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# Partners in grime

## How a council and a researcher built a climate change tool for the waste sector

In 2019, Cambridgeshire County Council identified that 93 per cent of its carbon emissions came from the goods and services it procured.

Its climate team promptly set a target to halve this by 2030. But they immediately uncovered an obstacle to their goal: there was no standard way of measuring emissions across all their suppliers and sectors.

Measuring and reducing carbon is a major, urgent and complex challenge for local authorities.

Of all the emissions within any council's remit, the 'scope 3 emissions' – those indirect emissions that occur in the upstream and downstream activities of an organisation – are toughest to tackle. Tough. But not impossible.

This is how one council and a researcher built a carbon-counting tool to drive down emissions from the waste sector across England.

### Innovative partnerships

Isabela Butnar is a Cambridgeshire resident. She is also a researcher who models greenhouse gas emissions at University College London (UCL).

While volunteering on climate projects in her area, Isabela crossed paths with Emily Bolton, a climate change officer working for Cambridgeshire County Council.

In summer 2020, they spotted an opportunity to work together properly.

The Net Zero Innovation Programme – funded by the LGA and delivery in collaboration with UCL – had an open call for councils wanting to form partnerships with university researchers to tackle local climate challenges.

Emily and Isabela signed up, with a bold aim to tackle all scope 3 emissions.

The partner team decided to create a carbon calculator, using Isabela's modelling expertise and applying it to Cambridgeshire County Council's data.

A few months into the programme, however, it became apparent that they would quickly run into opposition if they tried to include all sectors and suppliers at once. Instead, they decided to focus on one sector at a time.

"We had done a carbon footprint for the whole organisation," said Emily. "We already knew where the hotspots were: waste and highways construction."

There were several reasons that they, ultimately, chose to focus on waste.

First, they considered the need; unlike in the construction sector, no free tools existed for measuring emissions from the waste sector.

Second, they knew that, for a tool to actually be used, it would need to be developed with the sector.

Cambridgeshire councils' waste services are handled by a small number of suppliers, who are engaged through long-term contracts. They were prime candidates for a collaborative effort.

Over the following months, the partner team took many steps to create a well-informed and easy-to-use tool.

They mapped out the stakeholders who would use or be impacted by the tool and engaged with them. They created a project plan, agreed delivery timelines, and established a regular timeslot to work together.

They used mentoring sessions to hone their engagement skills and held meetings with their collaborators (the suppliers) to iteratively make improvements to the calculator.

By the summer of 2021, the partners had built and implemented a carbon calculator for scope 3 emissions from the waste sector in Cambridgeshire.

They then secured further funding and training in 2022 to scale up their tool and make

## "Measuring and reducing carbon is a major challenge"

it accessible for all local authorities in England.

In January 2023, having spent a year engaging with other councils, they launched the free-to-use tool on the Local Partnerships website, where it now lives.

The launch event was attended by 260 delegates and, by the end of March 2023, the tool had been downloaded by 60 local authorities.

### The ingredients for success

Projects such as the one undertaken by Cambridgeshire to build its emissions calculator are vulnerable to failure – up against the usual suspects: budget cuts, overstretched staff and competing priorities.

Yet this council-research partnership succeeded, and their example offers lessons for others eager to take on local climate challenges.

The team delivering the Net Zero Innovation Programme identified several ingredients in Cambridgeshire's recipe for success:

- **Personal commitment.** Neither party came with the 'I'm the expert' mentality – instead, they genuinely valued each other's knowledge.

They were both personally interested in climate change and took clear ownership of the project from the outset. They set aside a regular time to work together, and stuck to it.

- **Starting small(er).** The team recognised that, to achieve its grand ambitions, it would need to begin by focusing on one, carefully targeted sector. They chose an area with the potential for

big emissions savings, but where there were only a few suppliers to work with.

- **With the sector, for the sector.** By inviting suppliers to help develop the calculator, the project team avoided simply forcing a new tool upon end users. That step-by-step approach also gave the team multiple opportunities to identify improvements, and increased the likelihood that the tool would ultimately get used.

- **Engaging for scaling.** During their first year working together, the council and researcher built a functioning tool. But they continued working together for another year to engage other councils so they could develop, validate and scale the tool. They used the programme's mentoring support to design workshops to maximise engagement from other councils.

## A tool for tackling emissions

The waste emissions calculator helps local authorities understand the carbon emissions from their waste management and treatment operations.

This includes the transportation of waste, mechanical and biological treatment, composting, incineration, landfill and recycling.

The calculator can be used to estimate the current carbon footprint per contractor (where a local authority has several suppliers), per treatment process, or for the whole authority's waste services combined.

It also allows local authorities to investigate the potential carbon savings that can be achieved by using different treatment processes in the future.

The tool is free to use, and can be downloaded from the Local Partnerships website at [localpartnerships.org.uk/download\\_waste\\_emissions\\_calculator](https://localpartnerships.org.uk/download_waste_emissions_calculator).



**i** The Net Zero Innovation Programme is an initiative of the LGA and University College London's Climate Action Unit. It provides training to develop partnerships of researchers and climate change officers from councils, as well as mentoring and dedicated funding to deliver a project. Visit [www.local.gov.uk/net-zero-innovation-programme](https://www.local.gov.uk/net-zero-innovation-programme) or watch this YouTube video to find out more: [www.youtube.com/watch?v=drQZB-nQgDw](https://www.youtube.com/watch?v=drQZB-nQgDw)