



Ambius Greenhouse Gas Emissions 2009

Summary and Recommendations

Kenneth Freeman

Head of Ambius University and International Technical Director

April 2011

Summary

- Ambius succeeded in reducing its carbon footprint in 2009 over 2008 by approximately 10% (adjusted for change in the assessment boundary) to 15,600 tonnes CO₂e (carbon dioxide equivalents)
- The boundary for the assessment changes significantly between 2008 and 2009, with the inclusion of most of the continental European businesses and South Africa, but the exclusion of the Ambius Pacific region.
- The main sources of greenhouse gas emissions are:
 - Vehicle emissions: 58% (-5% on 2008)
 - Electricity: 21% (-39% on 2008)
 - Waste: 12% (- 59% on 2008, although confidence in the accuracy is not high)
 - Natural gas: 8% (-35%)
 - Air travel: 8% (+15%)
- South Africa produced the lowest emissions per FTE employee (5 tonnes CO₂e).
- UK produced the highest emissions per FTE employee (26 tonnes CO₂e).
- Consolidation of properties accounted for greatest improvement in building energy emissions.
- Emissions relating to paper usage and air travel increased significantly.
- Over five years, a year-on-year reduction in greenhouse gas emissions of just 5% will result in a gross reduction of almost 22,000 tonnes CO₂e compared with a business as usual scenario.
- Ambius is moving to a new web-based greenhouse gas recording and reporting system starting in May 2011 that will provide monthly reports on current emissions rather than annually-compiled reports using historic data. The current time lag between measurement and reporting of greenhouse gas emissions will be significantly reduced as a result. This will enable us to monitor progress more effectively and help us to set specific targets for business activities or regions.

- Ambius businesses in the UK, North America and Continental Europe are now Planet Positive Certified businesses.
- A survey (using methodology and algorithms developed by the UK Government's Department of the Environment, Food and Rural Affairs - DEFRA) of Ambius colleagues in North America and the UK was conducted to determine attitudes to climate change to help inform our behaviour change programmes. Over 60% of colleagues that completed the survey can be categorized as being motivated by green issues and actively seeking to reduce their impact on the environment.

Key focus for improvement (see also our 5-year sustainability road map)

Behaviour change (people factors)

- Recruit and empower green leaders within the business
- Encourage colleague-led sustainability initiatives
- Training to improve driving styles
- Improved energy 'housekeeping' policies.
- Reduced dependency on printed documents.
- Improved plant care to reduce disposal of replaced plants.

Measurement, target setting, benchmarking and monitoring

- Implement web-based recording and reporting system
- Set annual targets for business and operating units
- Report progress in company sustainability statements

Green operations

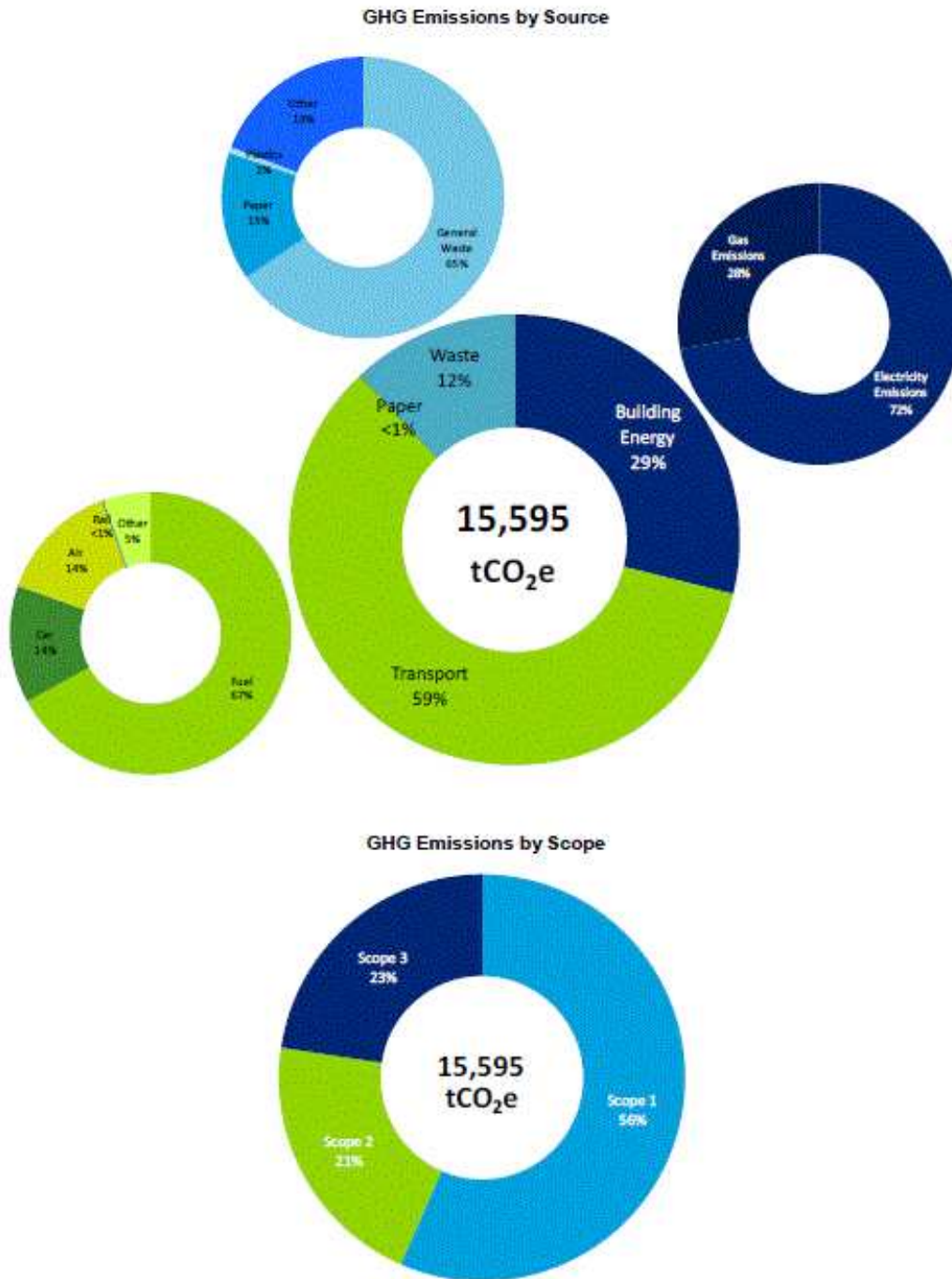
- Improved route planning
- Alternative modes of transport for sales and service colleagues
- Targeted reduction in air travel.
- More efficient journey planning to reduce the overall number of journeys.
- Greater use of video conferencing and on-line meetings
- Reduced energy demand in those properties with the greatest energy use intensity (kWh/m²).
- Greater waste separation.
- Waste reduction.
- More recycling.
- Composting of green waste.
- Increased reuse or recycling of paper.
- Increased proportion of recycled paper.
- Increased use of paperless systems

Green procurement

- Continued investment in fuel-efficient vehicles
- Introduction of smart metering (AMR) technology.
- Investment in more energy-efficient technology.
- PV and/or wind electricity generation with feed-in tariffs.
- Encourage / require suppliers to be more responsible with packaging.
- Greening products and services
- Develop green service offer
- Offer a greater range of sustainable products

- Work with suppliers and service partners to ensure a programme of continuous environmental improvement.

Graphical representation of Ambius's greenhouse gas emissions



Scope and boundary of greenhouse gas emissions assessment

For 2008 data, the boundary of the assessment included Ambius businesses in the UK, North America and Pacific regions. For 2009, the boundary was extended to include Ambius businesses in South Africa and Continental Europe.

The scope of the assessment included all Scope 1 (direct) emissions, Scope 2 (indirect) emissions and selected Scope 3 (facilitated) emissions. Scope 1 emissions are those emissions caused directly by Ambius through the burning of fossil fuels, i.e. vehicle fuel, heating oil and natural gas. Scope 2 emissions are those caused indirectly as a result of a third party burning fossil fuels on our behalf (i.e. grid electricity). Scope 3 emissions are those emissions generated as a result of our business activities. We have included waste, paper and airline travel as these are the most significant sources of such emissions for our business. For 2009, emissions relating to refrigerant gases (mainly used in air conditioning systems) was also included as many such chemicals are up to 40 times more potent greenhouse gases as carbon dioxide. However, the availability of such data was limited and the confidence in the emissions relating to such emissions is low).

The assessments were conducted according to internationally-recognised technical standards laid down in Greenhouse Gas Protocol (revised) and ISO 14064-1: 2006 and were compiled by the sustainability practice of Deloitte LLP in London and subsequently certified by Planet Positive.