



Services

- The Climalife approach
- Turnkey services
- Recovering, reclaiming, and waste treatment
- Regulatory background
- Engineering
- Authorisations and certifications



Services

Solutions for use and management of technical fluids

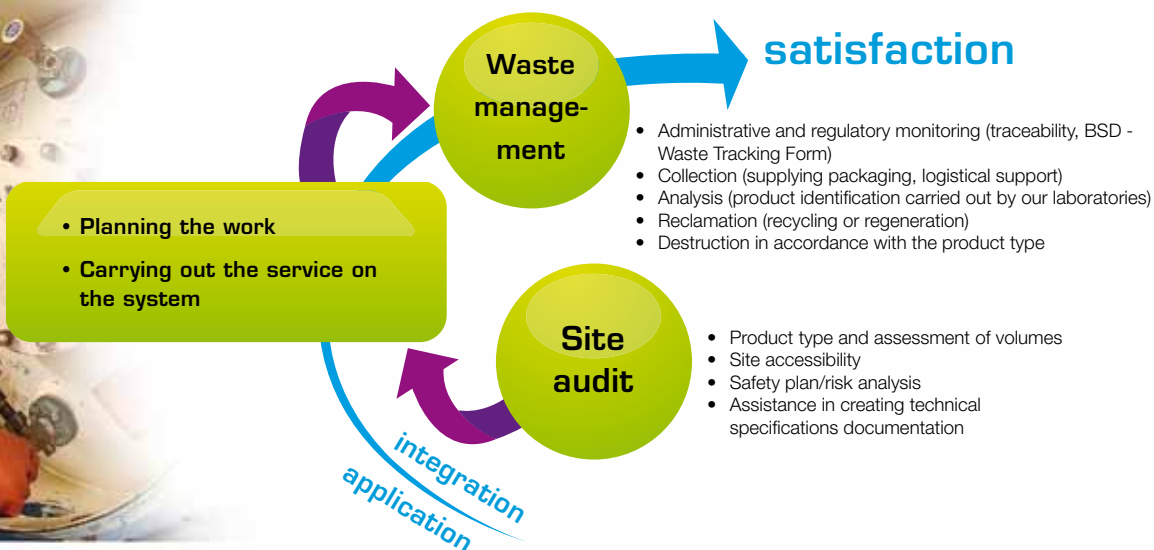


The Climalife approach

Given how diverse your activities in the field are, you find yourself needing to solve increasingly complex situations.

The challenge to achieve results and fulfil your obligations:

- Complex configuration of installations (high volume, special fluids, etc.),
- Need for special equipment (recovery unit, 70 bar pump, etc.) and occasional lack of available resources,
- Difficult logistics and access,
- Managing recovered fluids and controlling traceability.



Outsource your recovery services, profit from these advantages

✓ Turnkey solution for the service	➤	+ You can focus your efforts on your core business
✓ Planning for work in your country	➤	
✓ Expertise in the physico-chemical properties of the liquids	➤	+ Benefit from our expertise in liquids and specialist equipment for efficient recovery
✓ Our experts will share their knowledge with your teams	➤	+ You benefit from the knowledge and experience acquired by our chemical engineers
✓ Managing waste traceability (managing the BSD - Waste Tracking Form)	➤	+ You free yourself from operational and administrative constraints

Turnkey services

Our Industrial Services team is your **subcontractor** for conducting special operations on cooling, heating, and air conditioning installations, including: recovery, emptying, loading, cleaning, and more.

Ref.	Services	Comments
6768	Emptying refrigerants from installations	Recovering refrigerants, heat transfer fluids or secondary refrigerants, treating fluids according to current regulations, recovering unclean containers.
6769	Emptying heat transfer fluids from installations	
6749	Miscellaneous installation emptying	
7410	Emptying and refilling heat transfer fluids	Recovery and treatment in accordance with current regulations and loading at installation (bulk supplies, depositing, etc.).
7409	Miscellaneous emptying and refilling	
6771	Refilling installations with heat transfer fluids	Loading refrigerants or heat transfer fluids into installations: bulk supplies, depositing under special conditions, installation concentration (dosing).
6750	Miscellaneous installation refilling	
7412	Glycol - water system cleaning	For heating, cooling, or air conditioning installations: - Removing sludge from climate systems with the Thermonett® range of products. - Removing contaminants from refrigerant circuits with special products like Facilisolv or Nettogaz GC1. - Cleaning secondary refrigerant/heat transfer fluid circuits with the deoxidizer P and dispersing agent D, descaling with Duonett® D7.
7413	Cleaning refrigerant installation	
7414	Miscellaneous installation cleaning	
7415	Air conditioning water system cleaning	
7416	Heating water system cleaning	



Reclamation of recovered refrigerant fluids: on-demand treatment of the recovered product (for quantities above 300 kg) in order to offer performance equivalent to that of a virgin substance. After reclamation, the product is repackaged and made available to the client or stored at our industrial sites (storage contract). Offer subject to conditions.

Management and treatment of recovered fluids: receiving quantities of fluids at the plant and special management of various wastes, BSD¹ (waste transfer documents) traceability.

Regulatory maintenance of pressure equipment: Climalife handles the commissioning declarations, periodic inspection, and periodic requalification of your installations (tanks, pipes, applicable instruments, etc.) and issues a certificate:

- inspection and periodic requalification of pressure equipment,
- preventive maintenance of refrigerant storage and distribution equipment,
- periodic requalification of transportable pressure equipment (container retesting).

¹BSD: French regulatory Waste Tracking Form.

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Recovering, reclaiming, and waste treatment

Climalife supplies containers, receives your fluids, and takes care of treating them.

• Recovery and treatment



Ref.	Refrigerant fluids and special fluids
	E.g.: halons. See p.15.
	Cleaning products
7109, 1128, 6464	See p.52.
	Secondary refrigerants/heat transfer fluids (for reclamation and/or destruction)
1124	Empty 20 litre can
1128	Empty 217 litre drum
6710	Empty 1000 litre container
6163	Heat transfer fluid destruction
4512	Package including provision of a 1000 litre container and destruction (e.g.: glycol)
7272	Destruction of Dispersing agent/Deoxidizer
	Oils (for destruction)
1125	Empty 30 litre drum
1126	Empty 60 litre drum
1128	Empty 217 litre drum
7272	Oil destruction
	NH₃ (for conversion)
757	88-litre NH ₃ recovery cylinder
758	930-litre NH ₃ recovery container
4639	NH ₃ conversion (container)
4638	NH ₃ conversion (cylinder)
	ALCALI (for destruction)
6286	800-Litre container of demineralised water
6125	140-Litre drum of demineralised water
-	Package including 800 L container of demineralised water + destruction
-	Package including 140 L container of demineralised water + destruction
7272	Destruction of water with ammonium hydroxide

• Reclaiming HCFCs, HFCs and NH₃

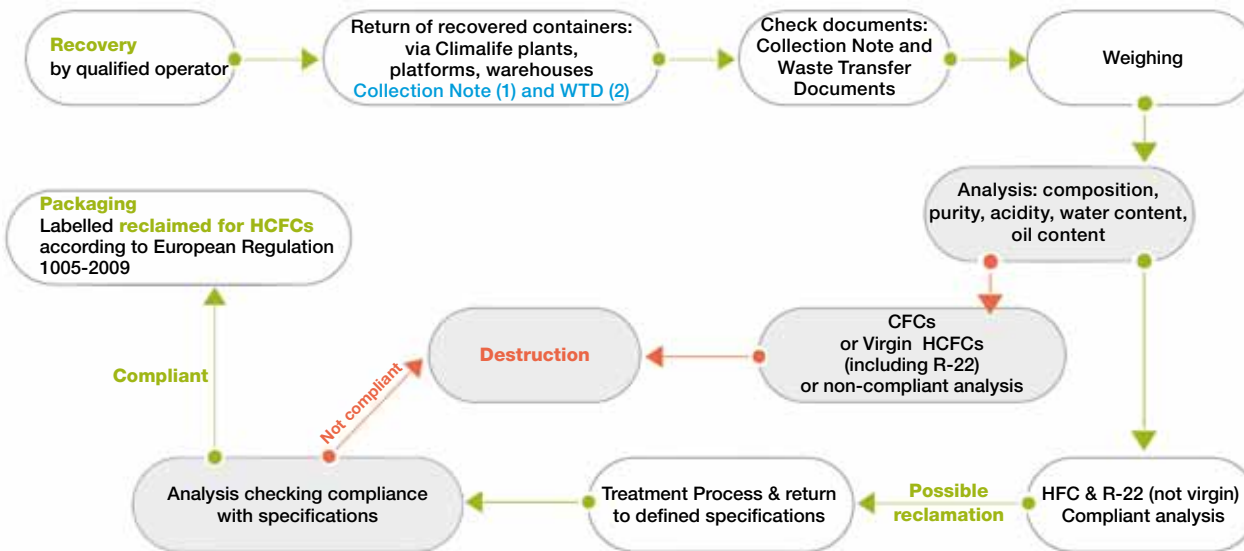
Reclaiming recovered HCFCs and HFCs is possible based on the results of the composition analysis carried out when the client's sample is received. (Sampling cylinders see p.68).

The conversion of NH₃ into Alkali is also possible under some conditions. Ask us for more information.

Our quality label and our specification guarantee you a reclaimed product with performance equivalent to that of virgin product. Analysis are always conducted by our laboratories during and after the reclamation cycle, guaranteeing the fluid's composition.



• Flow Diagram of fluids recovered for reclamation



- (1) Collection Note must be completed
 (2) Waste Transfer Document (WTD) for CFC, NH₃, Alkali and HCFCs and HFCs in particular, the waste creator (owner or qualified operator) needs a copy returned.

Most common European waste codes for filling out box 3 of the BSD / WTD

Product	European Code
Halogenated refrigerant	140601*
Ammonia	140603*
Ammonium hydroxide	140603*
Glycol water	130310*
Compressor oil	130208*
Halon	160504*
Halogenated solvent	140602*
Non-halogenated solvent	140603*

• Destruction of refrigerants

If reclaiming the recovered fluids is not possible, Climalife can destroy these fluids for you.

- CFCs: R-11, R-12, R-13, R-113, R-114, R-500, R-502, R-503,
- halons, NH₃,
- halogenated fluids not within specifications, which cannot be reclaimed (e.g.: HCFCs).

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Regulatory background

• Waste Treatment: waste tracking form (Bordereau de suivi des déchets)

Waste handling, documentation and tracking requirements apply in all European Union countries.

Refrigerants, secondary refrigerants and heat transfer fluids which have been used are classified as hazardous waste and must be recovered by qualified personnel with relevant qualifications and permits. These must be treated or disposed of in an approved manner and in accordance with European and local regulations.

Contact your Climalife subsidiary for more detailed information.

• Regulatory maintenance: pressure equipment

The maintenance of pressure equipment is regulated by the PED 97/23/EC standard for refrigeration systems and pressure equipment in Europe: (Pressure equipment directive).



Engineering

• Design, implementation, and project management

Climalife has patented several processes, particularly for recovering and treating refrigerant fluids. These systems, designed for industrial uses, may be offered for smaller capacity installations.

• Designing and building specific systems for industrial sites

- storage: tanks, containers, cylinders,
- refrigerant fluid distribution machines,
- reclamation machines,
- recovery machines,
- filling stations,
- inversion plants,
- special transfer units,
- sealing test, leak detection,
- remote monitoring: storage management (tanks, containers, cylinders).

Our teams provide:

- coordination and project tracking all the way to installation on-site,
- the commissioning of an installation.

When we deliver the installation, we provide you with a complete fact file including:

- the description of the appliance,
- the operating manual,
- the testing certificates or reports,
- the documents about safety accessories and the adjustment reports,
- the preventive and regulatory maintenance schedule.



Authorisations and certifications

CREALIS, which is a wholly owned subsidiary of the Dehon Group, and specialises in services and engineering, is recognised as an Installation Classified for the Protection of the Environment, as referred to in law no. 76-664 of 19 July 1976.

• Industrial site at Bry-sur-Marne (France, region 94)

CREALIS carries out its activities under a prefectorially issued business licence number 2005/2795, dated 03/08/2005.

This business licence covers the following activities, which are listed in the nomenclature of classified installations under these articles:

- 1185-1-a: Chlorofluorocarbons, halons and other carbons and halogenated hydrocarbons. Refrigerant packaging and other applications such as foam manufacturing, etc. except dry cleaning for textile products endorsed by the 2564 section. The quantity likely to be in the installation is greater than 800 L.
- 1185-3: Chlorofluorocarbons, halons and other carbons and halogenated hydrocarbons. Reclaiming refrigerant and recycling halons at the treatment site.

CREALIS possess the Certificate of Ability N° 183545.

• Industrial site at Saint-Priest (France, region 69)

CREALIS carries out its activities under a business licence issued by the Prefecture of Rhône dated 8 November 2007.

This business licence covers the following activities, which are listed in the nomenclature of classified installations under these items:

- 1419-B-1: storage and packaging of ethylene oxide,
- 11136-A-1.b/136-A-2.b/1136-B.c: use and storage of ammonia,
- 1185-1a/1185-2.a/1185-3: packaging, storage and reclaiming CFCs, halons and other halogenated,
- 1412-2.a: storage of flammable liquefied gases (gases which are kept liquefied under pressure),
- 1414-1/1414-2: installing filling and distribution for flammable liquefied gases.

CREALIS is certified. ISO 9001: 2000. Certificate number: 1766421.



• **Industrial site at Sint-Niklaas (Belgium): Cogal Belgium**

On 5 December 2007 agreement (no. 9532/E 159) was renewed, authorising Cogal as a waste collector in the region of Flanders.

Vlarem II, class I, business licence, issued on 27 July 2000 (modifying the RGPT type licence of 29 June 1984), valid until 31 August 2011.

This licence covers, in particular, the following activities:

- storage and sorting collected waste,
- packing, reclaiming and storage of CFCs, HCFCs, HFCs and halons,
- formulating and storage of antifreezes, MEG and MPG based heat transfer fluids.

Since October 2004, those members of staff who work on external sites have been VCA certified.

The U.S Department of Transportation renewed its agreement (V040) for visual checking and requalification of DOT cylinders on 7 April 2008.

Cogal Belgium is certified ISO 9001: 2000.

Since January 2009, in accordance with article 7, paragraph 1 of EU regulation n°303/2008, Cogal Belgium, as an enterprise, is certified under number AIB/K126 to carry out installation, maintenance and repair activities on fixed refrigeration, air-conditioning and heat pump equipment containing some fluorinated greenhouse gases.

According to the same regulation, article 4, paragraph 2, all of our technicians are holder of a certificate category 1 which permits them to carry out the following activities:

- leak control,
- recovery,
- installation,
- maintenance or repair.

• **Industrial site at Bergen op Zoom (Netherlands)**

Eco Collect B.V was designated by the VROM minister as a CFCs, HCFCs, HFCs and halons collector on 26/08/2003:

CREALIS Nederland B.V carries out its activities under a licence issued on 17/11/2006 by the Noord-Brabant province: 1166535/1239026:

- storage and sorting collected waste,
- blending, packaging, reclamation and storage of CFCs, HCFCs, HFCs and halons.

CREALIS Nederland B.V. is certified ISO 9001: 2000.

Since April 2010, those members of staff who work on external sites have been VCA certified.

