DfG Case

License to Heat

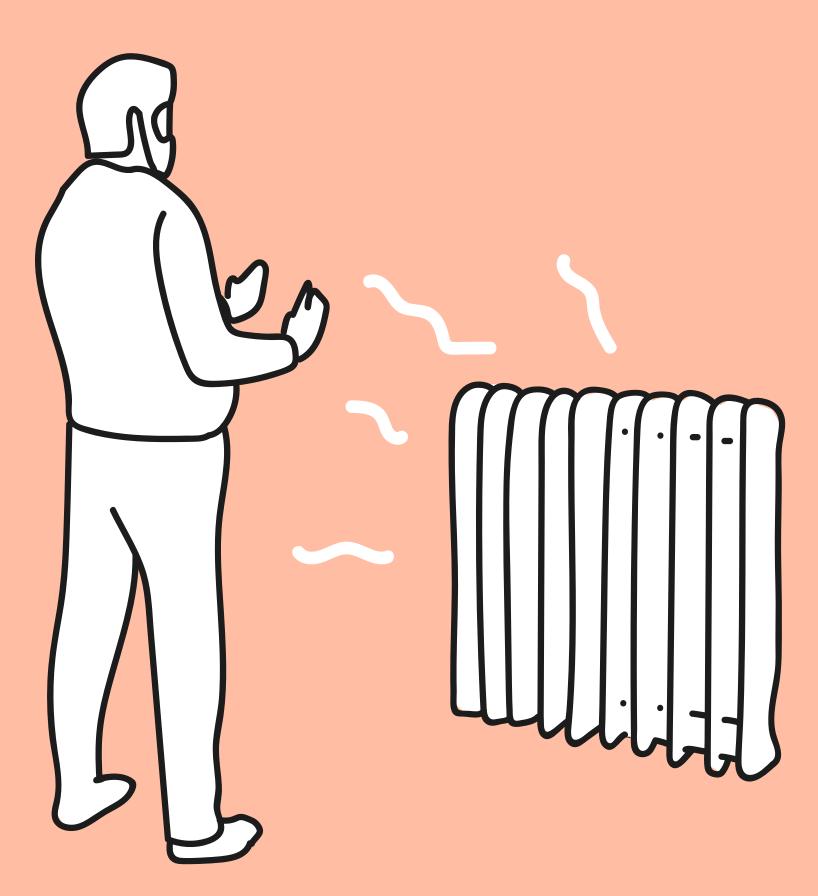
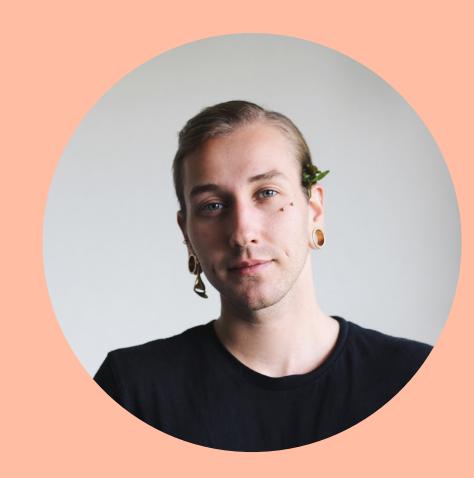


ILLUSTRATION: EMILE REBOURS





Daniel Leiviskä







Hsin-Yun Lai

Daniel Leiviskä



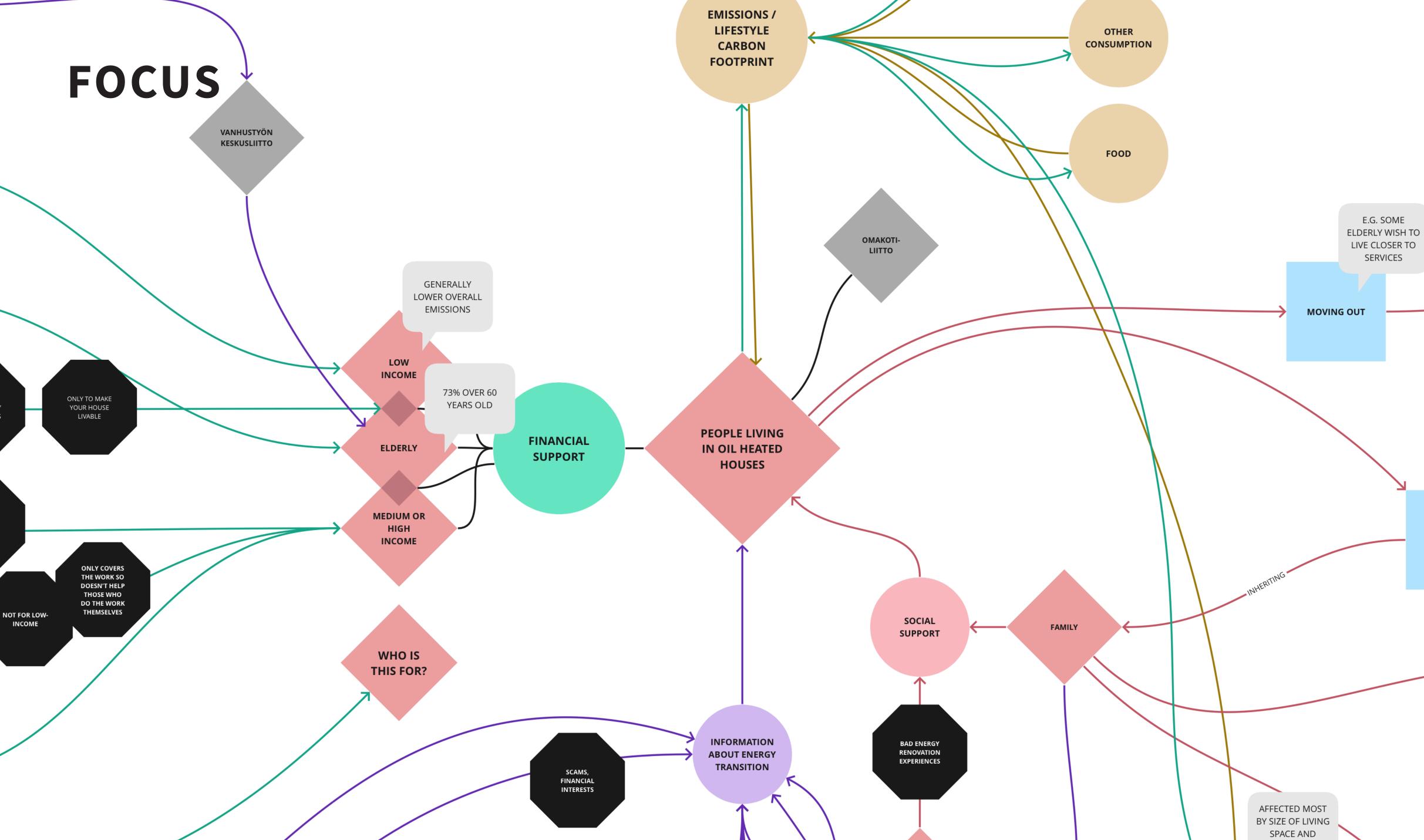




Emile Rebours

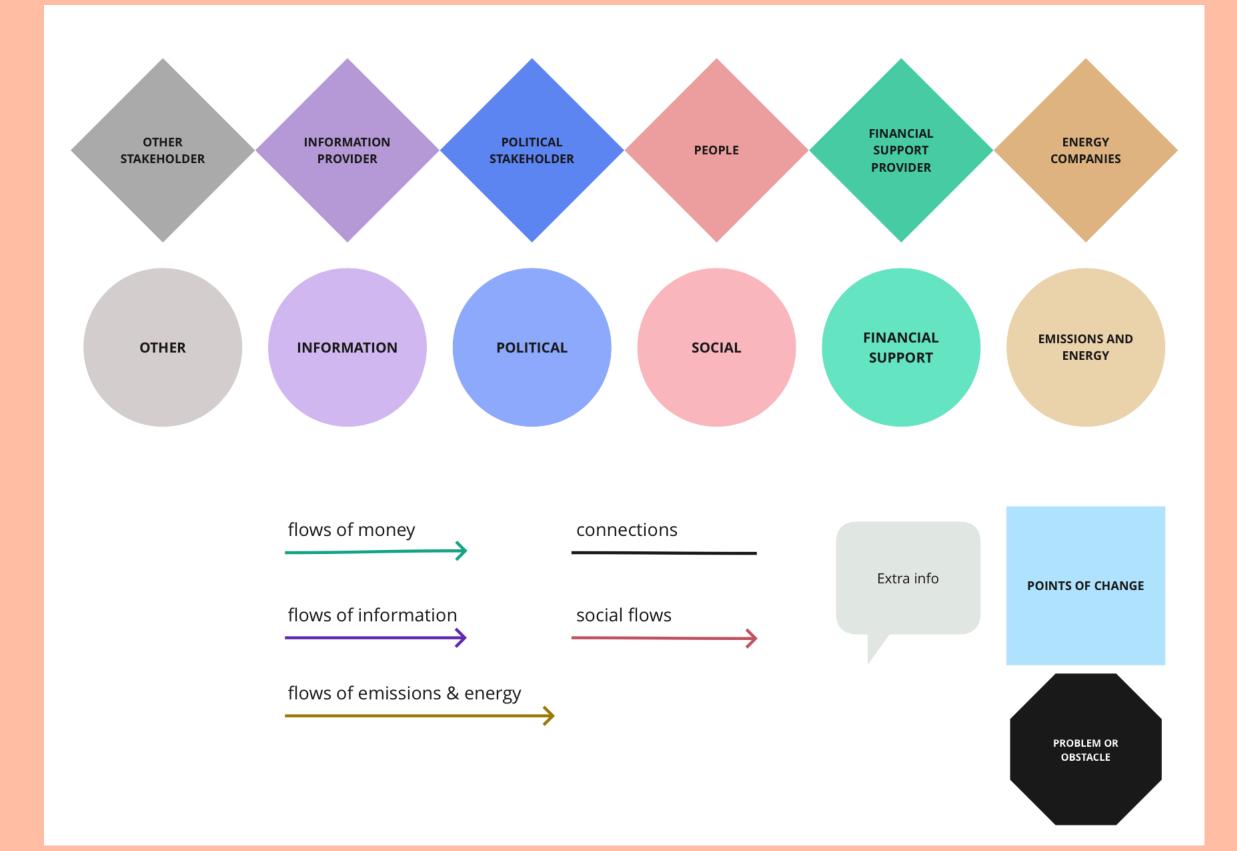


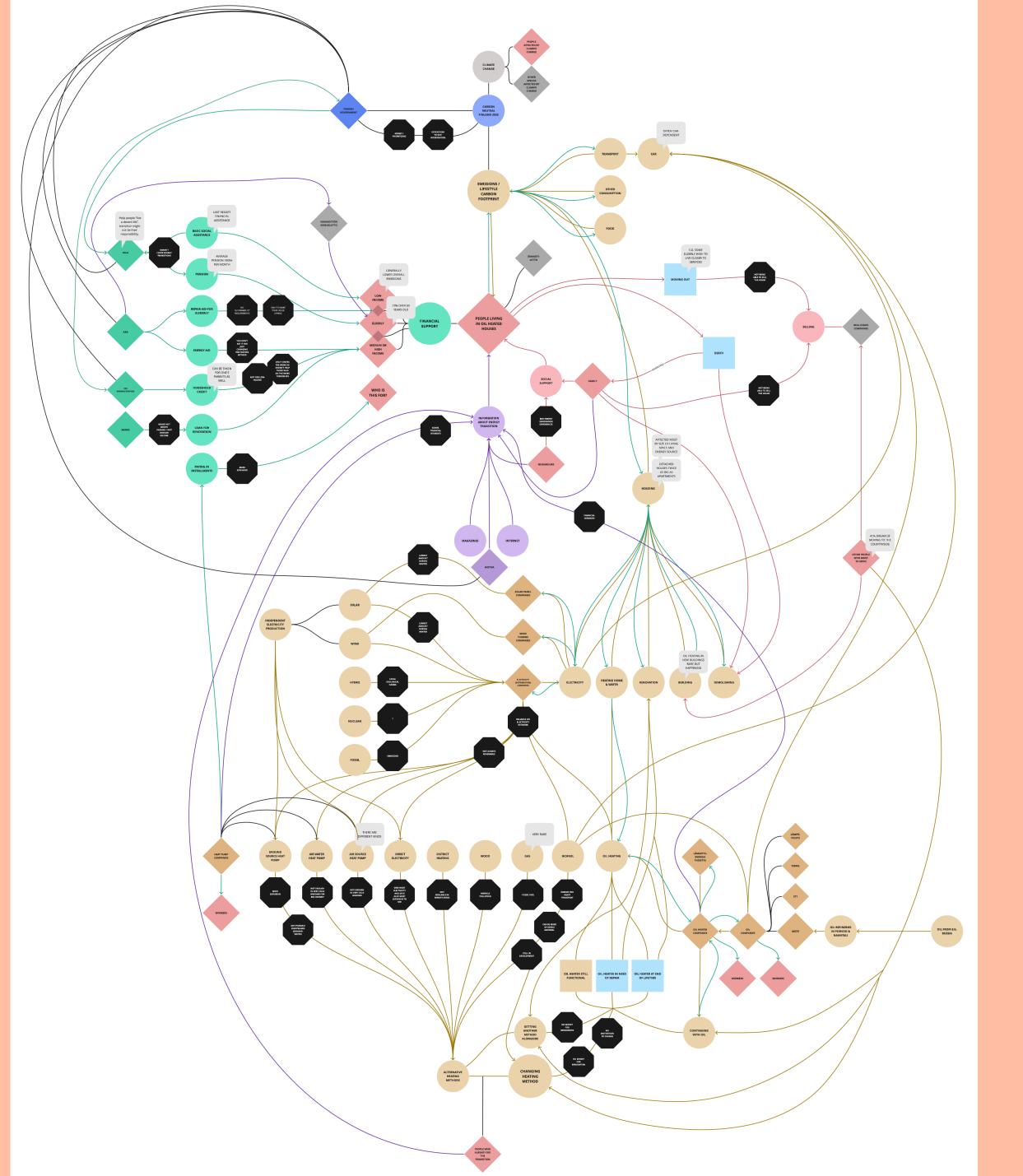
Just Transition to Post-Oil Heating





SYSTEMS MAP





RESEARCH QUESTIONS

- especially to those with low incomes?
- to the people living in oil heated houses?

1. How to effectively promote the highest amount of reductions in household energy use carbon emissions in a way that is fair

2. How to make the transition process transparent and simple



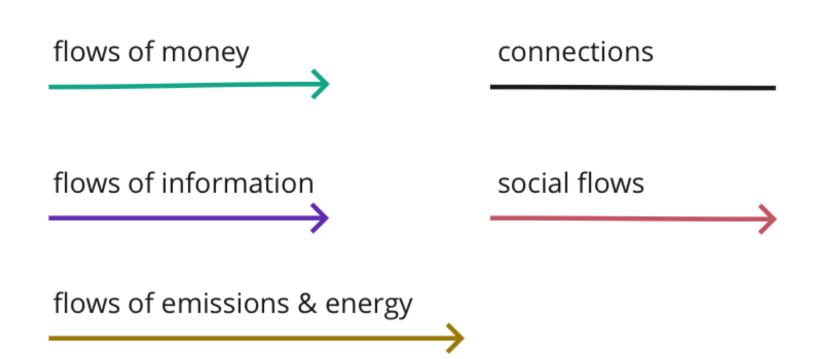
RESEARCH

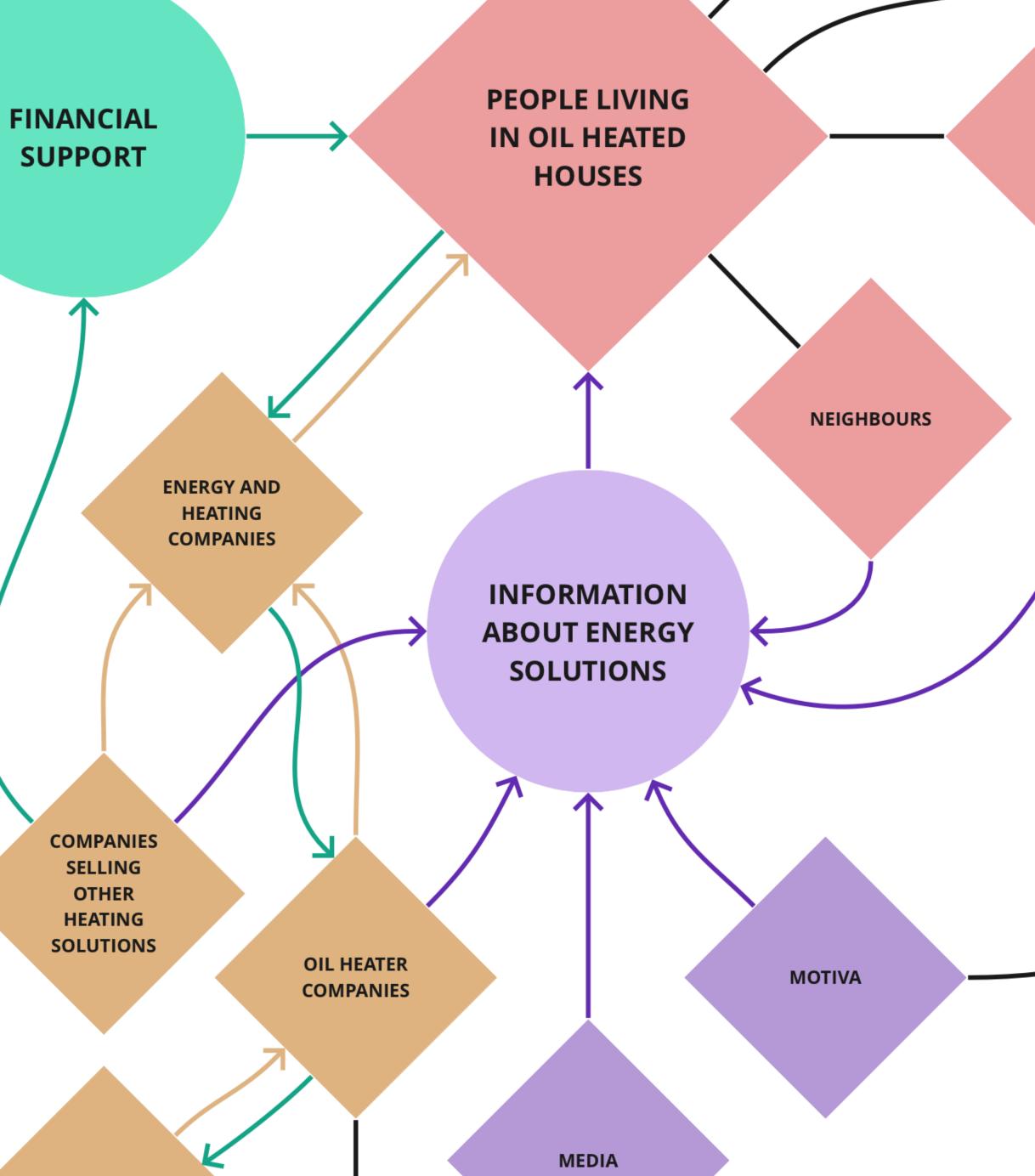
- Desktop research
- Expert interviews
- Resident interviews
- Questionnaire

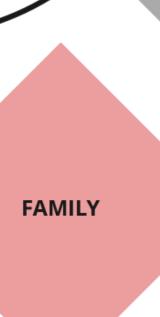














RATIONAL ECONOMIC MAN



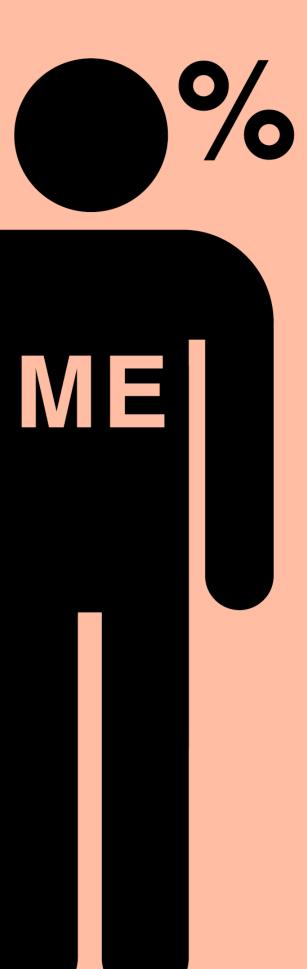
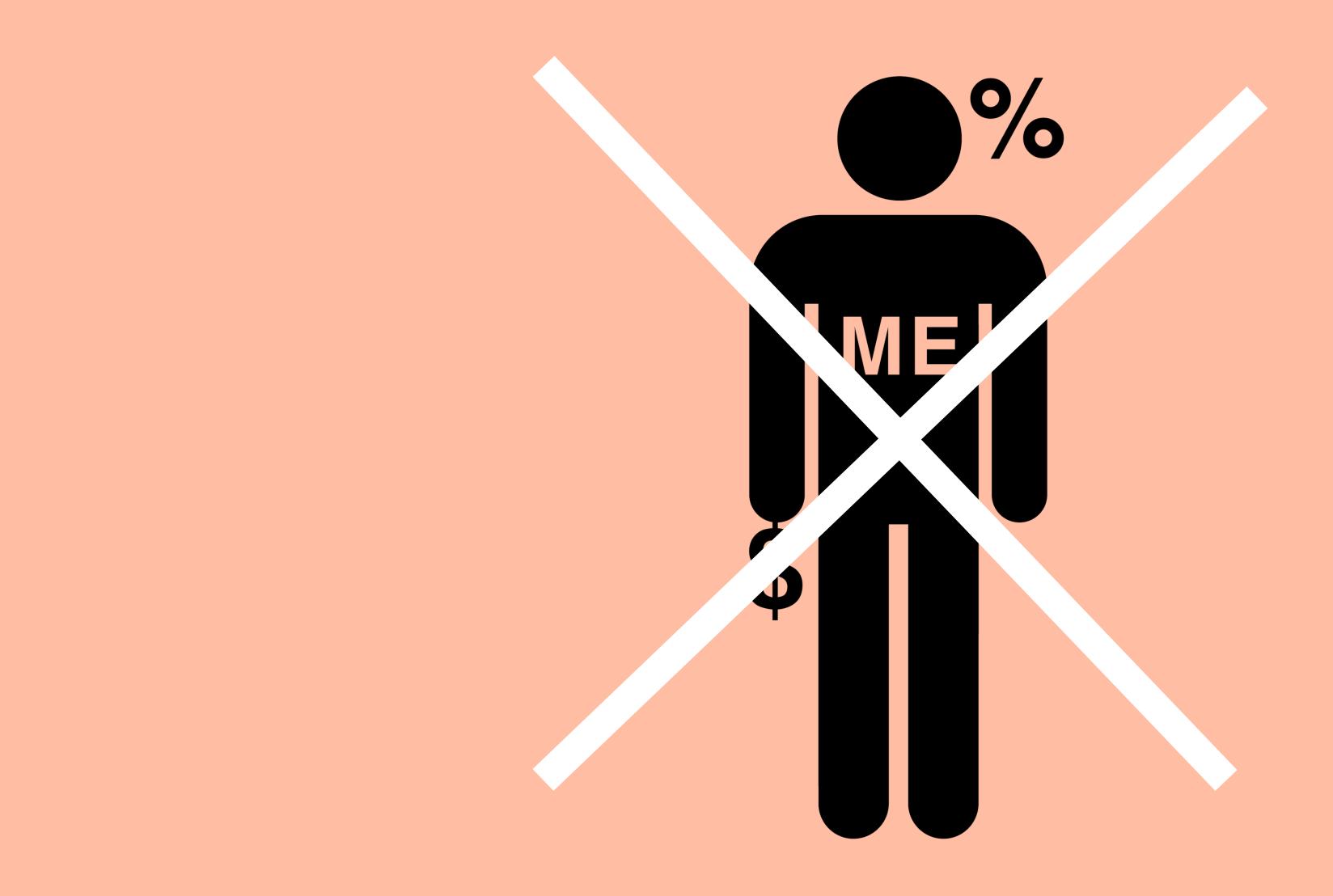


IMAGE: KATE RAWORTH (2017) **DOUGHNUT ECONOMICS**



RATIONAL ECONOMIC MAN



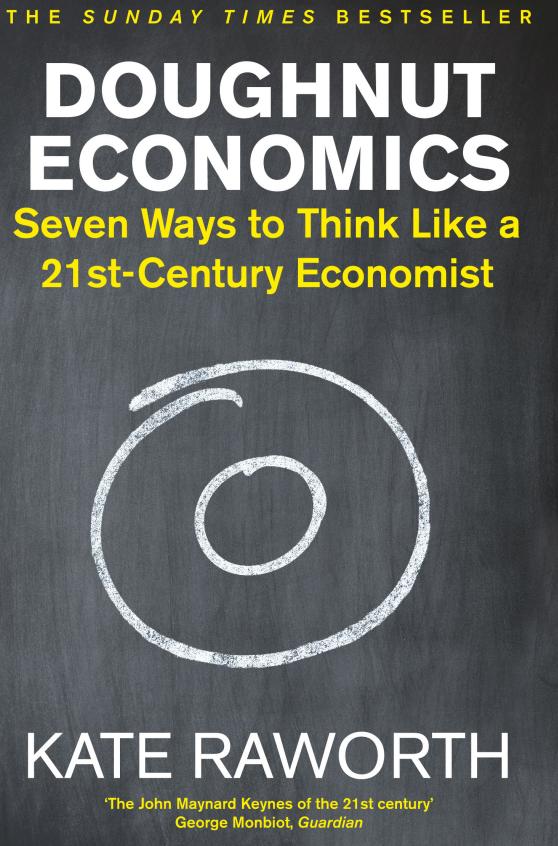
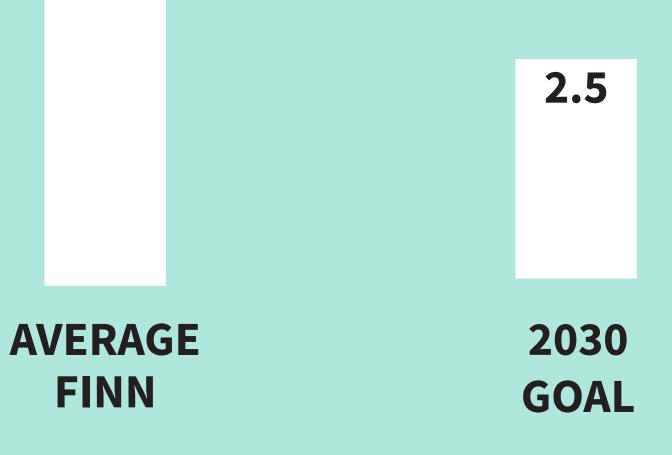


IMAGE: KATE RAWORTH(2017) **DOUGHNUT ECONOMICS**



KEY FINDING 1 REDUCING OIL USAGE IS NOT ENOUGH

10.4



CARBON FOOTPRINT TONS OF CO₂ E / YEAR / PERSON

SOURCE: IGES ET AL (2019) 1.5-DEGREE LIFESTYLES

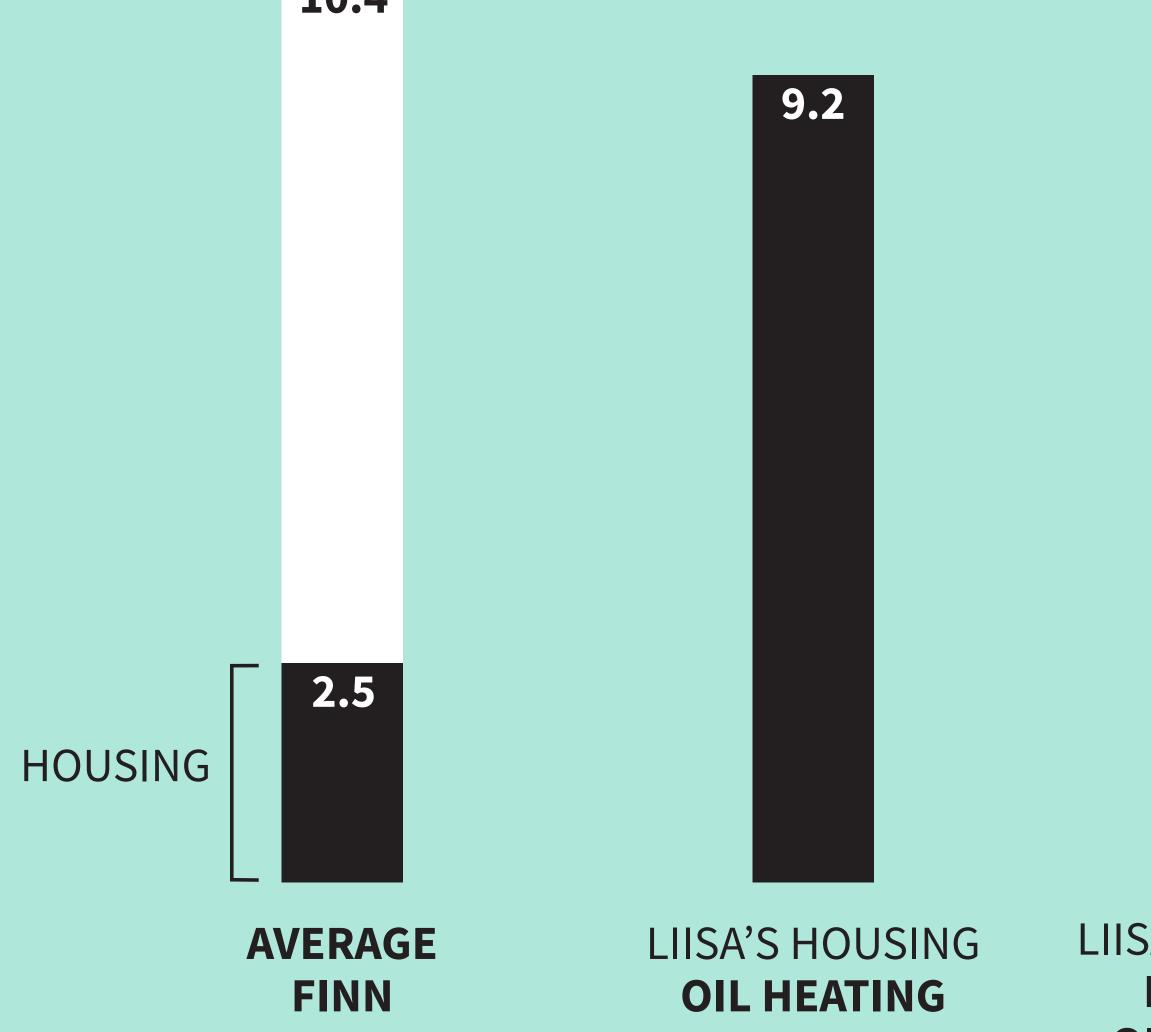
0.7

2050 GOAL

NT ON 2019) YLES

KEY FINDING 1 REDUCING OIL USAGE IS NOT ENOUGH

10.4



CARBON FOOTPRINT TONS OF CO₂ E / YEAR / PERSON

> SOURCE: IGES ET AL (2019) 1.5-DEGREE LIFESTYLES



LIISA'S HOUSING REDUCED OIL HEATING

7.3

LIISA'S HOUSING GROUND SOURCE HEAT PUMP & WIND

NT ON 2019) YLES

KEY FINDING 2 USER MOTIVATIONS ARE NOT TIED TO CLIMATE VIEWS

- **"The whole goal is just about** bullying and controlling the common people.
- **Increasing taxes will clean** the air, yeah right."
- MAKE, 44 (USER OF OIL HEATING)

KEY FINDING 3 FINANCIAL SUPPORT DOESN'T COVER EVERYONE

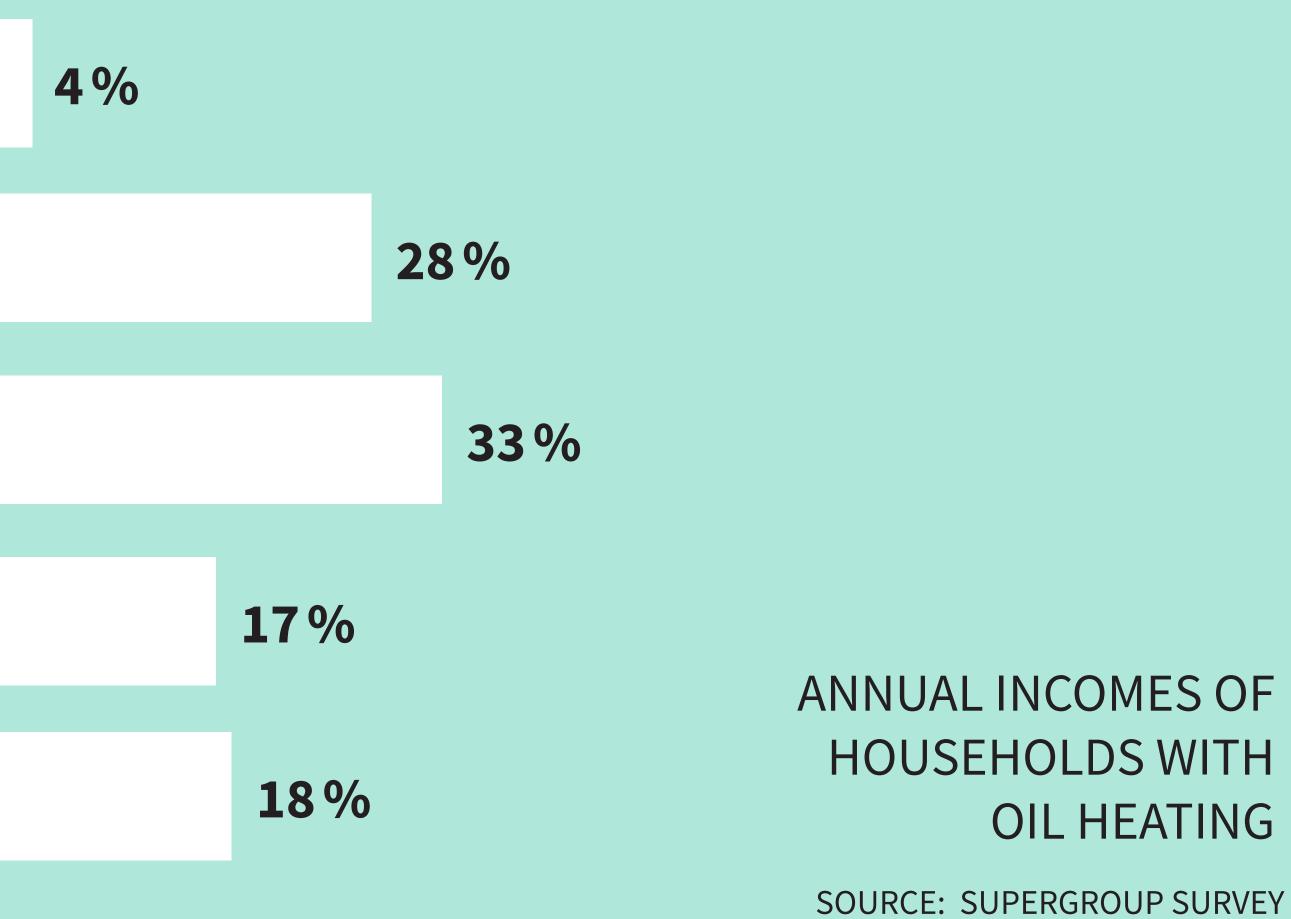
< 20 000

 $20\ 001 - 40\ 001$

40 001 - 60 000

60 001 - 80 000

> 80 001





KEY FINDING 4 USERS DON'T RECEIVE TRUSTWORTHY INFORMATION

"They almost tried to force me to buy a new heat pump, I felt quite annoyed."

LIISA, 68 (USER OF OIL HEATING)

KEY FINDING 5 OIL HEATING IS THE PASSIVE DEFAULT

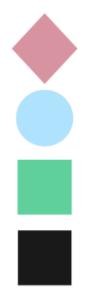
The default

USERS OF OIL HEATING

CONTINUE HEATING WITH OIL

LIFE EVENTS

PEOPLE LIVING IN OIL HEATED HOUSES

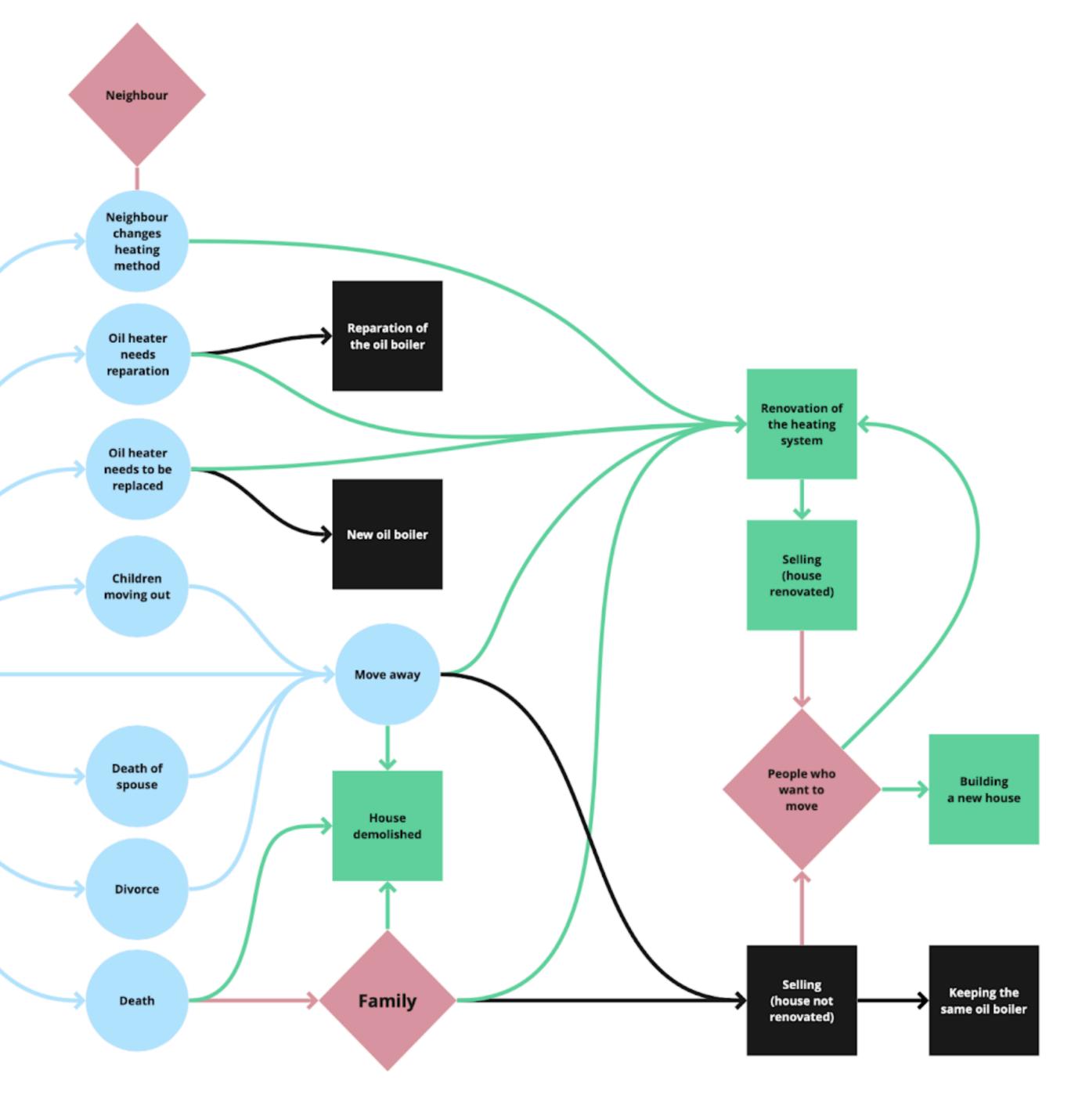


People

Life event

Desirable scenario

Undesirable scenario



SOLUTION



OIL HEATING LICENSE

CREATING **A TRIGGER POINT**

CONTINUE HEATING WITH OIL



OIL HEATING LICENSE

> **CHANGE TO OTHER HEATING METHOD**

GATHERING INFORMATION ABOUT USERS OF OIL HEATING

CONTINUE **HEATING** WITH OIL

USERS OF OIL HEATING

> OIL HEATING LICENSE

INFORMATION

CHANGE TO OTHER HEATING METHOD

GOVERNMENT

PROVIDING INFORMATION TO USERS OF OIL HEATING

> CONTINUE **HEATING** WITH OIL

OIL HEATING LICENSE

USERS OF OIL HEATING

INFORMATION

CHANGE TO OTHER HEATING METHOD

GOVERNMENT

LIMITING WHO GETS THE LICENSE

ONLY THOSE WHO CAN'T TRANSITION

CONTINUE **HEATING** WITH OIL

OIL HEATING LICENSE

USERS OF OIL HEATING

INFORMATION

CHANGE TO OTHER HEATING METHOD

GOVERNMENT

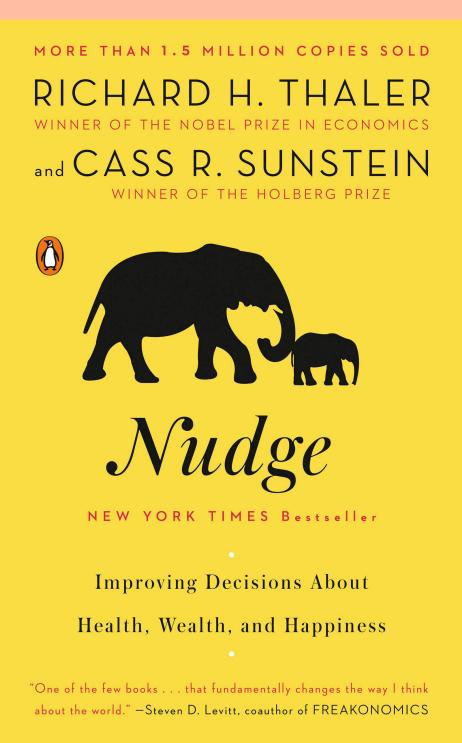
SUPPORTING THOSE WHO NEED IT

When we get the more capable to transition first, it requires less resources to give support to those who need it most.

BEFORE COMING UP WITH INTERVENTION

We had many possible directions & no idea what our solution could be

COMING UP WITH INTERVENTION



audio book + our research + google scholar + sleep

RICHARD THALER & CASS SUNSTEIN (2008) NUDGE

	Renewable and Sustainable En	ergy Reviews 41 (2015) 1385-1394
	Contents lists availa	able at ScienceDirect
R	enewable and Sustai	inable Energy Reviews
ELSEVIER	journal homepage: www	v.elsevier.com/locate/rser
		oural economics to understand 🌒 CrossMark
	-making and behavior ren Stenner ¹ , Elizabeth V. H	
	tems, Ecosciences Precinct, 41 Boggo Road, Dutt	
ARTICLE INFO	ABSTRACT	
August 2014 ccepted 17 September 2014 vailable online 16 October 2014 eywords: ehavioral economics sychology nergy consumption nergy conservation ousehold energy use ehavior change	desire to do so, many cor conservation. There is ofter attitudes and intentions, ar edge-action gap' and 'value by financial incentives and in unexpected and undesira calculus in favour of sustain conservation difficult to pr insights from behavioural motivational factors that ma personal values <i>or</i> material make household and comm	ge. Yet even with adequate knowledge of how to save energy and a professed isumers still fail to take noticeable steps towards energy efficiency and a sizeable discrepancy between peoples' self-reported knowledge, values, nd their observable behaviour—examples include the well-known 'knowl- action gap'. But neither is household energy consumption driven primarily the rational pursuit of material interests. In fact, people sometimes respond ble ways to rewards and sanctions intended to shift consumers' cost-benefit able behaviours. Why is this so? Why is household energy consumption and edict from either core values or material interests? By drawing on critical economics and psychology, we illuminate the key cognitive biases and y explain why energy-related behaviour so often fails to align with either the interests of consumers. Understanding these psychological phenomena can unity responses to public policy interventions less surprising, and in parallel, st-effective and mass-scalable behavioural solutions to encourage renewable
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Contents		
Introduction Applying psychology and bel Policy implications Directions for future research Conclusions	© 2014 The Authors. Publi havioural economics to explain, predict	ished by Elsevier Ltd. This is an open access article under the CC BY-NC-ND
Introduction Applying psychology and bell Policy implications Directions for future research Conclusions Introduction Consumer behaviour is comp	© 2014 The Authors. Publi	ished by Elsevier Ltd. This is an open access article under the CC BY-NC-ND license (http://creativecommons.org/licenses/by-nc-nd/3.0/).
Introduction Applying psychology and bel Policy implications Directions for future research Conclusions References Introduction Consumer behaviour is comp conomic theories of decision	© 2014 The Authors. Public havioural economics to explain, predict h	ished by Elsevier Ltd. This is an open access article under the CC BY-NC-ND license (http://creativecommons.org/licenses/by-nc-nd/3.0/).

FREDERIKS ET AL (2014) HOUSEHOLD ENERGY USE: APPLYING BEHAVIOURAL ECONOMICS TO UNDERSTAND CONSUMER DECISION-MAKING AND BEHAVIOUR

WHY CHOICE ARCHITECTURE

- requires less resources & easier to accept
- disrupting status quo & correcting current nudges





WHY NOT JUST CHOICE ARCHITECTURE

- bad options still available
- not complete enough change fast enough
- doesn't fix all problems
- can be used in combination with other solutions

