



## Dyson Environment Policy

Environmentally responsible engineering is efficient engineering. Doing more with less. Creating machines that consume less energy and made of fewer materials, but are better performing and longer lasting. It is a mix of technological leaps and many small steps. Revolution and evolution in order to improve.

### Developing digital motor technology

Motors convert electrical energy into mechanical energy. By developing high-speed digital electric motors we are able to engineer smaller, lighter, more energy efficient machines.

#### Example

Our latest digital motor (2009) has enabled us to develop our new hand held vacuum Dyson DC31, with a motor that is twice as energy efficient as its predecessor and just a third of its size – saving electricity and saving materials.

### Engineering efficient machines

Our machines are energy efficient; this means getting the best performance for the minimum amount of energy and sustaining it.

#### Examples

1. We refuse to specify unnecessarily large motors for our machines never exceeding 1400 Watts in our vacuums. Instead we continue to develop efficient ways of sustaining constant suction such as our patented cyclone technology.
2. Rather than relying on inefficient heating elements, our Dyson Airblade™ hand dryer forces cold air through 0.3mm slots at 640 km/h to create sheets of air that scrape water from people's hands. Compared with conventional warm air hand dryers it is 80 per cent more energy efficient.

### Doing more with less

By substantial testing of thinner materials, Dyson engineers minimise the size and weight of Dyson machines without reducing their strength, durability or ease of use. Slimmer components require fewer raw materials and less energy in the manufacturing process.

#### Example

The Dyson DC15 vacuum (2005) weighed in at 9.2 kg. Its successor, the Dyson DC25 (2008), was slimmed down to 7.4 kg.

### No Consumables

Our vacuums do not have consumables: no bags or replacement filters. So, no unnecessary waste.

#### Example

Dyson has never used bags in its vacuum cleaners. Where necessary, its filters are washable but never need replacing.

### Packaging

Dyson engineers use robust boxes to protect Dyson machines in transit, while also being environmentally responsible.

#### Example

Where possible we package our products using recycled materials. On average Dyson vacuum cleaner packaging is made from 90 per cent recycled cardboard.

### Building machines that last

We don't design for obsolescence. Rather than developing throw away items, we subject our prototypes to an assault course of abuse tests so by the time our machines roll off the production line and come into service, they are strong enough to withstand many years of use.

#### Example

The Dyson testing facility in Malaysia operates 24 hours a day, seven days a week and includes some 126 different test stations.



## Our Operations

Dyson operates in more than 40 countries. As with our products, we aim for our building and operations to be energy efficient and environmentally responsible. From the way we transport our machines, to the environments in which we work, we strive to save energy and prevent pollution.

### Examples

1. When we replace IT equipment we select models based on energy efficiency as well as performance. Now the majority of the Dyson work force uses energy efficient laptops rather than desk top computers.

2. We have eradicated the use of wooden pallets in more than 75 per cent of our shipping routes - doing away with the need to fumigate (often done using methyl bromide - a known pollutant). No pallets also means that we can fit more machines in a shipping container - saving on fuel. Our shipping efficiency has increased from 85 per cent (2005) to 98 per cent (2008).

## Measurement and Communication

The shops that sell our machines and the people that buy them are interested in their environmental impact so we are committed to communicating our environmental performance through our websites and our packaging.

### Example

We are introducing messages about the recyclability of our packaging on Dyson vacuum cleaner boxes.

## Working with suppliers

Our suppliers must meet high environmental standards and work with us to improve the environmental performance of our operations.

### Example

Our manufacturing suppliers in the Far East work with Dyson engineers to calculate and then reduce the carbon footprint of our machines.