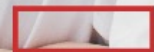


The European Innovation Council

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Programme Manager
Energy and environment

Firenze, 20 giugno 2022

European
Innovation
Council



The EIC within Horizon Europe



HORIZON EUROPE

EURATOM



* The European Institute of Innovation & Technology (EIT) is not part of the Specific Programme

Pathfinder

- Early stage research on breakthrough technologies
- Grants up to 3 to 4 million EUR
- Successor of FET (Open & Proactive)

Transition

- Technology maturation from proof of concept to validation
- Business and market readiness
- Grants up to 2.5 million EUR

Accelerator

- Development & scale up of deep-tech/disruptive innovations by startups/SMEs
- Blended finance (grants up to 2.5 million EUR; equity investment up to 15 million EUR)
- Successor of SME Instrument

European Innovation Council (EIC)

PM Roles : mix of policy and implementation



Building **strategic intelligence**, selection of topics and definition of scope of calls, chair of evaluation panel (pathfinder) and **portfolio implementation**

Clustering projects in thematic **portfolios**, enhance cross-sectorial contaminations and serendipity

Scientific knowledge + networking + entrepreneurial vision to **transform research into innovation**

**Scientific
intelligence
and
Proactive
Management**

Outreach to R&I stakeholders, links to other EU programmes and engagement with innovation ecosystem community

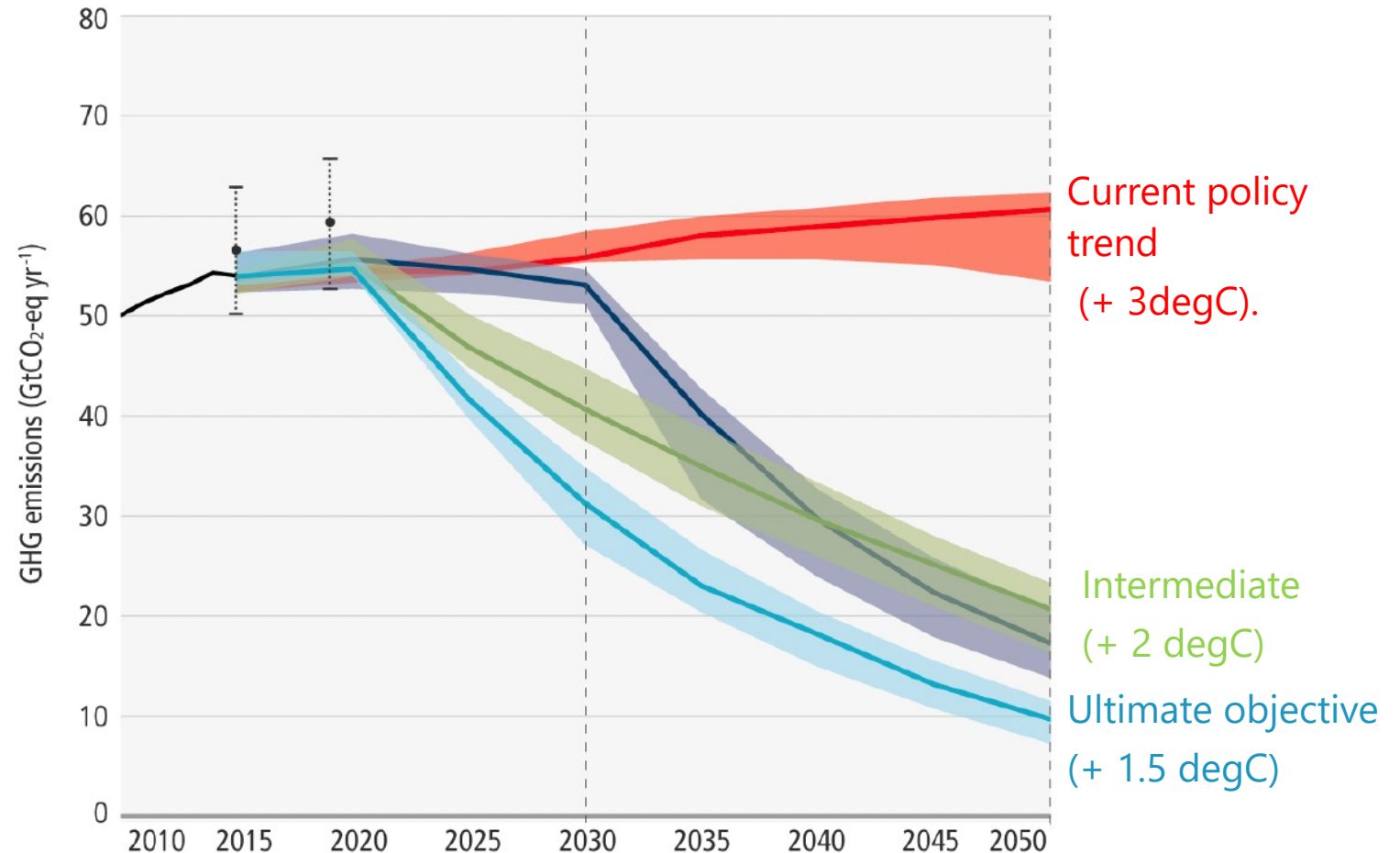
Global GHG emission reduction targets

Human-induced GHG emissions have never been as high as today.

To prevent a massive degradation of Life on Earth, we need to **limit global warming to 1.5°C**.

This implies:

- inverting the emission trend by 2025
- halving our emissions by 2030
- **reaching carbon neutrality by 2050**



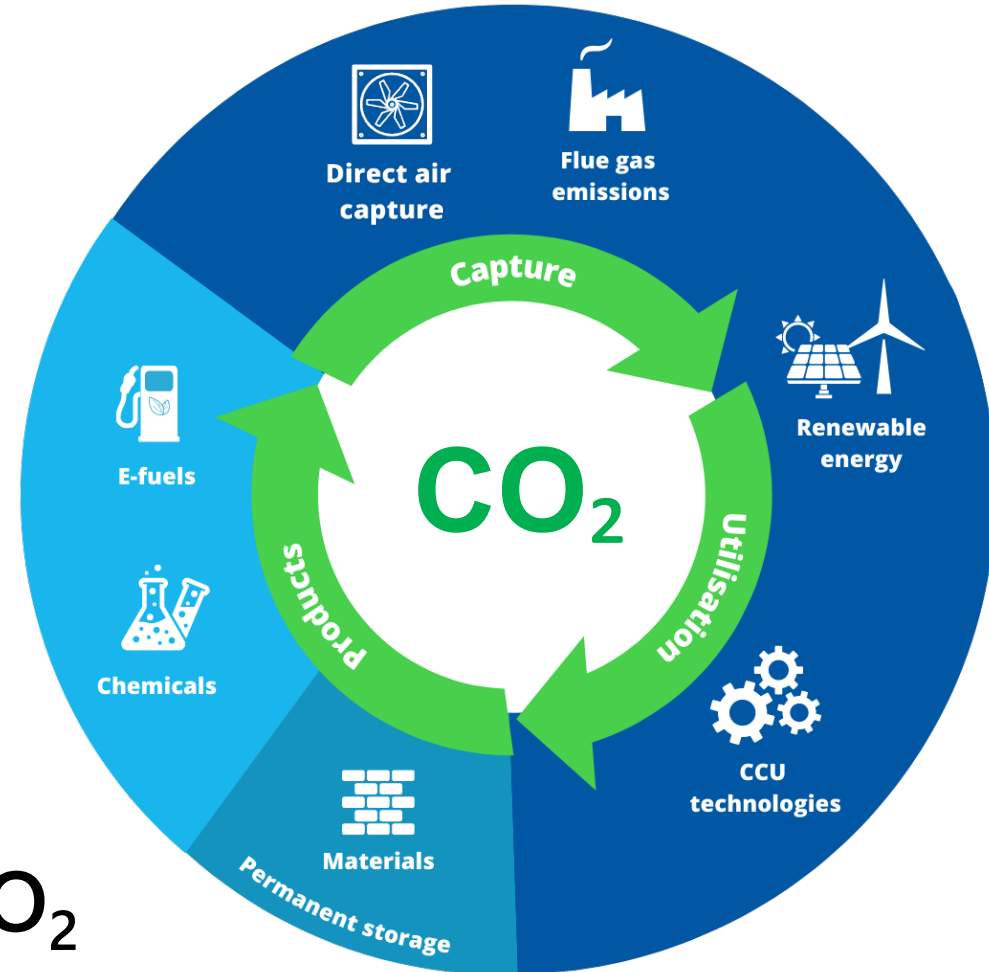
The role of Carbon Capture and Utilisation (CCU)

IPCC definition:

CCU refers to a process in which CO₂ is captured and the **carbon is then used in a product**. The climate effect of CCU depends on the product lifetime, the product it displaces, and the CO₂ source (fossil, biomass or atmosphere). CCU is sometimes referred to as Carbon Dioxide Capture and Use, or Carbon Capture and Utilisation."

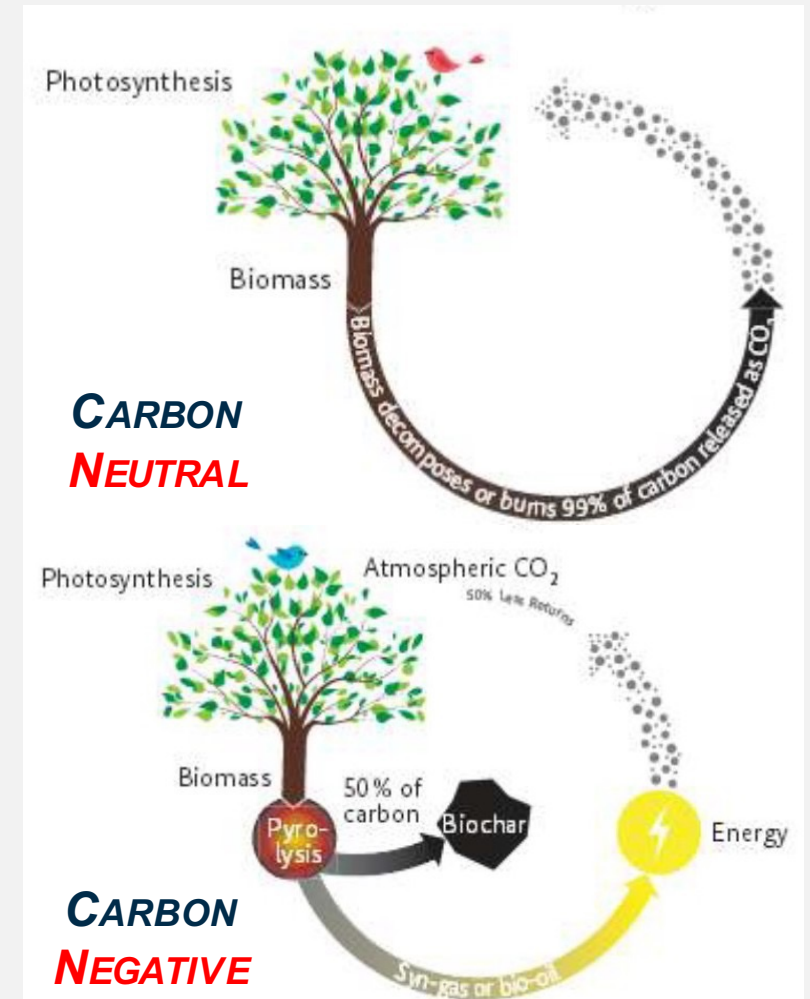
CCU technologies enable to...

REDUCE AVOID REMOVE CO₂



The need for Carbon, organic matter and nutrients in soil

- Lack of organic C in EU soil and Third Countries is documented and dramatically increasing
- Bringing this C back to soil is necessary
- It also sequester C, if in the long-lived C form



Il ruolo di biochar e carbon farming

- la cattura ed utilizzo di carbonio nei suoli attraverso il biochar e' una pratica estremamente sostenibile e virtuosa per raggiungere gli obiettivi di riduzione CO2
- il riconoscimento di crediti di carbonio per la produzione ed utilizzo del biochar consentirebbe di coprire la differenza di costo rispetto agli ammendanti e fertilizzanti attuali, garantendo la sostenibilita' economica per gli agricoltori
- L'accesso al mercato delle emission di CO2 puo' aprire interessanti prospettive al settore agricolo, fino ad ora escluso dai meccanismi di incentivazione ETS
- Attualmente il riconoscimento di ETS e' consentito solo nel caso di sostituzione diretta ' di carbonio fossile e non per applicazioni non dirette e sono presenti solo mercati volontari con modesta redditivita'
- Esiste una barriera di tipo regolatorio che puo; richiedere un intervento della Commissione Europea e l'azione congiuntadi diverse DG

Interservice and stakeholders consultation innovation deal: nature based solutions for carbon management



- **BIOCHAR is the most cost-competitive NET at large scale**
 - ✓ Biochar is a form of BioCCS/U. It can cost 200-500 €/tC
 - ✓ ICAO for Sustainable Aviation is already introducing offsetting through BioCCS/U
- Extension of ETS to incorporate a share of Nature-based solutions is key, but not yet possible as indirect offsetting
- ETS market must however be regulated to balance offer-demand and to maintain commitment of obligated companies

Biochar is currently non cost-competitive if it is not part of a global large scale NET policy

The agricultural sector could play a key role in the achievement of GHG targets, if the participation to the ETS market is allowed





Thank you!

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