



Particulart

“A Stitch in Time”, Bristol Cathedral, 2015

During Lent 2015 – 18th February to 4th April - the Church of England in the South West is running a Carbon Fast. It is 40 days to reflect on how we affect our planet and consider what we can do to reduce our carbon footprint.

This year is vital, as governments are meeting in Paris in December, and hopefully they will come to a ground-breaking agreement on the climate.

Human activity has caused the concentration of carbon dioxide (CO₂) in the atmosphere to increase from 287 parts per million before the Industrial Revolution to 400 parts per million today. But carbon dioxide is just one of many greenhouse gases contributing to climate change. How much each gas contributes – its Global Warming Potential – depends on its structure, its emissions and concentration in the atmosphere, and how long-lasting it is. For example, the concentration of nitrous oxide (N₂O) is much lower, but it has a Global Warming Potential nearly 300 times as much as carbon dioxide.

Each particle in "Particulart: A Stitch in Time" is made up of a number of atoms and bonds knitted in acrylic yarn. The design follows the ball and stick model and the CPK colour scheme used in chemistry. Carbon is black, oxygen is red, hydrogen is white, nitrogen is blue, fluorine is light-green, chlorine is mid-green, and sulphur is yellow. The atoms are stuffed with those plastic bags that charities keep dropping through the letterbox, and the particles stiffened with coathanger wire.

The materials used are not natural and beautiful - the yarn is made from oil not natural wool, and itself has caused greenhouse gas emissions. The carbon footprint of the particles, including yarn, bags and wire, is roughly 2.2kg CO₂, equivalent to a couple of loaves of bread. However, as only a fraction of charity plastic bags are actually used to collect bric-a-brac, and it can be difficult to recycle wire coathangers, reusing them keeps a few at least out of landfill.

Reducing our emissions of carbon dioxide and other greenhouse gases substantially, as we urgently need to, often requires doing something countercultural. Knitting can also be countercultural. There are no short cuts to knitting a particle. Each stitch must be stitched, sometimes more than once if a mistake is made! The act of assembling the data increased knowledge of the issue. The act of making is meditative, providing a space to mull it over. As a whole, the process led to a deeper care and concern for the planet.

About the artist: Clare Bryden is a freelance writer, website developer, energy-environment consultant, and general dabbler in things that interest her. She lives in Exeter and tweets at @ClareBryden.

For more about the Lent 2015 Carbon Fast, see ecochurchsouthwest.org.uk/carbon-fast.

Particulart.org.uk

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