Real-LIFE Emissions

Combustion and Emissions Measurement at Residential Wood Combustion Simulator

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LIFE Programme

- The project has received funding from the LIFE Programme under grant agreement n° LIFE 20/PRE/FI/00006. LIFE is the EU's funding instrument for the environment and climate action established on May 1992. LIFE is celebrating its 30th anniversary on 21 May, 2022
- Thematic areas of the LIFE programme are Nature and Biodiversity, Circular Economy and Quality of Life, Climate Change Mitigation and Adaptation and Clean Energy Transition
- Current Funding period: 2021-2027

LIFE Preparatory Project 2020 (2021-2024)

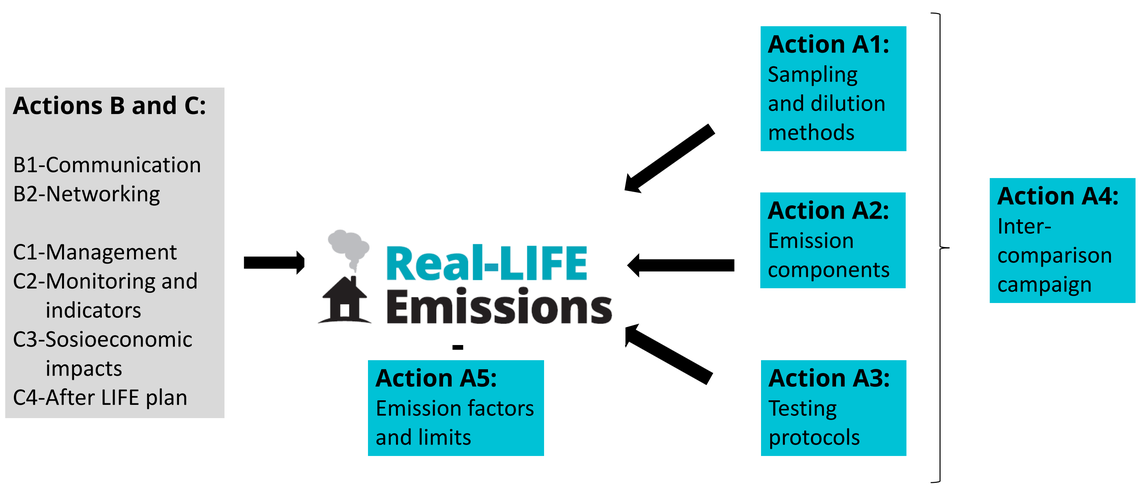
Title: Harmonizing reliable test procedures representing Real-LIFE air pollution from solid fuel heating appliances (Real-LIFE emissions)

Project partners: University of Eastern Finland (UEF) – Main project beneficiary, Technical University in Ostrava (VSB), Institut national de l'environnement industriel et des Risques (INERIS), Technology and Support Centre in the Centre of Excellence for Renewable Resources (TFZ)

Project Objectives:

- To produce a plan on the development and execution of the testing procedures reflecting real-life emissions
- To investigate and provide technical recommendations on the measurements of the most relevant RWC emissions based on adverse effects on health and environment
- To support the work done in the working groups of e.g., CEN, Ecodesign and UNECE, and to ensure that their visions will be also heard in the execution of the project
- To evaluate the scientific gains on using realistic emission factors in environmental impact studies
- To develop and justify suggestions for emission factors considering the various fuels, pollutants, stove types, age groups and measurement standards
- To disseminate new and existing knowledge to the relevant stakeholders
- To involve stakeholders to promote better governance and improve knowledge and awareness

Overview of the actions of the Real-LIFE Project



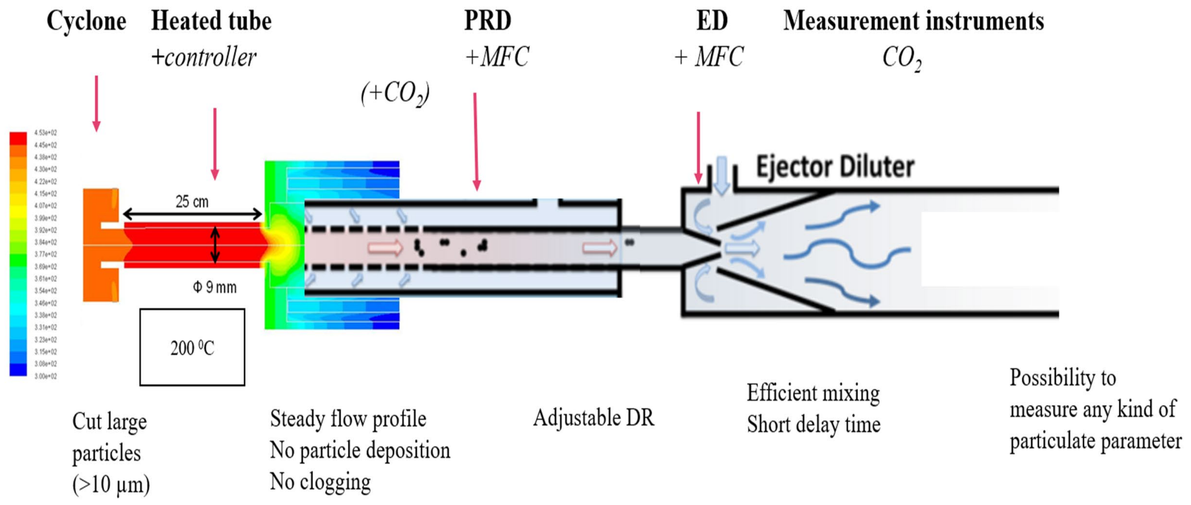
Expected Results of the Project

- Suggestions for the emission components that should be measured in emission testing, based on their feasibility and impact on environment, human health, and analysis cost
- Suggestion of the test protocol to be used in future emission testing of solid fuel appliances
- Suggestion of the revised emission factors, possible emission limits and applicable conversion factors

Residential Wood Combustion Simulator (SIMO)

- A unique concept to study real life emissions, energy efficiency and operation of small-scale combustion appliances
- The containers are equipped with the ventilation system corresponding to the ventilation of a detached house, as well as versatile, extensive, and scientifically valid measurement and sampling equipment
- The Simulator accelarates the development of stoves and promotes the use of wood as renewable energy source by controlling emissions
- Research and educational activities are carried out in this multi-purpose facility, and the simulator has also been exhibited at various events for the general public
- The simulator allows companies to test new ideas and gives support to different stages of product development
- The unit can be transported to manufacturer's premises or research institutes around the world
- The simulator was built with the support of European Regional Development Fund (ERDF), development and investment projects A72189 and A72192

Sampling and Dilution Technique at SIMO



Contact Information of the Project Beneficiary

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