

Environment

In brief:

- **Clean 'inside and out' programme**
- **Every all-new Volvo V50 supplied with an environmental product declaration (EPD)**
- **Five cylinder engines comply with forthcoming California emissions regulations**
- **Cabin air filter removes dust, pollen and exhaust particles**
- **PremAir ozone system converts 75% of ground level ozone to Oxygen**
- **Interior Air Quality System (IAQS) ensures cleaner air inside than out**
- **Interior trim materials confirm to Öko-Text standards and are allergen-free**
- **2.0D complies with Euro IV emissions regulations (from 2005 model year)**

Volvo's commitment to the environment is reflected in its 'clean inside and out' programme. The standard fit Interior Air Quality System (IAQS) employs an active carbon filter, which ensures that the air is always cleaner inside than out. To reduce the risk of an allergic reaction, all the trim materials comply with Öko-Text standards and are allergen-free.

Both of the Volvo V50's five cylinder petrol engines comply with California's forthcoming emissions regulations and Volvo's pioneering PremAir system converts 75% of the ground level ozone passing through the radiator into Oxygen, which helps to improve the local environment. The 2.0D models are Euro IV compliant, making them a cost-effective choice for company car drivers.

Like all Volvos, the Volvo V50 is supplied with an Environmental Product Declaration (EPD), which allows customers to compare the eco-performance of different Volvo models.

In full:

Volvo's 'Clean Inside and Out' programme represents a holistic approach to the environmental impact of the car. It focuses on health, resource utilisation and the ecological consequences of the production, use and disposal of the vehicle. Like all Volvos the all-new Volvo V50 sportswagon comes with an environmental product declaration (EPD), which provides the car buyer with an overview of the car's environmental impact throughout its lifecycle. The EPD makes it easier for potential customers to compare the eco-performance of different Volvos. Volvo was the first car manufacturer in the world to introduce such a system and the information is available to the public at www.volvocars.com.

The all-new Volvo V50 sportswagon has been designed from the ground up to be as environmentally friendly as possible. It is being built at the Volvo Car Corporation's Ghent factory in Belgium, which is one of the most advanced car production facilities in the world. Over 340 million Euros have been invested in the facility and both the manufacturing processes and the substances used have been chosen to minimise the environmental impact of production. For example, the plant uses chromium-free body material pre-treatment, water-borne exterior paints and CFC-free materials.

The materials used in the manufacture of the new Volvo V50 have been equally carefully chosen. Eighty-five per cent by weight of the car can be recycled. The plastic components are marked to facilitate recycling and recycled felt and wood-fibre materials are used in some interior trim components.

The Volvo V50's on-board systems have also been optimised for environmental efficiency. For example, the catalytic converters are located close to the engine, the oxygen sensors (Lambdasond) are located both up and downstream of the catalyst and the Volvo V50 has a system for recovering evaporated fuel vapour (EVAP).

All the five cylinder petrol engines fitted to the Volvo V50 have been developed to meet the next generation of California emissions regulations, which are recognised as the most stringent in the world. For example, the manifold and turbo unit in the T5 engine have been cast together in a high-alloy cast steel that has a high level of heat resistance (1050degrees). It requires less petrol to cool it so the engine can be

run with a leaner mixture, promoting lower fuel consumption and exhaust emissions. This system is particularly beneficial when the engine is operating under a heavy load.

Volvo's PremAir® system features in the radiators of the Volvo V50's five-cylinder engines. An industry first, PremAir® employs a catalytic coating on the radiator that converts 75% of the ground level ozone passing through it into Oxygen. This reduces harmful pollutants in the environment and makes a major contribution to local air quality.

The environment impact of the diesel's models has also been minimised. The new 2.0-litre common rail turbodiesel employs a particle filter that significantly reduces the quantity of unburnt soot particles exiting the exhaust. The system is cleaned (regenerated) automatically and the addition of the filter helps the diesel engine comply with Euro IV emissions regulations. The Volvo V50 2.0D is therefore exempt from the additional 3per cent Benefit in Kind tax levy that is typical applied to diesel-engined company cars. This results in considerable cash savings for company car drivers.

Volvo's holistic approach does not rest with the vehicle's exhaust emissions. While most drivers are familiar with vehicle emissions and air quality issues, many do not know that the air inside their cars may also be harmful, or that the metals, textiles and leathers used in car interiors can emit volatile substances, which activate allergies and skin conditions.

Every Volvo V50 sportswagon benefits from Volvo's Interior Air Quality System (IAQS). This constantly monitors the cabin environment to minimise odours and pollutants entering from the outside. It uses an activated carbon filter to ensure that the air inside the car is always cleaner than that outside. The air-conditioning system also incorporates a cabin air filter that prevents dust, pollen and exhaust gas particles entering the car.

The interior of the Volvo V50 has been designed to comply with a strict standard called Öko-Tex, which ensures that all the textures and leathers used are hypoallergenic and free from hazardous substances. The components on the Volvo

V50 that most frequently come into contact with the skin – the door handle, ignition key and safety belt locks - are also compliant with Öko-Tex and allergen-free.