



ABOUT US



Here at ENVIROAIRCON, we have been providing air conditioning solutions to residential and commercial clients for over 20 years. We have a team of expert engineers who are dedicated to designing and fitting the very best in cooling and heating systems.

We specialise in Split, Multi-Split, VRF, VRV and DVM systems and provide innovative design ideas to both residential and business premises.

During the past few years we have seen a tremendous change in consumer demand for greener solutions, coupled with huge technological advances towards this end by the air conditioning manufacturers. Air conditioning has now become more affordable, the running costs are cheaper and the damage caused to our planet is diminishing. At last, air conditioning is an option that can be considered by individuals and business that care about the environment.

Our Engineers attend regular courses in order to update and improve their skills. We comply with RAC regulations and we strive to maintain our reputation for quality and first class service.

Green Energy

In the past, the liquid or refrigerant used in air conditioning systems damaged the ozone layer. However, due to scientific research and the willingness by manufacturers to continually improve their products; we now have a refrigerant R410A whose impact on the ozone layer has been significantly reduced.

This breakthrough now means that having air conditioning in your home or business has very little damage to the atmosphere, so you can be comfortable with the impact you are having on the atmosphere.

Think energy saving.....Think reduced CO2.....Think Enviroaircon.....

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WHY I SHOULD HAVE AIR CONDITIONING



Air conditioning is used to control temperature within a room or area. Air conditioning has multiple mode functions, the two most commonly used are Cooling & Heating namely:

Cooling:

This is the traditional mode for air conditioning. The mechanism offers precise temperature control. Thus you can create the desired room temperature. It not only provides comfort but also makes you feel fresh and active irrespective of the temperature outside.

Heating:

The air conditioning market has undergone immense technological advancement since its heyday. It has now revolutionized the way we heat our homes & businesses. The new designs are innovatively created with the environment in mind, providing both heating and cooling. This makes it possible to enjoy a desired level of temperature all year round, no matter the condition. It is a more environmentally friendly and cost-effective alternative to conventional heating.

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CASE STUDY AND PROJECTS

Case Study—Dufours Place Dufours Place- Oxford Circus

Enviro Air Conditioning Services Limited installed a complete Heat Recovery Variable Refrigerant Volume (VRV) system covering two floors and replaced and relocated units on the 3rd floor of this office complex.

It was imperative that the engineers at enviro were flexible in their planning as during the installation building refurbishment and expansion were taking place at the same time. So therefore we had to working closely with other contactors.

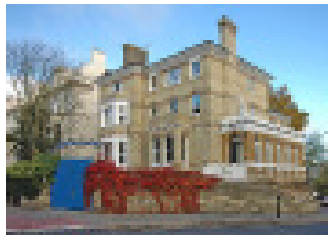
Two Daikin VRV systems were installed to accommodate two floors and 2 small split systems to facilitate server rooms. A total of 20 mini cassette units were installed within the offices, facilitating heating and/ cooling. Several evaporators were relocated over two floors. On the 3rd floor the Sonya Cassettes were replaced with Sanyo ducted systems thought out the office systems were rewired , repiped, pressure tested and recommissioned.



PROJECT DUFOURS PLACE

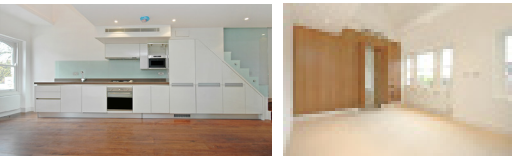


PROJECT HAMPSTEAD HEATH



Case Study – The House Hotel The House Hotel- Hampstead Heath

Hampstead heat project was very challenging. Upon receiving the briefing for this contract, our engineers and in house designers had to deliberate carefully as to the type of system to be installed. The building had been renovated from a hotel to house apartments and office spaces. Bearing in mind the locality of the commercial space we had to make our decisions bearing in mind specific requirements. A major factor was the building regulation requirements, thus the locality of the units were imperative.



Daikin are major manufactures in the air conditioning industry. Offering a wide range of commercial and residential solutions. They are specialist manufacturers in the VRV range Just recently they have developed the basic four way ceiling cassette into a new round flow. The round flow cassette offers a 3600 radial air flow pattern.

Daikin are renowned for innovation, energy efficiency, high quality and reliability. This results in them being at the forefront of developing sustainable refrigerants for use in air conditioning and refrigerant equipment.

Split and Multi—Split System

Split and multi-split systems are ideal for the home and small commercial spaces such as restaurants, small shops, etc. These systems usually operate with up to five indoor unit from a single outdoor cooling only or heat pump outdoor unit.

Daikin Package Air Conditioning System

Daikin packaged air conditioning units are very versatile and efficient. They are versatile as they fit into literally any architectural design. They are easy to install, durable and low noise efficiency. With the air conditioning units ducted into the ceiling this allows the décor to remain intact.

Heat Recovery System

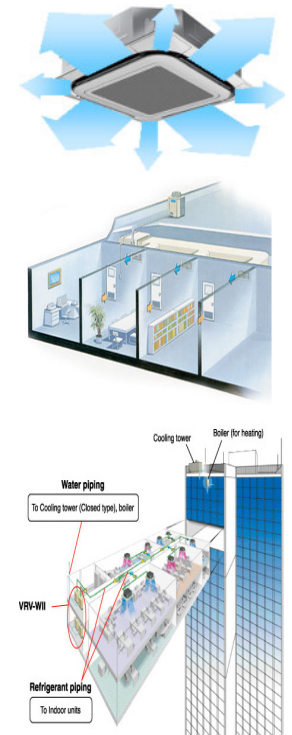
Daikin Heat Recovery System effectively exchange temperature and humidity between supply and exhaust air. The process reduces the air conditioning load by recovering energy lost during the process. The system versatility allows it to work in conjunction the VRV System.

VRV System

The Variable refrigerant volume are designed for medium and large size premises. The system is available in inverter driven cooling only, heat pump and heat recovery format. Due to rising energy and general building running cost a complete and effective system has to be energy efficient, economical, flexible and easily maintained. The Daikin VRV system addresses all these requirements and more.

Design for medium to large premises the third generation VRVIII (10kw-170kw), offers large capacity higher efficiencies, longer pipe length capability and greater fan coil connectivity. The VRV III-S or mini VRV (10kw-15.5kw), bridges the gap between the multi-split and large capacity VRV system and aims to provide the precise efficiency and control required by the smaller office, shop or residence.

Daikin VRV Systems offer the industry's highest COP (Coefficient of Performance rating. All Daikin systems operates with the safe, stable and energy efficient HFC R-410A refrigerant.





Samsung provide numerous solutions for commercial applications. They have developed the DVM range. The Digital Variable Multi Air Conditioning system is a multi zone modular system designed for both commercial and residential application. Its broad range allows each system to apply up to 16 indoor units. The system offers a full range of cooling from 2.2kw to 14.0kw. The system can consists of various indoor units.

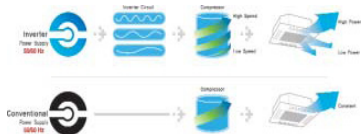
Other Solutions are:

- Free Joint and Multi-split

Samsung has over the years been renowned for their innovative designs and style of products. Over the years they have continued to develop new technologies, making air conditioning applications more energy efficient and green. Their basic indoor units are designed with Smart Inverter Technology and Micro Plasma Ion.

Smart Inverter

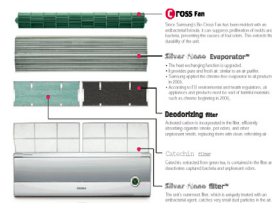
Smart Inverter technology allows for prompt and powerful heating and cooling with minimum power consumption. In cooperation with Samsung's DC rotary compressor, the desired room temperature is reached



- Achieves set temperature quicker
- Low noise levels
- Increase comfort through constant temperature
- Reduce power consumption by 40%
- Saves energy and money
- Wide operation range

Micro Plasma Ion

Samsung's Micro Plasma Ion device generates active hydrogen atoms together with oxygen ions into your room. This in an innovative invention to bond the generated active hydrogen atoms and oxygen ions with protein (3H) in a surface of harmful particles such as viruses, bacteria, moulds and allergens.



TOSHIBA

MiNi-SMMS VRF Heat Pump System

The MiNi-SMMS system has been developed to achieve the best performance in a wide variety of commercial applications including shops, offices and large apartments, where unobtrusive appearance and quiet operation are important.

The MiNi-SMMS system has been developed to achieve the best performance in a wide variety of commercial applications including shops, offices and large apartments, where unobtrusive appearance and quiet operation are important.

The extraordinary flexibility of this Toshiba system is guaranteed by the breadth of the range of SMMS indoor units - up to 13 models with a combination of 81 units. To offer flexibility and maximum air distribution which enables the MiNi-SMMS system to be easily installed for maximum performance

SMMSi - 2 Pipe Heat Pump Outdoor

The 2-pipe (heating and cooling) VRF Super Modular Multi System i (SMMSi) operates with R410A refrigerant and incorporates the latest inverter technology in all outdoor unit models.

In addition, the innovative design incorporates two inverter driven compressors in every module. The capacities range from 14 to 135 kW in cooling mode and 16 to 150 kW in heating mode with a capability to serve up to 48 indoor units.



- Modular design, light weight and compact from 5 to 48 hp, 14 to 150 kW
- Utilises R410A none ozone depleting Refrigerant
- High-efficiency DC twin-inverter compressor
- Indoor unit capacity between 50 and 135% of the co outdoor units
- High EER for reduced energy consumption
- High-lift design, greater location flexibility
- State-of-the-art communication bus system with au configuration addressing
- Advanced auto-diagnosis systems
- Low noise level
- Intelligent control and modulating valves
- Compatible with a wide range of control systems

SHRMi - 3 pipe Heat Recovery Outdoor

The new three-pipe heat recovery VRF(SHRMi) delivers world-class energy efficiency performance. The SHRMi three-pipe system is designed to deliver simultaneous cooling and heating in large buildings such as offices, shops, hotels and hospitals, recovering energy from areas of excess heat and redistributing it to parts of the building requiring heating.

Toshiba's latest generation of VRF air conditioners, becomes the new industry benchmark in the competitive three-pipe VRF sector. The SHRMi series is the most efficient product currently on the market at part-load conditions boasting a world-beating EER and COP which translates into a Seasonal Energy Efficiency Rating (SEER) of almost 8, leaving rival systems behind.

A key to its exceptional performance is the use of up to three super efficient DC twin rotary compressors in each outdoor unit, with dedicated vector-controlled inverters. Toshiba also utilises a separate inverter for each compressor, giving ultra precise control of rotation speed in 0.1Hz increments, exactly matching output to load. The advanced technology results in a starting current of just 1Amp per system, a major advantage where the power supply is restricted.



- Single phase power supply
- Compact and lightweight outdoor unit
- High-efficiency DC twin rotary compressor
- Best COP in the industry: 4.61
- Capacity range 12-15.5kW cooling and 12-18kW heating
- Automatic addressing
- Extended refrigerant piping capability
- Operates up to nine indoor units from a choice of over 80
- Ultra-quiet, utilising remote PMV kit (option)
- All systems achieve energy efficiency class A



- World class efficiency with the highest level SEER's & SCOP rating for reduced energy consumption
- Lightweight and compact design utilising latest coil technology
- Infinity variable control down to 0.1 Hz increments offering fine control and smoothest operation
- Connection of up to 48 indoor units capacities of 8 to 42hp to be combined with up to 135% of the outdoor unit
- Up to three high efficiency DC inverter driven twin rotary compressors per outdoor unit
- Best in class pipe work configuration boasting industry's greatest height difference between indoor units offering greater location flexibility
- Flexible refrigerant flow offering double refrigerant control
- Ultra low noise level
- Operational down to -20°c in heating mode

RAS Inverter High-Wall (AvAnt)

The AvAnt range of inverter high-wall units has been specifically designed for residential applications. The modern design fits well into any room.

Digital Inverter High-Wall

With its slim-line design the Digital Inverter high-wall unit is ideal for offices, restaurants and other applications where elegance is required.

4 Way Cassette Heat Pump System

The Super Digital Inverter Series of cassettes are unobtrusive and flexible which can easily blend in with any room interior. They offer a high performance utilizing minimum energy to help lower your power consumption.

Digital Inverter Ducted Unit

The Digital Inverter series of ducted units can be discreetly positioned in the walls or ceiling. They are ideal for hotels, banks and similar applications, where very low noise levels are needed.

Large Capacity D I, High Static Ducted Unit

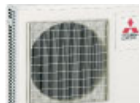
This range of units has been designed to provide a high Capacity output from a very small foot print.

MXZ Series

Advancements in the MXZ Series include efficiency and flexibility in system expansion capabilities. The best solution when requiring multi-system air conditioning needs.



MXZ-2B30VA
MXZ-2B40VA
MXZ-2B52VA



MXZ-3B54VA
MXZ-4B71VA



MXZ-4B80VA
MXZ-5B100VA



MXZ-8A140VA

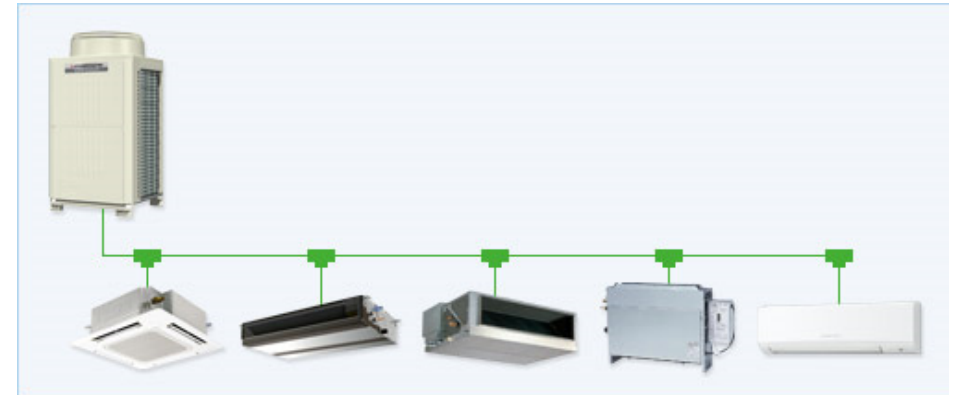


The MXZ Series offers an 8-system line-up to choose from, ranging between 3.0 and 14.0kW. All of them are compatible with specific M, S and P series indoor units. A single outdoor unit can handle a wide range of building layouts.

Industry-leading COP and System Flexibility

Highly efficient, ultra-quiet operation, low power consumption...

Our CITYMULTI systems utilize the innovative technologies, giving CITYMULTI units the same industry-leading COP (co-efficient of performance) classification. These highly efficient systems offer the merits of flexible installation, energy savings and ultra-quiet operation, all combined with the performance reliability and quality promised in the Mitsubishi Electric name.



High Coefficient of Performance (COP)

The latest energy-saving technologies are adopted for the CITYMULTI Series too. COP ratings are among the industry's best.

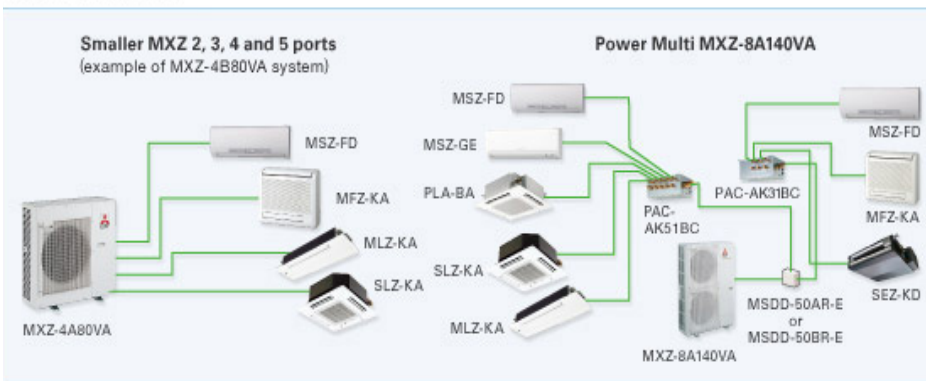
Silent Operation

Our outdoor units achieve high performance in low noise levels with a "low noise mode". Connected to the latest indoor units, the system is capable of offering a comfortable, silent interior space where occupants are not even aware of air conditioner operation.

Choice of Indoor Units

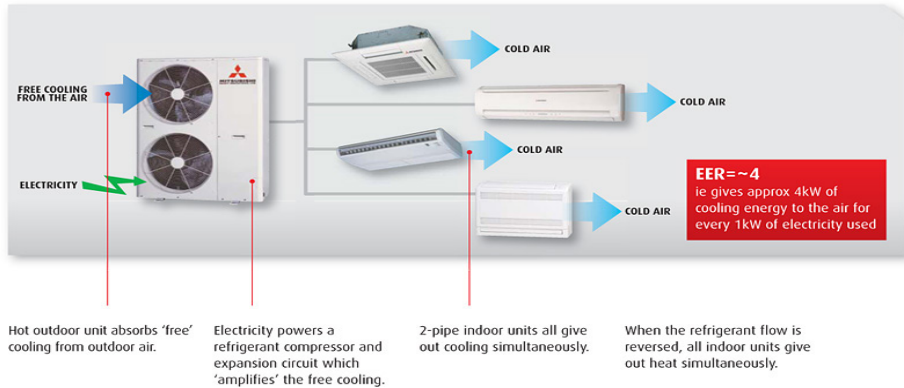
Select the best indoor unit to match room requirement and design needs. We have over 16 models in 8 type variations to choose from.

EXAMPLE SYSTEM





KX6 VRF Systems Heat pump systems



Height difference: **50m (outdoor unit above)**
 Height difference: **40m (outdoor unit below)**
 Furthest indoor unit: **160m**
 Total length: **1000m**

Up to 48 indoor units can be connected to the largest outdoor unit. The range includes 15 exposed and concealed models, in several capacities. A choice of 77 indoor units is available. KX6 heat pump systems operate with 2 inter-connecting pipes, commonly referred to as a '2-pipe system'.

These systems provide either a heating or cooling operation to all indoor units. They are suitable for a wide range of applications from an individual apartment (with the KX6 compact 1/phase system) to an entire multi-storey building, including where there are significant open plan areas to be controlled.

The range starts with a compact, 1 phase model with 11.2kW cooling capacity, up to the largest capacity single outdoor unit in the industry (24hp) with 68.0kW cooling capacity. Outdoor units can also be "twinned" providing up to 48HP/136.0kW on a single system.

The KX6 range has a total piping length of 1000m and the furthest indoor unit can be connected up to 160m from the outdoor unit.

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KXR6 VRF Systems Heat recovery systems (for simultaneous heating and cooling)



Height difference: **50m (outdoor unit above)**
 Height difference: **40m (outdoor unit below)**
 Furthest indoor unit: **160m**
 Total length: **1000m**

KXR6 heat recovery systems operate with 3 inter-connecting pipes, thus commonly referred to as a '3-pipe system'.

KXR6 systems provide both heating and cooling operations to individual indoor units according to the room condition/requirement. KXR6 incorporates highly sophisticated control to condition multiple indoor areas, whatever their requirement for cooling or heating, for applications where the building orientation (N, S, E, W) can mean that heat gain/loss varies on each side of the building.

The range starts from the 8hp model (22.4kW) cooling capacity, up to the largest capacity single outdoor unit in the industry (24hp) with 68.0kW cooling capacity. Outdoor units can also be "twinned" providing up to 48HP/136.0kW on a single system.

KXR6 heat recovery systems – for simultaneous heating and cooling

The KXR6 system inter-connecting pipework has a unique arrangement, with two of the inter-connecting pipes routed through a PFD Distribution Controller, and the third pipe connected directly to each indoor unit from the main pipe run. This reduces installation time and the number of brazed connections on site. The PFD Distribution Controllers are available for single connection, or as a combined PFD 4-way connection, with each connected unit having independent cooling or heating operation.

RESIDENTIAL UNITS

Air conditioning units used in the home are often split, ducted or multi-split systems. However each application can use the same indoor units in the process. Listed below are indoor units usually used in residential designs and installation.

Wall Mounted

These units are economical and cost effective. The unit is designed with a wide airflow and automatic swing vane to assist air flow. The unit comes with washable air filters, air purifiers and plasma filter, these trap and kill germs and bacteria which circulate in the air.



Lightweight and compact
Energy efficient
Air purification and deodorizing filter
Environmentally friendly

Floor and Ceiling Mounted

This type of air conditioning unit is quite versatile. The smart unit can either be installed as a ceiling mount or floor standing. The unit has a sleek design and an excellent air flow mechanism.



Under Ceiling



Floor Standing

Ducted

Ducted units are an ideal in some applications where there is access to ceiling void as it isn't visible. This allows the unit to be installed out of site. The standard filter suction on inverter systems save up to 30% more energy than conventional units.



Benefits
Light weight
Fits Flush into the ceiling
Leaves maximum floor space

Revolutionising Residential Heating

Due to the effect of fossil fuels on the environment and regulatory bodies pushing for more energy efficient ways for residential consumers to heat their home other than using the standard boiler system. Daikin has developed the Atherma Split System. The Atherma is a split system consisting of an outdoor unit and a hydro-box, which can be connected to all standard low temperature radiators and under floor heating system.

What the outdoor unit does is that it extracts free flow air from its surroundings and increases its temperature. This heated air is then transmitted via the refrigerant circuit to the hydro-box. The hydro-box then transfers the heat in the refrigerant to the water circulating in the radiators or under floor heating system. The energy efficiency of the Atherma makes it an ideal solution in reducing energy consumption and CO2 emissions.



COMERCIAL UNITS

With greater densities of employees and the increasing use of different technologies in the work place offices etc will heat up easier. Installing air conditioning systems within offices etc, provides a clean, relaxing and comfortable environment for employees and provides an energy efficient way of climate control.

One Way Blow Cassette

This type of unit is uniquely designed with wide blades allowing more cooling/heating air to enter the room. This cools the room faster and extends the cooling/heating process.

Two Way Blow Cassette

The two way cassette type are very slim, ideal for shallow ceiling voids.



4 Way Blow Cassette

This type of system is an ideal application for shops, offices and small to medium size spaces. The unit offers 2, 3 and 4 way air distribution through variable air flow louvers.

There are two types of systems: suspended and ceiling mounted.



4 Way blow ceiling suspended cassette AC unit

The ideal solution for shops, restaurant and offices without false ceiling
Air can be distributed in 4 directions
Possible to shut off one or two flaps for installation in corners
Air filter, drain pan and heat exchanger are mildew proof

4 Way ceiling mounted cassette air conditioning unit

Compact and lightweight

Excellent low draught characteristics

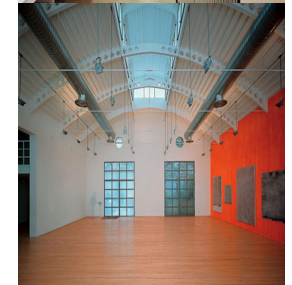
It is possible to use one or two branches for better air distribution

Choice of 8 air flow distribution patterns, this air flow pattern is only available in Daikin

Ceiling Mounted Corner

Ceiling mounted corner cassettes are integrated in the false ceiling. Optimum airflow conditions are created by either downward air discharge, frontal discharge or a combination of both.

For larger commercial Projects there are numerous solutions which are available such as Variable Refrigerant Volume/ Variable Refrigerant Flow, Samsung's DVM solution, Ducted applications and Chill Water System. Further details can be obtained regarding these solutions by contacting us.



THE ENVIRONMENT

Air conditioning systems offers an array of benefits, especially now that the effects of climate change are becoming more visible. Many air conditioning units before January 2004 contained the refrigerant gas know as R22. This type of gas was very harmful to the ozone layer as it contained chloride. Changes made to the regulations now means that the use of virgin R22 in servicing will be banned in 2010 and recycled R22 in 2015. Unit containing this form of gas will have to be replaced.

Enviro Enterprise takes preservation of the environment very seriously. The constant degradation of the earths resources have become of grave concern. It's ironic that the same technologies that help to create these problems are the same being diversified to counteract these problems. We at Enviro Enterprises structured our plans and procedures to comply with the Environmental standards ISO 14001. We are strong believers in recycling; Enviro continuously revises its policies and procedures to facilitate these changes as deemed necessary.

With Regulations changing and the constant drive to improve air conditioning units, manufactures are developing new technologies to make their products more energy efficient and are themselves implementing plans and strategy to aid in the process. Lets see how two of the leading manufacturers seek to aid in the environmental process.

Samsung

Samsung has taken the initiative and has devised environmental programs which will assist in the cleaning and air and water supply. They are actively involved in developing environmentally friendly products and related technology and are strong supporters of green designs.



Adopt-A-Mountain", "Adopt-A-River" Clean-up Campaigns
Developing incinerator that clean-burns 84 tons of waste a day
Researching commercially viable electric cars
Utilising green appliances and environmentally friendly plastics
Children's Painting Contests & Environmental Education

Daikin Sustainable use of energy

Daikin Europe is constantly seeking ways to improve the energy performance of its production facilities and reduce its overall energy consumption.

Reduced environmental impact from refrigerants and improved energy efficiency of air conditioners

Daikin Europe is committed to using and promoting refrigerants that have a reduced environmental impact. It also optimally maintains and manages its installations for the storage and distribution of refrigerants in order to reduce fugitive emissions.

Development of products with reduced environmental impact

Daikin invests heavily in eco-design. It is committed to compliance with all environmental legislation. In addition, its green procurement guidelines further ensure that its products are state of the art with respect to reduced environmental impact.



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