

# Behavioural Insights in Energy Policy

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Breakout Session [22 April 2021](#)





## Who am I?

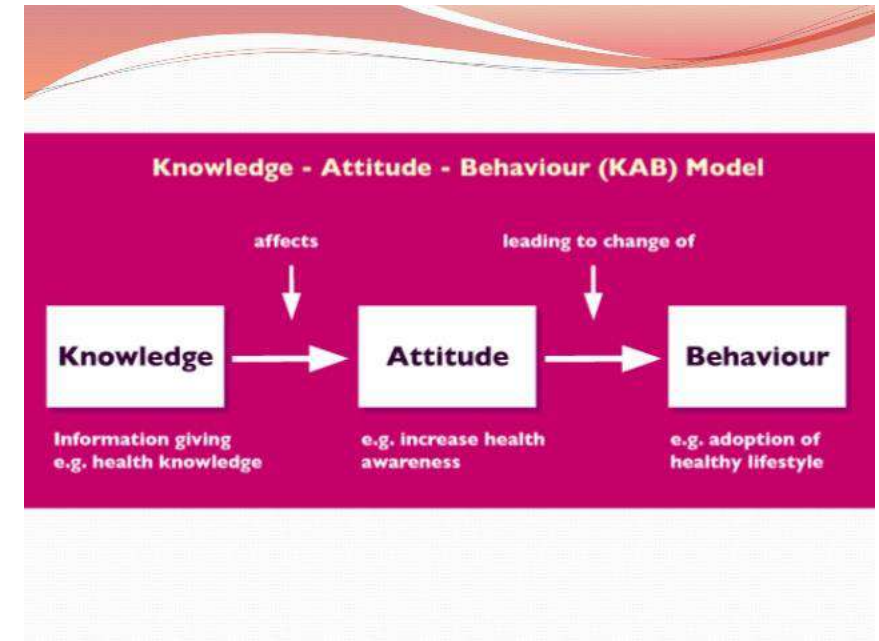
- **Assistant Professor**  
Faculty Technology, Policy, and Management
- **Scientific Director**  
TPM Energy Transition Lab
- **Co-founder**  
Platform for Social Innovation in the Energy Transition  
*Delft Energy Institute*
- **Dutch Expert “Behavioural Insights in Energy Policy”**  
International Energy Agency | RVO | Climate Crisis Policy Team
- **Climate Psychologist**





# Electric Car Charging

# Policy instruments







*Understanding human decision-making  
can provide insights on how to design  
more effective policies on sustainable  
consumption and production*

UN Environment, 2017



# Why psychology is so important for energy policy

*“... no deadlines, no geographic location, no single cause, solution, or enemy. Our brains, constantly scanning for the cues that we need to process and categorize information, find none, and we are left grasping at air.*

*But we still need these cues – we cannot deal with it otherwise – and so we create and impose our own.*

***Don't even think about it.*** George Marshall (2014, p.94)





### 5. Choice-supportive bias.

When you choose something, you tend to feel positive about it, even if that **choice has flaws**. Like how you think your dog is awesome — even if it bites people every once in a while.



### 9. Information bias.

The tendency to **seek information** when it does not **affect action**. More information is better, right?



### 6. Clustering illusion.

This is the tendency to **see patterns in random events**. It is key to various gambling fallacies, like the idea that red is more or less likely to turn up on a roulette table after a string of reds.



### 10. Ostrich effect.

The decision to **ignore dangerous or negative information** by “burying” it in a metaphorical hole.



### 7. Confirmation bias.

We tend to listen only to information that confirms our **preconceptions** — one of the many reasons it's so hard to have an intelligent conversation about climate change.



### 11. Outcome bias.

Judging a decision based on the **outcome** — rather than how exactly the decision was made in the moment.



### 8. Conservatism bias.

Where people favor prior evidence over new evidence or information that has emerged. People were **slow to accept** that the Earth was round because they maintained their earlier understanding that the planet was flat.



### 12. Overconfidence.

Some of us are **too confident about our abilities**, and this causes us to take greater risks in our daily lives. For example,



# Behavioural energy policy goals

**Reduction**  
of carbon footprint

**Acceptance**  
of energy/sustainable technologies and policies

**Adaptation**  
to climate change effects



# What is the goal of energy policy stimulating dynamic EV charging?

Reduction  
Acceptance  
Adaptation



# Energy Policies can be...

**Behaviourally-  
aligned**

*(hindsight)*

**Behaviourally-  
informed**

*(theoretical)*

**Behaviourally-  
tested**

*(assessed)*





# Scientific Relevance

## Behavioural diagnostics

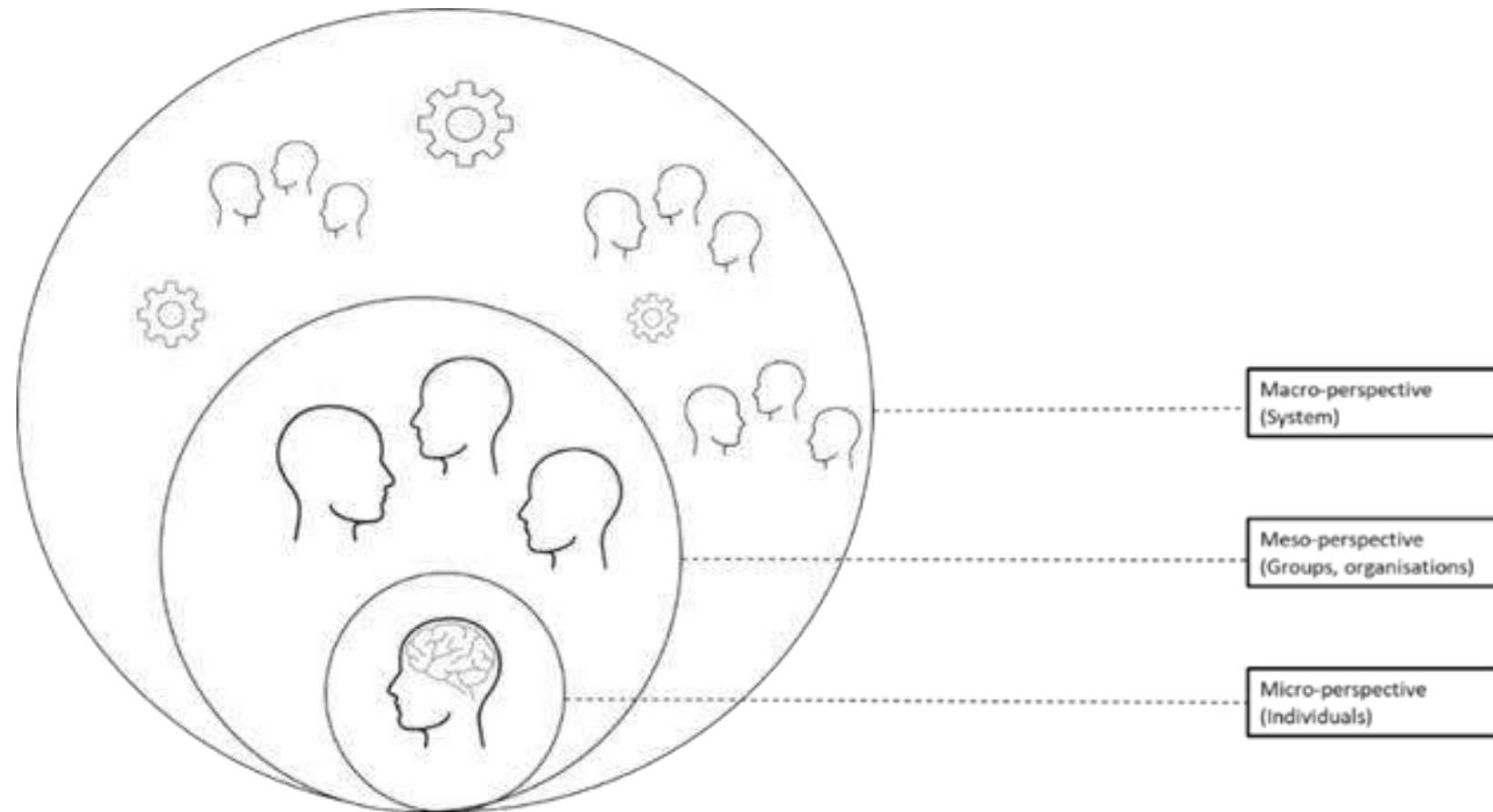
Psychologists have theories on human brain, reflexes, cognition, emotions, perceptions, expectations, personality, values etc) and know how to assess and analyse this.

More and more: integration of micro-perspective and system perspective.

## Behavioural interventions

Psychologists have tools to design and test behavioural interventions (e.g., random controlled experiments)

# Perspective





# Methods

Research Stage	Example
<b>Observing behaviour in real-life systems</b>	Policymakers do not reach their sustainable policy goals. Homeowners lack behind in sustainable home-renovations.
<b>Analysing multi-actor behaviour within a theoretical framework. Formulating hypotheses</b>	The literature on (general) barriers to green behaviour suggests that hassle prevents people to renovate sustainably.
<b>Empirical measuring of mechanisms underlying behaviour (surveying)</b>	Homeowners complete a questionnaire on hassle-perceptions, other barriers, and influencing factors. Policymakers and contractors are being interviewed on barriers.
<b>Designing interventions such as tools or policies.</b>	Design workshop with experts on interventions to prevent hassle (e.g., nudging, framing).
<b>Experimental testing of interventions in a lab setting.</b>	Test the effectiveness of a set of public and/or private services that can unburden homeowners.
<b>Field testing of interventions: placing the research back in the system.</b>	Make the service available for all homeowners. Monitor how many people use the service.
<b>Share insights and provide recommendations to improve the real-life system.</b>	Report findings in science and society (academic article, report, blog, presentations etc).

# Behavioural Interventions

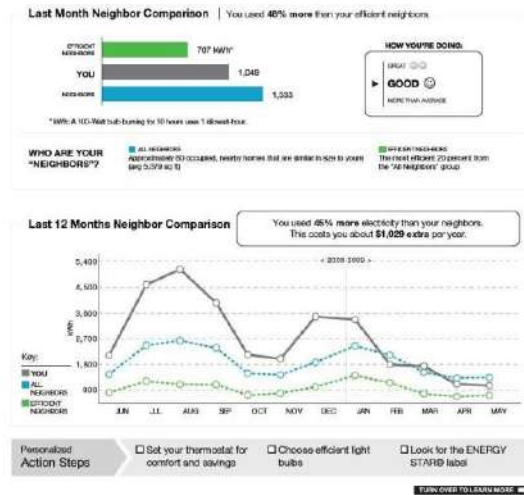




# Framing



# “Green Nudging”





## Finally... take responsibility

- Are behavioural interventions perceived as manipulation or facilitation?
- What is the role of the “intervener” (e.g., Shell, Greenpeace or national government)?
- Should interventions be transparent or are they less effective then?
- Should there always be an opt-out?
- What is well-being? Who decides about that?



# Would you consider applying behavioural insights in your future energy policies?

Yes

No

Don't know yet





## Behavioural insights for demand-side energy policy and programmes

An environment scan

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December 2020

Users TCP and IEA



# Collaboration?



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<https://www.tudelft.nl/tpm/energy-transition-lab>  
<https://www.tudelft.nl/siet>

