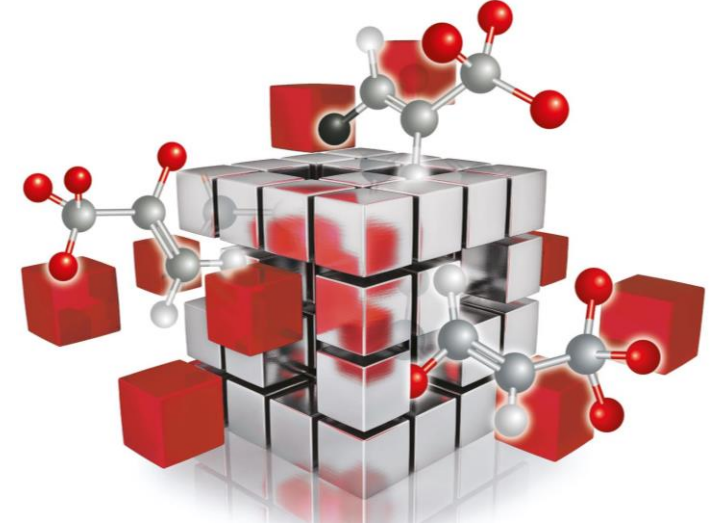


- MOST SUCCESSFUL RETROFIT PROGRAM WORLDWIDE
- CAN BE USED FOR RETROFIT AND SERVICE WITHOUT END DATE



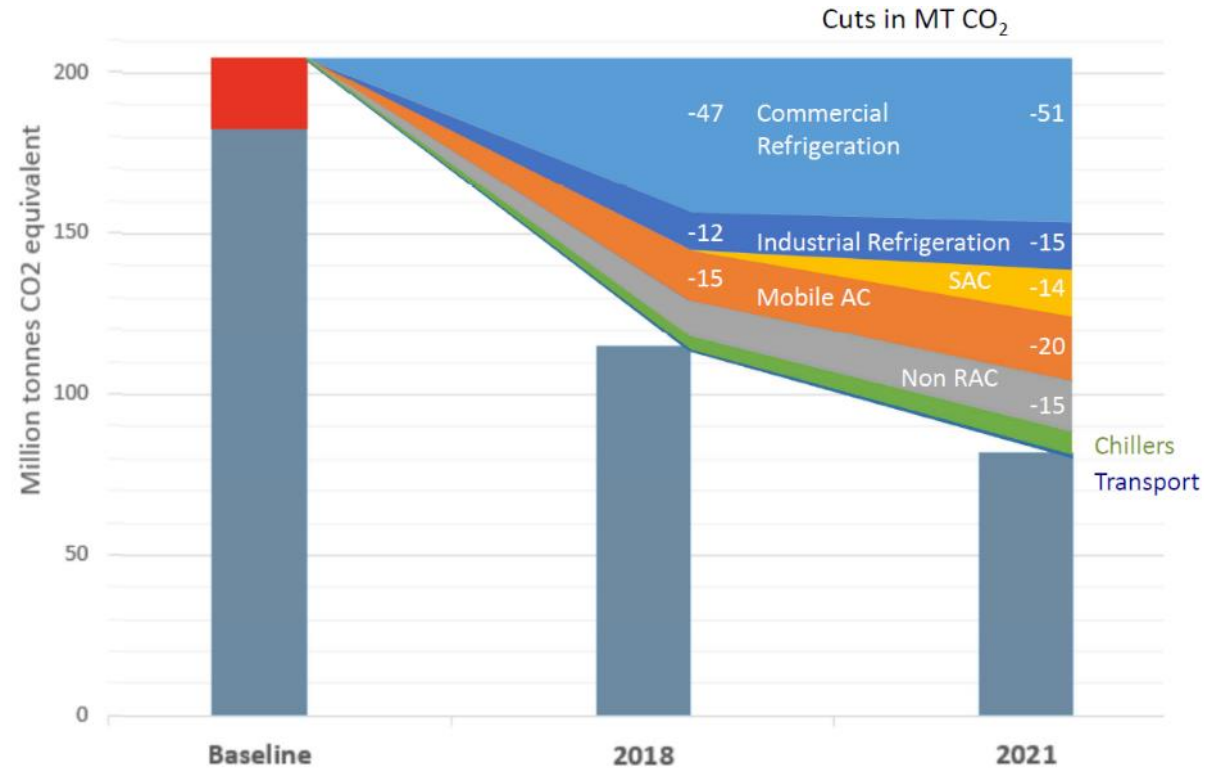
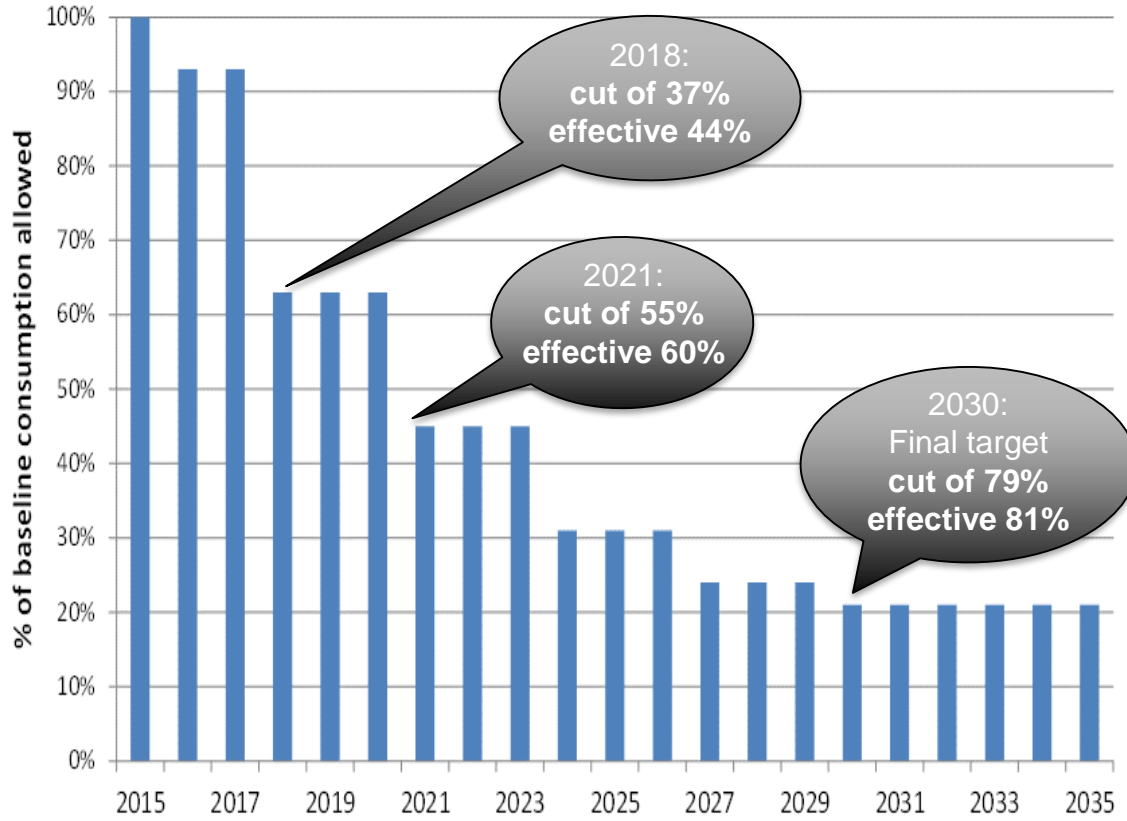
Tim Vink,  
Honeywell

## A SENSE OF URGENCY

### EU F-Gas Quota System, Perspective from an Incumbent

**Honeywell**  
THE POWER OF **CONNECTED**

# F-Gas Implications



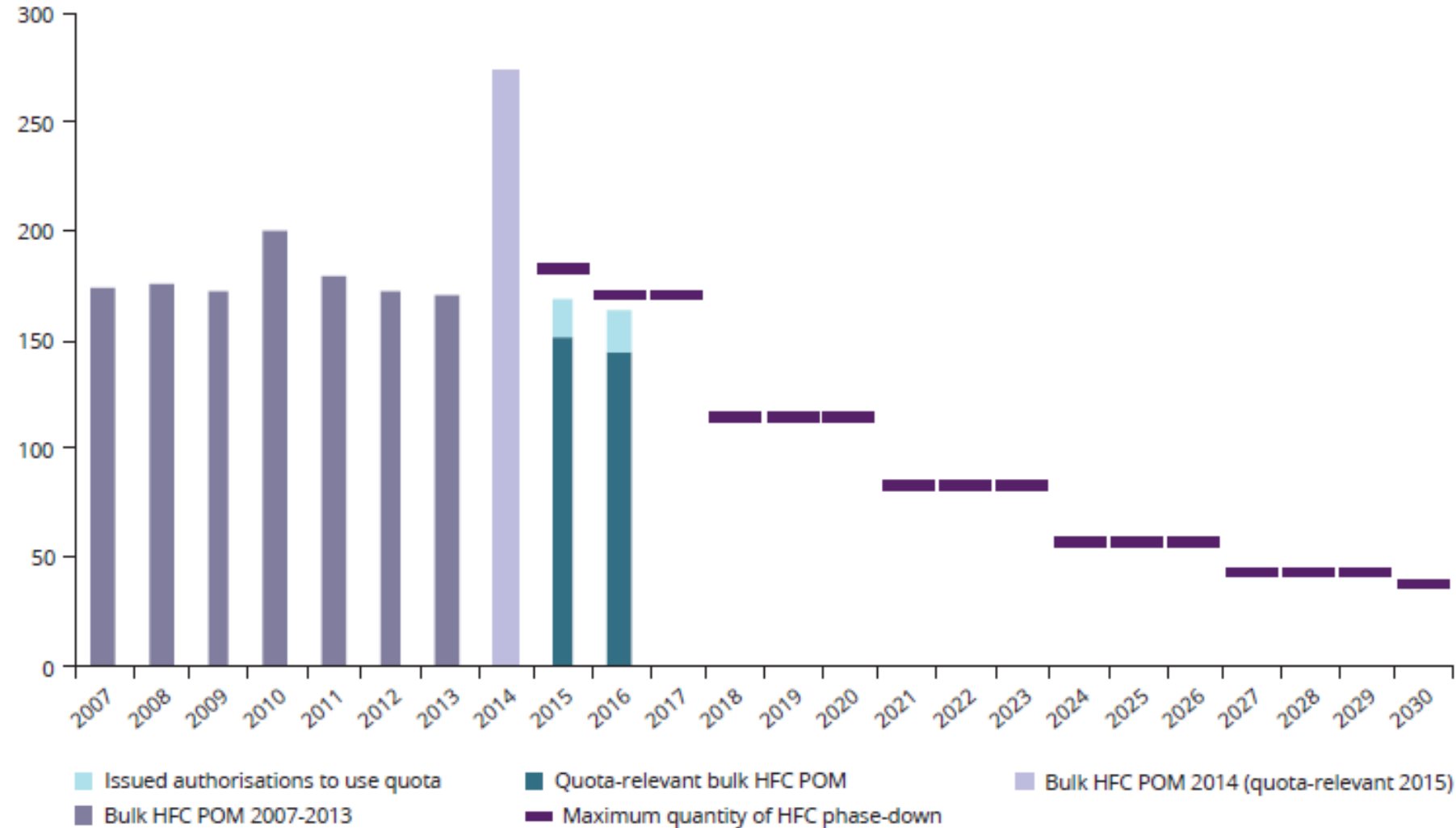
- “Effective”: precharged equipment included

pre-charged equipment and non-reported Imports were not included in baseline

# Quota Consumption in EU – Industry Average 94% in 2015/16

Figure ES.1 Progress of the EU HFC phase-down

Placing on the market of HFCs (Mt CO<sub>2</sub>e)

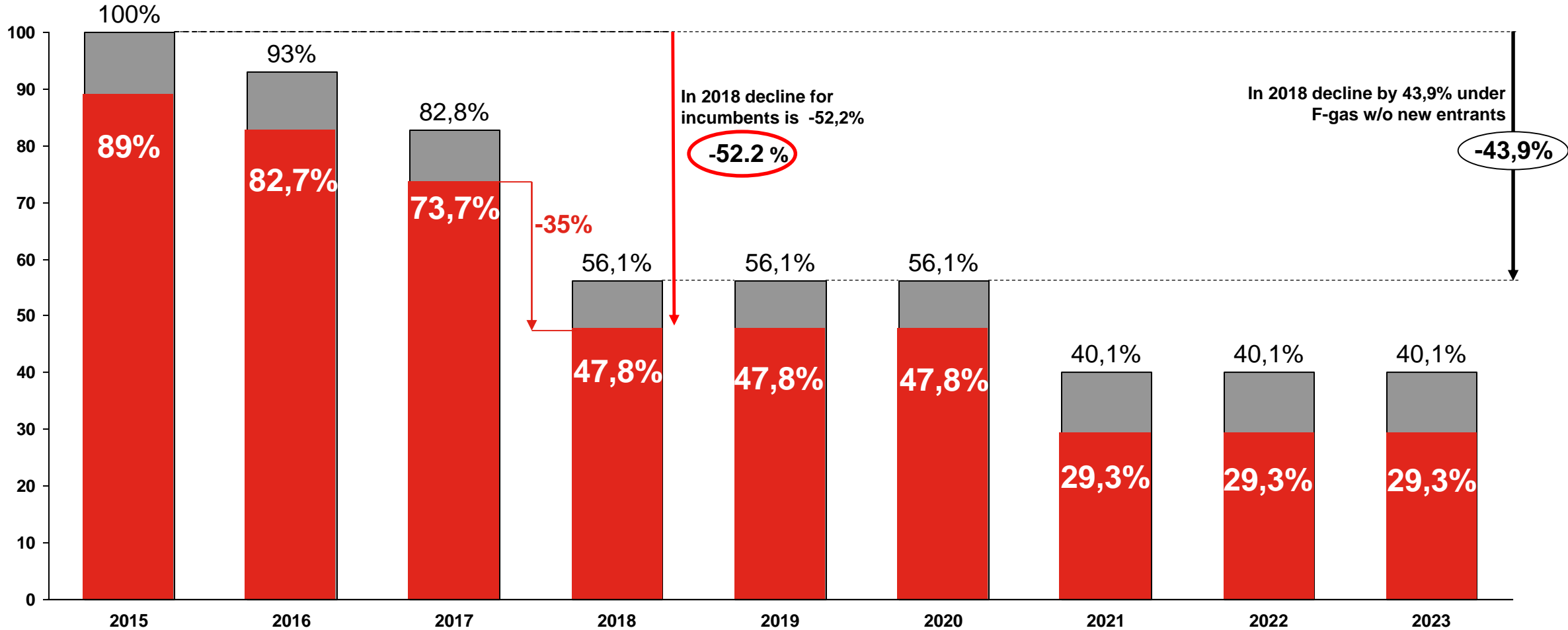


Source: EEA 2017

# Quota Allocation under F-gas HFC Phase-Down

■ Incumbents AVG 2009 – 2012  
 ■ New Entrants Reserve 11%

Total EU HFC phasedown schedule in % of CO<sub>2</sub> eq.



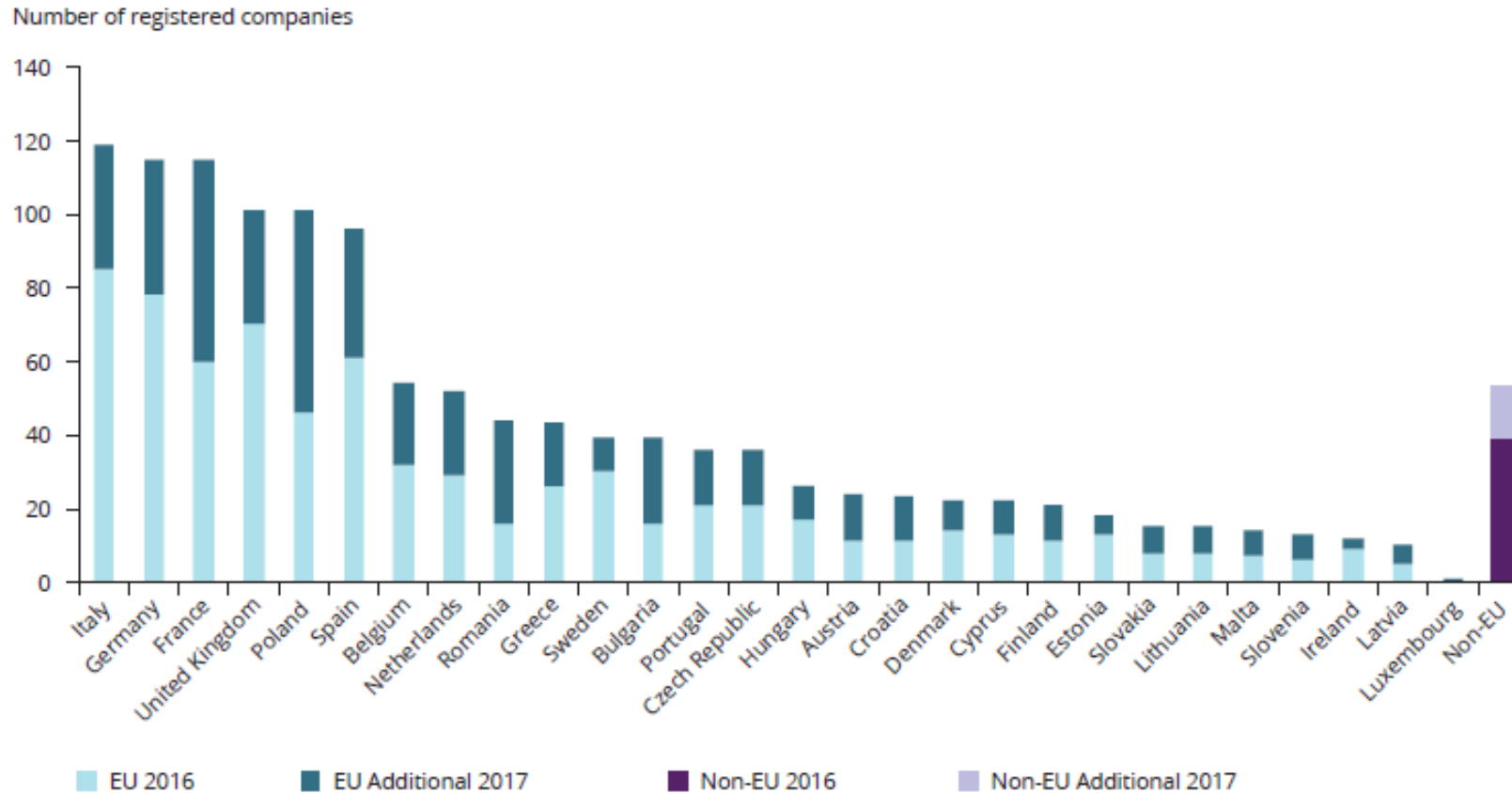
- 100% Quota in 2015 = average of 2009-2012 PoM = 183 Mln tons of CO<sub>2</sub>
- PCE under quota since 2017 is factored in in this view

# Incumbents' Situation

- Situation for incumbents is different from the general F-gas regulation Phase-Down Schedule
- Incumbents facing reduced quota allocation (at least -52%) compared to overall F-gas scenario (-37%)
- *Double Counting*: 2018 baseline calculated on actual consumption of quota in 2015-2016. It means that F-gas phase down of 7% in 2016 is now part of the new baseline adjustment. -> 3,5% penalty for 2018 - 2020
  - This will further aggravate for the new Baseline (2021 -2023) based on averages over 2015 – 2019.
- In addition, the individual quota usage is considered (*use-it-or-lose-it* principle);
  - Industry average quota usage in 2015: 92%; 2016: 96% -> **average 6% baseline reduction**

# Explosive Growth of New Entrants

**Figure 2.1 Reporting companies and new registrations in 2017 by Member State**

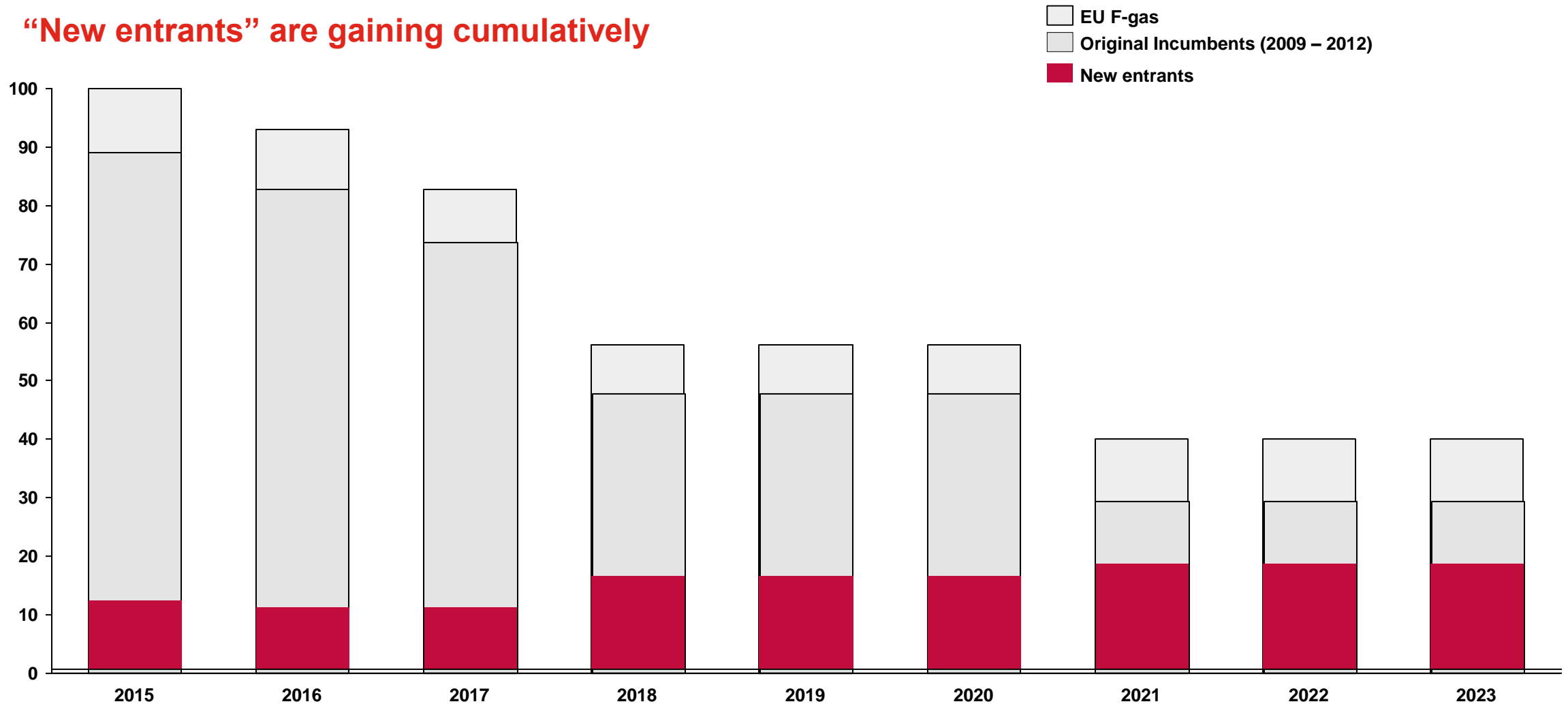


**Note:** Nil reports not included.  
 Non-EU countries: China, Gibraltar, Hong Kong, Japan, Malaysia, Monaco, Norway, Serbia, Switzerland and the United States.

**Source:** EEA, 2017b.

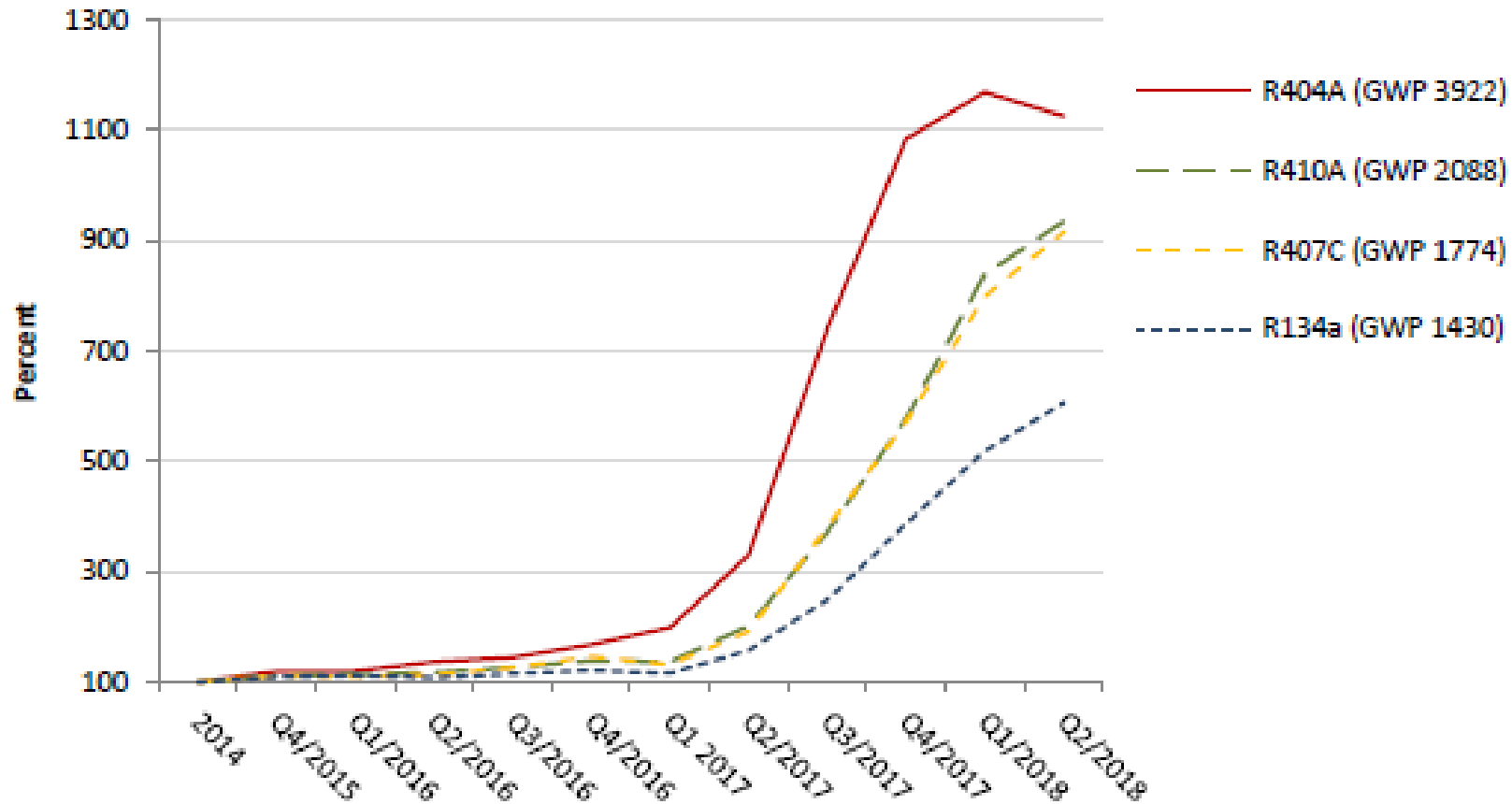
# Fragmentation of the EU F-gas market

“New entrants” are gaining cumulatively



- **New entrants in 2018: 1103** companies resulting in 11675 T of CO<sub>2</sub> per applicant

# Price Index (Based = 2014) in the Value Chain



Source: Oekorecherche

**Market Signals are Working – Lack of Enforcement Cause of Concern**



