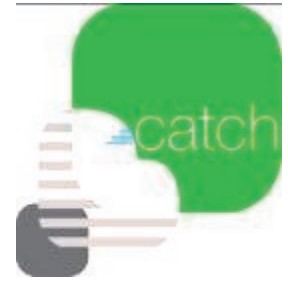


CATCH

Carbon Aware Travel Choice



Welcome!

In June 2011 the CATCH team welcomed a new partner to the project: the Forum for European e-Public Services (e-Forum) is an international not-for-profit organisation which operates in the field of eGovernment. E-Forum will primarily work in developing the future sustainability of the CATCH platform by encouraging its 200 members to take up the CATCH platform as well as fostering knowledge exchange between European and Chinese cities.

With our new partner, the CATCH team are moving to the delivery and launch of the CATCH knowledge platform. The project team is working strongly on validation and evaluation activities as well as planning for the future sustainability of the CATCH platform. We will present results of the project, and hear from other experts at the CATCH final event on 13 December in Bristol, UK. You can read more about the final event in this newsletter, along with news of the development of the CATCH tools and dissemination activities.

Data to Support Motivation for Sustainable Transport Change

To motivate a reduction of transport CO₂ emissions, connections with other triggers may strengthen support in both policy decision makers and individuals (See CATCH reports [D1.1](#) and [D1.2](#)). To highlight the links between transport and different quality of life measures, UWE is leading data collection from international sources that are facilitating both Geographic Information Systems (GIS) and traditional data analysis. This data will feed into the tools that Systematica is developing that will visually represent various indicators through widgets. However, before anything can be represented, appropriate data must be found.

Calculating transport CO₂ for cities of different nations is difficult, as the range of relevant available data varies. Thus UWE approaches the estimation of transport CO₂ from two angles, one from GIS and one from algorithms based on available transport data. These two methods will be compared for future pragmatic (and accurate) estimation.

To link transport with other quality of life considerations, the CATCH team has identified 6 co-benefits to start with: health, community, planning, budget, time & accessibility, and safety. The indicators available for each area are limited, as relevant data is often not collected at the city level. However, for each co-benefit at least three indicators were found and input for the first test version of the tool. Efforts continue to expand the available indicators.

Collaborating with Systematica, UWE is also researching the best way to present that information to increase impact. Concepts such as the contextual design of information are being examined with respect to interpretation of sustainability and motivation to reduce transport CO₂ emissions.

One potential positive outcome of the CATCH tool, along with raising awareness of transport CO₂, is to stimulate better data collection on a more holistic level that covers quality-of-life aspects, and not just traditional transport measures that ignore or limit external impacts.



Representing the data from cities in the CATCH scenario tool. Source: CATCH project

Visualisation Tools: focus on the co-benefit tool

A final version of the visual co-benefit tool was presented to the Third Interest Group meeting in Brussels in June. The **visual co-benefit tool** has the main aim to present information on carbon and other co-benefits in a comparative way through various graphical and interactive features to communicate - with powerful semantics - the city's levels of performance on a wide range of co-benefit indicators. Together with the visual transport scenario tool, it constitutes the very front end as well as the most interactive layer of the CATCH platform.

The co-benefit tool navigation follows a from-generic-to-specific "search and compare" logic. The user is initially presented with statements about the convenience of adopting low-carbon mobility habits and initiatives in general terms, and by ways of introducing the most important wider benefits entailed by such changes. The communication approach is generic in as much as it is not related to any specific city or geographical context, while it is specific in terms of the low carbon transport benefits presented. The tool covers the following six benefits:

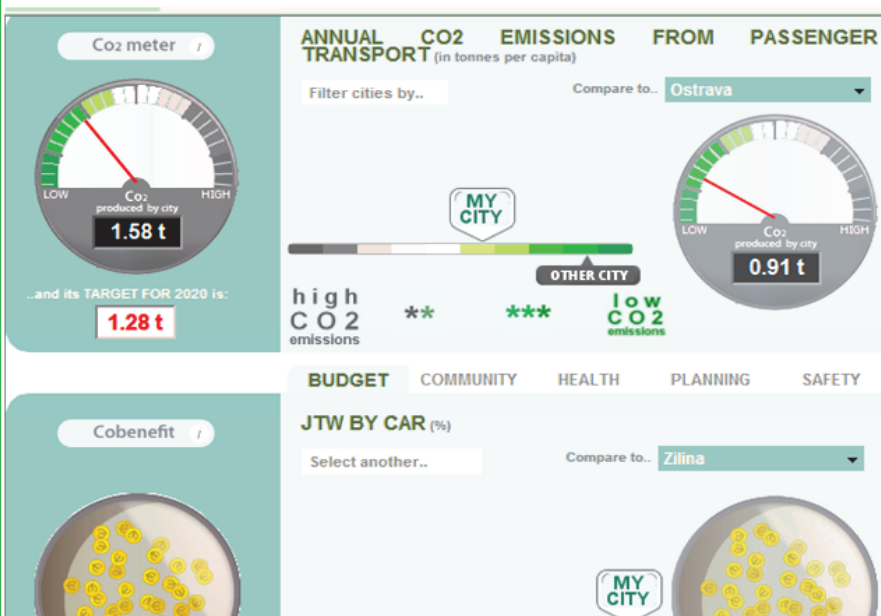
- cost/budget;
- time and accessibility;
- health;
- safety;
- community;
- planning/land use.

Widget representing 'time'. Source: CATCH platform



It then offers the possibility to focus on each issue and on its implications for, and links with, a low carbon mobility. This is achieved through a short description and a range of supporting options. At this level, users can already take advantage of the interactivity between the visual co-benefit tool and the content management system engine, as the supporting options for each co-benefit can query the content engine and trigger result pages which contain specific content taken from relevant sections of the content management system of the CATCH platform.

When this first exploration is concluded, users are likely to initiate the further city-focus navigation. This is condensed into two main screens, to keep the number of clicks to a minimum and thus avoid users' loss of interest and site abandonments: a) a city selection, which can be either done from a scrollable list or from a visual map; b) a couple of dashboards, built around the principles of info-graphics, which convey CO₂ and co-benefit measures (and performance) in an interactive and visual way for the selected city and for a range of comparison cities. The performance is communicated by means of a carbon-o-meter as far as CO₂ is concerned, and by means of tailor-made "widgets" for each co-benefit measure presented.



Screenshot of the co-benefit tool. Source: CATCH platform

The CATCH Final Meeting | 13 December in Bristol

The CATCH project is holding its final conference on 13 December 2011 in the University of West of England in Bristol, UK.

The CATCH project has developed a knowledge platform that facilitates communication about climate change in order to help move towards a low carbon transport system. It brings together a wide variety of information, and presents data related to low carbon transport to help incite behavioural change, for example through the co-benefit of scenario tools.

Grounding work for the development of the platform looked at how best to communicate messages about low carbon mobility. One of the major findings in the research is that low carbon messages about mobility must focus on other (linked) issues of value and not just mobility (e.g. quality of life, local amenity), and must tie policy benefits in mobility to other non-transport benefits. In other words communicating about low carbon transport and inciting behavioural change requires linking to the co-benefits of low carbon transport.

The theme of the conference takes up this idea: during the conference, the CATCH knowledge platform will be presented in the context of a variety of co-benefits that a low carbon transport will bring to health, the economy and to planning: the idea is to provoke discussion on the links that low carbon transport has with other "co-benefit" areas, and how these links can be harnessed as an opportunity to help shift to a low carbon transport system.

To view the draft programme and more information, click [here](#).



Aerial view of Bristol. Source: William Avery, Licence CC2.5

CATCH event in Brazil

The XXV ANPET - Congress Research and Education in Transportation will be held in Belo Horizonte, Brazil, from 7 to 11 November 2011 at the Convention Centre of the School of Engineering of UFMG.

The themes of the congress include, among others:

- Transport Policy,
- Transportation Planning,
- Analysis of Transport Systems,
- Transport and Environment,
- Transport Economics,
- Management and Organization of Transportation,
- Operation of Transport,
- Engineering and Traffic Safety,
- Transport infrastructure,
- Logistics,
- New Technologies and
- Human Resources Training in Transport.

As part of this event, on the 8th November, CATCH partner COPPE (transport engineering department) at UFRJ will hold the conference "Sustainable Mobility", to present initiatives and experiences on this topic. There will be a focus on the CATCH project, and how CATCH and the work done in the project could help in moving to a more sustainable mobility. The event will be held in Portuguese.



COPPE
UFRJ

More information can be found at www.xxvanpet.com.br

Communicating the work of CATCH

There has been much technical development, backed by in-depth research, of the CATCH platform since the last newsletter. This work has been matched by efforts to communicate the work being done by the CATCH team to a wider audience. A diverse range of stakeholders could benefit from the work being done by CATCH and the dissemination approach has been designed to reflect this. Dissemination events have been conducted to target decision makers on the local, regional and international levels, with some specifically targeting those working in the transport sector and others in the broader energy sector and in the field of climate change. Some dissemination activities have



been tailored to practitioners and policy-makers whilst others have been targeted at an academic audience. A cross-section of the type of events where CATCH has been disseminated is listed below:

- Training events
- Workshops
- Academic think tanks
- International climate conferences
- Local and regional transport practitioner meetings
- A European energy forum.

If you would like CATCH to be presented at an event that you are organising then please let us know. Similarly, if you would like any further details about any of these events, or the broader dissemination work being conducted by CATCH, then please get in touch.

CATCH co-benefit fact sheets

A key finding from the CATCH project, is that carbon reduction messages in mobility should be framed in terms of co-benefit areas. For example, the message "cycling instead of taking the car will reduce your carbon footprint", can be given in terms of other co-benefits: "cycling to work helps to keep you fit". This focus on the wider benefits of a low carbon transport system will be a major focus of the CATCH final event.

To better understand the possible links between carbon reduction and the co-benefit areas highlighted in CATCH, the project team have drafted 6 short fact sheets bringing together examples and studies linking some of the co-benefits associated with low carbon mobility. You can find links to the fact sheets below:

- [Introduction to fact sheets](#) (download)
- Benefits of CO₂ Reduction in Transport for [Health](#)
- Benefits of CO₂ Reduction in Transport for [Planning](#)
- Benefits of CO₂ Reduction in Transport for [Time](#)
- Benefits of CO₂ Reduction in Transport for [Cost](#)
- Benefits of CO₂ Reduction in Transport in the [Community](#)
- Benefits of CO₂ Reduction in Transport for [Safety](#)



CATCH publications & conference papers

Read more about the work of the CATCH project:

- Waygood, E. Owen D. and Erel Avineri (2010). Research and Design Report.
- Avineri, E. and E.O.D. Waygood (2010). Behavioural Inception Report.

Several conference papers have been written to present the work done in CATCH:

- Waygood E. O. D. and Avineri, E. Does "500g of CO2 for a 5 mile trip" mean anything? Towards more effective presentation of CO2 information. Transportation Research Board (TRB) 90th Annual Meeting, January 24-27, 2011, Washington, DC.
- Waygood E. O. D. and Avineri, E. The effect of loss framing on the perceived difference of CO2 amounts: implications for advanced travel information systems. Universities' Transport Study Group (UTSG) 43rd Annual Conference, Jan. 5-7, 2011, Milton Keynes. 2011.
- Waygood E. O. D. and Avineri, E. Visual Formats, Reference Points, and Anchoring Effects on Perceptions of the Sustainability of Travel Choices. The 1st Workshop on Traffic Behavior, Modeling and Optimization. TBMO'2010, 19 Sept. 2010, Maderia, Portugal. 2010.
- Waygood, E.O.D., Binsted, A., Clark, A, and E. Avineri (2011). Developing an online tool for behavioural change in urban transport. ECEEE Summer Study, Toulon, France, 6-11 June, 2011.
- Binsted, A., Clark, A., Waygood, E.O.D. and Avineri, E. (2011), Communicating the impacts of transport choices to encourage low carbon travel behaviours. In: M. Gather and A. Lüttmerding (Eds.), Transport and the Environment: Sustainable Transport, Green corridors. Proceedings of the 8th SoNorA (South-North Axis) University Think Tank Conference, June, Szczecin, Poland. ISSN 1868-8411, pp. 5-17.
- Binsted, A., Clark, A, Waygood, O, Avineri, E (2011). Carbon Aware Travel Choice for Sustainable Mobility. Transport Practitioners Meeting, Liverpool, UK 19-20 July, 2011.

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