



Rijkswaterstaat
Ministerie van Infrastructuur en Milieu

New Fgas-regulation (EU) No 517/2014

Effects on SF₆ containing
switch gear

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Content

- Rijkswaterstaat as organisation
- Regulation EU No 517/2014 and Changes for electrical switch gear industry
- usefull links

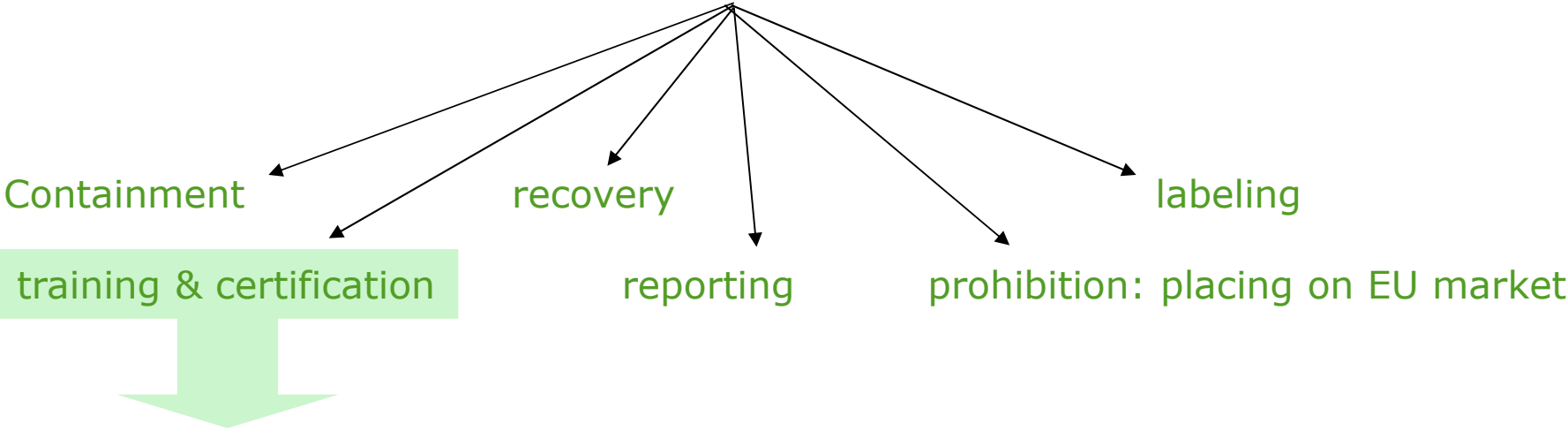


Rijkswaterstaat as organisation

- Founded in 1798 and is part of the Dutch Ministry of Infrastructure and the Environment.
- Role is the practical execution of the public works and water management, including the construction and maintenance of waterways and roads, and flood protection and prevention
- as of January 2013 RWS conducts also various knowledge and implementation tasks in the field of the environment
- Execution F-gas regulation was previously done by SenterNovem / AgentschapNL



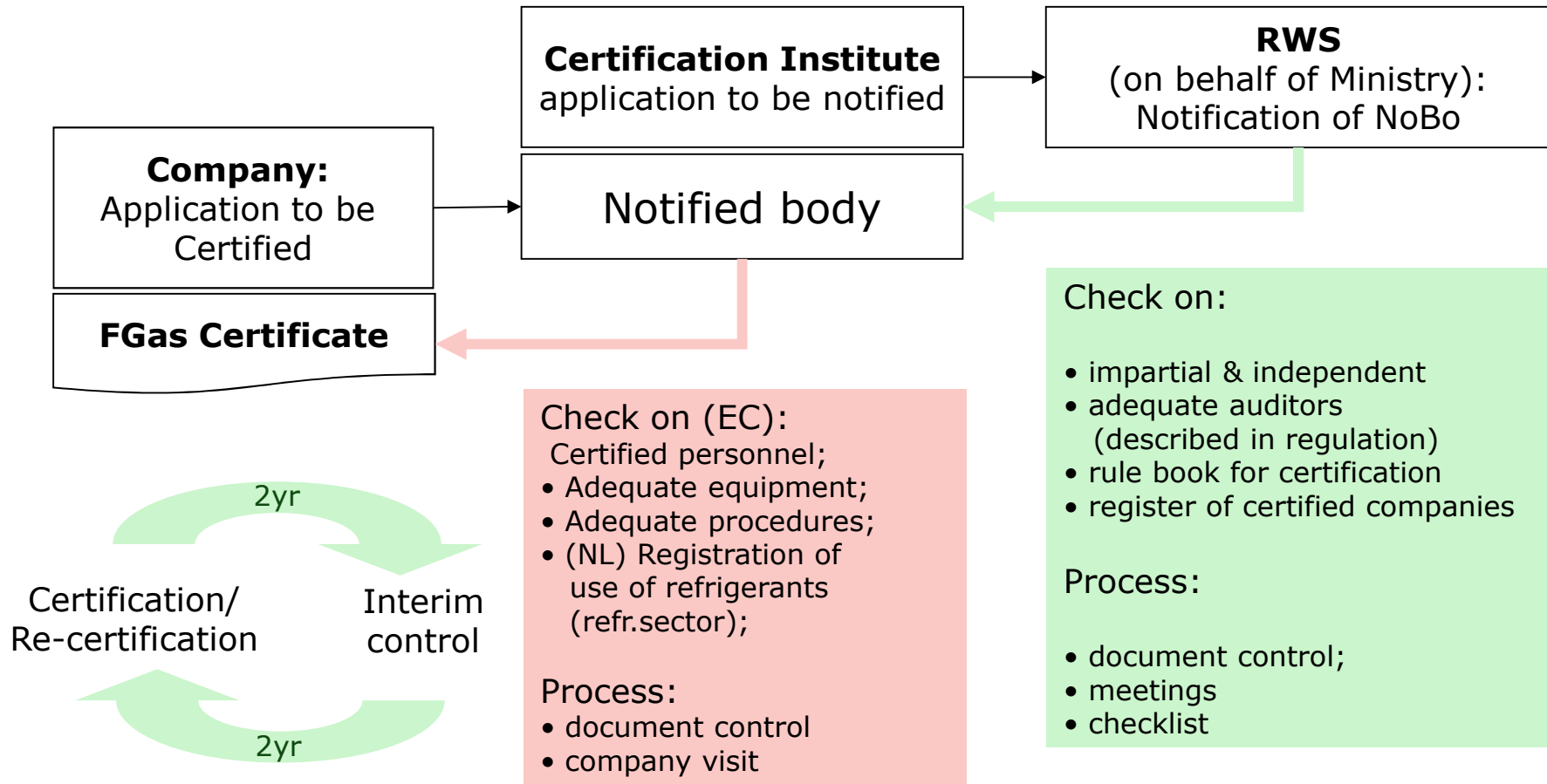
Fgas regulation in The Netherlands



National system for certification of companies and personnel

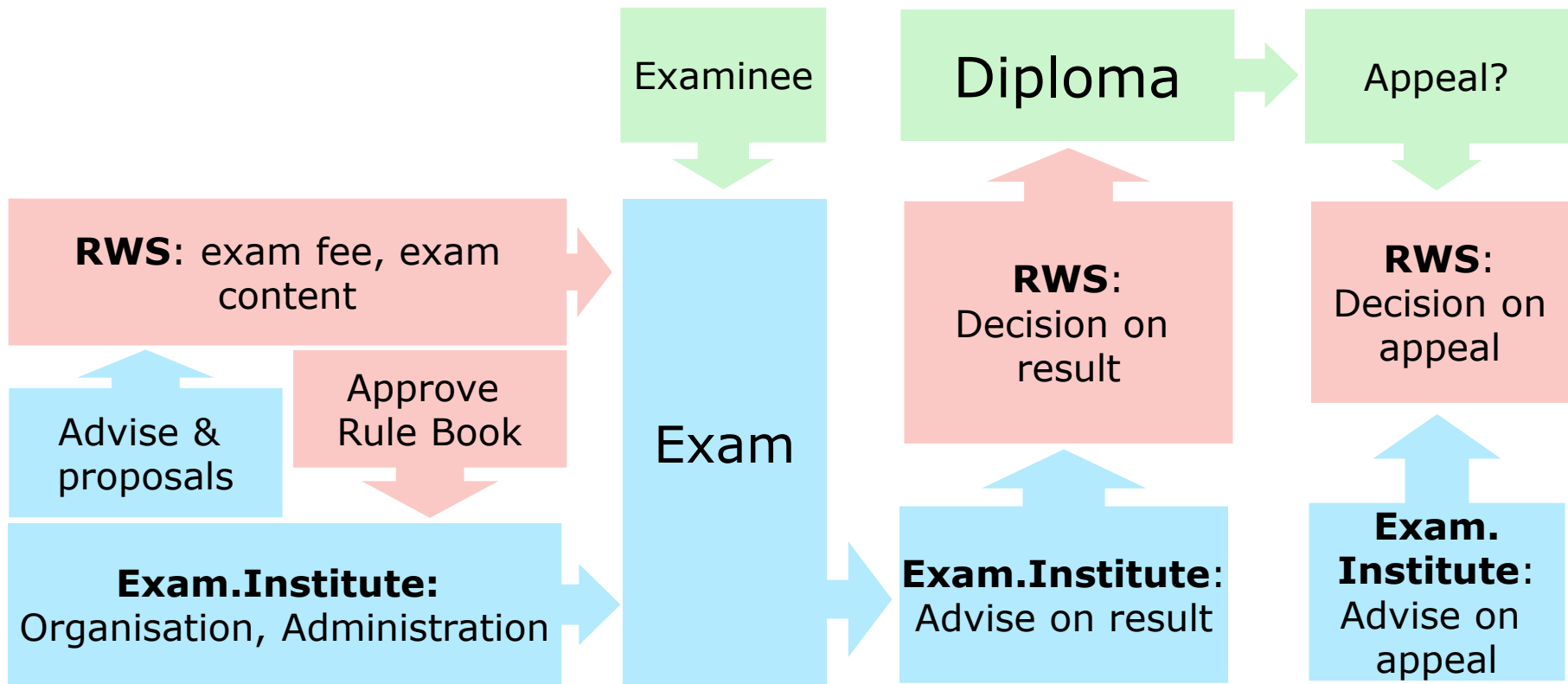


Certification of companies: How?





Certification of personnel: System design / who does what?





What is the EU 2014 F-Gas Regulation?

- The F-gas Regulation (EU) No 517/2014 fully replaces the 2006 F-Gas Regulation as of January 2015.
- seeks to bring down the EU's F-gas emissions by two-thirds from 2014 levels by 2030 as part of the ultimate objective of cutting overall GHG emissions by at least 80% by 2050 against 1990 levels.
- The gases covered by the EU Regulation are the so called fluorinated greenhouse gases: HFCs, PFCs and SF₆.



Is it the same as the 2006 EU F-Gas Regulation?

The new Regulation introduces additional requirements compared to the 2006 Regulation.

Not all provisions of the new Regulation apply to all types of F-gases. For example the phase-down only applies to HFCs and not to PFCs or SF₆.



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the regulation does a have a provision for reviewing the situation in 2020, just like 842/2006 did.



What are the main pillars of the EU F-gas Regulation?

- Emission prevention and leak checks (Art. 2-6)
- Control of by-production (Art. 7)
- End of life treatment of products and equipment (Art. 8-9)
- Training and certification (Art. 10)
- Restrictions on new applications (Art. 11)
- Restrictions on uses (Art. 13)
- Phase-down of HFC consumption (Art. 14 onwards)



Definition of operator

The operator is the natural or legal person exercising actual power over the technical functioning of products and equipment.



Certification personnel

Article 10 requires certification for all SF₆ handling operations like installation, servicing, maintenance, repair or decommissioning

Regulation 842/2006 required certification only for recovering old and unused SF₆.

There is no single training or certification system for all EU Member States. Minimum requirements are defined

Mutual recognition of certificates. Existing certificates remain valid



Operators still required to prevent emissions of F-gases

Electrical switchgear shall not be subject to leak checks according to art 4-1 provided it complies with one of the following conditions:

- (a) it has a tested leakage rate of less than 0,1 % per year as set out in the technical specification of the manufacturer and is labeled accordingly;
- (b) it is equipped with a pressure or density monitoring device; or
- (c) it contains less than 6 kg of fluorinated greenhouse gases.



Minimum requirements for a leakage detection system

Operators of electrical switchgear containing SF₆ in quantities of 500 tonnes of CO₂ eq. or more and installed from 1 January 2017 shall ensure that this equipment is provided with a leakage detection system which alerts the operator or a service company of any leakage (art 5-2).

Needs to be checked at least every 6 years



Product and equipment bans. Article 13 (1) and (2) SF₆ Usage Bans:

→→ *The use of SF₆ in magnesium die-casting and in the recycling of magnesium die-casting alloys shall be prohibited. For installations using <850 kg SF₆ per annum this ban starts at 1.1.2018.*

→→ *The use of SF₆ to fill vehicle tyres shall be prohibited.*



Reporting

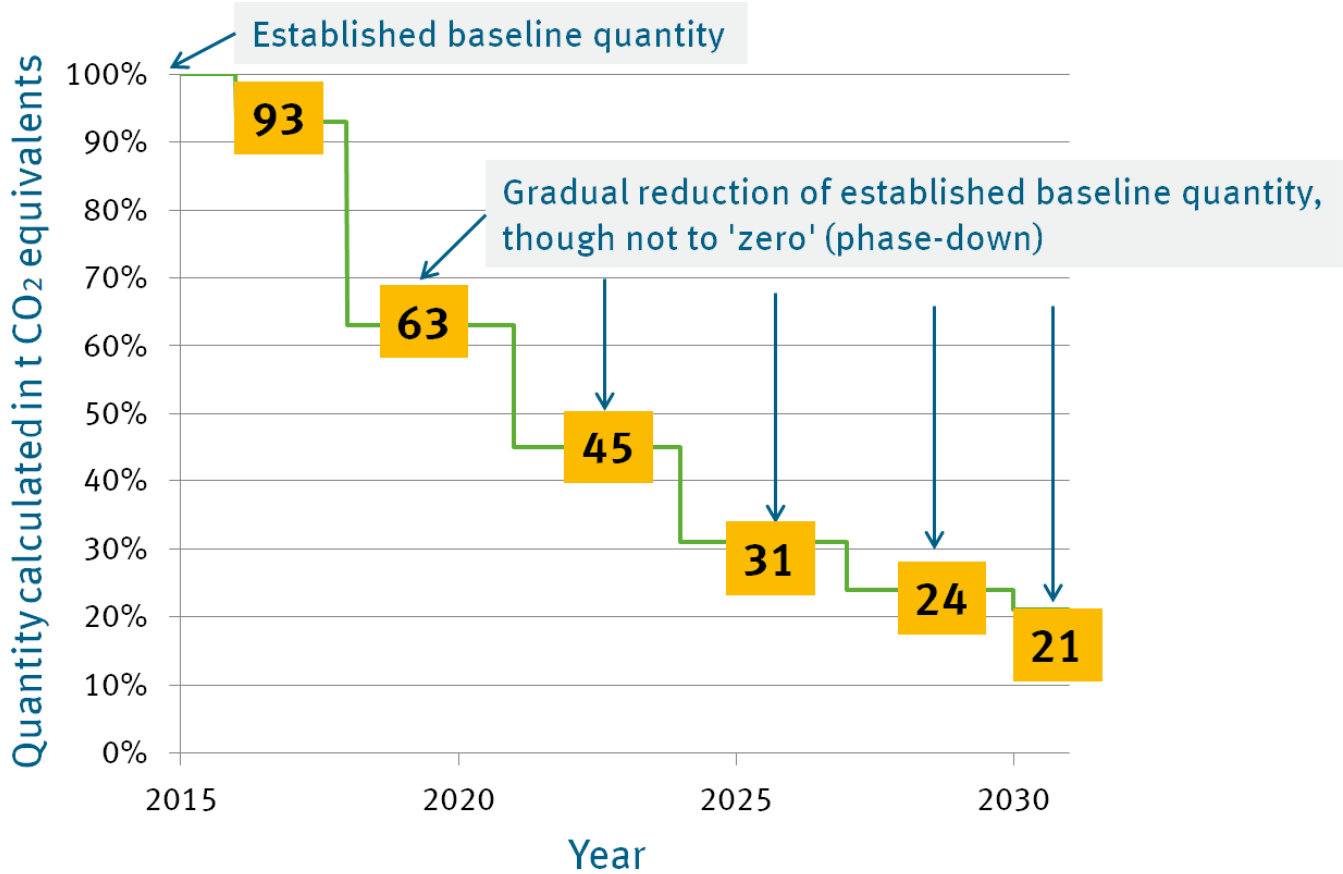
Reporting in accordance with F-gas Regulation (EU) 517/2014 and Regulation (EU) 1191/2014

Art.19 of the new regulation (EU) no. 517/2014 stipulates that the producers, importers, exporters, destruction companies of F-gases (in bulk or in products/equipment e.g. SF₆ gas insulated switchgear) shall report relevant data to the European Commission by 31 March 2015 and every year thereafter.

Placing **500 tons of CO2 equivalents (approx. 22 kg SF6)** or more contained in their products on the market per year, the manufacturer shall report to the European Commission the quantity of SF₆ contained in each product category.



Phase down of HFC's





Useful links

<http://ec.europa.eu/clima/policies/f-gas/>

<http://eur-lex.europa.eu/legal-content/NL/TXT/?uri=CELEX:32014R0517>

<http://www.infomil.nl/onderwerpen/klimaat-lucht/stoffen/ozon-gassen/>