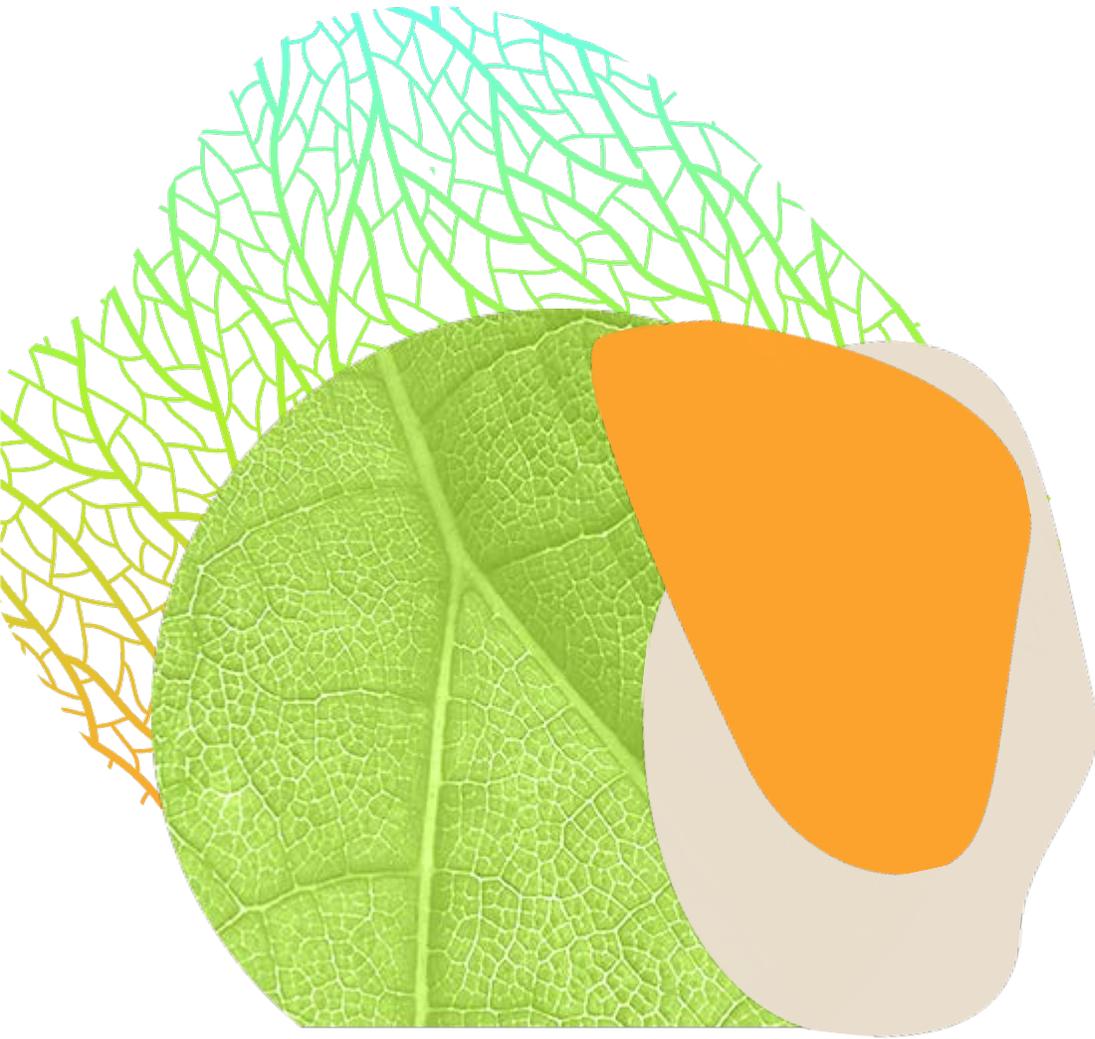




# DELIVERING THE EUROPEAN GREEN DEAL

*Review of the F-gas Regulations (EU) 517/2014*

ACERCOM 28 April 2022

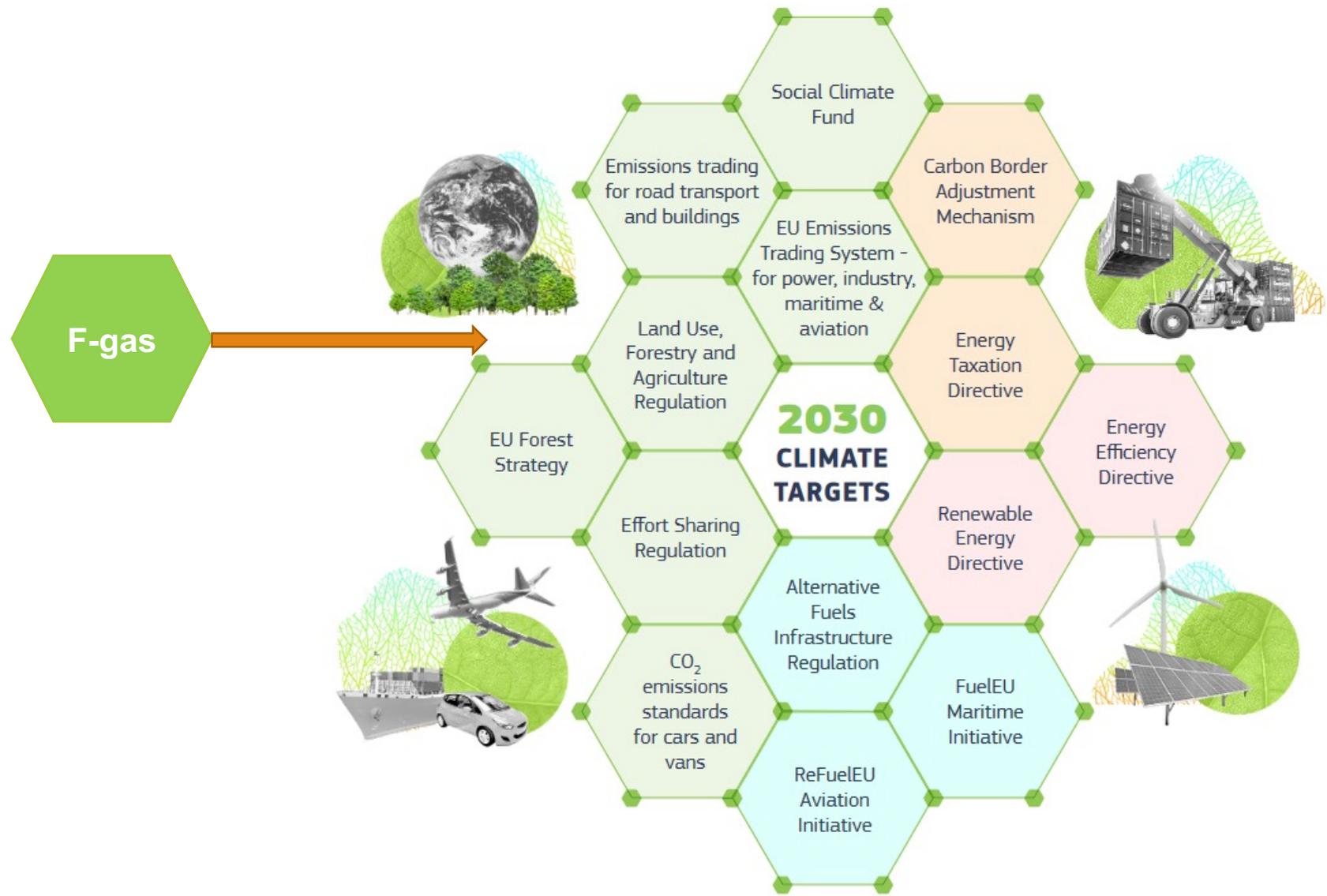


**European Green Deal** means we are committed to:

- Reduce emissions **by at least 55% in 2030** (compared to 1990)
- **Be net climate neutral in 2050**

=> Take actions to **walk the talk**

# Contribute to the Green Deal & climate targets



# Main objectives of the F-gas Policy

- **Prevent emissions, where technically and economically feasible**
    - The EU's 2030 target (min. 55% reduction) and climate neutrality by 2050.
    - Delivering on EU's commitment in its Nationally Determined Contribution (NDC) and reaching the Paris Agreement temperature goal
  - **Ensure full EU Montreal Protocol compliance**
    - Global ODS phase-out avoiding at least 2°C increase in 2070 and Global HFC phase-down avoiding around 0.4°C increase by the end of the century. Sustaining the Montreal Protocol → extremely important. [Source: Ozone Facts and Figures 5-4.pdf \(unep.org\)](#)
- + promoting green growth and innovation, leading by example ...

# Evaluation of the F-gas Regulation

- F-gas Regulation generally works well,
- main types of measures should be kept but some improvements necessary

=> “Review objectives” for fine-tuning each Regulation

# F-gas Regulation proposal should ...

- A. Align to the Green Deal climate ambition**
- B. Streamline with Montreal Protocol (HFCs)**
- C. Better implementation and enforcement**
- D. Improve monitoring and reporting
- E. Coherence and clarifications

*Measures targeting these review objectives were bundled in **three packages having different expected cost levels.** All options must safeguard Montreal Protocol compliance.*

# Main changes to the F-gas Regulation

## A. Align to the Green Deal climate ambition

- Steeper HFC phase-down = lower amount of HFCs that importers and producers may place on the EU market yearly (Annex VII)
- Additional Placing on the market and use prohibition, e.g. self-contained and split AC/heat pumps & switchgear (Art 11, Art 13, Annex IV)
- Extending containment measures to more activities and gases, e.g. leakage control measures covering HFOs (Article 4 to 10)
- Recovery obligation for some insulation foams (Article 8)

# Most important placing on the market (POM) & use prohibitions

- POM with gases GWP  $\geq 10$  [or  $\geq 2000$ ] in switchgear between 2026 to 2030 (Annex IV point 23)
- POM with gases GWP  $\geq 150$  or 750 in air conditioning and heat pumps between 2025 and 2027 (Annex IV points 17 and 18)
- POM with gases in personal care products and skin cooling equipment 2024 (Annex IV points 21 and 22)
- Use of gases GWP  $\geq 2500$  in smaller refrigeration equipment (charge size  $\leq 40$  tCO<sub>2</sub>e) and use of desflurane as inhalation anaesthetic (Article 13)

Some existing prohibitions have been extended from HFCs to all F-gases as a preventive measure.

# Main changes to the F-gas Regulation

## B. Streamline with the Kigali Amendment (HFC)

- Remove certain exemptions from phase-down, e.g. asthma sprays (MDIs) and minimum thresholds (Art. 16 and 26)
- Separate HFC production phase-down (Art. 14 and 15)
- Trade prohibition with non-parties to the Kigali Amendment (Art. 25)

# Main changes to the F-gas Regulation

## C. Better implementation and enforcement

- Specific provisions for surveillance and customs authorities (Art. 23, 28 and 29)
- Quota price instead of free allocation and requirements for new entrants (Art. 17, 18 and 21)
- Whistle-blowing and dissuasive penalty requirements (Art. 30 and 31)
- Certification and training programmes to cover energy efficiency and F-gas alternatives (Art. 10)
- ...

# Main impacts of the Fgas proposal

	Impact
Additional climate warming emission savings	310 Mt CO <sub>2</sub> e until 2050 [All GHG emissions in Spain 2019: 315 MtCO <sub>2</sub> e]
Additional energy savings	0.1-0.3% in 2030 and 0.1-0.5% in 2050 of baseline electricity use in RAC sector
Overall climate abatement cost	-36€ per tonne CO <sub>2</sub> e technology change costs (2024-2036 average)
Sectoral conversion costs	Up to €336 per tonne CO <sub>2</sub> e in a few sectors (mobile AC, switchgear)
Economic effects	Slightly positive GDP and employment effects; Stimulation of R&D No significant regional differences or impacts on consumer prices or gender equality

# Why was this package of measures the preferred option?

An option to **simply align with the Montreal Protocol** and include very low cost measures resulted in increased emissions compared to the baseline.

An option to do **everything that would be (technically) feasible** resulted only in marginal additional benefits, while the costs for the sub-sectors and authorities concerned would be very high.