

CASE STUDY: Sir Robert McAlpine – Providing Sustainable Alternatives To Single-Use Plastics

Sir Robert McAlpine is a leading UK building and civil engineering company. As one of the UK's largest construction firms, Sir Robert McAlpine is taking responsibility for protecting the environment and the local ecosystems in which it operates. In fact, Sir Robert McAlpine was rewarded Environmental Contractor of the Year at the Construction News Awards in 2018.

As part of the company's dedication to preserving the environment, Sir Robert McAlpine has developed an Environment Policy which is displayed on all its construction sites and premises. The Environment Policy states that Sir Robert McAlpine will actively work towards:

- Increasing biodiversity.
- Preventing pollution and nuisance.
- Managing and reducing carbon, waste, and water.
- Monitoring and improving environmental performance.
- Responsibly sourcing and increasing the recycled content of materials.

The Environment Policy ensures that everyone working for Sir Robert McAlpine is aware they have an obligation to integrate environmental awareness into every activity and action they perform in their roles and processes.

Diverting Waste From Landfill

Sir Robert McAlpine has maintained a particular focus on eliminating waste and ensuring that any waste produced on site is diverted from landfill to reduce its overall impact on the environment.

Sir Robert McAlpine targets for all its construction sites to be waste neutral with 100% of non-hazardous construction waste diverted from landfill. To achieve this objective, all Sir Robert McAlpine sites and premises must set up a Site Waste Management Plan before construction commences.

While subcontractors are required to demonstrate that measures to design out waste have been considered and strategies to eliminate waste, including plastics and packaging, have been implemented where possible. Waste forecasts must be completed on every site to predict the volume of waste that will be produced and the correct waste disposal routes are used to prevent waste disposed to landfill.

Likewise, Sir Robert McAlpine ensures it uses suppliers who operate take back schemes so that any excess materials and packaging are reused or remanufactured where possible.

As a result of the following initiatives, to date in 2018, Sir Robert McAlpine has diverted 98.8% of non-hazardous construction waste from landfill. This is not only protecting the environment, but proves financially beneficial.

In addition, Sir Robert McAlpine is committed to optimising resource efficiency by the responsible sourcing of materials and increasing the recycled content of materials used. Sir Robert McAlpine has been working extensively to reduce the quantity of materials used, and most importantly, to reduce its consumption of plastics and packaging.

Broadgate Framework (100 Liverpool Street and 1 Finsbury Avenue)

One of the main challenges the 100 Liverpool Street and 1 Finsbury Avenue sites faced when trying to reduce its consumption of plastic, was with the products used in the site canteens. Working with supplier H&W Catering, the following alternatives were introduced to overcome this issue:

- Recyclable paper cups, otherwise known as '**reCup**' have been introduced in the site canteen. The cup has a double wall design with two layers of paperboard, meaning there is no need for a sleeve or clutch to protect your hand from the hot contents. The reCup uses a revolutionary interior lining called '**Earth Coating**' rather than traditional PE or PLA. This coating is made using a blend of calcium carbonate which fragments away from the paperboard into small particles which can be easily separated during the standard recycling process. This means they can be processed alongside standard paper recycling as if there was not even a coating on them.
- Fiesta biodegradable disposable cutlery has been introduced on site. The cutlery is created from environmentally friendly birch. The disposable wooden cutlery can be used with both hot and cold foods.
- China plates and bowls are being used on site. These are durable products and have a limited impact on the environment.



Battersea Phase Three

At the Battersea Phase Three site in South East London, the site team are conducting environmental assessments to ensure all waste is diverted from landfill where possible. The workforce receives a monthly environmental toolbox talk and the Sustainability Manager on site communicates the importance of protecting the environment via posters, noticeboards, and slideshows which are broadcast on the TV screens in the site canteen.

The site team uses a specialist waste management contractor to segregate waste into individual segregated skips for wood, plastic, glass, and other materials, and to find items for possible reuse. At present, 100% of waste produced on site is diverted from landfill. While the site team itself works hard to reuse materials where possible, including hoardings, pallets, packaging, scaffolding, and pavers to prevent the production of waste.

Educating Site Operatives

Sir Robert McAlpine considers educating the workforce as paramount for reducing plastics and packaging waste on site and for improving the environment. Sir Robert McAlpine requires all site managers to incorporate environmental issues into site inductions to ensure all operatives are fully briefed on the environmental risks associated with construction before they start work.

On all sites, regular briefings and toolbox talks on environmental and sustainability issues are delivered to the workforce, and environmental targets are frequently communicated to encourage good environmental practice amongst the workforce. This form of education is an effective way for operatives to learn how to recycle and reuse plastics and packaging which in turn, will avoid waste from being diverted to landfill.



To find out more about Sir Robert McAlpine, please click [here](#) to visit their website or follow **@WeAreMcAlpine** on social media channels.