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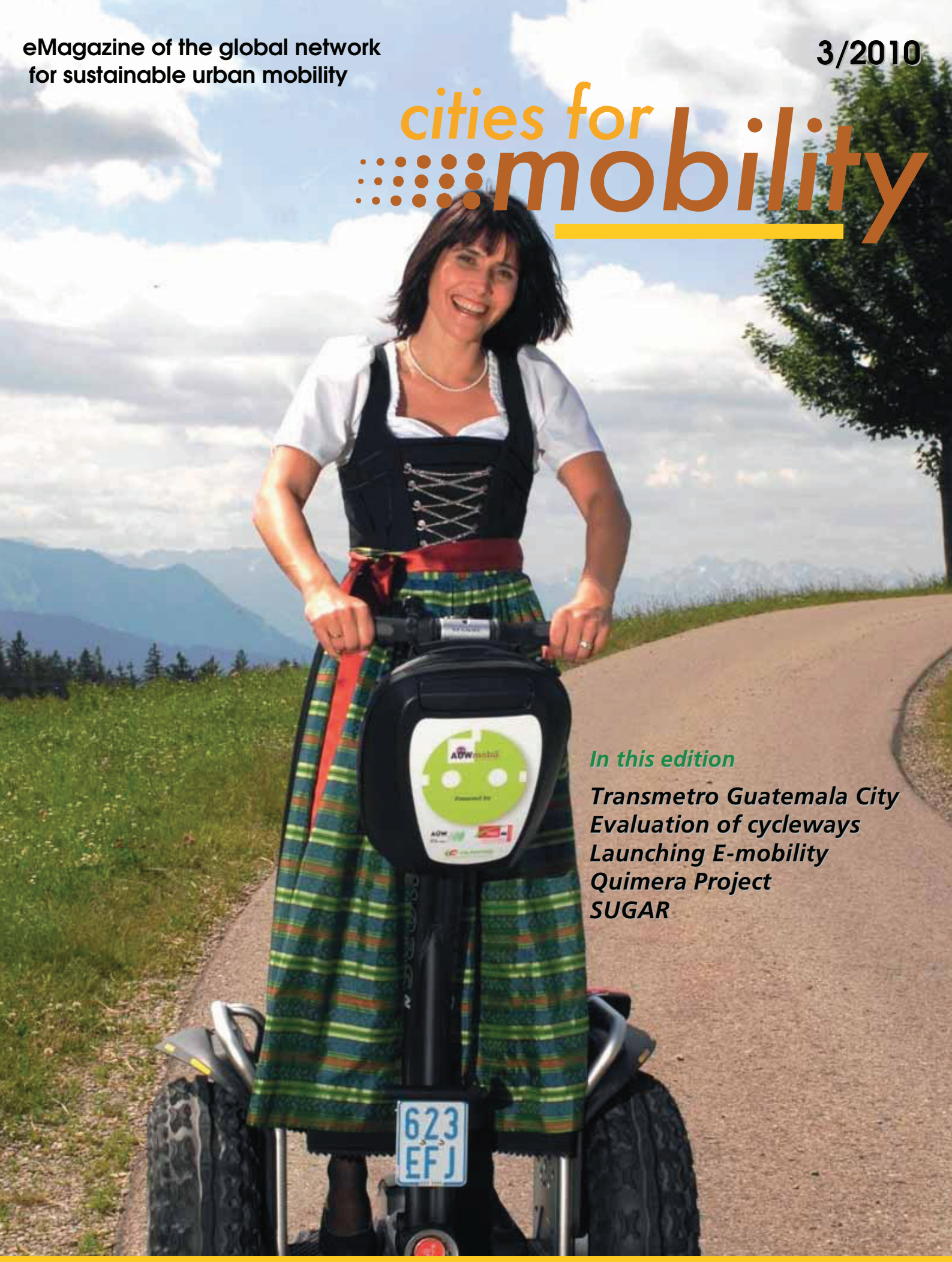

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Chicken or egg?

The role of national and local governments in launching electric mobility

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Generally, cities and public utility companies are seen as the ideal partners in promoting electric mobility. It is even widely assumed that municipalities first have to provide the necessary infrastructure to allow users to recharge their e-vehicles in many public locations before potential clients would start purchasing these instead of conventional ones. As the following examples of the local use of electric vehicles within the framework of the CO2NeuTrAlp project of the EU programme "Alpine Space" show, there is no doubt that local authorities can make valuable contributions to the development of sound strategies to foster e-mobility. However, it is evident that **without national governments setting the legal and tax related frame conditions right**, and without industry responding with proper technology and products to a massive demand of electric vehicles, **cities will remain powerless as promoters** of the "age of solar mobility".

Belluno: Provincial test fleet for municipalities

In close cooperation with the local transport company Dolomitibus, the Province of Belluno has leased **nine electric Piaggio mini-vans** with a max. range of 75 km. The provincial government acts as a promoter of electric mobility in the region by allowing 22 local authorities to **test an e-vehicle for six months free of charge**. In return, the beneficiaries have to deliver reports about their pioneer experience. The test drivers receive training before the e-vehicles are handed over. Experience shows that municipalities and public utility companies can perfectly fulfil most of their tasks, regardless of the limited range of the e-vans. For the garages, however, repair and maintenance of electric vehicles constitutes a totally new challenge. Envisaging the future need for skilled labour, the vocational school of Belluno has started to have their teachers trained by Piaggio and to **train all motor mechanic students in electric vehicle technology**. For local authorities, the main constraint so far is the high cost of e-vehicles, even though much lower operation costs will ensure amortisation over the life cycle. Therefore, the Province of Belluno plans to set-up a rotational fund providing municipalities interest free loans to buy e-vehicles.

Padova: Zero-emission city logistics works!

Drivers of the city logistics company Interporto Padova love their "e-master" with its astonishing acceleration. The Renault based lorry of 7.5 t has been converted by Enerblu. The e-truck delivers chocolate to the many local shops in the beautiful historic centre of Padova free of noise and emissions. Even though the Interporto freight terminal is located 10 km outside the city centre, the limited **vehicle range** (approx. 100 km) **has never been a problem**. The **batteries are charged over night**. Interporto shows that even freight can be delivered with zero emissions, preserving the high quality of life on the narrow streets and cosy squares of that beautiful historic city.

Allgäu: Pedelec region within a few months

The regional power supplier Allgäuer Überlandwerk has managed to bring together all relevant local and regional stakeholders to launch the age of electric mobility in one of Germany's leading tourism regions. Within a few months, 250 hotels, restaurants and bike retailers joined in a **network of pedelec rental and battery exchange stations** throughout the Allgäu. During high season, Movelo offers them an attractive leasing and maintenance service to build-up a rental fleet of Flyer pedelecs. Even for restaurants, the **provision of free exchange batteries** is profitable, as this service attracts further clients who tour the Allgäu by pedelec. For 2011 enthusiastic tourism partners have planned to double the number of pedelecs and stations within the network. Without a costly marketing initiative, the Allgäu region is already widely associated with "green" electric mobility. Since 2009, "eE-Tour Allgäu", an important R&D project funded by the German Ministry of Economy, even puts the region in a pole position regarding the development of intelligent e-vehicle management and smart grid technology.

First the chicken: Set national frame conditions right

Despite first encouraging local experiences with electric vehicles, it is evident that only national governments can set the frame conditions right to start the massive introduction of electric vehicles. Yet, for clients it is still much cheaper to by e.g. a polluting two-stroke scooter instead of a clean and energy efficient electric one.

Why do **governments still fear** to follow the example of Shanghai **imposing high taxes on conventional motorbikes**, according to the "**polluter pays principle**"? Why shouldn't car sharing initiatives and local authorities receive subsidies if they invest in costly but clean e-vehicles, testing them for the benefit of a future national growth industry? Why doesn't EU law foresee that e-vehicles can easily be identified through **a special zero emission plate**, enabling municipalities to provide and monitor specific rights of access to inner city areas or free parking for e-vehicles?

Then the egg: Start large-scale introduction locally

Only when the basic frame conditions have been set right by national governments, ideally through international cooperation and harmonisation, local authorities can unfold their full potential to promote this new technology locally. First experience in Germany shows, however, that users don't even demand a great deal of costly public charging infrastructure. Even commuters from the outskirts of cities tend to recharge their vehicles over night at home. **Parcel services, (public) fleet owners, and car sharing initiatives** whose vehicles mainly cover short distances, will be the **ideal pioneer users to stimulate the market**, enabling industry to invest in mass production facilities. However, local governments alone, with their scarce financial resources, will hardly be able to invest in electric vehicles, as long as **doing the right thing environmentally, means to be punished economically**. Evidently, when it comes to electric mobility, it's the chicken that has to lay the egg first.