

# IEA DSM Task 24: 7 years of Behaviour Change in DSM – so what and where to next?



What we learned from Task 24 and how we will apply it to the hard-to-reach (HTR) energy users

# Agenda

## Why

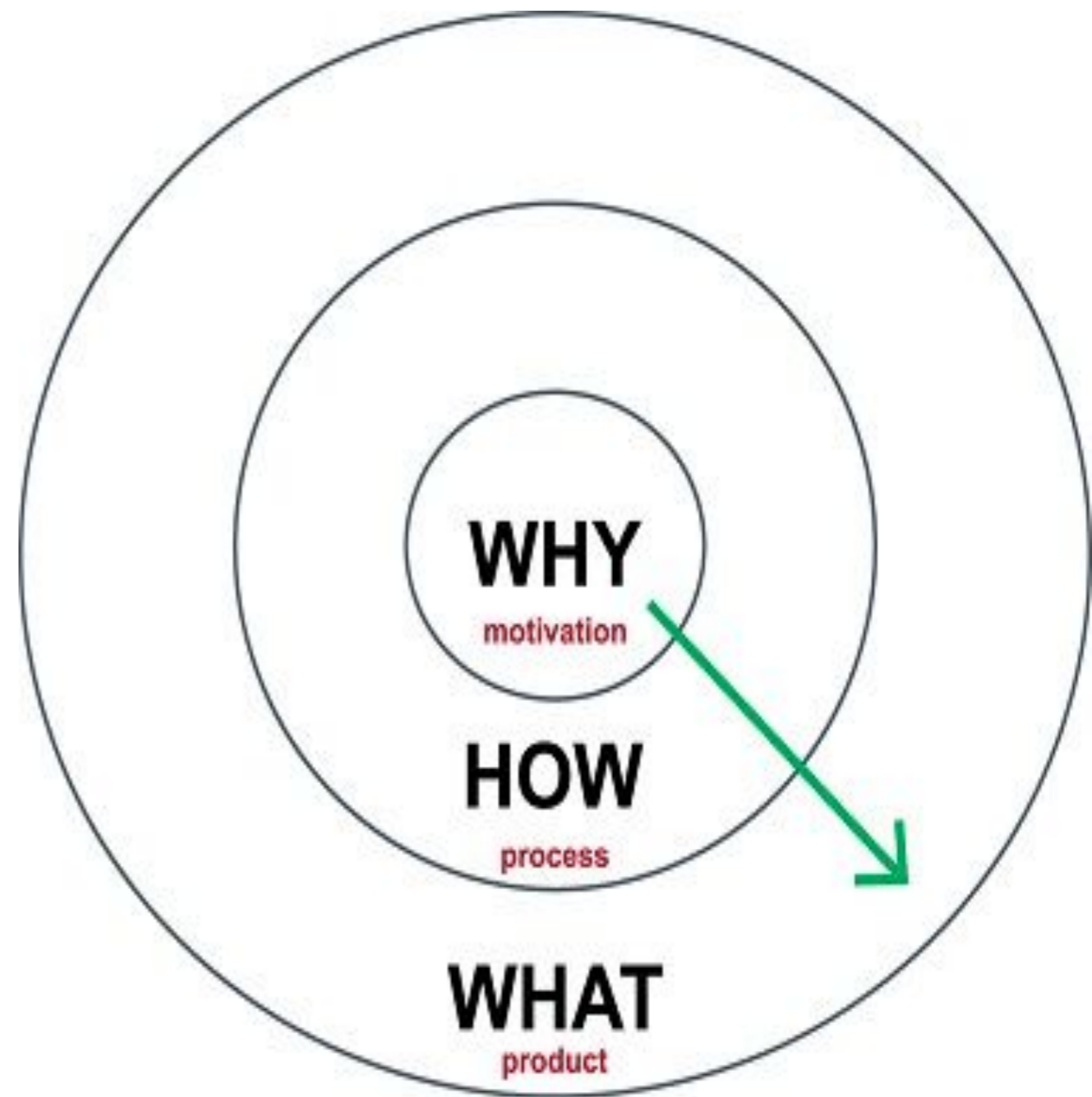
- My why
- Task 24 why
- HTR why

## How

- From attribution to contribution
- From categories to characteristics
- From programme to process

## What

- Task 24 successes
- HTR motivations
- Bigger impact



*The sea, once it casts its spell,  
holds one in its net  
of wonder forever.*



# WHY were we doing Task 24?

1. Focus on people



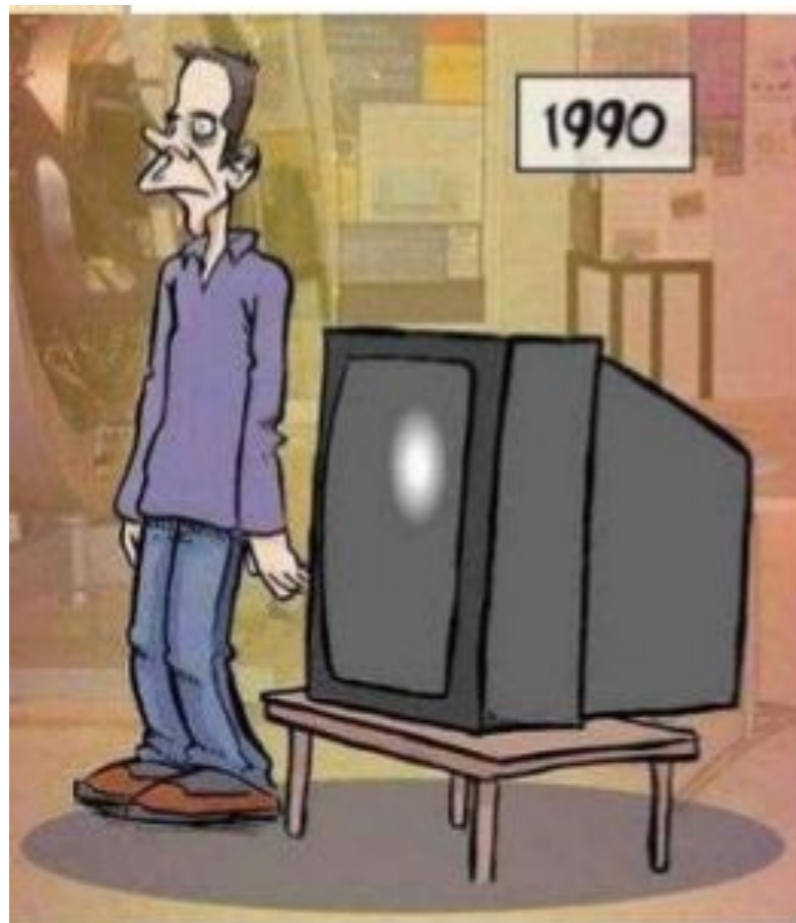
2. Connect science and practice



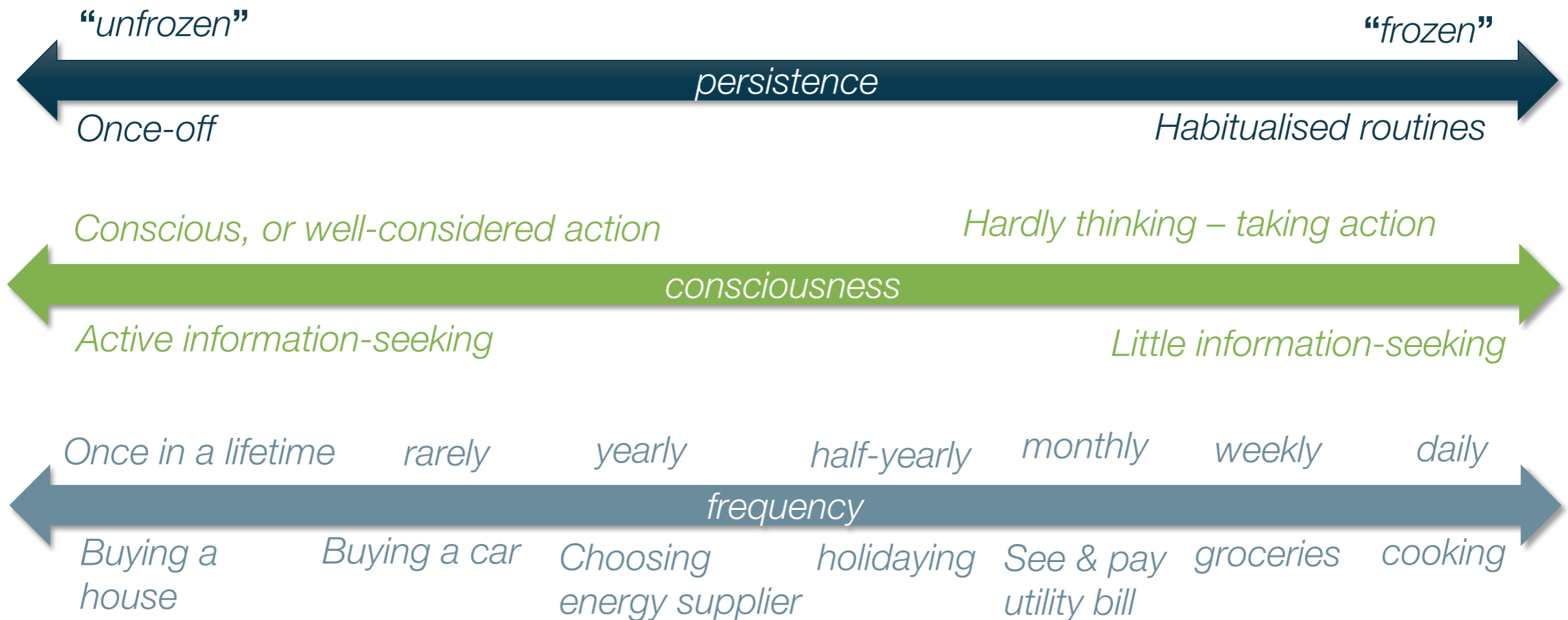
3. Learn and share what works



4. Serve as a global research model



# WHY? Understanding energy behaviour



*WHY? What is behaviour in our context?*

# BEHAVIOUR IS EVERYTHING!!!

total energy consumption, energy technology uptake or demand management but should be identified and specified by the *Behaviour Changer* designing the intervention for the purpose of outcome evaluation.

# WHO? *Our audience: Behaviour Changers*

Decision-makers



Providers



Experts



The Conscience



Middle Actors



# WHO: Task 24 Research Experts

**OBERLIN**  
COLLEGE & CONSERVATORY

**SUSTAINABILITY**



**Sheffield  
Hallam  
University**



**Environmental  
Change Institute**

**eci**



# HOW: Learnings from Task 24

1. There is no silver bullet for behaviour change (no, not even behavioural economics!)



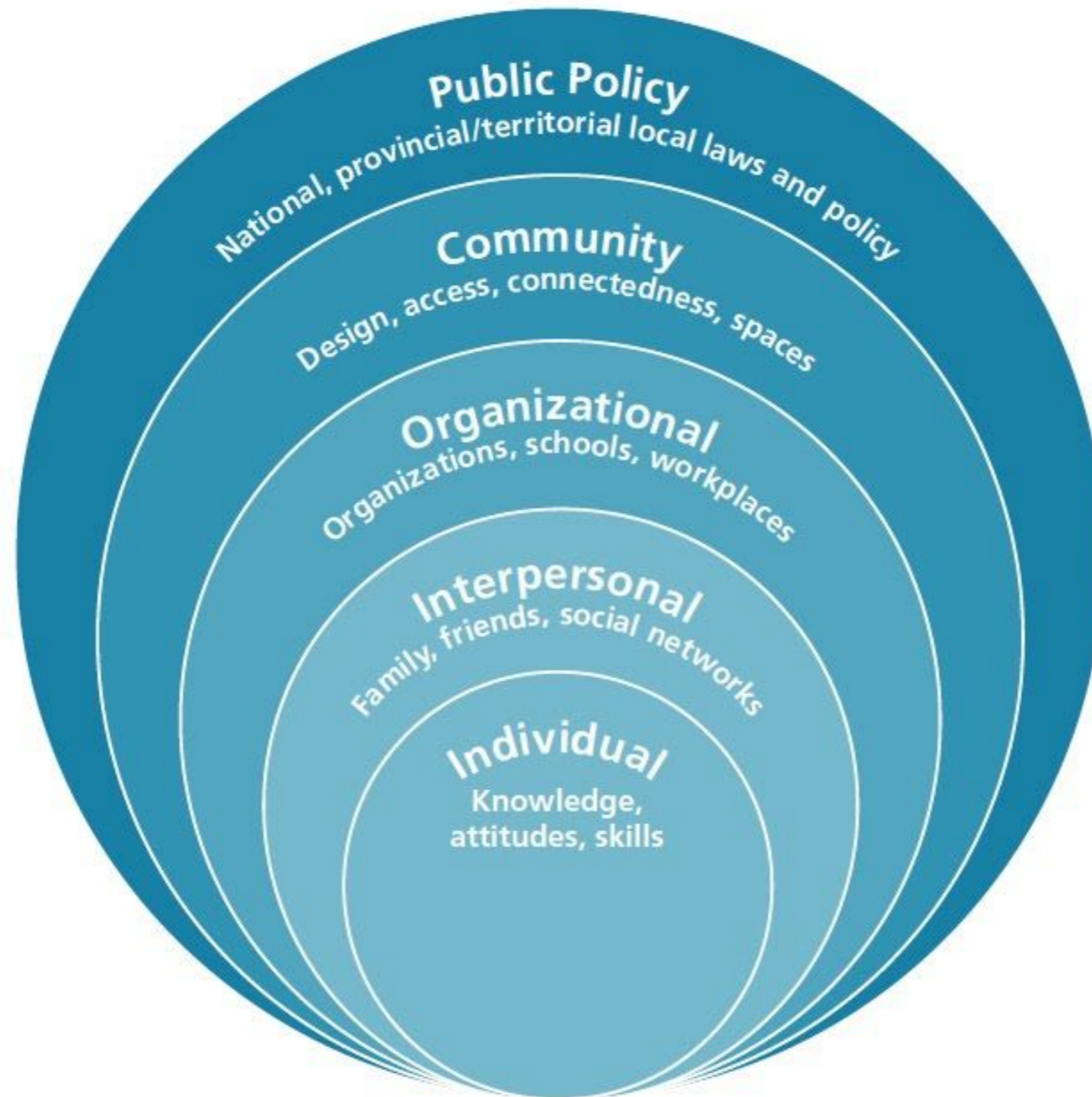
Essentially, all models are wrong, but some are useful.

(George E. P. Box)

izquotes.com

# HOW

1. There  
behavi
2. Some  
vs indi

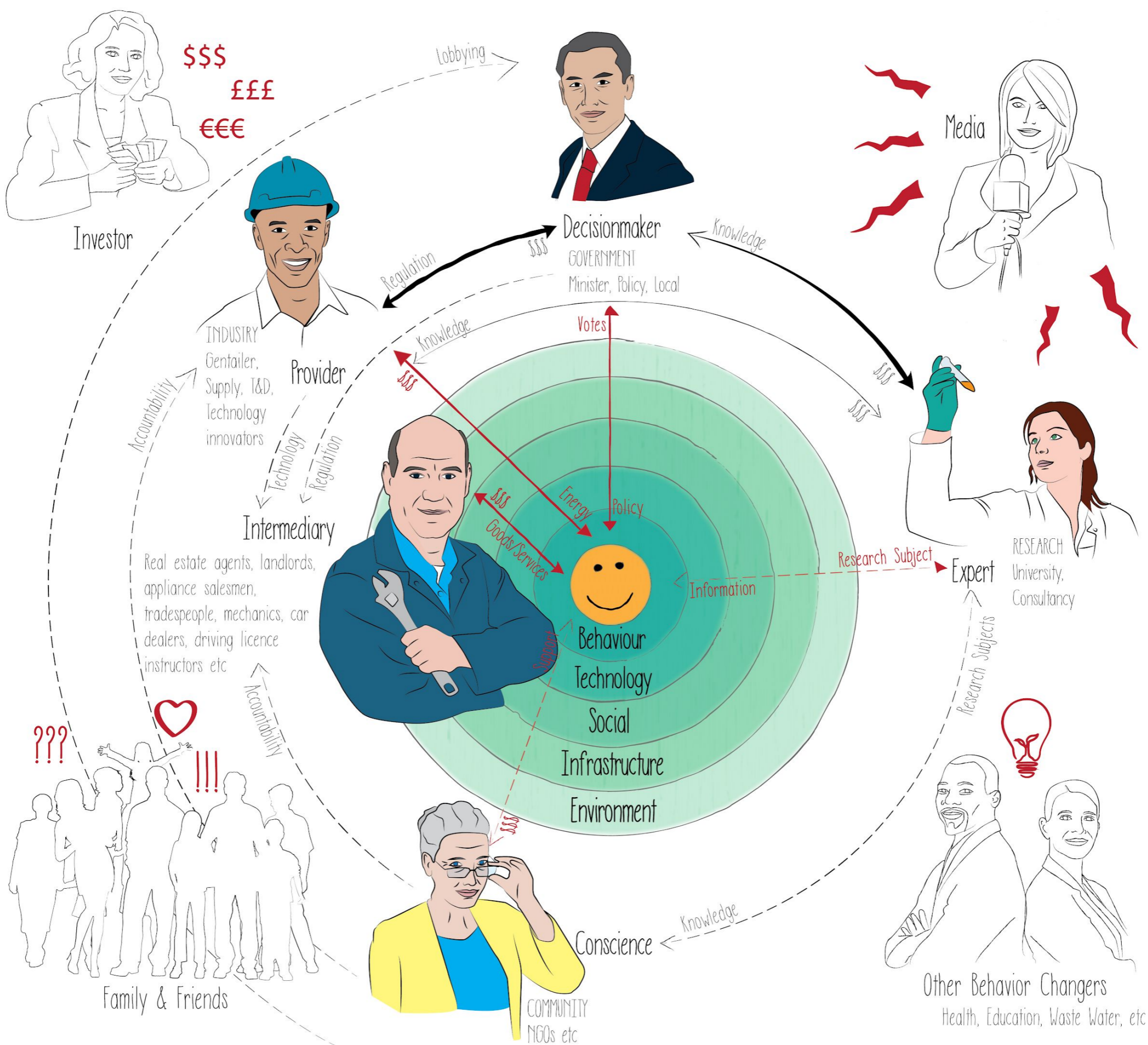


o, not even  
(systemic

A Social-Ecological Model for Physical Activity - Adapted from Heise, L., Ellsberg, M., & Gottemoeller, M. (1999)

H

- 1.
- 2.
- 3.



# HOW: Learnings from Task 24

1. There is no silver bullet for behaviour change (no, not even behavioural economics!)
2. Some approaches are more useful than others (systemic vs individualistic)
3. Whole-system collaboration among key stakeholders is complex but rewarding
4. We are seeing three paradigm shifts in behaviour change and energy efficiency (research)



# WHAT? Subtask 8 - Toolbox for Behaviour Changers: “Behaviour Change from A to Z”



# WHAT? *Highlights of Task 24*

- **11 countries** participated financially (eight in [Phase I](#) and 6 in [Phase II](#))
- **400+ experts** from over 200 institutions & organisations and 20+ countries collaborated
- Almost **100 publications** including an **ERSS special issue** on Storytelling and Narratives
- Over **60 expert and stakeholder workshops** including five special sessions at the largest behaviour change conferences (BECC, BEHAVE, Energy Cultures)
- **60 presentations** at major conferences, international workshops, seminars, lectures, including many keynotes
- Co-developed several **award-winning pilots** and tools
- Leveraged **over \$1m** of in-kind research and expert support via task-sharing model.

# *WHAT: Task 24 US participation*

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## **Atrium Health**

<http://www.toolsofchange.com/en/case-studies/detail/718>





## *WHAT: Task 24 US participation*

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2. Atrium Health joined Subtask 11 to develop a pilot case study in largest health network in North America (2016-18)
3. **Consortium for Energy Efficiency (CEE)** with 11 utility sponsors and DoE and NRCAN joined last year of Task 24 (2018)



**Atrium Health**



# Three major paradigm shifts

## 1. From attribution to contribution

- RCTs as gold standard to attribute energy savings, BUT: expensive, difficult, require control and not always possible. Also a simplistic causal model in a complex system.
- Identifying contribution of multiple factors to savings, e.g. via regression, using quasi-experimental designs, NMEC, Pay-for-Performance...
- Triangulating qualitative with quantitative data, measure counterfactuals, total resource costs and avoid double-counting

## 2. From categories to characteristics

- Energy behaviour can be many things, it affects many types of policies & programmes
- HERs and deficit models often thought of as “gold standard” of interventions, BUT: only minute, actual energy savings compared with very large costs of implementation
- Should measure characteristics of what makes intervention successful or not, instead (ABCDE building blocks of behaviour change)

## 3. From programme to process

- Identify and connect appropriate stakeholders (“magic carpet”)
- Determine **Audience (A)** and **Behaviour (B)** goals
- Design and test the **Content (C)** and **Delivery (D)** of messages
- Deploy with identified objectives and do process & impact **Evaluations (E)**

# ST3: SCI Process for behaviour change

## A Process for Behaviour Change



# ST0 – Administering & disseminating HTR Task

ST1 –  
Expert  
network on  
hard-to-reach  
energy users  
in residential &  
commercial  
sectors

ST2 –  
Definitions &  
case study  
analysis

ST2a –  
International  
Publication

ST3 –  
Developing &  
standardising a  
robust  
research  
process to  
engage the  
HTR

ST4 –  
Field  
research  
pilots



سلام  
peace

EMAR

# SO WHAT? Bigger impact

- We need to do **much more, much faster** (coral reefs are going extinct!)
- The IEA (DSM) has a **big part to play** in fostering global research collaborations
- Behaviour (change) is a **big part of the problem** – and the solution (~30%)
- How we are currently approaching behaviour change **isn't working** (enough)
- We can see a **paradigm shift** in how we should define, implement and evaluate behaviour change interventions
- We will test and validate a **better process** to align, define, design and deploy behaviour change interventions by looking at the ABCDE building blocks
- We will use this process on a user group that has traditionally largely fallen through the cracks, (hence, dubbed **“underserved” or “hard-to-reach”**)
- We think this group might be **>30%** of all residential and commercial energy users!
- We thus have the opportunity to tackle as much as **~10% of total energy demand potential** that is currently overlooked
- **This is only the beginning.**

*If there is ONE THING to take home from all this:*

# IT'S ALL ABOUT THE PEOPLE!



Thank you very much for your attention!

*Want to join & become part of the  
paradigm shift?*

*Please contact me:*

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