



Meeting climate obligations - a pathway for the dairy industry

Teagasc National Dairy Conference

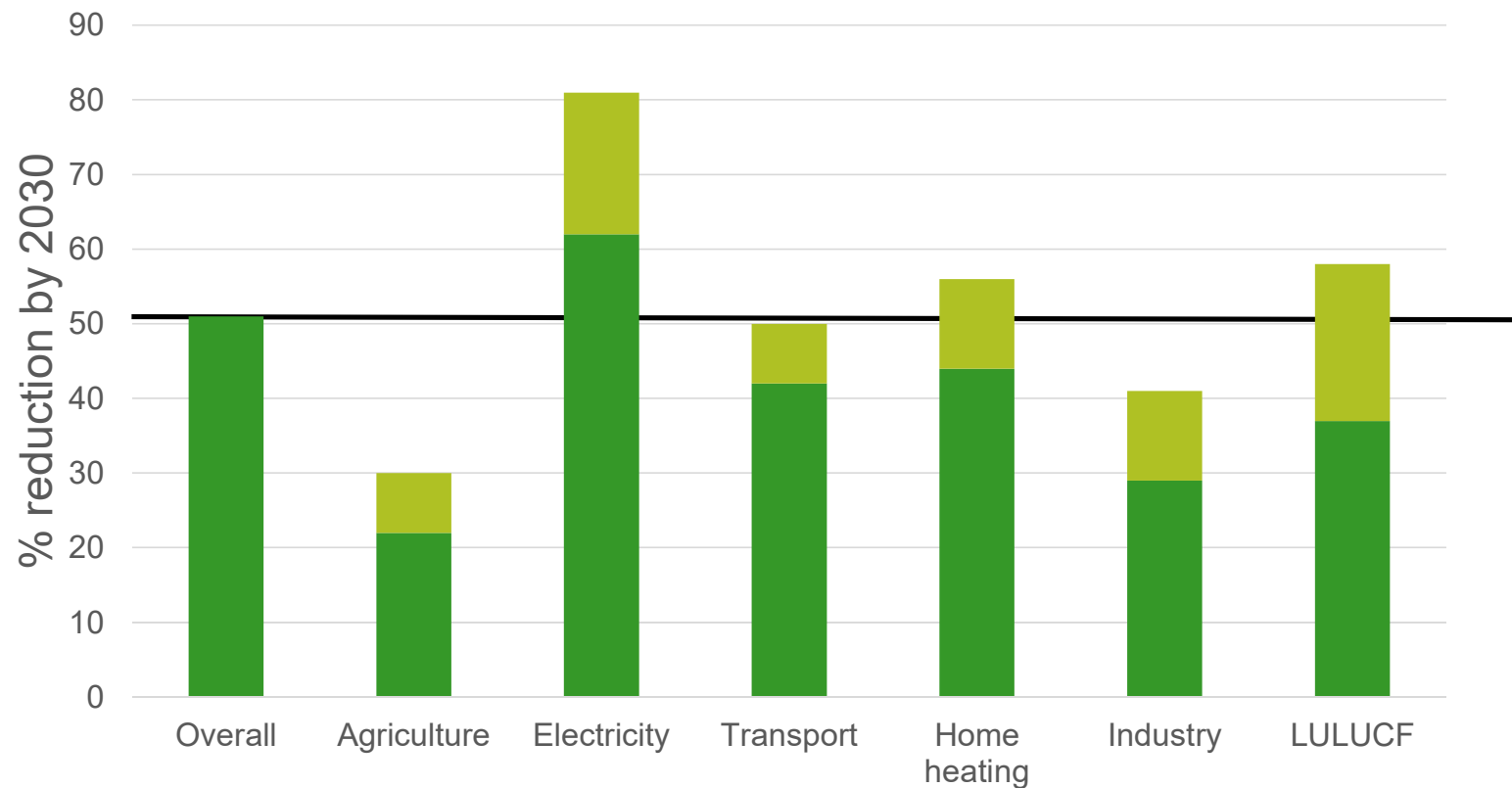
Prof Frank O'Mara,
Director, Teagasc
Nov 23 2021

Govt and EU policy targets on Greenhouse gases

- 2021 New Climate Action and Low Carbon Development Amendment Bill
 - National emissions to reduce by 51% by 2030, written into legislation
- EU has also increased its targets
 - ***Fit for 55*** targets a 55% reduction by 2030
- Climate change is central to licence to farm and in markets for our produce

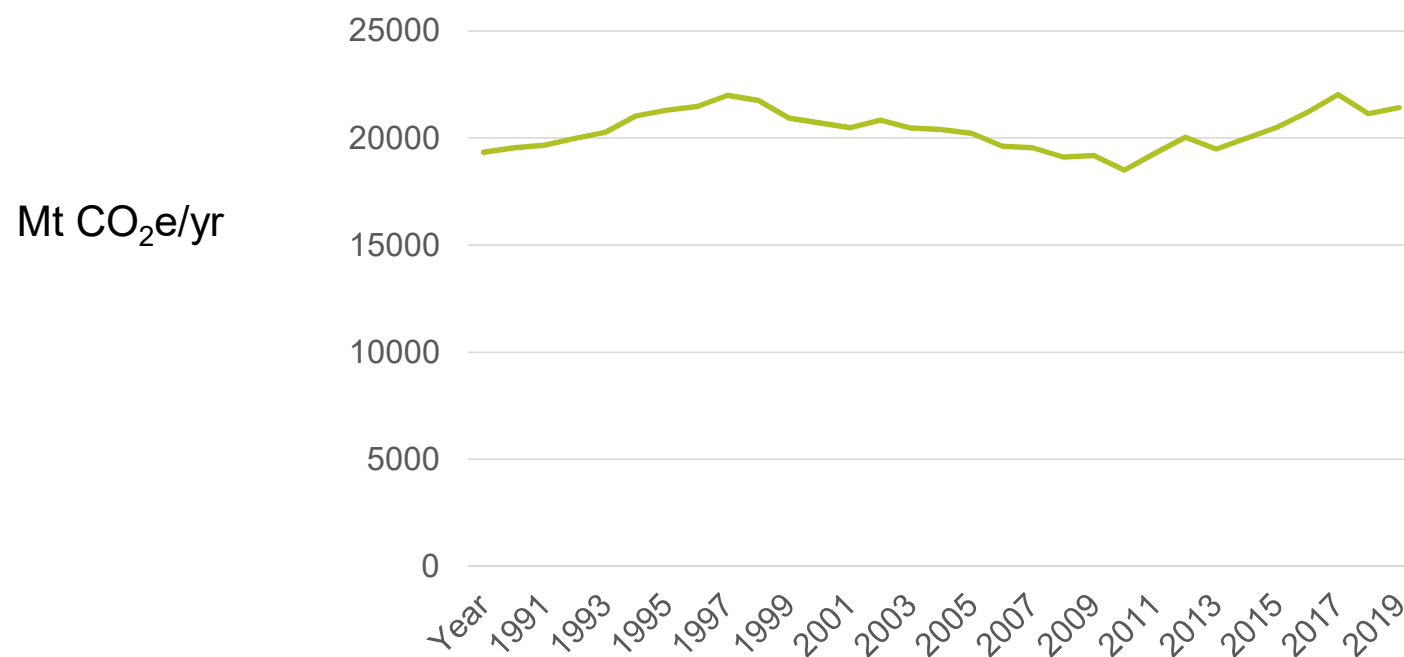
Sectoral targets (Climate Action Plan)

% reduction required by 2030, compared to 2018 as a baseline



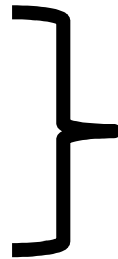
Agriculture emissions
2018: 23 MT CO₂e
2030: 16-18 MT CO₂e

Irish agricultural greenhouse gas emissions, 1990 - 2020

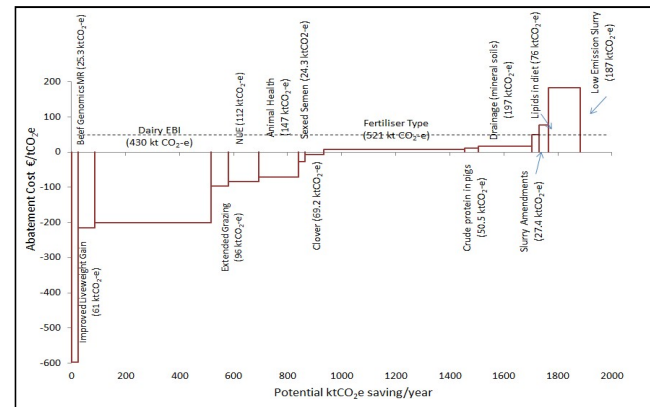


What can agriculture do now to reduce emissions?

- Efficiency
- Technology



Teagasc MACC



- Focus on nitrogen as methane hard to mitigate now
- Incentives / costs
- Industry needs to work together

7 Steps to Improving Farm Sustainability



7. Using the ASSAP advisors to help improve water quality



6. Incorporating forestry and hedgerows on farm



5. Improved energy efficiency and renewable energy



4. Reducing losses from slurry



3. Changing to protected urea



2. Substituting clover for chemical fertiliser



1. Improved EBI and extending the grazing season

Roadmap to 2030 +

Need to reduce by 5-7 Mt CO₂e

Almost ready technologies
(Feed additives, fertiliser, earlier slaughter...)
1 – 1.5 / 2 Mt CO₂e

2018:
23 Mt CO₂e

2030: 16-18 Mt CO₂e

2050
climate neutral agriculture

Early stage technologies
(Feed additives at pasture, breeding low emitting animals...)
1.5 – 3.0 Mt

Implement technologies in MACC
2 Mt CO₂e



Opportunities

- Sequester carbon in mineral soils, forestry and hedgerows – Carbon farming
- Reduce emissions from drained grassland peat soils through water table management
- Reduce electricity and diesel usage
- Opportunity to use/sell solar energy
- **These measures are separate to agricultural GHG reduction requirements of 5-7Mt CO₂e**
- But very important for post 2030

	LULUCF 2018
Emissions	9.6
Removals (sequestration)	4.8
Net LULUCF	4.8

Measuring soil carbon



Pippa Hackett  @pipp... · 9h ···

I was pleased to find out on my visit to [@teagasc](#) Moorepark that about 12% of their land area consists of diverse habitats including woodlands and a pond, and that they have planted nearly 3,000m of new native hedges since last year. [#Biodiversity](#) [#Habitats](#) [#Pollinators](#) [#Dairy](#)



Curtin's Farm solar installation

What will Teagasc do?

- Continue to support dairy farmers' **livelihoods**
- Promote **technology** and **efficiency**
 - Advisory priority - (**€17m Signpost Programme**)
- **Accelerate research** into new technologies
- Review **calculations** of emissions and sequestration
- Ensure new technologies get counted in the **inventory**
- Support **diversification** opportunities such as organics
- Develop, with others, a **pathway to 2030 and beyond**

