Behavioural insights as part of a policy mix for behaviour change and decarbonisation

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DAILY CONSUMPTION PATTERNS HAVE IMPORTANT ENERGY IMPLICATIONS

Largest energy end uses by sector in selected IEA countries, 2018





Source: IEA(2020), IEA Energy Efficiency Indicators

ACHIEVING CARBON NEUTRALITY REQUIRES LARGE-SCALE CHANGES IN HOW WE CONSUME AND PRODUCE EVERYTHING

What changes are needed in individual and household behaviour and investment?







Low-carbon mobility: walking, cycling, public transport





HOW CAN BEHAVIOURAL INSIGHTS INFORM POLICY-MAKING FOR SUSTAINABLE BEHAVIOUR CHANGE?

I. Identify **drivers** of individual behaviour

2. Identify **barriers** to sustainable behaviour

What (behavioural, market, policy) mechanisms affect **energy consumption** and associated decisions?

What (behavioural, market, policy) barriers

- ...prevent flexible and efficient energy use?
- ...hinder **investment** in energy efficient renovations, renewable energy, electric vehicles?
- ...block the uptake of sustainable mobility?

3. Shape **policy solutions:**



- **Price signals:** environmental taxation, energy price design, emissions trading...
- **Regulation:** fuel and energy efficiency standards...
- Information provision and other behavioural interventions ('nudges')



BARRIERS AND DRIVERS OF SUSTAINABLE ENERGY CONSUMPTION AND INVESTMENTS ARE COMPLEX

Behavioural mechanisms

- Habits
- Lack of awareness
- Social norms
- Time inconsistency

Policy misalignments

- Unpriced environmental externalities: missing or low carbon prices; inconsistent energy taxes...
- Environmentally harmful incentives: tax credits for corporate cars; fossil fuel subsidies

Market / context features

- Complex energy price design and energy bills
- Urban design and infrastructure: bike lanes, public transport frequency...
- Not-yet-mature markets for sustainable options (efficient housing...)



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Behavioural insights can help, but we cannot expect behavioural interventions *only* to solve *everything*!



THE URGENCY OF CLIMATE ACTION REQUIRES A BROAD POLICY MIX TO SUPPORT BEHAVIOUR CHANGE

Price signals

- •Environmental taxation, including carbon taxes / carbon emissions trading
- •Energy price design,
- •Removal of environmentally harmful subsidies
- •Urban policies: pollution pricing and congestion pricing

Regulation

- •Fuel and energy efficiency standards
- •Phase-out date for fossil-based technologies: ICE cars, gas boilers...
- •Urban policies: limited traffic zones, stricter speed limits

Information provision and other behavioural interventions ('nudges')

- •Labelling: energy efficiency, fuel efficiency, sustainable product sourcing...
- •Feedback provision (from energy utilities): smart meters, home energy reports
- •Smart defaults for product specifications and standards

Insights from behavioural sciences can inform design of all policy efforts

THANK YOU

About behavioural insights for energy policy:

- IEA (2021), <u>The Potential of Behavioural Interventions for Optimising</u> <u>Energy Use at Home</u>
- IEA and Users TCP (2020), <u>Behavioural insights and demand-side energy</u> policy: an environment scan
- OECD (2017), <u>Tackling Environmental Problems with the Help of</u> <u>Behavioural Insights</u>

