



Ministry of Infrastructure and the
Environment

Paris and Kigali

A way forward

**Eureka 2016. Heating, Cooling &
Ventilation: Sustainable
technologies for a better life**

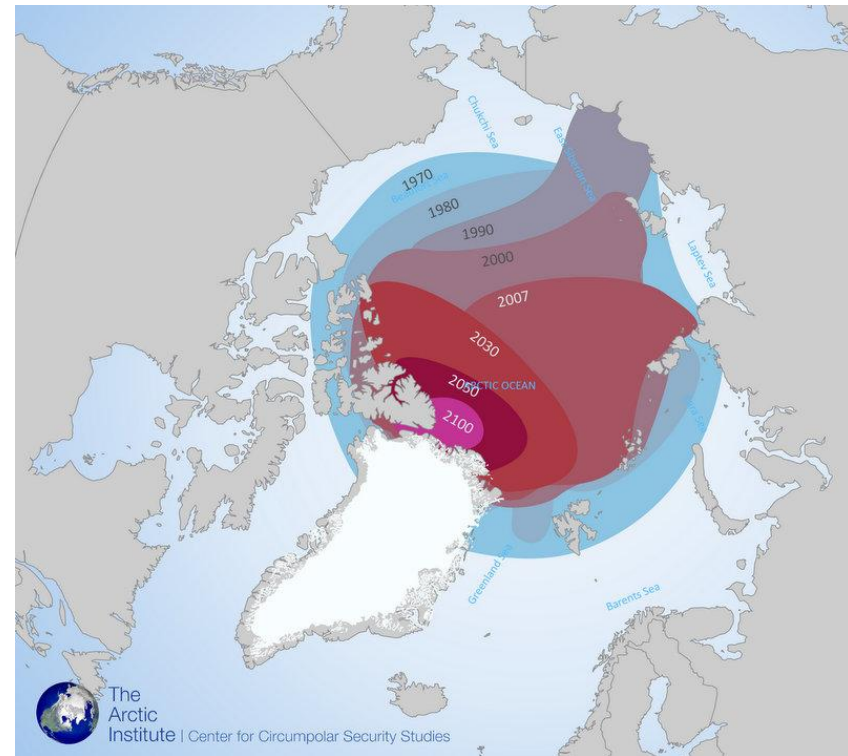
Erwin Mulders
Head of unit International and
EU climate policies

13 December 2016



Why climate action?

- 2005-2015: 9 warmest years on record
- Temperature rise:
 - extreme weather conditions
 - Melting ice-caps
 - Poss. sea level rise >1 meter in 2100



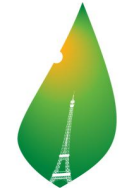


History of Climate Change Negotiations in 83 seconds

1992
UNITED NATIONS



12 december 2015 – Paris Agreement



PARIS2015
UN CLIMATE CHANGE CONFERENCE
COP21·CMP11



Central aim: keep global T rise well below 2°C; strive to limit to 1.5°C (above pre-industrial levels)

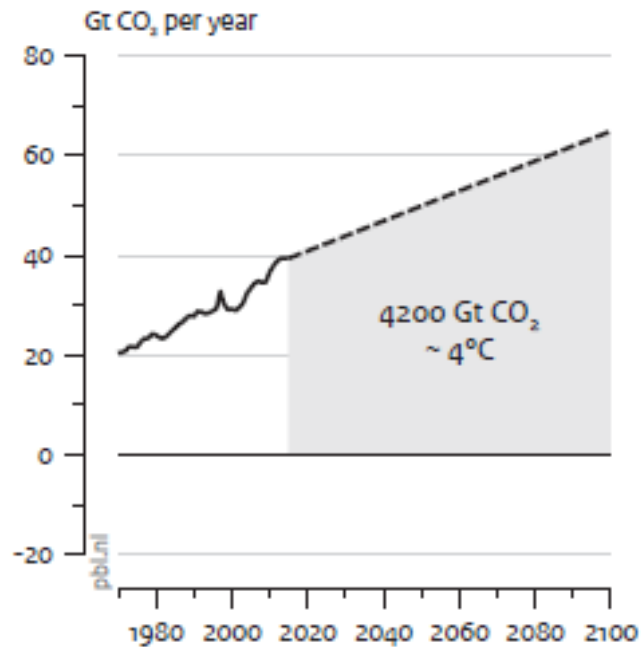
Adaptation, mitigation and support
NDCs, 5y cycle and transparency



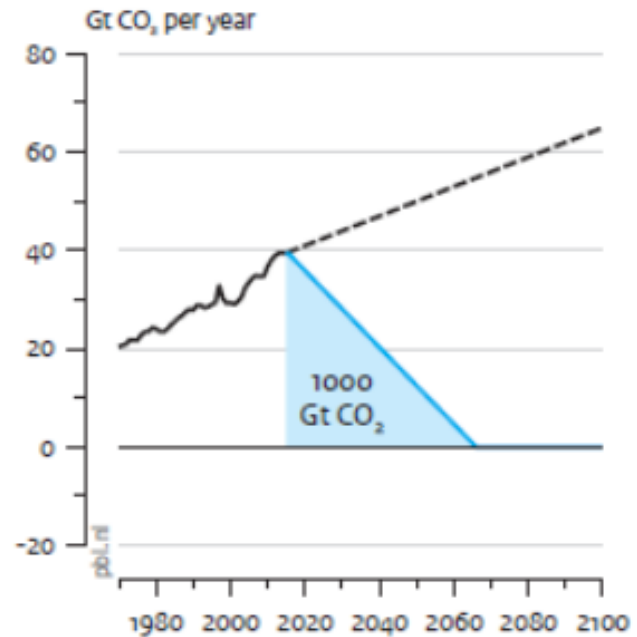
Enormeous challenge ahead

- Total worldwide carbon budget for 2°C scenario is ca. 1000 Gtonnes

Business as usual projection



Linear reduction over about 50 years

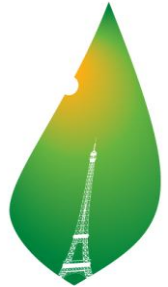


Bron: PBL



Good news, one year after Paris...

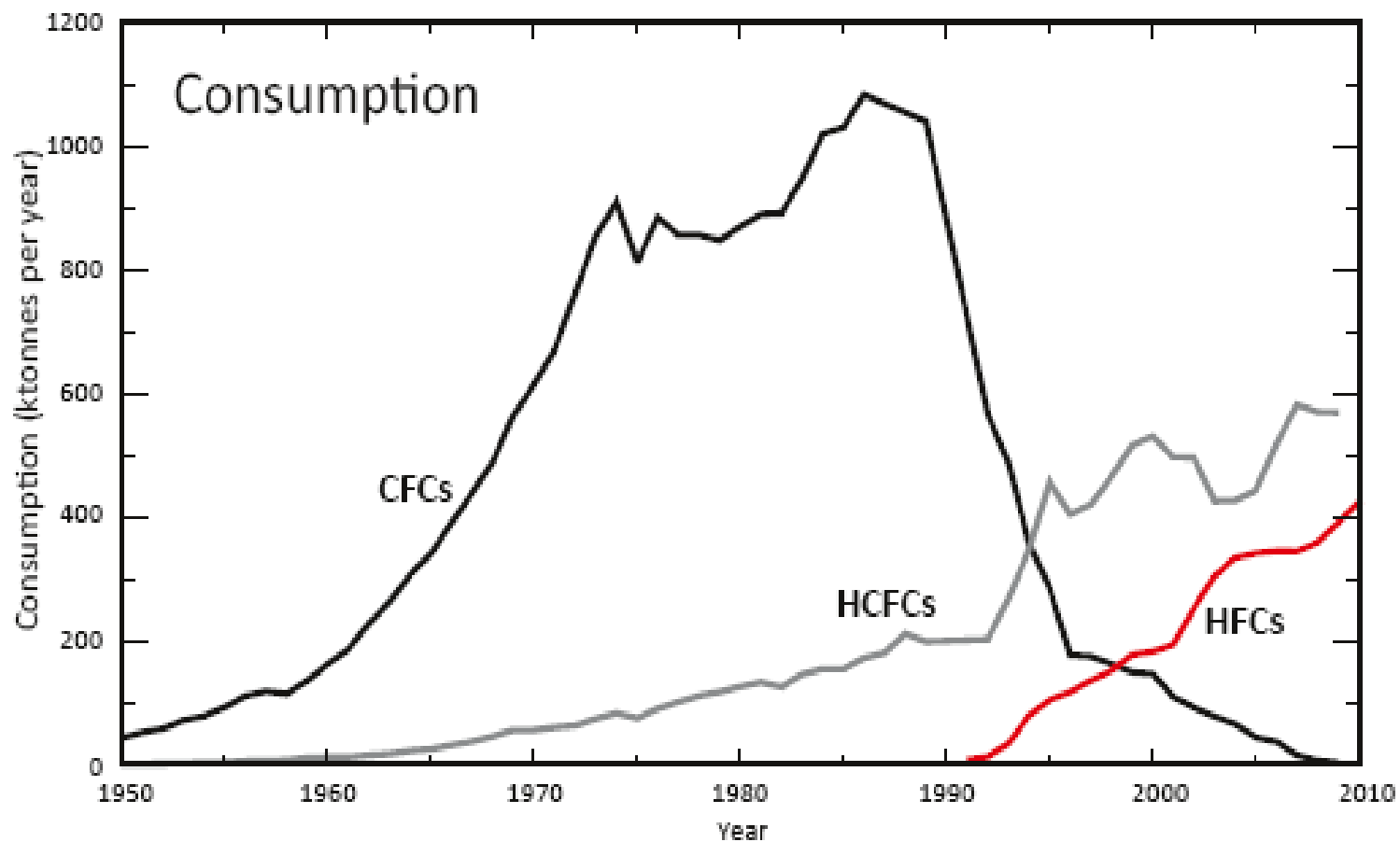
- 4 November - entry-into-force (117 countries ratified)
- October - ICAO: Global Market Based Mechanism
- October - Montreal Protocol: Kigali amendment on HFCs



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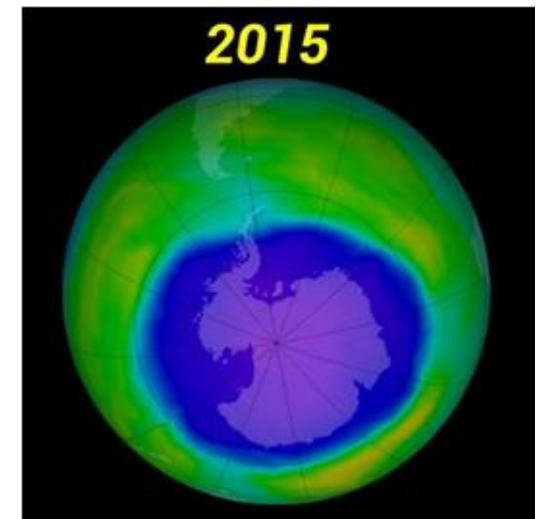
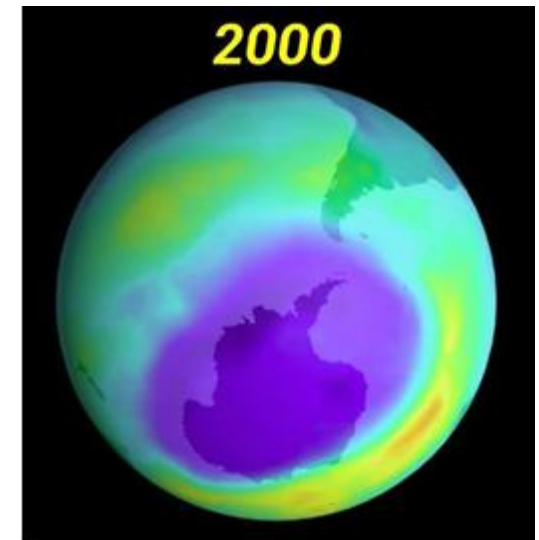
HFCs





Why Montreal Protocol (1987)

- Phase out of Ozone Depleting Substances
 - More than 95% of ODS phased out
 - Stopped ozone layer depletion
 - Millions of cases of skin cancer and other adverse impacts avoided
- Reduction of GHG
 - 5-8 times more than Kyoto Protocol
 - Delayed climate change by 12 years
- Investing in Green Economy
 - Countless technological developments
 - Technology transfer
- Montreal regulation is effective





Road to Kigali

- 7 years to negotiate HFC phase down
 - 2009 – amendment proposals US and Micronesia
 - 2014 – EU adopts F-gas regulation + inf paper EU
 - 2015 – 4 proposals: US, Island States, India, EU
 - 2015 – negotiation mandate for HFC contact group
- Key discussions
 - Availability of alternatives (costs, safety, etc)
 - Different circumstances
 - Financial mechanism
 - Legal relationship with UNFCCC





Kigali headline outcome

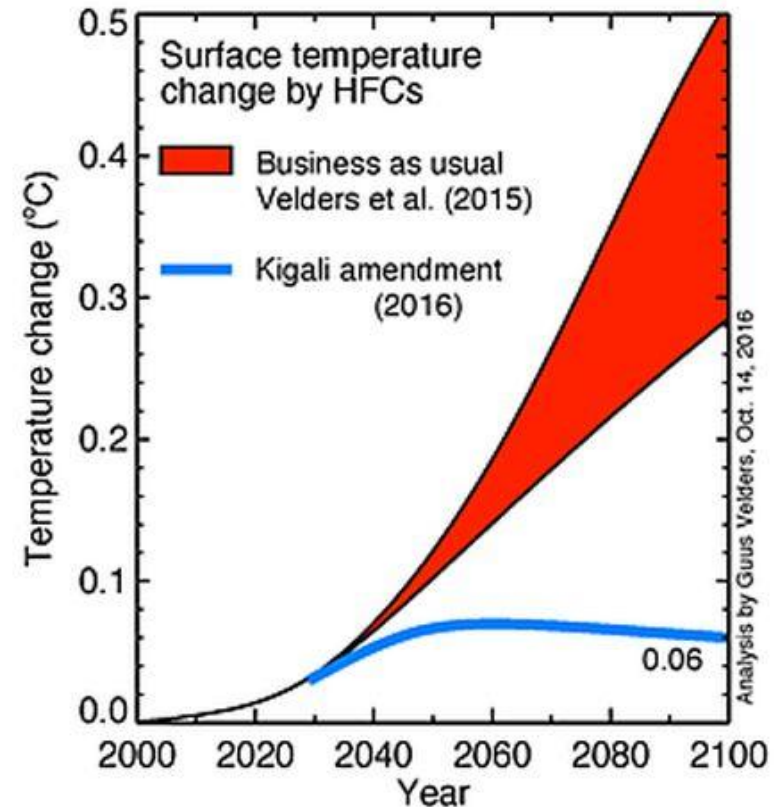
- Different reduction schedules for production and consumption:

<u><i>Developed countries:</i></u>	<u><i>Developing countries</i></u>
- 10% in 2019 <i>(-5% in 2020)*</i>	- freeze 2024 <i>(freeze 2028)**</i>
- 40% in 2024 <i>(-35% in 2025)</i>	- 10% in 2029 <i>(-10% in 2032)</i>
- 70% in 2029	- 30% in 2035 <i>(-20% in 2037)</i>
- 80% in 2034	- 50% in 2040 <i>(-30% in 2042)</i>
- 85% in 2036	- 80% in 2045 <i>(-85% in 2047)</i>
- HFC23 byproduction to be destroyed from 2020
- Exemptions for countries with High Ambient Temperatures
- MLF support to developing countries continued



Kigali impact

- Comparable to:
 - ~75-95 Gtonnes CO₂eq up to 2050
 - ~ closure of 250 coalfired powerstations
 - T decrease up to 0.5°C by 2100
- Increased level playing field
- Incentive for climate friendly alternatives





Next steps EU after Kigali amendment

- Ratification. Aim: entry into force by 1 January 2019 (20 Parties)
- EU F-gas Regulation up to date until 2030:
 - Controls consumption of HFCs in EU through a phasedown schedule to 21% compared to 2015 in 2030
 - Introduced bans on using high GWP HFCs in specific equipment
- Impact F-gas Regulation
 - F-gas emissions to be cut by two-thirds by 2030 in the EU
 - Expected cumulative emission savings are 1.5 Gigatonnes of CO₂-equivalent by 2030 and 5 Gigatonnes by 2050



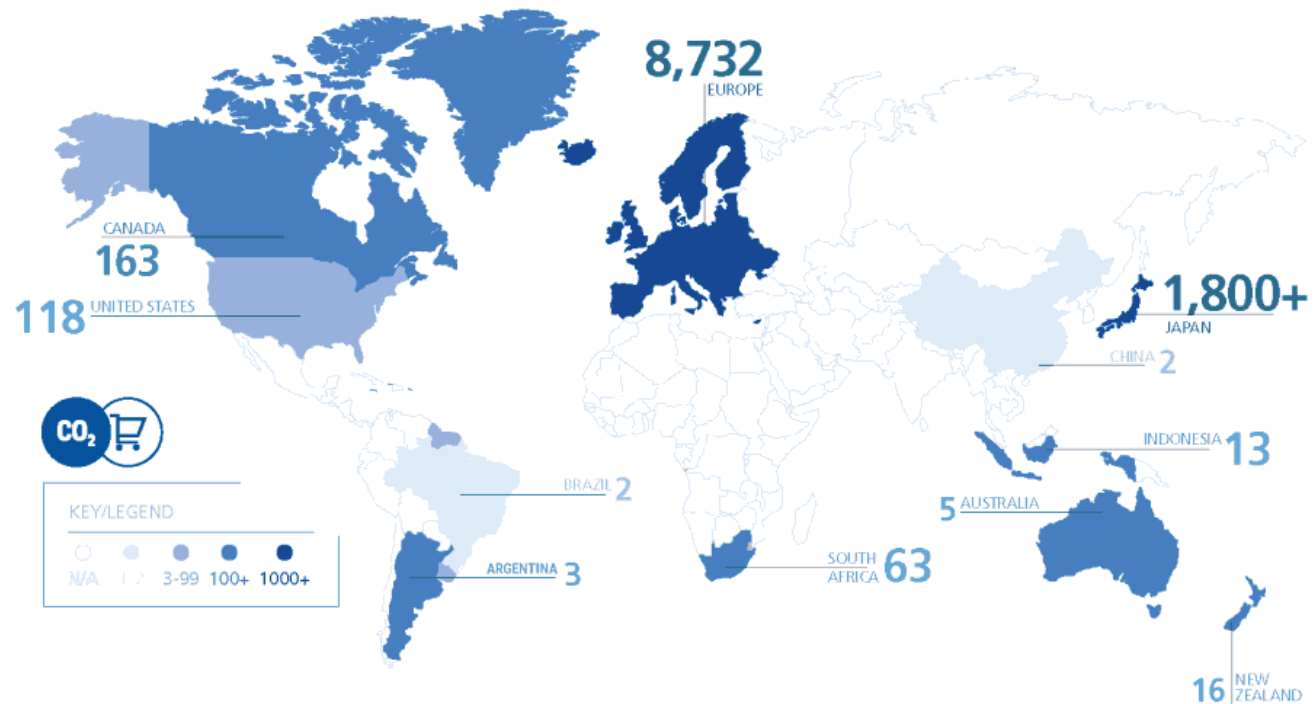
Effectiveness of F gases regulation

Low GWP alternatives increasingly available

Recent findings: 60% increase of low GWP alternatives in the supply chain

Industry able to switch to alternatives – and plays key role in transition

CO₂ stores in global perspective





Next steps for the EU

- 2018: first significant cut in HFC consumption quota - 37%.
 - Increased pressure on the price of HFC's = incentive for alternatives
- Energy efficiency improvement also important driver for alternatives
- Investments to be made...
 - ... but frontrunner position creates business opportunities:
worldwide HFC phase-down will increase market for alternatives
- EU industry to lead worldwide transition to green technologies, to help leapfrog HFCs?



Thank you and good luck !

