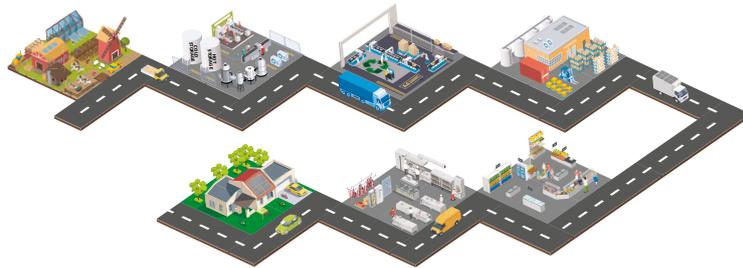




First reporting period completed

After the first 18 months of the project, we reported the project's activities and results to the European commission. The project was also presented and evaluated at a review meeting in Brussels in June. It was interesting to hear reviewers' feedback, and we had some good discussions. The project has been approved and we can keep up the good work. We are very excited as we head into the autumn and look forward to some interesting outcomes to share. Stay tuned!



WP1 Progress

In WP1, we aim to develop the database of emissions from the European food supply chain sectors. We are currently performing a robust baseline for 1990 with available data and a detailed baseline for 2019, also highlighting where data is missing and where datalogging needs to be improved. The main drivers of changes are identified and their impact on the future food chain is quantified. For each EU representative country, 20 sub-drivers (risks and wins) with the greatest impact are established. Top-down figures for 2019 are now completed for the UK and Italy. The drivers model performed by the University of Birmingham will be further implemented in the hybrid model for an accurate prediction of the future emissions. The model will be tested against Black Swan events to check chain sustainability and resilience.

The first results from the top-down (LSBU) model calculating scopes 1, 2 and 3 emissions for the UK food supply chain are shown in Figure 11. It can be seen that 60% of emissions are from scope 1, followed by scope 2 (24%) and scope 3 (16%). The carbon emissions of the different food supply chain sectors are shown in Figure 2. Transport (fuel consumption in refrigerated and non-refrigerated transport) accounts for the largest share of scope 1 emissions, quantified to 13MtCO_{2e}, and the retail sector is responsible for most of F-gas emissions. While the domestic sector is found to be the largest contributor to scope 2 emissions, packaging is the largest contributor to scope 3 emissions.

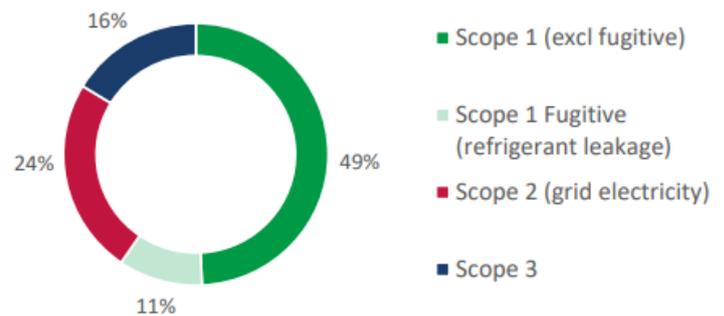


Figure 1. Emission sources

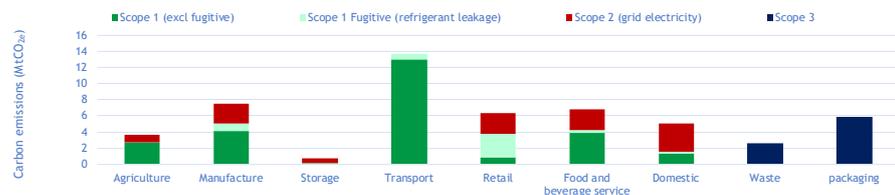


Figure 2. Carbon emissions of the different sectors

1. Foster et al. <https://doi.org/10.5281/zenodo.8119557>

About the demonstrators

We now have 18 ENOUGH demonstrators running, and 3 more have already been identified and are ready to start! The new ones are being used in retail, fish processing and the transversal topic of food waste management. Our demonstrators now cover the entire cold chain. The demonstration campaign is progressing; the results were disseminated at the 9th IIR Conference on Ammonia and CO₂ in Ohrid and at the 26th International Congress of Refrigeration in Paris. At the ENOUGH annual meeting in Padova in June, the partners actively brainstormed to identify ways of integrating demonstrators to fully represent a sustainable food chain and maximise the impact of the demonstration campaign. New activities are planned for the coming months! To find out more about the demonstrators, check out the Newsletters 2 and 3 and the demonstration sites.