

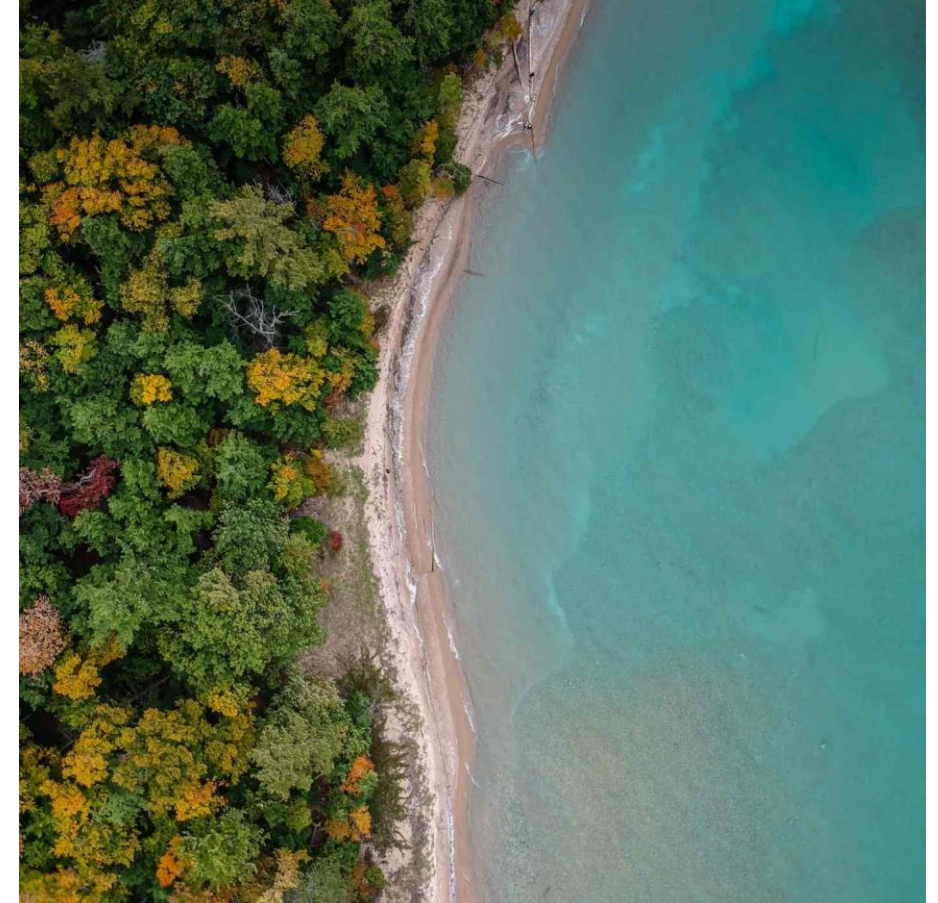
The state of carbon markets and their possible future role in climate mitigation

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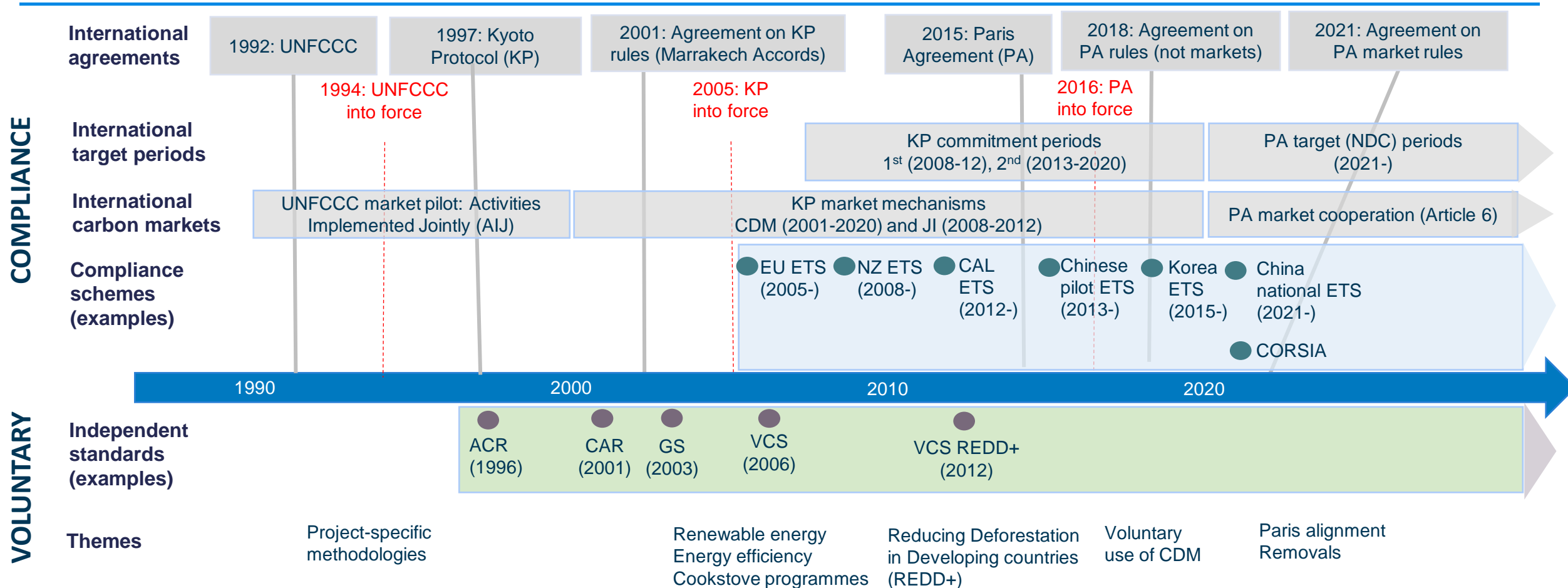
10 March 2022

Agenda

- Brief overview of the carbon markets and new rules for Article 6
- Compliance and voluntary markets interplay
 - Current trends
 - Key challenges in the voluntary market
 - Relevance of Article 6 for the voluntary market
- Outlook



Over 20 years of carbon markets



Source: Perspectives Climate Group

Carbon markets have various roles: search mechanism for policy gaps, testing ground, price discovery, paving way for policy

Key messages from COP26 in Glasgow

- A firm basis for delivering on the Paris Agreement



- Detailed reporting requirements for all and related support
- Robust rules for international carbon markets
- Clear 5-year NDC ambition cycle, more urgency



- Increased climate finance pledges, but low trust in developed countries keeping promises (100 billion), especially given unwillingness to commit on loss and damage



- Increased long term ambition, focus on 1.5°C target



- Unprecedented language on fossil fuels

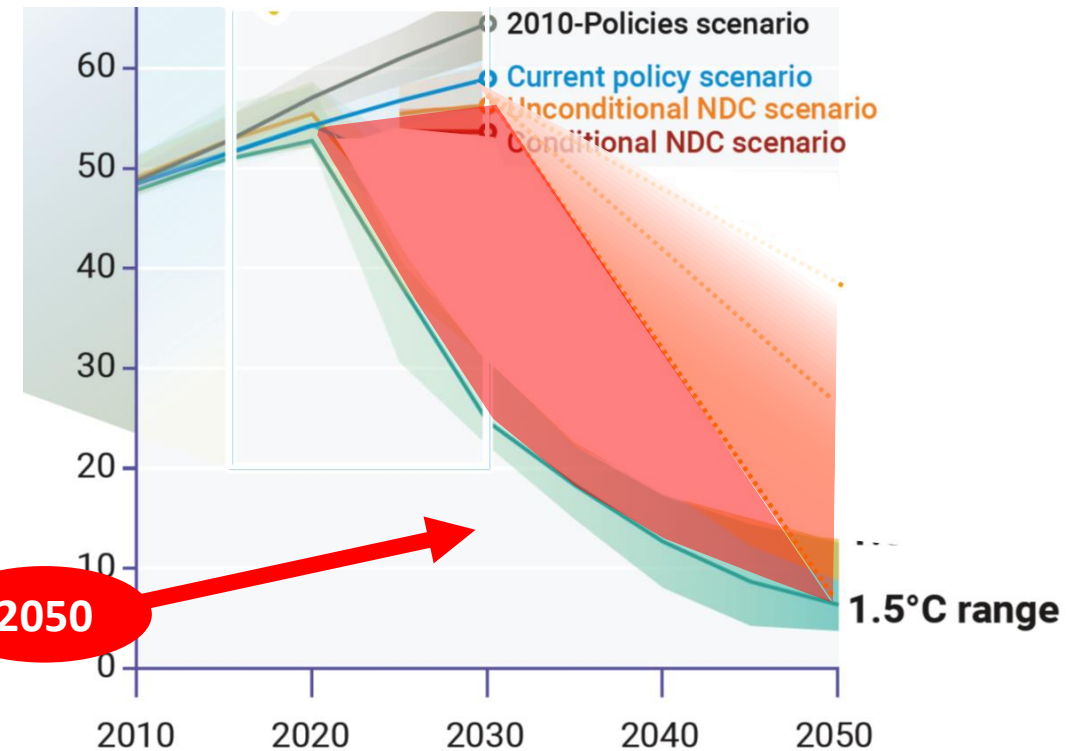
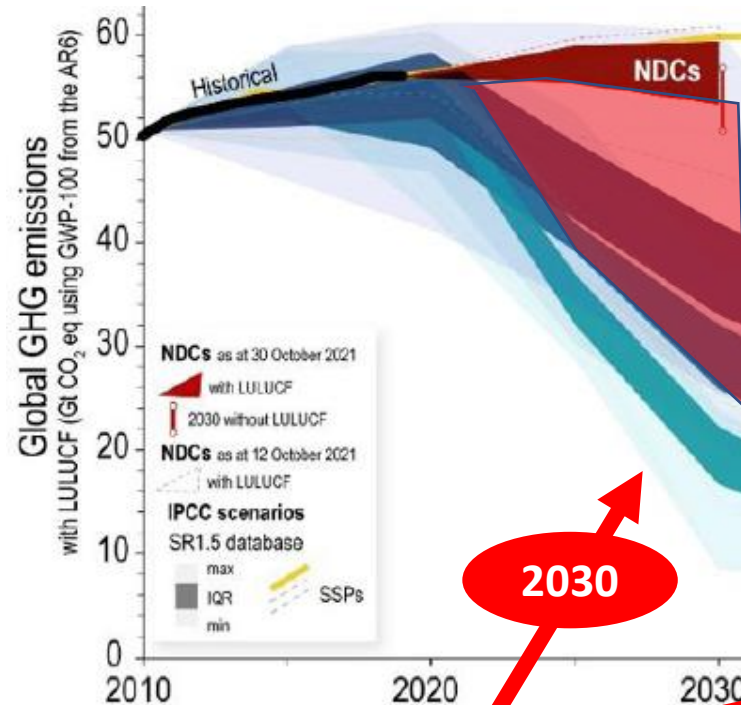


- The short-term emissions gap remains but will get smaller

“Coals, cars, cash and trees.” Boris Johnson



Ambition gap in 2030 and 2050



Ambition gap between countries' mitigation targets and 1.5°C pathway

Adapted from: UNFCCC Secretariat 2021, Climate Action Tracker 2021

Article 6 Rulebook adopted in Glasgow

Art. 6.2 *guidance*

- Cooperative (bilateral or multilateral) approaches generating internationally transferred mitigation outcomes (ITMOs)
 - ETS linking, crediting mechanisms
- How to account for CORSIA or the voluntary carbon market (VCM) with corresponding adjustments (CA)
- What to report internationally to demonstrate compliance with the guidance

Art. 6.4 *rules*

- Multilateral crediting mechanism (A6.4M) that will deliver A6.4ERs
- Successor to the Clean Development Mechanism (CDM)
- Delivery of SOP and OMGE
- Will deliver credits with and without CA

Art. 6.8

- Committee and work programme on non-market approaches

Negotiated since 2016 – agreement **failed twice** at COP24 in Katowice & COP25 in Madrid

- ✓ “Last chance” at COP26, as NDC implementation period started in January 2021.
- ✓ Parties engaged **constructively**, despite pandemic conditions, in innovative virtual formats leading up to COP26

Rulebook enables **rapid implementation** of international carbon markets to achieve NDCs and increase ambition beyond current targets.

- ✓ Challenge is now to implement new rules **without compromising integrity**
- ✓ Comprehensive **capacity building** agreed for developing countries

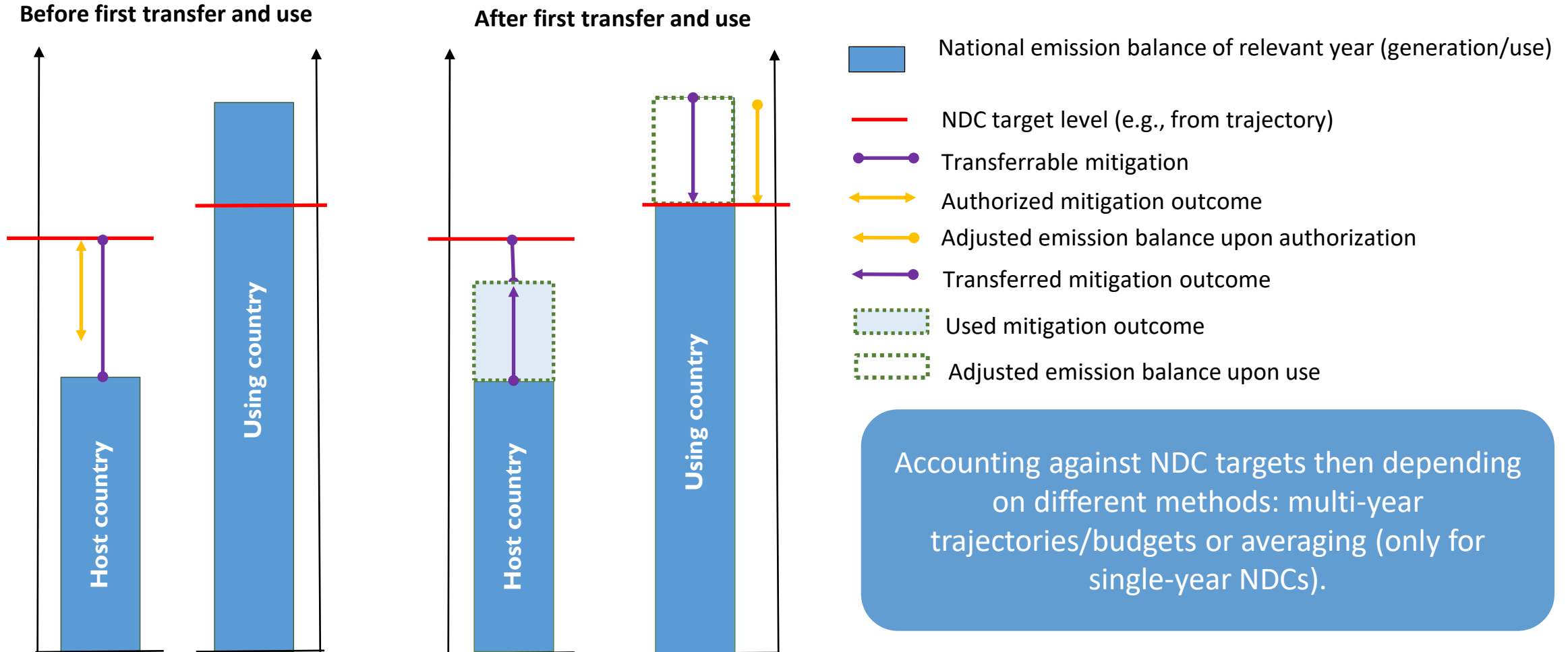
Carbon market rules: Article 6.2

- Rules for voluntary “cooperative approaches” that involve the use of ITMOs
 - Internationally Transferred Mitigation Outcome (ITMO) is defined as, inter alia:
 - ✓ Real, verified and additional emission reductions or removals
 - ✓ Mitigation outcome authorised by a host country for use:
 - 1) towards an **NDC**
 - 2) for **international mitigation purposes** and/or
 - 3) for **other purposes**
- } “Other international mitigation purposes”
- ✓ Article 6.4 emission reductions (A6.4ERs) when authorised for 1), 2) and/or 3)
 - Host country must apply **corresponding adjustments** (CAs) to all ITMOs to avoid double-counting
 - Participating countries must **report** e.g. how they ensure environmental integrity and avoidance of double counting, promote sustainable development, consider obligations on human rights, the rights of indigenous peoples and gender equality... The reporting is subject to a **review**.
 - **Registries** and an **Article 6 database** will be established for recording and tracking ITMOs
 - **No mandatory adaptation finance** and/or an overall mitigation in global emissions

Carbon market rules: Article 6.4

- Rules for a voluntary international baseline-and-credit mechanism (Article 6.4 Mechanism, A6.4M) governed by **Supervisory Body** under the guidance of the Paris Agreement
- Requirements for e.g. mechanism methodologies, local stakeholder consultation, environmental and social safeguards and sustainable development assessment, activity cycle, crediting periods, including to e.g.
 - ✓ ensure environmental integrity (via **additionality**, baselines, monitoring, verification etc.)
 - ✓ address non-permanence, avoid leakage and negative environmental and social impacts
 - ✓ encourage **ambition over time**
 - ✓ **align with host country NDC, long-term strategies and long-term goals** of the Paris Agreement
 - ✓ avoid locking in incompatible levels of emissions, technologies or carbon-intensive practices
- **Mandatory levies for adaptation, administration and overall mitigation in global emissions**
- International mechanism **registry** for issuing, first-transferring and voluntarily cancelling A6.4ERs
- **Transition of CDM activities** (subject to approval and revision) and CDM credits (use for 1st NDCs)
- **Capacity building support programme** for host countries

Corresponding adjustments



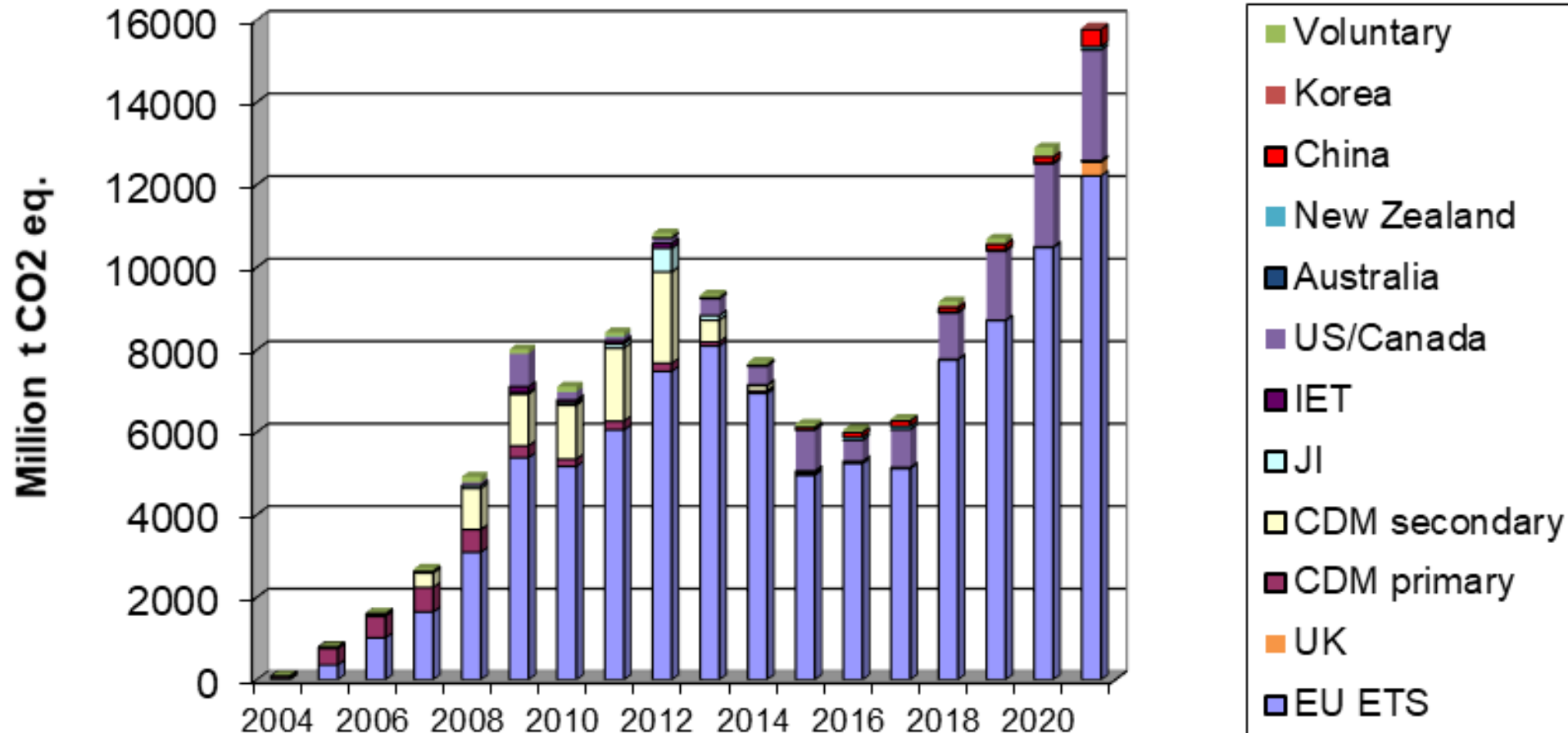
Corresponding adjustments: triggers

- ITMOs are **post-2020** real, verified and additional mitigation outcomes
 - ✓ in tCO₂e in accordance with IPCC guidance
 - ✓ in another metric congruent with NDCs (NDC target indicators)
- ITMOs must be **authorized** by the participating Parties:
 - ✓ Authorization for use towards another Parties' NDC: the requirement to apply corresponding adjustment is **triggered by the first international transfer**
 - ✓ Authorization towards other international mitigation purposes/other purposes: different triggers for corresponding adjustments, depending on host country decision/mechanism: **authorization** (ex-ante), **issuance** (A6.4M, crediting mechanisms), **use or cancellation** (CORSIA)
- A6.4ERs become ITMOs if authorized for NDC or **Other international mitigation purposes or other purposes**

Carbon market rules: CDM transition

- **Rules for transitioning CDM activities and Certified Emission Reductions (CERs) to the Article 6.4 Mechanism**
- **CDM activities may be registered as A6.4M activities if:**
 - Transition is requested by 31.12.2023 and approved by the host country by 31.12.2025
 - The CDM methodology is applied until the end of the crediting period or 31.12.2025 (whichever is earlier)
 - Activities meet A6.4M requirements, including on CAs
- **CERs may be used towards (only) the first NDCs if:**
 - CDM activity was registered on or after 1.1.2013
 - CERs are transferred to the mechanism registry and identified as pre-2021 units
 - Note: CERs are not subject to CAs (because they are pre-2021 units)
- **Perspectives Climate Group estimates that, of the 128 million CERs issued for these CDM activities, 115 million CERs remain unused. The total potential of pre-2020 CERs from CDM activities projects since 2013 is estimated at 340 million CERs.**
- **Demand for these CERs is unclear. Signatories of the [San Jose Principles](#), including potential key buyers such as Switzerland, Norway and New Zealand, have committed to not using pre-2021 units towards their NDCs.**

Carbon markets at a historical high



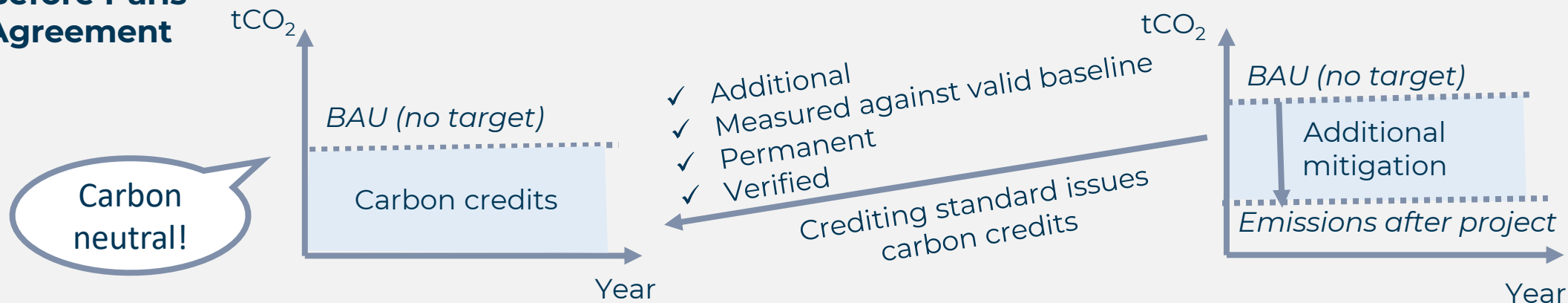
Source: Perspectives Climate Group

Hot topics in the carbon market

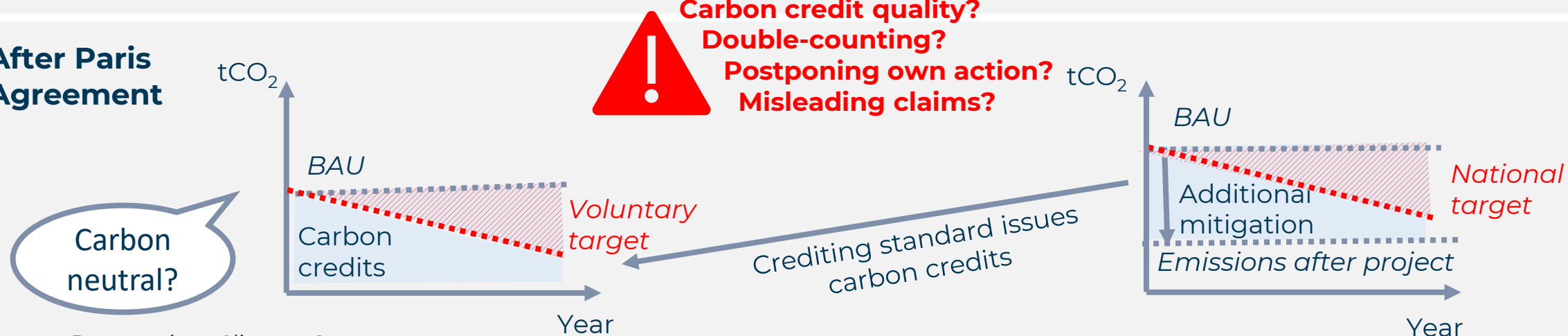
Carbon credit buyer

Carbon credit host country

Before Paris Agreement



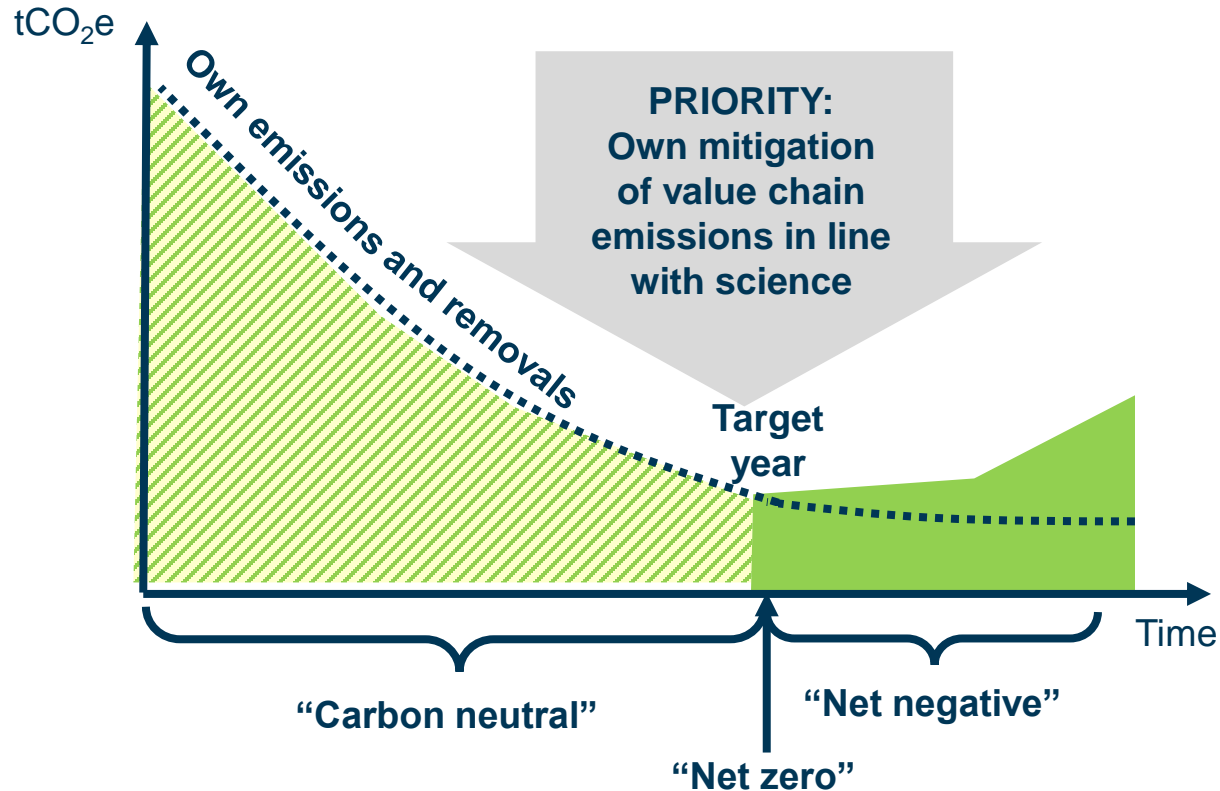
After Paris Agreement



Source: Perspectives Climate Group

BAU = Business-as-usual

Rise in corporate climate targets...



COMPLEMENTARY ACTION OUTSIDE VALUE CHAIN



Carbon credits based on emission reductions



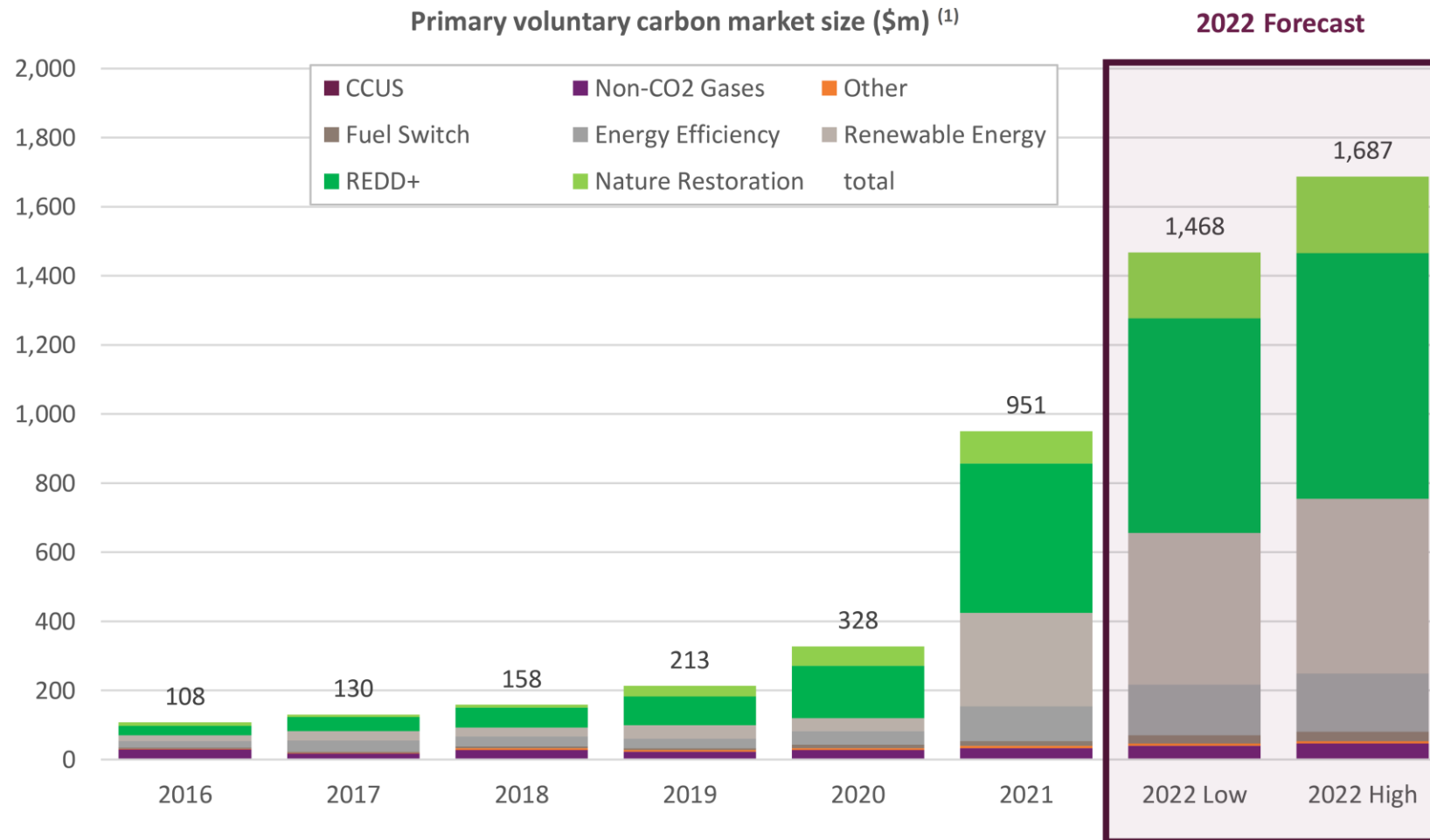
Carbon credits based on carbon removals

Offsetting: counterbalancing own emissions
(and making carbon neutrality claims)

Non-offsetting: supporting climate action (and making
contribution claims) without counterbalancing own emissions

Source: Perspectives Climate Group

...drives record-breaking VCM demand



In 2021, almost 300 Mt of carbon credits were purchased

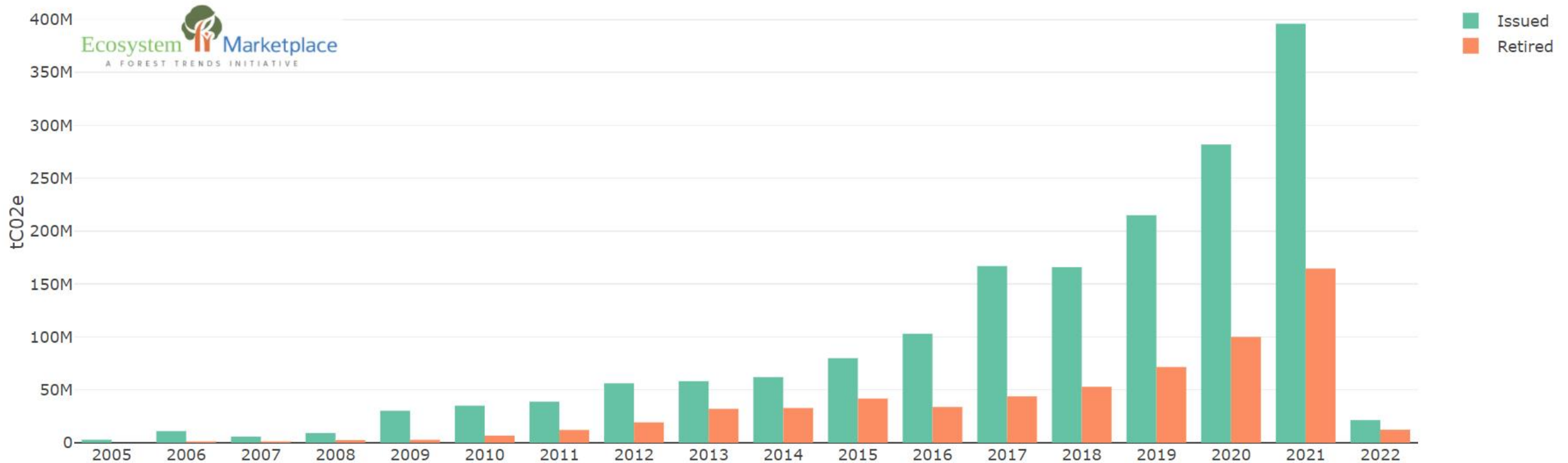
Average price:
2021: approx. 3 EUR/t
2020: approx. 2 EUR/t

Prices vary significantly based on
e.g. activity type, vintage, co-benefits
from <1 to 100+ EUR

Future prices will be much higher
as low-cost action is needed
for national targets

Source: Trove Intelligence (2022): Voluntary Carbon Market 2021 in Review and 2022 Outlook

...in a currently oversupplied market



Carbon Credit Issuances & Retirements (Independent & Compliance Standards) by Year, 2004 to date. Credit issuances and retirements reported by the American Carbon Registry (ACR), ART TREES, the Climate Action Reserve (CAR), California Air Resources Board (CARB), CDM (for credits issued after 2016), City Forest Credits, Climate Forward, Coalition for Rainforest Nations, EcoRegistry, Global Carbon Council, Gold Standard, Plan Vivo, ProClima, and Verified Carbon Standard (VCS).

Source: <https://data.ecosystemmarketplace.com/>

...that many initiatives aim to address

- **Science-based targets:** Science-Based Targets initiative (SBTi)
- **Carbon credit quality:** Carbon Credit Quality Initiative (CCQI)
- **Market integrity:** Integrity Council for the Voluntary Carbon Markets (IC-VCM)
- **High-integrity claims:** Voluntary Carbon Market Integrity Initiative (VCMI)
- **Carbon neutrality:** ISO
- **Best practices:** Nordic Dialogue on Voluntary Compensation
- **National guidance:** National regulation of voluntary markets & claims



Art. 6.2 – implications for voluntary markets

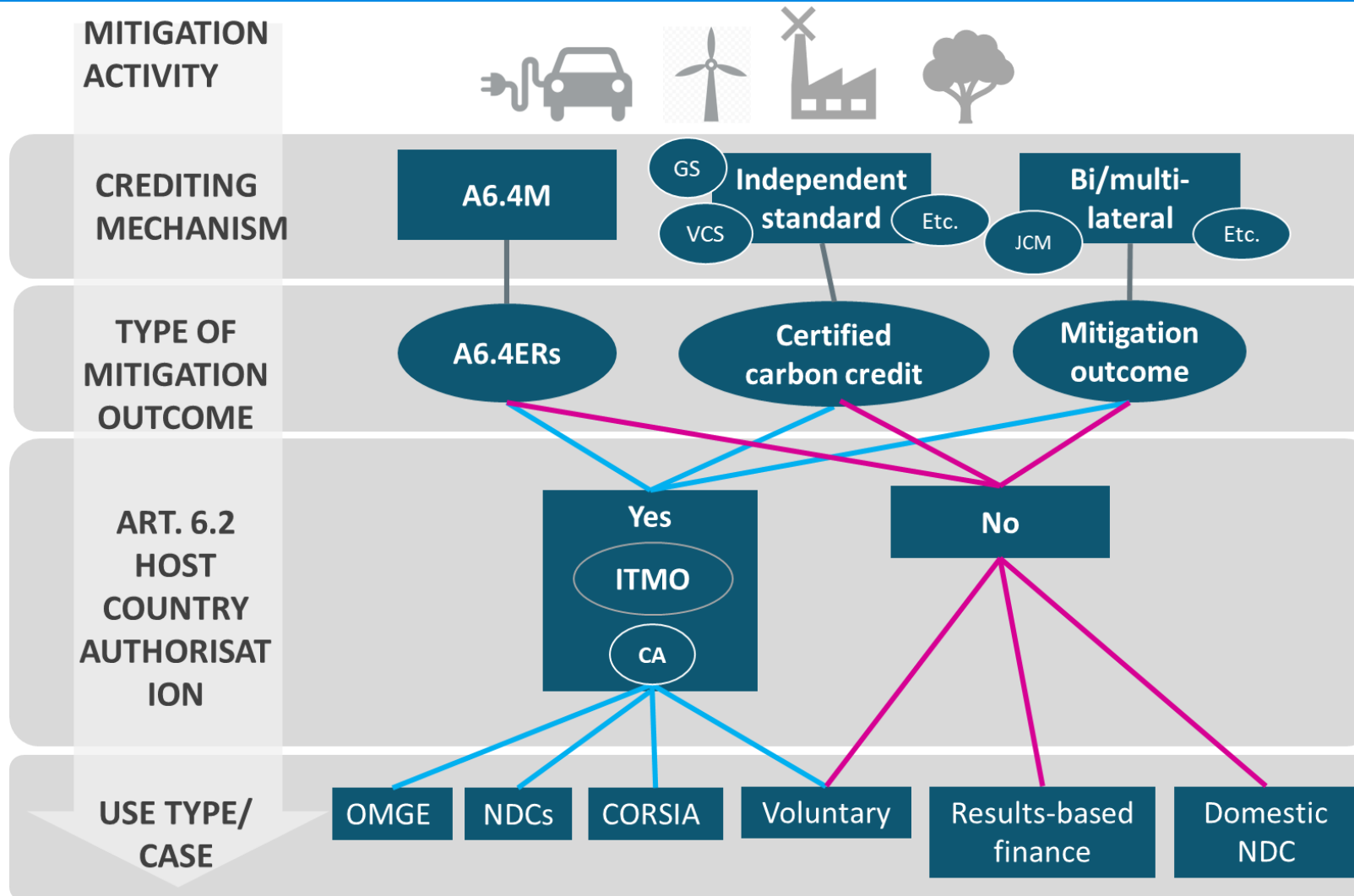
- Article 6 rules set the standard also for **high-integrity voluntary carbon markets (VCM)**, but do not directly regulate the voluntary use of carbon credits or related claims
- Article 6.2 procedure for **avoiding double counting via corresponding adjustments** is available for voluntary carbon market actors
 - ✓ Article 6.2 rules enable – but do not require – seeking an **authorisation and corresponding adjustment** for mitigation outcomes for purposes other than towards NDCs (including voluntary offsetting)
 - ✓ Note that “**other international mitigation purposes**” include also “**other purposes**” that are **determined by the host country** and are not necessarily international (they could include domestic voluntary offsetting use)

Art. 6.4 – implications for voluntary markets

- Article 6.4 Mechanism is available for voluntary carbon market actors
 - ✓ Host countries can authorise private entities to act as activity participants
 - ✓ Activity participants can request the issuance, transfer and voluntary cancellation of 6.4ERs
 - ✓ Only 6.4ERs with corresponding adjustments (CAs) can be used towards NDCs or international mitigation purposes (e.g. CORSIA compliance)
 - ✓ 6.4ERs with CAs can also be used towards voluntary offsetting
 - ✓ To get a CA, 6.4ERs need host country authorisation for NDC use or other international mitigation purposes
 - ✓ The CA is implemented in line with Article 6.2 rules

There is wide agreement that mitigation outcomes with CA are legitimate for voluntary offsetting. The legitimacy of mitigation outcomes without CAs for offsetting remains under debate.

Voluntary markets and use cases



Authorisation as per Article 6 rules includes responsibility of governments to ensure (and report on) Article 6 quality criteria

Source: Perspectives Climate Group

Carbon markets – future outlook

- Traded volumes and prices in the carbon markets are increasing steadily over the past five years , mostly in domestic emission trading schemes
- Stringent rules for Article 6 are an excellent basis for a truly global carbon market
- The VCM is increasing its importance: 300 MtCO₂ for a value of 1 billion USD in 2021.
 - ✓ The market is in good health but suffers from quality problems. Article 6 with corresponding adjustments could be the solution!
- The COVID-19 pandemic or the Ukraine war are challenges, the former has been weathered, the latter is currently having significant impacts on the markets. Forces calling for reducing ambitious climate policies will emerge but must be countered:
 - ✓ Confindustria calls for an interruption of the EU ETS, as well as revision of the “fit for 55” package. Effective policies in tackling emissions should be defended – No short term solutions only!
 - ✓ Bring the clock back to the early 2000s is not an option. Resorting to coal is not a solution, this is the time to really accelerate phasing out of fossil fuels and to radically rethink the energy systems.
- The decisions taken now will shape the emission trends for the next years and will be decisive for the achievement of the the 1.5 ° targets!

Thank you for your attention!

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