

## **Publication**

Advances in understanding energy consumption behavior and the governance of its change : outline of an integrated framework

## JournalArticle (Originalarbeit in einer wissenschaftlichen Zeitschrift)

**ID** 3116490

**Author(s)** Burger, Paul; Bezençon, Valéry; Bornemann, Basil; Brosch, Tobias; Carabias-Hütter, Vicente; Mehdi, Farsi; Hille, Stefanie Lena; Ramseier, Céline; Moser, Corinne; Samuel, Robin; Sander, David; Schmidt, Stephan; Sohre, Annika; Volland, Benjamin

**Author(s) at UniBasel** Samuel, Robin; Burger, Paul; Schmidt, Stephan; Bornemann, Basil; Sohre, Annika;

Year 2015

**Title** Advances in understanding energy consumption behavior and the governance of its change : outline of an integrated framework

Journal Frontiers in Energy Research

Volume 3

Number 29

Pages / Article-Number 1-19

**Keywords** Energy-related consumption patterns, behavior change, Interdisciplinary framework, Governance of Individual Behavior, Energy efficiency and sufficiency

Transforming today's energy systems in industrialized countries requires a substantial reduction of the total energy consumption at the individual level. Selected instruments have been found to be effective in changing people's behavior in single domains. However, the so far weak success story on reducing overall energy consumption indicates that our understanding of the determining factors of individual energy consumption as well as of its change is far from being conclusive. Among others, the scientific state of the art is dominated by analyzing single domains of consumption and by neglecting embodied energy. It also displays strong disciplinary splits and the literature often fails to distinguish between explaining behavior and explaining change of behavior. Moreover, there are knowledge gaps regarding the legitimacy and effectiveness of the governance of individual consumption behavior and its change. Against this backdrop, the aim of this paper is to establish an integrated interdisciplinary framework that offers a systematic basis for linking the different aspects in research on energy related consumption behavior, thus paving the way for establishing a better evidence base to inform societal actions. The framework connects the three relevant analytical aspects of the topic in question: (1) It systematically and conceptually frames the objects, i.e. the energy consumption behavior and its change (explananda); (2) it structures the factors that potentially explain the energy consumption behavior and its change (explanantia); (3) it provides a differentiated understanding of change inducing interventions in terms of governance. Based on the existing states of the art approaches from different disciplines within the social sciences the proposed framework is supposed to guide interdisciplinary empirical research.

**Publisher FRONTIERS MEDIA SA** 

edoc-URL http://edoc.unibas.ch/dok/A6381822

Full Text on edoc No;

Digital Object Identifier DOI 10.3389/fenrg.2015.00029

**ISI-Number** 000218724600033

Document type (ISI) Article