TrinityHaus

ResearchMatters Autumn 2011

Focus on the user and engagement with stakeholders at a regional, city, community and individual building scale is a unifying principle of the research conducted at TrinityHaus. Often the challenges of sustainable development can appear nebulous and by engaging with stakeholders on targeted projects, TrinityHaus aims to define the challenges and make tangible progress towards sustainable communities. From the creation of a suite of headline sustainable development indicators to fieldwork studies on shared spaces, it is essential to engage users in solution development.

The development of the sustainable indicators for the Dublin Region is an excellent example of how stakeholders can be engaged in solution development. By creating a vision for the development of the Dublin region a collaborative approach was established. The key focus areas were then defined through the identification of themes, and tangible areas under these themes were highlighted via the headline indicators. This approach developed co-ownership of the region's future development and allowed stakeholders to see how they contribute to its sustainability.

We hope that you enjoy this autumn edition of the TrinityHaus newsletter. If you have questions please do not hesitate to contact us.

Dr. Emma Siddall
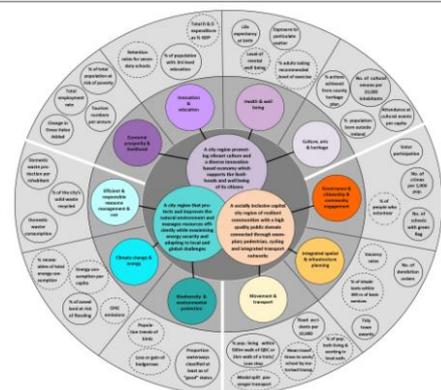TrinityHaus Research Fellow
emma.siddall@tcd.ie

In this issue

Sustainability Indicators for the Dublin Region

Client: Dublin Regional Authority & Dublin City Council
Researchers: Emma Siddall and Tom Grey
It is frequently at the regional and urban scale that sustainable development can be achieved, especially as 4 out of every 5 European citizens now live in cities. In order to maximise the efforts to improve the sustainable development of the Dublin Region TrinityHaus worked with the Dublin Regional Authority, the four local authorities and a wide range of stakeholders to develop a shared vision for the sustainable development of the region. From this vision a suite of sustainable development indicators were then identified to baseline the city's current performance, benchmark it against other European cities, set targets for future development and track progress towards these targets. This suite of 38 headline indicators will inform the Dublin Regional Sustainability Plan due to be published in 2012 and it is hoped that the suite will also be incorporated into future local authority development plans. This report is being launched by DCC on 18/11/11 (contact emma.siddall@tcd.ie).

Research of Shared Spaces and surfaces from a Universal Design approach for the urban environment in Ireland

Client: Centre for Excellence in Universal Design and the NDA
Researchers: Tom Grey, Emma Siddall and Mark Dyer

TrinityHaus has been appointed to carry out this research project which examines the application of Shared Space principles for urban spaces in Ireland using a Universal Design approach. Shared Space is an urban design and traffic management principle removing conventional controls and integrating traffic with other forms of human traffic. The driver becomes part of the cultural and social context and is controlled by everyday norms of behaviour. However, Shared Space concepts are not without their critics, so TrinityHaus is embarking on a detailed process of stakeholder engagement to partner with a wide range of users, representative groups, providers, design professionals and business interests to fully understand the main concerns and opportunities associated with the Shared Space concept. TrinityHaus will also conduct field studies with design partners to analyse in detail the on-street, practical issues that enable or impede inclusive access to the city. The project will deliver a number of working papers and provide recommendations regarding the appropriate use of Shared Spaces or surfaces in the Irish urban environment.
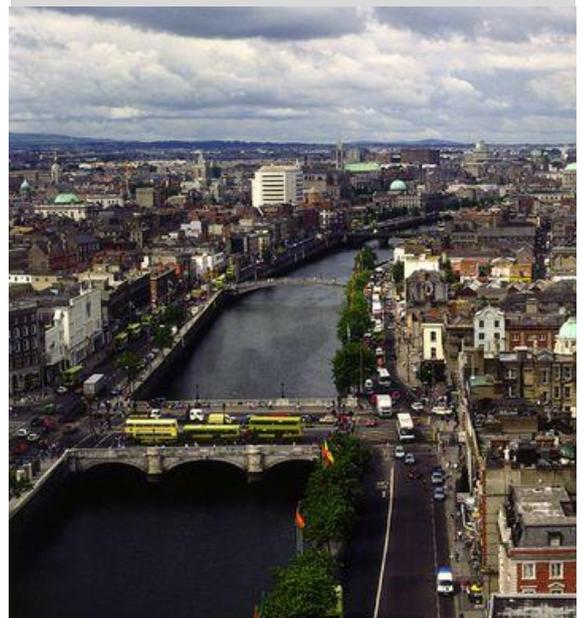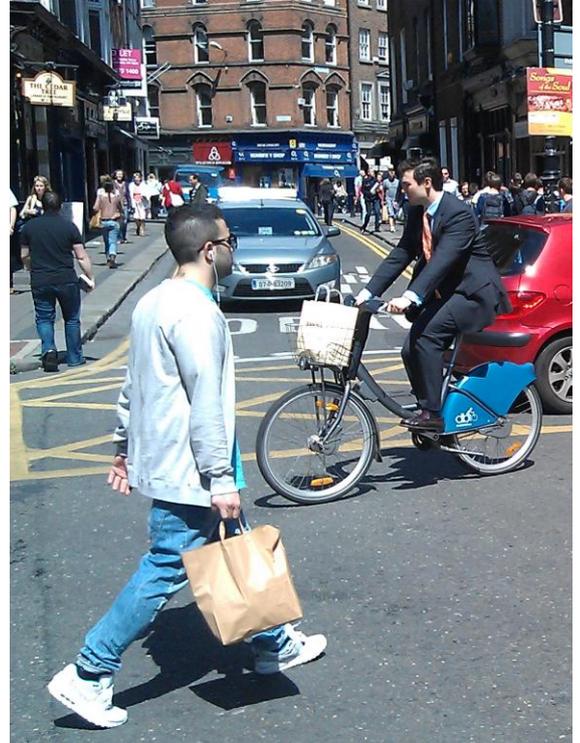 (Contact tom.grey@tcd.ie)

Sustainable Energy Community

Researcher: Mark Dyer, Oliver Kinnane &
Oluwakemi Bashorun

TrinityHaus supported Dublin City Council's successful bid to be a SEAI Sustainable Energy Community (SEC). With additional support from Codema and Siemens, the exemplar status was awarded to DCC at a SEAI sponsored event in the Hilton Hotel on 17th October 2011. The SEC is located within the largest local authority in Ireland, in the centre of the capital city and at the heart of the nation's government and business centre. The SEC will contribute to the Dublin City Development Plan and encourage the development of tools and methodologies to bridge the gap between energy efficiency measures at a building and neighbourhood level with improved urban planning strategies at a city and regional scale. The SEC will communicate locally via a number of means to influence improved energy practice including Kevin Street Library, Global Action Plan, Warmer Homes Scheme, IFSC, Ballymun4Business. Additional information about SEAI SEC initiative can be found at http://www.seai.ie/SEC/SEC_Programme/
(Contact mdyer@tcd.ie)

ECTP-E2BA Conference Warsaw 4-5 October '11
Conference Title: Let's build Europe's Future with Innovative Buildings and Infrastructure

As members of the European Efficient Buildings Association (E2BA), Tom Grey and Mark Dyer are contributing to work in progress such as **reFINE** (research for Future Infrastructure Networks in Europe) and a **Taskforce on Aging and Construction**, which formed part of this conference. The reFINE initiative has 'Infrastructure in an inclusive society' as one of its main priorities, and places much emphasis on demographic change, aging and user centred design. With more of a specific focus on aging, an initial **Taskforce on Aging and Construction** is being formed to examine how the European construction industry can provide age friendly buildings and urban infrastructure as Europe and the world becomes an older society. (Contact tom.grey@tcd.ie)

eGMS - Geophysical Monitoring System for Flood Embankments

Partners: Minerex Geophysics Ltd., Vodni Zdroje a.s, & Slovenia, Geoko d.o.o. and the Office of Public Works (IRL). Researchers: Matteo Viganotti and Ruth Jackson
This Eureka! approved project investigates a novel geophysical technique that combines advances in hardware with innovative software technologies which would increase the accuracy of Flood Risk Management Plans. The first survey of the test embankments on the Shannon estuary has been completed and the preliminary data analysis was presented to the partners at an international meeting in Ljubljana, Slovenia. The data acquired is now being compared with the results of a traditional Electric Resistivity Tomography (ERT) in order to validate the performance of the method as an embankment asset assessment tool on tidally influenced flood defences. Further surveys are planned for 2012 with the aim of further developing the data analysis software and GIS module. (contact viganom@tcd.ie)

New TrinityHaus Members
Oluwakemi Bashorun graduated with 1st class honors from Trinity College in 2006. Following placement with Laing O'Rourke on their Graduate Management Program, Kemi has completed a PhD on the assessment of cantilevered stone stairs in historic buildings. Her research interests also include energy performance of buildings and sustainable building services engineering.

TrinityHaus was formed in 2008 to provide innovative solutions for buildings, neighbourhoods and cities. Over the last two years the main research effort has focused on two principal themes. These are energy efficient buildings and eco-districts and secondly people centred design in homes and neighbourhoods for all ages, sizes and abilities.

Please see website www.trinityhaus.tcd.ie for further information on these and other projects. The contact details of each researcher can be found on the 'People' section of the website.