Photochemical smog

Certain volatile chemicals react with oxides of nitrogen in the presence of sunlight to form 'episodes' of ozone in the lower atmosphere. This episodic low-level ozone is a component of photochemical smog.

The Issue

High levels of ground level ozone can damage some leafy plants, irritate people's breathing systems and create a haze over the landscape.

Chemicals implemented in the formation of photochemical smog are generally called volatile organic compounds (VOCs) – these include among other components, solvents and propellants used in aerosol and non-aerosol based consumer products, such as hair sprays and deodorants. As they are released, they combine with nitrous oxides already present in the atmosphere from car emissions, factories and power plants for form low level ozone.

Unilever's impact

Consumer products emit very small amounts of VOCs compared with natural and other man-made emissions, such as car exhaust fumes. The means the contribution from Unilever products is relatively insignificant. Nethertheless, we recognise the seriousness of the smog problem and want to do what we can to contribute to a solution.

Action being taken

We reduce VOC emissions from our products where possible, while continuing to satisfy our consumers and keeping quality high. For example, in the USA the VOC levels of many consumer products, including our hairsprays have been reduced to meet strict regulations in California.

We continue to work with others in the industry to find ways to reduce VOC emissions.