**Clean and Green?**
**Lifting the veil on the dirty work of recycling**

Recycling is promoted as an important part of the move towards developing more sustainable economies. It is also seen as a clean and green activity. As recycling capacity is increased in the UK, new jobs are being created in these industries. But what kinds of jobs are being created?

Research conducted under the ESRC-funded The Waste of the World programme has spent four years investigating the activity of ship recycling, as the industry prefers to call it, or ship breaking – the more accurate term. It has looked at this work in Bangladesh, where approximately one third of the global tonnage of scrapped merchant vessels goes to be broken-up. It has also investigated this work as it is conducted within the European Union, including in the UK.

Ship recycling returned to the UK in the noughties, having moved offshore – to Taiwan and Korea, in the 1970s. It then moved to China, before becoming heavily concentrated in three 'beach' locations in South Asia – Alang (Gujarat, India); Sitakunda (Chittagong, Bangladesh); and Gadani (Pakistan). Lax, or non-existent, environmental regulations and cheap labour costs, together with high demand for scrap steel to feed re-rolling mills, which in turn supply the booming construction industry of South Asia, are the primary drivers for the industry's location.

Ship recycling's return to the UK is an example of a politically motivated market. Exposés of UK ex-naval vessels being broken up on the beaches of South Asia, and the import of four US ex-naval vessels to a facility near Hartlepool in 2003, led to the development of a Ship Recycling Strategy, in 2007. This insists that the UK's ex-naval vessels are broken up within the OECD area, in conditions that comply with environmental containment and the appropriate handling of wastes. The costs of handling wastes appropriately make the margins on ship recycling very tight in this part of the world.

Breaking up ships is a dirty and potentially dangerous activity wherever it is done. In the UK it involves the task of asbestos removal and the cutting of metal – through both ‘hot’ cutting, involving oxyacetylene torches, which seer through metal, and ‘cold’ cutting, tearing metal with heavy-duty sheers. Other tasks include segregating and sorting metal, and categorising and cleaning up wastes released by the breaking process. In this work there are risks of fire; jagged metal and falling metal is everywhere; so too is acrid smoke and slippery surfaces; and slips and falls are commonplace.

Tight margins mean that the work in the UK, and in continental Europe, is typically sub-contracted. Specialist firms handle the work of asbestos removal – although working on ships is much harder than working on buildings. Cutters and ‘sorters’ are also hired on a project-by-project basis. Workers, typically, are transient and itinerant. In some sites migrant labour is employed.

These are the kinds of jobs that are being created by the new recycling industries.

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