## "Why all the fuss about Plastic?"

The Iona Community and the Hard Questions Café 19th February 2018

The lona Community is committed to a five part rule which includes being accountable for actively working for Justice, Peace and Ecological Integrity. We oppose the Arms Trade and support actions to hold back global warming. Events this year have led many in the community to try to understand and act upon the problem of plastic. Both government and the governed are usually slow to accept change, but *not* in this case. Suddenly manufacturers, supermarkets, cafes and restaurants, are tumbling over each other to take action to 'save the planet.'

In the memorable 1967 film, 'The Graduate', Benjamin's family celebrated his college achievements. A family friend took him aside and urgently whispered in his ear the single word "Plastics". He knew that the manufacture of plastic would create many millionaires and powerful companies. Fifty years later we are left to literally 'pick up the pieces'. Almost all the plastic ever produced still exists... in landfill or in the sea. If we are not picking it up then seabirds and fish certainly are.

Before plastic, in the 1850s, billiard balls were made from Asian elephant tusks. Two tusks were needed to craft just eight balls. At that rate the Asian elephant would have faced extinction. A \$10,000 challenge to create an artificial alternative led New York chemist, John Wesley Hyatt, to produce the first polymer balls from cellulose: celluloid.

The Belgian, Leo Baekeland, produced Bakelite for radios and pens from 1907. In World War II synthetic rubber tyres and rot resistant nylon parachutes were developed. After the war plastic from crude oil led to rapid growth in plastic products. Earl Tupper made his fortune from the production of polythene boxes and children's toys could be moulded cheaply and mass produced for model planes and Lego bricks. The range of products expanded, from Formica table tops to plastic bins and chairs.

In the 1950s grocers and butchers shops used paper, paper bags and greaseproof paper. Now the population of Britain is above 66 million and the supermarket has largely taken over, finding it commercially best to preserve food in plastic film, boxes and trays. Greenpeace has long urged us to avoid 'single use' plastics. Butchers and greengrocers still exist where "loose fruit and veg is often cheaper than pre-packaged alternatives."

In Britain we use 400 million tonnes of plastic every year and 40% of it is "single use", disposed of as soon as the bottle is empty or the croissants have been taken out of their shiny box. *Replacing plastic paper bags/hard paper-board trays would decimate forests world-wide.* We would have to plant at least 4 trees for every tree used to make paper and cardboard. Planted now the trees would only be ready for harvest in 2043...

Problems with plastic have been studied for over sixty years. Greenpeace, Friends of the Earth, the Green Party and Transition Towns have long been urging us all to "cut down our plastic footprint."

Today only 9% of plastic is recycled, 12% is incinerated 79% goes to landfill.

Friends of the Earth, CEO, Neil Bennett reminds us that although reducing the use of plastic is so important, essentially "We must pull the plug on coal, gas and oil." Now, in 2018, three events have brought the issue of plastic waste into focus:

*Firstly*, in Blue Planet II David Attenborough, speaking "with a quiet fury tempered with hope" urged the world to save the environment from damage caused by plastic. *8 million tonnes of plastic end up in the ocean every year*. Watch the very short, powerful and shocking YouTube videos **Plastic Ocean** from the UN and any of Captain Charles Moore's videos going back to 1999.

Secondly, China stopped recycling 24 kinds of 'foreign garbage' (mainly plastic) from 1<sup>st</sup> January. Recently, on Calgary beach on Mull I saw plastic waste everywhere and though it came from the island. Now I know that the oceans of the world should be regarded as *one* ocean and plastic waste gets everywhere. The UK Marine Conservation Society finds an average of over 700 pieces of litter (mainly plastic) every 100 metres on beaches in Britain. **90% of albatrosses and shearwaters** on the South Atlantic islands eat plastic and feed it to their young. The results are leading to the extinction of several migrating seabird species. Plymouth University found that a third of caught sea fish (including cod, haddock mackerel and shellfish) are found to have ingested plastic. Obviously we are consuming micro particles of plastic ourselves.

*Thirdly,* in an obvious attempt to respond to the concerns of a younger generation of potential voters Teresa May launched a 'greenprint' paper on the environment for actions to be taken by 2043; 25 years and five parliamentary terms away... Some excellent proposals were welcomed, but the younger generation see past vague aspirations and sound bites. The mood is to demand change **now** and every day manufacturers and plastic consuming companies are announcing reassuring developments.

Teresa May said Conservatism and Conservation are "natural allies". The record on this is questionable. The 1956 Clean Air Act was good but no urgency is being given to reducing air pollution today. Margaret Thatcher gave early warnings about climate change but the consequences have not been taken very seriously. David Cameron saying "Vote Blue, Go Green" promised a Tory green revolution and went to the Arctic to "Hug a Husky". The 2010 Election Campaign promised to be the greenest government ever with the Green Deal for energy efficiency in homes. Plans to sell off state-owned woodland were vigorously opposed and dropped. Building restrictions on Green Belt land were relaxed. In 2013 Cameron instructed his aides to "get rid of all the green crap." The 2015 Conservative government cut the Green Deal, reduced or ended subsidies for solar and wind power and wanted to prevent the spread of on-shore wind farms. This 'environmentally friendly' government has made fracking in Britain almost unstoppable. Many of Michael Gove's initiatives for farming and the countryside have been widely welcomed. At least Teresa May exposed the key issues saying that plastic waste is "one of the great environmental scourges of our time."

Competitive manufacturers and supermarkets cannot ask their customers to wait for the year 2043: They are falling over themselves to respond to customer demand: Not a day passes without new developments being declared:

- 1. Norway, Germany and the Netherlands have taken a lead with a plastic bottle deposit schemes in which 95% of bottles are now being recycled. Some MPs, Tesco, Iceland and the Co-op are for this. Scotland is for; Wales is thinking about it; Northern Ireland has rejected the idea. Teresa May's 'greenprint' made no mention of a bottle deposit scheme. The Queen will only allow glass bottles to be used across all Royal Estates.
- 2. **2.5 billion coffee cups are thrown away every year in the UK; less than 1 in 400 are recycled**. We can now buy reusable ecocoffee mugs made of bamboo and disposable potato and corn starch bio-plastic cups are predicted to be available very soon. Gloucester Services (North and South on the M5) café uses first rate cardboard coffee cups and sell pots of hot sausages in cardboard tubs.
- 3. Five huge whirlpools (gyres) of trapped plastic exist in the oceans. The North Pacific gyre is the largest: It takes 6 years for plastic to arrive from the USA... a year from Japan. An ambitious "Ocean Cleanup" project will start in the North Pacific this year (2018). (See Boyan Slat on YouTube and on TED talks). An island in the Caribbean has a beach where a two mile wide plastic 'soup' has attached itself. The UK £5 and £10 notes are now plastic. I don't suppose these will end up in the sea...
- 4. Primaplast in Indonesia produces 600 million plastic straws a month. Hopefully the government may ban these very soon. Waxed tough paper straws do exist. Two places in Britain are taking the lead here: Brighton and Cornwall's initiative "The Final Straw" will try to ensure plastic straws will no longer be used. This ban is already in Scotland, on Calmac Ferries, by Costa Coffee, J D Wetherspoon and Pizza Express. We should say no to disposable cutlery by carrying a spoon or fork in our shoulder bag along with a reusable mug and a reusable bottle. Brighton has 120 shops/cafes offering free water refills. The scheme is being promoted in Cornwall's holiday towns. Pret a Manger in London and Brighton are trailing a 10p plastic bottle return scheme.
- 5. Most teabags are held together by a very thin layer of **polypropylene** plastic. This easily ends up in the soil, then rivers and eventually the sea." The Coop and now PG Tips have promised plastic free teabags. This is serious: micro or nanoplastic "is the least known area of marine litter but potentially also the most hazardous." Microbeads in face scrubs and toothpaste are likely to be banned this year. Glitter, used so much in art and craft is not at all good for the environment.
- 6. An Amsterdam supermarket is the first to have a plastic free aisle of 700 items. Much of it looks as though it is packaged in plastic but it is an oil free alternative that is biodegradable in 12 weeks and is sustainable. BP and the British Plastics Federation accept that bans on plastic use will dent demand for oil. Cling-film which helps keep food fresh comes from crude oil.
- 7. Supermarkets could have bins of dry food (jumbo oats, flour, sugar and so on) which could be sold in *paper* bags and avoid so much cardboard used for cereal boxes. Many types of soap exist and plastic bottles of shower gel could be avoided. Shampoo could be sold in refillable bottles. Cotton buds on *cardboard* sticks are fine, and should replace those on plastic sticks. It is possible to use eco-laundry detergent: It needs to be easier to find shops which will refill bottles and save money. Soapnuts, dried-fruit shells 100% of natural soap in a sock, can be used for washing laundry.
- 8. An entrepreneur from Lockerbie watched plastic waste in India being melted into potholes. He now has a factory in Lockerbie (Google: <a href="http://www.macrebur.com">http://www.macrebur.com</a>) to turn waste plastic into pellets and added to bitumen. A mix of 10% of plastic added to the bitumen makes the road surface sixty percent stronger. Roads in Cumbria use this asphalt expecting to have fewer potholes. A Frome company will accept any form of plastic waste to produce very solid plastic sheeting boards.
- 9. **UK v World:** Rwanda has banned all plastic bags. Haiti: Taking plastic waste to the Plastic Bank pays enough to have your cellphone recharged. Exmouth recycling is excellent whilst in Greater Manchester only bottles and tins are recycled. Their mantra is: "if in doubt leave it out."
- 10. **The EU Recycling Plan: Jan 2018** All plastic packaging to be recyclable or reusable by 2039. Restrict use of microplastic beads used in cosmetics. There is a ban on ships disposing of waste overboard. Europe generates 25m tonnes of plastic a year. At the Davos Forum in 2018 France said it hoped to recycle all plastic by 2025 and that 100% of plastic then would have to be reusable, recyclable or compostable. L'Oreal, Evian, Coco Cola, Unilever and Walmart all plan to have recyclable plastic bottles soon.

The developments are fast moving... just put "plastic" into the BBC News search... or YouTube. This couple of pages will at least set the scene in March 2018.

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