

## Sustainability solutions

# Carbon calculators: a smarter way to measure your trial's footprint

## Why it matters

Clinical trials are critical for advancing human health, but they also leave a significant environmental footprint:

- A single Phase III trial can generate CO<sub>2</sub> emissions equal to powering 100+ U.S. homes for a year.
- Patient travel, investigator meetings, shipping kits, and energy use at trial sites are some of the biggest contributors.
- With increasing pressure from regulators, investors, and patients, sponsors are being asked to deliver innovative therapies sustainably.

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100+ homes powered for a year









(Source: BMJ Open, 2022)

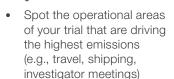
#### What is a carbon calculator?

A carbon calculator is a modeling tool that estimates the carbon footprint of a clinical trial. Instead of measuring every real-world data point (e.g., how many miles each patient drove), the calculator uses historical trial data, emissions factors, and operational models to identify where and how a study is generating emissions.

## WHAT YOU CAN LEARN-



#### **Hotspots**



 Focus your sustainability efforts where they can make the biggest impact



## **Efficiencies**

- Highlight excesses such as kit wastage, product overage, or unnecessary assessments
- Reduce not only emissions but also study costs



## Optimize

- Model the impact of digitization and decentralization on patient travel and site burden
- Explore alternatives like remote monitoring, at-home sampling, and virtual investigator meetings



## **Benchmark**

- Compare trial designs against emissions benchmarks
- Iterate study planning for continuous sustainability improvements

#### What you'll gain

- Environmental, Social and Governance (ESG) alignment
- Reduced cost through efficiency
- Stronger reputation with patients and stakeholders



## Advance research. Protect the planet.

Access our carbon calculator now.



Learn more at ppd.com/how-we-help/sustainability-solutions/

