

Linde support.

Linde can support you in understanding the implications of the service & maintenance bans to help you decide on the best solution that meets your requirements

We offer many lower GWP refrigerant gases suitable for retrofitting existing installations such as R404A, R507 and R422D systems. The range of gases is continually growing, and we expect to have new HFO blends in our portfolio in the near future that will offer further environmental benefits.

Linde also provides a wide range of additional services including refrigerant recovery, reclamation and banking.

Any questions?

For further information or queries on the f-gas regulation and how Linde can help meet your environmental and legislative challenges, please contact your local Linde supplier.

Alternatively visit www.linde-gas.com/fgas



Linde AG
Gases Division, Seitnerstrasse 70, 82049 Pullach, Germany
Phone +49.89.7446-2339, Fax +49.89.7446-2071,
refrigerants@linde-gas.com, www.linde-gas.com/fgas

→ F-gas regulation

THE LINDE GROUP

Linde

Refrigeration service and maintenance ban.

EU f-gas regulation.



13082_0814_LCS

Refrigeration service and maintenance ban – legislation summary.

From 1.1.2020 the use of f-gases with a GWP of 2500 or more to service or maintain refrigeration equipment with gas charge size exceeding 40T CO₂e will be banned.

Non refrigeration applications, such as air conditioning or heat pumps are not impacted. Low temperature refrigeration (below -50 °C) and military applications are also exempt.

Refrigeration equipment using gases such as R404A, R507 and R422D (ISCEON® MO29) will be impacted.

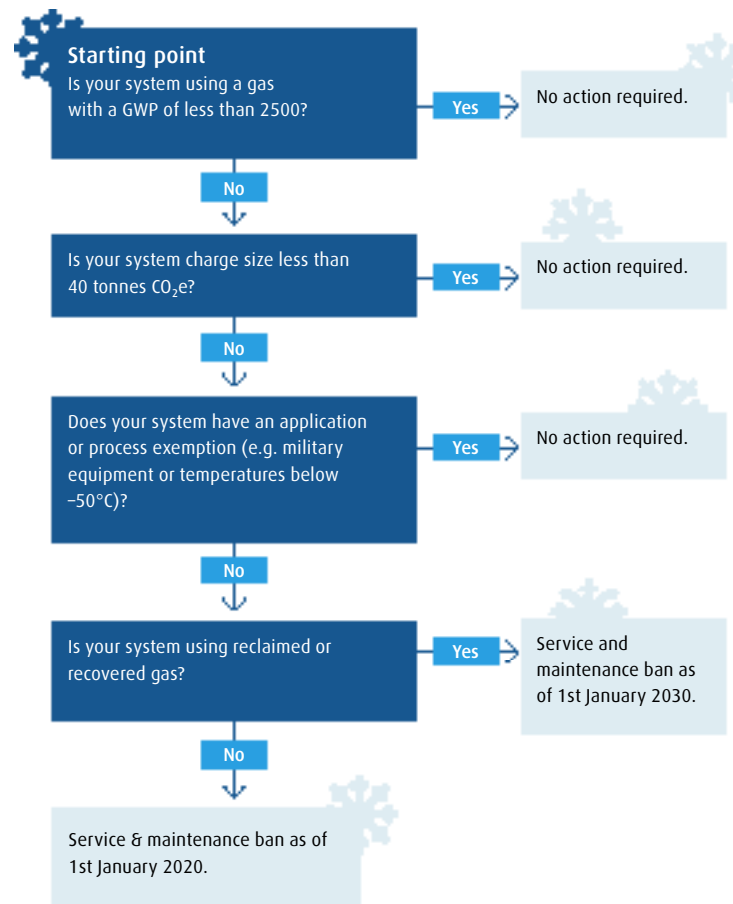
Refrigeration equipment using reclaimed or recycled gases can do so until 1.1.2030

Gases impacted by the refrigeration service and maintenance ban

Refrigerant	GWP	Charge size threshold (40T CO ₂ e)
R23	14800	2.7 kg
R404A	3922	10.2 kg
R422A (MO79)	3143	12.7 kg
R422D (MO29)	2729	14.7 kg
R428A (RS-52)	3607	11.1 kg
R434A (RS-45)	3245	12.3 kg
R507	3985	10.0 kg
R508B	13396	3.0 kg
MO89	3805	10.5 kg

Implications: which systems are impacted?

Understanding service and maintenance ban implications



Options: continue, convert or replace

For systems that are impacted by the service & maintenance bans, there are a number of options to consider:

Continue

Use the existing equipment and gas until 2020, and then use reclaimed or recycled gas, if available, until 2030.

Convert

Modify the equipment to run on a retrofit refrigerant gas with GWP less than 2500.

Replace

Install new higher efficiency equipment that uses lower GWP gases.

