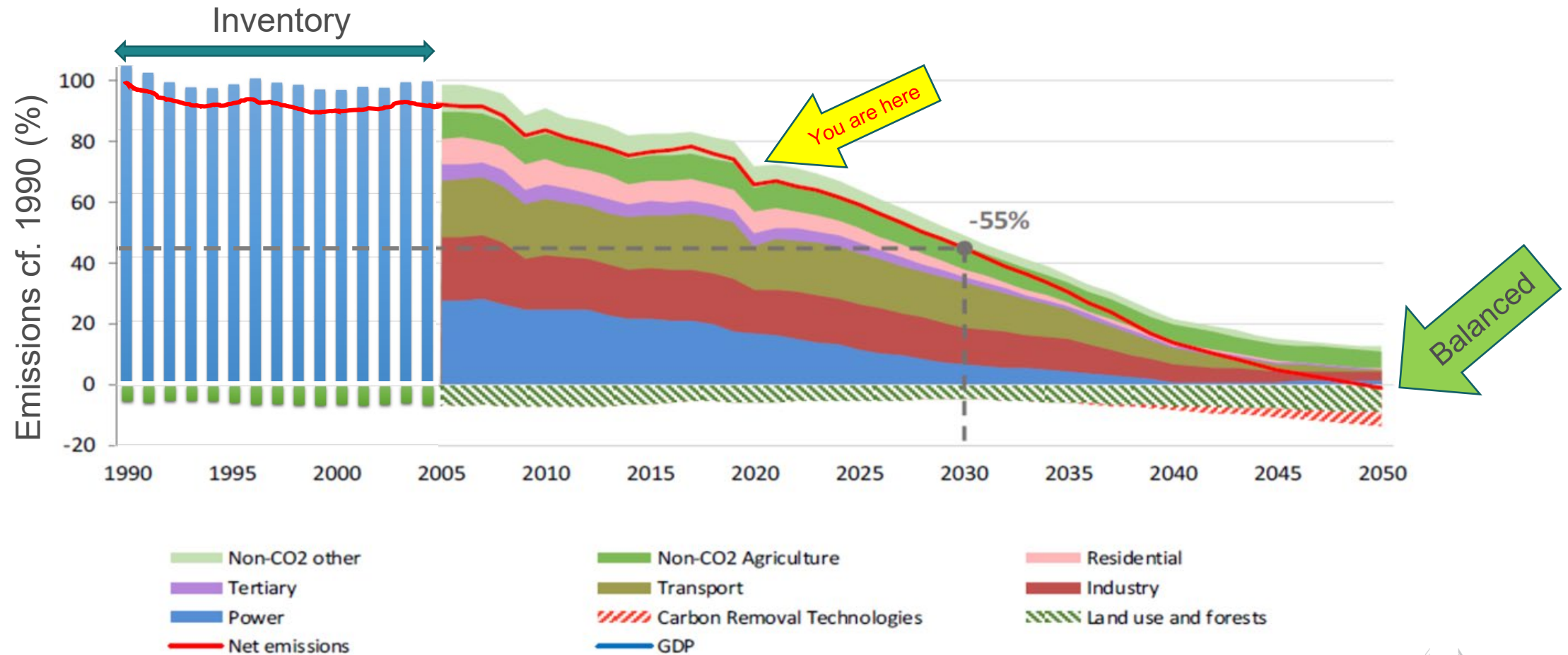




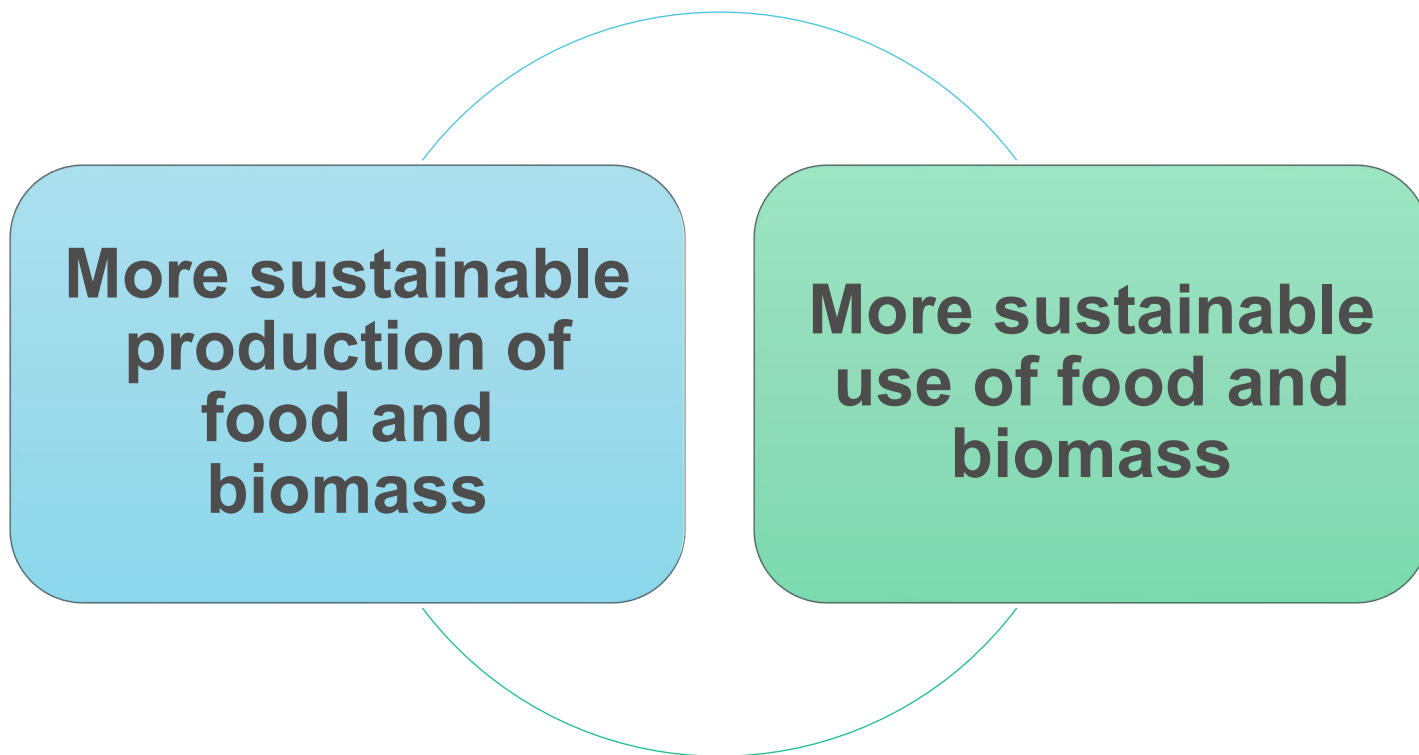
Sustainable Carbon Cycles

24 May 2022

Pathway to climate neutrality



Sustainable Carbon Cycles



Bioenergy with carbon capture and storage (BECCS)

Fibre crops for bio-plastics, packaging, clothes

Wood-based construction products

Carbon farming



A **green business model** rewarding land managers for improved land management practices, resulting in carbon sequestration in ecosystems and reducing the release of carbon to the atmosphere.

Benefits of carbon farming:



Increased carbon removals



Additional income for land managers



More biodiversity and nature



Increased climate resilience of farm and forest land

Carbon farming - examples



Afforestation and reforestation
according to ecological principles



Targeted conversion of **cropland to fallow**, or of set-aside areas to **permanent grassland**



Use of **conservation tillage, catch crops, cover crops** and increasing **landscape features**



Agroforestry
and other forms of mixed farming



Restoration, rewetting and conservation of **peatlands and wetlands**



Blue carbon: coastal wetlands, regenerative aquaculture, marine permaculture

Upscaling carbon farming

Private revenues and public support

Private markets

Common Agricultural Policy

Horizon Europe, LIFE,
cohesion funds

State aid

Transparent rules for high-quality carbon credits

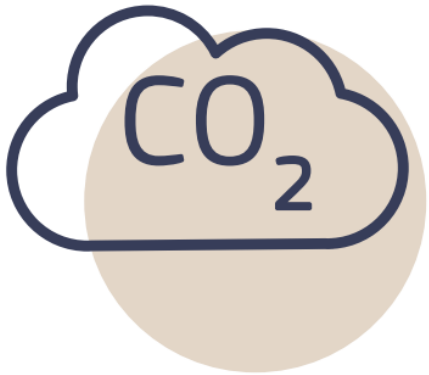
Common standards

Monitoring, reporting and
verification

Advisory services

Simplicity for land managers

Industrial capture, use, transport, and storage of carbon

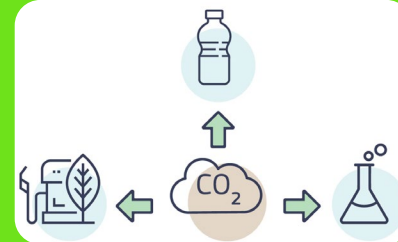


*In addition to decarbonising its energy system, the EU will also need to **rethink its sourcing of carbon** as feedstock for industrial processes.*

Creating an internal market for the sustainable capture, use, and storage of CO₂:



Replace energy-intensive materials (cement, steel...) with **bio-based materials** which store carbon



Transform CO₂ from a **waste product** to a resource, and use it to produce materials, chemicals and fuels



Remove carbon **from the atmosphere**

Sustainable bioeconomy - examples



Bioenergy with carbon capture and storage (BECCS) e.g. Stockholm Exergi's project financed by EU Innovation Fund



Fibre crops (applications: clothes, cosmetics, particle boards, bio-composites, bio-plastics...)



Use of **wood-based construction products** and other carbon-storing building materials

Sustainable capture, use, transport, and storage of carbon

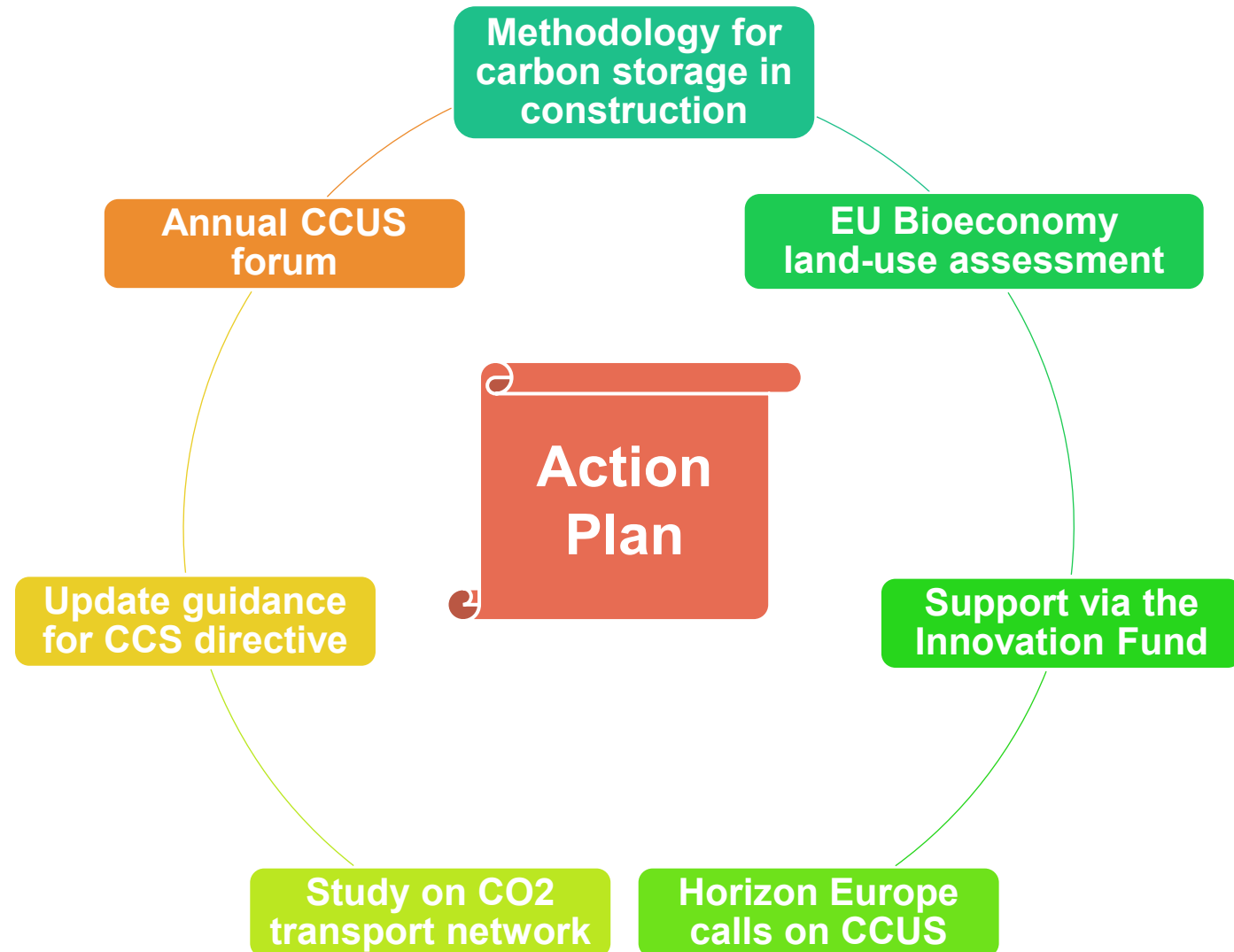
Challenges

By 2028:

- All CO₂ captured, transported, used and stored should be reported and accounted

By 2030:

- 20% of non-fossil carbon used in chemicals and plastics
- 5Mt of industrial carbon removals



Next step:

A regulatory framework for the certification of carbon removals

Conference on Sustainable Carbon Cycles – 31 January 2022

Call for Evidence* open until 2 May 2022

Legislative proposal (Q4 2022)

* Inception Impact Assessment open for feedback; Open Public Consultation.

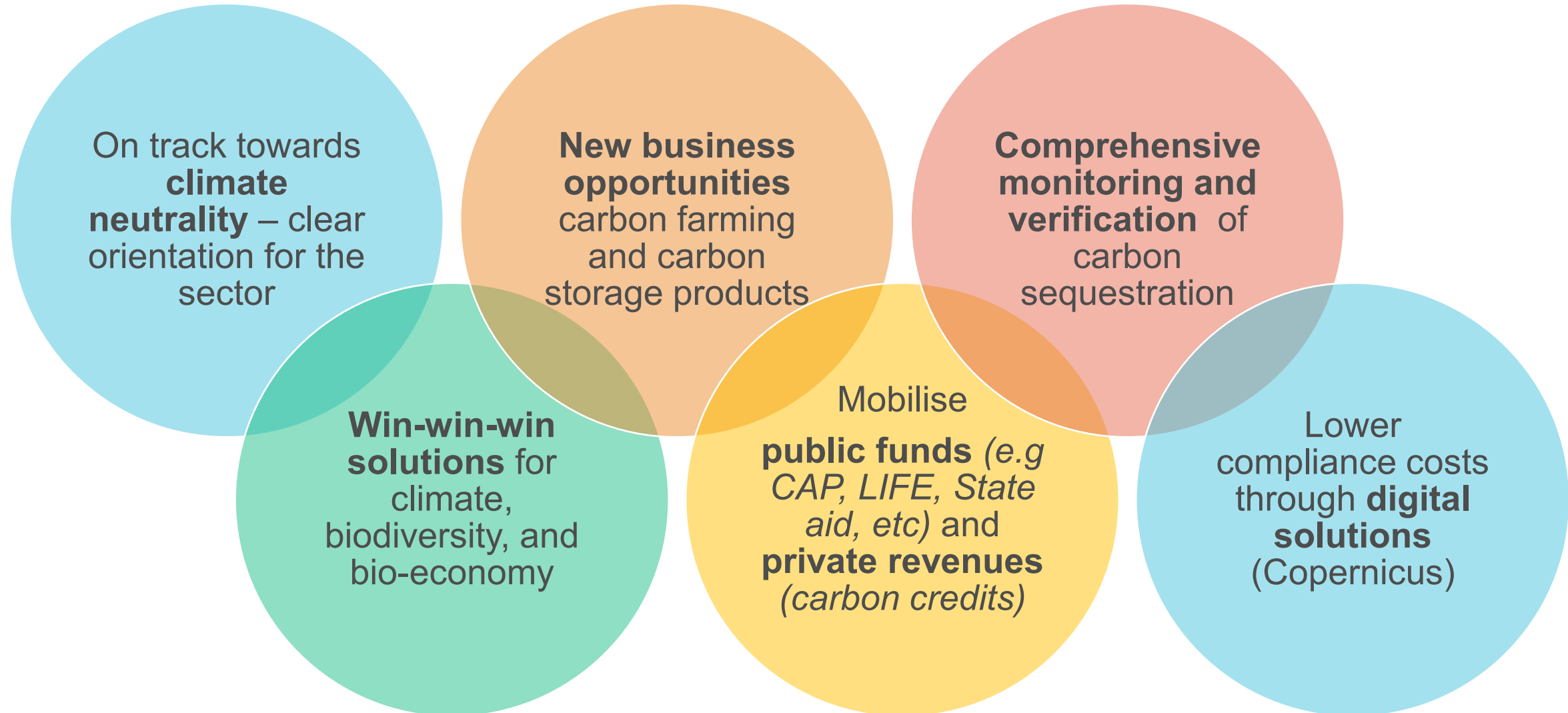
Set robust certification requirements

- Measurement and monitoring
- Additionality
- Duration of storage
- Environmental benefits and safeguards

Establish an effective governance framework for effective, cost-efficient and transparent implementation

Rules applicable for carbon farming and industrial carbon removal projects

Environmental benefits and business opportunities



Links

- Call for Evidence on Carbon Removal Certification [Certification of carbon removals – EU rules \(europa.eu\)](#)
- Conference on Sustainable Carbon Cycles, 31 January 2022 [Sustainable Carbon Cycles Conference - About \(b2match.io\)](#)
- Our [webpage](#) and our [press release](#) on the Sustainable Carbon Cycles communication
- Our webpage on [Carbon Farming \(europa.eu\)](#)
- Commission list of potential eco-schemes <https://europa.eu/!yb74nC>
- Study on Carbon Farming: <https://data.europa.eu/doi/10.2834/594818>
- Study on Wood in construction: <https://dx.doi.org/10.2834/421958>
- Legislative proposal on a new Regulation for Land use, forestry, and agriculture [Delivering the European Green Deal | Climate Action \(europa.eu\)](#)