



The EU carbon farming initiative

Webinar: Soil protection and building up of soil organic matter (humus)

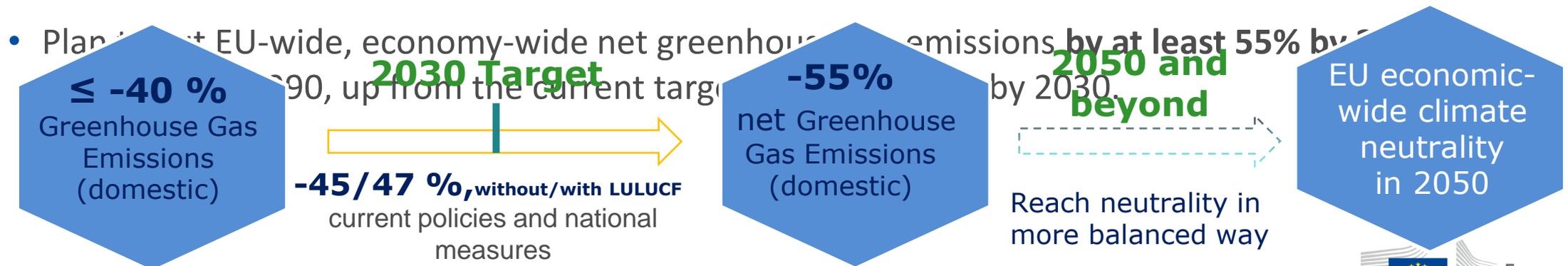
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Towards a climate-neutral EU by 2050

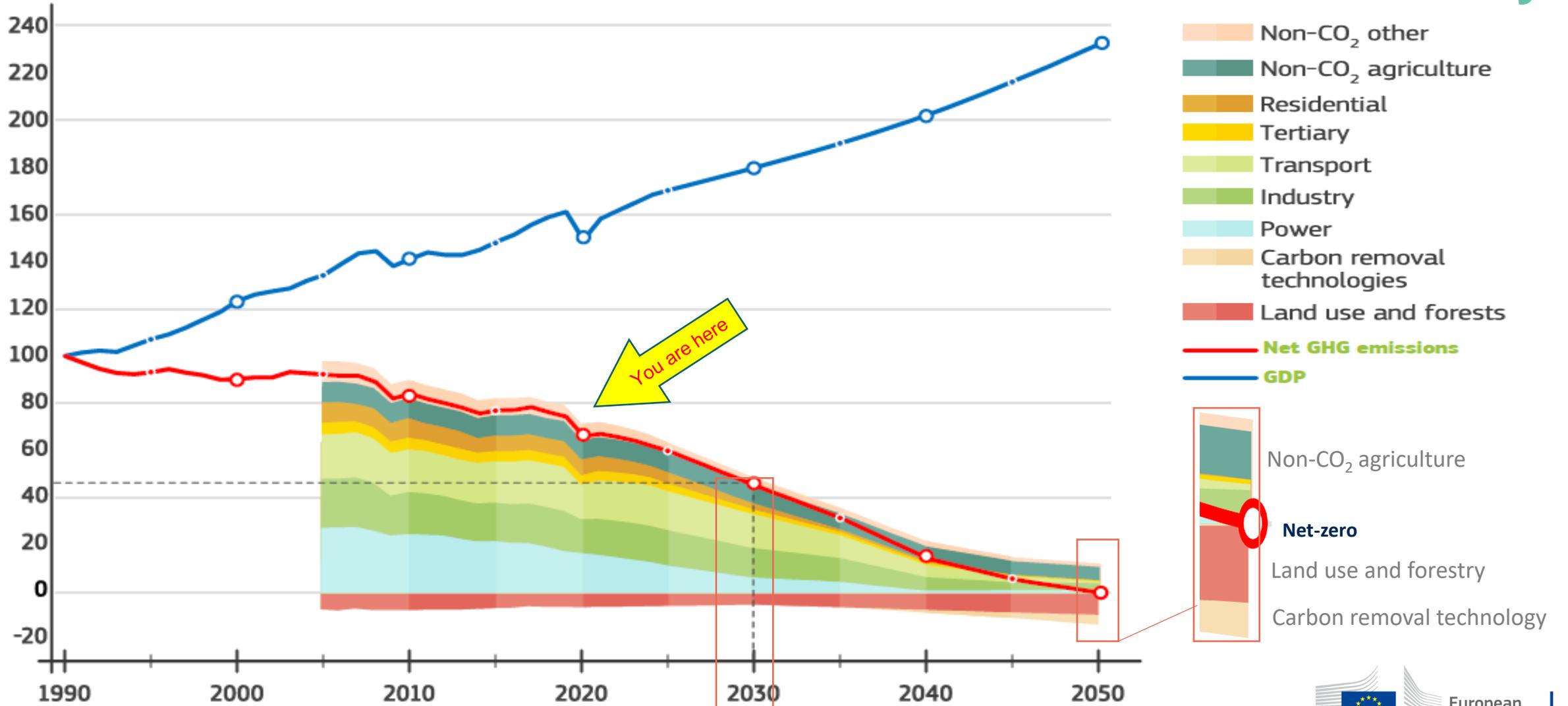
The EU climate law

- The EU submitted its **long term GHG reduction strategy** in March 2020 - committing to **climate neutrality by 2050** - and the **Nationally Determined Contribution (NDC)** in December 2020 to the UNFCCC.
- Climate neutrality by 2050 is **in line with the Paris Agreement** goals to keep climate change below 2°C while pursuing efforts to keep it below 1.5°C and Art 4.
- Political Agreement Council/EP on 5 May 2021 on the **EU Climate Law** - to enshrine this EU target legally. It establishes a climate pathway to climate neutrality by 2050 and negative emissions beyond (-55% by 2030, 2040 target, projected indicative GHG budget 2030-2050, adaptation, sectoral roadmaps etc).



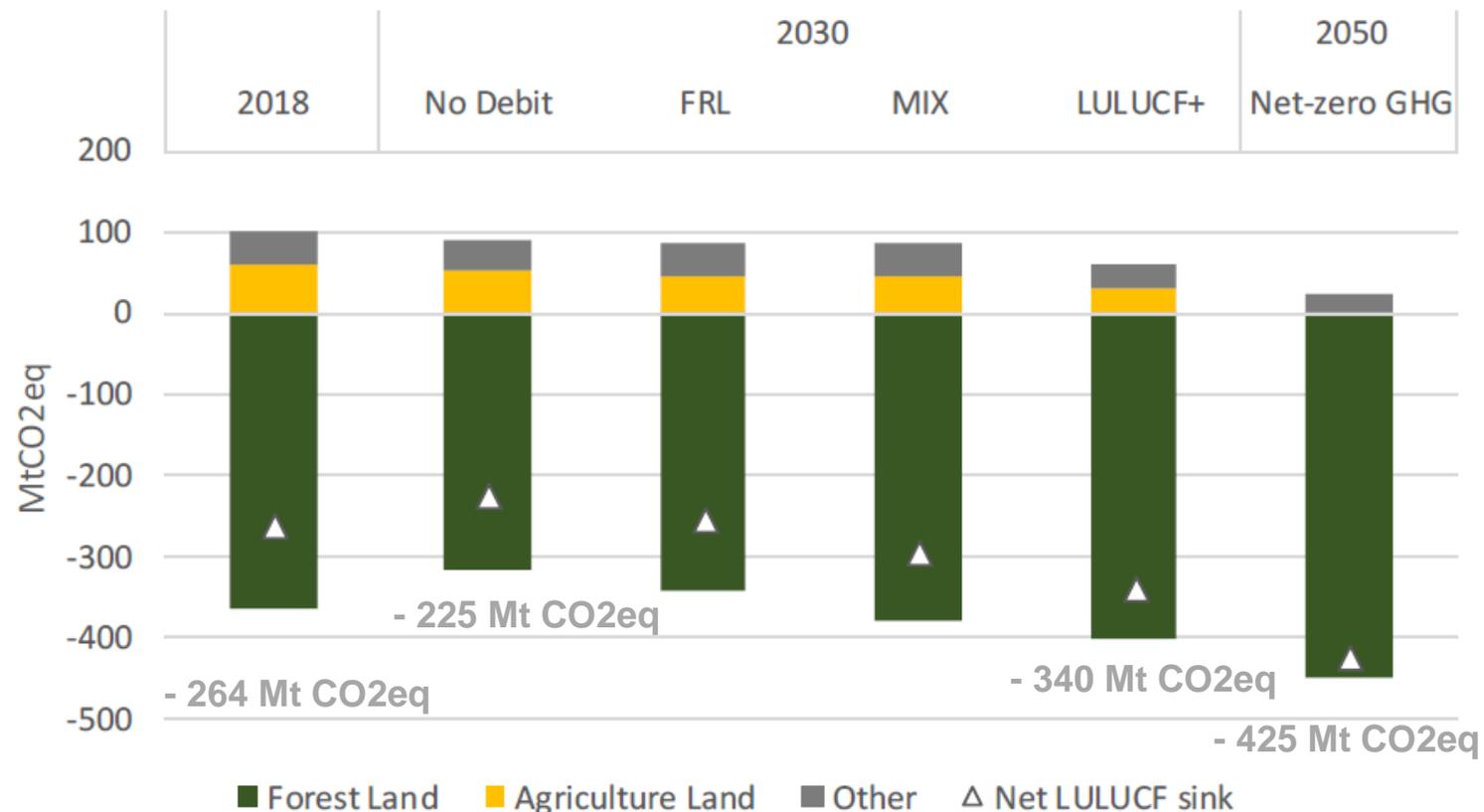
EU pathway to climate neutrality

55% GHG by 2030 can be achieved in a responsible way



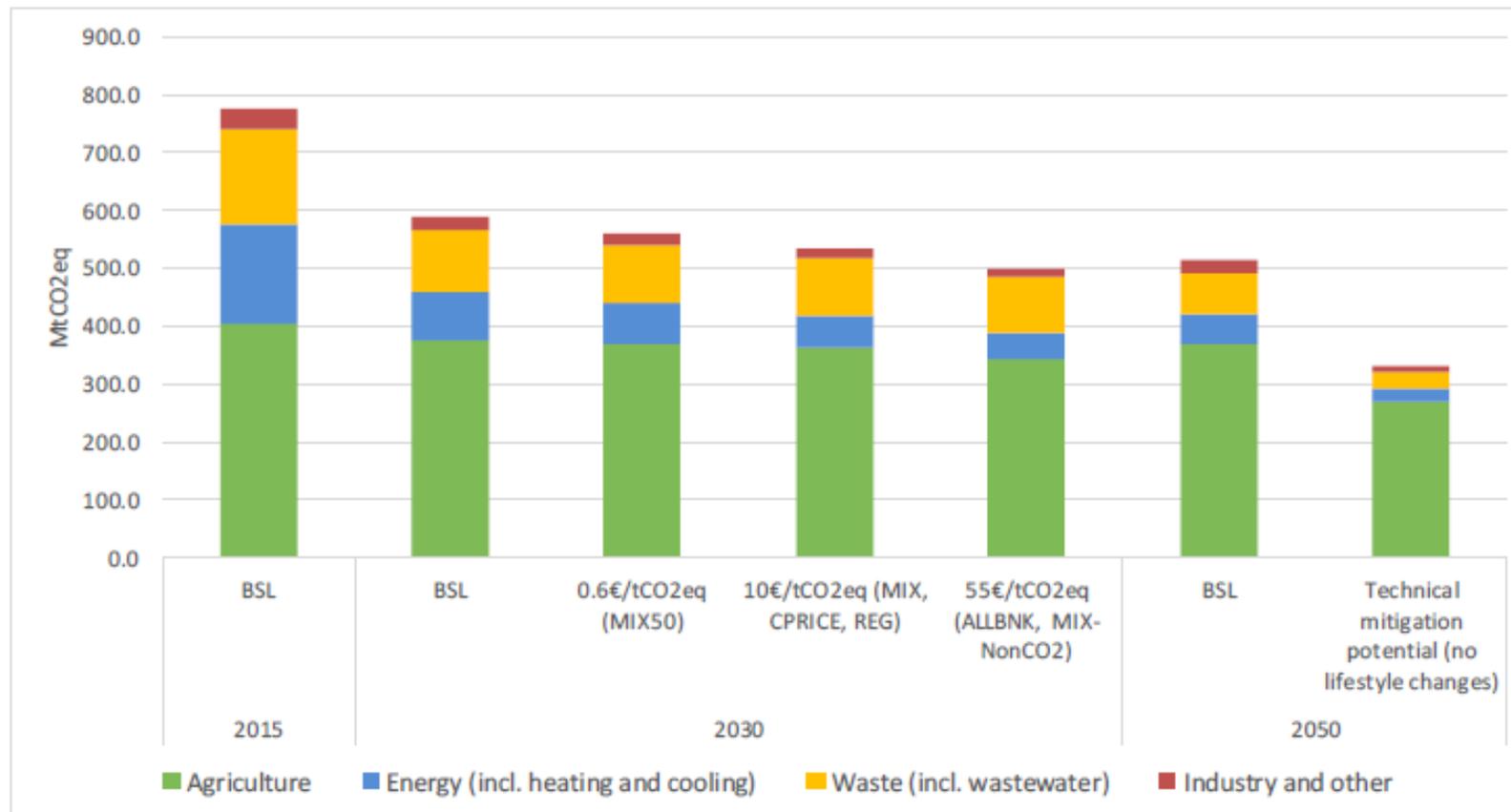
Crucial role of the LULUCF

- Significantly increase its sink capacity is required, while providing biomass for renewables and bio-economy (e.g. use of the harvested biomass in buildings), and face natural disturbances
- Main contribution is from forest. Energy crops (perennials) a possibility to reduce pressure on forest sink.



Non CO2 GHG emissions and mitigation potential

- Key importance of further reducing non-CO2 emissions towards 2050, which will be crucial to limit the need for net removals in order to achieve net zero GHG emissions.
- Over 150 million tonne CO2eq of removals saved, if the technical mitigation potential in non-CO2 would be



Potentials and challenges

Potential to increase net carbon removals to 300 millions tons CO₂eq by 2030

- Risk that business-as-usual and natural hazards due to climate change lead to **sink of 225 million tons CO₂eq only** by 2030.
- Significant short-term action needed due to long lead times, especially in forestry.

Potential to reduce non-CO₂ emissions in agriculture by 20% in 2030

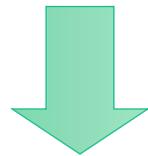
- **Potential** in the agriculture sector: e.g. fertiliser use efficiency, precision farming, healthy ruminants herds, anaerobic digestion

Climate-neutral land/bio-economy by 2035

- **Circular economy** and carbon removals as a new and growing market for farmers and foresters
- **Non-CO₂ emission in agriculture** expected to equal net carbon removals from LULUCF in 2035

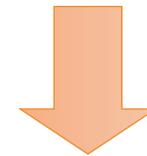
Key questions

How to set ambitious and credible targets for LULUCF and agriculture?



Review of the LULUCF Regulation as part of 'Fit for 55 package'
Commission proposal in July 2021

How to bring better incentives to farmers and foresters and create a better business model for them?



Carbon farming initiative
Q3 2021

Certification of carbon removals
Commission proposal in June 2022/23

Creating better incentives for farmers and foresters

Carbon farming

Climate

Co-benefits

Increase SOC in mineral soils and grasslands

Socio-economic (alternative income, reduce cost)

Protection/restoration of C-rich soils

Biodiversity ecosystem services

Increase storage in biomass

Increased resilience

GHG reduction at farm level

Other (preserve cultural heritage, water services)

Result-oriented CAP

CAP Recommendation and Strategic Plans

40% climate mainstreaming

Incentives through CAP

'Green architecture'
Research and Innovation
Horizon Europe/Soil Mission
Cooperation (EIP-AGRI)
Farm Advisory Service (+AKIS)

Certification of carbon removals

EU-wide standards for carbon removals

Voluntary and regulatory carbon markets

Nature-based and technological

Other (e.g. product standards)

EU strategies

Farm-to-Fork Strategy

Methane Strategy

Biodiversity Strategy

Forest Strategy

Soil Strategy (in prep)

Technical Guidance Handbook

Setting up and implementing result-based carbon farming mechanisms in the EU

The Handbook explores key issues, challenges, trade-offs and design options to develop carbon farming. It reviews existing schemes that reward climate-related benefits in the following five areas:

Offer advisory services to engage land managers

Design simple but robust MRV

Reduce risk for land managers

Peatland restoration and rewetting

Agroforestry

Livestock farm carbon audit

Maintaining and enhancing soil organic carbon on mineral soils

Managing soil organic carbon on grassland

Still a lot of open questions

Design dimensions

- Governance,
- Coverage & eligibility,
- Additionality and baseline
- Carbon leakage
- Permanence
- MRV (high costs and uncertainty),
- Transparency and reporting

Specific challenges for Soil Organic Carbon

- Non-permanence,
- Saturation of soil with carbon
- Effects of extreme events
- Results of the implementation of good practices

Reward mechanism

- Action-based
- Result-based
- Hybrid

The role of CAP

- Cross-compliance (GAEC and Statutory Management Requirements)
- Support schemes: eco-schemes, agri-environmental climate commitment, investments into biodiversity and ecosystem services,

Thank you

RESOURCES

2030 CLIMATE TARGET PLAN

https://ec.europa.eu/clima/policies/eu-climate-action/2030_ctp_en

CARBON FARMING

https://ec.europa.eu/clima/content/carbon-farming_en

CARBON FARMING SCHEMES IN EUROPE – ROUNDTABLE

<https://webcast.ec.europa.eu/carbon-farming-schemes-in-europe-roundtable#>

2ND CARBON FARMING ROUNDTABLE

https://ec.europa.eu/clima/events/2nd-carbon-farming-roundtable_en

CAP STRATEGIC PLANS RECOMMENDATIONS

https://ec.europa.eu/info/food-farming-fisheries/key-policies/common-agricultural-policy/cap-strategic-plans_en

TECHNICAL GUIDANCE HANDBOOK

<https://op.europa.eu/en/publication-detail/-/publication/10acfd66-a740-11eb-9585-01aa75ed71a1/language-en>



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