Just Transition: Elements and considerations for Emissions Trading Systems

PMIF Global Knowledge Forum 2022

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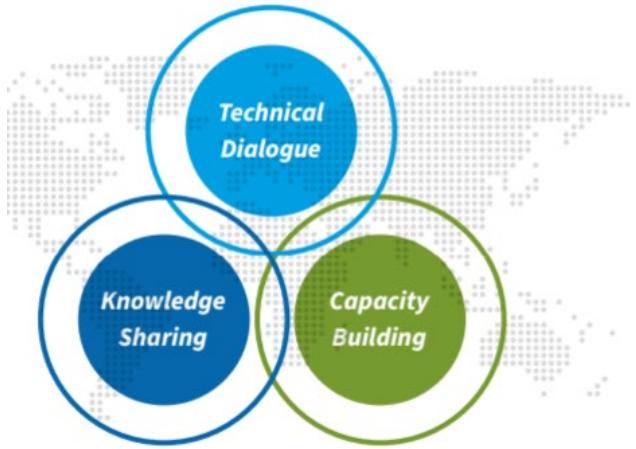
About the International Carbon Action Partnership

An international **forum** of **40 national & subnational** governments to **exchange** knowledge and experiences on emissions trading systems (**ETS**)

- Share **best practice** & learn from each others' experiences
- Facilitate **linking** of carbon markets
- Explore the **role** of carbon pricing in climate policy

ICAP members & observers

Countries	22
Provinces & States	16
Union	1
City	1



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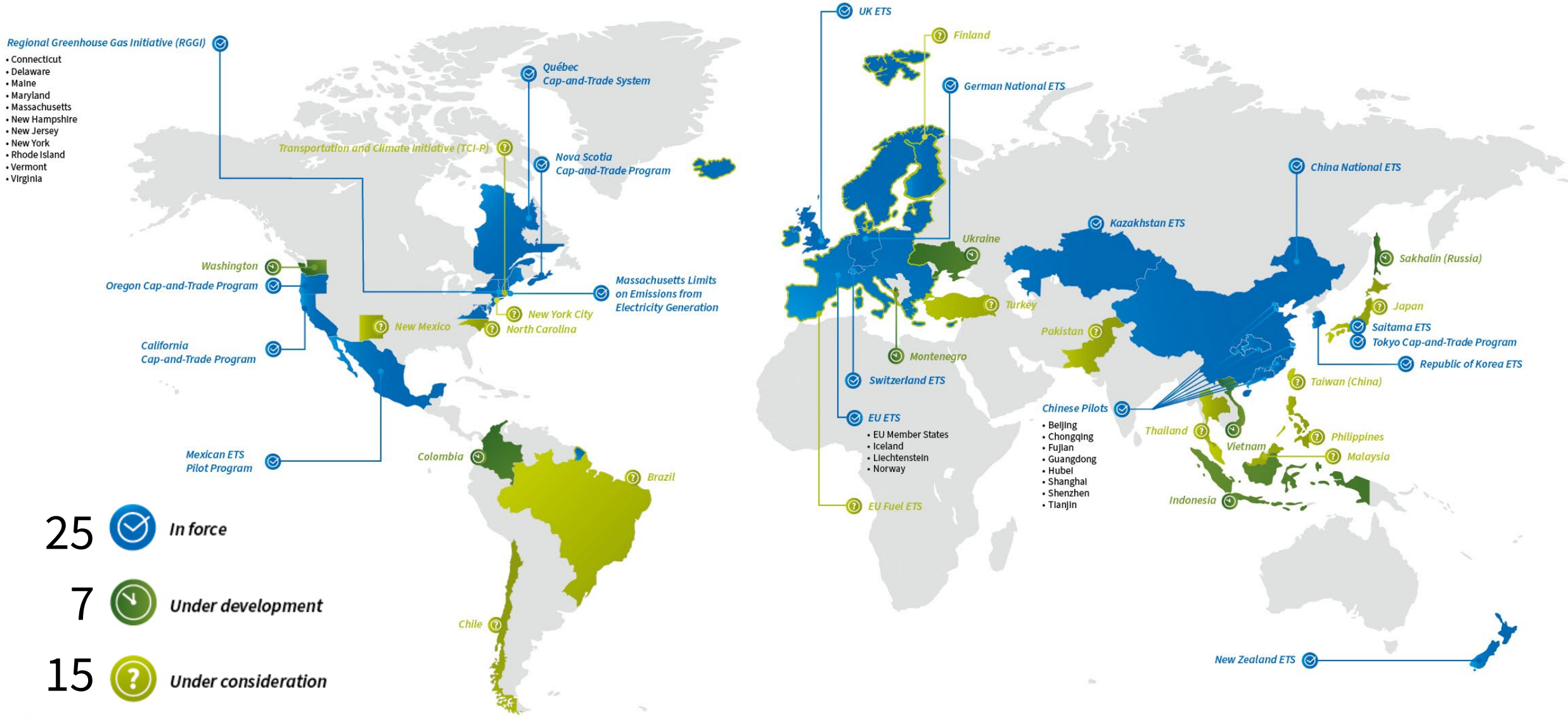
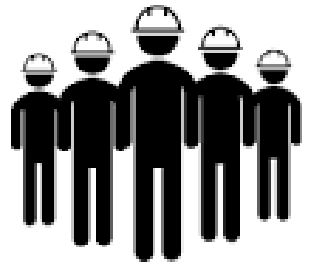
~~Emissions Trading Systems~~ Carbon Pricing and Just Transition

ETS worldwide



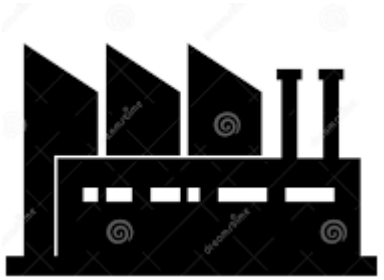
Groups affected by carbon pricing

Additional expenses for energy and fossil intensive products



Economic transition/loss of jobs

Fair distribution of co-benefits



Competitiveness impacts

Source: adelphi

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ETS effects on households

- **ETS entities pass on carbon cost to consumers -> rising prices for energy (and depending on ETS coverage, fuel)**

Effect of higher prices proportional to income

Regressive ⟷ **Progressive**

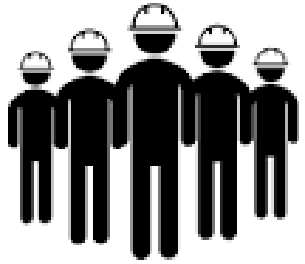
Regressive	Progressive
Poorer households pay proportionaly more than wealthier ones	Poorer households pay proportionately less than wealthier ones

- Depending on policy design and local circumstances, **ETS/carbon pricing can be progressive or regressive**

Source: adelphi

ETS effects on workers

- The desired low-carbon transition through carbon pricing and ETS – as other climate policy – will entail job losses, but also new job profiles and new jobs being created



- Relatively biggest job losses expected for coal mining and refineries (often locally concentrated + many low-skilled, older workers)

- Generally: studies point to net-job-gains (quantitatively + qualitatively) from transition to low-carbon economy

- Carbon revenues can be used for investing in green growth and green industries – but challenge extends beyond the realm of climate policy

Source: adelphi

ETS effect on local communities

- Flexibility of pricing instruments vs. ‘pollution hot spots’ with a high concentration of poor/disadvantaged groups

- Offset programs can amplify these effects

- Entry points:
  - Revenue use
  - Direct regulation complementing CO2 price
  - Limiting offset use

Source: adelphi

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Design considerations for ETS and Just Transition

JT elements for ETS: cap setting

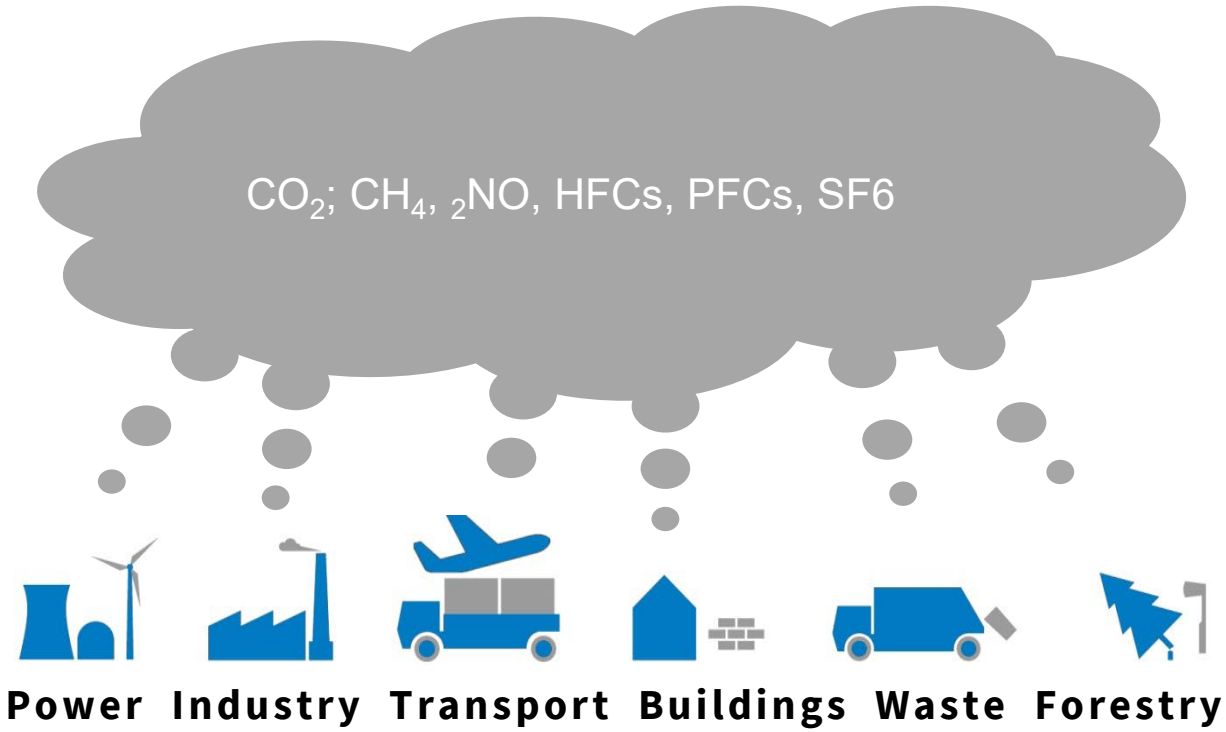
How far and how fast should emissions be reduced?

- Align with national **climate objectives**
- Expectation of mitigation vs. costs: no harm to national **competitiveness** and welfare
- Distribution of **mitigation effort** between sectors inside and outside the ETS

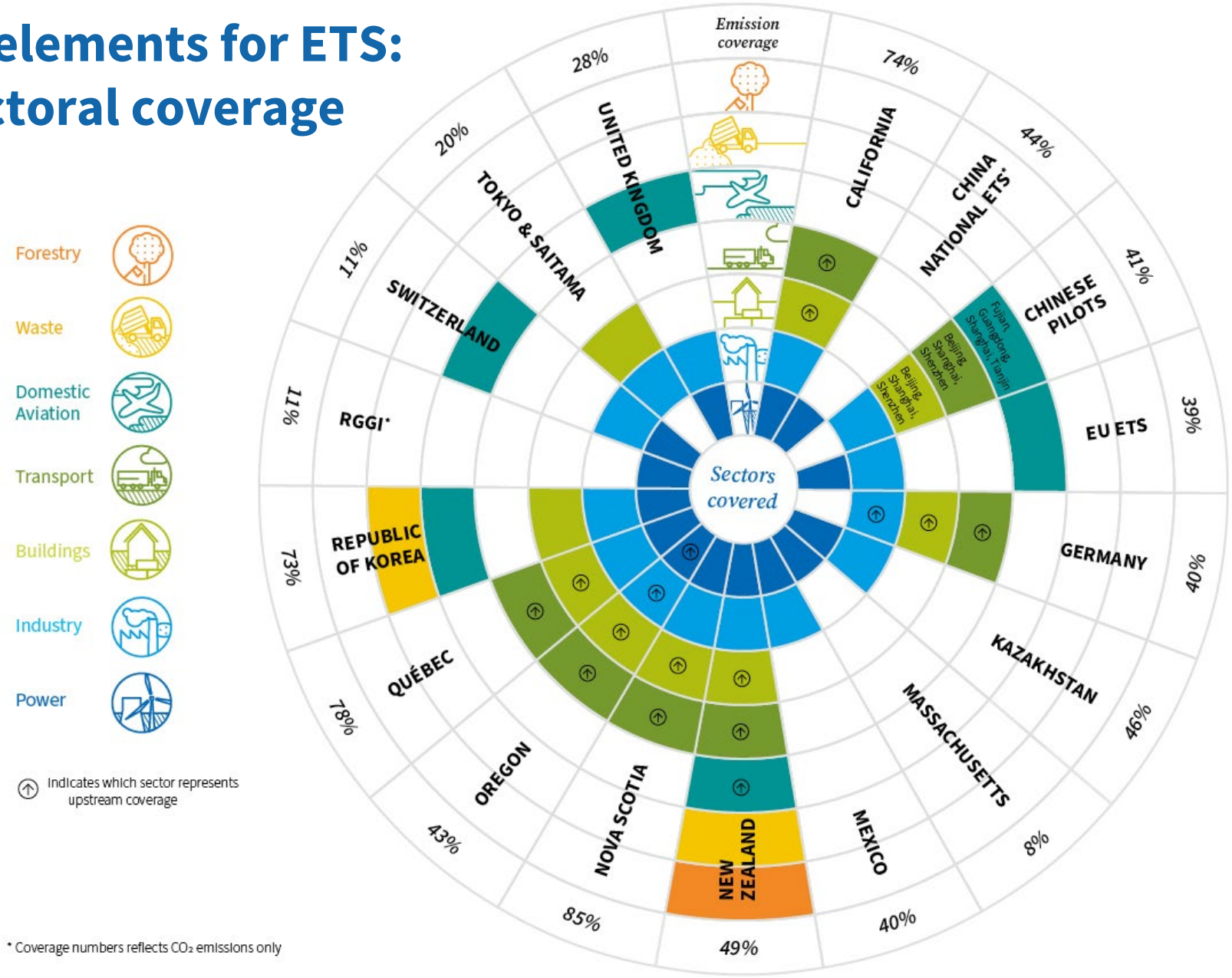
JT elements for ETS: scope and coverage

Defining the scope and coverage of an ETS involves determining:

- **Sectors** to be included
- **Greenhouse** gases to be included
- **Point of Regulation** (upstream or downstream)
- **Size** of facilities and companies (e.g., by capacity or emissions threshold)



JT elements for ETS: Sectoral coverage



* Coverage numbers reflects CO_2 emissions only

Most systems cover emissions from power and industry

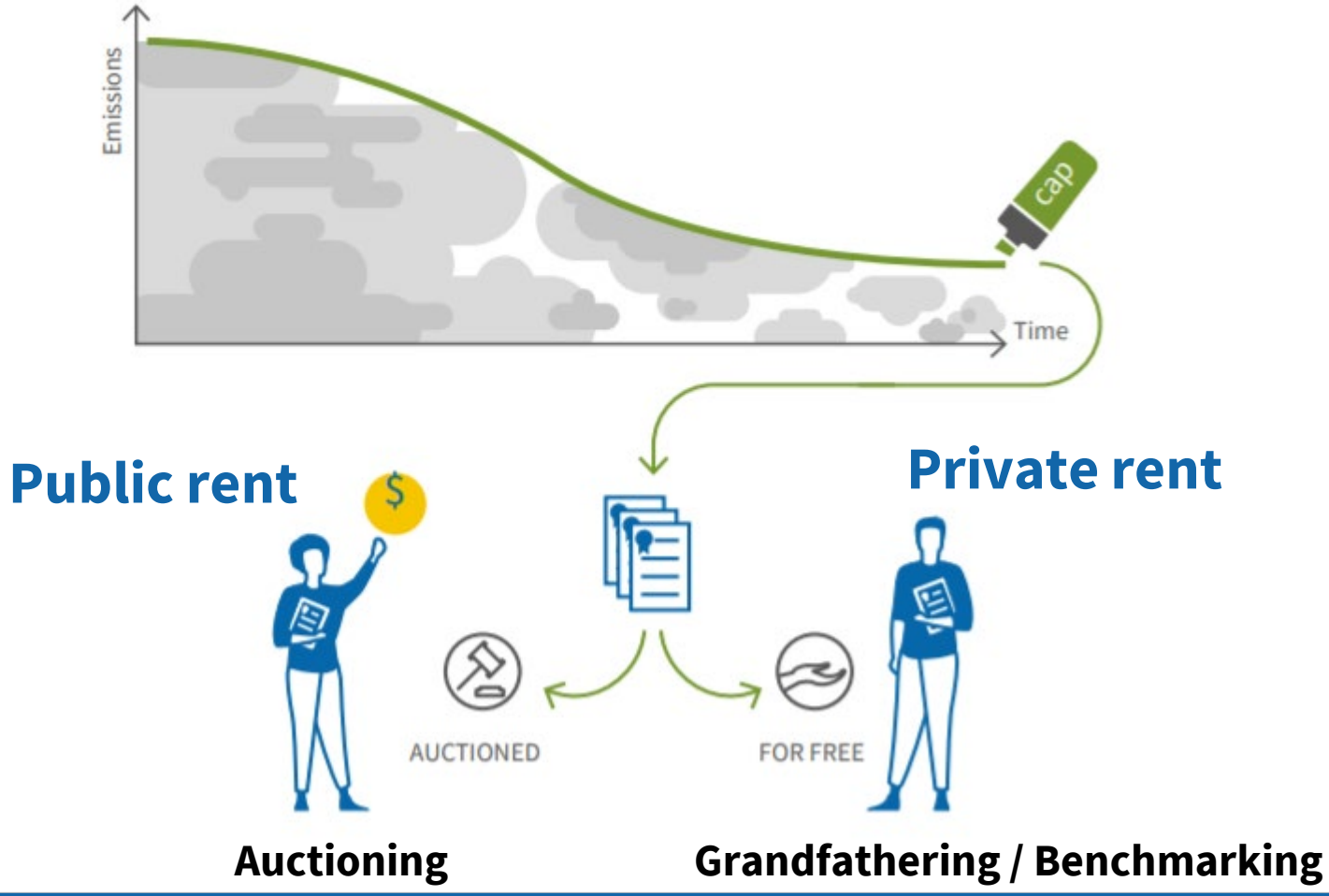
The sectoral coverage of several ETSs expands to other sectors as well

The share of emissions covered and the point of regulation (upstream vs downstream) varies significantly across systems

JT elements for ETS: Allocation of emissions allowances

- How allowances are allocated to covered entities in an ETS determines how the burden of meeting the target is shared across the economy
- The government can distribute allowances through free allocation, auctioning or (most commonly) a combination of the two

ETS creates valuable allowances: **climate rent** …
but who gains that value?



JT elements for ETS: Policy objectives of allocation

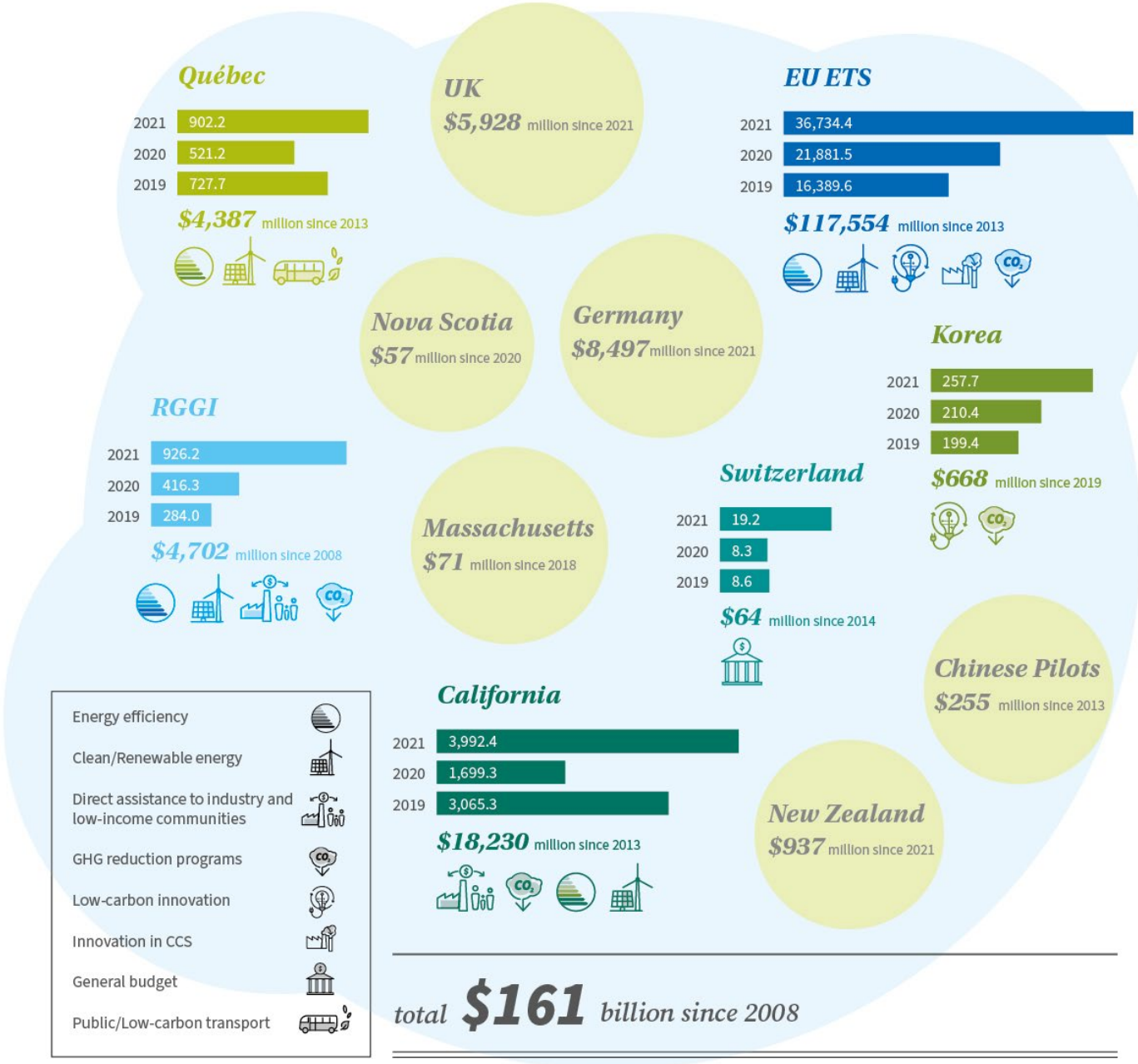
- **Manage the transition to an ETS** – some permits have been allocated freely as a means of compensation
- **Carbon leakage concerns** – free allocation can be used to protect industries exposed to external competition
- **Raising revenue** – auctioning can generate significant public revenues
- **Preserving incentives** – the allocation method can have implications for incentives to reduce emissions.

Auctioning revenues

High carbon prices and new revenue streams in NZ and DE generated record levels of revenues in 2021

In 2021 cumulative auctioning revenues grew by more than 50% year on year, from $103bn to $161bn

Revenues are being reinvested to further climate action or assist industry and consumers

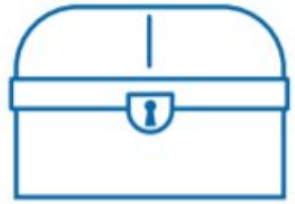


Using auction revenue

Spending depends on the policy objectives of the jurisdiction
Can **build political support** among the public and other constituencies

FINANCIAL ASSISTANCE TO DISADVANTAGED GROUPS
Governments can support low-income house-holds or vulnerable communities to counter rising energy costs and to facilitate the transition to a low-carbon economy.

RGGI, California, Québec



AUCTION PROCEEDS CAN BE USED IN DIFFERENT WAYS:

CONTRIBUTION TO THE PUBLIC BUDGET
Governments can use ETS revenue to reduce taxes, finance other policy priorities or to reduce the budget deficit.

Small % RGGI, California

FUND CLIMATE ACTION
Governments can invest in adaptation, renewable or other low-carbon technology, energy efficiency, clean transport, waste and forestry.

EU, RGGI, California, Québec

Using allowances for just transition

Freely allocated allowances

- Preserving **competitiveness** and avoiding **carbon leakage**
- Free allocation handout as **compensation**
- **Important to distinguish between compensation and leakage protection**

Auctioned allowances

‘Pre-auction’ set-aside:

- Allowances allocated to **funds** (for innovation, modernization, social expenditures etc) and are later monetized and disboursed

- Lump-sum payments
- Reduce cost of electricity
- Lowering other taxes
- Energy efficiency investments
- Workforce trainings

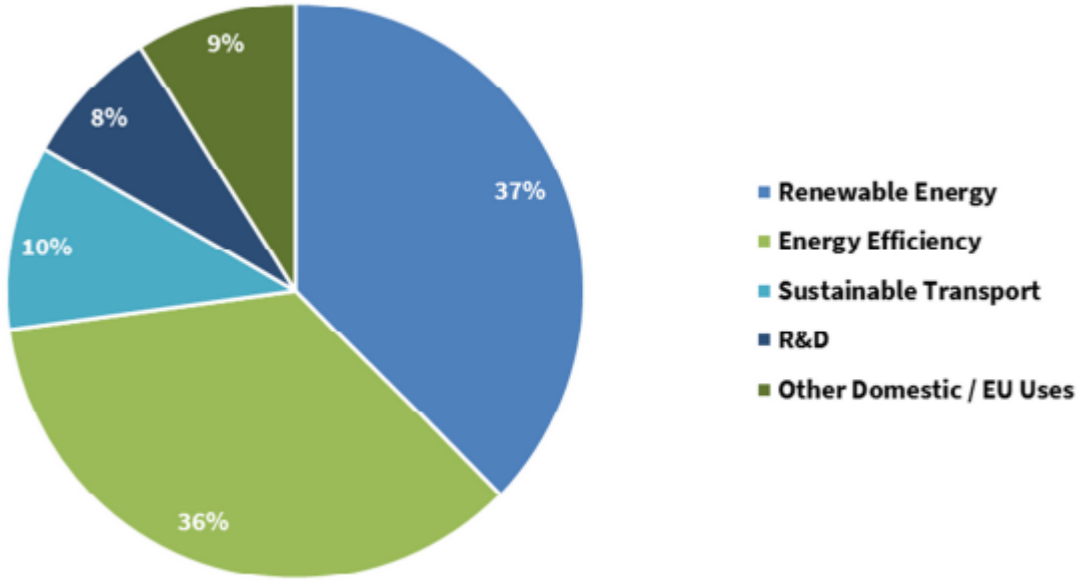
‘Post-auction’ use

- Revenues earmarking and recycling
- Consignment auctions
- Contribution to general budget – tax reform

- Increasing social transfers
- Subsidies and investments in clean energy and mobility
- Funding innovation… etc etc

Some examples: EU auctioning revenues

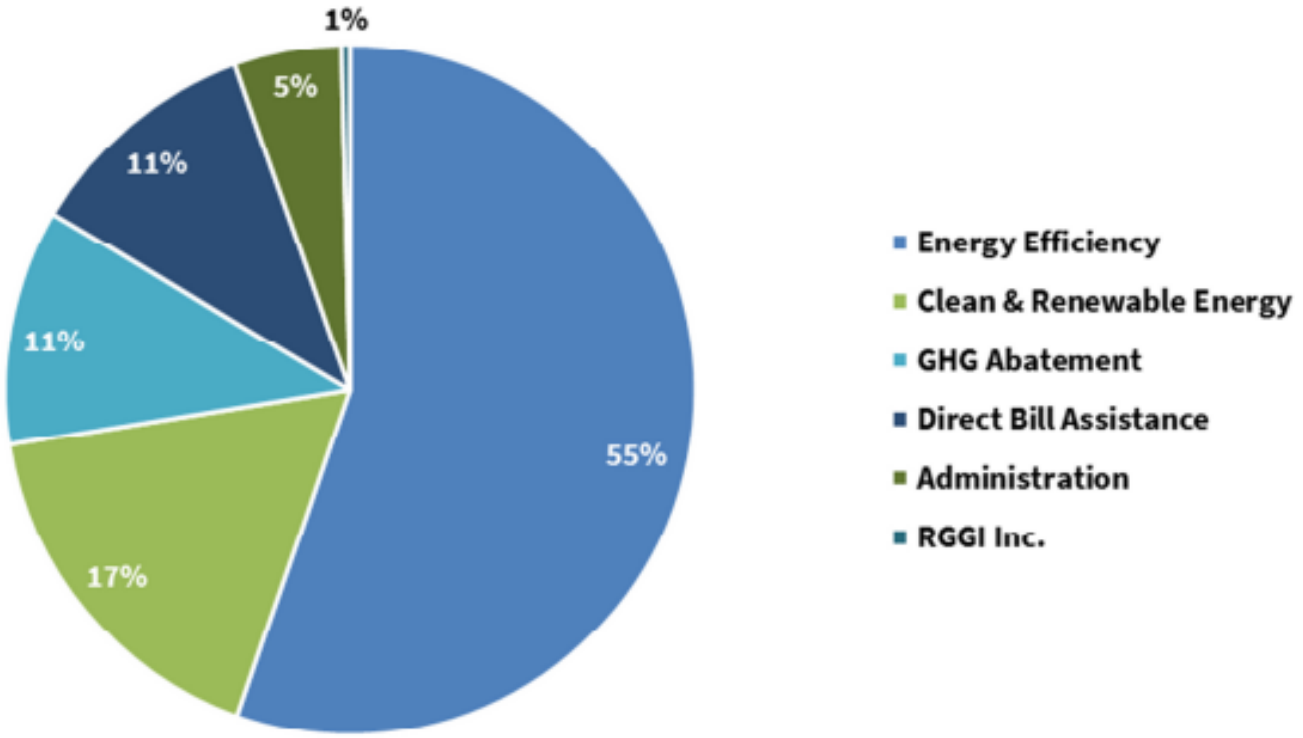
- **Focus on climate funding**
  - Member States decide how to use their auction revenue
  - Min. 50% should go towards climate action
  - World's largest programs for low-carbon innovation: the Innovation and Modernization Funds, which finance low-carbon technology innovation, modernization of energy systems and energy efficiency in 10 lower-income MSs)



Some examples: RGGI auctioning revenues

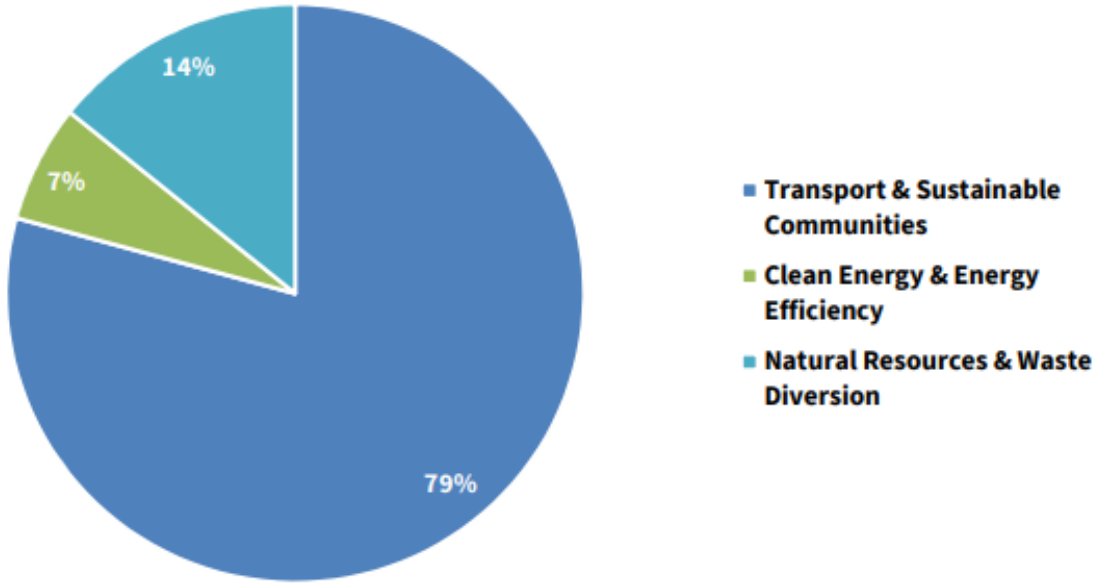
- RGGI considered a “Cap and invest” program – emphasis on investment
- RGGI states decide how they invest RGGI revenues
- Approx. 80% of proceeds have so far been invested in **consumer benefit programs**

*a job-year is one year of full-time employment; jobs such as efficiency audit performers, energy efficiency measures installers or trainers on energy issues



Some examples: California auctioning revenues

- **Most of California's revenue goes to the Greenhouse Gas Reduction Fund (GGRF)**
  - At least 35% must benefit low-income households or communities
  - Projects that reduce GHG emissions
  - Investments through the GGRF are generated through state-owned allowances and referred to as California Climate Investments.
  - Additional revenue from allowances allocated to utilities but auctioned on their behalf must benefit their ratepayers or reduce emissions.



Some concluding considerations

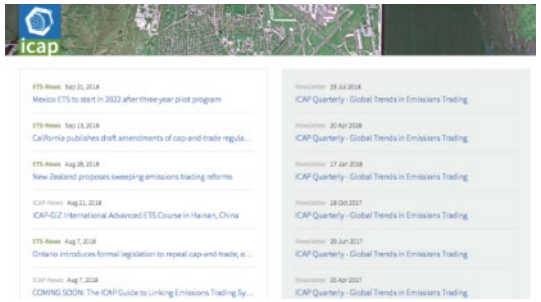
- International experience shows: carbon pricing can gain and maintain public support if it **addresses unintended impacts and communicates this effectively**.
- **Visible recycling of carbon revenues** effectively addresses adverse social impacts.
- Altering the basic design of a carbon market to achieve other objectives risks compromising its effectiveness
- Any measures to address the distributive impacts of the policy should be done in a way that **maintains a clear price signal**, to ensure that the carbon price is able to fulfil its intended role in the climate policy mix
- **Complementary policies** can contribute to cushioning social impacts

ICAP ETS Tools

ICAP new website and map

News

Objective coverage on all regulatory ETS developments as they occur

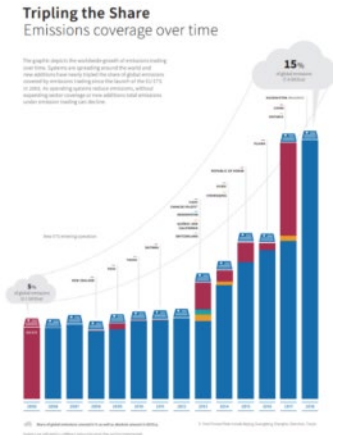


ETS briefs

Introduction of the basics of cap-and-trade

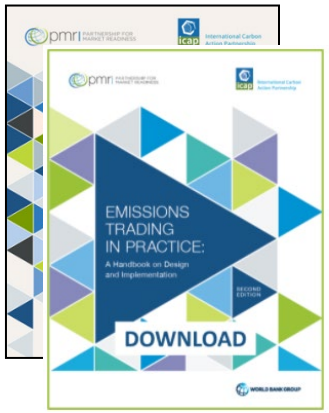
Infographics

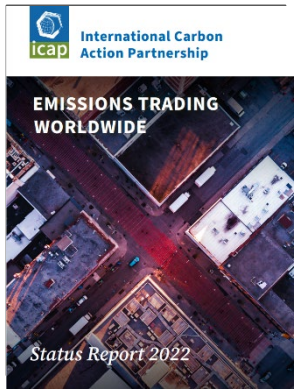
Visualization of key ETS trends



Publications

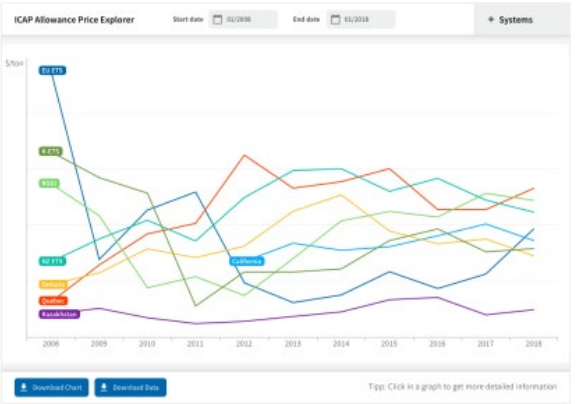
Key reference material on ETS





Allowance Price Explorer

Historical and current carbon prices worldwide



Thank you for your attention!

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