

## Abstract Submission Form

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**Preferred presentation**

Oral

**Preferred session**

Session 1: WG Animal Data Exchange – Decision Support Tools of the Future – Promoting Sustainability Farm Management

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**Title of your paper**

AgNav - a tool for putting climate action planning in farmers' hands

### Insert ABSTRACT text

Agriculture accounts for 37% of Irelands carbon emissions. The Irish government, in its Climate Action Plan, has set a target of a 25% reduction in emissions from agriculture by 2030.

One of the key challenges facing farmers, advisors and processors is having an accurate picture of on-farm emissions as well as understanding the potential carbon mitigation effects of individual farm management practices.

ICBF, Bord Bia and Teagasc are three agencies with key involvement in the research, implementation and promotion of best practice in the Irish agriculture and food industry.

They have collaborated to develop an online toolkit, AgNav, that provides individual farmers with an individual assessment of the total carbon emissions of their farm and the carbon footprint of their

produce.

AgNav adopts the approach of measure, predict, act to provide a holistic decision support tool for farmers.

**Measure:** AgNav is powered by access to the most accurate farm level data available drawing from a range of data sources. It uses certified methodology of the Lifetime Cycle Analysis model to calculate carbon emissions.

**Predict:** The tool provides on-demand forecasting capability that allows the farmer and their advisor to estimate the impact on farm emissions of different carbon mitigation actions, such as reducing fertilizer, optimizing grazing days or reducing finishing age.

**Act:** Once the farmer, in conjunction with their advisor, has evaluated the most appropriate mitigation practices for their farm, AgNav provides the functionality to develop a farm specific action plan.

Overall the aims of AgNav are to

- Encourage and support farmers to implement climate action and sustainability improvement on Irish farms;
- Leverage the most robust inter-agency data, research and resources to drive the most appropriate actions tailored to individual farms;
- Enable the most precise capture and analysis of data allowing accurate calculation of action impact;
- Provide a mechanism to support the quantification of progress towards Climate Action Plan targets for the agri-sector;
- Support clear communications on positive progress achieved at farm level – gives control to farmers

Throughout 2023 AgNav has been piloted with dairy and beef farmers with the intention to work with 10,000 farmers per year from 2024 onwards.

Future developments will see AgNav functionality extend into the sheep, pig, poultry and tillage sectors.

## **Enter keywords**

climate sustainability decision support farmer