ED/EL for boilers

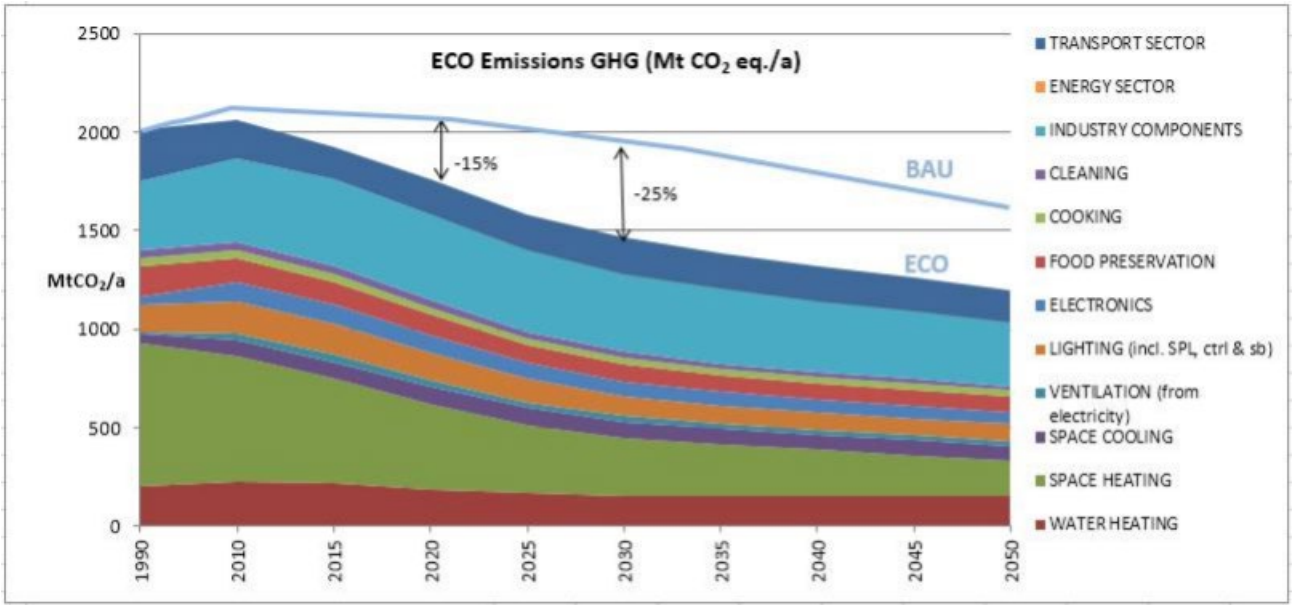
Heating Hub -29.10.2020

Mélissa Zill (ECOS) / Davide Sabbadin (EEB) 29.10.2020

ECOS

Heating - in figures

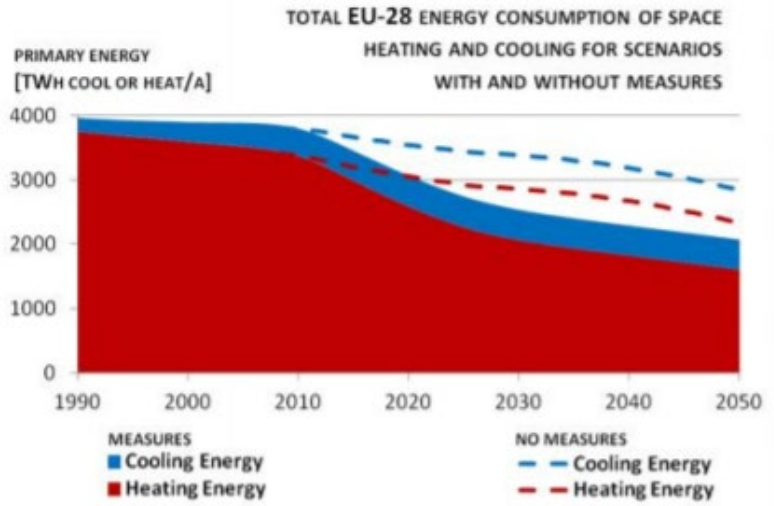
- Space and water heating: **28%** of the total energy consumed in the EU
- **80%** of the final energy consumption of EU households
- **12%** of the total EU CO_2 emissions (= the totality of cars in the EU)



Heating - in figures

70% of the EU building heat load (2000 TWh/y) is provided by space heating products covered by Ecodesign and Energy Labelling

Ecodesign measures allowed to save **35%** of the total primary energy savings of regulated products



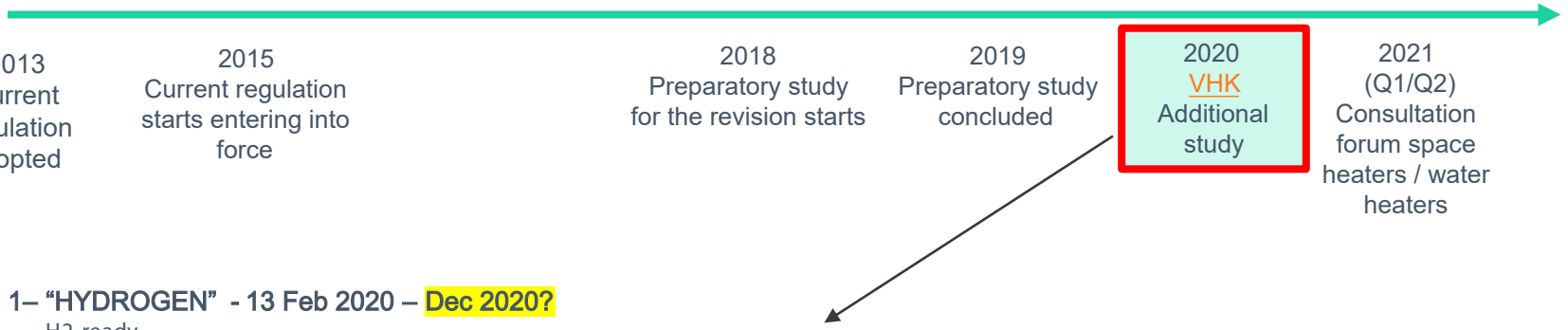
We can achieve more savings !

→ Central heating functions at **85% through direct use of fossil fuels**

→ Gas boilers represent **58% of the installed stock**

→ **60%** of the stock is **old and inefficient** (C class and below)

Timeline



WG 1– "HYDROGEN" - 13 Feb 2020 – Dec 2020?

1.1 H2-ready
1.2 Bio-fuel ready
1.3 Effect of revised PEF on limits and classes
1.4 Shared chimney problem for type B1, C4 and C8 (is mainly a political choice)
1.5 Cogeneration correction factor for electricity (is mainly a political choice)

WG 2 – "TESTING" – 2 Apr 2020 – Dec 2020?

2.1 Heat pumps testing: supply temp. at 65°C, dynamic testing, update standard test conditions
2.2 Fuel boiler testing: bin-method conditions at 65°C, include O-size
2.3 Verification tolerances
2.4 Third party conformity assessment
2.5 Scope extension to 1 MW (testing issues, lab test capacity)
2.6 New ErP group: Emitters & Controls
2.7 Label design for heat pumps (LT and HT on single label) (new built =LT, exist = HT)

WG 3 – "CALCULATION" – 10 Mar 2020 – Dec 2020?

3.1 NOx limits for 3rd family gases (or WG4?)
3.2 Revised integral ecodesign + labelling calculation
3.3 Updated package label calculation

WG 4 – "WATER HEATERS"– 20 Jan 2020 – 25 June 2020

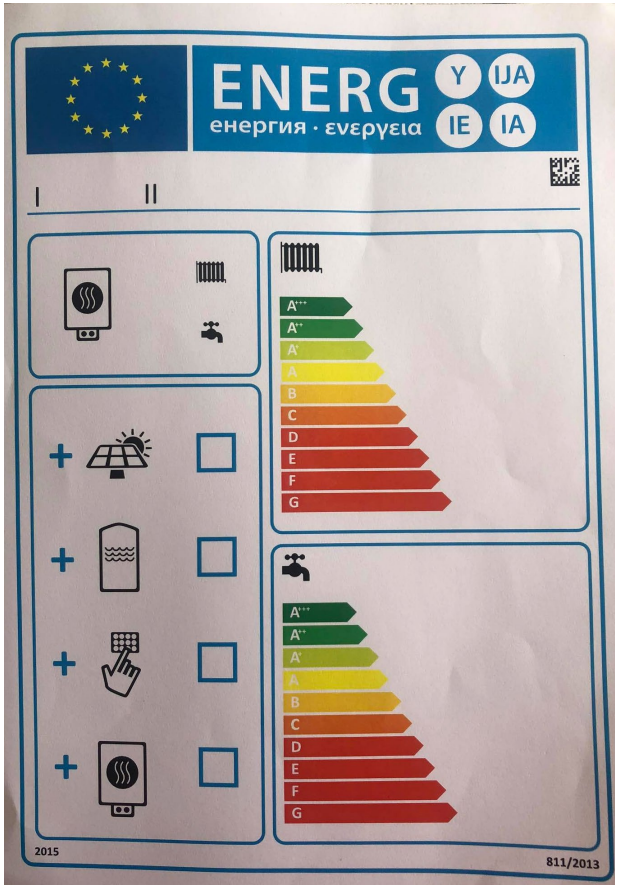
4.1 Analysis of technology specific limits for wh's (phase out pilot flame)
4.2 Improved definitions + scope alignment ecodesign/labelling (4XL etc.)
4.3 Storage tank (choice test standards, etc.)
4.4 Inclusion of PFHRD
4.5 Solar device contribution – simplification
4.6 Water heating performance in a single (WH) regulation

Issues with the current regulation

1. **Unfair advantage for fossil fuel fired appliances** (condensing gas boilers labelled A or A+)

2. **No clear advantage for renewable technologies** (e.g solar thermal)

3. **Incompatible with the climate and emission reduction targets**



Key asks

Overall goal: Phase out fossil fuel fired and inefficient electric space and water heaters by 2025

How ?

1. Rescale the energy label to an AG scale

2. Include all appliances below 105% efficiency in F and G classes

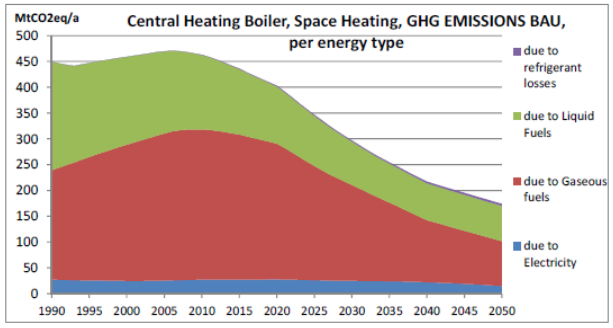
3. Plan a tiered phase out of the F and G classes

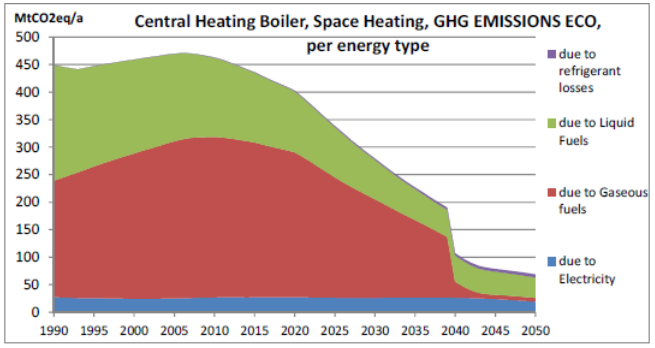
It is not that easy…

- Preparatory study **not considering a potential rescaling** of the energy label

> (17) Energy labelling of space and water heating products was introduced only recently and the rate of technological progress in those product groups is relatively slow. The current labelling scheme makes a clear distinction between conventional fossil fuel technologies that are at best class A, and technologies that use renewable energy, which are often significantly more expensive, for which classes A+, A++ and A+++ are reserved. Substantial energy savings can already be achieved by the most efficient fossil fuel technologies, which would make it appropriate to continue promoting them as class A. As the market for space and water heating products is likely to move slowly towards more renewable technologies, it is appropriate to rescale the energy labels for those products later.

- **Hydrogen & biomethane** presented as the solutions to decarbonise heating in the prep study





But there is hope

→ **Convincing high level policy makers** that the current review goes against the climate neutrality objectives

→ **Convincing Member States** to push the Commission to look into a rescaling

Swedish Energy Agency

Date
16 July 20

Department for Resource Efficient Community
Resource Efficient Products Unit
Carlos Lopes, Emma Olsson
+46 16 544 22 03
carlos.lopes@energimyndigheten.se

Preliminary Swedish comments following the second meeting of the technical working group on water heaters and hot water storage tanks

Sweden welcomes the suggestions developed and proposed in the interim report[1] and during the second meeting of the technical working group 4 on water heaters and hot water storage tanks. In summary, the most important comments from Sweden are:

- to welcome and support the proposal for setting technology specific ecodesign requirements for water heaters;
- to not support the suggested lower requirements for large electric water heaters as no evidence if is provided for this change;
- to urge the Commission to prepare a proposal for the rescaling of the label to A-G for water heaters and storage tanks. We consider that such rescaling is allowed by the framework regulation, while a revision of the scale without rescaling to A-G is not.

Comments from The Netherlands

In our opinion – looking at the Green Deal – **it is appropriate to rescale the labels as soon as possible and to start a preparatory study for the revision with a view to rescaling as soon as possible**. This would mean that at this moment nothing on the label is changed. Note that the relevant recital (17) does not mention a date but only says that it is appropriate to rescale the energy labels for these products *later* (based on the assumption that the market for space and water heating products is likely to move slowly towards more renewable technologies). We think that the market for space and

HEAT FOR ALL

We need inclusive change

Every European citizen deserves to be moving from the problem to the solution side of heating.

We need policies for all.

UPCOMING CAMPAIGN

2020-2021

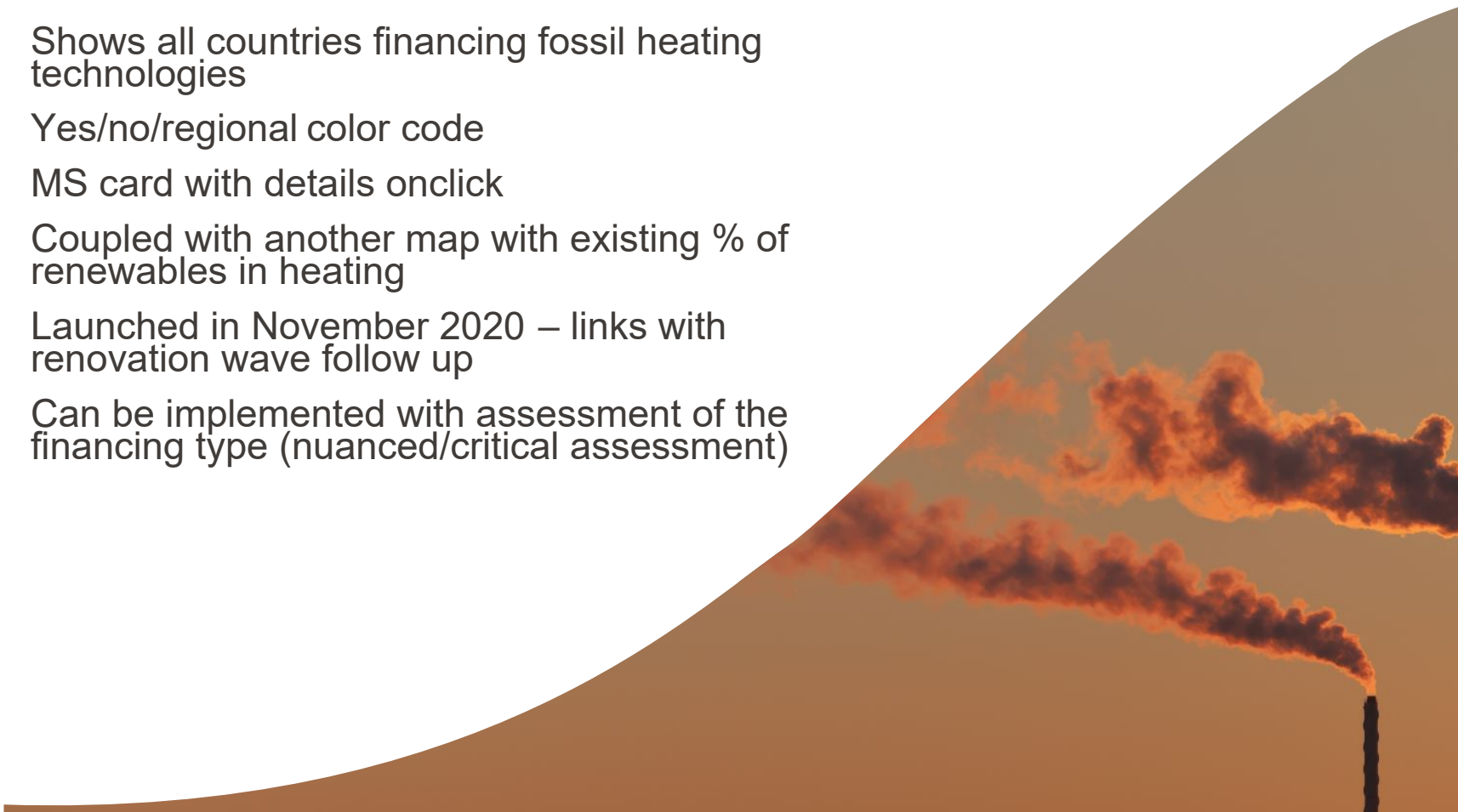
- Will provide content for media work
- Will provide visual content online
- Will engage with several national NGOs
- Will draft national brief and take different angles depending on members (fossil/RES)
- Will promote different tech solutions depending on th MS
- Will aim to put pressure MS to change their position phase out of fossil tech via ecodesign

EEB
European Environmental Bureau

THE FOSSIL MENACE

The first map to be released on coolproducts.eu

- Shows all countries financing fossil heating technologies
- Yes/no/regional color code
- MS card with details onclick
- Coupled with another map with existing % of renewables in heating
- Launched in November 2020 – links with renovation wave follow up
- Can be implemented with assessment of the financing type (nuanced/critical assessment)



EP II: THE ATTACK OF THE BRANDS

Brand audit research

- Public research on main brands in EU related to heating technologies
- Based on both interviews and survey
- Not a ranking but some categorization
- Will be focusing on existing and future business strategies, image and general narrative
- Will be out most likely in December (tbc)

RENEWABLES STRIKE BACK

Who is financing renewable heating and how

- Third map, to be released in December (tbc)
- Reports on domestic renewable heating subsidies in MS
- Same colour code as the previous one
- Will come with a detailed report on the ongoing measures listed by MS
- More precise assessment and comment by EEB based on efficacy of the measures and other criteria (indexed subsidies)
- Will focus mostly in HP and Solar Thermal

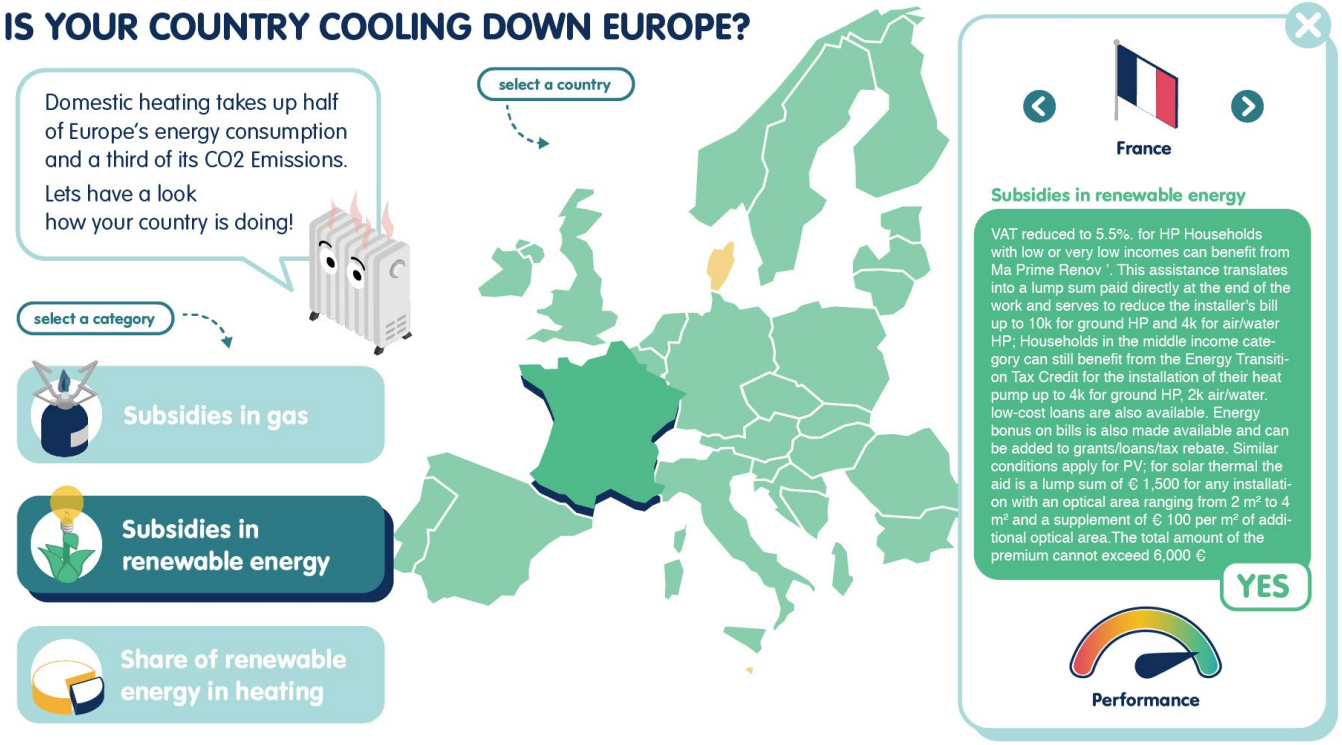
THE RETURN OF ECODESIGN

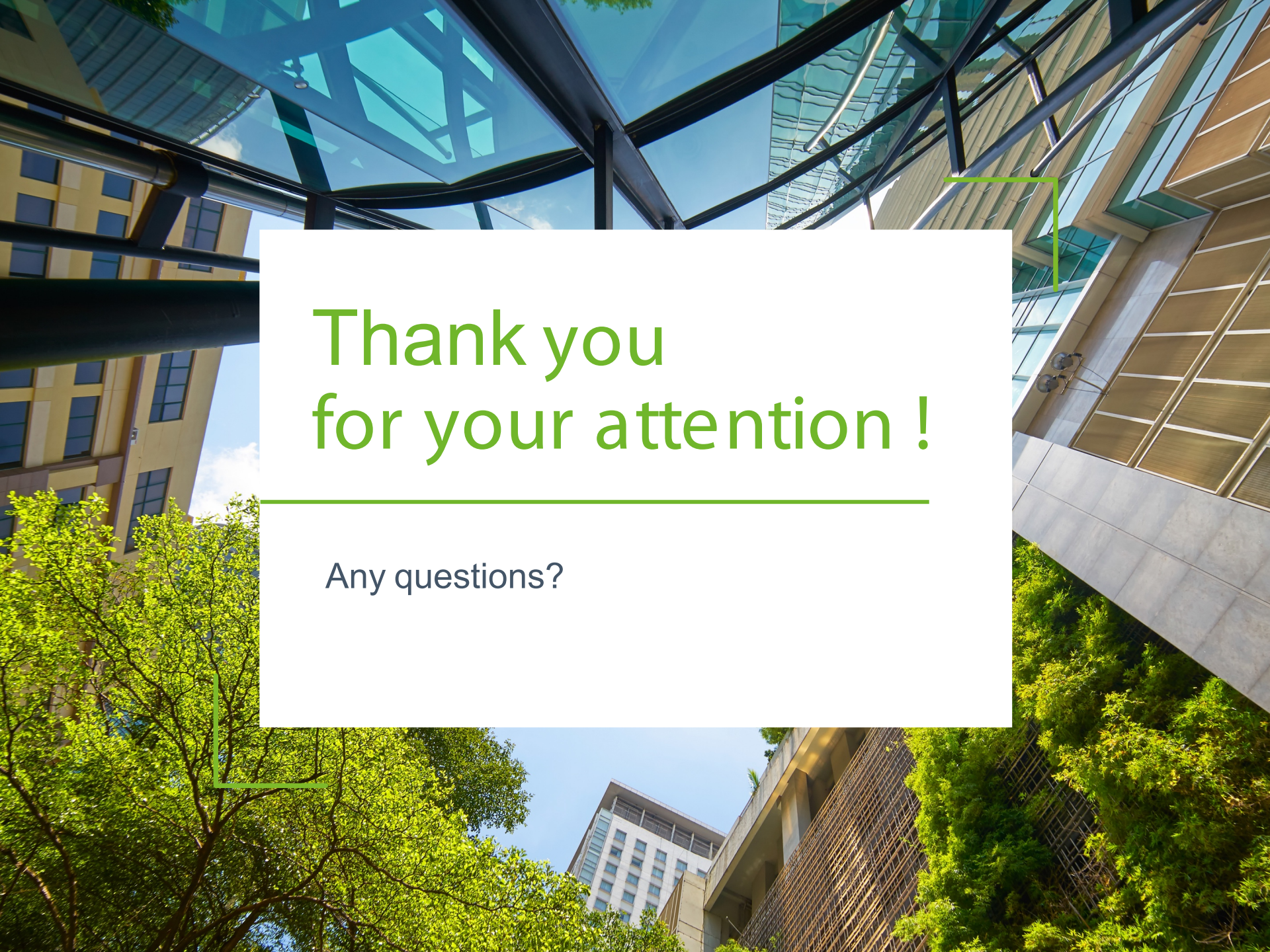
Positioning of MS on energy label switch and fossil phase-out

- Forth and last map to be released (Feb 2021)
- Will report positions of MS on key points in the ecodesign and energy labelling processes
- Based on public positions and intelligence gathered
- Name and shame is the desired effect to promote positioning
- Ideally influenced by previous work (members/media)

Source UK Parliament upon data from CCC

HOW IT COULD LOOK LIKE





Thank you for your attention !

Any questions?

Mélissa Zill
Programme Manager

www.ecostandard.org

Mundo B, Rue d'Edimbourg 26
1050 Brussels, Belgium

+32 2 894 46 08
info@ecostandard.org

@ECOS_Standard

ECOS-EU

Heating - Regulations

Local space heaters (ENER Lot 20)

Ecodesign

Reg 2015/1188: local space heaters (since 1st January 2018)
Review by 1st January 2019

Reg 2015/1185: solid fuel local space heaters
3rd party certification: by 22nd August 2018.
Review: by 1st January 2024

Energy Labelling:

Reg 2015/1186: local space heaters (excluding electric heaters)
Review by 1st January 2024
Revision with a view to rescale A to G label to be adopted **by 2nd August 2023**.

Proposal to merge energy labels (March 2019)

Air conditioning (ENER Lot 10)

Energy Labelling:

Reg 626/2011: air conditioners
Covers: electric mains-operated air conditioners with a rated capacity of ≤ 12 kW for cooling, or heating, if the product has no cooling function. Comfort fans ≤125W
CF in June/July 2019 → adoption expected in 2020.
Energy label to be rescaled during this review.

Ecodesign

Reg 2016/2281: air heating products, cooling products, high temperature process chillers and fan coil units
Covers: warm air heaters, comfort chillers, air-to-air air conditioners > 12kW , water/brine air to air conditioners
Fan coil units, air-to-air heat pumps >12kW, water/brine to air heat pumps, high temperature process chillers
Review by 1 January 2022

Air heating and cooling products (ENER Lot 21)

Space and water heaters (ENER Lot 1 & 2)

Ecodesign

Reg 813/ 2013: space heaters and combination heaters
Review ongoing- preparatory study finalised: May 2019

Reg 814/2013: water heaters and hot water storage tanks
Review ongoing- preparatory study finalised: May 2019

Energy Labelling:

Reg 811/2013: space heaters, combination heaters, packages of space heater, temperature control and solar device and packages of combination heater, temperature control and solar device.
Review ongoing- preparatory study finalised: May 2019

Reg 812/2013: water heaters, hot water storage tanks and packages of water heater and solar device.
Review ongoing- preparatory study finalised: May 2019

Rescaling
Derogation in EL Framework Reg (Recital 17) – distinction between fossil fuel technologies (A) and technologies using renewable energies (A+, A++, A+++). Rescaling later because slower move to renewable technologies.
Review by 2 Aug 2025
Adoption of rescaled labels: 2 Aug 2026 'where appropriate'/ Final deadline to adopt rescaled labels: 2 August 2030

Solid fuel boilers (ENER Lot 15)

Ecodesign

Reg 2015/1189: solid fuel boilers

Energy Labelling

Reg 2015/1187: solid fuel boilers

Review for both -1st January 2022 (no derogation in ELFR)
Study on introduction of 3rd Party certification – by 26 September 2018