PIECES OF DEMAND: Quick guides to DEMAND research





ESCALATING ENERGY DEMAND IN THE MODERN OFFICE

Market 'standards' that were introduced as energy efficiency measures are failing to deliver low-energy office buildings. Why is that so?

Research by the DEMAND Centre (Cass 2018; Cass et al. 2018) shows that market 'standards' and conventions that guide the design and development of speculatively developed office buildings are resulting in forms of overspecification and provision. These unintended consequences have long term impacts on energy demand and carbon emissions.

N. Cass (2018) <u>Energy-related Standards and UK</u> <u>Speculative Office Development</u>. Building Research & Information, 46 (6), pp. 615-635

N. Cass, J. Faulconbridge and J. Connaughton (2016) Negotiating Needs and Expectations in Commercial Buildings – Summary of Key findings and Conclusions.

DEMAND Research Insight #6 DEMANDING OFFICES. HOW MARKET STANDARDS DRIVE UP ENERGY DEMAND.

In the paper, 'Standards? Whose Standards?', Noel Cass and Elizabeth Shove show that standards in the speculative office development sector in the UK often result in escalating concepts of 'normal' provision regarding cooling requirements and peak loads. This is not what standards makers intend, but it is a consequence of the part that standards play within the property market. The researchers found that when

designing for unknown users, market 'standards' tend to 'black-box' ideas about needs and thereby disconnect building designs from changing user needs and office practices.

N. Cass and E. Shove (2018) <u>Standards? Whose</u> <u>Standards?</u> Architectural Science Review, July 27 2018, pp. 1-8

What are offices and what are they for?



Other DEMAND research by Kris De Decker has investigated the changing nature of office work and the energy demands that follow. IT systems and forms of mobile working mean that many places can become 'offices' at least for a time. These temporary office spaces include homes, trains, cafes and more. As this case shows, office technologies and practices are changing in ways that are likely to have long term impact on the commercial sector, and so on non-domestic energy demand in 'office' buildings.

Kris De Decker (Nov. 2016) The Curse of the Modern Office http://www.demand.ac.uk/22/11/2016/the-

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