INTRODUCTION

Unilever has proposed its ‘Less Environmental Impact (LEI)’ approach as “an ambitious and novel way to assess the environmental impact of a business and its products and to set an environmental impact reduction target”. A scientific and technical peer review panel has been commissioned to provide:

- Assurance of the robustness (transparency, quality and completeness) and relevance of the LEI baseline approach for our company, including:
  - Data acquisition/compilation strategy
  - The separate approaches for sustainable sourcing (Supply management/purchase) and the product-based metrics (GHG, Water and Waste)
- Scientific review of the individual metrics (GHG, Water and Waste) and calculation approaches:
  - Scope and boundaries of the current metrics
  - Validation of key assumptions and methods
  - Data sources
- Assurance that the results and conclusions are fit for purpose:
  - Objectives and scope of the work.
  - Use and communication of the results.
- Endorsement/critique of the approach in the form of a Peer Review Report that can be used to support external communications.

It was not possible to undertake a detailed review of all the aspects listed above due to the limited documentation available. The panel therefore focussed on the approach used to select and derive the 2008 baseline and on how the metrics will be used to set targets, to drive performance and to monitor progress against declared targets. The evaluation has been based on documents provided by Unilever’s LEI group, supported by meetings and tele-conferences.

This report sets out the observations and recommendations from the peer review panel. The members of the panel are:

Professor Roland Clift, University of Surrey (Chair)
Professor Matthias Finkbeiner, Technical University of Berlin
Dr. Mark Goedkoop, PRé Consultants
Associate Professor Sarah McLaren, Massey University
Stuart Orr, WWF

GENERAL OBSERVATIONS
The panel considers that the metrics have been well selected to support the LEI approach at its current stage of development. While other impacts (such as eutrophication, ecotoxicity, biodiversity and, in particular, land use) might have been included, we recognise that those selected – Greenhouse Gas (GHG) emissions, water use and waste generation – are pragmatic and representative of a significant proportion of impacts associated with Unilever’s business. “Sustainable Sourcing” represents a more general framework to encompass other issues at a global purchasing level.

The panel suggests, however, that effective communication of Unilever’s aspirations and actions needs an additional level of documentation. The publication “Unilever Sustainable Living Plan” provides a good introduction for a “lay” public. However, it would help clarity, transparency and credibility to have communications directed at a more expert audience, although respecting the confidentiality of some of the documents which the review panel has seen. More detail and clarity is needed on the methodology used, particularly for agriculture. This material could be made available on a web-site rather than as a publication. If, as is likely, the further details attract significant interest, then it could be useful to include an additional section on the Frequently Asked Questions (FAQs) website, ideally enabling interested parties to pose further questions for clarification. We suggest this, in part, because the review panel has been impressed that questions which arose in the course of this review were answered, and this helped the reviewers to have confidence in the approach. The questions raised by the panel and the responses might provide a starting point for the FAQs.

**Recommendation 1:** Unilever should consider making more detailed information on the Less Environmental Impact approach and metrics available on a website, including “Frequently Asked Questions”, and should enable interested parties to raise questions for clarification.

Commonly, raw material production and consumer use lead to the greatest impacts. The former is supposedly covered by using “verifiable sustainable renewable sources”. While recognising that the Peer Review Panel has been asked to focus on quantification of specific impacts, we suggest that a clearer statement of operational principles is needed, rather than the product-specific information in the Unilever Sustainable Living Plan. This further information should include an explanation of whether Unilever intends to progress from a global purchasing level to a product level, how it intends to address traceability and how it will select appropriate certification schemes. Given that half the raw materials are of non-agricultural origin, some statement on sustainable sourcing of these materials should also be included. This might usefully be made part of the further information suggested in Recommendation 1.

It could be that case that, as the programme proceeds, tensions or conflicts could develop between the Sustainable Sourcing approach and the metric-based approach that the review panel has examined. A clear exegesis of principles will help to resolve any such problems as they emerge.
Recommendation 2: The more detailed information should include an exposition of the principles followed in Sustainable Sourcing.

The other main source of impacts, consumer behaviour, is even less amenable to Unilever’s influence; consumer behaviour can even move in the wrong direction (as illustrated by recent increases in use and irresponsible littering of plastic bags in the UK!). It will be impossible to establish an unambiguous relationship between actual behavioural changes and any action taken by Unilever. It would therefore help credibility and transparency to provide information on how Unilever will use developments in understanding of behaviour to guide change, and to report on its actions.

Recommendation 3: The more detailed information should include a statement on how Unilever will address and report on changes in the behaviour of consumers using its products.

DERIVATION AND DEVELOPMENT OF 2008 BASELINE
There is some variability in System Boundaries across the different environmental themes – see Table 1. The peer review panel has been reassured that these differences are not examples of an unfortunate feature of some LCAs - selecting system boundaries to give the most favourable conclusions - but arise from pragmatic considerations:

- Allocation of management responsibility and structure of IT systems within Unilever;
- Differences in data availability between environmental themes;
- Limited scope for Unilever to affect consumer behaviour;
- Different focus of stakeholder concerns for the different themes.

These considerations are realistic at this stage of developing the Sustainable Living Plan, but they should not be regarded as fixed. In particular, the peer review panel recommends that the general information on the Plan (e.g. on the website) should include a summary that explicitly documents how the system boundaries currently vary for the three different themes (GHGs, water and waste), and what plans are in place to move towards a more complete assessment based on a life cycle perspective. This may include statements that Unilever does not intend to quantify impacts for certain life cycle stages because they are judged to be relatively insignificant.

Recommendation 4: The more detailed information should include an explanation of the system boundaries used. Attention should be given to making system boundaries more consistent in any further development of the LEI approach.

It is inevitable that the data providing the baseline for the LEI programme will change over time, regardless of subsequent actions by Unilever. The carbon
intensity of delivering energy vectors, especially electricity will change: will this affect the target of 40% renewable electricity, if national and regional grid mixes change to include significant renewable sources? The basis on which LCA databases are constructed is continually developing along with standards for the calculation of environmental impacts such as carbon “footprints”; these developments will include treatment of land use and land use change, which is a major concern for many of Unilever’s products (see below). Therefore the baseline cannot be regarded as immutable. Unilever needs to address how it will adapt the baseline to follow this kind of shift. Furthermore, the account of LEI only refers to process-based LCAs, whereas input/output (I/O) data are increasingly becoming used as the basis for generic background data. All changes in data will need to be clearly documented, with sources and dates. Is there any intention to build up Unilever’s own data base, to ensure more consistency than can be achieved by bringing together data from different data bases and sources?

**Recommendation 5:** Unilever needs to form a clear and specific policy on how to deal with and document changes in data, methodology, standards and other exogenous factors. It will help to declare now how these changes will be accommodated in the LEI baseline, as a counter against possible criticism for “moving the goalposts”.

**MODELLING AND METHODOLOGY**
Specifically for GHG emissions, changes in methodology and background data are likely to be particularly significant for food and beverages where accounting for land-use change (LUC) is a subject of current debate and development in LCA. This debate concerns not only direct LUC (which is included in the database currently used by Unilever) but also indirect LUC (iLUC) which is not addressed in Unilever’s attributional approach. Storage and delayed release of biogenic carbon are also increasingly recognised as significant, particularly in accounting for LUC. Standards on GHG reporting are starting to include LUC so that the issue cannot be ignored. It is not at all clear whether or how LUC is incorporated: in some places it is stated that LUC is not considered, although it is considered in the ecoinvent data which are used.

**Recommendation 6:** Much greater clarity is needed on the treatment of Land Use Change with a statement, consistent with Recommendation 5, on how exogenous developments will be applied by Unilever.

Identifying 2000+ skus to represent the total of more than 40000 is a critical part of this exercise. This is essential to make the exercise viable but more information is needed on how the representative skus and countries were selected, preferably with some specific examples especially over the choice of the highest volume product as the representative sku – there could be “high impact but low sales volume” skus and countries. As a specific example, mushroom bouillon is selected as the representative sku for the product cluster Bouillon liquid, PET bottle but no evidence is presented on how the impacts of this sku compare with the others in the group.
Recommendation 7: The more detailed information should include information on exactly how representative skus are selected, preferably with some form of sensitivity analysis to show how critical this selection is.

SETTING TARGETS AND MONITORING PERFORMANCE
Following the recommendation that more explicit information is needed on the process to select representative products, it would also help to be more explicit on how categories have been grouped according to their relative contributions projected to 2020; this, and the use of scenario analysis, only became clear in the further information provided to the peer review panel but was not clear initially. Similarly, the reasoning behind assigning higher significance to some grouped categories – skin is weighted more than laundry, for example – should be explained; the review panel accepts that the weighting is justified but there is a risk that this could be perceived as an attempt to make achieving the targets easier. Information is given on the unadjusted, adjusted and target values for waste; it would be helpful to provide similar graphs for GHG emissions and water use.

Recommendation 8: In the interests of transparency and credibility, the further information recommended should include explicit information on how the 2020 targets have been set.

WATER
The panel recognises that reporting water use in LCA is problematic, given that attempts to develop a standard accepted approach are continuing. However, it would help the results if Unilever were more specific about what aspects of water use it regards as essential for reporting environmental performance. Some “headline” issues are whether and how indirect water use in the supply chain is measured and reported, and whether it is the intention to update the treatment of water once the outcome of international standardisation efforts is clearer. More specific points in connection with water use are given below.

Recommendation 9: Unilever should clarify whether it will modify the treatment of water as international standardisation develops, and in any case should state clearly what elements of water use assessment are essential.

WASTE
More specific information needs to be made available on how treatment of waste, particularly post-consumer waste, is included in the metrics. As a specific example, it is unclear how “recovered” waste is defined or treated. Do “recovery rates” refer to reuse or do they include waste incinerated (with or without energy recovery) or composted? Practices in waste management differ between the 14 countries covered by the analysis, as do regulations and practice which cover emissions, for example of pollutants such as dioxins from waste incinerators. The
material used for packaging will impact on “recovery rates” however they are defined. Waste treatment practices also change over time in ways that are not under Unilever’s control; it is not clear how this is allowed for in the baseline and targets, specifically in the quantitative target to increase recycling and recovery rates by 5% by 2015 and 15% by 2020.

**Recommendation 10:** As part of the additional information to be made generally available, Unilever should clarify how waste recovery and treatment are defined and quantified in the metrics.

**GREENHOUSE GASES**
The documentation for GHG assessment is comprehensive and transparent.

**SUMMARY OF RECOMMENDATIONS**

1. Unilever should consider making more detailed information on the Less Environmental Impact approach and metrics available on a website, including “Frequently Asked Questions”, and should enable interested parties to raise questions for clarification.

2. The more detailed information should include an exposition of the principles followed in Sustainable Sourcing.

3. The more detailed information should include a statement on how Unilever will address and report on changes in the behaviour of consumers using its products.

4. The more detailed information should include an explanation of the system boundaries used. Attention should be given to making system boundaries consistent in any further development of the LEI approach.

5. Unilever needs to form a clear and specific policy on how to deal with and document changes in data, methodology, standards and other exogenous factors. It will help to declare now how these changes will be accommodated in the LEI baseline, as a counter against possible criticism for “moving the goalposts”.

6. Much greater clarity is needed on the treatment of Land Use Change with a statement, consistent with Recommendation 5, on how exogenous developments will be applied by Unilever.
7. The more detailed information should include information on exactly how representative skus are selected, preferably with some form of sensitivity analysis to show how critical this selection is.

8. In the interests of transparency and credibility, the further information recommended should include explicit information on how the 2020 targets have been set.

9. Unilever should clarify whether it will modify the treatment of water as international standardisation develops, and in any case should state clearly what elements of water use assessment are essential.

10. As part of the additional information to be made generally available, Unilever should clarify how waste recovery and treatment are defined and quantified in the metrics.