



BY PIETER VAN DEN BRAND

Divine wines, heady cheeses and stylish cars. Just a random dip into the range of successful products promoted around the world by La Douce France. If waste companies S  ch  , Suez Environnement and Veolia have anything to do with it, there will soon be another export product to add to the list: the EpE protocol. The letters stand for *Enterprises pour l'Environnement*, an association of about forty big French companies, including Air France, Michelin and Renault, which have joined forces to tackle climate change. The three waste companies in the association have formed a sub-group to develop the EpE protocol, which is designed to allow waste companies to calculate their CO₂ balance. Officially backed by the French waste industry association FNADE, the EpE protocol is used by the whole French waste sector and is gaining a reputation in Europe. It is by example catching on in England and seven members of the British waste association ESA have already used it in the preparation of their own carbon reporting.

Gary Crawford, vice president of Veolia's Greenhouse Gas Department, is one of the initiators of the EpE protocol. At the end of October he visited the Netherlands to attend a workshop with representatives from the Dutch waste sector. 'Awareness is increasing,' he says. 'Waste companies realise that it is important to explain to the outside world – clients, government, the environmental movement and the public – what their carbon footprint is.'

Meanwhile the number of reporting obligations is increasing, an example being the European Regulation on Pollutant Release and Transfer Registers (E-PRTR), and the European Commission harbours lofty ambitions for reducing CO₂ emissions. A study by the German research consultants Prognos, which was published last year,

Afvalbedrijven zijn zich steeds meer bewust dat het belangrijk is de buitenwacht – klanten, overheid, milieu-beweging en burgers – uit te leggen wat de carbon footprint van de onderneming is (foto: iStockphoto)
Waste companies are increasingly aware of the importance of explaining to the outside world – clients, government, the environmental movement and the public – what their carbon footprint is (photo: iStockphoto)

EPE PROTOCOL: A STANDARD FOR CARBON ACCOUNTING

A single yardstick for greenhouse gas emissions

The EpE protocol, developed in France, enables waste companies to quantify, audit and report their greenhouse gas emissions in a transparent and consistent manner. The popularity of the carbon accounting standard is growing, both in the Netherlands and elsewhere, but there are still opportunities to improve the protocol. 'This is a living tool.'

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shows that the European waste sector could make a significant contribution to this reduction, delivering at least a fifth of the Commission's reduction target of about 780 million tonnes of CO₂ in 2020. Crawford knows that these developments make a transparent, reliable and consistent 'greenhouse gas yardstick' essential.

At Veolia the American leads a team that calculates and reports on the worldwide greenhouse gas emissions of the company. 'We came across many different carbon calculation methods and models, which explains our attempts to harmonise the various efforts by drawing up a protocol for the quantification of greenhouse gas emissions.' The French waste industry is putting the EpE protocol forward as an international standard. Crawford believes it is important that the whole European waste sector adopts the standard. Local authorities that collect waste and companies that take care of their own waste management also belong to the target group.

CARBON INVENTORY

The EpE protocol covers the whole chain, from collection to all treatment activities, from recycling and incineration to composting and anaerobic digestion. The greenhouse gas emissions from each of these activities are calculated. All types of emissions are covered: direct emissions (such as emissions from refuse collection vehicles and combustion chambers, and methane emissions from landfills), indirect emissions (such as the procurement of diesel and electricity, which also have a carbon 'cost') and avoided emissions from recycling, landfill gas recovery, waste-to-energy and other recovery operations. The carbon accounting can be done using the Excel spreadsheet programme.

'The method is transparent and simple,' says Jan Manders, who reviewed the EpE protocol for the Dutch Waste Management Association. The former director of AVR Afvalwerking sees plenty of opportunities

At the moment there are numerous methods available in the Netherlands for indicating corporate carbon performance, but no one system offers a standard protocol for accounting and reporting.

The EpE protocol fills this need. The Dutch Renewable Energy Monitoring Protocol (*Protocol Monitoring Duurzame Energie*), which provides annual overviews of renewable energy sources in the Netherlands, does not put much emphasis on greenhouse gas reduction, neither does it give any attention to waste collection. The Institute of Environmental Sciences at Leiden University regularly analyses the different waste treatment routes. This LCA bible is an excellent reference work, but it is not suitable for corporate carbon accounting and reporting.

SenterNovem's CO₂ tool gives indices for the recovery and reuse of waste streams, but only provides a calculation method to determine the CO₂ emissions avoided by using recycled waste streams. This instrument covers just a small part of the total CO₂ puzzle. In addition, the avoided emissions factors used in the tool are extremely high compared with other European scores in the area of materials recycling. It is unwise to make too optimistic a case, says waste expert Jan Manders. He argues that a uniform standard like the EpE protocol will increase the credibility of carbon performance data, and that is needed precisely because of the large differences across Europe.

for optimising the protocol.

'The main focus is currently on landfill and incineration and there are too few specific provisions for detailed reporting on recycling, anaerobic digestion and composting. The protocol therefore gives an incomplete picture.' Manders expects that the Netherlands, as a specialist in these forms of treatment, can provide much information for improving the protocol. The Netherlands has a scientifically sound CO₂ tool that registers the performance of anaerobic digestion and composting.

According to Freek van Eijk, strategy and public affairs director at SITA Nederland, 'the EpE tool is the best available carbon accounting tool on the market. It is entirely logical that if the market develops and the EpE mechanism receives international support, the tool will be refined. Recycling is rapidly gaining ground in Europe, driven by both market forces and legislation. Mechanical biological treatment methods will also be increasingly taken up. The protocol should be developed to take these better into account.' Moreover, van Eijk thinks that the sector will not only have to look to its own carbon accounting and carbon footprint, but also take the carbon footprints of its clients into account. 'It's all about making environmental improvements throughout the whole chain. Waste management is the catalyst for integrated lifecycle management.'

A LIVING TOOL

Crawford is the last person to claim that the protocol is complete. 'This is a living tool. We will be continually refining it. Criticism is welcome. To make the protocol a success it is essential that information

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is shared across the whole sector.' He describes the response to the EpE protocol from the Netherlands as 'positive and well considered. There is clearly considerable interest in the standard. Companies are interested in harmonisation in order to get reliable and transparent data.' The EpE organisation is receptive to the idea of integrating Dutch CO₂ models into the protocol, 'definitely if they are scientifically sound and widely accepted,' says Crawford. In the meantime, the carbon accounting software has been expanded to include special sheets for processes such as anaerobic digestion, composting and solid recovered fuel (SRF).

Manders calls on the Dutch waste sector to embrace the EpE protocol. Last year an LCA study by CEWEP, which surveyed a large number of waste incinerator operators, revealed that the waste-to-energy plants in Europe make a net CO₂ saving. The CO₂ savings made by generating energy and heat and recovering metals turns out to be somewhat more than the total fossil CO₂ emissions from incinerating the waste. 'The contribution made by the waste sector to greenhouse gas reductions is exceptionally large. Why would you not bother to publicise this fact? You can use the EpE protocol to clearly demonstrate the carbon performance of a country, including the Netherlands. After all, the idea is to let people know how well you are doing.' ☺