



# ClimaEast

Support to Climate Change Mitigation and  
Adaptation in Russia and ENP East countries

## F-gases – the bottom-up approach:

Experience with introducing F-gases MRV system to industry  
Martin Beckmann, VERICO SCE, EU ETS Auditor/F-Gas Auditor

28 March 2017

GHG Inventory and MRV of GHG emissions from industrial  
installations for officials and representatives of industry

# Overview

- Reducing HFC's under the Montreal Protocol
- Regulation (EU) No 517/2014 on fluorinated GHG
- Reporting under Regulation (EU) No 517/2014
- Experiences with F-gases MRV system in industry
- Verification by an independent auditor

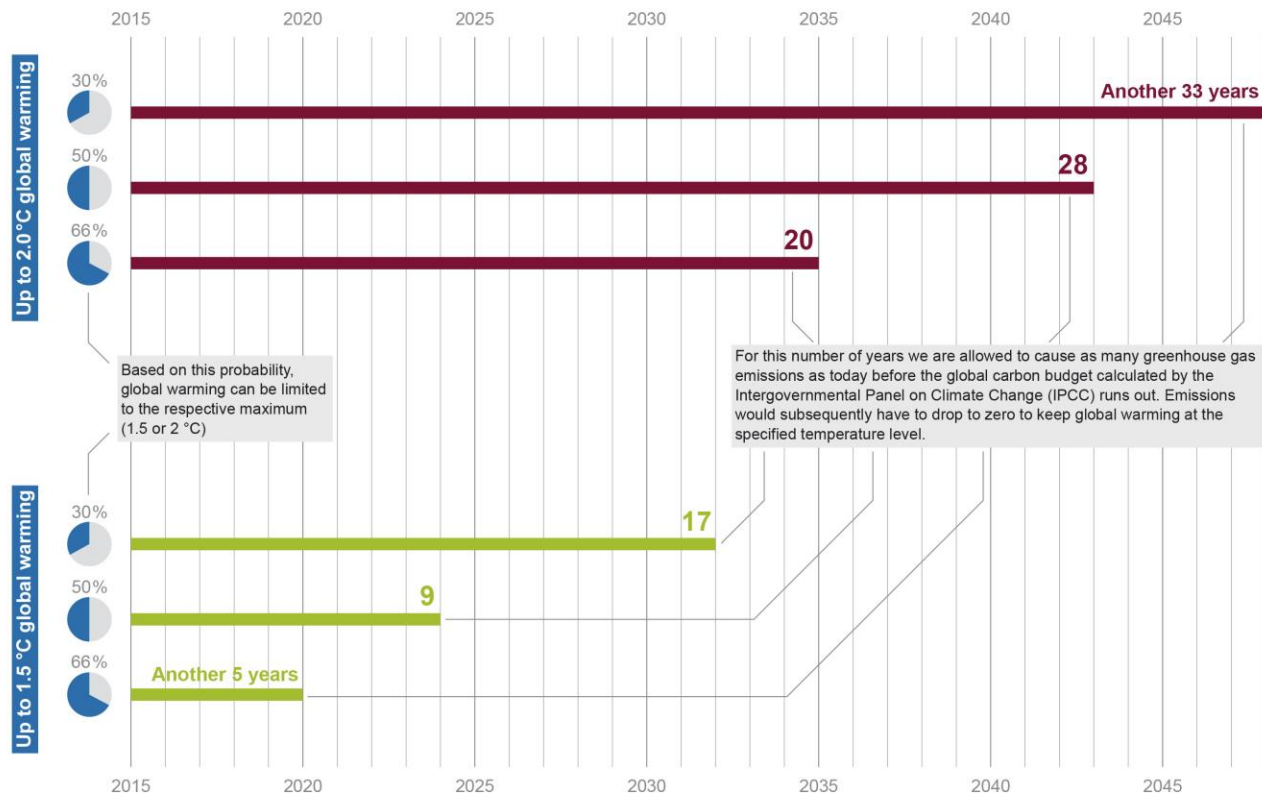


# Reducing HFC's under the Montreal Protocol

Öko-Institut e.V.

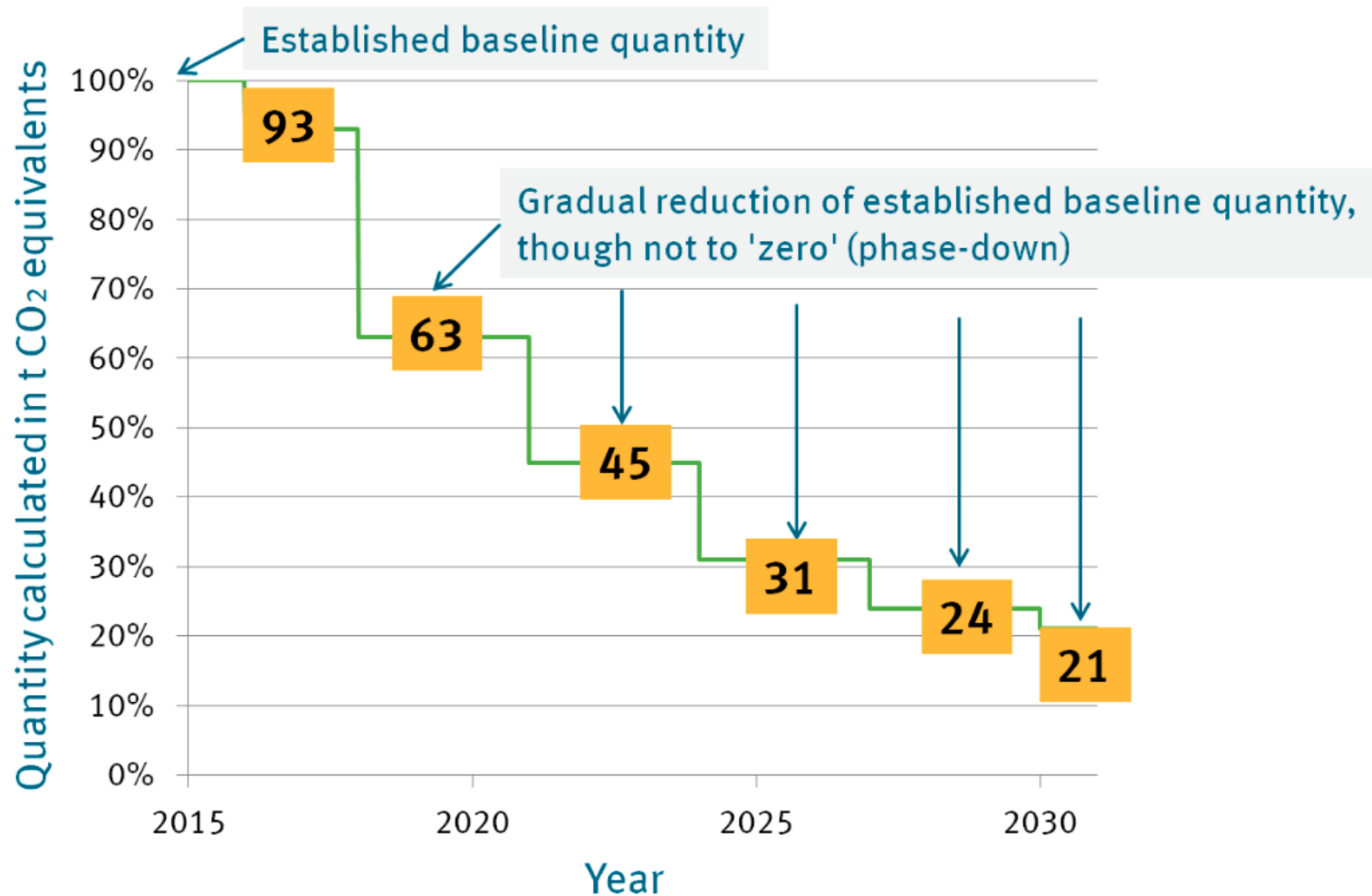
## What level of greenhouse gas emissions is still allowed?

For how many years are we allowed to cause as many greenhouse gas emissions as today before the maximum emission level of the IPCC is reached?



SOURCE: INTERGOVERNMENTAL PANEL ON CLIMATE CHANGE (IPCC) 2014, ÖKO-INSTITUT 2016

# Reducing HFC's under the Montreal Protocol



# Reducing HFC's under the Montreal Protocol

**Montreal Protocol: Annex F: Controlled substances**

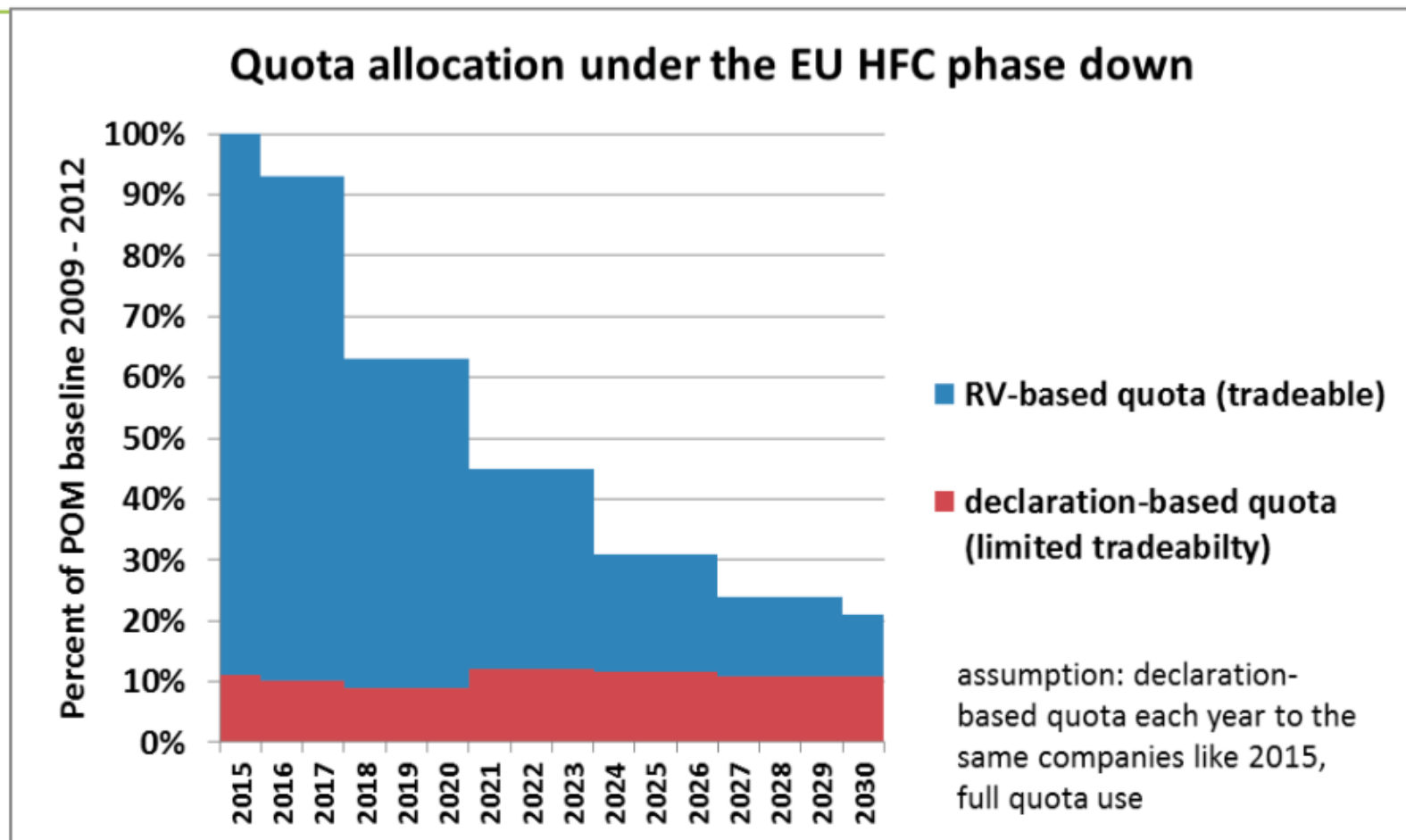
Group I		GWP <sub>1</sub>
CHF <sub>2</sub> CHF <sub>2</sub>	HFC-134	1100
CH <sub>2</sub> FCF <sub>3</sub>	HFC-134a	1430
CH <sub>2</sub> FCHF <sub>2</sub>	HFC-143	353
CHF <sub>2</sub> CH <sub>2</sub> CF <sub>3</sub>	HFC-245fa	1030
CF <sub>3</sub> CH <sub>2</sub> CF <sub>2</sub> CH <sub>3</sub>	HFC-365mfc	794
CF <sub>3</sub> CHFCF <sub>3</sub>	HFC-227ea	3220
CH <sub>2</sub> FCF <sub>2</sub> CF <sub>3</sub>	HFC-236cb	1340
CHF <sub>2</sub> CHFCF <sub>3</sub>	HFC-236ea	1370
CF <sub>3</sub> CH <sub>2</sub> CF <sub>3</sub>	HFC-236fa	9810
CH <sub>2</sub> FCF <sub>2</sub> CHF <sub>2</sub>	HFC-245ca	693
CF <sub>3</sub> CHFCHFCF <sub>2</sub> CF <sub>3</sub>	HFC-43-10mee	1640
CH <sub>2</sub> F <sub>2</sub>	HFC-32	675
CHF <sub>2</sub> CF <sub>3</sub>	HFC-125	3500
CH <sub>3</sub> CF <sub>3</sub>	HFC-143a	4470
CH <sub>3</sub> F	HFC-41	92
CH <sub>2</sub> FCH <sub>2</sub> F	HFC-152	53
CH <sub>3</sub> CHF <sub>2</sub>	HFC-152a	124

<sup>1</sup> Global Warming Potential

Quelle: Umweltbundesamt



# Regulation (EU) No 517/2014 on fluorinated greenhouse gases



# Reporting under Regulation (EU) 517/2014

- The regulation applies to importers, exporters and producers of 1 t or 100 t CO<sub>2</sub>e or more of F gases
- Destruction of 1 t or 1.000 CO<sub>2</sub>e or more of F-gases
- Undertaking 1.000 t CO<sub>2</sub>e or more as feedstock
- POM of 500 t CO<sub>2</sub>e or more of F-gases listed in Annex II
- F-gases in pre-charged equipment where the gases have not been placed on the market before (starting 2017)
- POM 10.000 t CO<sub>2</sub>e or more will require verification by independent accredited auditor



# Reporting under Regulation (EU) 517/2014

- Reference values, Quota Allocations
- Registry - F-Gas Portal
- Reporting format (operator)
- Guidance Documents (e.g. quota allocation process, company reporting, FAQs...)

<https://webgate.ec.europa.eu/ods2/resources/domain>

[https://ec.europa.eu/clima/sites/clima/files/f-gas/docs/guidance\\_submitting\\_quota\\_declaration\\_en.pdf](https://ec.europa.eu/clima/sites/clima/files/f-gas/docs/guidance_submitting_quota_declaration_en.pdf)  
[https://ec.europa.eu/clima/sites/clima/files/f-gas/docs/guidance\\_equipment\\_importers\\_en.pdf](https://ec.europa.eu/clima/sites/clima/files/f-gas/docs/guidance_equipment_importers_en.pdf)

# Open questions operator's side

Who is a new entrant?

Who will be managed by company groups and subsidiaries?

Who is meant by incumbent?

What about increasing quota allocations?

# Verification by an independent auditor

Required since 2015 for the first time for 2014 F-Gas inventories following Art. 19 of the regulation either

1. auditing company or
2. nationally accredited auditing company (DAKkS in Germany etc.



# Experiences with introducing F-gases MRV system to industry

What will be the basis for external verification?

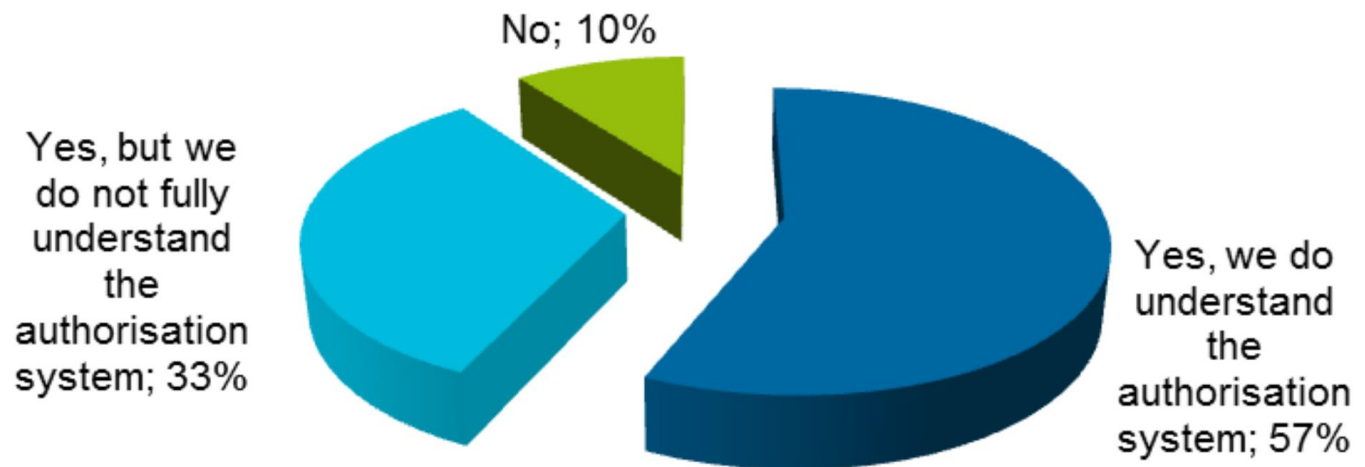
- ✓ SAP receipts
- ✓ Product specifications
- ✓ SOP's
- ✓ Data base requests
- ✓ IOS certificates



# Experiences with introducing F-gases MRV system to industry

*Survey results Oeko Institut June 2016:*

**Awareness of the need for authorisations for imports into the EU of RAC equipment containing HFCs after 1st January 2017**



n = 127

# Experiences with introducing F-gases MRV system to industry

- Get involved your industry the sooner the better
- Find out the current status and requirements



## How to contact ClimaEast

The project team can be contacted at personal e-mail addresses (email address) and:

[info@climaeast.eu](mailto:info@climaeast.eu)

Clima East Office, c/o Milieu Ltd  
Chaussée de Charleroi No. 112  
1060 Brussels (Belgium)  
Tel: +32 2506 1000

Website:

English: [www.climaeast.eu](http://www.climaeast.eu) - Russian: <http://russian.climaeast.eu/>



**[Follow us on Facebook: look for CLIMA EAST PROJECT](#)**

