

Blog for Tyndall Centre for Climate Change Research December 2020. Available: <https://tyndall.ac.uk/news/harnessing-social-networks-help-tackle-climate-change>

## **Title: Harnessing social networks to help tackle climate change**

Understanding how social influence and networks can be harnessed to increase adoption of consumer innovations to reduce carbon emissions is a crucial step towards a sustainable future. A new study by Emilie Vrain and Charlie Wilson of the Tyndall Centre for Climate Change Research at the University of East Anglia demonstrates the importance of studying social networks and communication behaviours to provide insights into potential obstacles for rapid diffusion of low carbon innovations. Using smart home technology as a case study, their paper identifies marketing strategies and policy actions using social mechanisms to overcome barriers and accelerate adoption.

Smart home technologies, such as smart heating systems, lighting and appliances have vast potential to lower CO<sup>2</sup> emissions. Such technologies can help directly reduce energy use in the home, improve energy management (i.e. energy being turned on and off, stored, scheduling tasks and shifting peak load), and engage consumers to be more aware of their energy use.

Through conducting an online survey in the UK with adopters and non-adopters of smart home technologies with energy benefits, their work focusses on the social element of why the market for such technologies has not taken off as expected.

Previous studies often focus on other elements of market failures. What is it people don't like about a technology? Are they too expensive or too complicated? And in the case of smart home technologies, the perception of security issues crop up time and time again.

Emilie and Charlie's work finds that there is generally a positive opinion of smart home technology, but that these positive messages are not spreading. Non-adopters know very few people who actually have smart home technology, and adopters are mainly sharing information with their close wealthy friends and less so with colleagues, acquaintances and other distant contacts.

Emilie said, "This is what is needed to help diffusion. If we choose to only share information with our close friends, who are very similar to ourselves, the spread of new ideas won't travel very far. Conversations in the coffee room at work, at a friend's dinner party with other guests or even the stranger you end up sitting next to on the train. These are all the little conversations that we learn the most new and varied things from. Unfortunately, they are also the types of interactions we have missed out on this year with Covid restrictions. Such chitchat doesn't quite happen so naturally over Zoom."

This work was conducted pre-covid, and the social barriers highlighted by the results will presumably be even more widespread this year. "Our results show the need for strategies to focus on increasing non-adopters' exposure to interpersonal information from adopters for first-hand experience, in addition to encouraging adopters to spread information beyond their close friendship groups," Emilie concludes.

Their paper recommends several example strategies and highlights how such insights could be transferable and applicable to other innovations trapped in small market niches.

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