

## Topic 1.2.1-2026 (IA): Next Generation of Sustainable and Alternative Animal Feeds for Circular and Resilient Mediterranean Farming Systems

TABLE 7. CALL GENERAL CONDITIONS

<b>Thematic Area 2 - Farming systems in the Nexus</b>	
Topic 1.2.1. (IA) -2026	<b>Next Generation of Sustainable and Alternative Animal Feeds for Circular and Resilient Mediterranean Farming Systems</b>
Contribution to SRIA	Operational Objective: 4/ SMART AND SUSTAINABLE FARMING. 7/ REDUCES LOSSES AND WASTE
Contribution to EU Policies	<a href="#">A Vision for Agriculture and Food</a> <a href="#">European Climate Law</a> <a href="#">European Green Deal</a> <a href="#">New Circular Economy Action Plan</a>
SDGs	<a href="#">SDG 2 – Zero Hunger</a> <a href="#">SDG 8 – Decent Work and Economic Growth</a> <a href="#">SDG 12 – Responsible Consumption and Production</a>
Admissibility conditions	The conditions are described in <a href="#">General Annex A for Section 1.</a>
Eligibility conditions	The conditions are described in <a href="#">General Annex B for Section 1.</a>
Financial and operational capacity and exclusion	The criteria are described in <a href="#">General Annex C for Section 1.</a>
Award criteria	The criteria are described in <a href="#">General Annex D for Section 1.</a>
Documents	The documents are described in <a href="#">General Annex E for Section 1.</a>
Procedure	The procedure is described in <a href="#">General Annex F for Section 1.</a>
Legal and financial set-up of the Grant Agreements	The rules are described in <a href="#">General Annex G for Section 1.</a>
Expected EU contribution per project	PRIMA estimates that an EU contribution of around <b>EUR 2.7 million</b> would allow these outcomes to be addressed appropriately. Nonetheless, this does not preclude submission and selection of a proposal requesting different amounts.
Indicative budget	The total indicative budget for the topic is <b>EUR 10.815 million</b>
Duration	PRIMA considers that proposals with a duration of <b>36 months</b> would allow these outcomes to be addressed appropriately. Nonetheless, this does not preclude submitting and selecting proposals with different durations.
Type of Action	Innovation Action (IA)

Technology Readiness levels (TRL)	Activities are expected to achieve <b>TRL 7-8</b> by the end of the project. Proposals should clearly state the starting and end TRLs of the key technology or technologies targeted in the project. Applicants are encouraged to use the <a href="#">TRL self-assessment tool</a> to accurately determine the <a href="#">Technology Readiness Level (TRL)</a> of their proposal.
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### **Expected Outcomes**

This topic supports the objectives of the [Vision for agriculture and Food](#) and the [New Circular Economy Action Plan](#) promoting the transition towards sustainable, resource-efficient, and circular agri-food systems. It contributes to Operational Objectives 4 – Smart and Sustainable Farming and 7 – Reduce Losses and Wastes in PRIMA SRIA.

The topic promotes circular feed systems, low-input livestock farming, and the integration of agroecological practices, including through Living Lab approaches. These innovations should enable the valorisation of agri-food waste and biomass residues, reduce dependency on imported feedstocks, and lower the overall environmental footprint of feed production and use. In doing so, they contribute to climate change mitigation, resource efficiency, and the preservation of ecosystems.

Funded innovations are expected to reduce the environmental footprint, including methane emissions, associated with feed production and use, with a focus on resource-use efficiency, ecosystem co-benefits, and climate mitigation in line with the [Global Methane Pledge](#), the [EU Methane Strategy](#).

### **Project results are expected to contribute to all the following expected outcomes:**

- Reduced dependence on imported animal feeds through the development and adoption of regionally sourced alternatives feed by farmers, supported by demonstration activities, knowledge sharing, capacity building, and policy support
- Reducing overall environmental impact (including methane emissions) of feed production and use, with improved resource-use efficiency and enhanced ecosystem benefits, aligned with circular economy and sustainable agriculture principles
- Effective valorisation of food and agricultural waste, reducing organic waste and minimising the embedded loss of water, energy, and nutrients
- Improved animal health, welfare, and productivity through affordable, nutritionally balanced, and safe feed formulations

**Scope:** Livestock and aquaculture are key sectors where innovation in animal feed can reduce greenhouse gas (GHG) emissions, curb nutrient pollution, improve resource-use efficiency, and valorise food system waste. These priorities are aligned with the [European Green Deal](#), the [New Circular Economy Action Plan](#), and the Vision for Agriculture and Food, which call for a fundamental transformation of farming systems toward sustainability, resilience, and circularity. This transformation includes creating fair income opportunities for producers, rewarding ecosystem services, and encouraging the engagement of young innovators in agriculture.

In the Mediterranean region, the sustainability of livestock and inland aquaculture systems is increasingly challenged by the high environmental and economic costs of conventional feed supply chains—particularly those reliant on imported cereals and fishmeal. These dependencies contribute to biodiversity loss, GHG emissions, pollution, and the overexploitation of natural resources, while exposing farmers to global market volatility. At the same time, the underutilisation of regional agri-food by-products and biomass residues represents a missed opportunity to close nutrient loops, reduce organic waste, and foster circular, place-based food systems<sup>1</sup>.

The action aims to develop and validate sustainable, economically viable, and regionally adapted alternative feed solutions derived from locally available biomass, including agri-food waste streams. Proposed innovations should build on and advance existing knowledge and solutions from previous projects, including those supported under EU and PRIMA programmes, where relevant<sup>2</sup>.

Projects are expected to validate the proposed feed solutions in (near-)operational environments (TRL 6–7), demonstrating their technical performance, added environmental value, and competitiveness relative to conventional feed systems, with the objective of progressing toward higher TRLs and investment-readiness for deployment at farm and value-chain scale.

**Projects are expected to address at least three of the following activities:**

- Co-develop and optimise alternative feed formulations based on regionally available biomass legume crops and agri-food waste streams (e.g., processing residues, by-products, bakery waste), ensuring nutritional adequacy, digestibility, safety, environmentally sustainability, and compliance with relevant EU and national regulations.
- Test and validate the selected feed solutions in (near-)operational environments (TRL 6–7), including livestock and/or aquaculture demonstration sites and Living Labs<sup>3</sup>, to assess technical performance, practicality, and adaptability across different production systems.
- Assess the effects of the alternative feeds on animal health and welfare, productivity, and the quality and safety of animal-derived products, ensuring conformity with relevant regulatory standards.
- Conduct environmental and economic performance assessments, including: – Life Cycle Assessment (LCA) (e.g., carbon footprint, water use, land use, biodiversity impacts), – Cost–benefit and competitiveness analysis compared to conventional feed chains, – Evaluation of contributions to circularity and resource-use efficiency.
- Develop strategies for scalability and commercialisation, including business and financing models, integration into local feed value chains, investment-readiness assessments, and engagement with market actors and potential investors.

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<sup>1</sup> FAO (2021). The State of Food and Agriculture 2021: Making agrifood systems more resilient to shocks and stresses. Rome: FAO. <https://openknowledge.fao.org/server/api/core/bitstreams/e51e0ef0-4ece-428c-8227-ff6c51b06b16/content>

<sup>2</sup> In particular, synergies with ongoing and recent projects particularly in relation to circular feed systems, feed additives, and GHG emission mitigation in livestock production, such as the NUTRIFEED project, as well as with relevant Horizon Europe calls (e.g. HORIZON-CL6-2026-02-FARM2FORK-05 and HORIZON-CL6-2027-02-FARM2FORK-02), should be considered to enhance complementarity, avoid duplication, and maximise impact.

<sup>3</sup> PRIMA adopts the ENOLL Living Labs definition recognising them as dynamic, open innovation ecosystems where research and innovation are developed, tested, and validated in real-life settings rather than isolated laboratory environments. Through a systematic co-creation approach, Living Labs place citizens, end-users, and local stakeholders at the centre of the innovation process, ensuring that new solutions are not only technically sound and creative, but also relevant, context-appropriate, and grounded in real-world needs.

In line with the award criteria for Innovation Actions, proposals will be assessed on the credibility of their pathways to impact, including the meaningful involvement and role of SMEs and other innovation actors, as well as on the economic and financial viability of the proposed feed solutions. Applicants are therefore expected to demonstrate cost-effectiveness, competitiveness with conventional feed systems, and scalability, supported by appropriate business and financing models and, where relevant, engagement with value-chain actors or investors.

Proposals should adopt a Multi-Actor Approach (MAA)<sup>4</sup>, ensuring that all key actors—end users, practitioners, SMEs, technology providers, researchers, and competent authorities—are meaningfully involved throughout the entire project lifecycle. This includes the definition of needs, co-design of solutions, testing and validation in real contexts, interpretation of results, and formulation of recommendations. Living Labs<sup>5</sup> are encouraged ensuring their relevance to local socio-ecological contexts, and their feasibility under real operational conditions.

Proposals are expected to integrate relevant [Social Sciences and Humanities \(SSH\) disciplines](#) to analyse socio-economic drivers, governance arrangements, and behavioural factors influencing the development and adoption of sustainable alternative feed solutions. This includes assessing farm-level decision-making, value-chain incentives, market acceptance, and cultural perceptions linked to animal-derived products.

Projects should define and monitor relevant social and behavioural outcomes, including PRIMA KPI 6 (e.g., cooperative governance models, social innovations, behavioural change in feed and farming practices). The SSH contribution should be clearly reflected in the work plan and methodology, stakeholder engagement processes (e.g., cooperatives, farmers, SMEs, feed producers, consumers), and impact pathways, including business and policy uptake. To support anticipatory and responsible innovation, consortia may use the [Societal Readiness Thinking Tool \(Bernstein et al., \*Science & Engineering Ethics\*, 2022\)](#) to systematically address societal needs, ethical considerations, and adoption pathways throughout the project lifecycle.

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<sup>4</sup> The definition and specific requirements of the multi-actor approach as applied in PRIMA can be found in the Introduction of the Horizon Europe Work Programme (2025) - Cluster 6 (pages 14-16).

<sup>5</sup> PRIMA adopts the ENOLL Living Labs definition recognising them as dynamic, open innovation ecosystems where research and innovation are developed, tested, and validated in real-life settings rather than isolated laboratory environments. Through a systematic co-creation approach, Living Labs place citizens, end-users, and local stakeholders at the centre of the innovation process, ensuring that new solutions are not only technically sound and creative, but also relevant, context-appropriate, and grounded in real-world needs.