Meeting the regulatory landscape

Faming and Food – a Sector Worth Backing

IFA conference, The Curragh Racecourse
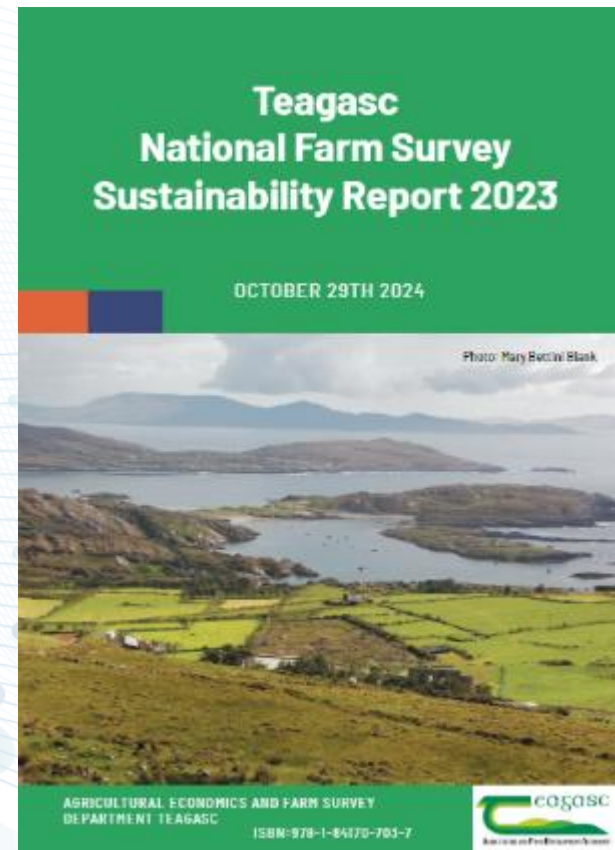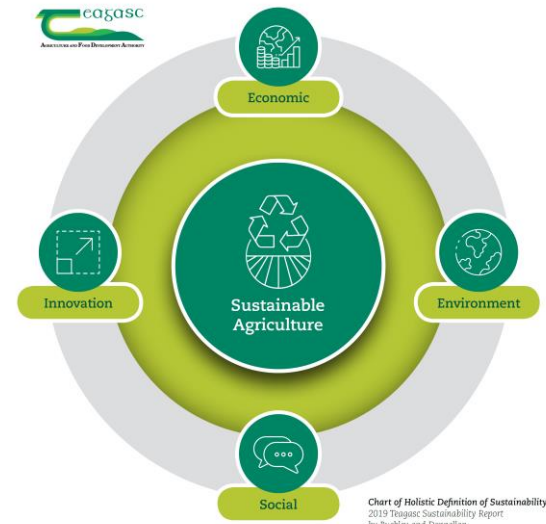
Prof Frank O'Mara, Teagasc Director

31 October 2024
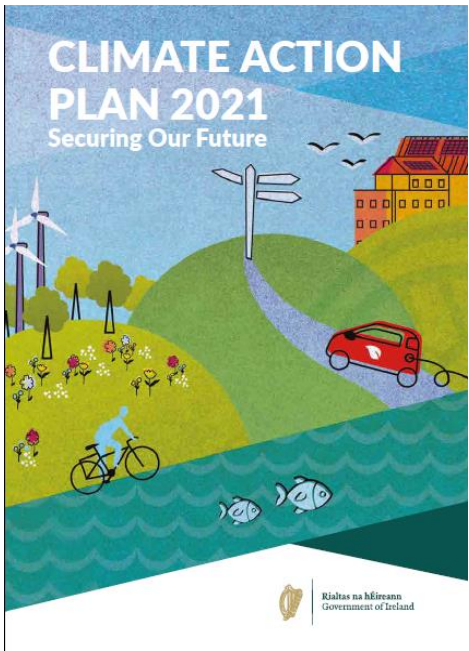
Outline of presentation

The three big environmental regulatory areas - climate, biodiversity, water

Chart of Holistic Definition of Sustainability.
2019 Teagasc Sustainability Report
by Buckley and Donnellan

Teagasc
National Farm Survey
Sustainability Report 2023

OCTOBER 29TH 2024

Photo: Mary Bettini Blank

AGRICULTURAL ECONOMICS AND FARM SURVEY
DEPARTMENT TEAGASC

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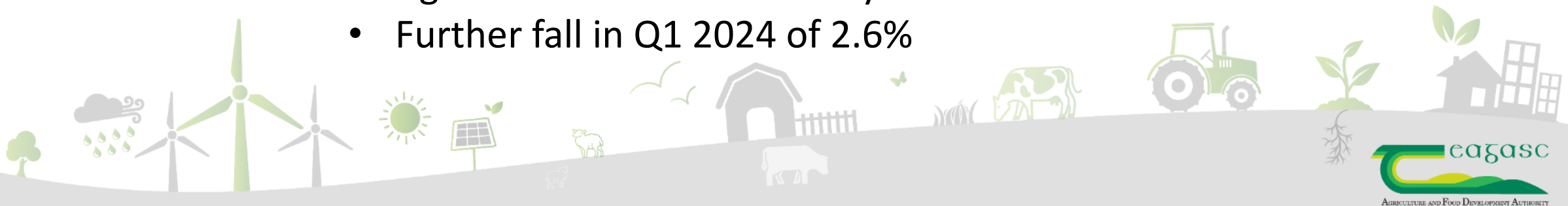
Agricultural greenhouse gas emissions

51% reduction in GHG Emissions by 2030
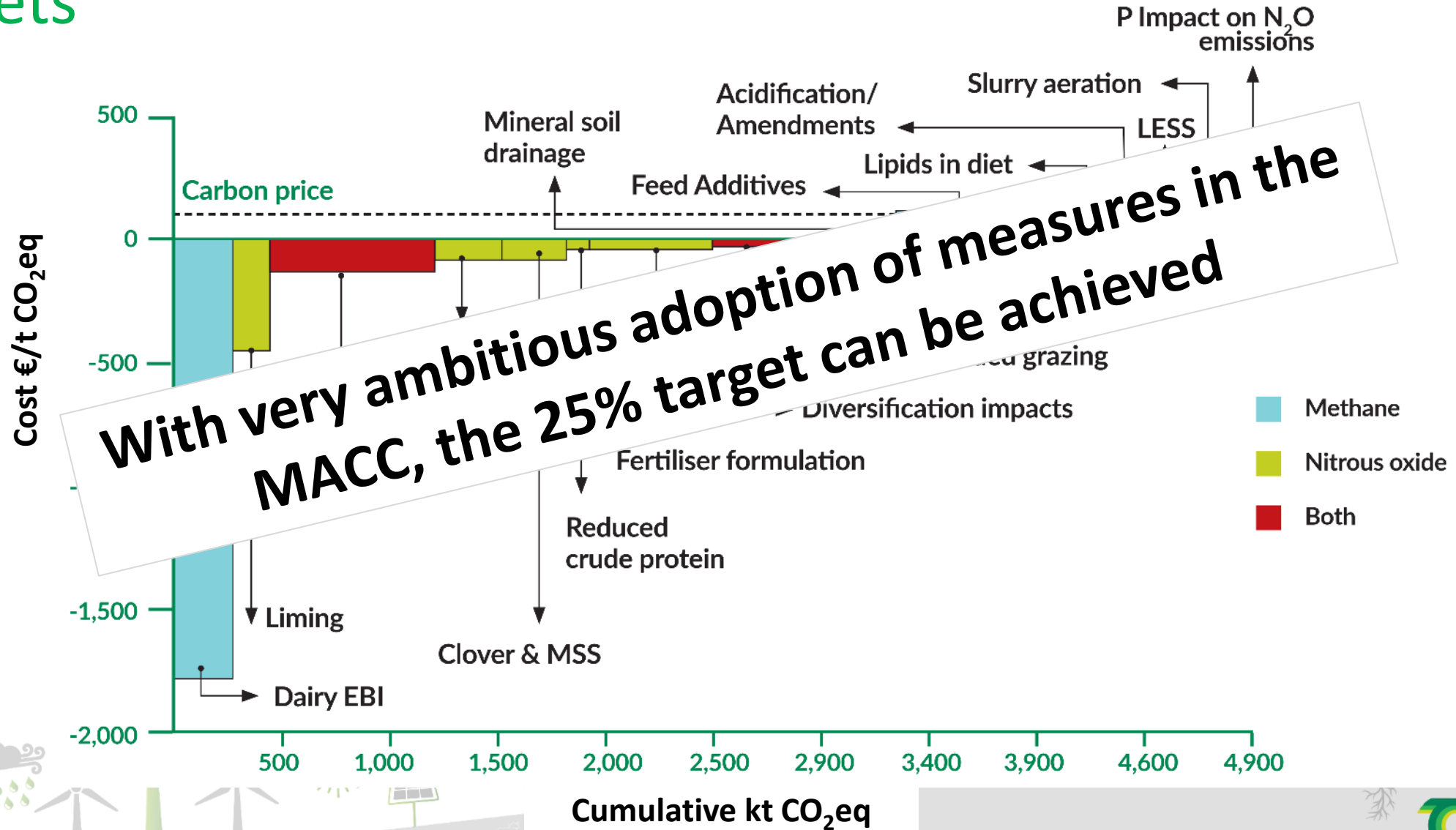
across whole economy

25% reduction in GHG Emissions *for agri sector* by 2030

Provisional GHG Emissions 2023

- Agricultural emissions fell by 4.6% v 2022
- Further fall in Q1 2024 of 2.6%

# Climate change – there is a pathway to meeting the 2030 targets

How are we doing with MACC measures so far?

2030 target in MACC	Progress to date
Reduce nitrogen fertiliser use by 30%	2023 sales of N fertilise below this level.
Protected urea constitutes 95% of straight fertiliser nitrogen	25% of straight N in 2024*. *Full year statistics not available yet for 2024 fertiliser year
Average age at finish of beef cattle reduced by 3 months	Reduced by c. 2 months over last decade No progress in 2023 – poor weather and high feed price delayed finishing?
Feed additives fed to 50% of dairy cows during grazing and 65% of housed cattle	Active research area On-farm trial on 20 Signpost Dairy Farms Cost is a barrier
EBI: +€90 by 2030	+ €18 by 2023 Research into direct effect on emissions underway
Diversification	• Biomethane strategy launched • Forestry still below 8k ha planting target • Organics area has grown significantly, but effect on emissions not clear

Signpost Advisory Programme

- Launched in July 2023 with 21 dedicated advisers
- Aims to provide 50k farmers with a plan to reduce emissions, and support them to implement the plan
- Use AgNav to baseline emissions and generate the plan
- 12,149 farmers registered to date, 9,374 with a plan
- AgNav developed to also deal with nitrogen surplus, so plans will evolve to include water quality
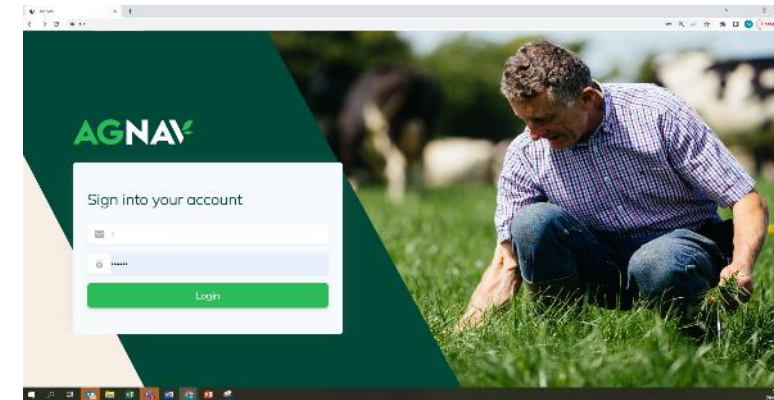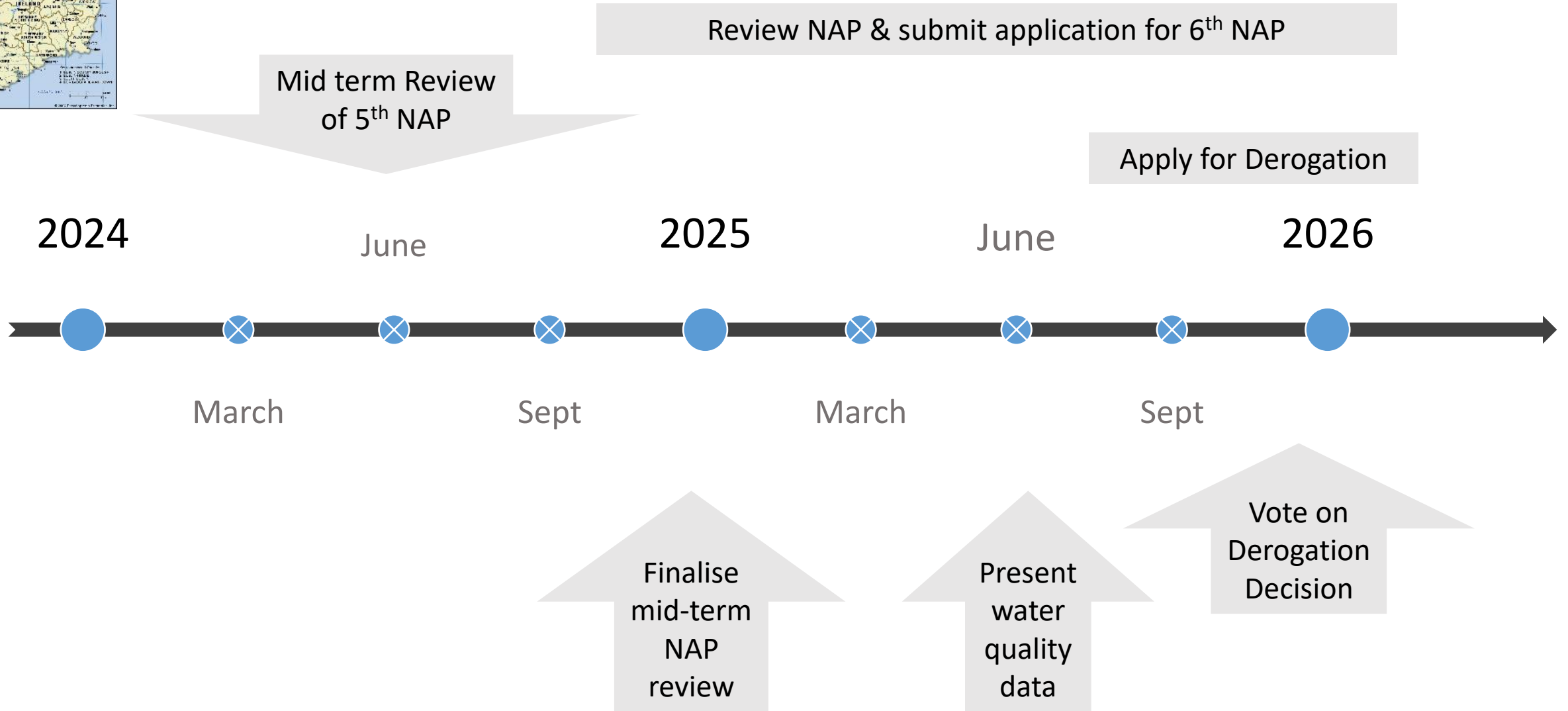
Water Quality

EU Water Framework Directive- requires EU member States to achieve water quality of at least Good Status in rivers, lakes, groundwater, estuaries and coastal waters, by 2027 at the latest.
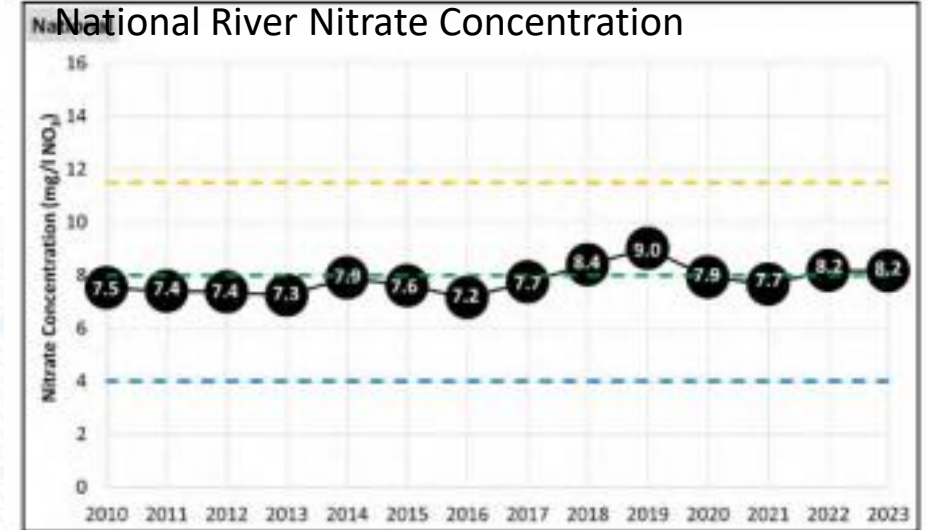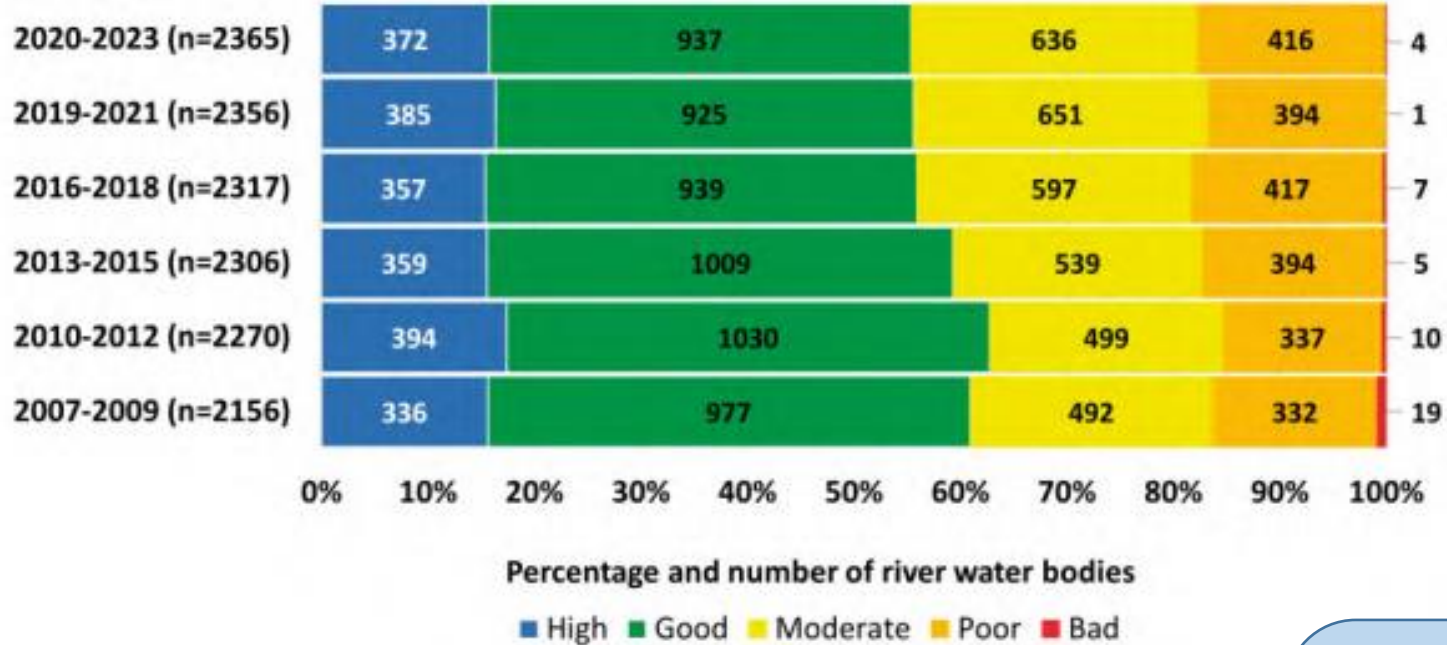
Currently in year 3 of 5th Nitrates Action Programme (NAP)

Where is water quality now?

Rivers Biological Quality National 2007 - 2023 Q value (Water body level)

Period	High	Good	Moderate	Poor	Bad
2020-2023 (n=2365)	372	937	636	416	4
2019-2021 (n=2356)	385	925	651	394	1
2016-2018 (n=2317)	357	939	597	417	7
2013-2015 (n=2306)	359	1009	539	394	5
2010-2012 (n=2270)	394	1030	499	337	10
2007-2009 (n=2156)	336	977	492	332	19

Percentage and number of river water bodies

■ High ■ Good ■ Moderate ■ Poor ■ Bad
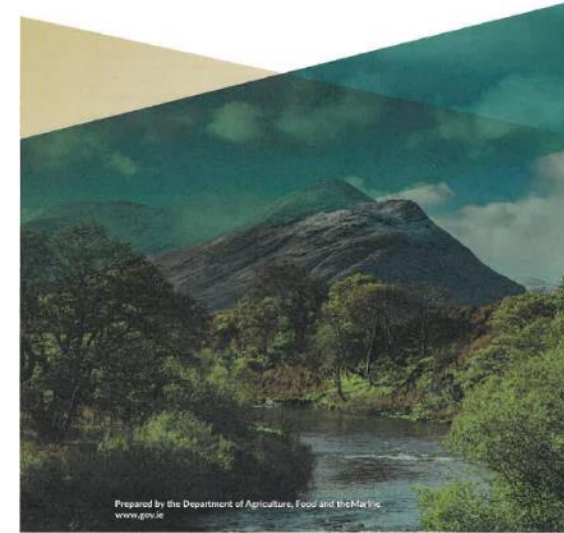
National River Nitrate Concentration

EPA 2024

Water Quality has not improved in recent years

Water quality – key steps to stabilisation and improvement

- Measures already introduced will have an effect in coming years
  - Banding, 220 kg N SR, lower chemical N limit, more restricted spreading dates, etc
- Reduced levels of chemical N usage (-30%) will help water quality if sustained (role of clover and multi species swards)
- Need to increase advisory support to farmers
- Slurry storage appears to be inadequate on some farms – leads to sub-optimal nutrient management
- Need to do a better job of getting information to farmers on local water quality and risk factors

An Roinn Talmhaíochta,
Bia agus Mara
Department of Agriculture,
Food and the Marine

Water and Agriculture
A collaborative approach

Prepared by the Department of Agriculture, Food and the Marine
www.gov.ie

Better Farming for Water campaign
8-Actions for Change

Nutrient Management

01 Reduce purchased nitrogen (N) & phosphorus (P) surplus per hectare

02 Ensure soil fertility is optimal for lime, phosphorus and potassium

03 Ensure application of fertiliser and organic manure at appropriate times and conditions

Farmyard Management

04 Have sufficient slurry and soiled water storage capacity

05 Manage and minimise nutrient loss from farmyards and roadways

Land Management

06 Fence off watercourses to prevent bovine access

07 Promote targeted use of mitigation actions such as riparian margins, buffer strips & sediment traps to mitigate nutrient and sediment loss to water

08 Maintain over-winter green cover to reduce nutrient leaching from tillage soils

Biodiversity

- 85% of our protected habitats are at unfavourable conservation status

- 620,000 km of hedgerows – 140m per ha

- Many schemes are helping biodiversity

  - ACRES has a big focus on it – 50k(+) farmers

  - Organics promotes biodiversity – 7% of farmed land

  - Increased interest in planting native woodland and hedgerows

Teagasc

AGRICULTURE AND FOOD DEVELOPMENT AUTHORITY
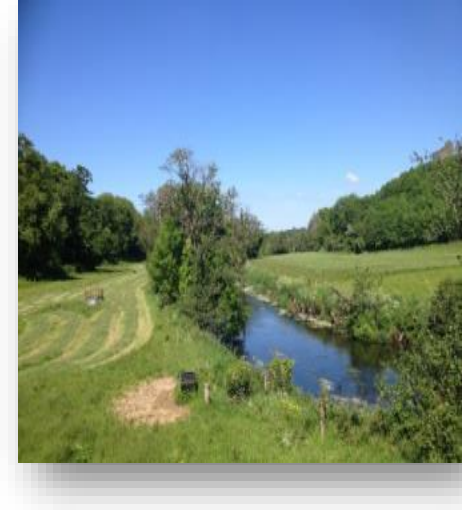
Nature Restoration Law

- Decline in biodiversity and ecosystem services

- "Voluntary targets have been ineffective"

- **Overarching objective**: to contribute to the continuous, long-term and sustained recovery of biodiverse and resilient nature …restore ecosystems and … contribute to achieving climate mitigation and climate adaptation objectives and commitments.

Article 11 – Restoration of agricultural ecosystems

Achieve an <u>increasing trend</u> for each of the following indicators in agricultural ecosystems, .. from the date of this Regulation to December 2030, … until <u>satisfactory levels</u> are reached,

- grassland **butterfly** index;

- stock of **organic carbon** in cropland mineral soils;

- share of agricultural land with high-diversity **landscape features**

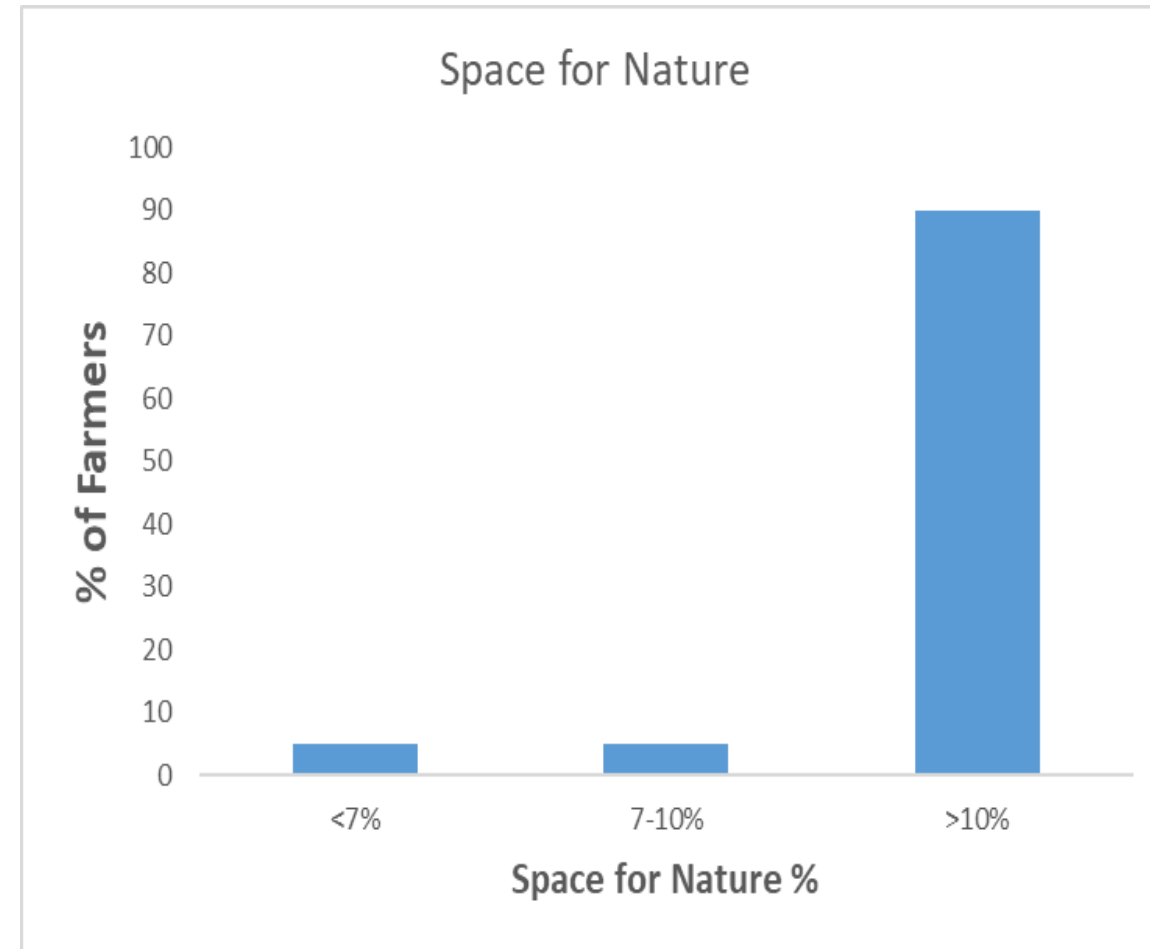- **common farmland bird** index

- **"Drained peatlands"**

High diversity landscape features

<u>Increasing trend</u> from the date of Regulation to December 2030, … and until <u>satisfactory levels</u> are reached

Satisfactory level? - …….. 10% agricultural area?

Farm-, regional-, national-level?

- **Landscape feature** – Buffer strips, fallow land, hedgerows, stonewalls, field margins, trees, copse, scrub (patch), woodland, archaeological features, drains/ ditches, pond, …

- **Semi-natural habitats**? species-rich grassland, designated habitats, scrub?

Restoration and Rewetting

For organic soils in agricultural use constituting drained peatlands, ... <u>restoration measures</u>...shall be in place on at least:

a) 30% of such areas by 2030, of which at least a *quarter* shall be rewetted;

b) 40% by 2040, of which at least *a third* shall be rewetted;

c) 50% by 2050, of which at least *a third* shall be rewetted

...restoration measures, including rewetting, in areas of **peat extraction sites** and count those areas as contributing to achieving the respective targets
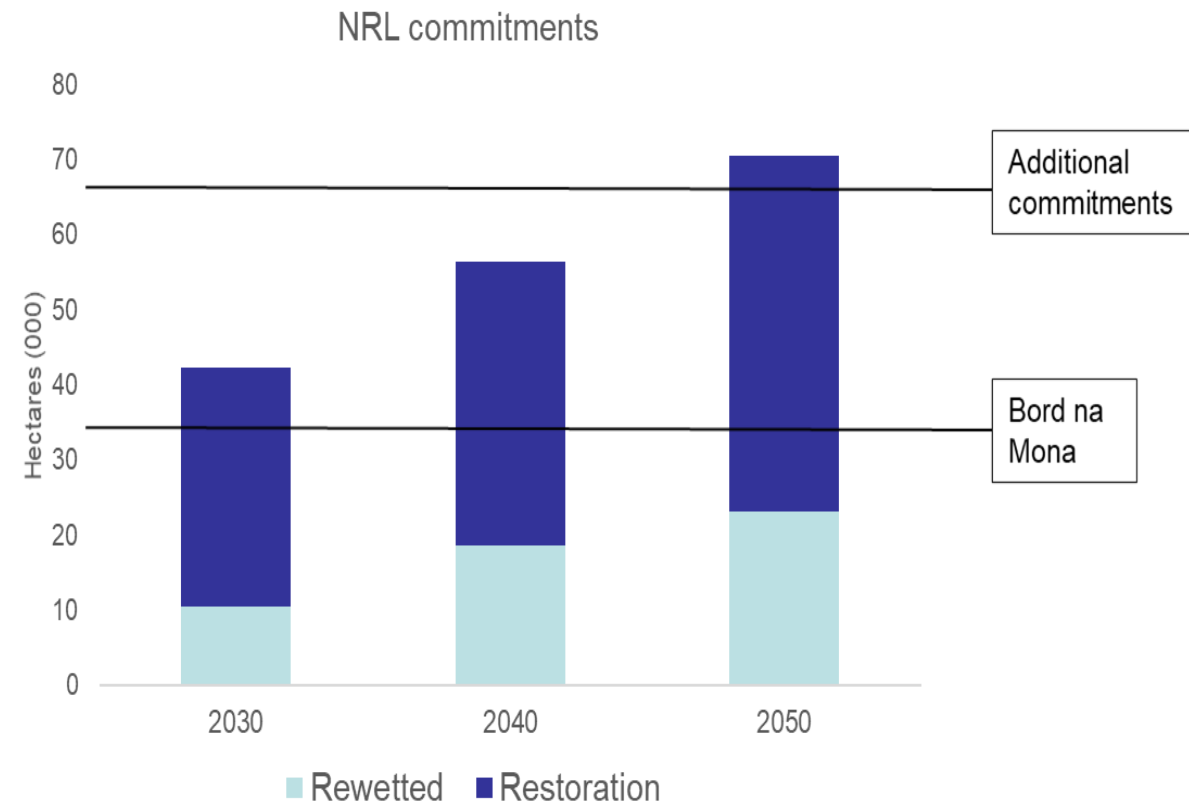
What are the key issues for the industry?

- Deal with the challenges facing us regarding water quality, climate change, biodiversity

- Protect and enhance our competitiveness through efficiency, productivity, technology and cost control

- Must also focus on generational renewal, H&S and mental wellbeing, animal welfare

- Great future for agriculture if we can get these right

Farmers need support at three levels

Policy

Incentives

Research, Advisory and Education