

Footprinting the future of the region

North West leaders to 'test drive' their region with 'crystal ball' software.

Key decision makers from across government and business in the North West were today (Thursday 25 May) given the chance to 'test drive' their region using dynamic new online modeling tools developed by a team of researchers at the University of Manchester.

The Eco-Region North West project - the first of its kind in the UK - uses a well-known technique known as 'ecological footprinting' to work out how much of world's resources are used by the seven million residents of the region, and then employs interactive database technologies to forecast where the region could be headed by 2050 if it fails to clean up its act and take major environmental issues more seriously.

Using topical questions, on-screen prompts, and real-life data, users get to make major policy decisions regarding the future on vital issues such as climate change, waste or transport.

The North West eco-footprint - three times our fair share

The Eco-Region team has measured the amount of materials we use, waste we generate and carbon dioxide we release to get an accurate measure of the region's eco-footprint - traditionally this is measured in hectares with the global 'fair share' standing at around 1.8 hectares per person.

For the Northwest, the regional eco-footprint works out at a worrying 5.45 hectares each - more than three times our fair, planetary share. This massive impact on the environment includes a total 13 million tonnes of waste and 11.5 tonnes of carbon dioxide emissions per person. Inward flows of materials for major industries like mining or agriculture account for 5.3 tonnes of raw materials person while imports from overseas account for 2.2 tonnes per person.

'Sim-region' models the future North West

In an echo of the experience many will have had playing well-known computer game, SimCity, the Eco-Region software uses tools such as newspaper headlines to help users start to unpick the future.

After focusing on 'tough choices' in areas such as housing, jobs, transport and public finances, the participants then get to see what kind of an impact these decisions might have right through to 2050, through maps, charts and trend data.

With what's usually a sobering 'wake-up call' in front of them, the users of the software then get to rethink the region's development path, returning to their scenarios to craft a new low carbon, low impact future for England's Northwest.

The challenge for the region

The Chief Executive of the region's dedicated eco think-tank, Sustainability Northwest, described the project as a 'real and tangible step towards sustainability'. Speaking at the Eco-Region launch at the University of Manchester Erik Bichard, said:

"Informed decisions and a better sense of the bigger picture are of huge importance if we want to see a more sustainable, environmentally-robust region emerge in the future. With major challenges such as climate change and a rapidly reducing landfill capacity facing us in the near future, it's time to start making smarter choices: Eco-Region NW can make a significant difference."

The research sponsor for Eco-Region NW, Peter Jones, Development Director of the Biffa waste management company, said that the long-range nature of the scenarios generated was the key to the software's appeal:

"Too many of us, whether in business or government, get locked into short-term thinking that is defined by our term of office or accounting periods. We're lucky if we look a year ahead, never mind ten, or twenty," he said. "Eco-Region offers real value in delivering very high quality data across the kind of timeframes that matter when you're talking about ecological systems and pivotal challenges like climate change."

Regional champions - and those who could do better...

The sectors across the region that have the biggest impact on the environment according to the University of Manchester team are domestic energy and food and drink. For a sector such as this latter one, the chances to make a difference on environmental issues are huge given the sector's scale and impact. Worth more than £9 billion, the sector takes in a total of 18,000 farm holdings and over 1,200 food and drink businesses; in total it employs around 30,000 people.

When local areas were analysed, the areas with the highest eco-footprint per head turned out to be Macclesfield and Fylde: and with the lowest, Halton and Barrow. Liverpool, Manchester and Blackpool each have a eco-footprint of 200 times their actual area.

One major challenge for the future, according to the research team, is the impact of air flights, especially low-cost deals from Manchester and Liverpool. At current growth rates, air travel would consume the region's entire carbon budget by 2050.

Ends.

For more information call Steve Connor or Claire Rajah at Creative Concern on 0161 236 0600 or 0797 117 1228 (24hrs); email steve@creativeconcern.com or clairer@creativeconcern.com.

Notes to editors

Eco-Region NW can be accessed online at <http://www.eco-region.org>. Developed by the Centre for Urban and Regional Ecology (CURE) at the University of Manchester, the project partners include Stockholm Environment Institute, Building Research Establishment and White Young Green plc. Project sponsors include BiffAward, The Environment Agency, Merseyside Waste Disposal Authority, McGrath Environmental Consultants and The Research Methods Consultancy. The project co-ordinator is Sustainability North West.

On www.eco-region.org itself you can explore the future of the NW region with 2 kinds of interactive tools: Eco-life NW – this asks topical questions (i.e. what do people really want), and then shows a vision of the future based on the answers; and Eco-Quest NW – this asks for policy decisions (housing, transport etc) and then shows the results of the choices in local maps and charts.

The Eco-Region NW research has focused on 3 main indicators of environmental performance in production and consumption: CO₂ emissions, as the largest cause of climate change; material flow and mass balance; and cco-footprint, as the overall measure of impact.

The NW region's eco-footprint is just over the UK average at 5.45 global hectares per person. This is 3 times bigger than our fair 'earth share' of 1.8 global hectares. Material flow analysis puts another light on our impacts: primary industries such as agriculture, fishing, forestry and mining bring 5.3 tonnes per person per year into the NW economy. Imports from overseas bring another 2.2 tonnes per person, and half of that tonnage is then exported. All these materials are then circulated around in the economy from one sector to another, until they reach the point of sale or 'final demand'. Households purchase directly nearly 1.9 tonnes per person of food and other products, and capital investment is another 0.3 tonnes. Waste accounts for over half the material flow at 4.2 tonnes per person.

The Eco-region NW provides a detailed benchmark for the performance of 123 business sectors, but this is not enough in itself. There is a wider realization that the necessary step change in resource efficiency can be both cause and effect of growth and competitiveness.