

Waste & Water

Research outputs from EPSRC'S Sustainable Urban Environments (SUE) programme

The
ISSUES
Project

Energy Footprint of Waste Management Methods

Potential users/Target audience: Waste management industry, Local Authority planners, National government - strategic planners, Environment Agency, DEFRA, WRAP

The SUE-WASTE consortium has produced an energy footprinting model to compare different waste recycling and disposal techniques with respect to their energy use. The model is based on the city of Southampton, and takes into account both energy and material flows.

website <http://www.suewaste.soton.ac.uk/>

contact Professor Charles Banks at c.j.banks@soton.ac.uk

SUE-WASTE

Local Area Resource Analysis (LARA)

Potential users/Target audience: Waste management industry, Local Authority planners, National government - strategic planners, Environment Agency, DEFRA, WRAP

Developed initially within SUE-WASTE (and extended in the ESRC funded RESOLVE project), LARA is a top down model of material and energy flows in households. It uses expenditure data from the National Statistics and household data from the Census to model materials and energy consumption at a high level of socio-economic and geographical detail. LARA can be used to assess and forecast local waste arisings. It can also be combined with a waste input-output model to estimate the upstream commercial and industrial wastes attributable to households.

website <http://www.surrey.ac.uk/resolve/LARA.htm>

contact Angela Druckman at a.druckman@surrey.ac.uk

SUE-WASTE

UK Stormwater Drainage: Guidance and Tools

Potential users/Target audience: Water Utilities, planning authorities, land developers, architects

An online resource maintained by HR Wallingford, this site contains guidance documents and tools relating to stormwater drainage and SUDS developed by the WaND consortium and is specifically developed to support planners and developers to obtain site-specific guidance. The site presents tools for assisting in the outline design of SUDS, tools for assisting with detailed design aspects of drainage, and the evaluation of the hydraulic and water quality performance of drainage systems.

website	http://www.uksuds.com/index.htm
contact	Richard Kellagher at r.kellagher@hrwallingford.co.uk
WaND	

Centralised Portal for WaND findings and tools

Potential users/Target audience: Water utilities, planning authorities, land developers, architects.

This 'intelligent portal' designed by the WaND consortium contains all outputs from their research, and guides the user through various steps in order to assess which tool, guidance or finding will be of most relevance for that specific situation. Currently available on CD-ROM, the WaND portal will be available through the consortia's website after the project comes to a close.

website	www.wand.uk.net
contact	Prof. David Butler at d.butler@exeter.ac.uk
WaND	

Water Demand Forecasting

Potential users/Target audience: Water utilities, planning authorities, land developers, architects.

The WaND consortium has developed several water demand forecasting tools for application at different scales. The MacroWater tool, for example, calculates the combined impact of house building, water efficiency legislation and climate change on water consumption. The forecasting is carried out over medium term, 5 year spans, under different scenarios or models of society.

website	http://www.water.leeds.ac.uk/wand/home/index.htm
contact	Prof. Adrian McDonald at a.t.mcdonald@leeds.ac.uk
WaND	

Sustainable Lifestyles

Potential users/Target audience: Planning authorities, developers, local authorities

This project is the first comprehensive analysis of the influence of flagship 'sustainable' housing projects and technologies on residents' behaviour and lifestyles. In relation to waste, the project team collected data on the level of use of, and attitudes towards, using less water and waste and recycling in the home. The findings show that while energy and water efficient homes do appear to encourage residents to be generally more energy and water efficient, the provision of recycling facilities in the home did not affect whether people recycled their waste. The analysis therefore shows that there are other factors in play that influence people's choice to behave sustainably.

website	http://www.city-form.org/research_projects.html
contact	Prof. Katie Williams at katie4.williams@uwe.ac.uk
CITYFORM	

Urban River Corridors (SUE2¹)

Potential users/Target audience:

The hypothesis of the URSULA project is that there are significant social, economic and environmental gains to be made by integrated and innovative interventions in urban river corridors. This is to be tested by providing a portfolio of new ideas, new tools and new data to support redevelopment of urban river corridors as places where people want to live and work, now and in the future. The key themes of the URSULA analysis are 'people' (living, working), 'river' (ecological goods and services), 'design' (possibilities for intervention and innovation) and 'values' (agents of change, measures of success).

website <http://www.ursula.ac.uk/>

contact Prof. David Lerner at d.n.lerner@shef.ac.uk

URSULA

¹ 'SUE2' indicates that the consortium is one of the second round of Sustainable Urban Environment consortia. These are beginning their work between late 2007 and mid 2008.