

# Better, smarter waste collection

*An uplifting new technology...*

**G**ood waste management has a number of obvious environmental benefits, including better sanitation, reduced pollution, sustainable use of resources and less space wasted on landfills. Perhaps less well-known is that waste management is also a climate issue, as waste is typically the source of 3-5% of greenhouse gas emissions. With climate change moving up the policy agenda as international negotiations progress on more stringent emissions cuts, pressure for action to minimise emissions from waste will only increase. This requires more sophisticated systems to collect and treat waste, based on the best information possible.

Who should pay for such actions? It is by now a well established principle that polluters should pay for the cost they induce. This is not only fair, but gives polluters an incentive to reduce pollution and pay less. In the case of waste, the polluters are not a handful of big industries, but individual households and businesses, and it is not easy to establish an effective system to assess the fair share of each actor.

Bearing this in mind, the Iceland-based company Ecoprocess has developed a new generation of bin lift systems for waste management and related products for quantification, data collection and management of waste streams. The lifts are electric, not hydraulic, and introduce revolutionary changes in the way garbage is collected. The technology is robust, and meets the challenges that are

coming from structural changes in waste collection, driven by the EU.

For many, the mundane task of garbage collection has little to do with innovation and progressive green technology, even within the confines of the waste management industry. Indeed, most of the waste collection vehicles on the streets today have remained little changed for a long time. Collection, however, is a crucial part of effective waste management. What needs to be collected is not only garbage, but data on waste streams. If you can't measure it, you can't manage it, goes the saying, and waste is no exception.

So, the humble task of collecting dustbins is ripe for a technological upgrade. The vacuum in this field has drawn Ecoprocess to develop a revolutionary electric bin lift. Among the key attributes of the Ecoprocess lift systems are: substantial reduction in fuel consumption and CO<sub>2</sub> emissions, and increased productivity in waste collection, along with greatly improved workers safety and reduction in noise levels. The lift systems also provide data collection allowing for real-time management of operations. They are designed to meet the needs of the municipalities with an agenda to reduce the volume of waste, increase recycling, reduce cost, improve worker safety, reduce pollution and improve their image.

Most municipalities are feeling the pressure of regulation and public opinion. Local councils in developed countries are sensing that their duties of collecting and disposing of domestic waste are presenting all of them with serious challenges. Household waste is growing at a rate



of 3% each year, faster than the growth in the economy as a whole. On average, every person in the UK now produces about seven times their own weight in waste a year. Around 20% of the food we buy of supermarket shelves goes straight to the bin. At the moment, most of this waste is buried in landfill sites, which are in effect just big holes in the ground. That can't last. Waste sites are filling up and getting more expensive. The landfill tax is increasing by £8 per tonne per year. In some areas, we are simply running out of space. On top of that, the amount of biodegradable waste permitted to be landfilled is reducing rapidly, with those who exceed their allowances being threatened with severe fines.



As for climate concerns, landfills are responsible for about a quarter of our emissions of methane, a major greenhouse gas, 25 times more harmful than carbon dioxide. But the most important reason for changing direction is that the current position is, quite literally, wasteful. Half of the waste we generate could be re-used and recycled, and transformed from a problem into an asset. At current rates of growth the amount of household rubbish will double by 2020, and cost £3.2bn per year to dispose of. That would mean spending an extra £1.6bn a year on waste management.

There has also been a big change in public attitudes to waste and recycling. The Pay-As-You-Throw (PAYT) principle is rapidly gaining in the EU and the US. The objective is to create awareness and economic incentives to reduce total waste generation and increase recycling. Weighing waste at source has proved to be instrumental in achieving these goals. One example is from York County in Ireland where the total amount of waste to landfill fell by roughly 50% - with the introduction of a pay by weigh scheme in 2003.

The UK government is now to pilot up to five PAYT rubbish collection schemes under powers in the Climate Change Bill. To ensure the trials encourage people to recycle more by charging to collect waste, it is clear that they have to have the right

equipment so that people believe that they are paying for the right amount of waste. Ecoprocess offers a PAYT weighing system along with the electric bin lifts by request.

New electric bin lifts with the possibility of a weighing system have been introduced to some

local authorities here in Britain. They help reduce the oil cost and emission from the collection trucks, and by weighing waste from households, they set up the preconditions for an effective PAYT-based system to reduce volume of organic and other greenhouse gas producing waste.

#### About Ecoprocess

Main customers:

- World leading International Waste Management Operators: Sita, Veolia, and leading national operators, Coved
- Municipalities France: Paris, Lyon, Nantes, Toulouse, Bordeaux
- Municipalities UK: London/ Greenwich, Hull, Pool, Redditch
- Others: Reykjavík, Barcelona

Contracts: Ecoprocess is a contractual 'preferred supplier' to world leading international waste management operators:

- Véolia Environnement (ONYX)
- Suez Environment (Sita)
- Saur (Coved)

Co-operation: All the leading manufacturers of refuse collection vehicles in Europe:

- Ros Roca (Pan European)
- Semat (France)

Number of staff: Over 40 in Iceland, UK and France

Mission: Is to specialise in the design, production and sales of optimised equipment and data systems for the waste management industry. The Ecoprocess philosophy is to combine intelligence and ergonomic design to provide solutions that support sustainable growth and improve workers safety.

Vision: Is to be the leader in bin lifts, weighing equipment and information systems for waste management. We will lead the industry in profitability and growth for the benefit of our customers, stockholders, employees and the community through quality, innovation and continuous improvement.

Market advantage: The first and only producer of electric bin lifts. All other bin lifts on the market are hydraulic powered.



Scott Young  
Sales Manager

Ecoprocess UK  
3 Avery Way  
Questor Business Park  
Hawley Road  
Dartford  
Kent DA1 1JZ

Tel: +44 (0)1322 228349  
Fax: +44 (0)1322 228352

scott@ecoprocess.com  
infouk@ecoprocess.com

Johannes V Gunnarsson  
Business Development

Ecoprocess hf. Iceland  
Sudurlandsbraut 46  
108 Reykjavik  
Iceland

Tel. +354 5 124 354

johannes@ecoprocess.com  
www.ecoprocess.com