Annex 1: Description of the Pilot Plant / Ecological Effect

*The following supplementary information must be uploaded in the eCall system as an attachment* ***only in the case of application for additional environmental funding from KPC*** *(UFI – Umweltförderung Inland)!*

For flagship projects or cooperative projects for experimental development that are conducted within the framework of the Climate and Energy Fund, the investment costs for pilot plants relevant to the environment may be funded. A prerequisite for this funding is its effect on the environment (a reduction of energy consumption, an innovative use of renewable energy, a reduction of noise, waste or air emissions). A detailed technical description of the pilot plant is required, including a labelled plant diagram and floor plans. This description must make evident the source of the effect on the environment in addition to quantifying the environmental effect. It is also necessary to describe the feasibility and market potential of the project.

**Technical Description of the Pilot Plant**

Please present a detailed technical description of the pilot plant, including a labelled plant diagram and floor plans. This description must make evident the source of the afore mentioned environmental effect.

Please illustrate the innovative character of the pilot plant. To what extent does the technology of the pilot plant exceed standard technologies? Can it be used to test new technologies? Will it lead to the implementation of new or improved technologies?

**Ecological Effects**

**Potential reduction of greenhouse gas emissions**

Describe the environmental effect of the planned demonstration plant with regard to the prevention, mitigation and reduction of greenhouse gases, e.g. through the reduction or replacement of fossil fuels. This should include a clear presentation and quantitative prognosis of the effect on the environment according to the flow of energy and materials in comparison to the current situation or to a reference scenario, which provides the same services with conventional technologies. It is necessary to quantify the amount of the expected reduction. (For example: A comparison of the energy consumption split up between the various energy sources in MWh per year before and after the implementation of the pilot plant.)

**Potential for prevention or reduction of atmospheric pollution, noise or hazardous wastes**

Describe the environmental effect of the planned demonstration plant with regard to the prevention and reduction of atmospheric pollutants, noise or hazardous wastes. This should include a clear presentation and quantitative prognosis of the effect on the environment according to the flow of energy and materials in comparison to the current situation or to a reference scenario, which provides the same services with conventional technologies. It is necessary to quantify the environmental effect.

**Calculation of profitability**

Please prepare a calculation of profitability that includes a presentation of operative costs and profit of the pilot plant compared to the current situation or a reference plant.

**Feasibility and Market Potential**

Please present the feasibility and the market potential of the pilot plant.

**Cost Plan**

Please provide the cost plan for the planned infrastructure. Use the template on the website and upload the cost plan as .xls-file.