National Beef Conference 2021

Meeting climate obligations - a pathway for the beef industry

National Beef Conference
6 December 2021

Prof Frank O'Mara
Teagasc Director

Teagasc commitment to beef farmers

- Approx. 29k drystock clients, 18k with suckler cows
- c. 200 Beef discussion groups with about 3k members
- 139 advisers and 11 specialists/programme advisers
- New demo farm advisory programmes starting for sucklers (**Future Beef**) and dairy beef (**Dairy Beef 500**)
- Active research programme with new investment in people and facilities at Grange

Launch of Future Beef 6 Dec 2021

Oliver and Christina O'Hara, Leckaun, Co. Leitrim

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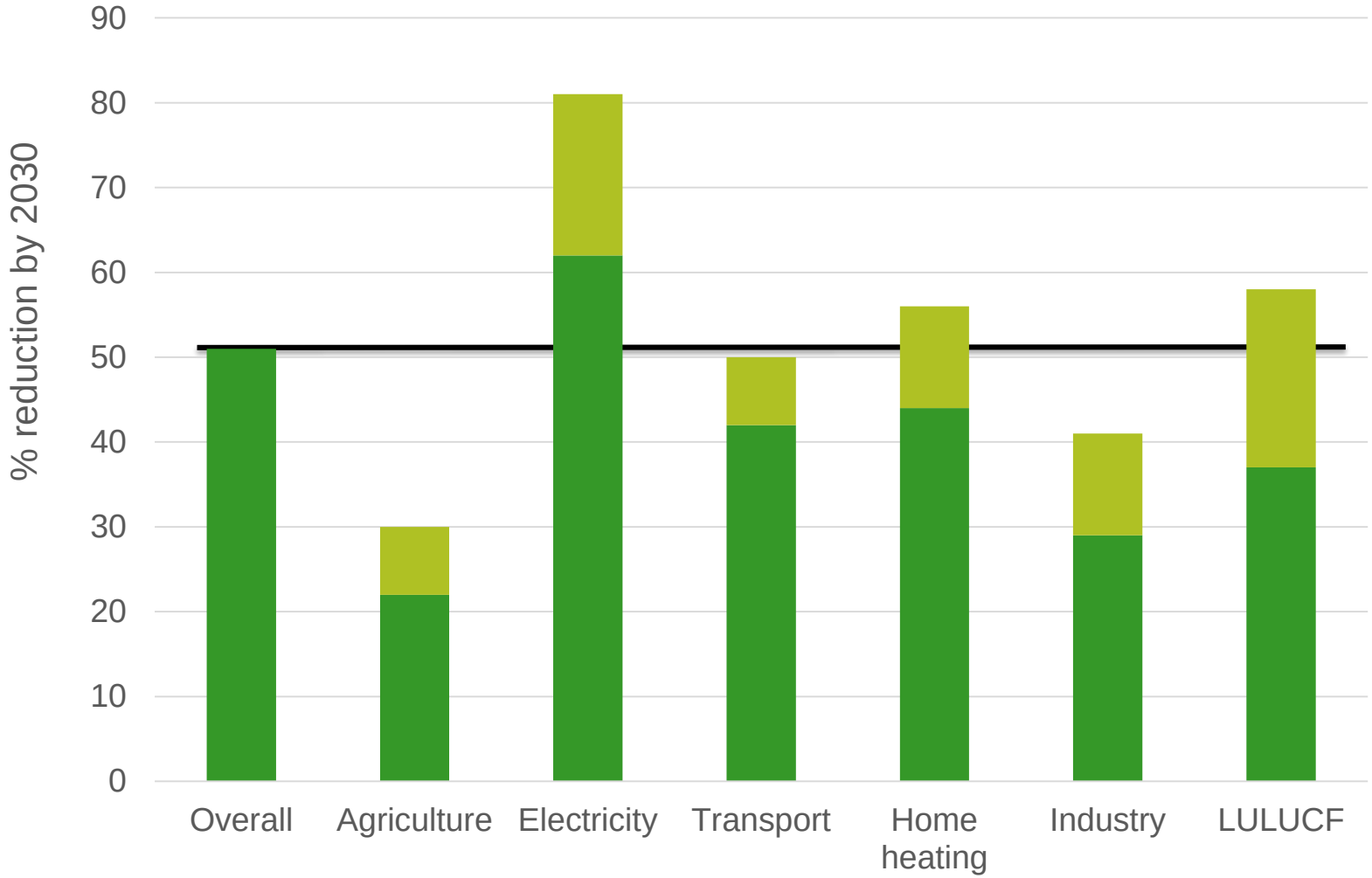
Govt and EU policy targets on Greenhouse gases

- 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 CO_2e

2030: 16-18 MT CO_2e

Reduce by 5-7 MT CO_2e

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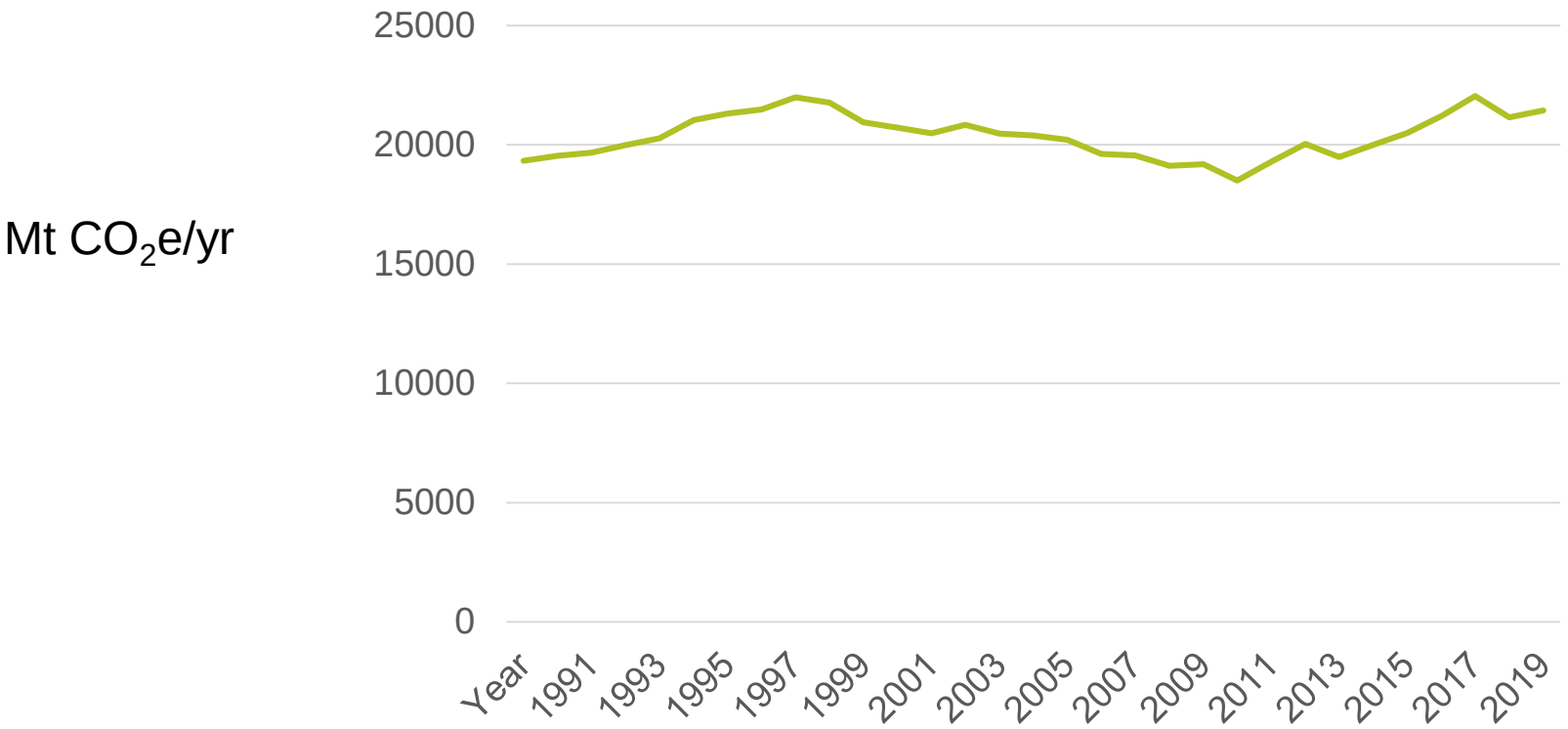
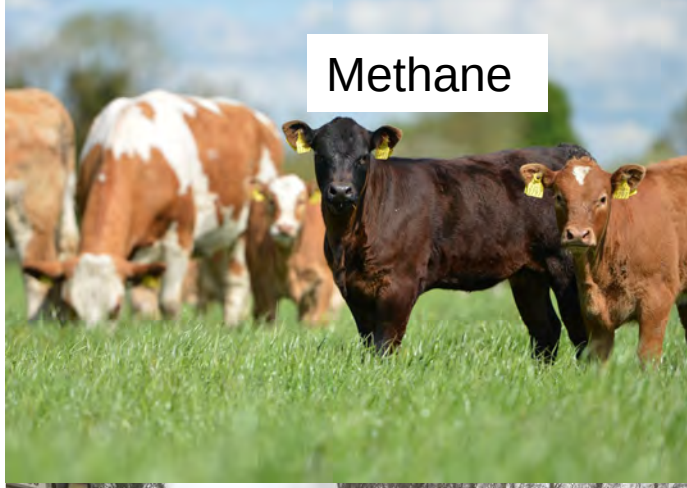
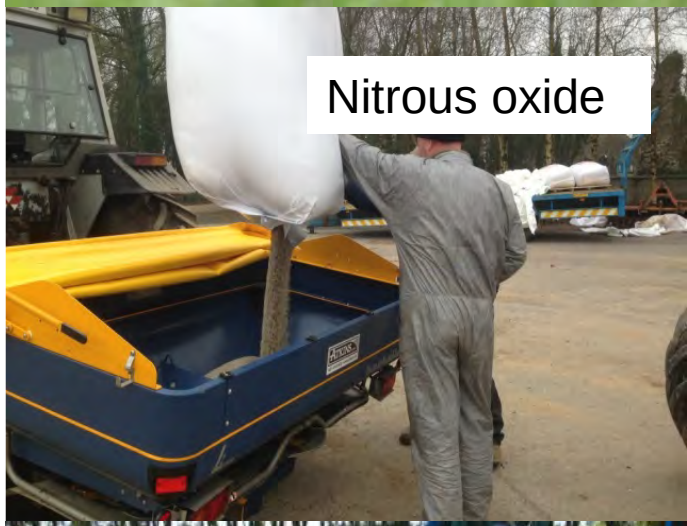
Irish agricultural greenhouse gas emissions, 1990 - 2020





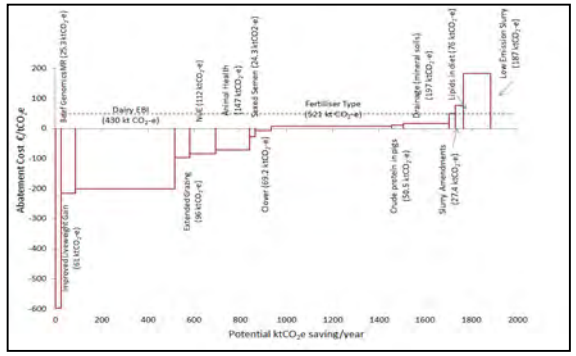


How can we meet these targets?

There is a pathway using efficiency and technology

- Efficiency
- Technology

Teagasc MACC



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

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Roadmap to 2030 +

Need to reduce by 5-7 Mt CO_2e

2030: 16-18 Mt CO_2e

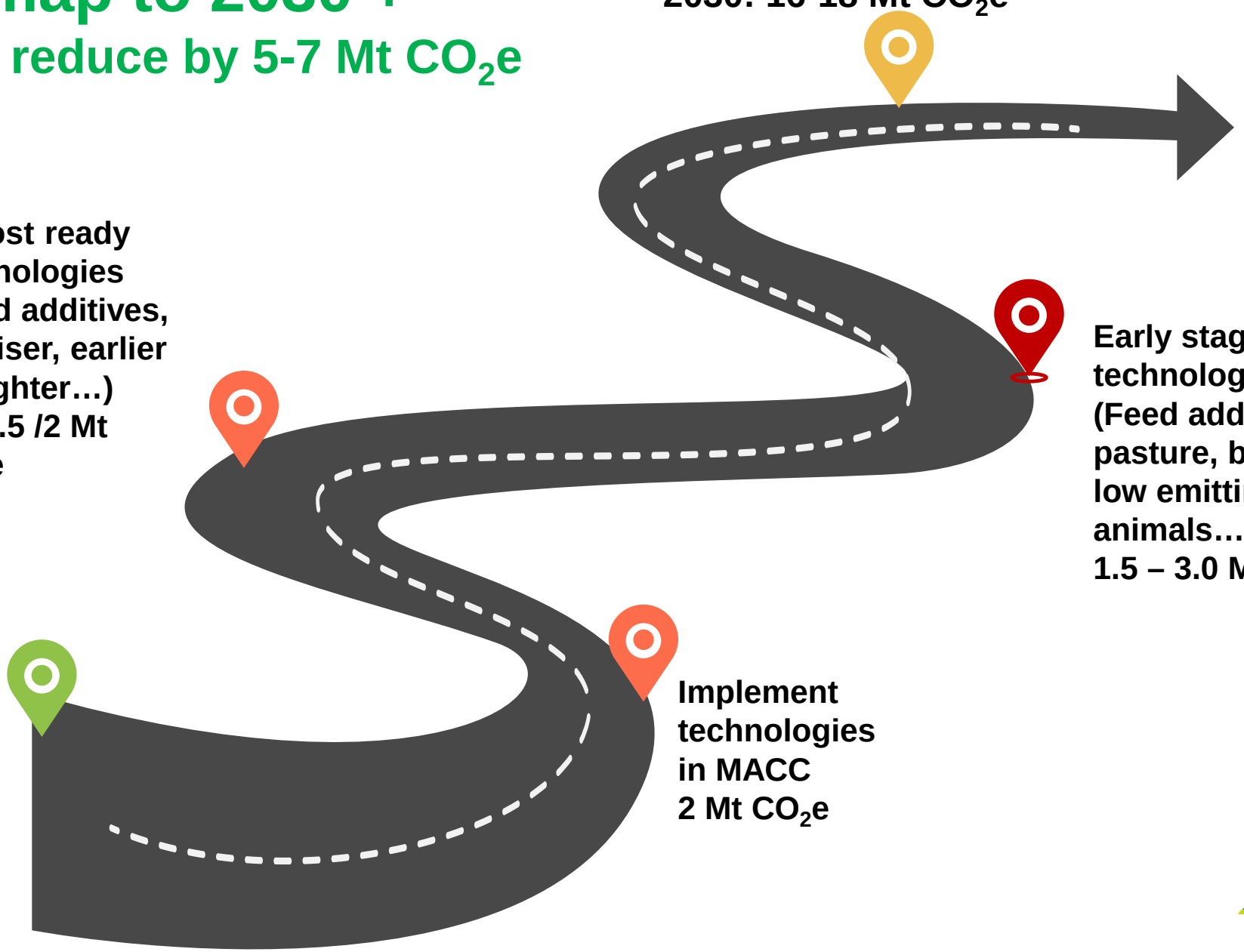
2050
climate neutral
agriculture

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

Almost ready technologies (Feed additives, fertiliser, earlier slaughter…) 1 – 1.5 /2 Mt CO_2e

Implement technologies in MACC 2 Mt CO_2e

2018: 23 Mt CO_2e



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How will we work with farmers to achieve these targets?

- Signpost programme is a new national programme supporting farmers for climate action
  - > 100 demo farms with both suckler and dairy-beef
  - Farm walks, events, discussion groups, media
  - Training
  - Whole farm plan
- Focus now on
  - breeding, grassland management, animal health
  - saving N fertiliser (LESS, clover, soil fertility), protected urea
  - earlier slaughter as same carcass weight

SIGNPOST
Farmers for Climate Action

Future Beef
Sustainable Cattle Production

DAIRYBEEF 500
Sustainable Dairy Beef Production

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What KPI's will we enable Beef Signpost Farmers achieve?

GHG emissions	• Contribute to the national reduction of GHG emissions from farming • Reduce GHG emissions per kg carcase weight produced
Pasture productivity & stocking rate	• Identify and rejuvenate unproductive swards • Increase grass utilisation, while matching stocking rates to grass production
Reduced fertiliser use	• Reduce chemical N fertiliser usage by 10% over 5 years • Increase sward clover content to 20% over 5 years • Spread 35% of chemical N as protected urea and all slurry using LESS
Optimum soil fertility	• 90% of productive soils to have an optimum soil pH status within 5 years • Correct soil P & K levels in high output fields to Index 3 e.g. silage fields; match soil P & K levels in grazing fields to stocking rate
Winter feeding	• Target higher quality grass silage (DMD >70%) • Target weanling performance over the first winter of at least 0.6Kg ADG
Breeding	• Target an 18-20% herd/ flock replacement rate for a stable herd/ flock • Select only high €uro-star index rams • Increase the Beef Repl. Index in the suckler breeding herd by €5 per year
Herd and flock health	• All farmers to have a detailed herd/ flock health plan in place • Target increased vaccination and reduced antibiotic usage on farm, with anthelminthics used in response to faecal egg test results
Biodiversity	• Target 10% of high value biodiverse area per farm • Increase quantity and quality of biodiversity on the farm

We will work with farmers to achieve these targets.

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What areas of environmental sustainability will be focused on by Teagasc advisors with beef farmers?

Using Protected Urea & Correcting Soil pH

Low Emission Slurry Spreading

Incorporating White Clover

Improving Breeding & Grassland Management

Incorporating a % of Forestry

Improving Water Quality

Improving Hedgerow Management

Increased Biodiversity

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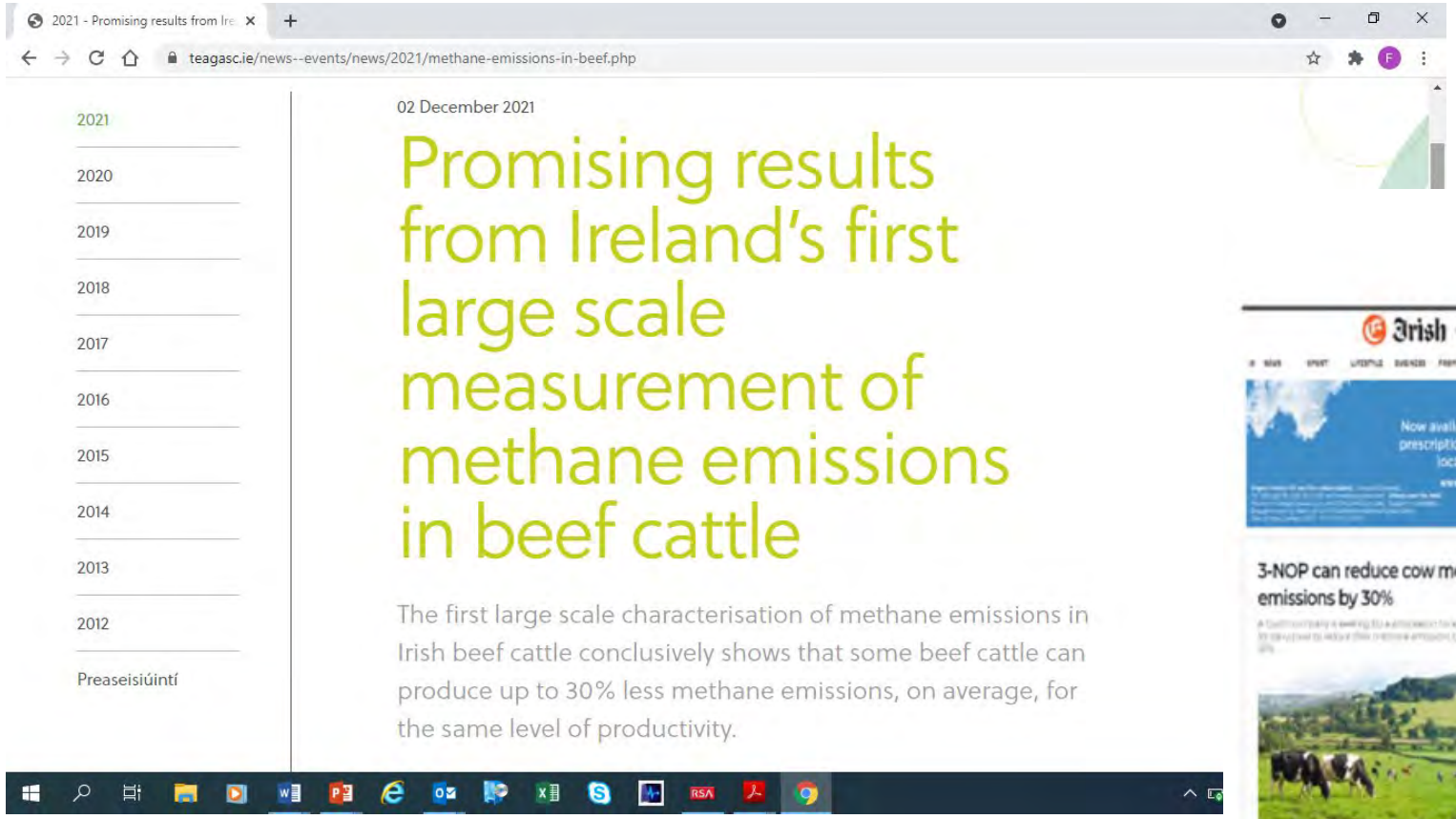
Promising research on breeding low emitting cattle and feed additives



efsa European Food Safety Authority

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What will Teagasc do?

- Continue to support improvements in farmers' **living standards and well being**
- 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**

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