DIRECTIVES AND REGULATIONS

Dina Koepke

Brussels, 24th of January 2020
AGENDA

1. F-Gas:
   - Oeko-Recherche F-gas Price Monitoring
   - EEA indicators for F-gas placing on the market
   - BREXIT
   - F-gas topical and comprehensive review

2. Ecodesign Update
   - Focus on Lot 12 – Commercial Refrigeration
This quarter was said to be characterised by oversupply of refrigerants and further price declines. Some companies reported that customers were rather reluctant to build up stocks. Strongest price reductions for R404A, R410A and R134a were reported at gas producer (selling prices) or gas distributor (purchase prices) level, respectively.

However, HFC prices were still several times higher than before the F-gas Regulation (EU) No 517/2014 entered into force (OEM level: + 300 % (R134a), + 500 % (R410A) / service companies: + 300-600 %). Average selling prices of service companies reached a comparable price level to that at the beginning of 2018.

According to gas distributors, demand for synthetic low GWP alternatives was said to be low due to further price reductions of conventional HFC refrigerants. Prices of these alternatives remained rather stable, while some declines were recorded in purchase and selling prices of service companies.

Prices for reclaimed R404A received from French service companies ranged from 13,50 to 40 €/kg. In cases where companies provided the gas themselves, the price was at the lower end of this range.

Quota authorisations reached a price level of 3-5 €/t CO2e (reported by eight companies), which is comparable to 2015/2016 price levels.
PRICE MONITORING Q3 2019
AT SERVICE COMPANY (34) LEVEL

€/kg

Q3/2019

Ø purchase price
• The European Environmental Agency has not yet published the full report on 2018 yet
• But some indicators are available on their website
BREXIT – 31 JAN. 2020
THE UK WILL CEASE TO BE MEMBER OF THE EU

The withdrawal agreement that sets a transition period ending on 31 Dec. 2020
The EU F-Gas Regulation will continue to apply in the UK until the end of 2020
In 2020, the gases placed on the UK market will be considered as placed on the EU market

• NB: when allocating the quota for 2020, the European Commission allocated quota to UK companies on the basis of a hard Brexit scenario, using “Brexit reference values”

• These Brexit reference values are lower than the values used for EU undertakings. Because there will be no hard Brexit, the EC will have to top-up UK companies’ quota

• The UK will be out of the EU quota system from 2021 which coincides with the calculation of the new reference values

Validity of F-gas certificate between UK and EU are not a given!

In general advice can be found on https://www.gov.uk/brexit
F-GAS REVIEWS (TOPICAL)
UPCOMING IN 2020

• “No later than 1 July 2020, the Commission shall publish a report assessing whether cost-effective, technically feasible, energy-efficient and reliable alternatives exist, which make the replacement of fluorinated greenhouse gases possible in new medium-voltage secondary switchgear... “

• “...and new small single split air-conditioning systems and shall submit, if appropriate, a legislative proposal to the European Parliament and to the Council to amend the list set out in Annex III.”

• “No later than 31 December 2020, the Commission shall publish a report on the availability of hydrofluorocarbons on the Union market.”
a forecast of the continued demand for HFCs up to and beyond 2030;
an assessment of the need for further action in light of existing and new
international commitments regarding the reduction of F-gas emissions;
an overview of EU and international standards, national safety
legislation and building codes in relation to the transition to alternative
refrigerants;
a review of the availability of technically feasible and cost-effective
alternatives to products and equipment containing F-gases not listed in
Annex III, taking into account energy efficiency.

To adapt the provisions of this Regulation, in the light of its
implementation and of new developments and international commitments,
and to propose, if appropriate, further reduction measures
ECODESIGN UPDATE 2
ECODESIGN UPDATE

10 ECODESIGN AND 7 ENERGY LABELING LOTS HAVE BEEN PUBLISHED BY DECEMBER 2019

- HVACR relevant lots:
- ENER Lot 12 Commercial refrigerators and freezers (ecodesign (EU) 2019/2024 and energy labeling (EU) 2019/2018): electric mains-operated refrigerating appliances with a direct sales function, including appliances sold for refrigeration of items other than foodstuffs
- ENER Lot 13 household refrigerating appliances (ecodesign (EU) 2019/2019 and energy labeling (EU) 2019/2016)
- ENER Lot 30 electric motors and variable speed drives (ecodesign (EU) 2019/1781)
## CHEAT-SHEET ENER LOT 12

<table>
<thead>
<tr>
<th>Product Groups</th>
<th>EEI 2021</th>
<th>EEI 2023</th>
<th>Resource Efficiency</th>
<th>Information Requirements</th>
<th>Energy label</th>
<th>EPREL</th>
</tr>
</thead>
<tbody>
<tr>
<td>Supermarket refrigerating (freezer or refrigerator) cabinets</td>
<td>100 80</td>
<td>YES YES</td>
<td>Standard Label</td>
<td>YES</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Gelato-scooping cabinets</td>
<td>100 80</td>
<td>YES YES</td>
<td>Standard Label</td>
<td>YES</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Refrigerated vending machines</td>
<td>100 80</td>
<td>YES YES</td>
<td>Standard Label</td>
<td>YES</td>
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<td></td>
</tr>
<tr>
<td>Beverage coolers</td>
<td>100 80</td>
<td>YES YES</td>
<td>beverage cooler</td>
<td>YES</td>
<td></td>
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</tr>
<tr>
<td>Small ice-cream freezers</td>
<td>80 50</td>
<td>YES YES</td>
<td>small ice-cream freezer</td>
<td>YES</td>
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</tr>
<tr>
<td>Refrigerating appliances with a direct sales function that do not use a vapour compression refrigeration cycle</td>
<td>NO NO</td>
<td>YES YES</td>
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<tr>
<td>Refrigerating appliances with a direct sales function for the sale and display of live foodstuffs, such as refrigerating appliances for the sale and display of living fish and shellfish, refrigerated aquaria and water tanks</td>
<td>NO NO</td>
<td>YES YES</td>
<td>NO NO</td>
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<tr>
<td>Saladettes</td>
<td>NO NO</td>
<td>YES YES</td>
<td>NO NO</td>
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<tr>
<td>Horizontal serve-over counters with integrated storage designed to work at chilled operating temperatures</td>
<td>NO NO</td>
<td>YES YES</td>
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<tr>
<td>Corner cabinets</td>
<td>NO NO</td>
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<td>Vending machines designed to work at frozen operating temperature</td>
<td>NO NO</td>
<td>YES YES</td>
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<tr>
<td>Serve-over fish counters with flaked ice</td>
<td>NO NO</td>
<td>YES YES</td>
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<tr>
<td>Minibars and wine storage appliances with sales functions</td>
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<td>Within Household Refrigeration</td>
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**EXCLUDED**

Refrigerating appliances with a direct sales function that are only powered by energy sources other than electricity

The remote components, such as the condensing unit, compressors or water condensed unit, to which a remote cabinet needs to be connected in order to function

Food processing refrigerating appliances with a direct sales function

Refrigerating appliances with a direct sales function specifically tested and approved for the storage of medicines or scientific samples

Refrigerating appliances with a direct sales function that have no integrated system for producing cooling, and function by ducting chilled air that is produced by an external air chiller unit; this does not include remote cabinets nor does it include category 6 refrigerated vending machines, as defined in Table 5 of Annex III
Requirements are applicable as
• from 1 March 2021
• 2nd tier from 1 September 2023
Review and draft revision proposal no later than 25 December 2023
ECODESIGN ENER LOT 12
ENERGY EFFICIENCY, RESOURCE EFFICIENCY AND INFORMATION REQUIREMENTS FOR:

• Refrigerating appliances with a direct sales function: supermarket refrigerating (freezer or refrigerator) cabinets, beverage coolers, ice-cream freezers, gelato-scooping cabinets, refrigerated vending machines.

• Minibars and wine storage appliances with sales functions are covered in: (EU) 2019/2019 (household refrigeration)

• Vertical static-air cabinets are covered in: (EU) 2015/1095 (professional refrigeration)
ECODESIGN ENER LOT 12

EXCLUDED ARE

- Refrigerating appliances with a direct sales function that are only powered by energy sources other than electricity;
- The remote components, such as the condensing unit, compressors or water condensed unit, to which a remote cabinet needs to be connected in order to function;
- Food processing refrigerating appliances with a direct sales function;
- Refrigerating appliances with a direct sales function specifically tested and approved for the storage of medicines or scientific samples;
- Refrigerating appliances with a direct sales function that have no integrated system for producing cooling, and function by ducting chilled air that is produced by an external air chiller unit; this does not include remote cabinets nor does it include category 6 refrigerated vending machines, as defined in Table 5 of Annex III;
- Professional refrigerated storage cabinets, blast cabinets, condensing units and process chillers as defined in Regulation (EU) 2015/1095
ECODESIGN ENER LOT 12
FOR THESE PRODUCTS NO ENERGY EFFICIENCY/LABEL
BUT RESOURCE EFFICIENCY & INFORMATION REQUIREMENTS

- Refrigerating appliances with a direct sales function that do not use a vapor compression refrigeration cycle
- Refrigerating appliances with a direct sales function for the sale and display of live foodstuffs, such as refrigerating appliances for the sale and display of living fish and shellfish, refrigerated aquaria and water tanks
- Saladettes
- Horizontal serve-over counters with integrated storage designed to work at chilled operating temperatures
- Corner cabinets
- Vending machines designed to work at frozen operat. temp.
- Serve-over fish counters with flaked ice
Availability of **spare parts to professional repairers (registered with manufacturer)** of at least the following spare parts:

- thermostats; starting relays; no-frost heating resistors; temperature sensors; software and firmware including reset software; printed circuit boards; light sources

Availability to **professional repairers and end-users** of at least the following spare parts:

- door handles and door hinges; knobs, dials and buttons; door gaskets; and peripheral trays, baskets and racks for storage
At the latest two years after the placing on the market of the first unit; for a minimum period of eight years after placing the last unit of the model on the market.

Can be replaced with the use of commonly available tools and without permanent damage to the appliance.

Ensure the delivery of the spare parts within 15 working days after having received the order.

Provide access to the appliance repair and maintenance information to professional repairers.

Requirements for dismantling for material recovery and recycling while avoiding pollution (WEEE).
ECODESIGN ENER LOT 12
INFORMATION REQUIREMENTS

• Recommended setting of temp. in each compartment for optimum food preservation
• An estimation of the impact of temperature settings on food waste
• Climate areas for beverage coolers and for ice-cream freezers
• Instructions for the correct installation and end-user maintenance, including cleaning, of the refrigerating appliance with a direct sales function
• For integral cabinets the recommended frequency for cleaning the condenser coil
• Access to professional repair such as internet webpages, addresses, contact details
• Relevant information for ordering spare parts, directly or through other channels, importer or authorised representative such as internet webpages, addresses, contacts
• The minimum period during which spare parts, necessary for the repair of the refrigerating appliance with a direct sales function, are available
• The minimum duration of the guarantee of the refrigerating appliance with a direct sales function offered by the manufacturer, importer or authorised representative
• Instructions on how to find the model information in the product database: weblink EPREL European Product Database for Energy Labelling (except for products slide 17)
Internal Design Control System – Technical Documentation requirements

- Product information
- Details and results of measurement methods and calculations
- Include a list of all equivalent models
- Product information sheet (Energy Labeling regulation)

Resource efficiency requirements for products listed on slide 17 (spare parts, repair and maintenance information, requirements for dismantling under WEEE - information for treatment facilities)
For Market Surveillance verification only:

- Tolerances for efficiency are 10% (only for market surveillance authorities!)

Circumvention and software updates:

- No recognising of test conditions or cycle
- Energy consumption and other declared parameters shall not deteriorate after an update, except with explicit consent of the end-user prior to update
- A software update shall never make it non-compliant with the ecodesign requirements
Energy efficiency classes A (EEI < 10) - G (EEI ≥ 80)

- Supermarket refrigerating (freezer or refrigerator) cabinets
- Gelato-scooping cabinets and
- Refrigerated vending machines
- Beverage coolers
- Small ice-cream freezers

Labels shall be at least 96 mm wide and 192 mm high
ENERGY LABEL ENER LOT 12

FURTHER OBLIGATIONS

- Any visual advertisement for a specific model, including on the internet, contains the energy efficiency class and the range of energy efficiency classes available on the label
- Supply with printed label
- Electronic product information sheet must be available to dealers
- **Technical documentation** to be entered into the product database (EPREL)
  - pre-registration ahead of time possible
- Dealer and hosting platform / distance selling obligations
• Based on simplification of technical product categories
• Has been argued against by industry
• Example USA and Australia: many more categories of product

• First time an Energy Label for commercial products

• Resource efficiency will become a regular occurrence
  • Spare parts availability and lead time
  • WEEE related information

• Future review of regulation within a rather short timeframe – right after 2nd Tier comes into force
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