

# Measure it to manage it: Vodafone Ireland's carbon emissions

Sustainability is now firmly on the C-Suite agenda and it's at the heart of NTT DATA's vision forthe future.



#### Supporting Vodafone Ireland's emissions ambitions

Vodafone's commitment to a sustainable future is clear, with a published strategy focusing on five key areas – the digital society, inclusion for all, operating responsibly, reducing impact on the planet and helping its customers to reduce emissions.

With climate change a key concern for many governments, regulators, investors, companies and their customers, one of the most urgent priorities for Vodafone Ireland is reducing carbon emissions.

There may be obvious emissions reduction projects to be started – NTT DATA can help Vodafone Ireland in a wide array of areas including energy reduction plans, smart metering or greener offices. However, achieving any sustainability objective calls for data-driven decision-making that relies on using measurement to prioritise and manage initiatives.

## Gain a single view of Vodafone Ireland's carbon footprint

A carbon reduction plan is pretty much obligatory for every organisation, yet carbon footprint calculation can seem impossibly complex. The data integration challenge in getting to a calculation is considerable. Furthermore, it is no longer enough to piece something together once a year for the annual report - it is vital the measurement is regular.

Measuring emissions caused directly by an organisation's activities (called Scope 1) and from its energy consumption (Scope 2) is relatively straightforward using bills and fuel expenses. In contrast, calculating indirect emissions along an organisation's supply chain (Scope 3) is highly challenging.

#### NTT DATA has all scopes covered

At NTT DATA, we already have solutions for Scope 1 and Scope 2 calculations, but it's also essential to tackle Vodafone Ireland's supply chain emissions.

We focus on two supply chain categories – purchased goods and services, and capital goods – which together make up more than 40% of all emissions for the average organisation. They are also the most difficult to do.

Not only are we familiar with complex data challenges, but we apply advanced technologies and tools to produce the kind of accurate calculations essential for Vodafone Ireland's emissions reduction decision-making and its reporting obligations. For example, our

Blockchain Centre of Excellence can apply distributed ledger solutions for detailed carbon tracking across the supply chain.

We also use an end-to-end carbon footprint calculation platform. Rather than depending on suppliers reporting their emissions, which can be slow and unreliable, the platform uses advanced techniques, including natural language processing, to produce a carbon estimate based on level of spend. Accuracy is surprisingly good and improving all the time.

Today, it is already possible for Vodafone Ireland's total carbon emissions to be tracked like any other business performance parameter. And that's vital in helping the organisation to meet its sustainability commitments.



## Cutting data centre emissions a hundred-fold

Data centres currently use around 1% of all global electricity, forecast to increase to more than 8% by 2030. NTT DATA is addressing the challenge through a technology that could reduce ICT power consumption a hundred-fold.

Innovative Optical and Wireless Networks (IOWN) technology holds potential to transform today's existing networks and data centres by introducing a new architecture that brings photonics into chips. By shifting from the world of electronics to the world of photonics, we are striving to realise an innovative IOWN network with excellent capacity, low latency, flexibility and energy efficiency, all based on photonic technology.

Find out more on NTT DATA sustainability solutions in our paper "Creating a Vision for a Sustainable Future"

Click here →

To find out more about how NTT DATA can help Vodafone Ireland achieve its sustainability goals, please contact conor.clarke@nttdata.com

NTT DATA UK 1 Royal Exchange London EC3V 3DG 020 7220 9200 **NTT Data** 

