

With you at every stage - no matter the challenge

Rental power, heating and cooling solutions



Data centres need continuous, reliable power and precise temperature and climate-control – even when the grid fails.
That's where we can help.

From building and commissioning new data centres, to upgrades and day-to-day operations, our engineers can design, test and install reliable power, temporary cooling and loadbank services.

AMOUNT OF ENERGY USED BY DATA CENTRES

2 X
every 4 years*



*at current rate

SIZE OF GLOBAL DATA CENTRE CONSTRUCTION MARKET:

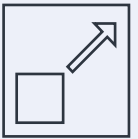


2014 – \$14.59bn
2019 – \$22.73bn



NUMBER OF DATA CENTRES WORLDWIDE

509,147,258.8
million ft²



Of space - enough space to fit 5,955 football fields.

COMPOUND GROWTH:

9.5%



2.5
exabytes
of data

10101010
01010101
10101010



Equivalent to **530,000,000** million songs / **5 million** laptops / **250,000** libraries / **90 years** of HD video

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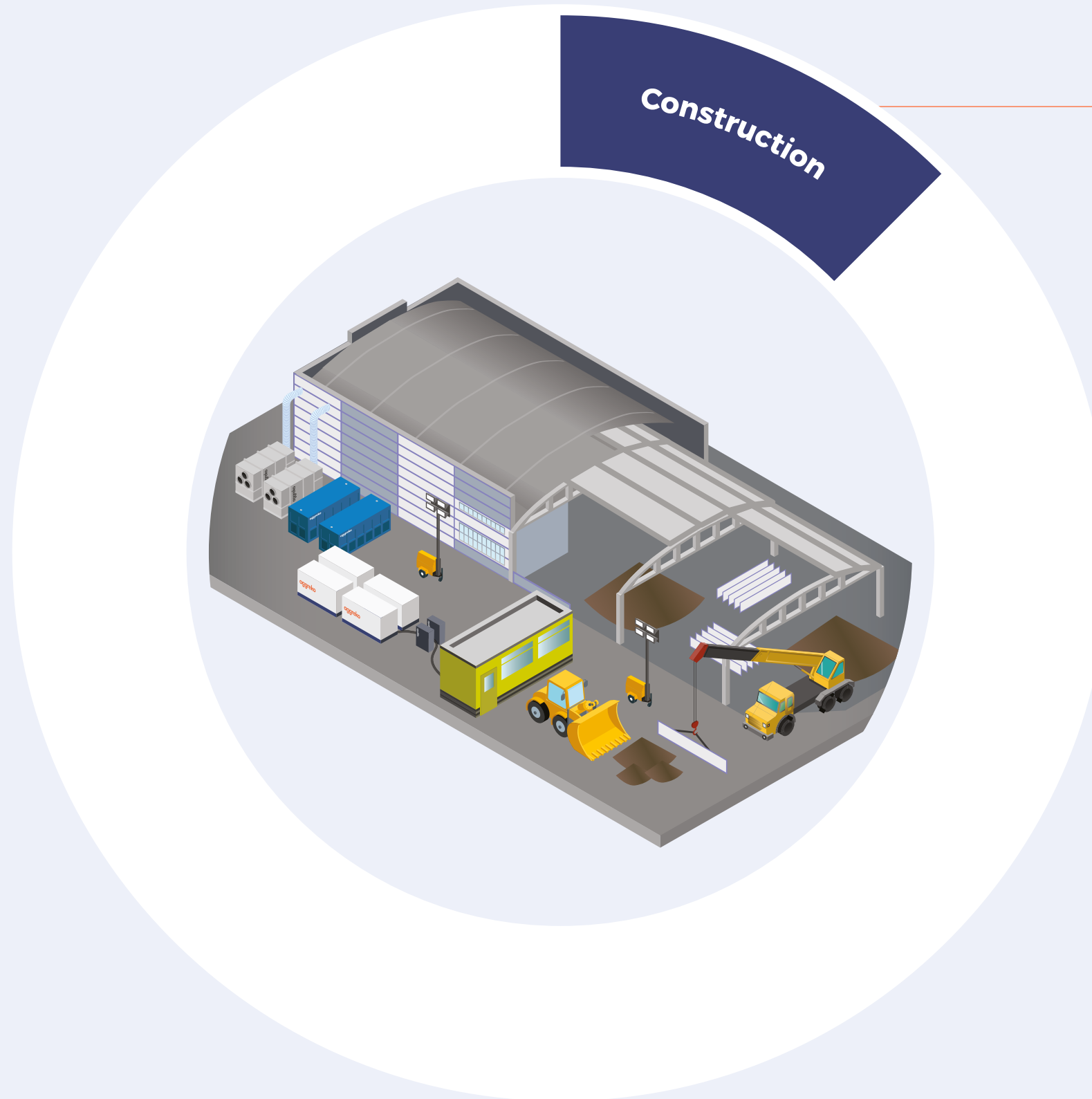
Rental power, heating and cooling solutions



CONSTRUCTION

We'll recommend **the best power, heating and drying** hire equipment for your construction site job.

We have a range of fuel efficient and cost-effective site power options - from super-silent and low emission generators (Stage IIIB) to load-on-demand power and hybrid packages.



THE CHALLENGE:

Construction site power, heating and drying.

OUR KIT:

Temporary site power:

- General construction power and distribution
- Load-on-demand power for variable power requirements e.g office and welfare blocks, temporary lighting
- Tower crane power

Heating and drying:

- Concrete curing and general building dry-out
- Temperature and humidity control to ensure warranties for bought equipment (e.g. switchgear) remain within specification
- Data loggers to monitor ambient conditions
- Forced air and filtration systems to keep areas clean and dust free
- Comfort heating/cooling

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FAT / SAT

Testing your power and cooling systems is crucial to ensuring the resilience of your site. Our engineers can put your equipment through its paces to make sure it's ready to go.



Factory and site
acceptance testing
(FAT / SAT)

THE CHALLENGE:

Temporary power, heating and cooling to support level 3 factory acceptance tests and level 4 site acceptance tests.

OUR KIT:

- Loadbanks and diesel generators to test generators, UPS, busbars and switchgear
- Heaters, emulators, boilers and loadbanks to test chillers and cooling systems

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IST

We support data centres across the globe with their integrated systems testing. No matter how complex your power, heating or cooling systems, **we'll find a solution to test them to their limit.**



Integrated
systems testing (IST)

THE CHALLENGE:

Testing of complete power and cooling systems ready for go live.

OUR KIT:

- Heat load testing - loadbanks, heaters and emulators to simulate electrical IT load and heat output for testing cooling systems
- Loadbanks and low/high voltage power generation to test integrated power systems
- Data logging (plus infrared cameras) to monitor ambient conditions

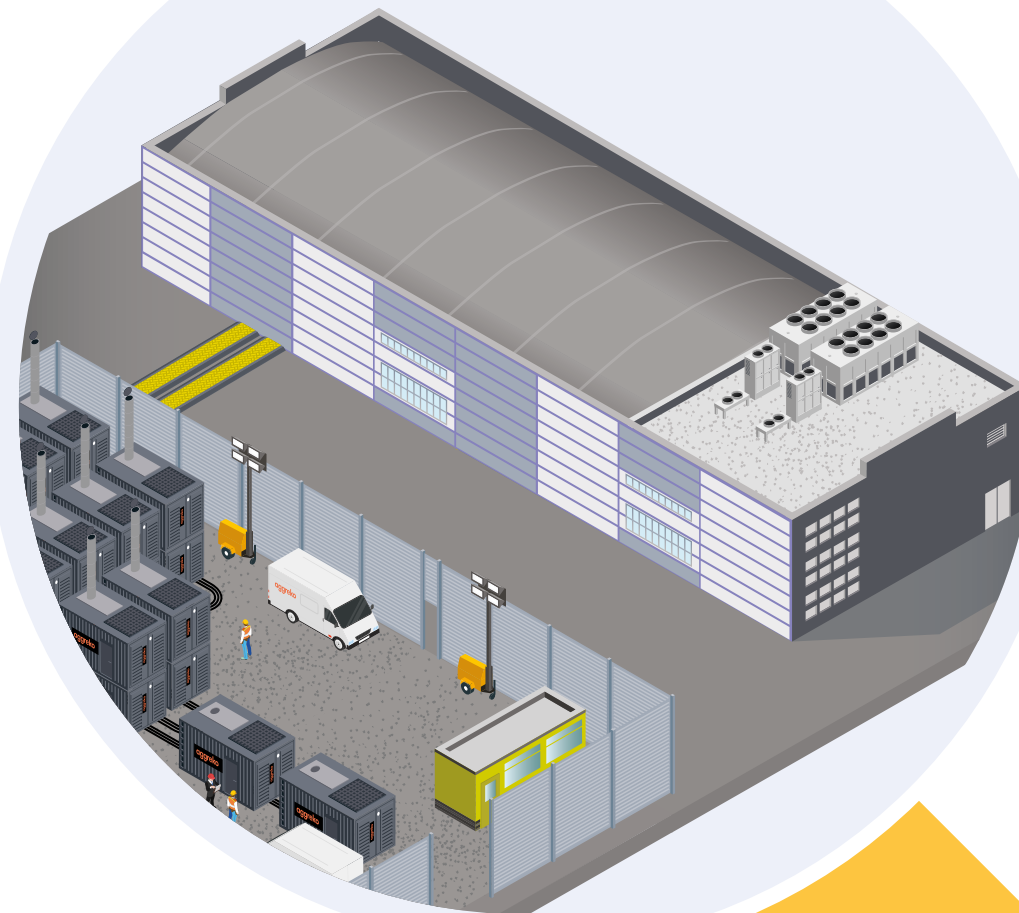
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Rental power, heating and cooling solutions



OFF-GRID POWER

Our gas generators can be used as a stand-alone source of power – independent from the grid. They can replace mains power or support the grid supply – allowing you to achieve full Tier 4 status.



Off-grid power

THE CHALLENGE:

- Off-grid power when grid connection is late for a new build or inadequate for expansion
- Off-grid power to provide additional capacity to grid supply

OUR KIT:

- Gas generation with grid synchronisation to support grid supply
- Gas generation as a 'mini power station' providing complete off-grid power – full redundancy possible

With you at every stage - no matter the challenge

Rental power, heating and cooling solutions

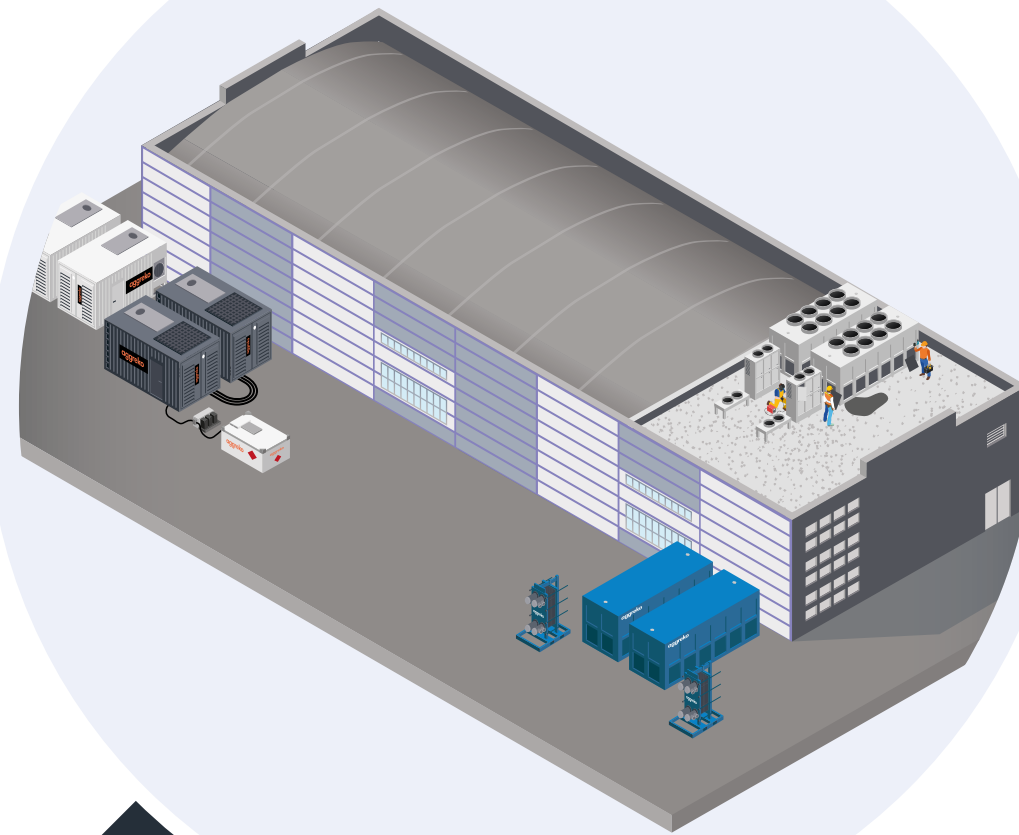
OPERATION AND MAINTENANCE

THE CHALLENGE:

- Regular testing of on-site generators and UPS systems etc
- Support during servicing, maintenance and repair programmes

HOW WE HELP:

- Back-up power generation – diesel or gas generators and UPS – full redundancy possible
- Back-up cooling, using chillers, cooling towers, heat exchangers, air conditioners and air handlers to deliver best solution



Operation
and maintenance

We understand that it's crucial for your site to stay online. So when you're maintaining your plant we can set up back-up power, heating and cooling equipment with **100% redundancy for 100% peace of mind.**

With you at every stage - no matter the challenge

Rental power, heating and cooling solutions



UPGRADE

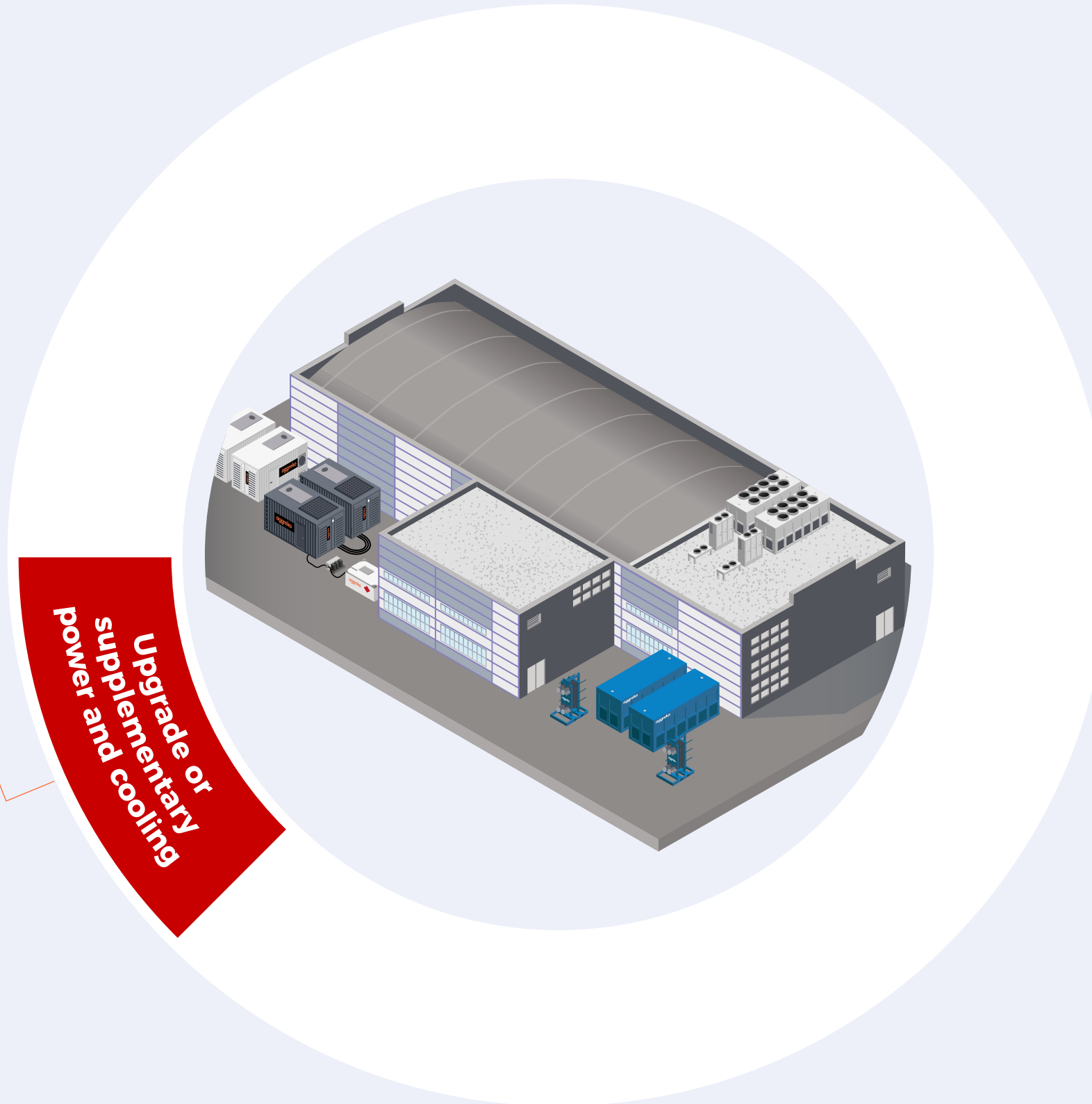
When you need more data storage but don't have the power or cooling capacity to support it - **we can help.** Our temporary power and cooling systems offer 100% redundancy giving you the supplementary support you need.

THE CHALLENGE:

- Additional power capacity to support grid and allow site expansion
- Additional cooling and heating to support site expansion
- Supplementary cooling during periods of hot weather

OUR KIT:

- Diesel or gas generators and UPS - full redundancy possible
- Heating and cooling, using chillers, cooling towers, heat exchangers, air conditioners, boilers, heaters and air handlers to deliver best solution



With you at every stage - no matter the challenge

Rental power, heating and cooling solutions



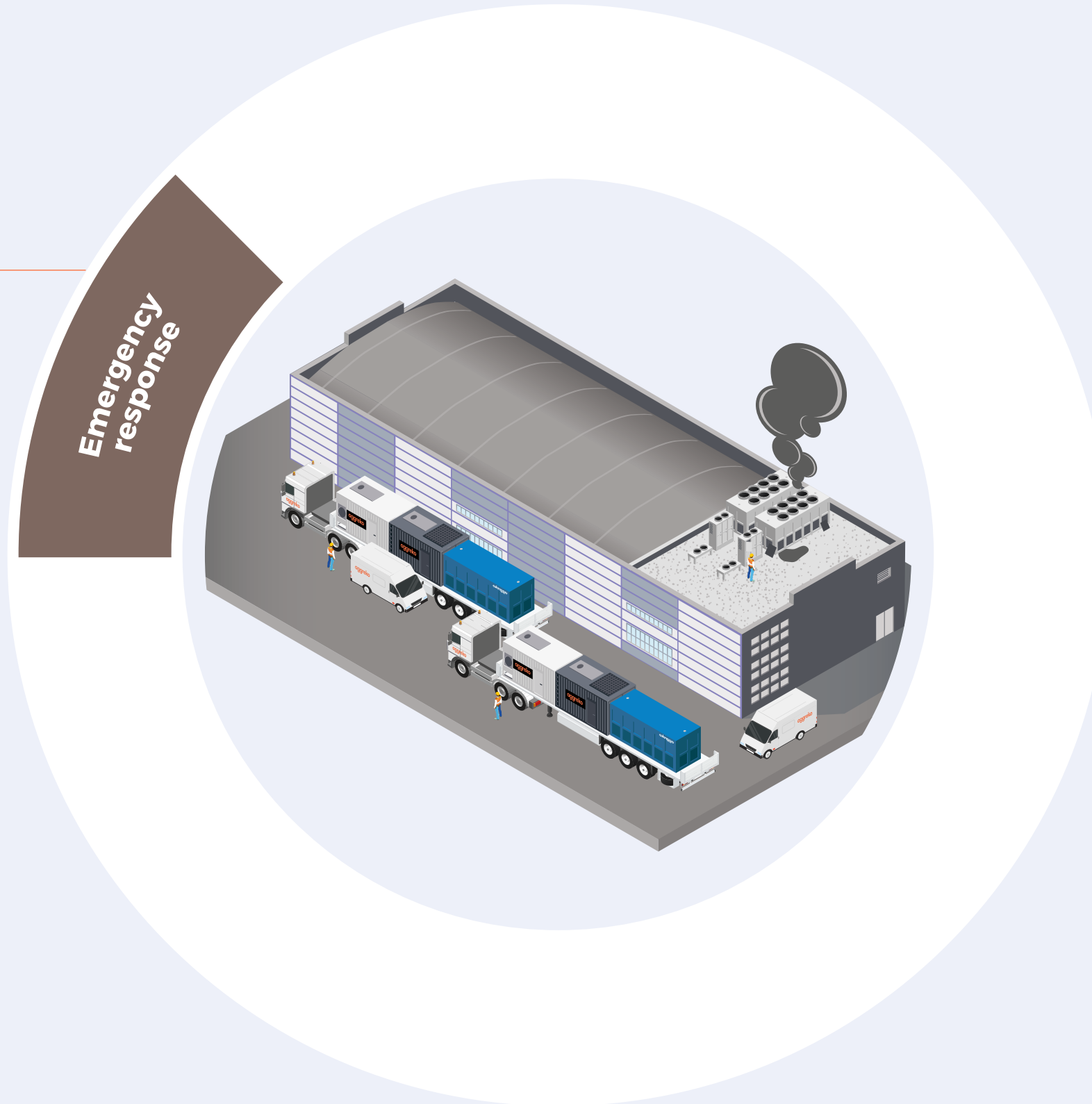
EMERGENCY RESPONSE

THE CHALLENGE:

- Getting your site back up and running at 100 percent uptime should power or cooling systems fail

HOW WE CAN HELP:

- 24/7 power, heating and cooling systems
- Nationwide team of engineers ready to deploy equipment within hours of your call



Our emergency services telephone line is open 24 hours a day, every day of the year. We'll send our local engineers to your site within hours. They'll assess the situation, create a plan and then deliver and install the equipment needed to get things up and running again. Fast.

With you at every stage - no matter the challenge

Rental power, heating and cooling solutions



THE CHALLENGE:

Ensuring 100% uptime with a back-up plan should power or cooling systems fail

HOW WE CAN HELP:

- Contingency plans and emergency support - 24/7 for power, heating and cooling systems
- Ring fenced fleet options available

Contingency
planning



CONTINGENCY PLANNING

Be prepared for your next emergency. We can help you plan for power, heating or cooling outages with our contingency planning service - so you can be sure we've got your back should disaster strike.

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Rental power, heating and cooling solutions



PHOTOS

OVERVIEW

HOME

CONSTRUCTION

We'll recommend the best power, heating and drying hire equipment for your construction site jobs.

We have a range of fuel efficient and cost effective site power options - from super silent and low emission generators (Stage II) load-on-demand power and hybrid packages.



Container generator being craned into place at data centre construction site.

01 of 02

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CHALLENGE:

Power, heating

Power:

Construction power and

Power for variable loads e.g. office and welfare lighting

Heating:

General building

Humidity control to protect equipment (e.g. switchgear) within

Monitor ambient

Filtration systems to keep air clean and dust free

Heating/cooling

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We'll recommend the best power, heating and drying hire equipment for your construction site jobs.

We have a range of fuel efficient and cost effective site power options - from super silent and low emission generators (Stage II) load-on-demand power and hybrid packages.



Canopy generator and fuel tank at data centre construction site.

CHALLENGE:

Power, heating

Power:

Construction power and

Power for variable loads e.g. office and welfare lighting

Heating:

Office and general building

Power and humidity control to protect equipment (e.g. switchgear) within

Power to monitor ambient

Power for filtration systems to keep air clean and dust free

Power for heating/cooling

With you at every stage - no matter the challenge

Rental power, heating and cooling solutions



PHOTOS

OVERVIEW

HOME

FAT / SAT

Testing your power and cooling systems is crucial to ensuring the resilience of your site. Our engineers can put your equipment through its paces to make sure it's ready to go.



3 x 600 kW electric boilers for factory acceptance testing of data centre chillers.

01 of 02

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CHALLENGE:

Power, heating and cooling to support factory acceptance tests and site acceptance tests.

Supply of diesel generators to test UPS, busbars and switchgear, transformers, boilers and loadbanks and cooling systems

With you at every stage - no matter the challenge

Rental power, heating and cooling solutions



PHOTOS

OVERVIEW

HOME

FAT / SAT

Testing your power and cooling systems is crucial to ensuring the resilience of your site. Our engineers can prepare your equipment through its paces to make sure it's ready to go.



Site acceptance testing using loadbanks to test site generators.

02 of 02

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CHALLENGE:

Power, heating and cooling to support factory acceptance tests and site acceptance tests.

Testing diesel generators to test busbars and switchgear, transformers, boilers and loadbanks and cooling systems

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Rental power, heating and cooling solutions



PHOTOS

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IST

We support data centers across the globe with their integrated system testing - no matter how complex your power heating or cooling systems, we'll find a solution to test them to their limit.



4 MW heat load test using loadbanks.

01 of 01

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CHALLENGE:

Complete power and cooling system testing for go live.

Testing - Loadbanks, heaters and fans to simulate electrical IT load and output for testing cooling system.

Testing at low/high voltage and power to test integrated systems.

(plus infrared cameras)

With you at every stage - no matter the challenge

Rental power, heating and cooling solutions



PHOTOS

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OFF-GRID POWER

Our gas generators can be used as a stand-alone source of power - independent from the grid. They can replace mains power to support the grid supply - allowing you to achieve full Tier 4 status.



Gas generation compound in construction at data centre in Ireland.

CHALLENGE:

When grid connection is not available or build is inadequate

Need to provide additional power supply

Requirement for power supply with grid synchronisation

Need for power supply as a 'mini power station' to provide complete off-grid power - full Tier 4 status possible

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Rental power, heating and cooling solutions



PHOTOS

OVERVIEW

HOME

OFF-GRID POWER

Our gas generators can be used as a stand-alone source of power - independent from the grid. They can replace mains power to support the grid supply - allowing you to achieve full Tier 4 status.



Gas generators powering data centre - up close.

02 of 02

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CHALLENGE:

when grid connection is unavailable or build or inadequate

to provide additional power supply

with grid synchronisation supply

as a 'mini power station' to provide complete off-grid power - full capacity possible

With you at every stage - no matter the challenge

Rental power, heating and cooling solutions



PHOTOS

OVERVIEW

HOME

THE CHALLENGE:

- Regular testing of on-site generator and UPS systems etc
- Support during servicing, maintenance and repair programmes

HOW WE HELP:

- Back-up power generation – diesel generators and UPS – full redundancy possible
- Back-up cooling, using chillers, cooling towers, heat exchangers, air conditioning and air handlers to deliver best results



3 x 1 MVA UPS system to support a planned UPS upgrade. Each 20ft container housed 2 x 500kVA UPS with DX air-conditioner on an N+1 configuration.

01 of 02

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MAINTENANCE

Understand that it's essential to have a backup plan for your site to stay online. So when it comes to maintaining your equipment, we can set up a backup power, heating and cooling equipment with 100% redundancy for 100% peace of mind.

With you at every stage - no matter the challenge

Rental power, heating and cooling solutions



PHOTOS

OVERVIEW

HOME

THE CHALLENGE:

- Regular testing of on-site generation, UPS systems etc
- Support during servicing, maintenance and repair programmes

HOW WE HELP:

- Back-up power generation – diesel generators and UPS – full redundancy possible
- Back-up cooling, using chillers, towers, heat exchangers, air conditioning and air handlers to deliver best



3.15 MVA 11Kv solution delivered as a standby package to support maintenance work on ageing switchgear at a critical data centre site.

02 of 02

aggreko

MAINTENANCE

Understand that it's
for your site to
line. So when
maintaining your
you can set up
to power, heating
cooling equipment
100% redundancy
100% peace of mind.

With you at every stage - no matter the challenge

Rental power, heating and cooling solutions



PHOTOS

OVERVIEW

HOME

UPGRADE

You need more storage but don't have the power or capacity to support it - **we can help.** Temporary power, cooling systems, 100% redundancy and you the temporary support needed.

THE CHALLENGE:

- Additional power capacity to support the grid and allow site expansion
- Additional cooling and heating support site expansions
- Supplementary cooling during periods of hot weather

OUR KIT:

- Diesel or gas generators and UPS with 100% redundancy possible
- Heating and cooling, using chillers, towers, heat exchangers, air conditioning, boilers, heaters and air handlers as the best solution



Additional power to support data centre whilst additional back-up generators were installed to support site expansion.

01 of 02

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With you at every stage - no matter the challenge

Rental power, heating and cooling solutions



PHOTOS

OVERVIEW

HOME

UPGRADE

You need more storage but don't have the power or capacity to support it - **we can help.** Temporary power solutions, cooling systems with 100% redundancy and 24/7 on-site support.

THE CHALLENGE:

- Additional power capacity to support site expansion
- Additional cooling and heating support site expansions
- Supplementary cooling during periods of hot weather

OUR KIT:

- Diesel or gas generators and UPS with 100% redundancy possible
- Heating and cooling, using chillers, heat exchangers, air conditioning, boilers, heaters and air handlers - the best solution



Supplementary cooling to support data centre during site expansion - with automatic control system linked to on-site cooling plant to provide on-demand additional cooling when required.

02 of 02

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Rental power, heating and cooling solutions



PHOTOS

OVERVIEW

HOME

THE CHALLENGE:

- Getting your site back up and running at 100 percent uptime should cooling systems fail

HOW WE CAN HELP:

- 24/7 power, heating and cooling solutions
- Nationwide team of engineers ready to deploy equipment within hours of your call



200 kW chiller installed with power to provide emergency air conditioning at critical data centre site when on-site chiller failed.

01 of 02

aggreko

EMERGENCY RESPONSE

Emergency services open 24 hours every day of the year. We'll send our engineers to your site within hours. They'll assess the situation, develop a plan and then install the equipment needed to get things up and running again. Fast.

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THE CHALLENGE:

- Getting your site back up and running at 100 percent uptime should cooling systems fail

HOW WE CAN HELP:

- 24/7 power, heating and cooling
- Nationwide team of engineers to deploy equipment within hours of your call



2 x 500 kVA UPS system for a data centre in Ireland following a Saturday morning call for emergency power.

02 of 02

aggreko

EMERGENCY RESPONSE

Emergency services
open 24 hours
every day of the
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PHOTOS

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HOME

THE CHALLENGE:

Ensuring 100% uptime with a backup plan should power or cooling systems fail.

HOW WE CAN HELP:

- Contingency plans and emergency support - 24/7 for power, heating and cooling systems
- Ring fenced fleet options available



3 x 200 kW chillers, a 1 MW heat exchanger and 2 x 500 kVA generators supporting a data centre that called off its contingency plan to provide emergency supplementary cooling during a very hot summer.

01 of 02

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EMERGENCY PLANNING

Prepared for your emergency. We help you plan for power, heating or cooling outages with our emergency planning - so you can be confident we've got your back in a disaster strike.

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PHOTOS

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HOME

THE CHALLENGE:

Ensuring 100% uptime with a backup plan should power or cooling systems fail.

HOW WE CAN HELP:

- Contingency plans and emergency support - 24/7 for power, heating and cooling systems
- Ring fenced fleet options available



2 x 800 kVA generators on a load share set-up, being craned into place due to space restrictions. Requirements planned during contingency plan site survey. Power needed during breaker upgrade in switchgear.

02 of 02

aggreko

EMERGENCY PLANNING

Prepared for your emergency. We help you plan for power, heating or cooling outages with our contingency planning - so you can be confident we've got your back in a disaster strike.

CONSTRUCTION

CLOSE

Chillers, heaters and dehumidifiers for heating, cooling and drying out buildings and maintaining constant temperatures

Construction site power and distribution

Site cabins



FAT / SAT

CLOSE

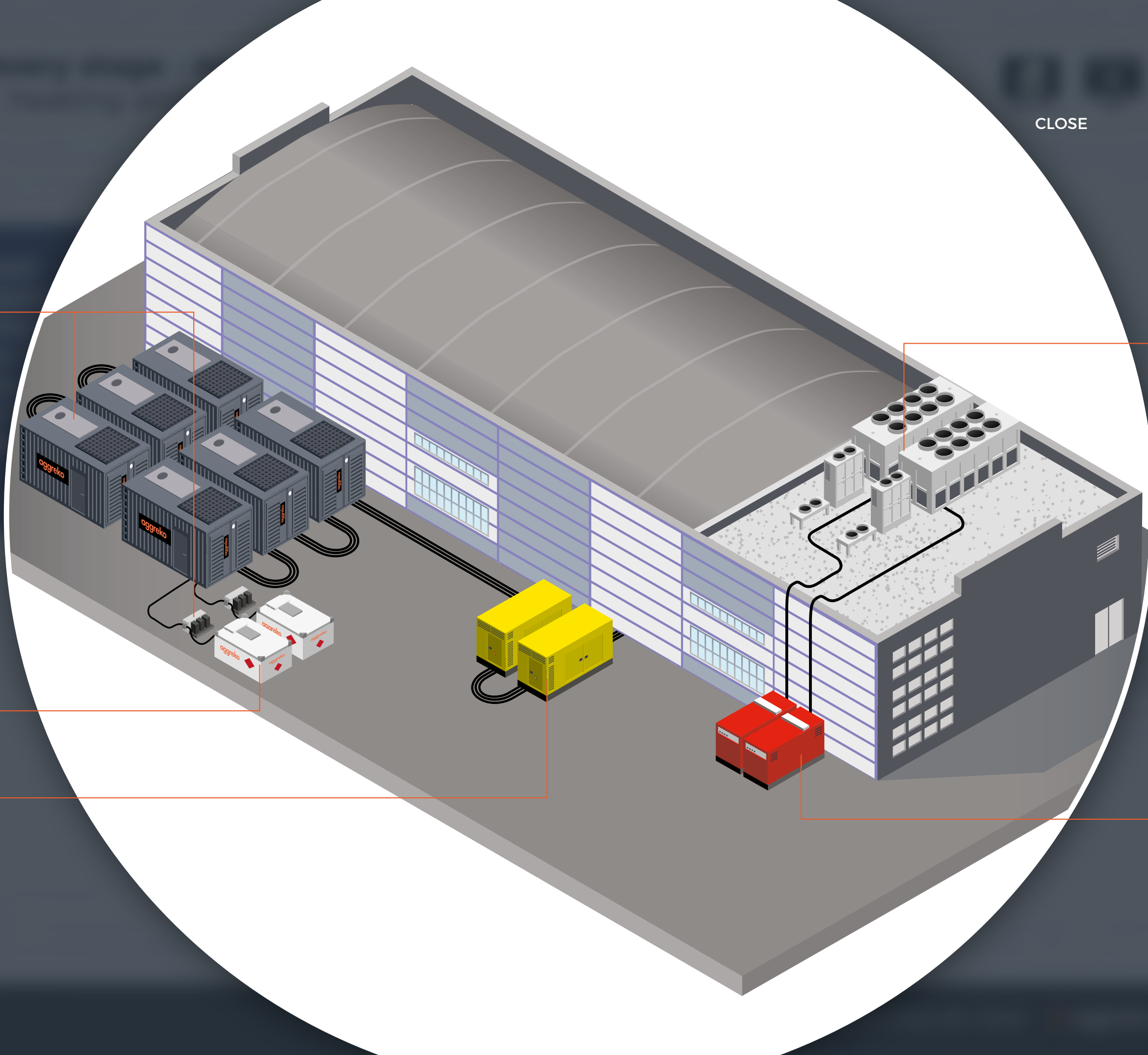
Loadbanks and generators to test power equipment

Site cooling plant

Fuel tanks

Site generators

Boilers to test site's cooling equipment



IST

CLOSE

Servers

Loadbanks for heat load testing

Site generators

Busbars

UPS (Uninterruptible power supply)

PdUs (Power distribution units)

Loadbanks and generators to test integrated power systems



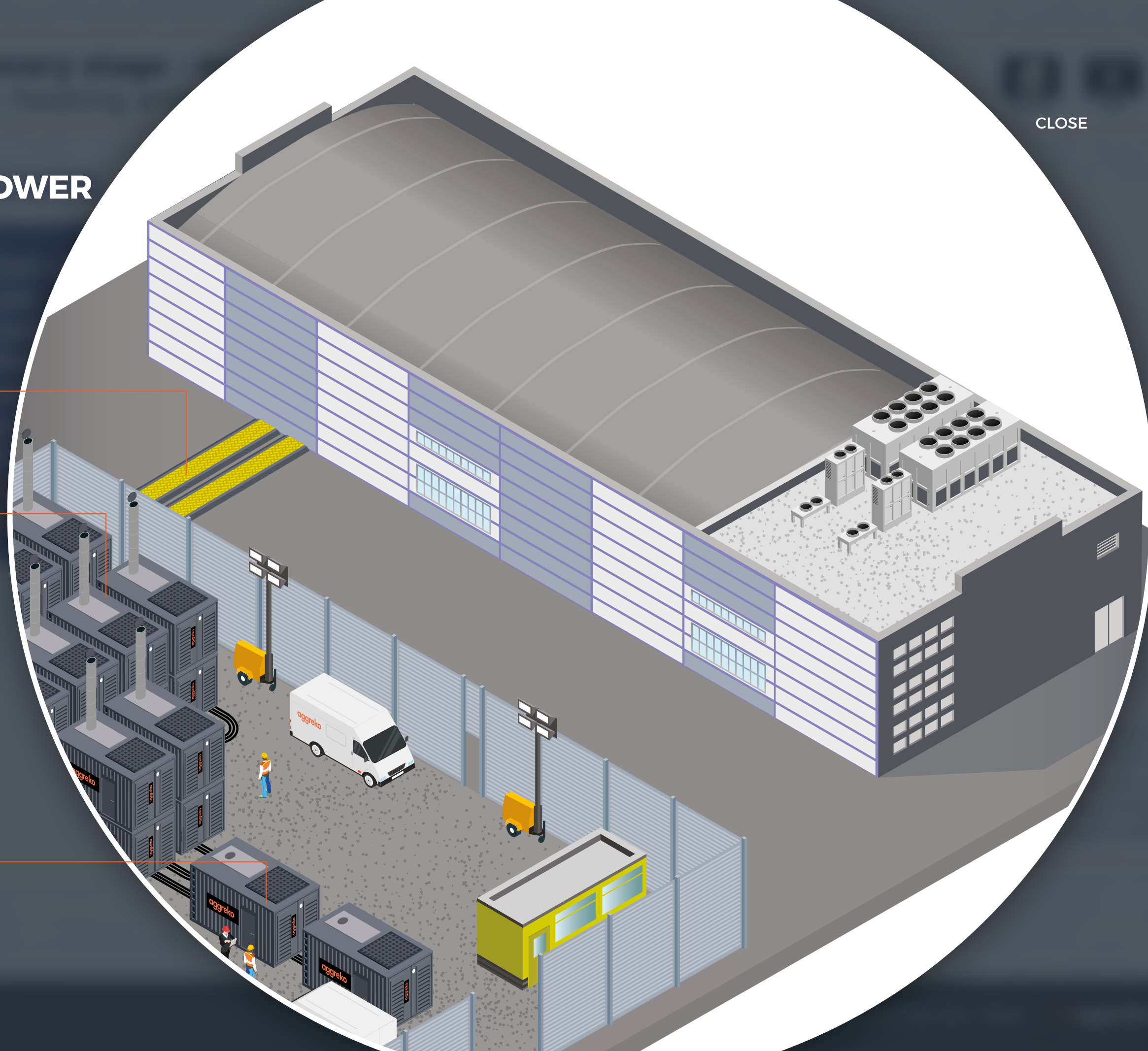
OFF-GRID POWER

CLOSE

Cables and cable cover

Gas generators as standalone power or with grid synchronisation

Transformers



CLOSE

OPERATION AND MAINTENANCE

UPS and/or generators for back-up power



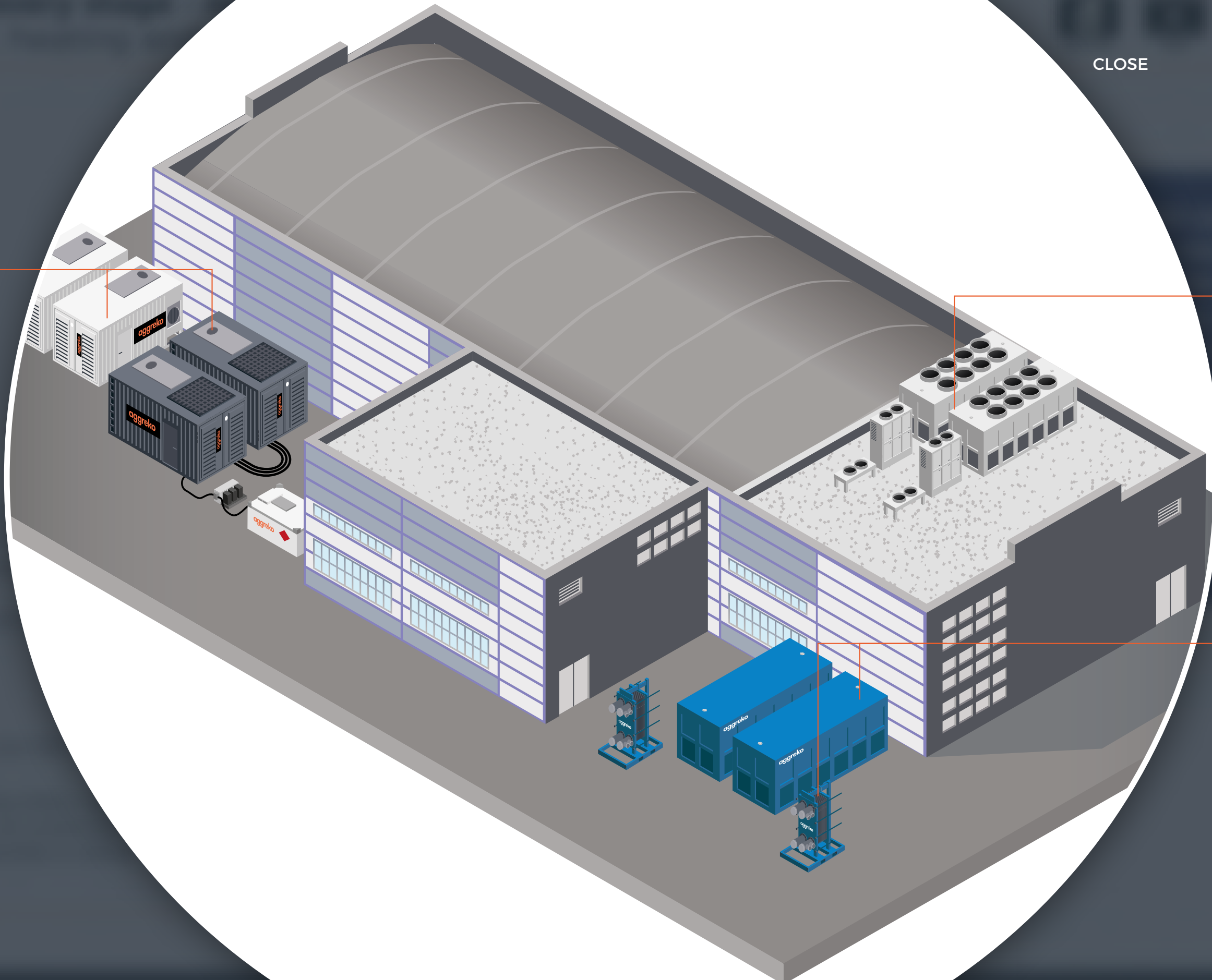
Site cooling plant being repaired

Chillers and heat exchangers providing back-up cooling

UPGRADE

CLOSE

UPS and/or generators for additional site power



Site cooling plant providing insufficient cooling following extension

Chillers and heat exchangers for supplementary cooling

EMERGENCY RESPONSE

CLOSE

UPS

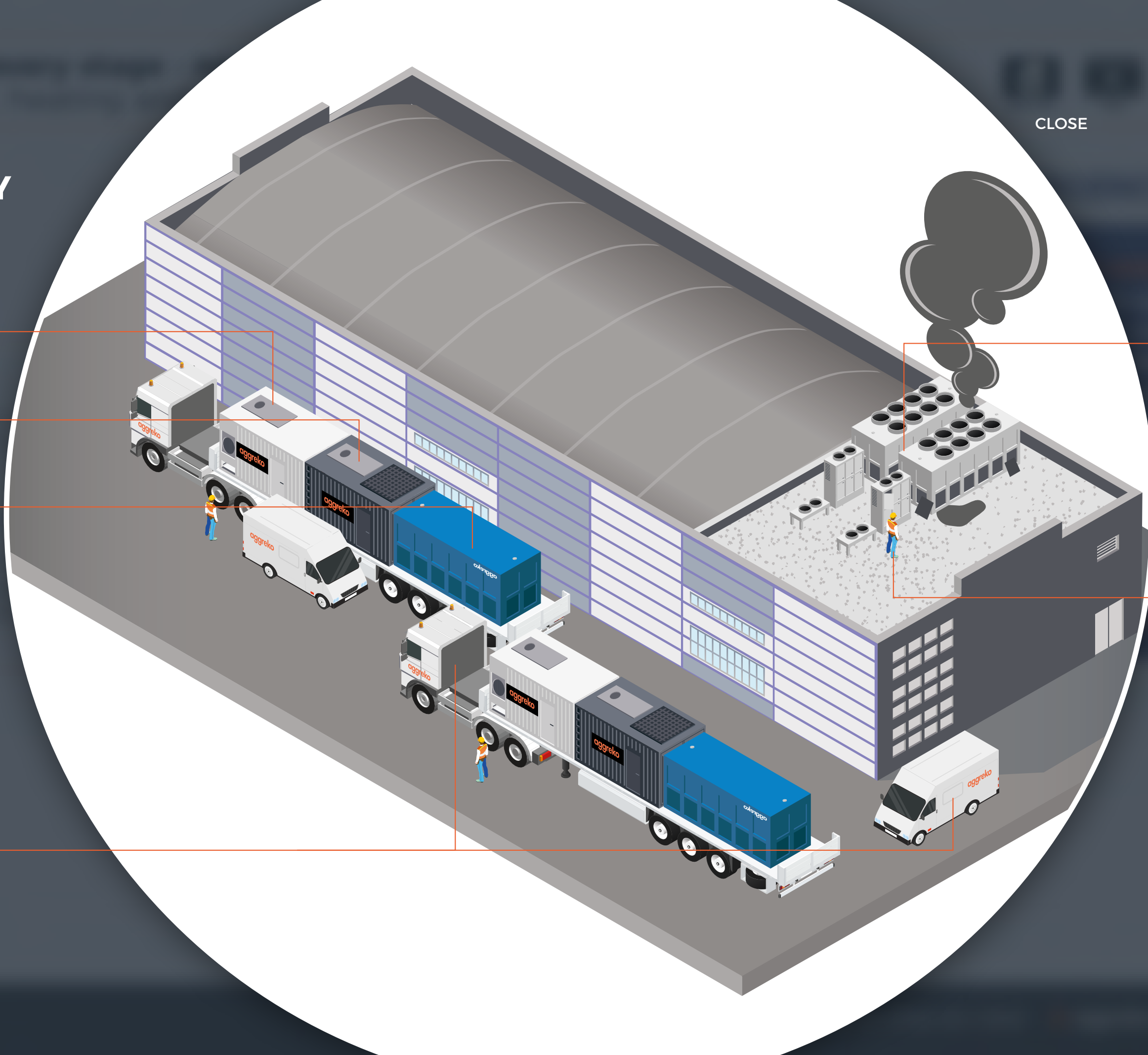
Generator

Chiller

Site cooling plant breakdown

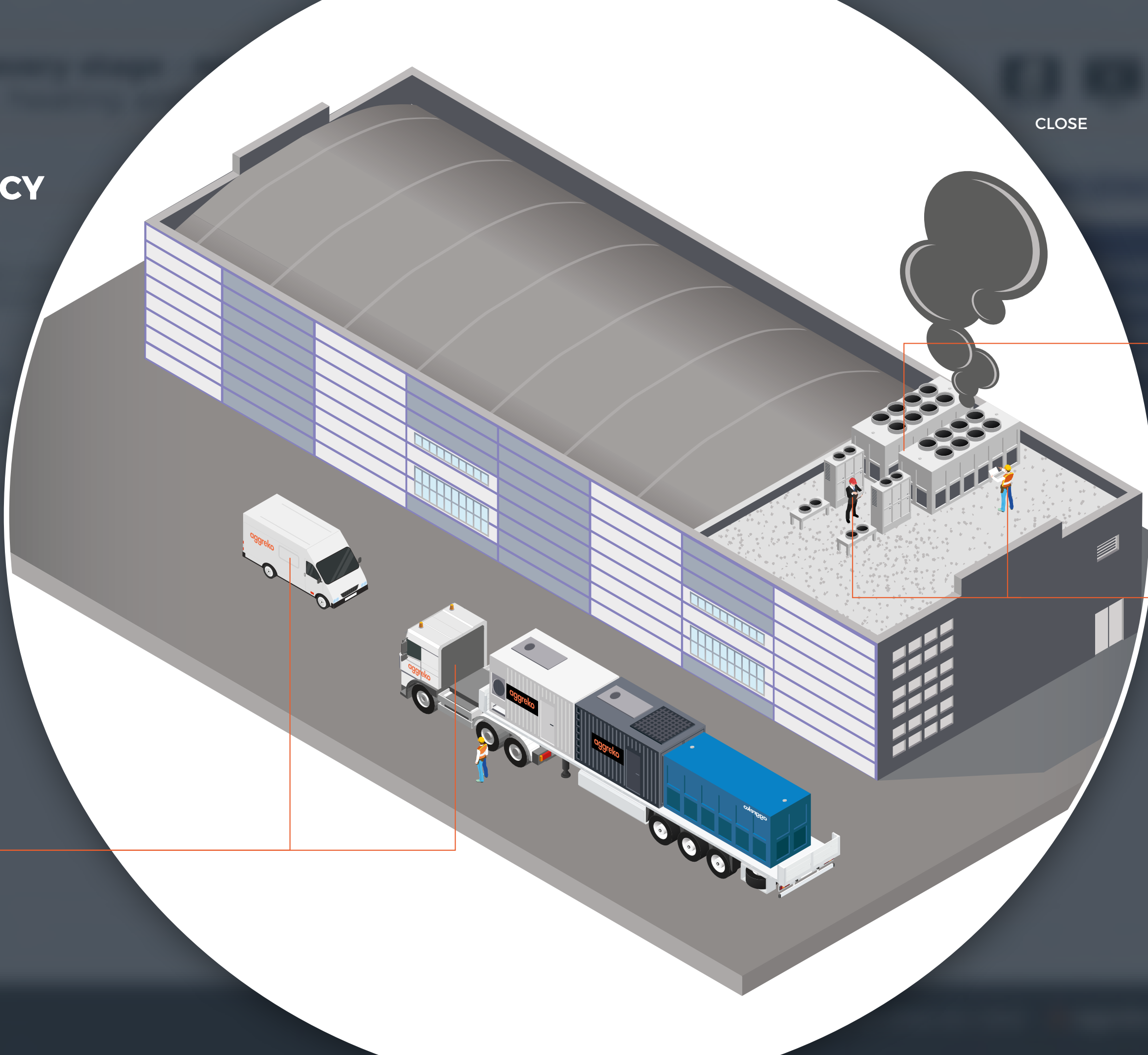
Team carrying out emergency site survey

Aggreko emergency response with power and cooling equipment to support



CONTINGENCY PLANNING

CLOSE



Site cooling plant breakdown

Team following pre-worked contingency plan

Pre-specified equipment ready for installation as described in contingency plan