

## Personal Carbon Footprint Calculator- Carbon Budget

### An empirical and modelling study

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Research group: Energy and resources

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### Project Description

**This research project aims to gather and analyse empirical data for building a model for calculating the Carbon footprint of individuals.** Individuals' activities, services and commodities (e.g., housing, transport, travelling, education, grocery, and clothes) are responsible for a considerable share of carbon emissions. As a final consumer to which the activities, services and commodities are directed, they could potentially reduce environmental footprints. Various studies and projects took place during the last years to measure and reduce such footprints by studying individuals' behaviour. However, as a potential approach and its applications on the final consumer behaviour, individual carbon footprint budgeting and assessment have not been extensively applied. In this regard, there is a need to gather data on individuals' activities, services and commodities and eventually develop strategies to reduce Carbon footprint. **This research aims to provide insights into individuals' behaviour (e.g., activities, services, commodities and the consumption categories, patterns and amounts) and to develop a model for measuring and reducing their Carbon footprint.** Therefore, the research involves collecting extensive detailed data on individuals' behaviour and consumption patterns, translating them into Carbon footprint, analysing and categorising the data, building a model (e.g., Excel file), and finally providing insights through individuals' Carbon budgeting. For all these steps, close supervision and guidance will be provided. **This project could bring insights for individuals and policy-makers finding solutions and strategies for reducing Carbon emissions.**

### Job Requirements

A highly motivated student with fluency in English and experience in (or willingness to learn) data collection (e.g. desk research and literature review) is a must. Experience performing research on related topics (e.g., carbon footprint, environmental impact assessment) is a plus. Knowledge and experience building such models (e.g., Excel) are highly appreciated.