



Energy  
Transitions  
Commission

# COP28 Action Agenda: Potential Impact to 2030

December 2023

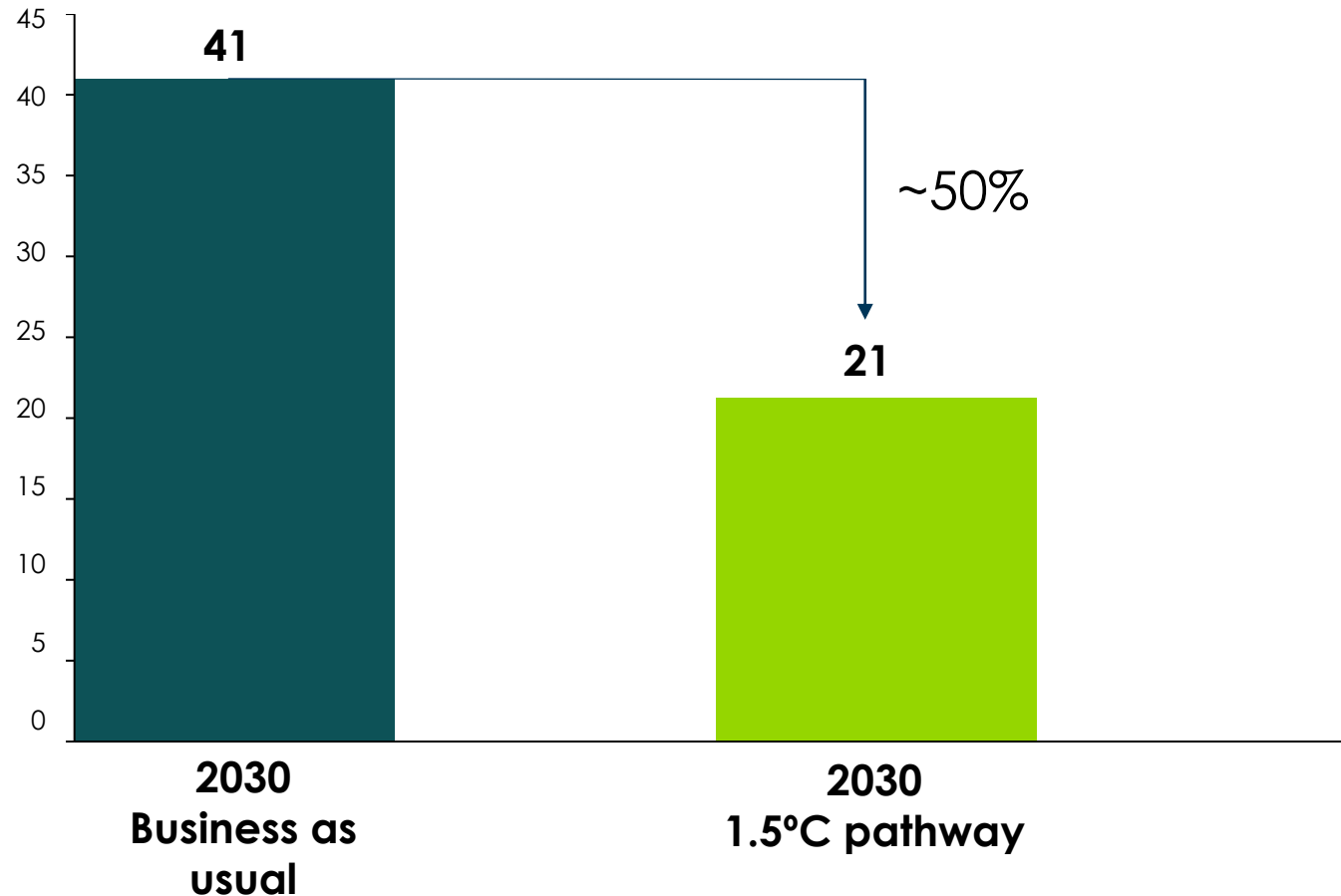
# COP28 Action Agenda

| Sector                        | Ambition   |
|-------------------------------|--|
| <b>Renewables</b>             | <ul style="list-style-type: none"><li>• Triple total installed renewables capacity from ~3.5 TW to ~11 TW by 2030</li></ul>  |
| <b>Energy Efficiency</b>      | <ul style="list-style-type: none"><li>• Double annual energy efficiency improvements from ~2% to ~4% by 2030</li></ul>   |
| <b>Oil and Gas</b>            | <ul style="list-style-type: none"><li>• Net Zero Scope 1 &amp; 2 emissions by 2050</li><li>• Near-zero methane and zero routine flaring by 2030</li></ul>                |
| <b>CCS</b>                    | <ul style="list-style-type: none"><li>• Aspirational goal for gigatonne-scale CCUS by 2030</li></ul>   |
| <b>Heavy Emitting Sectors</b> | <ul style="list-style-type: none"><li>• Launch of Industrial Transition Accelerator</li></ul>  |
| <b>Deforestation</b>          | <ul style="list-style-type: none"><li>• Protect, restore and sustainably manage forest basins in key tropical countries</li></ul>  |
| <b>Agriculture and Food</b>   | <ul style="list-style-type: none"><li>• Accelerate uptake of alternative proteins, fertilizer innovations, dietary shifts, and reductions in methane emissions</li></ul> |

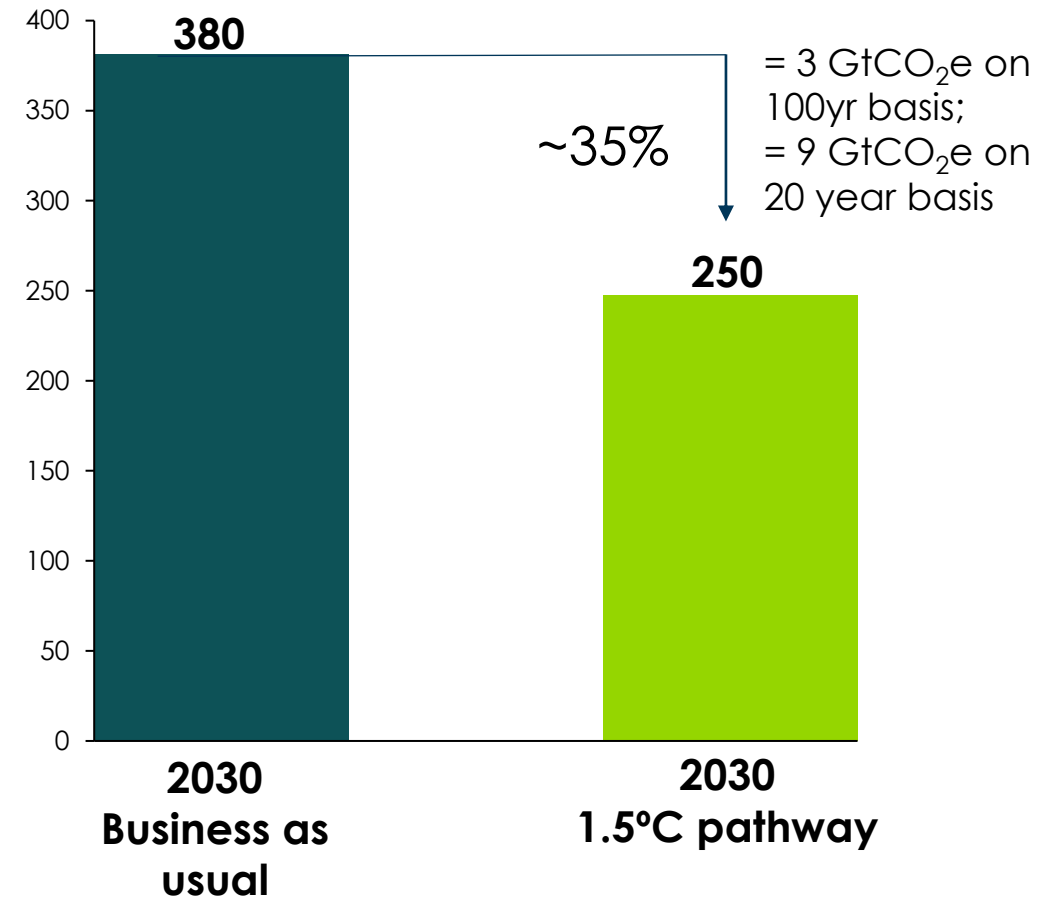


# Pursuing the 1.5°C North Star: emissions reductions required by 2030

Global CO<sub>2</sub> emissions  
GtCO<sub>2</sub>

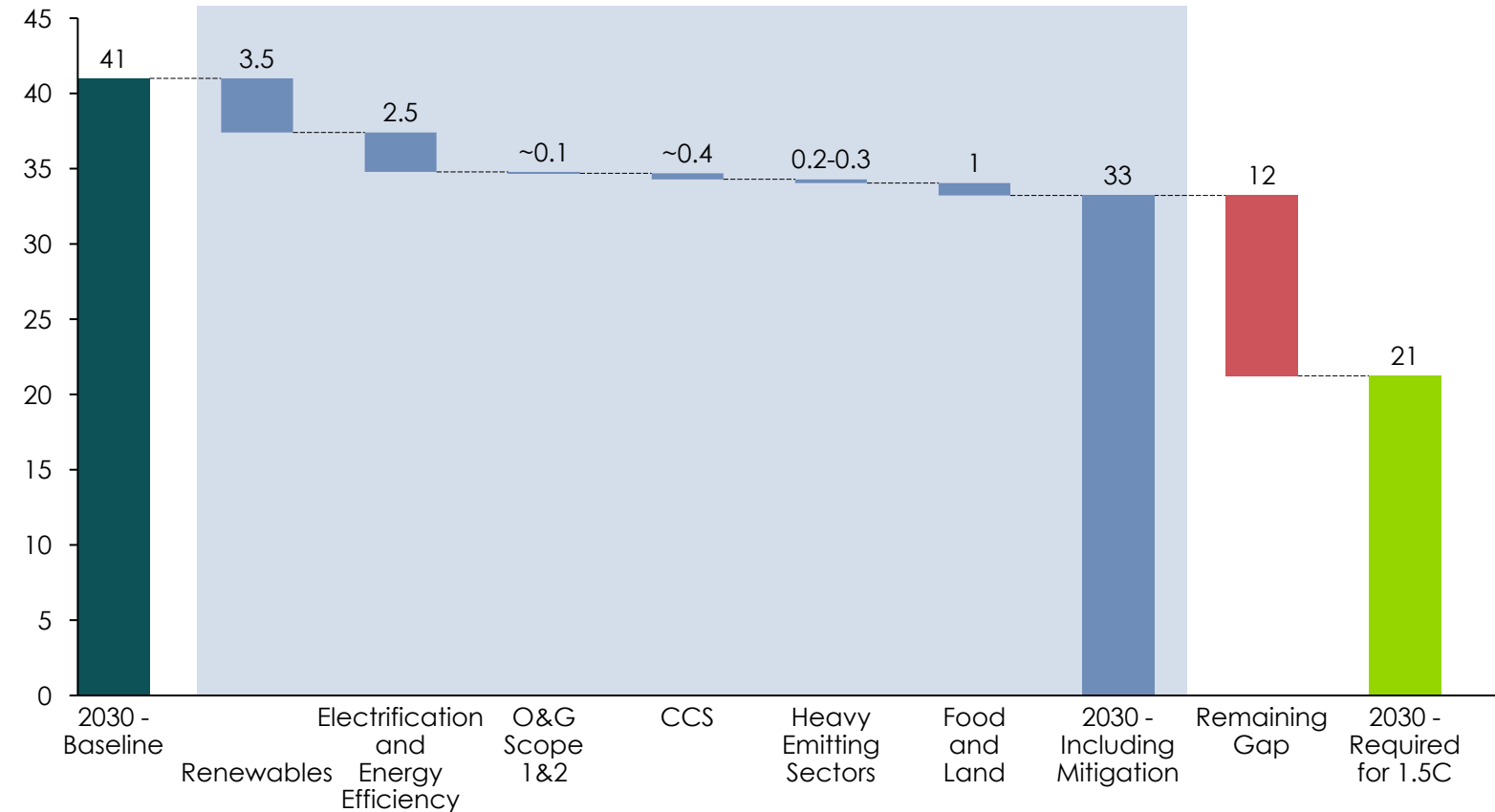


Global CH<sub>4</sub> emissions  
MtCH<sub>4</sub>

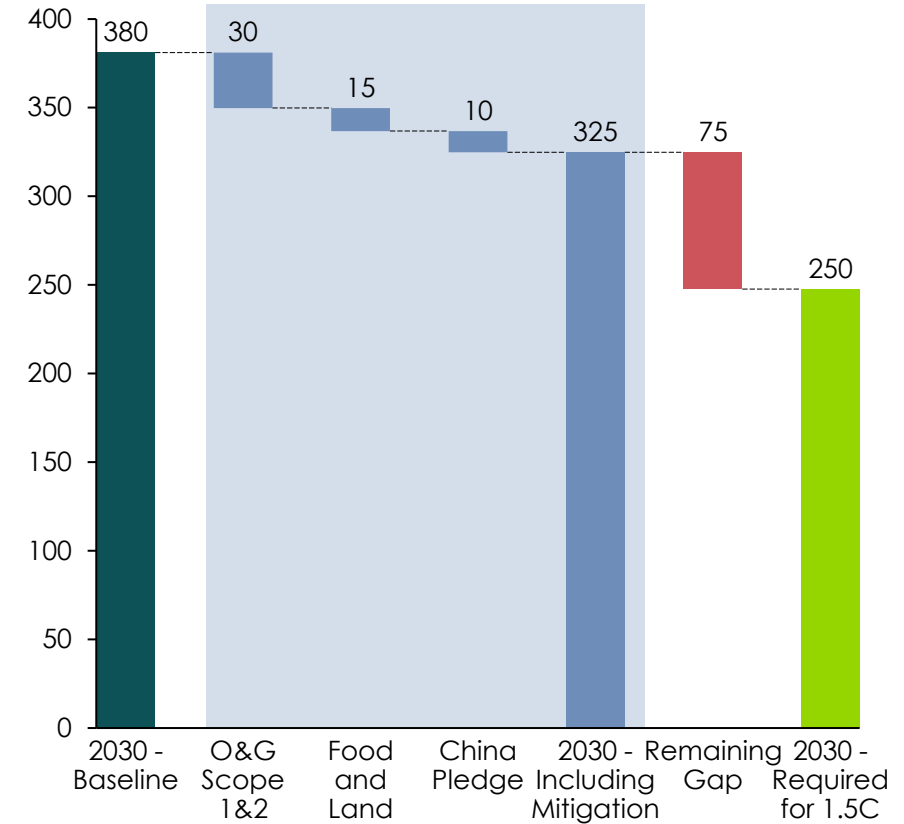


# Prudent assessment of impact

**Global CO<sub>2</sub> emissions**  
GtCO<sub>2</sub>



**Global CH<sub>4</sub> emissions**  
MtCH<sub>4</sub>



## Tripling renewables: actions required

- **Strategic vision:** setting clear national targets in line with the global tripling commitment
- **Faster permitting** – halving timescales for wind, solar
- **Investing in the grids needed** to connect renewable resources
- Quadrupling of investment in **low- and middle-income countries**, to **~\$650 bn p.a. by 2030**



## Doubling energy efficiency: actions required

- **As much electrification as possible** – replacing internal combustion engines with electric vehicles; gas boilers with electric heat pumps
- **Increasing technical efficiency of key equipment:** heat pumps and air-conditioners
- **Accelerating retrofit** of existing buildings to make more efficient
- **Efficiency improvements in internal combustion engines**
- **Behavioural changes**, e.g. lower driving speeds, lower thermostat settings for heating, higher settings for air conditioning



## Oil and Gas: actions required

- **Independently verified and accurate measurement**
- **Strong and tightly enforced regulations**
- **Economic incentives:** e.g., US Inflation Reduction Act's explicit methane price
- **Need to apply measures across all geographies and companies**



## Carbon Capture: actions required

- **Stronger policies to make CCUS economic**, incl. subsidies, regulatory requirements or carbon prices
- Coordinated action to develop the shared infrastructure of transport and storage
- **High capture rates** and **strong transparency**
- Annual **investment of ~\$70 bn p.a. by 2030**, more than 10x current levels





## Industry Transition Accelerator: specific actions to drive rapid progress

- **Increased and widespread commitments**
- **Critical mass of early demand** for green products
- **Targeted public subsidies**, financial institution support and value chain coordination **to stimulate the initial projects**
- **Long-term economic incentives:** carbon prices or volume mandates



## Agriculture, Forestry and Land Use: actions required

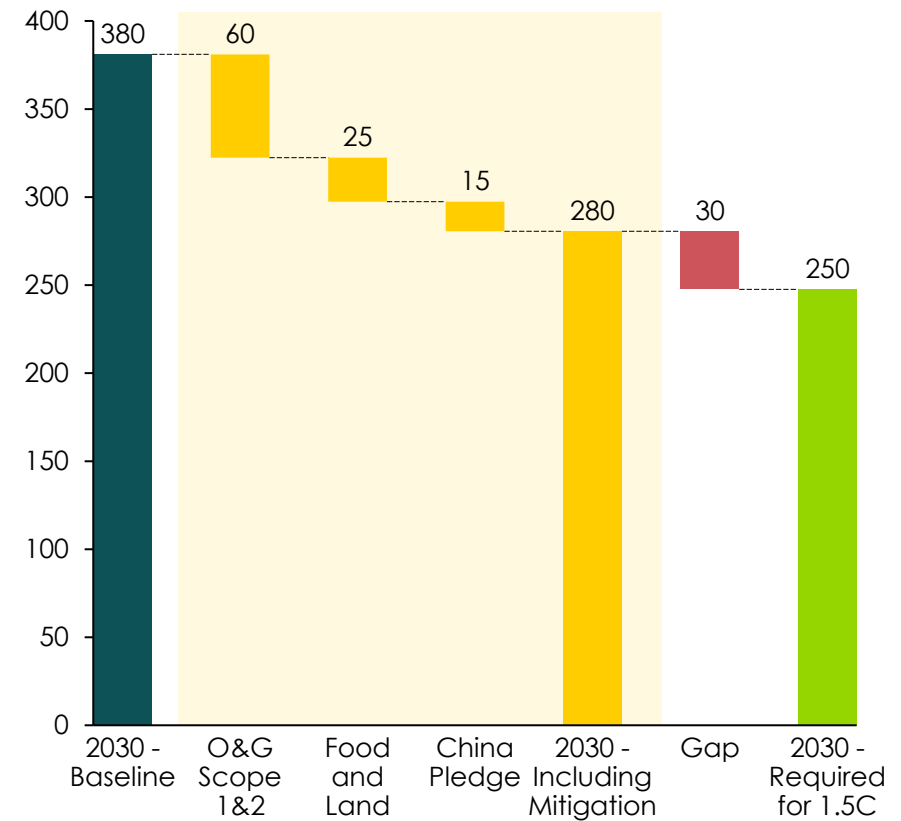
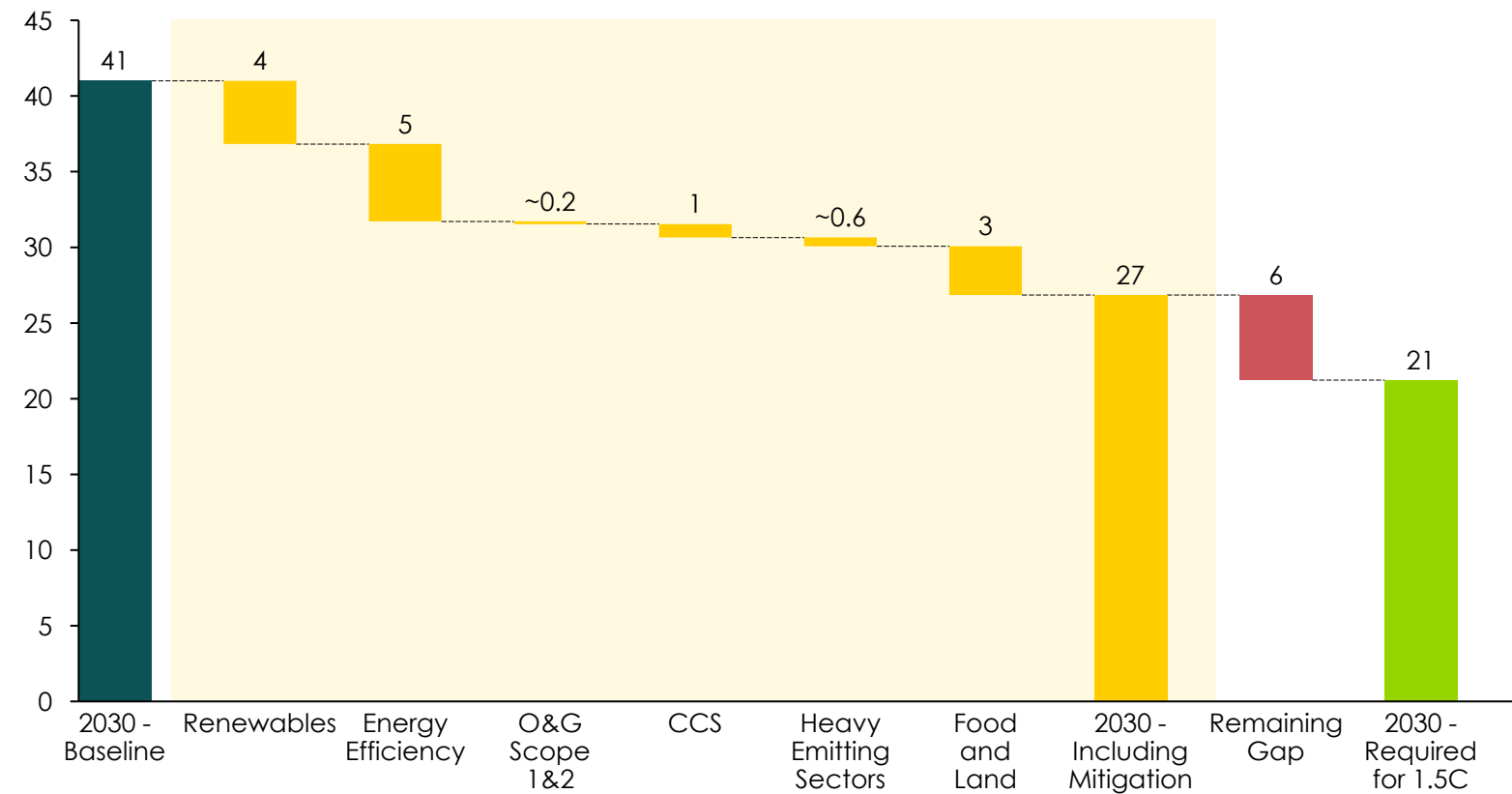
- **Strong policy and enforcement**
- **Increase in grant and concessional payments**
- Research, development and deployment of **alternatives to meat and dairy**
- **Best practices at specific national/local levels**



# Maximum potential if all countries committed, and strong policies drive implementation

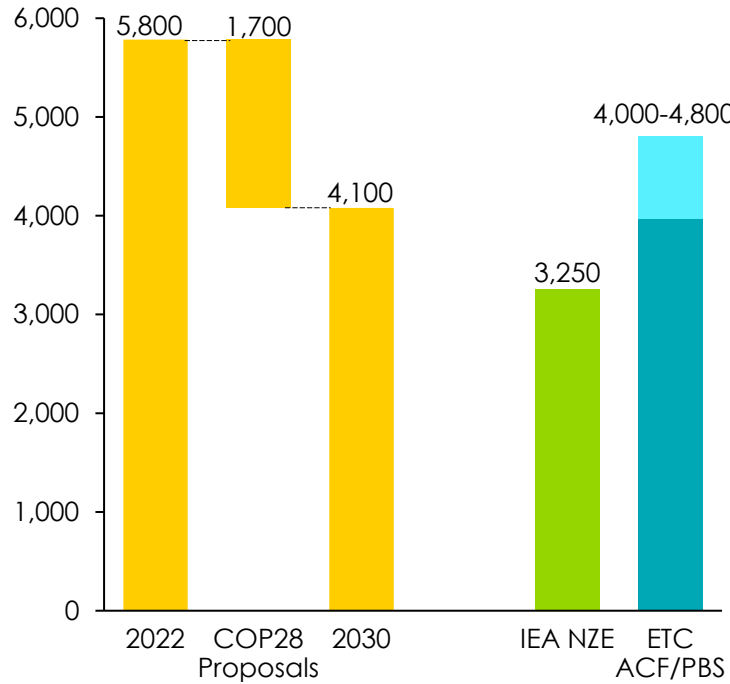
Global CO<sub>2</sub> emissions  
GtCO<sub>2</sub>

Global CH<sub>4</sub> emissions  
MtCH<sub>4</sub>



# Implications of full implementation for fossil fuel demand

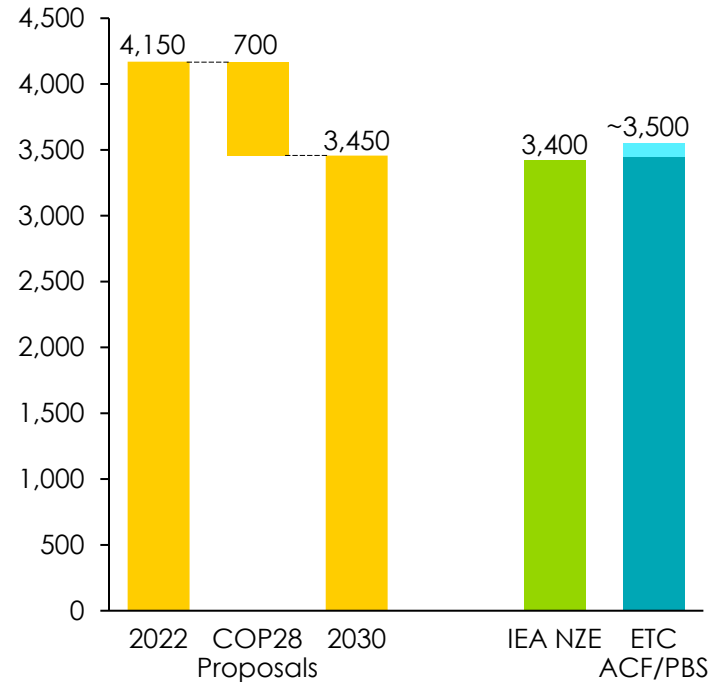
Coal, Mtce



30% reduction

Coal

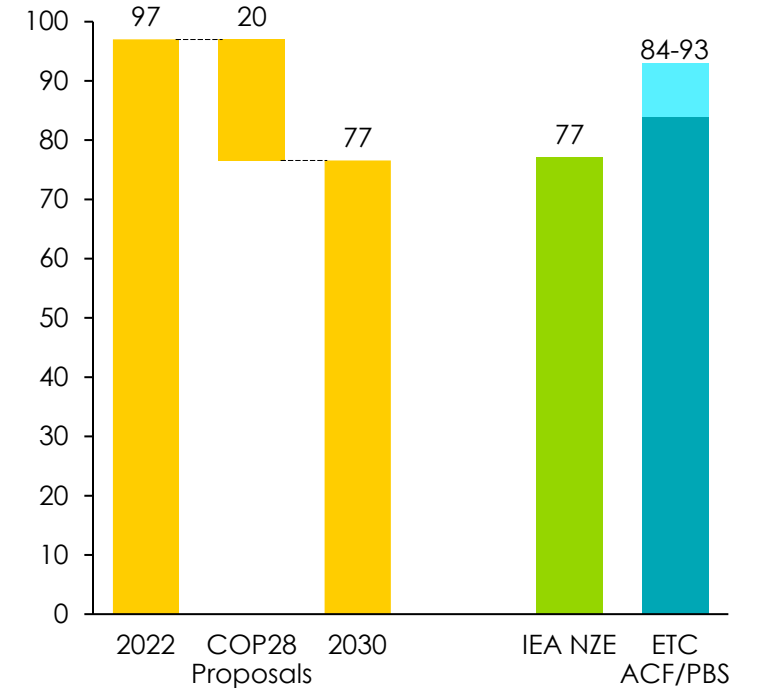
Gas, bcm



15% reduction

Natural Gas

Oil, Mb/d



25% reduction

Oil

