



SHIP SHAPE

What happens when East Anglia goes the same way as Atlantis? Head for the Earthships, says **Rob Newman**

What does social change in response to climate change mean for housing justice? Does it just mean fewer pavement-level ventilation ducts blasting out blessed warm air on cold days? Or does it mean asking fundamental questions about land-use and land ownership? Or perhaps it will mean the homeless pioneering self-build lo-impact, lo-cost housing, which unlike their first draft models under railway arches are designs the rest of the population want to live in themselves?

I'm talking Earthships. Oh yes. These are low-impact, sustainable dwellings where you never have to pay a utility bill again. They look like Gaudi sculptures, all curvy and wavy, but their internal cavities are made from old car tyres and rammed earth to make a compacted earth brick encased in steel belted rubber. The cavity is covered with adobe cement – studded with glass bottles and cans – which is then sealed with linseed oil. The walls are three foot thick so as to be warm in winter and cool in summer; floor to ceiling windows angled to maximise sunlight; internal flowerbeds for recycling of black, to grey, to white water.

The concept is that, once granted a plot of land, people can build their own homes with materials that are free, by-products of those crazy homes that need all those dirty wires in the sky. There are colonies of Earthships in Mexico, Bolivia, USA, Canada, Japan, Belgium, Australia and post-tsunami Thailand. And as the Earthship guru Michael Reynolds says: 'They produce their own electricity with a prepackaged photovoltaic power system, collect their own water from a unique metal roof silt catch and cistern system, and deal with their own sewage through food-producing greenhouse technology that allows flush toilets. These homes are absolutely independent and can be built in any climate'.

I'm not convinced about the flush toilet part (you can't beat a good compost toilet); or about the never needing fossil fuels part (most people who live in Earthships have a big old propane cylinder for the gas ring and the piping hot bath water). But as the



Self-build Earthships, like those in the Mexican desert, could regenerate south Wales

middle classes desert suburbia because of rising oil prices, new brownfield sites will appear for those who never cared much for commuting. Self-build Earthships could regenerate south Wales, and people could be given grants to build them and move in, or build them and sell them. Yes, Earthships' need for direct light means they are on the edge of town and this does create problems if you want to get your prescription. But if they come with regeneration grants to be built in south Wales, this won't be a problem.

One of the reasons they are called Earthships is because the resident is in an on-going process of attending to and adjusting their function, like in a sailboat – opening a convection window here, putting the grey water on the internal flowerbed there. It's all very empowering.

There is a large colony of Earthships in New Mexico. They are popular, not so much with locals, as with affluent greenies. But here in Britain I reckon it's best pioneered by the homeless, just in case the whole concept doesn't work and it turns out that they are freezing... But also because, as with climate change, there is no market-based solution to a market-based problem, and so we have to take action ourselves. What's more, when East Anglia goes under, or the Thames Gateway is discovered to have been built on a flood plain, there's going to be a whole lot of people losing their homes. All of them, like the rest of us, are going to have to find a way of living while keeping fossil fuels in the ground.

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