Sustainable Mobility Innovations

Our experts' choices Autumn-Winter 2014

The world of "*sustainable mobility*" is full of innovations. On a daily basis, new tools, approaches and concepts are developed, tried and implemented to make the life of pedestrians, cyclists and public transport users more comfortable.

As part of their daily routine, our mobility experts around the world are constantly looking for such innovations – please find below their discoveries. Some of these innovations are not new or innovative on a global scale, but are adapted to suit local conditions and hence worthwhile to be included in this list and shared.

New Bike Bridge in Copenhagen connects harbour

The newly launched elevated cycle track "*Cykelslangen*" (Cycle Snake) strengthens Copenhagen's efforts to further optimise the town's bicycle infrastructure. The bridge, only accessible for cyclists, was opened in summer 2014 in order to connect *Vesterbro* neighbourhood with the Island *Brygge* — the first fixed link above Copenhagen harbour for many years. The orange structure is four metres wide, 220 metres long and allows bidirectional bicycle traffic.

Prior to the construction of the new cycling bridge, options for cyclists to cross the original bridge were limited: Either pushing the bikes up and down stairs or taking long detours in order to reach their targeted destinations.

This elevated structure solves several problems at once: The separation of pedestrians, motorists and cyclists results in a less stressful flow of traffic; a faster connection to the island of *Amager* for cyclists is established; and the ongoing struggle for space within the city remained unaffected. Further information can be found on: http://www.theguardian.com/cities/2014/jul/14/bike-lanes-bridge-copenhagen-new-cycle-snake-cykelslangen?CMP=fb_gu.
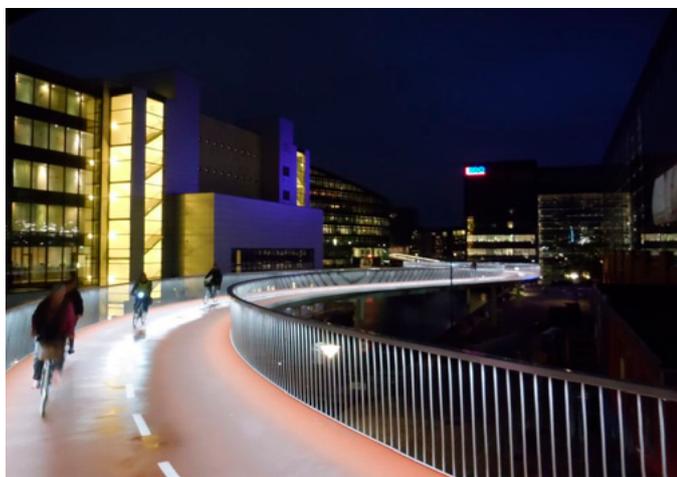

Photo: © Armin Wagner, Kopenhagen

Real time bus application released in Beijing

Waiting for a public bus in China's capital used to be tiresome. Due to traffic jams and lack of real time information on the operating busses, users of public transport in Beijing were used to wait a long time for the arrival of their ride. The new smartphone application "*Beijing Real-time Buses*", released in 2013, aims to change this situation.

Through the provision of real time information (generated via GPS) indicating the current location of the busses, the exact arrival time can be determined. Furthermore, information on available bus stops, route planning and updated timetables is provided. The application includes all 140 bus lines, 9 400 bus stops and 4 600 buses in the 21 million-inhabitant city.

The developers of the application have ongoing plans of including other means of transport like passenger trains and motorised private transport that could furthermore result in a mitigation of road congestion and air pollution. Further information can be found on: http://sustainabletransport.org/beijing-released-beijing-real-time-buses-app

Europe's first zero-emission train station opened

In June 2014, Europe's first carbon-neutral train station has been officially opened in Kerpen-Horrem, Germany. It has been the first project of the *StationGreen* programme of the German railway company Deutsche Bahn. The station is solar powered by a 440 square metres photovoltaic system, producing an annual output of 35 000 kWh. Furthermore, a geothermal system heats and cools the building, rainwater is reused and the lighting concept includes natural light as well as energy-saving LEDs. It is intended to implement the *StationGreen* concept in further cities in upcoming years. For more information, please visit http://www1.deutschebahn.com/ecm2-susstation/start/projects/project_stationgreen.html.

MyRide Kenya

In Kenya the bulk of public transport takes place through privately owned minibuses, called matatus. This sector has undergone some regulation in recent years but generally eludes the authorities. This is where MyRide comes in: as a 'tripadvisor' for matatus, MyRide allows passengers to rate matatus. They can post text, audio or video, to which fellow passengers, the matatu owners and the National Transport & Safety Authority (NTSA) can respond. The ratings and comments are shared freely online to generate awareness and empower the public to make informed transport choices. This innovation aims to reduce road accidents, increase reliability and comfort and make matatus a more attractive transport option.

In addition to MyRide others solutions such as a digital Matatu Map and the NaiFlow big data project, to map traffic flows through Nairobi, are envisaged. All solutions are scalable and can be applied to other African cities. For more information please see http://www.kijicho.com.

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