



MONITORING & MITIGATION OF GREENHOUSE GASES
FROM AGRI- AND SILVI-CULTURE

ERA-GAS

ERA-NET for Monitoring & Mitigation of Greenhouse gases from Agri- and Silvi-culture

Guidelines for Applicants Full Proposal Submission

Version 1.1: 18 October 2016



This ERA-NET receives funding from the European Union's Horizon 2020 research and innovation program under Grant Agreement n° 696356.

1 Preamble

This document supplements the Call Announcement of the co-funded call of the ERA-Net ERA-GAS (please see “Call Documents” at <https://www.submission-eragas.eu/call1>)

It provides all the additional information needed to submit a full proposal successfully.

Please note that the content of the Call Announcement of the Co-funded Call has been updated and must be re-considered before submitting the full proposal as well as the information provided in the Evaluation Guidelines.

Full proposals that are not complete or contrary to any formal requirement will not be considered in the second step evaluation.

2 Full Proposal Submission

Full proposals must be submitted online by the research consortium coordinator using the ERA-GAS Call Submission Tool at:

**<https://www.submission-eragas.eu/call1>
by 19th December 2016 (14:00 CET)**

Password and username of the account are the same as for pre-proposal submission and most of the data of the submitted pre-proposal are still available online.

To submit a full proposal successfully, the following actions need to be taken by the Coordinator and the Consortium Partners:

- Ensure that all partners contact their National/Regional Contact Point (funding organisation) again to obtain information on any additional national/regional obligations related to the proposal (see Call Announcement - Annex A & E) and to get oral or written approval for the submission of the requested grant.
- Project partners who:
 - Are from countries not participating in the call or
 - Are from New Zealand or
 - Are based in participating countries but do not seek funding from the participating funding agencies

must provide a Letter of Financial Commitment upon submission of the Full Proposal (Part E). **Even if partners uploaded a letter of financial commitment at the pre-proposal stage, they are now required to upload an updated version of the letter (with a date not earlier than 18th October 2016).**

- Check the contact details of all partners participating in the consortium.

- Check whether the application form in the online system has been filled out completely and accurately and to best knowledge and belief.

At any time, the coordinator and the project partners can log into the ERA-GAS Call Submission Tool by using the account login data in order to check the already provided information. All available and uploaded information will be displayed. Some of this information will be editable (see Section 5 Online Submission)

Please note, the “publishable summary” of all Funded Projects will be published on the ERA-NET Cofund ERA-GAS homepage <http://www.eragas.eu/>. As certain core data from the pre-proposal (in particular, the composition of the consortia and the funding requested by any partner) cannot be changed in full proposals, unless explicitly requested by a Funding Organisation or the Call Steering Committee, please contact the ERA-GAS Call Office if you were asked to amend your data.

3 Open Access

In accordance with the EU Commission [Guidelines on Open Access to Scientific Publications and Research Data in Horizon 2020](#) where possible, research data and scientific publication arising from ERA-GAS funding should be made available in an open access repository whenever feasible, but taking account *inter alia* of European and national data protection rules.

Further to ensuring adherence with the principles of open access all beneficiaries of ERA-GAS funding will be required to:

- (a) As soon as possible and at the latest on publication, deposit a machine-readable electronic copy of the published version or final peer-reviewed manuscript accepted for publication in a repository for scientific publications.
- (b) Aim to deposit at the same time the research data needed to validate the results presented in the deposited scientific publications.
- (c) Ensure open access to the deposited publication — via the repository — at the latest:
 - i. on publication, if an electronic version is available for free via the publisher, or
 - ii. within six months of publication (twelve months for publications in the social sciences and humanities) in any other case

Adherence of full proposals to the principle of Open Access will be considered under the evaluation criterion “Impact”.

4 Data Management

In line with Horizon 2020 guidelines, projects should include a detailed Data Management Plan as an early deliverable (within the first six months) where that is relevant to the project. A Data Management Plan is a document outlining how the research data collected or generated will be handled during a research project, and after it is completed, describing what data will be collected/generated and the methodology and standards followed, whether and how this data will be shared and/or made open, and how it will be curated and preserved.

Data management in full proposals will be considered under the evaluation criterion “Impact”.

5 Online Submission

Most of the information from the pre-proposal will still be available online. Those elements which can be edited are indicated in the table below. In addition, a detailed Description of Work (max. 30 pages) must be prepared on the required template (Part D Description of Work) and uploaded to the online system.

Please consider the evaluation criteria for Full proposals stated in the ERA-GAS Evaluation Guidelines while addressing the following sections

(<https://www.submission-eragas.eu/call1>)

A: Core data

- » Project title
- » Acronym
- » Duration (months)
- » Research Theme(s)
- » Keywords
- » Publishable Abstract [*Editable*]
- » 3 experts (by name) not to evaluate the proposal (optional) [*Editable*]

B: Project partners & brief description

- » Project Coordinator Information
 - › Contact details [*Editable*]
 - › Tasks [*Editable*]
 - › Uploaded CV [*Editable*]
 - › Main Publications (max 5) [*Editable*]
- » Project Partner Information
 - › Contact details [*Editable*]
 - › Tasks [*Editable*]
 - › Uploaded CV [*Editable*]
 - › Main Publications (max 5) [*Editable*]
- » Brief Description [*Editable*]

C: Budget Plan

- » Total funding requested by each project partner from the funding organisation (where applicable) itemised by project cost sub-headings: personnel, travel, consumables, sub-contracts, equipment, overhead, other costs [*Editable – note requested funding for each project partner must not change from the Pre-Proposal unless specifically requested by the Call Steering Committee or relevant funding organisation. The distribution of project costs among the different cost categories (Personnel, Travel, Consumables/Equipment and Subcontracts) may be edited. Total Own Contribution of each project partner must not decrease from the Pre-Proposal.*]
- » Budget Comments: Provide clarification on budget items (mandatory) [*Editable*]

D: Description of Work

Max. 30 pages – See **Part D Description of Work template** (Annex B to this document and also available to download at <https://www.submission-eragas.eu/call1>)

E: Financial commitment

Project partners who:

- a) Are from countries not participating in the call or
- b) Are from New Zealand or
- c) Are based in participating countries but do not seek funding from the participating funding agencies

must provide a Letter of Financial Commitment upon submission of the Full Proposal (to be uploaded in the online tool). Please complete the PDF template document “Financial Commitment”. **Even if you uploaded a letter of financial commitment at the pre-proposal stage, you are now required to upload an updated version of the letter (with a date not earlier than 18th October 2016).** You are allowed to use your own templates (to be uploaded), however the content of the letter as provided should be regarded as the minimum requirement.

F: Societal and Ethical Aspects

Outline any aspects of your proposal that could possibly raise societal concerns and/or ethical issues and how you plan to deal with them. Please note that any research project involving the use of animals is required to fully implement the principles of Replacement, Reduction and Refinement (3Rs).

To complete the application, the information above has to be added /provided for the full proposal and submitted through the online tool by:

19th December 2016 – 14:00 CET

It will be possible to update and resubmit the full proposal as many times as required up to the submission deadline, but not after the deadline has expired. Applicants should note that the online system may experience high traffic volumes in the last hours before the submission deadline and it is therefore highly recommended to submit the final version of the full proposal well in advance of the deadline to avoid any last minute technical problems. Requests for extensions to the deadline due to last minute technical problems will not be considered.

ANNEX A

Scope of the Call - amendments

Proposals submitted to the **ERA-GAS** call will address several key *scientific and societal challenges*, which fall under four main research themes:

1. Improving national GHG inventories and monitoring, reporting and verification of emissions
2. Refining and facilitating the implementation of GHG mitigation technologies
3. State of the art production systems that are profitable and improve food and forest biomass production while reducing GHG emissions
4. Assessment of policy and economic measures to support emissions reductions across the farm-to-fork and forest-to-consumer chain

Theme 1: Improving National Inventories and Monitoring, Reporting and Verification of GHG Emissions.

There remains considerable uncertainty surrounding emissions sources and sinks within agriculture, forestry and other land-use (AFOLU). Inventories would be improved if this uncertainty was reduced. Also, many mitigation strategies cannot currently be incorporated into national inventories. New techniques may allow more widespread monitoring of emissions, including at farm and landscape level.

Expected impact – proposals should show how some or all of the following impacts will be achieved:

- Improved inventories and reduced uncertainty by the development of better emission factors and activity data.
- Development of inventories that are better able to capture the impact of implemented mitigation actions.
- Improved monitoring, reporting and verification of GHG emissions, sinks and mitigation actions.

Proposals under this theme should focus on activities that will have the largest impact, and they need to clearly outline what proportion of the inventory is addressed, what is the extent of the reduction in uncertainty, and which additional mitigation options will be included in inventories as a result.

Theme 2: Refining and facilitating the implementation of GHG Mitigation Technologies.

Absolute reductions in methane, nitrous oxide, N leaching and ammonia losses associated with enteric fermentation, manure management and N application, and change in land use and management practices, will require the deployment of technical mitigation options. The scope of this theme also includes options to reduce soil organic carbon loss or enhance soil and other carbon sinks by means of forestry and land-use changes. Taking into consideration the 2013-14 International Multipartner Call on Agricultural Greenhouse Gas Research, this ERA-NET will fund research that focusses on **enabling the more rapid implementation** of existing and emerging technical mitigation options. Their socio-economic efficacy and other barriers to adoption of the mitigation options should also be examined. Measures that reduce input demands via nutrient recycling or the circular economy may also be considered.

Expected impact – proposals should show how some or all of the following impacts will be achieved:

- Refinement of existing and emerging technical GHG mitigation options to facilitate their

implementation at farm level. This will include the adoption in one region of a mitigation option developed in another region.

- Development and refinement of options in arable, grassland and forestry systems to reduce emissions or to maintain and/or enhance soil and other carbon sinks.

Proposals under this theme should clearly outline the technical mitigation potential, the barriers to adoption, details of the time to application, provide a first estimate of costs and benefits, and demonstrate strong links to stakeholders and end users.

Theme 3: State of the Art Production Systems that are Profitable and Improve Food and Forest Biomass Production While Reducing GHG Emissions.

This involves the development of sustainable, profitable, GHG-efficient production systems that incorporate mitigation strategies successfully demonstrated at animal and field level. These systems should also incorporate measures to allow adaptation to climate change and provide synergies with other ecosystem services.

Expected impact – proposals should show how some or all of the following impacts will be achieved:

- Farm systems and forest management practices tailored to individual circumstances to maximise the economic and environmental performance and sustainability while reducing GHG emissions. These should assess the potential synergies and trade-offs between measures.
- Demonstration in diverse situations that promising mitigation options work at the farm level to ground-truth modelled maximisation of food production with increased GHG and resource (energy and nutrient) efficiency.
- Systems of forestry management that optimize wood production and forest carbon sequestration (both in soil and vegetation).

Proposals under this theme should clearly outline the advantages of the proposed production and management systems in terms of reduction of GHG emissions and sustainable economic and environmental performance.

Theme 4: Assessment of Policy and Economic Measures to support emissions reductions across the farm to fork and forest to consumer chain.

Policy measures and instruments (local or regional) are important to enable the implementation of mitigation strategies. Even strategies which have no negative impact on production or profitability often require a policy intervention to achieve widespread adoption. Policy can help actors in the supply chain to work together with consumers to reduce emissions. Research under this theme will assist policymakers to design optimum policy and economic measures to assist adoption and to better understand the impacts of supply chain and consumer actions.

Expected impact – proposals should show how some or all of the following impacts will be achieved:

- Identification and evaluation of local, national and EU-wide strategies and measures that could be used to remove barriers and identify pathways to enhance adoption of measures to reduce emissions from AFOLU sector.
- Development and engagement of local to national knowledge-transfer experts and the development of best-practice stakeholder engagement.

Identify and evaluate instruments, levers and incentives that could be used to deliver an integrated approach to reducing emissions from all actors across the supply chain including consumers. This includes research that can better quantify the efficacy of actions by supply chain actors and by consumers to reduce emissions at the national and supra-national scale.

ANNEX B

Part D. Description of Work template

Please follow the structure of this template when preparing your Description of Work. It has been designed to ensure that the important aspects of your planned work are presented in a way that will enable the experts to make an effective assessment against the evaluation criteria. Sections 1, 2 and 3 each correspond to an evaluation criterion for a full proposal.

⚠ Page limit: For full proposals, the cover page, and sections 1, 2, 3 and 4, together should not be longer than 30 pages. All tables in these sections must be included within this limit. The minimum font size allowed is 11 points. The page size is A4, and all margins (top, bottom, left, right) should be at least 15 mm (not including any footers or headers).

Evaluators will be instructed to disregard any pages in excess of the page limit specified above.

Please do not consider the page limit as a target! It is in your interest to keep your text as concise as possible, since experts rarely view unnecessarily long proposals in a positive light.

COVER PAGE

Title of Proposal

List of Partners

Partner Role	Partner organisation name	Country
Coordinator		
Partner		
Partner		

*Add additional rows as required.

Table of Contents

1. Excellence

Your proposal must address a theme from the ERA-GAS call scope for this call for proposals.

1.1 Objectives

- Describe the specific objectives for the project, which should be clear, measurable, realistic and achievable within the duration of the project. Objectives should be consistent with the expected exploitation and impact of the project (see section 2) and should not have changed significantly from the pre-proposal.

1.2 Relation to the call scope

- Indicate the research theme to which your proposal relates (this should align with Part A. Project Data in the submission platform), and explain how your proposal addresses this theme as described in the call scope.

1.3 Concept and approach

- Describe and explain the overall concept underpinning the project. Describe the main ideas, models or assumptions involved. Identify any trans-disciplinary considerations;
- Describe the positioning of the project e.g. where it is situated in the spectrum from 'idea to application', or from 'lab to market'. Refer to Technology Readiness Levels where relevant.
- Describe any national or international research and innovation activities which will be linked with the project, especially where the outputs from these will feed into the project;
- Describe and explain the overall approach and methodology.

1.4 Ambition

- Describe the advance your proposal would provide beyond the state-of-the-art, and the extent the proposed work is ambitious. Your answer could refer to the ground-breaking nature of the objectives, concepts involved, issues and problems to be addressed, and approaches and methods to be used.
- Describe the innovation potential which the proposal represents. Where relevant, refer to products and services already available on the market.

2. Impact

2.1 Expected impacts

⚠️ Please be specific, and provide only information that applies to the proposal and its objectives. Wherever possible, use quantified indicators and targets.

- Describe how your project will contribute to:
 - the expected impacts set out in the call scope, under the relevant research theme;
 - improving innovation capacity and the integration of new knowledge and strengthening the competitiveness and growth of companies through innovation
 - any other environmental and socially important impacts (if not already covered above).
- Describe any barriers/obstacles, and any framework conditions (such as regulation and standards), that may determine whether and to what extent the expected impacts will be achieved. (This should not include any risk factors concerning implementation, as covered in section 3.2.)

2.2 Measures to maximise impact

a) Dissemination and exploitation of results

- Provide a draft ‘plan for the dissemination and exploitation of the project's results’. Where appropriate, describe a credible path to deliver the innovations to the market. The plan, which should be proportionate to the scale of the project, should contain measures to be implemented both during and after the project.
 - ⚠️** *Dissemination and exploitation measures should address the full range of potential users and uses including research, commercial, investment, social, environmental, policy making, setting standards, skills and educational training.*
 - ⚠️** *The approach to innovation should be as comprehensive as possible, and must be tailored to the specific technical, market and organisational issues to be addressed.*
- Explain how the proposed measures will help to achieve the expected impact of the project.
- Include information on how the Partners will manage the research data generated and/or collected during the project, in particular addressing the following issues:
 - What types of data will the project generate/collect?
 - What standards will be used?
 - How will this data be exploited and/or shared/made accessible for verification and re-use? If data cannot be made available, explain why.
 - How will this data be curated and preserved?

Projects should include a detailed Data Management Plan as a distinct deliverable in the first six months of the project where that is relevant to the project (see note in table 3.1c for further guidance).

⚠ *You will need an appropriate consortium agreement to manage (amongst other things) the ownership and access to key knowledge (IPR, data etc.). Where relevant, these will allow you, collectively and individually, to pursue market opportunities arising from the project's results.*

⚠ *The appropriate structure of the consortium to support exploitation is addressed in section 3.3.*

- Outline the strategy for knowledge management and protection. Include measures to provide open access (free on-line access, such as the 'green' or 'gold' model) to peer-reviewed scientific publications which might result from the project¹.

⚠ *Open access publishing (also called 'gold' open access) means that an article is immediately provided in open access mode by the scientific publisher. The associated costs are usually shifted away from readers, and instead (for example) to the university or research institute to which the researcher is affiliated, or to the funding agency supporting the research. Note, individual ERA-GAS funding organisations may or may not provide funding for publication costs in open access journals.*

⚠ *Self-archiving (also called 'green' open access) means that the published article or the final peer-reviewed manuscript is archived by the researcher - or a representative - in an online repository before, after or alongside its publication. Access to this article is often - but not necessarily - delayed ('embargo period'), as some scientific publishers may wish to recoup their investment by selling subscriptions and charging pay-per-download/view fees during an exclusivity period.*

b) Communication activities

- Describe the proposed communication measures for promoting the project and its findings during the period of the grant. Measures should be proportionate to the scale of the project, with clear objectives. They should be tailored to the needs of various audiences, including groups beyond the project's own community. Where relevant, include measures for public/societal engagement on issues related to the project.

3. Implementation

3.1 Work plan — Work packages, deliverables and milestones

Please provide the following:

- brief presentation of the overall structure of the work plan;

¹ Open access must be granted to all scientific publications resulting from the ERA-GAS Call. Further guidance on open access is available in the Guidelines for Applicants.

- timing of the different work packages and their components (Gantt chart or similar);
- detailed work description, i.e.:
 - a description of each work package (table 3.1a);
 - a list of work packages (table 3.1b);
 - a list of major deliverables (table 3.1c);
- graphical presentation of the components showing how they inter-relate (Pert chart or similar).

⚠ Give full details. Base your account on the logical structure of the project and the stages in which it is to be carried out. Include details of the resources to be allocated to each work package. The number of work packages should be proportionate to the scale and complexity of the project.

⚠ You should give enough detail in each work package to justify the proposed resources to be allocated.

⚠ You are advised to include a distinct work package on 'management' (see section 3.2) and to give due visibility in the work plan to 'dissemination and exploitation' and 'communication activities', either with distinct tasks or distinct work packages.

⚠ You will be required to prepare an updated (or confirmed) 'plan for the dissemination and exploitation of results and communication measures' within the first six months of the project. Guidance on this will be given as part of a workshop at the project kick-off event.

Definitions:

'Work package' means a major sub-division of the proposed project.


'Deliverable' means a distinct output of the project, meaningful in terms of the project's overall objectives and constituted by a report, a document, a technical diagram, a software etc.

'Milestones' means control points in the project that help to chart progress. Milestones may correspond to the completion of a key deliverable, allowing the next phase of the work to begin. They may also be needed at intermediary points so that, if problems have arisen, corrective measures can be taken. A milestone may be a critical decision point in the project where, for example, the consortium must decide which of several technologies to adopt for further development.

3.2 Management structure and procedures


- Describe the organisational structure and the decision-making (including a list of milestones (table 3.2a))
- Explain why the organisational structure and decision-making mechanisms are appropriate to the complexity and scale of the project.
- Describe, where relevant, how effective innovation management will be addressed in the management structure and work plan.
- Describe any critical risks, relating to project implementation, that the stated project's objectives may not be achieved. Detail any risk mitigation measures. Please provide a table with critical risks identified and mitigating actions (table 3.2b).

3.3 Consortium as a whole

 *The individual members of the consortium are described in Part B in the submission platform. There is no need to repeat that information here.*

- Describe the consortium. How will it match the project's objectives? How do the members complement one another (and cover the value chain, where appropriate)? In what way does each of them contribute to the project? How will they be able to work effectively together?
- If applicable, describe the industrial/commercial involvement in the project to ensure exploitation of the results and explain why this is consistent with and will help to achieve the specific measures which are proposed for exploitation of the results of the project (see section 2.2).

3.4 Resources to be committed

 *Please make sure the information in this section matches the costs as stated in the budget table in Part C in the submission platform, and the number of person/months, shown in the detailed work package descriptions.*

Partners participating with own resources should provide further elaboration on the details in this section if not already described elsewhere in the application.

In addition, please provide the following:

- a table showing number of person/months required (table 3.4a)

Table 3.1a: Work package description

For each work package:

Work package number		Start Date or Starting Event						
Work package title								
Partner number								
Short name of Partner								
Person/months per Partner:								

Objectives

Description of work (where appropriate, broken down into tasks), lead partner and role of Partners

Deliverables (brief description and month of delivery)

Table 3.1b: List of work packages

Work package No	Work Package Title	Lead Partner No	Lead Partner Short Name	Person-Months	Start Month	End month
				Total months		

Table 3.1c: List of Deliverables²

Deliverable (number)	Deliverable name	Work package number	Short name of lead Partner	Type	Dissemination level	Delivery date

KEY

Deliverable numbers in order of delivery dates. Please use the numbering convention <WP number>.<number of deliverable within that WP>.

For example, deliverable 4.2 would be the second deliverable from work package 4.

Type:

Use one of the following codes:

- R: Document, report (excluding the periodic and final reports)
- DEM: Demonstrator, pilot, prototype, plan designs
- DEC: Websites, patents filing, press & media actions, videos, etc.
- OTHER: Software, technical diagram, etc.

Dissemination level:

Use one of the following codes:

- PU = Public, fully open, e.g. web
- CO = Confidential, restricted under conditions set out in Model Grant Agreement
- CI = Classified, information as referred to in Commission Decision 2001/844/EC.

Delivery date

Measured in months from the project start date (month 1)

² Where relevant to the project, you must include a **data management plan** as a distinct deliverable within the first 6 months of the project. This deliverable will evolve during the lifetime of the project in order to present the status of the project's reflections on data management. A template for such a plan is available in the Horizon 2020 Grants Manual (http://ec.europa.eu/research/participants/data/ref/h2020/grants_manual/hi/oa_pilot/h2020-hi-oa-data-mgt_en.pdf). In addition, you will be required to prepare an updated (or confirmed) 'plan for the dissemination and exploitation of results and communication measures' within the first six months of the project. Guidance on this will be given as part of a workshop at the project kick-off event.

Table 3.2a: List of milestones

Milestone number	Milestone name	Related work package(s)	Estimated date	Means of verification

KEY**Estimated date**

Measured in months from the project start date (month 1)

Means of verification

Show how you will confirm that the milestone has been attained. Refer to indicators if appropriate. For example: a laboratory prototype that is 'up and running'; software released and validated by a user group; field survey complete and data quality validated.

Table 3.2b: Critical risks for implementation

Description of risk	Work package(s) involved	Proposed risk-mitigation measures

Table 3.4a: Summary of staff effort

Please indicate the number of person/months over the whole duration of the planned work, for each work package, for each Partner. Identify the work-package leader for each WP by showing the relevant person-month figure in bold. Add additional columns where necessary.

	WP_n	WP_{n+1}	WP_{n+2}	Total Person/ Months per Partner
Partner Number/Short Name				
PartnerNumber/ Short Name				
Partner Number/ Short Name				
Total Person/Months				

4. References

If relevant, you can include literature references related to the application here. Please include author, title, journal, year, volume, pages etc.