

## CASE STUDY

## CLIMATE TECH INNOVATIONS

# Potential for impact through disruption

Looking ahead, we anticipate the climate tech portfolio companies within our CCD Innovation Strategy will deepen the impact we have on the environment, by reducing our reliance on virgin extracted resources.



[Phase Change Solutions \(PCS\)](#) makes compostable biopolymers that improve insulation and temperature control, significantly reducing the carbon footprint of emissions-heavy cold chains. These alternatives to virgin petroleum-based products also improve overall efficiency in industries facing temperature-control challenges such as fresh produce and beverages, where high levels of food waste are an additional contributor to GHG emissions.

PCS' products deliver a significant CO<sub>2</sub>e reduction benefit over base emissions for every unit sold.



[Circ](#), an advanced recycling technology innovator, is helping to create a circular economy for used clothes, uniquely including cotton-polyester blended textiles, thanks to its patented technology that returns clothes to the raw materials from which they were made. Currently, 73% of the world's clothing eventually ends up in landfills. Circ offers a significant impact potential by keeping greater volumes of materials in a closed loop and its production process emits less CO<sub>2</sub> than the production process of virgin material.

In total, scaling these solutions is estimated to avoid approximately 550,000 metric tonnes of GHG emissions by 2030, the equivalent of one year's emissions from 120,000 cars. In addition, these technologies also have the potential to deliver a significant long-term impact by creating alternative pathways for material production and consumption.