

Zest Recycle Case Study | March 2021

CNH Industrial



Background

Zest Recycle were appointed to take over full management of CNH Industrial's waste operations at its Basildon plant in summer 2019.

CNH Industrial is a global leader in the manufacture of heavy machinery including agriculture and construction equipment, commercial vehicles and powertrains. The nature and scale of the operation at the Basildon plant, where a tractor is produced every four minutes, means that the site generates a multitude of waste streams in significant volumes, including various packaging materials, wood, confidential waste and a range of specialist waste and oils.

A key aim of the partnership was to improve segregation, increase recycling and ensure that CNH Industrial's waste resources were being managed with maximum efficiency and cost effectiveness. CNH Industrial also recognised the benefit of using a single, experienced provider to take ownership of the management of all waste streams, as opposed to their current process dealing with multiple contractors.

Following a competitive tender process, Zest Recycle was appointed as the key waste contractor due to our experience in managing multiple waste streams, knowledge and expertise in dealing with hazardous waste and focus on sustainability.



Action

Zest Recycle's approach from the outset was to set out a clear strategy for firstly ensuring a smooth mobilisation of services, and then to implement action plans to meet both shorter term and longer terms goals. The overall aim being to significantly improve the efficiency of the site's waste operations and ultimately make more efficient use of waste resources.

By working closely with CNH Industrial, Zest Recycle identified a number of areas in which more immediate benefits could be recognised both financially and from a sustainability perspective.

From recycling to reuse

Wooden pallets were being placed in large containers and crushed down using a Roll Packer, producing around 3-4 roro containers a week of wood for recycling. Zest Recycle identified that a significant number of these pallets were suitable for reuse and therefore had a rebate value.

Zest Recycle sourced a supplier for reused pallets and provided the site with 'tool-box' talks and onsite guidance on the correct segregation of the wooden pallets. This resulted in a reduction in the number of wood skips required by a third and the generation of a healthy rebate.

A win-win situation both financially and environmentally, with waste now being treated further up the waste hierarchy and the site benefiting from reduced waste costs.

Reduce

Preventing waste

Reuse

Reusing materials

Recycle

Turning waste into products

Recover

Recovering energy

Landfill

Disposing of waste

Greater efficiencies

Another area of focus was on the large volumes of cardboard packaging being produced by the site. When Zest Recycle took over management of the account the rebate market for waste resources was turbulent, meaning that the highest quality material was essential for achieving optimum rebate values. It was also identified that there was an opportunity to increase load weights of cardboard for greater environmental and cost efficiencies.

To tackle this area, Zest Recycle worked with CNH Industrial to optimise cardboard bale weights and review the current collection processes. Bale weights were improved by adjusting and testing baling pressures and a new process for the collection of cardboard bales was also introduced, utilising a Moffett Clamp Truck system.

By introducing this system, man hours were reduced on site as there was no longer a requirement for a member of staff to load the collection vehicles.

Overall by working with our client and supply chain partners, we were able to introduce a much tighter, more efficient ordering process, resulting in maximum payloads of cardboard, reduced haulage and the highest possible rebates.

These, along with a number of other changes, have helped CNH Industrial to take large strides in increasing recycling, improving environmental performance and reducing costs at its Basildon site.



Ongoing monitoring for continuous improvement

Whilst tackling some of the larger waste streams to achieve those 'Quick Wins' Zest Recycle also implemented an auditing programme to further identify steps and measures to extract maximum material for reuse and recycling. This has included in depth waste audits utilising video footage of the general waste compactor, to root out any further lines of recycling.

Through this process we were able to identify that there was a significant volume of Low Density Blown Foam which could be extracted for recycling. Although a more difficult waste stream to find an outlet for, Zest Recycle were able to source a supplier for this material, which not only meant a further boost to CNH Industrial's recycling, but also meant a reduction in haulage on the general waste compactor resulting in both financial and environmental benefits.

Performance

By working closely with CNH Industrial, which has a strong focus on responsibly and sustainably managing the waste produced at its Basildon site, we have been able to make significant progress in a relatively short space of time.

In the first year, recycling rates increased by over 10%, and with a Zero Waste to Landfill approach, all remaining waste is sent for energy recovery. We have also made significant cost savings for CNH Industrial in a number of areas and returned very healthy rebates for waste materials back to the business despite a turbulent market.

Our approach of continuous monitoring and review means that we are constantly exploring new opportunities for environmental and operational efficiencies and are currently working on a number of initiatives to increase recycling and further reduce costs.

"Sustainability is a key business driver for CNH Industrial, and through our partnership with Zest Recycle we have been able to significantly improve recycling rates, within the framework of our overall ambition of zero waste to landfill."

Ryan Hopkin, CNH Industrial