The F-Gas Regulation No. 517/2014 is an EU legislative instrument which is directly (i.e. without any further transposition measures) applicable in all EU Member States. It was published in the Official Journal on 20 May 2014 and replaces the 2006 F-Gas Regulation. The 2014 Regulation further strengthens the 2006 rules, and contains some significant new provisions to reduce emissions.

The phase-down is a stepped approach where the quantities of HFCs that are placed on the market are progressively reduced in order to achieve consumption reductions. The EU has set ambitious targets: in 2030, HFC consumption must be reduced by 79%. The phase-down will commence in 2015. It will steer innovation and ensure a move towards refrigerants with a lower global warming potential (GWP).

Who will be impacted by the phase down?
The phase-down will change forever how the industry operates. It will impact the entire chain, from the producers of refrigerants to the manufacturers of equipment, the installers and the users.

How does the phase-down work?
To implement the phase-down, the European Commission needs to ensure that the amount of HFCs placed on the Union market will be reduced over time. To do so, HFC producers and importers receive ‘quota’: Quota are expressed in CO₂ equivalent (weight of HFC x GWP) and represent the maximum amount producers and importers of HFCs are allowed to place on the Union market.

Who can apply for quotas?
Quota are intended for market players that directly handle HFCs which are not contained in equipment (so called ‘bulk’ HFCs). Equipment manufacturers installers or endusers cannot apply for quota, but need to ensure that the HFCs they use are part of the EU quota.

What’s new?
- Massive reduction of HFC consumption: introduction of the phase-down mechanism
- Strong focus on GWP of refrigerants: leak detection and labelling requirements now based on CO₂ equivalent
- Restrictions on the placing on the market: GWP limits for certain equipment types
- Traceability scheme for HFCs contained in pre-charged equipment
- Service ban: GWP limits for service and maintenance of big refrigeration applications for commercial use

Bulk HFC producers/importers can apply for quota.
Manufacturers/importers of equipment containing HFCs cannot apply for quota. They still need to ensure that the HFCs they use are part of the EU phase-down.
To ensure the integrity of the phase-down, the European Commission needs to keep track of all HFCs that are circulating in the EU market, whether they are placed on the market in bulk or imported in pre-charged equipment. Manufacturers of pre-charged equipment – refrigeration, air conditioning and heat pump equipment that has been charged with HFCs in the factory – therefore need to ensure that pre-charged HFCs are accounted for under the phase-down scheme.

How can they prove this?
Both, producers / importers of bulk HFCs and manufacturers of pre-charged equipment have reporting obligations. Whilst this has already been the case for bulk HFC producers / importers in the 2006 F-Gas Regulation, it is new for pre-charged equipment manufacturers in the 2014 F-Gas Regulation. Whether they are based inside or outside the EU, they will have to comply with specific reporting obligations – a sort of ‘traceability’ scheme. In particular, as of 2017, manufacturers and importers of pre-charged equipment have to establish a declaration of conformity stating that the HFCs contained in their equipment are covered by the EU-phase-down. Detailed reporting and declaration systems will be set up by the European Commission.

WHICH PRODUCTS AND EQUIPMENTS WILL BE BANNED?
To steer the phase-down, the new rules introduce additional restrictions on the placing on the market of HFCs. The products and equipment listed in Annex III of the Regulation will not be allowed to be placed on the EU market starting from the date specified in the Annex. The dates are differentiated on the basis of the type of equipment and the GWP of HFCs. A major focus has been put on limits in refrigeration, but also air-conditioning systems will need to comply with GWP limits.

LEAKAGE PREVENTION AND CHECKS
Containment remains one of the key elements of the legislation. Operators will still be required to use all available measures to prevent emissions of F-gases. As in the 2006 Regulation the regularity of checking depends on the refrigerant content of the equipment (per refrigerant circuit). However, according to the new rules the leak checks will depend on the amount of tonnes of CO₂ equivalent contained in the refrigerant circuit (instead of basing the thresholds on the amount in kilograms as was the case in the 2006 legislation). In practical terms this means, that leak checking obligations may now apply to equipment where this was not the case before. This happens typically when the global warming potential of the refrigerant is high as in such case the threshold expressed in CO₂ equivalent may be reached before the charge size threshold expressed in kg which was applied previously.

TRAINING AND CERTIFICATION
Training and certification is crucial to ensure that HFCs are handled with care. As in the 2006 Regulation, not only personnel dealing with F-gases need to be certified, but also the undertakings that carry out installation, service or maintenance will need to be certified. There is no single training or certification system for all EU Member States; however a certificate or training attestation in one Member State should be recognized in another Member State. More focus on training on alternative refrigerants, that can have safety considerations, will be expected.