

ENVIRONMENTAL INITIATIVES THROUGHOUT THE PRODUCT LIFE CYCLE

1

2



MANUFACTURING



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



USE



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 HVAC-R industry to set up voluntary take-back schemes across Europe:

RECYCLING SCHEMES

SALES & SUPPLY



WHILE EXPANDING ITS SALES & SUPPLY ACTIVITIES, DAIKIN WORKS HARD 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

Daikin Europe N.V.'s affiliated companies have or are in the process of obtaining ISO 14001 certification (see page 9). In so doing, they are continuously making efforts to improve their environmental performance. Examples of FY2007 initiatives taken by Daikin's affiliates in the sales phase include expanding the company car fleet with hybrid cars, switching to renewable energy sources for the supply of electricity, increased use of laptops to save energy and paper, promotion of energy efficient products using inverter technology, and actions to compensate for CO₂ emissions.

FOCUS ON ENERGY-EFFICIENT INVERTER TECHNOLOGY: DAIKIN BELGIUM

Inverter technology allows important energy savings (up to 30%). At Daikin Belgium, important efforts have been undertaken to promote this technology in recent years. As shown in the table, the results are striking and demonstrate Daikin Belgium's concern to focus on energy-efficient climate control systems in its sales efforts.

INVERTER RATIO (DAIKIN BELGIUM)	RESULT 2005 (%)	RESULT 2006 (%)	RESULT 2007 (%)
SPLIT UNITS (residential applications)	85%	88%	95%
SKY AIR UNITS (commercial applications)	64%	70%	79%



LAPTOPS RULE: DAIKIN SOUTH AFRICA

For several years, Daikin South Africa has promoted the use of laptops to replace desktop PC's. Paul Meinking, Managing Director:

"This measure is just one of Daikin South Africa's energy-saving actions. Not only does it substantially reduce paper, it also makes our staff more mobile".

“Impatto Zero⁸ is about setting an example and genuinely caring for our planet.”



Stefano Germagnoli,
Legal Affairs &
Environmental
Department, Daikin Italy

“When we decided to compensate for our company-related CO₂ emissions in 2006, we could never have imagined the impact this action would have! Today, not only do we offset our own CO₂ emissions by planting trees in Costa Rica and Italy, we have also extended the programme to include our purchasers’ emissions in the case of Ururu Sarara. In fiscal year 2007, we further expanded our efforts to compensate for all the CO₂ emissions related to our spring and autumn marketing campaigns. Then LifeGate, the company handling the Impatto Zero compensation programmes, proposed a renewable energy contract to us. The renewable energy sources included in the contract consist of wind energy and hydropower. While our renewable energy is more expensive than conventional energy, the CO₂ savings involved are considerable. Hence, our choice for green energy was very clear from the start. It is our way of setting an example and proving our commitment to reducing our environmental impact.”

*It is our way of
setting an example
& proving our
commitment*

”

⁸ Impatto Zero: A project aimed at certifying and offsetting Daikin’s life cycle carbon footprint in Italy

SALES & SUPPLY

COMMUNICATING TO REDUCE ENVIRONMENTAL IMPACT

The moments of selection, installation, servicing and dismantling are crucial to reducing the environmental impact of Daikin's products. Proper sizing with regard to building needs and regular maintenance, for example, are very important to guaranteeing energy savings. In addition, careful handling of refrigerant is required to avoid leakage into the atmosphere.

This is why Daikin Europe N.V. and its affiliates devote special attention to **educating** and **training** dealers and installers on the right choice, correct and safe installation, use and maintenance of its products.



➤ Daikin Italy showcased its 98% recyclable exhibition booth at Italy's most important HVAC-R fair, Mostra Convegno Expocomfort.



➤ Daikin A/C Belgium technician inspects refrigerant charge during maintenance.

SHARING EXPERIENCE ON F-GAS SCHEME WITH OTHER AFFILIATES: DAIKIN NETHERLANDS

A special workshop was organised during Daikin Europe N.V.'s 5th Environmental Conference on the European Regulation on fluorinated greenhouse gases (F-gas regulation). This regulation stipulates the need for regular inspection of equipment and for certification of companies and persons handling HFC⁹ refrigerants. HFCs are refrigerants that do not harm the ozone layer, but which themselves are greenhouse gases¹⁰. Hence, leakage into the atmosphere has to be prevented. During the F-gas workshop, Daikin Netherlands passed on its experience with the Dutch STEK¹¹ scheme to the other affiliated companies. This Dutch scheme resulted in a drastic reduction of refrigerant leakage and in increased customer satisfaction due to reduced maintenance and repair costs. Moreover, the Dutch scheme served as a model for the European regulation and will be rolled out in all European member states in the coming years.

LYON-BASED TRAINING CENTRE OPENED IN APRIL 2007: DAIKIN FRANCE

With the opening of this training centre, Daikin France intends to optimally train all of its dealers & installers on all aspects of the safe and quality installation and maintenance of its products. This includes drawing their attention to all the environmental aspects involved, which ultimately will contribute to decreased power consumption and CO₂ emissions, and thus will reduce the environmental impact of Daikin products.



➤ Safe and quality installations are given top priority at Daikin France's Lyon training centre, which opened in April 2007.

⁹ HFC: Hydrofluorocarbon; one of the greenhouse gases with a Global Warming Potential (GWP). Examples of HFCs are R-410A, R-134a and R-407C. Their GWP values are respectively 1,975; 1,300 and 1,652.5 (values used by the European F-gas regulation).

¹⁰ Greenhouse gases: gaseous constituents of the atmosphere, both natural and anthropogenic, contributing to global warming.

¹¹ STEK is the Dutch regulation to reduce refrigerant leakage. Adopted in 1993, this legislation served as a model for the European F-gas regulation.

SALES & SUPPLY

→ 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.

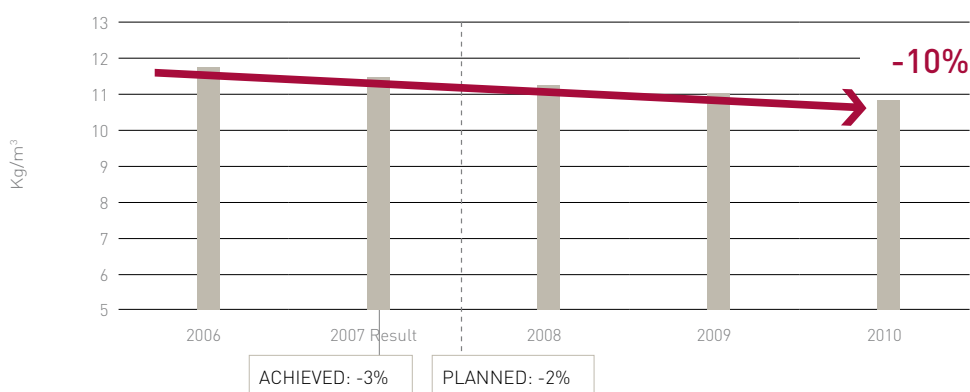
REDUCING TRANSPORT-RELATED EMISSIONS CRUCIAL

In fact, Daikin Europe N.V.'s concern to reduce its transport-related emissions is due to the fact that more than 20% of overall CO₂ emissions in Europe originate from transport. Hence reducing transport-related CO₂ emissions means a lot to a company such as Daikin, which has made environment its top priority.

TARGET: REDUCE TRANSPORT-RELATED CO₂ EMISSIONS BY 2% YEARLY

Daikin Europe N.V. set a voluntary target of reducing its CO₂ emissions by 2% yearly (volume-based relative comparison).

CO₂ Emission Kg/m³

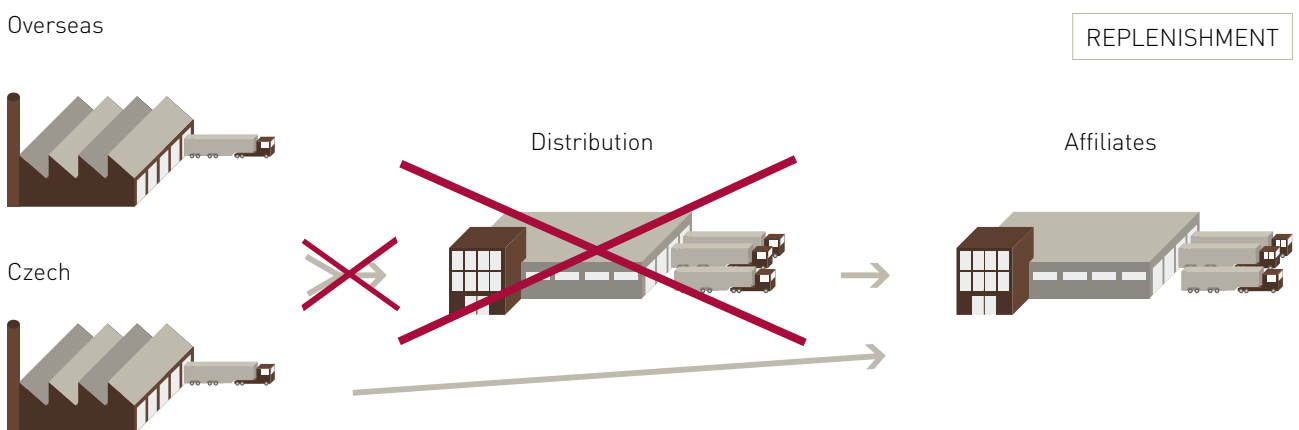


➡ Accompanying the annual targets were a number of simulations based on the volume transported and distance covered. The measurements included road transportation for replenishment and transportation between the factory and the first warehouse. Not included in the scope was the final delivery to the customer and sea/air transportation.

2

MEASURES TO ACHIEVE ANNUAL TARGETS:

- > **Increasing direct logistics flows**
Increasing the proportion of direct shipments will achieve considerable savings.
- > **Choosing logistics providers with a good environmental record**
When choosing suppliers, logistics providers are requested to fill out a questionnaire, including proof of environmental actions.
- > **Searching for ways to shift to less carbon-rich transportation**
This measure looks at alternative transportation such as trains or ships. Both transport modes emit less CO₂ than trucks.



➤ Daikin Europe N.V. examined alternative logistics flows during FY2007, on the road to achieving 10% transport-related CO₂ savings by FY2010.