
DEMAND
DYNAMICS OF ENERGY, MOBILITY AND DEMAND

We have learned that policies and measures to promote energy efficiency reproduce contemporary meanings of service which are (often) incompatible with radical reductions in carbon emissions.

Efficiency measures reproduce the status quo

Unsustainable meanings of comfort and demand are baked into technological ‘solutions’

Technologies make and do not just meet demand

Energy efficiency policies are not solutions to the challenge of radical carbon reduction, they are (often) part of the problem.

Even efficient appliances enable increasingly energy demanding systems and networks of provision

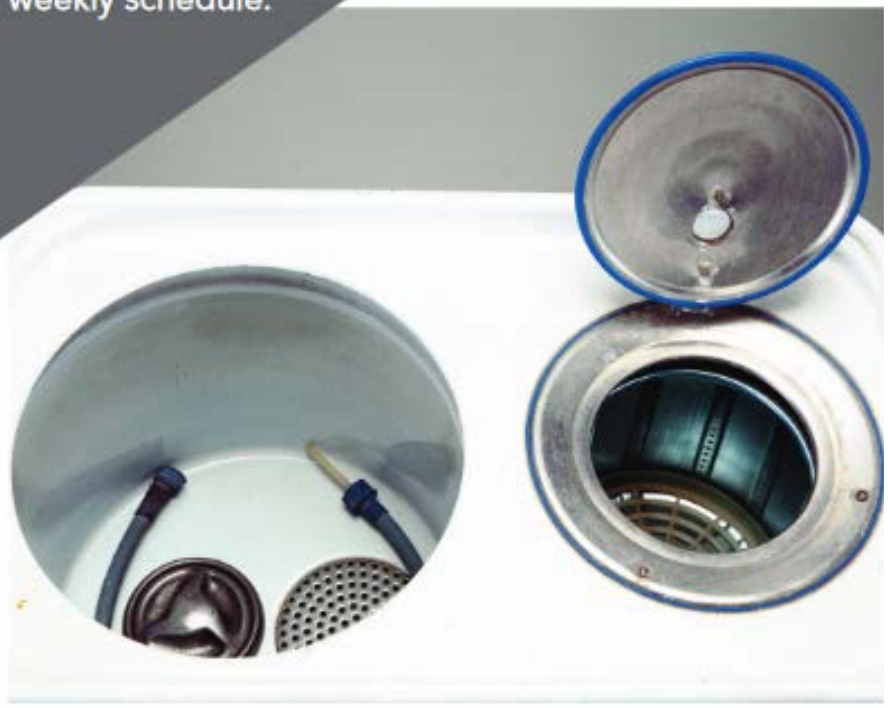
In Hanoi and Bangkok, fridge freezers enable the diffusion of ‘Western’ diets, and resistance to these trends as well.

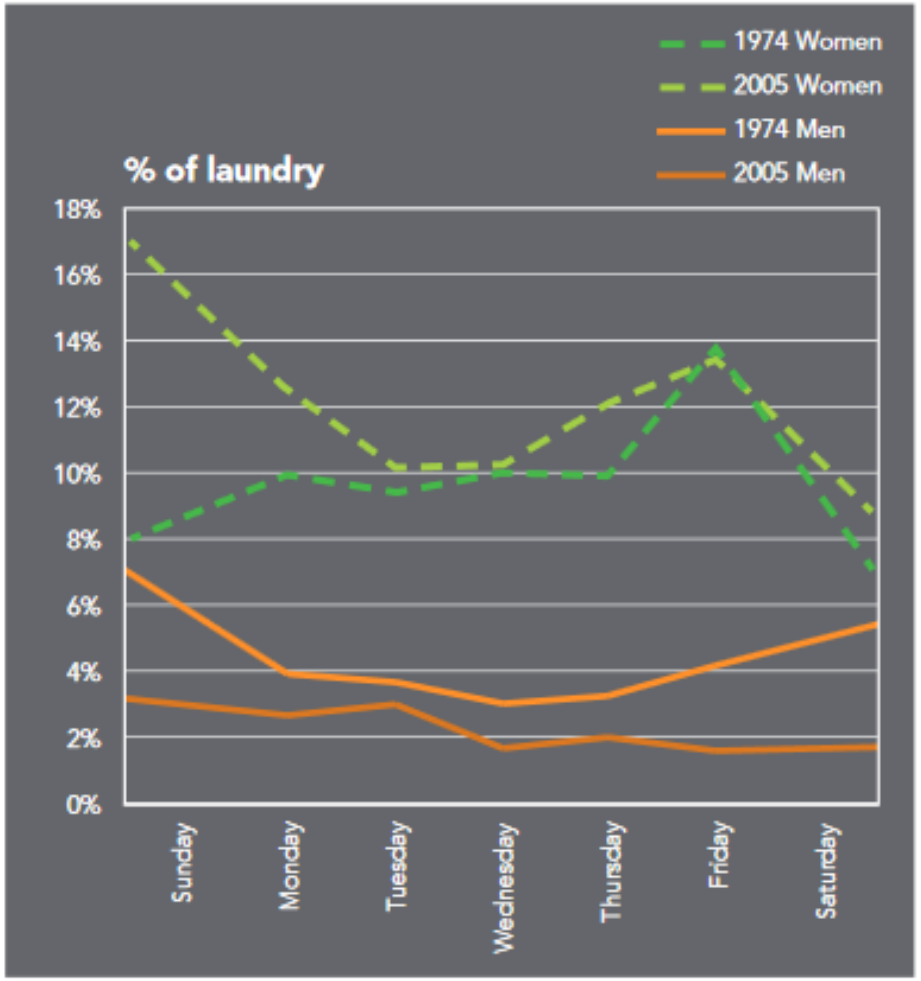
Appliances have a role in transforming ideas of care and convenience, well-being and food safety.

We have learned that increases and reductions in energy demand depend not on appliances alone but on how they are embedded in systems and networks of provision.

We have learned about how activities are scheduled and sequenced across days, weeks and seasons, and about the potential for flexibility at every ‘scale’.

Replacing a twin tub with an automatic washing machine didn’t just make laundry easier. It changed the weekly schedule.





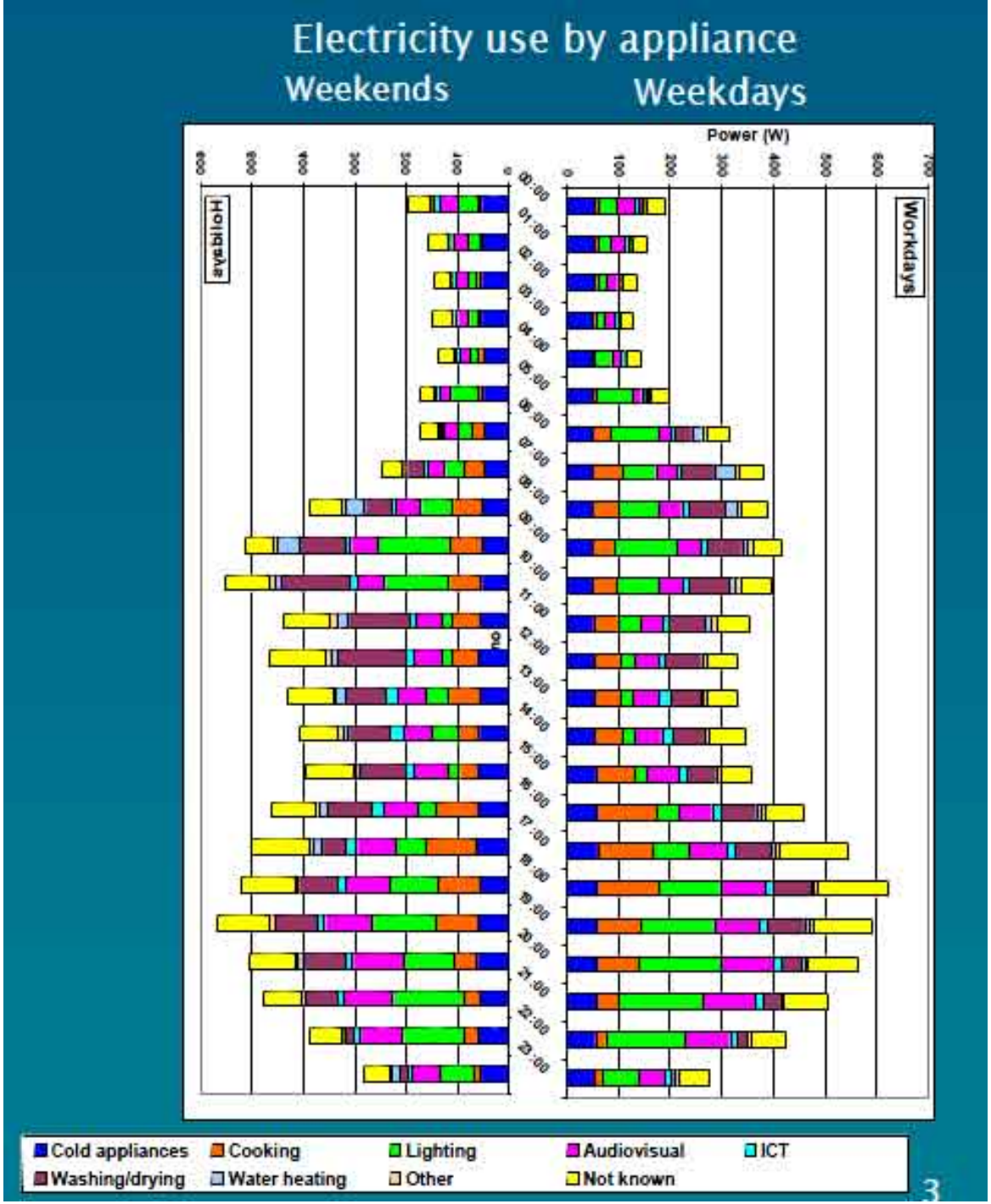
We know how changing technologies, patterns of employment, and societal rhythms constitute each other and we know more about where opportunities to reduce peak demand really lie.

We know a lot more about the living, breathing dynamics of energy demand and daily life

We know about forms of

Frequency
Duration
Synchronicity

We know that all of this is critical intelligence for demand management in an age of renewable supply.

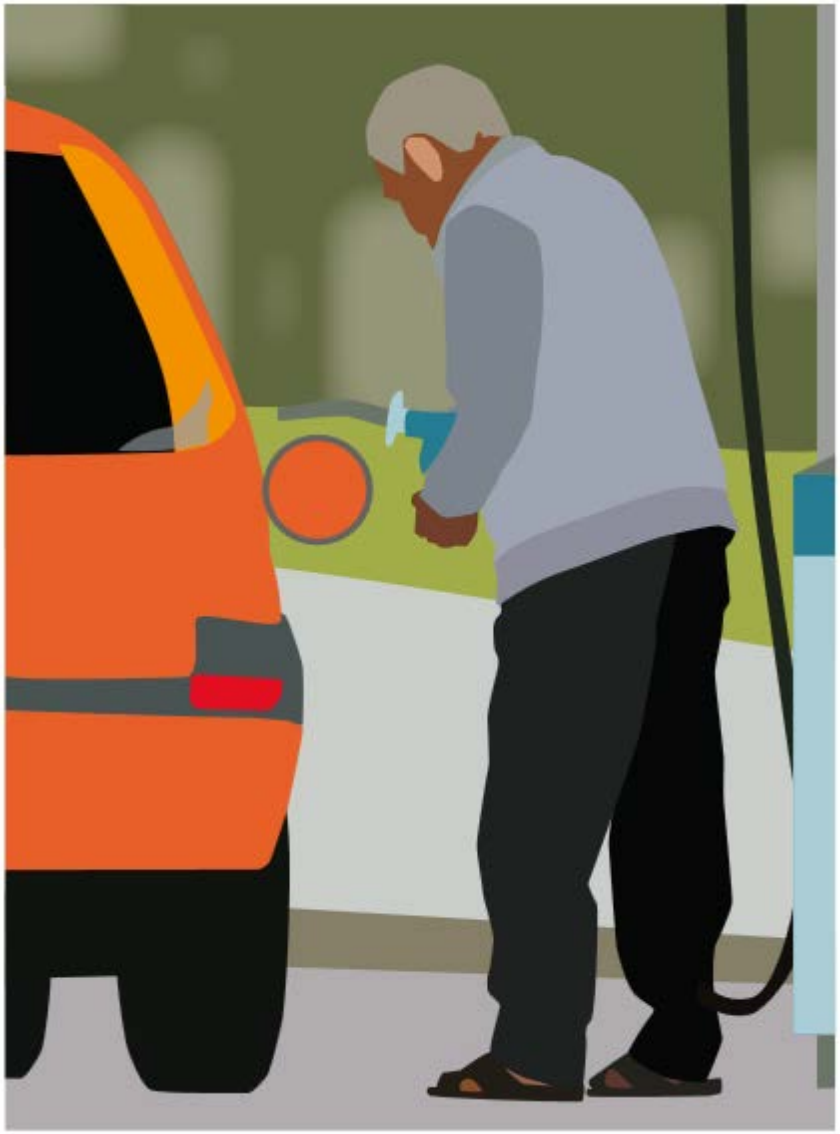


We know about the histories and combinations of provision and practice that underpin rapid increases in demand – e.g. for leisure mobility amongst older people.

We know how different age cohorts encounter changing opportunities and ideas about travel and well being.

We know that more and less energy demanding arrangements co-exist today and that the future is not fixed.

We know how patterns of ‘car dependence’ become established, and we know that trends like these have different implications for different parts of society.



In daily life practices that matter for travel and for energy demand intersect - but not in research and not in policy.

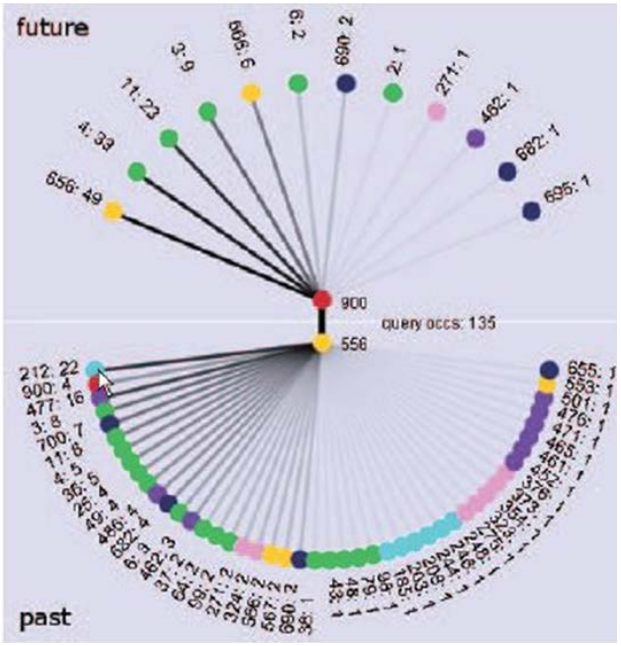
We know that effective demand reduction depends on overcoming these divides.

Transport researchers talk of the demand for travel as ‘derived’ demand.

It is derived from what it is that people do. The same applies to all other forms of energy demand.

We have helped lots of people to ask different questions and collect different evidence about how demand is constituted, how it changes and how it can be steered.

For example..



Into which other sequences of practices does car-driving fit?

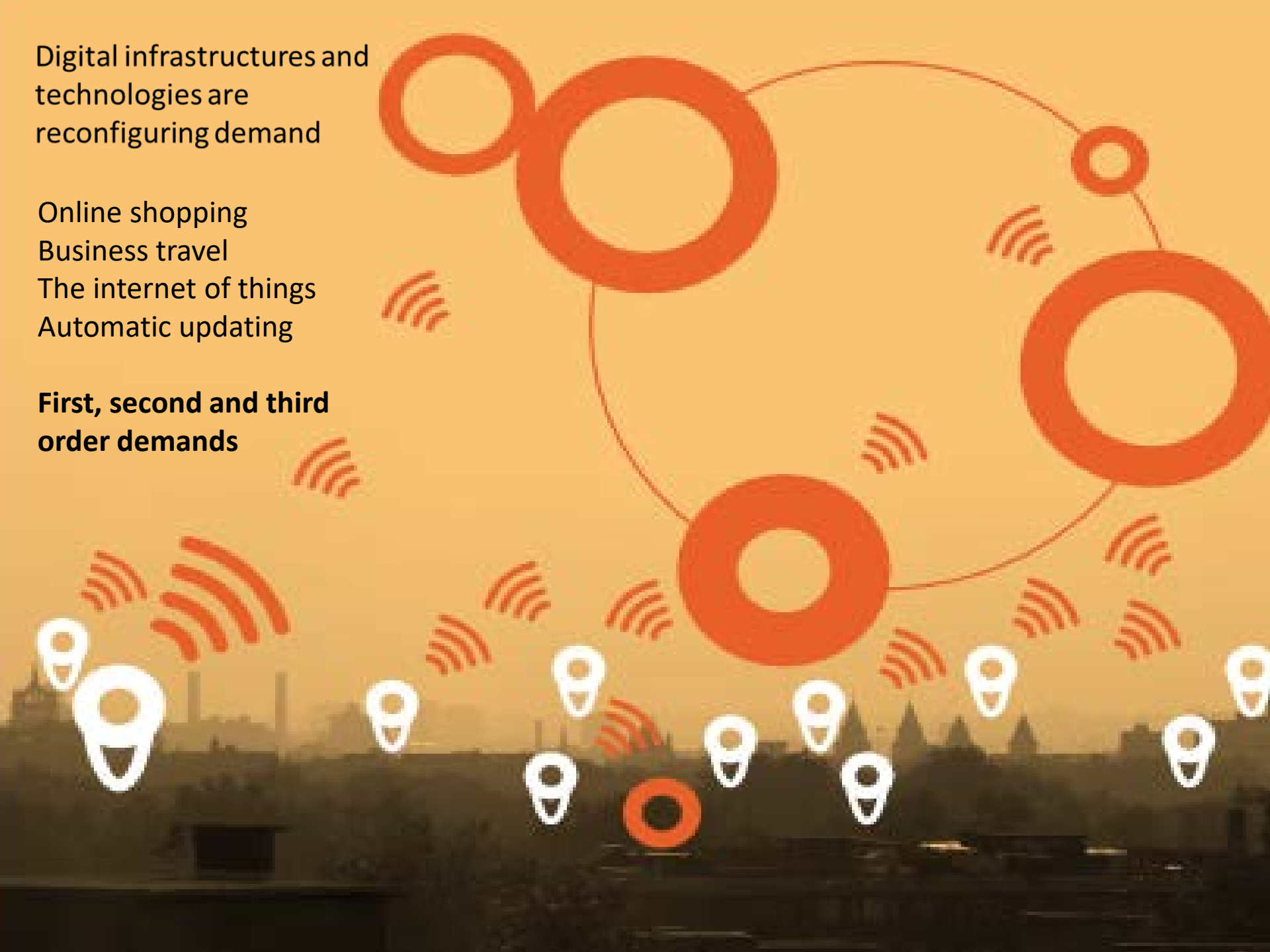
Carrying things or people

Reducing demand for the car means improving the cargo-capacity of other means of transport

Digital infrastructures and technologies are reconfiguring demand

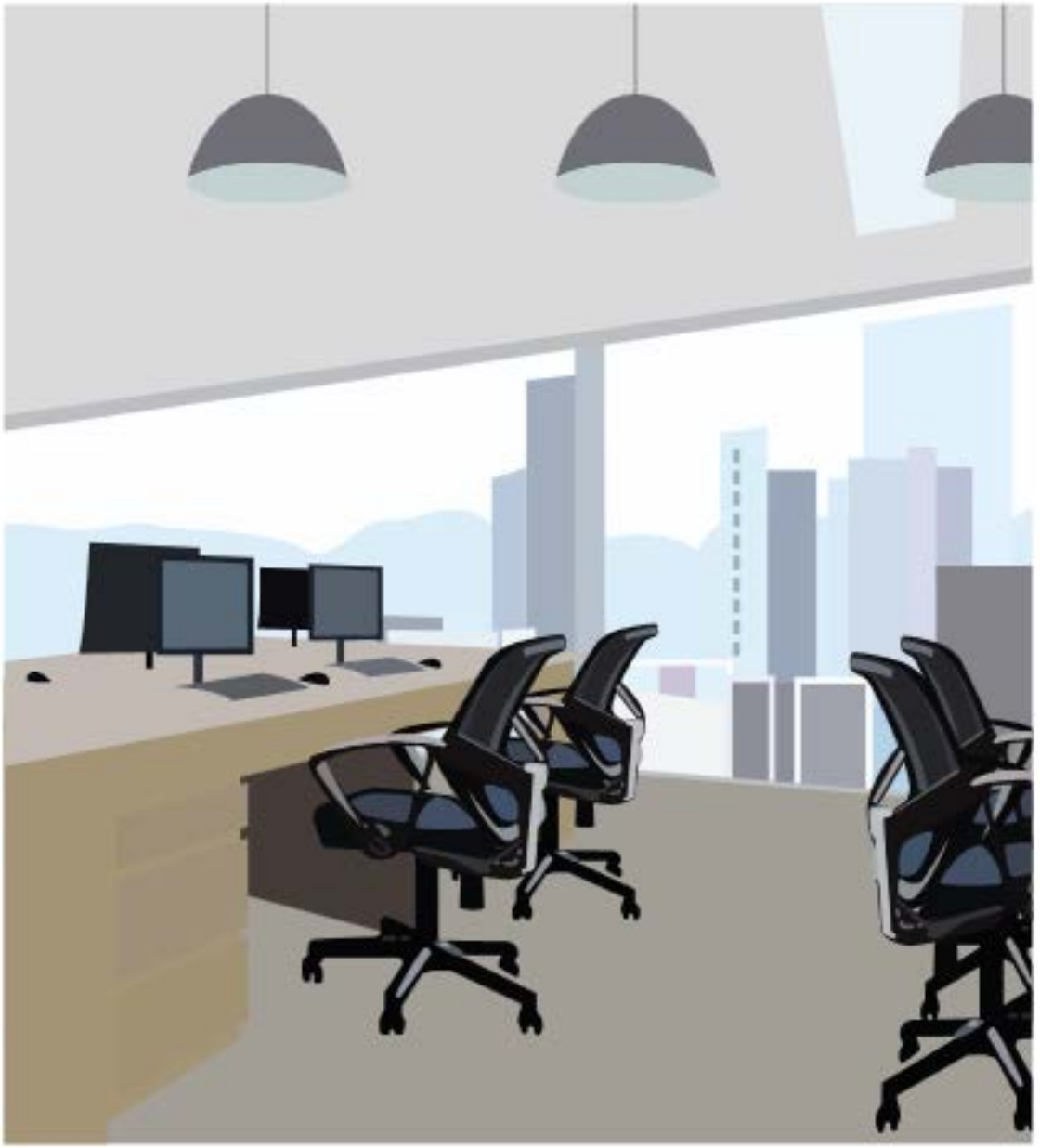
Online shopping
Business travel
The internet of things
Automatic updating

First, second and third order demands




Interconnections revealed
Mobile phone
Water
Garage doors
Automatic locking
Gas central heating
Computers
Traffic lights
Cash machines
Petrol pumps
And a lot more…

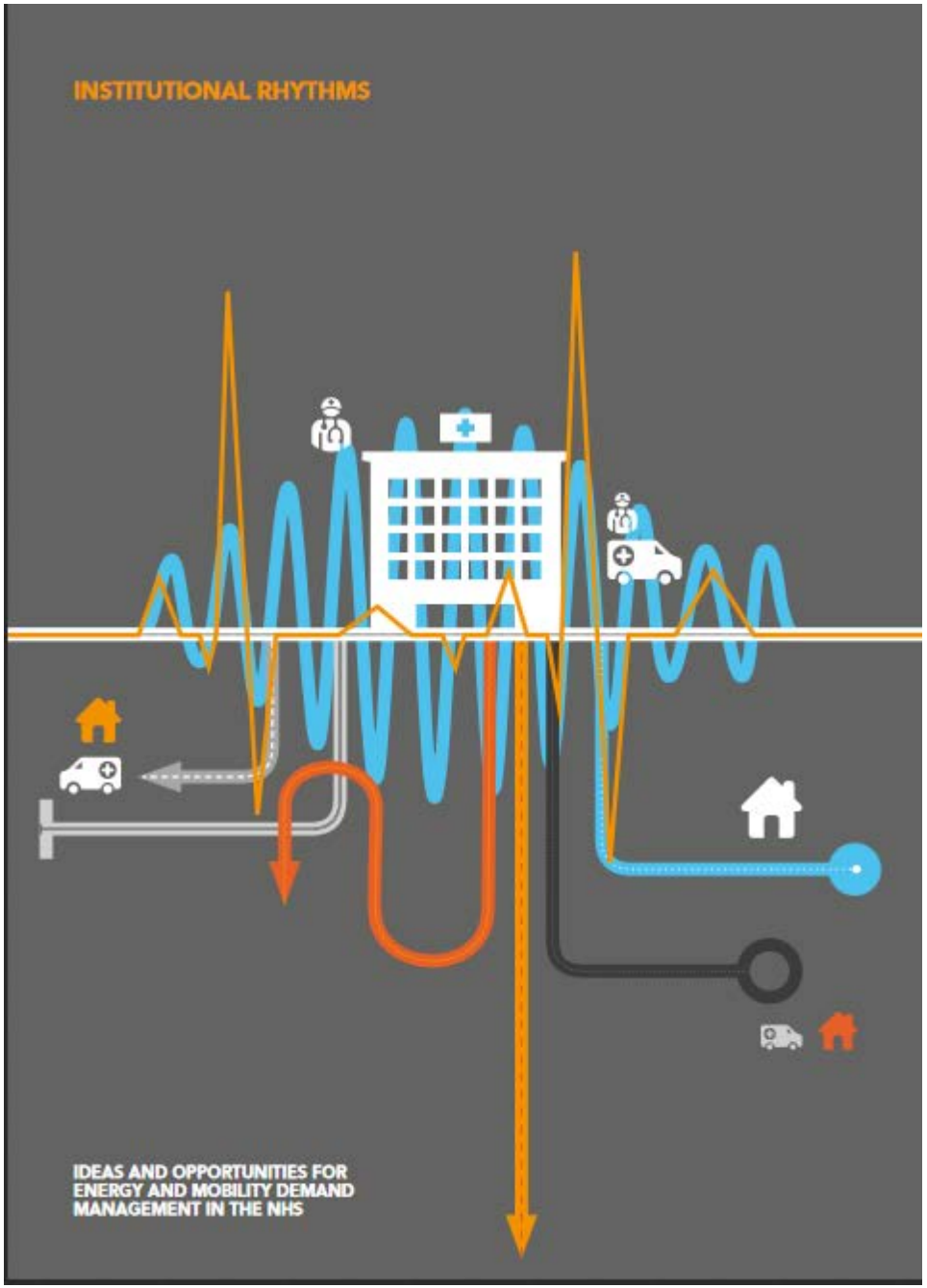
We have learned that standards intended to reduce energy demand can lead to escalating energy consumption.



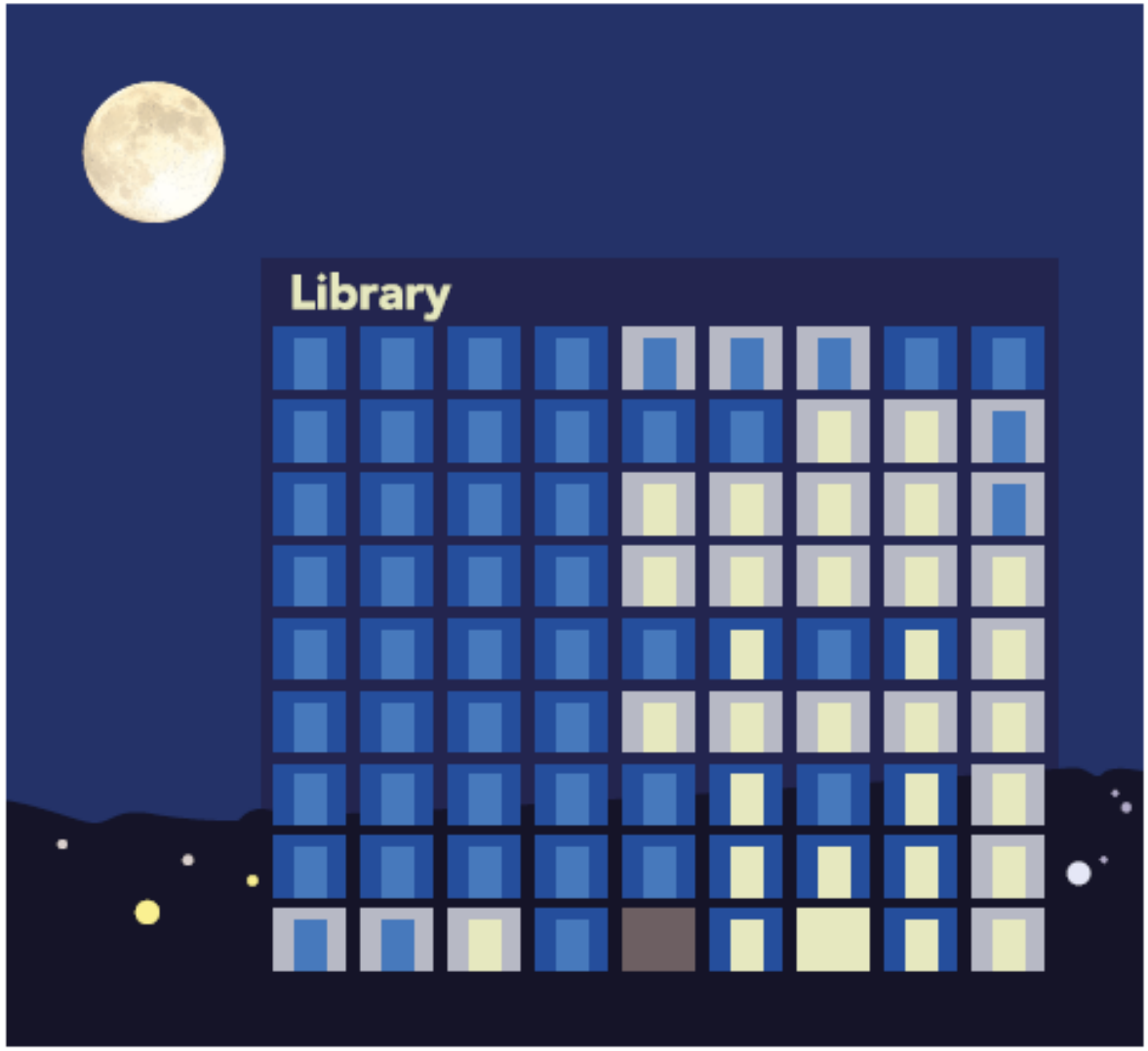
Property markets
Office work
Grade A office specification

Institutional rhythms generate peak demands.

Different working arrangements reduce demand.



We have learned that not all policy that matters for energy demand is ‘energy policy’



Competition for students and rankings means that university libraries are open 24 hours a day.

There is massive potential for using non-energy policy to reduce energy demand.

Reducing demand depends on understanding what energy is used for and how this changes

Technologies and infrastructures make and do not simply meet demand

The timing and location of demand is an outcome of societal and institutional rhythms

Energy demands are shaped by energy policy, but also by many non-energy policies. These can be used to reduce demand.

We have helped shift agendas in research and policy

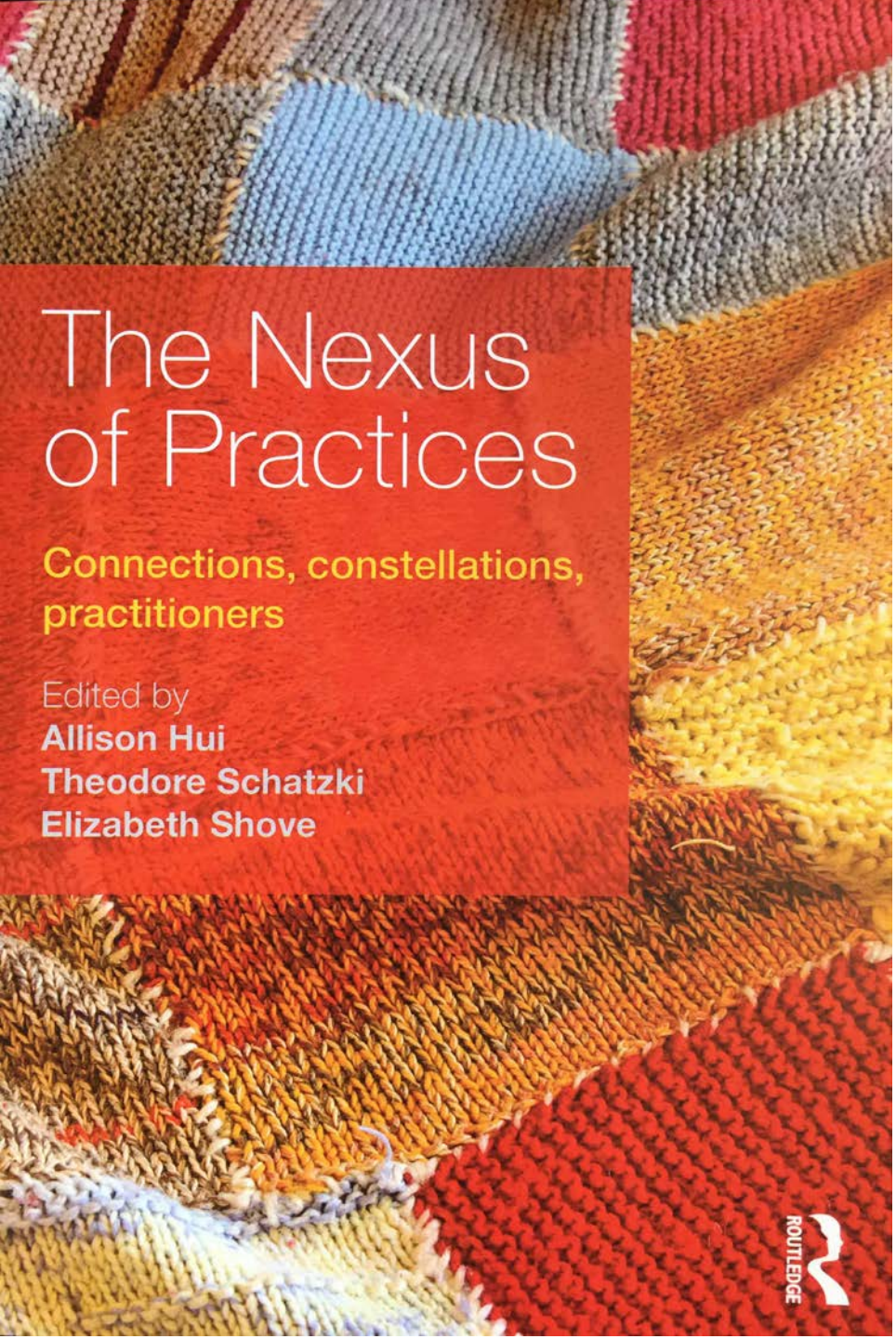
We have shown what it takes to intervene in demand and we have shown that the future is not the present and it is not fixed.

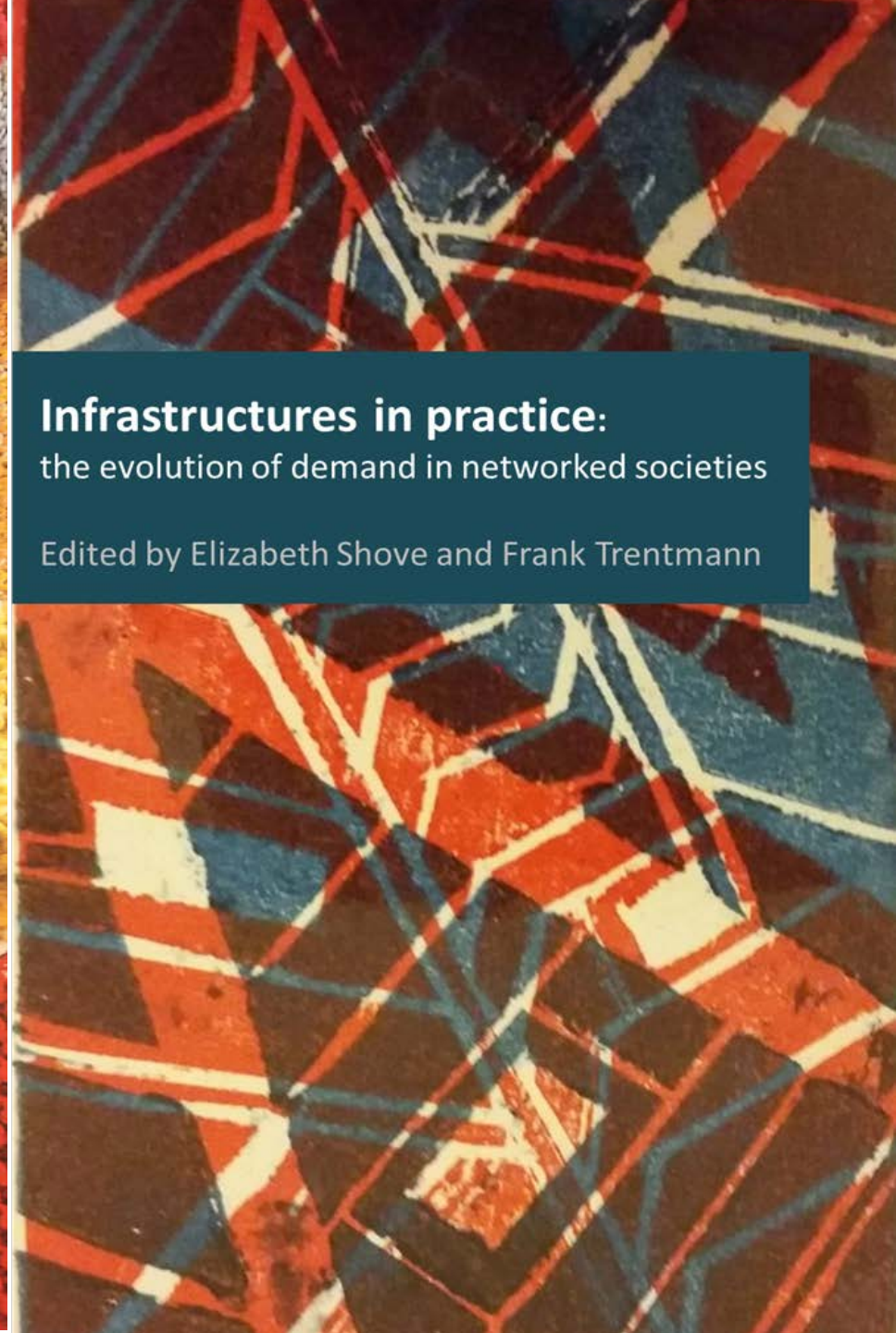
www.demand.ac.uk

for details of DEMAND's research and for the ideas, interest and evidence we have generated.

DEMAND

DYNAMICS OF ENERGY, MOBILITY AND DEMAND


The Nexus of Practices
Connections, constellations, practitioners
Edited by
Allison Hui
Theodore Schatzki
Elizabeth Shove
ROUTLEDGE


Infrastructures in practice:
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Demanding Energy
Space, Time and Change
Edited by
Allison Hui
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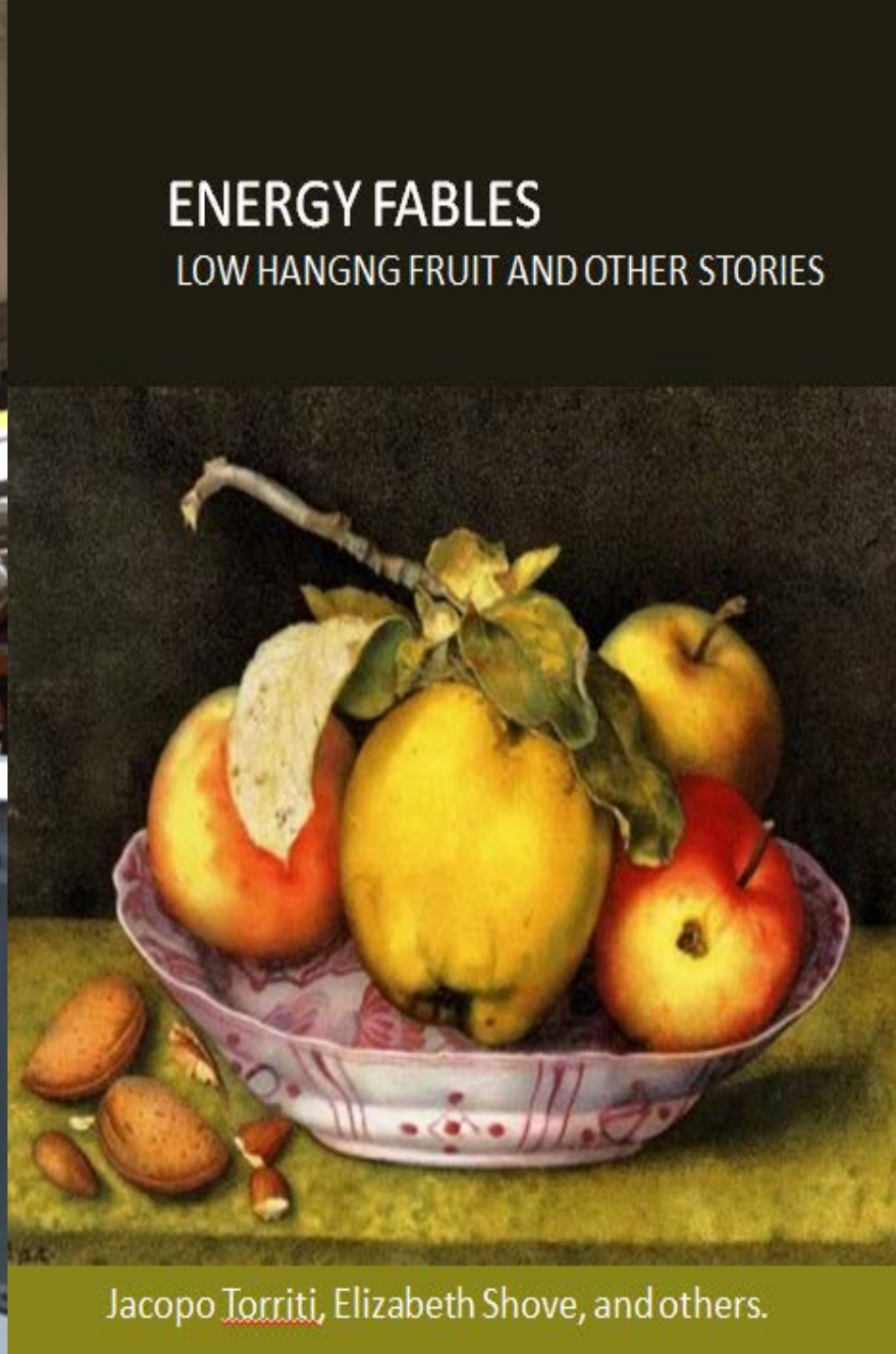
ENERGY FABLES
LOW HANGNG FRUIT AND OTHER STORIES
Jacopo Torriti, Elizabeth Shove, and others.