

Presentation on the report:

Swedish participation in the
voluntary carbon market
Guidance for potential buyers and sellers

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Topics

- Summary
- Background
- Key terms and guidance
- Role of Article 6
- European context
- Managing risks
- Looking forward
- Q&A and discussion



Summary

Opportunities of voluntary carbon market participation

Carbon credits are a tool for financing mitigation activities through payments for verified and additional emission reductions and removals

- Activity developers can **sell** carbon credits to **earn revenue**
- Non-state actors can **buy** carbon credits to **take responsibility** for their emissions and **contribute to global/national mitigation efforts**
- Governments and private initiatives can provide **frameworks for credits and claims**

Challenges of voluntary carbon market participation

Universal rules and definitions for credits and claims are lacking and existing guidance and regulation include gaps and contradictions

- This creates uncertainties, confusion, mistrust and risks

Sellers and buyers need to understand key terms and guidance

- Various options exist for carbon credit generation, voluntary use and claims
- Gaps and inconsistencies in key terms and guidance create risks

Paris Agreement's Article 6 can (but does not have to be) used for voluntary purposes

- Article 6.2 rules enable credits to avoid double claiming with national targets (ITMOs)
- Paris Agreement Crediting Mechanism certifies and issues credits that meet UN criteria

Policy context sets boundaries for voluntary carbon market participation

- Claims based on carbon credits must comply with local anti-greenwashing law
- EU law is relevant e.g. for claims, certification, reporting and Article 6 within the EU

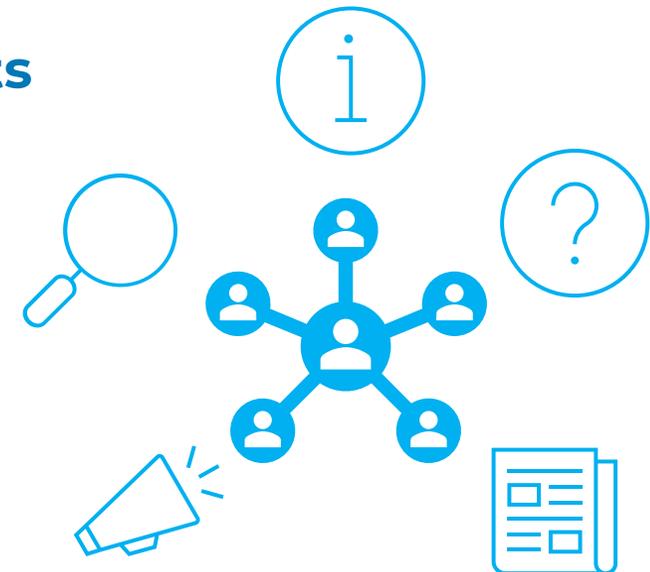
Key messages (2/2)

Risks cannot be avoided but they can be mitigated and managed

- At minimum: Use reputable crediting programmes and comply with legislation
- Recommendation: Follow good practices to mitigate risks further

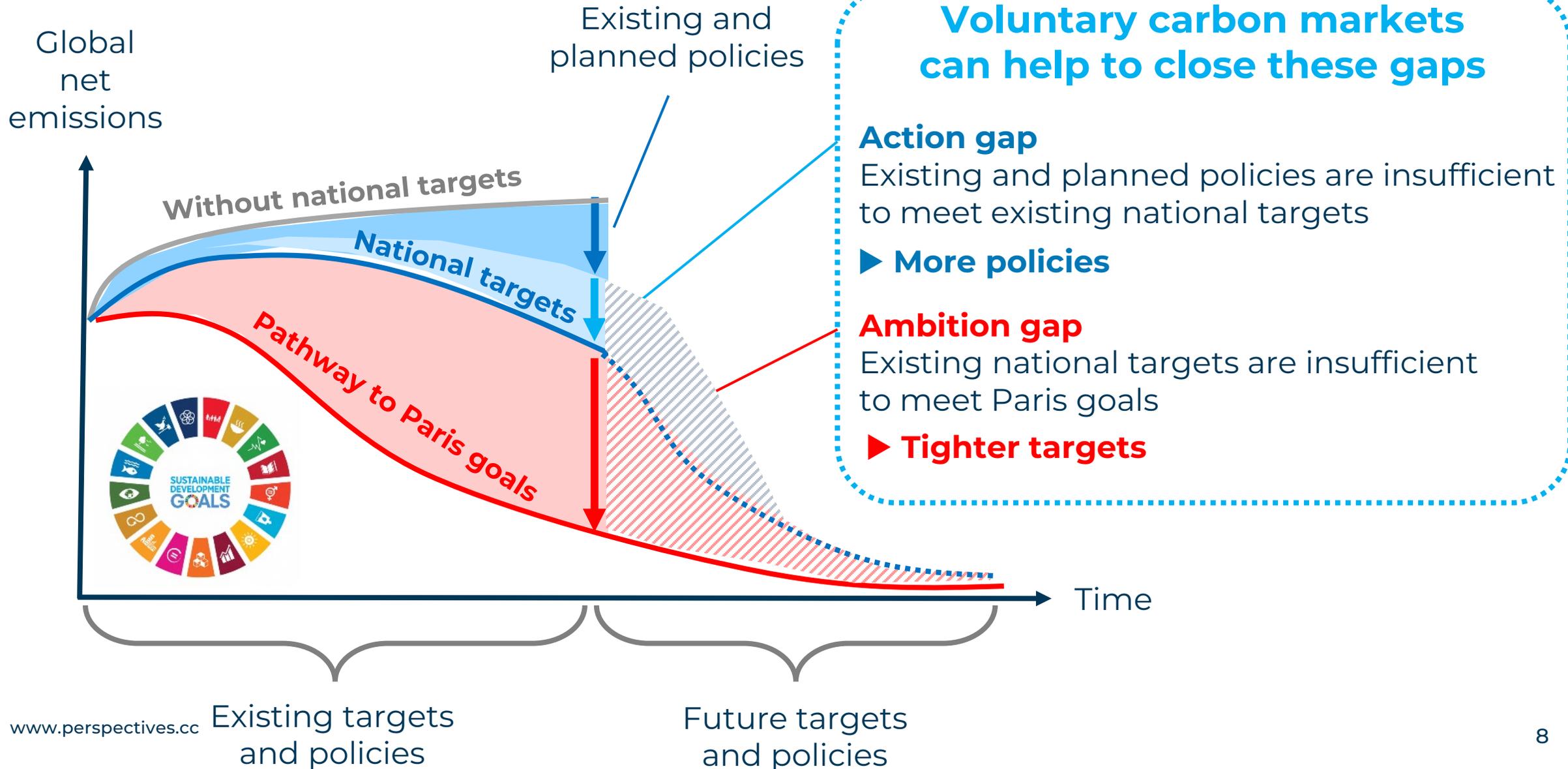
Sellers and buyers need to follow market developments

- Key terms, guidance and regulation evolve over time
- No easy way to follow developments



Background

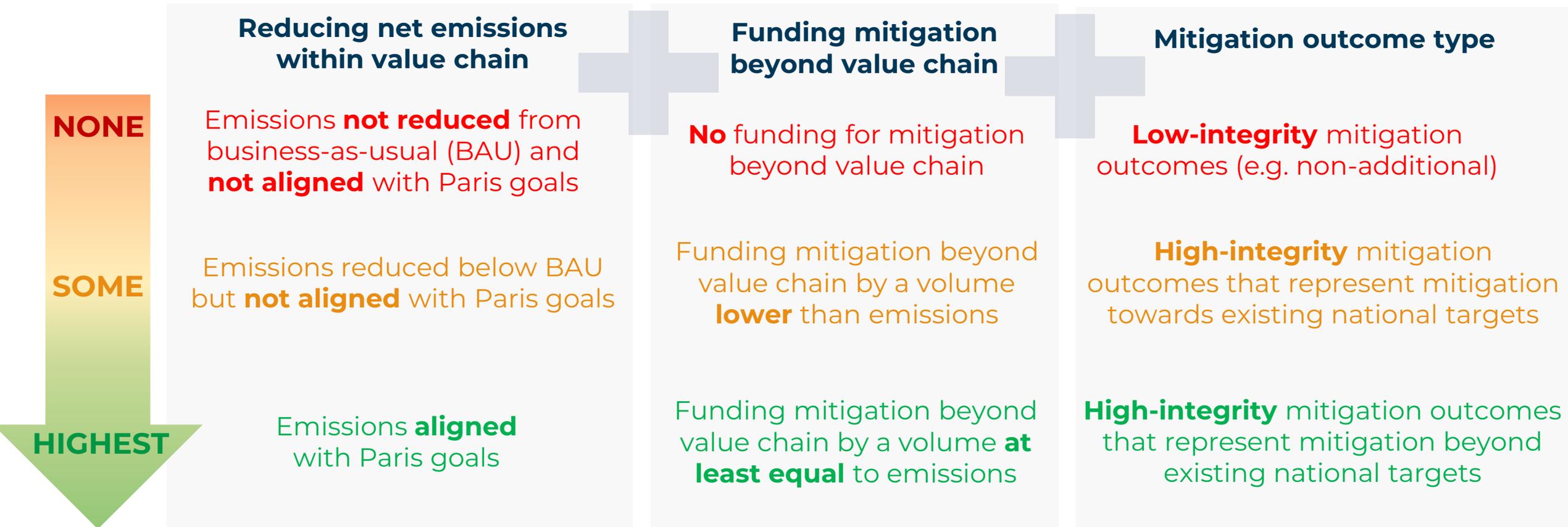
Action and ambition gaps



Source: Adapted from Laine et al., 2025, p. 28

Non-state actors' contribution to mitigation

Non-state actors can contribute to global mitigation through, for example:



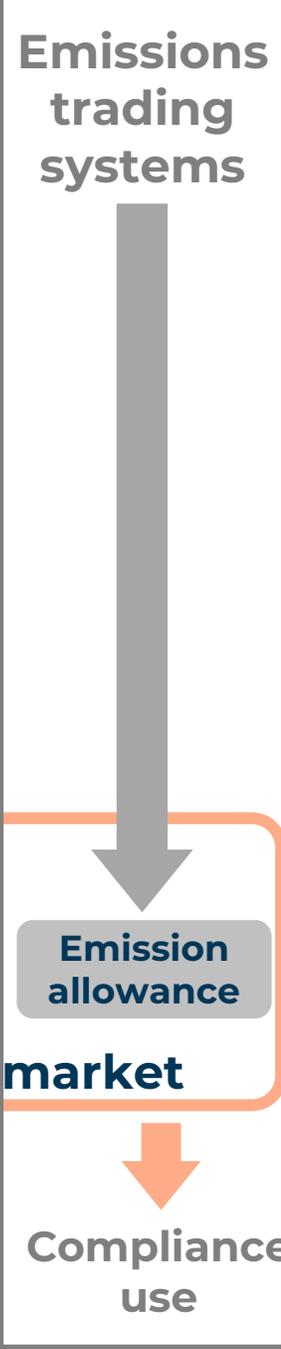
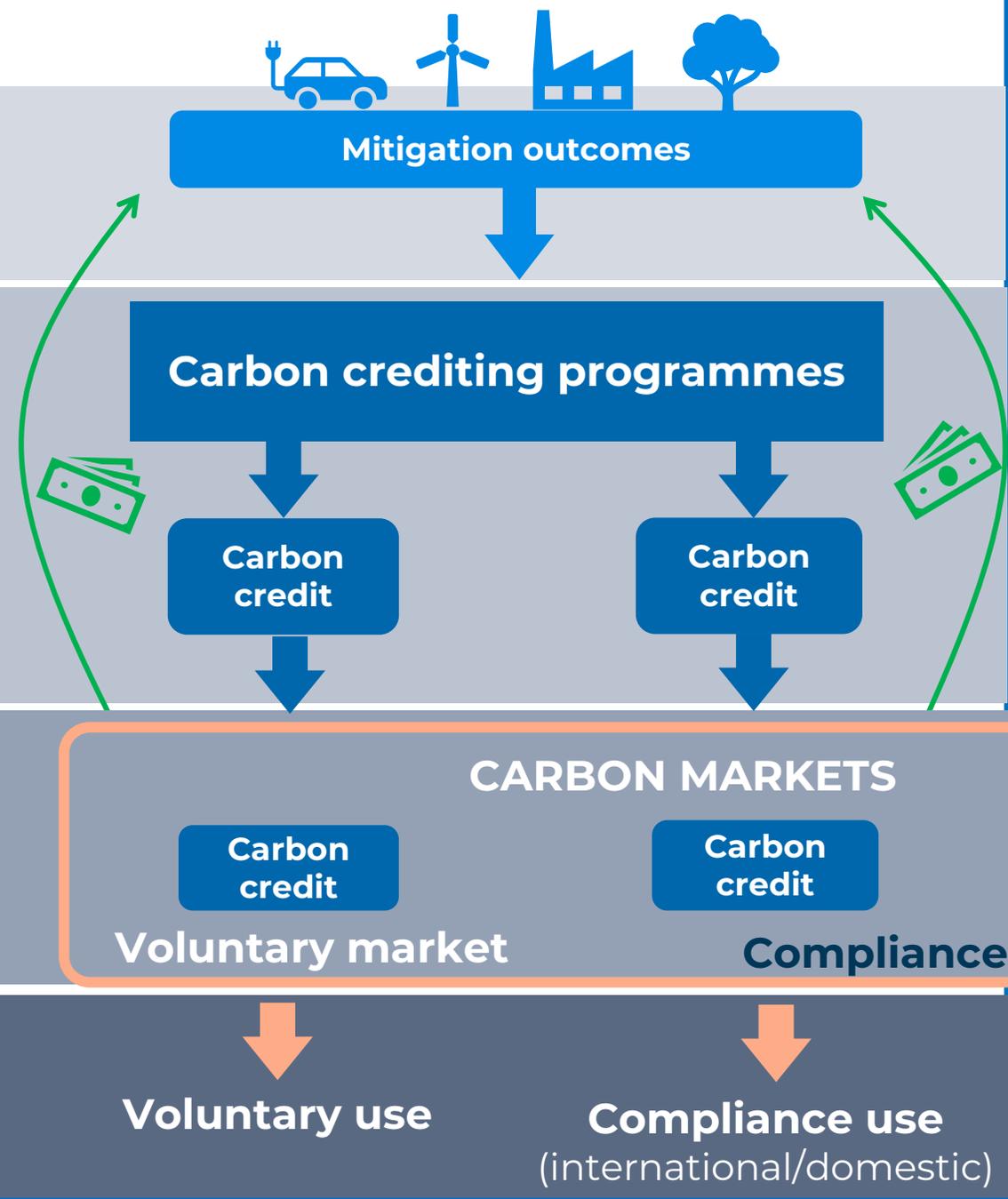
Carbon credits

Generating mitigation outcomes
 Mitigation outcomes are **emission reductions and removals** generated by **mitigation activities** (projects, programmes or policies)

Generating carbon credits
 Carbon crediting programmes assess mitigation activities and issue **carbon credits** against mitigation outcomes that meet **requirements for carbon credits** that are designed to **ensure environmental and social integrity**

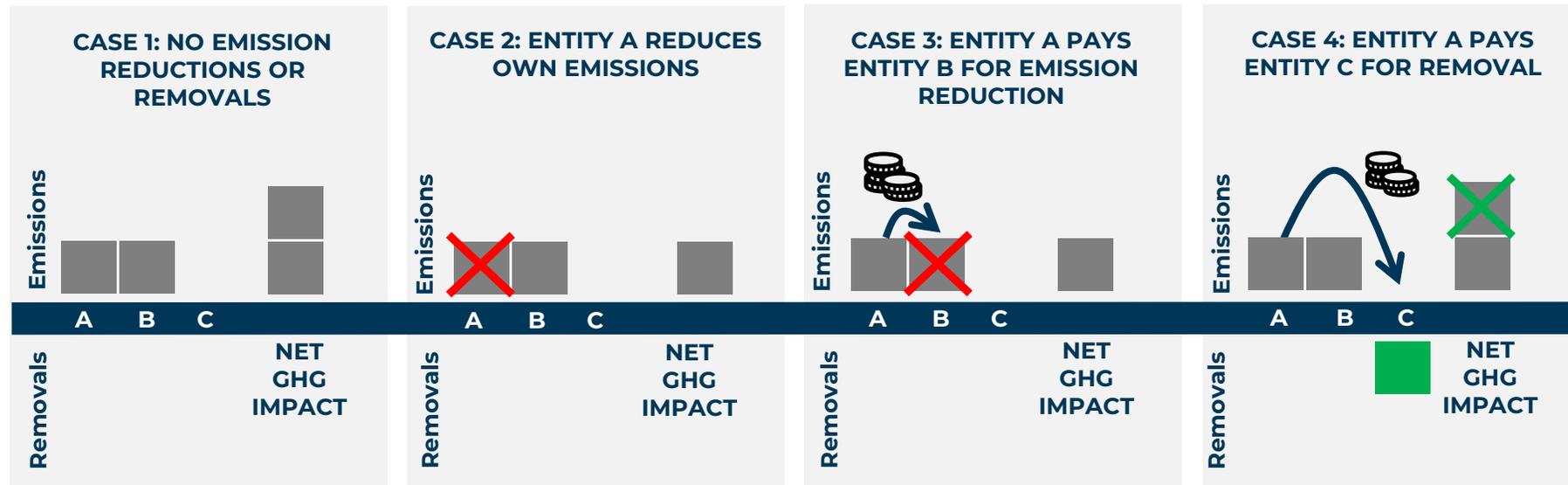
Selling & buying carbon credits
 Carbon credits are traded in **carbon markets**, covering **voluntary markets** for units intended for voluntary use, and **compliance markets** for units intended for compliance.

Using carbon credits
 Carbon credits can be used for **voluntary purposes**, and some carbon credits can also be used for **compliance**.



Impact of emission reductions and removals

An emission **reduction** and a **removal** have **the same** net greenhouse gas **impact**



Key terms and guidance

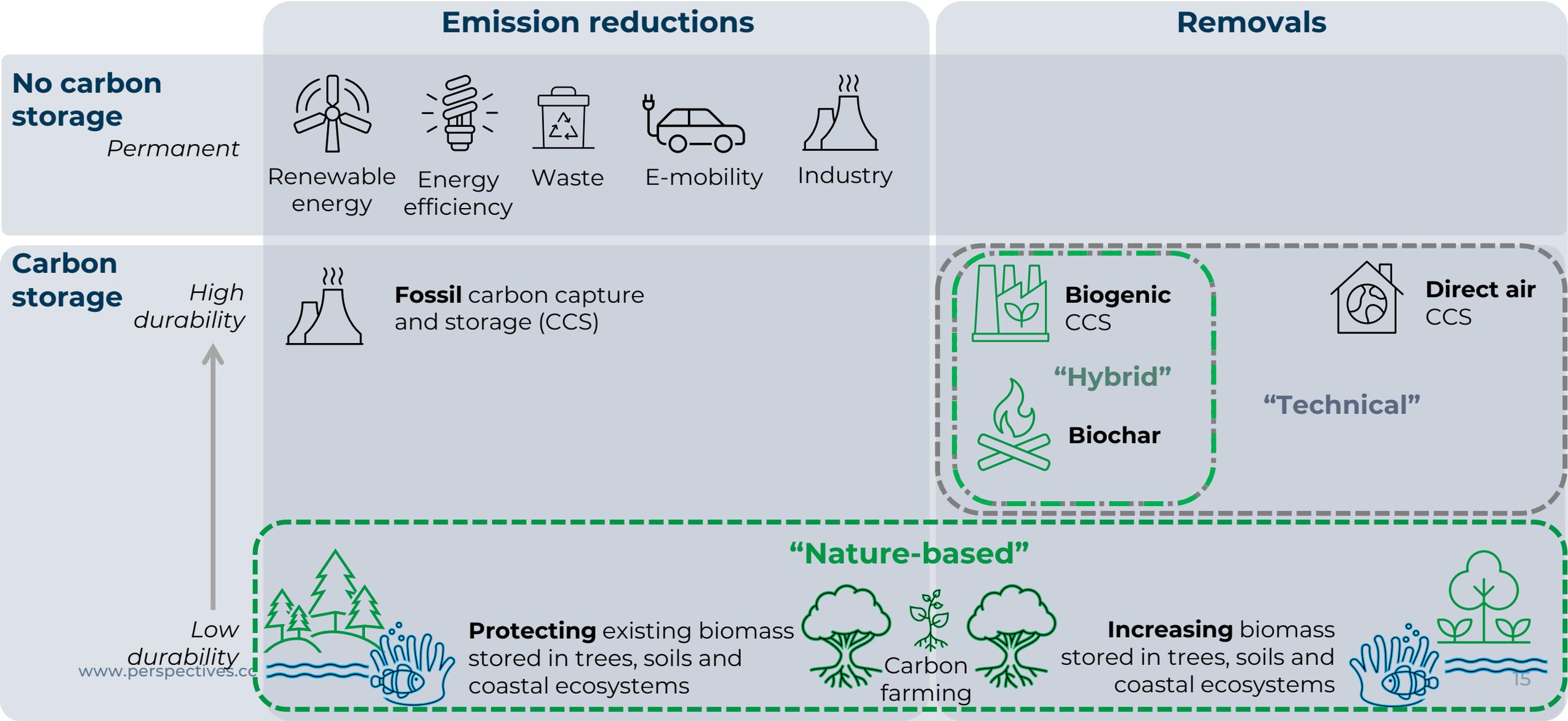
Relevance to Swedish non-state actors

- **Credible carbon credit markets require:**
 - Precise and widely understood **terminology**
 - Robust and consistent **guidance**
- **Key terminology and guidance relate to:**
 - Removals and emission reductions
 - Generating carbon credits
 - Using carbon credits and making claims
- **Swedish non-state actors should understand:**
 - Areas of **broad agreement** and issues that are **still unclear or under debate**
 - Particular **Swedish** terminology challenges
- **Opportunities AND challenges**



Examples of activity types

Source: Perspectives Climate Group



Carbon storage options and duration

- **Storage:** Biological, product, geochemical
- **Permanence:** A function of **durability** of storage and **reversal** risk of storage
 - **Permanent storage**, with no practical risk of reversal
 - **Stable storage** with some, but very low risk of reversal
 - **Long-term temporary storage** gradually released over centuries/millennia
 - **Vulnerable storage** with a medium to high risk of reversal
 - **Short-term temporary storage** where the carbon is lost after a few years to decades

Carbon credit generation: Criteria

Common integrity criteria for carbon credits

*Aim to ensure that a carbon credit represents at least one **real, additional, permanent and verified tCO₂e of mitigation outcomes**, relative to a conservative crediting baseline.*

- Additionality
- Robust crediting baseline
- Robust quantification, monitoring and reporting
- Third-party validation and verification
- Permanence
- Avoidance of double counting
- Environmental and social safeguards

Carbon crediting programmes

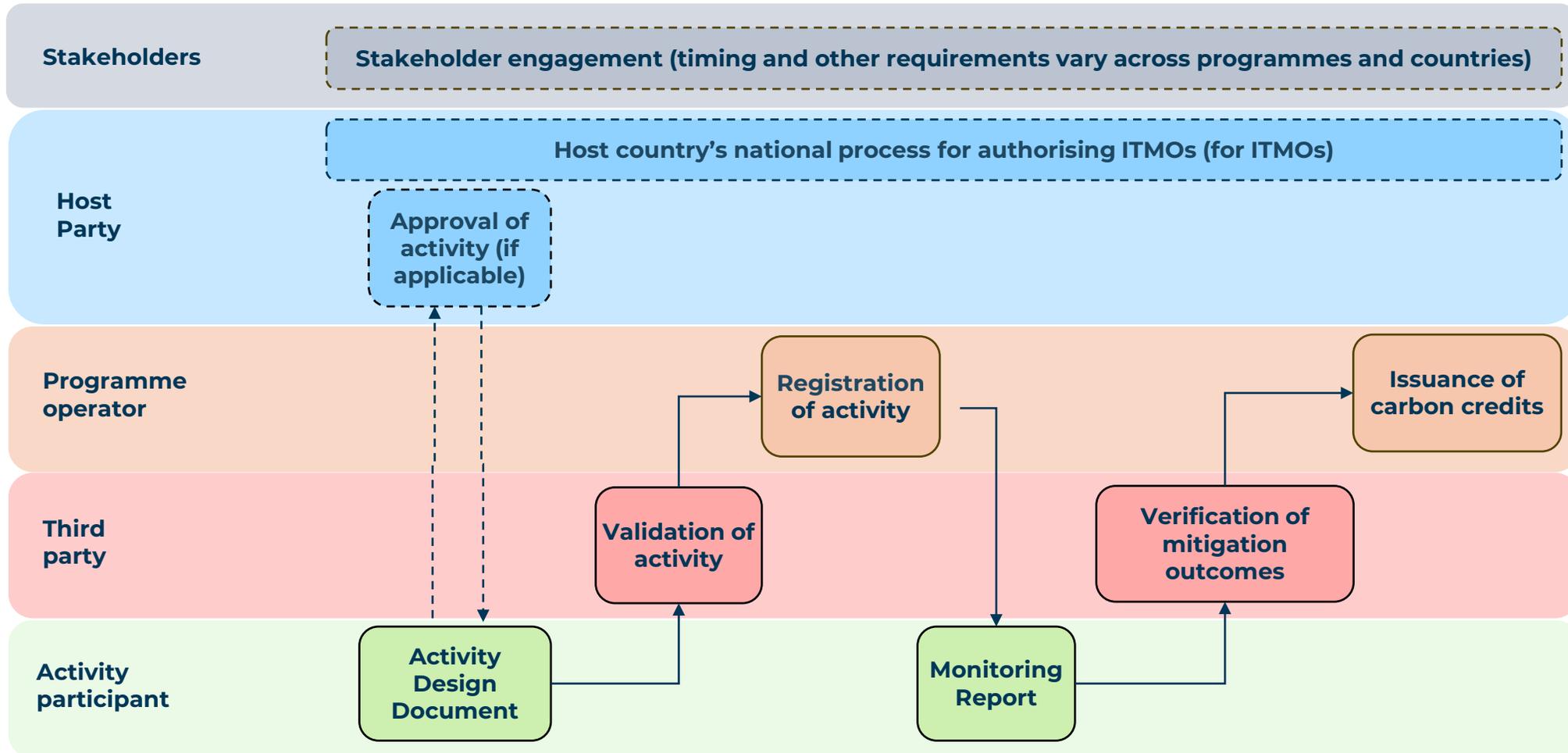
Aim to ensure that carbon credits meet the integrity criteria.

*Programmes should meet criteria relating to **robust governance and transparency**.*

- Gold Standard
- VCM
- PACM
- CRCF
- Puro.earth
- Isometric

Etc.

Carbon credit generation: Process



Carbon credit use: Voluntary use cases

Funding mitigation within value chain (insetting)

What: Using carbon credits based on emission reductions/removals within value chain

Why: To support verified mitigation inside the value chain

Funding beyond value chain mitigation (contribution or offsetting)

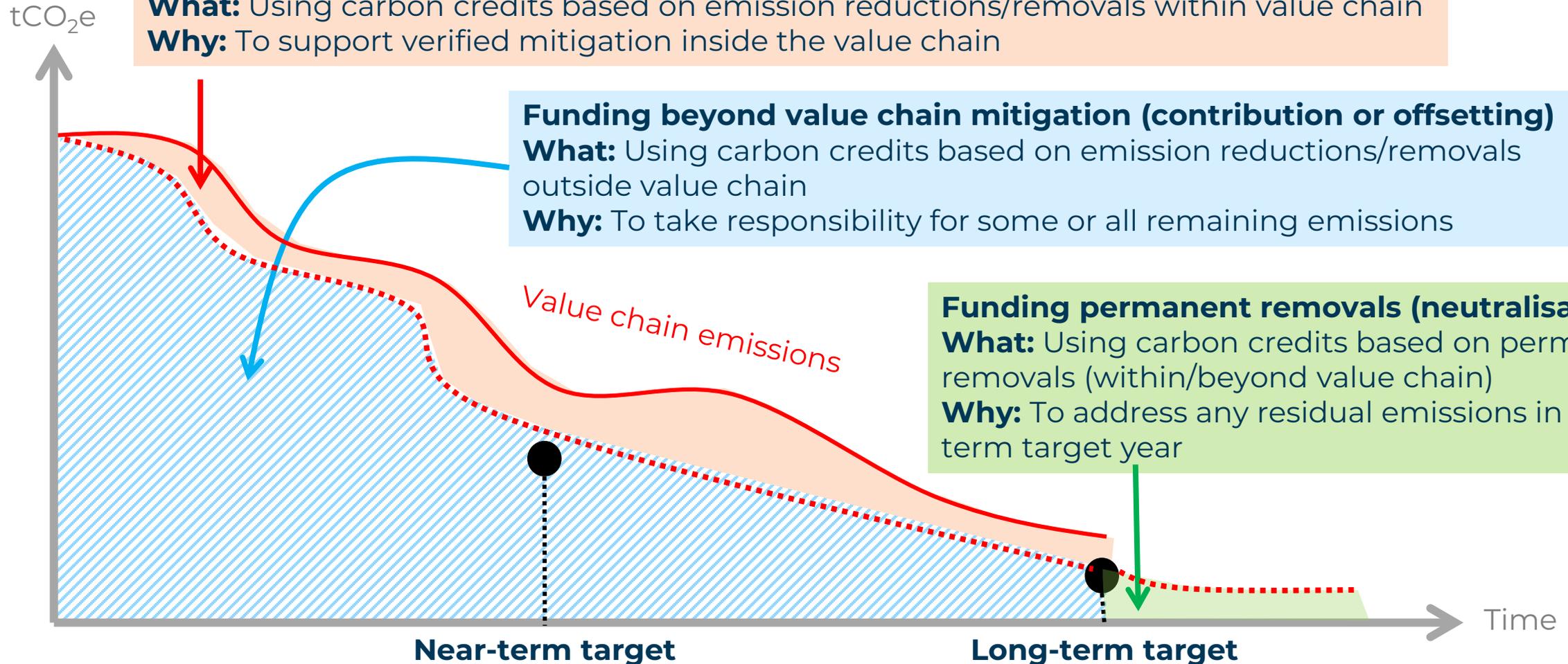
What: Using carbon credits based on emission reductions/removals outside value chain

Why: To take responsibility for some or all remaining emissions

Funding permanent removals (neutralisation)

What: Using carbon credits based on permanent removals (within/beyond value chain)

Why: To address any residual emissions in long-term target year



Offsetting vs contribution

- **Offsetting:** to the use of carbon credits sourced outside the user's boundaries **to counterbalance** an equivalent amount of GHG emissions within the user's boundaries (ISO)
 - Counterbalancing is generally defined as “to have an **equal but opposite effect**”
 - In a carbon credits context, counterbalancing means that the **combined impact of the emissions and the carbon credit use on global net emissions is zero.**
 - ... and **offsetting and compensation** are commonly used as **synonyms.**
- **Contributions:** contributing to global or national mitigation by voluntarily supporting mitigation outside the actor's value chain, for example through the voluntary purchase of carbon credits, **without implying that this support counterbalances the actor's value chain emissions** (e.g., Gold Standard, SBTi)

Carbon credit use: Key guidance



On the way to net zero: Carbon neutrality target

tCO₂e

ISO 14068-1 Carbon Neutrality Standard

- Science-aligned carbon neutrality pathway
- Near- and long-term targets for reducing value chain emissions

- Offsetting** unabated emissions in specific period
- Use high-integrity carbon credits
 - Avoid double claiming, also with national targets



Net zero target

SBTi Corporate Net Zero Standard V. 1:

- Near- and long-term targets for reducing value chain emissions
- **Neutralising** residual emissions
 - Use permanent removals

Carbon neutrality pathway
Carbon credits

Near-term target

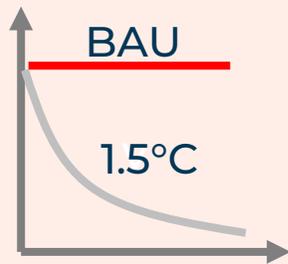
Long-term target

SBTi: -90...95% by 2050

Time

Carbon credit use: Possible claims

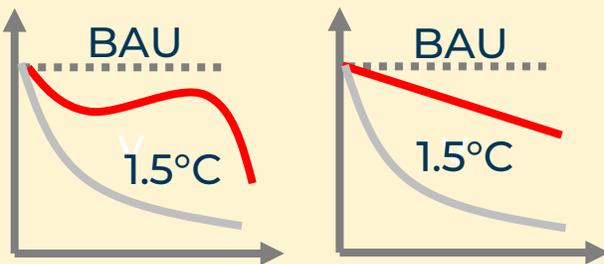
When non-state actor's internal mitigation action is **NOT science-aligned**:



Value chain emissions
not reduced (BAU) and
not science-aligned

Making any claims based on carbon credits not recommended by good practice guidance

- Carbon credit use should complement, not substitute, reductions in value chain emissions



Value chain emissions
reduced below BAU
but **not science-aligned**



Contribution claim possible

- Any share of emissions (no requirement to link to emissions)
- E.g. Gold Standard guidance

Making offset claims not recommended by good practice guidance

- E.g. Gold Standard, WWF advise against

The role of Article 6 of the Paris Agreement

Article 6.2 is relevant for Swedish non-state actors who wish to:

- Avoid double claiming with voluntary offsetting
- Raise global ambition beyond existing national targets

PACM is relevant for Swedish non-state actors who wish to:

- Demonstrate carbon credit quality with UN-approved standards
- *Note: PACM does not necessarily guarantee quality but it serves an international benchmark developed under the Paris Agreement*

Article 6: Allow for higher ambition through cooperation

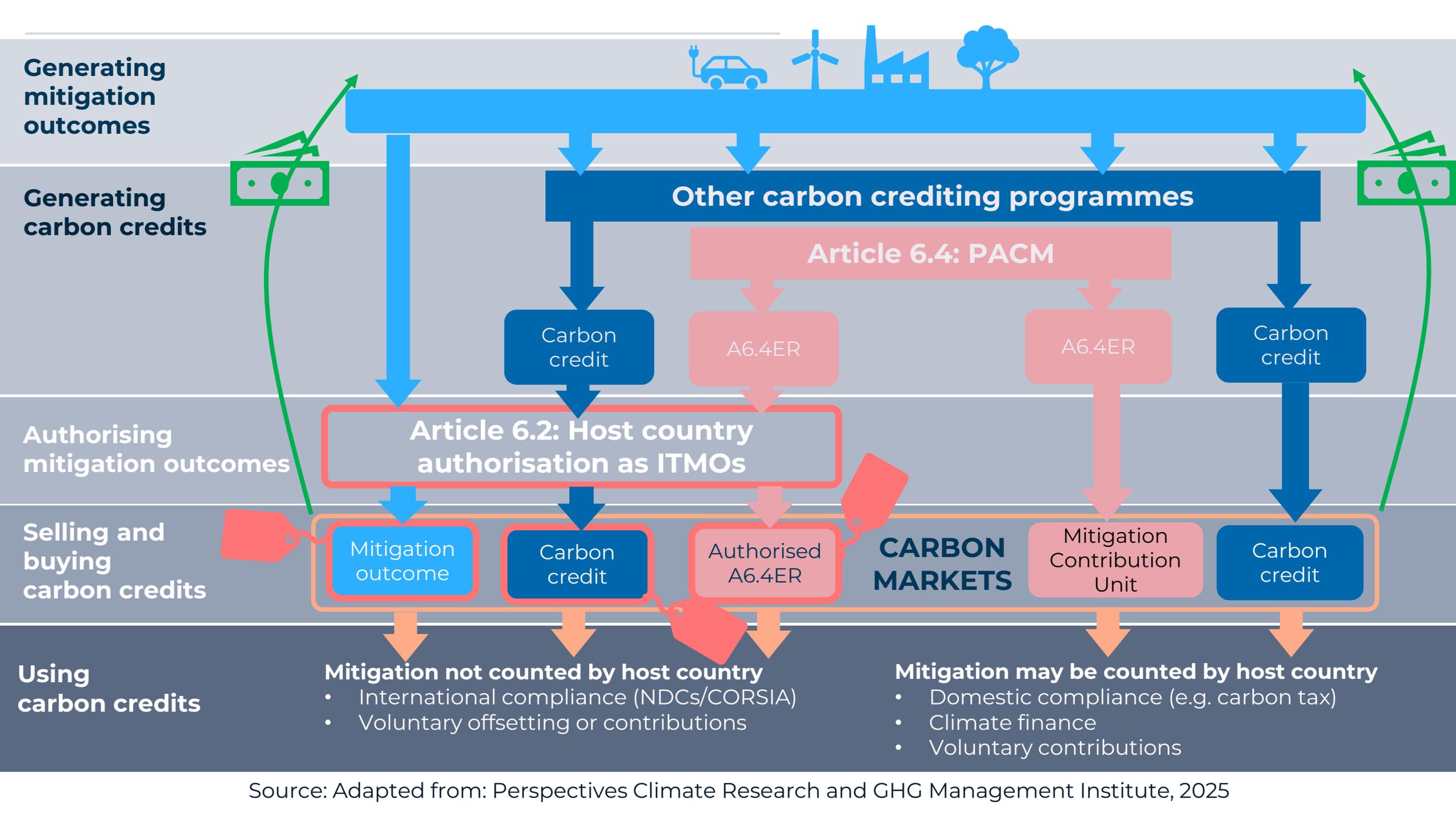
- Promote environmental integrity and sustainable development

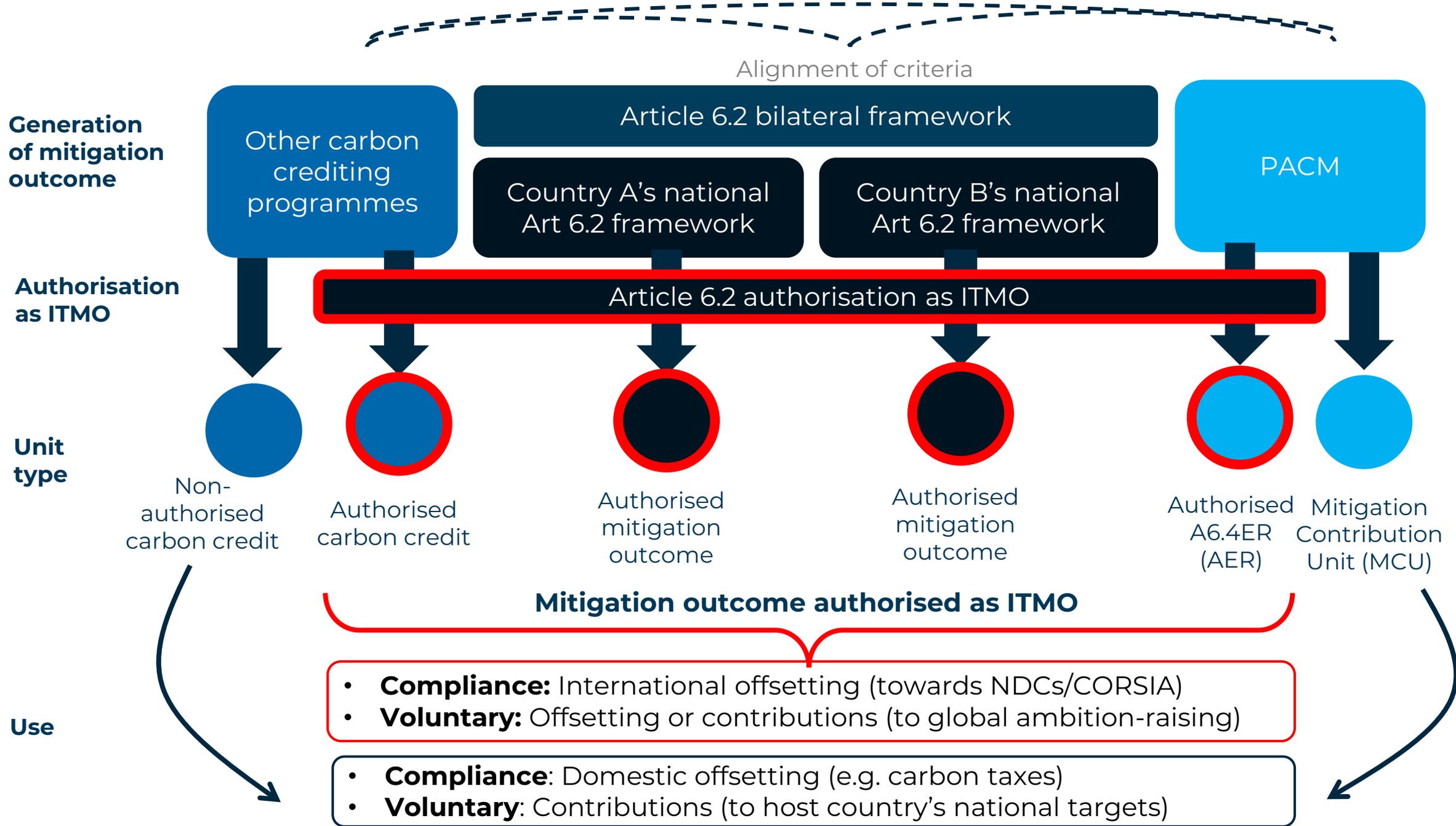
Article 6.2: ITMOs

- **High-level international** rules for authorising cooperative approaches, entities and ITMOs, and tracking and reporting ITMO-related information
- **Detailed national** rules for authorisation
- **Countries** ensure environmental integrity
- **Host country's authorisation and corresponding adjustments** required

PACM: A6.4ERs

- **Detailed international** rules for approving methodologies, registering activities, issuing A6.4ERs, promoting sustainable development, accrediting third parties
- **Supervisory Body** ensures environmental integrity
- **Host country's approval** for activities required





European context

Relevant legislation and guidance include, inter alia:

- EU legislation and guidance
 - Swedish legislation and guidance
 - Multi-country initiatives, e.g., Nordic initiatives and statements
-
- **Legislation sets minimum requirements**
 - **Guidance provides recommendations (e.g., for good practice)**



Corporate sustainability legislation

- EU requirements for reporting sustainability information by companies
- Incl. reporting requirements on climate targets and use of removals/carbon credits

Green claims legislation

- EU requirements to prevent greenwashing
- EU ban on product-level offset claims based on carbon credits
- Requirements for contribution/offset claims based on carbon credits under work

Opportunities: EU clearly requires green claims to be truthful and not misleading

Challenges: There are different interpretations on what is true and misleading

EU Climate Law

- Long-term target for **2050**
- Interim targets for **2030, 2035, 2040**
- For emissions and removals that are **regulated in EU law**

2030

2035

2040

2050

EU NDC, regulations and directives

- **Joint** EU NDC for Paris Agreement
- Specific targets for **sectors** and **Member States**

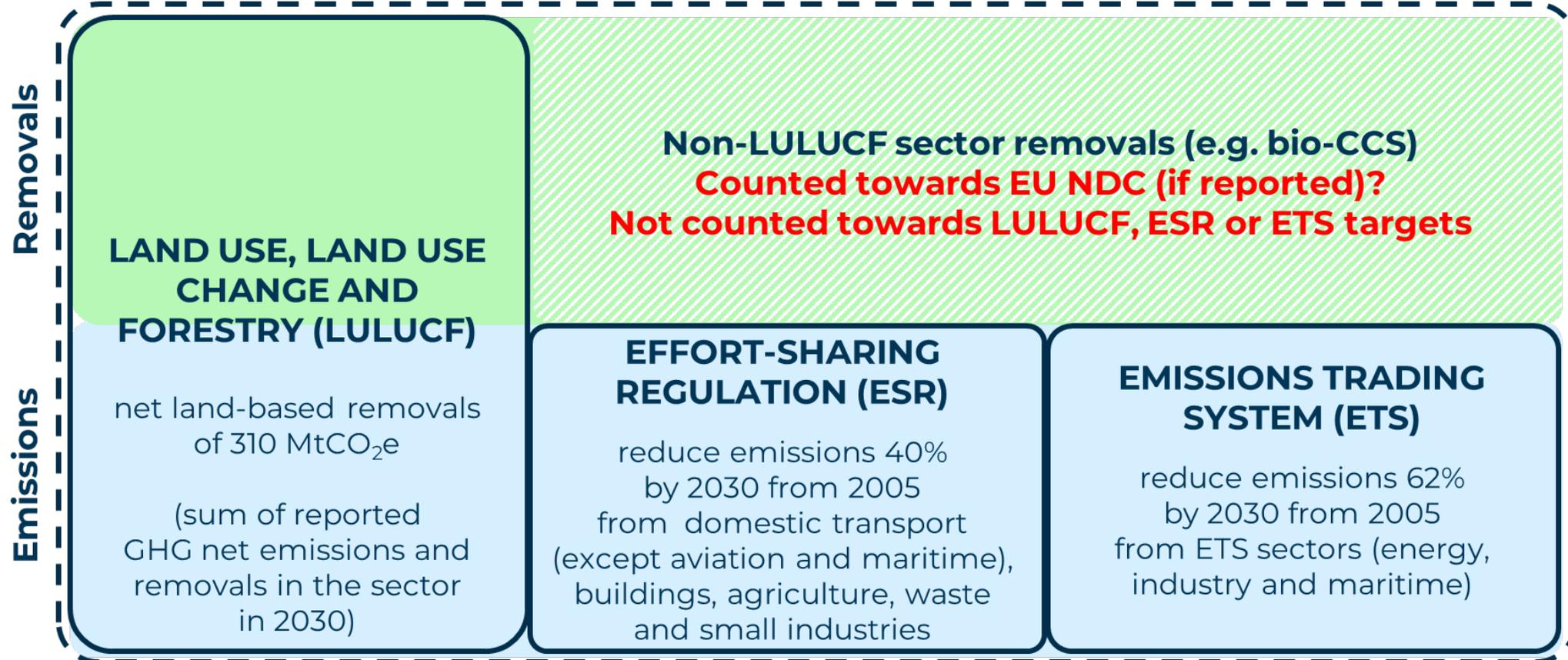
Opportunities: EU is developing legislation for removals and Article 6

Challenges: EU does not currently regulate durable removals nor enable EU-based ITMOs

Removals in EU targets

EU NDC (Economy-wide emissions and removals)

a **net** domestic reduction of at least 55% in GHG emissions by 2030 compared to 1990



Source: Source: Ahonen et al., 2025b, p. 9

Opportunities: EU is developing policies to incentivise “industrial” removals

Challenges: Current EU law lacks incentives for “industrial” removals

- EU offers voluntary **Carbon Removal and Carbon Farming** (CRCF) certification framework for certifying units
 - For removals and soil emission reductions that meet relevant criteria
 - From activities implemented in EU and contributing to EU climate targets
 - Using Commission-approved methodologies
 - Using Commission-approved carbon crediting programmes
- Focuses on **supply** of units; does not provide use cases or demand drivers

Opportunities: CRCF framework is developed by the Commission for the EU context

Challenges: Integrity of CRCF methodologies has been questioned by experts

- The Swedish **Marketing Act**, requires good marketing practice and bans any misleading marketing claims.
- Swedish Consumer Agency
 - "claims such as carbon neutral, climate compensated, net-zero and similar are unclear and undefined"
- Vague and undefined climate-related claims concerning products that are based on offsetting must, therefore, be supplemented by prominent specifications or explanatory statements
 - No guidance provided
- Claims with a factually correct basis can be misleading, depending on the overall impression generated by the way the product is marketed.

Other relevant initiatives

- Declaration on Nordic Carbon Neutrality
- Nordic Initiative for Cooperative Approaches
- Swedish-Swiss Memorandum of Understanding on Article 6 piloting
- Nordic statement on climate compensation claims in marketing
- Joint statement on claims in the voluntary carbon markets by a group of EU countries
- Coalition to Grow Carbon Markets by multiple countries
- Finnish government's guide for good practices for the voluntary carbon market
- UK government's principles for voluntary carbon and nature market integrity

Opportunities: Initiatives can provide additional guidance and clarity

Challenges: Initiatives do not have a formal status and they can be contradicting

Nordic Carbon Neutrality Declaration (2019)

We will intensify our cooperation in order to ... **encourage Nordic companies**, investors, local governments, cities, organizations and consumers to **step up their efforts towards carbon neutrality**.

Nordic statement on climate compensation claims in marketing (2024)

Instead of using general claims of climate compensation that most businesses will have trouble proving are true, **businesses should describe the concrete actions they are taking** to for example bind carbon dioxide.

Joint Statement on Voluntary Carbon Market: The Claims Side (2023)

The Voluntary Carbon Market can be used to accelerate action (**closing the action gap**) and raise ambition globally (**closing the ambition gap**) ... without robust standards and safeguards, the use of carbon credits can undermine climate action and **can cause environmental or social harm**.

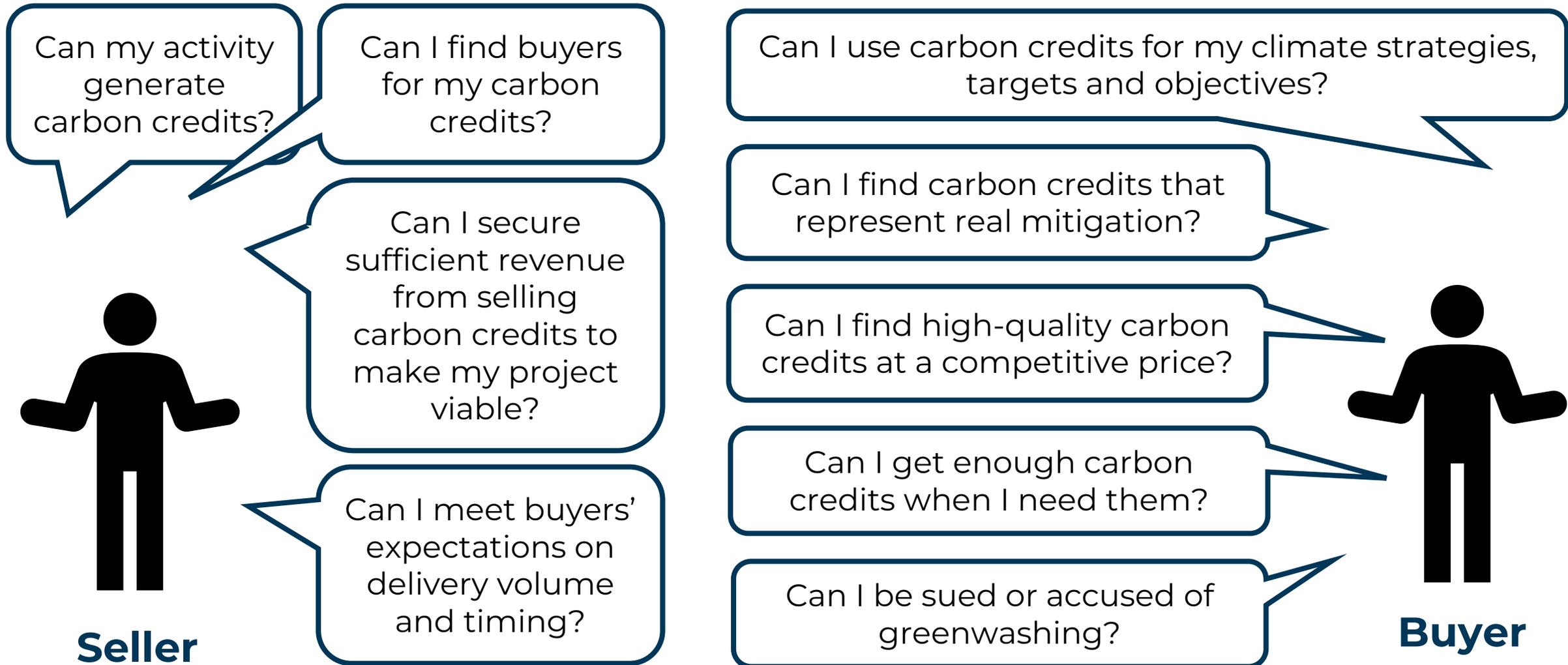
Managing risks

Risk management is key for successful market participation

- Risks vary across actors, activity types, use cases, location and time
- **Risks can be managed and mitigated**
- **Risks cannot be fully eliminated**



Key concerns of seller and buyer



Categorising key risks

Delivery risks

Risks relating to the activity's ability to **generate and deliver carbon credits**

Relevant for carbon credits **not yet issued**

Legal and regulatory risks

Risks relating to **existing legislation and changes** in legislation associated with carbon credits

Relevant for e.g. **ownership** of mitigation outcomes; **requirements for claims**

Reputational risks

Risks relating to **negative publicity** associated with carbon credits

Relevant for integrity of carbon **credits** and **claims**, ambition of **own action, environmental and social impacts**

Market risks

Risks relating to the **market-level supply, demand and price** of carbon credits, and overall **functioning** of the carbon market

Key risks for seller and buyer

For

Seller

Buyer

Delivery risks

Uncertainty about amount and timing of **revenue from credit sales**

Uncertainty about amount and timing of **received credits**

Legal and regulatory risks

Uncertainties about **legal status** of mitigation and credits

Uncertainty about **eligible use cases** for credits and related **claims**

Reputational risks

Negative environmental and social **impacts** and/or carbon credit **integrity**

Negative environmental and social **impacts** and/or **greenwashing** accusations

Market risks

Challenges to **secure buyers** for sufficient volumes and/or prices

Challenges to **secure supply for preferred credits** at competitive prices

Managing key risks

Who	Delivery risks	Legal and regulatory risks	Reputational risks	Market risks
Seller	<p>Feasibility studies</p> <p>Conservative estimations</p>	<p>Use reputable programmes</p> <p>Apply safeguards</p>	<p>Apply good practices for carbon credit generation and safeguards</p>	<p>Secure revenue for future credits, e.g. through long-term contracts at favourable terms</p>
Buyer	<p>Due diligence of seller and activity</p> <p>Insurance</p>	<p>Apply good practices for own action and credits and comply with claims legislation</p>	<p>Apply good practices for own action, credits and claims</p>	<p>Enter into long-term contracts and diversify carbon credit portfolio</p>
Regulator	<p>Clear regulation for carbon credits and ITMOs</p>	<p>Clear and predictable regulation on carbon credits and claims</p>	<p>Clear guidance on integrity of carbon credits and claims</p>	<p>Predictable regulatory environment for supply, demand, and trading of credits</p>

- **Risks can be shared in various ways** between seller, buyer and third parties
 - Contracts specify risk distribution between seller and buyer
 - Insurance products can cover certain (e.g. ITMO) risks
- **Risks can change over time**
 - E.g. Delivery risks fall over time as activity matures and track record develops
- **Risks can be interrelated**
 - E.g. Legal and reputational risks can increase overall market risks
- **Some risks are specific to, or especially relevant for durable removals**
 - E.g. Lack of common definitions for „durability“

- **At minimum, Swedish sellers and buyers should:**
 - Use reputable carbon crediting programmes
 - Transparently disclose information about carbon credits
 - Comply with national and EU legislation on reporting and claims

Sellers should at least:

- Understand minimum requirements for carbon credit generation and use
- Use applicable methodologies under reputable programmes
- Be transparent about relationship with host country's targets

Buyers should at least:

- Develop clear climate strategy for own action and carbon credit use
- Conduct due diligence on credits, incl. sellers and underlying activities
- Purchase credits from reputable programmes
- Use credits and make claims in line with relevant legislation (e.g. no product-level offset claims)

- **Applying good practices can reduce risks further, e.g.**
 - Gold Standard's Climate Responsibility Framework
 - Finnish Guide to Good Practices for the Voluntary Carbon Markets
 - Oxford Principles for Responsible Engagement with Article 6
- **For buyers, risks are lower when own action is science-aligned and claims are framed as contributions rather than offsetting**
 - For offset claims, risks are lower when double claiming is avoided

Carbon credits have lower integrity risks if they have:

- ICVCM approval
- PACM issuance
- High CCQI score
- High rating by carbon rating agency

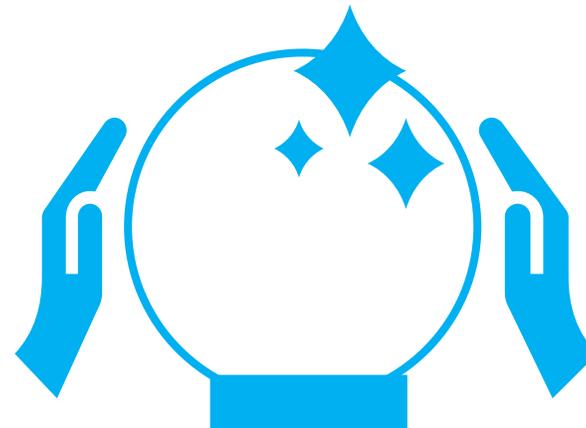
Claims have lower integrity risks if:

- **Contribution claims** follow VCM Claims Code and/or Gold Standard claims guidance
- **Carbon neutrality claims** follow ISO 14068 Carbon Neutrality Standard
- **Net zero claims** follow SBTi Corporate Net Zero Standard

Looking forward

Looking forward

- The voluntary carbon market is continuously evolving, with key developments in **standards, guidance, and legislation**.
- Key areas to monitor include changes in **methodologies, carbon credit programmes, activity types, use cases, and claims**.
- While navigating the market can be challenging, there are valuable opportunities for **non-state actors** to contribute to global climate efforts.
- There is no simple way to follow all the relevant developments.



Thank you

