

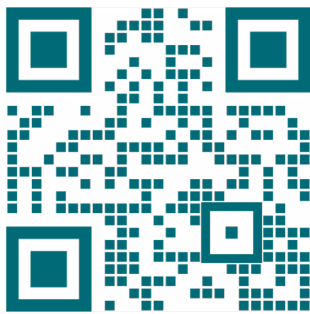


Cooling as a Service
Refresh the planet



WHAT IS Cooling as a Service (CaaS)?

CaaS, in principal, is an agreement where the supplier (EP Refrigeration) agrees to generate and sell cooling to the client. Typically, the client grants permission to the supplier to, at its own cost, erect and operate a refrigeration plant at the client's premises. The cooling generated (measured in kilowatt hour refrigeration or "kWhR") is then sold to the client at a pre-agreed tariff with fixed and variable components - which is typically lower than the total life cycle cost of generating cooling by the client.



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*Driving investment in
climate solutions*

SET **ALLIANCE**

BENEFITS TO THE CLIENT

REDUCED RISK

EP takes the risk – client free
to focus on core business

ZERO CAPITAL

We finance, own, operate
and maintain your cooling

OPTIMAL EFFICIENCY

Optimal efficiency
contractually guaranteed

INCREASED PROFITABILITY

More uptime, less waste

DECREASED ENVIRONMENTAL IMPACT

Reduced CO2 emissions through
use of Natural Refrigerants



Frequently Asked Questions

The accounting treatment of the Energy Partners CaaS

CaaS is an operational expense in a similar fashion to that of a local municipality bill for power consumption. There is no capitalisation of assets on the balance sheet (as the client does not own the system) and no depreciation impact on the income statement. CaaS is in no way seen or classified as any kind of lease (with resultant accounting and tax implications) and can be tested by applying the rules set out in the IFRS 16 - Leases standards.

Contract term

The Energy Partners CaaS contract is typically of a longer-term nature – up to 15 years is not uncommon. EP Refrigeration structured agreements from 10 years to 20 years in the past and can do any contract term upon the client's request. There is a direct correlation between the starting rate (R/kWhR) of the CaaS and the term – the longer the term that the client agrees to, the lower starting rate can be offered.

All-inclusive fee structure

The CaaS fee is all inclusive and consists of the following three components:

1. Monthly availability fee
2. Monthly maintenance and warranty fee
3. Cooling fee: calculated as $A = B \times C$, where:
 - A = Cooling fee payable by the client to EP Refrigeration
 - B = the cooling output (measured in kWh/R) for the month, and
 - C = the rate per kWhR of cooling output (defined in Rand)

The calculation of the monthly invoice to the client will include the following variables:

$$\text{Total invoice} = \text{Availability fee} + \text{Maintenance fee} + \text{Cooling fee} - \text{System Electricity Consumption}$$

This means that all monitoring, reporting and all maintenance and repairs is for the EP Refrigeration account.

Purchase option

The client has the option to purchase the refrigeration plant from EP Refrigeration at any time during the term of the agreement, provided that the client gives the agreed-upon written notice to EP Refrigeration. The agreement determines the purchase price for the refrigeration plant.

Basics of the service level agreement

For the duration of the contract period, the EP refrigeration (the supplier) will be responsible for monitoring and managing the performance of the System by:

- Applying active monitoring of the plant to detect any malfunctions in conjunction with the client's 24hr security system; and
- Providing to the client a performance metrics on a weekly basis which enables the tracking of the plant performance as follows:
 - Electricity consumption (kWh) of the plant;
 - Cooling consumption (kWRh) of the refrigerated rooms;
 - The average, minimum and maximum values of the measured saturated suction temperatures of both the medium temperature and low temperature suction lines of the plant;
- Being responsible to provide the following services:
 - Conduct regular visits to the client premises to inspect the plant and to conduct scheduled servicing. The labour, traveling costs and spares required to perform the scheduled servicing is included in the Refrigeration Outsourcing Fee. Any cost related to any other party performing any work on the plant, and the rectification thereof by the contractor, will be for the Client's account.
- Attend to breakdowns caused by a malfunction of the plant while operating within the design conditions specified in the contract and the detailed specification of this project.



CLIENT FEEDBACK

PnP Family Darras replaced its end-of-life simplex refrigeration system with a more efficient multiplex system and outsourced it to EP Refrigeration, realising a 37% energy saving for the client and removing the headache of having to maintain the plant in-house.



By outsourcing its cooling system to Energy Partners, Afrupro could upgrade its unreliable, aging refrigeration system without any capital costs, improving efficiencies and lowering energy consumption by 20%.



Clover's Queensburgh factory, is in the process of being upgraded with a new, state-of-the-art 10MW ammonia refrigeration system through Cooling as a Service. This new plant will serve all the cooling and heating needs of the new expanded factory in the most cost-effective way using our unique product of solar enhanced Cooling as a Service.



The project offered great savings in terms of energy efficiency and reducing CO2 emissions. A baseline plant estimated at 20% less efficient will use 334MWh more electricity, which results in 317 tons of CO2 per year being avoided in this installation based on energy savings alone. When taking in an average refrigerant leak rate of 15%, the number of CO2 emissions avoided goes up to an annual amount of 1,200 tons.



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GROBLERSDAL

**20
MWR**
installed
capacity

**R300
million**
invested

2015
First
CaaS plant