

REVIEW

***Transport, Climate Change and the City*, Robin Hickman and David Banister,**
Routledge Advances in Climate Change Research, London and New York, Routledge, 2014

Cities are the heart of economic activity, social progress and human mobility. But this comes at the price of rising greenhouse (GHG) emissions that cities are both responsible for and exposed to. Unless something radically changes in the way we move within and between cities, we are set to make the Earth an unliveable place within a few generations. Concerns over death toll of road accidents, adverse health and well-being impacts of rapid motorisation, consideration that energy resources are finite (even if somewhat weakened by recent reductions in energy demand and mobilisation of new conventional and unconventional energy sources) and – foremost and more than ever – dangers of the climate change have stirred ambitions and courage in a number of cities around the world to take bold actions geared at sustainable travel. While the aspirations of city leaders, who have formed an *avant-garde* of decarbonisation, are now backed up by pledges of national governments the main question still rests on if and how they can be fulfilled.

Transport, Climate Change and the City provides insights on the state-of-the-art of urban travel, what it does to the environment, where it is heading, and what can be done to break the projected trends and achieve more sustainable travel behaviours. The book offers both a compelling account of how the urban world is slipping further into car dependency and an imaginative approach to think about and shape future urban mobility. By taking a scenario approach to a very diverse set of cities - different in regards to size, demographics, urban form, geo-regional location, development opportunities and challenges, transport system characteristics and aspirations, and governance path dependencies - Hickman and Banister think about the impossible and how to make it possible.

To this purpose *Transport, Climate Change and the City* offers matrix of four scenarios – (i) business as usual, (ii) clean but intense mobility, (iii) progressive travel with limited technological innovation and (iv) sustainable mobility – positioned on the axes of (x) technological innovation and (y) behavioural change. The shared conceptual framework is consistently used in the book to shape scenarios along transport policy priorities and available policy families - for urban structure, public transport, traffic demand management, low-emission vehicles, public realm and walking and cycling facilities, and ICTs – to encourage the implementation of future policy measures, and to quantify their potential impacts. This turns *Transport, Climate Change and the City* into an indispensable guidebook for policy-makers and practitioners, which explains a rationale for scenario building, steps to be taken, potential pitfalls, and outcomes to be expected in the sustainable future-making endeavour. At the same token, by supporting a statement that various transport policies across the world do matter in making sustainable and unsustainable mobility happen, this book issues both a promise and a warning to communities of practice.

What will the interdisciplinary community of transport and mobility scholars find in *Transport, Climate Change and the City* is a broader understanding of socio-technical change that moves beyond forecasting and capitalising on the impacts of technological innovation alone. By offering methodologies capable of quantifying carbon impacts of social change the book explores how affective and instrumental factors of behavioural change are equally important in designing sustainable mobility as technological innovation and advanced infrastructures provision. Hickman and Banister also point to broader sustainability impacts of the decarbonisation agenda. This involves, in particular, a potential of using multi-criteria analysis in combination with participatory scenario-building to explore synergies between low carbon mobility on the one hand, and broader economic, social and environmental sustainability, on the other.

While *Transport, Climate Change and the City* signals some synergic effects of low carbon mobility policies, it is less explicit on tensions that they might bring about. I would have welcomed a more comprehensive discussion of the interplays between low carbon mobility, economic

development and social justice. Some elements of a 'conflict perspective' would have strengthened the book. Urban communities from Bangkok to LA not without a reason mobilise against incremental public transport investments. To name a few tensions that arise around sustainable mobility: mass transit systems, and sometimes also BRT, are unaffordable for large swathes of urban population; their development is likely to divert funding from existing public transport networks; severe parking issues arise around underground and BRT terminus stations; in some cases, such as the Bask Country HSR or the Turin TGV route, adverse local environmental impacts of HSR outweigh decarbonisation gains; and new underground lines tend to produce orbit situations where neighbourhoods well serviced by public transport are transformed into empty blown egg-shells while their old residents, forced out to remote locations, fall into car dependency. Furthermore, not only technologically advanced infrastructures but also walkable environments may reinforce gentrification processes; transformation of roads into cycling environments might have adverse impacts on local businesses; and the fight with urban sprawl through dense urban form correlates with undersupply of housing and delivery of units that are of poor quality and small in size. While making sustainable mobility happen will inevitably involve wide-ranging costs, the question remains in how to secure legitimisation and fairness of their distribution. When coupled with local insights on who opposes sustainable transport solutions, on what grounds, and how they may be convinced to change their mind, participatory scenario approach could help much in negotiating conflictive positions.

Transport, Climate Change and the City is stimulating and agonising. Just as any endeavour with such a great ambition, it may attract voices of readers who would have wished more of something, but this in itself makes the book stir ambitions and creativity for imagining, designing and implementing more sustainable futures. This imaginative, well-evidenced and fantastically illustrated book is a must read for academics, students, transport professionals and local authority officers who embark on making our cities more sustainable and liveable places to live, work and play.

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