

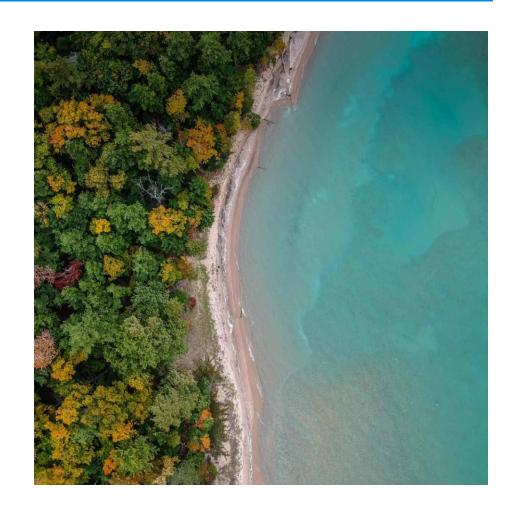
# The role of voluntary and compliance carbon markets in carbon farming

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Perspectives Climate Research and University of Zurich

Conference "Carbon farming - New potential for farmers or greenwashing?

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## Agenda

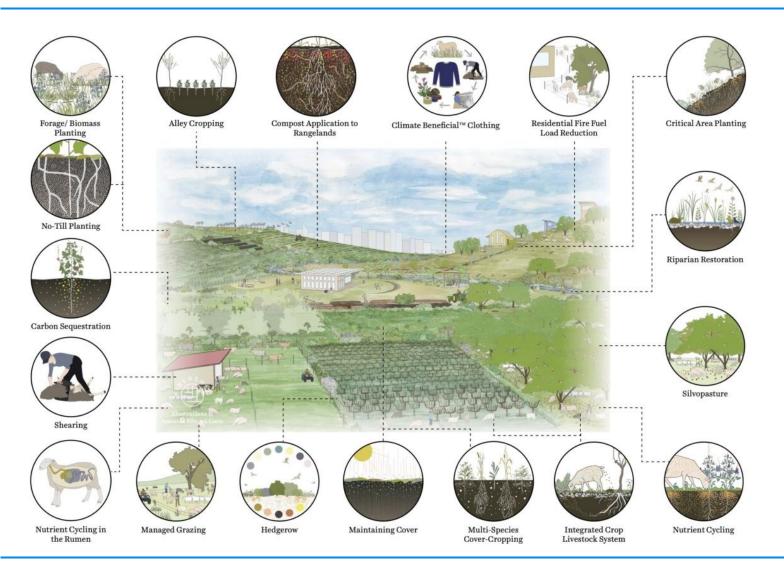


- The potential for GHG mitigation in the agricultural sector
- Voluntary and compliance carbon markets as incentives for agricultural carbon removal
- The key role of environmental integrity to enable carbon markets to play a growing role for carbon farming in the long term



## Greenhouse gas mitigation in agriculture





- Agriculture has
   multiple opportunities
   to reduce GHG
   emissions and to
   remove carbon from
   the atmosphere
- A lot of this potential remains untapped
- There is no universally accepted definition of "carbon farming"
  - Removals only?

Source: Carbon Cycle Institute (2023)

## Compliance & voluntary carbon markets



Carbon markets are an effective tool to incentivize greenhouse gas emission reductions and removals internationally and domestically

#### Compliance markets

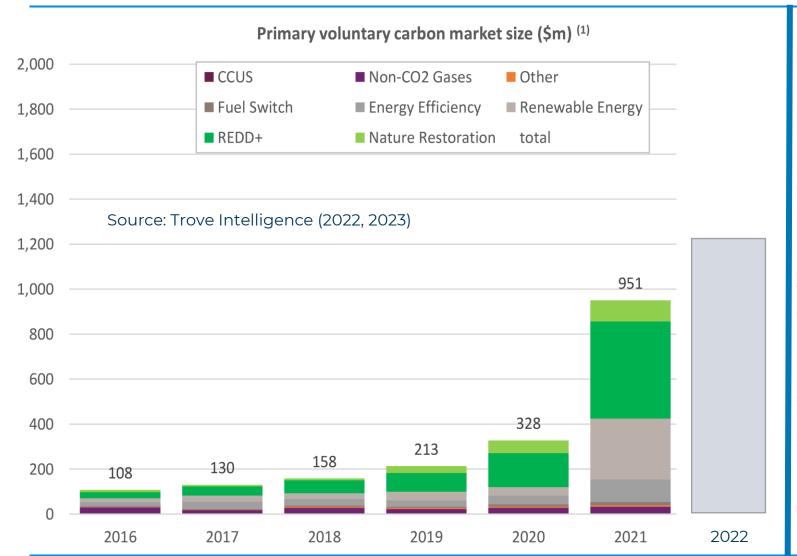
- are created and regulated by mandatory national, regional, or international emission reduction regimes
  - Article 6 under the Paris Agreement, previously Kyoto Mechanisms
  - National emissions trading schemes
  - Using of emission credits against domestic mitigation policies (carbon taxes)

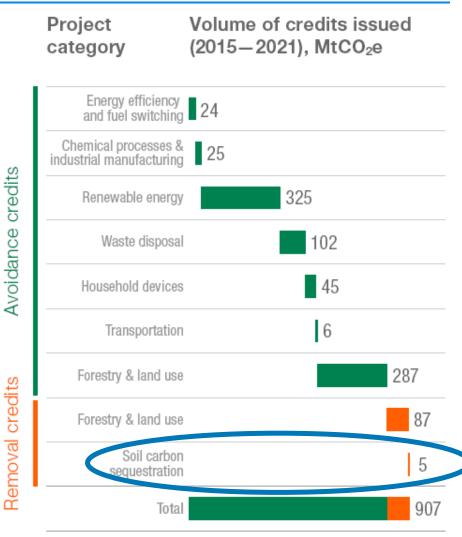
#### Voluntary carbon markets

- allow businesses and individuals to purchase emission credits on a voluntary basis with no intended use for compliance purposes
- currently worth 1.2 billion \$ annually, growing rapidly until 2022, but still much smaller than the compliance markets (~100 billion \$)
- removals market very small in volume, but with very high prices and growing very quickly

## Voluntary market: gold rush and credit types perspectives

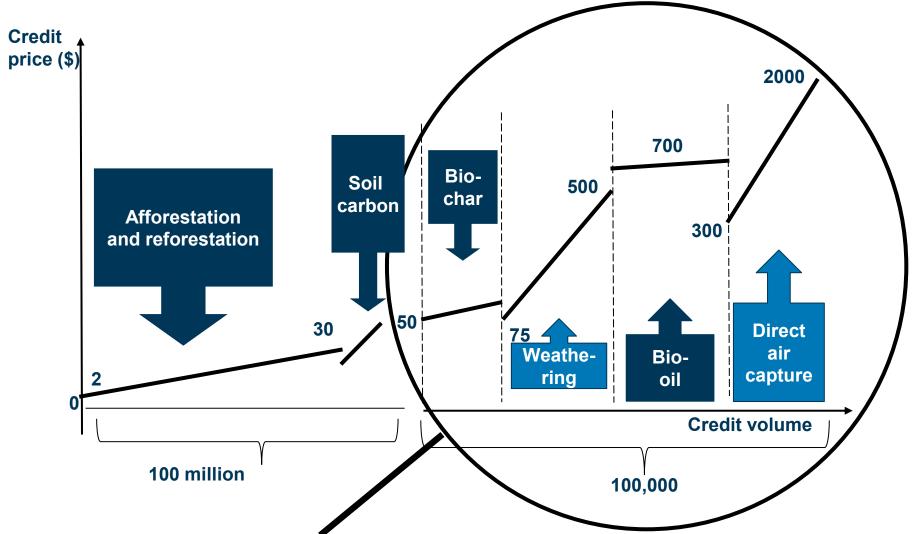






## Removal credit prices and quantities

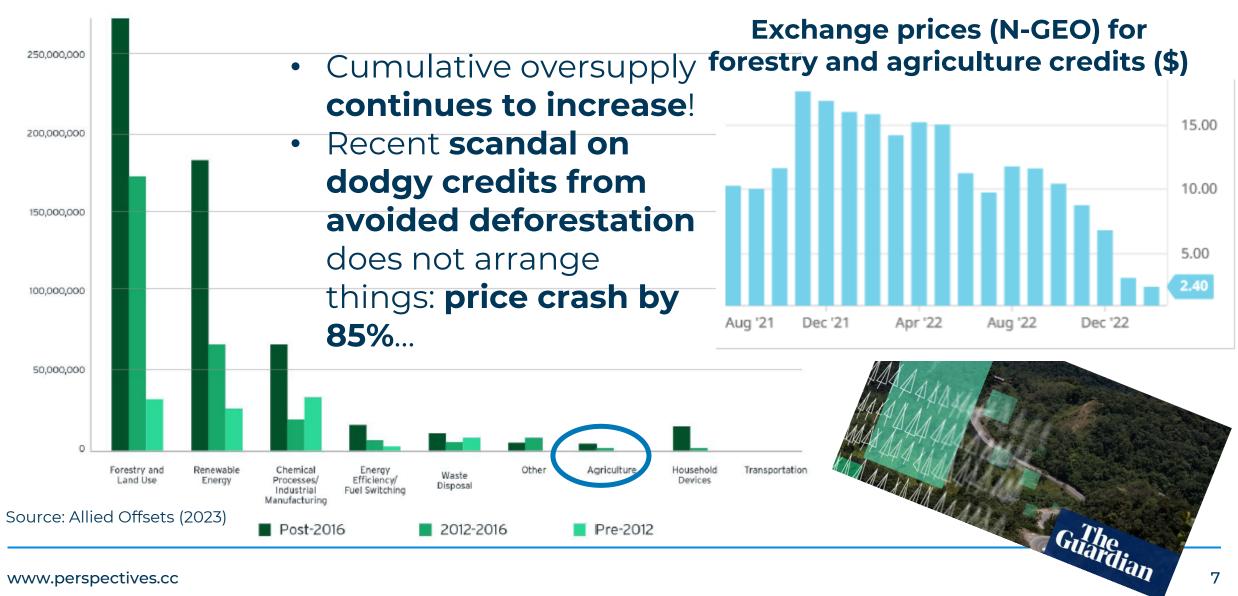




- Extremely
   wide range
   of prices
   and
   quantities:
   several
   orders of
   magnitude!
- Carbon farming relevant removals fetch good prices

#### Unsold credits and LULUCF credit price crash





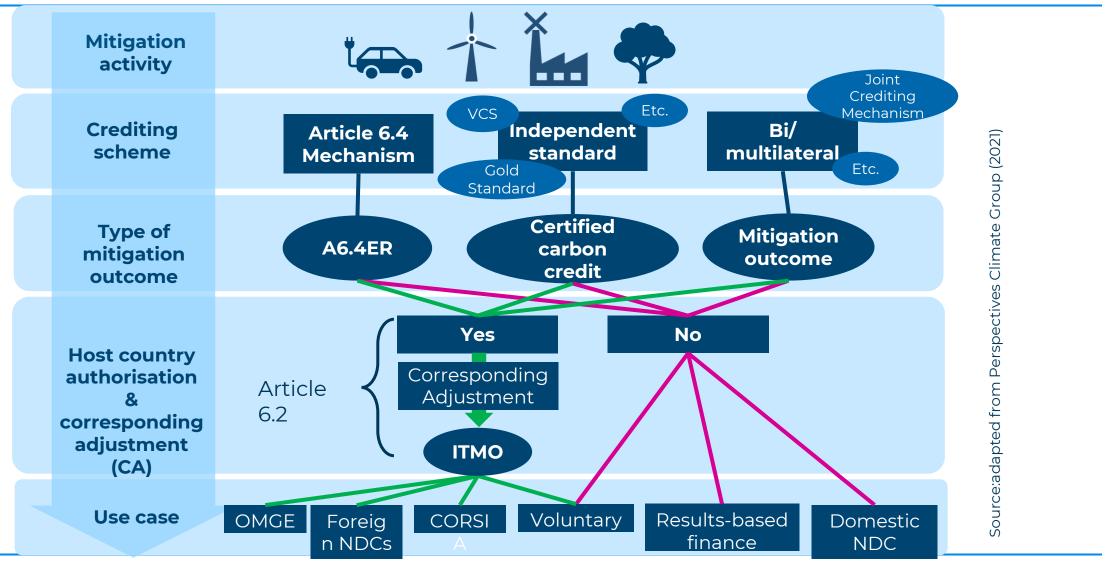
#### International carbon markets under Art. 6



- Article 6 of Paris Agreement sets up two forms of international carbon markets
  - Article 6.2: bilateral agreements, no international oversight
  - Article 6.4: international mechanism with oversight by Article 6.4 Supervisory Body
- Art. 6 covers emission reductions and removals generated from 2021 onwards
- Specific requirements for removals
  - minimising the risk of non-permanence of mitigation across several national target periods
  - when **reversals** of emission removals occur, ensuring that these are **addressed in full** (Art 6.2)
  - 45 year crediting period (Art 6.4).
- Key principles of Article 6.4 mechanism
  - Contribute to increasing ambition
  - Demonstrating additionality: activity shows it is mobilized by the incentives from credit sales
  - Taking into account all existing national mitigation targets and related policies / practices
  - Setting baselines below business-as-usual (BAU)
  - Addressing uncertainties in quantification and preventing overselling
  - Addressing potential leakage

## Article 6 interplay with voluntary market





#### Conclusions



- Carbon markets are an important tool to harness carbon farming
- EU CRCM should not shy away from a market for carbon farming credits
  - EU originally was quite open to emission credit markets, but became strongly opposed to them; such opposition should not become "ideological"
  - Emission credit markets if correctly designed can significantly contribute to climate change mitigation ambition!
- EU should learn lessons from voluntary and compliance credit markets
  - Additionality testing and baseline setting need to be stringent
    - Perspectives' work on removals methodologies for voluntary market (CCS+ initiative)
  - Transparency is key
  - Monitoring approaches and liability for reversals need to be credible
- Farmers should not expect miracles from emission credit markets: they
  can provide relevant revenue, but will not become comparable to
  current agricultural subsidies



## Thank you!

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