



## REPORTING NATIONAL RESEARCH PROGRAMMES

# IMPLEMENTED, MANAGED AND FUNDED BY THE PARTICIPATING STATES

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## -PSiAs-

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Each year, by the 30th of January, PRIMA Funding Agencies shall provide a full report of the implementation of the PSiAs included in the AWP's to allow the Secretariat to comply with the reporting obligations with the EC and count the financial contributions as an in-kind contribution to the PRIMA programme.

The report shall include the following for each PSiA:

- a description of its objectives, information on the participants and countries involved;
- information on the activities performed, their costs and output, including the PRIMA Key Performance Indicators.
- a description of the beneficiary/ies and the allocated funding received by each beneficiary for conducting activities in the scope of the PRIMA programme.

The template is hereby provided to deliver the information mentioned above.

Please consider that the national programme activities (otherwise known as "Participating States Initiated Activities" or "PSiAs"):

- (i) meet the objectives and comply with the activities set out by the European Union for the PRIMA Programme;
- (ii) have been included and clearly identified in the PRIMA "Annual Work Plan" approved by the European Commission;
- (iii) have been conducted according to the [common principles agreed<sup>1</sup>](#) by the Participating States and the European Commission;
- (iv) have been correctly [labelled or co-labelled in any communication or publication as part of the PRIMA Programme supported by the European Union<sup>2</sup>](#) and that
- (v) the contributions to PSiAs are the costs actually allocated in implementing those PSiAs.

Concerning (v) also consider that the PSiAs [costs reported as contributions to the PRIMA Programme have been allocated from the date of entry into force of the European Commission decisions](#) approving the respective annual work plans where the concerned PSiAs have been included and identified therein.

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<sup>1</sup> See the box at the bottom of the document regarding the common principles agreed by PS and EC

<sup>2</sup> See the box at the bottom of the document on the co-labelling requirement

## PARTICIPATING STATE (PS)

### Participating State institution

PS REPRESENTATIVE NAME

ANR

## PARTICIPATING STATES INITIATED ACTIVITIES (PSIAs)

### 1. GENERAL INFORMATION

Reference/Code	FR.2023.1
Title of activity	RESEARCH PROJECTS FUNDED BY ANR UNDER THE ANNUAL NATIONAL CALL FOR PROPOSALS
Outputs	<p>The Generic Call for Proposals (AAPG) is the French National Research Agency's (ANR) main call. It is directed towards all scientific communities and all public and private players involved in French research. It is designed to give researchers in various scientific fields access to co-funding in a large number of research themes, basic or applied, in addition to their allocated recurrent funding.</p> <p>A total of <b>1 640</b> research projects were selected out of <b>6753</b> submitted proposals in 2023. The budget allocated in 2023 to research projects was of <b>758 M€</b>.</p>
Start date of the action	<p>Publication of the work programme and Call for proposals 2023 in July 2022.</p> <p>Publication of the results of the Call for Proposals in July 2023</p>
End date of the action	2023
Duration of action	One year
Budget commitment	1 M€
Website of PSIAs	<a href="https://anr.fr/fr/detail/call/aapg-appel-a-projets-generique-2023/">https://anr.fr/fr/detail/call/aapg-appel-a-projets-generique-2023/</a>

### 2. DESCRIPTION OF PSIA

Abstract (publishable)	<p>Plastics benefit society in innumerable ways and their production has drastically increased over the last century, resulting in a dramatic generation of plastic wastes. Most studies assessing plastics focused on microplastics (MP) in marine environments, while the occurrence of nanoplastics (NPT) have been overlooked in terrestrial and soil systems. NPT environmental risks also result from their ability to carrier metals through environmental interfaces. However, no information exists on the impact of the pedoclimatic conditions that control the physico-chemical conditions as well as the</p>
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	water flow in soils on such processes. <b>NANOCLIPO</b> aims to assess the transfer and resulting migration of NPT and associated metal from soil to the hydrosystems under various climatic conditions to further characterize and evaluate the genuine risk posed by NPT occurrence in the Critical Zone.
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<b>Theme</b>	Cross-cutting : <i>water management and farming</i>
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<b>Funding Institution</b>	ANR
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<b>Beneficiary/ies</b>	<i>Researchers, students, research platform</i>
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<b>Country/ies Involved</b>	<i>FR, DE</i>
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<b>Type of action</b>	<p>Select the most appropriate option among the following:</p> <p><i>Joint reseach project Please specify</i></p> <ul style="list-style-type: none"> <li>- <i>Research Innovation Action (RIA)</i> <input checked="" type="checkbox"/></li> <li>- <i>Innovation Action (IA)</i> <input type="checkbox"/></li> </ul> <p><i>Other: Please specify the type of activity</i></p> <p><i>Training and Mobility Action (TMA): Please specify</i></p> <p><i>Scholarship</i> <input type="checkbox"/></p> <p><i>Mobility</i> <input type="checkbox"/></p> <p><i>Training action</i> <input type="checkbox"/></p> <p>- <i>Other: Please specify the type of activity</i></p>
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<b>Objective/Impact</b>	<p><i>Objectives:</i></p> <ul style="list-style-type: none"> <li>• <i>Promoting the scientific excellence and the development of innovative concepts</i></li> <li>• <i>By pooling different skills</i></li> </ul> <p><i>Expectations:</i></p> <ul style="list-style-type: none"> <li>• <i>Scientific originality and excellence</i></li> <li>• <i>Added-value of the collaboration to achieve common goals</i></li> </ul>
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<b>Abstract (publishable)</b>	<p>Groundwater (GW) systems exist in dynamic balance with the climate and human pressure, connecting interfacing zones of recharge and discharge with multiple feedbacks. Quantifying the aquifer recharge and the stream-aquifer is a key issue for hydrogeologists to consider the safe yield and good water quality, especially in view of the ongoing changes in climate and land use. The objective of <b>GWSBOUND</b> is to provide monitoring and predictive tools of the water fluxes through these interfaces by the combined uses of hydrogeology, poroelasticity, petrophysics and geophysics approaches. The fully combined hydrogeophysics tools will improve the accuracy of groundwater models, aid in uncertainty assessment of its parameters by the uses of advanced numerical modelling, probabilistic, deep learning inversion approaches and spatiotemporal interpolation using the geostatistical approaches. The great novelty resides in the use of geophysical and hydrogeological data that are directly dependent on the water content storage, temperature and water level temporal variations. GWSBOUND will proceed in five main steps: developing a High-Performance numerical model to couple the groundwater and geophysical model through poroelastic and petrophysic models, create synthetic cases to realise a sensitivity analysis of the different heterogeneity configuration and hydrogeological regime on the hydrothermal and seismic wave responses, develop the workflow of the combined hydrogeological and geophysical inversion, apply this tool to the outlet of the Orgeval Critical Zone Observatory in current climatic conditions, and finally simulate the responses of the water resources to various IPCC scenarios of climate change (CMIP6 projections). The Orgeval Critical Zone Observatory (CZO) represents an opportunity to apply the combined inversion, for which an important database exists thanks to the French research program PIREN-Seine and the OZCAR research infrastructure.</p>
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<b>Theme</b>	Water management
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<b>Funding Institution</b>	ANR
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<b>Beneficiary/ies</b>	Researchers, students
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<b>Country/ies Involved</b>	FR
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<b>Type of action</b>	<p>Select the most appropriate option among the following:</p> <p>Joint research project Please specify</p> <ul style="list-style-type: none"> <li>- Research Innovation Action (RIA) <input checked="" type="checkbox"/></li> <li>- Innovation Action (IA) <input type="checkbox"/></li> </ul> <p>Other: Please specify the type of activity</p> <p>Training and Mobility Action (TMA): Please specify</p> <p>Scholarship <input type="checkbox"/></p> <p>Mobility <input type="checkbox"/></p> <p>Training action <input type="checkbox"/></p>
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	<p>- Other: Please specify the type of activity</p>
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<p><b>Objective/Impact</b></p>	<p><i>Objectives and Expectations:</i></p> <ul style="list-style-type: none"><li>• <i>Encouraging young researchers to take responsibility, acquiring a scientific independence</i></li><li>• <i>Encouraging them to adopt innovative approaches</i></li><li>• <i>Springboard for young researchers who will consider submitting a proposal in response to calls from ERC</i></li></ul>
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<b>Abstract (publishable)</b>	<p><b>Project Acronym: TAW-tree</b></p> <p>In the context of climate change, forests will face more frequent and intense periods of water deficit. How forests react to this climatic stress will depend, to a large extent, on their access to the soil water resource. For a long time, the so-called “available water content” (AWC, in millimeters of water) has been identified as a key ecosystem parameter, modulating the forest response to water shortage. Yet, AWC is typically determined over shallow depths (e.g. 1-m), and does not consider that in many cases, trees can access deep water resources, the depth and quantity of which is currently not known. Recent works developed by our consortium have introduced the concept of Total Available Water (TAW) to trees, a concept that adds “deep water” to the AWC estimate. Deployed at scales from the forest site to Metropolitan France and supported by an interdisciplinary consortium, the TAW-tree project aims (1) to quantify the TAW reserve in forests through a combination of geophysical (WP1) and ecophysiological (WP2) approaches, (2) to upscale TAW at regional scale using remote sensing (WP3) in order to (3) quantify the influence of TAW on the functioning, growth and vulnerability of temperate and Mediterranean forests facing climate change (WP4). Our working hypotheses are (hypothesis 1) that AWC generally underestimates TAW, often in a considerable way in forests, (hypothesis 2) that the variations of TAW in a particular forest drive a large part of the inter-tree differences in their response to water shortage, (hypothesis 3) that TAW, and particularly its deep component, has a critical role in the functioning and vulnerability of forests exposed to heat and drought stresses and that it changes the forests’ contribution to groundwater discharge.</p>
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<b>Theme</b>	Water management
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<b>Funding Institution</b>	ANR
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<b>Beneficiary/ies</b>	Researchers, students
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<b>Country/ies Involved</b>	FR
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<b>Type of action</b>	<p>Select the most appropriate option among the following:</p> <p>Joint reseach project Please specify</p> <ul style="list-style-type: none"> <li>- Research Innovation Action (RIA) <input checked="" type="checkbox"/></li> <li>- Innovation Action (IA) <input type="checkbox"/></li> </ul> <p>Other: Please specify the type of activity</p> <p>Training and Mobility Action (TMA): Please specify</p> <p>Scholarship <input type="checkbox"/></p> <p>Mobility <input type="checkbox"/></p> <p>Training action <input type="checkbox"/></p> <p>- Other: Please specify the type of activity</p>
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<b>Objective/Impact</b>	<p><i>Objectives:</i></p> <ul style="list-style-type: none"><li><i>• Promoting the scientific excellence and the development of innovative concepts</i></li><li><i>• By pooling different skills</i></li></ul> <p><i>Expectations:</i></p> <ul style="list-style-type: none"><li><i>• Scientific originality and excellence</i></li><li><i>• Added-value of the collaboration to achieve common goals</i></li></ul>
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<b>Abstract (publishable)</b>	<p>Forty percent of the Earth's population depends on carbonate aquifers for water supply. The goal of PREFAB is to understand how carbonate aquifers develop and are further preserved following burial, with a particular emphasis on the precursor role of early diagenesis. Two questions are at the core of PREFAB: (i) how do porosity and permeability evolve during early diagenesis and (ii) how are they further sustained over time considering mechanical compaction at depth? PREFAB will address these questions through a unique investigation of the key factors conditioning the creation of porous and permeable units in carbonate rocks. The novelty of PREFAB approach is the simultaneous synthesis of analogous, controlled, carbonate microstructures with measurements of physical properties evolution. This is achieved thanks to a new apparatus designed to simulate fluid-rock interactions in the laboratory under temperature and stressfield in oedometric conditions, while measuring deformation, porosity, permeability and ultrasonic velocities. By simulating diagenesis in the laboratory through accelerated dissolution and mineral precipitation in a controlled environment, PREFAB will isolate the effect of one specific microstructure relevant for understanding the role of early diagenesis on aquifers: Early Cements. Triaxial mechanical testing of these lab-produced samples will allow evaluating compaction during burial as a function of sediment type and diagenetic alteration. By answering the fundamental question of carbonate aquifer creation and preservation, PREFAB will provide new insights for research on groundwater resources, as well as more generally resource management in carbonate rocks (e.g. geothermal, carbon storage, nuclear waste storage).</p>
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<b>Theme</b>	Water management
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<b>Funding Institution</b>	ANR
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<b>Beneficiary/ies</b>	Researchers, students
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<b>Country/ies Involved</b>	FR
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<b>Type of action</b>	<p>Select the most appropriate option among the following:</p> <p>Joint reseach project Please specify</p> <ul style="list-style-type: none"> <li>- Research Innovation Action (RIA) <input checked="" type="checkbox"/></li> <li>- Innovation Action (IA) <input type="checkbox"/></li> </ul> <p>Other: Please specify the type of activity</p> <p>Training and Mobility Action (TMA): Please specify</p> <p>Scholarship <input type="checkbox"/></p> <p>Mobility <input type="checkbox"/></p> <p>Training action <input type="checkbox"/></p> <p>- Other: Please specify the type of activity</p>
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<b>Objective/Impact</b>	<p><i>Objectives and Expectations:</i></p> <ul style="list-style-type: none"><li>• <i>Encouraging young researchers to take responsibility, acquiring a scientific independence</i></li><li>• <i>Encouraging them to adopt innovative approaches</i></li><li>• <i>Springboard for young researchers who will consider submitting a proposal in response to calls from ERC</i></li></ul>
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<b>Abstract (publishable)</b>	<p><b>Project Acronym: MICROLARGE</b></p> <p>The project will evaluate the impact of more frequent and more intense drought events on CO<sub>2</sub> emissions of temperate soils and how such relationships are modulated by the legacy of agricultural management practices. The project will propose an upscaling methodology to improve prediction of large scale models of soil organic matter decomposition. It will be based on the elucidation of the key mechanisms taking place at the microscopic scale of the soil microbial habitats. We will submit small soil cores sampled under different soils and agricultural managements to wetting/drying cycles with different durations of drought as well as frequencies and number of wetting/drying cycles until mimicking semi-arid climate. The project will test the main hypotheses explaining flushes of CO<sub>2</sub> emissions on rewetting, which are the release of microbial products created during the cycles (extra-cellular enzymes, osmolytes, dead microbial cells) and modification of soil architecture responsible of the release of soil organic matter that was previously physically protected from microorganisms. To do so, the project will: i) combine an unprecedented set of multi-scale and multi-temporal data imaging tools describing soil microhabitats (from <math>\mu\text{m}</math> to cm scale) and ii) produce ambitious and novel 3D microscale models of soil organic decomposition simulating for the first time the dynamics of soil architecture, water, microbial diversity and activity. The mechanistic knowledge gained from microscale investigations will be transferred to the land surface ORCHIDEE model by including new emerging statistical functions emulating the microscale models. The new version of ORCHIDEE will be evaluated against soil respiration continental database.</p>
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<b>Theme</b>	Farming
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<b>Funding Institution</b>	ANR
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<b>Beneficiary/ies</b>	Researchers, students, research platform
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<b>Country/ies Involved</b>	FR
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<b>Type of action</b>	<p>Select the most appropriate option among the following:</p> <p>Joint reseach project Please specify</p> <ul style="list-style-type: none"> <li>- Research Innovation Action (RIA) <input checked="" type="checkbox"/></li> <li>- Innovation Action (IA) <input type="checkbox"/></li> </ul> <p>Other: Please specify the type of activity</p> <p>Training and Mobility Action (TMA): Please specify</p> <p>Scholarship <input type="checkbox"/></p> <p>Mobility <input type="checkbox"/></p> <p>Training action <input type="checkbox"/></p> <p>- Other: Please specify the type of activity</p>
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<b>Objective/Impact</b>	<p><i>Objectives:</i></p> <ul style="list-style-type: none"><li><i>• Promoting the scientific excellence and the development of innovative concepts</i></li><li><i>• By pooling different skills</i></li></ul> <p><i>Expectations:</i></p> <ul style="list-style-type: none"><li><i>• Scientific originality and excellence</i></li><li><i>• Added-value of the collaboration to achieve common goals</i></li></ul>
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<b>Abstract (publishable)</b>	<p>The Transdisciplinary Pathways for Sustainable Water Governance (<b>TRANSWATER</b>) project, implemented by researchers from UMR G-EAU (<a href="http://www.g-eau.fr">www.g-eau.fr</a>), proposes to develop and test a framework to understand –and enhance- the ways transdisciplinary arrangements of coproduction can contribute to sustainable transformations of water governance in four hydrosocial territories. TRANSWATER aims to link recent interdisciplinary advances in water research and Sustainability Science’s commitment towards transformations while being attentive to the situated and contingent nature of research, hence contributing to the emergence of a reflexive Sustainability Science of Water. The project will be implemented in four hydrosocial territories where UMR G-EAU has on-going partnerships with a diversity of water actors: the greater Montpellier area in the South of France, the Lac de Guiers area in Senegal, groundwater-based agro-ecosystems in the south of Tunisia, and the Cambodian Upper Mekong delta. Recognizing that hydrosocial transformations are best assessed and brought about over the long term, we make the methodological choice to establish synergies with existing transdisciplinary processes that aim at identifying and implementing just and sustainable transformations in these hydrosocial territories. Grounded in what we call a “negotiated reflexivity” approach, the framework developed under the project will investigate the daily practices of designing and implementing these transdisciplinary processes while also generating new water knowledge. We expect this will yield insights of operational value to steer on-going transformations towards more just and sustainable ends in these four hydrosocial territories but also (1) generic lessons on how and why hydrosocial transformations come about and a (2) reflexive assessment of the role researchers at the science-action interface can play in these.</p>
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<b>Theme</b>	Water management
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<b>Funding Institution</b>	ANR
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<b>Beneficiary/ies</b>	Researchers, students, private company
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<b>Country/ies Involved</b>	FR, TN, SN, KH
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<b>Type of action</b>	<p>Select the most appropriate option among the following:</p> <p>Joint reseach project Please specify</p> <ul style="list-style-type: none"> <li>- Research Innovation Action (RIA) <input checked="" type="checkbox"/></li> <li>- Innovation Action (IA) <input type="checkbox"/></li> </ul> <p>Other: Please specify the type of activity</p> <p>Training and Mobility Action (TMA): Please specify</p> <p>Scholarship <input type="checkbox"/></p> <p>Mobility <input type="checkbox"/></p> <p>Training action <input type="checkbox"/></p> <p>- Other: Please specify the type of activity</p>
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<b>Objective/Impact</b>	<p><i>Objectives:</i></p> <ul style="list-style-type: none"><li><i>• New areas of research for the laboratories of organisations or research establishments in partnership with the private sector</i></li><li><i>• Promoting innovation within companies carrying out R&amp;D work in France</i></li></ul> <p><i>Expectations:</i></p> <ul style="list-style-type: none"><li><i>• Public-private partnership</i><ul style="list-style-type: none"><li><i>• at least one laboratory from a research and knowledge dissemination organisation or institution eligible for ANR funding</i></li><li><i>• at least one company conducting research and development in France including large, small and medium-sized company and start-up</i></li></ul></li><li><i>• Effective collaboration between the partners during the project: research objectives defined jointly, shared tasks, shared risks and results, shared intellectual property</i></li><li><i>• Coordination can be ensured by the "laboratory" or "Company" partner</i></li></ul>
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<b>Abstract (publishable)</b>	<p>Water catchment areas devoted to human consumption are threatened by pollution that may be of agricultural, industrial or even domestic origin, which may lead to the final closure of drinking water catchments. At the same time, some cultivated soils have lost their organic matter content, in particular due to the reduction of organic resources in areas where livestock farming has virtually disappeared, which ultimately leads to a loss of soil fertility. The transition of agricultural systems must reverse these trends and agriculture can become regenerative by participating in the regeneration of common goods such as water and soil.</p> <p>Miscanthus, a perennial grass that does not require chemical inputs except early crop weeding, would accelerate the restoration of water quality by its growing in water catchment areas (WCA). Targeted contaminations are nitrates and pesticide residues (active ingredients and processing products) which remain problematic in many WCA. The valorization of miscanthus straw by farmers located around the catchment area, in litter then organic amendment, would generate a circularity of the bioeconomy at the scale of the territory. But since only one clone is grown for this recent crop in France, the enlargement of varietal offer is required.</p> <p>In this context, four units of the National Research Institute for Agriculture, food and the Environment (BioEcoAgro, EcoSys, HYCAR and IJPB) and the private company Novabiom have combined their complementary skills (agronomy, ecophysiology, hydrological transfers, modeling and genetics) to propose the final project MisEauVert, which is entitled: "Ecosystem services of miscanthus to restore water quality and soil fertility". It is intended to highlight the ecosystem services of miscanthus to preserve water quality and restore soil fertility.</p> <p>Thus, miscanthus was introduced in 2022 in the WCA of Vernouillet near Dreux under the impulse of the Seine-Normandie water agency and the agglomeration community «l'Agglo du Pays de Dreux» and will serve as a study object. The project is structured around four scientific activities:</p> <ul style="list-style-type: none"> <li>- Miscanthus production in the water catchment area</li> <li>- Protection of soil and water in the water catchment area</li> <li>- Cascading use of miscanthus biomass based on animal litter and organic amendment</li> <li>- Development of tools and genitors to expand the variety supply.</li> </ul> <p>Besides project management, a last activity deals with a global analysis of the project's added value and impact as well as establishing synergies between the stakeholders (scientific experts, company, farmers, local authorities and water agencies) with different interests and cultural backgrounds, which is needed to develop an efficient research-action partnership at the level of agricultural territories.</p>
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<b>Theme</b>	Cross-cutting: Farming and Water management
<b>Funding Institution</b>	ANR
<b>Beneficiary/ies</b>	Researchers, students, private company
<b>Country/ies Involved</b>	FR

<p><b>Type of action</b></p>	<p>Select the most appropriate option among the following:</p> <p>Joint reseach project Please specify</p> <ul style="list-style-type: none"> <li>- Research Innovation Action (RIA) <input checked="" type="checkbox"/></li> <li>- Innovation Action (IA) <input type="checkbox"/></li> </ul> <p>Other: Please specify the type of activity</p> <p>Training and Mobility Action (TMA): Please specify</p> <p>Scholarship <input type="checkbox"/></p> <p>Mobility <input type="checkbox"/></p> <p>Training action <input type="checkbox"/></p> <p>- Other: Please specify the type of activity</p>
<p><b>Objective/Impact</b></p>	<p>Objectives:</p> <ul style="list-style-type: none"> <li>• New areas of research for the laboratories of organisations or research establishments in partnership with the private sector</li> <li>• Promoting innovation within companies carrying out R&amp;D work in France</li> </ul> <p>Expectations:</p> <ul style="list-style-type: none"> <li>• Public-private partnership <ul style="list-style-type: none"> <li>• at least one laboratory from a research and knowledge dissemination organisation or institution eligible for ANR funding</li> <li>• at least one company conducting research and development in France including large, small and medium-sized company and start-up</li> </ul> </li> <li>• Effective collaboration between the partners during the project: research objectives defined jointly, shared tasks, shared risks and results, shared intellectual property</li> <li>• Coordination can be ensured by the "laboratory" or "Company" partner</li> </ul>

<b>Abstract (publishable)</b>	<p>Innovations in food packaging mostly concern food shelf-life and consumer safety by the inhibition or prevention of microbial growth onto food, thanks to the development of antimicrobial active packaging. In particular, bio-based biodegradable polymers and antimicrobial natural compounds generate a growing interest in the sustainability of packaged food. The aim of <b>NanoBAP</b> project is to investigate the potential of electrospun nanofibers in the field of active packaging, through the development of an antimicrobial and antioxidant coating based on biosourced materials for the combined release of multiple natural active compounds from a PLA film. Two strategies based on electrospinning will be fully investigated: from the design and characterisation of physico-chemical properties of the coated films and the release/transfer mechanisms of active compounds up to the evaluation of in vitro and model/simplified food antimicrobial activity. The final innovative proposed packaging solution would be of key importance for the packing of sliced or textured fresh foods. In conclusion, the outcome of this project will generate fully bio-based and biodegradable active films with the potential to substantially mitigate plastic pollution and to reduce food waste. This will make a both scientific and economical step forward to "zero waste" concept.</p>
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<b>Theme</b>	Agro-food
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<b>Funding Institution</b>	ANR
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<b>Beneficiary/ies</b>	Researchers, students
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<b>Country/ies Involved</b>	FR
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<b>Type of action</b>	<p>Select the most appropriate option among the following:</p> <p>Joint research project Please specify</p> <ul style="list-style-type: none"> <li>- Research Innovation Action (RIA) <input checked="" type="checkbox"/></li> <li>- Innovation Action (IA) <input type="checkbox"/></li> </ul> <p>Other: Please specify the type of activity</p> <p>Training and Mobility Action (TMA): Please specify</p> <p>Scholarship <input type="checkbox"/></p> <p>Mobility <input type="checkbox"/></p> <p>Training action <input type="checkbox"/></p> <p>- Other: Please specify the type of activity</p>
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	<ul style="list-style-type: none"><li>• <i>Scientific originality and excellence</i></li><li>• <i>Added-value of the collaboration to achieve common goals</i></li></ul>
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<b>Abstract (publishable)</b>	<p><b>Project Acronym: OLOCAP</b></p> <p>Among consumers, food choices are increasingly shifting towards products of "local" origin. This enthusiasm has a strong impact on small producers who are faced with an increased and very diversified demand, and who - very often - have to ensure all the logistics by their own means, including delivery. This project deals with the problem of the logistics of short and local food circuits, with a multidisciplinary perspective. Management sciences will help to understand the logic of the actors (producers, customers, consumers), to define the needs of the producers and from field studies, to design the platform and to define sustainable economic models. A PhD thesis, co-supervised in two laboratories (Tours and Grenoble) will deal with these questions. Data sciences will help to build the platform and design the algorithms allowing the pooling of routes and the definition of the positioning of intermediate stocks or collective points of sale, in order to minimize the costs of routes, the time spent in distribution, consumption energy, the GHG emissions. A PhD thesis, co-supervised by two laboratories (Tours and Troyes) will design the optimization algorithms. The development of local food logistic, sometimes seen as an alternative to mass distribution industries, requires innovations to meet the challenges of sustainable development, and to reduce energy consumption and GHG emissions as much as possible. This project is part of this challenge.</p>
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<b>Theme</b>	Agro-food
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<b>Funding Institution</b>	ANR
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<b>Beneficiary/ies</b>	Researchers, students
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<b>Country/ies Involved</b>	FR
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<b>Objective/Impact</b>	<p>Objectives:</p> <ul style="list-style-type: none"> <li>• Promoting the scientific excellence and the development of innovative concepts</li> </ul>	<p>Objectives: Expectations</p>
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	<ul style="list-style-type: none"><li>• <i>By pooling different skills</i></li></ul> <p><i>Expectations:</i></p> <ul style="list-style-type: none"><li>• <i>Scientific originality and excellence</i></li><li>• <i>Added-value of the collaboration to achieve common goals</i></li></ul>	
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<b>Abstract (publishable)</b>	<p>Although our knowledge of the impact of climate change on hydrology and water resource availability in France has progressed significantly in the recent years, our ability to think prospectively about sectoral and spatialized adaptation and mitigation strategies remains limited, especially in the long term and at a large scale (France). We observe that we do not currently have an integrative multisectoral modeling approach that places water in its various dimensions (production factor, common resource, public good) at the heart of the analysis. This is the main challenge of <b>WAT-IMPACTS</b>, which proposes to develop regionalised dynamic macro-economic models at the scale of France (Computable General Equilibrium (CGE) modes) explicitly integrating hydrosystems in order to assess the long-term economic (in particular on employment, economic growth and competitiveness), social (inequalities between categories of economic agents or between sectors) and environmental impacts of future water resource evolution scenarios. WAT-IMPACTS will also question sectoral adaptation and mitigation measures by proposing accompanying measures (public water policies) within the framework of long-term prospective approaches (national and territorial) involving water stakeholders. One ambition of the WAT-IMPACTS project is to produce innovative scientific common goods useful to a wide range of stakeholders. Thus, the production of structured, documented and reusable data will be an objective of the project. WAT-IMPACTS aims at producing conceptual and operational works on tutelary values of water. Such values, spatialized and likely to vary over time, allow to indicate to private actors, but also to public authorities, the social value associated with saving or protecting the water resources in different contexts.</p>
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<b>Theme</b>	Water management
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<b>Funding Institution</b>	ANR
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<b>Beneficiary/ies</b>	Researchers, students
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<b>Country/ies Involved</b>	FR
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<b>Type of action</b>	<p>Select the most appropriate option among the following:</p> <p>Joint reseach project Please specify</p> <ul style="list-style-type: none"> <li>- Research Innovation Action (RIA) <input checked="" type="checkbox"/></li> <li>- Innovation Action (IA) <input type="checkbox"/></li> </ul> <p>Other: Please specify the type of activity</p> <p>Training and Mobility Action (TMA): Please specify</p> <p>Scholarship <input type="checkbox"/></p> <p>Mobility <input type="checkbox"/></p> <p>Training action <input type="checkbox"/></p> <p>- Other: Please specify the type of activity</p>
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<b>Objective/Impact</b>	<p><i>Objectives:</i></p> <ul style="list-style-type: none"><li><i>• Promoting the scientific excellence and the development of innovative concepts</i></li><li><i>• By pooling different skills</i></li></ul> <p><i>Expectations:</i></p> <ul style="list-style-type: none"><li><i>• Scientific originality and excellence</i></li><li><i>• Added-value of the collaboration to achieve common goals</i></li></ul>
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## 3. INFORMATION ON THE CALL(S) FOR PROPOSALS

<b>Title of the Call(s) for Proposals</b>	Generic Call for Proposals 2023
<b>Publication Date</b>	Publication of the work programme and Call for proposals 2023 in July 2022. Publication of the results of the Call for Proposals in July 2023
<b>Deadline for application</b>	Deadline for Step 1: November 2022 Deadline for Step 2: March 2023
<b>Projects selected for funding (title and acronym)</b>	<p><b>NANOCLIPO:</b> "Dissémination environnementale des NaNOplastiques : Impact des conditions pédoCLimatiques et Conséquence sur les POLLUANTS associés"</p> <p><b>GWSBOUND:</b> "Prévisions des flux d'eau à travers la zone non saturée en combinant des données et des modèles hydrogéophysiques"</p> <p><b>TAW-tree:</b> "L'eau totale disponible pour l'arbre : un paramètre clé, manquant pour évaluer la vulnérabilité du fonctionnement des forêts face au changement climatique"</p> <p><b>PREFAB:</b> "La diagenèse précoce comme précurseur des niveaux aquifères dans les roches carbonatées"</p> <p><b>MICROLARGE:</b> "Impact du changement climatique et des systèmes agricoles sur les émissions de CO2 du sol : des études à micro-échelle aux prévisions à grande échelle"</p> <p><b>TRANSWATER:</b> "Sciences de la Durabilité et Gouvernance de l'Eau"</p> <p><b>MisEauVert:</b> "Les services écosystémiques du miscanthus pour restaurer la qualité de l'eau et la fertilité des sols"</p> <p><b>NanoBAP:</b> "Emballage alimentaire actif biosourcé, multifonctionnel et à propriétés antibactériennes élaboré par électrofilage"</p> <p><b>OLOCAP:</b> "Optimisation logistique des circuits alimentaires de proximité"</p> <p><b>WAT-IMPACTS:</b> "Approches de long terme pour évaluer les impacts économiques, sociaux et environnementaux des contextes de rareté de l'eau en situation d'incertitudes"</p>

<b>Allocated Budget per project selected from the PSIA<sup>3</sup></b>	<p><b>NANOCLIPO:</b> Allocated budget - <b>599 499,06</b>; Disbursed funds in 2023: <b>119 899</b></p> <p><b>GWSBOUND:</b> Allocated budget - <b>304 874,08</b>; Disbursed funds in 2023: <b>60 974</b></p> <p><b>TAW-tree:</b> Allocated budget - <b>638 474,93</b>; Disbursed funds in 2023: <b>127 692</b></p> <p><b>PREFAB:</b> Allocated budget - <b>261 050</b>; Disbursed funds in 2023: <b>52 210</b></p> <p><b>MICROLARGE:</b> Allocated budget - <b>707 849,57</b>; Disbursed funds in 2023: <b>141 567</b></p> <p><b>WAT-IMPACTS:</b> Allocated budget - <b>651 161,99</b>; Disbursed funds in 2023: <b>130 230</b></p> <p><b>TRANSWATER:</b> Allocated budget - <b>413 571,30</b>; Disbursed funds in 2023: <b>82 714</b></p> <p><b>MisEauVert:</b> Allocated budget - <b>688 896</b>; Disbursed funds in 2023: <b>137 777</b></p> <p><b>NanoBAP:</b> Allocated budget - <b>490 366,08</b>; Disbursed funds in 2023: <b>98 072</b></p> <p><b>OLOCAP:</b> Allocated budget - <b>430 846</b>; Disbursed funds in 2023: <b>86 169</b></p>
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## How is the reporting on PS' contributions verified? –

1. The activity shall be included and clearly identified in the annual work plan –

<sup>3</sup>The budget for the projects selected under the reference PSIA (from the launch of the reference PSIA) shall be indicated here

2. In the annual report, there shall be a description of the activity (objectives, participants, indicators), its budget, the costs incurred by the PS in the relevant year, and its status (its beneficiary/ies. –
3. A PS Certificate shall support costs incurred by the PS
4. Costs incurred shall be **certified by an independent auditor** appointed by the PS or national funding bodies concerned
5. Other reporting requirements agreed upon between the PS and the Commission (e.g. on indicators) shall be fulfilled –
6. There shall be evidence that any **communication or publication on the activity has been labelled or co-labelled** as '[name of the activity]' is part of the PRIMA programme supported by the European Union



### Box co-labelling obligations

All participants in activities funded by the PRIMA Foundation or by Participating States of the PRIMA Programme must label or co-label any communication or publication related to their activities performed under the PSIA.

If the obligations mentioned above cannot be implemented by your Funding Agency, at least the following acknowledgement should appear on the funding agency webpage where the PSIA are listed:

**"[name of the activity/grant code] is part of the PRIMA Programme supported by the European Union", with the PRIMA logo and EU logo.**

Please provide that the PSIA code and year of implementation are indicated with a direct link to the PSIA webpage.

Whenever [country/funding agency] reports to the PRIMA Secretariat on its PSIA, it will be necessary to provide supporting evidence that any communication has been co-labelled. For this reason, you may be requested to provide evidence of co-labelling (e.g., print screens of websites).

### **Box with Description of the Applicable common principles to all the actions and activities**

In accordance with Article 6(9) of the PRIMA Decision (EU), activities included in AWP 2021 that are funded by the PS without the Union financial contribution shall be implemented in compliance with common principles adopted by PRIMA-IS after obtaining approval from the Commission.

#### **Equal treatment**

Participation in PSiAs, including the right to receive funding, should in general be open to any type of legal entity, private or public. It is understood and acceptable however, that national legislation or specific objectives of an action may dictate that only certain legal entities, e.g. public institutions, can participate and receive funding in certain actions.

Funding to PSiA actions should to the largest possible extent be allocated through open calls for proposals, and the PRIMA programme should be mentioned in the call text. It is understood and acceptable however that existing national research infrastructures and organisations, e.g. publicly funded research institutes, can be used to implement parts or the entire PSiA. Funding may therefore not be allocated through open calls for proposals, but either through internal competition within the research infrastructure or according to an overall strategic research plan.

The principle of equality and non-discrimination based on gender, racial or ethnic origin, religion or belief, disability, age and sexual orientation should be observed and promoted.

#### **Transparency**

Evaluation and selection criteria and details of the review process should be published before applicants submit proposals. The awarding of funds through calls for proposals or through institutional funding is made public.

Any communication or publication related to PSiAs, whether undertaken by the PRIMA Foundation, a Participating State, or participants to an activity, shall be labelled or co-labelled as '[name of the PSiA] is part of the PRIMA programme supported by the European Union'.

#### **Independent peer review evaluation**

Applications submitted through open calls for proposals should be evaluated by panels of leading independent domestic and/or non-domestic experts (peer review).

In case of direct funding to a national research infrastructure or organisation, the quality of the research output by the national research infrastructures or organisation should be assessed on a regular basis and structured manner, preferably through independent peer review.

#### **Ethics and scientific integrity**

The principles of scientific integrity as defined in the European Code of Conduct for Research Integrity should be observed and promoted.

Fundamental ethical principles and in particular those related to the Charter of Fundamental Rights of the European Union, the European Convention on Human Rights and its Supplementary Protocols, should be adhered to and enforced, both during selection of actions for funding and during the subsequent implementation of the actions.

#### **Exploitation and dissemination of results**

The findings of research activities included as PSiAs in the PRIMA annual work plan must be made available to the research community and the public in a timely manner.