

## The SEI Initiative on Behaviour and Choice

Often, technical “solutions” introduced in the developing world fail to take hold because the individuals and communities they aim to benefit never truly embrace them. Many development interventions are centred on households, often requiring them to adopt new technologies. However, it remains largely unknown how this happens due to a lack of knowledge about how drivers of behaviour influence technology uptake. There is a clear need to understand people’s needs and motivations in order to design and deliver products and services that will be accepted and adopted.

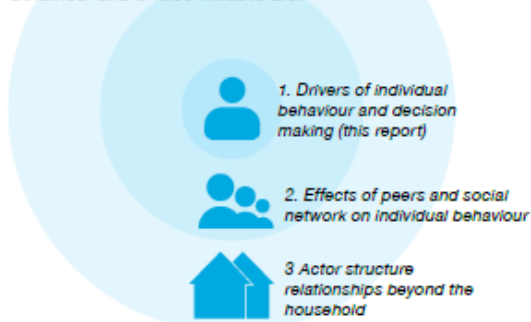
Development policy is increasingly moving towards results-based approaches, where public funding is justified only when pre-specified outcomes have been achieved. Understanding the drivers of individual behaviour is particularly important in this context, where the “success” of an intervention depends on an individual or household shifting their behaviour.

SEI has launched a new research initiative aimed at understanding what drives individual and household behaviour, and how this impacts on the uptake of innovative technologies in developing countries. The SEI Initiative on Behaviour and Choice will prototype innovative tools and approaches to better understand behaviour, choices and decision-making at the household level, and will develop these through application in areas where SEI has a legacy of engagement, including household energy and sustainable sanitation. We will collaborate with experts in product and service design and behavioural economics to develop and test these approaches.

The initiative will generate new knowledge about:

- How influences on individual and household level behaviour affect the uptake of technology
- How this information can be used by public and private sector actors to support better design of policies, programmes, interventions and products.

The three core research streams in the Behaviour and Choice Initiative are:



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The three research themes in this initiative reflect the multiple layers of influence that must be taken into account to properly understand behaviour and choice.

### Areas of study

The initiative will focus on household energy and sustainable sanitation, which have been core fields of research for SEI over the past two decades. In that time we have built a rich body of work in these areas, as well as extensive networks, which include practitioners, policy-makers and private entrepreneurs. Recently our research has increasingly focused on how individual behaviour impacts on the uptake of technologies, such as improved cookstoves, and how to better incorporate end users’ perspectives into the design of interventions. This work has ranged from economic analysis of household decision-making on energy in East Africa to ethnographic studies of cookstove user behaviour in India, conducted in close partnership with local stakeholders.

As highlighted in the *World Development Report 2015: Mind Society and Behavior*, in order to be successful, interventions need to better “account for the human factor”, i.e. the multiple behavioural and social factors that affect whether an intervention is successful. In the context of improved technological interventions, this requires understanding how decisions to acquire such products are made and how they can be supported. The initiative will also develop an analytical framework for understanding the psychological and social factors that influence behaviour and how these factors affect technology uptake. Our empirical research will inform the development of the framework, which will be developed and tested for the duration of the initiative.

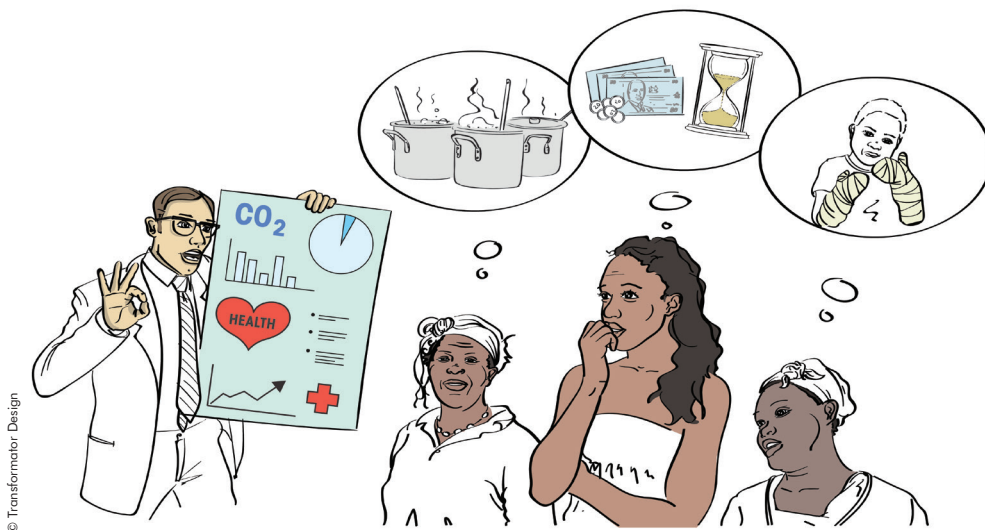
Crucially, this framework should allow for analysis of these various behavioural drivers in the context of specific policies and programmes, and local contexts, to ensure that insights are linked to specific policy levers.

Our aim is that insights generated from the research will help to improve the design and effectiveness of interventions, policies and products that seek to change behaviour toward adoption of clean technologies in developing countries.

### Research themes

While the initiative will focus on household behaviour change, we acknowledge that it is impossible to study individual behaviour in isolation, because it is influenced by what happens at many other levels – from the neighbourhood level to local, national and even international spheres. To ensure that the findings are valid externally as well as policy relevant, any framework for understanding behaviour and choice must incorporate these multiple layers of influence. The following themes have been identified as core work streams: 1) drivers of individual behaviour, 2) impact of relational/peer effects, and 3) actor-structure relationships (see figure 1).

Although these themes are deeply interconnected, each represents a distinct stream of work, and includes specific



An illustration of some different drivers of individual behaviour for adoption of improved cookstoves.

research questions and methods. We will draw on the fields of behavioural economics, cognitive psychology, anthropology, design research, political economy, and sociology, and synthesize the research, using the findings to inform an analytical framework that will be developed and tested over the duration of the initiative. The work will contribute to a better understanding of how behaviour change is scaled up and sustained over time, and how behavioural insights can translate into policy and action.

### Key activities

During year one, core activities will focus on household energy, specifically on understanding the drivers of behaviour behind adoption of advanced biomass-pellet cookstoves in the context of Kenya. Exposure to smoke from traditional biomass cookstoves results in 14,300 deaths each year in Kenya, mostly among women and children, and less than 5% of the population uses gas as a primary cooking fuel. Adoption of cleaner stoves could lead to a remarkable reduction in household air pollution, but efforts to bring about behaviour change in this sector are failing to make significant inroads (Nature 2014). Although an estimated 30% of Kenyan households are currently using an “improved” wood-burning stove, almost none are using advanced biomass stoves of the type the World Health Organisation recommends for achieving significant health benefits.

The initiative will examine the individual, social and structural determinants of household behaviour and decision-making related to the adoption of biomass pellet cookstoves in Kiambu and Nakuru, Kenya, using a combination of methods including service design, social network analysis, and political economy analysis.

During year two we will examine the adoption of clean stoves and fuels in another country setting (yet to be confirmed). We will also conduct a scoping study on behaviour and choice in the context of sustainable sanitation, in partnership with SEI’s initiative in this field (see: [www.sei-international.org/sustainable-sanitation](http://www.sei-international.org/sustainable-sanitation)).

### Outputs

The initiative will develop a set of proven tools and methods to support product and programme designers and decision-makers in designing policies, interventions and products that respond to the user perspective. We will also engage with

policy-makers and local implementers to ensure that our research responds to the particular challenges they face by co-designing the research together with them.

### What is novel about the approach?

A defining feature of the initiative will be the iterative process used to design and implement the research, in which key boundary partners will be involved at every stage of each case study – from research design to data analysis, to prototyping and testing methods.

Engagement with boundary partners is also a core part of our work, allowing us to better explore and test the enabling conditions for the uptake of innovation. This mode of working will provide us with a “knowledge lab” where solutions to real-world problems – which could be regulatory (e.g. new standards for testing cookstoves), technical (e.g. a new product) or social (e.g. new behaviour change techniques or “nudges” applied to trigger the uptake of a household intervention) – are co-designed with boundary partners and end users. All case studies will allow for iteration on the methods while further developing the conceptual framework.

SEI is currently consulting with potential partners and stakeholders on the design of the programme of activities. For further information or to discuss possible engagement with the initiative, use the contact details in the box below.

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