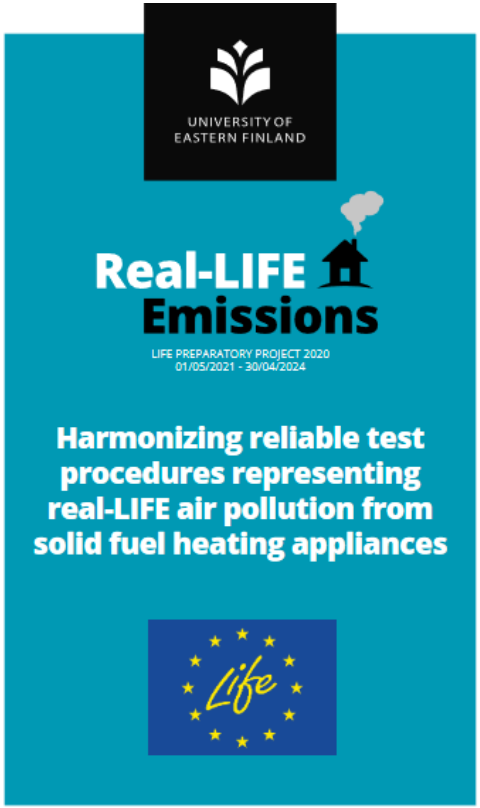
1st INTERNATIONAL REAL-LIFE EMISSIONS WORKSHOP ON SMALL-SCALE COMBUSTION:

The measurement methods and emission components for the solid fuel combustion appliances

Wednesday 9th November 2022, 08:00-15:50 (CET)



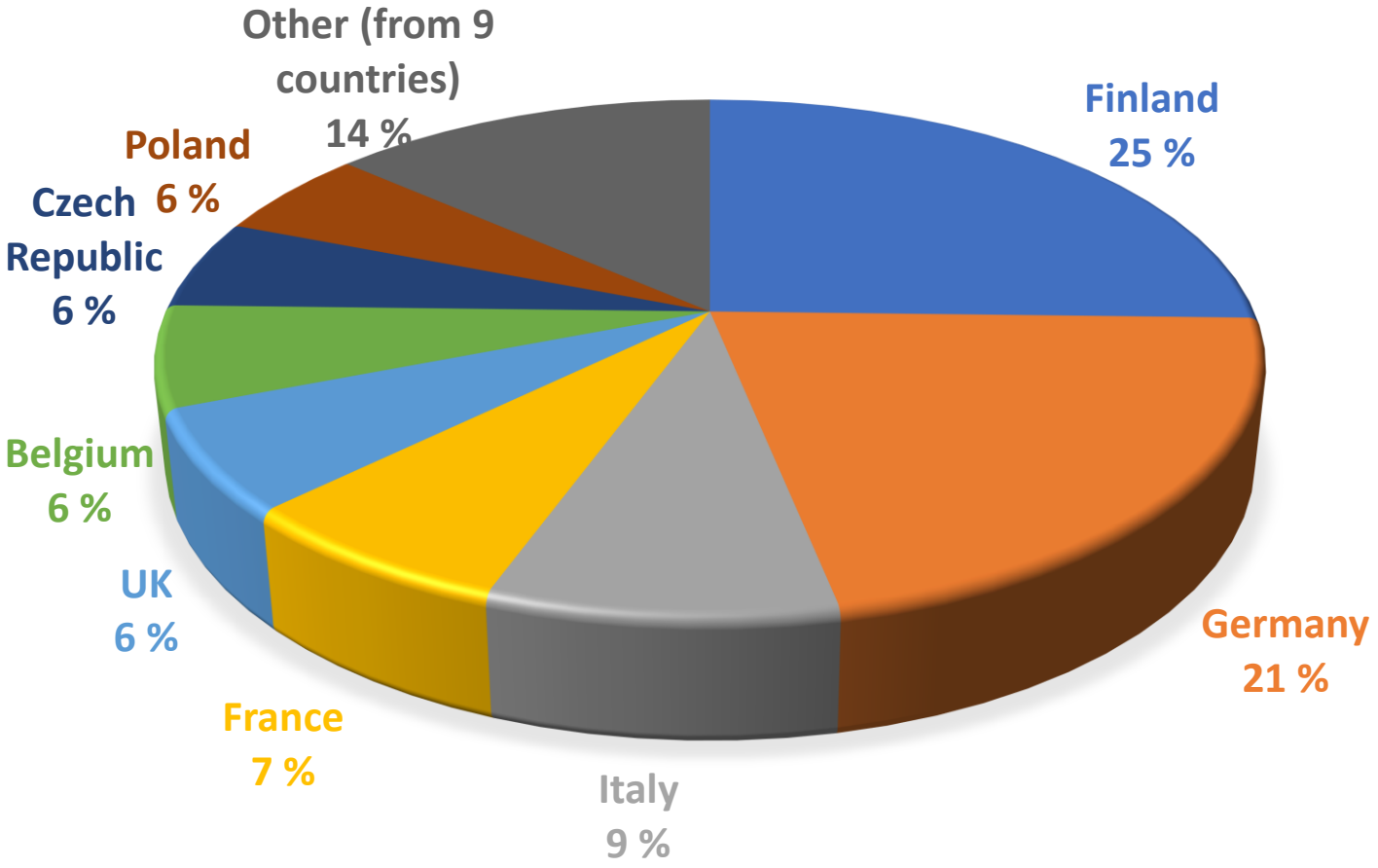
VSB TECHNICAL UNIVERSITY OF OSTRAVA | ENERGY AND ENVIRONMENTAL TECHNOLOGY CENTRE | ENERGY RESEARCH CENTRE

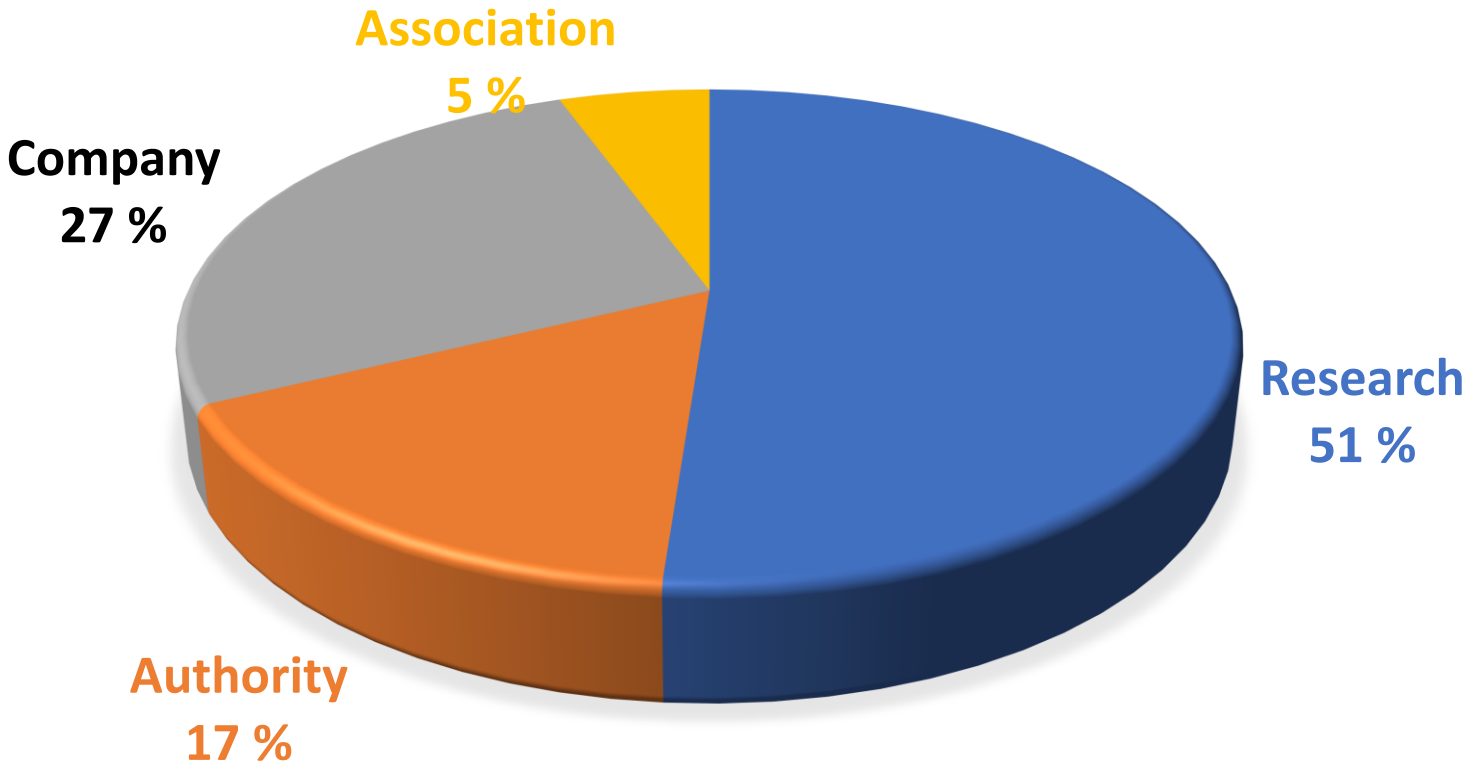
TFZ | RÉPUBLIQUE FRANÇAISE | INERIS

Sessions

- **First Session:** Evaluation of emission components to be measured (Chair Karna Dahal, UEF)
- **Second session:** Description of the applicable PM sampling and measurement methods (Chair Petr Kubesa, VSB)
- **Third session:** Outlook of other activities in Europe (Chair Hans Hartmann, TFZ)
- **Other activities:** Social event with Dinner and Smoke Sauna experience at Rauhalahti Spa Hotel
- More information about the project can be found on the website https://sites.uef.fi/real-life-emissions/

WS participants >130




Association
5 %
Company
27 %
Research
51 %
Authority
17 %

KUOPIO

- 8. largest city in Finland
- Population 122 000
- Population density, 37 /km^2
- 900 lakes, 6340 km coastlines

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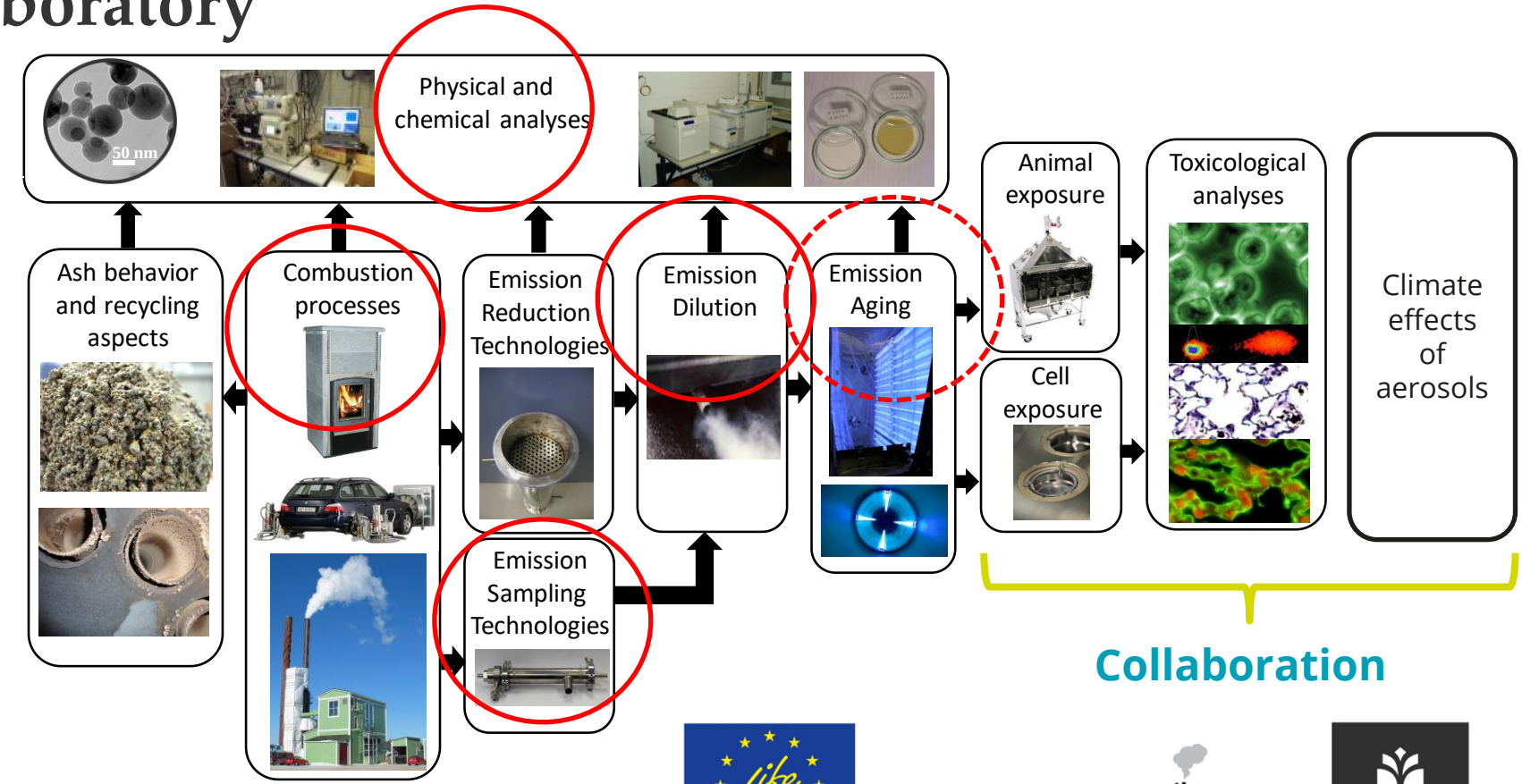
UEF

- >15 000 degree students, 2500 staff members, 100 major subjects
- Faculty of Science and Forestry
  - Department of Environmental and biological Sciences
    - **Fine particle and aerosol technology laboratory**
      - **Combustion TEAM**

Combustion aerosol research at the FINE-laboratory



Small-scale combustion simulator (SIMO)
~ 600 tests during 2018-2022

https://sites.uef.fi/fine/front-page/simo/

Real-LIFE Emissions

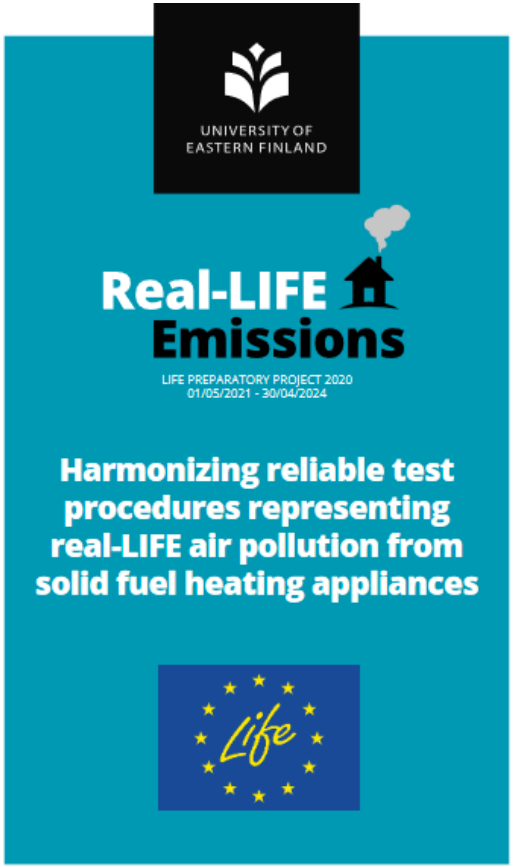
Harmonizing reliable test procedures representing real-LIFE air pollution from solid fuel heating appliances (Real-LIFE emissions)

LIFE Preparatory Project 2020

Support EU for testing procedures for air pollutants from solid fuel heating appliances

Partners

- University of Eastern Finland
- Technical University of Ostrava, Czech Republic
- INERIS, France
- TFZ Technology and Support Centre in the Centre of Excellence for Renewable Resources, Germany



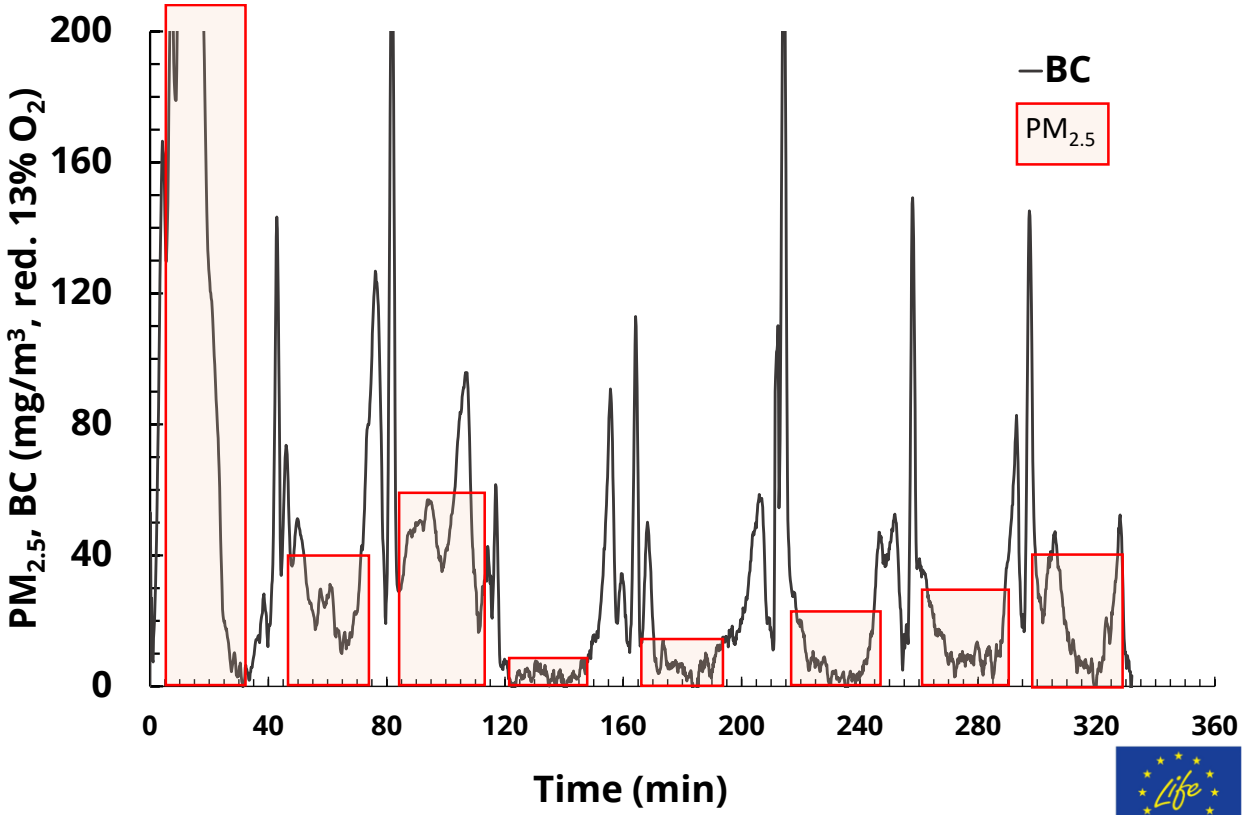
What are LIFE preparatory projects?

- LIFE is the European Programme for the Environment and Climate Action
- Preparatory projects address specific needs for the development and implementation of Union environmental or climate policy and legistlation.

- Call Topic: Support for testing procedures for air pollutants from solid fuel heating appliances

Key Problem: Testing and measurement methods

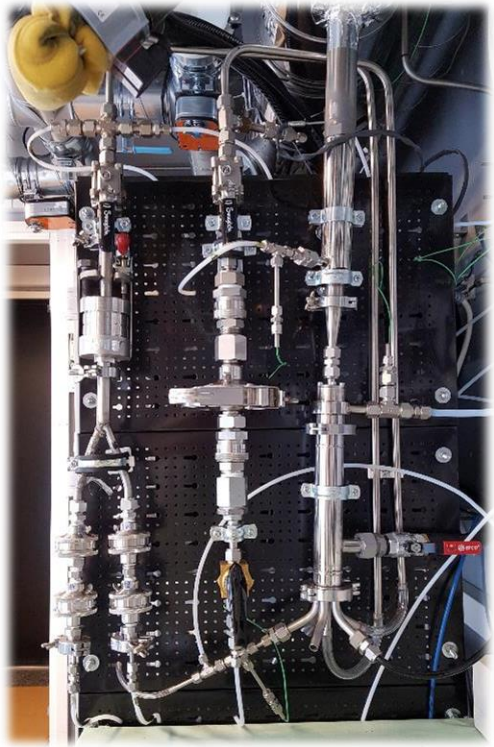
- A key problem in evaluating the real-life emission levels is that the testing protocols and measurement methods vary and are not possible realistic.



Project objectives

- **To produce a plan on the testing procedures, which better reflects quality and quantity of the real-life emissions from solid fuel heating appliances, as well as the adverse effects to human health and environment.**

- To support the work done in the working groups of e.g., CEN, Ecodesign and UNECE.
- **Fill in the gaps-of-knowledge**.
- Disseminate new and existing knowledge to the relevant stakeholders.



Actions B and C:
B1-Communication
B2-Networking

C1-Management
C2-Monitoring and indicators
C3-Sosioeconomic impacts
C4-After LIFE plan

Action A5: Emission factors and limits

Action A2: Emission components

Action A1: Sampling and dilution methods

Action A3: Testing protocols

Action A4: Inter-comparison campaign

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