



2017-IPR-C-000-8984

Technology for fuel combustion in residential sector

Position for:

Trainee

As the science and knowledge service of the Commission, the mission of Joint Research Centre is to support EU policies with independent evidence throughout the whole policy cycle.

The JRC is located in 5 Member States (Belgium, Germany, Italy, the Netherlands and Spain). Further information is available at: <http://www.jrc.ec.europa.eu>

Short description of activity:

The Air and Climate Unit (C5) of the Directorate for Energy, Transport and Climate offers a Trainee position to be involved in research activity related to air emissions. The Unit performs scientific research on the links between air pollution and climate changes to inform policy makers about potential synergies and trade-offs. In the framework of the “Macro-regions and regions of the future: mainstreaming sustainable regional and neighbourhood policy” (MARREF) project, the unit estimates emissions from residential sector in the EU Danube macro-region. These emissions are calculated by using the Emission Database for Global Atmospheric Research (EDGAR), which contains independent emission time series from 1970-2012 for all key sectors and subsectors considering the technologies and mitigation measures and grids these on 0.1x0.1 degree resolution.

The objective of this research activity is to increase the accuracy in emissions evaluation by compiling reliable information on the technology used for fuel combustion in residential sector and applying it in EDGAR.

It is foreseen that the trainee will assist in carrying out:

- A literature review on existing technologies used for fuel combustion in the residential sector, including their associated emission factors from field measurements in particular.

- A literature review on emerging technologies and information on their associated emission factors, including best

	<p>practices for reducing emissions from the residential sector.</p> <ul style="list-style-type: none"> - Setting-up a collection of technology sharing for each fuel type for countries in EU Danube macro-region and calculating emissions from the residential sector using EDGAR. - A final report including a comprehensive comparison and presentation of the results. <p>During this training, the trainee will receive guidance on how to perform a literature review and on how to prepare a summary of his/her scientific findings to be included in a publication.</p> <p><u>Qualifications:</u></p> <p><u>Essential:</u></p> <ul style="list-style-type: none"> • Master degree in physical science or engineering science focusing on air pollution and technology for fuel combustion in residential sector; • Good knowledge of English (level B2); <p><u>Advantage:</u> Knowledge of air emissions estimation for small combustion activities</p> <p><u>For general eligibility requirements, please read the rules governing the traineeship scheme of the JRC:</u></p> <p>https://ec.europa.eu/jrc/en/working-with-us/jobs/temporary-positions/jrc-trainees</p>
Institute/Directorate Unit	<p>Directorate for Energy, Transport and Climate C.5 – Air & Climate</p> <p>Further information: https://ec.europa.eu/jrc/en/research-topic/air-quality</p>
Indicative duration	5 months
Preferred starting date	As soon as possible
JRC Site	Ispra
Country	Italy
<u>JRC contact details</u>	<p>For any technical problems with your application, please contact: JRC-ESRA@ec.europa.eu</p>