

ATMOsphere Europe conference | 27 September 2017 | Berlin

Reporting on fluorinated greenhouse gases

Handling of the reporting cycle and 2016 report



Role of the EEA in the context of F-gases reporting

1. Data flow management

- *Online reporting tool at BDR* – <https://bdr.eionet.europa.eu/>
- *Support to companies* – BDR.helpdesk@eea.europa.eu
- *QA/QC and database handling: ETC/ACM* – <http://acm.eionet.europa.eu/>

2. EU reports on fluorinated greenhouse gases

- *Confidential report for European Commission and Member States*
- *Public report (forthcoming)* – <https://www.eea.europa.eu/publications/fluorinated-greenhouse-gases> (last year)

3. F-gases indicator

- *Emissions and supply of fluorinated greenhouse gases (F-gases)*
(new development autumn 2017)

Project setting

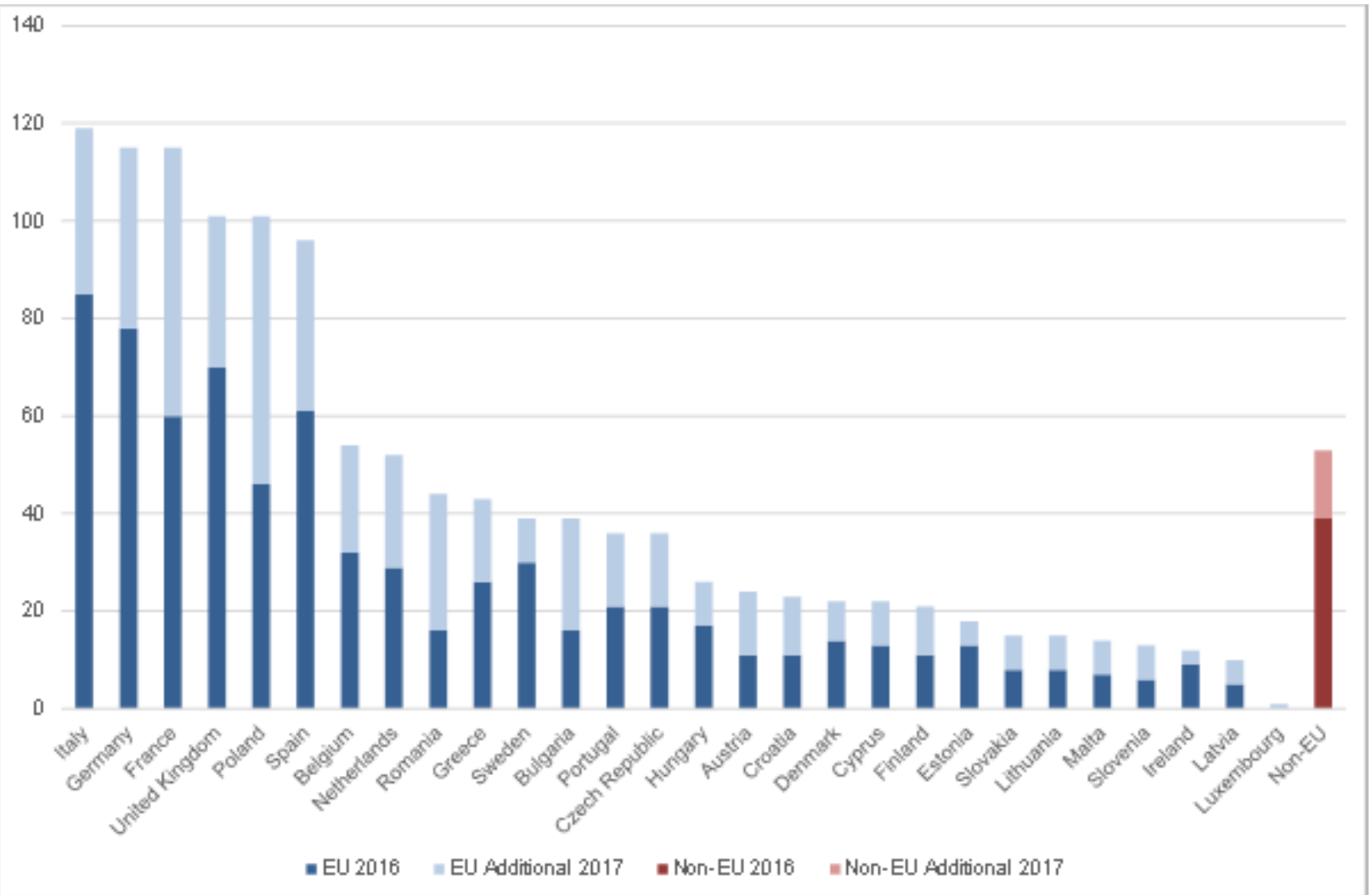
Partnership between the EEA and its European Topic Centre on Air Pollution and Climate Change Mitigation (ETC/ACM)

- **EEA**
 - *Overall project supervision*
 - *IT platforms and handling of IT support*
 - *Centralised holding of the data*
- **ETC/ACM**
 - *Technical support to reporters*
 - *QA/QC and aggregation of the data*

2017 reporting round on 2016 transactions

- **Third year of reporting under Regulation (EU) No 517/2014**
- **New reporting elements directed to quota compliance, related to phase-down start in 2015**
- **1279 companies reported on 2016 transactions**
- **A further 803 companies reported no activity (NIL)**

Origin of reporting companies



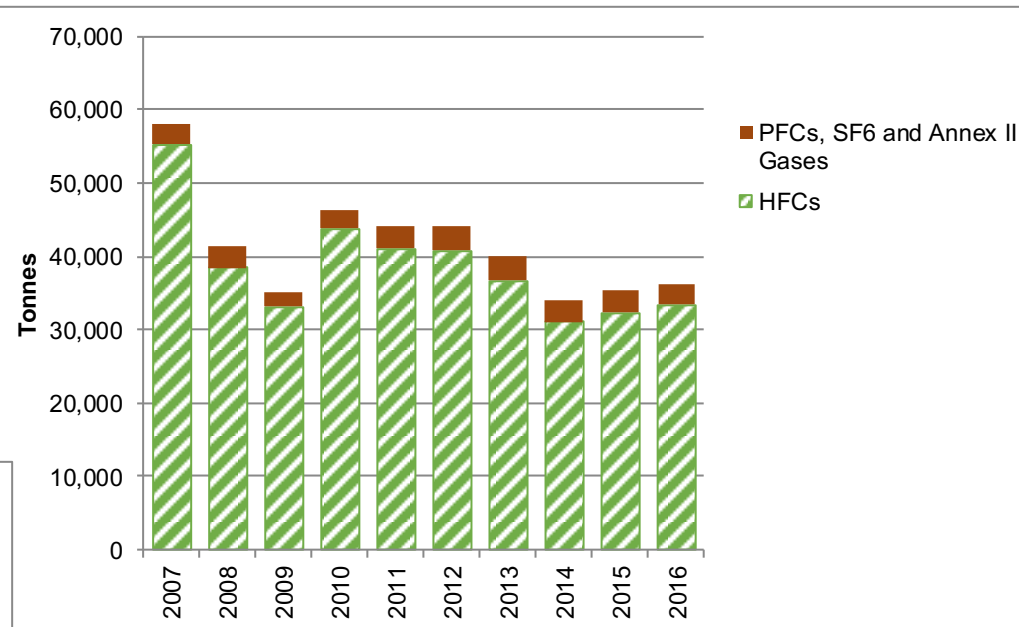
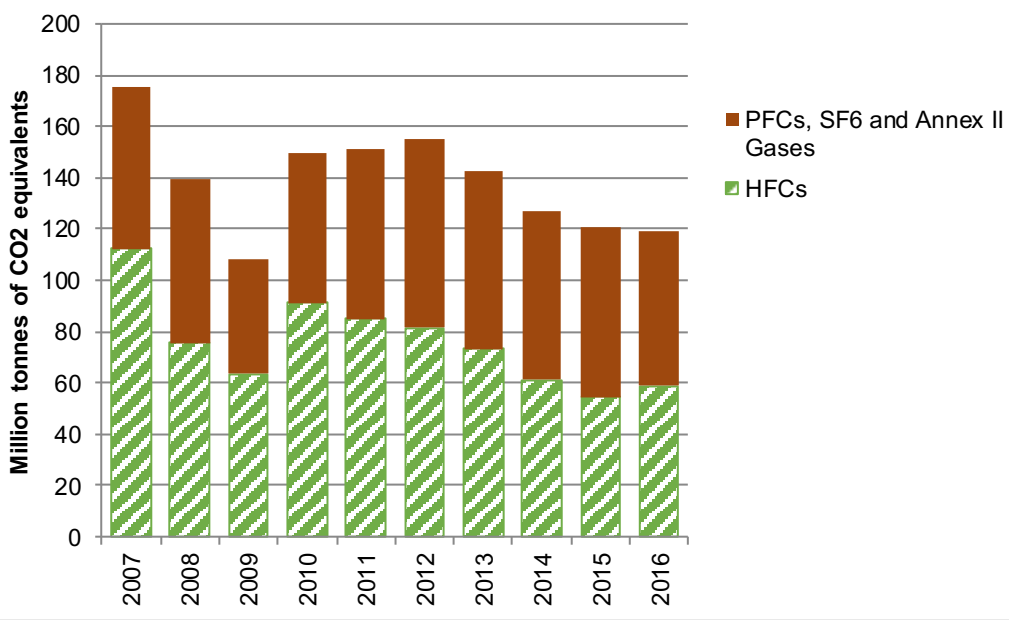
Note on the F-gas reporting data...

Be aware of the break in 2014

- *Annex II gases: Unsaturated HFCs and HCFCs, HFEs and alcohols, and NF3 and other perfluorinated compounds were not subject to reporting prior to 2014*
- *Import of equipment charged with F-gases was not reported prior to 2014*
- *Be careful when comparing values and interpreting trends: Numbers from before 2014 are typically lower because of different reporting requirements, not because of changes in the market.*

Production of F-gases

Overall production slightly higher than 2015, but with lower total GWP



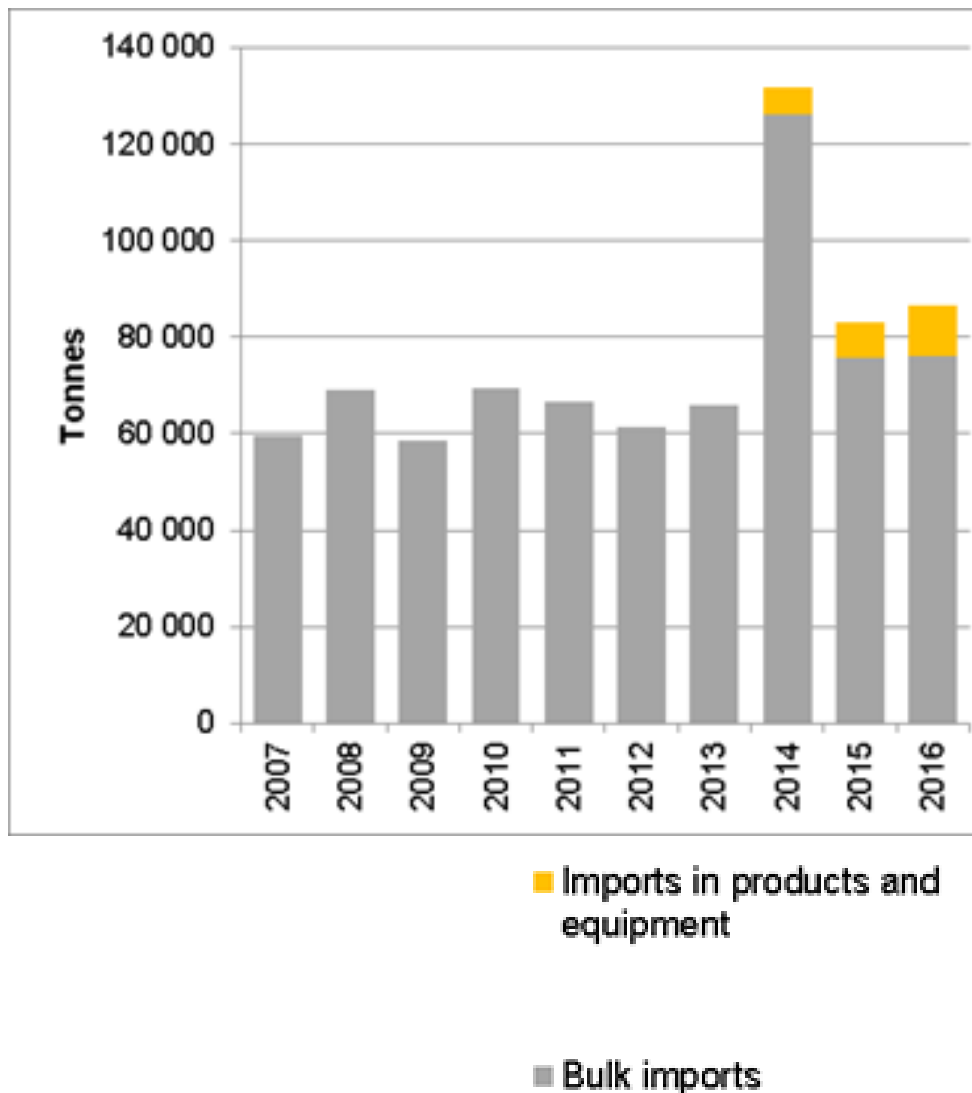
HFCs:

+3% (t) / +7% (CO₂e)

Others:

-9% (t and CO₂e)

Imports of F-gases (total)

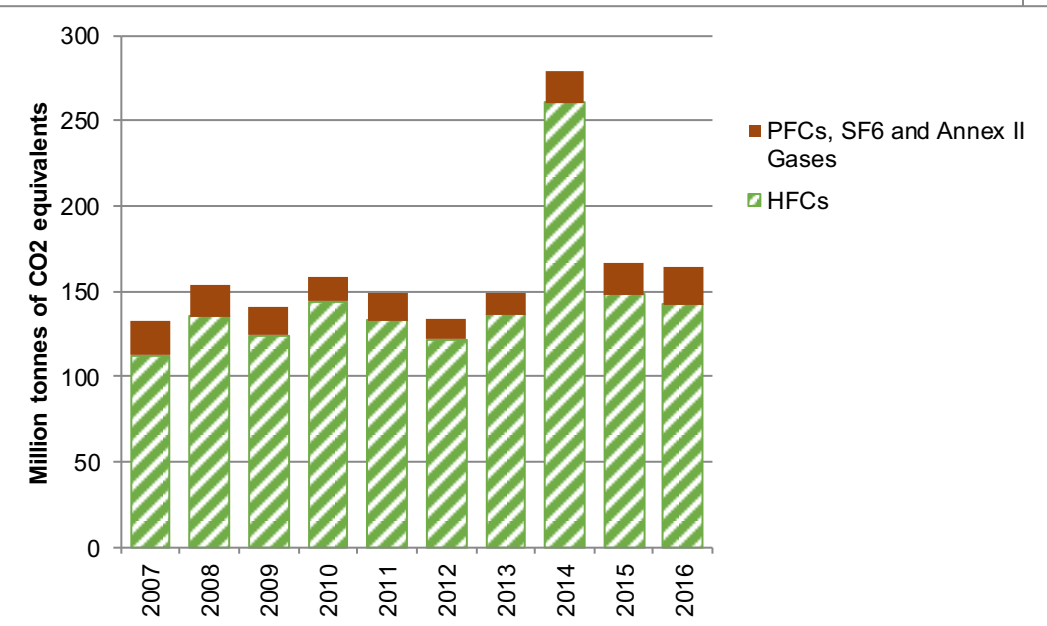
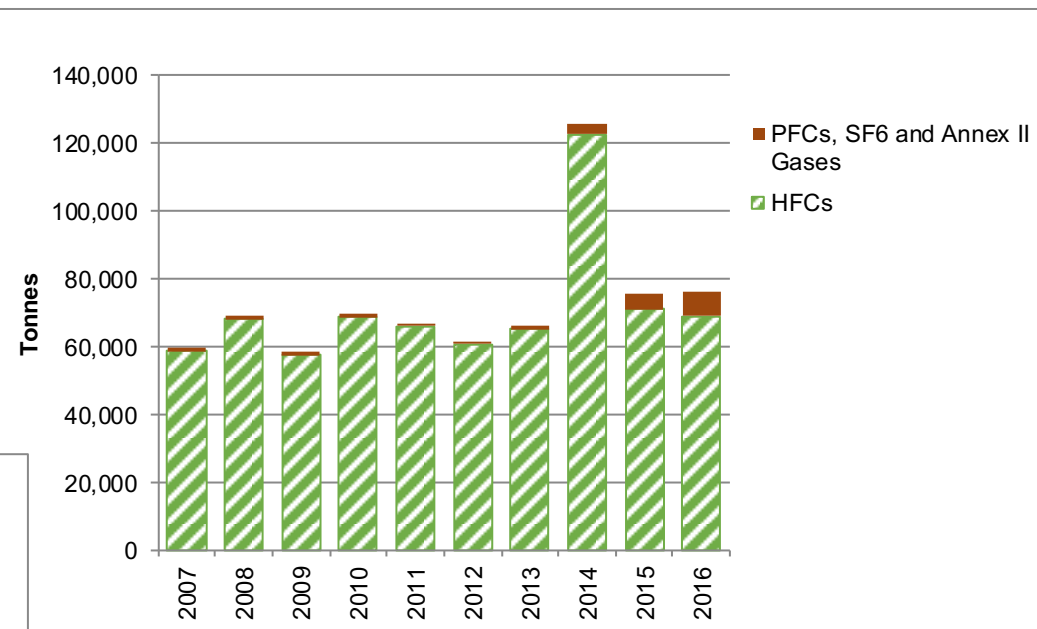


- **Equipment import up 50% in 2016**
- **Half of increase due to more complete reporting**
- **Peak in 2014: last year before phase-down started**

Time series before/after 2014 not easily comparable: Equipment imports were not reported prior to 2014

Imports of F-gases (bulk)

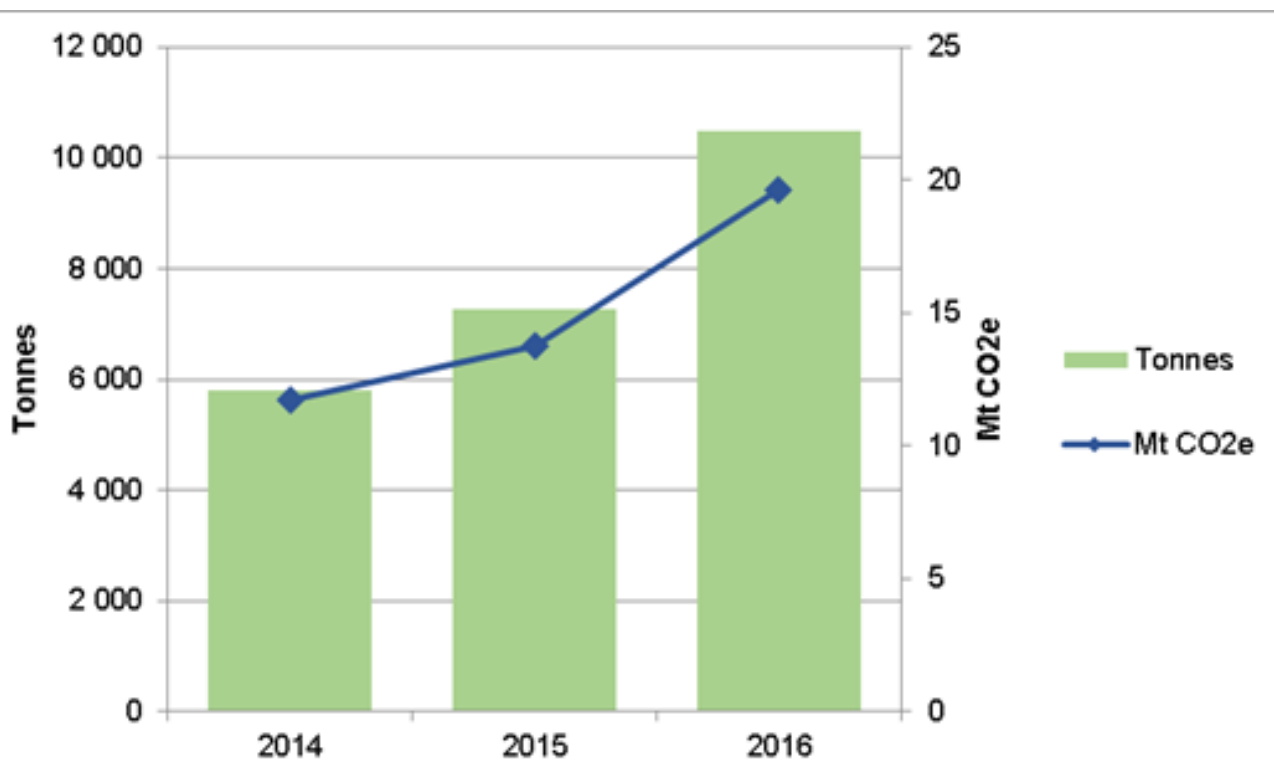
- **Unsaturated HFCs and HCFCs up**
- **NF₃ up 60%**
- **Other imports stable**



- **Shift to lower GWP gases in HFCs**
- **Shift to unsaturated HFCs and HCFCs**
- **Small increase in CO₂ equivalents**



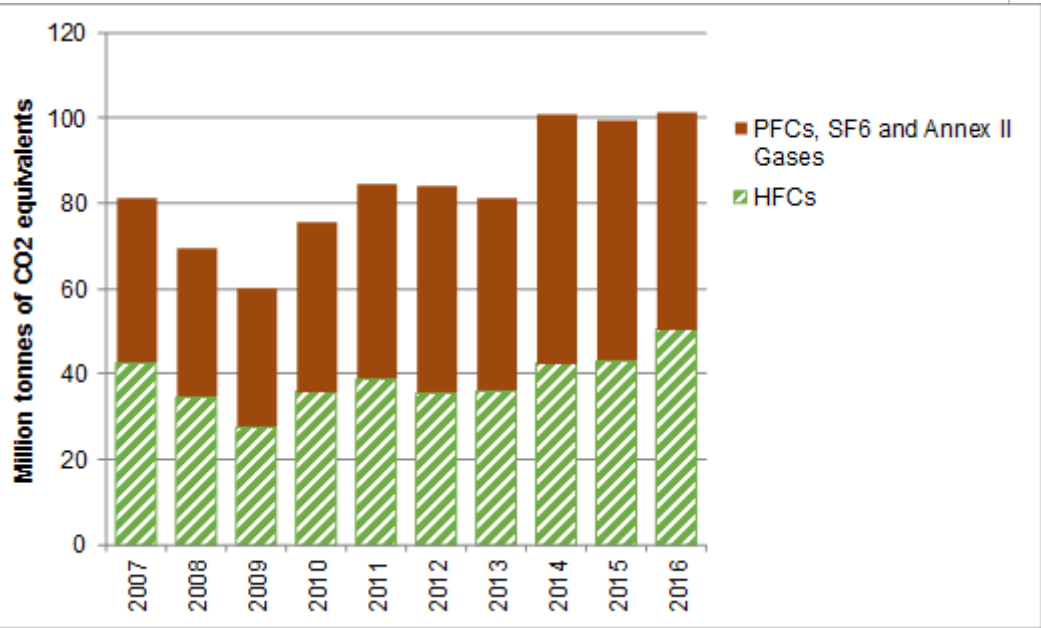
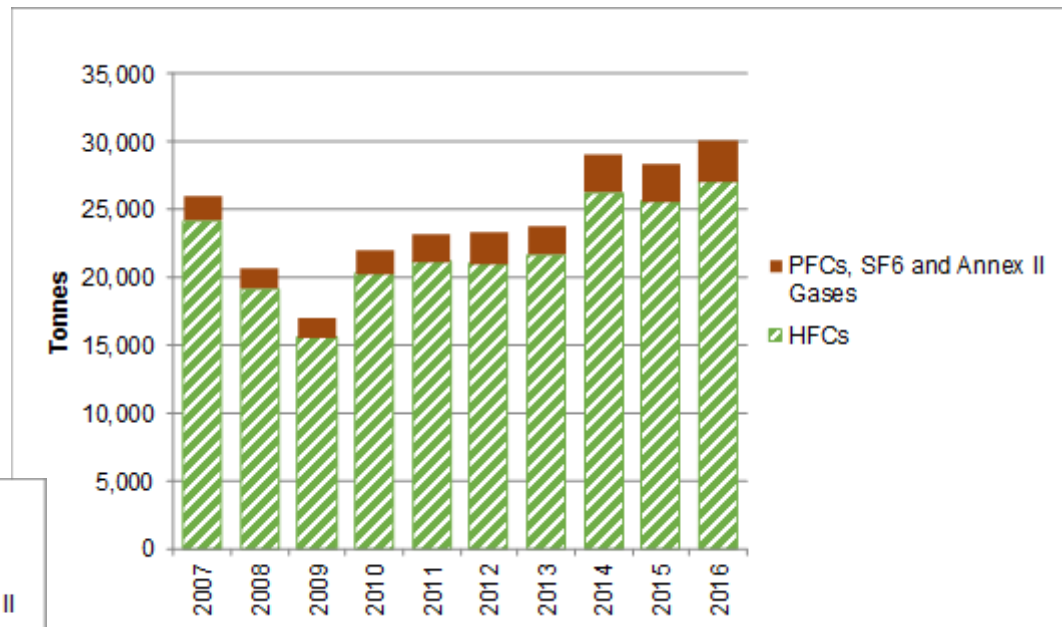
Imports of F-gases within products and equipment



- **Largely HFCs (refrigerants R410A and R-134a)**
- **44% increase in 2016 vs. 2015**
- **Half of this due to more complete reporting**

Export of F-gases

- **HFCs: marked increase in 2016 vs. 2015**
- **Other high-GWP gases: marked decrease**



- **Total F-gases 2016 vs 2015: +6%(t) / +2%(CO₂e)**
- **HFCs: +6%(t) / +16%(CO₂e)**

What is supply?

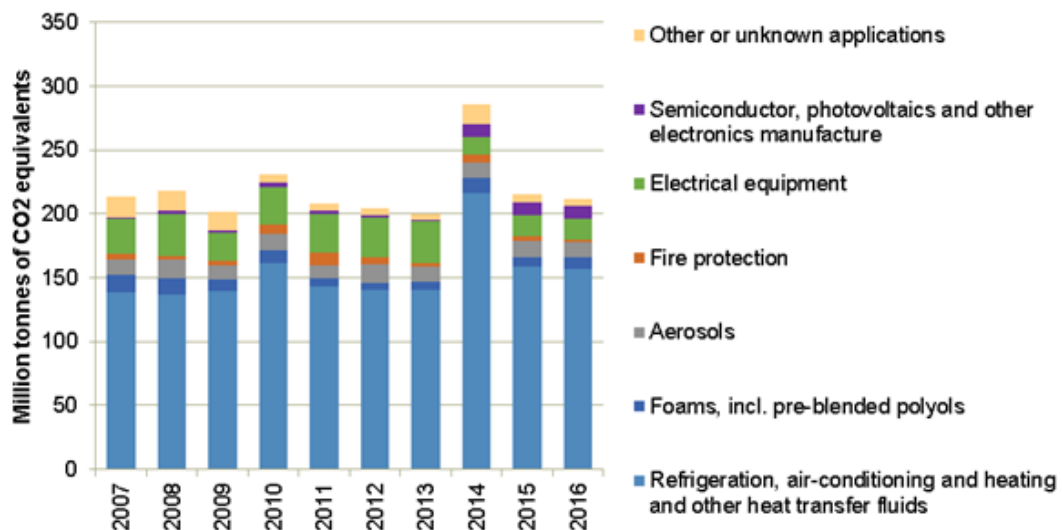
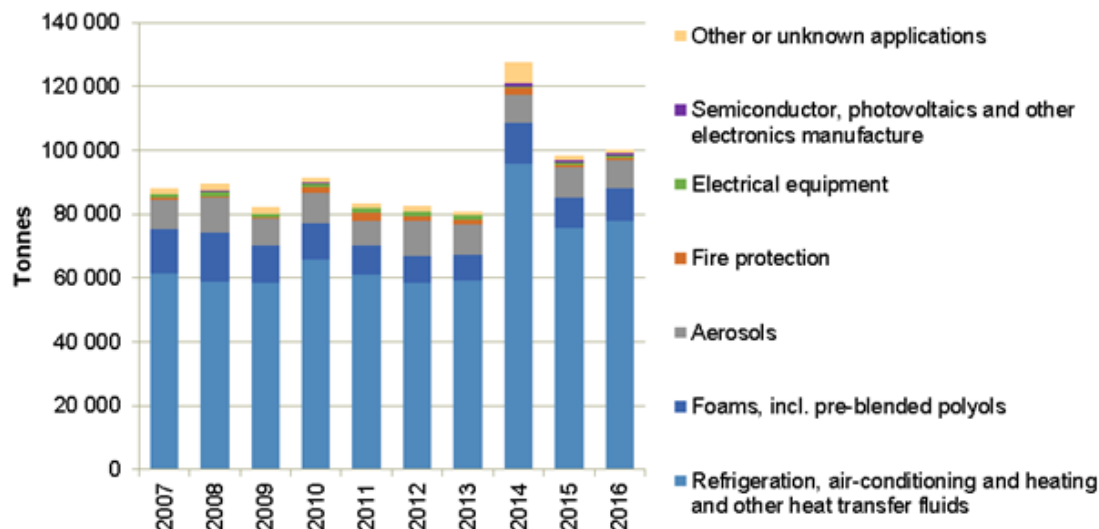
Supply \neq POM (placing on the market)

- **Difference in accounting for exports, equipment import, reclamation, feedstock use, destruction, & stocks**
- **Indicator for potentially emission-relevant supplies of F-gases to EU industries**

Intended applications of bulk supply

Note: Equipment import & Annex II gases covered since 2014

- Structure largely unchanged
- Refrigeration & AC dominant
- Electronics



2016 shares for total F-gases:

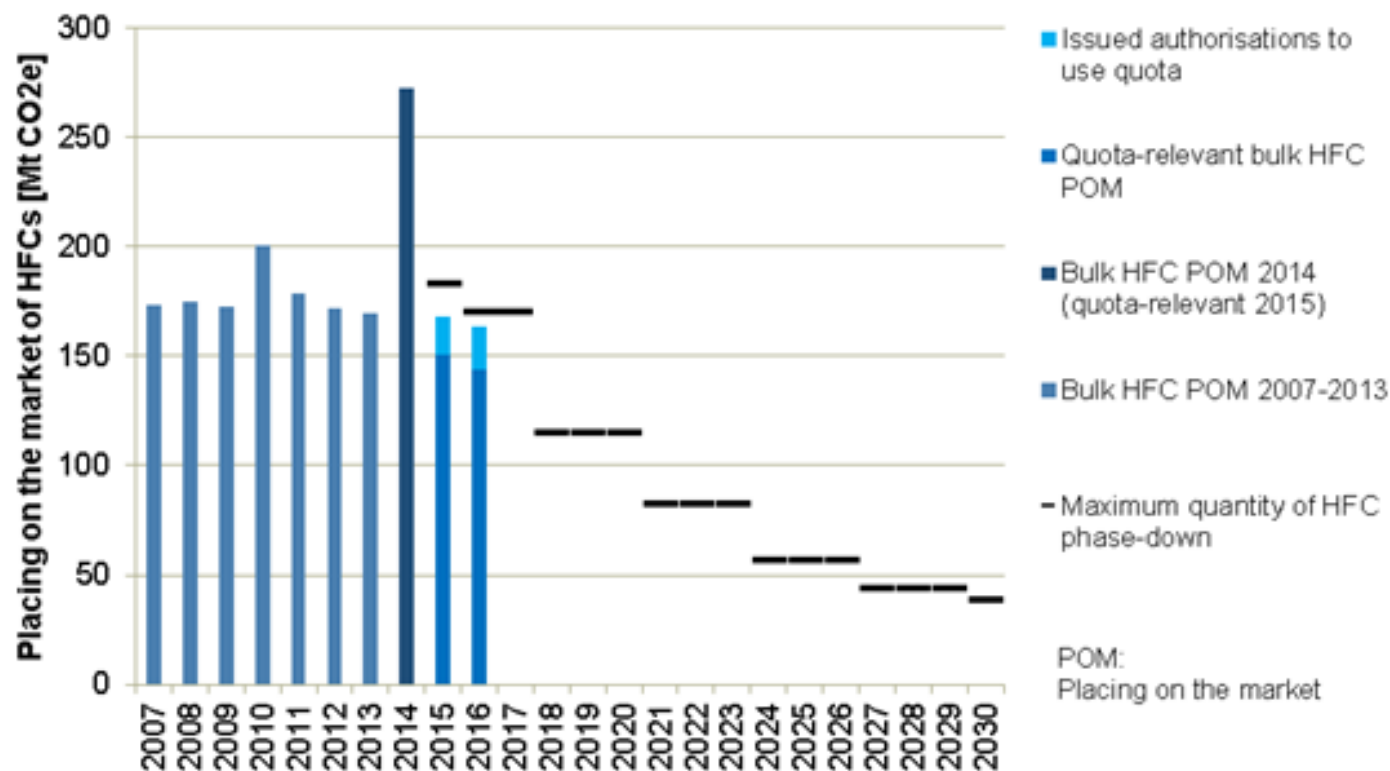
≈ 75% Refrigeration & AC (t/CO₂e)

- 10% Foams (4% CO₂e)
- 9% Aerosols (5% CO₂e)
- 8% (CO₂e) Electrical equipment
- 5% (CO₂e) Electronics manufacture



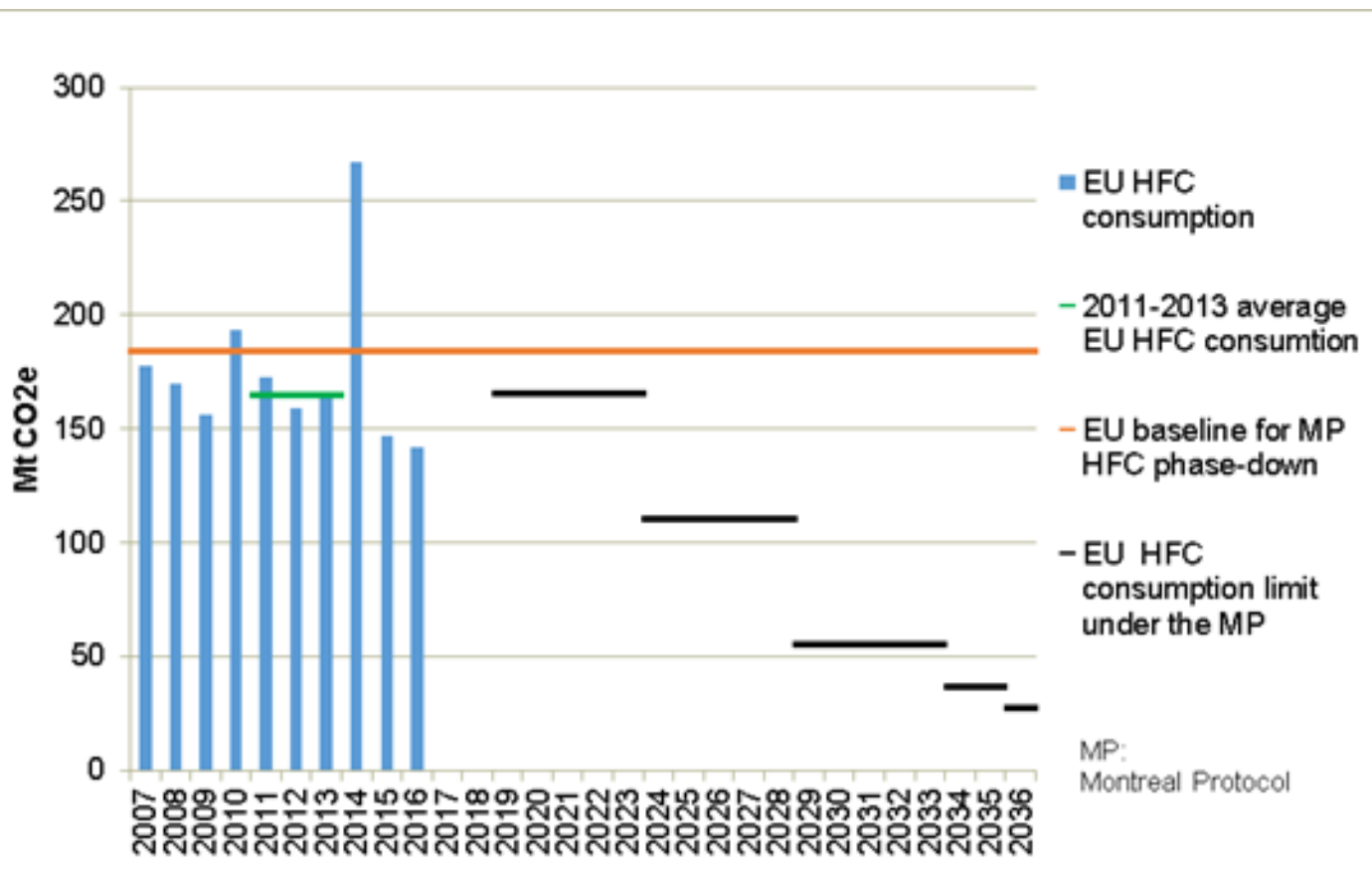
Progress of the EU HFC phase-down

2016 was 2nd year of the HFC phase-down:



- 4.5 % of 2016 quota not used
- Overachievement by 6.4 Mt

Approaching the MP HFC phase-down



- **Different metric compared to EU phase-down**
- **Total EU baseline under the MP HFC phase-down 184.1 Mt CO₂e**
- **14 % below the ceiling expected for 2019**

Thank you very much

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