



EPA Research - 2014 Call

EPA Research –Climate Research Call 2014

Technical Description



Comhshaol, Pobal agus Rialtas Áitiúil
Environment, Community and Local Government

The EPA Research Programme 2014-2020 is funded by the Irish Government.

Environmental Protection Agency Research Call 2014: Climate

This document provides the Technical Description for the Environmental Protection Agency Climate Research Call 2014. Applicants should read the following carefully and also consult the other documentation provided (i.e. Guide for Applicants, Terms and Conditions for support of grant awards).

Contents

Contents	1
1. INTRODUCTION	2
2. CALL CONTENT	5
Theme 1: Carbon Stocks, GHG Emissions, Sinks and Management Options	5
1.1 The use of remote sensing to quantify biomass in Irish landscape	5
1.2 Assessing sources of activity data for Agricultural Management	7
1.3 In depth analysis of GHG Emissions Inventory and Projections	9
Theme 2: Ireland's Future Climate, its Impacts, and Adaptation Options	10
2.1 Research Fellowship on future climate in Ireland, impacts and adaptation	10
2.2 Vulnerability of natural and managed ecosystems to Climate Change with a full integrated assessment	12
2.3 Vulnerability of managed systems and the built environment to Climate Change with a full integrated assessment	13
2.4 Downscaling Climate Projections and Sectoral Analysis of potential impacts climate change in Ireland	14
2.5 Adaptation preparedness indicators	15
Theme 3: Climate Solutions, Transition Management and Opportunities	16
3.1 Project Scoping Study on Optimising Land-Use	16
3.2 Catalysing and Characterising Transition	18
3.3 Understanding and Promoting Exemplar Behaviours in Communities	20
3.4 Mitigation in the Transport Sector	22
Theme 4: Air science	23
4.1 Research Fellowship on Air Science	23
4.2 Bioaerosol monitoring at waste management sites	25
4.3 Media analysis of climate change coverage	26
3. FURTHER INFORMATION	28

Additional Documentation

Additional Documents available at: <http://www.epa.ie/researchandeducation/research> and on the online portal at <https://epa.smartsimple.ie>

- *EPA Research: 2014 Guide for Applicants*
- *EPA Research: 2014 Terms & Conditions for Support of Grant Awards*
- *EPA Research: 2014 quick guide to the EPA on-line portal (How to make an application)*

1. INTRODUCTION

The EPA's Research Programme 2014-2020 is designed to identify pressures, inform policy and develop solutions to environmental challenges through the provision of strong evidence-based scientific knowledge.

- **Identifying Pressures:** Providing assessments of current environmental status and future trends to identify pressures on our environment.
- **Informing Policy:** Generating evidence, reviewing practices and building models to inform policy development and implementation.
- **Developing Solutions:** Using novel technologies and methods that address environmental challenges and provide green economy opportunities.

The EPA Research Programme has been allocated funding of approximately €7m for new commitments in 2014. The EPA Research Programme addresses a broad range of environmental issues including those that lie beyond its regulatory remit such as indoor air quality.

Climate is structured into 4 thematic areas of research as follows, and will have approximately €2.1m in new funding.

- Theme 1: Carbon Stocks, GHG Emissions, Sinks and Management Options
- Theme 2: Ireland's Future Climate, its Impacts, and Adaptation Options
- Theme 3: Climate Solutions, Transition Management and Opportunities
- Theme 4: Air science

The EPA invites research proposals under the specific topics listed in the table below. These proposals will be either Desk Studies or Medium Scale Projects or Research Fellowships. Generally a Desk Study will last from 6 to 18 months with an indicative cost range of €50,000 to €150,000. A Medium Scale Project will typically last from 24 to 36 months with an indicative cost range of €100,000 to €350,000. A Research Fellowship will typically last from 24 months with an indicative cost range of €120,000 to €200,000.

All research proposals must **build on findings and recommendations** from past and current research projects (where relevant) and **demonstrate value for money**.

Where project outputs include data and/or technical solutions (Websites, developed software, database solutions etc.) then the format of same must be agreed with the EPA to ensure that they are compatible with EPA IT infrastructure and can be maintained by EPA after the completion of the project.

Open Access and Open Data

All projects must comply with the EPA's Open Data and Open Access rules, which are being aligned with Horizon 2020 for the 2014-2020 EPA Research Programme.

Call Topic Ref.	Thematic Areas and Project Titles	Budget (€)
	Theme 1: Carbon Stocks, GHG Emissions, Sinks and Management Options	
Climate 2014_Call-Project 1	Pilot Study of Remote Sensing of Above Ground Biomass within non-forest landscapes	€160k -€210k
Climate 2014_Call-Project 2	Activity Data resources for assessment of emissions association with Agriculture and Land Use management practices	€120k -€150k
Climate 2014_Call-Project 3	Tools for detailed sectoral analysis of emissions, projections and impact of policy measures	€120k -€150k
	Theme 2: Ireland's Future Climate, its Impacts, and Adaptation Options	
Climate 2014_Call-Project 4	Theme 2 Research Fellowship	€160k -€210k
Climate 2014_Call-Project 5	Vulnerability of natural and managed ecosystems to Climate Change with a full integrated assessment	€120k -€150k
Climate 2014_Call-Project 6	Vulnerability of managed systems and the built environment to Climate Change with a full integrated assessment	€120k -€150k
Climate 2014_Call-Project 7	Downscaling and sectoral analysis of potential impacts and vulnerabilities	€160k -€210k
Climate 2014_Call-Project 8	Adaptation preparedness indicators	€60k -€90k
	Theme 3: Climate Solutions, Transition Management and Opportunities	
Climate 2014_Call-Project 9	Scoping study for Optimising Land Use	€110k -€160k
Climate 2014_Call-Project 10	Catalysing and Characterising Transition	€110k -€160k
Climate 2014_Call-Project 11	Working to understand and promote exemplar behaviours in communities	€160k -€210k
Climate 2014_Call-Project 12	Mitigation in the transport sector	€160k -€210k
	Theme 4: Air science	
Climate 2014_Call-Project 13	Theme 4 Research Fellowship	€120k - €190k
Climate 2014_Call-Project 14	Bio-aerosol monitoring and forecasting system	€150k - €200k
Climate 2014_Call-Project 15	Media analysis of climate change coverage.	€100k -€150k

Application Process

Making an application on-line:

Applications must ONLY be made on-line <https://epa.smartsimple.ie>.

Guide to the EPA on-line application system:

The guide to the EPA on-line application system, 'EPA Research: 2014 Quick guide to the EPA on-line portal (making an application)', is available for download

at <http://www.epa.ie/researchandeducation/research> and <https://epa.smartsimple.ie>

What to include in the application form:

To make the best application possible, it is recommended that you read the 'EPA Research: 2014 guide for applicants' before drafting and submitting an application, available at <http://www.epa.ie/researchandeducation/research> and <https://epa.smartsimple.ie>

To make an application under any of the topic areas:

Applicants must use the correct **Call Topic Reference**, as indicated in this document, from the drop down menu on the EPA on-line system e.g. *Climate 2014 Call Project 1*

It is the responsibility of the Applicants to ensure:

- Proposals are submitted before the **call deadline**, and
- That the relevant Grant Authoriser (i.e. Research Offices / Managing Directors for companies) authorises the proposals before the **organisation approval deadline**.
- Failure to meet either of the above deadlines means your proposal will not be considered for funding

2. CALL CONTENT

Theme 1: Carbon Stocks, GHG Emissions, Sinks and Management Options

Research undertaken under this thematic area aims to improve understanding of greenhouse gas emissions and sinks thereby providing better information to support actions to mitigate emissions and enhance sinks. Research in this area contributes to improving inventory and projections methodologies for estimation of emissions and sinks of Greenhouse Gases (GHGs), and improved assessment of mitigation options.

The estimation of emissions and sinks of GHGs from agriculture and land use remains a key uncertainty within Land Use, Land Use Change and Forestry (LULUCF). The dynamic of land use within Ireland is not fully understood, particularly the impact of management of land within agriculture. Analysis is required to assess the potential of this activity on a national scale.

The 2014 Theme 1 call is focused on elements of this work.

1.1 The use of remote sensing to quantify biomass in Irish landscape

(Medium scale study)

To make an application under this topic area, you must use the following:

Call Topic Reference: [Climate 2014 Call-Project 1](#)

Description

Under the United Nations Framework Convention on Climate Change, (UNFCCC), Ireland makes an annual report on greenhouse gas emissions related to land management. Agriculture is the dominant land use in Ireland and can have an important impact on the landscape and the carbon stocks within the landscape. The management of peatlands and wetlands also an important impact on carbon stocks.

Non-forest wooded areas, including hedgerows and isolated clumps of trees, form an integral part of agricultural land and are a distinctive feature of the Irish landscape. These are important corridors for biodiversity and provide a range of other ecosystem services.

Analysis of data from the recent National Forest Inventory 2012 estimates that hedgerows cover an area of approximately 272kha, whilst "Other Woodland" cover just under 48kha. These features also represent a carbon store in the managed landscape and there is potential for improved sustainable management to impact positively on magnitude of this carbon store. There is also potential for more effective use of these as resources of biomass.

However, there is a lack of detailed information of the status and condition of much of our non-forest wooded area, particularly in terms of the current carbon stocks and the potential for sequestration of additional carbon through appropriate management. At present, the EPA assumes these systems are in a state of equilibrium with respect to carbon uptake, and only includes estimates of carbon change associated with loss of hedgerows due to new settlement activity.

The EPA wish to invite proposals for a pilot study to advance capacity in this area and to provide next steps towards a national assessment of carbon stock, and carbon stock change within non-forest wooded areas as a priority, and biomass stocks within peatland and wetlands areas in Ireland.

Proposals are invited for a research project to undertake the following:

The principle focus of the project is to conduct a pilot study to quantify the carbon stocks within non-forest wooded areas in Ireland based on remote sensing technologies and appropriate focused ground truth field survey. Of particular interest is an assessment of current stocks and the detection of change.

The project should also consider similar application of remote sensing tools for the assessment of peatlands and wetlands.

The project should include the development of a robust methodology to scale analysis to the national level based on existing and new remote sensing datasets.

Expected outputs for this project include:

Expected outputs include a project report of key findings, a robust methodology to establish the carbon stock and carbon stock change within non-forest wooded areas, peatlands and wetlands in the Irish landscape, including uncertainty analysis; recommendations for future data requirements and an outline of research activities undertaken during the project, and data products where relevant.

Project Structure and Funding:

This project is a Medium Scale Project which will run for **24** months. The indicative funding range is between **€160,000** - **€210,000** (which includes a 5% provision for communication costs^[1] please refer to the 2014 Guide for Applicants for further details).

^[1] For example, a €100,000 grant award is made up of €95,000 for project costs, and €5,000 for communication costs (€3,000 of which relates to communication activities and events which take place over the lifetime of the project and €2,000 which relates to post completion dissemination costs).

1.2 Assessing sources of activity data for Agricultural Management

(Research Fellowship)

To make an application under this topic area, you must use the following:

Call Topic Reference: [Climate 2014 Call-Project 2](#)

The Agriculture sector accounts for the at 32% of total national greenhouse gas (GHG) emissions (excluding LULUCF). This is one of the highest proportions for developed countries, and present significant challenges in terms of accurate assessment of emissions and identifying, and quantifying the impact of, mitigation options.

This proportion will increase, as cost efficient mitigation policy in other sectors takes effect. The Department of Agriculture Food and Marine has funded the GHG Consortium, led by Teagasc, and initiated a number of linked projects which seek to identify mitigation options and enable improvement in inventory estimation of emissions and removals within the agriculture sector.

As these on-going research initiatives mature, the findings of GHG Consortium research need to be embedded in the inventory methodology. A key challenge in this is the collation activity data from a variety of diverse sources, to meet the data requirements of the specific process models of GHG emissions emerging from this research.

Fellowship Description

The EPA invites proposals for a Research Fellowship which will work closely with the EPA Inventory Team and the GHG Consortium lead by Teagasc to develop the necessary tools and data systems to capture the impact of mitigation actions within agriculture within the national emissions estimates.

Outputs from the fellowship to include:

- Review of data requirements of emissions models emerging from research activities
- Assessment of current databases to address these requirements
- Identification of potential data gaps and liaison with data providers to address these
- Preliminary analysis of country specific national GHG emissions including detailed uncertainty analysis
- Recommendations as to next steps

The applicant should have relevant qualifications and experience in etc.

Applications

It is envisaged that the successful candidate will have experience in the in depth analysis of GHG emissions and removals for inventory purposes. Qualification or experience of a number of the following issues is required.

1. GHG emissions inventory development
2. UNFCCC reporting and Kyoto Protocol accounting methodologies
3. Emissions and removals processes within key sectors e.g. agriculture and Land Use
4. Measurement, Reporting and Verification systems requirements
5. Data management and report writing

Applicants should have a PhD or equivalent experience in a relevant discipline e.g. science, engineering. Applicants are required to provide curriculum vitae detailing their background and relevant experience.

It is anticipated that this person will work closely with experts in these areas within the EPA and other state agencies and government departments.

Fellowship Structure

The fellowship award will be up to **24 months**, with the potential for an additional year.

The indicative funding range is between **€160,000 - €210,000** (which includes a 5% provision for communication costs [1] please refer to the 2014 Guide for Applicants for further details).

^[1] For example, a €100,000 grant award is made up of €95,000 for project costs, and €5,000 for communication costs (€3,000 of which relates to communication activities and events which take place over the lifetime of the project and €2,000 which relates to post completion dissemination costs).

Awards will be made in line with the Irish Universities Association recommended salary scales, and to include (which includes 5% for post-completion publicity/dissemination¹ please refer to 2014 Guide for Applicants for further details).

It is recommended that Fellowship applicants identify a host organisation and supervisor prior to submission of completed proposals.

In the event that a host organisation cannot be identified by the submission deadline, the applicant may **register** on the EPA Grant Application & Project Management Portal under the organisation entitled: **“Organisation to be confirmed”**. A suitable host organisation must be identified during the review stage. **Failure to do so will disqualify the application.**

¹ For example, a €100,000 grant award is made up of €95,000 for fellowship, and €5,000 for post-completion publicity

1.3 In depth analysis of GHG Emissions, Policies and Measures

(Medium Scale Study)

To make an application under this topic area, you must use the following:

Call Topic Reference: [Climate 2014 Call-Project 3](#)

Description

The objective is to progress in depth analysis of the impact of specific policies and measures to reduce emissions of greenhouse gases and air pollutants as the subject of routine analysis within Ireland. This analysis should be based on the data and outputs of the national Inventories and Projections published by the EPA.

Official projections of GHG emissions for Ireland from the EPA, based on current “With Measures” and “With Additional Measures” scenarios, indicate a risk that Ireland may not achieve required emissions reductions under the EU Climate and Energy Package and that further additional measures above and beyond those already accounted for will be required.

Proposals are invited for a research project to undertake the following:

The EPA invites proposals for a medium scale study to develop and implement analytical tools for the assessment of the impact of additional policies and measures on emissions of greenhouse gas and air pollutants. The study should consider both historic emissions data and emission projections.

This project will seek to identify policies and measures to reduce GHG emissions that are not already included in current With Measures and With Additional Measures options and to explore scenarios of their potential based on the detailed information contained in emission estimates. These may be complementary to existing or anticipated policies. Tools for the assessment of these may be developed as part of this process. Approaches of other countries to assessment of policies and measures should be reviewed as part of this work

The project should include the development of a robust set of tools for detailed analysis of national emission inventory and emissions projections data to inform policy. It is envisaged the project team will work very closely with the EPA's Inventory and Projection teams in this study.

Expected outputs for this project include:

Expected outputs include an interim report including

- a review of international best practice,
- an assessment of model and data resources in order to provide new or complementary inputs toward policy development
- Preliminary analysis of the potential effectiveness of any mitigation measures that are identified

The final outputs should include an end of project report with key findings, review of data systems and models including analysis of sources of uncertainty and discontinuity, and new tools to resolve these issues, tools for developing multi-sectoral scenarios for use in policy development and projections, recommendations for future data requirements and an outline of research activities undertaken during the project, and data products where relevant.

Project Structure and Funding:

This project is a Medium Scale Project which will run for **24** months. The indicative funding range is between **€100,000** **€150,000** (which includes a 5% provision for communication costs [1] please refer to the 2014 Guide for Applicants for further details).

^[1] For example, a €100,000 grant award is made up of €95,000 for project costs, and €5,000 for communication costs (€3,000 of which relates to communication activities and events which take place over the lifetime of the project and €2,000 which relates to post completion dissemination costs).

Theme 2: Ireland's Future Climate, its Impacts, and Adaptation Options

Research under this thematic area aims to provide information on future climate conditions in Ireland and their impacts. This information will create the basis for better informed decision making on adaptation in the years to come and make key economic and policy sectors more resilient to the effects of climate change.

The research focus of this thematic area is to improve climate observations and projections, identify risk and vulnerability and inform adaptation responses. In recent years, research has progressed on climate modelling, climate analysis, development of observation systems and indicators. This information has been used in impact analysis, risk and vulnerability assessment. The outputs from these assessments have been designed to support sectoral and local level planning and decision making in the context of climate change. At a broader scale it also develops a basis for provision of future Climate Services as identified by Joint Programme Initiative- Climate and Horizon 2020. The 2014 Theme 2 call aims to advance aspects of work in this area.

2.1 Research Fellowship on future climate in Ireland, impacts and adaptation

Research Fellowship

To make an application under this topic area, you must use the following:

Call Topic Reference: [Climate 2014 Call-Project 4](#)

Description

This fellowship is for the provision of knowledge about climate change, impacts, vulnerability and adaptation which are fundamental to actions which address the risks of climate change. In the near term Ireland's preparedness for the impacts of climate change must be underpinned by data, climate systems, governance and information dissemination. In the longer term the goal is to assist key economic and policy sectors become resilient to climate change. This will require cross-sectoral and cross disciplinary research with a view to engaging a wide cohort of stakeholders including the private sector, non-governmental organisations and citizens. This also entails responding to reporting requirements set out under the NCCAF, the Climate and Energy Bill, the EU Adaptation Strategy and the UNFCCC.

Proposals are invited for a research project to undertake the following:

Proposals are invited for a Research Fellow who will work closely with the EPA and the DECLG in support of the delivery of decision making by those responsible for adaptation decision making in Ireland. This will require substantial and sustained interaction with both national and international climate change adaptation decision makers such as local authorities, national sectors, EU Climate Change Committee, EEA, and the UNFCCC. Ongoing interaction with national and international research groups on the provision of analysis and assessments of impacts, vulnerability and adaptation such as JPI Climate, H2020 will be required.

The role will also include management of EPA funded research under this programme, as well as complementary research funded by other Agencies and the private sector. This is an important and senior role in the co-ordination and management of research activities, synthesis and communication of research findings and the provision of opinion to a range of audiences.

The role involves:

- Contribution to the development of the climate services with a view to positioning Ireland for future research collaboration and innovation possibilities;
- Implementation and management of thematic research activities and projects to achieve strategic goals and to address requirements emerging from national and EU processes and;
- Effective synthesis and communication of key research findings and data through preparation of discussion documents, reports, seminars and workshops

- Ongoing development and provision of structures for further analysis, integration and distribution of research findings and provision of advice on the development of research in this area.

Expected outputs for this project include:

- Further development of research structure to higher levels of analyses including the development of climate services
- Tailored dissemination of outputs from research to the implementation of adaptation
- Provision of support for the utilization of these research findings and liaison with research project coordinators.
- Report on the synthesis of research findings and recommendations where appropriate

Applications

It is envisaged that the successful candidate will have extensive experience in the area of impacts, vulnerability and adaptation research, policy and practice at the national, EU and International levels. Knowledge or experience of a number of the following issues is required:

1. Research identification, coordination and management in the area of impacts and adaptation
2. Understanding and familiarity with National, EU and International processes; including reporting requirements
3. Effective collaboration with a broad range of stakeholders including policy makers, researchers, business community and NGOs
4. Provision of tailored information and opinion to selected audiences

Applicants should have a PhD and at least 5 years post-doctoral experience, or equivalent, in a relevant discipline e.g. geography, science, engineering.

It is anticipated that this person will work closely with experts in these areas within the EPA and other state agencies and government departments.

Project Structure and Funding:

The fellowship award will be up to **24 months**, with the potential for an additional year.

The indicative funding range is between **€160,000 - €210,000** (which includes a 5% provision for communication costs [1] please refer to the 2014 Guide for Applicants for further details).

Awards will be made in line with the Irish Universities Association recommended salary scales, and to include (which includes 5% for post-completion publicity/dissemination² please refer to 2014 Guide for Applicants for further details).

It is recommended that Fellowship applicants identify a host organisation and supervisor prior to submission of completed proposals.

In the event that a host organisation cannot be identified by the submission deadline, the applicant may register on the EPA Grant Application & Project Management Portal under the organisation entitled: **“Organisation to be confirmed”**. A suitable host organisation must be identified during the review stage. **Failure to do so will disqualify the application.**

^[1] For example, a €100,000 grant award is made up of €95,000 for project costs, and €5,000 for communication costs (€3,000 of which relates to communication activities and events which take place over the lifetime of the project and €2,000 which relates to post completion dissemination costs).

² For example, a €100,000 grant award is made up of €95,000 for fellowship, and €5,000 for post-completion publicity

2.2 Vulnerability of natural and managed ecosystems to Climate Change with a full integrated assessment

Medium Scale Study

To make an application under this topic area, you must use the following:

Call Topic Reference: [Climate 2014 Call-Project 5](#)

Description

There is a growing understanding of both the broad set of services that ecosystems provide and the many ways that ecosystems are threatened by a changing climate. Healthy ecosystems can provide sustainable resources; help to prevent erosion and inland and coastal flooding; support biodiversity, including endangered species; remove pollutants from the air and water. Significantly, ecosystems also play an important role in climate regulation such as green- house gas mitigation. More research is needed on how ecosystems respond to extreme events and gradual climate changes. These climatic effects on ecosystems need to be studied in the context of other stresses (e.g loss of biodiversity, invasive species, over development, etc) which themselves may be influenced by climate change. Understanding is also required of the complex nature of vulnerability- impacts- adaptation (VIA) and mitigation interactions in order to make possible more effective elaboration of development pathways that achieve desired combinations of adaptation and mitigation and that maximize co-benefits and minimize undesired side-effects.

Proposals are invited for a research project to undertake the following:

The EPA invites proposals for a medium scale integrated study of the responses of a natural ecosystem (e.g. peatlands, wetlands, sand dunes, etc) to (recent) extreme events as well as gradual climate change. The study should be able to account for the combined impacts of multiple stressors and be able to compare different management approaches. Taking an integrated approach, the study should also assess the role of the ecosystem in terms of greenhouse gas mitigation potential. Where a “carbon hotspot” exists, the study should be able to account for this in the assessment with a view to advancing both adaptation and mitigation strategies.

Expected outputs for this project include:

- Assessment of selected ecosystem responses to (recent) extreme events as well as gradual climate change
- Analysis of combined impacts of multiple stressors
- Assessment of ecosystem in terms of both adaptation and mitigation potential
- Recommendations for management approaches that integrate both adaptation and mitigation responses

Project Structure and Funding:

This project is a Medium Scale Project which will run for **24** months. The indicative funding range is between **€120,000** - **€150,000** (which includes a 5% provision for communication costs [1] please refer to the 2014 Guide for Applicants for further details).

^[1] For example, a €100,000 grant award is made up of €95,000 for project costs, and €5,000 for communication costs (€3,000 of which relates to communication activities and events which take place over the lifetime of the project and €2,000 which relates to post completion dissemination costs).

2.3 Vulnerability of managed systems and the built environment to Climate Change with a full integrated assessment

Medium Scale Study

To make an application under this topic area, you must use the following:

Call Topic Reference: [Climate 2014 Call-Project 6](#)

Description

The built environment ranges from critical infrastructure systems and assets including energy, transportation and telecommunications to private dwellings, industry, and facilities such as hospitals, schools, ports, etc. Much of the built environment was designed with limited knowledge of local climate and climate variability, while also being located in areas increasingly vulnerable to climate change impacts. Both extreme events and gradual climate change are expected to further impact on the ability of the built environment and some infrastructure to perform its intended functions, while producing costly damage, both directly to infrastructure itself and indirectly through loss of economic productivity and opportunities. Research is needed to understand the vulnerability of the built environment to climate change impacts in certain locations with a view to addressing social, economic and environmental resilience. Additionally further research on how infrastructure and buildings can be designed to simultaneously support greenhouse gas mitigation and adaptation strategies is needed.

Proposals are invited for a research project to undertake the following:

The EPA invites proposals for a medium scale study of the responses of the built environment in vulnerable coastal locations to extreme events as well as gradual climate change. The study should be able to assess vulnerability and resilience of the existing infrastructure, appraise adaptation strategies that provide 'win-win' solutions such as how engineering standards, codes and regulation, etc, can address both adaptation and mitigation responses. The study would also be able to present an economic evaluation of adaptation options and benefits and identify the most suitable sources of funding for adaptation options chose.

Expected outputs for this project include:

- Assessment of selected built environment responses to (recent) extreme events as well as gradual climate change
- Assessment of built environment in terms of vulnerability and resilience
- Assessment of built environment in terms of both adaptation and mitigation potential
- Recommendations for management approaches that integrate both adaptation and mitigation responses

Project Structure and Funding:

This project is a Medium Scale Project which will run for **24** months. The indicative funding range is between **€120,000** - **€150,000** (which includes a 5% provision for communication costs^[1] please refer to the 2014 Guide for Applicants for further details).

^[1] For example, a €100,000 grant award is made up of €95,000 for project costs, and €5,000 for communication costs (€3,000 of which relates to communication activities and events which take place over the lifetime of the project and €2,000 which relates to post completion dissemination costs).

2.4 Downscaling Climate Projections and Sectoral Analysis of potential impacts climate change in Ireland

Medium Scale Study

To make an application under this topic area, you must use the following:

Call Topic Reference: [Climate 2014 Call-Project 7](#)

Description

Global and regional meteorological and climate model outputs provide useful insight into climate variability and potential climate change on a relatively large scale. However, there are significant challenges in the interpretation of these data at higher spatial and temporal resolution. Also, stakeholder, service providers and end users may require specialized, sector specific analysis so as to integrate climate change into decision making.

Data from a number of major reanalysis and climate modelling initiatives are coming on-stream, including the model re-analysis of Irish climate (1980-present) by Met Eireann, ERA-20C, and CMIP5, EC-Earth, CORDEX outputs. These data incorporate major recent advances in the understanding and analysis of climate at global and regional level. There is a need to perform downscaling analysis on these to better establish potential local and sectoral impacts of projected climate change based on the IPCC Representative Concentrations Pathways, (RCPs), e.g. RCP 2.6 and RCP 8.5.

Proposals are invited for a research project to undertake the following:

The analysis of national climate change related data in combination with new data emerging from state of the art Global and Regional Reanalysis and Climate Models. This further develops capacity to use data held by Met Eireann and integrate these with regional and global analysis. This type of analysis will underpin work on impacts and risk analysis at sectoral and local levels and enhance the level of information that is provided to stakeholders who require the most up to date analysis.

The project should also undertake to development and pilot a methodology for engagement with sectoral stakeholders and end-users with the purpose of producing sector specific analysis to meet community needs.

The project will also inform wider consideration of adaptation issues at national levels, engagement with the EU, and provide content on the Climate Information Platform, which should be moving from a pilot to operational phase during the course of this project.

Expected outputs for this project include:

- Downscaled climate datasets for Ireland based on a number of scenarios of future emissions pathways, but with particular emphasis on the IPCC RCPs for business as usual (RCP 8.0) and 2°C (RCP 2.6)
- Established network of engaged sectoral and end users for the products being developed
- Guidelines on a methodological approach to analysis of regional and local projections of climate change focused on the requirements of specific sectors, including a case study

Project Structure and Funding:

This project is a Medium Scale Project which will run for **24** months. The indicative funding range is between **€160,000 - €210,000** (which includes a 5% provision for communication costs^[1] please refer to the 2014 Guide for Applicants for further details).

^[1] For example, a €100,000 grant award is made up of €95,000 for project costs, and €5,000 for communication costs (€3,000 of which relates to communication activities and events which take place over the lifetime of the project and €2,000 which relates to post completion dissemination costs).

2.5 Adaptation preparedness indicators

Desk Study

To make an application under this topic area, you must use the following:

Call Topic Reference: [Climate 2014 Call-Project 8](#)

Description

Monitoring, reporting and evaluation is a critical part of the adaptation process. The combination of the long timescales associated with climate change, and inherent uncertainties (e.g. in terms of our understanding of future climate change and societal responses) makes it essential that we monitor, report and evaluate how well we are adapting. In addition, we are still at a relatively early stage in implementing adaptation policies and therefore it is critical that we understand which adaptation actions work (or not), in what contexts and why. Such a process needs to be underpinned by an appropriate set of indicators.

Proposals are invited for a research project to undertake the following:

The EPA invites proposals for a desk study to undertake the following: identify a set of appropriate adaptation indicators for use at the local and sectoral scales that are fit for monitoring, evaluation and reporting purposes. This would include a full understanding of EU developments in this area and a demonstration of how nationally tailored indicators can meet forthcoming reporting requirements.

Expected outputs for this project include:

- Recommendations as to a set of robust indicators that can easily be monitored at the sectoral and local level to enable national and international reporting on adaptation.

Project Structure and Funding:

This project is a Medium Scale Project which will run for **12** months. The indicative funding range is between **€60,000 - €90,000** (which includes a 5% provision for communication costs [1] please refer to the 2014 Guide for Applicants for further details).

^[1] For example, a €100,000 grant award is made up of €95,000 for project costs, and €5,000 for communication costs (€3,000 of which relates to communication activities and events which take place over the lifetime of the project and €2,000 which relates to post completion dissemination costs).

Theme 3: Climate Solutions, Transition Management and Opportunities

Research priorities are informed by our vision under this theme of “a carbon neutral Ireland by 2050, with a thriving green economy and society” and the new national policy position on climate change aiming “to achieve transition to a competitive, low-carbon, climate–resilient and environmentally sustainable economy by 2050” and mandating low carbon roadmaps. Research under this call is planned to build on existing Irish climate research and analysis such as “Addressing Climate Change Challenges in Ireland” research report (O’Reilly, O’Brien et al, 2012), “Irish TIMES Energy Systems Model” (Ó Gallachóir et al, 2013) and “Ireland and the Climate Change Challenge; Connecting ‘How much’ to ‘How to’” (NESC, 2012).

The following research objectives have been identified under this theme; 1) To advance socioeconomic modelling of cross sectoral greenhouse gas emissions to 2050; 2) To promote cross disciplinary analysis of effective options for behavioural change in businesses and households and to identify and assess current and future mitigation options including technologies; and 3) To bring together diverse research outputs to form a coherent picture of analysis for Ireland and in so doing, to identify green economy and other opportunities from international trends in policy and economics. Significant progress has been already been achieved in building cross-sectoral modelling capacity. This call aims to engage a broad range of academic disciplines in examining the core questions and sectoral challenges behind transition management and identification of climate solutions and opportunities.

3.1 Project Scoping Study on Optimising Land-Use

Desk Study

To make an application under this topic area, you must use the following:

Call Topic Reference: [Climate 2014 Call-Project 9](#)

Description

Land-use can lead to greenhouse gas emissions or removals directly attributable to human activity. Land-use is also implicated as an indirect driver of emissions. Land-use choices determine activity levels in agriculture and transport which drive emissions. Transport and Agriculture represented 50.5% of Irish greenhouse gas emissions in 2012 (EPA, 2013). Land-use choices can also determine availability of bio-energy at local, regional and national levels and can determine the feasibility of alternative energy options.

There is significant Irish sector specific research on land-use with a focus on either agriculture, forestry or residential distribution. However, many climate solutions identified for Ireland imply changes to land-use that may have environmental, economic and other implications across sectors. This year Ireland adopted a new national policy position on climate change. The position states the “fundamental objective, to achieve transition to a competitive, low-carbon, climate–resilient and environmentally sustainable economy by 2050”. The policy mandates low carbon roadmapping which will be based on; an aggregate reduction in CO₂ emissions of at least 80% by 2050 across the electricity generation, built environment and transport sectors; and an approach to carbon neutrality in the agriculture and land-use sector. Recent reports have shown the key role of land-use in achieving ambitious mitigation across all sectors (NESC, 2012 & O’Reilly et al, 2012). A strategic perspective is required to look at how best to plan for developments in Irish land-use that achieve mitigation goals while being environmentally sustainable and meeting demands for food production, energy production, residential and transport needs as well as offering amenity value.

Ireland also faces a future regulatory requirement under Decision 529/2013/EU on “accounting rules on greenhouse gas emissions and removals resulting from activities relating to land use, land-use change and forestry” requires the submission by Member States of projections of national emissions and removals from land-use. Work is urgently required in this area to meet EU requirements while responding to domestic policy questions.

Proposals are invited for a research project to undertake the following:

- Literature review on land-use optimization at local, national, and international levels
- Identify and assess options for analytical tools to project land-use in Ireland in medium term and to 2050 including under business-as-usual and optimal scenarios. This should build on existing analysis and long term modelling, e.g. by ESRI, UCC, Teagasc, UCD etc.

Expected outputs for this project include:

- Final report including literature review
- Recommendations on next steps in the development of analytical tools for projecting land-use in the medium to long term assessment of land use optimization.
- Provide indicative scenarios of land use for Ireland which address the issues of climate change, food production, energy security, and ecosystem services.

Project Structure and Funding:

This project is a **Desk Study** which will run for **12-18 months**. The indicative funding available is **€110,000 - €160,000** (which includes a 5% provision for communication costs³ please refer to the 2014 Guide for Applicants for further details).

³ For example, a €100,000 grant award is made up of €95,000 for project costs, and €5,000 for communication costs (€3,000 of which relates to communication activities and events which take place over the lifetime of the project and €2,000 which relates to post completion dissemination costs).

3.2 Catalysing and Characterising Transition

Desk Study

To make an application under this topic area, you must use the following:

Call Topic Reference: [Climate 2014 Call-Project 10](#)

Description

A systemic problem is a one which is due to issues inherent in the overall system, rather than due to a specific, individual, isolated factor. Climate change can thus be identified as a systemic problem that requires economies and societies to transition to low-carbon sustainability and climate resilience. Technological solutions in most cases exist but institutional rules, political realities, market failures and socio-cultural attitudes prevent implementation. Therefore, governance of the transition does not lie solely in government or in the market-place for technology but in niches and regimes where institutions, regulations, consumers and governments interact.

Behavioural measures and cross disciplinary analysis is emerging as a key requirement for ambitious mitigation. A framework for integrating analysis from diverse disciplines and for understanding the transition process across sectors is needed to better direct and shape required future actions. A characterisation of transition, where it is happening, and identification of relevant indicators will facilitate monitoring and identifying progress and gaps.

The state of deployment of key technologies is a starting point. The NESC report of 2012 identified six priority exploratory projects or technologies for Ireland; carbon-neutral agriculture, smart grid, electric vehicles, electrification of heat, bio-methane and anaerobic digestion, and carbon capability. Work under this call will examine key technologies and their sectors and characterise the scale and nature of transition required. It will explore options for the identification and characterisation of transition that is taking place at local or sectoral levels and identify how lessons and output from diverse disciplines such as behaviour, systems and technology can be applied to catalyse further transition. The framework will provide a systematic approach to compilation and assessment of options, informing their further development and building on existing initiatives and developments that are enabling, advancing or exploring climate solutions.

Proposals are invited for a research project to undertake the following:

- A literature review on economy and society-wide transition to low-carbon sustainability including barriers to transition and options to incentivize promote or otherwise facilitate transition or systemic innovation
- International comparison or benchmarking of the stage of transition of selected technologies or systemic innovation in Ireland
- A case study of technology in Ireland exploring its state of adoption and further steps to be taken. The technology chosen should build on existing analysis and plans e.g. by NESC, SEAI, Teagasc, SFI.
- Develop an analytical framework in which to direct and integrate further research on advancing transition in Ireland

Expected outputs for this project include:

- A review of literature relevant to the characterization of the sustainable transition in Ireland
- An analytical framework for informing and assessing transition to low carbon sustainability
- A final report

Project Structure and Funding: *Project Structure and Funding*

This project is a **Desk Study** which will run for **12-18 months**. The indicative funding available is in the range of **€110,000 - €160,000** (which includes a 5% provision for communication costs⁴ please refer to the 2014 Guide for Applicants for further details).

⁴ For example, a €100,000 grant award is made up of €95,000 for project costs, and €5,000 for communication costs (€3,000 of which relates to communication activities and events which take place over the lifetime of the project and €2,000 which relates to post completion dissemination costs).

3.3 Understanding and Promoting Exemplar Behaviours in Communities

Medium Scale Study

To make an application under this topic area, you must use the following:

Call Topic Reference: [Climate 2014 Call-Project 11](#)

Description

With the publication of summaries for policy makers from the 5th Assessment Report of the IPCC, it is clear that we have sufficient scientific knowledge to act now on mitigation and adaptation. That we (in Ireland and Internationally) have not yet seen sufficient progress is evidence of the need to move beyond research that only addresses scientific processes. Much research on climate action has focussed on national level policies and measures to reduce emissions, climate modelling and impact assessment. However, much could be done at a local level to cut emissions enhance sinks and adapt to climate change. Early adoption of technologies or methods to reduce and/or manage emissions and manage climate change risks is also something that can be better understood when examined and explored at local level.

This research would, using a case-study approach work with a community to explore the possibilities for enhanced action on mitigation and adaptation or Mitigation/adaptation (with a preference being an integrated approach). Engagement with communities could build on existing focuses for local environmental activity such as 'Tidy Towns' groups. The "Behavioural Insights Unit" in the UK government, commonly referred to as the 'Nudge Team' is one example of a new approach to achieving results through research. The CONSENSUS project is another example of a new approach to understanding and promoting sustainability.

Engagement including collaboration and co-funding with government departments and agencies, local authorities, business and NGOs will be crucial to the success of the framework.

This project has two objectives: 1) to understand the reasons for citizens' and local decision-makers' engagement in local initiatives on climate action (mitigation and/or adaptation) and 2) to identify policy, participation, and communication procedures which effectively engage citizens and local decision-makers in climate action. It focusses on the mobilising effects of collective beliefs and positive future visions. Innovative use of technology or application of lessons from diverse analytical disciplines will also be encouraged. Work should build on and where possible engage with existing work, e.g. CONSENSUS.

Proposals are invited for a research project to undertake the following:

- Literature review
- Identification of a target community
- Engagement with community leaders and wider community
- An assessment of current attitudes, behaviours, performance of the community
- Work with community to change attitudes, behaviour or performance for the better
- An assessment of the change achieved drawing out lessons to be learnt

Expected outputs for this project include:

- Interim report on literature review and the chosen community
- In addition to regular engagement with the community, a seminar or stakeholder event with EPA and policy makers
- Recommendation on how mitigation/adaptation (or both) can be effectively implemented with a view to reducing emissions and building resilience
- A final report

Project Structure and Funding: *Project Structure and Funding*

This project is a **Medium Scale Project** which will run for **24-36 months**. The indicative funding available is **€160,000 - €210,000** (which includes a 5% provision for communication costs⁵ please refer to the 2014 Guide for Applicants for further details).

⁵ For example, a €100,000 grant award is made up of €95,000 for project costs, and €5,000 for communication costs (€3,000 of which relates to communication activities and events which take place over the lifetime of the project and €2,000 which relates to post completion dissemination costs).

3.4 Mitigation in the Transport Sector

Medium Scale Study

To make an application under this topic area, you must use the following:

Call Topic Reference: [Climate 2014 Call-Project 12](#)

Description

The 2014 National Emissions Projections identify transport as a key future contributor to emissions in the non-ETS sector (EPA, 2014). Transport emissions were 18.6% of greenhouse gas emissions in 2012 and are expected to increase by 15-23% by 2020 (EPA, 2013, 2014). However, it has been difficult to identify effective solutions for this sector to assist Ireland in meeting existing 2020 and anticipated 2030 EU greenhouse gas (GHG) emissions reduction targets. There are a number of issues within transport that could benefit from further research; e.g. behavioural change, emissions from freight transport, electric vehicles, biofuels, rural transport solutions, potential co-benefits of mitigation in transport etc.

In 2011 the EPA together with the National Transport Agency (NTA) and Dept. of Transport co-funded a feasibility study for an Irish National Transport Model (WSP, 2011). This identified existing analytical capacity and data availability in Ireland. Existing sources and anticipated improvements in transport data availability should facilitate progress in this area and options to progress need to be explored.

Proposals should build on existing work including by NTA, ESRI and UCC. Proposals should demonstrate either 1) development of options with high potential for mitigation or 2) potential significant improvements in analytical capacity enabling strategic policy planning. High potential for mitigation can be demonstrated either via potential domestic implementation or via international adoption of an innovative approach/technology.

Proposals are invited for a research project to undertake some of the following:

- Identification and analysis of high potential options for reducing GHG emissions from transport in Ireland pre-2020 and pre-2030
- Development of analytical tools for strategic planning in the transport sector
- Development and analysis of selected options for reducing GHG emissions from transport in the short to medium term

Expected outputs for this project include:

- Interim report including brief literature review
- Workshop or seminar for relevant stakeholders and policymakers
- Final report

Project Structure and Funding: *Project Structure and Funding*

This project is a **Medium Scale Project** which will run for **18-36 months**. The indicative funding available is **€160,000 - €210,000** (which includes a 5% provision for communication costs⁶ please refer to the 2014 Guide for Applicants for further details).

⁶ For example, a €100,000 grant award is made up of €95,000 for project costs, and €5,000 for communication costs (€3,000 of which relates to communication activities and events which take place over the lifetime of the project and €2,000 which relates to post completion dissemination costs).

Theme 4: Air science

The aim of research under this theme is to provide the analysis necessary to the achievement of clean air and co benefits for climate health environment and society and to inform pathways for achievement of highest air quality standards in Ireland and advance integrated assessments of air pollution and wider environmental issues

- To advance analyses of emissions, transport and removal of air pollutants and increase understanding and awareness of the impacts of air pollutants.
- To improve national inventories and projections of emissions over a wide range of pollutants including heavy metals and POPs.
- To identify and promote emissions abatement options which can enable Ireland to achieve the highest air quality standards.

Topic areas include attribution of air pollutant emissions to economic sectors in order to inform effective actions and improvement of inventory and Projections of emissions under National Emissions Ceilings Directive (NECD) and CLRTAP/Gothenburg.

4.1 Research Fellowship on Air Science

Research Fellowship

To make an application under this topic area, you must use the following:

Call Topic Reference: [Climate 2014 Call-Project 13](#)

Description

This fellowship is for a research fellowship to support the delivery of information and analysis for a range of air pollution/quality issues including linked environment and health issues to support informed decision making based on research. This will be focused on adaptation planning in Ireland. It will also require interaction with bodies and process at EU and wider international levels that are focused on air pollution issues these include the CAFÉ and UNECE processes under the CLTTAP and its various constituent bodies.

The fellowship will support the delivery of research related to the measurement, analysis of air pollution in Ireland, and advance communication of emerging issues. The fellow will also consider short life climate drivers in the context of national emissions and source activities. This may link to the work of the Coalition on Clean Air and Climate (CCAC). The role will include support for development and management of EPA funded research under this programme, as well as assessment of complementary research funded by other bodies. This is an important role in co-ordination and management of research activities, synthesis and communication of research findings.

Proposals are invited for a research project to undertake the following:

The role will include management of EPA funded research under this programme, as well as complementary research funded by other Agencies and the private sector. This is an important role in co-ordination and management of research activities, synthesis and communication of research findings.

The role involves:

1. Contribution to the development of Air Science research programme, including the identification of gaps in knowledge and emerging issues
2. Implementation and management of thematic research activities and projects to achieve strategic goals and to address requirements emerging from national and EU processes.
3. Effective Synthesis and communication of key research findings and data through preparation of discussion documents and reports
4. Organisation of workshop and outreach events

Expected outputs for this project include:

- Report on the synthesis of research findings and recommendations where appropriate
- Contribution to communication and briefing documents
- Analysis of environmental and policy issues

Applications

Applicants should have a PhD and post doctoral experience, or equivalent, in a relevant discipline e.g. environmental science, engineering.

It is anticipated that this person will work closely with experts in these areas within the EPA and other state agencies and government departments.

Project Structure and Funding:

The fellowship award will be up to **24 months**, with the potential for an additional year.

The indicative funding range is between **€120,000 - €190,000** (which includes a 5% provision for communication costs [1] please refer to the 2014 Guide for Applicants for further details).

Awards will be made in line with the Irish Universities Association recommended salary scales, and to include (which includes 5% for post-completion publicity/dissemination⁷ please refer to 2014 Guide for Applicants for further details).

It is recommended that Fellowship applicants identify a host organisation and supervisor prior to submission of completed proposals.

In the event that a host organisation cannot be identified by the submission deadline, the applicant may register on the EPA Grant Application & Project Management Portal under the organisation entitled: **“Organisation to be confirmed”**. A suitable host organisation must be identified during the review stage. **Failure to do so will disqualify the application.**

^[1] For example, a €100,000 grant award is made up of €95,000 for project costs, and €5,000 for communication costs (€3,000 of which relates to communication activities and events which take place over the lifetime of the project and €2,000 which relates to post completion dissemination costs).

⁷ For example, a €100,000 grant award is made up of €95,000 for fellowship, and €5,000 for post-completion publicity

4.2 Bioaerosol monitoring at waste management sites

Medium Scale Study

To make an application under this topic area, you must use the following:

Call Topic Reference: [Climate 2014 Call-Project 14](#)

Description

Recently developed spectroscopic techniques have the ability to detect and quantify in near real-time airborne primary biological aerosol particles (PBAPs) in the environment. Bio-aerosols have the potential to cause health issues when inhaled due to allergic reactions in some people. The current methodology specified for monitoring bio-aerosols on waste composting sites is the Anderson method. This project will use novel technology to monitor bio-aerosols and compare against the standard monitoring methodology at candidate sites in Ireland. This could include composting sites, waste management sites including landfill and sites using biological based air abatement systems (e.g. biofilter/bioscrubber).

A number of recent research papers have also shown the potential for this technology to be used as a method for pollen monitoring. At present Ireland's pollen forecasting is provided by Met Éireann and is based on modelling undertaken in the UK's National Pollen and Aerobiology Research Unit in the University of Worcester.

Proposals are invited for a research project to undertake the following:

Part A -Use of near real time instrumentation for the detection and attribution of bioaerosols from composting / waste sites.

It is proposed that a number of sites will be selected for detailed PBA analysis. The analysis should be undertaken alongside specified bioaerosol monitoring methods in EPA and Environment Agency licences for monitoring bioaerosols. A comparison of results and the efficacy of methods should be undertaken.

Part B – Feasibility study on the development of a national pollen forecasting service using same.

A separate work package in this project will assess the current pollen forecasting services undertaken in the UK for Ireland and assess the feasibility and value of setting up a national pollen monitoring and forecasting service. This project will involve liaison with Met Éireann and the providers of the pollen forecast in the UK.

Expected outputs for this project include:

- Final report including literature review
- Comparison of different bioaerosol monitoring methods and improved understanding of sources and types of bioaerosols from different sites.
- Feasibility study for a national pollen monitoring and forecasting service.

Project Structure and Funding:

This project is a Medium Scale Project which will run for 24 months. The indicative funding range is between **€150,000 - €200,000** (which includes a 5% provision for communication costs^[1] please refer to the 2014 Guide for Applicants for further details).

^[1] For example, a €100,000 grant award is made up of €95,000 for project costs, and €5,000 for communication costs (€3,000 of which relates to communication activities and events which take place over the lifetime of the project and €2,000 which relates to post completion dissemination costs).

4.3 Media analysis of climate change coverage

Medium Scale Study

To make an application under this topic area, you must use the following:

Call Topic Reference: [Climate 2014 Call-Project 15](#)

Description

Despite increasing levels of certainty from the Intergovernmental Panel on Climate Change (IPCC) and other international bodies on the impacts of climate change, there remain difficulties in the communication of climate change issues, responses and opportunities to society. The media plays an important part in this communication and can impact on the acceptance of climate change and other scientific issues by the general public.

Conventional mass media continue to be an important source of information for the general public in terms of their awareness of scientific issues. There have been numerous recent studies undertaken on the level and content of media coverage of climate change in countries such as England, Australia and the US.

Proposals are invited for a research project to undertake the following:

This project will undertake a literature review on previous studies undertaken on climate change media analysis in Ireland. The project could consider a content analysis of climate change coverage in newspaper, (print and online), TV and radio coverage. There is increasing interest in the research of the use of imagery associated with climate change coverage and the impact that this can have on the public in accepting the messages and subsequent behavioural change. The project could consider an appropriate analysis of imagery used through for example Q methodology or other semiotic image analysis in Irish media and compare against international studies undertaken in this area. The study should recommend how the communication of climate change issues can be improved based on the findings made through the research.

Expected outputs for this project include:

- Final report including literature review of media analysis undertaken on climate change coverage in Ireland
- Analysis of media coverage over a specified period
- Recommendations on improving communication of climate change

Project Structure and Funding:

This project is a Medium Scale Project which will run for 18 to 24 months. The indicative funding range is between **€100,000 - €160,000** (which includes a 5% provision for communication costs [1] please refer to the 2014 Guide for Applicants for further details).

^[1] For example, a €100,000 grant award is made up of €95,000 for project costs, and €5,000 for communication costs (€3,000 of which relates to communication activities and events which take place over the lifetime of the project and €2,000 which relates to post completion dissemination costs).

INDICATIVE TIMEFRAME

27th June 2014	Announcement of funding opportunity via national newspapers, EPA website and College Research Officers, HEANET & ESAI list server.
5pm, 5th August 2014	Deadline for submission of applications by applicants
5pm, 15th August 2014	Deadline for approval of applications by Research Offices/Management Failure to meet <u>either</u> of these deadlines means your proposal will not be considered for funding.
Mid-August/September 2014	Evaluation Process
September/October 2014	Negotiation ⁸
November 2014	Grant Award of Successful Projects

3. FURTHER INFORMATION

Information on current research projects being supported by the programme is available in the Research Section of the EPA web site (www.epa.ie/researchandeducation/research). Alternatively, for further information on this call, please contact research@epa.ie.

⁸ The EPA may consider calling the shortlisted applicants for interview at this stage.