

Environmental initiatives throughout the product life cycle



1

Manufacturing

2

Sales & supply

Daikin's efforts to reduce its environmental impact start as early as the manufacturing stage, comprising of:

Research & development

Procurement

Assembly

While expanding its sales and supply activities, Daikin is working hard to raise awareness among its affiliates and their customers to help protect and conserve the environment:

Sales activities

Logistics



3

Use

4

End of life

Environmental efforts don't stop once Daikin Europe N.V. has sold its products. Throughout its entire product range, Daikin Europe N.V. shows the same pioneering concern for reducing the global warming impact caused by energy use and potential refrigerant emissions:

Residential

Commercial

Industrial

Proving its concern for the environment, Daikin Europe N.V. is among the first manufacturers in the industry to set up voluntary take-back schemes across Europe:

Recycling schemes

2 Sales & supply

While expanding its sales & supply activities, Daikin continues to raise awareness among its affiliates and their customers to help protect and conserve the environment.

The following areas are covered in the sales & supply phase:

Sales activities

Supply

► Sales activities

Ongoing efforts in affiliated companies' offices

Daikin Europe N.V.'s affiliated companies have or are in the process of obtaining ISO 14001 certification (see page 9). This requires continuous efforts to improve their environmental performance. Some examples are given below:

Daikin France: hybrid cars and paper recycling

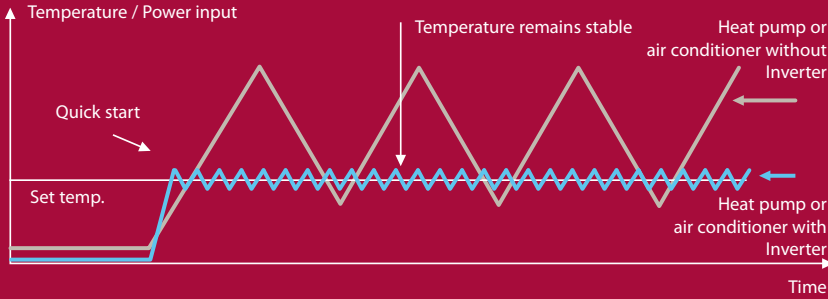
Daikin France is putting significant effort into reducing its team's emissions. More than 80% of its vehicle fleet currently consists of hybrid cars (emitting less than 140 g CO₂/km). The French affiliate also voluntarily contributed to a nationwide paper recycling programme called 'EcoFolio' (www.ecofolio.fr). This sponsored programme aims at improving paper recycling and decreasing the amount of wasted paper.



Daikin UK and Daikin Ireland: green energy

Daikin UK and Daikin Ireland are one step further in reducing their CO₂ emission levels, by respectively opting for 100% renewable electricity and an electricity supplier who sources most of its supply from renewable sources (mainly wind). Daikin UK also added both hybrid and low carbon vehicles to its fleet, and is a part of the 'Carbon Trust', an association to help cut carbon emissions. Finally, power saving features were installed on all Daikin UK ICT equipment including printers and copiers.

Benefits of inverter technology:



➔ With inverter technology the set temperature is reached faster and room temperatures remain more stable. On top of this, it is energy saving.

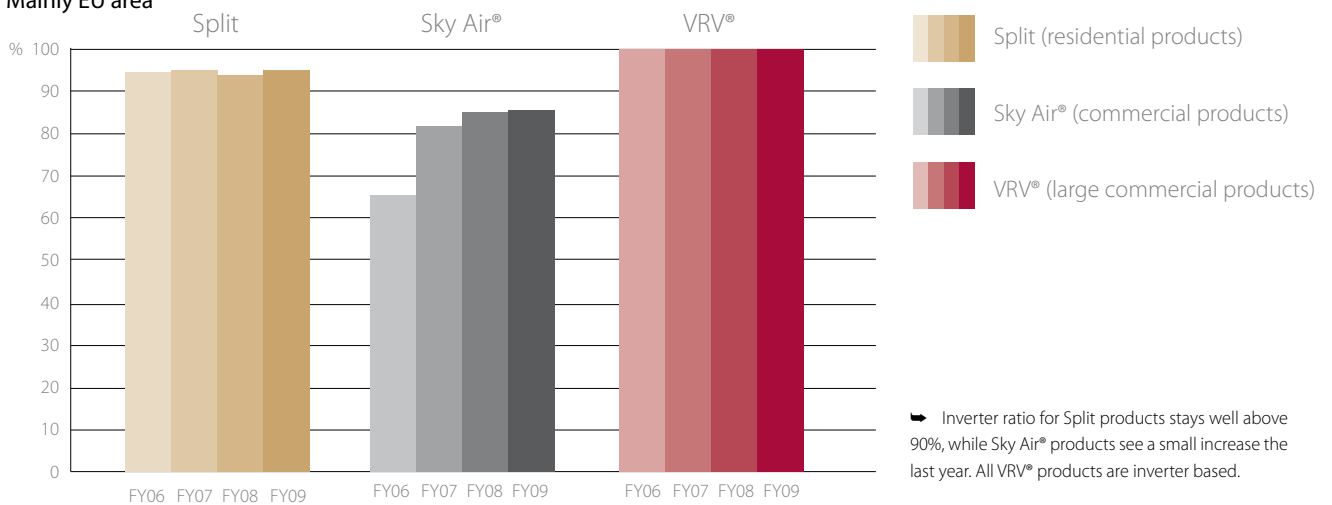
Ongoing efforts towards customers

Focus on energy-efficient inverter technology

Daikin’s affiliates also continue to progress in ensuring that the most efficient systems are marketed and sold by focussing on Daikin’s efficient inverter technology, which varies compressor speed to use only the amount of energy needed.

A key element in reducing environmental burden is consuming less energy. Daikin’s inverter control is a proven technology that can result in energy savings up to 30% over non-inverter systems (based on seasonal efficiency ratios), while increasing comfort at the same time. Hence, the sales activities of Daikin Europe N.V. ’s affiliates focus on increasing the percentage of our units sold that include this energy-friendly technology. For residential applications, the positive trend of the past years remained, with Daikin Europe N.V. again having a share of inverter units above 90%. Commercial applications (Sky Air®) indicate a significant increase over past years, as shown in the graph below.

Mainly EU area





Green initiatives involving the end user

'L'économètre' by Daikin France

To raise awareness among potential customers about the power consumption of the heating products installed in their home, Daikin France developed calculation software called 'L'économètre' (www.pompeachaleurdaikin.fr) in 2009. L'économètre uses the following parameters: type of project (renovation or new construction), type of home (detached, semi-detached,...), region, energy source for space heating and domestic hot water, number of inhabitants, surface area to be heated, desired temperature,... Thanks to this tool, end users can compare their current heating costs, consumption and environmental impact with those of a heat pump solution, and choose a heating and cooling solution that is better for the environment and from a financial point of view.



➔ L'économètre: a simple tool to compare end users' current heating costs, consumption and emissions with those of a heat pump solution



Daikin Europe's N.V. EcoCalculator

Daikin Europe N.V. also introduced a tool similar to that of Daikin France that can be customised for a number of European countries. The EcoCalculator (<http://energycalc.daikinaltherma.eu>) includes country-specific criteria and compares the cost and CO₂ emissions of a Daikin Altherma heat pump system with the consumer's current installation (in the case of renovation) or possible alternatives to heat pump based systems (in the case of new construction).



➤ Entering specific heating system data (type of furnace, year of installation, heat emitters,...) helps to make the calculation more accurate.



➤ Daikin's EcoCalculator gives potential heat pump buyers across Europe a good overview of the cost savings and CO₂ reductions that can be achieved with a Daikin Altherma air to water heat pump system.



Supply

Logistics are an important link in a company's supply chain. That is no different at Daikin Europe N.V., where specialists are constantly looking for ways to decrease Daikin's environmental impact at the logistics stage. Because transportation accounts for the bulk of logistics' impact on our environment – with CO₂ emissions as a direct consequence – one of Daikin Europe N.V.'s main challenges is to reduce its transport-related emissions, and thus achieve considerable CO₂ savings.

Daikin Europe N.V. welcomes Velvet Revolution

With its Velvet project that officially began in FY2008, Daikin Europe N.V. intends to restructure and optimise its entire supply chain. This restructuring has financial as well as environmental benefits.

The Velvet project has 3 main targets:

1. Keeping the logistics cost ratio (logistic costs vs. turnover) at the same level as in 2006
2. Reducing the total inventory across European warehouses
3. Increasing service to customers

An action plan has been set up, resulting in the following initiatives, of which the first effects were clearly visible in FY 2009:

- › Reduction in the number of warehouses and integration of stock. Daikin Europe N.V. owns and controls the stock in these warehouses, based on forecasts and sales orders from its affiliates.
- › Transporting products from factory to end-customer in the most efficient way. The principal aim of this approach, called 'direct supply', is to have no more than 1 warehouse between the factory and the end-customer.

In recent years, Daikin Europe N.V. has developed 3 kinds of 'direct supply' flows:

- (1) Direct containers: goods produced in Asian factories are shipped directly to the warehouses of the main affiliates (Italy, Spain, France and UK).
- (2) Direct trucks: similar, but for the units produced by Daikin Czech Republic.
- (3) Direct deliveries: goods are delivered from a Daikin Europe N.V. warehouse directly to the affiliates' customer. This is the case for Belgium, the Netherlands and also partially for France and Germany.

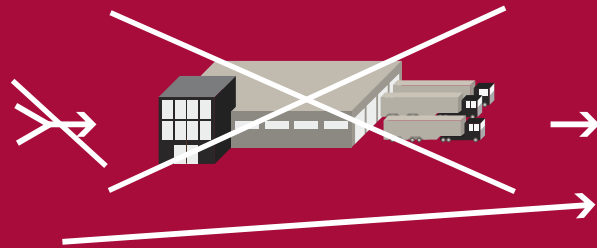
Overseas



Czech



Distribution



REPLENISHMENT

Affiliates



Daikin Europe N.V. examined alternative logistics flows during FY2008, on the road to achieving 10% transport-related CO₂ savings by FY2010.

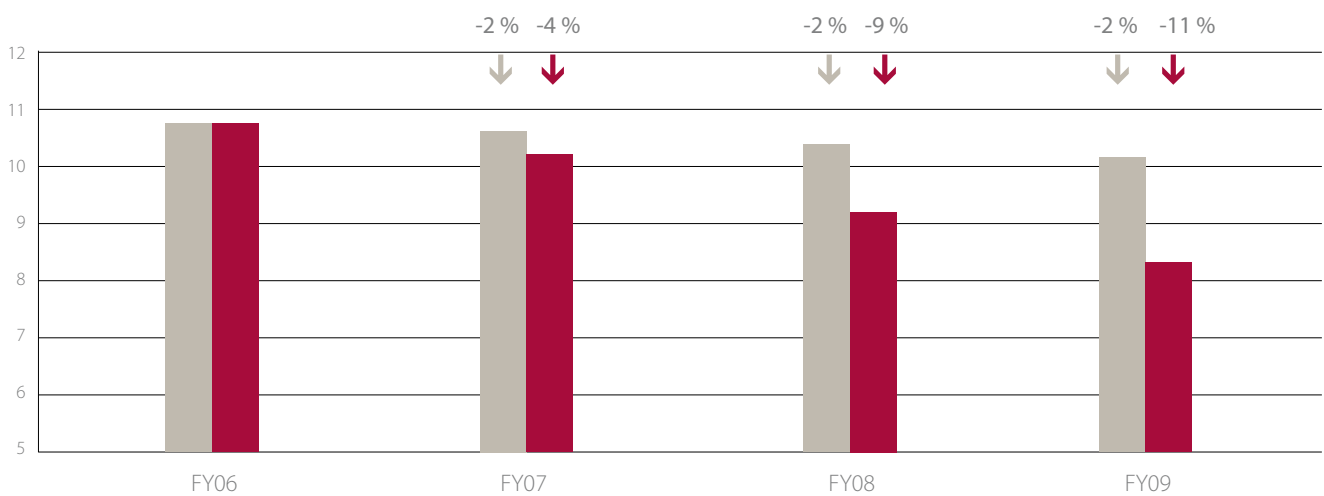
Results for the environment

Geert Snoeck, Department Manager Logistics at Daikin Europe N.V., is one of the members of the Velvet steering committee. He sees ample progress in terms of the logistic environmental footprint since the introduction of Velvet: 'Although Velvet was primarily designed to reorganise our logistics flows, the impact of direct supply on the environment is considerable: 11% less CO₂ emissions to date, and we will continue to reduce the burden on our environment with, for example, the introduction of multimodal transportation wherever possible.'



Geert Snoeck, Department Manager Logistics at Daikin Europe N.V.

CO₂ emissions (ton) per Sales volume (m³)



Target Result