



**PROCESS TEMPERATURE CONTROL SPECIALISTS.  
SALES. HIRE. SERVICE.**



# PROCESS TEMPERATURE CONTROL SPECIALISTS.

ICS Cool Energy are specialists in temperature control solutions for critical and manufacturing processes including rental, capital equipment, planned preventative maintenance and emergency breakdown support across all industries Europe wide.

For over 30 years, we've been providing technical advice and solutions to leading companies, worldwide – helping them to meet compliance, reduce their energy consumption, maintenance and operative costs.

Our technically trained engineers will work in partnership with you to provide the most efficient temperature control solutions for the demands of your facilities or process, constraints of your site and budget.

Through one point of contact, we develop, manufacture, deliver, install, hire and service high quality, energy efficient and reliable temperature control solutions from -40°C to 350°C for your applications.

We offer the widest range of cost-effective temperature control solutions in the industry – enabling us to provide you with the best solution to meet your individual requirement.

- SALES
- HIRE
- SERVICE
- PROCESS COOLING
- PROCESS HEATING
- HVAC
- FAST EMERGENCY SOLUTIONS
- FREE SITE SURVEYS
- ENERGY ANALYSIS
- DESIGN & INSTALLATION
- TURNKEY PROJECT MANAGEMENT
- FREE COOLING SOLUTIONS
- PLANNED MAINTENANCE
- 24/7 BREAKDOWN SUPPORT
- REMOTE MONITORING



**SAME DAY  
DELIVERY**



**INSTALLATION, COMMISSIONING  
& MAINTENANCE**



**TECHNICAL  
SUPPORT**



**FULL TURNKEY TEMPERATURE  
CONTROL SOLUTIONS**

**KEEPING**  
INDUSTRY RUNNING

**Mission  
Critical**

**flex**



# “KEEPING INDUSTRIAL AND CRITICAL PROCESSES RUNNING WITH EFFICIENT TEMPERATURE CONTROL SOLUTIONS THROUGH EXPERT CONSULTATION”

Any down time in production or public services because of faulty temperature control equipment can lead to serious consequences.

These affects can impact directly on human life & health, for example in the event of an MRI scanner’s cooling supply failing or a district heating network breakdown leaving residents without heating or hot water

There are also significant financial implications if a chiller goes off-line on a food production line or a data centre’s fans are unable to keep their servers cool.

ICS Cool Energy, through our ability to offer Hire, Service and Sales under one fully connected umbrella, means we are ideally situated to get your process or facilities temperature control equipment back up and running both quickly and hassle free.

PLANNED PREVENTION	EMERGENCY SUPPORT
Process specific i-Chiller range	24/7 Breakdown
Planned Preventative Maintenance	Emergency rental
Contingency Plans	Remedial works
Installation & Commissioning	24/7 technical support
Remote Monitoring	National depots and van Spares
Water Treatment & Glycol	
Major Account Asset Management	

- SOLUTION APPROACH, SALES/HIRE/SERVICE
  - FULL SERVICE PARTNER
  - PPM TIERS, CONTINGENCY PLANS
- PLANT LIFE EXTENSION, REFRIGERANT RECYCLING & CLEANING
  - SITE AUDIT
  - FLUID ANALYSIS
- RETRO FITTED REFRIGERANTS
  - THERMAL IMAGING
  - PROCESS SPECIALIST i-CHILLER FIT FOR PURPOSE
  - REMOTE MONITORING



# PLANNED SERVICE WORK

OPERATE, MAINTAIN & REPAIR

- ✓ SAFEGUARD AGAINST DOWNTIME
- ✓ FAST AND EFFICIENT PROCESS
- ✓ INCLUSIVE REPAIRS THROUGHOUT WARRANTY

- ✓ TRUSTED SERVICE PARTNER
- ✓ SYSTEM FLUID ANALYSIS OPTIONS
- ✓ COMPLETE PEACE OF MIND

## PLANNED PREVENTATIVE MAINTENANCE & MONITORING

Benefits from a custom maintenance package:

- Preventative maintenance service visits
- Reduced labour rates for planned and emergency requirements
- Discounted spare parts
- F-Gas Compliant\*
- Engineer availability 24 hours, 7 days a week
- Prioritised calls
- Chiller log book on completion
- Glycol Check %
- Direct access to our technical support desk
- 70+ Service Engineers with £15K+ Spares Stock Per Van

*\*An ICS Cool Energy technician will assess your system for refrigerant type and refrigerant change to ensure the system is F-Gas compliant and fully leak tested.*

## MAXIMISE SYSTEM EFFICIENCY

Prolonged hours of system operation can lead to reductions in performance due to wear and tear of components and contamination of water or thermal fluids within the system. In order to combat this, ICS Cool Energy offer additional optimisation capabilities such as water sampling to ensure that circuit fluid is free from particulates and able to maintain optimum heat exchange.

Added value benefits:

- Water analysis
- Thermal imagery
- Fluid Checks
- Remote monitoring

*\*Are available as required*

## CONTINGENCY PLANS & ASSET MANAGEMENT

When your process downtime is not an option, secure your process cooling or heating supply by having ICS Cool Energy deliver a full contingency plan agreement. This includes a full site survey to plan everything required in advance to minimise downtime.

Risk mitigation and contingency planning is ideal for industries that have critical processes including plastics, healthcare, food, beverage, chemical, pharmaceutical, manufacturing, data centres and HVAC.

ICS Cool Energy will work with you to build a plan and prepare your facility to mitigate risks and minimise downtime. Plans may include adding extra valves & pipework into your existing installation to allow a rental unit to be added quickly when needed.

For national, multisite operations, facilities management providers or any business needing to manage multiple temperature control equipment assets, ICS Cool Energy can help.

Our asset management services include enhanced condition based reporting, enhanced regular updates on site activities, critical risk based site contingency planning, energy audits and advice and bespoke SLA's. We take care of everything to keep your industry running.

## REPAIR & REFURBISH

ICS Cool Energy have experience with all major brands of chillers as well as our own and we have a high percentage of first fix during planned maintenance visits as we carry spare parts on all our vans nationwide with automatic stock replenishment.

Our goal is to keep your operations running with routine maintenance and planned refurbishment. If things do go wrong, we'll get you back up and running in the fastest most effective way possible 24/7. We can provide temporary rental equipment where equipment can't be repaired, or the parts are on long lead times with a complimentary extended hire promise.



## ICS PROTECT AGREEMENTS

ICS Protect Agreements are our comprehensive service agreements for your process temperature control equipment. They have been designed to provide operating efficiency, prolong your system life and help you cut your costs.

### WHY YOU SHOULD CHOOSE AN ICS PROTECT AGREEMENT

Most facility managers understand their organisation's dependence on their process temperature control systems. Business owners also realise that their process temperature control equipment is essential to ensure the continued manufacturing and business operations. But equipment that is improperly maintained can fail to provide the level of efficiency needed.

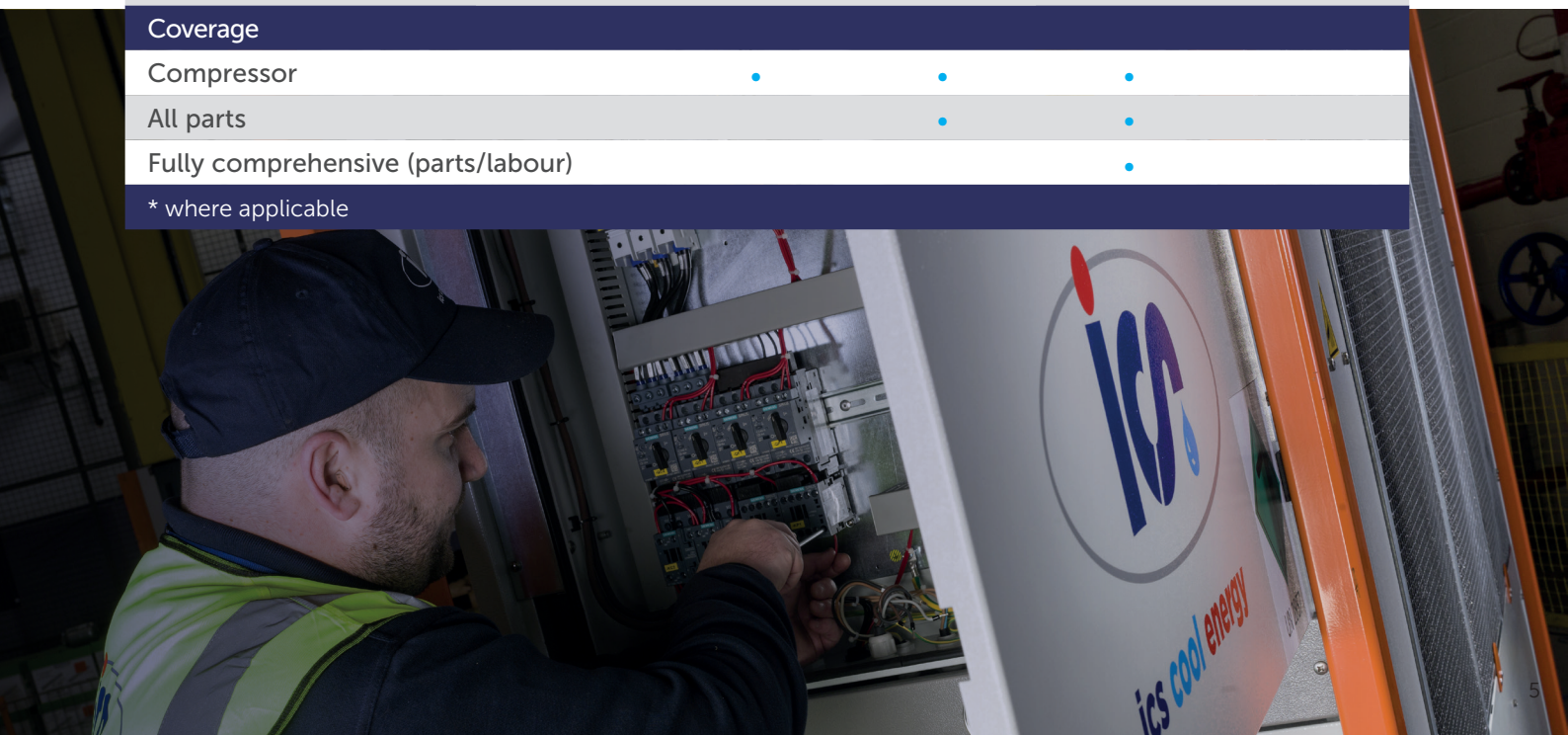
ICS Cool Energy combines the expertise of a global manufacturing and distribution company with local experienced service personnel to help you recognise your process temperature control maintenance needs. With an ICS Protect Agreement, your equipment will receive regular inspection, preventive maintenance, and proper calibration. Any potential problem will be corrected before anyone at your site becomes aware of it.

With three service level options, you know exactly what services and parts are covered. ICS Protect Agreements help you eliminate the risk of high cost repairs and predict your maintenance costs. The bottom line is, you can save money while obtaining a complete portfolio of value-added services.

ICS Cool Energy service experts will listen to your needs and help you select the agreement that best fits your application.

A simple, stress reducing strategy.

	BRONZE	SILVER	GOLD
<b>Liability</b>			
24 hrs/day, 7 days/week	•	•	•
<b>Maintenance</b>			
<b>Preventive</b>			
Inspection visits	•	•	•
Annual maintenance	•	•	•
Virtual maintenance	⊙	⊙	⊙
<b>Predictive</b>			
Oil analysis*	•	•	•
Coil cleaning		•	•
Water sampling	•	•	•
<b>Coverage</b>			
Compressor	•	•	•
All parts		•	•
Fully comprehensive (parts/labour)			•
* where applicable			



A photograph of industrial equipment, likely a chiller or pump system. In the foreground, there's a grey control panel with several indicator lights (green and yellow) and a red emergency stop button. Below the panel is a large, orange-painted metal frame. Inside and around the frame are various pipes, valves, and mechanical components. In the background, a person wearing a white hard hat and a high-visibility yellow safety vest is working on the equipment. The scene is set outdoors or in a large industrial facility.

# EMERGENCY & SUPPORT SERVICES

BREAKDOWN, RENTAL & SUPPORT

## 24/7 BREAKDOWN & TECHNICAL SUPPORT

We are on hand to help with all temperature control equipment breakdowns and offer 24/7 technical support 365 days of the year. This is vital to ensure we keep businesses operational, day or night, rain or snow and deliver on our keeping industry running promise.

Our network of 70+ Service Engineers' vans and depots are equipped with spare parts to ensure that when your equipment fails, we don't. Speed of response is paramount to your business, so we have set up our own business processes to deliver just that. We constantly review what we carry on our vans and in stock in Southampton and Bradford to make sure your equipment can continue doing what it needs to.

## 24/7 BREAKDOWN RENTAL

It is critical that process and facilities temperature control runs efficiently and uninterrupted for manufacturers, FM/M&E companies and healthcare providers.

Any changes in operation, from a chiller failing to cool effectively, to full on hot water or heating breakdowns can be catastrophic.

In the manufacturing sector it is essential to keep processes running smoothly and avoid unwanted and unnecessary costs. Conversely, in hospitals and the healthcare sector as whole, any dips or issues can cause massive disruptions for patients.



Having a planned preventative maintenance contract in place on all chillers and units is highly recommended. Additionally, having a service partner with the necessary infrastructure and 24/7/365 response is especially important. ICS Cool Energy have over 30 years' experience providing both.

In an ideal world, any issues with chillers, boilers or temperature control equipment could simply be rectified by either:

- A)** a telephone call with a service technician who can troubleshoot remotely, or
- B)** a prompt visit from a service engineer (who carries spare parts on their van) when an over the phone solution is not effective.

Unfortunately, there will be instances where a quick fix just cannot be achieved, due to a spare part being on a longer lead time or a repair being more complicated and time consuming.



## GLYCOL

Glycol is intended to prevent freezing & damage to systems and equipment that can result in production downtime. It's the preferred alternative to using mains water in heating or cooling systems.

ICS Cool Energy offer a specially formulated FlowCool range of glycol based products which importantly incorporate organic inhibitors (not all glycol products include inhibitors but they are essential to avoid system corrosion).

They are industry recommended and meet the BS5117 standard for use within two way cooling and heating processes. The complete range includes industrial grade glycol, suitable for Food Grade applications and bio degradable glycol. All available for next day delivery in 5l, 25l and 1,000l IBCs.



## REPLACEMENT AND SPARE PARTS

ICS Cool Energy stock a wide range of parts and spares on site in the UK and on our Service Engineers' vans (each van carries £15K+ worth of spare parts) for both their own and other manufacturers units, meaning they can be sent to your site quickly or replaced during emergency or planned maintenance helping you to keep your operation running. The Spares Team offer advice on what part you may need, or you can simply get in touch to specify the part you need.

A photograph of industrial equipment, likely a chiller or cooling tower, with large pipes and valves. The ICS Cool Energy logo is visible on a panel in the background.

# IMPROVEMENT SERVICES

ENERGY, SUSTAINABILITY & UPGRADES

## 24/7 BREAKDOWN & TECHNICAL SUPPORT

Improve your existing temperature control equipment to reduce energy costs, reduce carbon emissions, extend plant life and mitigate breakdown risk. ICS Cool Energy conduct no obligation energy analysis audits and consultation to illustrate the best opportunities to improve energy efficiency whether through free cooling, heat recovery or efficiency improvements such as adiabatic enhancements or variable speed drives.

We provide data to show how efficient your equipment is operating and recommend ways it can be improved with expected payback periods.

## RENEW & UPGRADE

Re-think what is possible when reviewing aged temperature control equipment. For chillers under consideration for replacement, often major components and the base framework are perfectly serviceable. ICS Cool Energy can customise a factory refurbishment on site to replace and upgrade what needs changing but reuse what is serviceable. Prevent the upheaval of replacement where built in and allow us to refurbish and rebuild your equipment in situ for a sustainable economic solution to plan life extension without capital expenditure.





	1 (No Flame Propagation)	2 (Lower Flammability)		3 (Higher Flammability)
A (lower toxicity <400ppm)	A1 – inc. CFC's R-718 (Water) R-744 (CO2) R-22 R-410a R-407c R-513a R-1234zd	A2L – inc. HFO's R-32 R-454b R-1234yf R-1234ze	A2 – inc. HFC/ HCFC's R152a	A3 R-290 (Propane) R600a (Isobutane)
B (higher toxicity)	B1 R-123	B2L R-717 (Ammonia)	B2	B3 R-1140

	Type	Refrigerant	ODP	GWP	
Synthetic	CFC	R-12	1	Very High	10,910
	HCFC	R-123	0.012	Low	
	HFO	R-1234ze	0	Ultra-Low	1
	HFC	R-134a	0	High	1,430
	HCFC	R-22	0.05	High	1,810
	HFC	R-32	0	Medium	675
	HCFC	R-401a	0.027	Medium	
	HFC	R-404a	0	Very High	
	HFC	R-407a	0	High	
	HFC	R-407c	0	High	
	HCFC	R-408a	0.016	Very High	
	HCFC	R-409a	0.039	High	
	HFC	R-410a	0	High	2,090
	HFO	R-454b	0	Low	466
	HCFC	R-502	0.18	Very High	
	HFC	R-507	0	Very High	
	HFO	R-513a	0	Medium	631
Natural	Isobutane HC	R-600a	0	Ultra-Low	
	Ethane	R-170	0	Ultra-Low	
	Propane	R-290	0	Ultra-Low	
	CO <sup>2</sup>	R-744	0	Ultra-Low	1
	Ammonia	R-717	0	None	
	Water	R-718	0	None	

As members of the Carbon Trust, ICS Cool Energy's mission is to reduce waste heat pollution and save customers' energy through expert consultation and technology leadership. As part of an overall enterprise the challenge is to reduce customers' footprint by one Gigaton (1,000,000,000 metric tons) of carbon emissions (CO<sub>2</sub>e) by 2030.

- We offer chillers from 40 – 610kW running on R454B refrigerant, which has an ozone depletion of 0 and a low global warming potential.
- We offer chillers from 320 – 2MW running on R1234ze refrigerant, which has an ozone depletion of 0 and an ultra-low global warming potential.
- Free Cooling projects can save up to 80% of temperature control energy costs
- Heat pumps are a renewable energy and can improve TER (Total efficiency ratio) from 1.5 to 9 giving 600% potential efficiency gain. Why waste "waste heat"?
- Energy efficiency enhancements include: adiabatic, variable speed drives, EC fans, water treatment

# RENTAL SOLUTIONS

Renting can bring the best of all worlds. ICS Cool Energy's 500 MW/50M+ fleet is modern, compact & energy efficient; expertly maintained with a 60 point check before certified as ready for hire. Fully trained and dedicated hire team with over 35 years' experience and more than 30,000 hire projects completed.

## COOLING

- Cooling capacities from 3kW to 1.4MW
- Air & water cooled chillers
- Low temperature chillers 10°C down to -40°C
- Dry air coolers up to 500kW
- Cooling Towers up to 2MW
- Air handling units & fan coils
- low temperature fan coils down to 21°C
- Heat exchangers up to 1.4MW
- Cold room conversions & Cold Stores to -60°C



Air & Water Chillers  
3kW - 1290kW



Dry Air Coolers  
& Free Cooler  
3kW - 1290kW



Cooling Towers  
Supporting duties  
up to 2MW



VLT Chillers  
Cooling Solutions down  
to -40°C



Air Handling Units  
10kW - 350kW



Fan Coils & Fan Coils LT  
5kW - 50kW



Portable Air Con  
& Air Purification



Cold Storage  
Cooling Solutions down  
to -60°C

## HEATING

- Heating capacities from 3kW to 2MW
- Domestic Hot water (DHW)
- Space & District Heating
- Fuel delivery, management and monitoring
- Single or dual circuit
- Containerised or in bespoke framework
- Can be supplied with AHUs or Fan Coils



Oil, Gas & Steam Boilers  
Up to 200kW



Diesel Heaters  
70kW, 100kW & 200kW



Fan Heaters  
3kW to 42kW



Electric Boilers  
3kW to 40kW



Domestic Hot Water  
150kW to 1300kW



Fuel Tanks 978L, 2900L  
& 900L

## PORTABLES

- Spot Coolers
- Portable AC
- Air Purifiers (*stand alone & ceiling mounted*)
- Fan Coils
- AHUs
- Portable Heaters
- Radiators
- Fan Heaters
- IDFs



## FUEL MANAGEMENT SERVICE



# EQUIPMENT SALES SOLUTIONS

ICS Cool Energy has vast experience in the design, manufacture, installation and commissioning of temperature control solutions for industrial and critical process applications as well as facilities and buildings.

We will understand your precise temperature control requirement from the outset and offer consultation & expert assistance right through from solution design & manufacture to SAT & FAT of your equipment. Our aim is to provide high performance, reliable, energy efficient and cost effective solutions that are right for your application and will last.

## PACKAGED PROCESS CHILLERS UP TO 469kW



## FREE COOLING

## FIVE YEAR WARRANTY



An industry-leading five year warranty is available on ICS Cool Energy's best selling i-Chiller units as standard\*. Extended warranties are provided with safety, efficiency and complete reliability in mind, ensuring that chillers operate at optimal efficiency.

\*5 year warranty applies to all new i-Chillers commissioned by ICS Cool Energy and purchased with a PPM plan, effective 1st June 2022.

## BESPOKE CHILLERS



## AIR-COOLED SCROLL/ SCREW CHILLERS UP TO 3.2MW

- i-Chiller packaged process chillers from 1 to 469kW
- APTUS chillers with scroll/screw compressors from 17kW to 3.2MW
- IMPERIUM chillers with screw compressors from 236 to 3.2MW
- Low temperature process chillers
- Low GWP (global warming potential) chillers
- Chillers running on R454B from 40-610kW
- Chillers running on R1234ze from 320kW – 2MW
- Water source heat pumps
- Free cooling, adiabatic & dry air coolers
- Water, oil and steam to water process temperature control units (TCUs)



i-Temp Compact



i-Temp



i-Temp Max



## TURNKEY PROJECT MANAGEMENT, DESIGN, INSTALLATION & COMMISSIONING

Our in house design and project management team will work closely with you to ensure that your process cooling, heating or temperature control equipment is tailored to your site footprint, operation and production requirements.

Wherever we can, we'll make recommendations to save you energy and budget without compromising the quality of your output.

With the largest fleet of hire equipment in the UK, we can provide temporary solutions while we complete your installation.

We understand how important your equipment is to your production and ensure with every installation that it's easily accessible for ongoing maintenance and we can take care of this for you too.

Every project can be completed so you can arrive at site and focus on your production without any hassle.



Our team will project manage:

- Delivery to site
- Lift and shift of chiller/temperature control equipment
- Final positioning of unit(s), including new bases/mezzanine floor builds etc.
- Flat pack chiller builds on site if there are access or space constraints
- New pipework
- Getting the system installed
- Commissioning the system
- SAT (Site Acceptance Test) if necessary

# FLEX MEMBERSHIP



## WHAT IS FLEX MEMBERSHIP EXACTLY?

FLEX membership allows you to have the latest and most energy efficient temperature control equipment with maintenance and breakdown cover included for a monthly subscription and no capital expenditure.

Equipment and maintenance subscriptions without CAPEX and flexibility to upgrade. Spend your time doing what you do best and let us fully manage your temperature control needs within a fixed monthly subscription.

FLEX is our Fixed Long Term Exchange (Long Term Rental) program for bespoke temperature control equipment without the need for capital investment. Benefit from the latest most efficient chiller technology and low GWP refrigerants with the peace of mind that all planned maintenance and emergency breakdown repairs are included for a known subscription cost. Flex your temperature control capacity and upgrade to new equipment for additional running cost and carbon footprint savings.

Monthly subscription	Temperature control equipment without the need for capital
Bespoke designed long term solution for your application	Options to exchange and upgrade the equipment as technology improves
Options to FLEX capacity add and remove equipment with demand	Fully inclusive of all maintenance, warranty and emergency repairs for the contract duration

## THE BENEFITS AND WHAT IS INCLUDED IN FLEX MEMBERSHIP?



No upfront cost, positive cash flow



Access to the latest technology and refrigerants



Flexible switching to more powerful equipment



Minimised running costs and a fixed monthly rate



Total reliability, total availability



Zero risk and maximum flexibility



Maintenance included



All repairs included



All parts included



Warranty included



24 Emergency call out included



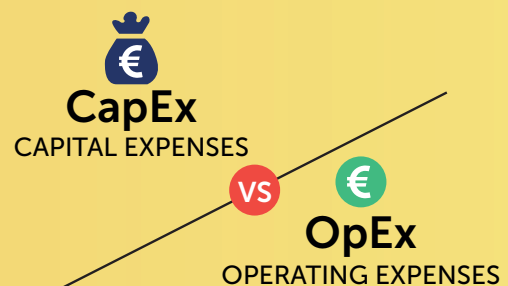
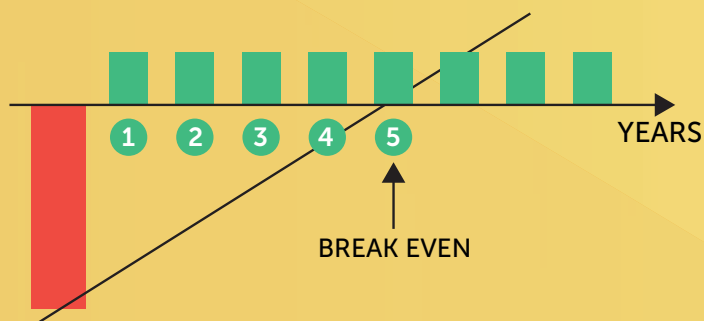
Lowest energy consumption and carbon footprint included



**FLEX**ibility included.

## Financial Flexibility

- Capital expenditure upfront
- Long payback period



- Fixed subscription
- Flexible solution



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## KEEPING INDUSTRY RUNNING

- Rental, equipment & service
- Consultation & technical expertise approach
- Emergency support 24/7 every day of the year



## EMISSION CRITICAL

- Reducing carbon by One Gigaton by 2030
- Free Cooling & Heat Recovery products
- Energy Efficiency enhancements



## FLEX

- Zero capital membership solution
- Flex capacity to pay only for what you need
- Built in contingency planning

## UK & IRELAND COVERAGE

### UK Depots

### Regional Offices

- 70+ Service Technicians with Van Stock
- £15K Van Stock Per Van
- Further stock held in our central warehouse
- All engineers have access to a network of suppliers in the field
- 40+ Sales Engineer Consultants
- 30+ Depot Repair Engineers
- Major Account Management Team
- Service Account Management Team
- £50M+ 500MW Fleet
- 6,000+ Customers
- 24/7 Emergency Support

For Service, Breakdown Support

& Emergency Rental:

**+44 (0) 800 840 4210 (24hr response)**

Local Offices:

Glasgow: +44 (0) 1689 744 540

Bradford: +44 (0) 1274 740 877

Birmingham: +44 (0) 01675 432 270

Southampton: +44 (0) 2380 527 300

Dublin: +353 (0) 4692 52934



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V2.0 June 2022

