Sustainability evaluation of research policy initiatives for innovation – the case of KTH live-in labs

KTH Live in Lab is a construction industry innovation testbed project. The physical core of the testbed KTH Live-in Lab is currently under construction on the KTH Campus. The central aim of the project is to shorten lead times between conclusive research results and market introduction for innovative technologies and thereby contribute to achieving the vision of sustainable and resource-efficient buildings, see also the project webpage. In order to evaluate the extent to which the KTH live in lab project contributes to achieving its sustainability related goals, it is important to establish what specific sustainability aspects are important in the context of the project. So doing will contribute to understanding whether and how a testbed such as this can actually contribute to increasing resource efficiency, reducing environmental impacts and other benefits in relation to society's transition to sustainability.

The aim of this thesis project is therefore to propose a model for evaluating sustainability-related benefits associated with products, services and concepts developed as part of the testbed, as well as the testbed concept as a whole. The model should be able to consider the entire ten year lifespan of the KTH Live-in Lab project. The thesis project potentially involves:

- Review of other models for assessing sustainability/environmental aspects of innovations, test-beds and other projects focusing innovation, such as eco-cities, etc.
- Systematic selection of environmental/sustainability aspects to be evaluated by the model
- Proposing methods for assessing these aspects
- Proposing a procedure for how to perform recurrent evaluation within the KTH Live-in Lab

The thesis project offers an interesting possibility to critically assess current innovation policies from a broad sustainability perspective and make recommendations for future policy development through the lens of the case of KTH Live-in Lab.

Beyond the contribution that the work will make in the evaluation of the KTH live-in lab itself, the project will prepare a student for working life in particular in strategic sustainability management of organizations and projects in more general terms.

The project is intended for a student in the final year of a Masters' degree with an evident commitment to sustainability. Beyond this, the student may come from a wide variety of backgrounds, for example studying KTH's five year Masters' program in Energy and Environment, or any other programs with a strong focus on sustainability.

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