

Lunch time Meeting:

The EU amendment proposal:

Maximising the climate benefits of the HCFC phase-out

European Commission36th OEWG, Paris, 20 July 2015

Programme



- Short description of the proposal
 - ➤Time for questions
- > The "basket approach": More details
- > Interactive discussion
 - ➤ Flexibility to address Parties' specific conditions
 - ➤ Differentiation between non-Article 5 and Article 5: 'Grace-periods' vs different commitment designs
 - >UNFCCC and the Montreal Protocol

Background



- ➤ Increases in HFC consumption & production are leading to significant emissions
 - Maximise the climate benefits of the ODS phaseout and mitigate the negative impacts of earlier conversions
- Recognition of the success and efficiency of the Montreal Protocol:
 - > Cooperation between non-Article 5 & Article 5
 - > Existing institutions & implementing bodies
 - > Funding through the Multilateral Fund

Non-Article 5: Production and consumption



Non-Article 5 are large HFC users today, should take the lead in reducing their consumption and production!

Baseline:

Average **HFC** production/consumption 2009 to 2012

+ **45%** of average **HCFC** production/consumption allowed under the Protocol 2009 to 2012, expressed in CO₂ equivalents

Reduction schedule for HFCs:

2019: 85%

2023: 60%

2028: 30%

2034: 15%

Article 5 Parties: Consumption



Specific circumstances for Article 5: HCFC phase-out just started, demand for refrigeration and air conditioning are growing rapidly (need for some HFCs in the short to medium term)

Baseline

Average **HFC** and **HCFC** consumption 2015/2016, expressed in CO₂ equivalents

> Freeze

Combined HCFC and **HFC** consumption ('basket approach'), expressed in CO₂ equivalents in 2019: 100%

Reduction schedule

Reduction target and reduction steps to be agreed by 2020

Article 5 Parties: Production



Global HFC production is rather evenly distributed between Article 5 and non-Article 5 parties

Baseline

Average **HFC** production 2009 to 2012 plus 70% of average **HCFC** production 2009 to 2012, expressed in CO₂ equivalents

Freeze

HFC production in 2019: 100% of baseline

Reduction target

2040: 15% of baseline

Reduction schedule

Intermediate reduction steps to be agreed by 2020

Other provisions



- > Reporting
- Licensing
- Assessment and review
- HFC-23 by-production
- > Funding
- Trade with non-parties

Estimated Benefits



Cumulative estimated environmental benefits of the EU amendment proposal in Article 5, non-Article 5 Parties and globally

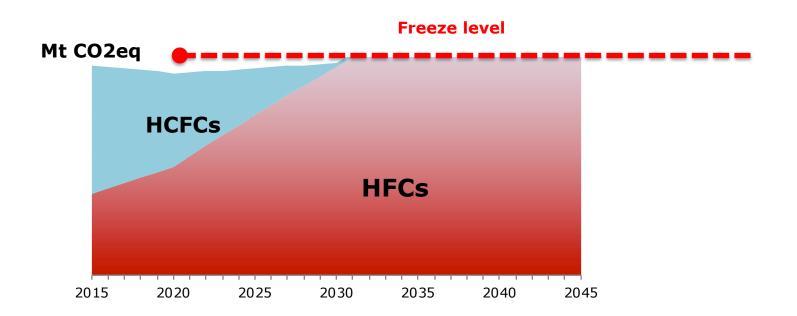
Gt CO₂eq	2050	over 40 years
Non-Article 5 Parties	23	33
(phase-down of		
production + consumption)		
Article 5 Parties (consumption freeze + production	56	94
reduction)		
Global total	79	127

- Reductions in Non-Article 5 are achieved by reducing the current use of high-GWP HFCs, and phase-down of production
- Reductions in Article 5 are mostly achieved by avoiding the phase-in of high-GWP HFCs, and phase-down of production
- ➤ The figures do not include **further benefits** from reducing HFC-23 by-production, and additional possible benefits from further reductions of Article 5 consumption and production (to be agreed by 2020)

The "basket approach": More details



- Climate impacts of HFCs & HCFCs are capped together, avoiding their growth;
- With progress of the HCFC phase-out, Parties gain flexibility to use some HFCs where needed to address growth and for difficult sectors



Article 5 Case Studies

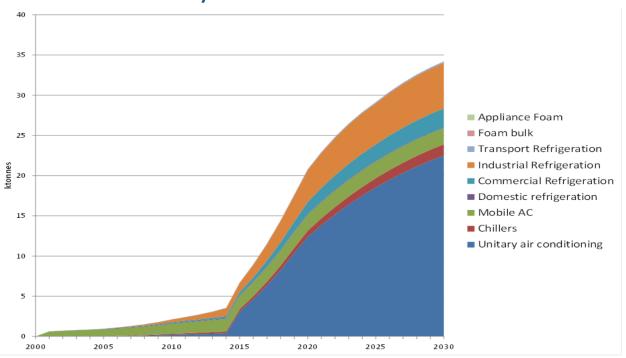


Reality check: Calculations for real countries

- Identifying important (sub-)sectors
- Overview of the emissions savings potential using available technology
- Required actions and feasibility to meet a freeze

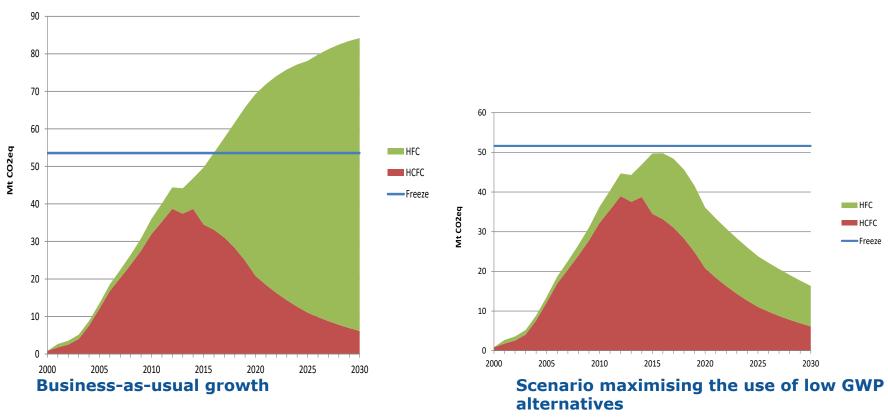
Example:
Article 5 country
with high ambient
temperature

BAU sectoral growth



Article 5 Case Studies





Conclusions: → The freeze is achievable

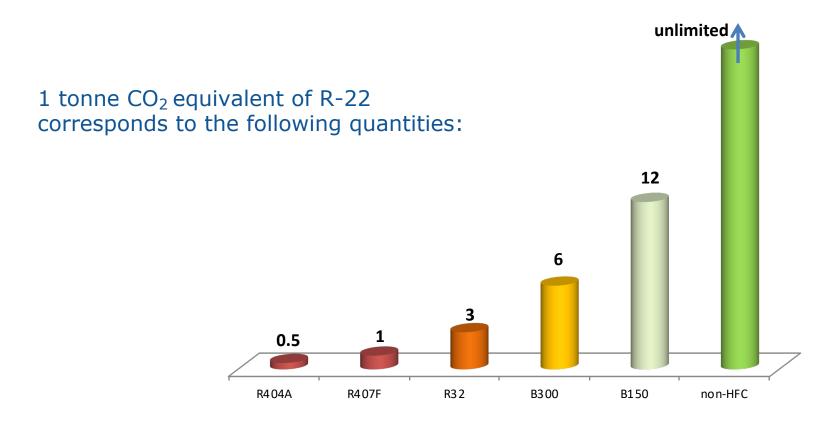
- → Action needs to be taken as soon as possible
- → Converting the most relevant sectors leads to long term reduction

Flexibility



"CO₂ Metric"

The transition to HFCs and blends with lower GWP, the metric volumes can increase accordingly



Flexibility



Phase-down, not phase-out

Targeted end-level allows continued use of HFCs where necessary

'Basket approach' (Article 5 consumption)

Targeting the combined climate impacts of both HCFCs and HFCs enables Parties to choose the most efficient reduction options for their individual situation

A Party with predominant HCFC consumption:

➤ Leap-frogging HFCs in the HCFC phase-out

A Party with high consumption of HFCs:

Replacing high GWP-HFCs (e.g. R-404a or R-507) may be prioritised

Differentiation between non-Article 5 and Article 5 European Commission

Same start date but different commitments

No 'grace period', except transitional periods for administrative preparation

Any delay in implementation would lead to interim conversions, risk of "dumping" of out-dated technology!

Non-Article 5 Parties take the lead

Domestic legislation on HFCs (EU: reduction by 79% of consumption by 2030; other countries with effective domestic reduction policies: CAN, CH, JP, NO, US,...)

Early start of HFC phase-down (2019) with a first reduction step

Spurs development of alternatives and facilitates accessibility for Article 5 Parties



> Funding of Article 5 compliance

Measures related to HFC production and consumption will be funded via the MLF

Parties are mandated take decisions on the policies and obligations for the operation of the MLF



- HFCs are not "controlled substances", but only phaseddown -> need to be monitored under UNFCCC!
- Amendment contributes to reaching the objectives of the UNFCCC by reducing emissions
- Emission monitoring (UNFCCC) will help monitoring the impact of HFC measures taken under the Montreal Protocol
- Efforts under the Montreal Protocol are accountable under the UNFCCC, can be integrated in INDCs
- Fully compatible and realising mutual supportiveness of the agreements

The ideal interim solution?



- Reaching environmental benefits in the short term
- Avoiding the growth of the problem by the freeze
- Creating synergies with the ongoing HCFC phase-out, enabling leap-frogging
- Enabling an informed decision on a long-term reduction target and schedule for Article 5 Parties
 - Work on data collection/inventories is ongoing (Decision XXVI/9)
 - Alternatives develop further, become more available and less costly
- Deciding on additional reduction steps for Article 5 through an adjustment by 2020

To know more...



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