



## Scientists want to 're-engineer' nature

Scientists want to 're-engineer' nature to eliminate the plastic in our seas and the fatbergs in our sewers – and create slugs to biomine our landfill.

Every year, 12 million tonnes of plastic waste enter the world's oceans. The problem was brought to life this year in heart-breaking scenes in the documentary Blue Planet, which included a mother pilot whale watching her poisoned calf die.

Waste is a man-made problem but political solutions seem hard to make so can we re-engineer nature as part of a man-made solution?

Several research groups around the world hope to do exactly that, highlighted in an investigation by Engineering and

Technology magazine (E&T) - an editorially independent magazine, with a readership of 138,000 professional engineers, published monthly by IET Services Ltd, a subsidiary of the Institution of Engineering and Technology.

The investigation looked at new, cutting-edge solutions, from bacteria which could digest plastic waste, to genetically engineered slugs which could one day recycle rare 'earth metals' from landfill sites.

Other projects focus on recycling the pollutants before they become a problem, from using plastic bottles to make clothes, to innovative recycling projects which turn cigarette ends into bricks.

'The amount of waste going into our seas and into landfill is an enormous, ongoing problem and one that will still don't seem to have a ready answer for' says Dickon Ross, E&T editor-in-chief. 'Our report looked at several companies and research teams working on ideas which could drastically reduce the scale of the problem, some in the short term, some over the longer term.'

In many ways, the problems were created by technology, so it's tantalising to see how technologies as diverse as genetic engineering thorough to innovative recycling initiatives could help us finally move to solve this problem.'