



CARBON MARKET WATCH

Overview of carbon credits and carbon markets

An overview of carbon credits and markets

- 1 carbon credit represents 1 tonne CO₂eq reduced/removed by project
- Many types of carbon credit w/ different rules and levels of quality
- Reduction credits: e.g. renewable energy, energy efficiency
- Removal credits: e.g. reforestation, afforestation, soil carbon sequestration, direct air carbon capture and storage
- Carbon Avoidance credits: e.g. forest conservation

Carbon Markets

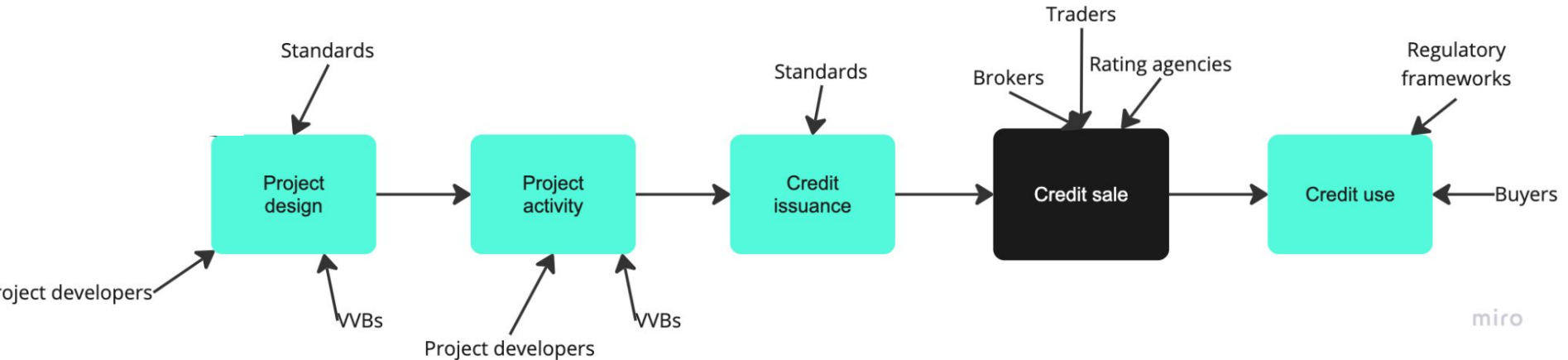
- Carbon credits are used on “voluntary” & compliance carbon markets
 - o Compliance =
 - e.g. International: Article 6 of the Paris Agreement (Article 6.2 and 6.4),
 - National: Australian carbon market,
 - Offsetting as an obligation: CORSIA (aviation market),
 - Offsetting as an alternative to compliance: Colombia carbon tax
 - o Voluntary = unregulated space with numerous buyers and sellers

Carbon credit markets

- On the VCM, there is **no**:
 - Central **marketplace**
 - Defined market **price**
 - **Homogeneity** between credits
 - **Governance** body
- The **voluntary carbon market is a combination** of multiple independent certifiers (« programs »), developers, auditors (« validation and verification bodies »), intermediaries, and final buyers + many more actors



Life cycle of a credit



miro



Regulatory (non-governmental)

Funders

Coalitions

Standards

Buyer (companies)

voluntary market

Project developers

VVBs

Traders

Rating agencies

Brokers

Regulatory
((inter)governmental)

Host countries

compliance market

Designated national authorities

Buyer (countries)

Designated operational entities

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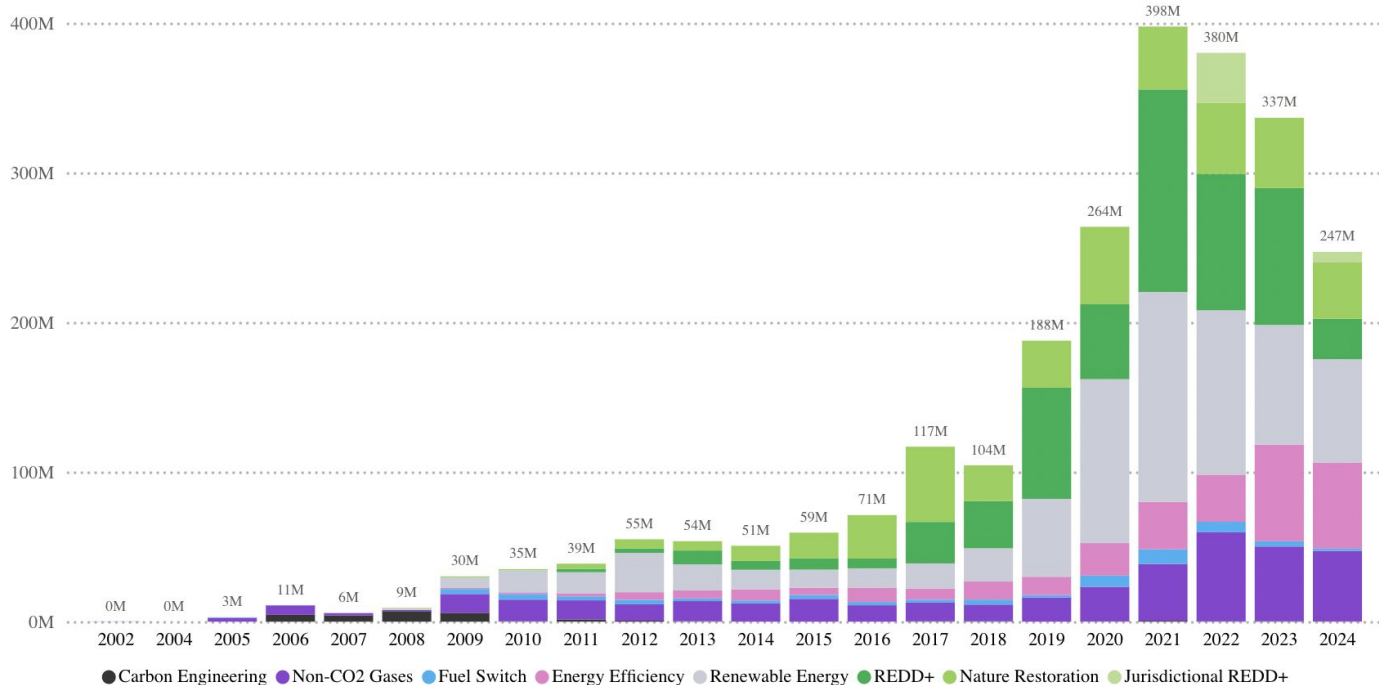


The VCM has declined in recent years

of projects with issued credits: 5,540

Cumulative issued quantity: 2,459 MtCO₂e

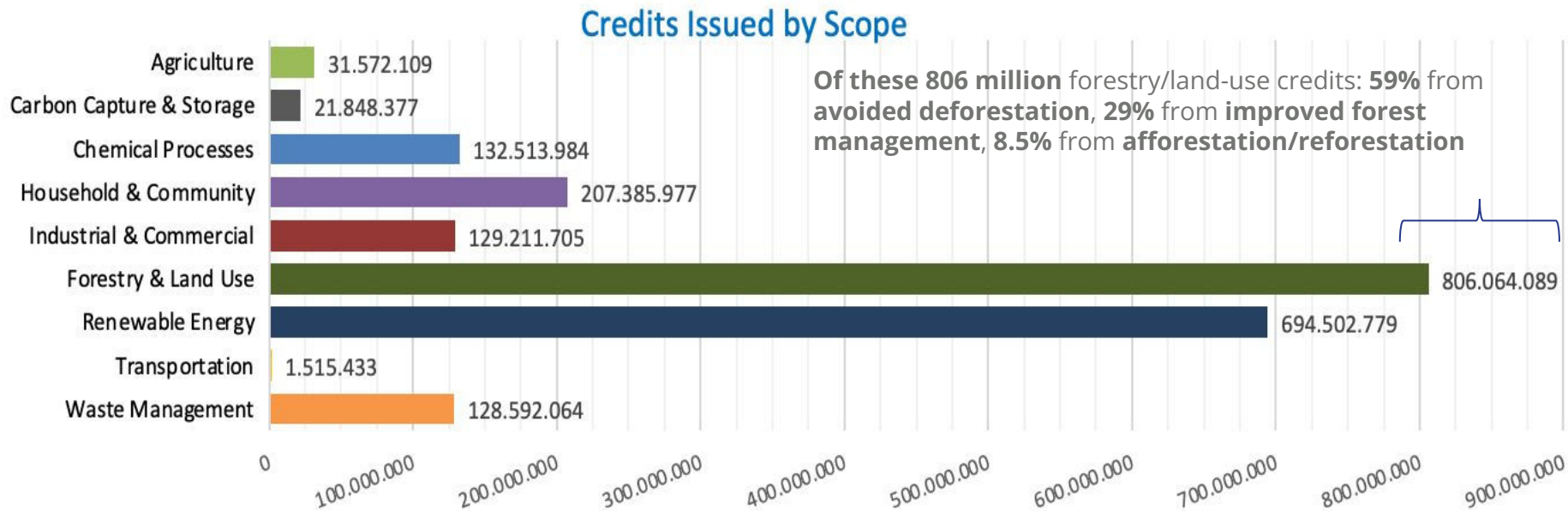
Annual Carbon Credit Issuances (tCO₂e)



Source: [MSCI Carbon Markets \(2024\)](#)

Snapshot: types of VCM project

Most carbon credits ever issued tied to Forest and Land Use and Renewable Energy

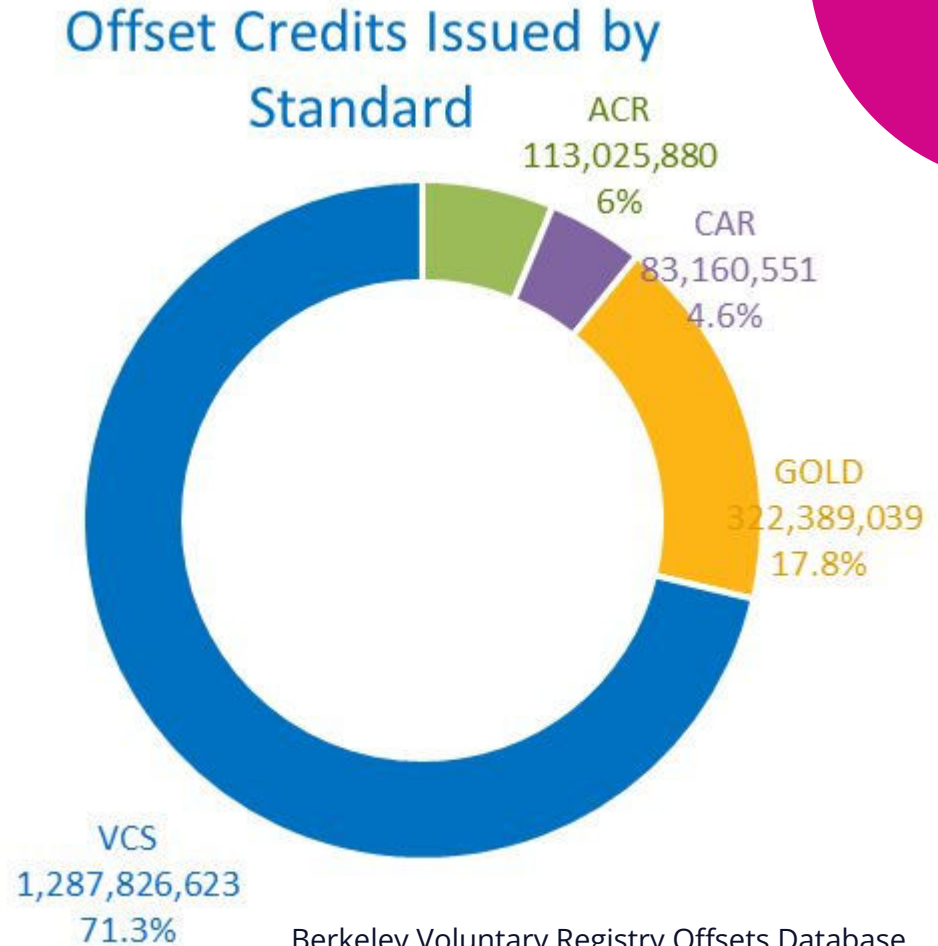


Note: Data from Sep 2024, covering total carbon credits issued by the 4 largest VCM standards, Verra, Gold Standard, ACR and CAR. Source: University of Berkeley (Sep 2024), [Voluntary Registry Offsets Database](#), version 8.0

Standards

- Verra (VCS)
- Gold Standard
- American Carbon Registry
- Climate Action Reserve

- Smaller: Global Carbon Council, ART TREES, Plan Vivo, Puro.earth..



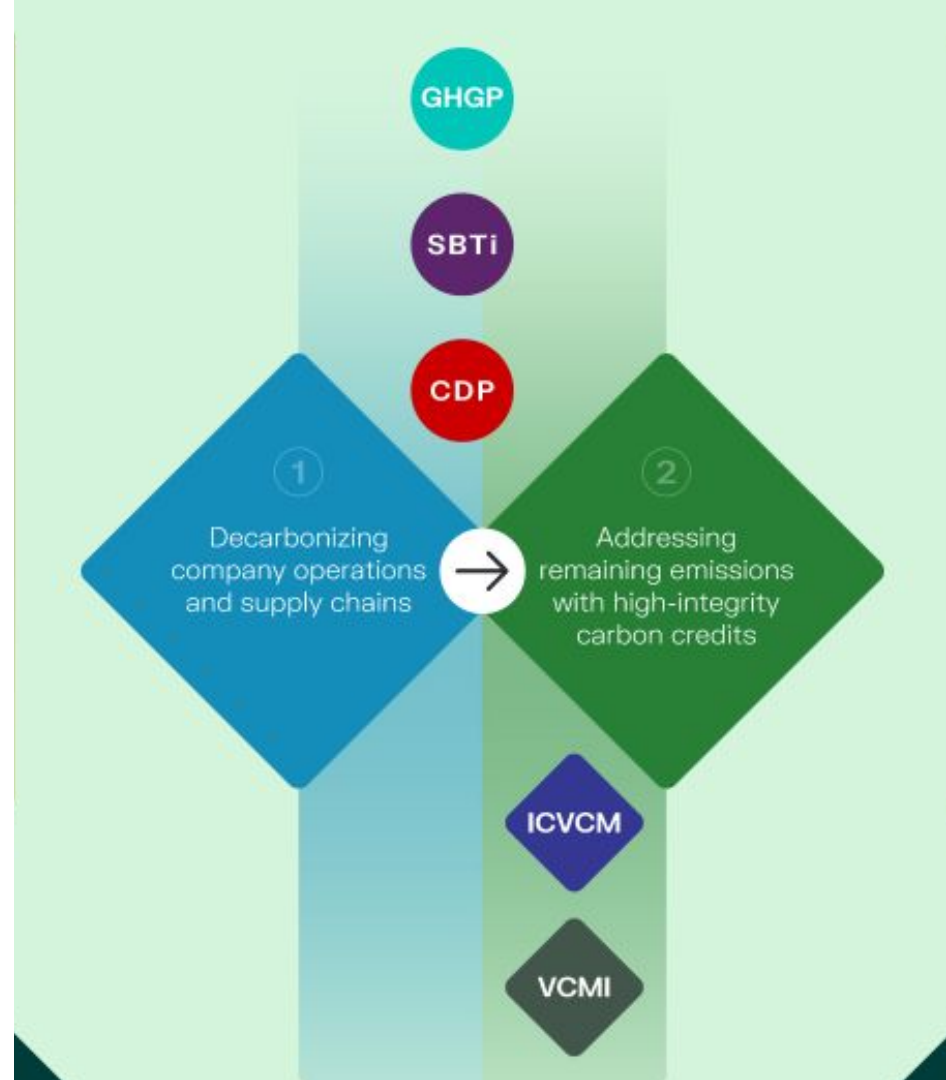
Basic rules for a carbon credit

- ❑ *Real*
 - Project must exist and accurately estimate the GHG emission reductions/removals
- ❑ *Additional*
 - Project depends on revenue from carbon credit to operate
- ❑ *Permanent*
 - The CO₂eq reduced/removed must not be re-released any time soon
- ❑ *Verifiable*
 - The project design and activities must be independently verified
- ❑ *Rights-respecting*
 - If local communities are involved in/affected by project, then proper consultation & equitable benefit-sharing must occur



Regulators

- Decarbonization frameworks:
SBTi, GHGP, Race to Zero, CDP
- Integrity initiatives:
ICVCM, VCMi





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**Thank you, questions
are very welcome!**