



ON AGRICULTURAL GREENHOUSE GASES

ALLIANCE EXTRAORDINARY COUNCIL MEETING

Online meeting hosted by the Secretariat

Wednesday 11 September 2024

OVERVIEW

The Global Research Alliance on Agricultural Greenhouse Gases (GRA) Council meeting was held online on Wednesday 11 September 2024 hosted by the GRA Secretariat.

This report is a summary of the key discussions and outcomes from the meeting. Full recording of this two-hour meeting is available to view [HERE](#).

PARTICIPANTS

Refer to Appendix 1 for a full participants list.

KEY OUTCOMES OF MEETING

The outcomes identified during the meeting will be confirmed through the development of the annual Operational Plan that sits under the GRA Strategic Plan.

Outcomes
Council
Ahead of the meeting Ireland was confirmed as Vice-Chair for 2024, and Chair from 2025 to host the next Council meeting in June 2025. Spain is willing to continue in the Council Chair role until the end of December 2024.
Strategic Plan refresh to review the actions of the 2021-2025 Strategic Plan and develop the 2026-2030 plan for the 2025 Council meeting. Working Group: Canada, China, Germany, Ireland, New Zealand, Spain, United Kingdom, United States, Zimbabwe Working Group Chair: Ireland
First science to policy communication note to be developed on GHG emission metrics comparison and use for climate policy as pilot document ahead of the June 2025 Council meeting. Working Group to develop a process identifying future topics of interest.
Request to Council members to support GRA capability building activities such as the CLIFF-GRADS programme, including by hosting students for the Round 7 call in 2025.
Research Groups
Research Group review to take place, with a proposal for decision at the 2025 Council meeting. Working Group: Australia, Canada, China, France, Germany, Ghana, New Zealand, Spain, South Africa, United Kingdom, United States, Zimbabwe Working Group Chair: Ireland
Continue to foster collaboration between Networks, especially through the establishment of new Flagships.
Consider the scope of the Manure Management Network and alignment of activities with other Networks, as part of the review.
Secretariat
Website improvement to support the science to policy communication Working Group actions.

SUMMARY OF DISCUSSIONS

STATEMENT FROM SPAIN

1. Vice Director of INIA-CSIC, Jose Luis Alonso Prado, welcomed everyone to the 2024 GRA Council extraordinary meeting. Spain assumed the presidency of the GRA in April 2023 and has held the role for 16 months, this will come to a close at the end of 2024. It has been a pleasure to hold the role of GRA Council Chair and during this time Spain has been delighted to contribute to research, training, dissemination, and communication activities.
2. Spain has played a pivotal role in the GRA as co-Chair of the CRG and leading the Feed Additives Flagship. Supporting the contributions to capability building; Spain has hosted CLIFF-GRADS fellows and training courses with the International Centre for Advanced Mediterranean Agronomic Studies (CIHEAM).
3. Spain prioritises research at the nexus between mitigation and adaptation in response to climate change challenges, to meet the challenges of regular drought conditions in Spain. To support this Spain is leading the Agroecology and Agroforestry Flagship project, led by Dr. Rosa Mosquera Losada, and has established the Mediterranean Agriculture Network led by INIA, CIHEAM and Remedia.
4. To improve the communication of GRA activities to policy makers Spain is the co-lead of the Science to Policy communications Working Group with Canada and has helped to develop the work plans of this group. Spain has also been pleased to host meetings of the GRA Research groups and related research meetings.
5. Spain has also been assuming the presidency of the Council of the European Union and is supporting the extension of science and innovation through a programme between 19 EU countries for integrated water management and improved food systems in the Mediterranean region.
6. INIA-CSIC has played a significant role in advancing research on agricultural greenhouse gases, promoting research mobility and bilateral collaboration to enrich our collective endeavours. Together we will continue to make meaningful strides in a more sustainable and resilient agriculture sector.

STATEMENT FROM IRELAND

1. As the new GRA Council vice-Chair Karl Walsh, Head of Research, Bioeconomy and Codex Alimentarius, Ministry of Agriculture and the Marine was welcomed into this role by Jose Luis Alonso Prado and invited to present Ireland's priorities during their leadership.
2. Ireland's agriculture emissions account for over a third of its total emissions and the sector is now facing ambitious targets to reduce agricultural greenhouse gases, for agriculture this is 25% reduction by 2030. Research will be crucial to help develop the tools needed for farmers to achieve these targets. The Ministry of Agriculture, Food and the Marine is a

funder of research related to improving the agriculture, food and forestry sectors of the economy. The annual research spend on climate mitigation and adaptation currently accounts for c.40% of the budget, providing a significant investment to develop solutions.

3. During Ireland's term as GRA Council Chair priorities will include furthering the reputational profile and leadership of the GRA, advancing research priorities to address both mitigation and food security, and continuing to build the momentum and resourcing of the GRA to advance solutions. Ireland will also support projects of the Council, represent the GRA at international fora and would be pleased to facilitate meetings of the Research Groups.
4. The 2025 Council meeting is scheduled for 3-4 June in Dublin, Ireland. A research conference will be held on 5 June, open to wider participation and field tours to research facilities and farms will take place on 6 June. Ireland is looking forward to welcoming you to Dublin and working in collaboration with you all.

GRA SPECIAL REPRESENTATIVE UPDATE

5. Dr Harry Clark, GRA Special Representative provided an update of the key activities and events of the GRA over the last year. This is also covered in the Annual Highlights publication and the Research Stocktake Celebrating 12 Years of the GRA, both available on the GRA website.
6. The GRA continues to support student fellowships through the CLIFF-GRADS fellowship and the GRA-GRG Programme with Ruforum African Universities supporting master's students. The CLIFF-GRADS programme conducted a survey to understand the impact of the programme in supporting the career of its alumni. Over 70% of students have found the programme valuable for the next steps in their career and a similar number are still working in the field of agricultural greenhouse gas emissions. The seventh round of the CLIFF-GRADS programme will open in the first half of 2025, and we hope that you are able to host students for this programme.
7. The Ruforum programme has supported 16 master's and 2 PhD students during its second round. In November 2023 recipients of the first round launched GRAN-Afrique the GRA-Ruforum Alumni Network.
8. The GRA is working closely with Partners to contribute to global research activities including through the Greener Cattle Initiative research call. Round 1 of this call has supported three projects to develop innovative approaches to reduce methane from livestock via animal breeding and mitigation for improved animal performance. Round 2 recently closed and projects are now being assessed.
9. Collaboration on a new project with the Global Dairy Platform, Global Methane Hub, and Environmental Defense Fund to identify animal health interventions and greenhouse gas emissions. The Methane inhibitor Flagship also includes funding from the Global Dairy Hub for a Post-Doctoral researcher.
10. The GRA has contributed to a new report, to be released September 2024, of the Climate and Clean Air Coalition (CCAC) on the impact of N₂O emissions on air quality. Another report is now being planned for COP 30 in Brazil. This report will focus on the importance of N₂O emissions for the agriculture and food sectors and the GRA has been approached to lead and identify contributing authors from among our Members.

11. The GRA has also been contributing to a project led by a number of global dairy companies. The MiLCA project is identifying common methods for incorporating mitigation methodologies into LCAs.
12. Upcoming activities of the GRA where the Special Representative will attend are the Agri-GHG Symposium organised in Berlin in October, and meetings of the GRA and its Networks organised alongside (Livestock Research Group, Integrative Research Group, Circular Food Systems Network, Inventories and NDC Network). The Croplands Research Group is meeting in Texas in November with an opportunity to discuss a review of the group and its Networks.

RESEARCH GROUP CO-CHAIRS REPORT

Key messages from the Research Group Co-Chairs

13. A complete update of activities from all four Research Groups is provided on the website for review. During the extraordinary meeting Jean-Francois Soussana co-Chair of the Integrative Research Group presented the key recommendations from the Research Groups to the Council.
14. The Livestock Research Group is considering a broader scope for the Manure Management Network. The Network has come to an end of its existing projects and needs to maintain links to its existing community of scientists. If the group were to expand and consider wider uses of resources, including bio-refining and circular systems, this would also strengthen the links with other Research Groups and Networks. The Livestock Research Group sees the proposed review of the Research Groups as an opportunity to review the scope of this Network while considering other Research Groups and Networks.
15. The Integrative Research Group supports the establishment of a review group to assess the current GRA structure and propose a new structure that improves the efficiencies across the research communities.
16. The IRG sees opportunities in ensuring that Networks with a stronger focus on the science-to-policy interface, such as the Inventories and NDC Network, the Indigenous Research Network, and the Circular Food Systems Network are more closely connected to the Council. These Networks engage in activities that are more directly linked to societal and policy topics.
17. The groups are also supportive of the work plans developed in the science-to-policy interface, and this discussion has also been identified for upcoming meetings of the Research Groups. This is an important consideration when reviewing the future structure of the GRA to identify the best way to link the GRA Research Groups to activities of Partners, for example some of the reports and events that involve the GRA special representative.

Discussion

18. The group discussed the proposal to broaden the scope of the Manure Management Network and could see where there might be opportunities for aligning with other Networks, such as the Circular Food Network which should be explored. More broadly the group felt that there was a need to better clarify the role of the Network, but that a mitigation focus was still essential.

19. The topic of technology transfer to farmers was raised to ensure that the joint knowledge we have developed is adopted by farmers. Understanding how farmer adoption is managed through modelling of assistance and extension was noted to be of interest for future discussion or collaboration.
20. The work of the Feed additive Flagship was recognised. The Flagship has produced six papers, and these are a good example of papers that are highly relevant in the policy space. The papers were published in peer reviewed journals and had advice that was able to be considered by policy makers. The group now plans to develop plain language summaries of these papers to share more widely.

RESEARCH GROUP AND NETWORK STRUCTURE REVIEW

21. Harry Clark introduced a proposal to review the structure of the GRA Research Groups and Networks. The current structure of the four Research Groups (Croplands, Paddy Rice Livestock and Integrative) has been in place for almost 10 years. In that time, the GRA has grown significantly in Membership and the number of Networks that sit underneath the Research Groups has also increased.
22. Across the four Research Groups of the GRA, some have developed strong Networks and identified project resourcing and others have struggled to establish ongoing Networks or areas of expertise. In some cases, an increase in Networks has meant that the co-Chairs find it difficult to coordinate activities that are relevant to all Networks.
23. It is now timely to consider the Research Groups structure and what is working, and if there are any changes that could be identified to better support the GRA for the future. We are asking a group to review the current functioning of the Research Groups, including areas of overlap or inactive Networks, and how to organise those Networks which don't fit well under the current structure.

Discussion

24. The Council was strongly in favour of reviewing the Research Groups and Networks of the GRA and considering what organisational structure would support the future of the GRA. Specific points raised for the review group to consider was the need to provide dedicated Secretariat support for Research Groups, the opportunity to clarify the activities of each group and reduce cross-over, and a question around the suggestion to have some networks reporting directly to Council.

Actions

25. The Council agreed to establish a Research Group and Network Review Working Group chaired by Ireland as 2025 Council Chair. Members willing to contribute: Australia, China, France, Germany, Ghana, New Zealand, Spain, South Africa, United Kingdom, United States, Zimbabwe.

SCIENCE TO POLICY COMMUNICATION WORKING GROUP

26. The work of the Science to Policy Working Groups was presented by Charles Kounkou of Agriculture and Agri-Food Canada. The Working Group was established at the 2023 Council meeting as a response to the 2022 survey identifying that the GRA needed to improve communications to policy makers.

27. The goal of the group was to strengthen the dialogue between scientists and policy makers with the aim of reducing agricultural greenhouse gases. A long-term and a 2024 annual work plan were developed over a series of meetings and shared with Members in May 2024.
28. The first two activities identified have a strong communication focus to improve the GRA website to better share the scientific publications from GRA projects and developing plain language summaries of the research outputs.
29. A need to support capacity building activities was identified and this includes webinars and exchanges as well as providing links to science to policy training information on the website.
30. The final activity identified was the development of GRA communication notes to make use of the expertise within the GRA's Membership. Topics of interest are to be identified on a regular basis by the Council. Four potential topics were outlined as initial suggestions for the Council to consider.
 - GHG emission metrics comparison and use for climate policy
 - Climate benefits of regenerative agriculture
 - Experiences with balancing food production, sequestration and emission reductions
 - Delivering climate benefits from intensification

Discussion

31. The group noted that this was a topic of interest currently in the policy space and there is a feeling that scientific breakthroughs are not making their way quickly enough to decision makers.
32. There was strong support from the group for activities to improve the GRA website and capability building. However, it was also noted that the use of social media platforms, such as LinkedIn offer more diverse and immediate tools for information exchange.
33. All topics proposed had some interest from the group, but it was clear that the strongest interest was for a communication note covering GHG emission metrics comparison and use for climate policy. It was agreed that the working group would move forward with developing information on this topic to be ready for the Council meeting in 2025. This Communication Note will be viewed as a pilot to help develop processes and understand how best to communicate this information.

Actions

34. The GRA Secretariat, the Working Group and Members with communications expertise and resource to continue with work plan activities on website improvement and capability building
35. A GRA Communication Note will be developed on the topic of GHG emission metrics comparison and use for climate policy ahead of the next Council meeting.

STRATEGIC PLAN REVIEW

36. The work of the GRA Council is directed by a five-year Strategic Plan that identifies four Key Strategies of the GRA. The current Strategic Plan, covering the period 2021-2025, is coming

to an end. The purpose for this session is to establish a working group to develop the next GRA Strategic plan until 2030.

37. The current plan recognises four focus areas for the GRA as Key Strategies and identifies Strategic Objectives to support each of these Key Strategies.

38. Four Key Strategies:

- Further Research collaboration
- Foster Outreach, Knowledge Sharing and Information Exchange
- Build Effective Partnerships
- Leverage Financial and Other Resources

Discussion

39. A proposal was put forward by Ireland to establish a process for the Working Group; to review what has changed since the last Strategic Plan was established, recognise how the GRA has evolved, quantify how successful has the previous plan been, and identify how the GRA stays successful and relevant over the next five years.

40. On the question of mitigation versus adaptation the group noted that the consideration of adaptation activities was an important part of the discussion. The GRA has always had a mitigation focus which is an important focus not covered by most other global communities.

Actions

41. The Council agreed to establish a Strategic Plan Working Group chaired by Ireland as 2025 Council Chair. Members willing to contribute: China, Germany, Ireland, New Zealand, Spain, United Kingdom, United States, Zimbabwe.

APPENDIX 1: PARTICIPANTS LIST

Members	
Argentina	Andres Said, Ministry of Agriculture
Australia	Nick Blong, Department of Agriculture, Fisheries and Forestry Maddy Wright, Department of Agriculture, Fisheries and Forestry
Benin	Bossou Annick
Brazil	Gustavo Mozzer, Brazilian Agricultural Research Corporation (EMBRAPA)
Canada	Charles Kounkou, Agriculture and Agri-Food Canada Priyanka Vanaik, Agriculture and Agri-Food Canada
China	Xiobo Qin, Chinese Academy of Agricultural Science Dong Hongmin, Chinese Academy of Agricultural Science
France	Valérie Dermaux, Ministry of Agriculture, Food & Forestry
Germany	Dorothea Schidt, German Ministry of Food and Agriculture Anne Roth, German Ministry of Food and Agriculture Leonie Lütke Drieling, German Ministry of Food and Agriculture Claudia Heidecke, Thuenen Institute Nina Grassnick, Thuenen Institute
Ghana	Edward Yeboah, CSIR-Soil Research Institute
Indonesia	Bess Tiesnamurti, Indonesian Centre for Animal Research and Development
Ireland	Karl Walsh, Department of Agriculture, Food and the Marine John Harrison, Department of Agriculture, Food and the Marine
Japan	Kaori Fujita, Ministry of Agriculture, Forestry and Fisheries
Lithuania	Vilma Kraujalytė, Ministry of Agriculture Simona Bieliauskaite, Ministry of Agriculture Šukytė-Kraskauskienė Živilė, Ministry of Agriculture
New Zealand	Trish Ranstead, Ministry for Primary Industries William Aitkenhead, Ministry for Primary Industries

	<p>Nilusha Ubeynarayan, Ministry for Primary Industries</p> <p>Ackim Mwape, New Zealand Agricultural Greenhouse Gas Research Centre</p>
South Africa	<p>Dumisani Mthembu, Department of Science and Technology</p> <p>Michiel Scholtz, Agricultural Research Council</p> <p>Motshabi Mokolobate, Agricultural Research Council</p>
Spain	<p>Jose Luis Alonso Prados, INIA-CSIC</p> <p>Marisa Tello Mariscal, INIA-CSIC</p>
Switzerland	Saskia Sanders, Federal Office for Agriculture
United Kingdom	Rick Bruintjes, Department for Environment, Food & Rural Affairs
United States	<p>Marlen Eve, U.S Department of Agriculture</p> <p>Jaime Adams, U.S Department of Agriculture</p> <p>Linsey Haram, U.S Department of Agriculture</p> <p>James P Dobrowolski, U.S Department of Agriculture</p> <p>Adam Wilke, U.S Department of Agriculture</p> <p>Amy Ganguli, U.S Department of Agriculture</p> <p>Arlene Adviento-Borbe, U.S Department of Agriculture</p> <p>Bisoondat Macoon, U.S Department of Agriculture</p>
Vietnam	Nguyen Van Tuat, Ministry of Agriculture and Rural Development
Zimbabwe	Dumisani Kutwayo, Ministry of Lands, Agriculture, Fisheries, Water and Rural Development
Partners	
AgMIP	<p>Roberto Valdivia</p> <p>Erik Mencos Contreras</p>
CIHEAM	Antonio López-Francos
CORAF	Alioune Fall
EDF	John Tauzel
European Commission	Jean-Charles Cavitte

	Matthias Leonhard Maier
FONTAGRO	Eugenia Saini
World Farmers' Organisation	Macaulay Jones
Research Group Co-Chairs	
Jean-François Soussana, Integrative Research Group -France	
Tommy Boland, Livestock Research Group - Ireland	
Richard Dewhurst, Livestock Research Group - UK	
Hero Gollany, Croplands Research Group – USA	
GRA Secretariat	
Harry Clark, GRA Special Representative	
Deborah Knox, New Zealand	
Chista Keramati, New Zealand	

APPENDIX 2: MEMBER AND PARTNER ANNOUNCEMENTS

New Zealand update for 2024 GRA council meeting

Introduction

New Zealand values the strong, practical partnerships through the GRA, which enable a greater impact towards achieving climate resilience, growing more food without growing emissions.

The collaborative ethos, the sharing of expertise, supporting inclusive participation and creating the scale of research needed to achieve a global impact, continues to describe the GRA's value proposition. We all know the challenge is beyond any single country or organisation, that we each have something to contribute to addressing the challenge and that our collective and complementary experiences and expertise will magnify the impact.

For New Zealand, the partnerships formed through the GRA have taken us so much further than we would have managed alone and we are committed to continuing to work with members and partners to realise the potential of the GRA.

Ireland-New Zealand Joint Research Initiative

The third and final research call under the Pilot Joint Research Initiative between Ireland and New Zealand took place from April 10 to June 6, 2024. This call focused on topics such as national inventory refinement, greenhouse gas mitigation technologies, and data and digitalization for climate actions. Following an expert evaluation, three proposals were selected for funding, with an announcement expected in October. The first two rounds funded eight projects aimed at reducing GHG emissions from pasture systems, and a review of the initiative is planned for late 2024.

An Alliance for the Climate – Dialogue on Climate and Agriculture between New Zealand and Germany

In September 2023, New Zealand signed a Declaration of Intent titled "An Alliance for the Climate – Dialogue on Climate and Agriculture." With Germany. The Declaration aims to facilitate knowledge sharing to address climate change mitigation and adaptation challenges and foster collaboration in third countries. It focuses on three pillars: enhancing scientific exchange, supporting policy learning, and coordinating joint efforts in third-party countries. The program's kick-off meeting took place in August 2024, with an official launch scheduled for late October in Berlin at the AgriGHG conference.

2024 Green Era Hub Call

New Zealand has been invited to participate in the 2024 Green ERA-Hub (GEH) joint international funding call, co-organized by the GRA. New Zealand will contribute up to €300,000 to support research projects focused on greenhouse gas measures. In the 2023 GEH Call, New Zealand participated as a third-party funder, supporting a project that targeted at Livestock breeding.

Climate Smart Agriculture (CSA) Initiative

The Climate Smart Agriculture Initiative is the largest program administered by New

Zealand, aimed at building capacity in Africa, ASEAN, Latin America, and the Caribbean to improve measurement and reporting of agricultural GHG emissions.

Africa - Nine countries can now report livestock emissions comprehensively, supporting their climate policies and Paris Agreement commitments. Phase Two is currently underway in Uganda, Zambia, and Zimbabwe.

ASEAN- Work is underway across six countries and a CSA-funded pilot MRV system for rice in Vietnam, "RiceMoRe," has gained additional funding from the World Bank for expansion to Cambodia and Laos.

Latin America and Caribbean - New Zealand and FONTAGRO have partnered for a 2024 joint research call, approving eight projects, four of which will be co-financed by FONTAGRO and the New Zealand government.

Global Research Alliance Agricultural Inventory Training (GRAIT)

In May New Zealand launched the [GRA Agricultural Inventory Training Programme \(GRAIT\)](#) through the Inventories and NDC Network. GRAIT streamlines current agricultural inventory capacity building initiatives that support the Enhanced Transparency Framework (ETF) of the Paris Agreement.

To support the inventory training programme, two agricultural inventory improvement training workshops for agriculture have been held this year in Fiji and a workshop is planned for Samoa in September.

2024 Council Meeting Announcements - Ireland

1. IE-NZ awards – Successful 2nd Call and Launch of 3rd Call

The 2023 Joint Research Call between Ireland and New Zealand opened on **10 May 2023 at 12:00 (IST)** and invited eligible Research Performing Organisations (RPOs) from Ireland to submit joint research proposals, with collaborating partners from New Zealand.

There were four research topics in the Call:

- Topic 1: Land management on organic agricultural soils to support the development of GHG mitigation and Carbon sequestration
- Topic 2: Refinement of agricultural GHG emissions inventories through the development of emission factors for Methane, Nitrous Oxide and Carbon Dioxide
- Topic 3: Identification and development of technologies for the mitigation of greenhouse gases from ruminant systems
- Topic 4: Digitalisation and data to support climate-related action and management practices in agriculture

Total funding provided jointly by the Irish Department of Agriculture, Food and the Marine (DAFM) and the New Zealand Ministry for Primary Industries (MPI) was €7,342,967 towards four projects.

The successful projects are as follows:

- MAPSERS-C - Modelling and measuring agricultural management on peat soils to enhance removals and sequestration of carbon. Giulia Bondi (Teagasc); (DAFM funding: €1,027,290)
- Emissions4Pastures - Development of methane emission factors specific to pasture-based dairy systems. Ben Lahart (Teagasc); (DAFM funding €1,007,789)
- BNIPastures - Reducing nitrous oxide emissions from ruminant systems through accelerating nitrification inhibition in ryegrass and plantain mixed pastures. Bridget Lynch (Teagasc); (DAFM funding €1,050,129)
- PRISM - Proximal sensing for near real-time monitoring of soil organic carbon pools for climate smart management. Karen Daly (Teagasc), (DAFM funding €809,607)

Call 2024

Now in its third year, the third Joint research Call between both countries launched on 10th April 2024, with a total funding commitment of €6 million from both organisations for joint research proposals from Irish and New Zealand researchers across three research topics:

1. Inventory refinement and improvement,
2. The development and assessment of greenhouse gas mitigating technologies, and
3. Digitalization and standardisation of data to support climate mitigation.

The 2024 Call closed on the 6th June 2024 and successful projects are expected to be announced in October 2024, following a 3-stage competitive evaluation of proposals.

2. AIM4C

At the AIM for Climate Ministerial Summit in Washington (May 8-10, 2023), Ireland deepened its engagement with the initiative by announcing:

- An increase in investment in climate-related research under the initiative, committing to further increase our initial investment from 40% to 60%, providing an investment increase during the initiative of just under €9.5 million over the 2020 baseline, and a total investment in climate-related research and innovation of over €25 million.
- Joining the Aim for Climate Innovation Sprint “Enteric Fermentation R+D Accelerator”, led by the Global Methane Hub, with a commitment of at least €5 million over five years.
- USAID and Ireland are collaborating to develop a programme of work to support Malawi to achieve its agricultural transformation and commercialisation objectives. The initiative comprises at least US\$75 million in joint support over the next four years to support the transformation of food systems to become more climate resilient, promote green energy transition and provide more nutritious food as well as an adequate income for smallholder farmers, especially female farmers.

3. Enteric Fermentation R&D Accelerator

The Innovation Sprint titled “An Enteric Fermentation R&D Accelerator”, aims to provide a global coordinated research and development initiative over a 5-year period (from 2023-2028).

DAFM formally joined the Aim for Climate Innovation Sprint “Enteric Fermentation R+D Accelerator” by committing at least €5 million over five years.

4. Agriculture and Climate Change: Science into Action Conference, November 2023 Dublin Ireland

Held during Science Week 2023 (15/11/2023), the [conference](#) hosted a range of national and international researchers presenting to an audience of 500 the state of science across areas such as breeding and feed additives to reduce methane, and soil and pasture management to reduce nitrous oxide and increase carbon sequestration.

Key aims of the conference

- Bring stakeholders up to date on the latest climate policy developments relating to agriculture and land use.
- Present the latest scientific developments on measuring and mitigating the principal agricultural greenhouse gases and facilitate discussion on how this research can inform policy and be implemented on farms.
- Discuss the potential for diversification opportunities for agriculture and land use.

5. VistaMilk II

VistaMilk is a research centre focused on innovation in technology and enhancing sustainability across the dairy supply chain from soil to society, positively impacting the environment, animal well-being and the health of consumers.

VistaMilk links the Irish agri-food industry with Ireland’s leading agri-food and technology research institutes in a large-scale innovation ecosystem that includes 14 research institutes and over 50 industry partners.

Phase 2 was officially launched Tuesday, May 14th 2024, and will see DAFM co-fund VistaMilk Phase II for six years commencing September 2024. The co-fund amounts to just over €8,73 million over

the six-year period, representing a DAFM commitment of c.33% of the total public funding of €26,458,130 (including overheads) towards Phase II.

The second phase of the centre will see the addition of a fourth thematic area, soil, to add to pasture, cow and food from phase I. It will also have an enhanced climate and environmental research focus, in particular in the areas of soil carbon sequestration, developing slow-release bolus for administering methane inhibiting feed additives at pasture, identification of biomarkers for low versus high methane emitting animals, as well as other aspects that are beneficial to biodiversity and water quality

6. Agroecology Partnership

The European Partnership on Accelerating Farming Systems Transition – Agroecology Living Labs and Research Infrastructures (AGROECOLOGY) announced the first co-funded call with a €31.5M budget. The call was launched on the 15th of February 2024. The partnership aims to structure and support a network of living labs and research infrastructures that will accelerate the transition towards agroecology throughout Europe. It will provide spaces for long-term, site-specific, multi-stakeholder and real-life experimentation, and direction for research activities on agroecology at the European and national levels.

7. Annual Climate Action Plan

The Climate Action Plan 2024 (CAP24) is the third annual update to Ireland’s Climate Action Plan.

The purpose of the Climate Action Plan is to lay out a roadmap of actions which will ultimately lead us to meeting our national climate objective of pursuing and achieving, by no later than the end of the year 2050, the transition to a climate resilient, biodiversity rich, environmentally sustainable and climate neutral economy. It aligns with the legally binding economy-wide carbon budgets and sectoral emissions ceilings that were agreed by Government in July 2022.

Key targets for agriculture under the Climate Action Plan 2024

- 25% reduction in emissions by 2030
- Provide support for farmers to continue to produce world-class, safe and nutritious food, while also seeking to diversify income through tillage, energy generation and forestry.
- 80% uptake of inhibited urea on grassland farms, resulting in reduced ammonia N and nitrous oxide N emissions and a potential reduction in farm emissions of 8% on dairy farms
- Reduce the use of chemical Nitrogen on our farms
- Production of 1TWh of biomethane by 2025
- Flagship €1.5 billion Agri-Climate Rural Environment Scheme (ACRES) rewards farmers for undertaking measures with a wide range of environmental benefits

8. National Climate Trends

Ireland’s greenhouse gas emissions in 2023 lowest in three decades

- Ireland’s greenhouse gas emissions decreased by 6.8 per cent (4.0 Mt CO₂eq) in 2023 with reductions in almost all sectors. This is the lowest that greenhouse gas emissions have been in three decades, and below the 1990 baseline.

- Emissions data show the largest single year reductions in the energy and agriculture sectors and the lowest level of residential emissions since 1990, while transport emissions were below pre-Covid levels.
 - Power generation emissions decreased by 21.6 per cent (2.2 Mt CO₂eq)
 - Agriculture emissions decreased by 4.6 per cent (1.0 Mt CO₂eq) Residential emissions decreased by 7.1 per cent (0.4 Mt CO₂eq)
 - Transport emissions increased marginally by 0.3 per cent (0.03 Mt CO₂eq)
 - Emissions per capita decreased from 11.4 tonnes CO₂eq/person to 10.4 tonnes CO₂eq/person in 2023.

Agriculture: Agriculture emissions decreased by 4.6 per cent to 20.8 Mt CO₂eq due to an 18 per cent reduction in fertiliser nitrogen use, reduced lime application and overall reduction in numbers of livestock. Dairy cow numbers increased by 0.6 per cent, however total milk production decreased by 4.7 per cent in 2023.

Germany

Germany is happy to announce that it is hosting the Second **International Research Symposium on Agricultural Greenhouse Gas Mitigation - From Research to Implementation on 21-23 October 2024 in Berlin**. The event takes place in cooperation with GRA, CGIAR and Thünen-Institute. It will bring together researchers and relevant stakeholders from all over the world to discuss options for both climate change mitigation measures and low-emission development strategies in agricultural food systems, as well as their implementation and win-win solutions for combating climate change and enhancing food security. On 24 October there will be several side events with participation of GRA: the Annual meeting of the GRA Livestock Research Group, the Inventory and NDC network meeting and the Circular Food Systems (CFS) network meeting. Registration is closed by now. We are looking forward to see you in Berlin!

[Agrighg-2024.de](https://www.agrighg-2024.de)

We are happy to announce that the Ministries of Agriculture of Germany and New Zealand have launched a bilateral cooperation programme, called Agri-DENZ. Our aim is to foster mutual understanding, as well as political, scientific and technical cooperation in transforming agriculture and food systems in a changing climate. To achieve this aim the project will:

- Encourage the development of solutions addressing the global impact of agricultural production systems on climate
- Provide a mutual learning platform for policy advisors, decision makers and researchers from New Zealand and Germany, focusing on the global impact of agricultural production systems on the climate, food security, and solutions for climate resilient and climate-friendly agricultural practices
- Provide a platform for an exchange about climate policy action plans and research results
- Exchange and platforms are meant to include third party countries

Project duration: 1st April 2024 – 31st December 2026

We will keep you informed about further activities.

GRA Council-Meeting 2024: Announcements from Switzerland

New Climate Strategy for Agriculture and Food

In 2023, the Swiss Federal Office for Agriculture published, together with the Federal Office for the Environment and the Federal Food Safety and Veterinary Office, its new [Climate Strategy for Agriculture and Food](#). The strategy takes a food systems approach, including production, processing, trade and consumption. The strategy focuses on the following three objectives to be achieved by 2050:

- Domestic agricultural production contributes at least 50% to the food needs of the population in Switzerland, taking into account the production potential of the location and the carrying capacity of the ecosystems.
- The diet of the population in Switzerland corresponds to the recommendations of the Swiss Food Pyramid, and the greenhouse gas footprint of the diet per capita is reduced by at least two thirds compared to 2020.
- Greenhouse gas emissions from domestic agricultural production are reduced by at least 40% compared to 1990. Remaining emissions will be offset as far as possible.

The associated action plan includes a wide range of measures that promote sustainable agricultural production, healthy diets, more sustainable trade relations and reduced food loss and waste.

The necessary legal provisions to achieve these targets will mainly be regulated in the agricultural policy and will be developed further in future policy frameworks. Implementation of mitigation measures will be promoted mainly via financial contributions for sustainable production systems. Adoption of mitigation strategies in practice will be accompanied by a coherent development of the general agricultural policy, a broad participation process among all stakeholders, and an expansion of scientific knowledge.

Updated Swiss GRA-Website

Switzerland is updating the content of the [Swiss-GRA-Website](#). The new content presents brief information on the agricultural GHG emissions in Switzerland, the political context and the ambitions for mitigation, as well as Switzerland's activities in the GRA. Most importantly, a list of Swiss research institutions and groups is provided with a tentative allocation to the GRA research groups and networks. Stakeholders interested in any form of collaboration are invited to contact either the indicated persons directly or the Swiss GRA contacts.



UPDATE ON EUROPEAN COMMISSION ACTIVITIES IN SUPPORT OF THE GLOBAL RESEARCH ALLIANCE ON AGRICULTURAL GREENHOUSE GASES (GRA)

SUBMISSION FOR THE GRA COUNCIL MEETING OF 11 SEPTEMBER 2024

LIVESTOCK RESEARCH GROUP (LRG)

The EU-funded project [HoloRuminant](#), running until the end of September 2026, was selected under a Horizon 2020⁽¹⁾ topic encouraging to interact as appropriate with relevant collaborative projects in Europe and with international initiatives such as the GRA's Rumen Microbial Genomics Network (RMG). Actually, several international entities, in particular from New Zealand, Australia, Canada, the USA, are member of the project. Many of HoloRuminant's partners belong to and participate actively in the RMG.

Through its science networks, LRG is participating to running projects funded through the H2020 ERA-NETs and Horizon Europe, namely:

[Integrity](#) (2022-2026), through the Feed and Nutrition Network (FNN) of LRG. The project aims to evaluate alternative management of mixed crop-ruminant livestock systems to increase the potential increment of Carbon and Nutrient Circularity in diverse agro-climatic regions. Argentina is the coordinator, while New Zealand, Peru and Uruguay are international partners.

[STEP UP](#) (2024-2027) The Horizon Europe⁽²⁾ project will provide a comprehensive understanding of the impacts and externalities associated with European Livestock Production Systems (ELPS), essential for informed policy-making. It will develop new indicators for sustainability assessment and will propose transition pathways for more sustainable ELPS. As per call, the project will collaborate with international organisations, including the LRG of the GRA, particularly through the development of protocol and bringing technology together.

[NUTRITIVE](#) (2024-2028) will develop a decision-making tool able to define the most efficient and sustainable (in its three pillars: environmental, economic, and social) manure management strategies for a given livestock farm limiting manure air emissions as well as soil and water contaminants. As per call, the project will utilise data and research outcomes from ERA-NETs SusAn and ERA-GAS funded projects like CCC Farming, with USA and Brazil among the partners, MELS (a follow up of DATAMAN project where the Manure Management Network (MMN) of the LRG was involved) and others.

(¹) *Horizon 2020* (H2020) was the EU's previous Framework Programme for Research and Innovation (2014-2020).

(²) *Horizon Europe* is the EU's current Framework Programme for Research and Innovation (2021-2027).

OTHER ONGOING PROJECTS AND ACTIVITIES

Reducing GHG emissions from agriculture has been a priority of EU R&I programming for some time already. The programming is aligned with relevant legislative initiatives, in particular a new [EU Regulation](#) on carbon removals and carbon farming, which creates a framework for certification of carbon sequestration and emission reductions in agriculture, among other carbon-removal activities.

Two ongoing EU “[Mission Soil](#)” projects (MARVIC, MRV4SOC) specifically focus on the monitoring, reporting and verification (MRV) of carbon removals; another one (CREDIBLE) is building a network of carbon farming practitioners. The CREDIBLE project also organises annual [Carbon Farming Summits](#), open to participants from all over the world, with the second summit to be held in March 2025 in Dublin, Ireland.

The project [ORCaSa](#) is operationalising an International Research Consortium (IRC) on Soil Carbon. The IRC was launched in November 2023, has received letters of interest from organisations across the globe, and is inviting additional expressions of interest.

In January 2024, a European Partnership on accelerating farming systems transition through agroecology living labs and research infrastructures ([Agroecology Partnership](#)) was launched with funding from Horizon Europe. Several non-EU countries are members of the Partnership consortium. One of the objectives of the Partnership is to tap into the potential of agroecology to increase the resilience of agroecosystems to climate change, as well as to contribute to efforts to mitigate the effects of the farming sector on climate change. The Partnership’s [Strategic Research and Innovation Agenda](#) provides the framework for activities over its lifespan (7-10 years).

OPEN AND FORTHCOMING CALLS

Until 8 October 2024, [calls are open](#) for project proposals under nine different topics contributing to the EU Mission Soil, including one dedicated to the assessment of soil health in Africa. In line with the overall policy for [international cooperation](#) in EU-funded R&I, applicants are welcome from all countries, with specific [conditions](#) depending on whether non-EU countries are associated to Horizon Europe; organisations from a certain number of low- and middle-income countries are also eligible for EU funding.