

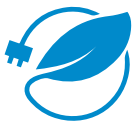
A man in an orange safety vest and cap is operating a green machine. He is looking towards the camera with a slight smile. The background is slightly blurred, showing another worker in similar attire.

# 5 waste management trends and how to take advantage of them

Digitally linked pumps, waste containers with sensors, autonomous road sweepers. Bright thinkers continue to come up with new waste management innovations. DLL, a global financial solutions provider and 100% daughter of Rabobank, has collected the top 5 waste management trends to watch. We are exploring innovative financing opportunities to help waste management companies and municipalities benefit from these new technologies



“At DLL, we closely watch trends in waste management and other industries, because we actively support new, sustainable business practices and technologies that marry profitability with environmental and social benefits,” says Michiel van Ramesdonk, VP Fleet Solutions at DLL. “We see that many new waste management innovations are out of reach for companies and municipalities because of the higher investment and longer payback period involved. In this article, our DLL experts in waste management and recycling share their experiences in helping customers finance new technologies that drive efficiency and ultimately reduce their total cost of operation (TCO).”



## Trend 1 Electric vehicles

We are seeing new electric technologies being introduced for garbage trucks, street cleaners and other vehicles. For example, Electra, the UK's first fully electric refuse truck powered by lithium-ion batteries, rather than diesel, was trialed in London in February and March 2018. The new Volvo FE Electric garbage truck will be introduced in Hamburg in 2019. Electric truck technologies will improve air quality while reducing traffic noise and lowering congestion during peak traffic hours, since commercial operations can instead be carried out quietly and without tail-pipe exhaust emissions early in the morning or late at night.

Most companies will face an uphill battle to invest in new e-vehicles. They are expected to cost 1.2 to 2 times more than a diesel vehicle and will require additional investments in recharging infrastructures. Part of this investment will be offset by lower fuel and maintenance costs and a longer vehicle lifetime.

### **DLL perspective:**

The main challenge we see for our customers who are investing in electric technology is the time lag between the high upfront costs and the eventual payback, which can only be realized over the lifetime of the equipment. In some cases that might take 10 or 15 years. So instead of purchasing this high value equipment, DLL recommends that companies structure the investment through a mid to long-term lease which takes into account the economic lifetime and future value of the equipment. Such a structure can help the customer to manage their cash flow by replacing the high upfront costs with a fixed monthly fee that compensates the higher investment cost with the savings generated over time. This effectively can reduce the payback period to 0.



## Trend 2 Connected equipment

Internet of Things (IoT) technologies are being used to create a variety of new options for the waste management industry. One example is smart waste bins that tell a control center when they are full and should be picked up. Software can then calculate the most efficient route for that day based on the data that comes in, reducing unnecessary driving and the impact of overflowing bins.

In one UK town, this application reduced the number of seagulls scavenging waste, as well as the number of bin collections conducted. <https://waste-management-world.com/a/bigbelly-beats-back-waste-scavenging-seagulls-in-hartlepool>

These new hardware and software solutions are relatively new and are often very customer specific, so leasing companies have been reluctant to step into this market. As a result, most companies have to pay for this investment up front, while it might take them up to 5 or 10 years to earn that money back. In practice, it can take even longer because many manufacturers require advance payments during the 7-12 months it can take from the moment the order is placed to the moment the unit is operational.

### **DLL perspective:**

To address this issue, we used the same principles that we apply to other forms of software leasing to come up with different leasing options for new IoT solutions. These contracts can be used to finance software and hardware add-ons across an existing fleet. Or they can be used to finance a brand new fleet equipped with smart technologies.



### Trend 3 **Automation**

Automation is popping up in different sizes and shapes across the waste management industry. From **wind-powered robotic sorters** to sort construction waste 24 hours a day to **automatic waste transformers** that turn organic waste in neighborhoods into biofuel, water and fertilizer. Each project is unique and presents complex challenges for the companies and communities who are taking them on.

#### **DLL perspective:**

This trend offers similar challenges as those our customers face when investing in electric equipment. These projects are always unique and require an in-depth analysis of the project scope, the involved stakeholders and, most importantly, the expected cash flow streams. So instead of using standard lease products for these situations, DLL is always developing tailored investment solutions to address the specific requirements of each and every automation project. We advise companies to carefully assess all of the factors involved before choosing a financing solution.



### Trend 4 **Outsourcing**

Many municipalities outsource their waste collection and recycling activities to private companies to reduce capital outlay and staffing costs. This puts a large financial burden on the shoulders of waste management companies who have to invest in costly equipment that has a payback period of 5 to 10 years. This risk is compounded by contract periods which are shrinking from 10 or 15 years to as little as 5 years.

#### **DLL perspective:**

The key factor here is finding a reliable financing partner who understands your industry and is willing to share your business risk. Based on our long experience in both asset financing and waste collection equipment, our financing experts assess your business requirements and propose solutions that will meet your needs for each specific tender. We can match the cost of the lease to the individual income and duration of your waste management contract. By using shorter lease terms our customers get much more flexibility and can partially outsource their business and residual value risk to DLL. We also work with our waste handling customers to find the best disposal options for their equipment at the end of a lease to protect their competitive position. As a lessee you will stay in control of the equipment during and at the end of your contract period, if desired.



## Trend 5 Waste prevention

The ideal way to deal with waste is to avoid creating waste in the first place. There has been a strong surge in public opinion towards waste prevention and recycling thanks to the **"Attenborough effect"** and other environmental movements. Zero Waste Europe is promoting its Recircle case study, a Swiss social enterprise that has introduced reusable meal boxes to put an end to the flood of single-use containers for take-away food. The Queen of England has banned plastic straws and bottles on royal estates.

### **DLL perspective:**

Preventing waste means fundamentally rethinking how we make products, use products and live our lives. We find that working with our partners closely in discussions about how to unlock new ways of preventing waste leads to solutions.

One example is DLL's Life Cycle Asset Management (LCAM) programs. We help customers to use their equipment longer than maybe originally intended, by selling and leasing back refurbished equipment. As an example in Germany, we replaced a fleet of 12 trucks after a 4 year lease with 12 new trucks, but the customer was able to re-use and retrofit the original upper structure of the old trucks on to the 12 new trucks. So both the new trucks and the retrofitted build-up were financed together in a new 4 year lease. This deal was a great example of how DLL helped the customer re-use an important and costly part of the truck set by make use of the full lifecycle of the upper structure to avoid unnecessary waste.

## A brighter, greener future

Wherever you are on the journey towards a sustainable planet, we want to join you. Leverage our experience in financing waste management innovations and in supporting large fleet users across diverse industries to help drive down your total Cost of Operation (TCO). By combining our strengths we can come up with creative ways to keep waste management moving forward towards a brighter, greener future.

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**For more information**  
Please contact our DLL expert:

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**For more information see our website.**  
<https://www.dllgroup.com/gb/en-gb/solutions/fleet-solutions>

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