Carbon Farming Certification Technical Support – emission reductions from livestock

Expert Webinar

Online

28th October 2025

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Housekeeping rules

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Mute your microphone if not speaking

Raise your hand when you wish to make an intervention

Introduce yourself when making an intervention

Meeting is being recorded for note taking purposes

Agenda

Timeslot	Agenda Item
14:00	Welcome, opening of the meeting & housekeeping rules
14:05	Welcome from the Commission
14:10	Overview of the pilot certification methodology for livestock
14:15	Part 1: Key points, deep dives and discussion • Activities and eligibility • Quantification
15:15	*Coffee break*
15:20	Part 2: Key points, deep dives and discussion • Additionality • Sustainability
15:55	Next steps
16:00	Closing of the meeting

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Welcome from the Commission

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How does certification work?

EU certification methodology

QUALITY criteria
- Quantification
- Additionality
- Liability
- Sustainability

Commission establishes certification methodologies in consultation with **expert group**

Certification process

Private and public certification schemes recognised by the Commission

Independent certification bodies to issue
- Audit reports
- Compliance certificate
- Group audits possible!

Certification registries & Union-wide CRCF registry from 2028

Publicly accessible information on activities and operators
- Audit reports
- Certificates of compliance

Quantity and status of certified units
- Permanent carbon removals unit
- Carbon farming sequestration unit
- Soil emissions reduction unit
- Carbon storage in products unit

Scope of the certification framework

Soil emissions reductions

- More efficient use of fertilizers
- Rewetting of peatlands

Carbon farming sequestration

- Carbon removals in soils and forests

Livestock emissions reductions

- Not yet included in scope but pilot methodology by 2026

Carbon storage in buildings

- Long lasting use of biomaterials

Permanent removals

- Bioenergy with Carbon Capture and Storage (BECCS),
- Biochar
- Direct Air Capture and Storage (DACCS)

Overview of the pilot certification methodology for livestock

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Background to the study…

Pilot certification methodology for livestock

1. Review
   - existing certification methodologies covering livestock emissions reductions
   - scientific research
   - guidelines and handbooks on common practices
   - relevant management practices to inform an activity-based approach
   - legislative developments in the EU
   - case studies on emissions reductions activities from specific EU Member States and from NZ & Australia
   - findings from relevant **EU projects** under Horizon Europe or LIFE programmes

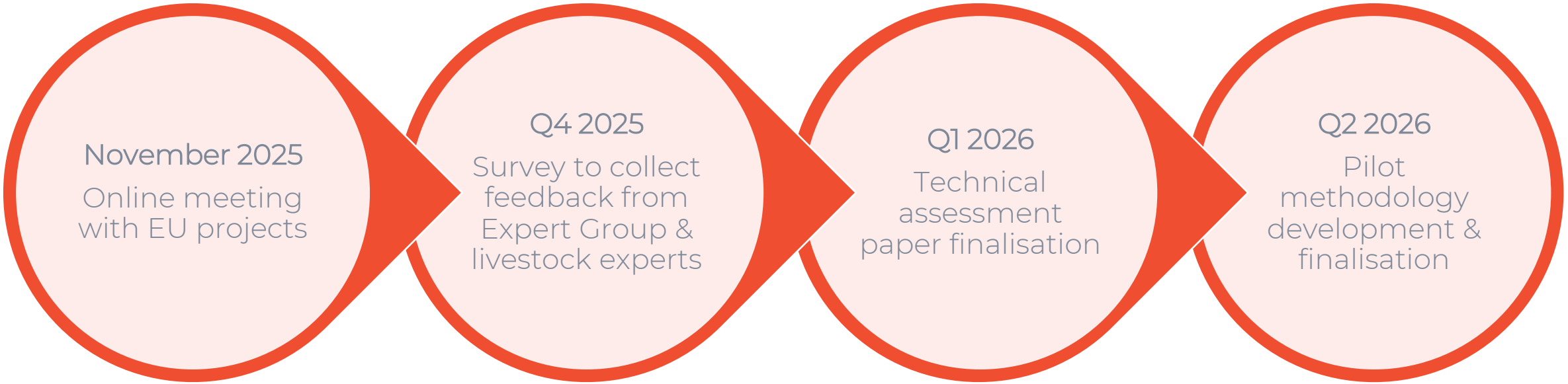
2. Produce a **technical assessment paper,** and **pilot methodology**

Background to the study...

Work to date

Background to the study...

Next steps



Aim of the webinar

The purpose of the meeting **is to present the current state of the work on the livestock pilot methodology development and gather expert views on various questions** we have come across during the research and technical assessment paper writing phase. These are open topics of debate, especially on the areas of carbon farming practices, quantification, monitor, report and verify (MRV) methodologies, and sustainability of livestock activities.

In this webinar today we will also look to discuss challenges, opportunities, and best practices to ensure the methodology is robust, practical, and aligned with EU policy objectives.

Please note that as we have limited time in the webinar with lots of attendees present, and some members of the EG unfortunately received the invitation too late (apologies from DG CLIMA), not everyone will be able to voice their thoughts. So, we welcome all responses to the survey that will be circulated in November so that everyone can share their views on the topics of discussion from today.

Technical assessment paper

To ensure the quality and comparability of carbon removals and soil emission reductions, the CRCF Regulation establishes the quality criteria. This forms part of the structure of the TAP.

1. Activities & Eligibility: defining the scope, eligible activities, and assessment boundaries;
2. Quantification: the eligible activities need to deliver unambiguous benefits for the climate and be measured, monitored and reported accurately;
3. Additionality: the eligible activities need to go beyond existing practices and what is required by law;
4. Storage, Monitoring and Liability The certification accounts for the duration of carbon storage and ensures that monitoring and liability mechanism for potential carbon leakages are in place;
   - *Not applicable to livestock emissions reductions*
5. Sustainability: Carbon farming activities must do no significant harm to sustainability objectives such as climate change adaptation, circular economy, water and marine resources, and biodiversity; they must also be beneficial to biodiversity.

Annexes to the TAP include policy review, MS and third countries case studies, methods & tools review, and literature and projects review.

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Part 1: Key points, deep dive, and discussion

Activities & Eligibility and Quantification

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Activities & Eligibility

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Defining the scope, eligible activities, and assessment boundaries.

This chapter of the TAP provides definitions of technical terms and descriptions of the practices and processes that could be covered in a future livestock methodology for carbon farming that is compliant with the CRCF Regulation (Annex I (a)).

We set out the definitions for:

- Carbon farming: livestock farming and livestock types
- Assessment boundaries (emissions and their sources)
- Emissions reduction practices/activities
- Eligibility of carbon farming activities

Activities & Eligibility

Livestock carbon farming scope

"The carbon farming activities that are within the scope of this technical assessment paper are activities related to livestock farming, covering specifically **enteric fermentation** and **manure management**.

It is important to note that other soil emissions reductions or carbon removals related to livestock farming (e.g., emissions from soils under grazing, carbon sequestration in soils or agroforestry systems), are already eligible under the certification methodology for agriculture and agroforestry."

During the first Focus Group meeting on 4th July '25, experts agreed on the importance of looking at livestock farming holistically (i.e., synergies with soil carbon in cropland and grassland); therefore, the pilot methodology for livestock emissions will be designed as a module to be potentially integrated in the carbon farming methodology for agriculture & agroforestry currently under development.

Activities & Eligibility

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Livestock farming and livestock types:

The raising of animals for agricultural purposes, including:

- Bovine animals (such as cattle, buffaloes, and bison)
- Sheep and goats
- Pigs
- Poultry (such as broilers, laying hens, turkeys, ducks, and geese)
- Rabbits
- Other animals (such as deer for meat production, fur animals, and livestock not classified in other species)




Question

Is it worth including all these animal categories?

Or, only focus on higher emitting livestock types, such as bovines, sheep, and pigs?

Activities & Eligibility

Emissions reductions practices/activities

Potential for an 'open' or flexible list of activities to allow a range of activities that reduce emissions, as long as there is good evidence for emissions reductions.

Activities that result in a reduction of livestock emissions and are widely used in other certification methodologies (e.g., Verra, LBC, VCS):

- Feed additives
- Biogas and Biomethane

Other activities that could be in scope:

- Enteric fermentation: Health/welfare improvements, rumen manipulation, breeding, productivity, and livestock density reduction
- Manure management: Cooling/storage temperature, acidification, slurry/ manure covers, solid-Liquid separation, frequent removal/scraping, inhibitors/additives, and others.

Activities & Eligibility

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Flexible list?

- Considering a flexible list to allow adoption of any practice, if:
  - there is a GHG benefit, and
  - quality criteria are met.
- However, emission factors need to be available, but are not available for some farm practices (e.g. use of denitrification inhibitors for manure management) in the IPCC guidelines.
- There will be a need for verification that practices are adopted on farm as claimed.

Question

Is an 'open list' a good way forward?

Can activities be included if EFs are not available from IPCC?

Will verification be possible in practice?

Quantification

The eligible activities need to deliver unambiguous benefits for the climate and be measured, monitored and reported accurately.

Livestock emission reduction practices need to be quantified accurately and deliver unambiguous benefits for the climate. The following themes about quantification are discussed in the Technical Assessment Paper:

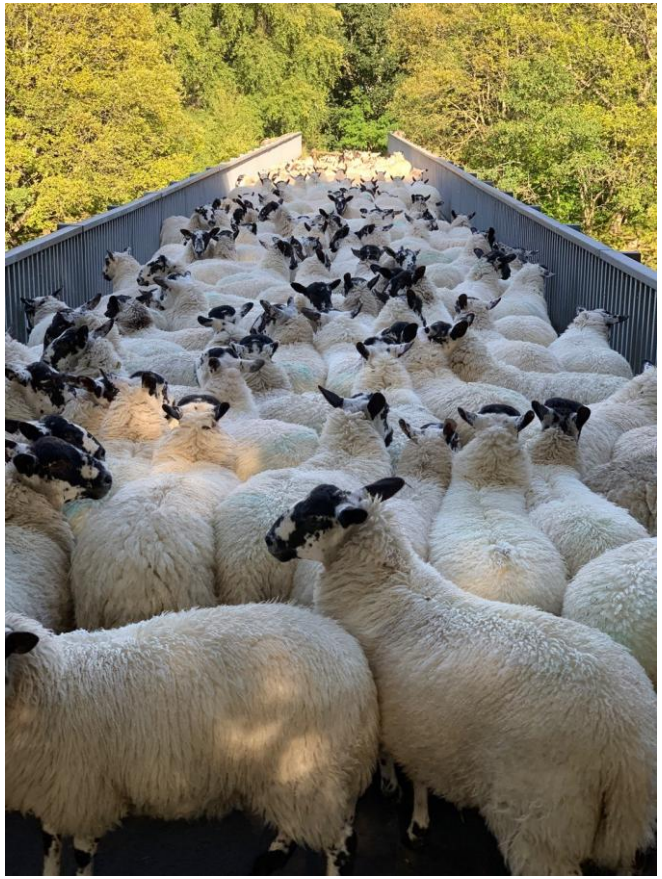
1. Methods for assessment and monitoring of GHG emissions
2. Rules for baselines – standardised and activity specific
3. Quantification approaches for livestock emissions reductions
4. Quantification of the direct and indirect emissions
5. Assessment boundaries
6. Quantification of uncertainty
7. Units of measurement

Quantification

1. Methods for assessment and monitoring of GHG emissions

Lots of questions for discussion!

- What restrictions, if any, should be placed on choice of models of software tools for estimating GHG emissions or GHG emissions reductions?
- Should methodological tier be prescribed? Or should flexibility be allowed?
- To what extent should generic data be allowed (e.g. standard liveweight data for livestock?) Should rules be made to specify data fields that may use generic data inputs?
- What monitoring should be in place for quality checking activity data?



Quantification

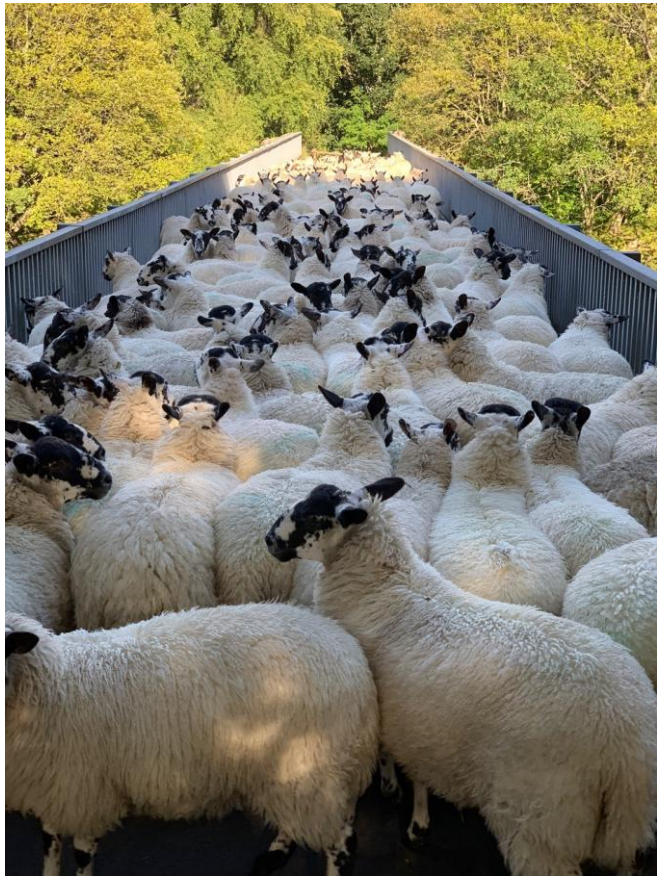
2. Rules for baselines:

   A. Standard baseline

   - Standardised by social, economic, environmental, technological and regulatory circumstances
   - Requires EU/national/regional/local and activity specific data
   - Data is not enough harmonized and in many member states not available

   B. Activity specific baseline

   - Define the duration of the pre-project period on which the baseline will be based;
   - Frequency of updating the baseline must be determined (related to the duration of the activity period);



The question on activity-level vs farm-level monitoring and reporting is being addressed in the carbon farming methodology for other activities (agriculture, agroforestry, peatland rewetting, afforestation), and the decision taken will also apply for the livestock methodology.

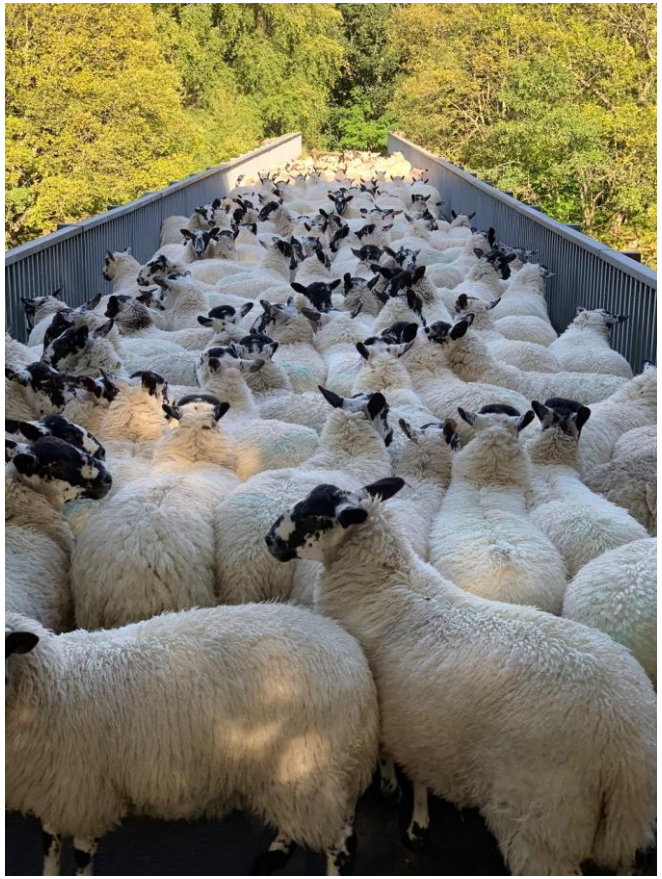
Quantification

3. Quantification approaches for livestock emissions reductions

- Suitability criteria for tools/calculators need to be defined, and it is proposed that these are consistent with other certification methodologies on carbon removals and soil emission reductions under the CRCF Regulation (i.e.: published in peer-reviewed journals, calibrated/validated for the relevant circumstances, reasonable accuracy, transparency).
- Activity data must be transparent, including standard values for data fields that are not easily measured directly.

4. Quantification of associated direct and indirect emissions

- The CRCF Regulation requires that associated emissions ("GHG associated") occurring during the lifecycle of the activity and related to the implementation of the activity, shall be quantified and subtracted from emissions reductions, to quantify the net benefit.



Quantification

5. Assessment boundaries (emissions and their sources)

The scope of emissions sources and gases emitted, for emissions reductions claims, resulting from farming activities covered in this technical assessment paper, is as follows:

- Enteric fermentation: methane (CH_4)
- Manure management: methane (CH_4) and nitrous oxide (N_2O)

….Upstream emissions?

- Inclusion of upstream emissions (e.g., feed production and other inputs) within the assessment boundary was supported by the literature and the experts from the first focus group.
- However, there are concerns over data uncertainty, and data might not be robust enough to support claims (verified carbon units)…
- Upstream emissions will be “associated emissions”

Question

How can we ensure that data for assessment emissions from feed production (upstream) is of high quality to reduce uncertainty?

Quantification

6. Quantification of statistical uncertainty

   - The pilot methodology will need to follow the requirements of the CRCF Regulation regarding the inclusion of a deduction factor to reflect statistical uncertainty in a conservative manner.

7. Units of measurement

   - GHG emission savings shall be expressed in absolute units (kg CO_2e).
   - Absolute emission decrease units do not give any indication of leakage risk.
   - A condition could be to demonstrate that there is no increase in emissions per head of livestock, or per ha of land, requiring assessment in these units.

Question

Is it practical to require multiple reporting units?

Coffee break

Please stay connected. We'll be back at 15:20

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Part 2: Key points, deep dive, and discussion

Additionality and Sustainability

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Additionality

The eligible activities need to go beyond existing practices and what is required by law.

Additionality rules in case of an activity specific baseline:

- Must go beyond Union and National requirements for livestock management practices
- The most relevant EU policies for mandating practices or management specifications include: the National Emissions reduction Commitments Directive (NECD), the CAP for CAP strategic plans (eco-schemes) and Good Agricultural & Environmental Conditions (GAECS) or Statutory Management Requirements (SMRs), and the Best Available Techniques (BAT) Reference (BREF) Document for poultry & pigs
- Some MS go further in national legislation (e.g., Denmark)
- Additional even if legal requirements are introduced during the activity period

Additionality requirements of the CRCF Regulation shall be complied with, and the pilot methodology will present these requirements in a way that is **consistent with other methodologies**, particularly the agriculture methodology.

The requirements **must allow for early movers to participate** in the scheme and must not be too complex, while ensuring that certification is necessary for the financial viability of the activity.

Sustainability

Carbon removal activities must do no significant harm to the following sustainability objectives, and must contribute to protecting and restoring biodiversity.

- Climate change mitigation
- Climate change adaptation
- Sustainable use and protection of water resources
- Circular economy
- Pollution prevention and control
- Protection and restoration of biodiversity

Sustainability

1. Mandatory co-benefits for biodiversity
   - Problem: biodiversity co-benefits are difficult to show from some livestock practices, especially practices that impact enteric fermentation
   - Should actions to reduce GHG emissions be excluded because there is no identifiable biodiversity benefit?
   - Alternatively: could other sustainability requirements be imposed? Or could it be required that a suite of emission reduction actions should have a biodiversity benefit, but not each action individually?

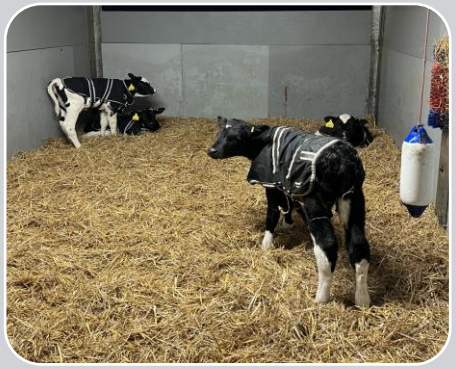
2. Monitoring and reporting of co-benefits
   - Combination of data collection, remote sensing and modelling
   - Use existing frameworks as developed for EU environmental directives
   - What geographic scale of assessment?

Question

Should other co-benefits be required for livestock activities as alternatives to biodiversity?

Should biodiversity be measured at the farm level? Or, at a different scale?

Recap of discussion today



BOUNDARIES

What other sources of upstream emissions, besides feed production emissions, have high uncertainty?

METHODS

Should methodological tier (IPCC) be prescribed? Or should flexibility be allowed?

ELIGIBILITY

Is there a consensus that safeguards/ conditions should be required?

CO-BENEFITS

Should biodiversity co-benefits be measured at the farm level, or more widely such as at regional level?

Recap of discussion today

Eligibility of farm-level activities

- Is it worth including all these animal categories? Or, only focus on higher emitting livestock types, such as bovines, sheep, and pigs?
- Is an ‘open list’ a good way forward?
- Can activities be included if EFs are not available from IPCC?
- Will verification be possible in practice?

Recap of discussion today

Eligibility of farm-level activities

- Is there a consensus that safeguards/conditions should be required?
- What should be done regarding assessment of farm practices for which emission factors are not available in the IPCC guidelines?
- Is it practical and achievable to verify that practices are actually adopted on farm as claimed?

Recap of discussion today

Methods for assessment & monitoring of GHG emissions

- Should methodological tier (IPCC) be prescribed? Or should flexibility be allowed?
- To what extent should generic data be allowed (e.g. standard liveweight data for livestock? Should rules be made to specify data fields that may use generic data inputs?
- What monitoring should be in place for quality checking activity data?
- Is it practical to require multiple reporting units?
- How should multiple units be presented?
- What restrictions, if any, should be placed on choice of models of software tools for estimating GHG emissions or GHG emissions reductions?

Recap of discussion today

Boundaries of GHG emission assessments

What other sources of upstream emissions, besides emissions from feed production, have high uncertainty?

- For upstream activities that have emissions with high uncertainty, is it best to:
  - (a) accept the uncertainty and include a requirement to assess these emissions, or
  - (b) omit the assessment of these emissions?

How can we ensure that data for assessment emissions from feed production (upstream) is of high quality to reduce uncertainty?

Recap of discussion today

Co-benefits

- Should other co-benefits be required for livestock activities as alternatives to biodiversity?

- Should biodiversity be measured at the farm level? Or, at a different (e.g., regional) scale?

Next steps

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Thank you!

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