

theaxionnewsletter

WELCOME to the latest edition of the Axion Newsletter. This issue includes an article suggesting that it makes both economic and environmental sense for companies to 'mine' resources from WEEE in the UK and an item about Pla.to's dry cleaning technology, as featured in WRAP's Mixed Plastics report.

SUSTAINABLE SOLUTION BEGINS 'AT HOME'

Record high oil and metal prices may mean in future it will be more profitable, and environmentally more responsible, for Western countries to 'mine' resources close at home in their own waste streams, according to Axion Recycling.

Axion argues that processing the WEEE (waste electrical and electronic equipment) waste stream at home, rather than exporting it overseas, is the most sustainable and cost-effective solution for all; particularly given the world-leading capability in the UK recycling sector to handle it.

Roger Morton's comments follow a recent article in The Guardian highlighting serious health and environmental problems in West Africa caused by the alleged illegal dumping of thousands of discarded computers from Europe and the US.

"Treating this valuable waste stream at home ensures responsible treatment close to the point of waste generation, thereby protecting people overseas from the damaging effects of its irresponsible treatment in developing countries. This waste stream is rich in valuable materials, particularly specialist metals such as copper and engineering plastics.

"Crucially, it also conserves resources in the UK and reduces our dependence on unstable areas of the world where much of the primary raw materials come from, especially given the recent phenomenal price increases in these commodities" asserts Roger Morton, Axion's Commercial Director.



Example of 'low tec' WEEE recycling in the FarEast

Stronger enforcement of waste export legislation would prevent much of this waste going overseas when it could be responsibly treated here by UK recyclers with the technology and skills to do so.

The company's Axion Polymers division produces high quality branded polymers from mixed small WEEE,

and waste fridge and monitor plastic at its state-of-the-art processing plant in Salford. The polymers are supplied to UK and European-based companies for use in a wide range of new sheet-extruded and injection-moulded products. Multi-million pound investment in sophisticated separation techniques is improving recyclate yields, helping to boost re-processing capacity in the UK.

About two tonnes of crude oil are needed to make one tonne of a typical plastic, such as polyethylene. At around \$135 a barrel for crude, the crude oil content of one tonne of plastic is therefore about £950 per tonne before any refining or processing costs are added. Current selling prices for finished plastics are around this level, but are bound to rise in the long term as oil cost stays high.

"With these high prices dramatically increasing the demand for oil and mineral exploration services around the world, Axion believes that the sustainable solution in future would be to 'mine' these resources from our own waste streams," continues Roger.

Primary WEEE sorting and treatment for recovery of metals followed by non-metallic separation by processes like Axion's has a very low carbon impact - about 6% - compared to virgin polymer production, and can compete on cost too, according to the company's calculations. Axion generates about 202 kg of CO₂ to produce a tonne of recycled polymer, compared to an estimate by Plastics Europe of 3,400 kg of CO₂ per tonne of virgin high-impact polystyrene (HIPS).

"Axion's recycled polymer sells for around £700 to £800 per tonne - considerably less than virgin polymer," says Roger. "Plastic is a very recyclable material that can be re-used in a variety of new products with no loss of performance."

However, he voices concern that much of this useful infeed material is being lost from the UK at present because of poor enforcement of existing EU controls on waste export. "This means a lot of unprocessed WEEE and some part-processed non-metallic materials, such as plastic containing brominated flame retardants from TVs and computer monitors, are being exported to Africa and China."

"This is both environmentally irresponsible and a waste of precious resources," he concludes. "Especially as the capacity now exists in the UK to process this material and we are actually leading the world in this technology."

PLA.TO DRY CLEANING SYSTEM PERFORMS WELL IN WRAP TRIALS



Pla.to's dry cleaning machine

At the recent WRAP Mixed Plastics event in London, Dry Cleaning technology was highlighted as a very effective method for removing dirt and contaminants from mixed plastics. Axion Recycling Ltd are the UK agents for the sale of the Pla.to dry-cleaning system that was used as part of the technology trial programme. Results of the WRAP trials show that dry-cleaning is simpler and lower-cost than traditional wet washing because there is no need for a large effluent treatment plant as part of the process:

“Water separation systems cannot accept high levels of contamination with paper and carton board causing particular problems. Dry friction cleaning of plastic flake is a relatively inexpensive processing step that improves the efficiency of the water based flake sorting systems.”

Pla.to's highly efficient dry cleaning technology is currently being used very successfully by a number of UK plastics recyclers on both films and rigid plastic wastes. The full WRAP report “Domestic Mixed Plastics Packaging Waste Management Options – June 2008” can be found at:

http://www.wrap.org.uk/manufacturing/projects/plastic_projects/mixed_plastics.html

For further details of how the Pla.to system could benefit your business, and to arrange a free trial using your waste material, please contact:

Keith Freegard

tel: +44 208 567 14250

email: kfreegard@axionrecycling.com



STAFF FOCUS – BOB ALEXANDER



Staff member Bob Alexander recently took the plunge and married his Japanese sweetheart in not one but two ceremonies! Bob and Fumi married in Gajoen, Tokyo in April and followed that with a blessing in the UK for family, friends and work colleagues. The blessing was carried out by Martin Green, Axion's former Sales Manager and was attended by several staff members from Axion Polymers.

As Site Engineer for Axion Polymers, Bob is responsible for maintenance and repair at the site, ensuring the smooth running of the plant machinery and keeping the whole site in full working order. Bob will be leaving the team in September to start his new life in Japan. As Bob's new wife Fumi is a scriptwriter for Japanese television station TBS (Tokyo Broadcasting Services), he is hoping to finally have the chance to take a 'gap year'!



CONTACTS:

Axion Recycling

Errwood House, 212 Moss Lane,
Bramhall, SK7 1BD. UK

Tel + 44 161 426 7731
Fax + 44 161 426 7732

info@axionrecycling.com
www.axionrecycling.com

Registered office address:
89, Woodford Road,
Stockport. SK7 1JR
Company Registration
Number: 04322117



Axion - Innovative resource recovery



Axion Polymers

Langley Road South,
Salford, M6 6HQ, UK

Tel +44 161 737 6124
Fax +44 161 925 9761

info@axionpolymers.co.uk
www.axionrecycling.com

