## GOVERNANCE INSTRUMENTS FOR SUSTAINABLE MOBILITY IN GRA? AND HANGZHOU: UBIQUITOUS INSTRUMENTS, LOCAL ADAPTATION

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This presentation explores the attempts by urban governments in Hangzhou (China) and Graz (Austria) to reduce carbon emissions by changing the mobility behavior of their residents. The study shows how the best practices for sustainable mobility are shared by ambitious cities transnationally. The two case study cities utilize same governance tools but implement them in different ways because of different local context. The objective of the study is to contribute to the in-depth and comparative studies that are needed to increase our understanding of local adaptation of transnationally shared best eco-governance practices.

The analytical framework is based on three different categories of ecological governance instruments (developed from Opschoor and Turner 1994; Fryxell & Lo 2002). With the help of the three tools local authorities can pursue to raise the awareness of the residents, enable them to change their behavior and steer or even force them to use more sustainable modes of mobility.

#### The instruments are:

- 1. Regulatory instruments that include for example prohibitions, restrictions, guidelines and plans issued by government units. Regulatory instruments can provide new alternatives or forbid old ones.
- 2. Communicative instruments include for example education, information dissemination, campaigns, training, steering public expectations and learning by doing. It aims at inducing voluntary adaptation of ecological behavior and at stimulating the readiness to contribute (rather than to come with a list of demands).
- 3. Economic instruments include for example charges, subsidies, bonuses and tradable permits. They aim to change the context in which the consumer does decisions.

The study uses the concept "ubiquitous eco-city" (Joss et al 2013) to frame the comparison. Based on a survey on 178 eco-city initiatives worldwide, Simon Joss with his colleagues concluded that urban sustainability policies have become globally mainstream — a phenomenon that they call "ubiquitous eco-city". Although urban ecopolicy initiatives share many common features, the localization of the ubiquitous plans into the social, political, economic and cultural context of cities necessarily leads to great diversity. The survey conducted by Joss and his research group exposed striking diversity of local concepts, forms and practices, which led them to call for more in-depth case studies in the local forms urban eco-policy initiatives.

The study is based on an analysis of local official policies, plans and guidelines issued by relevant authorities in Hangzhou (China) and Graz (Austria). These two cities are chosen as cases because they both have ambitious green mobility agendas and they represent important second tier cities in their respective countries.

### Innovation, Agglomeration, Evolution

# RE-SPECIALISATION AND HOLLOWING-OUT: INDUSTRIAL DYNAMICS ON THE POST-SOCIALIST PERIPHERY

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Industrial restructuring in post-socialist Central Europe has resulted in a new balance of industry and services — significant, although territorially uneven tertiarisation — and the deep transformation of formerly significant industrial regions. Although all of these regions experienced symptoms of a structural crisis in the early years of transition, their development patterns have been rather divergent: some experienced relative smooth integration into global production networks; other struggled with structural and network-related problems of "Old Industrial Regions"; and yet others experienced deep deindustrialisation.

In this paper, relying on case studies from Hungary, Poland and Czechia, and supplemented by cross-sectional data, the author argues that instead of radical structural change, the more successful patterns of industrial adaptation in the region have followed a gradualist model of transformation instead of radical structural change. We can see that the beneficial effects of radical tertiarisation have been mostly concentrated in metropolitan regions (mainly national capitals), while elsewhere, successful restructuring has relied on virtuous path-dependencies rooted in previous industrial traditions.

Regions which could rejuvenate their previous skillset, or convert their knowledge base to new forms of industrial production and integration are undergoing re-specialisation and the slow emergence of resilient industrial networks; while regions which could not exploit these continuities increasingly experience hollowing-out, the loss of their productive capabilities and the erosion of the knowledge bases which could lead to socio-economic renewal.

Contrary to many expectations, the overly "thick" and "rigid" networks of Old Industrial Regions have been much more successful in survival and competition than those peripheries where these networks weren't present, or they were lost after the dissolution of their inherited industrial base. Skilled labour, institutions, and technical skills are now among the most valuable assets of post-socialist regions, and with a few significant exceptions (particularly coal mining), these industrial heritages are being converted for the needs of new industries.

This is not the case in hollowed-out regions, where consumption-oriented services have failed to revitalise the regional economy, while local productive capacities and knowledge assets are insufficient to reconstruct competitive and resilient local economic networks. In these less dense, peripheral region, we can still find evidence of path creation and early-stage industrial organisation. However, the weak institutions of their regions, supplemented by the specific Central European problem of low capital accumulation and a high reliance on Foreign Direct Investment, presents specific challenges which necessitate a re-thinking of development strategies. In the author's opinion, the cornerstones of these strategies should be a stronger commitment to human resource development, network-building, and support for emerging medium-sized domestic companies.

Case studies in innovation

### REGIONAL DEVELOPMENT FOR STATUS MARKETS: ELECTRIC VEHICLES AND CONSUMER PERSPECTIVES

### Stewart MacNeill, Centre for Business in Society (CBiS), UNITED KINGDOM Carlos Ferreira, Coventry University, UNITED KINGDOM

This paper presents a preliminary analysis of the potential role of local and regional economic development in the development of a servitization model for marketing electric vehicles (EVs).

The transport sector is estimated to be responsible for around 14% of carbon dioxide emissions worldwide. As a result, there is an on-going interest in EVs and their potential for reducing emissions. Governments have offered various incentives for consumers wishing to acquire EVs, including grants to reduce the purchase price, help with charging infrastructure, waiving road use taxes, access to free parking and charging and to bus lanes, as well exemption from congestion or emissions charges in cities. However, and despite these incentives, the uptake of EVs has been slow, confining these vehicles to a small niche of the total automotive market. On current standing, it seems unlikely that EVs will appeal to mass consumerism.

However, work on status markets and the importance of 'value added services' provides an interesting model for how the EV market might develop. Appealing to differing aspects of consumer lifestyle, status and valuation may hold the key to future sales of EVs within the status or luxury market. One key may be a `servitization' model, where producers develop on-going and individualised relations with purchasers, as typically seen in the markets for luxury and status vehicles. To develop such markets would require that manufacturers add value to EVs themselves, but also that they constitute and integrate downstream networks with other companies, which can provide additional services and value for consumers.