

# Reduce scope 3 emissions using green data centres



**Data centres generate more emissions than the entire aviation industry. Shocking, isn't it?**

Due to their massive power usage for cooling and keeping servers "always-on", data centres create 3% of global emissions whereas aviation creates 2%.<sup>1</sup>

With increasing digitalisation, the global data volume is predicted to grow to 175 zettabytes by 2025, putting increasing demands on data centres.<sup>2</sup> What can be done about the subsequent power usage?

Shifting our focus to efficiency in every corner of business is the only way to achieve sustainability.

**175**  
zettabytes  
by 2025

## What are scope 3 emissions?

Scope 3 emissions are the indirect greenhouse gases (GHGs) generated by suppliers. They vary per business, but are commonly found in the upstream and downstream value chain through:<sup>3</sup>



Extraction and processing of raw materials



Manufacturing



Distribution



Product use



Product end-of-life

**Adding green data centres into your value chain directly reduces Scope 3 emissions.**

## What makes a data centre 'green'?



### Power use

The energy involved in data centre buildings and operations is substantial. Renewable and efficient energy sources build long-term sustainability.



### Power usage effectiveness

PUE looks at energy efficiency as a whole and gives each data centre a clear sustainability measurement.



### Recycled water

Water used in data centre cooling must come from renewable sources to remain constant. Reduction plans must also be in place.

## Data centres beyond sustainability

As data centre operators achieve sustainability the possibilities of future innovation grow. AI and sustainable technology enable a new generation of sustainable tech experts to enter the marketplace and secure an ongoing green future.

These visionary steps will enable efficiencies in the large amount of energy needed for GPU and computing power.



## Nxera - A new era of data centres

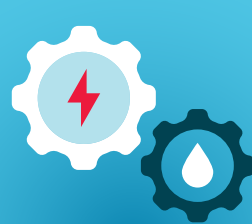
Nxera is an ecosystem of partnerships that will enable AI development in Singapore. With AI-ready data centres at the core, the initiative is green, sustainable and hyper-connected.

### Nxera is:



#### Powered by renewables

Global energy partnerships will power Nxera via renewable sources.



#### Operationally resilient

Improved power and water efficiency will reduce fossil fuel dependency.



#### Fostering talent

The future talent pool will be secured through training initiatives.

## The tricky part - international standards

The GHG protocol standardises the definition of scope 3 emissions. But, maturity in the collection of measurements varies from region to region, presenting multi-national companies with reporting challenges. Regional data centres address scope 3 and standardise measurement:



**Through Nxera and Singtel Data Centres, companies will get closer to true sustainability while building increased capacity for AI development.**

Achieve technology-fuelled growth and increase your company's positive impact.

Contact us

### Sources

<sup>1</sup> World Economic Forum, February 2023, Data centres have a larger carbon footprint than the aviation industry...[LinkedIn]

<sup>2</sup> Deloitte, 2021, Data: a small four-letter word which has grown exponentially to such a big word

<sup>3</sup> Science Based Targets, 2023, Scope 3: Stepping up science-based action