

# Visual language for energy poor households

Target group-specific information for the hard-to-reach



# Measures by the Austrian Federal government

## Energy supply crises is harming the life & wellbeing of citizens

### #measures

►► Various support services and measures for specific target groups



**Mission11:** Government campaign to save 11 % of energy



**Various one-off payments:** Subsidies to make it easier to switch from fossil-fuelled boilers to sustainable heating systems



**Temporal Discontinuation and reduction of levies** (green electricity subsidy, natural gas and electricity levy)



**Electricity cost subsidy:** Financial support for electricity costs for households (if price per kWh above 10 ct, subsidy of up to 30 ct/kWh for up to max 2900 kWh per household)

# Focus on energy poor households

## Targeted measures

### #energy poor

▶▶ Measures that relieve energy poor households and those that are threatened by energy poverty



**Increase of housing umbrella:** not just support for rent arrears – now also for energy cost arrears due to inflation



**Clean Heating for All:** Subsidies to make it easier for energy poor households to switch from fossil-fuelled boilers to sustainable heating systems



**New counselling formats:** social energy advice with a focus on support services and low-threshold energy-saving counselling



**Appliance replacement and energy saving advise:** Appliances can be exchanged free of charge if an energy-saving consultation has taken place on site

# Visual language for energy poor households

## Hard-to-reach energy consumers

#hard-to-reach

Beyond raising awareness on energy issues ↔ support people in taking the next step towards action

Existing information and support formats are often not prepared in a suitable form

### Co-creation process



- ▶▶ DIE UMWELTBERATUNG: deliver face-to-face advice
- ▶▶ Austrian Energy Agency: ENPOR Partner, energy and behaviour change expertise

### Update existing factsheets



- ▶▶ Content update
- ▶▶ Promotion of accessibility through visualisation

### Pilot phase



- ▶▶ Testing of the new factsheets via face-to-face advice services
- ▶▶ Finalisation of visualised factsheets

# Energy poverty on the rise

## Reaching the hard-to-reach

### #solutions

Solutions and measures to reduce energy consumption need to be simple, easy to implement and cheap to meet the requirements of energy poor households.



### *Willingness to accept offers of support requires trust*

- ▶▶ Repeated home visits by energy consultants specialised on energy poor households
- ▶▶ Energy poverty is a multidimensional problem. Overlaps between energy supply and social aspects



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# Conveing information with graphic elements

## Increase accessibility

### #illustrations

A illustration speaks a thousand languages



#### Available Factsheets

- ▶▶ Save electricity the easy way
- ▶▶ Save heating costs in winter
- ▶▶ Cool through the summer



#### Illustrated Factsheets

- ▶▶ Break down factsheets into easy to implement energy saving tips
- ▶▶ Graphic designer translates them into illustrations
- ▶▶ Tested during pilot phase with 50 households

**Kühlen und Gefrieren**

- Die optimale Temperatur bei Kühlgeräten beträgt +4 °C bis +6 °C und bei Gefriergeräten bis -18 °C. Je kälter, desto höher der Stromverbrauch.
- Lüftungsgitter freihalten
- Regelmäßig abtauen: Starke Eisbildung ist ein Zeichen für eine zu niedrige Kühltemperatur oder defekte Türdichtungen – der Stromverbrauch steigt beträchtlich.
- Warme Speisen erst auskühlen lassen und dann in den Kühlschrank stellen.
- Stellen Sie Kühlgeräte möglichst nicht neben dem Herd auf.

Ein 4-Personen-Haushalt kann so ca. 28-70 Euro pro Jahr einsparen!

**Geschirrspülen**

- Temperatur runter: Waschen Sie das Geschir bei niedrigen Temperaturen, das Aufheizen braucht die meiste Energie.
- Volle Ladung: Geschirrspüler erst einschalten, wenn er voll beladen ist.
- Vorwaschen ist nicht notwendig: Alles was im Geschirrspüler Platz hat und spülmaschinenfest ist, sollte auch damit gewaschen werden. Händisches Waschen im Waschbecken braucht viel mehr Wasser und damit mehr Energie.
- Kompelt abschalten: Viele Geschirrspüler verbrauchen in der Standby-Funktion Energie.

Durch das Senken der Waschttemperatur von 70 auf 50 Grad können Sie ca. 30 % Strom einsparen!

**Wäsche waschen**

- Temperatur runter: Eine Wäsche mit 30 °C entfernt mit einem heute üblichen Waschmittel 99 % der Bakterien und spart bis ca. 50 % der Energie, verglichen mit höheren Temperaturen. Außerdem wird die Wäsche geschont.
- Kurzprogramm verwenden: Eine Vorwäsche ist nur in Ausnahmefällen nötig, z.B. bei berufstätiger starker Verunreinigung der Wäsche.
- Volle Ladung: Die Trommel gut anfüllen und eine Handdrehe nach oben setzen lassen. Wäsche locker einlegen. Eine Überladung ist auch nicht gut, da die Waschergebnisse ebenfalls leiden.

Bei einem 4-Personen-Haushalt und 4 Waschgängen pro Woche können Sie durch Temperaturabsenkung ca. 27 Euro pro Jahr einsparen!



**KITCHEN**

COOLING AND FREEZING

- Open the door briefly
- 1 min = 2 kWh
- 18.0° wash
- 15 s sprints
- 100 hours
- 1 hour
- 100 sprints of heat

Preheating the fridge is a bad decision, reduces electricity consumption by 3%.

# Final result and feedback from consultations

## #evaluation

Feedback from consultations was very positive → Target group-specific preparation shows clear advantages and effects

### Save electricity the easy way

Using these tips, a family of 4 can reduce their annual energy consumption by 30% = up to 1,000 kilowatt hours

**1 kilowatt hour of electricity can:**

- 1 x 40' wash
- 15 t-shirts
- 100 hours
- 1 lunch
- 130 slices of toast

**KITCHEN**

**>> COOLING AND FREEZING**

- Open the door briefly
- 1 cm → defrost
- 18°
- +6° - +7°
- Positioning the fridge in a cool location reduces electricity consumption by 5%.

### Save heating costs in winter

1°C lower room temperature = 6% lower heating costs.

**>> REDUCE TEMPERATURE**

Setting thermostats at night to 17 – 19°C (level 2) saves up to 10% heating costs

**>> DON'T OBSTRUCT RADIATORS**

Furniture and curtains in front of radiators increase heating costs by up to 12%

How warm should I heat my home?

| Thermostat level | Temperature | Notes                            |
|------------------|-------------|----------------------------------|
| 5                | 26°C        | Please avoid                     |
|                  | 25°C        |                                  |
|                  | 24°C        |                                  |
| 4                | 23°C        |                                  |
|                  | 22°C        | Bathroom                         |
|                  | 21°C        | Living room and children's rooms |
| 3                | 20°C        |                                  |
|                  | 19°C        |                                  |
|                  | 18°C        | Bedroom                          |
| 2                | 17°C        |                                  |
|                  | 16°C        |                                  |
|                  | 15°C        |                                  |
| 1                | 14°C        |                                  |
|                  | 13°C        |                                  |
|                  | 12°C        |                                  |
|                  | 11°C        |                                  |
| *                | 10°C        | Frost protection                 |

### Cool through the summer

Leave the heat outside – keep windows closed during the day and air your home at night.

**PROTECTION FROM SUMMER HEAT**

**>> LEAVE THE HEAT OUTSIDE**

Houseplants cool down rooms and humidify the air

Plants help stop buildings heating up ...

**>> CREATING SHADE**

1. Ideal: external sunshade
2. Also suitable: darkening between the panes
3. Least suitable for cooling rooms: internal sunshade

... and cast shadows when positioned in front of the window

**Why use plants as heat protection?**

# High acceptance and support from governance level

#success

- ▶ Due to interest of many stakeholders from consultation to use the new material, cooperation with the Ministry of Climate Action was possible.
- ▶ The ministry financed the translation into five languages: English, Turkish, Bosnian-Croatian-Serbian, Arabic and Farsi (originally only German) → Strong increase in accessibility

The infographic is divided into five vertical panels, each representing a different language:

- German:** "Strom sparen so einfach geht's" (Saving electricity is so easy). Tip: "KÜCHE" - "KÜHLEN UND GEFRIEREN" (Cooling and freezing). "Tür nur kurz öffnen" (Open door only briefly). "1 cm → abs" (1 cm → off).
- Slovenian:** "Štednja struje – na jednostavan način" (Saving electricity – in a simple way). Tip: "KUHINJA" - "HLABENJE I ZAMRZAVANJE" (Cooling and freezing). "Samo nakratko otvorite vrata" (Only briefly open the doors). "1 cm → otapanje" (1 cm → melting).
- English:** "Save heating costs in winter". Tip: "REDUCE TEMPERATURE". "Setting thermostat at night to 17-15 (level 2) saves up heating costs". Tip: "DON'T OBSTRUCT RADIATORS". "Furniture and cu in front of radiat increase heating by up to 12%".
- Arabic:** "توفير تكاليف التدفئة في الشتاء" (Saving heating costs in winter). Tip: "تقليل درجة الحرارة" (Reduce temperature). "وإست على 17 (الدرجة الثانية) من تكاليف" (Save up to 12% of costs by setting to level 2). Tip: "حافظ على جسم السخان خالية" (Keep the radiator free). "الأثاث في أمام المشع في فصل إلى 12%".
- Persian:** "Yaz boyunca serin" (Stay cool throughout the year). Tip: "YAZ SICAĞINDAN KORUN" (Protect from summer heat). "ISIYI DIŞARIDA BIRAKIN" (Keep heat outside). "Oda bitkileri odaları serinletir ve havayı nemlendirir" (Indoor plants cool the room and humidify the air). Tip: "KARARTMA" (Blinds). "1. İdeal: Day karartma" (Ideal: Day blinds). "2. Su da uygundur: Camlar arasında karartma" (Water is also suitable: Blinds between windows).

Additional Persian text on the right: "گرمای را بیرون نگه دارید - پنجره ها را در روز بستید و صبح و شب تهویه کنید" (Keep heat outside - close windows during the day and ventilate in the morning and evening). "چرا گیاهان به خنک ماندن فضا کمک می کنند؟ گیاهان باعث کاهش گرمایش ساختمان می شوند... و جلوی پنجره سایه می آوازند" (Why do plants help cool the space? Plants reduce building heating... and provide shade for windows).



# Widespread use was made possible within the framework of ENPOR

## #impact

- ▶▶ The developed material is now being used throughout Austria in energy counselling and contributed to sustainably improving its quality.
- ▶▶ The Ministry for Climate Action finances the printing for advisory services. More than 140,000 copies have already been ordered.

## Integration into existing and new support services was made possible

- ▶▶ The Ministry of Social Affairs now also uses the new material in its support offers
- ▶▶ Materials are used in energy consultations carried out in the housing umbrella support programmes and the household electrical appliance exchange programme.
- ▶▶ They are also made available to newly trained advisors as part of the Social Energy Advice trainings.
- ▶▶ Due to the great interest, a new factsheet on water saving is currently being developed and further translations into Ukrainian and Russian are planned.

## Your contact persons

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