



CASE STUDY

Recycling Construction Waste at our Clonee Data Center

↑ Construction at the Clonee Data Center in County Meath
Credit: In The Dark Productions

At Facebook, we aim to minimize our energy, emissions and water impact, while embracing the responsibility and opportunity to improve the world beyond our operations.

The opportunity

At Facebook, we embed sustainability in everything we do. We make sure our advanced data centers conserve resources during operations once they are up and running. And we also find creative ways to minimize the impacts linked to construction in the communities where we build.

In April 2016, when we began building the Clonee Data Center in County Meath—our first data center in Ireland and the second in Europe—we saw an opportunity to work with our general contractor to foster a zero-waste culture by finding inventive ways to reduce our materials footprint and recycle as much as possible.

The solution

Building a data center is no small feat. From the day we break ground, there are complex supply chains to manage and large volumes of materials entering and leaving the site every day. Given the scale of our Clonee Data Center, monitoring and minimizing the amount of construction waste we generate was a key priority.

At the peak of construction, up to **250 tons** of building materials were delivered to the site every day. And over the course of three years it took to build the first three data center buildings, the project generated over **10,000 tons of waste**. We partnered with our general contractor to align suppliers around our vision for waste management.

The most important step was to minimize the amount of waste generated in the first place. We accomplished this by making sure subcontractors only brought materials on-site that were essential for construction and identifying which materials could be reused. In some cases, we worked with vendors to establish takeback schemes to give materials a second life. For example, we were able to create plant pots from used waste canisters.

96%

of waste generated during the construction of our first three buildings was recycled



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For any materials that could not be reused, we positioned seven collection areas across the construction site and partnered with a local company to recycle and compost the waste instead of sending it to landfills. It required an ongoing process of educating our workforce on the best waste minimization techniques and empowering them to come up with new ideas to help us achieve our goals.

Through the use of digital tools, such as a cloud-based construction management system, we were able to effectively track all materials entering the construction site, the amount of daily waste generated, and how unused or waste materials were being transported off the site.

The impact

Over **9 million hours** went into constructing **three buildings** in Clonee, with as many as **1,500 people recorded on-site per day**. Despite the enormous scale of the project and people involved, we recycled **96% of waste** generated during the construction of our two first buildings. This helped our Clonee data center win Ireland's 2019 Green Construction Award.

Earlier this year, we announced plans to expand our presence in County Meath with the addition of two new buildings at this site, creating additional jobs during construction and operations. This expansion demonstrates Facebook's investment in Clonee and we are excited to do our part to continue protecting the environment while contributing to the local economy.



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More information

For more information visit our Sustainability site at sustainability.fb.com