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THERMALLY EFFICIENT T-SHIRTS REDUCE THE NEED FOR HEATING AND AIR CONDITIONING

 FASHION & BEAUTY

The textiles are made from recycled materials and their production minimises the use of water and chemicals

Spotted: Materials science company LifeLabs has developed a new generation of thermally efficient textiles. Wearers of the company's CoolLife t-shirts experience a continual reduction of body temperature by three degrees Fahrenheit. The fabric is recycled, engineered polyethylene, a material that is transparent to infrared wavelengths, allowing heat to easily flow away from the wearer.

Wearing the company's CoolLife or WarmLife clothing can help to reduce reliance on cooling and heating systems, both of which contribute significant amounts of emissions. Continuous cooling of three degrees of body heat can make a huge difference throughout the day and night, making it easier to target the use of HVAC systems for limited amounts of time and at the most efficient rates. Indeed, LifeLabs suggests setting the thermostat two degrees warmer in the summer and two degrees cooler in the winter – this, the company claims, can save up to 153 pounds of carbon dioxide per person per year.

The brand's in-house technology saves water, heat, steam, chemicals, and plastic through its dedicated sustainability processes that track the energy footprint of every article of clothing. The clothing is 74 per cent recycled content by fabric weight, and manufacturing improvements have reduced water consumption by 70 per cent. For packaging, the company uses reusable fabric garment bags and other environmentally friendly materials.

From cooperation amongst brands to leverage [recycling technology](#) at scale to collections embedded with [climate change data](#), the fashion industry innovations Springwise is spotting are helping to make sustainability the norm.

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Takeaway:

In the US, **38 per cent of greenhouse gas emissions** from residential housing are produced from heating and cooling rooms. It is therefore crucial that we reduce our reliance on heating and cooling if we are to meet global net-zero targets. LifeLabs takes a novel approach to this issue while also tackling the sustainability of textile production – another thorny environmental issue