



# Expectations on MS to use online tools to influence behaviour in the energy crisis

WG session 1.1: Consumer behaviour and instruments providing information

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# The context


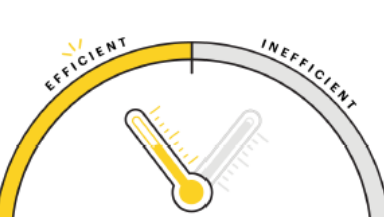


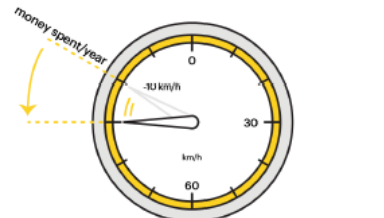

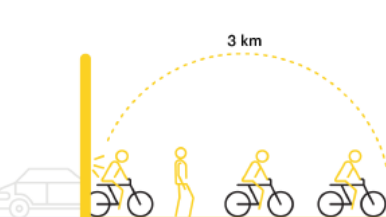

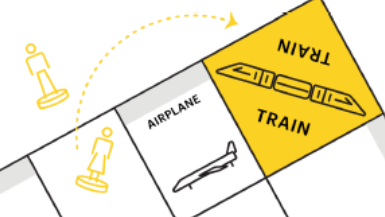
- Energy crisis is hurting households, businesses and the economies
- Increasing energy prices have led to higher end-user costs worldwide, with largest impacts in Europe
- Governments are committing to supporting consumers through price controls and income transfers, but are also asking people **change their behaviour**

# Behavioural insights can lead to significant savings

- Real-time feedback via smart thermostats can reduce gas consumption by 4.5% to 5%, without loss of thermal comfort
- Energy-saving competitions and games can achieve savings of around 14%
- Regular feedback through home energy reports have been estimated to reduce household electricity consumption by as much as 2.2%
- Goal setting and prompts for demand response programmes in Australia led to savings in the range of 25-42%
- Change of default settings by manufacturers can result in substantial savings as demonstrated by example of India regulating the default temperature to be 24°C

Source: IEA

# “Playing my part” by IEA and EC

<p><b>1</b> Turn down heating and use less air-conditioning</p> 	<p><b>2</b> Adjust your boiler's settings</p> 	<p><b>3</b> Work from home</p> 
<p><b>4</b> Use your car more economically</p> 	<p><b>5</b> Reduce your speed on highways</p> 	<p><b>6</b> Leave your car at home on Sundays in large cities</p> 
<p><b>7</b> Walk or bike short journeys instead of driving</p> 	<p><b>8</b> Use public transport</p> 	<p><b>9</b> Skip the plane, take the train</p> 

# REPowerEU

- REPowerEU is the European Commission's plan to make Europe independent from Russian fossil fuels well before 2030, in light of Russia's invasion of Ukraine
- The REPowerEU plan sets out a series of measures to rapidly reduce dependence on Russian fossil fuels and fast forward the green transition, while increasing the resilience of the EU-wide energy system. It is based on:
  - **Diversifying**
  - **Accelerating clean energy**
  - **Saving:** Every citizen, business and organisation can save energy. Small behavioural changes, if we all commit to them, can make a significant difference. Contingency measures for supply interruptions will also be needed

# EU Save Energy Communication

- How citizens and businesses can save around 13 bcm of gas imports
  - Information actions
  - Incitement and supporting actions
- Mid- to long-term energy efficiency measures
  - Increased ambition on energy savings by raising the EU-wide target on efficiency for 2030 from 9% to 13%
  - Strengthening of energy efficiency measures, stemming from EED and EPBD
  - Further increase energy efficiency in transport

# “Save gas for a safe winter”

- The Commission therefore proposed that all Member States reduce gas demand by 15% from 1 August 2022 to 31 March 2023:
  - Encourage fuel switching away from gas, with a priority for renewables and cleaner fuels
  - Promote saving of non-critical gas for electricity and heat production
  - Incentivise consumption reduction by industry, for example through tenders or auctions for reduced gas use, interruptible contracts, and contract swaps
  - Promote reduced heating and cooling in buildings, including through Member State awareness raising campaigns and action by individual citizens
  - Provide guidance to Member States on prioritisation of industry sectors in case of curtailments

# EED (2018) – Article 10a

2. Member States shall:

...

(b) ensure that final customers are offered the option of ***electronic billing information and bills***;

(c) ensure that ***clear and comprehensible information is provided with the bill*** to all final users in accordance with point 3 of Annex VIIa;



# EED (2018) – Annex VIIa

## 1. Billing based on actual consumption or heat cost allocator readings

***In order to enable final users to regulate their own energy consumption***, billing shall take place on the basis of actual consumption or heat cost allocator readings at least once per year.

## 2. Minimum frequency of billing or consumption information

From 1 January 2022, where remotely readable meters or heat cost allocators have been installed, billing or consumption information based on actual consumption or heat cost allocator readings shall be provided to final users at least monthly. It may also be made available ***via the internet and be updated as frequently as allowed by the measurement devices and systems used***. Heating and cooling may be exempted from that requirement outside the heating/cooling seasons.

# EED (2018) – Annex VIIa

## 3. Minimum information contained in the bill

Member States shall ensure that the following information is made available to final users in clear and comprehensible terms in or with their bills where those are based on actual consumption or heat cost allocator readings:

- (a) current ***actual prices and actual consumption of energy or total heat cost and heat cost allocator readings***;
- (b) ***information about the fuel mix used and the related annual greenhouse gas emissions***, including for final users supplied by district heating or district cooling, and a ***description of the different taxes, levies and tariffs applied***. ...;
- (c) ***comparisons of the final users current energy consumption with consumption for the same period in the previous year***, in graphic form, climate corrected for heating and cooling;
- (d) ***contact information*** for final customers' organisations, energy agencies or similar bodies, including website addresses, from which information on available energy efficiency improvement measures, comparative end-user profiles and objective technical specifications for energy-using equipment may be obtained;
- ...
- (f) ***comparisons with an average normalised or benchmarked final user in the same user category***. ...

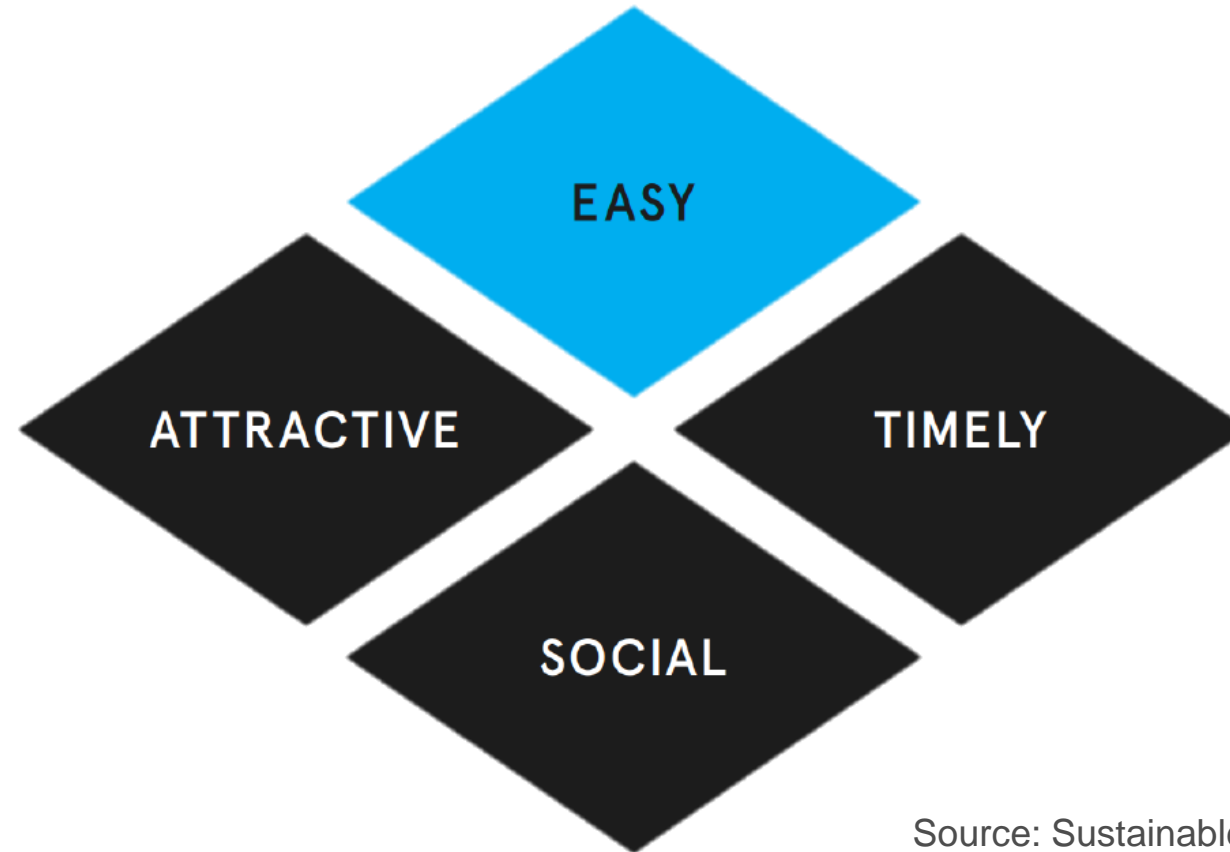
# EED (2018) – Article 10a status

- 20 open cases for *non-communication* (for the whole amendment)
- 7 MS are assessed as having communicated full transposition
- Then, all MS will be checked for *conformity*

# Measures that MS have taken to mitigate the energy crisis

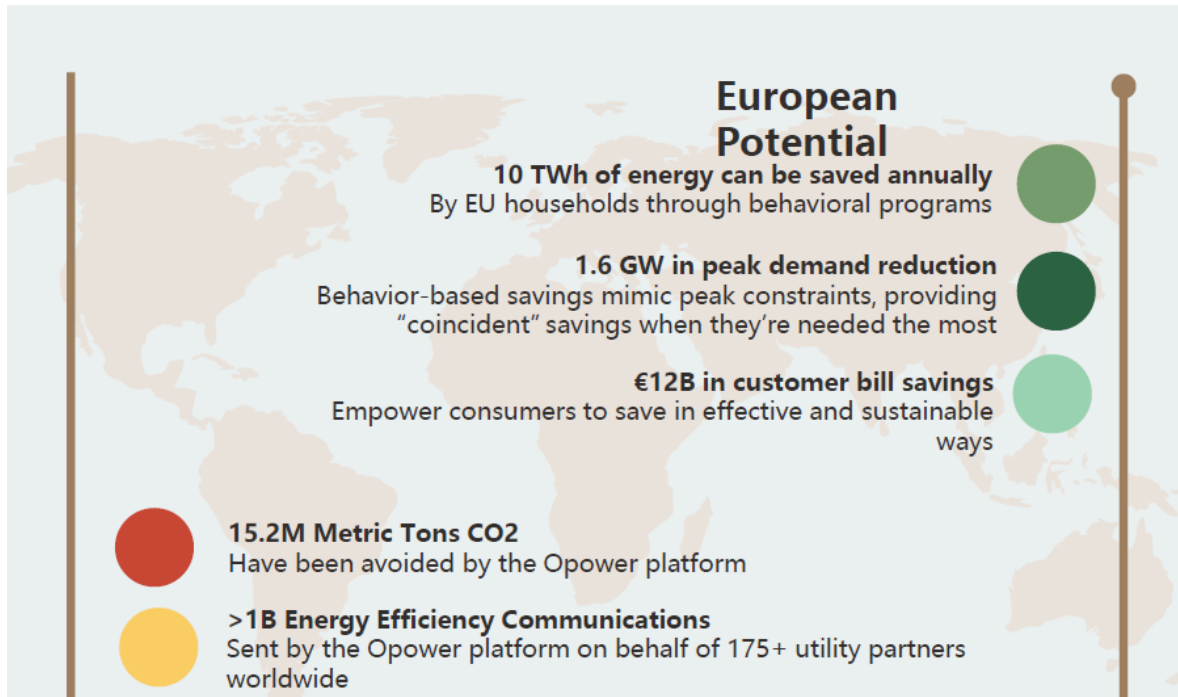
- In all cases, direct payments to consumers...
- In many cases, changes in the energy markets...
- In several cases, information and awareness campaigns...
- **Online tools and instruments? None that we know of!**
  
- ***Is this an opportunity to revisit the topic?***
  - *Cost efficiency studies*
  - *Installation, use of meters and online tools*
  - *Integration with information campaigns*
  - *Audits as part of the direct payments?*

# A framework for behavioural change



Source: Sustainable Energy Authority of Ireland

# Example #1



Why aren't these programs in Europe today?

To enable a successful behaviour change *programme*, you need:

1. Access to meter data
2. The ability to proactively communicate with consumers in a personalized way
3. Retail supplier incentive

Source: Opower platform, Oracle

# Example #2



## Policy recommendation 1 Visualise energy consumption behaviour

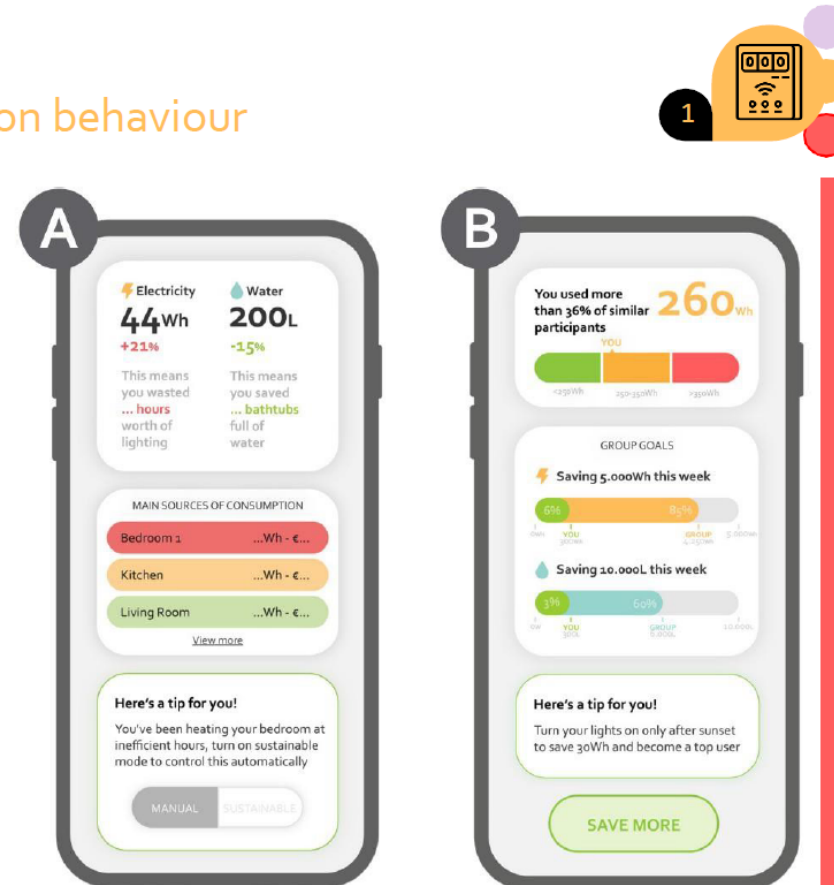
*Perceived behavioural control / subjective norms*

### Means

- Provide access to anonymized data for analytics
- Advance smart meter rollout
- Enable data sharing through IoT, smart meters, etc

### Nudging features

- A) Visualisation of in-depth information about real time consumption
- B) Relevant social comparison



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Source: Nudge project

Thank you