



International Carbon
Action Partnership

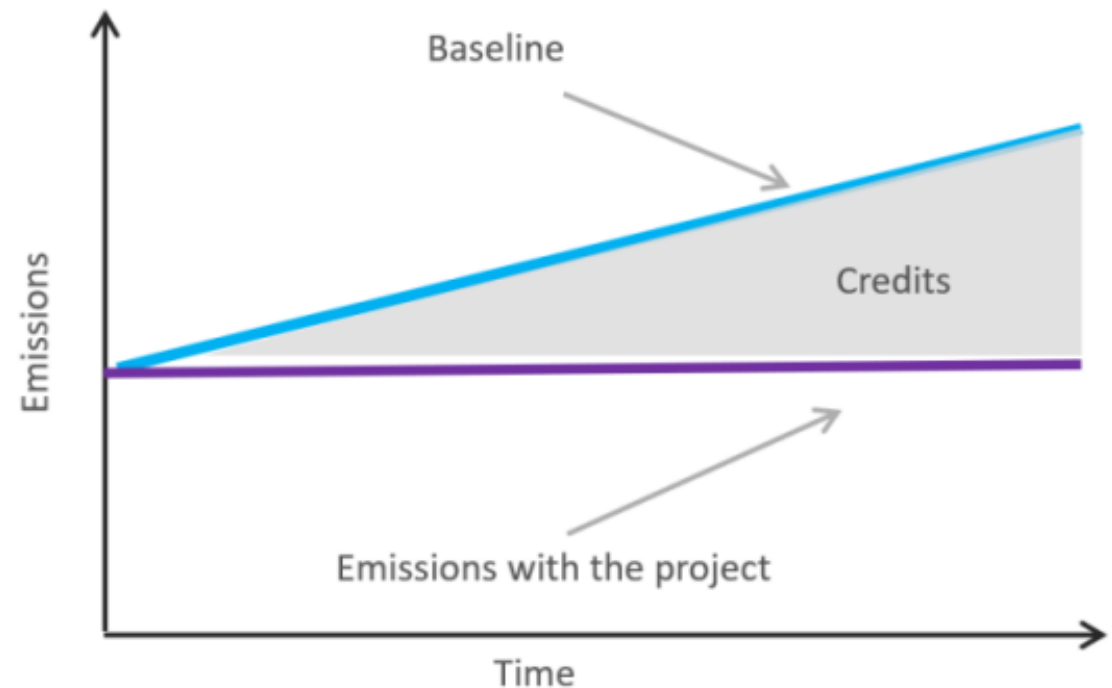
Offset Use Across Emissions Trading Systems

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20 October 2023

What is an offset and how are they generated?

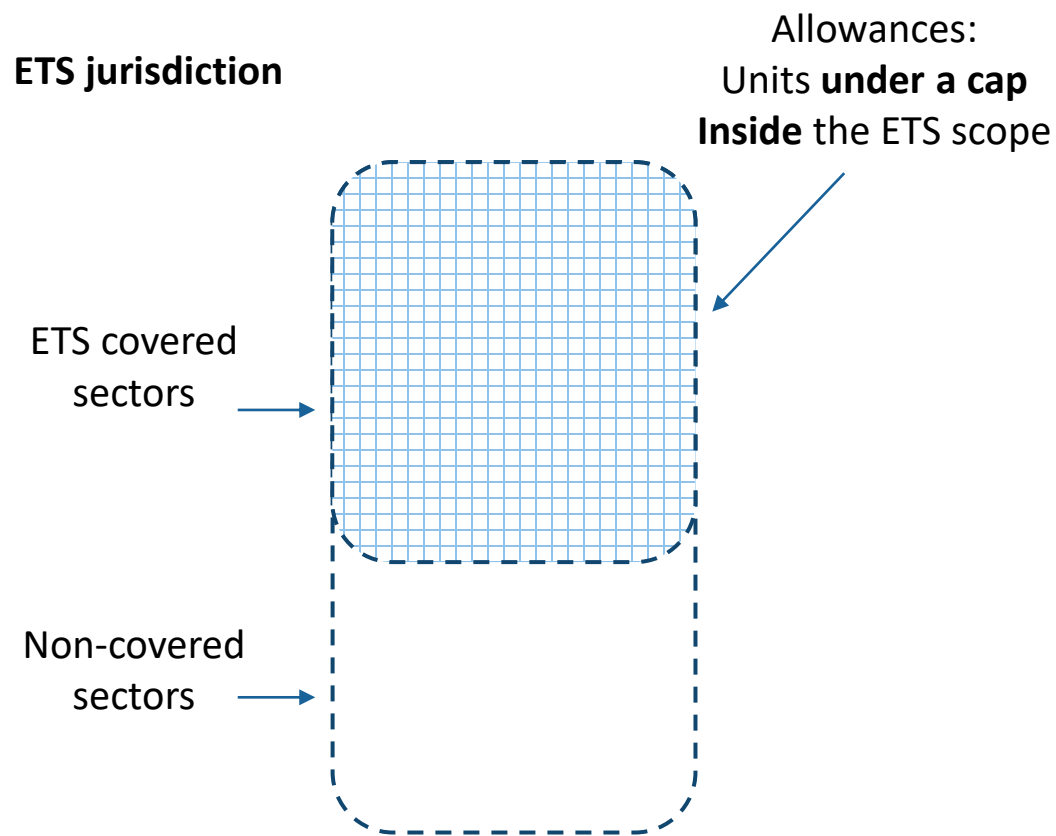
- **An offset represents 1 tCO₂e reduced or removed, compared to a counterfactual scenario**
- **Achieved by implementing emissions reduction projects**
 - E.g., landfill methane capture, afforestation
- **Projects normally take place in activities/sectors outside the scope of an ETS**
- **Generated by crediting mechanisms**
 - “International” (e.g., Verra) or “Domestic” (e.g., CCER)
 - Mechanisms ensure compliance with requirements and issue units



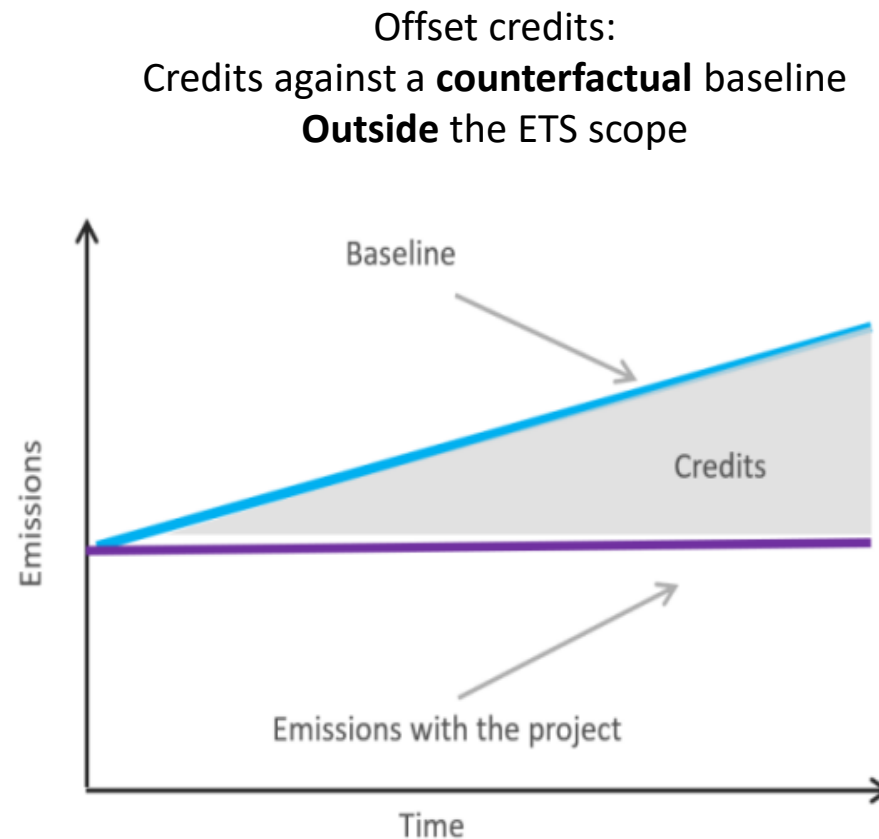
Source: ICAP Offset Use Across ETS (2023)

Difference between allowances and offsets

They are much more different than they appear!



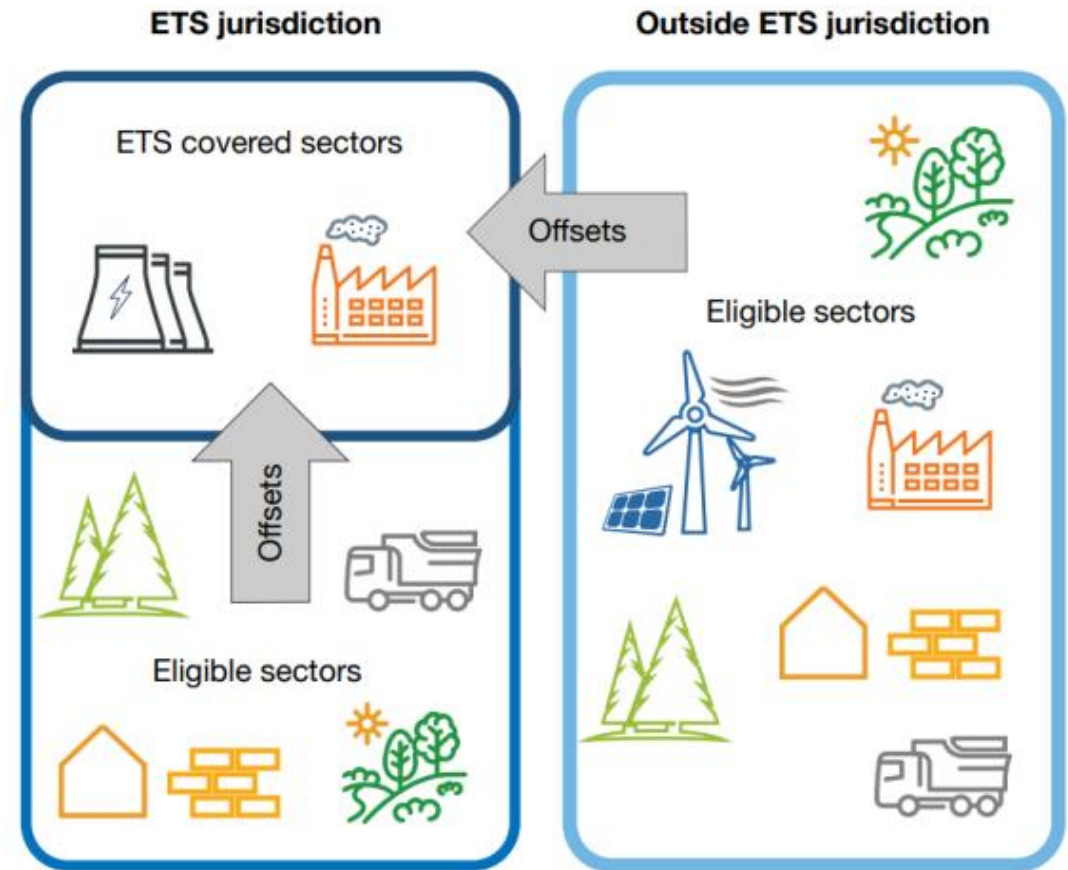
Source: La Hoz Theuer (2018)



Source: ICAP Offset Use Across ETS (2023)

Offsets and ETS: How and why?

- **Regulated entities can surrender an offset instead of ETS allowance**
- **Rationale:**
 - More flexibility for regulated entities
 - Can lower compliance costs (if offsets are cheaper than allowances)
 - Provides incentives for abatement outside of ETS scope
 - Stimulates learning outside the system
- **What's happened in practice**
 - Often qualitative and quantitative restrictions on offset use



Note: Sectors need to be deemed eligible by the ETS jurisdiction.

Source: ICAP & PMR ETS Handbook (2021)

Using offsets

Benefits

- **Cost containment:** Realizing low-cost mitigation opportunities from uncapped sectors
- May allow policy makers to set a **more ambitious cap**
- **Expand abatement incentives and co-benefits** to uncovered sectors
- May facilitate **transition** to market-based mechanisms in uncovered sectors and countries
- **Target** specific policy goals



Using offsets

Challenges

- **Lower allowance prices** and fewer incentives to reduce in covered sectors
- Establishing **additionality**, i.e., if it would not be implemented in the absence of the crediting mechanism, holding all other factors constant
- **High transaction costs**
- **Reversal**: Offset credits from sequestration projects might have a **non-permanent mitigation** effect only
- Shifting activities, market and investment **leakage**
- **Distributional issues**: Offsets imply resource transfers to areas outside the ETS or abroad
- **Subsidy lock-ins**: Offsetting sectors may resist eventual inclusion in ETS

Offset design considerations

Geographic coverage

Domestic system

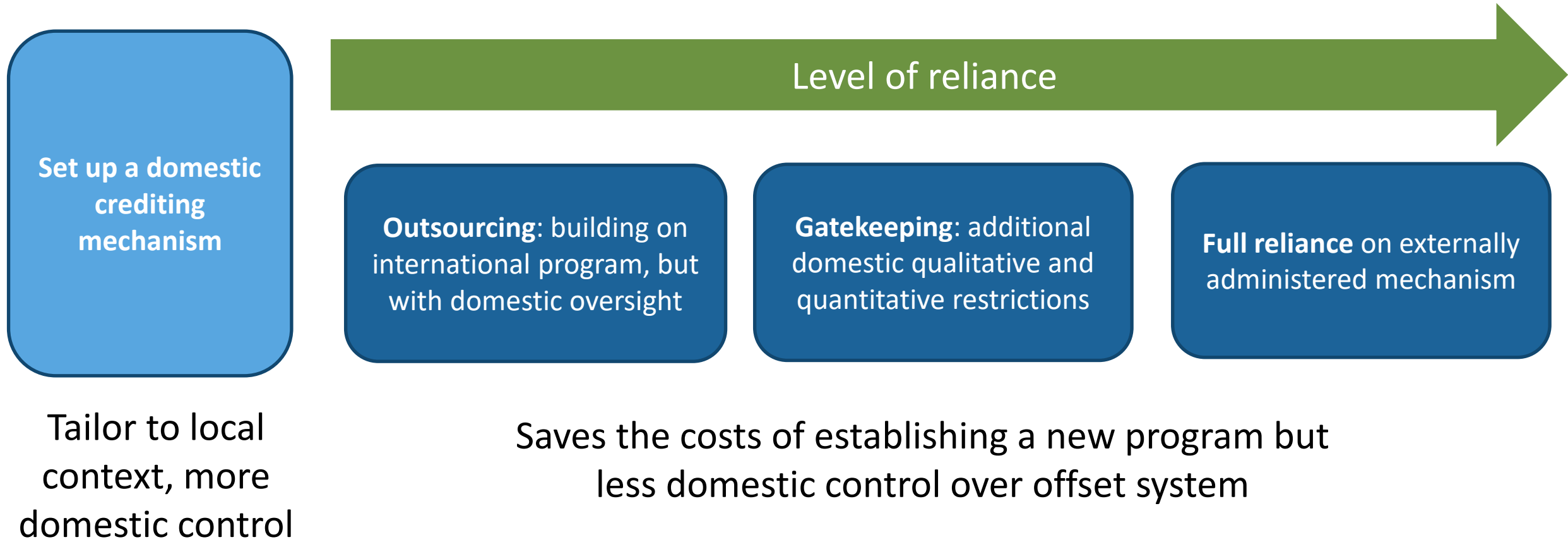
- Attractive where **domestic emissions reductions** are key priority
- Keeps **co-benefits** of mitigation in the jurisdiction
- May **reduce MRV and compliance concerns**

International system

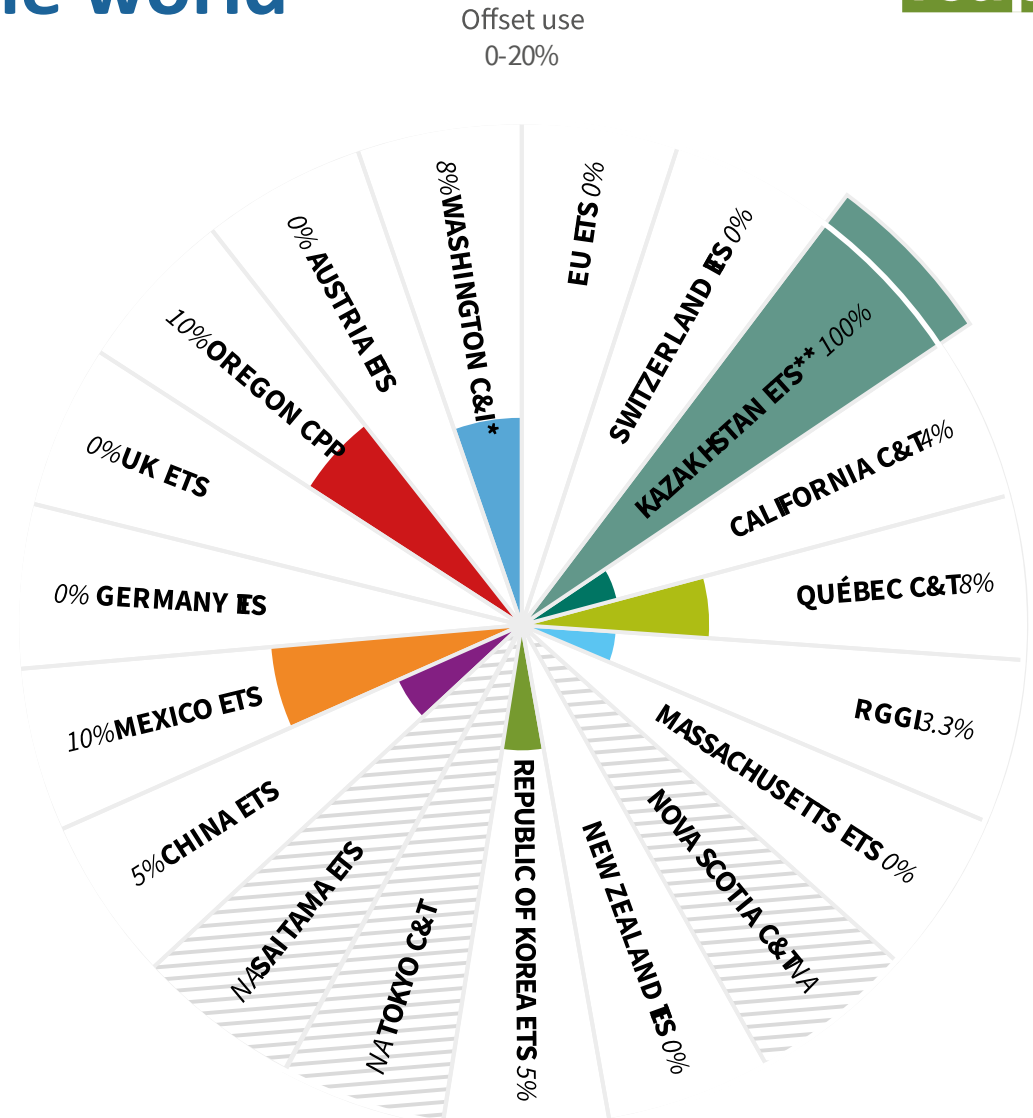
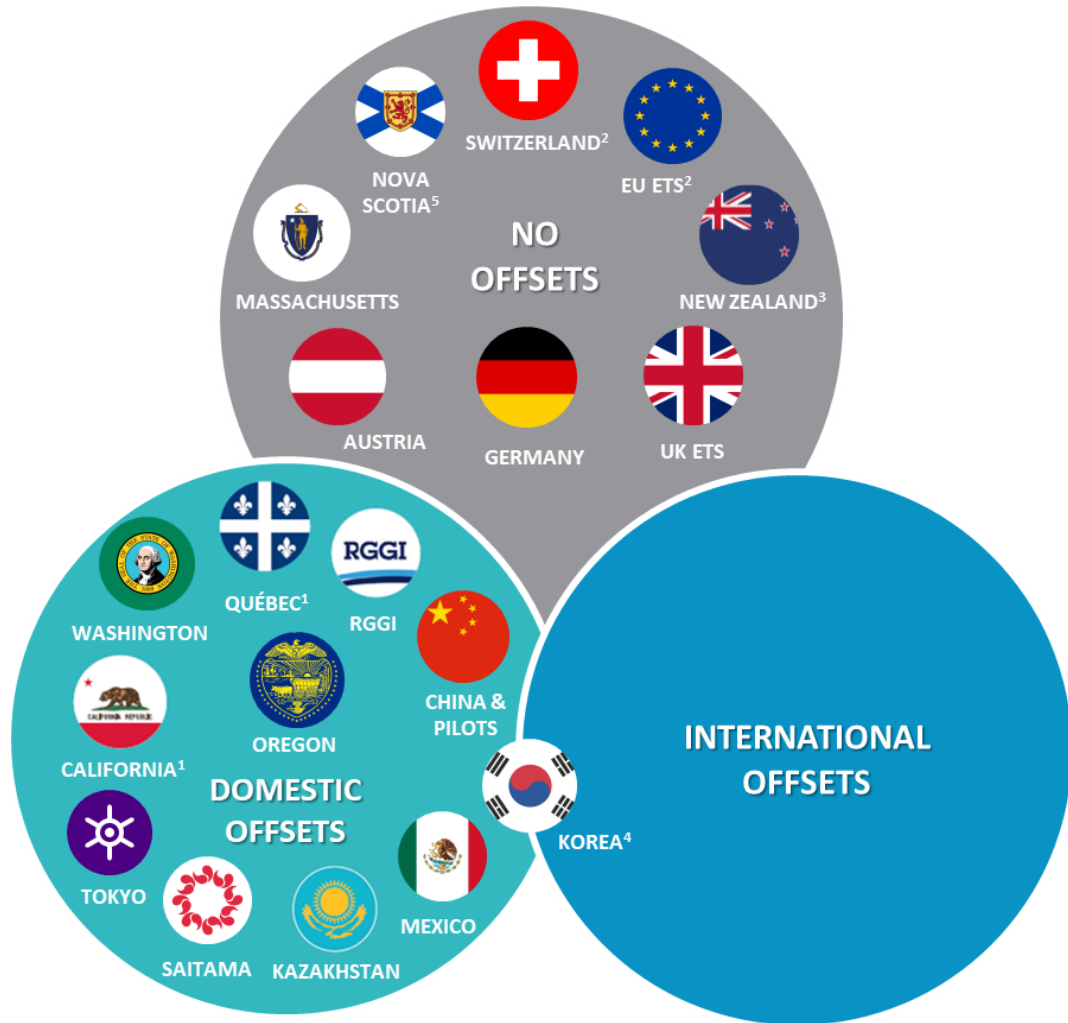
- **Expands supply** and offers more low-cost abatement options
- Aids **international cooperation**, provides carbon finance to specific regions, countries or sectors
- Potentially **greater concerns with ensuring environmental integrity**

Offset design considerations

Option to connect to existing mechanism



Current status of offset use around the world

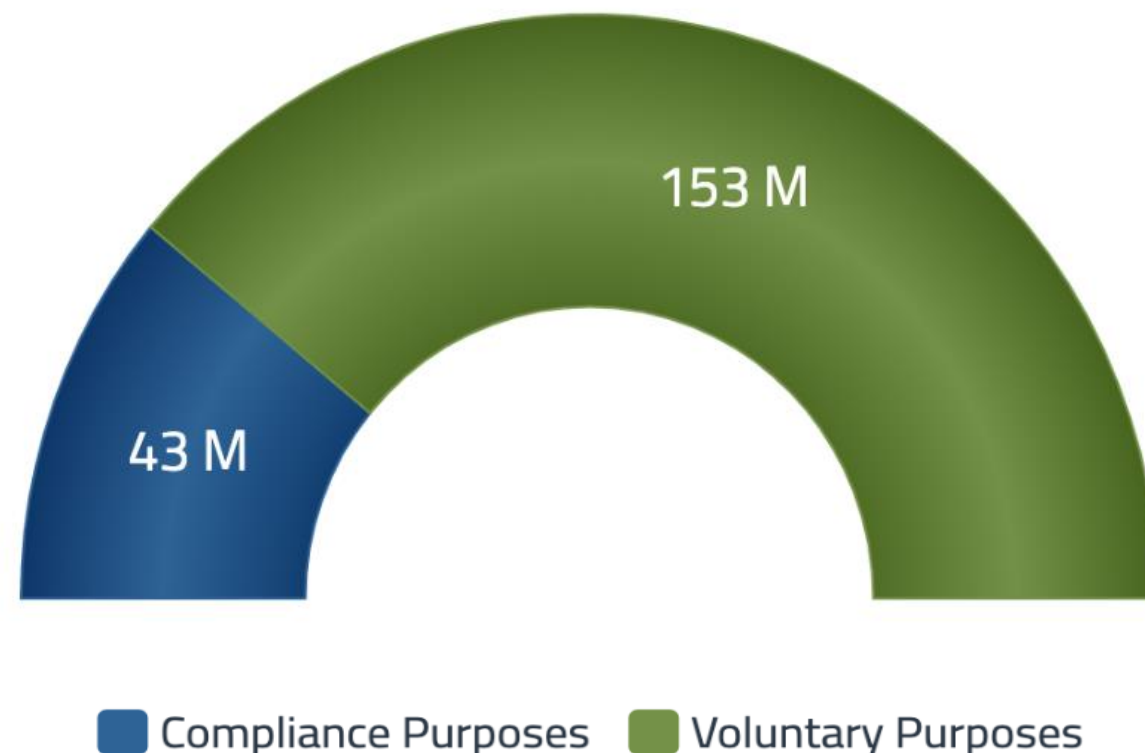


Source: adapted from: ICAP Offset Use Across ETS (2023)

Carbon credits and compliance instruments

- At present, compliance instruments only represent a **small portion of the demand for carbon credits**
- This can change over time: in the past they were virtually the only source of demand (EU ETS and NZ ETS for the CDM)
- Compliance-driven demand is highly fragmented and characterized by low-fungibility
- Different approaches to: geographical/sectoral scope, level of reliance on offsets, use of standards and methodologies for generation.

Retirements of carbon credits in 2022



Source: Own elaboration based on WB State & Trends of carbon pricing (2023)

European Union and New Zealand

Harnessing the potential of the Kyoto Protocol's flexible mechanisms

- **Early years: extensive integration with Kyoto Protocol flexibility mechanisms**
- **Lots of offsets used for compliance; high supply of KP units**
 - But this contributed to declining allowance prices
 - + Impacts of financial crisis
- **Concerns about quality of some offsets**
- **EU: Major restrictions introduced from 2013, significantly curtailing offset eligibility**
- **NZ: Market price for international offsets crashed from late 2012 (drop in demand after financial crisis + higher-than-expected supply volumes of KP units)**
 - No limits, so rush of international offsets to NZ → NZU price crash, halt in domestic abatement activities, buildup of NZUs in circulation
- **Both EU (disallowed 2021) and NZ (disallowed 2015) now exclude offsets entirely**



China and Republic of Korea

Domesticating Kyoto flexibility mechanisms

- **China and South Korea originally involved as CDM host countries**
 - Helped establish experience and capacity for government and in developing carbon offset projects
- **Experience with CDM key to establishing their own crediting mechanisms**
 - Chinese Certified Emission Reductions (CCER) scheme
 - Korean Credit Units (KCU) scheme
- **CCER**
 - 2017: Need to revise “Interim Measures” → suspended CCER
 - Signals that CCER will become operational again
- **KCU**
 - Domestic projects to generate Korean Offset Credits + (some) CDM CERs allowed
 - Domestic and international offsets are converted to KCUs before being used for compliance



Western Climate Initiative and Regional Greenhouse Gas Initiative

Using domestic crediting mechanisms

- **Offsets allowed, though eligibility varies between programs**
- **Systems follow broader guidelines to make offsets comparable and fungible across borders**
- **Administered independently**
- **Environmental integrity approaches:**
 - Québec: environmental integrity account used to replace any offsets deemed illegitimate after issuance
 - California: buyer liability → state can invalidate offsets later determined not to meet the protocol requirements and the entity must substitute it
 - Forest Buffer Account for wildfires/pests



In the works

New offset regulations in existing ETSs / upcoming ETSs with offset provisions

- **Mexico**
 - Flexibility mechanisms including offsets currently under development
- **Colombia**
 - 2018 climate change law includes crediting provisions
 - Offsets used under carbon tax since 2017
 - ETS under development, expected pilot phase in 2024 / full operation in 2025
 - Offset provisions not yet defined
- **Vietnam, Indonesia**
 - Developing a national crediting program



Takeaways

Looking back, looking ahead

- 1. Clear move away from international crediting mechanisms in the last decade**
- 2. International mechanisms have nevertheless played a key role in supporting the growth of domestic mechanisms**
 - E.g., building capacity, developing methodologies
- 3. Where allowed, offset use is carefully regulated by governments**
 - Balance between flexibility for participants and achieving the ETS targets
- 4. Offsets must be of high integrity or risk undermining ETS objectives**
- 5. Offsets look to play a prominent part in the next generation of ETS/CPIs, often countries setting up domestic mechanisms**
- 6. Article 6 and independent standards can offer additional opportunities going forward**

New ICAP publication

- Available on ICAP website
- Overview of offset provisions in several major ETSs around the world
- Provides outlook for offsets in the future

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International Carbon
Action Partnership



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Secretariat of the International Carbon Action Partnership

Thank you



@ICAPSecretariat



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