Fact sheet: Designing greener machines

At a glance

- *Nespresso* launched the VerTech™ Network, a sustainable technology Research and Development project to design the green machines of the future
- As part of this commitment the Network is committed to reducing the carbon footprint of the machine system by 20% by 2013
- *Nespresso* recently introduced environmental criteria in its technical briefs
- New machine technology will allow energy savings of about 40%

The smartly designed and easy-to-use *Nespresso* machines are specifically developed to complement and enhance the aroma, crema and flavour of *Nespresso* coffee – creating the perfect cup every time.

A patented extraction system facilitates the ideal flow and temperature of water through the ground coffee.

The machines are designed and developed by an internal *Nespresso* R&D team working together with external technical experts, academics, and designers.

Beyond their performance and innovation, *Nespresso* seeks to produce machines that are known not only for their beautiful design but also for their environmentally friendly performance. This includes machines that are more energy efficient, minimise material use, and incorporate new and greener materials.

To be able to deliver greener technology *Nespresso* conducted a Life Cycle Assessment (LCA) of its machines. This allows an evaluation of the environmental impact of the machines generated from the production of raw materials, manufacturing, distribution, use and disposal.

Through this *Nespresso* learned that the way Club Members use their machine has a considerable impact on carbon emissions. If a household or business, for example, leaves the machine on all day then the emissions can become significant. For a machine left on for 12 hours, the energy consumption to keep the machine ready to use is 140 watts per hour (Wh) per day, which is equivalent to 30kg CO2e per year.

As a result of the LCA finding, *Nespresso* has launched the VerTech™ Network, a sustainable technology Research and Development project to design the green machines of the future. The network includes an internal *Nespresso* R&D team, machine suppliers, product and machine designers and sustainability experts. As part of this commitment the Network is committed to reducing the carbon footprint of the machine system by 20% by 2013.

The VertTech™ Network is working towards two main goals. In the short term it is designing solutions to the current energy use and CO2 emission performance of the current *Nespresso* machine range. Beyond that the network is exploring bluesky technologies for the future that will improve the overall sustainability impacts of the *Nespresso* machines.

Through VerTech™ *Nespresso* is launching a new range of machines from 2009 that will integrate auto standby technology. Such machines will be compliant with 2010 and 2013 European Energy Using Products (EuP) Directive, which imposes stricter limits for standby and off-mode power consumption for all household and office electrical equipment. In the near future, all machines will also have an energy efficiency label as required in the future by law.

For other machines *Nespresso* is evaluating whether to replace auto standby by automatic off function and therefore reduce even more wasted energy. After 2010, the machines will have a lower environmental impact, as they will integrate at least an auto power-off or an auto standby function.

Nespresso machines are produced and distributed by external partners. These suppliers must meet the project's technical brief and purchasing guidelines, which includes specific safety and quality guidelines and, of course, meets legal requirements such as the type of materials that can be used. It also sets minimum corporate social responsibility standards. In addition, *Nespresso* recently introduced environmental criteria in its technical briefs. This will require suppliers to conduct an LCA for each newly designed machine and take eco-design principles into consideration such as making machines that can be easily disassembled so that more components can be separated and recycled.

Nespresso machines are also compliant with the Waste Electrical and Electronic Equipment Directive (WEEE Directive), which aims to minimise the impact of electrical and electronic goods on the environment, by increasing re-use and recycling and reducing the amount of waste going to landfill. At present about 60% of the machine weight used in the Essenza machine can be recycled and *Nespresso* is working to increase this percentage.

Nespresso is starting a pilot project that is looking at establishing a dedicated machine-recycling programme, which will allow materials from old machines to be reused to produce new machines and increase recyclability rate above WEEE minimal requirements.