

# Carbon Dioxide Removal in EU Climate Policy: strategic policy design choices

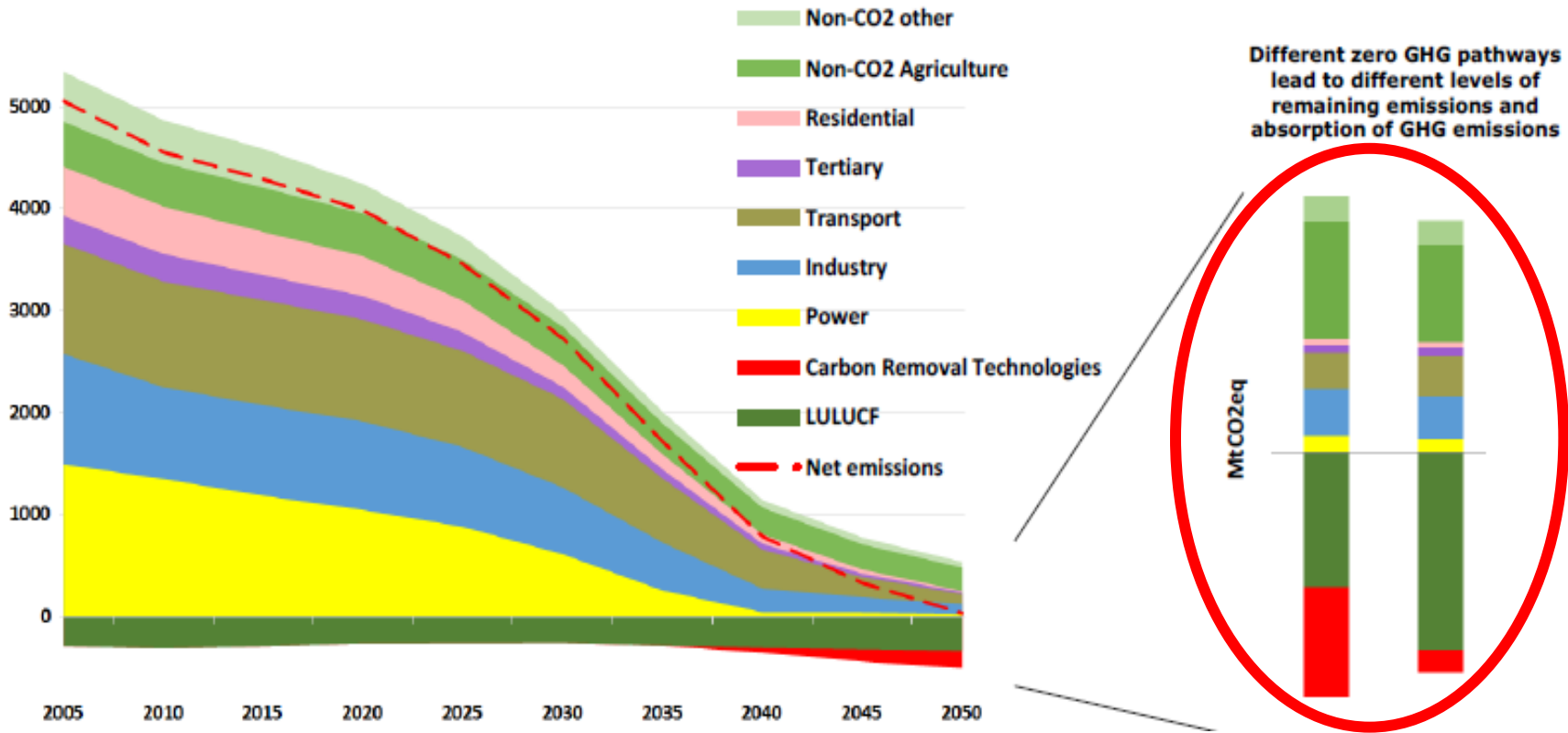
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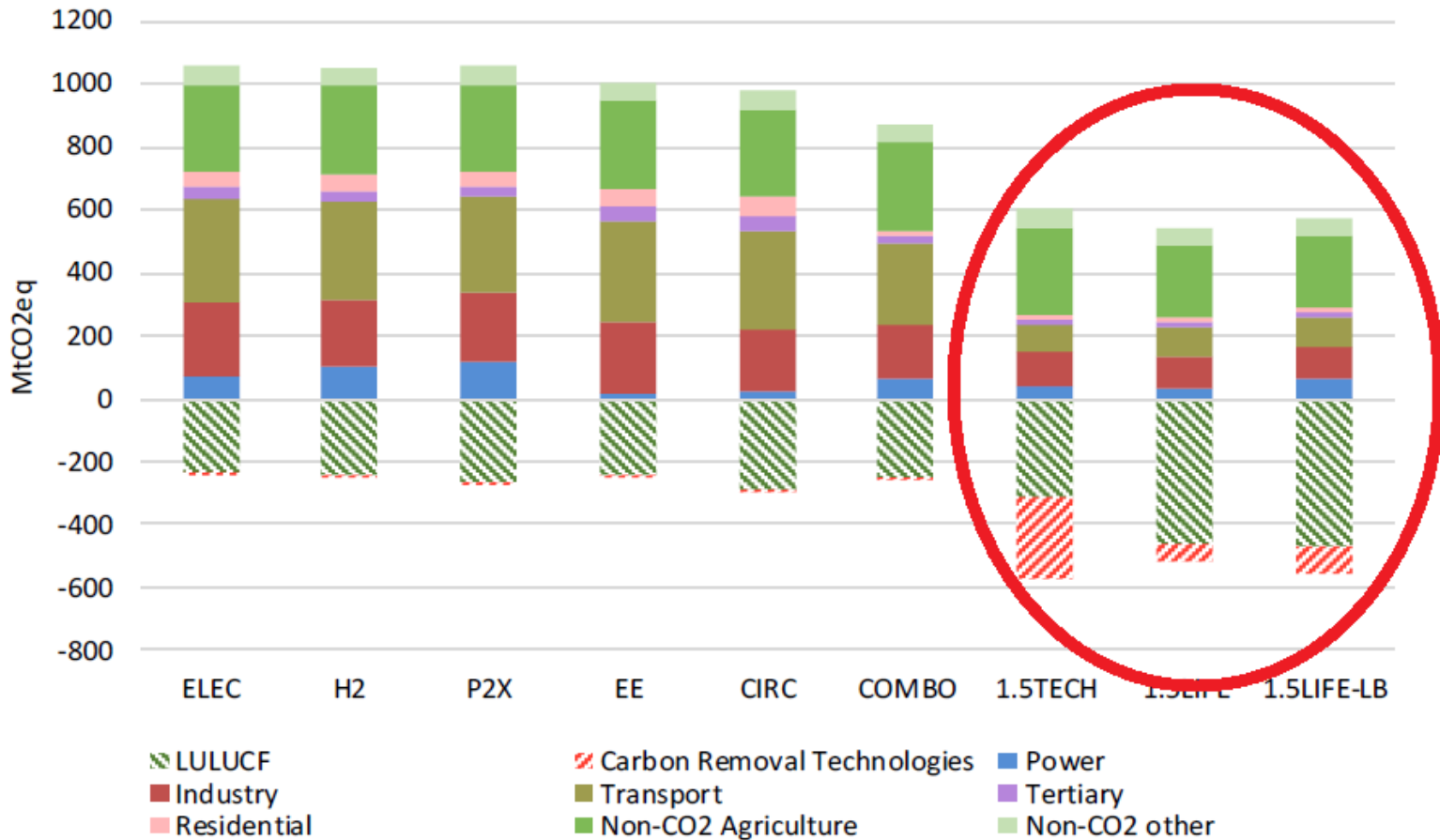
*ERCST Brainstroming,*  
**Brussels, Sep 24, 2019**

# Residuals vs. Removals Principle



In-Depth Analysis in support of COM(2018) 773 final

# Which sectors to benefit from removals?



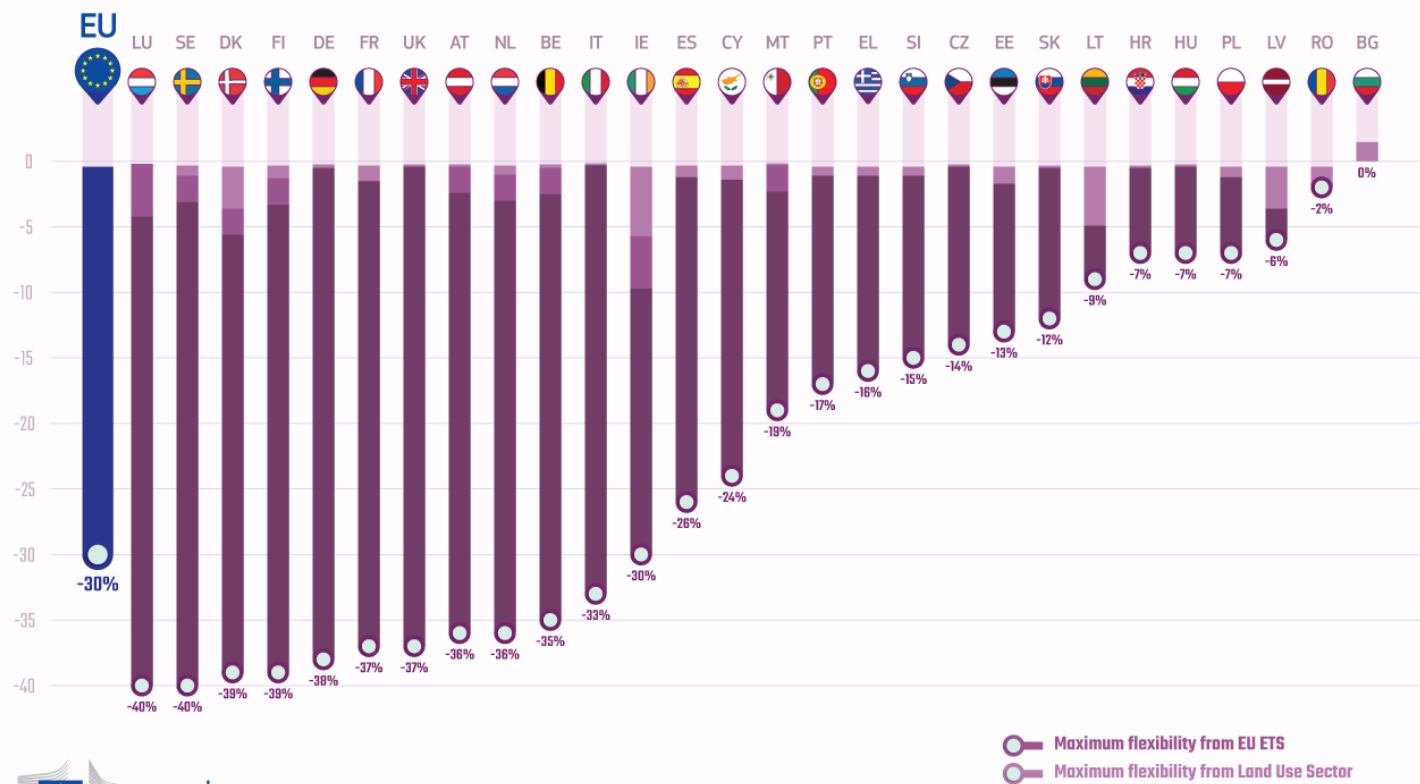
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# Distributional Considerations

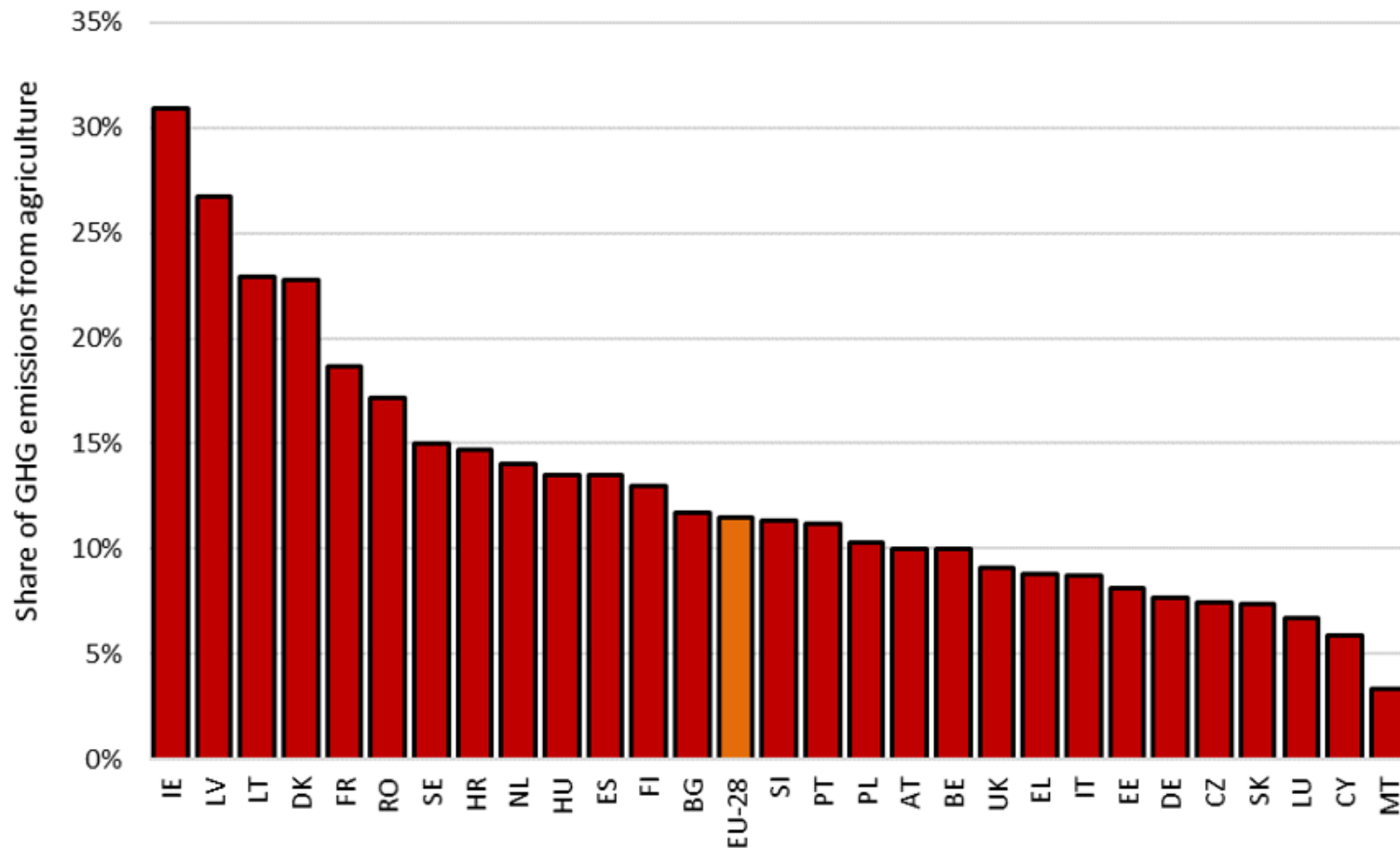
- The higher the residuals/removals columns, the more flexibility in mitigation trajectories
- Residuals to become highly politicised category
- If not every sector, company or EU Member State needs to eliminate all its emissions then others will need to go *net negative*
- Main issues: Who's allowed to stay above zero, who needs to go net negative (and how far)?  
Who's responsible for delivering removals – and who's going to pay for it?

# Removals to Prolong National (GDP-related) Differentiation of Efforts?

Member State specific emission reduction targets for 2030 compared to 2005, for sectors outside the EU Emissions Trading System including new flexibilities for reaching those targets



# Removals to Maintain Specific National Economic Structures?



EU Statistical Pocketbook 2018

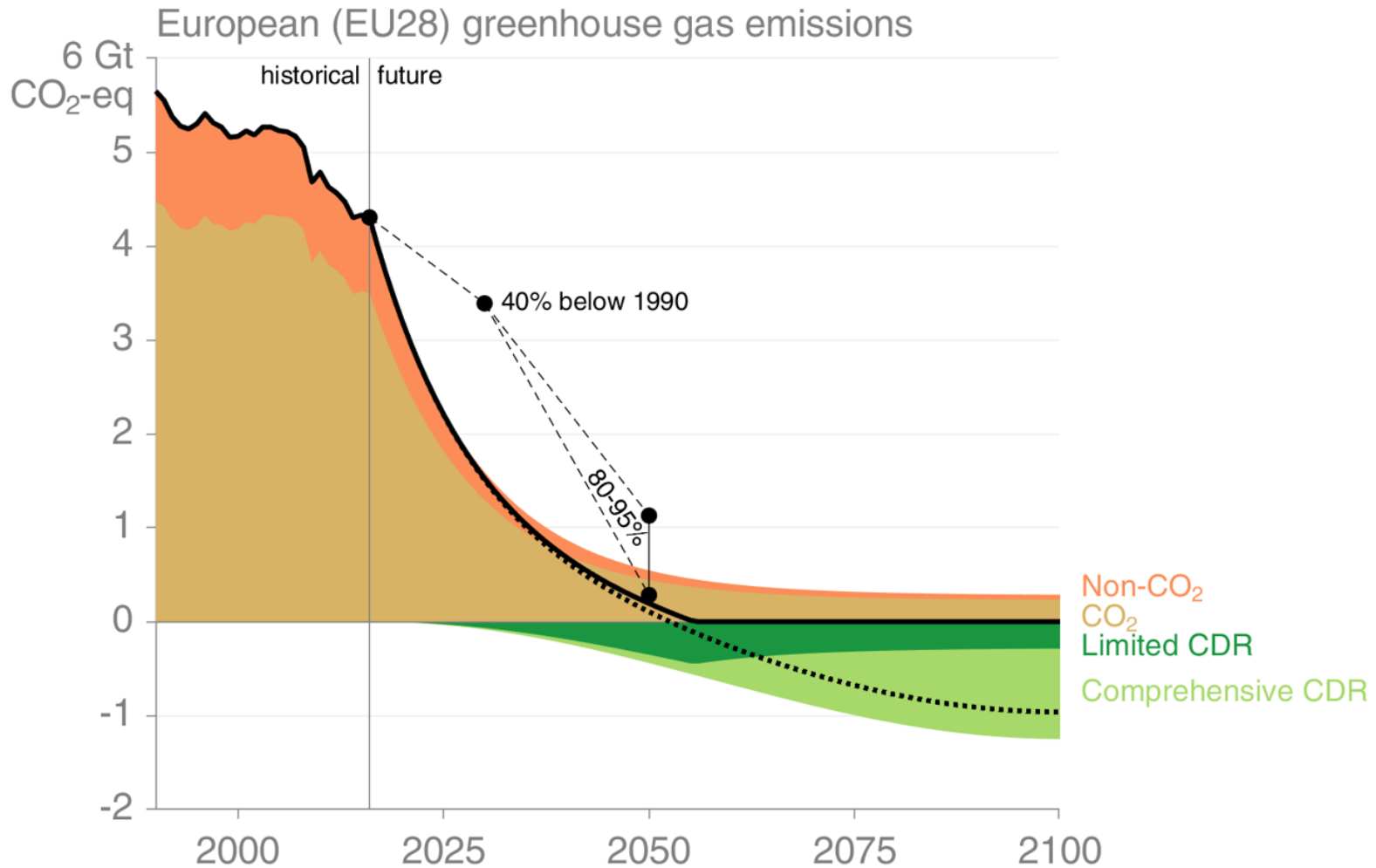
# Main Takeaways

- Efforts to reach net zero will not be evenly distributed among sectors and Member States
  - Distribution will not primarily follow cost-optimal designs but political considerations
- Major EU design choices
  - Integration of removals into existing structure (ETS – ESR – LULUCF) or creation of specific (tech) removal instrument?
  - Open competition (no limits on removals) or split targets for conventional mitigation and removals (95%-5% or 90%-10%)?
  - What is EU aiming for in the (very) long-term?

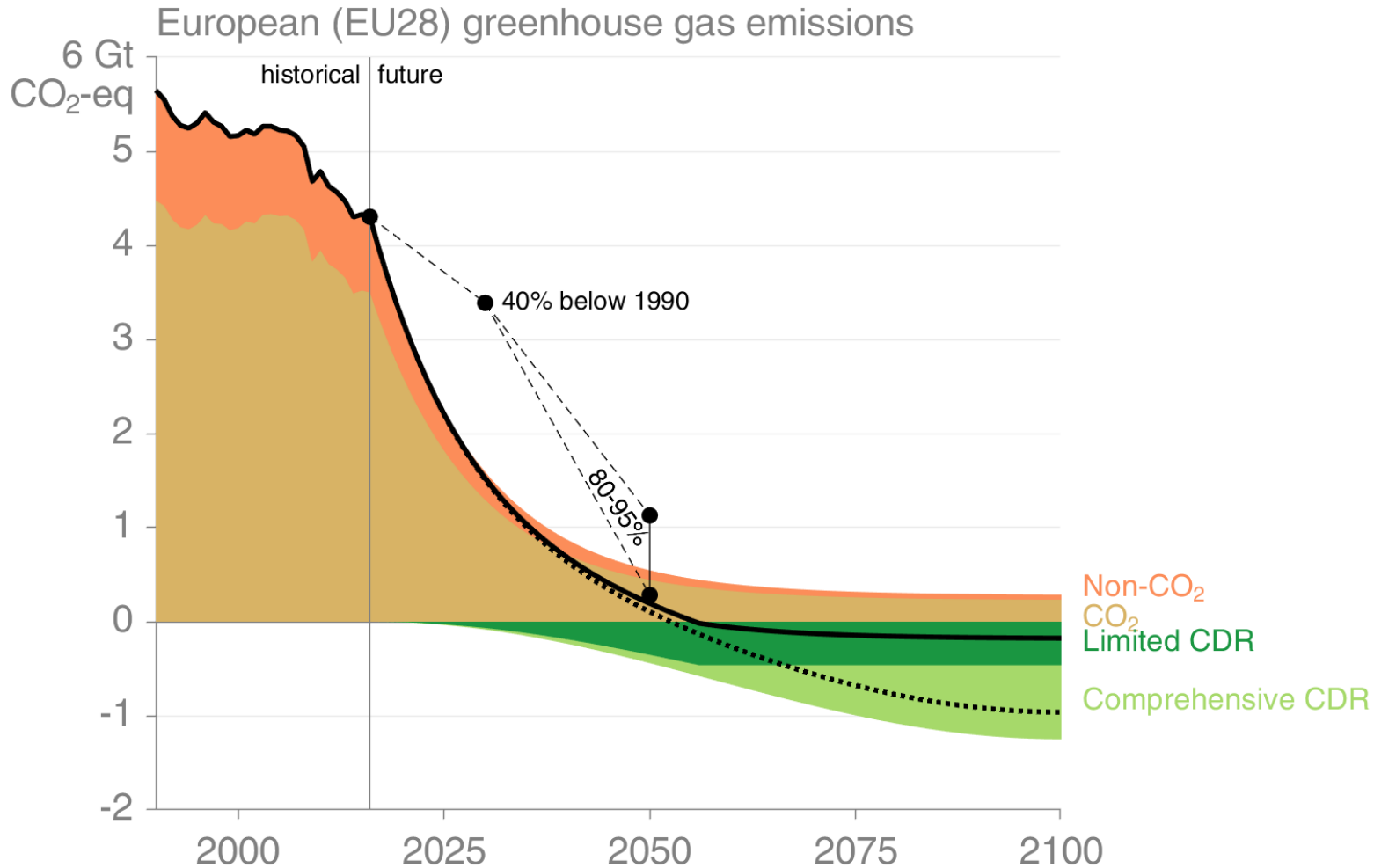
# Backup



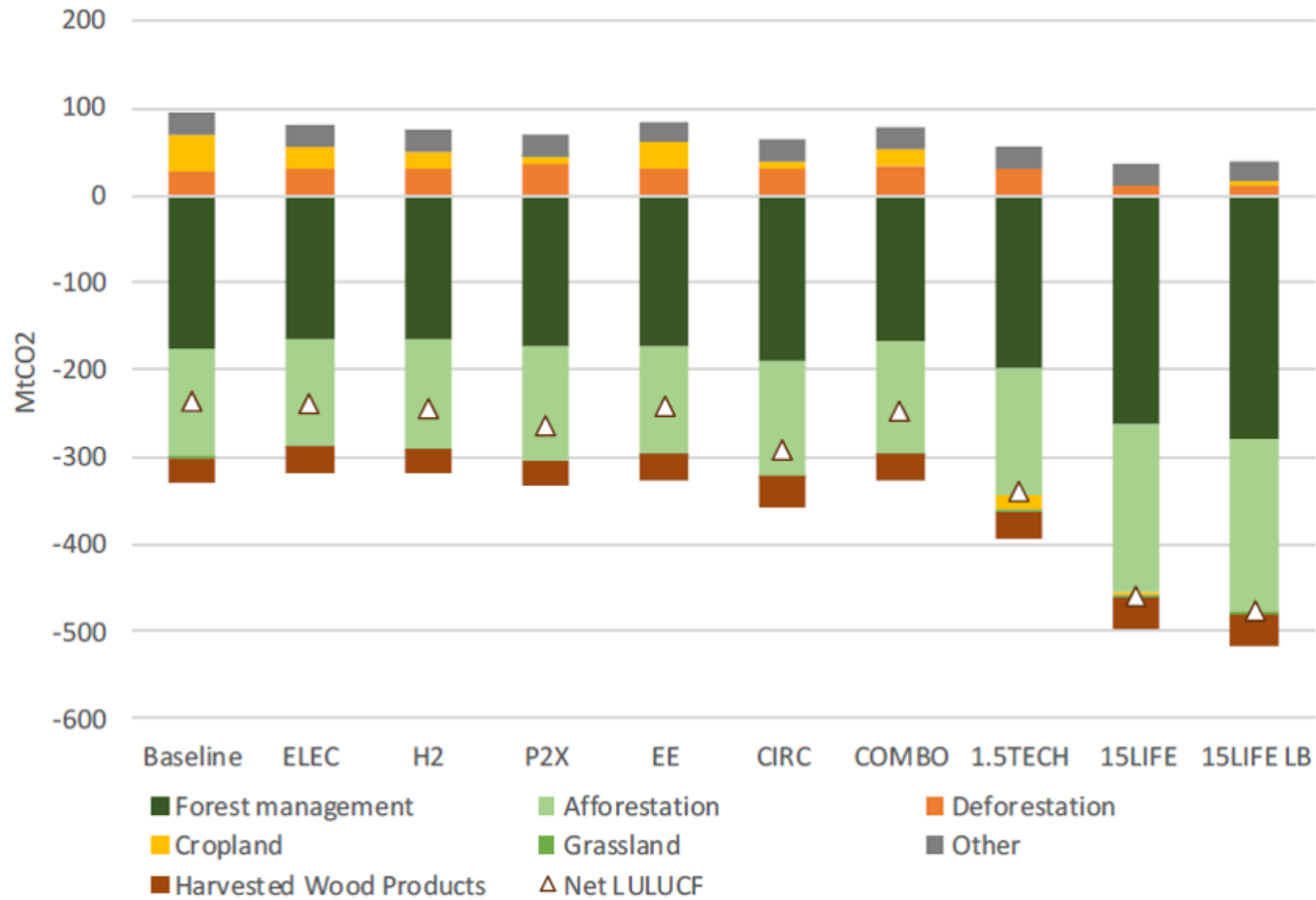
# Long-Term: *Net Zero* or *Fully Net Negative*?



# Long-Term: *Slightly or Fully Net Negative*?

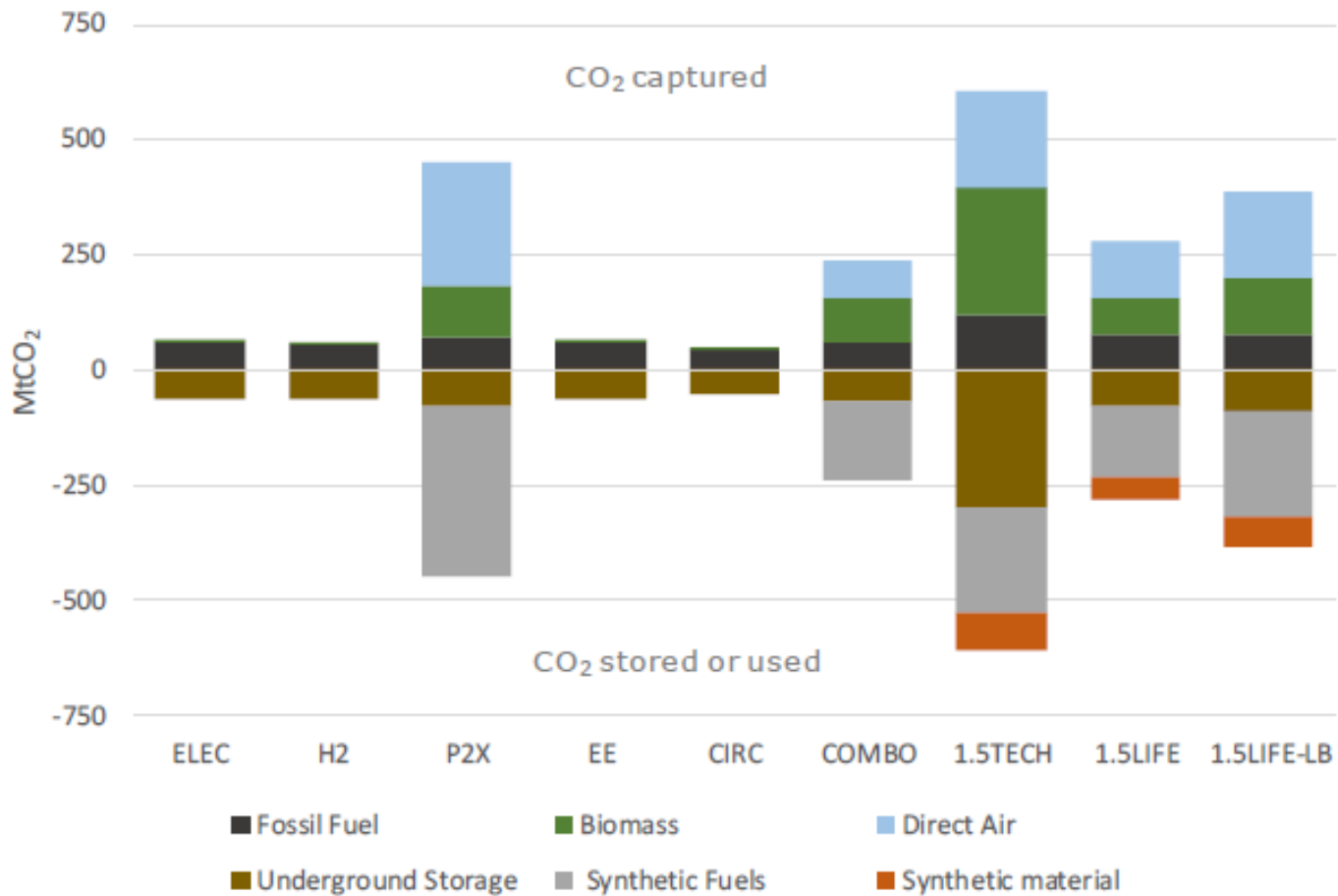


# LULUCF Emissions in 2050



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# CO<sub>2</sub>-Capture, Utilisation and Storage



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