#### Understanding our environmental impact

During 2013 we commissioned an environmental footprint study to better understand the impacts of our global business across our tobacco products value chain. Our overall aim was to gain an understanding which would then strongly direct the setting of the most effective priorities for our future environmental strategy.

# Scope of the study

The tobacco product value chain that we considered included:

- all aspects of tobacco growing and curing;
- the manufacture and delivery of materials such as paper, cardboard, filter and plastic foil;
- our worldwide operations;
- the transport and logistics activities prior to and after production (when finished goods are delivered to warehouses);
- distribution centres; and finally
- delivery to the customer.

We also included our Logista transport business whilst keeping it as a separate business unit.

The study focused on the most relevant impact categories:

- energy use and climate change;
- particulate matter dust and smoke-type emissions;
- eutrophication the over-stimulation of the natural environment with nutrients such as when fertilizers unintentionally encourage the growth of algae in water courses; and
- acidification the artificial adjustment of pH in the natural environment, which can decrease biodiversity and bio-productivity.

In addition, we also looked at water consumption.

We appointed a well-known life-cycle assessment consultancy to conduct the study. We supported the study by providing extensive data that best represented our activities relevant to these main environmental impacts.

Data sets were provided in relation to:

- our tobacco suppliers and their methods of growing and curing;
- the amount of tobacco we bought in our reference year from different countries and suppliers;
- how the tobacco was distributed to warehouses and further on to the factories;
- our other materials, considering where they were manufactured, how much we bought and how these materials were delivered to our factories;
- our direct operations and their direct impacts; and finally
- an estimation on how, and to which point of sale, the various finished goods were delivered.

### Insights gained

The results were impressive and showed us that our major environmental impacts do not lie in the manufacture of our product, where we directly manage the production process, but are mainly to be found in the supply side of our value chain, especially in the tobacco leaf growing and curing, as well as the manufacture and delivery of our other material requirements. Notably the logistic processes

were found to also account for some 14% of the environmental impacts, with slight variances depending on which environmental impact category was being considered.

Looking into the different categories we found that the ratio is more or less similar for all impacts including energy use and climate change, eutrophication, acidification and particulate matter. We also found that our own factories account for less than 25% of the environmental impacts, with two or three times the percentages in the supply chain. However, water was found to be an exception to this pattern.

### Water consumption

A large proportion of our supply chain is based in agricultural activity, mainly growing tobacco plants. Like other crops water is needed to grow the tobacco plants. We found that the magnitude of water consumption needed for this crop irrigation was significantly higher than for any other step in the value chain, particularly when compared against the water requirements for the manufacture of our products and the sanitary requirements of our personnel.

To be specific, the report highlighted that our factories only account for 1% of the overall water impact compared to 92% in tobacco growing (when accounting for rainwater consumption), whilst the remaining 7% is predominately used in the manufacture of paper-based materials such as cigarette papers and cardboard.

# Direction for our environmental approach

In the past we have predominantly focused efforts on reducing environmental impacts in our own operations, for example with energy efficiency projects, water saving, recycling efforts and waste minimisation programmes. The study has informed us that we can achieve greater reductions in our overall environmental impacts by further engaging with our material and leaf suppliers.

Whilst these supply chain impacts are beyond our direct management control, we can influence by raising awareness, demonstrating that conserving and protecting natural resources is important to us, leading by example and working through our supplier standards and constructive supplier partnerships.

Following the study we have now intensified our supplier focus, emphasising tobacco sector collaboration with opportunities presented such as the Supply Chain Carbon Disclosure Project (SC CDP). We have asked all our strategic material suppliers to report on their carbon emissions in relation to the materials that they deliver to us and participate in the SC CDP. This will also help us to better understand our indirect scope 3 Greenhouse Gas emissions and eventually the on-going water consumption within our supply chain.

Similarly, we have increased direct engagement with our tobacco growers and the smallholder farmers to focus reductions in their environmental impacts. This cooperation is largely driven by our leaf supplier programme (SRTP), which aims to strengthen good agricultural practices, efficient use of water and irrigation and the use of more efficient curing barns.

All of these activities will help to reduce resource consumption and the overall environmental impacts of our tobacco products value chain.