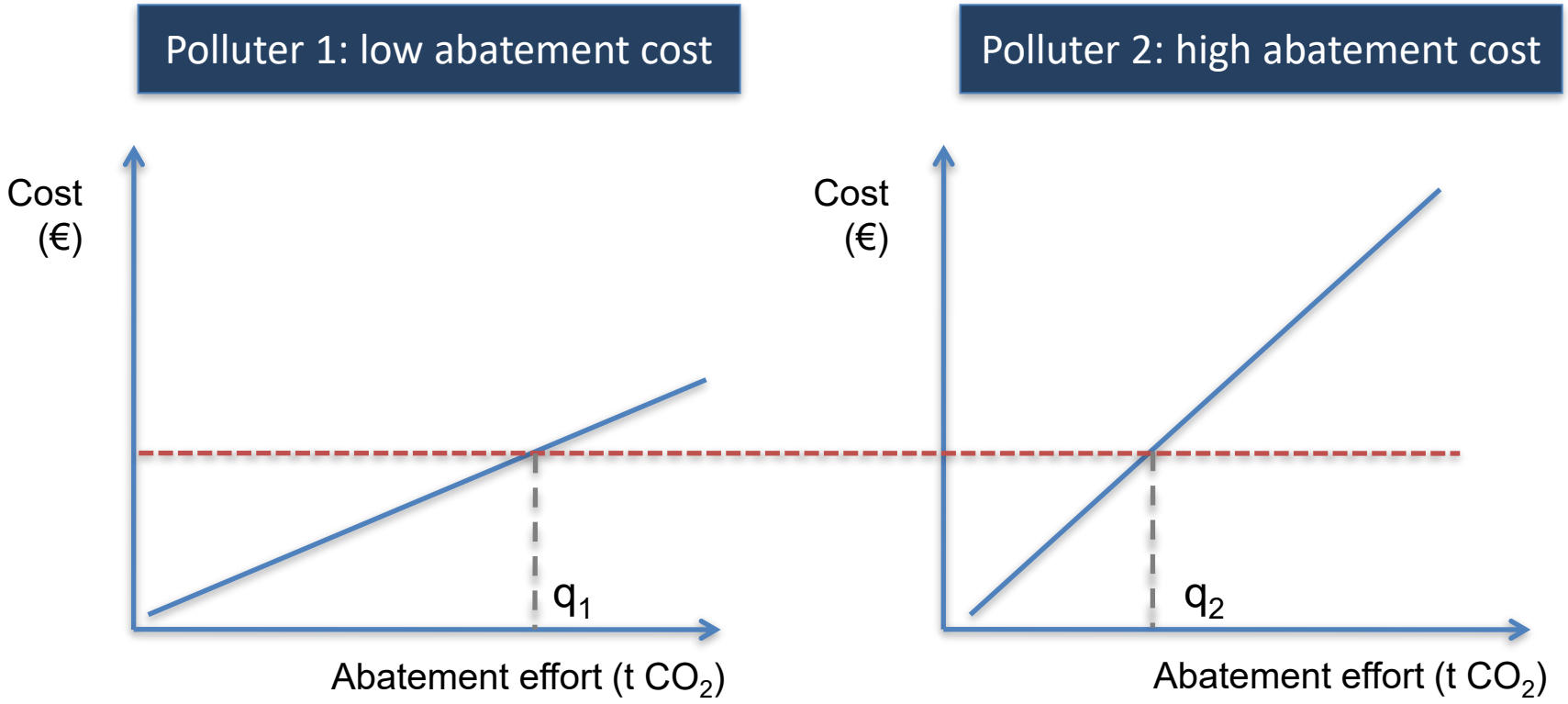
Command-and-Control vs. Carbon Pricing (1)

Case 1: Command-and-Control Regulation w. same level of abatement effort



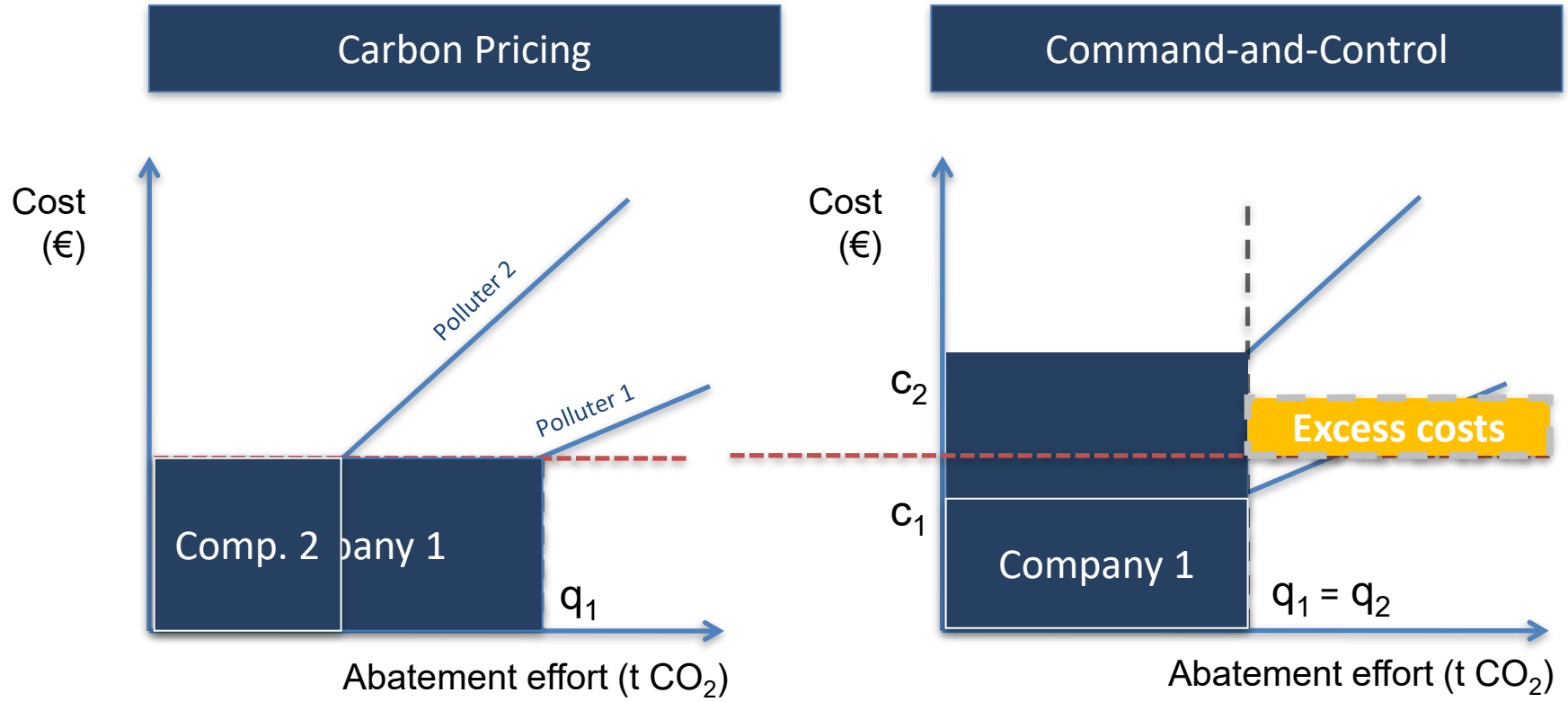
Command-and-Control vs. Carbon Pricing (2)

Case 2: Carbon pricing with the same abatement cost



Command-and-Control vs. Carbon Pricing (3)

Comparing the costs



Area of box *(tonnes abated x cost per tonne)* ***= compliance cost***

How high should the carbon price be?

Social Cost of Carbon

- **Question: how much** should we be willing to pay to avoid future damages from climate change?
- **Answer**: the **"social cost of carbon"** – a value to measure benefits of avoiding climate change, which can be compared against costs of reducing emissions
- **Process**: estimate **all impacts** of greenhouse gas emissions including infrastructure damage, agricultural productivity, health issues, etc
- Adding up all quantifiable costs and benefits from emitting one additional tonne of greenhouse gases yields the social cost of carbon
- Impossible to calculate with complete precision; underestimation is likely, as not all impacts are known yet

Example: US Social Cost of Carbon Estimate (2021)

SCC per Tonne at different Discount Rates			
Year	CO_2 (at 2.5%)	CO_2 (at 2%)	CO_2 (at 1.5%)
2020	$120	$190	$340
2030	$140	$230	$380
2040	$170	$270	$430
2050	$200	$310	$480

Source: US Environmental Protection Agency, 2023

How high should the carbon price be?

Alternative approaches

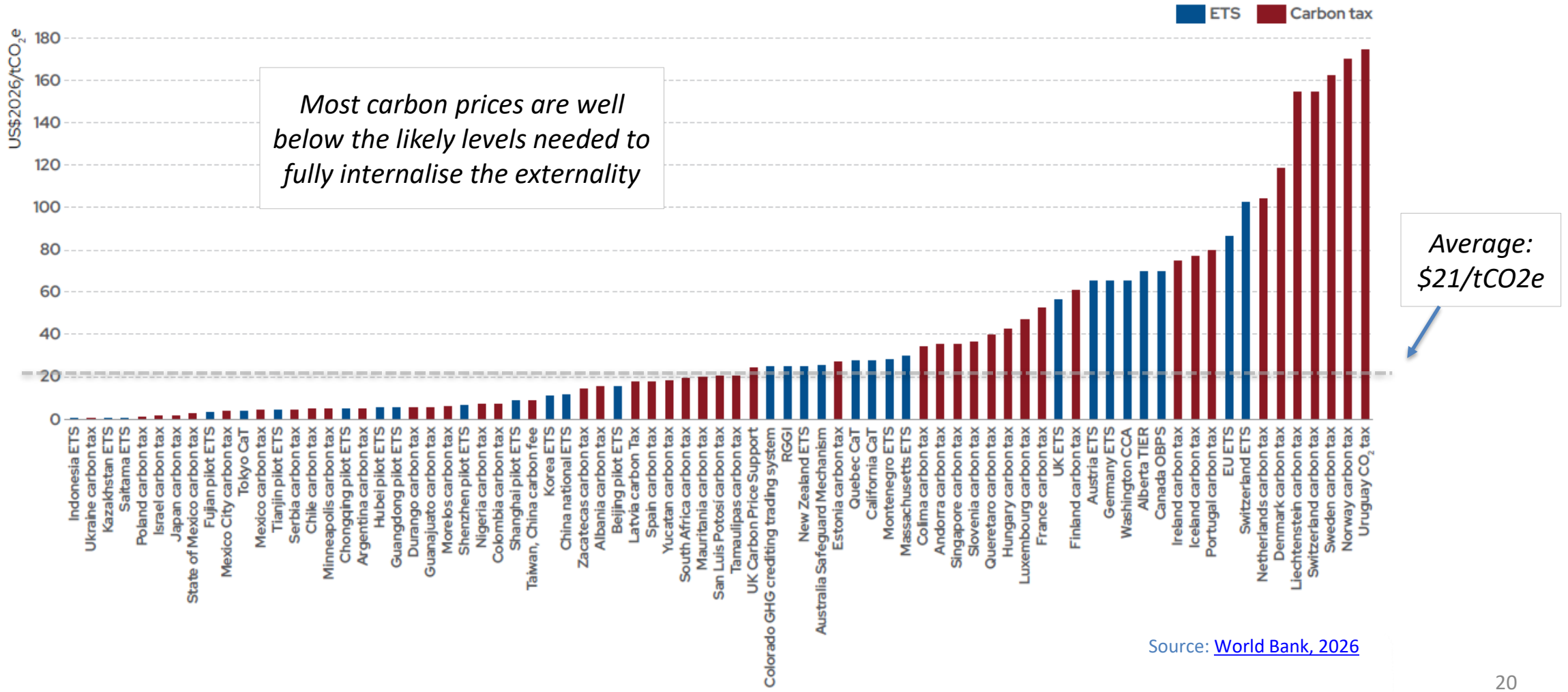
Instead of pricing the damage (social cost of carbon), ask what price is needed to meet a policy goal?

Examples:

- **International**: The High-Level Commission on Carbon Prices (2017) concluded that carbon prices would need to reach **US$50–100/tCO₂ by 2030** to be on track to keep temperature rise to below 2°C, the upper limit of the Paris Agreement
  - 2017 estimate – the equivalent figure today would likely be higher
  - The estimates treats carbon pricing as part of the policy portfolio with other policies doing much of the mitigation in non-covered sectors
- **UK**: The UK Government estimates the carbon price consistent with the UK's legislated net-zero by 2050 target (CCC, 2025).

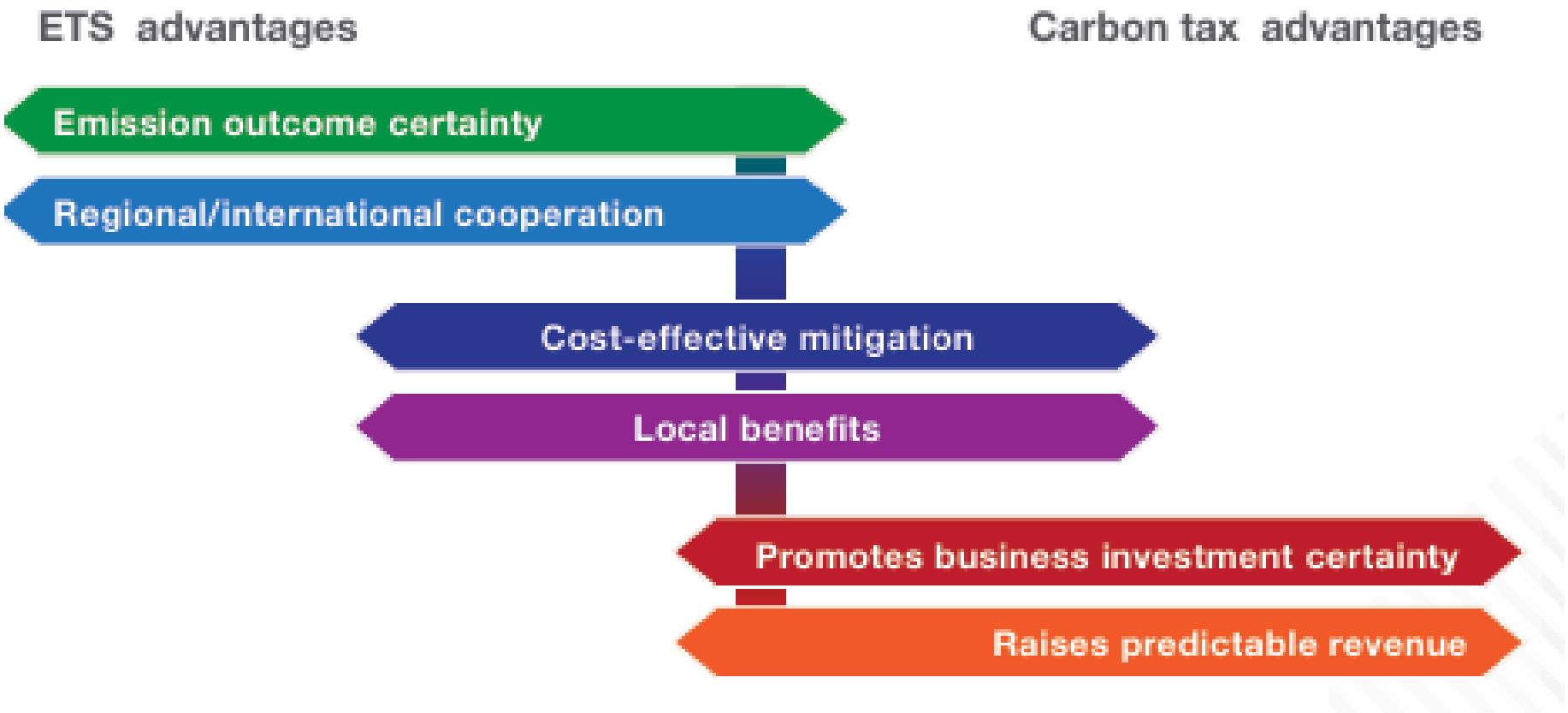
How high should the carbon price be?

Carbon Price Levels Around the World



Source: World Bank, 2026

ETS vs. Carbon Tax: strengths and trade-offs

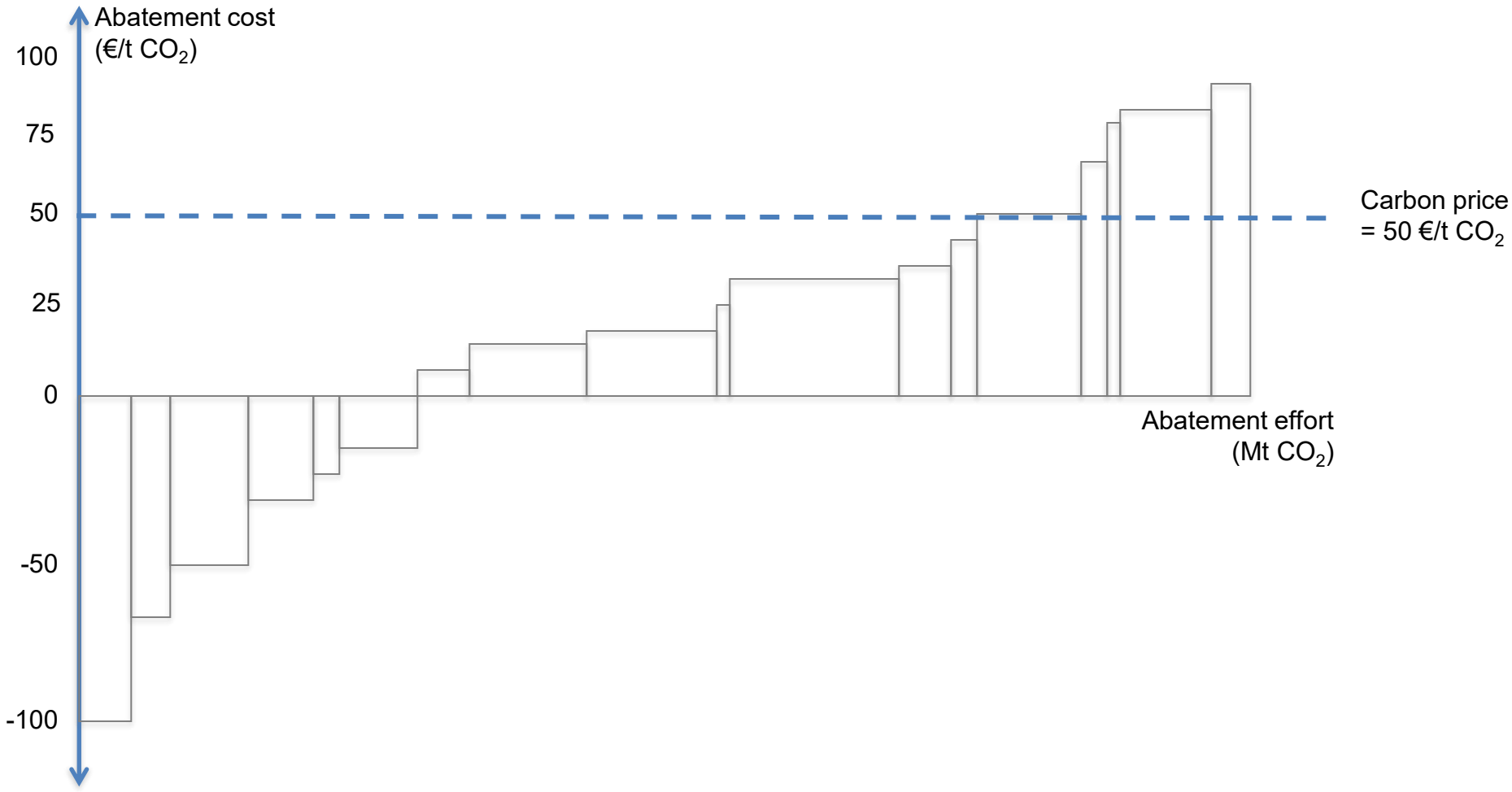


Source: World Bank, 2021

Where the carbon price can reach

Carbon pricing can help make abatement options economical!

In this case, all abatement options below €50 / tCO_2 are cheaper than paying the carbon price



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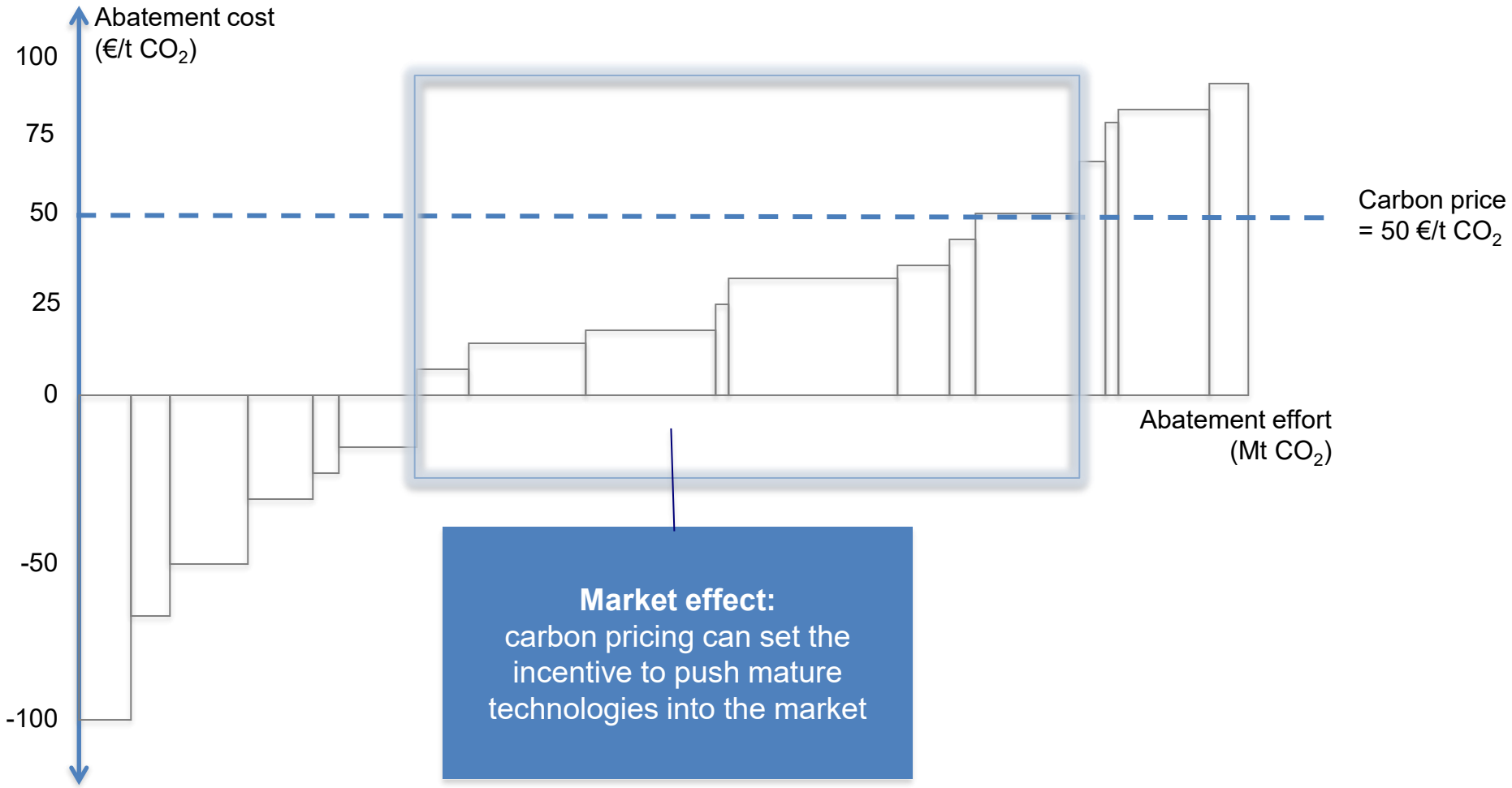
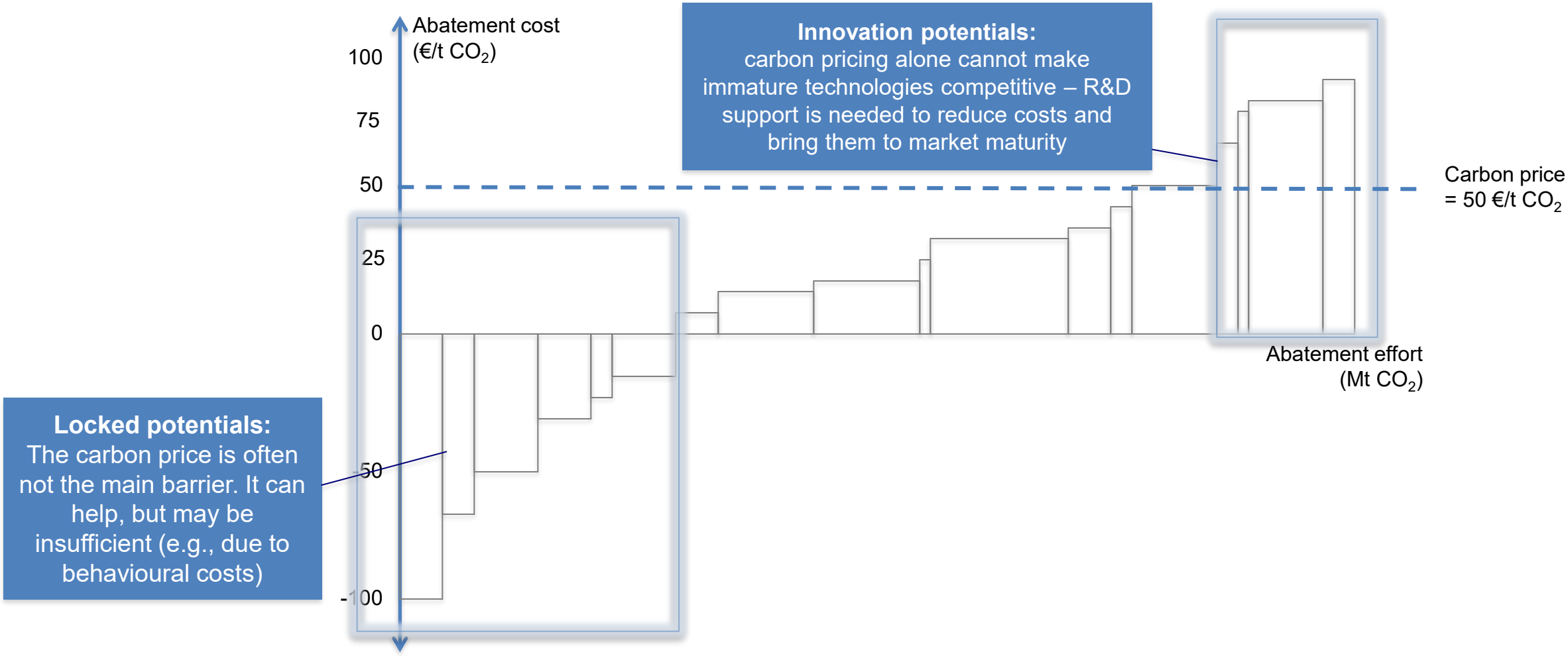


Where the carbon price cannot (always) reach



When a carbon price may *not* work so well

Other market failures at work, e.g.:

- **Split incentives,** such as principal/agent
- **Information asymmetries,** e.g. lack of awareness about exposure and alternatives
- **Lack of access to finance** where abatement requires investment
- **Ownership** of fossil resources

Technical & regulatory **constraints on implementation**, e.g.:

- Lacking **administrative capacities** and infrastructure (e.g. MRV, enforcement)
- Lacking familiarity with **market-based policies**
- **Price controls** in relevant markets, **market distortions**

Revenues raised from carbon pricing can help with many of these issues.
Still: **is carbon pricing on its own enough?**

Carbon pricing as part of an instrument mix

- Carbon pricing is a **cross-cutting** tool: in the logic of minimising abatement cost and revealing abatement options across the economy, it serves well as a **broad pillar** of climate policy across diverse sectors
- Nonetheless, there are good (and not so good) reasons to promote or prohibit specific technologies with **targeted policies**, e.g. to:
  - Cover innovation and learning costs (internalizing positive externalities)
  - Avoid technology lock-in and provide greater phase-out certainty
  - Address industrial policy and other strategic objectives (e.g. supply chain security)
- **Flanking policies** can help improve the context of carbon pricing (e.g. access to finance, availability of infrastructure, capacity building)

Key takeaways

- **Climate policy requires cost-effective and scalable tools:** worsening climate change increases the need for policies that are capable of delivering substantial emissions reductions
- **Carbon pricing offers important advantages:** it encourages reductions where they are cheapest, creates incentives to shift towards cleaner alternatives, and can raise substantial public revenue
- **ETSs are a rapidly expanding form of carbon pricing:** they offer certainty in achievement of mitigation target, enable international cooperation, and offer flexibility in how the costs are distributed (e.g., through free allocation).
- After a short break we will explain basic building blocks of **ETS design and implementation** … but before that, we'll try to better understand how an ETS can reduce mitigation costs with the “Into the Trading Pit” game!

Thank you!

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International Carbon Action Partnership

Into the Trading Pit

The role of carbon pricing in lowering compliance costs

ICAP Regional Webinar

21 July 2026 | online

Michael Mehling (MIT) and Aaron Best (Ecologic Institute)

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Shall we play a game?

(a highly simplified one?)

Outline of the Game

***Game objective**: Learn how companies respond to different climate policy approaches.*

In this game, each participant leads one of **three different companies** with very different production assets and abatement costs.

In **four consecutive rounds**, these companies are faced with an **evolving climate policy landscape** that imposes a varying **compliance burden**.

Steps for participants:

1. **Pick** a company (A, B, or C). You will make compliance decisions for that company.
2. **Study** your assigned company (sales price, CO_2 abatement cost)
3. For each round, **calculate** production levels, CO_2 emissions and profit.

***Player objective**: maximize earnings for your company.*

Pick a Company

Name	Description	Abatement cost
Company A: *Fit & Flexible Co.*	A flexible firm with few legacy assets, modular and easily upgradable technology and cash on hand for abating CO_2	$3 per ton of emissions
Company B: *Golden Middle Corporation*	A more established player, with several legacy fossil-powered assets, many of which can be upgraded or retrofitted	$7 per ton of emissions
Company C: *Stranded Assets Inc.*	An older player that has seen better days, with many early-generation fossil-powered assets for which retrofitting is either extremely costly or impossible.	$14 per ton of emissions

Carbon emissions before abatement: 1 ton per unit of good produced.
Production costs: we assume 0 production costs in this exercise.

Round 1: No Climate Policy

Your country has not introduced any climate policies constraining or pricing greenhouse gas emissions.
Carbon is not regulated.
Your task now: Maximize earnings for your company.

→ How many units will you produce? (**Note** that each company can produce up to a maximum of 5 units, but that may not always be the most profitable option.)

→ Record your unit production, CO_2 reductions and net earnings: what is **most profitable** in this policy setting?

Parameters			Round 1 No Climate Policy		
Starting emissions: 1 ton CO_2 per unit *Max Quantity = 5 units*			Units	CO_2 emissions	Net earnings
	Sales Price	*Abatement cost (1 ton)*			
Company A	$10	$3			
Company B	$10	$7			
Company C	$10	$14			

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Parameters			Round 1 No Climate Policy		
Starting emissions: 1 ton CO_2 per unit *Max Quantity = 5 units*			Units	CO_2 emissions	Net earnings
	Sales Price	*Abatement cost (1 ton)*			
Company A	$10	$3	5	5 tons	$50
Company B	$10	$7	5	5 tons	$50
Company C	$10	$14	5	5 tons	$50

Without a climate policy, all 3 companies produce their maximum quantity of 5 units. Overall CO_2 emissions are unchanged.

Companies' logic: Since CO_2 abatement is voluntary, Companies A, B and C each choose not to incur any abatement costs.

Check your work (net earnings calculation):
= Price * Quantity
= $10 * 5 = $50

Round 2: Command and Control

Your country has decided to introduce a rigid command & control performance standard that requires each company to phase out their **entire** emissions. In other words: carbon is **now regulated**; for every unit you produce, you will need to **fully abate** your emissions to comply with the government requirement.

Your task now: Maximize earnings for your company.

→ How many units will you produce?

→ Record your unit production, CO_2 reductions and net earnings

Parameters			Round 1 No Climate Policy			Round 2 Command and Control		
Starting emissions: 1 ton CO_2 per unit *Max Quantity = 5 units*			Units	CO_2 emissions	Net earnings	Units	CO_2 emissions	Net earnings
	Sales Price	*Abatement cost (1 ton)*						
Company A	$10	$3	5	5 tons	$50			
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	Sales Price	*Abatement cost (1 ton)*						
Company A	$10	$3	5	5 tons	$50	5	0 tons	$35
Company B	$10	$7	5	5 tons	$50	5	0 tons	$15
Company C	$10	$14	5	5 tons	$50	0	0 tons	$0

When required to abate, Companies A and B continue producing because their net earnings after abatement remain positive. Company C shuts down production because its $14 abatement cost exceeds its $10 net earnings per unit. Overall CO_2 emissions are down by 15 tons.

Companies' logic: Are net earnings after the required abatement positive, or will we lose money by continuing to produce?

Check your work (net earnings calculation):
= (Price - Abatement Cost) * Quantity or 0, whichever is greater
= (10 - AC) * 5 or 0, whichever is greater

Round 3: Carbon Tax

Your country has switched to a more cost-effective carbon tax that affords compliance flexibility. Companies can choose whether to abate or pay the tax. Carbon is now regulated with a carbon tax of $5 per ton of emissions. For every unit you produce, you will either need to undertake abatement or instead pay the tax.

Your task now: Maximize earnings for your company.

→ How many units will you produce?

→ Record your unit production, CO_2 reductions and net earnings

Parameters			Round 1 No Climate Policy			Round 2 Command and Control			Round 3 Carbon Tax		
Starting emissions: 1 ton CO_2 per unit *Max Quantity = 5 units*			Units	CO_2 emissions	Net earnings	Units	CO_2 emissions	Net earnings	Units	CO_2 emissions	Net earnings
	Sales Price	*Abatement cost (1 ton)*									
Company A	$10	$3	5	5 tons	$50	5	0 tons	$35			
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Parameters			Round 1 No Climate Policy			Round 2 Command and Control			Round 3 Carbon Tax		
Starting emissions: 1 ton CO_2 per unit *Max Quantity = 5 units*			Units	CO_2 emissions	Net earnings	Units	CO_2 emissions	Net earnings	Units	CO_2 emissions	Net earnings
	Sales Price	*Abatement cost (1 ton)*									
Company A	10	$3	5	5 tons	$50	5	0 tons	$35	5	0 tons	$35
Company B	10	$7	5	5 tons	$50	5	0 tons	$15	5	5 tons	$25
Company C	10	$14	5	5 tons	$50	0	0 tons	$0	5	5 tons	$25

Company A abates because $3 is cheaper than the $5 tax. Companies B and C pay the tax because their abatement costs exceed $5. Overall CO_2 emissions are down by 5 tons.

Companies' logic: Do we earn more if we abate CO_2 or will we earn more by paying the carbon tax instead? Stop producing if net revenue falls to 0.

Check your work (net earnings calculation):
= (Price - Carbon Tax) * Quantity or (Price - Abatement Cost) * Quantity or 0, whichever is greater
= (10-5)*5 or (10-AC)*5 or 0, whichever is greater

Round 4: Emissions Trading

Your country has decided to switch to an emissions trading system. Each company receives 2 free emission allowances. The market cost of emission allowances is $5 per ton of emissions. For every unit you produce, you will either need to undertake abatement or surrender an allowance. You can also sell allowances if you can do so profitably.

Your task now: Maximize earnings for your company.

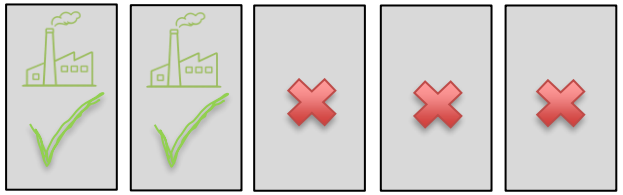
→ How many units will you produce?

→ Record your unit production, CO_2 reductions and net earnings

Parameters			Round 1 No Climate Policy			Round 2 Command and Control			Round 3 Carbon Tax			Round 4 Emissions Trading		
Starting emissions: 1 ton CO_2 per unit *Max Quantity = 5 units*			Units	CO_2 emissions	Net earnings	Units	CO_2 emissions	Net earnings	Units	CO_2 emissions	Net earnings	Units	CO_2 emissions	Net earnings
	Sales Price	*Abatement cost (1 ton)*												
Company A	$10	$3	5	5 tons	$50	5	0 tons	$35	5	0 tons	$35			
Company B	$10	$7	5	5 tons	$50	5	0 tons	$15	5	5 tons	$25			
Company C	$10	$14	5	5 tons	$50	0	0 tons	$0	5	5 tons	$25			

Into the Trading Pit!

Your task now: Maximize earnings for your company.



1t CO_2 **$5**

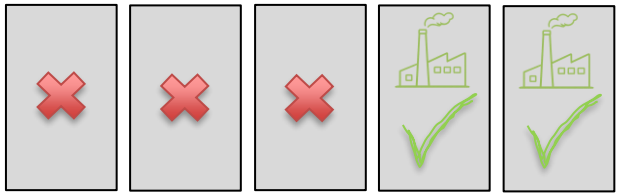
1t CO_2 **$5**

Hmm... abate for $3 or buy allowance for $5?

A

$10 Sales Price
$3 Abatement Cost

Hmm... use free allowance or sell for $5?



Hmm... abate for $7 or buy allowance for $5?

B

$10 Sales Price
$7 Abatement Cost

1t CO_2 **$5**

1t CO_2 **$5**

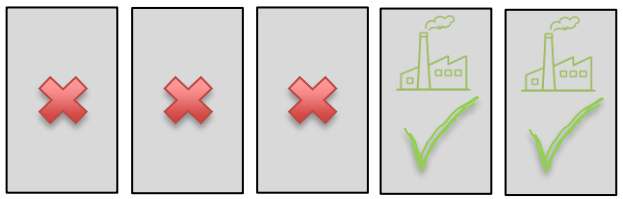
Hmm... use free allowance or sell for $5?

$10 Sales Price
$14 Abatement Cost

C

Hmm... use free allowance or sell for $5?

Hmm... abate for $14 or buy allowance for $5?



1t CO_2 **$5**

1t CO_2 **$5**

1t CO_2 **$5**

Allowance market

1t CO_2 **$5**

1t CO_2 **$5**

1t CO_2 **$5**

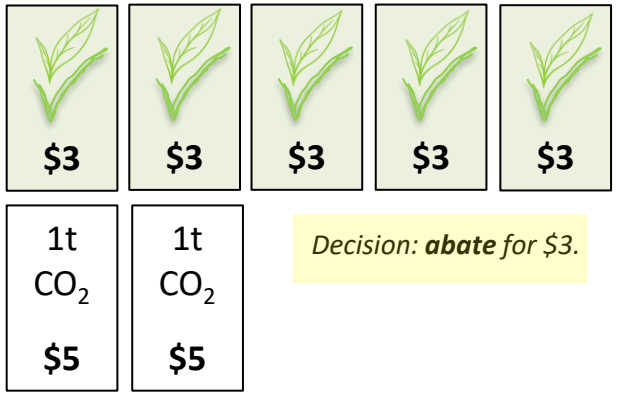
1t CO_2 **$5**

Companies' logic:

1. If abatement costs less than an allowance ($5), abate.
2. If abatement costs more than an allowance, use or buy allowances.
3. Sell any unused allowances.

Into the Trading Pit!

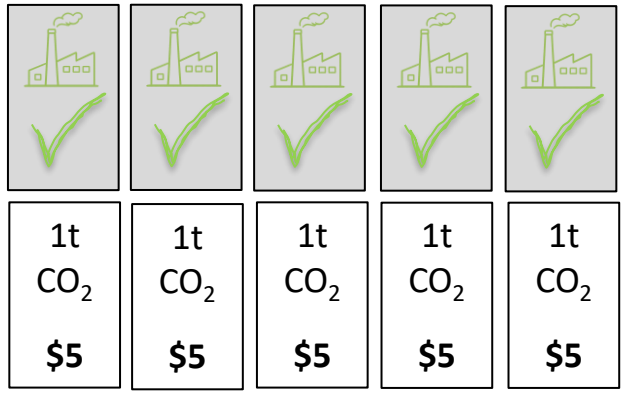
Your task now: Maximize earnings for your company.



*Decision: **abate** for $3.*

A

$10 Sales Price
$3 Abatement Cost



B

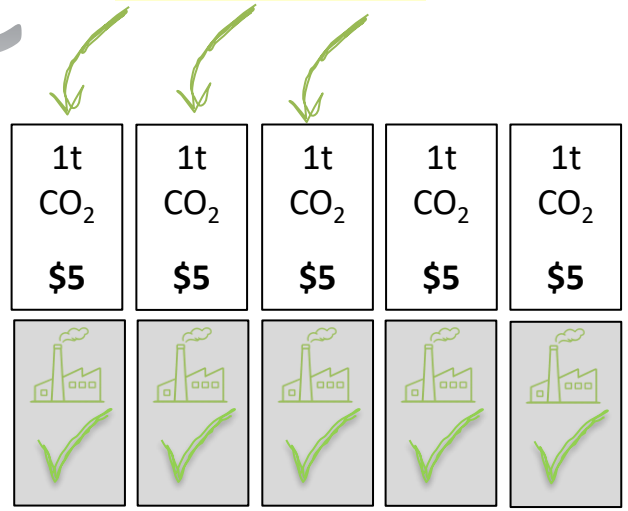
$10 Sales Price
$7 Abatement Cost

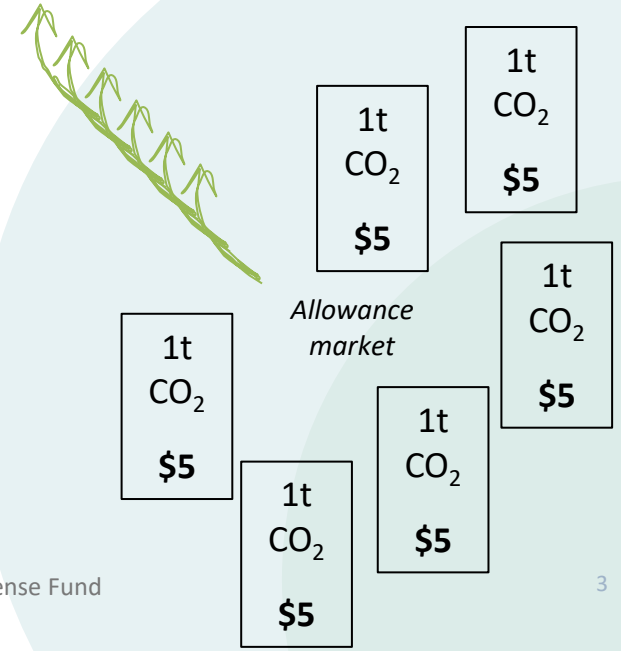
Decision:
***buy** allowances for $5.*

$10 Sales Price
$14 Abatement Cost

C

Decision:
***buy** allowances for $5.*



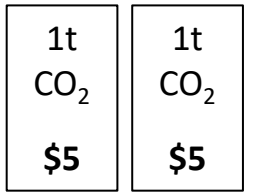


Companies' logic:

1. If abatement costs less than an allowance ($5), abate.
2. If abatement costs more than an allowance, use or buy allowances.
3. Sell any unused allowances.

Into the Trading Pit!

Your task now: Maximize earnings for your company.

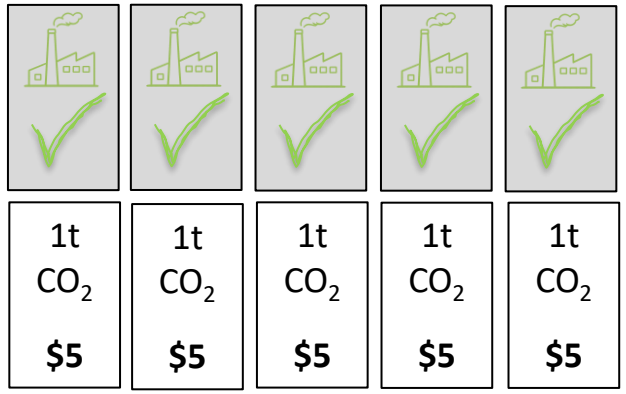


*Decision: **abate** for $3.*

A

$10 Sales Price
$3 Abatement Cost

Decision:
***sell** allowances for $5.*



B

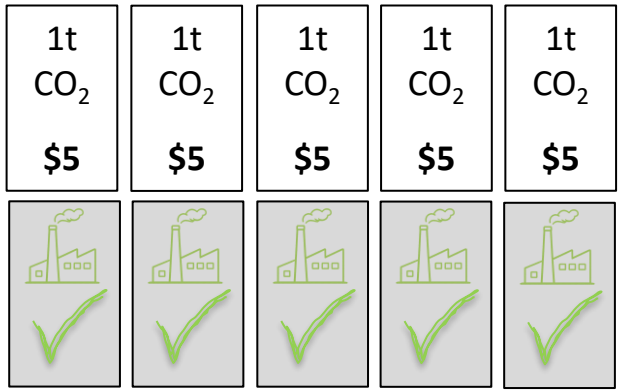
$10 Sales Price
$7 Abatement Cost

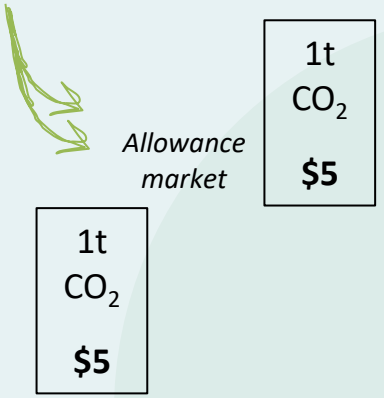
Decision:
***buy** allowances for $5.*

C

$10 Sales Price
$14 Abatement Cost

Decision:
***buy** allowances for $5.*





Companies' logic:

1. If abatement costs less than an allowance ($5), abate.
2. If abatement costs more than an allowance, use or buy allowances.
3. Sell any unused allowances.

Round 4: Emissions Trading

Your country has decided to switch to an emissions trading system. Each company receives 2 free emission allowances. The market cost of emission allowances is $5 per ton of emissions. For every unit you produce, you will either need to undertake abatement or buy and surrender an allowance. You can also sell allowances if you can do so profitably.

Your task now: Maximize earnings for your company.

→ How many units will you produce?

→ Record your unit production, CO_2 reductions and net earnings

Parameters			Round 1 No Climate Policy			Round 2 Command and Control			Round 3 Carbon Tax			Round 4 Emissions Trading		
Starting emissions: 1 ton CO_2 per unit *Max Quantity = 5 units*			Units	CO_2 emissions	Net earnings	Units	CO_2 emissions	Net earnings	Units	CO_2 emissions	Net earnings	Units	CO_2 emissions	Net earnings
	Sales Price	*Abatement cost (1 ton)*												
Company A	$10	$3	5	5 tons	$50	5	0 tons	$35	5	0 tons	$35	5	0 tons	$45
Company B	$10	$7	5	5 tons	$50	5	0 tons	$15	5	5 tons	$25	5	5 tons	$35
Company C	$10	$14	5	5 tons	$50	0	0 tons	$0	5	5 tons	$25	5	5 tons	$35

Company A abates because its $3 abatement cost is below the $5 allowance price. It also sells the 2 free allowances. Companies B and C use their two free allowances and buy three additional allowances each.

Companies' logic: If abatement costs less than an allowance ($5), abate. If abatement costs more than an allowance, use or buy allowances. Sell any unused allowances.

Check your work (net earnings calculation):
= (Price – Allowance Price) * Quantity or (Price - Abatement Cost) * Quantity or 0, whichever is greater
= (10-5)*5 or (10-AC)*5 or 0, whichever is greater
+ sell any unused allowances: = Allowance Price * Quantity of Unused Allowances

Thank you!

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International Carbon Action Partnership

ETS 101

10 Steps of ETS Design & Implementation

ICAP Regional Webinar

21 July 2026 | Online

Speaker: Marissa Santikarn

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eco logic GET Environmental Defense Fund

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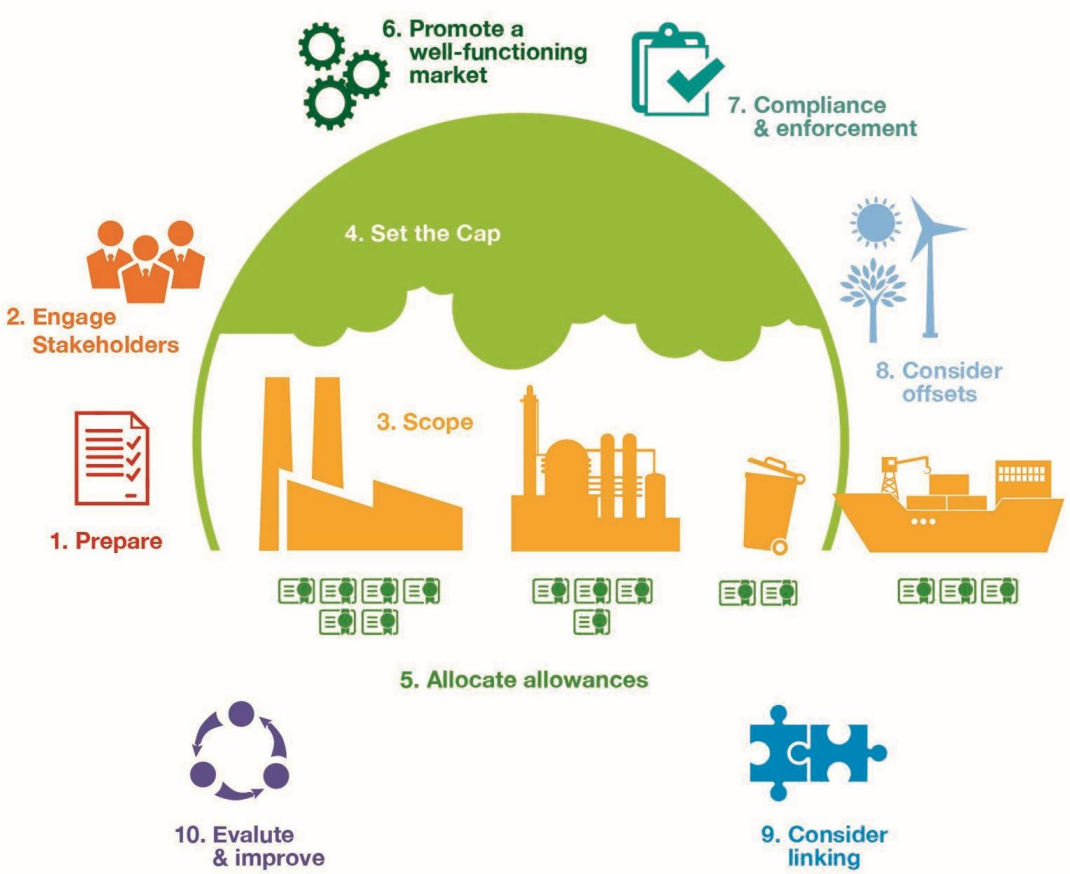
Key Takeaways

- Know the **core components** of an ETS — scope, cap, allocation, market, and compliance — and how they fit together
- See how to **sequence the 10 steps** — and why Prepare & Engage Stakeholders comes before you set scope or cap
- Identify what protects **environmental integrity** — an ambitious cap, robust MRV, real enforcement, and credible offsets/linking

10 Steps of ETS Design & Implementation

1) Prepare
2) Engage Stakeholders
3) Scope
4) Set The Cap
5) Allocate Allowances
6) Promote a Well-Functioning Market
7) Compliance & Enforcement
8) Consider Offsets
9) Consider Linking
10) Evaluate & Improve



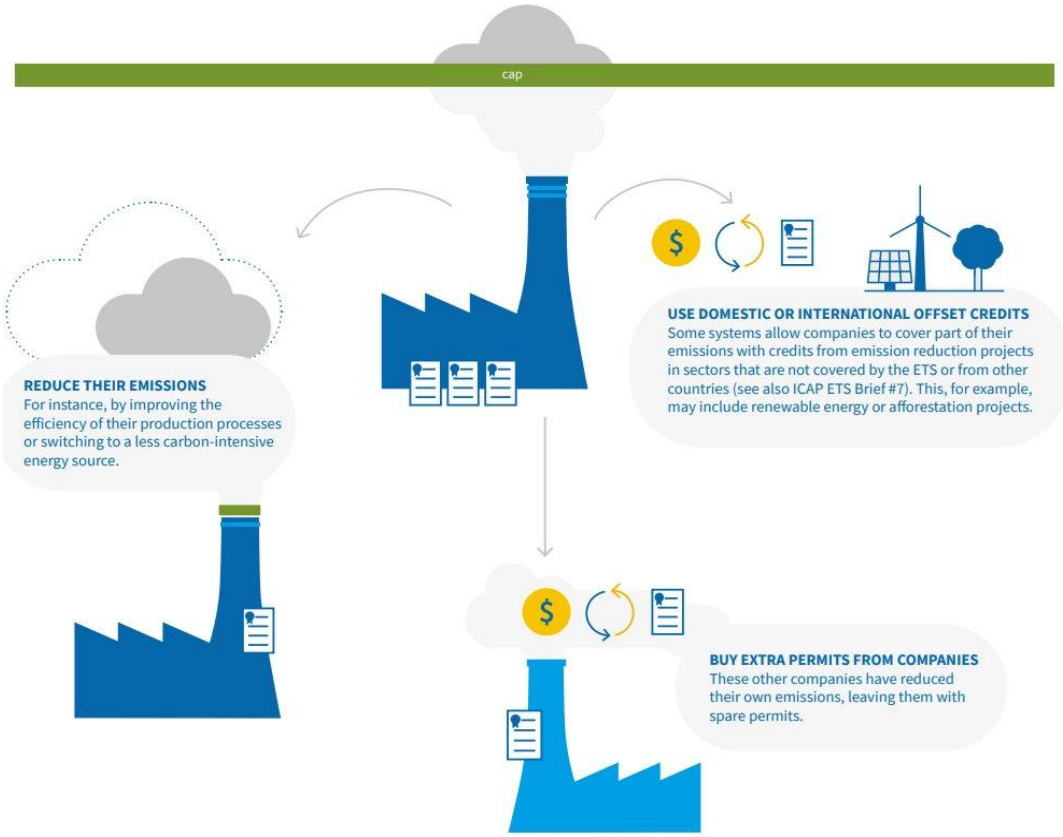
Source: International Carbon Action Partnership (ICAP) Emissions Trading In Practice Handbook

How Does an ETS Work?

1 2 3 4 5 6 7 8 9 10

Government **imposes a limit (cap) on the total emissions** in one or more sectors of the economy and **issues tradable allowances not exceeding the level of the cap.** Each allowance typically corresponds to one ton of emissions.

Regulated entities **must surrender one allowance for every ton of emissions** for which they are accountable. Entities with extra allowances can sell or bank them; entities that fall short must buy more on the market.



Source: International Carbon Action Partnership (ICAP)

Prepare & Engage Stakeholders

1 2 3 4 5 6 7 8 9 10

Starting out: build a legal basis, align with existing policy, and engage stakeholders early. Each group needs different capacity:

Government Departments

- Identify and evaluating ETS design options
- Draft ETS legislation, negotiate linking agreements
- Administrate ETS core functions

Regulated Entities

- Build capacity to fulfill obligations: MRV, unit surrender
- Develop mitigation strategies
- Administrative tasks: taxes, accounting, etc.

Other Market Participants

- Analyze the implications of ETS governance
- Engage in supporting processes: verification, offset provision, etc.

Political Communication & Engagement: Build public and political support through transparent communication, early stakeholder engagement and outreach build trust and acceptance of the ETS.

Scope: Broad vs. Narrow

1 2 3 4 5 6 7 8 9 10

Scope covers area, sectors, GHGs, entities, and point of regulation (upstream, source, or downstream). Thresholds exclude the smallest emitters.

Broad Scope

- Greater **emissions coverage** and confidence in achieving reduction targets
- More **efficient market** with greater liquidity and more abatement opportunities
- Reduces **competitive distortions** across sectors
- More **complex to administer** and coordinate

Narrow Scope

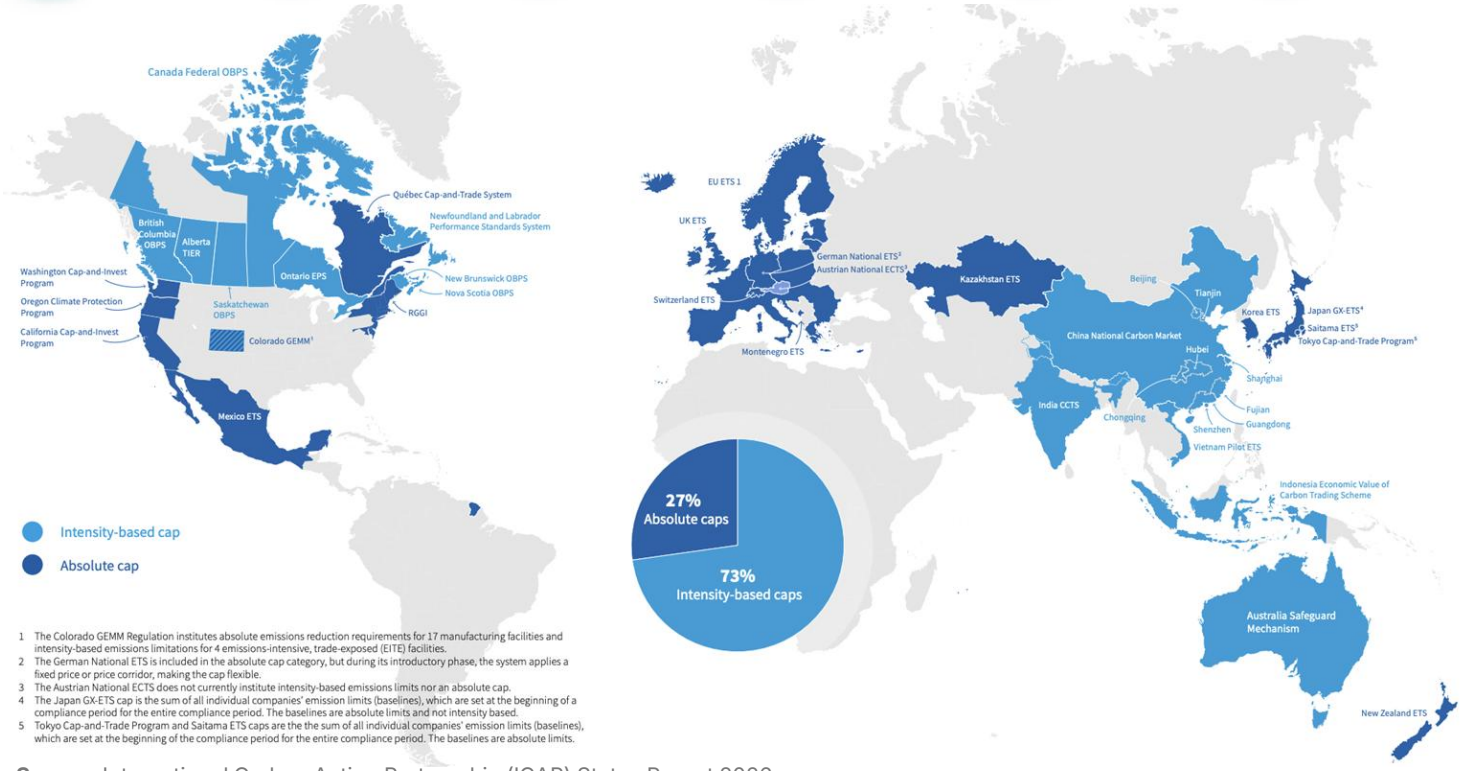
- Lower **administrative and transaction costs**
- Simpler implementation, especially in early phases
- May **exclude important emissions** sources
- Can **shift compliance costs unevenly** across covered sectors

Type of Cap: Absolute or Intensity?

1 2 3 4 5 6 7 8 9 10

Absolute Cap: Sets a fixed limit on total emissions, with reductions following a defined pathway over time.

Intensity Cap: Sets emissions targets relative to output, allowing total emissions to change as the economy grows



Source: International Carbon Action Partnership (ICAP) Status Report 2026

ETSs can use either absolute or intensity caps. Either way, the cap is the amount of allowed emissions over a period — its ambition should align with the jurisdiction's climate target, and it's typically set 3-10 years ahead, then tightened over time.

Methods of Allocation

1 2 3 4 5 6 7 8 9 10

Auction: Sells allowances through auctions, generating revenue and strong price signals, but provides less protection for emissions-intensive industries

Grandparenting: Allocates allowances based on historical emissions, easing the transition to an ETS but weakening long-term incentives for emissions reductions

Benchmarking: Rewards efficient producers and adjusts for production levels to reduce leakage. Most systems mix methods, shifting toward more auctioning over time

Source: International Carbon Action Partnership (ICAP)

Well-Functioning Markets & Compliance

1 2 3 4 5 6 7 8 9 10

Trading finds the lowest-cost abatement; banking, borrowing, and price floors/ceilings keep it stable. A strong legal framework gives the ETS authority to operate and enforce.

Monitoring, Reporting, Verification (MRV)

Monitoring involves emissions quantification through calculation or direct measurement. This must then be consolidated in an emissions **report**. Typically, these reports are then **verified** by independent service providers (verifiers) or through similar audit processes

ETSs should be reviewed regularly to ensure they continue meeting emissions reduction goals as economic conditions, technologies, and climate policies evolve. Reviews can be **comprehensive** (scheduled assessments of the overall system) or **targeted** (focused updates to address specific issues or design elements).

Offsets, Linking & Review

1 2 3 4 5 6 7 8 9 10

An offset represents 1 tCO2e reduced or removed, compared to a counterfactual scenario. Achieved by implementing emissions reduction or removal projects

Banking

Save unused allowances today for use in future compliance periods

Borrowing

Use allowances from a future compliance period to meet current compliance obligations (only where permitted)

Crediting

Use verified emissions reductions outside the capped sectors to meet a limited portion of compliance obligations

****Linked ETS**: entities from one system can use permits from another for compliance, creating a larger, more liquid market. Every ETS should also be reviewed regularly — comprehensively or on targeted issues — to keep working as conditions change.

What Protects Environmental Integrity

Ambitious, NDC-Aligned Cap

The cap must be **ambitious enough, and clearly aligned with the jurisdiction's Nationally Determined Contribution (NDC)**, to actually drive emissions reductions rather than just formalize business-as-usual.

Robust MRV

Emissions must be **Monitored, Reported, and Verified** to a consistent standard. Without credible data, the cap and every trade built on it lose meaning

Strong Compliance & Enforcement

Penalties for missing a surrender deadline must be **real and consistently applied**. Without enforcement, the cap is only a suggestion — entities have no reason to comply.

Credible Offsets & Linking

Offsets and linked systems must represent **real, additional, and verified** emissions reductions — otherwise the ETS is importing weaker climate ambition, not extra abatement.

Thank you!

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