The peril of plastics and the advantages of alternatives

In their monthly column, Climate Action Stokesley and Villages look at how to reduce plastic waste

HECK your home and notice how much plastic is present. Furniture, clothing, toys, food and drink containers. even tea bags: plastics are used everywhere as they are durable and resistant to degradation. But these properties also make them nearly impossible for nature to break down. We have become dependent on single-use plastic products; half of all plastic produced is designed to be used once then becomes litter in rivers and subsequently oceans, or as waste going to incineration producing carbon emissions or landfill where it may become harmful microplastics. UK households annually throw away 100 billion pieces of plastic packaging, recycling less than 12 per cent. Most plastic items never disappear; they transform into microplastics in the air and water which we absorb into our bodies through inhalation and through food and drink. Recent studies found microplastics in every human placenta tested. Research into the impact on our health is ongoing but already shows that microplastics cause inflammation in body tissues and microplastics found in our blood vessels are linked to obstructions. It is thought that the increase of microplastics in our tissues could explain increases in health problems, including inflammatory bowel disease, colon cancer and declining sperm counts.

Just as microplastics impact on human health, they also impact on animal and plant life globally. Microplastics have spread across the planet, from the summit of Mount Everest to 100s of million tonnes of plastic currently found in our oceans. From 1950 to 1970 plastic production was low so waste was relatively manageable. Since then the rate of plastic production has grown faster



than that of any other material. If these trends continue, global production of plastic is forecast to reach 1,100 million tonnes by 2050. Ninety eight per cent of single-use plastic products are produced from fossil fuel. Greenhouse gas emissions associated with the production, use and disposal of plastics is forecast to grow to 19 per cent of the global carbon budget by 2040.

So what can be done?

Governments can legislate to reduce this level of plastic waste. The UK has succeeded in eliminating some plastic products where there are more sustainable alternatives eg plastic straws and single use plastic bags, although this isn't enough. Governments should now regulate to encourage companies to promote innovation so plastics we need are designed to allow for their reuse and ensure we circulate plastic in the economy for longer, but change is resisted and so becomes slow, for example the deposit return scheme for plastic bottles has been delayed again.

Currently, world leaders are negotiating The Global Plastics Treaty; an international legal agreement to prevent the harmful impacts of plastic. The UK government has a powerful position



Zero-waste shops in the area include Earth Unwrapped in Northallerton

on the world stage, and needs to champion bold, decisive action to end the age of plastic.

What can we do?

This isn't about feeling guilty about the amount of plastic we use but rethinking our consumption of singleuse plastic and finding sustainable alternatives.

Aim for a zero-waste lifestyle: Invest

in sustainable products – reusable coffee mugs, water bottles and food wraps. Consider options like bamboo toothbrushes, solid shampoo and shower bars, and refillable deodorants. Choose food with no plastic packaging, carry a reusable fabric bag and refill containers. Locally we have zero-waste shops – 'What Planet Are You On', Guisborough; 'Off the Scale', Castleton; and 'Earth Unwrapped', NATSAN

Northallerton with refillable stations at 'Roots', East Rounton.

Single use plastics are found in garden centres, hotels, restaurants and supermarkets. Be an advocate for change by asking suppliers to find alternatives for single use plastic. For more information and ideas for zero waste visit our website: www. climateactionstokesleyandvillages. org