ACADEMY OF FINLAND

Application review form

Key Areas of Green and Digital Transition 2021

Panel/Name of reviewer:
Name of applicant:
Title of proposed project:

Application number:

Application review form: Key Areas of Green and Digital Transition 2021

The Key Areas of Green and Digital Transition funding is targeted at research promoting green and digital 'twin' transition by advancing carbon neutrality and adaptation to climate change, and digital technologies. The goal is to strengthen existing competence clusters (such as Finnish research flagships) in this thematic area but also to promote competence development outside the clusters. Competence clusters are characterised by strong research expertise and impact generation, and active collaborations with partners utilising research outputs and with other actors. Projects to be funded must comply with the 'Do No Significant Harm' principle, according to which the projects must not cause significant harm during or after the project to the environmental objectives defined in the EU Taxonomy Regulation.

Please provide both written feedback and numerical ratings to each of the following items. Write evaluative rather than descriptive comments.

- Bullet text refers to technical instructions for the online services (SARA).

Rating scale in the pre-review (before the panel meeting) and the final review (in the panel meeting). The consistency between the numerical rating and the written comments is particularly important.

Draft rate	Description	Final rate
6 (outstanding)	Demonstrates extremely high novelty and/or innovation; has potential to substantially advance science at global level; presents a high-gain plan that may include risks	6 (outstanding)

5 (excellent)	Is very good in international comparison – contains no significant elements to be improved	5 (excellent)
4 (good)	Is in general sound but contains some elements that should be improved	4 (good)
3 (fair)	Is in general sound but contains important elements that should be improved	1–3 (fair to insufficient)
2 (poor)	Contains flaws; is in need of substantial modification or improvement	
1 (insufficient)	Contains severe flaws that are intrinsic to the proposed project or the application	

1 Project's relevance to programme/call

1.1 Project's relevance to programme/call **Sub-rating (1–6)**

Contribution of the application to achieving the objectives of the programme/call: The Key Areas of Green and Digital Transition funding is targeted at research promoting green and digital 'twin' transition by advancing carbon neutrality and adaptation to climate change, and digital technologies. The goal is to strengthen existing competence clusters (such as Finnish research flagships) in this thematic area but also to promote competence development outside the clusters. Competence clusters are characterised by strong research expertise and impact generation, and active collaborations with partners utilising research outputs and with other actors.

- See all items of the research plan and special item **1.4 Special objective of call** in the research plan.
- See all items of the research plan and special item **5.1 Effects and impact beyond academia**.

2 Quality of research described in the plan

2.1 Scientific quality, novelty and innovativeness of research **Sub-rating (1–6)**

Significance of project; objectives and hypotheses; ambitiousness and state of the art of objectives (possible novel concepts and approaches or development across disciplines);

scientific impact of research; potential for breakthroughs or exceptionally significant outcomes; etc.

- See item **1 Aim and objectives** in the research plan.

2.2 Implementation of research plan **Sub-rating (1–6)**

Feasibility of project (bearing in mind extent to which the proposed research may include high risks); materials, research data and methods; human resources and management of research tasks; research environment or competence cluster(s) including research infrastructures; tasks for strengthening competence cluster(s) and/or for promoting competence development outside the cluster(s); identified potential scientific or methodological problem areas and mitigation plan; etc.

- See item **2 Implementation** in the research plan.

2.2.1 Research consortium **(no numerical rating)**

Significance and added value of consortium for attainment of research objectives

- See item **2.4 Added value of consortium** in the research plan.
- A consortium is a fixed-term body of subprojects under a joint research plan that it implements together with a view to achieving more extensive added value than through normal cooperation. Each consortium subproject applies for funding to implement the plan as part of the joint consortium application, but a consortium application is reviewed as a single research plan.

3 Competence of applicants, quality of collaboration

3.1 Competence of applicants and complementary expertise of applicants' research teams (project personnel)

Sub-rating (1–6)

Merits and scientific expertise of applicants in terms of project implementation; complementary expertise of applicants' research teams (i.e. project personnel directly working/funded for the

project); competence of applicants in terms of supervising PhD candidates or postdoctoral researchers; support for researcher training within project; etc.

- See item **3.1 Project personnel and their project-relevant key merits** in the research plan.
- See **most relevant publications and other key outputs** in the application form**.**
- See **CVs** of the applicants in the application form.
- See complete **lists of publications.**

Competence of all principal investigators of the consortium should be reviewed.

3.2 Significance of collaboration and mobility **Sub-rating (1–6)**

Significance of national and/or international collaboration (i.e. collaborators engaged in the project with their own funding) including complementary expertise and environment of collaborators in terms of project implementation; significance of collaborations in terms of strengthening existing competence cluster(s) and/or promoting competence development outside the cluster(s); significance of planned mobility for implementation of research plan and researcher training; etc.

- See item **3.2 Collaborators and their project-relevant key merits** in the research plan.
- See **mobility** in the application form.
- See attached **Letter(s) of collaboration.**

4 Responsible science

4.1 Has the applicant considered the following aspects of responsible science properly in the application? Please provide further comments if responsible science has not been properly considered.

- See item **4 Responsible science** in the research plan.
- The Academy of Finland is committed to promoting research integrity, responsible conduct of research and the principles and practice of equality and nondiscrimination and open science. See ‘Instructions for reviewing’ for further information.

4.1.1 Research ethics

- ☐ Yes (no comment needed)
- ☐ No, please comment

4.1.2 Promotion of equality and nondiscrimination within project or in society at large

- ☐ Yes (no comment needed)
- ☐ No, please comment

4.1.3 Open access to research publications

- ☐ Yes (no comment needed)
- ☐ No, please comment

4.1.4 Data management and open access to data

- ☐ Yes (no comment needed)
- ☐ No, please comment

4.2 Comment on principles of sustainable development

You are encouraged to comment on the principles of sustainable development (see item 4.4 in the research plan).

- Please note that comments on principles of sustainable development should not affect the scientific review/rating or ranking of the application. Instead, they will be considered as an additional factor when the funding decisions are made.

5 Overall assessment and rating

5.1 Main strengths and weaknesses of project (no numerical rating)

Please list major strengths and weaknesses of the application as well as any additional comments.

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- Please give an overall assessment for the application including lists of strengths and weaknesses as well as any additional comments. It is important to comment on both the strengths and the weaknesses of the application.

Strengths:

Weaknesses:

Comments:

6 Overall rating	**Rating (1–6)**

- Please note that the final rating should not be a mathematical average of the sub-ratings. For example, the application should not be penalised if it has a slight weakness in one evaluation item that is later strengthened in another item (e.g. lack of some expertise in a local team but compensated through international collaboration).

Ranking based on the panel discussion (the ranking is made during the panel meeting)

Your application was ranked [ordinal number] of all [number] [Funding instrument name] applications reviewed in this panel. Only strongest applications were ranked. The [Funding instrument name] applications addressed to the Academy's General Subcommittee were reviewed in a total of [number] panels.