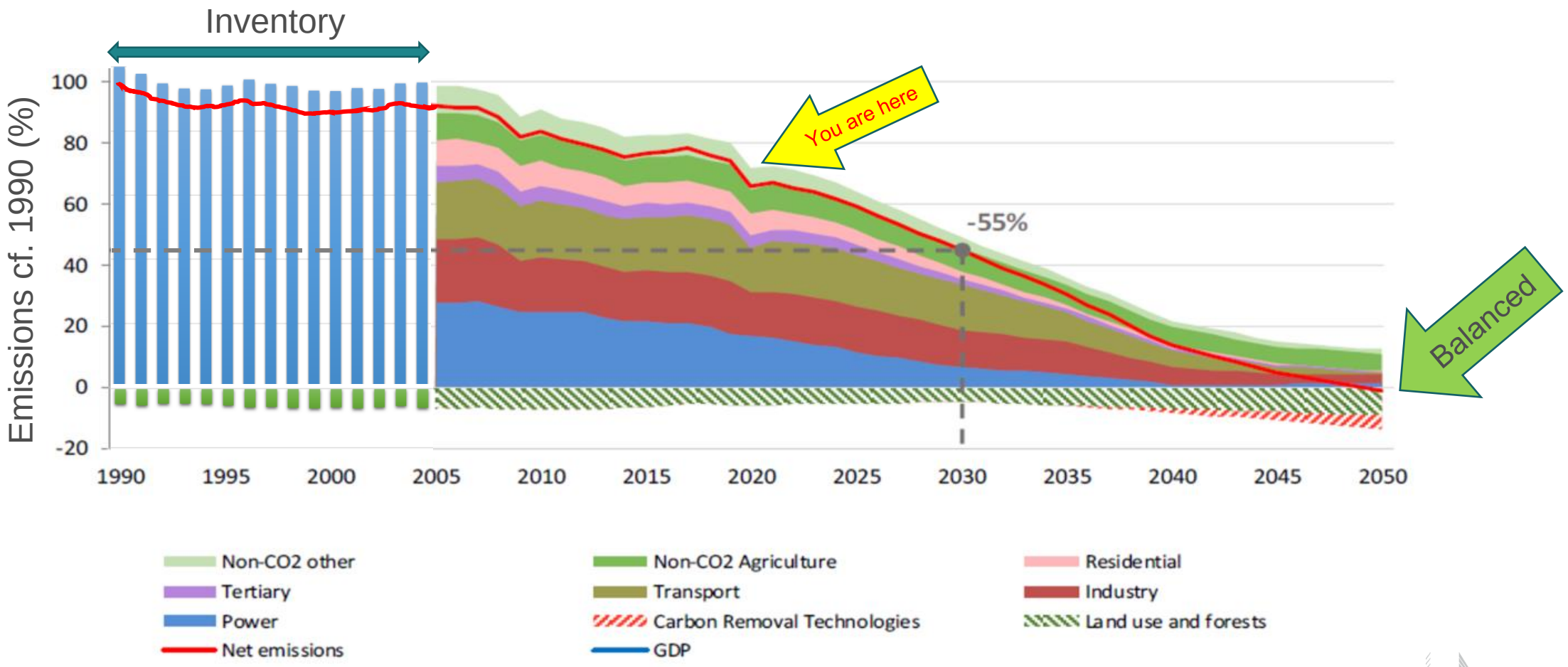
# Sustainable Carbon Cycles

*14 March 2022*

# Pathway to climate neutrality

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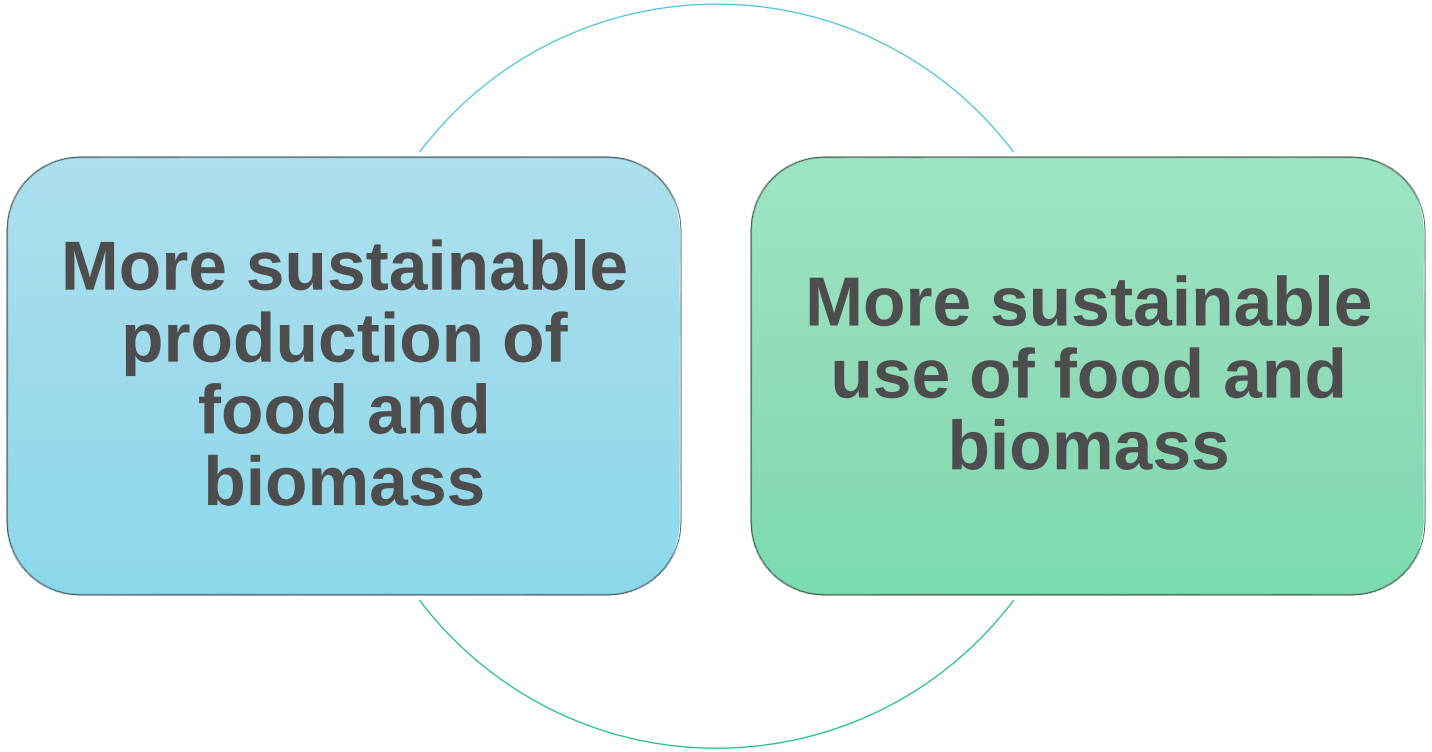
# Sustainable Carbon Cycles




- 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

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# 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

# Carbon farming

## Challenges

### By 2028:

- Access to verified emission and removal data for all land managers

### By 2030:

- Contribute to reaching LULUCF target of 310 Mt CO2eq net removals


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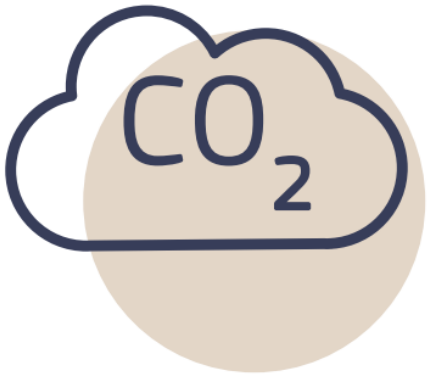
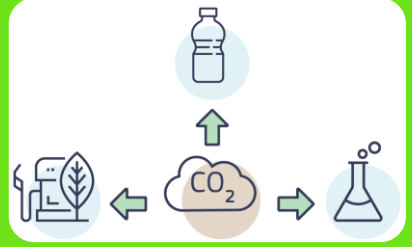
# Industrial capture, use, transport, and storage of carbon




*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**

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# 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

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# 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.

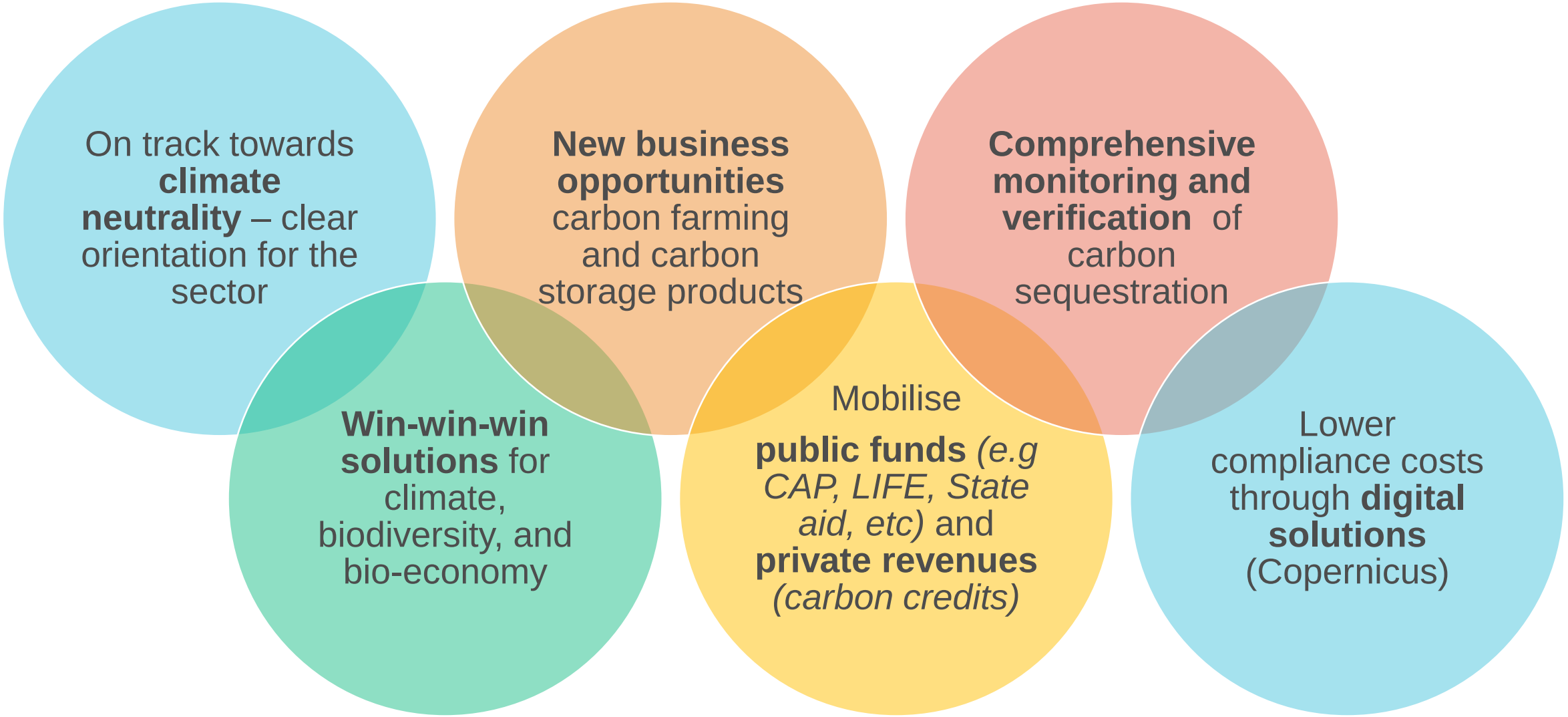
Set robust certification requirements

- 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)