Monitoring of Refrigerant Prices on the EU market

in light of the HFC quota system put in place by Regulation (EU) 2024/573

Results of Quarterly Survey: Quarter 3/2024

This work was performed by independent consultants Öko-Recherche, CiTEPA in cooperation with PROZON and CONAIF

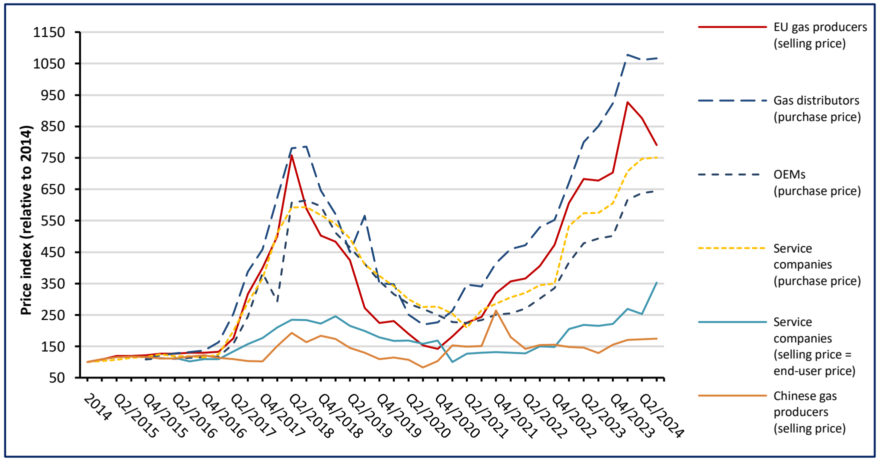
In Q3/2024, 60 companies from 10 EU Member States (main respondents from Germany, France, Poland and Spain) and all supply chain levels (3 gas producers, 17 gas distributors, 25 OEMs (original equipment manufacturers), 14 respondents from the service sector and one company involved in fire protection) 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) to the consultants. Please note that companies do not report prices for all refrigerants but only for the ones relevant to them.

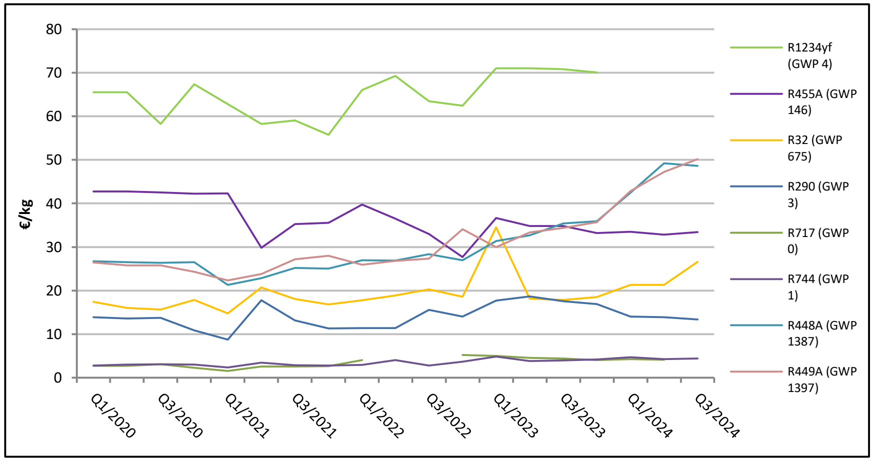
Along the supply chain

Figure 1 shows the **price developments for R134a** (GWP 1430) at all levels of the supply chain. Data presented include prices reported by 3 gas producers, 10 gas distributors, 17 OEMs, and 9 service companies.

OEM-level

Figure 2 shows the **development of average HFC purchase prices** reported by all OEMs that participated in the survey. At the OEM level, prices increased on average by 3% from last quarter, with the most notable change for R407C (+4%). Prices at OEM level are usually determined by longer term fixed price agreements.





Further findings:

- In general, the EU refrigerant market appears to be stable in terms of supply for most companies. However, in Q3/2024, two companies from France indicated limited regional availability and non-availability of R449A, respectively.
- The price of quota authorizations was indicated to be ranging from 15 to 18 €/t CO2e (selling price). On average, selling prices for quota authorisations amounted to 15.6 €/t CO2e, approximately. Compared to Q2/2024, the selling price of quota authorisations decreased by 1%.
- Compared to 2014, prices of R134a are 3.5 (end user) to 10.7 (distributor) and R410A prices are 3.3 (end-user) to 11.3 (distributor) times higher. For comparison: on the world market, producer prices increased by a factor of 1.8 for R134a and 1.5 for R410A (evidence from Q3/2024).
- Compared to Q2/2024, the purchase price of reclaimed R404A decreased by 1% on distributor and service company level, respectively.
- In Q3/2024, reclaimed R404A purchase prices are 13.3-fold the price level of virgin R404A material in 2014 on service company level. For comparison: prices for virgin R404A material were 12.8 times higher compared to 2014 levels in Q3/2024.
- When it comes to alternatives, price levels along the supply chain changed as follows relative to Q2/24 (end-user prices omitted): R448A +10%, R449A +6%, R32 +2%, R744 +0%, R290 -1%.