

## Excerpt for participants:

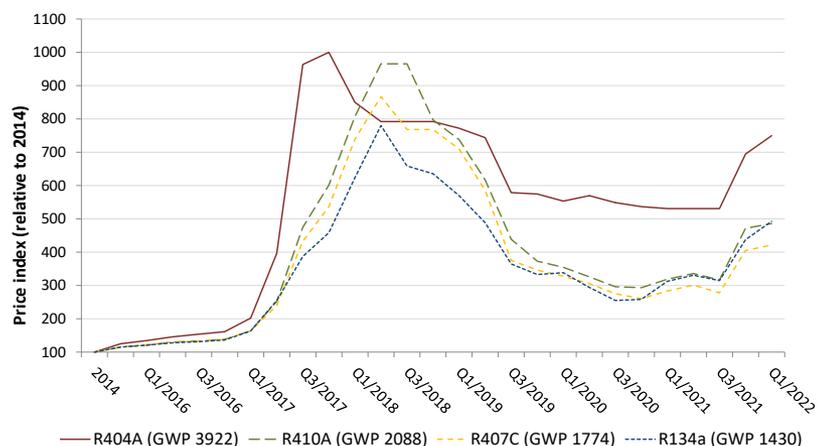
# Monitoring of refrigerant prices against the background of Regulation (EU) No 517/2014

### Q1/2022

In Q1/2022, 68 companies from 14 EU Member States (main respondents from France, Germany, Italy and Poland) and all supply chain levels (3 gas producers, 15 gas distributors, 29 OEMs, 16 respondents from the service sector, 4 end-users and 1 equipment renting company) reported purchase and/or selling prices for HFCs and lower GWP alternatives either in absolute terms (€/kg) or as price index (with 2014 as baseline year). Please note that companies do not report prices for all refrigerants but only for the ones relevant to them.

#### Gas distributor level

Figure 1 shows the development of purchase prices of four high GWP HFC refrigerants at gas distributor level. Data presented include prices reported by three large gas distributors. Prices are indexed to the baseline year 2014 (= 100 %).



#### Further findings:

- For the high GWP gases/mixtures R134a, R404A, and R410A considerable year-on-year increases have been observed throughout the supply chain (average prices up by 24%, 17%, and 15%, respectively, when compared with price levels reported for Q1/2021).
- The prices of alternatives are mostly stable while HFO-1234yf prices continue a downward trend.
- Besides the stricter phase-down, there are reported bottlenecks in worldwide transport capacity and delivery delays, significant freight and transport problems due to labour shortage and lockdowns of Chinese harbors (including Shanghai, Shenzhen, and Ningbo-Zhoushan) leading to significant slowdown of cargo movement, cost increases, with the entire supply chain affected.
- On the distributor level, prices of alternatives such as HFC/HFO blend solutions increased (R448A, R452A and R449A up by 13%, 5%, and 4%, respectively). Limited regional availability was indicated by few individual companies for the following refrigerants: R1234yf, and R1234ze. For R1233zd and R515B, availability still appears to be constrained as a result of temporary shutdown of US production plants in Q3 and Q4/2021.
- Prices of quota authorisations are reported to have changed little, with some tentative indications for increasing average prices (range of 2.8 to 6 €/t CO<sub>2</sub>e, with an average of ca. 4-5 €/t CO<sub>2</sub>e).
- Compared to 2014, prices of R134a are 2-5, R404A prices are 2-8 and R410A prices are 1-5 times higher depending on the supply chain level.



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#### Service company level

Figure 2 displays the development of purchase prices of some fluorinated alternatives with medium-high or low GWP as reported by 14 companies from the service sector.

