Mid-term Evaluation of the Sustainable Consumption and Production and Sustainable Industrial Policy Action Plan

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Mid-term Evaluation of the Sustainable Consumption and Production and Sustainable Industrial Policy Action Plan


Final Report

Client: European Commission - DG Environment

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Rotterdam, September 2011
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Executive Summary

Scope

The Sustainable Consumption and Production / Sustainable Industrial Policy Action Plan (AP) was adopted in July 2008 with the intention of reviewing progress by 2012. Ahead of this 2012 review the Commission is reviewing the progress of the AP by means of this mid term evaluation.

The AP contains a diverse mix of instruments and activities with the feature that unites them being that they all relate to making production and consumption more sustainable, while ensuring the competitiveness of the European economy. The AP does not have a specific budget line. Rather funding for the various instruments and activities originate from a diverse range of Commission sources, across a number of DGs (Environment, Energy, Enterprise and Health and Consumer Policy). The AP is essentially an umbrella programme, guiding the extension and development of other Directives and legislation, e.g. the Ecodesign Directive, Energy Labelling Directive and the Ecolabel Regulation, as well as overarching or setting up other voluntary and regulatory instruments, such as efforts to green public procurement and promoting the environmental technology sector. Section 3.2 lists the instruments covered by the AP and Annex A provides a description of the nature of each and the progress to date.

For the purposes of evaluation this makes the AP somewhat unusual, in that it is not a ‘programme’ but nor is it purely a strategy. The report contains a discussion of this issue and prior to developing an intervention logic for the AP develops the following list of ways in which the AP is intended to make the group of instruments and actions more than the sum of their parts, i.e. how the AP is intended to add value:

- Increased cooperation – Between many groups, such as between DGs, between the Commission and MSs, between MSs and between public and private actors;
- Better information and therefore policy making;
- Stronger political traction / momentum; and
- Improved coherence and synergy – Increased profile/ visibility, linking up supply and consumption policies and instruments, improving scale and take up and simplification.

Methodology

Given the scope and nature of the AP described above our approach to this evaluation has had to draw heavily on data already collected (including via evaluations) for the constituent instruments. We have supplemented this with a combination of over 37 one to one interviews and a questionnaire survey. The stakeholders we consulted via these routes were a combination of Commission Officials, MS officials and other stakeholders, including a number of industry groups. The questionnaire survey was completed by 72 respondents which represents a response rate of 37%.

Overall Conclusions

Chapter 5 contains our conclusions against each of the evaluation questions, but the following key points emerge:
Strength of rationale has grown and detailed prioritisation remains a subject of (helpful) debate - There is a clear and increasing rationale for action relating to sustainable consumption and production and the instruments grouped under the AP do address the majority of the issues involved. There is some inevitable (given the breadth of issues) discussion of the prioritisation between the objectives, but apart from an under representation of social and possibly competitiveness issues the balance appears satisfactory.

The AP has made a positive start on improving Commission policy making but there remains more to be done - The AP has improved coordination between the DGs most involved in SCP/SIP, this is a very useful and positive outcome but these efforts need to be maintained and potentially widened to include other DGs. There are some instruments (see recommendations for examples) outside the AP which could usefully be more formally aligned with it.

Striving for consistency of approach between instruments is sound but achieving this in practice is proving difficult - The objectives of the AP related to improving cooperation and alignment between EU and MS instruments, e.g. between Ecolabel and MS level labelling schemes are recognised as worthy, with some, albeit limited, progress being achieved. This limited progress relates to a combination of the complexity of the compromises involved and possibly a lack of resourcing.

The AP has helped present a coherent policy picture but is somewhat stuck in Brussels - Some MSs have been helped by both the high level statement of objectives (and collation of instruments) that the AP offers and there are some good examples of instrument specific progress in MSs. However the AP is more influential on Commission policy making than MS policy making.

The AP and its instruments lack targets and data, making evaluation difficult - The lack of firm targets for the AP and for most of the instruments it covers is a weakness. This, combined with a lack of data, has made quantified evaluation difficult. Monitoring requires a combination of high level indicators and instrument specific outputs.

The breadth of issues involved in this area make it a true cross DG activity - Overall control of the AP and its instruments under one DG would simplify implementation, however the fundamental issues involved are genuinely cross DG so this approach (which would inevitably exclude the non lead DGs to a certain extent) would not be recommended.

Satisfactory progress in adding value – The AP has helped its constituent instruments become more than the sum of their parts, but there remains significant scope (and need) for more. The following table summarises progress on this issue.

<table>
<thead>
<tr>
<th>Added Value Objective of the AP</th>
<th>Score / Comment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Increased cooperation</td>
<td>1 Clear evidence of improved links between DGs. MSs utilised AP in policy making, presentation and justification.</td>
</tr>
<tr>
<td>Better information and policy making</td>
<td>1 A number of studies to inform policy making have been completed. Better policies should result, given time.</td>
</tr>
<tr>
<td>Stronger political traction / momentum</td>
<td>0/1 Maintained profile and some evidence of the AP helping put SCP/ SIP issues on the political agenda but no strong opinions or evidence.</td>
</tr>
</tbody>
</table>
Faster progress is needed and there are opportunities to address this - From a review of high level indicators, it appears that the rate of improvement in a selection of key issues is slow and mixed between MSs (though the most recent data only covers part of the AP’s life). Therefore there is a case for more ambitious policy instruments to increase the rate of positive change in this area. The development of the Resource Efficiency initiative offers the opportunity to address this.

Recommendations

Based on the conclusions reached above we offer the following recommendations, grouped under the sub headings of Strategic and Instrument Specific:

**Strategic Recommendations:**

- There is a need for more ambitious and effective policy in this area - The importance of resource efficiency is increasing, driven by increasing resource cost and scarcity, the need to address the negative environmental consequences of consumption (including global warming) and the need for the European economy to differentiate itself on innovation and added value, with eco innovation being an approach well suited to this. The high level indicators on resource efficiency are proving difficult to move in the correct direction. This indicates a need for increased activity and effort in the areas of activity covered by the AP;
The opportunity now exists to modify policy activity and to consider ways it could be made more ambitious:

- Although cooperation between the DGs has been significantly improved by the AP there is a need to keep working on this. The development of the Resource Efficiency flagship offers a good opportunity to discuss the areas of friction between the DGs and how these can be overcome;
- The strategic grouping that the AP offers to the instruments underneath it is valuable and useful. This benefit should be clearly recognised and efforts made to enhance it.

Separate out the high level policy objectives of the AP, potentially using the Resource Efficiency initiative - The scope of the AP is necessarily broad, though the current nature of the AP, combining strategic objectives with operational targets, makes for a cumbersome policy approach. To address this we suggest separating out the high level strategic objectives into a high level, cross DG statement (the current Resource Efficiency Initiative could be used for this) and creating a roadmap and multiple action plans beneath it. The high level statement of objectives would allow a number of currently under represented areas to be addressed, such as the desire to more fully consider social issues and consumer behaviour.

The high level policy statement should include the following aspects:

- Include the long term objective of reducing consumption, though accepting that this is a sensitive issue, which requires further research and will be a difficult objective to achieve;
- Include high level targets for resource efficiency and links to the targets in other high level policies – such as for energy efficiency, waste generation, competitiveness, integrated product policy, sustainable development and social inclusion;
- Consider the adoption of MS specific ‘shares’ of this target - in the same way as the renewable energy target has been shared among MSs;
- A set of common principles for the Action Plans to follow, including a statement that common methodologies are the ideal and should be adopted where possible and practical;
- A clear progression for voluntary to mandatory – state that the assumed policy progression is to start with voluntary measures but move towards mandatory actions if targets are not met within clear deadlines;
- Retain the aim of consistent methodologies, within limits - Retain and clarify the objectives of enhancing synergy and coherence between policies and instruments in this area, including the desire to see common procedures and processes, for example on LCA. However it should also be made clear that entirely common procedures should not be pursued if they cause excessive complexity and delays. This potential problem should be recognised and the benefits and workload involved in adopting common procedures should be assessed as part of the process of investigating and developing them;
- Improve the coverage of social issues, but only via high level alignment - It is reasonable to consider where the AP and its constituent instruments (or any future equivalent / successor) could be modified to better recognise and address the social issues that are comparatively less covered than the economic and environmental issues. For example the ecolabelling and GPP criteria could be expanded to consider the quality of the employment rights for those involved in the manufacture of the products, in a similar way to ‘fair trade’ criteria. However given the large scale and high importance, and difficulty, of addressing the environmental and economic challenges, and the existence of labour protection legislation in the EU, we would recommend that social challenges are recognised at high level but are not yet pursued via this route in a detailed way.
The roadmap and Action Plans should include the following aspects:
- **Additional actions on consumer behaviour and awareness**, beyond retailer driven activity, ideally utilising successful existing MS and private sector schemes, particularly those in labelling;
- **A framework for MS activity**, to allow for those more advanced in this issue to continue to push the edges of best practice in this area while providing a basis for the less advanced MSs to develop a credible and effective programme;
- **The Action Plans should identify a suite of ‘accompanying measures’** which should be a combination of existing activity such as the Competitiveness and Innovation Programme, Life+ and Interreg and new activity aimed at increasing consumer awareness and changing consumer behaviour;
- **Allow alignment with / adoption of existing initiatives** - The Action Plans should allow for alignment with / integration of existing sector and MS led instruments. For example, this could take the form of EU validation / approval of existing labelling schemes, in a similar way to which the proposed changes to the EMAS scheme allow recognition of MS environmental management schemes.

**Instrument Specific Recommendations**

Although our recommendations are limited by the amount of material we have been able to gather on each instrument within the time and budget constraints, there are a number of instrument specific suggestions that have emerged from our work. Some of these should be treated with caution, particularly where they rely on stakeholder opinions, as we have not taken a large sample of views on all instruments:

- **The current studies and evaluations into the use of common methodologies should be used (or expanded) to assess the practicality of the concept at a fundamental level** – Despite a recognition of the potential efficiency and consistency benefits these studies may indicate that precise methodological alignment results in procedures which are too long and complex, bearing in mind that many stakeholders already view the process as too complex. If this is the case a potential compromise would be to agree on common high level objectives and aims but allow for different detailed procedures. This would run the risk of real (or apparent) contradictions stemming from the fact that the prime focus of instruments is different. However these risks should be recognised and accepted. The studies should also be able to investigate if more staff resource would enable a workable methodology to be developed, or if there is a risk of chasing an unobtainable compromise;

- **Firm outputs data is missing for the majority of the instruments** – the current (and planned) evaluations should be collated. There are a significant number of instrument specific evaluations currently underway, for which the Commission should request output and result data as well as consideration of any marginal benefit of AP inclusion / alignment. These results should be collated. We have attempted to collate what information is available but there are a number of gaps in this;

- **Some strong (if isolated) criticism of the Retail Forum** - The Retail Forum received some (albeit isolated) criticism and its evaluation should carefully consider its objectives and effectiveness and whether other methods to influence consumer behaviour might be more effective instead (or in addition);

- **The Ecolabel and EMAS appear to be low impact and if they are to achieve significant growth they may need to be radically reassessed**, though EMAS is starting to address this - The Ecolabel scheme although useful and well regarded by some, appears to be suffering from low awareness and low uptake. This appears to relate to a combination of multiple competing sectoral and MS labelling schemes as well as a perception of overly complex criteria. The main options for its future appear to be either to stay as a small, niche label or to radically alter its criteria and nature, possibly by seeking to set principles to which sector and MS specific
labelling schemes could adhere. EMAS appears to have similar problems to the Ecolabel, with low take up and a perception of complexity. The perceived 'low impact' is inherent to the voluntary nature of instruments as EMAS and the lack of proper incentives in many Member States. Solutions can be found in either an obligation for companies to have a certified Environmental Management System (like e.g. in Norway) or in the creation of proper (financial or regulatory) incentives in the Member States. The latest revision of the EMAS regulation allows MSs to ask for recognition of existing environmental management systems as complying with EMAS this appears a sound first step to increasing uptake by association;

• **The AP has done little to speed the Ecodesign process** - Although this is the subject of specific evaluations it would appear that a lack of staff resource may be part of the reason for the slow progress, though others suggest the complexity of the modification of the scope of products, from energy using to energy related has a role. If the evaluations confirm this it should be addressed. Other factors that may need to be considered are the inherent technical complexity, resistance by some stakeholders and lack of political drive.

• **There is progress related to green public procurement but its (usually) voluntary nature limits its impact** – The uptake of GPP has increased with virtually all MSs now setting criteria, with good evidence of common approaches being adopted. There remains variation between MSs with a concern that the voluntary approach in many MSs is a constraint;

• **Little value seen in attempting to identify and sum the marginal costs of AP from the individual instrument evaluations** - Individual instrument evaluations could attempt to isolate the marginal cost of AP, but this is likely to be very small (and difficult to achieve) as well as excluding some AP activity that does not come under the remit of a programme or instrument large enough to be evaluated. We therefore suggest that attempting to cost the implementation of the AP in a bottom up manner should not be attempted.
1 Introduction

This final report presents the findings of this evaluation. It briefly summarises the objectives and methodology used in the evaluation and discusses the nature of the Sustainable Consumption and Production / Sustainable Industrial Policy Action Plan (AP) and how this influences our evaluation. It also presents our findings based upon literature review, analysis of the consultation interviews (with EU officials, stakeholders and Member State (MS) contacts) and analysis of the wider web based survey with a larger sample of the same groups as interviewed. Finally, it provides conclusions and recommendations regarding the AP.

1.1 Purpose of the evaluation

The AP was adopted in July 2008 with the intention of reviewing progress by 2012. Ahead of this 2012 review, the Commission is reviewing the progress of the AP by means of this mid-term evaluation, the objectives of which are as follows:

- Provide the Commission with key findings and lessons from experience of implementation of the AP. Moreover provide the Commission’s managers and policy makers with a set of detailed (and practical) recommendations to enhance implementation of the AP and support its upcoming review due in 2012;
- Provide key findings and lessons focused on the implementation and achievements of the AP. In particular, whether (and how) adequate coverage of needs and expectations at national and European level have been met;
- Provide an assessment of the AP’s relevance, effectiveness, efficiency, sustainability, internal/external coherence, synergy, EU value added and impact, and in particular whether it succeeds in its objectives, among others to create a virtuous circle by promoting Sustainable Consumption and Production (SCP), improving environmental performance of products throughout their life-cycle, improving the competitiveness of the European economy and finally, the integration of sustainability in EU activities;
- Assess whether the general environmental, economic and social context of the AP is still properly addressed, and whether all the elements (actions) in the AP are still relevant; and
- Assess the degree of dissemination and valorisation of the achieved results of the AP, via-à-vis (key) stakeholders.

This evaluation covers all of the different aspects and policy instruments that are linked to the AP. A detailed description of the AP, covering the context in which it was developed, the problems it is addressing, its objectives and the history of the main instruments is provided in Annex A.

A full list of the activities evaluated can be found in Annex C.

The results and (practical) recommendations will serve as input to prepare the review of the AP and its Impact Assessment, and should help to better define the needs and objectives for a reviewed AP.

1.1.1 Scope and Description of activities to be evaluated

The evaluation covers a reference period of the last three years (2008-2010) and encompasses the implementation of the AP both at the EU level and within Member States.
1.2 Structure of this report

The remaining chapters of this report are as follows:

- Chapter 2 summarises the methodology used in this study;
- Chapter 3 presents a discussion of the nature of the AP including the intervention logic and discussion of the evaluations carried out on the individual instruments;
- Chapter 4 presents our findings from the literature review, interviews and survey against the evaluation questions;
- Chapter 5 presents our conclusions and recommendations.

- Annex A – Context, description and progress of the AP and its main instruments;
- Annex B – Progress on high level SCP indicators;
- Annex C – SCP/SIP Action Plan – instruments and actions;
- Annex D – Stakeholder questionnaire;
- Annex E – List of Interviewees;
- Annex F – Detailed intervention logic;
- Annex G – List of acronyms.
2 Research methodology

2.1.1 Our approach

This mid-term evaluation of the AP followed the approach and components described in the EC Evaluation Guide¹. The evaluation process was structured in five phases. However, some of the phases were carried out in parallel given the overlaps, synergies, and feedbacks in the process:

1. **Structuring phase**: in this phase the evaluation objectives and scope were finalised in close consultation with the Commission. Qualitative and quantitative evaluation indicators were also identified;

2. **Literature and data collection phase**: in this phase the literature and data for the analysis was gathered;

3. **Consultation phase**: in this phase interviews and questionnaires were conducted with the relevant Commission and Member States officials and key stakeholders engaged with the AP;

4. **Analysis phase**: based on the collected literature, data and feedback received in the consultation phase. The analysis assessed and evaluated the outputs and results of the AP in the three key domains: social, economic and environmental; and

5. **Formulation of judgements and practical recommendations**: conclusions have been formulated around the key evaluation criteria of efficiency, effectiveness, relevance, coherence, etc; and specifically targeted to the evaluation questions. Furthermore practical recommendations for future actions and integration of the AP in other sustainability EU activities are proposed.

The figure below illustrates how the various components of our evaluation framework and methodology fit together with the tasks, subtasks, outputs and deliverables based on the project approach specified by the Consortium and given the requirements set in the Terms of Reference.

¹ Ex Ante Evaluation A Practical Guide For Preparing Proposals For Expenditure Programmes.
We created a survey, based on the terms of reference that was distributed to a range of experts; see Annex D for a full list of the questions. The survey was directed at European Commission and Member State policy staff, companies, trade organisations, charities, NGOs and consumer groups. The distribution of the different groups as a share of the total number of respondents can be seen in figure 2. The survey was conducted with the help of an online survey tool, between the 17th of May and the 17th of June. A total of 193 invites to participate in the survey were made and 72 responses were received, giving a response rate of 37%. Given the nature of the survey group, i.e. that they were stakeholders and policy makers from across a range of subjects, as opposed to beneficiaries of a single programme; this is a good response rate.
3 Policy Context

3.1 Synopsis

The Sustainable Consumption and Production / Sustainable Industrial Policy Action Plan (AP) was formulated in 2007 to bring together two separate Action Plans prepared in parallel by DG ENV and DG ENTR; on the basis that, by combining them, certain potential synergies could be realised. In addition the scope of the new AP was widened to include related areas led by other DGs, for example DG ENER (then DG TREN) became more involved through the inclusion of actions associated with Ecodesign and Energy Labelling, while DG Sanco also became involved with the inclusion of consumer education issues.

As we will discuss later on, one result of this genesis has been that the AP contains a diverse mix of instruments and activities, including changes to existing directives and programmes, some new policy development exercises and small programmes. The feature that unites this diverse group of policies and activities is that they all relate to efforts to make production and consumption more sustainable.

The AP does not have a specific budget line. Rather, funding for the various instruments and activities that are linked to it originate from a diverse range of Commission sources. In this sense it is important to understand the nature of the AP (for example it is clearly not a ‘programme’ as the term is usually understood; but nor is it purely a strategy). This was important, not least to ensure an appropriate approach was adopted in terms of evaluating it.

3.2 Action Plan Description

In seeking to understand the nature of the AP, we first reviewed the individual instruments and measures assembled under its banner. Table 2 addresses this issue, classifying each constituent component, using the following typology:

Instrument

Description / title of the instrument. This list was refined throughout the project but it appears that such a list has not been formally circulated prior to this evaluation and there remains a degree of uncertainty as to the inclusion or not, of some instruments. For example the Lead Market Initiative is mentioned in the AP but only with reference to focussing on its sectors in the screening of regulatory barriers and market failures; and the potential of ICT to deliver sustainable solutions and the work with retailers (i.e. the Retail Forum) should be actions in line with EU’s communication on Corporate Social Responsibility (CSR).

Action Type

- Specific – A clear action described, e.g. extend the scope of the directive to include…;
- Information Provision – Actions focussed on delivering research and/or raising awareness; and
- Policy Direction – Statements and intentions of strategic policy direction and focus, some with associated actions.

Some instruments have aspects in more than one of these categories.
**Mandatory / Voluntary**

Is the target group obliged to take part in / abide by, the instrument? Where instruments are mandatory their implementation attracts much more interest and stakeholder / industry involvement – as they have no choice. This increase in interest can slow implementation. For voluntary instruments a key factor in evaluation is the level of take up achieved amongst the potential target group.

**Pre-existing?**

Did the instrument exist prior to the AP? For pre-existing instruments the impact of the AP should be improvement in their implementation and operation.

**Deadline?**

Is there a clear deadline for action / achievement by 2011/12? Where there is a deadline for achievement of a certain deliverable (or target) this can be verified as achieved or not.

**DG**

Which DG(s) are involved in the implementation. In some cases there is clear sole responsibility, in other cases there is joint responsibility. In other cases the role of the DG may solely be a policy interest. The Joint Research Centre (JRC) have contributed from their own resources in relation to internal scientific support/research and complementing the focus/skills of the policy DGs.

**Supply / Consumption**

Is the focus of the instrument on improving the environmental performance of goods into the market or on improving the market take up of greener products. Some instruments address both.

The numbering and titles of the instrument / measure are those used in the AP communication\(^2\), hence they start at 2.1. This has been done to clarify the origin (and grouping) of the instruments and measures.

---

Table 2 SCP / SIP Action Plan Measures – Classification

<table>
<thead>
<tr>
<th>Instrument / Measure</th>
<th>Action type</th>
<th>Mandatory or voluntary</th>
<th>New or Pre-existing</th>
<th>Due By 2011</th>
<th>DGs</th>
<th>Supply / Consumption</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Specific</td>
<td>Information provision</td>
<td>Policy direction</td>
<td>M</td>
<td>V</td>
<td>New</td>
</tr>
</tbody>
</table>

2.1 The Ecodesign Directive (Scope of Ecodesign, energy using products directive extended to cover all energy related products. Minimum requirements set for products. Advanced benchmarks of environmental performance will be identified. Periodic reviews of minimum requirements and benchmarks.)

- Implementing measures developed for products with significant environmental impacts.  
  - | X | X | X | X | ENER, ENTR |
- Further work programme developed for products not currently covered.  
  - | X | X | X | ENER, ENTR |
- All implementing measures subject to Impact Assessment.  
  - | X | X | X | ENER, ENTR |
- Implementing measures will include minimum requirements and advanced benchmarks, with date for review. These will feed into labelling.  
  - | X | X | X | ? | ENER, ENTR |

2.2 The Labelling of Products

- Categories for Energy Labelling extended to wider range of products (categories set according to Ecodesign directive procedure).  
  - | X | | | X | ENER |
- Labelling used for indicating energy in use and other relevant and significant environmental parameters.  
  - | X | | | X | ENER |
- Ecolabel remains voluntary, revised to simplify and streamline process and extend product coverage.  
  - | X | X | X | X | ENV |
- Ecolabel criteria may also be developed to cover products without Ecodesign criteria.  
  - | X | X | X | ENV |
- The target is for 10% of products in a group to meet the criteria.  
  - | X | X | X | X | ENV |
- Link implementation between of Ecolabel, to Ecodesign and labelling directive – use the data and knowledge / information from setting the criteria for Ecodesign / Ecolabel (assessment methods and review) feed into Ecolabel. Timetables converge.  
  - | X | X | ? | ENER ENV, ENTR, JRC |

2.3 Incentives (Energy and Environmental criteria under Ecodesign and Energy Labelling and Ecolabel used to establish harmonised base for public procurement and incentives)

- Labelling directive establish a harmonised base for public procurement and incentives.  
  - | X | X | ? | ENER, ENTR |
- Minimum label level for public procurement.  
  - | X | ? | ENER, |
<table>
<thead>
<tr>
<th>Instrument / Measure</th>
<th>Action type</th>
<th>Mandatory or voluntary</th>
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<tr>
<td></td>
<td>Specific</td>
<td>Information provision</td>
<td>Policy direction</td>
<td>M</td>
<td>V</td>
<td>New</td>
</tr>
<tr>
<td>Studies into fiscal incentives.</td>
<td>X</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2.4 Consistent data and methods on products – share data, harmonised EU standards (ideally based on international standards)</td>
<td>X</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2.5 Promote green public procurement. Remain voluntary. Commission will provide guidance and tools, set indicative targets, provide model tender specifications. Encourage MS cooperation on e.g. common GPP criteria, monitoring.</td>
<td>X</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2.6 Work with retailers and consumers. Set up Retail Forum which will – identify key areas to be tackled, define baseline of existing initiatives, share best practice, extend geographical coverage, report on progress on an individual basis and lead to individual large retailers committing to ambitious and concrete actions.</td>
<td>X</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2.6. Actions to increase consumer awareness. Europa diary for young people and an on-line education module in Dolceta (for adults).</td>
<td></td>
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<td></td>
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<tr>
<td>3. Leaner Production</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3.1 Boost resource efficiency – tools to develop, monitor, benchmark and promote resource efficiency.</td>
<td>X</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3.2 Support eco-innovation – tools to monitor benchmark and promote eco innovation (as part of a wider EU research and innovation policy).</td>
<td>X</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3.2 EU wide environmental technology verification scheme, to verify the performance and potential environmental impacts of new technologies) – to be a voluntary and partially self financed schemes and based on a regulatory framework.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3.3. Revise EMAS regulation – to increase participation and reduce the admin burden for SMEs</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*These actions will be amplified and supported by:*
<table>
<thead>
<tr>
<th>Instrument / Measure</th>
<th>Action type</th>
<th>Mandatory or voluntary</th>
<th>New or Pre-existing</th>
<th>Due By 2011</th>
<th>DGs</th>
<th>Supply / Consumption</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Specific</td>
<td>Information provision</td>
<td>Policy direction</td>
<td>M</td>
<td>V</td>
<td>New</td>
</tr>
<tr>
<td>3.3 Developing industrial policy 'initiatives' for environmental industries. - Screening of regulatory barriers and market failures, potential of ICT to deliver sustainable solutions</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>?</td>
<td>ENTR</td>
</tr>
<tr>
<td>3.3. Helping SMEs - Enterprise Europe network to raise awareness and disseminate know how.</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>ENTR</td>
</tr>
<tr>
<td>4. Work towards global markets for sustainable products. (Building on: Thematic strategy for the sustainable use of natural resources, The global energy efficiency and renewable energy fund, the forest law enforcement governance and trade agreement)</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>ENV. ENTR</td>
</tr>
<tr>
<td>Promote sectoral approaches in international climate negotiations, including capacity building in key emerging economies.</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Promote good practice internationally; Marrakesh process, EU Asia Switch Programme.</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td></td>
</tr>
</tbody>
</table>
In summary, based on the analysis presented in the table it can be concluded that the AP has been successful in capturing a diverse range of related activity across a range of DGs and stakeholder interests. This bringing together of related activity appears a sound concept.

Although the link between these activities in terms of theme is clear there was a need to assess if this diversity in terms of type, nature and degree of AP ‘ownership’ has any practical effects on stakeholders, outputs and outcomes. This was an important aspect of our evaluation.

3.3 Issues encountered in the evaluation

The nature of the AP posed a challenge in the formulation of an intervention logic and for the evaluation in general. The AP is essentially an ‘umbrella’ programme, guiding the extension and development of other Directives and legislation, e.g. the Ecodesign Directive, Energy Labelling Directives and the Ecolabel Regulation, as well as overarching or setting up other voluntary and regulatory instruments, such as efforts to green public procurement and promote the environmental technology sector. This nature of the AP made this evaluation different to evaluations of single programmes or policies for a number of reasons, including:

Additionality of pre-existing instruments – For instruments that pre-dated the AP, logically the only impacts of relevance and interest are those which occurred since the AP was put in place, and those related to the changes to that measure implemented by the AP. This meant that the issue of attribution was difficult, which was particularly problematic for instruments where attribution was already difficult because of the large numbers of relevant factors.

A very broad target group – Because very few of the stakeholders involved are knowledgeable across all of the areas covered by the AP – this meant that virtually all of those consulted had detailed experience of certain aspects. However, their knowledge of the AP as an overarching mechanism was, in many cases, limited.

Combines strategic and operational objectives – Some aspects of the AP could be linked to measurable and specific outputs, e.g. number of EMAS registrations, share of market taken by highest label category. However, other aspects related to much ‘softer’ outputs, such as awareness levels and promotion of broad sectors whilst other parts of the AP are effectively statements of high level policy objectives. This meant that any attempt to capture all of the potential outputs created a long and diverse list of indicators, including both quantitative and qualitative measures. The nature of the AP is such that it contains high level objectives as well as actions. This combination is unusual for something described solely as an ‘action plan’, as in policy terms it should just contain actions, not objectives – which belong in a strategy.

AP objectives relate mainly to making the combination of the instruments more than the sum of their parts – The purpose of the AP is to emphasise and strengthen the individual, but interrelated, instruments contained within it. This means that the key benefits which ideally need to be identified and measured, for the purposes of evaluation, are the marginal improvements in achieving the objectives of the individual instruments achieved by improving the synergies and coherence between these instruments. These marginal improvements could include an increase in scale, speed and spread of impacts, but could also include an improvement in the quality of the impacts, for example a consideration of environmental as well as energy impacts in the labelling of products. This point is discussed in the following section on additionality.
The AP can have positive and negative impacts on the same instrument – for example, this could occur if the intention was to improve the quality of an instrument by broadening its scope, but this has the unintended effect of increasing the number of factors which need to be taken into account in the design of the instrument, slowing the process and leading to a reduction in the speed of uptake.

3.3.1 Additionality of the Action Plan

Given the large number and diversity of instruments linked to the AP and the resources available for this interim evaluation, it has not been possible to evaluate each instrument in detail, although Annex A contains a description of each instrument and the progress we have been able to ascertain in each. Equally, many of the instruments are the subject of separate, detailed evaluations. It was also vital to keep in mind that the purpose of the AP is as a tool intended to add value to the instruments, i.e. so that impact is more than the sum of its instruments. As discussed above, this has added significance because not all of the instruments are fully ‘under’ the AP. For these reasons, and to assist the evaluation, we have formulated a set of objectives / intended effects that the AP should bring:

- **Increased co-operation** – To help facilitate links and learning between a number of groups, including industry, eco-industries, the Commission, Member States, trade associations and (seemingly minor, but potentially very important) between the DGs with roles and responsibilities in this area;

- **Better information and therefore policy making** – A number of the actions under the AP were intended to research areas where key information was lacking. By filling these information gaps the intention is to improve policy making;

- **Stronger political traction / momentum** – Raise the profile of this policy area and hopefully improve the effectiveness of the instruments to help demonstrate the benefits of activity in this area and create a virtuous cycle of interest and action via the desire to emulate and expand success;

- **Improved coherence and synergy** – The idea that the related instruments should be clearly seen as working towards common goals, with clear attempts to standardise common methodologies and, where possible, link up to the benefit of all the instruments in question. There are a number of areas where these benefits could occur:

  - **Profile / visibility** – To help increase the profile, visibility and take up (for voluntary measures and programmes) by association (formal and informal) with other instruments and a larger whole;

  - **Linking up supply and consumption policies and instruments** – This is a key objective with the desire being to present the instruments and policies aimed at producing products with a lower environmental impact (sustainable production) as being part of the same group as the policies and instruments aimed at increasing market demand and take up of these products (sustainable consumption), and at the same time ensuring the competitiveness of the European companies;

  - **Scale / take up** – This links to the previous two points in that the hope is that by improving the visibility of the policies and instruments, and by linking them to other policies and instruments the take up (and geographical and sectoral spread of this take up) will increase;

  - **Simplification** – The idea here is that by simplifying procedures the uptake should increase.
3.4 Intervention logic

Having established, in evaluation terms, how to address the issue of the scope and intended effects of the AP (as distinct from the performance of individual actions linked to it), we now turn to the intervention logic that frames the AP, in order to place it in a wider policy context. The intervention logic was then subsequently used to structure the evaluation, in particular to set out the objectives and intended effects logically and ‘unpack’ the APs policy relevance.

The first step in our construction of an intervention logic was to develop a problem tree for the Action Plan based on the policy strategy and implementation documentation and consultation with officials. The results of this are presented in Figure 3.

Based on this, plus further analysis and discussions, an intervention logic for the AP was developed and this is presented in Figure 4. The intervention logic provides valuable insights into the links between the different components of sustainable consumption and production and the purpose / rationale of the AP. The intervention logic has also been used to draft indicators of success at both operational and higher levels for the AP. These indicators helped to define the evidence and data that was sought, at both operational and strategic level.

As can be seen the intervention logic has a large number of objectives present at all levels. This is inevitable given the diverse range of instruments and policies included. The central core of the AP can be best appreciated by considering the top and bottom of the logic tree. At these two points the three main strands of the AP are visible. i.e.:

- Enhance the economic performance of EU industries;
- Improve the environmental performance of products and services;
- Protect and enhance the environment.

These three high level objectives are common to all of the various instruments that are summarised in the body of the diagram though the emphasis shifts between them from instrument to instrument.
The wording and grouping of the activities, objectives and impacts are not identical to the detailed intervention logic (see annex F) due to limited space.

Mid-term evaluation of the SCP/SIP Action Plan
3.5 Previous studies and evaluations

This is the first evaluation of the AP since its implementation and the Impact Assessment carried out at the time.

As noted previously, it was not the objective of this study to evaluate each instrument under the AP in detail. The aim was to evaluate the impact of the AP as a whole, this could, in part, be described as a meta evaluation, i.e. an evaluation of the evaluations of the constituent instruments. However, as discussed above, this evaluation also considered the objectives of the AP which are distinct from its constituent instruments. The meta approach assumes that the performance of the instruments in combination represents overall impact of the AP, so it was important that we considered each instrument independently – though in doing so we were reliant on the availability of relevant data and/or the opinions of a small sample of stakeholders. The process was complicated by the fact that evaluations of a number of the major instruments were not yet complete, many were either underway or are yet to have started and some of the instruments are also too small to have their own dedicated evaluations.

Noting this, it is useful to attempt to collate these evaluations and reports which contain material which provides indicators of performance, as this process can contribute towards the evaluation of the final impact of the AP in 2012. This was not the purpose of this study but in the evaluation findings we make a first attempt to draw together a combination of high level and output indicators for the various instruments that could be collated in order to measure achievement.

The findings from our review of the instrument specific evaluations, and other recent progress reports, that were available, can be summarised as follows:

3.5.1 Ecodesign

As outlined in Article 21 of the Ecodesign Directive, an evaluation study was commissioned in 2011 to review the effectiveness of the Directive and its implementing measures. This study is still underway, but based on the findings the Commission shall assess the appropriateness of extending the scope of the Directive to include non-energy-related products. The consultants carrying out the evaluation have been consulted during the generation of this report, however the final report will not be available for review until September 2011.

The first progress report from this study was published in April 2011. The report recognises the issue of inadequate data due to the fact the regulations have only come into force recently and also states that even where data does exist the issue of causality means it is difficult to link effect with the Ecodesign Directive specifically.

The study will also provide an assessment of the feasibility of extending the Directive to include non-energy products and means of transport. The aim is to examine the appropriateness of using the Ecodesign Directive beyond the current coverage of energy related products to include non-energy related products, such as consumer, housing, agricultural, industrial or transport products. This will attempt to address the following key issues:

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4 Directive 2009/125/EC.

• Is an EU Directive setting Ecodesign requirements an appropriate policy tool when assessed against, or in combination with, other existing instruments;
• If Ecodesign is extended to non-energy related products which of these should be given priority in terms of developing an Ecodesign policy tool to fulfil the policy objectives concerning sustainable consumption and production;
• Whether current provisions and mechanisms within the Ecodesign directive are suitable in the case of non-energy related products;
• If not, what are the necessary changes required and how feasible are they.

Due to the recent and evolving nature of the Ecodesign Directive there is limited verified data on actual environmental impacts i.e. energy savings and associated carbon reductions. Due to these constraints the initial report focuses on 5 case studies to extract what lessons can be learnt from experiences to date. The 5 case studies concern possible non energy-related products and so they are not about assessing the impact of the current Directive but testing the feasibility of extending the scope of the Ecodesign Directive. This issue has also been encountered by research consultants who are currently carrying out an assessment of the Ecodesign Directive. A study by the Wuppertal Institute reveals that the regulations already adopted within the Ecodesign framework claim to reduce annual GHG emissions by approximately 135-138 Mt CO₂ eq. in 2020 compared to the business as usual scenario⁶. However, this data has not been verified and is only an estimate. The Commission’s own estimates indicate that annual GHG reductions of between 211-265 million t CO₂ eq. can be achieved by Ecodesign implementing measures in 2020 compared to business as usual development scenarios.

A 2010 UK study on behalf of DEFRA also indicated that minimum performance standards appear to have been more effective in stimulating improvements in energy efficiency than demand side measures. The introduction of minimum standards has a rapid and significant affect on average product energy efficiency, whereas measures such as labelling are less clear cut and inherently more difficult to attribute⁷. This points towards Ecodesign being a more effective approach to energy savings than Ecolabelling.

3.5.2 Energy Labelling Directive

To promote the use and market up-take of energy efficient domestic appliances, the EU introduced the Energy Labelling Directive (ELD [92/75/EC]) in 1992, resulting in selected products being labelled. The labels had an A-G rating scale for the energy efficiency of selected white goods and consumer products⁸, with ‘A’ being the most efficient and ‘G’ being the least efficient and the bounds for each defined in absolute, rather than relative, terms.

The directive was recast in 2010 but the changes remain contentious. This recast was to respond to a problem where in some product groups the majority of products were rated in the top categories. The recast of the Directive was adopted in 2010 (2010/30/EU). The scale was amended, removing categories E-G, while adding categories A+, A++ and A+++, it also changed text to pictograms to make the labels more universally understandable (see Figure). The recast of the ELD was delayed by discussions whether to retain the A-G scale and simply tighten (reset) the criteria for the top categories. The suggestion was generally supported by consumer groups and MEPs. However, more stringent criteria also meant re-labelling and down-grading of some top-tier products. Hence, industry and some Member States wanted to introduce an open-ended scale. The result was the

⁸ Currently including household: refrigerators, dishwashers, washing machines, televisions, wine storage appliances, lamps and light bulbs, air conditioners, tumble driers and electric ovens.
compromise of adding plusses to the existing A label. In the recast, the scope was expanded to commercial and industry products as well as private consumption goods such as TVs and water-heaters that were not previously covered. The recast labels have remained an issue of debate, with many stakeholders remaining unhappy with the existing arrangement and doubting the effectiveness of the A+ system.

Overall, the ELD has been a success in terms of many products reaching the highest energy performance categories. It has been estimated that these changes have saved 14Mt of CO₂ annually over the period 1996 – 2004. The Impact Assessment of the ELD recast suggested revisions to the scope and/or extension to all energy using products could result in total additional emissions savings of between 65-80 Mt of CO₂ by 2020.⁹

Going forward there is interest in expanding the scope of labelling beyond only energy. In the recast ELD, recital 23, the Commission was asked to explore possible expansion of the existing Energy Labelling scheme to include other information such as carbon footprint and environmental impacts. A recent communication on the Single Market Act also includes a similar objective, to propose an initiative on the ecological footprint of products.¹⁰ There has also been debate over the proposed scope of article 9 of the Energy Labelling directive, in relation to public procurement, a proposal was released in March 2011 to repeal part of article 9 as part of a new Energy Efficiency Plan (EEP)¹¹.

There may also be a need to look to improved enforcement of the existing Directive. The evidence highlights some flaws underlying Energy Labelling in practice, including weak enforcement and testing of ratings in some member states and for some products¹². These could undermine the achievement of objectives for energy savings and also consumers’ trust in the labels.

There does not yet appear to have been a recent (post-AP) standalone evaluation of Energy Labelling.

### 3.5.3 Ecolabel

The European Ecolabel is a voluntary scheme, established in 1992, to encourage businesses to market products and services that are environmentally better performing. A major revision of the regulation took place in 2009. An impact assessment was carried out as part of the revisions to the Ecolabel scheme¹³ in 2008. The overall conclusions were that the Ecolabel scheme as it existed was a good idea but significantly hampered by a number of major barriers, including the complexity of the regulation, low take up and not enough product categories. Simplification was identified as

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¹¹ EC (2011) SEC(2011) 779 final
the key need and it was hoped that this would greatly increase the success of the scheme and the potential benefits. The main changes that followed in the revision were as follows:

- More product groups / quicker criteria development process / product group development by the Commission;
- Reduction of annual fees;
- Simplification of assessment procedure;
- More focus on the most significant environmental impacts of products, while keeping the ambition levels high.

3.5.4 Green Public Procurement

A number of relevant studies have been supported by the Commission in this area\textsuperscript{14} including: “Collection of statistical information on GPP in EU” (PWC 2009) and the 2010 analysis: “Assessment and Comparison of National Green and Sustainable Public Procurement Criteria and Underlying Schemes– (9MS and Norway)” (AEA group 2010).

According to research carried out in 2006 for the European Commission\textsuperscript{15}, only seven EU countries managed any significant amount of Green Public Procurement (GPP). These were the ‘Green 7’: namely Austria, Denmark, Finland, Germany, Netherlands, Sweden and the UK. Other EU countries lagged behind with some having no formal GPP policies at all.

Good progress appears to have been achieved in recent years. A 2010 report for DG Environment\textsuperscript{16} compared green public procurement across nine MSs Austria, Belgium, Denmark, Finland, France, Germany, the Netherlands, Sweden and the United Kingdom, together with a tenth country Norway. This reported strong similarities between the approaches in these countries in terms of evidence base, ambition, mixture of mandatory and voluntary and priority product groups.

Similarly a 2011 report\textsuperscript{17} for DG MARKT into the strategic use of public procurement in Europe highlighted the following progress:

- 20 EU countries now have National Action Plans (NAPs) on GPP or Sustainable Public Procurement (SPP);
- Three further countries are in the process of adopting previously developed NAPs for GPP;
- The remaining four countries are currently developing their own GPP NAPs;
- Strong commonality of approach in terms of priority products, and their alignment to EU guidelines.

The report also outlines how activity in this area is helping drive related activity in socially responsible public procurement (SRPP) and in helping to drive environmental innovations through public procurement promoting innovation (PPPI). It also notes that many MSs are copying the EU’s approach by utilising similar environmental criteria for priority product groups. Whilst not a target of any specific EU policy, it is also noteworthy that many MSs are introducing elements of SRPP into their NAPs. Whilst much progress has been made, there is still a significant gap between the “Green 7” and newer Member states. However, all MS are implementing GPP to some extent and

\textsuperscript{14} For a complete list see: \url{http://ec.europa.eu/environment/gpp/studies_en.htm}.
\textsuperscript{15} GPP (2006) Green Public Procurement in Europe.
\textsuperscript{17} Strategic use of public procurement in Europe report, 2011, \url{http://ec.europa.eu/internal_market/publicprocurement/docs/modernising_rules/strategic-use-public-procurement-europe_en.pdf}.
many (e.g. France, Belgium, Italy, Cyprus, Spain (regional approach), Poland, Czech Republic, Lithuania and Slovenia) have achieved significant progress.

### 3.5.5 Consumer Education

The Europa Diary is currently subject to an evaluation commissioned by DG SANCO, conducted by Ecorys, which is considering the relevance, effectiveness and efficiency of the resource. The evaluation is also considering whether a paper version of the Diary is still relevant or whether or not new channels of communication might be employed, such as social media or mobile phone applications. The evaluation is currently at the interim stage and therefore no findings are available for wider review. With regard to relevance to the AP it should be borne in mind that the Europa Diary only addresses sustainable consumption as a small aspect of wider consumer information.

Dolceta, an EU-wide web-based consumer information tool, is currently subject to an evaluation commissioned by DG SANCO, also being conducted by Ecorys, which is considering its relevance, effectiveness and efficiency. This evaluation is currently at the interim stage and therefore the findings are only preliminary and not available for wider circulation. With regard to the relevance of Dolceta to the AP, it appears to be greater than the Europa Diary, with green consumption a focus area among the wider information provided.

### 3.5.6 Retail Forum

From our review of progress all three Retail Forum actions stipulated in the AP have been carried out. Both retailers and the Commission state that this is a useful forum which has contributed to improved dialogue and understanding among the involved parties. Nevertheless, the Commission as well as environmental NGOs are pushing for more progress and stronger commitment from the retailers and possibly mandatory targets.

### 3.5.7 EMAS

Two important studies on EMAS have been carried out since the introduction of the AP, their main findings can be summarised as follows:

"Step up to EMAS": Study on Guidelines for Transition from Non-Formal EMS and ISO 14001 to EMAS\(^{18}\): this provides a summary of 20 environmental management systems from around Europe and the world, comparing and contrasting them to EMAS. The goals of this project were to identify complementarities between the other schemes and EMAS to allow mutual accreditation, therefore encouraging firms to progress from other schemes to EMAS. It was also intended to be of use to member states in submitting existing schemes for recognition under the revised EMAS III regulation. This appears to be having the desired effect as two Member States have drawn on the results of this study to submit a request for recognition of (part of) existing Environmental Management Systems as corresponding to provisions of the EMAS Regulation.

*Study on costs and benefits of EMAS to registered organisations*\(^{19}\): by looking at costs/benefits this study explored the drivers and barriers to registration for EMAS and the benefits and incentives of registration. It highlighted that a desire to improve resource efficiency was the biggest driver to register for EMAS; other factors included a perception of improved reputation, legislative compliance, meeting supplier requirements and competitiveness across the EU. Barriers to

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\(^{19}\) Milieu, RPA (2009) Study on costs and benefits of EMAS to registered organisations.
registration were found to be a lack of clarity on the benefits of participation, the costs of registration and the low levels of awareness among consumers regarding EMAS.

The benefits from those registered for EMAS were primarily experienced in reduced material and energy costs. The results of the study illustrate that in many cases the savings achieved exceed the initial costs of implementing EMAS, although a large share of these gains were achieved shortly after initial implementation (i.e. quick wins). Improvements at a later stage seem to be harder to achieve. Other benefits included market access, customer retention, reduced number of environmental incidents and improved relations with regulators. Greater financial support was identified as a potential incentive to improve the number of registrations.

3.5.8 Assistance to SMEs

The Environmental Compliance Assistance Programme (ECAP) aims to support SMEs in complying with environmental legislation and obtaining potential savings in energy and resources. Under ECAP, action to improve environmental compliance of SMEs has focussed on where it is believed to have the biggest impact. The first assessment of the ECAP initiative recently published its findings.

This evaluation highlights the overall success of the programme and its value to SMEs as follows “Broadly speaking ECAP has performed well in meeting its key objectives and targets to support SMEs in the problems that they face in complying with environmental legislation and improving environmental performance.”. Though this is tempered with the following statement: “However, although ECAP actions have been widely implemented, the effectiveness and success of the programme has been short of its original expectations. … this assertion is indicative and not conclusive due to the complex nature of evaluating ECAP’s success”.

The following table outlines their assessment of progress against the main components of ECAP to date: and areas of potential improvement.

<table>
<thead>
<tr>
<th>Component</th>
<th>Summary of Progress</th>
<th>Areas for Improvement</th>
</tr>
</thead>
<tbody>
<tr>
<td>Better Regulation</td>
<td>Improved tools and advice, but much remains to be done.</td>
<td>ECAP expert group could play larger role in developing policy.</td>
</tr>
<tr>
<td></td>
<td>“SME test” has improved legislative design with regards SMEs concerns.</td>
<td>Development of Compliance assessment methodology would prove useful.</td>
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<tr>
<td></td>
<td></td>
<td>Environmental law and SME regulations could be better aligned.</td>
</tr>
<tr>
<td>Improved Environmental</td>
<td>EMASeasy and EMAS III have proved successful, particularly for SMEs under pressure</td>
<td>Promote the use of EMAS as a tool to monitor environmental compliance</td>
</tr>
<tr>
<td>Management Systems</td>
<td>from supply chains.</td>
<td>EMAS still viewed as too cumbersome due to extensive registration requirements.</td>
</tr>
<tr>
<td></td>
<td>EMAS III regulation is more specific and clear relating to SMEs</td>
<td>Increased promotion of non-formal systems within SMEs such as Ecomapping.</td>
</tr>
<tr>
<td>Financial Assistance</td>
<td>Funding has been provided to SMEs and SME support organisations through multiple</td>
<td>Gaps exist between available funding streams and ECAP priorities.</td>
</tr>
<tr>
<td></td>
<td>streams including LIFE+, CIP, and structural funds.</td>
<td>Need for improved information on schemes for SME’s.</td>
</tr>
</tbody>
</table>

20 Interview DG Environment, 20 April 2011.
<table>
<thead>
<tr>
<th>Component</th>
<th>Summary of Progress</th>
<th>Areas for Improvement</th>
</tr>
</thead>
<tbody>
<tr>
<td>Building local expertise</td>
<td>Training events successful at raising awareness of ECAP objectives, feedback largely positive. Forum a useful tool for sharing knowledge and best practice. Has strengthened SME support organisations, who have been important delivery partners in implementing ECAP actions.</td>
<td>Improve take-up of ECAP to allow more specific training to be delivered. Attendance and participation at events and training to be improved. Registration for forum and user interface could also be improved.</td>
</tr>
<tr>
<td>Communication and Information</td>
<td>ECAP website provides a valuable information resource. Mainly used as a source of information on legislation, funding and news relating to environmental performance and compliance. Use of the forum has increased</td>
<td>Website tools and best practice examples need to be expanded to become relevant to all MSs, including in additional languages. Improved brand identity and links to Your Business Europe and the SME portal would also prove beneficial whilst improving awareness of the Helpdesk.</td>
</tr>
</tbody>
</table>
4 Evaluation findings

This section addresses the evaluation questions as set out in the terms of reference and discussed in Chapters 2 and 3 of this report. For each evaluation area the questions are presented in boxed text, these are followed by our findings against these questions from the literature we have reviewed, interviews and survey.

For each question, we begin with a discussion of our interpretation of the question followed by a number of points and themes which have emerged from our review of the literature, our survey and interviews.

4.1 Relevance

**To what extent is the AP recognising and addressing the great environmental and social challenges e.g. ageing society, climate changes, limited natural resources and social inclusion?**

In this evaluation, the consideration of relevance needs to recognise the diverse target groups of the multiple instruments which are fully or partially linked to the AP. As the intervention logic for the AP shows, there are a large number of, albeit linked, needs and problems that the AP is designed to address. This means that by its nature the AP needs to recognise and attempt to address a very wide range of challenges.

*The wide scope of the AP means that while social, economic and environmental issues are recognised achieving a balance between them is complex*.

The AP was designed to address a multitude of environmental and social challenges that stem from the impacts of consumption and production while ensuring the competitiveness of European companies. Social, economic and environmental considerations are highly intertwined and need to be taken into account simultaneously. For example, it has been proven that over the last century that global economic growth has been highly correlated with growth energy use and CO₂ emissions. Whilst this relationship and trend is not necessarily a given, understanding of it as a problem and development of mitigation measures has been limited to the most recent decades, it still highlights the strong likelihood that the AP’s relevance will increase as the total impact from consumption and production increases with future economic growth.

One of the underlying aims of the AP is the decoupling of resource consumption from economic growth. The AP recognises the challenge of limited natural resources and aims to increase resource efficiency. However, it is becoming increasingly clear that the achievement of absolute decoupling will require actions beyond business-as-usual and beyond the best practices of most countries, which have to date primarily delivered marginal or incremental improvements. Policy conflicts are still substantial factors that make this goal difficult to achieve. An example is the current EU economic and trade policy that encourages consumers to shop across borders for

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goods and services, without sufficiently accounting for the resulting negative environmental effects.\textsuperscript{23}

Environmental considerations are at the core of the AP’s objectives. While there is no debate about the general notion that environmental impacts have to be reduced, there is continuous disagreement on the prioritisation among them. The AP’s main focus in this area is seen by many as lying with climate change and the related CO\textsubscript{2} emissions.

\textit{There are differences of opinion on what the priorities of the AP are, and should be, which are rooted in the prime motivations of the consultee / organisation}

Some external stakeholders (i.e. not Commission Officials) felt that the AP was failing to address any of the issues with any significant degree of success and that the activity which is making a difference in this area is largely confined to businesses and is being driven by energy cost pressures and other legislative drivers (such as those related to waste reduction).

Some felt that the AP should seek to focus more on reducing energy use, due to the pressing need to act on climate change, while others felt that there is a lack of focus on the remaining environmental challenges such as the loss of biodiversity. For example, the European Environmental Bureau (EEB) felt that the AP does not aim to address these other challenges and furthermore shows a lack of vision, clarity and ambition.\textsuperscript{24} A Commission policy maker felt that when thinking about prioritising between energy and environmental impacts, it is logical to look for the biggest impacts first. However this weighing of impacts is complex and case by case considerations are required. This can be achieved within the individual instruments, for example in the field of Ecodesign it is the job of the preparatory studies to highlight these issues.

Most respondents to our survey felt that the AP does indeed address many environmental challenges to a large extent. Despite this, many also felt that there is a clear need for better communication of the instruments, e.g. clarifying the differences between energy performance vs. the overall environmental impacts of products. The climate change focus of the AP was felt to have moved a bit further into the background with the creation of DG CLIMA and other environmental topics such as biodiversity gaining in importance.

At the higher level there is arguably no need to seek to state priorities between energy and environment, as both have their own dedicated policies, directives and targets. It is arguably more important for the AP to recognise the links between these policy areas and seek to align resource efficiency policies and actions with both (as both are relevant).

\textit{Some feel that social issues are missing from the AP, but including them could be overambitious}

A number of survey and consultee respondents felt that social issues were not recognised or included in the AP, partly because some of the DGs which are involved in these issues, e.g. DG EMPL are not directly involved in any of the AP instruments. The suggestion was made that this could be addressed by changing from ‘green’ public procurement to ‘sustainable’ public procurement and by adding social criteria to the Ecolabel scheme. However when this suggestion was made to a MS policy officer they could see the logic (of including social criteria) but felt that there was a risk of becoming overambitious and that the AP and its instruments would be better off retaining their focus on energy and environment issues – where there remains much to be achieved.

\textsuperscript{23} The European Consumers’ Organization (BEUC) and ANEC (2010) \textit{position paper.}

– though social issues could be incorporated in the evaluation / LCA criteria in some of the instruments (this is already done in Ecolabel25).

Some survey respondents felt that the social dimension was not addressed enough within the AP. They would like to see clear targets and indicators to evaluate social impacts. Despite this call, 70% of the Member State respondents thought that the AP had no effect on the costs that households face and 56% of the stakeholders from industry & trade shared this view.

Some policy documents and interpretations of the word sustainable appear to forget the social aspects which may help explain the lower level of coverage.

Another MS policy maker felt that the term ‘social aspects’ can be missed by some when interpreting the word ‘Sustainable’ in the AP title. They felt that within some EU (and MS) policies and documentation the word sustainable is almost equivalent to the word “green”. Whereas the correct interpretation of sustainable is much broader than ‘green’ and includes social and economic dimensions.

| To what degree (both qualitative and quantitative) do instruments and initiatives under the Action Plan address its objectives? |

As discussed in Chapter 3, the AP has a diverse range of objectives, both in terms of the target area and the nature of the change / influence that the instruments are intended to have. It should be noted that the objectives of the AP were clearly shaped by the objectives of the instruments that existed before. It is no coincidence then that the objectives of the instruments closely match that of the AP.

The balance of instruments under the AP was criticised by some as being too focused on supply rather than consumption

The European Consumers’ Organisation (BEUC), in conjunction with the European Association for the Co-ordination of Consumer Representation in Standardisation (ANEC), voiced their position on the relevance of the instruments and initiatives under the Action Plan. While they welcomed the introduction of the Action Plan in general, they stated their dissatisfaction with its “unbalanced and often insufficient focus on the production side”26 This view is also shared by Scholl27, who claims that: “The Action Plan focuses on measures that deal with the supply side, and falls short of genuinely consumption-focused initiatives.”

A French policy maker viewed the mix of tools used in the AP as reasonably successful. However, they felt that production efficiency should receive more attention. They agreed that the AP was presented by the Commission and perceived by others, as a first step and that the next steps are going to be more ambitious (which is regarded as necessary). For example, they suggested that whole pillar of activity around consumption/consumer behaviour/ lifestyle should also be addressed, as it has been noticeably overlooked. It is was also suggested that policy should have its basis clearly harmonised with energy efficiency in order to respond to ambitious objectives, such as the extension of eco-design to all environmental criteria of all manufactured products.

25 For example the requirement for sustainably sourced timber via schemes those consider social aspects). The inclusion of social criteria is specifically referenced under Art. 6.3(e) of the Ecolabel Regulation. The current Ecolabel Work plan states that more will be done to develop social and ethical criteria.

26 ANEC / BEUC (2011) ANEC/BEUC preliminary thoughts in view of the revision of the EU action plan on sustainable consumption & production (long version).

Our MS and stakeholder survey expressed support for the match between instruments and objectives but raised doubts over their ambition and likely impact

This view was echoed in the survey where many participants felt that the instruments of the AP do address its objectives. There was however some doubt on how much impact these instruments actually have and whether the level of ambition was high enough. In general participants called for increased integration of the AP instruments with other policies and a larger focus on the international dimension of SCP.

Respondents were asked to comment on the AP in general. One reoccurring criticism of the plan was its perceived weakness on the consumption side beyond information provision, labelling and incentives. They suggested that there was a need for new instruments and policy initiatives to tackle consumption focussed side issues, though few clear ideas of what these could, or should, be were provided. Furthermore, many respondents called for more integration between the economic, environmental and social dimensions of the AP initiatives, calling for the EC to make the role of consumption in a green economy clearer in the future. The development of clearer targets and indicators would be welcomed by many respondents, particularly if this included new mandatory regulation at some point.

In terms of competitiveness, the surveyed stakeholders from industry and trade did not feel that the AP has led to increased profits for their business or sector. On the contrary, 21% believed that it has increased the costs of production moderately, while only 6% thought that it had slightly helped to increase international exposure or export. 15% of respondents also thought that the plan had led to a moderate improvement in overall corporate image and an increasing demand for green products. Overall, most participants felt that the plan has not had an impact on competitiveness, or that they do not have enough knowledge to make such a judgment.

Some feel that in order to truly address the issues of resource efficiency a more radical review of the nature of consumption and growth is required. However this may be too radical to include as a headline objective though it would be credible and sound to have it as a longer term objective.

In addition to the perceived lack of focus on the consumption side, doubt exists on the general usefulness of measures that target individual consumers’ behaviours. Mont and Power28 argue in a recent paper that the focus on the individual level is misguided as social norms and values underlying mainstream society have the most significant impact on consumption behaviour. According to their view, policy intervention should take place at a higher level and target entire ways of life to be effective. This type of “systems thinking” is also advocated by BEUC, which states that in order to reach the goals set by the AP, it will be necessary to hold a fundamental discussion on economic growth and its potential to undermine measures to enhance resource efficiency.29

This point was discussed with UK policy makers who felt that while the logic behind the need to modify consumption patterns and expectations was sound it would be a difficult concept to ‘sell’ to the vast majority of individuals and companies who would be influenced by policies in this area. They agreed with the suggestion that a sound compromise would be to state these issues as an ultimate goal but to seek to move towards them via policies of the type currently in place. This approach would give credibility to the position and help facilitate the debate of how, and if, it might be achieved but would avoid being seen as too radical by many of the more conservative stakeholders.

28 Osaka Mont, Kate Power (2010) Understanding the complexity of consumer behavior and implications for the sustainable consumption discourse.
The comparison was made with UK resource efficiency policy where the policy interventions are seen as operating over three levels – which would be a reasonable way of considering the same policies at EU level:

- Resource efficiency for processes should be the first level of action, and there is still much to be done in this area;
- Products and supply chain improvements should be next – this involves more radical improvements. (being dealt with currently);
- The third step is whole system/business model/service changes, i.e. less products and less consumption, via longer lasting products and lifestyle changes. This is a more radical step. It would therefore be seen by many as too radical to put this at the core of future policy, although it would be credible to have it included in innovative areas of the action plan and to support actions to research it.

There is stakeholder support for the desire (and actions) to develop consistent methodologies (e.g. for LCAs) between the instruments, though the difficulty of arriving at one ideal is recognised

With regard to the initiatives to support the uptake of products with a lower life-cycle impact, stakeholders expressed the need for scientifically reliable, consistent and clear product assessment criteria across the EU, covering the most significant environmental impacts of the product over their life-cycle.30 This view was echoed by a UK policy maker who commented that they felt that it was a sound desire to strive for consistency in methodologies used for Life Cycle Assessments (LCAs). However, there is a risk in harmonising methodologies – with a danger of locking into the wrong system and metrics, putting all our eggs in one methodological basket. However they agreed with the criticism raised by others that GPP, Ecolabel and Ecodesign all have different LCA methodologies, so the desire to improve consistency is sound.

The AP has a variety of types of measures / instruments and this typology affects their utility.
Mandatory instruments are more powerful but creating them needs strong justification and will face more resistance, so starting with a voluntary approach is sound and understandable

As discussed in Chapter 3, the AP contains a mixture of strategic, specific, mandatory and voluntary schemes. A number of those interviewed pointed out that with voluntary measures, such as EMAS, take-up will begin with the most motivated and many companies will only make a limited commitment. Generally mandatory instruments are more effective. However, there needs to be a strong justification for mandatory instruments. For some of the voluntary instruments they should be thought of as a first step towards addressing the issues. There have been attempts to strengthen the position of certain instruments (e.g. to get GPP to include Ecodesign minimums) but these have been resisted.

The point was made by many that the AP is a good start to achieving the over-arching objectives, but it is only a start. It will not be enough to fully achieve these objectives.

Opportunities exist to improve the achievement of synergies between areas already under the AP and to seek synergies with other related policy areas that are outside of the AP

There were a number of comments received regarding the soundness of the concept, but the difficulties achieved in obtaining concrete progress, in terms of synergies between areas that are included in the AP. The examples given were the links between GPP and Ecolabel and the potential to align LCA procedures between (for example) Ecodesign and Ecolabel. Some felt that this has led to a position where the reality on the ground does not live up to the rhetoric.

The point was also made that there are a number of policy areas with clear links into the resource efficiency field, where synergies are available, that are not mentioned in the AP. The examples that were given were waste and recycling policy where it was felt that the overarching objectives of resource efficiency could be better articulated.

**Some questioning of whether some of the larger instruments need an overarching AP.**

An important point was made by a number of consultees who felt that being part of the AP is useful for the smaller and voluntary instruments, such as EMAS, Ecolabel and GPP but that the larger and mandatory instruments, such as Ecodesign and Energy labelling gained less from being part of the AP.

**Given the scale and breadth of the objectives many felt that the AP needs to be more ambitious and strategic, this clearly links to the Resource Efficiency flagship**

A diverse range of stakeholders felt that the measures adopted in the AP are not sufficient to achieve the objectives of the action plan. There should be more ambitious objectives and the inclusion of other areas such as consumption and production methods.

Some felt that this would be best achieved by making the AP more strategic, at the level of the EU 2020 strategy, with numerous policies and programmes delivering on its various constituent strands. This suggestion clearly overlaps with the questions relating to the links between the AP and the Resource Efficiency Flagship.

To what extent are the objectives of the Action Plan still pertinent in the current environmental, social, and economic context?

**The majority of the contextual changes have increased the relevance of the AP's objectives**

The AP was adopted in 2008, and was designed to fit into the environmental, social and economic context present in the EU at the time. Since then, several major events have occurred that could well have altered the AP’s relevance. Among these events was the credit crisis that led to an economic downturn in many EU countries, followed by the debt crisis that plagued several member states and put pressure on the value of the common currency. The financial crisis was raised by a number of those consulted as being a spur to increased interest in the objectives of the AP. In environmental terms, the Deepwater Horizon oil spill in the Gulf of Mexico, the Copenhagen climate conference and, more recently, the nuclear disaster in Fukushima, Japan, may also have influenced public opinion in the EU in favour of an increased interest in the objectives of the AP. Some felt that the financial crisis has reduced the level of interest in environmental issues in favour of a focus on reducing costs via resource and energy efficiency.

Despite these and other large scale changes to the context of the AP, the relevance of its objectives seems to still be very high or even increasing. In a review of its Marrakesh process, the UN recently stated that the world faces unprecedented challenges due to an inter-linked economic, social and environmental crisis and that there is a need for a fundamental shift in the way goods and services are produced and consumed. Furthermore, there is a clear need to rethink our current way of pursuing economic growth and the business models used to attain it. 31 In terms of general relevance, it is a commonly agreed goal today that an overall reduction in the level of material consumption is required, particularly in the Western countries which are responsible for more than two thirds of global environmental impacts. 32

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31 UN (2010): Paving the Way to Sustainable Consumption and Production
32 Scholl, Rubik: Policies to promote sustainable consumption: Innovative approaches in Europe
At the EU policy level it is clear that there has been an increase in the number of high level policy drivers and goals, e.g. the 20/20/20 targets and the very recent 2020 strategy. There are clear mandates from multiple Council conclusions to work to implement policy to achieve these goals swiftly and strongly. The developing Resource Efficiency flagship was mentioned by a number of consultees as being closely linked to the AP and the relationship between these two is specifically discussed later in this chapter.

*The increasing urgency and importance of resource efficiency is increasing the interest levels among companies*

A MS policy maker pointed out the sound point that resource security and the inherent risks of this are increasingly becoming the driving political forces behind resource efficiency policy. This fact is increasingly being recognised by companies and those with foresight are making strong progress to address these issues in their sustainability strategies.

### 4.2 Effectiveness

In the context of this evaluation the effectiveness questions need to be considered in two ways. The first of these relates to the effectiveness of the individual instruments in achieving their specific objectives. Our ability to answer this question is hindered by the lack of completed (or planned) evaluations for many of these and the lack of resources for us to carry out detailed instrument-specific evaluations as part of this mid-term evaluation. However we have attempted to review progress under all of the instruments (see Annex A) and have attempted to suggest / collate indicators for all of the instruments.

The other way in which effectiveness needs to be considered in this evaluation is with regards to the objectives above and beyond the individual instruments (synergy, coherence, scope etc;) that we have identified. The specific question asked in the Terms of Reference is below:

<table>
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<th>(4) To what extent is the AP contributing to:</th>
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<tr>
<td>a) Environmental protection within the EU and outside;</td>
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<tr>
<td>b) Integrating sustainability in other EU policy areas;</td>
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<tr>
<td>c) Improving resource efficiency.</td>
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The effect on competitiveness is also an important consideration.

The findings separate into two main groups: firstly, evidence concerning the effectiveness of the AP, as measured against its own overarching objectives as a supporting or enabling function and secondly, evidence of the effectiveness of individual instruments (where this is available).

*Some feel that the lack of targets and detailed specific actions makes the AP more of a strategic wish list than the set of actions that the AP title implies. While this comment has some merit it overlooks the specific actions that the AP does include*

A high level stakeholder commented that they felt that generally what is missing in the AP is commitment. They felt that that it contained clever and innovative ideas, but is more of a collection of ideas than an actual action plan. They felt that there is a great difference between visions and ideas and actual policy action plan with time limited targets and milestones.
Defining an EU-wide policy in an area where there is wide variation in MS progress is not straightforward

The same stakeholder mentioned in the previous point went on to say that one of the difficulties the AP has in achieving relevance is the huge gulf that exists between Member States in terms of progress on many of its instruments. They felt that there is an inherent difficulty in designing an overarching policy to cover a range of countries, whilst taking into account their varying levels of implementation and progress in the area of SCP.

Some positive opinions of the added value contributions of the AP

The AP has been praised as a showcase of how consultation opinions can be integrated into a definitive strategic document33. It is also understood to have been instrumental in drawing attention to the EMAS revisions and the Ecodesign directive.

The AP was originally a combination of different initiatives from within DG ENV and DG ENTR. There was clearly large overlap between these, especially on the rationale, though their approaches differed. This overlap was picked up and efforts were made over a short timescale to combine the two approaches and address consistency issues. With hindsight this perhaps could have been done better, but within the time available it was an achievement.

Though there is a recognition that more could be done to enhance the added value benefits of the AP

Some felt that the ‘Establishment of a harmonised base for incentives’, as outlined in the AP, now seems a bit ambitious with hindsight. It is very complex to try and harmonise all of these issues within and between Member States.

The survey indicates that stakeholders believe that the AP has made progress against its objectives, but the vast majority do not think that the level of progress is significant

Stakeholders were asked about the perceived progress that has been made on the various objectives of the AP since its introduction in 2008. As the results in Figure 5 indicate, there were pronounced differences in perceived progress across the various objectives. Participants felt that the greatest progress has been achieved in improving the environmental performance of products, with 11% stating that there has been significant progress and 75% feeling that some progress has been made in this area.

33 Wuppertal Institute et al (2009) Eco-innovation: Putting the EU on the path to a resource and energy efficient economy.
The objectives that were perceived to have experienced the least progress are “improving the alignment and consistency between incentives and stimuli” and “Promote SCP good practices internationally as well as the international trade on environmental goods and services”. In a further follow-up question it was asked to what extent this progress can be attributed to the AP. The two aforementioned objectives that were ranked as having experienced the least progress were also the ones that participants felt as having the lowest AP contribution with only 31% citing that there has been “some contribution” towards their achievement. This contrasts with the best performing objective, the improvement of the environmental performance of products, where 64% of the respondents felt that “some contribution” had been made by the AP.

As shown in figure 6, more than a third of the Member State officials surveyed found that both materials used in production and the amount of waste have been reduced in their countries and that the AP had at least a slightly positive effect on this. 39% also believe that it succeeded in changing people’s behaviour towards sustainable consumption. A somewhat larger share of the respondents was however of a different opinion and stated that the AP has had no effect on these objectives.

From the industry and trade stakeholders, 42% thought that the AP has had a slightly positive effect on reducing materials used in production e.g. better packaging. 29% found this to be the case for reductions in the amount of waste created and 36% thought that the plan had a slightly positive effect on changing people’s behaviour towards sustainable consumption.
The same group of respondents were also asked the question: “After the AP, production and consumption practices in my sector/business now are more sustainable than before the implementation of the AP”. The results are presented in Figure 7, which shows that only 25% of them slightly agreed with this statement, 44% were undecided. Despite this, 16% of the participants strongly agreed that there is more information available about sustainable consumption and production since the introduction of the AP. 41% slightly agreed to this. Another 34% slightly agreed that the AP has contributed to improving the environmental performance of products, whereas 31% were undecided about this statement. In all but the information case respondents are largely neutral on any changes in SCP in their sector.
According to the survey results, there seems to be a relatively optimistic view on the AP’s impact on resource efficiency. Some 17% of the surveyed Member State officials thought that it is very likely that the AP will boost resource efficiency through its various initiatives. A further 57% believed that this will happen to some extent. The different stakeholder groups surveyed all had a similar opinion on this, with almost the same distribution in their answers.

Data is lacking to quantify the instrument specific contributions
The Ecodesign directive, as an obligatory measure, was felt to be a powerful initiative. However, data to prove this was described as, and proved to be, difficult to source. This is partly because the market begins to change as soon as a product group comes under discussion, with leading manufacturers thinking ahead and improving their products in advance of formal regulation. This pre-emptive activity, while of course welcome and positive, makes measures of pre-regulation market sales more difficult to calculate, as they are different to what they would have been without the proposed measures. In addition the full impact of the regulations on final energy use and resource use will not be visible for some time as there is a time lag as new improved products are introduced whilst discounted older (less efficient) stock is still available and being sold.

There are some positive qualitative opinions on specific instruments (e.g. on the benefits of EMAS) and some less positive, e.g. on the effectiveness of the Retail Forum and awareness of the Ecolabel
A clear link was made by some consultees between EMAS and its contribution to environmental protection and resource efficiency, disregarding the success of the scheme itself. The Retail Forum was felt by some consultees to have the potential to achieve far more than it currently does and could have wide-ranging benefits to environmental protection, sustainability and resource efficiency. Another consultee commented that the Retail Forum is an example of an instrument that is not currently delivering; they felt that it is not really a commitment as it has no targets or deadlines and went on to state that as it is a formal initiative with the support of the Commission, the deliverables should be much more formalised than they are. Their perception is that the retailers can do what they want and there is no sectoral commitment. It should be pointed out that a wider range of opinions would need to be collected on the Retail Forum in order for a fully informed opinion to be offered on its effectiveness.
A survey on the recognition of the Ecolabel in the UK showed low levels of awareness. This is thought to relate to a vicious circle of a limited number of Ecolabelled products on the market, leading to limited recognition, leading to lack of incentive for companies to get their products Ecolabelled. Although UK interest in the Ecolabel has increased in recent years and so has the number of Ecolabelled products. Another consultee commented that the Ecolabel scheme attempts to cover too much and by doing so makes it burdensome to achieve and limits its eventual effectiveness. They commented that simplifying it would boost uptake.

Some instruments of the AP reflect the lower level of knowledge that the Commission had of certain issues when the AP started, so it needs to evolve in line with the latest knowledge, for example on consumer awareness and social issues

For example, the Retail Forum was justified as the Commission saw it as a good way of involving retailers to help address sustainable consumption. From the literature we have reviewed and the opinions of stakeholders it is apparent that knowledge has developed regarding the availability of other methods/routes available to raise consumer awareness (as well as via retailers) to address this. The social aspects of ‘sustainability’ is also not very well covered by the instruments, with arguably no specific links or instruments to address this and no indicators in our list of measurement.

There is a recognition that the nature of the instruments (particularly mandatory vs. voluntary) has a major impact on their effectiveness. The ETV was originally intended to have a legislative basis but this has not transpired and it has had to progress on a voluntary basis

ECAP for example lacks political MS support due to the lack of a Council resolution or clear incentive for action. This has had a detrimental influence on the effectiveness of the instrument. The ETV on the other hand is a concrete tool. Its effectiveness (impact) will depend on its actual use. It has not been possible to assess this as yet. Green procurement is another example of an instrument with great potential, but its voluntary nature has limited its uptake, particularly among newer member states. GPP does have the potential to contribute to environmental protection not only within the EU, but in developing countries also.

The original intention for the ETV was for a proposal on legislation (see original AP document). This was put on hold in 2009 and since then, nothing has happened legally. The situation led to the start of the ETV’s pre-programme progressing without a legal instrument, on a voluntary basis. Further evaluation will be necessary to decide on the next steps.

What would be good measurement tools for a reviewed AP?

What are the best indicators to measure the progress being made?

These two questions have been grouped together as the review of indicators of progress made, is a key factor when looking forward to the final evaluation of the AP next year (2012). To this end we have put together original material in this section that may assist in the preparation of future measurement tools.

The AP was criticised for its lack of targets and measurement tools

A major weakness of the AP that has been pointed out in the literature and was echoed by consultees is the absence of concrete targets and measurement tools. When the plan was introduced, criticism was voiced that the absence of mandatory quantifiable targets and deadlines and a reliance on both cross-sectoral and multi-level relationships were likely to weaken the ability
The consumer organisation BEUC made the point that the drafting of clear and ambitious targets (e.g. for energy savings) and the provision of tax and fiscal incentives such as the encouragement of sustainable private procurement would be helpful. Clear indicators would not only ease the assessment of the AP up to this point, but also help to pinpoint areas of adjustment in the future.

The diversity of instruments and issues covered by the AP means that a suite of indicators are required, containing a combination of high level contextual indicators and instrument specific achievements.

A Commission officer (and others) made the point that the diverse nature of the instruments mean that indicator metrics are not straightforward and that it is difficult to assign causality to specific instruments, but general trends should be identifiable e.g. resource productivity, waste arisings and innovation/labelling uptake rates etc.

A number of consultees agreed with the statement that high level indicators are difficult to define as their economy wide nature makes it hard to see the impact of the instruments. The favoured solution to this issue was the creation of a suite of simple indicators based on a combination of high level contextual indicators and specific instrument achievements. Examples of this which were suggested include: EMAS certification rate, (view is that the AP changes improved EMAS and increased the uptake rate), Dolceta - how many hits on the website, Ecolabel – no. of products achieving accreditation, Ecodesign – potential gains from each product (from impact studies), Energy label – no. of products moved up in rating (reveals market movement), Retail forum – papers produced, retailers participating, % sales increase.

There is a lack of detailed data available for many of the specific instruments

When the Commission officers most directly involved in specific instruments, were asked for data (or studies) to quantify the success of the instruments they are involved with, most were unable to produce detailed data. For example, for the Ecolabel it was described as being very hard to get good data to measure performance and that it is nearly impossible to measure the actual take-up or sales of Ecolabelled products as it is not currently monitored. This is in contrast to the mandatory labelling for products such as refrigerators under the Energy Labelling Directive. Similarly difficulties were expressed relating to assessing the impact of EMAS as the measurement of benefits would need to be done at individual (example) company level and then extrapolated to the total number of companies participating.

The nature of many of the AP instruments means that qualitative or output indicators are required, particularly in the short term, though benefits and impacts should become clearer in the longer term

Discussion with the policy officers involved in a number of the instruments, combined with a review of the material available on their nature and outputs, suggests that the ultimate impacts of many of the instruments are too far away from them, and influenced by too many other factors, to allow for meaningful attribution. This is not to say that these instruments are ineffective but rather that their purpose is more to build the capacity and awareness that is the necessary starting point for actions. For example, the Retail Forum is a platform for discussion and as such it is not clear how progress can be measured in the short term. However, in the long term this will be easier, as it can be measured on the basis of actions and linked to the commitments within their Matrix of

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35 BEUC (2010) The European Consumers’ Organization (BEUC) and ANEC position paper
environmental Action Points (MAPs). With regards to the Environmental Technology Verification (ETV) scheme, it was stated that the intention is to use surveys to follow up one year after certification, to ask what impact the certification has had (on the company whose product has been verified). This type of data is of a qualitative nature and thus less clear cut and more time consuming to ascertain. Therefore in the short term this is not seen as an immediate priority for those setting up the programme.

For the instruments aimed at promoting and enhancing eco industries measurement of success is difficult due to blurred sector definitions. This can be addressed by tracking certain agreed sectors plus assessing the level of relevant activity in other sectors

With regard to those instruments and activities designed to promote the growth and competitiveness of eco industries, a significant issue here is the lack of an up to date and agreed sectoral definition. This is partly because eco-efficiency as a concept has become increasingly mainstreamed across virtually all economic sectors so anyone improving their products or process is arguably part of the eco industry sector. Studies that have been carried out that have looked into this sector, have addressed this issue by tracking the growth in certain sectors that are very clearly wholly associated with the eco-industry sector, and considered the degree of influence in other sectors, assigning a certain percentage of employment and output in these other sectors to eco-industry.

The large number of factors which influence the key indicators, in combination with the relatively limited influence of the AP instruments makes attribution tenuous and complex

The goal of ‘resource efficiency’ is more complex than for example energy efficiency and increasing the uptake of renewable energy. Therefore, targets are much harder to define.

Strategic / high level indicators, including soft issues such as consumer attitudes, are needed to assess overall progress and awareness

The high level indicators should include softer issues such as those captured in a flash Eurobarometer survey which was carried out in 200936 to assess citizens’ attitudes towards sustainable consumption and production. This survey used a variety of metrics to explore progress in this area, with indicators covering: the influence of environmental impact on consumption habits, eco-labelling – general perceptions, the EU Ecolabel, claims by producers and companies on environmental performance, a voluntary environmental “code of conduct” for retailers and the promotion of environmentally-friendly products: this provided a comprehensive base of indicators of consumer behaviour and attitudes towards sustainable consumption and production.

A further survey that repeated these same questions would be beneficial to measure progress against these metrics.

With regard to high level general progress indicators the project “European Policies to Promote Sustainable Consumption Patterns” (EUPOPP) conducted extensive research37 and reporting on SCP measures and identified (see Table 4) useful indicators to assess the progress of policy implementation and included the official sustainable consumption and production indicators prepared by Eurostat, as shown in the third column38:

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36 Eurobarometer (2009) Survey on the attitudes of Europeans to sustainable consumption and production.
38 Also see http://epp.eurostat.ec.europa.eu/portal/page/portal/sdi/indicators/theme2.
Table 4  Summary of potential indicators to measure progress in SCP

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<td><strong>Energy</strong></td>
<td>Environmentally significant consumption trends and patterns</td>
<td><strong>Headline indicator</strong></td>
<td>Eionet39</td>
</tr>
<tr>
<td></td>
<td>• Economic trends, e.g. level and trends of private final consumption expenditure</td>
<td>• Resource Productivity</td>
<td>Environmentally extended input-output analysis</td>
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<tr>
<td></td>
<td>• Socio-demographic trends e.g. urban versus rural population in 1000 inhabitants, and as % of total population</td>
<td><strong>Operational objectives/targets</strong></td>
<td>Total Material Requirement (TMR)</td>
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<tr>
<td></td>
<td>• Sector specific trends including transport, tourism and consumption of durable and non-durable goods. E.g. average length of product life, by selected product groups.</td>
<td>(actions/explanatory variables)</td>
<td>Material productivity &amp; intensity</td>
</tr>
<tr>
<td><strong>Materials</strong></td>
<td><strong>Resource use and waste</strong></td>
<td><strong>JRC</strong></td>
<td>Decoupling indicators</td>
</tr>
<tr>
<td></td>
<td>Non-mineral waste generation</td>
<td>Basket of goods indicators</td>
<td>Waste management indicators</td>
</tr>
<tr>
<td></td>
<td>• Components of domestic material consumption</td>
<td>Life Cycle Analysis indicators – by product and country specific groupings</td>
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<tr>
<td></td>
<td>• Domestic material consumption by material</td>
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<td></td>
<td>• Municipal waste generation and treatment, by type of treatment method.</td>
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<td></td>
<td>• Generation of hazardous waste, by economic activity</td>
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<tr>
<td></td>
<td>• Emissions of sulphur oxides (SO\textsubscript{x}), by source sector (not yet available)</td>
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<td></td>
<td>• Emissions of nitrogen oxides (NO\textsubscript{x}), by source sector (not yet available)</td>
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<td></td>
<td>• Emissions of non-methane volatile organic compounds (NMVOC), by source sector (not yet available)</td>
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<tr>
<td><strong>Water</strong></td>
<td><strong>Consumption patterns</strong></td>
<td></td>
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<tr>
<td></td>
<td>• Air, e.g. air emission from passenger transport</td>
<td>• Electricity consumption of households</td>
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<tr>
<td></td>
<td>• Waste, e.g. waste recycling rates.</td>
<td>• Final energy consumption by sector</td>
<td></td>
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<td></td>
<td>• Water, e.g. waste water discharges by households</td>
<td>• Consumption of certain foodstuffs per inhabitant</td>
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<tr>
<td></td>
<td>• Noise, e.g. national population exposed to noise levels from various sources</td>
<td>Motorisation rate</td>
<td></td>
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<tr>
<td></td>
<td>• Land and biodiversity, e.g. urbanisation: land covered by urban development in Km\textsuperscript{2} and as % of total land area</td>
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<tr>
<td><strong>Land use</strong></td>
<td><strong>Production patterns</strong></td>
<td></td>
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<tr>
<td></td>
<td><strong>Interactions between consumption and the environment</strong></td>
<td>• Organisations and sites with EMAS registration</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Air, e.g. air emission from passenger transport</td>
<td>• Ecolabel licenses Area</td>
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<tr>
<td></td>
<td>• Waste, e.g. waste recycling rates.</td>
<td></td>
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<td></td>
<td>• Water, e.g. waste water discharges by households</td>
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<td></td>
<td>• Land and biodiversity, e.g. urbanisation: land covered by urban development in Km\textsuperscript{2} and as % of total land area</td>
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<tr>
<td><strong>Mobility</strong></td>
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<tr>
<td></td>
<td>Distance travelled per capita by mode of transport</td>
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<tr>
<td><strong>Consumer goods and services</strong></td>
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<tr>
<td></td>
<td>Retail sales of selected goods per capita (e.g. electronics, home-appliances, clothing)</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Market share of more sustainably produced goods and services</td>
<td></td>
<td></td>
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<tr>
<td><strong>Buildings and housekeeping</strong></td>
<td></td>
<td></td>
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<tr>
<td></td>
<td>Residential energy and water use per household</td>
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<tr>
<td></td>
<td>Average household size</td>
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<tr>
<td><strong>Food</strong></td>
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</table>

39 See also http://eea.eionet.europa.eu/Public/irc/eionet-circle/etc_waste/library?l=/scp_2010indicator/indicators_paperpdf_EN_1.0_&a=d for report on SCP indicators.
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Food market share of more sustainably produced food</td>
<td>Economic and policy aspects</td>
<td>under agri-environmental commitment</td>
<td></td>
</tr>
<tr>
<td>Recreation</td>
<td>- Regulatory instruments</td>
<td>Area under organic farming</td>
<td></td>
</tr>
<tr>
<td>Spending on recreation as share of disposable income</td>
<td>- Economic instruments</td>
<td>Livestock density index</td>
<td></td>
</tr>
<tr>
<td>Time spent on leisure, paid and unpaid work and travelling</td>
<td>- Information / social instruments</td>
<td>Contextual indicators</td>
<td></td>
</tr>
<tr>
<td></td>
<td>- Trade aspects</td>
<td>- Number of persons in households</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Final consumption expenditure of households, by consumption purpose</td>
<td></td>
</tr>
</tbody>
</table>

Source: Eurostat, EUPOP, EIONET, JRC.

These indicators provide a base to assess progress on sustainable consumption and production with significant conceptual commonalities across the proposed indicators. The sets from UNDESA and OECD representing more of an ideal or conceptual target for indicators, while the Eurostat set is an actual set of indicators that is collected.

Across the indicator sets there is a focus on energy, material and water consumption. The role of agriculture and food production is common, as is the focus on mobility and transport. The OECD set takes a more conceptual approach looking beyond the headline indicators into how this translates into actual environmental impact, it also includes framework conditions in terms of policy and regulation and larger trends in population and demographics. These are useful to measure the relative changes in performance.

The final column represents the most recent developments in this field and particularly the application and development of indicator collection within Europe. The Eionet and JRC are both highly active in debates relating to sustainable consumption and production indicators. JRC in particular has been building on Life Cycle Thinking and applying this approach to produce useful measures of progress. Reports on specific new indicators of this type are expected to be published shortly by the JRC. The groups associated with Eionet have developed a more over-arching framework for SCP indicators and populated these as far as possible with available data. Though this in many cases is only partial or no later than 2007. Among the most visible trends in SCP indicator development is the increasingly important role of imports/export in defining the sustainability of EU consumption and production.

An interesting point is that there are virtually no indicators, with the possible exception of market share of sustainably produced goods and services in the UNDESA set, that focus on the competitiveness of EU industry. This is a central objective of EU policy in general and is an important part of the intervention logic for the AP. The impact on competitiveness can be interpreted in both a positive and negative way. The positive way would be to look for signs of benefits to EU industry, through for example growth and increased profitability for companies which ‘green’ their products and benefit from increased sales as a result of the AP instruments, or through increased profits for companies via reduced energy and waste costs in production. The potential negative set of impacts stem from the potential down sides of the instruments, with companies encountering increased costs through the need to comply with the instruments, via changes required to their production processes and the administrative burden of compliance. It could also be the case that environmental regulation in Europe, which includes the AP, has contributed to the relocation of certain activities and companies to outside Europe. However there is lack of data to
assess the impacts of European legislation on EU and non EU companies and the decision to relocate is based on a wide variety of sector and company specific issues. This means that it is hard to isolate and quantify the relative importance of environmental legislation in general, or AP instruments and measures in particular.

While both the positive and negative issues are important and relevant their identification and quantification needs to be done on an instrument and measure specific basis, via impact assessment – both during policy design and in subsequent evaluation. From the evaluations we have identified and reviewed this appears to be a difficult task due to issues of attribution and timing. However this is an issue which should receive attention in the impact assessments.

*It is currently impossible to summarise progress against high level AP relevant issues since the introduction of the AP in 2008*

Looking at the Eurostat indicators to review progress under the AP a significant problem is soon encountered. That the datasets for each of the indicators lag in their reporting timeliness. Material consumption related indicators, such as Domestic Material Consumption (DMC) and Resource Productivity are only available to 2007. This doesn’t allow for anything to be said about any potential effect of the AP on sustainable material use in production or consumption and is a major limitation to analysing impact.

While energy and other consumption data is available to 2009, coverage is often partial and, more importantly, the data set only has two data points and these fall within the biggest economic crisis of recent times. This makes it impossible to say anything meaningful about the changes in any of the headline indicators of sustainable consumption and production as it is impossible to detect any effect within the much larger economic variations.

An analysis of a selection of high level indicators, summarised from various sources, is provided in Annex 2. This gives some impression of the high level trends in the years leading up to the AP and in some cases in the first years of the AP. The main trends identifiable from this and other sources are that:

- EU energy consumption has tended to increase over the last decade but its environmental impact is becoming more sustainable as emissions are reduced and higher proportions of renewable energy are used;
- Material consumption has risen since 2000 (until 2007) and while the increase is relatively decoupled from economic growth, material consumption continues to grow in all but a handful of countries. This point may continue to provide a rationale for the AP. In other aspects, transport demand and impact has also been rapidly increasing;
- Resource productivity has slowly increased, a factor of economic growth outpacing material consumption;
- Transport related impacts have increased faster than other major sectors such as households, industry, services or agriculture.

These indicators represent a largely mainstream view of the issue. The results from work by JRC and Eionet, incorporating trade based impacts, paints a somewhat different picture, by incorporating the environmental impacts of imported materials and goods that are consumed in the EU, different conclusions are reached. In each case the performance of the EU declines, reflecting the export of the most environmentally damaging production outside the EU but consumption remaining, representing a hidden ‘trade’ in environmental impact. This has consequent implications for measuring sustainability.
**Suggestion of an indicator set to illustrate general / contextual progress in SCP/SIP**

Using a combination of the Eurostat, Eionet and JRC indicators will, in time, give an excellent overview of high level SCP impacts. Indeed the Eionet (ETC/SCP) Working Paper ‘Progress in Sustainable Consumption and Production in Europe: Indicator Based report’ offers a good example of how this can be collated and presented in a simple way. Yet these data sets may not be directly applicable to the AP.

Taking this into account and the limitations of current data sources, we collate, in the following table, a selection of high level contextual indicators, that we feel are most appropriate and suitable for monitoring the success of the AP. Where data is available we have included a brief comment on the current situation, direction of travel and the implications. Where the data is not available, or has proved impossible to source, we have made suggestions of where it could potentially come from.

<table>
<thead>
<tr>
<th>Indicators</th>
<th>Progress to date/Emerging Trends</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Environmental impact</strong></td>
<td></td>
</tr>
<tr>
<td>Energy use across the EU</td>
<td>Final Energy Consumption reduced 2008-2009 (-5.2%) due to downturn, impact of AP unclear. General trend is positive, exhibiting absolute decoupling.</td>
</tr>
<tr>
<td>Changes in consumption patterns across EU - municipal waste, domestic material consumption, recycled and composted municipal waste.</td>
<td>Municipal Waste Generation, kg per capita, down 1.5% 2008-2009. Better treatment of waste, reduction in waste treated at landfill from 39.7% to 38.2% in 2008-2009, increased energy recovery, recycling and composting. Resource Productivity, as a gross measure of sustainable consumption and production, has increased by around 1% per annum for the past 10 years throughout the EU27. However, this trend has been achieved by GDP (Gross Domestic Production) increasing faster than DMC (Domestic Material Consumption) therefore an absolute decoupling of resource use and economic growth has yet to be achieved.</td>
</tr>
<tr>
<td><strong>Economic and competitiveness impact</strong></td>
<td></td>
</tr>
<tr>
<td>Changes in import of environmentally better performing products (e.g. computer screens, low energy home appliances, low emission cars) in developing countries (progressive)</td>
<td>Data lacking – future evaluation subject.</td>
</tr>
<tr>
<td>Change in scale, turnover and profitability of (eco) industrial sectors – both clearly identifiable sectors and estimates of the share of other sectors in which the issues are being mainstreamed.</td>
<td>Eco-industries have shown significant growth in last decade, averaging 7-8% growth per annum and employing approximately 3.4 million people in the EU in 2008. Policy and feedback shows that eco-innovation is increasingly important to firms.</td>
</tr>
<tr>
<td>Increase of share of EU exports of environmentally better performing products outside the EU</td>
<td>Limited progress – no clear and agreed definitions of suitable product categories on which to seek data</td>
</tr>
<tr>
<td><strong>Social impact</strong></td>
<td></td>
</tr>
<tr>
<td>Extent to which private households are affected by higher product prices</td>
<td>No attributable increase in costs identified. Perception that this issue is not considered in the current suite of actions.</td>
</tr>
<tr>
<td>Employment conditions and standards in general and for those involved with eco labelled products</td>
<td>Limited data available for social metrics. Indications that social criteria may be integrated into textiles product group for eco-labelling.</td>
</tr>
</tbody>
</table>

40 Ecorys, Technologisk Institut, Cambridge Econometrics, CES IFO, IDEA Consult (2009) Study on the Competitiveness of the EU eco-industry.
A table of suggested instrument specific output indicators that could be populated by evaluations of the individual instruments

The following table collates the suggestions made (including our own) for monitoring indicators for the specific instruments. As with the previous table where the data is available we have included a brief comment on the direction of travel and the implications. Where the data is not available, or has proved impossible to source, we have made suggestions of where it could potentially come from.

Table 6 Suggestions for indicators to monitor AP progress

<table>
<thead>
<tr>
<th>Indicators</th>
<th>Progress to date/Emerging Trends</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Ecodesign</strong></td>
<td></td>
</tr>
<tr>
<td>Number of products completing the process and resultant energy and environmental benefits.</td>
<td>2005-2008 Transitional phase: 22 product groups completed the assessment process, 12 product groups with implementing measures adopted – none yet implemented from the 2009-11 Working Plan, though 9 product groups have completed preparatory studies. Transitional phase: estimated annual savings from implemented measures by 2020 = 376 TWh, or 14% of EU Final Electricity Consumption in 2009⁴¹ Some concerns about monitoring in some MSs</td>
</tr>
<tr>
<td>Rate of sales increase of better performing products (progressive) in EU</td>
<td>Impact assessment of Ecodesign directive will collect data on this. Data from Eionet (Enerdata) on ‘Developments in specific energy consumption of average household appliances, alongside ownership rates of appliances and total electricity consumption in households’ describes a trend for efficiency improvement gains being wiped out by increases in total appliance numbers.⁴²</td>
</tr>
<tr>
<td>Role of the Directive (and Action Plan) in raising market share of products with environmentally performing features</td>
<td>Suggested positive correlation, data currently lacking, a study is being let to test this (via consumer and retailer surveys).</td>
</tr>
<tr>
<td><strong>Energy Labelling</strong></td>
<td></td>
</tr>
<tr>
<td>Number of products with labelling</td>
<td>New energy labels now cover 5 product classes – Televisions, Refrigerators, Dishwashers, Washing Machines and Wine Storage Appliances.</td>
</tr>
<tr>
<td>Assessed (via impact assessment) and actual (via sales data) energy savings</td>
<td>Some estimations of individual product performance are available but it is unclear to what extent efforts have been made to aggregate impacts. This type of data is methodologically difficult to collect at a detailed level, Retail trade associations are potential data source.</td>
</tr>
<tr>
<td>Perceptions of consumer groups about improvement of information provision</td>
<td>Improved provision and understanding of labelling Consumer pressure groups would like firmer targets and commitments.</td>
</tr>
<tr>
<td>Utilisation in public procurement</td>
<td>Article 9 of the recast labelling directive includes links to public procurement. Monitoring data (at MS level) should become available</td>
</tr>
<tr>
<td><strong>Ecolabel</strong></td>
<td></td>
</tr>
<tr>
<td>Uptake of Ecolabel accreditation – absolute and as a proportion of all eligible (market share)</td>
<td>Generally positive trends - Data available to 2010, increase in ecolabel licenses from 705 in 2008 to 1067 in 2010, an increase of over 50% in two years. Biggest increase 2008-2009 (+234), lower in 2009-2010 (+128). Need to monitor for recovery in uptake. The increase has been localised in certain member states so far.</td>
</tr>
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</table>

<table>
<thead>
<tr>
<th>Indicators</th>
<th>Progress to date/Emerging Trends</th>
</tr>
</thead>
<tbody>
<tr>
<td>Opinion of companies and stakeholders with regards to their understanding and application of best practices in the retail sector</td>
<td>Limited progress. Retail forum has become active, but consumers would like to see more.</td>
</tr>
<tr>
<td>Views on best practices dissemination among producers and retailers</td>
<td>Improved dissemination channels are indicated.</td>
</tr>
<tr>
<td>Number of companies signed up to Retail Forum</td>
<td>20 retailers and 7 retail associations signed up to the REAP.</td>
</tr>
<tr>
<td>Number of specific actions taken by Retail Forum</td>
<td>7 issue papers published, 1 paper produced per quarterly meeting.</td>
</tr>
<tr>
<td>Green Public Procurement</td>
<td></td>
</tr>
<tr>
<td>Member States adopting green procurement procedures</td>
<td>Significant progress in certain MSs. Majority of concrete actions was limited to ‘green 7’ - Austria, Denmark, Finland, Germany, Netherlands, Sweden and the UK. Other EU countries lagged behind. Coverage has improved in the last 2-4 years (after EC Communication &quot;Public Procurement for a better Environment&quot;) with 20 EU countries now having National Action Plans on GPP (or sustainable PP), three countries in the process of adopting their NAPS and the remaining four developing NAPS.</td>
</tr>
<tr>
<td>Increase in value of green procurement compared to prior 2008, example: computers, low emission cars, recycled paper</td>
<td>Progress made in establishing data collection methodology - as yet, a lack of specific data. Good alignment between MSs in terms of priority products.</td>
</tr>
<tr>
<td>Perception of MS officials on their increased awareness about green procurement</td>
<td>Risen on agenda considerably, actions taken by virtually all MS. 20 now have national action plans.</td>
</tr>
<tr>
<td>The role the AP played in increasing awareness of public authorities and uptake of public procurement</td>
<td>Helped facilitate action</td>
</tr>
<tr>
<td>Identify one of the labelling classes as a minimum below which public authorities in MS are not allowed to purchase (green procurement)</td>
<td>Limited uptake – MS are using labelling as criteria for GPP standards.</td>
</tr>
<tr>
<td>Consumer Advice / Opinion</td>
<td></td>
</tr>
<tr>
<td>Europa Diary – use of (and user opinion on) resource efficiency aspects</td>
<td>Evaluation outputs imminent. Mixed results, numbers distributed up from 2.7 million in 2008 to 3.3 million in 2010.</td>
</tr>
<tr>
<td>Dolceta – hits on resource efficiency pages</td>
<td>Evaluation outputs imminent – initial indications are that it is possible to derive data but this is not routinely collected/monitored</td>
</tr>
<tr>
<td>Consumer opinions – EuroBarometer (and other) awareness and opinion surveys</td>
<td>2009 Eurobarometer survey on consumer SCP perception(^{43}) revealed: Consumers see waste and recycling as the area they can make the most valuable contribution. That environment is an important consideration in purchases but is less important than quality or price. Varying levels of awareness and effectiveness of Ecolabelling. Support for tax based incentives for environmentally friendly products.</td>
</tr>
<tr>
<td>Industrial Policy – Sector Support</td>
<td></td>
</tr>
<tr>
<td>Countries that took up environmentally sustainable industrial or sectoral policies</td>
<td>SWITCH programmes are in process of being let. Some results should flow from this.</td>
</tr>
<tr>
<td>Existing initiatives have been continued/expanded on an international level</td>
<td>Best practice has been shared internationally, but Marrakech process has failed.</td>
</tr>
<tr>
<td>Market share of green technology products produced in the EU in international markets</td>
<td>Limited progress – no clear and agreed definitions of suitable product categories on which to seek data</td>
</tr>
</tbody>
</table>

\(^{43}\) Flash Eurobarometer (2009) 256 Europeans’ attitudes to sustainable consumption and production.
<table>
<thead>
<tr>
<th>Indicators</th>
<th>Progress to date/Emerging Trends</th>
</tr>
</thead>
<tbody>
<tr>
<td>Perception of environmental industries on their own competitiveness</td>
<td>Industries report EU is world leader in recycling, renewable energy and water supply.</td>
</tr>
<tr>
<td></td>
<td>EU R+D expenditure relative to US and China starting to show signs for concern.</td>
</tr>
<tr>
<td>An EU-wide ETVS is developed Number of products rated Changes to sales of</td>
<td>Pre-programme operational 2011, monitoring systems should be put in place.</td>
</tr>
<tr>
<td>these products</td>
<td></td>
</tr>
<tr>
<td>Industrial policy – decreasing environmental impacts of companies</td>
<td></td>
</tr>
<tr>
<td>Revision of the EMAS</td>
<td>Completed, including the possibility of MSs submitting schemes for approval / accreditation as EMAS compliant – two MSs have already submitted.</td>
</tr>
<tr>
<td>Number of companies participating in the EMAS</td>
<td>Modest Increase from 4233 companies in 2008 to 4521 companies in 2010 - Just over one hundred new registrations in 2009-2010 throughout the EU27. Total new number of applicants has slowed, i.e. faster growth in registrations 2005-2008. The reasons for this slowdown are unclear, but could be related to the economic downturn and environmental management decreasing in importance to firms.</td>
</tr>
<tr>
<td>Energy and environmental impacts of EMAS participants</td>
<td>Requires survey of a sample of EMAS companies (and comparable non EMAS companies) and grossing up to whole economy (and whole EMAS companies) of the difference.</td>
</tr>
<tr>
<td>Closing policy gaps and create uniform criteria for EU products</td>
<td>Progress made, fine tuning required.</td>
</tr>
<tr>
<td>(addressing the market fragmentation problem)</td>
<td></td>
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</tbody>
</table>

**Potential for increased cooperation and alignment between EU and MS instruments**

The Nordic co-operation of northern European countries has recently stated that an increase of effectiveness of SCP measures could be achieved by better coordination and use of various environmental information instruments.\(^44\) An example would be the Nordic swan and the EU Ecolabel. They also voiced the need for creating legal conditions and economic policy instruments to further promote sustainable consumption and production.

**Management of the AP within the Commission might be more efficient if it was all done by one DG but this would work against the key objective of increasing cooperation and policy coherence**

It was suggested that perhaps the Action Plan should be overseen and managed by a single Directorate, as opposed to three main DGs (ENV, ENER, ENTR) as is currently the case. This would be more effective and efficient, but could prove problematic organisationally and politically. Additionally, a better distinction and prioritisation between energy and environmental issues would be useful. However, this is a complex task that would require a substantial rethink of the AP’s priorities. At the moment product policy is spread across many DGs, all of whom will develop policies in slightly different ways e.g. DG ENTR, ENER, SANCO, AGRI, CLIMA and ENV. This runs the risk of internal incoherence. The answer is probably not to put all product policy under one DG but to highlight all the areas of activity and try and promote coherence and avoidance of duplication between the DGs. At present no DG has an overall (controlling) lead on resource efficiency. This is probably unavoidable when multiple DGs have a legitimate interest in the subject. However, for those DGs involved in the AP it does help avoid duplication and therefore reduces incoherence and add value. For those DGs not directly involved in the AP its strategic priorities are less likely to be

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\(^44\) Nordic Cooperation (2011) The Nordic Cooperation on SCP.
fully recognised in their policy making activities. This issue is picked up in the conclusions and recommendations.

The diversity of instrument types calls for a diversity of implementation procedures
The wide range of instrument types and the recently extended range of working groups, call for a wide variety of approaches to be taken to implementing the measures to the different stakeholder groups involved. It can prove challenging to strike the right balance between communication and action.

Member States not impressed with the ease of policy implementation
Most Member State respondents to our survey found the implementation of the various policies to be either average or difficult (see Figure 8). Comments indicated that GPP initiatives were easier to implement than market-based instruments.

Figure 8 Ease of policy implementation:

<table>
<thead>
<tr>
<th>Sub-questions</th>
<th>Resp.</th>
<th>% of responses</th>
</tr>
</thead>
<tbody>
<tr>
<td>Streamlining incentives (e.g. green procurement and market-based instruments)</td>
<td>23</td>
<td>35  25  25  22</td>
</tr>
<tr>
<td>Boosting resource efficiency (e.g. Environmental Technology Verification scheme, etc...)</td>
<td>23</td>
<td>35  22  13  35</td>
</tr>
<tr>
<td>Enhance the environmental potential of industry (Revision of EMAS regulation, industrial policy development, raise SME awareness, etc...)</td>
<td>23</td>
<td>43  26  26  26</td>
</tr>
</tbody>
</table>

In the online survey related to this revision, stakeholders from industry and trade were asked to state whether the AP has improved the administrative procedures associated with obtaining an Ecolabel. Only 15% of them believe that this has happened to some extent, 29% think that no improvement has taken place. Furthermore, 18% of the same group of respondents stated that the costs for Ecolabel registration are “fair”, a further 18% found costs to be high.

4.3 Efficiency

In the context of this evaluation the consideration of efficiency is unusual because the AP itself does not have a dedicated budget line with the instruments and initiatives affected / covered by it funded from a variety of other Commission budgets. We have not attempted to analyse the budgets for each instrument and compare these with the outputs, as would be normal in Commission evaluations, because this is beyond the scope of our work. Such an exercise would also be somewhat misleading as it would give the impression that pre-existing initiatives had been ‘taken over’ by the AP, and this is not the case as they still exist as independent instruments, albeit with their scope / nature somewhat modified by the AP.

Are the costs and resources (both at EU and national level) involved reasonable as compared to the progress obtained so far? Are the actions being implemented in a cost-effective manner?
Difficulty in identifying / isolating costs which are specific to the AP has made answering this question difficult, through the perception is one of some added value from a relatively small expenditure. It is suggested that the final evaluation attempts to assign the total and any AP specific additional staffing and costs for each instrument

From the interviews and investigations we carried out it appears that activity under the AP is not accounted in a distinct way. There were some examples of staff being regarded as active under the AP, though it is difficult to say whether these posts would have existed without the AP, for example:

- Three people were reported as being employed in the development of methods for, and collection of, consistent and reliable product data for DG ENV, plus three in JRC. Also call on consultancy support, with more consultancy support expected in the future;
- DG ENTR were reported as having about six full time equivalent (fte) staff active in AP related areas, with an annual spend of around EUR 1 to 1.5 million.

However, it has not proved possible to isolate and sum up the administrative effort and cost that could be attributed to each instrument. As with the lack of output / impact indicators at an instrument specific level we suggest that in the final evaluation of the AP efforts are made to assign the number of Commission staff involved with each instrument, and also the proportion of these (or proportion of each person's time) that could be attributed to AP specific activity that the instrument alone would not require.

It should be stated that the impression we gained from most consultees, and our own impression of the AP is that it has achieved useful added value for a relatively low expenditure.

Feeling among many that given its importance and the level of funding offered in competitor economies the AP is under funded

A number of consultees felt that AP activity is under funded. The evidence provided for this centred on the higher expenditure made in competing economies. For example on Ecodesign alone it was reported that the EU has 13 people working specifically on this issue across a range of Directorates. By comparison it was reported that the USA has a team of 80-100 people working on similar subject areas and that Australia, a much smaller market, has 30 people dedicated to Ecodesign activities and research.

Member states relatively happy with the costs of implementation, but this relates to the constituent instruments rather than the AP

According to the data collected in our survey MS estimates of implementation costs depend on the type of instrument. 48% of the surveyed Member State policy staff believed that the streamlining of incentives caused average costs, while 22% found the implementation costly (see Figure 9). Similar opinions were given about the initiatives to enhance the environmental protection of industry. The boosting of resource efficiency was seen to be the most expensive policy area to implement, with 33% of the respondents regarding it as “costly.”
Mid-term evaluation of the SCP/SIP Action Plan

Figure 9 Opinions on cost of implementation:

How would you describe the cost of implementation in each of the policy areas in your country?
(Each respondent could choose only ONE response per sub-question.)

<table>
<thead>
<tr>
<th>Sub-questions</th>
<th>Resp.</th>
<th>% of responses</th>
</tr>
</thead>
<tbody>
<tr>
<td>Streamlining incentives (e.g. green procurement and market based instruments)</td>
<td>23</td>
<td></td>
</tr>
<tr>
<td>Boosting resource efficiency (e.g. Environmental Technology Verification scheme, etc...)</td>
<td>21</td>
<td></td>
</tr>
<tr>
<td>Enhance the environmental potential of industry (Revision of EMAS regulation, industrial policy development, raise SME awareness, etc...)</td>
<td>23</td>
<td></td>
</tr>
</tbody>
</table>

In terms of implementation timeliness, survey opinions were rather similar. About a third of the Member State respondents found that the implementation of the streamlining of incentives and the enhancement of the environmental potential of industry was conducted in a timely manner. For resource efficiency this figure was lower, with only 9% of the participants describing implementation as timely.

To what extent have the actions been prioritised according to the needs?

Opinions vary on prioritisation within the AP - as to what it is and what it should be, with the prime area of interest of the consultee tending to be most important in their eyes

Stakeholder opinion on this issue was varied. Some felt that, in addition to the current environmental priorities, the AP should do more to take competitiveness effects into account.

Another stakeholder felt that besides the obvious goal of environmental performance it is hard to see any other prioritisation and agreed that there seems to not have been any move towards prioritising economic issues (jobs/GVA). Another consultee felt that the focus has moved away from climate change, this was felt to be partly explained by the DG split (to form DG CLIMA).

The questionnaire survey provided the following breakdown of responses in relation to how actions should be prioritised:

Figure 10 Opinions on prioritisation

Q – If the policy actions were to be prioritised, on what basis should this be?

<table>
<thead>
<tr>
<th>Response</th>
<th>Total</th>
<th>% of responses</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. GHG (Greenhouse gas) emission reductions</td>
<td>25</td>
<td>40%</td>
</tr>
<tr>
<td>2. Job creation</td>
<td>26</td>
<td>36%</td>
</tr>
<tr>
<td>3. Increasing the competitiveness of European industries</td>
<td>49</td>
<td>68%</td>
</tr>
<tr>
<td>4. Don’t know / N/A</td>
<td>3</td>
<td>4%</td>
</tr>
<tr>
<td>5. Other, please specify</td>
<td>32</td>
<td>44%</td>
</tr>
</tbody>
</table>

The survey did not reveal any strong opinions on prioritisation, though companies and trade organisations ranked Ecodesign and Labelling as a lower priority than MS policy makers

Participants in the survey were asked to rank the five most important instruments under the AP if a prioritisation were to be made. Overall, as shown in figure 11, participants found the streamlining of
incentives to be the most important instrument, followed by the production of consistent data and methods. The differences between the instruments are rather low when looking at the total sample, they diverge however when looking at the different subgroups. An interesting observation is that Member State policy staff ranked Ecodesign and labelling as a high priority (rank 2&3 out of 9), whereas companies and trade organisations rank these initiatives as being very low in priority (rank 8 & 9).

Figure 11  Prioritisation of policy actions – survey results, all respondents

<table>
<thead>
<tr>
<th>Response</th>
<th>Weighted score</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Streamlining incentives (e.g. green procurement and market based instruments)</td>
<td>15%</td>
<td></td>
</tr>
<tr>
<td>Produce consistent data and methods on products</td>
<td>14%</td>
<td></td>
</tr>
<tr>
<td>Boosting resource efficiency (e.g. Environmental Technology Verification scheme, etc..)</td>
<td>12%</td>
<td></td>
</tr>
<tr>
<td>Support Eco-innovation</td>
<td>11%</td>
<td></td>
</tr>
<tr>
<td>Enhance the environmental potential of industry (Revision of EMAS regulation, industrial policy development, raise SME awareness, etc..)</td>
<td>11%</td>
<td></td>
</tr>
<tr>
<td>Retail and producers sector involvement</td>
<td>10%</td>
<td></td>
</tr>
<tr>
<td>Working towards global markets for sustainable products (developing sectoral approaches in international climate change negotiations, promote good practices, etc..)</td>
<td>10%</td>
<td></td>
</tr>
<tr>
<td>Extension of Eco-design directive</td>
<td>9%</td>
<td></td>
</tr>
<tr>
<td>Labeling of products (e.g. Extension of Energy Efficiency Labeling Directive (ELD) and amendment to Ecolabel regulation)</td>
<td>9%</td>
<td></td>
</tr>
<tr>
<td>No prioritization needed</td>
<td>1%</td>
<td></td>
</tr>
</tbody>
</table>

The survey suggests that instruments should be prioritised first by their ability to improve the competitiveness of European industries

A further question asked was on what basis a prioritisation should be. A large majority (71%) of the overall respondents cited “increasing the competitiveness of European industries” as the most important basis for prioritisation, followed by GHG emissions reduction. The distribution of answers among the different participants on this question is slightly different, with trade organisations voicing job creation as more important than GHG emissions reductions, while Member State staff put more emphasis on the latter. Respondents were also asked to name further factors that should work as a basis for prioritisation. Several participants cited improved resource efficiency and other environmental impacts next to GHG emissions as important factors.

Are there missing tools and/or actions to implement the Action Plan more efficiently?

A number of instrument specific suggestions to improve the efficiency of specific instruments were made including the need to increase participation in the Retail Forum and a need for more activity focussed on communicating this issue to the general public

One stakeholder commented on the Retail Forum and felt that although in general the implementing procedures were good there were some issues e.g. participation in some measures is relatively low.
A number of stakeholders made the more general point that consumption issues have not received a great deal of attention from the AP as the perception is that it is focussed more on production issues. They felt that this could be addressed through large scale public communication exercises which are required to make people aware of the issues involved and modify their behaviour accordingly.

The food and drink sector is seen as being in need of more intervention; the Retail Forum is viewed by some as lacking teeth, with space being seen for an enlarged Retail Forum or an increased role for the SCP Roundtable on Food and Drink

The Food and Drink Europe trade association stated that they feel there is a need to assess the environmental performance of food and drink; however they felt that the Retail Forum, in its current guise, was not best placed to do this. In order to do this they feel it would need to take into account a wide range of performance criteria that is necessary to influence customer behaviour and promote SCP practices throughout the supply chain. It could potentially be interested in being more involved in the forum, should it be extended to include more of the supply chain than just retailers (i.e. to include farmers, producers, packagers, logistics, irrigation specialists etc.). However, it does actively participate in the Sustainable Consumption and Production Roundtable on Food. The Retail Forum is seen as a small part of this larger picture and the EU has been involved (the European Commission is co-chair of the Roundtable) and contributed to its development. Whilst this view is interesting, it was an isolated view, as our role is not to undertake a complete evaluation of the Retail Forum, as this would require us to seek a wider variety of opinions.

What are the major sources of inefficiencies? What steps could be taken to increase the efficiency of the Action Plan?

Awareness levels of the Eco labelling scheme were felt to be low and it was also felt to still be overly bureaucratic. Both of these issues need to be addressed to increase its take up and effectiveness

The Ecolabelling scheme has been criticised as suffering from low awareness and low uptake due to overly bureaucratic processes and management. Despite attempts to achieve better harmonisation with other national schemes and EU initiatives, these problems have only been partially addressed. To increase the efficiency of the label, a need for more marketing and additional product groups has been identified. Furthermore, bureaucratic hurdles should be reduced in order to increase the popularity of the label.

A number of cross cutting problems that limit the efficiency (and effectiveness) of the measures were identified, including MS enforcement (including market surveillance), 'silo thinking' within the DGs, vested interests in existing (potentially competing) schemes and too high of a workload on some Commission officers

The following points were raised in stakeholder interviews:

- Lack of MS market surveillance is an issue, e.g. for Ecodesign requirements. It is felt that foreign imports can get away with pretending to be compliant when in reality they are not. This relates to the market surveillance activities that MSs are required to undertake;

- The biggest barrier to synergies and efficiency is silo-thinking, between and within DGs. This is the biggest barrier to constructive working. Poor communication between DGs and a lack of a shared evidence base can hinder cross departmental working and create inefficiencies in the delivery of the AP. Greater policy coherence and better working relationships between DGs would help to increase the efficiency of the AP;

Food labelling is potentially a significant issue – Organic food labelling regulations currently prevent any other eco label appearing on the packaging e.g. a carbon footprint label. The organic lobby has significant vested interests in adhering to the status quo;

It has been identified that the workload on some DG officers (on compulsory tools such as Ecodesign and Energy Labelling) is too high. This has added to the perception that the process for Ecodesign measures, in particular, is slow, indeed none of the products in the Working Plan 2009-11, the first since the AP, has yet produced an implementing measure. Yet the technical complexity of the process is believed to make a 3-4 year process necessary to fully design and implement measures, this was the case for the transitional phase 2005-2008, where 12 implementing measures have now been introduced. Evidence for excessive workload may emerge in 2012 if implementing measures are not forthcoming, though it should also be recognised that many other important factors, such as technical complexity, stakeholders and political issues, are also highly relevant and can lead to delays.

One challenge is the increasing task-load and resulting time constraints which can lead to a decline in work quality. Budgetary changes are only a minor cause with the decrease in staff (in DGs) regarded as being more important.

Some felt that widening the scope of the AP, e.g. to consider resource efficiency of all products in all sectors, would improve its efficiency. This may be easiest to achieve by changing the nature of the AP, away from a mixture of strategic and operational objectives to solely strategic;

The following points were raised in stakeholder interviews to support this view:

- Increased efficiency could be achieved by expanding the scope of the AP, e.g. to consider all products and sectors;
- The scope of the AP could be taken much wider, for example to cover all product policies, or to integrate energy issues into what are now environmentally focussed directives (e.g. those relating to waste and the removal of substances hazardous to health). While the latter increase in scope would fit with the logic that saw Ecodesign expanded in scope from energy using to energy related products and the similar expansion of the Energy Labelling directive it would make these areas much more complex. Seeking to include all product related interventions would make the scope too wide to be manageable.

Our survey revealed some positive view from MSs on the efficiency gains enabled by the AP but concern over the lack of resources (presumably at MS level) dedicated to the issue

Member State officials were asked in the survey about whether the AP has helped to increase efficiency in the implementation of policies in their area of specialisation. Some 30% of the respondents thought that the AP has made a slight contribution to an increased efficiency, 22% believed that the plan has helped slightly to reduce the administrative burden. 13% of the participants thought that the AP has helped considerably in eliminating duplication of policies and actions, while a further 26% believed it had made a slight contribution. When asked about the reasons for inefficiencies, respondents highlighted a lack of dedicated resources for implementation as the biggest cause, followed by a perceived conflict between policies (See Figure 12). The communication between the EU and Member States was only of minor concern, ranking last as a potential source of inefficiency.
Figure 12  Sources of inefficiencies:
If you think that the implementation of the Action Plan was inefficient, please indicate the main sources of inefficiency. (Each respondent could choose MULTIPLE responses.)

<table>
<thead>
<tr>
<th>Response</th>
<th>Total</th>
<th>% of responses</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Communication between EU and MS</td>
<td>1</td>
<td>4%</td>
<td></td>
</tr>
<tr>
<td>2 Conflicts between policies</td>
<td>11</td>
<td>46%</td>
<td></td>
</tr>
<tr>
<td>3 Lack of dedicated resources for implementation</td>
<td>19</td>
<td>73%</td>
<td></td>
</tr>
<tr>
<td>4 Lack of knowledge</td>
<td>8</td>
<td>33%</td>
<td></td>
</tr>
<tr>
<td>5 The process was efficient</td>
<td>2</td>
<td>8%</td>
<td></td>
</tr>
</tbody>
</table>

The surveyed stakeholders were less positive about the efficiency benefits enabled by the AP
The online survey included questions to stakeholders from industry and trade on the EMAS revisions. None of the respondents believed that the revisions have considerably reduced the administrative burden on SMEs, reduced the cost of participation or increased the participation of companies. Only about a quarter of the respondents found that this has happened to some extent. 18% thought that the participation of companies has not been improved at all. However, a large share, of more than 50%, felt that they did not possess enough information or knowledge to make judgments about the EMAS revisions.

4.4 Sustainability

To what degree are the results and positive impacts likely to last after an instrument has been implemented (in the medium term up to ten years)?

In the context of this evaluation this question splits between the instrument specific results and impacts and the results and impacts that could be linked to the added value impacts of the AP in addition to the instruments in their own right.

Sustainability of the instrument specific results and impacts was mentioned as positive for Ecolabel, and EMAS though there was less confidence in the Retail Forum
Stakeholder comments to support this point include:

- For the Ecolabel the changes companies make to their production processes and impacts on the value chain would be likely to continue. There remains a need to keep the instruments to maintain these effects;
- Even de-registered EMAS firms have still improved their EMS which is likely to last and constitutes a strong requirement for continual improvement. Knowledge has been spread within the companies and to other markets. There is a growing interest also from other sectors e.g. food manufacturing, packaging, buildings and transport and there is a spill over on these sectors from the discussion;
- It is important to regularly assess if the Retail Forum is worth continuing with. The current three year periods represent a good time-frame. Maintaining its dynamic nature is important.

The survey indicates that MS officials think that Ecodesign and Labelling will have the most long lasting effects of the instruments. The stakeholders surveyed have a less positive view on the longevity of the effects of all the instruments and activities
Member State officials and Stakeholders were asked separate questions about whether the different instruments under the AP will have a lasting effect in their respective countries or
industries. Member State officials on average expected Ecodesign, labelling and the streamlining of incentives to be the measures that will have the most long-lasting effects in their countries, with close to 40% of the respondents thinking that this will be “very likely” for each of these three instruments. Stakeholders from industry & trade have different expectations, only 6% of them thought that Ecolabelling of products is “very likely” to have a long-lasting effect, 44% thought that this is unlikely. For this group of respondents, it was thought that the support for eco-innovation is most likely to have a long impact, with 69% thinking that this is true to some extent.

Sustainability of the AP in addition to the individual instruments was a difficult question to answer though those who were able to offer an opinion felt that the AP only exists via its instruments so the improvements it makes to the instruments should be considered its legacy.

Stakeholders were positive regarding the framework for cooperation and communication created by the AP but felt that the main stimulus for activity remains the threat of legislation and company’s desire to differentiate their products.

A stakeholder commented that the AP has created a positive framework of communication and cooperation between the food sector and the commission. They also commented that this increased cooperation and cross working has also been seen in the DGs e.g. AGRI, ENV, ENER, SANCO and they felt that this increased collaboration and cooperation will provide a lasting benefit.

Despite this belief that the effects and results will be long lasting, they also pointed out that they felt that the main driving force stimulating activity is the threat of legislation and the desire for proactive market differentiation.

This is an example of the opinion that the AP has had some positive benefits, but that it (and the instruments it covers) is not felt to be achieving enough. This is a key point that will emerge in our conclusions and feeds into our recommendations.

4.5 Coherence

This group of questions (along with synergy and added value) are particularly important and pertinent to this evaluation. This importance links to a key objective of the AP which is to promote and facilitate a unified approach to interventions and policy making in this area.

Internal

To what extent are the actions implemented under the Action Plan complementary and not contradictory (i.e. Ecolabel for TV awarded to class A energy label)?

Overall coherence between the issues grouped under the AP appears strong though the issue of prioritisation complicates this.

From the range of stakeholder's opinions we received the general impression is that the actions implemented are complementary. However, the complexity of the resource efficiency issue means that progress against one issue can sometimes cause problems for another, which illustrates why the issue of prioritisation of objectives is not simple in this area.

Some examples of apparent contradictions between the requirements / focus of individual instruments

There has been some criticism of this nature in the area of product labelling. Stakeholders cited windows as an example for a product that will soon have to bear the burden of various different certifications and tests stemming from the Ecodesign, Green Public Procurement and energy-labelling initiatives, though this statement is contested by some in the Commission. This situation...
might lead to the need for a product to obtain up to four different marks or labels which test its characteristics or production process more than once. The stakeholders in question felt that the fulfilment of these criteria is burdensome and expensive, showing a lack of coherence among the involved instruments and procedures.

A reoccurring example given in the survey was the overlap with the Energy Performance of Buildings Directive (EPBD) and the CEN/TC350 standards currently under development in the construction sector.

Appears that for some of the pre existing instruments some feel that they have not benefited through inclusion in the AP and that their main justification remains outside of the AP. For some of the pre existing instruments the clear perception among those involved in their implementation is that the AP is a relatively minor influence on their justification whose main role have been that of minor modification. This attitude was most apparent with regard to Ecodesign and to a lesser extent with Energy Labelling. Some went further than this and felt that the pre-existing directives/ measures have delivered to the extent that they would have done without the AP and felt that there seems to be no evidence of added value.

The AP has helped highlight some areas where coherence between instruments could be improved, though the detailed achievement of these improvements can be difficult, e.g. the desire to harmonise LCA methodologies between Eco design and Ecolabelling, or meet with resistance, e.g., the attempt to link energy labels to public procurement.

Our consultations indicated that the potential synergies which exist in using the LCA methodology developed for Ecolabelling elsewhere in the instruments of the AP has been recognised as potentially beneficial, e.g. the Ecodesign directive uses a different methodology, which at the moment is justified by the need to ensure compatibility with the Directive. The opportunity is now arising to address this — though it is recognised that it would be difficult to change this quickly. In a similar way GPP uses the Ecolabel criteria, so the work already done on improving Ecolabelling should automatically feed into this.

A number of consultees commented on the lack of action to date on the establishment of harmonised incentives, though the attempt to link Energy Labelling to Public Procurement, which met with MS resistance, was raised as a concrete attempt to achieve this.

A stakeholder commented that they felt that progress has not been ideal in the level of coherence achieved between tools, particularly on the development of criteria for product policies. They commented that instruments continue to have different processes, which demonstrates a lack of coherence. However they agreed that the question also exists of the level of coherence which is possible/practical to achieve, for example some criteria cannot/should not be sensibly applied to some products. E.g. Ecolabel for food might not work.

### External coherence

<table>
<thead>
<tr>
<th>To what extent has the AP contributed so far to the preparation, development and implementation of EU sustainable development policy, including the preparation of legislative actions and the establishment of structured cooperation between Member States and with stakeholders?</th>
</tr>
</thead>
</table>

There are some good examples of the AP providing help and assistance in policy development to MSs and stakeholders at the instrument specific level.

A MS consultee stated that without the AP some legislative actions would have been more difficult at MS level. A Danish policy maker commented that they feel the AP is complementary to other
actions and national policies and that similar initiatives exist nationally e.g. in Denmark under the MoE.

Some 52% of Member State officials surveyed felt that the AP has helped to prepare legislative actions in their respective countries to some extent. Ecodesign and GPP were cited as examples of this process. Furthermore, 52% believed that the AP has helped to establish structured cooperation between Member States. Exchange of good practice was one of the examples given by the respondents.

The survey of MS stakeholders indicates that more of them feel there are contradictions between EU initiatives in this policy than between EU and MS initiatives
Some 23% of the Member State officials surveyed cited that there is contradiction to some extent between Action Plan instruments and country level initiatives. 64% of respondents thought that there is no contradiction at all. A slightly larger share of respondents (32%) found that contradiction exists to some extent at EU policy level.

Stakeholders were also asked whether there is contradiction between some of the instruments of the AP or with other EU initiatives in their area of interest/business. In response to this, 50% stated that this is happening to some extent, 11% to a large extent and 19% thought that this is not at all the case. However, when asked for examples of contradictions between AP instruments within the survey questionnaire, no examples were cited. An example that was highlighted in the stakeholder interviews was that some feel that the Ecolabel does compete with and contradict various existing national and single issue (sectoral) labelling schemes. One respondent pointed to a general contradiction in policy favouring economic growth but also targeting sustainability at the same time, a fundamental difference, but an isolated view. Other potential contradictions or conflicts were identified between Ecodesign measures and the Energy Performance in Buildings Directive (EPBD), the promotion of cross border shopping and in promoting waste reduction and recycling at the same time.

However, there remains a wide range of quality and depth in terms of MS responses and activity in this area
The following points raised in the interviews with Commission officials support this point:
• There is a wide variation between MSs in monitoring of Ecodesign. This is apparent from the DG Enterprise website with some countries not even having a department which is responsible for this issue. The AP has had little or no effect on MSs in this aspect;
• With regard to success of the Ecodesign and Energy Labelling polices MS market surveillance is key, and there remains variable performance in this;
• Based on survey responses it is believed that the AP has had spill over effects to third countries but only to a limited extent and with no solid examples available;
• There is a pressing need for MSs to improve their surveillance mechanisms and improve enforcement of existing legislation. Identifying a way to do this cost effectively is the challenge; steps should be taken to disseminate best practice between member states in this area.

There are also examples of MSs reporting that the AP has been useful in helping them prepare, present and explain overarching policy goal and the links between instruments in this area
A policy maker from the Netherlands commented that the AP has succeeded in the Netherlands in bringing people together who wouldn’t necessarily be working with each other to focus on SCP issues and initiatives. They commented that an interdepartmental working group was set up specifically from the AP and continues to meet to this day. The stakeholder felt that the AP has acted as a framework and guide within which to develop national policies and initiatives and they went on to say that another feature of the action plan is that is catalysed local authorities (as
opposed to central government) in the Netherlands to start thinking about GPP for the first time. They felt that this has increased their awareness of GPP and is a positive development, although there is still much scope for improvement in this area.

A Danish policy maker shared this opinion stating that they felt that the AP contributes to creating coherence amongst policies.

A UK policy maker gave the following examples of international cooperation in policy development:

- Within the UK the review of the PAS 2050 carbon footprinting standard has involved consultation with a very wide range of stakeholders in the EU and worldwide, including government departments in other MS. They have particularly engaged with French colleagues to gain an insight into their experience in implementing their recent legislation on standards for assessing multi-criteria environmental impacts and communicating that information to consumers;
- In relation to GPP the UK also regularly shares experience with other members of the Green 7+ Group (Sweden, Netherlands, Austria, Finland, Denmark, Germany, Norway, Switzerland).

The desire to harmonise policies between the EU and MSs and between MSs is largely viewed as a positive objective, however some feel that there is a need to recognise that there is a need to allow some MS flexibility and recognise that the more progressive MSs may go beyond the AP

A UK policy maker commented that:

- Some consistency between the AP and national policies should facilitate a broad harmonisation of approaches across the EU. Consistency is important, particularly where there are competition and trade implications in an increasingly global market-place. However, there are strong indications that a ‘one size fits all’ approach is not always appropriate or achievable. This has been clear from the recent work being done on carbon footprinting standards i.e. the review of the UK-developed PAS 2050, the developing GHG Protocol product standard and the developing ISO standard;
- We don’t simply adopt EU GPP criteria. Instead we use them as a benchmark to challenge our own standards, and carry out impact assessment, market analysis and stakeholder consultation in order to develop our own Government Buying Standards;
- In most areas, the UK was already active pre-AP and was already going in the same policy direction. Therefore the AP said what the UK wanted to see as the UK was ahead of the EU norm in some areas. – e.g. the Defra SCP programme started in 2005/6 against the 2008 start of the AP. The AP clearly has an influence with regard to which products are being taken forward for eco design, Energy Labelling etc.;
- The EU GPP criteria have challenged the UK to update its own sustainable procurement standards, and given an important benchmark for doing so;
- An example of MS actions that may be ahead of EU level activity was given with the UK-developed PAS 2050 carbon footprinting standard would like to gain international recognition and be used as the basis for other standards under development, such as the GHG Protocol product standard and the ISO.

A specific example of the issues involved around aligning MS instruments can be seen in labelling schemes, where the large number of non state controlled schemes in existence would make standardisation very difficult

A UK policy maker commented that:

- Studies have shown that consumers are confused by the plethora of labels and labelling schemes. Until there is consistency in the assessments of environmental performance which lie behind the label/labelling scheme, they will be open to challenge on their credibility and their
value must be questionable. The need for such consistency is already apparent in the discussions which are ongoing in several different international fora;

- Problem remains that the Eco label in the UK is not widespread enough yet. Much labelling in UK is on a product specific basis e.g. FSC for timber, MSC for fish, Organic, Energy Saving recommended etc. Many of these schemes are independent of the Government – so there would be no mechanism to impose conformity – and to try and do so would arguably reduce the credibility of the labels (as at the moment they are set by sectoral experts and independence is valued).

Some sectors feel that the initiatives they develop (for their own sector) better suit their needs and the AP should align with these in order to create better policy and avoid duplication

In the specific case of the construction industry it was highlighted by a stakeholder from this sector that:

- The introduction of an ecological footprint type approach would directly contradict with existing European standard assessment procedures and add an unnecessary burden on the construction industry. The Commission has already mandated CEN to develop standards to determine the cradle to grave environmental impact of construction products through Environmental product declarations and to measure the overall performance of buildings (measure the performance of products at the building level). The CEN standards are already widely used today even though not all of them are published yet. The AP is duplicating this initiative, but without performance measurement at the building level. The results are therefore not leading to more sustainable buildings. Furthermore, the AP develops new impact categories leading to confusion in the market and adding compliance costs. They felt that Commission should align the AP to the CEN standards and avoid any duplication.

Potential exists to link to other EU programmes and activities to help improve the coherence of polices and activities in this area, this could include the designation of existing activity (e.g. parts of the CIP, LIFE+ and Interreg) as 'accompanying measures' and possibly additional activity in awareness raising among the public

Commission officials made the following points to support this:

- Ground level interest in eco-innovation is increasing. Building and supporting a network of awareness and capacity would help support and grow this interest level. A way in which the scope of the AP could be expanded is by bringing in parts of other programmes (CIP, LIFE+, Interreg etc.) which aim (amongst other things) to support projects and activities to increase the uptake of SCP/SIP;

- Legislation needs accompanying measures to be successful, so the SCP/SIP approach (integrated compulsory measures, optional measures, awareness raising etc.) is a good one. It could even add more accompanying measures – e.g. promotion of eco design, with future legislative back up. MS level activity on promoting legislation can be lacking.

To what extent are the actions and instruments implemented under the AP integrated with other EU policies and activities, and with actions implemented at national or international level?

There are a number of EU policy areas and programmes that share objectives and high level goals with the AP, e.g. Integrated Product Policy, Sustainable Development Strategy, some appear well integrated but there remains potential to clarify and improve this integration

An important EU initiative related to the AP is the Integrated Product Policy (IPP). It was introduced with the aim of minimising the impacts of products by looking at all phases of a product's life cycle
and taking action where it is most effective. To achieve this goal, the policy makes use of a variety of initiatives that are shared with the AP. Among them are the Ecolabel, EMAS, ETAP and GPP.\textsuperscript{46} The AP also stands in close relation to the EU Sustainable Development Strategy (EU SDS). The EU SDS aims to integrate immediate and long-term objectives, local and global action, thereby regarding social, economic and environmental issues as inseparable and interdependent components of human progress.\textsuperscript{47} These goals are very much in line with those of the AP and also try to stimulate a change in citizen’s lifestyles.

The cross cutting nature of the AP (energy, environment, social and economic) means it does not prioritise any of these issues, this creates apparent contradictions with polices and programmes specifically aimed at one of these issues. Attempting to improve this alignment will affect both.

The following points were made by Commission officers to support this:

- The EU climate change programme prioritises products with the largest GHG savings potential – which may move away from the desire to consider wider environmental issues implied in the Ecodesign directive. (Though in practice the energy use is usually identified as the most significant environmental impact of products, and other environmental issues are picked up through compliance with legislation such as ROHS and WEEE);
- The Action Plan has overlap with the Small Business Act. If this was moved into SCP it would affect the priorities of both;
- There is limited integration, but still more room for improvement. A good example is the links which could be made with the biodiversity / agriculture activities supported by the Common Agricultural Policy, i.e. their activities could be aligned with the AP principles\textsuperscript{48};
- The proposed Energy Efficiency Directive (COM(2011) 370 final) suggests minimum public procurement standards related to energy efficiency standards which is expected to encounter resistance from MSs (due to its perceived cost). Similar resistance was met to the (ultimately accepted) Article 9 in the recast Energy Labelling Directive regarding public procurement and minimum Energy Labelling.

There are a large number of MS led SCP/ SIP strategies with common objectives and goals to the AP. There is evidence that this is something that MSs are aware of (partly because of the AP) but, despite some good examples, there remains much to be done in terms of formal alignment between MS and EU policies

Aside from the AP, member states have introduced a variety of their own SCP/SIP strategies with varying scopes and concepts. These initiatives include labelling (e.g. the Nordic Swan or the German blue angel), different public procurement standards and information campaigns (e.g. the Danish “One Tonne Less” or the British “Red/Green Calculator”). Some of these programmes have been in place for several years and enjoy considerable success. Despite these diverse experiences, the criticism has been made that there is not enough information sharing between the European authorities in this field\textsuperscript{49} and that more communication is needed between the different national public authorities, the EU and other stakeholders involved.

Commission officer consultees made the following relevant points on this issue:

\textsuperscript{46} BIO IS study (2008) Reporting on the implementation of integrated product policy (IPP).
\textsuperscript{47} European Commission: http://ec.europa.eu/environment/eussd/.
\textsuperscript{48} This view is not necessarily shared by the Commission particularly as regards agriculture. Indeed, in 2007, the Commission published a Communication on the mid-term review of the sixth Environment Action Programme (COM(2007) 225) indicating that “the integration of environmental concerns into other policy areas is one of the basic principles of environmental policy. It is enshrined in Article 6 of the EU Treaty – but progress has been mixed. In the agricultural sector there have been fundamental reforms over the last 15 years that have moved towards seeing farmers as stewards of nature. However, the integration of environmental concerns into other areas has been less successful.”
There is evidence that most MS have at least reviewed SCP/SIP and considered what could be further aligned to achieve synergies. In some MS though, e.g. Sweden, the MS level policies were ahead and more developed 10 years ago, than the AP is now;

Regarding EMAS: Italy assists firms in identifying legal requirements (EMAS type focus), Germany, Spain shortened application procedures, lowered fees for EMAS registered firms (e.g. in the state of Bavaria in Germany, EMAS registered organisations receive a 30% reduction for the fees to process their normal waste and 50% for the processing of their hazardous waste.

The AP’s efforts to group and present the EU’s policy activities in SCP/SIP appear to have been helpful in presenting the EU’s response at an international level, though international integration is viewed by some as somewhat abstract

The highest international-level initiative addressing SCP issues is represented in the UN Marrakesh Process. It aims to facilitate regional, national and international dialogue and cooperation on SCP issues among representatives of all levels of governments, UN agencies and other stakeholders. The latest UN review on the global status of SCP initiatives recognises the EU’s Action Plan in this area and places it at the centre of Europe’s response to the environmental challenges being faced.50

The Marrakesh Process is itself part of the wider Sustainable Development agenda as outlined during the 1992 Rio Earth Summit, with biannually reviewed cycles and targets to measure progress. However, at the recent UN Conference on Sustainable Development in New York negotiations on the Marrakesh Process broke down on the final day with no final consensus or agreement. The UN stated that this lack of consensus is seen as a major setback to international progress on their Sustainable Development goals, as the process is now essentially in limbo.51

Commission officials and other stakeholders made the following points of relevance to this:

- There is strong co-operation through the international working group on the ETV issues – with EU, US, Canada and Philippines, now also Japan and Korea as observers. This may really add value to an ETV scheme over time;
- International integration is present to some extent, but at a very high, abstract level;
- Numerous delegations have visited from around the globe to learn about EU best practice in this policy area including India, Japan, China, South Korea, USA and Brazil.

To what extent has the knowledge generated by the Action Plan been disseminated and how?

The AP has been perceived as a very useful mechanism for presenting the diverse range of instruments, measures and activities that the Commission have in this area. This appears most effective in Brussels but there is some evidence that this has also been found useful in MSs

A number of Commission officials felt that dissemination of the AP has only really happened within Brussels and policy circles, to decision makers only. They felt that awareness levels beyond this were low. However, they also considered that this was not a problem, as it is the instruments rather than the AP itself that should make their way into people's awareness.

A number of Commission and MS consultees commented that the AP is beneficial in that it shows appreciation of the wider picture beyond single instruments which is helpful in presenting the EU’s policy as an integrated approach. A MS consultee commented that the AP helps to give legitimacy

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50 UN (2010) Paving the way to sustainable consumption and production.
to government intervention in this field by illustrating that it is not an issue that can be left to the private sector to deliver on. This political support was felt to be very useful.

A UK policy maker commented that they felt that the AP is useful in providing an overarching vision on how policies in this area fit together and that it is important to retain this high level picture as individual instruments evolve. They went on to say that the benefits of aligning the actions between DGs are clear and it is important that this happens. They said that the AP was useful for new staff members, to give them a picture of how policies fit together. With regard to awareness raising on this area in general they felt that much of the activity relating to SCP issues and instruments has been confined to businesses and driven by energy, cost and legislative considerations, not the AP.

The European Consumers Organisation commented that they were active in disseminating information about the instruments within the AP. However, they also recognised that they could potentially do more in this area, particularly in relation to disseminating its achievements.

*There is a mixed picture in terms of dissemination at an instrument specific level, for example EMAS is promoted well in some MSs and regions and GPP is mandatory in some MSs (e.g. the UK)*

Member State officials were asked to what extent a selection of elements from the AP are shared and disseminated in their country; 26% of the respondents found that best practices on GPP are shared very well across Member States, 39% think that this dissemination is only taking place moderately well. 13% of the same group of respondents stated that know how and expertise in the field of resource efficiency is shared very well among industries and particularly SMEs. 39% think that this functions moderately well. Finally, 13% state that data and information on products and their related environmental impacts is shared very well, while 43% think that this is only functioning moderately well.

Consultees made the following points regarding dissemination:

- In terms of the EMAS, some countries have very good dissemination, e.g. the Chamber of Commerce in Catalonia, Spain – EMAS club. In other countries, e.g. NL, it is more problematic, with significant room to improve;
- Within the UK, the sustainable procurement quick wins were developed in 2003, but it has taken 8 years for them to be adopted as government buying standards. The issue remains that if guidelines are not enforced or monitored there is no incentive to act. GPP is mandatory for UK central government, but they only make up a small fraction of UK public procurement. The UK has had a national SCP action plan and guide to buying sustainably for 8 years, pre SCP/SIP AP. However, its “quick wins” guide to sustainable procurement still hasn’t been widely adopted. This is largely due to their voluntary nature. In more recent times the UK has launched the National Sustainable Public Procurement Programme (NSPPP) to standardise sustainable procurement training in the UK. DEFRA has also created a sustainable procurement prioritisation tool to accompany the course.

Stakeholders have a less positive view of dissemination activities than MS or EU officials - these perceptions generally relate to instrument specific activities, though awareness of the AP appears to be low

Among the surveyed stakeholders the view on the dissemination of the AP was a lot more pessimistic. Only 29% of them thought that data and information on products and their related environmental impacts is shared moderately well, a further 44% felt that this process did not function very well. 12% of the stakeholders thought that GPP best practices are shared moderately well, 50% found that this process is not functioning very well. At the same time limited knowledge of dissemination was a factor, with 32% of the respondents stating that they did not know about the
state of dissemination. Finally, 15% of the surveyed stakeholders stated that know how and expertise in the field of resource efficiency is shared moderately well among industries. 47% thought that this is not functioning very well. This represents an important finding as information sharing among industries would be very important to obtain better efficiency and synergy of the AP.

Many forward looking companies are proactively involved in this policy area, but some companies are very wary of extra regulations being imposed on them and can react with suspicion to policy activity in this area.

The point was made by a Commission official that progressive and innovative companies are already involved and take a proactive role in working with, and receiving advice from the EC, e.g. in roundtable seminars.

Discussions with policy makers around this issue suggest that although the point of eco labelling policy (and the other parts of the AP) is not to impose burdens on companies, many companies react in a protective way because of this fear. From the continued reluctance of some companies to become involved in a positive way it is clear that there is a communication issue in convincing some companies of the benefits and positive motivations, e.g. to improve the design (and quality) of incentives, which can stimulate the market behind the AP.

**To what extent is the Action Plan consistent with the Commission's Resource Efficiency initiative?**

Given that the details of the Resource Efficiency initiative are not yet fully developed (we were informed that the timetable has now changed and that the roadmap will not be ready in the summer as planned) this question has been answered with an eye to how the AP could be combined with it.

There appears to be clear strategic alignment between the AP and the Resource Efficiency initiative and the question of balance between supply and consumption and energy, environment and economic priorities is key to both.

Both the AP and the Resource Efficiency initiative share the common goal of decoupling economic growth from resource consumption. Many aspects of the Resource strategy (e.g. life cycle thinking) has been incorporated in the AP and other EU initiatives. Despite these similarities, more inter-linkages between environmental and economic policies could be established. This view is also reported by consumer groups which stated their worries that a pronounced focus on efficiency could provoke unintended effects and does not rule out over-consumption. Furthermore, they would welcome the introduction of concrete reduction targets for resource consumption under the AP as well as under the EU Resource strategy. A difficulty in both cases will be the fact that data collection on resource consumption in the EU has been relatively weak until now. This would however be necessary in order to establish a base for future reduction targets.

The main objective of the EU’s resource strategy is to achieve a more sustainable use of natural resources by reducing the negative environmental impacts generated by the use of natural resources and at the same time ensuring economic growth. The Resource Efficiency flagship initiative is the seventh and last initiative under the Europe 2020 strategy. It was adopted in January of 2011 and will be accompanied by a roadmap to a resource-efficient Europe due to be released in mid-2011. The initiative addresses all natural resources, from raw materials to food, water, air and ecosystems and establishes it as the guiding principle for EU policies on energy, transport, climate change, industry, commodities, agriculture, fisheries, biodiversity and regional development.

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52 BIO IS (2010) Preparatory study for the review of the thematic strategy on the sustainable use of natural resources.
53 2010, The European Consumers' Organization (BEUC) and ANEC position paper.
The need for clear targets and guidance in the Resource Efficiency initiative has already been raised

In line with many stakeholder comments, the preparatory study for the review of the thematic strategy on the sustainable use of natural resources found that the development of a basket of indicators will be among the most pressing issues in the near future. Another interesting finding was that strong disparities still exist between countries depending on their challenges and maturity in the field of environmental policy. Good guidance and concrete targets were cited to potentially help in diminishing these differences in the future.

The AP could become a sub instrument of the Resource Efficiency initiative; this would enable the AP to retain its mixture of strategic and operational instruments and targets

Some consultees felt that the AP would have potential under the Resource Efficiency flagship initiative; and that it could become a core instrument of resource efficiency policy.

The AP could be subsumed into the Resource Efficiency initiative – though if the intention is for the initiative to be a high level strategic document, this would require the removal of the more operational instruments and issues from the AP, or the clear positioning of these at a lower operational level

Consultees assume that the Commission want to highlight where existing activity (across all DGs) contributes to the new Resource Efficiency initiative. There appears to be a reasonable case of added value in seeing how these activities fit together. This was felt to be reasonable because resource efficiency is a broad concept, and many of the issues have been well known and addressed (by many DGs) for a number of years. It was reported that there is arguably currently something of a re-badging of these existing activities to reflect the increased high level impetus to improve coordination between the policy areas.

An external stakeholder made the point that it is of concern that the AP is not mentioned within the RE flagship initiative. They felt that because the AP provides a framework of instruments that contribute to delivering increased resource efficiency within the EU it is a natural fit as the basis of the initiative and starting from scratch would be to “reinvent the wheel”. They also stated that the phrasing and ordering of the policy activity in this area should follow the logic of starting with a flagship initiative, then a road map and then an action plan. They commented that the real contribution of the action plan should be in its ability to be concrete and specific and it should be on micro rather than macro levels and contain measurable actions that can be monitored and followed up on.

A Commission officer gave his personal view that a massive version of the AP as the resource flagship, won't work as it tries to group together too many DGs and instruments and is likely to become unwieldy.

A consultee gave the opinion that the AP in its current form suffers from its unusual hybrid nature; strategic, yet not quite high level enough, whilst also being operational in nature, without being specific and targeted enough. He felt it needed to establish whether it should be a high level strategy document, covering a wide range of subtopics and programmes with their own specific, time related, measurable action plans. Or alternatively to give it some teeth and recast it as a practical action plan, covering much the same topics as it does now.

55 Preparatory study for the review of the thematic strategy on the sustainable use of natural resources, BIO IS, 2010.
4.6 Synergies

Do the different instruments and initiatives together produce an impact on sustainable consumption and production, which is greater than the sum of the impacts they would produce alone? How could synergy be reinforced?

As with coherence this question is particularly important in this evaluation given that one of the key ways in which the AP is intended to add value is in enabling synergies between the related instruments.

There is a clear consensus that a key objective of the AP is to identify and promote synergies between the policy areas. There is also a clear consensus that this objective is a sound and correct approach to adopt and that there are positive examples of this working.

The following points made by Commission officers support this view:

- The intention to improve coordination between DGs (in the SCP/SIP Action Plan) is a good thing as sharing expertise should be mutually beneficial;
- The main purpose of the SCP/SIP Action Plan is to coordinate actions and to drive tools and policies in the same direction. This adds value and efficiency, e.g. by aligning product specifications for Ecodesign and labelling and between EMAS criteria and corporate environmental foot printing. This alignment should also help companies achieve compliance as the standards are consistent. The aim of linking products and consumption policy is also sound – i.e. need ‘green products’ to be ‘green consumers’.

From the survey of Member State officials, see Figure 13, the majority believed that the AP increased synergies between the different instruments to some extent. The stakeholders from industry & trade were a bit more pessimistic on this, with 59% of the respondents thinking that synergy has improved to some extent, 3% think this has happened to a large extent and 24% find that the AP did not improve synergies at all.

Figure 13 To what extent do you think the Action Plan has improved the synergy and coherence between these instruments?

Despite a recognition that the objective of improving synergy between the instruments is sound it is also recognised that the adjustments needed to achieve this can be detailed and time consuming to achieve.

The following opinions and examples of this were provided by the consultees:

- There is still room for improvements between the Ecolabel, Ecodesign and energy labels;
- So far synergies are not structural under the AP; they are mostly developed on a case-by-case basis;
- The Ecolabel is working with GPP, via the JRC, to develop joint product criteria – this is good to optimise resources and strive for consistency;
With regard to the use of a common LCA methodology by Ecodesign and Ecolabelling. The DG ENV / JRC method is very detailed and as such is not ideal for the Ecodesign process, which needs a quicker and easier approach – such as the current MEEuP, including the Ecoreport which are adopted to the procedures and requirements of the Ecodesign Directive. The existing procedure is already under pressure due to its complexity and there is a desire to speed it up (from companies and consumers). This has been discussed and it appears that the JRC understand that their approach can’t really replace the Ecoreport. However the future changing of the Ecodesign LCA should be considered, for example it should, when appropriate, utilise the information in the ILCD database. This cooperation could be viewed as another positive outcome enabled by the AP;

Commission has a key role. A Product Data Bureau should be established that would feed scientific based information into the various instruments. Perhaps one of the important aspects for further work of these instruments is to focus entirely on the products/services/works that have the highest environmental impacts using LCA;

GPP involved in many internal consultation processes in order to get GPP into as many policies as possible. This includes successfully getting GPP written into the EU2020 strategy.

There are other policy areas and instruments of relevance to SCP / SIP which are currently not under the influence of the AP. However bringing these within the AP would influence both the AP and the instruments in question.

Many of the benefits of the AP (such as promotion and the identification of quick win synergies) could be achieved with a high level alignment of principles and objectives between policy areas, rather than some of the more detailed operational alignments sought by the current AP.

The following comments were made by Commission officials who were consulted:

- There are other DG ENER activities which could be arranged under the AP banner – as the energy sector can all be defined as relevant to ‘sustainable’ so could all be included. However if this approach is taken the potential scope becomes very wide as it would bring in measures and policies from very many DGs;
- There is a reasonable logic in the current grouping and the overall intention of coordinating product policy. Could be argued that DG ENV have a number of related directives which are not included – e.g. WEE. ROHS. The selection of which policies are included in AP seems arbitrary – although synergies are available between those selected;
- The main priority of DG ENER is saving energy – as per their mandate. This does not mean that other environmental issues (waste, recycling etc.) are ignored but they are not their primary focus;
- There is spill over to other policy areas. Cooperation and inter-linkages exist between DG MARKT, MOVE, ENER, CLIMATE, ENTR, REGIO, INFSO and AGRI. However, aligning policies may well require tough negotiations (despite it being part of the Commission's central aims).

Within the Commission there is agreement that the AP has improved coordination between the DGs most involved in SCP/SIP. This is a very useful outcome and given the relatively low cost of the AP this alone could be regarded as justifying its existence.

Comments from Commission Officials which supported this view include:

- Overall the SCP / SIP has enabled some better coordination between DGs and helped with the extension of Ecodesign Directive (to energy related products). Arguably this was all it was supposed to achieve. Another positive is the more formal link between Ecodesign and labelling and links to GPP and incentives. This linking of push and pull policies is a good idea, though the implementation of such policies in product specific measures takes time and is currently under development.
Are there possibilities for more synergies at EU level?

There were a number of suggestions for additional synergies that could be sought between instruments currently covered by the AP, although the complexity of achieving the detailed changes was recognised as a limiting factor.

The following suggestions and points were made by consultees:

- **EMAS – GPP** could become a stronger link, e.g. favouring EMAS registered companies. However this could prove to be difficult given competition rules and discrimination;
- It would be useful to increase the scope of the AP and further develop instruments e.g. link GPP to Ecolabelling and EMAS;
- The synergies with other policy areas (GPP, EMAS) are real, but it is hard for DG ENER to become actively involved in these due to their high existing workload;
- DG ENV does more work with JRC than DG ENER, who use more external consultants. There is future scope for synergy here (also applies to DG ENTR), which makes sense in principle. However DG ENER (and possibly ENTR) would need to be convinced that the JRC (as with any other contractor) has the track record and capacity to deliver the work.

Some felt that cooperation between the DGs in this policy area still has scope for improvement.

A Commission consultee voiced the opinion that there are still big differences among the DGs and they have separate initiatives that focus on similar issues, and these should be more integrated and cooperation improved: Example policy areas with potential synergies were suggested as follows: Low carbon economy by DG CLIMA, Product/Waste policy by DG ENV and Energy efficiency policy in DG ENER where there are possibilities of synergies by addressing embedded energy in production processes. They commented that there still appear to be some difficulties in the relationships between the key DGs, ENV, ENTR and ENER.

The potential for synergies to be developed with policy areas that are currently outside the scope of the AP was also recognised.

Surveyed stakeholders would welcome the AP establishing stronger links with upstream and downstream policies along the life-cycle of products, such as, for example, sustainable sourcing (i.e. timber, fish, etc) and waste management. Furthermore, a number of respondents stated that the synergies with the CEN standards in sustainable construction could be improved.

4.7 Added Value

**What is the EU added value of the instruments and initiatives under the AP?**

As with coherence and synergy this group of questions is key to this evaluation as they include a consideration of the benefits that the AP could bring above that which would be achieved by the EU and MS instruments in isolation.

There is clear EU added value in action in this policy area related to the single market dimension of harmonised rules for product manufacturers and information for consumers.

Consultees made the following points related to the EU added value of the AP:

- The AP is linked to the single market dimension in product and production policy and harmonised rules for manufacturers. This will lead to better environmental performing products;
- The AP provides consumers with better choices through improved information;
- The AP helps to overcome problems from competing standards in each MS, this reduces administrative burdens;
- The added value is the synergies created by linking different regions, companies and policies, thus avoiding conflicting policy drivers pulling in different directions. This allows policies to be streamlined from the outset.

**Are there other instruments and initiatives that are not part of the AP and that the EU should insert because of the EU potential added value (i.e. the Food SCP Roundtable, environmental footprint of products, etc.)?**

This question has been covered under a number of others, however there are some other aspects of relevance here.

There are a number of specific instruments and broader policy areas which could logically be brought under the influence / scope of the AP. However if the AP is to retain its combination of strategic and operational objectives this may well lead to a significant workload regarding the detailed alignment of instruments

The UEAPME opinion is that aside from the current instruments under the AP, the introduction of further market-based instruments should be considered. Tools such as SME environmental subsidies or tax incentives could raise the market demand for environmental goods and services, supporting the existing measures and at the same time strengthening the competitive position of the EU's green industries.56

In the survey a number of stakeholders call for a better integration of food production into the AP. They cite an ever increasing industrialisation of the sector and the large potential impact as the biggest reasons for this opinion. They further state that it is important that the harmonised framework methodology developed by the Food SCP Roundtable converges with other leading international standards.

**It was suggested that food could be brought within the Ecolabel approach. However it was recognised that there are already a very large number of labelling schemes for food and adding another one would be risky. Therefore any move in this direction would need careful consideration and alignment with existing schemes**

Food labelling remains a complex and challenging issue. For example organic food labelling regulations were reported by stakeholders as preventing any other eco label (such as a carbon footprint label) appearing on packaging. This illustrates the many challenges that effective food labelling faces and was felt by some stakeholders to be symptomatic of the complex vested interests involved in the food supply chain. Food stuffs are currently exempt from Ecolabelling requirements, although various single issue standards exist. It may be that food products are too complex for a single eco-label to be effective. The interests of an array of single issue standards will need to be incorporated for a food Ecolabel to gain any traction with stakeholders and customers alike.

4.8 Impact

**To what extent has the AP generated unexpected positive or/and negative impacts?**

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56 UEAPME, (2011) UEAPME’s first reflections on the upcoming revision of the Sustainable Consumption and Production Action Plan.
There is clear potential for unexpected impacts in this policy area, particularly from rebound effects, where efficiency savings are spent on increased consumption elsewhere.

Potential side-effects from the implementation are mostly non-intended, but not necessarily unanticipated. They range from positive spin-off effects to “perverse effects” that undermine an instruments stated objectives. In the case of sustainable consumption, this could occur as a “rebound effect”. This stems from fact that efficiency improvements in products are likely to increase consumers’ real income which may cause a growth in demand elsewhere in the economy, thereby increasing resource consumption. These effects can be highly complex and very hard to measure, resulting in a difficulty in quantifying the real impact of a policy. In the case of the Action Plan, this could mean that energy savings from initiatives such as the Energy Labelling Directive are partially offset by increased consumption in other areas.

Some feel the increasing profile of resource efficiency is leading to an increase in ‘green washing’ (i.e. false or inflated green claims for products) – though this is more of a general point than something specific to the AP.

An unexpected effect of the AP was mentioned in the survey, namely a perceived increase in “greenwashing” by companies and organisations. Some of the newly created standards seem to be used as a marketing tool to sell products as being very environmentally friendly when in reality they just adhere to minimum requirements. The CO₂ labelling of cars was cited as an example and a legislative framework against “greenwashing” was requested.

There was no evidence identified, or opinions offered, regarding examples of unintended effects, though it was postulated that (eco)innovation should be boosted as a result of the market promotion enabled by the AP – though this is arguably an expected part of the rationale.

Stimulation of innovation within processes, organisations and sectors should also be encouraged. Framework for social innovation would ideally encourage early stage risk taking as opposed to waiting until regulations are imposed. If regulation becomes too prescriptive it could risk stifling innovation, which requires a flexible-goal-driven approach.

To what extent do the results and impacts respond to the initial needs and problems?

This question is included under impact but could also fit under relevance or effectiveness. As with a number of other questions in this evaluation there is a need to consider this at both the specific instrument level and with regard to the benefits that the AP is intended to deliver above and beyond that which the instruments would deliver on their own.

The AP is perceived as being on the right track but in need of alteration in order to increase the scale of impacts.

Consultee points in support of this include:

- The Action Plan is on the right track but it needs to be seriously re-vamped. As it is now, it is not sufficiently addressing the real production and consumption issues;
- There is room for improvement, e.g. broader recognition of initiatives that are not launched by the EU – e.g. other labelling schemes. The EU has a preference for own labels and schemes and this can lead to a biased approach. It is important to keep a business perspective and really keep sustainability in mind – not only the environment. All three aspects must be integrated: The environment but also social and economic aspects are important to consider;


The main impact of the action plan is improved awareness and dialogue and communication. It has contributed to create a desire to know more about what works and what does not. It has been a basis for learning. Now in the new AP it is a matter of using what has been learned.

Suggestions as to how effectiveness of the AP could be increased included up skilling policy officials in the New Member states (NMs), stricter control of 'green claims', speeding up the implementation of instruments, harmonising LCA methodologies and taking a whole system approach to sectoral systems

The consultation points which contained these suggestions are as follows:

- The action plan could have more of a focus on up-skilling and training officers in the newer member states. This capacity building will be important if levels of SCP/SIP throughout the EU are to be improved as many of the “worst offenders” are from the newer member states;
- There needs to be clear control over the information communicated to consumers. Enforcement of rules and regulations is key to preventing unscrupulous companies taking advantage of any new systems or labels. Enforcement of rules and testing of claims made by companies is required. The outstanding issue here is who should be responsible for this;
- The instruments and activities would benefit from being more dynamic, as would the AP in general. Updates take too long to filter through and this can impact upon the effectiveness of instruments;
- The effectiveness and impact of the AP could be increased by harmonising the development criteria for the Ecolabel and for any developing GPP guidance. Not just for the Energy Labelling directive and energy performance certificates (as required by the Energy performance of Buildings directive). The ideal approach for infrastructure and building projects would be to take a systems approach such as the UK developed Buildings Research Establishment Environmental Assessment Method (BREEAM) and the US Leadership in Energy and Environmental Design (LEED) standard green building certification system. This would allow GPP and the other instruments of the AP to have maximum impact within the public sector.

A number of suggestions were made on the future direction of the AP, these included the need to harmonise the use of national labelling schemes in GPP criteria, address the risk of international trade obligations watering down product criteria. The consultation points which contained these suggestions are as follows:

- Labelling and procurement – The European Ecolabel can be used when specifying GPP, however it is illegal to use similar more recognised nationally derived standards. A recent high profile court case in Holland has set a legal precedent. This is a potential threat to the various national schemes that already exist and the organisations that have designed and promoted them. Harmonisation in this area is vital;
- Industrial Policy issues – innovation vs. competition issue. Whilst Ecolabelling and Ecodesign can stimulate internal markets to manufacture more efficient products there are potential conflicts that might arise with international imports and accusations of protectionism;
- Public consumption issues have been largely ignored as existing AP focuses mainly on production. A huge public communication exercise would be required to make people aware of the issues involved; this would have a significant cost.
5 Conclusions and Recommendations

5.1 Conclusions

The conclusions presented here are based on the findings in Chapter four in combination with our professional opinion. We have presented the conclusions against each of the primary evaluation questions.

5.2 Relevance

| To what extent is the Action Plan recognising and addressing the great environmental and social challenges e.g. ageing society, climate changes, limited natural resources and social inclusion? |
| To what degree (both qualitative and quantitative) do instruments and initiatives under the Action Plan address its objectives? |
| To what extent are the objectives of the Action Plan still pertinent in the current environmental, social, and economic context? |

The AP and its constituent instruments reflect, and contain actions to address, the significant environmental and social challenges facing Europe and the world. However, the wide scope of issues that the AP seeks to address makes it difficult to achieve a balance that is seen as ideal in the eyes of all stakeholders. This is partly because each stakeholder will tend to have a focus on a particular issue / objective and in their eyes this objective will be the most important. Given the breadth of issues covered by the AP this apparent problem is not a major concern, particularly as it appears that there is no consistency of opinion as to which aspect is the prime focus.

Of the three main criteria in sustainability (economic, environmental and social) our evaluation, indicates that environmental (including energy) issues are covered most comprehensively, with economic issues receiving a reasonable coverage, for example via the objectives focussed on promoting eco industries, making industry more efficient and encouraging it to produce goods which have a lower environmental impact. Social challenges (for example the employment rights of workers and the affordability of ‘green’ products and services) are the least clearly addressed by the AP.

The extent to which the AP and the instruments it includes address its objectives needs to be judged by a combination of quantitative and qualitative measures. Looking at quantitative progress against the high level indicators of resource efficiency, while there is some progress being made the rate of improvement is small and it is very difficult to prove a causal link between the majority of the instruments and the changes that have occurred. The mandatory instruments (Energy labelling and Ecodesign) are regarded as having larger impacts than the voluntary instruments, with increasing energy and resource prices and the desire of leading companies to differentiate themselves on ‘green’ credentials arguably being at least (if not more) important.

At a qualitative level the AP and its instruments, can all be seen as, and are generally regarded as, a good conceptual match with the objectives, i.e. the way in which they are intended to influence production and consumption is logical and sound. However the soft nature of many of the instruments and their relatively low take up means that the instruments currently included in the AP do not collectively have sufficient ambition or impact to achieve the scale of change that is required.
Protecting and enhancing the competitiveness of EU industry is a central objective of EU policy in general and is an important part of the intervention logic for the AP. Our survey supported this with the finding that the impact on competitiveness was the most popular criteria for prioritising the policy actions of the AP.

The AP could enhance competitiveness by, for example, growth and increased profitability for companies which ‘green’ their products and benefit from increased sales as a result of the AP instruments. Protecting competitiveness should be achieved if effective efforts are taken to minimise the potential down sides of the instruments, such as companies encountering increased costs through the need to comply with the instruments, via changes required to their production processes and/or via the administrative burden of compliance. While both of these issues are important and relevant their identification and quantification needs to be done on an instrument and measure specific basis, via impact assessment – both during policy design and in subsequent evaluation. As such the detailed assessment of the impacts on competitiveness of the AP’s instruments is considered beyond our scope but we would recommend that these issues are clearly and explicitly considered in the instrument specific evaluations.

On a qualitative level related to competitiveness there are some negative comments from companies who see the burdens imposed by the instruments under the AP as being excessive, a lack of strong support for instrument specific improvements which are supposed to have occurred under the influence of the AP – such as a reduction in cost and complexity of the EMAS and Ecolabel schemes and some claims of continued contradiction between the requirements of different instruments (which are contested by the Commission), However there are also examples of companies who would like the instruments to go further as their business model is focussed on green innovation.

5.3 Effectiveness

| To what extent is the Action Plan contributing to: a) Environmental protection within the EU and outside. b) Integrating sustainability in other EU policy areas? c) Improving resource efficiency d) Competitiveness of European industry |
| What would be good measurement tools for a reviewed Action Plan? |
| What are the best indicators to measure the progress being made? |
| How could the implementation procedures of the Action Plan be improved (i.e. Ecodesign and Ecolabel working groups)? |

In the context of this evaluation the effectiveness questions need to be considered in two ways. The first of these relates to the effectiveness of the individual instruments in achieving their specific objectives. The second is with regards to the objectives we have identified that are above and beyond the individual instruments (synergy, coherence, scope etc.).

5.3.1 AP effectiveness in a supporting / enabling function

The lack of high level targets contained within the AP is a weakness as it means there is no clear way of recognising and measuring success. However a key difficulty in setting targets lies in the currently high variation between MSs. Although the majority of the specific instruments appear to have clear objectives many of them also lack clear targets. An approach that has been used in setting targets in other policy areas where MS progress is varied (for example renewable energy targets) is burden sharing based on current progress and potential between MSs. A similar approach could be considered in this area.
Table 7 considers the findings of the evaluation against the objectives we defined, in Chapter 3, for the AP, as distinct from the individual instruments. We have scored the AP against its added value objectives as follows:
<table>
<thead>
<tr>
<th>Added Value Objective of the AP</th>
<th>Score / Comment</th>
</tr>
</thead>
</table>
| Increased cooperation                       | 1  
- Clear evidence of improved links between DGs. MSs utilised AP in policy making, presentation and justification. |
| Better information and policy making        | 1  
- A number of studies to inform policy making have been completed. Better policies should result, given time. |
| Stronger political traction / momentum      | 0 / 1  
- Maintained profile and some evidence of the AP helping put SCP/ SIP issues on the political agenda but no strong opinions or evidence. |
| Improved coherence / synergy – Profile     | 0  
- Some positive evidence of the AP being used by MSs to justify and present policies, but arguably a lack of AP visibility beyond Brussels and no clearer increase in the profile of the instruments. |
| Improved coherence / synergy – Linking up supply and consumption | 0 / 1  
- Some progress on achieving this, for example the proposed energy efficiency directive includes provisions on energy efficiency procurement, some MSs have adopted formal green public procurement procedures and the recast of the Energy Labelling directive includes public procurement targets, but more could be done, for example the energy efficiency directive does not include provisions on green procurement. |
| Improved coherence / synergy – Scale / take up | 0  
- No clear evidence of increased take up of the instruments. Some environmental considerations for Ecodesign being picked-up by other instruments. Trends in take-up of other instruments broadly similar to pre-AP. |
| Improved coherence / synergy – Simplification | 0 / 1  
- Work to simplify EMAS and Ecolabel procedures completed (though with no positive impact apparent yet, partly because the implementation process in the Member States is still ongoing and partly because the EU decision process for additional guidance documents is still ongoing), process of considering common LCA methodologies is underway. Work to develop Ecolabel and GPP criteria together started in early 2011, so no results yet available. Work with IPTS/JRC started in 2009, with more done in 2010, with results beginning to flow. |

As can be seen in all of the objectives, we consider that the AP has had a positive or neutral impact. We feel that given the relatively short life of the AP, and the low budgets associated with it, this can be regarded as a satisfactory performance.

With regard to measurement tools for a reviewed AP its cross sectoral nature means that there is a need for strategic / high level indicators, including soft issues such as consumer attitudes, to assess overall progress and awareness. There is a lack of recent data to cover performance against these indicators over the entire life of the AP. However in order to illustrate progress to as recent a time
as possible, and illustrate what data is available we have collated data which indicates the following trends:

- Resource productivity (gross domestic product divided by domestic material consumption) increased by 7.4% between 2000 and 2007 indicating slight positive improvements in the efficiency with which the EU turns energy and materials into economic output;
- Relative decoupling of material use from GDP growth was evident in most EU economies, absolute decoupling is evident in a handful;
- Final energy consumption decreased slightly between 2000 and 2009 with an 18% decrease in industrial energy use, 7% increase in transport energy use and little change in household energy use. Long term trends appear to be for continued slow growth in energy consumption despite a recent drop; which is linked to the economic crisis;
- Municipal waste generated decreased very slightly between 2000 and 2009;
- Domestic material consumption (the total amount of materials directly used by the EU economy) increased by 7.9% between 2000 and 2007.

5.3.2 Effectiveness of individual instruments

Given the time and budget available to complete this evaluation we have had to rely on collecting secondary data on the effectiveness of the individual instruments. This review has shown that there is a lack of such data. This lack of data relates in part to the difficulty of isolating and quantifying the impacts of individual instruments in an area where the drivers of change are very diverse. For some instruments there are current (or imminent) evaluations and studies designed to address this issue. Our consultations have revealed a number of interesting qualitative opinions, but given the large number of instruments involved these have had to be treated with caution as it has not been possible, within the time and budget, to gain a balanced picture of each instrument. Some high level conclusions which can be drawn from these opinions include the belief that mandatory instruments achieve better results than voluntary instruments. Another interesting point which emerged from a number of consultees is that knowledge in this area is developing quickly, particularly with regard to influencing consumer behaviour. Therefore instruments need to evolve to reflect this increasing knowledge.

Many of the instruments are currently either undergoing, or are due to receive, specific evaluations. In order to help these evaluations, and make a first attempt at a cross AP collation, Chapter three of the report contains a table presenting data on progress by instrument. There are a number of general points which have become apparent in our attempt to collate these indicators, as follows:

- There are a large number of factors which influence the key indicators, and this fact, in combination with the relatively limited influence of the AP instruments makes attribution both tenuous and complex;
- There are a diverse range of instruments grouped under the AP and qualitative targets and outputs are more obvious for some than others. The time gap between outputs and results for many of the AP instruments means that in the short term qualitative or output indicators are required, though benefits and impacts should become clearer in the longer term;
- For instruments aimed at promoting and enhancing eco-industries measurement of success is difficult due to blurred sector definitions. This could be addressed by tracking certain agreed sectors and also assessing the level of relevant activity in other sectors.

Implementation procedures

The strategic objective of aligning methodologies (e.g. for LCAs of Eco design and Eco labelling) is sound and well supported, insofar as the needs relating to procedures and requirements of the different instruments are respected. However this alignment does appear to be slowing the process. This delay reflects the complexity of the alignment and the level of resources allocated to it. The
complexity issue relates to the difficulty of agreeing an optimum methodology, and it may be the case that too many compromises are required to arrive at one methodology. This issue is the subject of a number of current studies.

5.4 Efficiency

Are the costs and resources (both at EU and national level) involved reasonable as compared to the progress obtained so far? Are the actions being implemented in a cost-effective manner? To what extent have the actions been prioritised according to the needs? Are there missing tools and/or actions to implement the Action Plan more efficiently? What are the major sources of inefficiencies? What steps could be taken to increase the efficiency of the Action Plan?

In the context of this evaluation the consideration of efficiency is unusual because the AP itself does not have a dedicated budget line. The instruments and initiatives affected / covered by it are funded from a variety of other Commission budgets. We have not attempted to analyse the budgets for each instrument and compare these with the outputs, as would be normal in Commission evaluations, because this is beyond the scope of our work. Such an exercise would also be somewhat misleading as it would give the impression that pre-existing initiatives had been ‘taken over’ by the AP, and this is not the case, as they still exist as independent instruments, albeit with their scope / nature somewhat modified by the AP.

The objectives of the AP which relate to improving coherence and synergy between the instruments and measures should improve the efficiency of implementation. For example common procedures should reduce the cost of impact assessment.

Our overall perception is one of some added value from the AP from a relatively small expenditure.

It appears from our work that given the strategic importance of the issues covered by the AP and the level of funding reported as being provided in competitor economies, the AP is underfunded. In part this lack of funding appears to relate to the low priority of this issue in some MSs, reflected by the variety of performances in the indicator data and the lower efforts made in market surveillance by some MSs.

A number of cross-cutting problems that limit the efficiency (and effectiveness) of the measures were also identified, including weak MS enforcement and implementation, ‘silo thinking’ within the DGs, vested interests in existing (potentially competing) schemes and excessive workloads for some Commission Officers.

The general conclusion that we have drawn regarding the efficiency of the AP is that it has encouraged inter DG collaboration, but barriers remain. We feel that some resistance is inevitable given the different primary focus of the DGs involved and feelings of ownership of pre existing initiatives, so these difficulties should be expected and any successor to the AP should recognise them and continue to seek to address them.

5.5 Sustainability

To what degree are the results and positive impacts likely to last after an instrument has been implemented (in the medium term up to ten years)?
This questions splits between the impact and results of the specific instruments and the added value impact of the AP. The AP only exists via its instruments; therefore the improvements it makes to the instruments should be considered its legacy and will be as sustainable as those instruments. Our evaluation has revealed generally positive opinions regarding the framework for cooperation and communication, between DGs and between MSs and the EU, created by the AP.

For specific instruments positive indications of sustainability are clearer from the mandatory instruments. For the voluntary instruments the difficulty of identifying data on specific impacts makes it harder to speculate on how far into the future any positive impacts will last. Having said this we have found no evidence of clear negative impacts from any of the instruments, and even if the impacts are small, they appear to be positive.

5.6 Coherence

This group of questions (along with synergy and added value) are particularly important and pertinent to this evaluation. This importance is linked to one of the key objectives of the AP, which is to promote and facilitate a unified approach to interventions and policy making in this area.

5.6.1 Internal and external coherence

<table>
<thead>
<tr>
<th>To what extent are the actions implemented under the Action Plan complementary and not contradictory (i.e. Ecolabel for TV awarded to class A energy label)?</th>
</tr>
</thead>
<tbody>
<tr>
<td>To what extent has the Action Plan contributed so far to the preparation, development and implementation of EU sustainable development policy, including the preparation of legislative actions and the establishment of structured cooperation between Member States and with stakeholders?</td>
</tr>
<tr>
<td>To what extent are the actions and instruments implemented under the Action Plan integrated with other EU policies and activities, and with actions implemented at national or international level?</td>
</tr>
</tbody>
</table>

The coherence between the issues grouped under the AP is strong, though the issue of prioritisation of objectives complicates this, because individual instruments will inevitably have specific issues at their core. In addition the AP has helped highlight, and begin to address, some areas where coherence between instruments could be improved, though the achievement of these improvements can be difficult, e.g. the desire to harmonise LCA methodologies between Ecodesign and EcoLabelling, or meet with resistance, e.g. the attempt to link energy labels to public procurement, though Article 9 of the recast Energy Label Directive does support this.

There are examples of MSs reporting that the AP has been useful in helping them prepare, present and explain overarching policy goals and the links between instruments in this area and there are a large number of MS SCP/ SIP strategies with common objectives and goals to the AP. There are also some good examples of the AP providing help and assistance in policy development to MSs and stakeholders at the instrument specific level, e.g. on designing, implementing and sharing best practice on GPP and Ecodesign. However, there remains a wide range of quality and depth in terms of MS responses and activity in this area and in many areas there remains much to be done in terms of formal alignment between MS and EU policies.

However, the desire to harmonise policies between the EU and MSs and between MSs is, in general, a positive objective and important to much of what the Commission does. However in this, as in other policy areas there is a need to recognise that some MS flexibility allows the more progressive MSs to go beyond a minimum. A specific example of the issues involved around
aligning MS instruments can be seen in labelling schemes, where the large number of non-state controlled schemes in existence would make standardisation very difficult. It is also true that for some sectors they feel their own initiatives better suit their needs.

It is evident that there is potential to link to other EU programmes and activities to help improve the coherence of polices and activities in this area, this could include the designation of existing activity (e.g. parts of the CIP, LIFE + and Interreg) as ‘accompanying measures'. At a high level there are a number of EU policy areas and programmes that share objectives and high level goals with the AP, e.g. Integrated Product Policy and Sustainable Development Strategy; some appear well integrated but there remains potential to clarify and improve this integration.

5.6.2 Dissemination and future policy options

| To what extent has the knowledge generated by the Action Plan been disseminated and how? |
| To what extent is the Action Plan consistent with the Commission's Resource Efficiency initiative? |

The AP's efforts to group and present the EU's policy activities in SCP/SIP appear to have been helpful in presenting the EU's diverse range of instruments, measures and activities in this area at an international level, in Brussels (i.e. at a European policy making level) and for some MSs. Stakeholder awareness of the AP is low, and from our limited review, it appears that awareness levels of the instruments vary widely between MSs and even regions within MSs. For example EMAS is promoted well in some MSs and regions and GPP is mandatory in some MSs (e.g. the UK, though this was the intention prior to the AP). As with most areas of policy making there are forward looking companies who are proactively involved at the leading edge and other companies whose response is much more defensive, seeing Commission (and MS involvement) as a potential source of extra regulations being imposed on them.

As the Resource Efficiency initiative is not yet fully developed there is a clear opportunity to consider how (or if) the AP could be combined with it. There is a clear strategic alignment between the AP and the Resource Efficiency initiative and the question of balance between consumption and production, and energy, environment and economic priorities is key to both. Related to this the need for clear targets and guidance in the Resource Efficiency initiative has already been raised and is also an issue for the AP.

5.7 Synergies

| Do the different instruments and initiatives together produce an impact on sustainable consumption and production, which is greater than the sum of the impacts they would produce alone? How could synergy be reinforced? |
| Are there possibilities for more synergies at EU level? |

High level alignment, with the additional benefits in terms of presenting a coherent policy is possible if the principles (and targets) of the various instruments are aligned with an overarching strategic level statement. This high level statement and targets could also include other instruments currently not 'within' the AP.
5.8 Added Value

What is the EU added value of the instruments and initiatives under the Action Plan?
Are there other instruments and initiatives that are not part of the Action Plan and that the EU should insert because of the EU potential added value (i.e. the Food SCP Roundtable, environmental footprint of products, etc.)?

There is clear EU added value in action in this policy area related to the single market dimension of harmonised rules for product manufacturers and information for consumers.

There are a number of specific instruments and broader policy areas which could logically be brought under the influence / scope of the AP. The additional areas of relevance which have come to our attention during this study are as follows: (Though it should be pointed out that we have not carried out a comprehensive review of all Commission policy activity):

- **The extension of ecolabelling to food** – This is already being considered under article 6 (5) of the new Ecolabel regulation (66/2010) in which the Commission are asked to carry out a study by the end of 2011 on the feasibility of establishing ecolabel criteria for food and feed;
- **Lead market initiative** – mentioned in the AP communication but with no associated actions;
- **Sector production policy** – much of the sectoral work of DG ENTR deals with resource efficiency (in particular sectors);
- **Cohesion and Structural funds** – For example Interreg funds, in relevant themes, could be described as accompanying measures. The same could be said for relevant themes of learning and skills programmes;
- **Competitiveness and Innovation Programme (CIP)** – potential alignment of parts of this (e.g. parts of both the Intelligent Energy Europe and the Entrepreneurship and Innovation Programme) could be described as ‘accompanying measures’;
- **Agriculture and Food and Drink Policies** - There is scope for the wider issues of the AP, such as resource efficiency in general, and even the need to decrease consumption in general to be better integrated into the range of policies of relevance to agriculture and food and drink. Policies which aim to favour less resource intensive food and drink products are potentially controversial as they may be interpreted by some as requiring import restrictions on certain products, attacking the livelihoods of farmers and limiting consumer choice.
- **European Food SCP Round Table** – This forum is well regarded by those consulted and many stakeholders consider that it is part of the AP, though it is not explicitly mentioned in the AP communication. It appears effective and there is a good case for its formal inclusion in the AP.

5.9 Impact

To what extent has the Action Plan generated unexpected positive or/and negative impacts?
To what extent do the results and impacts respond to the initial needs and problems?

There was no evidence identified, or opinions offered, regarding examples of unintended effects, though it was postulated that (eco)innovation should be boosted as a result of the market promotion enabled by the AP – though this is arguably an expected part of the rationale. The increasing profile of resource efficiency is leading to an increase in ‘greenwashing’ (i.e. false or inflated green claims for products) – though this is more of a general point than something specific to the AP. There is clear potential for unexpected impacts in this policy area, particularly from rebound effects, where efficiency savings are reduced by increased consumption elsewhere.
5.10 Overall Conclusions

Strength of rationale has grown and detailed prioritisation remains a subject of (helpful) debate - There is a clear and increasing rationale for action relating to sustainable consumption and production and the instruments grouped under the AP do address the majority of the issues involved. There is some inevitable (given the breadth of issues) discussion of the prioritisation between the objectives, but apart from an under representation of social and possibly competitiveness issues the balance appears satisfactory.

The AP has made a positive start on improving Commission policy making but there remains more to be done - The AP has improved coordination between the DGs most involved in SCP/SIP, this is a very useful and positive outcome but these efforts need to be maintained and potentially widened to include other DGs. There are some instruments outside the AP (see recommendations for examples) which could usefully be more formally aligned with it.

Striving for consistency of approach between instruments is sound but achieving this in practice is proving difficult - The objectives of the AP related to improving cooperation and alignment between EU and MS instruments, e.g. between Ecolabel and MS level labelling schemes are recognised as worthy, with some, albeit limited, progress being achieved. This limited progress relates to a combination of the complexity of the compromises involved and possibly a lack of resourcing.

The AP has helped present a coherent policy picture but is somewhat stuck in Brussels - Some MSs have been helped by both the high level statement of objectives (and collation of instruments) that the AP offers and there are some good examples of instrument specific progress in MSs. However the AP is more influential on Commission policy making than MS policy making.

The AP and its instruments lack targets and data, making evaluation difficult - The lack of firm targets for the AP and for most of the instruments it covers is a weakness. This, combined with a lack of data, has made quantified evaluation difficult. Monitoring requires a combination of high level indicators and instrument specific outputs.

The breadth of issues involved in this area make it a true cross DG activity - Overall control of the AP and its instruments under one DG would simplify implementation, however the fundamental issues involved are genuinely cross DG so this approach (which would inevitably exclude the non lead DGs to a certain extent) would not be recommended.

Satisfactory progress in adding value – The AP has helped its constituent instruments become more than the sum of their parts, but there remains significant scope (and need) for more.

Faster progress is needed and there are opportunities to address this - From a review of high level indicators, it appears that the rate of improvement in a selection of key issues is slow and mixed between MSs (though the most recent data only covers part of the AP's life). Therefore there is a case for more ambitious policy instruments to increase the rate of positive change in this area. The development of the Resource Efficiency initiative offers the opportunity to address this.

5.11 Recommendations

Based on the conclusions reached above we offer the following recommendations, grouped under the sub headings of Strategic and Instrument Specific:
5.11.1 Strategic Recommendations

- **There is a need for more ambitious and effective policy in this area** - The importance of resource efficiency is increasing, driven by increasing resource cost and scarcity, the need to address the negative environmental consequences of consumption (including global warming) and the need for the European economy to differentiate itself on innovation and added value, with eco innovation being an approach well suited to this. The high level indicators on resource efficiency are proving difficult to move in the correct direction. This indicates a need for increased activity and effort in the areas of activity covered by the AP;

- **The opportunity now exists to modify policy activity and to consider ways it could be made more ambitious:**
  - Although cooperation between the DG’s has been significantly improved by the AP there is a need to keep working on this. The development of the Resource Efficiency flagship offers a good opportunity to discuss the areas of friction between the DGs and how these can be overcome;
  - The strategic grouping that the AP offers to the instruments underneath it is valuable and useful. This benefit should be clearly recognised and efforts made to enhance it.

- **Separate out the high level policy objectives of the AP, potentially using the Resource Efficiency initiative** - The scope of the AP is necessarily broad, though the current nature of the AP, combining strategic objectives with operational targets, makes for a cumbersome policy approach. To address this we suggest separating out the high level strategic objectives into a high level, cross DG statement (the current Resource Efficiency Initiative could be used for this) and creating a roadmap and multiple action plans beneath it. The high level statement of objectives would allow a number of currently under represented areas to be addressed, such as the desire to more fully consider social issues and consumer behaviour.

- **The high level policy statement should include the following aspects:**
  - **Include the long term objective of reducing consumption**, though accepting that this will be a difficult objective to achieve;
  - **Include high level targets for resource efficiency and links to the targets in other high level policies** – such as for energy efficiency, waste generation, competitiveness, integrated product policy, sustainable development and social inclusion;
  - **Consider the adoption of MS specific ’shares’ of this target** - in the same way as the renewable energy target has been shared among MSs;
  - **A set of common principles for the Action Plans to follow**, including a statement that common methodologies are the ideal and should be adopted where possible and practical;
  - **A clear progression for voluntary to mandatory** – state that the assumed policy progression is to start with voluntary measures but move towards mandatory actions if targets are not met within clear deadlines;
  - **Retain the aim of consistent methodologies, within limits** - Retain and clarify the objectives of enhancing synergy and coherence between policies and instruments in this area, including the desire to see common procedures and processes, for example on LCA. However it should also be made clear that entirely common procedures should not be pursued if they cause excessive complexity and delays. This potential problem should be recognised and the benefits and workload involved in adopting common procedures should be assessed as part of the process of investigating and developing them;
  - **Improve the coverage of social issues, but only via high level alignment** - It is reasonable to consider where the AP and its constituent instruments (or any future equivalent / successor)
could be modified to better recognise and address the social issues that are comparatively less covered than the economic and environmental issues. For example the ecolabelling and GPP criteria could be expanded to consider the quality of the employment rights for those involved in the manufacture of the products, in a similar way to ‘fair trade’ criteria. However given the large scale and high importance, and difficulty, of addressing the environmental and economic challenges, and the existence of labour protection legislation in the EU, we would recommend that social challenges are recognised at high level but are not yet pursued via this route in a detailed way.

- The roadmap and Action Plans should include the following aspects:
  - Additional actions on consumer behaviour and awareness, beyond retailer driven activity, ideally utilising successful existing MS and private sector schemes, particularly those in labelling;
  - A framework for MS activity, to allow for those more advanced in this issue to continue to push the edges of best practice in this area while providing a basis for the less advanced MSs to develop a credible and effective programme;
  - The Action Plans should identify a suite of ‘accompanying measures’ which should be a combination of existing activity such as the Competitiveness and Innovation Programme, Life+ and Interreg and new activity aimed at increasing consumer awareness and changing consumer behaviour;
  - Allow alignment with / adoption of existing initiatives - The Action Plans should allow for alignment with / integration of existing sector and MS led instruments. For example, this could take the form of EU validation / approval of existing labelling schemes, in a similar way to which the proposed changes to the EMAS scheme allow recognition of MS environmental management schemes.

5.11.2 Instrument Specific Recommendations

Although our recommendations are limited by the amount of material we have been able to gather on each instrument within the time and budget constraints, there are a number of instrument specific suggestions that have emerged from our work. Some of these should be treated with caution, particularly where they rely on stakeholder opinions, as we have not taken a large sample of views on all instruments:

- The current studies and evaluations into the use of common methodologies should be used (or expanded) to assess the practicality of the concept at a fundamental level - Despite a recognition of the potential efficiency and consistency benefits these studies may indicate that precise methodological alignment results in procedures which are too long and complex, bearing in mind that many stakeholders already view the process as too complex. If this is the case a potential compromise would be to agree on common high level objectives and aims but allow for different detailed procedures. This would run the risk of real (or apparent) contradictions stemming from the fact that the prime focus of instruments is different. However these risks should be recognised and accepted. The studies should also be able to investigate if more staff resource would enable a workable methodology to be developed, or if there is a risk of chasing an unobtainable compromise;

- Firm outputs data is missing for the majority of the instruments – the current (and planned) evaluations should be collated. There are a significant number of instrument specific evaluations currently underway, for which the Commission should request output and result data as well as consideration of any marginal benefit of AP inclusion / alignment. These results should be collated. We have attempted to collate what information is available but there are a number of gaps in this;
- **Some strong (if isolated) criticism of the Retail Forum** - The Retail Forum received some (albeit isolated) criticism and its evaluation should carefully consider its objectives and effectiveness and whether other methods to influence consumer behaviour might be more effective instead (or in addition);

- **The Ecolabel and EMAS appear to be low impact and if they are to achieve significant growth they may need to be radically reassessed, though EMAS is starting to address this** - The Ecolabel scheme although useful and well regarded by some, appears to be suffering from low awareness and low uptake. This appears to relate to a combination of multiple competing sectoral and MS labelling schemes as well as a perception of overly complex criteria. The main options for its future appear to be either to stay as a small, niche label or to radically alter its criteria and nature, possibly by seeking to set principles to which sector and MS specific labelling schemes could adhere. EMAS appears to have similar problems to the Ecolabel, with low take up and a perception of complexity. The perceived 'low impact' is inherent to the voluntary nature of instruments as EMAS and the lack of proper incentives in many Member States. Solutions can be found in either an obligation for companies to have a certified Environmental Management System (like e.g. in Norway) or in the creation of proper (financial or regulatory) incentives in the Member States. The latest revision of the EMAS regulation allows MSs to ask for recognition of existing environmental management systems as complying with EMAS this appears a sound first step to increasing uptake by association;

- **The AP has done little to speed the Ecodesign process** - Although this is the subject of specific evaluations it would appear that a lack of staff resource may be part of the reason for the slow progress, though others suggest the complexity of the modification of the scope of products, from energy using to energy related has a role. If the evaluations confirm this it should be addressed. Other factors that may need to be considered are the inherent technical complexity, resistance by some stakeholders and lack of political drive.

- **There is progress related to green public procurement but its (usually) voluntary nature limits its impact** – The uptake of GPP has increased with virtually all MSs now setting criteria, with good evidence of common approaches being adopted. There remains variation between MSs with a concern that the voluntary approach in many MSs is a constraint;

- **Little value seen in attempting to identify and sum the marginal costs of AP from the individual instrument evaluations** - Individual instrument evaluations could attempt to isolate the marginal cost of AP, but this is likely to be very small (and difficult to achieve) as well as excluding some AP activity that does not come under the remit of a programme or instrument large enough to be evaluated. We therefore suggest that attempting to cost the implementation of the AP in a bottom up manner should not be attempted.
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Annex A: Context, description and progress of SCP/SIP Action Plan and main instruments

This section presents what has been achieved in each of the policy areas covered by the AP since it was launched in 2008. This summary is drawn from the literature reviewed and current policy related press releases. The purpose of this summary is to illustrate the achievement of specific objectives and more general ambitions, as outlined within the AP. Where possible this description focuses on the specific objectives described for each area, however what the description also illustrates is that in many of the areas there is significant activity that began in advance of the AP.

Policy context

Ongoing economic growth throughout the world will lift millions out of poverty in the future and improve living standards globally. This fact, combined with a further increase in global population levels will lead to additional pressures on resources and the environment.

To regain balance between earth’s ecological capacity and human production and consumption, we need to strive for sustainability. In modern societies the challenge is to connect sustainable use of resources with economic growth, i.e. decouple environmental degradation and economic growth. The sustainable consumption and production (SCP) challenge is to transform the production and consumption cycle and improve the environmental performance of products, increase demand for better products, and assist consumers in making the right choices.

For the EU, the SCP challenge is addressed by a variety of policies and initiatives. They all target individual problem areas while aiming to support each other in a larger framework. To boost the impact of SCP policies the EU adopted the Sustainable Consumption and Production and Sustainable Industrial Action Plan (AP) in 2008. The objective of the AP is to improve the sustainability of European consumption and production “the core of the Action Plan is a dynamic framework to improve the energy and environmental performance of products and foster their uptake by consumers.”

Background

As outlined above, economic growth will continue to bring benefits to people’s living standards in Europe and globally, yet for all to enjoy a lifestyle equivalent to the current European standard the pressures on the environment and resources would become unsustainable. Evidence that this is the case already exists, particularly with respect to climate change and resource use. Part of the solution to this is to reduce the impact and resource use in Europe. Moving towards sustainable consumption and production practices by consumers and industry is a vital step in this transition.

Current problems

The move towards sustainable consumption and production is derived from the ambition of decoupling the environmental impacts of resource use caused through consumption and production from economic growth. That this is only occurring on a relative rather than an absolute scale is a

result of a variety of factors. The problems considered together can be considered a market failure. The main challenges facing consumption and production choices include the following:

- **Negative externalities:**
  As rational consumers try to maximise private utility rather than social welfare, their consumption choices do not necessarily reflect the interest of society as a whole. Free-riding becomes common practice and, even as everybody agrees that it would be better to avoid the negative environmental and health impacts, no one has a sufficiently strong incentive to act accordingly.\(^6^0\)

- **Information asymmetries:**
  Consumers do not always base their buying decisions on their own long term interest or benefit. They do not always choose the kind of products that provide the biggest cost benefits, in reduced energy and resource use over their full life-time. This is, in part, due to a lack of information. The lack of standardised information can be compounded by insufficient, misleading or missing labelling and the costs associated with acquiring this information. An information asymmetry is created that leads to more resource efficient products not being bought.

- **Bounded rationality:**
  Even if all relevant information is available, consumers often still don’t choose products with the lowest lifetime costs. Product performance and quality in relation to cost remain the primary factors in consumer choice. Since energy-saving products often have higher initial costs, consumers might opt for cheaper devices despite their long term drawbacks in energy and resource use and related environmental damage. The reasons for this lie in human cognitive processes and psychology, which does not always lead to the most economically rational decision. It may also be the case that some low income consumers cannot afford the more expensive products. It is also impacted by pricing mechanisms that do not sufficiently require the polluter to pay the full cost of their consumption and production impacts.

- **Principal-agent problems:**
  A misalignment of incentives between economic agents can also be the reason for energy and resource inefficiency. This can be illustrated by the owner-renter problem: While the owner (agent) of a house or apartment is to a large extent the one who provides the appliances such as boilers and refrigerators, it is the renter (principal) who has to pay the energy bill. The owner often has little incentive to pay attention to energy efficiency, only to the initial purchasing price, as they will not receive the energy efficiency benefits. This dilemma leads to higher energy use than otherwise would be the case.

- **Regulatory failures:**
  As individual member states encourage a variety of incentive schemes with different criteria, the internal market is fragmented for the concerned products. A harmonised approach would send more consistent messages to consumers and increase the uptake of environmentally friendly products across Europe. For example if all member states linked their procurement policies to agreed EU labelling schemes this would reduce fragmentation of the market.

**Existing policy responses**
A variety of policies have been put in place over the last decade to move towards more sustainable production and consumption. The following is a short summary of the main policies implemented in this area:

\(^6^0\) Impact Assessment of the SCP/SIP Action Plan (EC, 2008).
Climate Change Package – 20% reduction in GHG emissions by 2020, and associated policies e.g. Kyoto Protocol, EU ETS, Biofuels Directive, REAPs;

- Air quality, industrial emissions and waste legislation (IPPC);
- Product policy (Ecodesign, labelling directive, GPP);
- Energy Efficiency (EPBD, Ecodesign, NEEAPs);
- Other policies (ETAP, EMAS, member state activities).

All of these policies have helped to address aspects of the market and regulatory failures described earlier, but several problems still remain after their introduction. For example the Ecodesign Directive only covers products that are responsible for less than half of per capita externalities. Information asymmetries related to labelling still exist with sales of Ecolabelled products accounting for only 1% of the relevant market and the recognition level of the label standing at 11%. Principal agent problems and bounded rationality are also of concern, with the exclusion of buildings smaller than 1000 square meters under the Energy Performance of Buildings Directive, leaving residential buildings vulnerable to this problem. These market and regulatory failures have not only reduced the effectiveness of the existing policies, but also slowed green innovation within the EU.

All of these issues have paved the way for the introduction of the AP in 2008. The plan was implemented with the aim of addressing the market and regulatory failures and to improve the synergy between the individual measures.

**Interactions between AP policies and initiatives**

The key advantage of the AP is the integration of all the above described policies into a common framework. Only by working together can the policies foster the market transformation needed.

In essence, the policies included in the AP are intended to create ‘push/pull’ effects, i.e. ‘push’ the worst performing products off the markets and ‘pull’ the best-in-class one into the market. Initially, Ecodesign removes the worst performing products from the market and establishes benchmarks. The Ecolabel represents the best-performers. Second, the Energy Labelling Directive (ELD) provides incentives for producers and consumers to improve energy performance. Third, EU GPP stimulates market up-take of more sustainable products while ensuring proper competition. The graphics below show how they are linked.

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The different policies are to some extent reliant on the success of each other. A few important points should be elaborated, as follows:

- To assist Member States in increasing their total GPP share they need clear criteria. Common criteria for product and service groups are expected to generate benefits in harmonisation of competition and companies working cross-border. In addition to the voluntary EU GPP criteria, there are some cases of mandatory GPP: the obligation to buy Energy Star office equipment for national central authorities, plus the obligation to take into account energy and environmental impacts linked to the operation of vehicles over their whole lifetime in purchase decisions;

- Further requirements on energy efficiency could result if the recently proposed Energy Efficiency Directive is adopted. The proposal includes obligations to purchase products, services and buildings with high energy efficiency performance, include those with an Energy Label covered by the ELD. To reap the full potential of GPP there needs to be robust and ambitious Minimum Energy Performance Standards (MEPS) established within the implementation measure procedures under the ELD;

- EPBD – obligation for public authorities by 2019;

- So far, specific GPP criteria have been developed for 18 priority product groups/services that have been identified as most suitable for “greening” under Public Procurement. These products can be seen on the GPP website;

- There is evidence that data gathering establishing criteria for product groups in the Ecodesign Directive and the ELD have several similarities. Current processes are lengthy and cumbersome and the Commission has begun to explore what synergies can be found. One

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The report suggests that the Ecodesign Directive and ELD share the following characteristics: clear product group definition; life-cycle based; consideration of EU market in terms of sales; identification of differences between technologies within groups; identify best-practices; focus on consumers for delivering the environmental improvements; and, include stakeholder processes. The project suggests that synergies are waiting to be found between policies which can both reduce work-loads and increase policy effectiveness.

- The Ecolabel is expected to simplify GPP. The Commission mentions three arguments: (1) There is no expert knowledge required by buyers since the label already ensures quality, (2) It is fully compatible with the internal market, thus avoids debates on competition, and (3) it is easy to identify labelled companies for each product via an online data-base called the Green Store.

The above mentioned examples provide some information on how the integration of policies is expected to function. In order to fully evaluate the impacts of the AP, the current state of the relationship is key to understanding where we are and what needs to be done.

**Ecodesign Directive for Energy-using Products (EuP)**

**Context**

The Directive on Ecodesign (2009/125/EC) aims to progressively phase out the worst performing products within specific product lines throughout the EU marketplace.

The Ecodesign Directive sets a framework for manufacturers of energy-using and energy-related products to reduce environmental impact and energy consumption throughout the products' life-cycle. Considerations should be made from the initial design-phase and manufacturers are legally bound to follow a set of Minimum Energy Performance Standards (MEPS).

To determine the MEPS, products are divided into categories (or “lots”), such as light bulbs, TVs and boilers, and discussed between the Commission and key stakeholders in so called implementing measures. The implementation process for each lot starts with a study on market data, technological status, and other relevant issues. This report is then discussed by experts, Member States and other key stakeholders. The full process is described in the figure below:

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The product groups to be included under the Ecodesign Directive were initially determined in a working plan for 2009-2011. Based on a study which identified 25 product groups the Commission decided on an indicative list of product groups including: Air-conditioning and ventilation systems; Electric and fossil-fuelled heating equipment; Food-preparing equipment; Industrial and laboratory furnaces and ovens; Machine tools; Network, data processing and data storing equipment; Refrigerating and freezing equipment; Sound and imaging equipment; Transformers; Water-using equipment. In order to determine which product groups are going to be included in the 2012-2014 amended working plan, the Commission has commissioned a study to support decision-makers. This is expected to be released in late 2011.

Article 17 of the Ecodesign Directive includes Voluntary Agreements (VA) as they are priority, see recital 18 to implementing measures. These VAs are proposed by industry and are required to be environmentally ambitious and show that a voluntary process brings faster and cheaper results than a compulsory intervention. The first Directive was adopted in 2005 and revised in 2009. Today it covers in principle all EuPs.

**Timeline of activity**

2009 - Directive recast to include all Energy-related products (Directive 2009/125/EC)
2011 - A study on the next Working Plan has been commissioned which will help the Commission to identify and select the priority product groups to be investigated under the 2009/125/EC Ecodesign Directive.

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71 http://www.ecodesign-wp2.eu/
72 http://www.ecodesign-wp2.eu/introduction.htm
The original EU Ecodesign Directive was adopted in 2005. It established a framework under which manufacturers of energy-using products were, at the design stage, obliged to reduce the energy consumption and other negative environmental impacts occurring throughout the product life cycle.

In accordance with Article 16 (1) of the Directive the Commission established a working plan setting out an indicative list of product groups which will be considered as priorities for the adoption of implementing measures between 2009 and 2011. The first step in considering whether and which Ecodesign requirements should be set for a particular product is a preparatory study looking into the relevant provisions of the Directive and recommending ways to improve the environmental performance of the product.

For each product sub-group going through the Ecodesign process there is a separate working plan and preparatory study that consists of 7 separate task reports including:

- Legislation and standards;
- Market Analysis;
- Consumer and Infrastructure;
- Technical Analysis;
- Definition of base case;
- Design Options;
- Policies, Scenarios, Impact and sensitivity analysis.

The following table shows the products currently going through the Ecodesign process and their status.

<table>
<thead>
<tr>
<th>Product Group</th>
<th>Product Working Plan Sub-Group</th>
<th>Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>Heating and hot water systems</td>
<td>Boilers and Combi-boilers</td>
<td>Completed 2007</td>
</tr>
<tr>
<td></td>
<td>Water heaters</td>
<td>Completed 2007</td>
</tr>
<tr>
<td></td>
<td>Solid Fuel small combustion installations</td>
<td>Completed 2009</td>
</tr>
<tr>
<td></td>
<td>Local room heaters</td>
<td>Task 4 underway</td>
</tr>
<tr>
<td></td>
<td>Central heating systems using air to distribute heat (other than CHP)</td>
<td>Task 4 underway</td>
</tr>
<tr>
<td>Electric motors</td>
<td>Electric motors (1-50kW)</td>
<td>Completed 2008</td>
</tr>
<tr>
<td>Lighting in the residential and tertiary sectors</td>
<td>Domestic Lighting</td>
<td>Completed 2002</td>
</tr>
<tr>
<td></td>
<td>Office Lighting</td>
<td>Completed 2002</td>
</tr>
<tr>
<td></td>
<td>Street Lighting</td>
<td>Completed 2002</td>
</tr>
<tr>
<td>Domestic appliances;</td>
<td>Domestic washing machines and dishwashers</td>
<td>Completed 2009</td>
</tr>
<tr>
<td></td>
<td>Laundry dryers</td>
<td>Completed 2009</td>
</tr>
<tr>
<td></td>
<td>Vacuum cleaners</td>
<td>Completed 2009</td>
</tr>
<tr>
<td></td>
<td>Non-tertiary coffee machines</td>
<td>Task 8 draft available</td>
</tr>
<tr>
<td>Office equipment in the residential and tertiary sectors:</td>
<td>Imaging Equipment (copiers, faxes, printers, scanners, multifunctional devices)</td>
<td>Completed 2008</td>
</tr>
<tr>
<td>Consumer electronics;</td>
<td>Personal computers and computer monitors</td>
<td>Completed 2007</td>
</tr>
<tr>
<td></td>
<td>Battery chargers and external power supplies</td>
<td>Completed 2007</td>
</tr>
</tbody>
</table>
Mid-term evaluation of the SCP/SiP Action Plan

<table>
<thead>
<tr>
<th>Product Group</th>
<th>Product Working Plan Sub-Group</th>
<th>Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>HVAC (heating, ventilation and air conditioning) systems.</td>
<td>Air-conditioning and ventilation (residential)</td>
<td>Completed</td>
</tr>
<tr>
<td></td>
<td>Ventilation fans (residential)</td>
<td></td>
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<tr>
<td></td>
<td>Completed 2008</td>
<td></td>
</tr>
<tr>
<td>Industrial &amp; laboratory Furnaces and Ovens</td>
<td>Domestic and Commercial hobs and grills</td>
<td>Task 7 report available</td>
</tr>
<tr>
<td></td>
<td>Domestic and Commercial Ovens (electric, gas, microwave) including when incorporated in cookers</td>
<td>Task 7 report available</td>
</tr>
<tr>
<td>Network, data storing and data processing equipment</td>
<td>Complex set top boxes</td>
<td>Completed 2008</td>
</tr>
<tr>
<td></td>
<td>Standby and Off-mode losses</td>
<td>Completed 2011</td>
</tr>
<tr>
<td></td>
<td>Networked standby losses by EuP</td>
<td>Task 8 report available</td>
</tr>
<tr>
<td>Refrigeration and Freezing Equipment</td>
<td>Commercial Refrigeration (display cabinets and vending machines)</td>
<td>Completed 2010</td>
</tr>
<tr>
<td></td>
<td>Domestic Refrigeration</td>
<td>Completed 2008</td>
</tr>
<tr>
<td></td>
<td>Refrigeration and freezing equipment: service cabinets, blast cabinets, walk-in cold rooms, chillers, remote condensing units, wall dispensers, mini bars, wine chillers, ice makers, desert and beverage machines</td>
<td>3rd stakeholder meeting complete</td>
</tr>
<tr>
<td>Sound and Imaging Equipment</td>
<td>Televisions</td>
<td>Completed 2007</td>
</tr>
<tr>
<td>Transformers</td>
<td>Sound and imaging equipment</td>
<td>Completed 2010</td>
</tr>
<tr>
<td></td>
<td>Distribution and power transformers</td>
<td>Task 7 draft report available</td>
</tr>
<tr>
<td>Water using equipment</td>
<td>Water pumps</td>
<td>Completed 2008</td>
</tr>
<tr>
<td></td>
<td>Circulators in buildings</td>
<td>Draft task 7 report available</td>
</tr>
<tr>
<td></td>
<td>Professional dishwashers, washing machines and dryers</td>
<td></td>
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</tbody>
</table>

Once each study has been completed it still has to pass through the following EuP process before it is finalised:
1. Product study completed;
2. Consultation forum and proposal;
3. Draft Regulation;
4. Approved by regulatory committee;
5. Final Regulation.

As of June 2011 final regulations have been published for 12 separate product groups and are now actively influencing the design and eventual resource consumption of products sold within the EU. A timeline of progress of Ecodesign measures by product is shown in Figure 16. This demonstrates the significant length of time, 3-4 years, for most product groups to pass through the process. On this basis it will be expected that the first product groups from the 2009-2011 working plan may see implementing measures in 2012.
### Figure 16 Timeline of progress of Ecodesign measures

#### Ecodesign Timeline

<table>
<thead>
<tr>
<th>Year</th>
<th>Q1</th>
<th>Q2</th>
<th>Q3</th>
<th>Q4</th>
</tr>
</thead>
<tbody>
<tr>
<td>2005</td>
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<td>2006</td>
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<td>2013</td>
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<tr>
<td>2014</td>
<td></td>
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</tr>
</tbody>
</table>

#### Working Plan Phase and Product Group

**Transitional Period 2005-08**
- **Standby and off mode losses**
- **Simple set top boxes**
- **Domestic Lighting**
- **Tertiary sector Lighting (street and office)**
- **Secondary Power Supplies**
- **Ovens**
- **Circulators**
- **Refrigerators**
- **External Power Supplies**
- **Domestic Refrigeration**
- **Domestic Dishwashers & washing machines**
- **Personal Computers**
- **Imaging Equipment**
- **Boilers and Comb boilers**
- **Water heaters**
- **Electric pumps**
- **Solid fuel small combustion**
- **Complex set top boxes**
- **Commercial Refrigeration**
- **Air con and ventilation (residential)**

**Working Plan 2009-11**
- **Professional washing machines, dryers and dishwashers**
- **Refrigerating and freezing equipment**
- **Sound and imaging equipment**
- **Transformers**
- **Local room heating products**
- **Central heating products using heat air (incl. GHP)**
- **Domestic and commercial ovens**
- **Domestic and commercial hobs and grills**
- **Non-tertiary coffee machines**
- **Data processing and data storage equipment**
- **Power generation sets**
- **Stationary agricultural equipment**
- **Mobile construction machinery**
- **Taps and showerheads**
- **Steam boilers and systems**
- **Thermal insulation products for buildings**
- **Lighting control**
- **Window Products for buildings**
- **Heating controls**
- **Positive displacement reciprocating pumps**
- **Servers and storage equipment**
- **Detergents**
- **Mobile power generation sets**
- **Stationary agricultural equipment**
- **Elevators, escalators and moving walkways**
- **Logistic Equipment**
- **Mobile phones**
- **Electric kettles and water coolers**
- **Mobile agricultural equipment**
- **Non-domestic hot beverage equipment**
- **Base station subsystems**
- **Home audio products**
- **Mobile construction machinery**

**Working Plan 2011-14 (suggested priority product groups)**
- **Taps and showerheads**
- **Steam boilers and systems**
- **Thermal insulation products for buildings**
- **Lighting control**
- **Window Products for buildings**
- **Heating controls**
- **Positive displacement reciprocating pumps**
- **Servers and storage equipment**
- **Detergents**
- **Mobile power generation sets**
- **Stationary agricultural equipment**
- **Elevators, escalators and moving walkways**
- **Logistic Equipment**
- **Mobile phones**
- **Electric kettles and water coolers**
- **Mobile agricultural equipment**
- **Non-domestic hot beverage equipment**
- **Base station subsystems**
- **Home audio products**
- **Mobile construction machinery**
Estimated energy savings from the adoption of implementing measures is outlined in the following table73.

<table>
<thead>
<tr>
<th>Product</th>
<th>Implementing Measure adopted</th>
<th>Estimated annual savings by 2020 (TW)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Standby and off-mode losses of EuPs</td>
<td>17/12/2008</td>
<td>35</td>
</tr>
<tr>
<td>Simple set top boxes</td>
<td>04/02/2009</td>
<td>9</td>
</tr>
<tr>
<td>Domestic Lighting (general lighting equipment)</td>
<td>18/03/2009</td>
<td>39</td>
</tr>
<tr>
<td>Tertiary Lighting</td>
<td>18/03/2009</td>
<td>38</td>
</tr>
<tr>
<td>Battery changers and external power supplies</td>
<td>06/04/2009</td>
<td>9</td>
</tr>
<tr>
<td>Domestic refrigerators and freezers</td>
<td>22/07/2009</td>
<td>8</td>
</tr>
<tr>
<td>Electric motors 1-50kW</td>
<td>22/07/2009</td>
<td>15</td>
</tr>
<tr>
<td>Televisions</td>
<td>22/07/2009</td>
<td>43</td>
</tr>
<tr>
<td>Circulators in buildings</td>
<td>22/09/2009</td>
<td>23</td>
</tr>
</tbody>
</table>

Source: European Commission.

If the estimated carbon savings outlined above are accurate, the Ecodesign Directive could be responsible for an annual saving of 219 TW of electrical power by 2020.

**Evaluation of the Ecodesign Directive**

As outlined in Article 21 of the Ecodesign Directive an evaluation study has been commissioned to review the effectiveness of the Directive and its implementing measures including, inter alia:

a. The methodology for the identification and coverage of significant environmental parameters, such as resource efficiency, considering the whole life cycle of products;

b. The threshold for implementing measures;

c. Market surveillance mechanisms; and

d. Any relevant self-regulation stimulated.

Following this review, the Commission shall assess the appropriateness of extending the scope of the Directive to include non-energy-related products74.

The first progress report from this study was published in April 2011. However, it recognises the issue of inadequate data due to a) the fact the regulations have only come into force recently b) the subsequent lack of hard data and, c) even where data does exist the issue of causality means if is difficult to link effect with the Ecodesign Directive specifically. Due to these constraints the initial report focuses on 5 case studies to extract what lessons can be learnt from experiences to date.

**Feasibility of extending the Directive to non-energy related products**

This study provides an assessment of the feasibility of extending the Directive to include non-energy products and also include means of transport. The aim is to examine the appropriateness of using the Ecodesign Directive beyond the current coverage of energy related products to include non-energy related products75. This will attempt to address the following key issues:

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74 Directive 2009/125/EC.

• Is an EU Directive setting Ecodesign requirements an appropriate policy tool when assessed against, or in combination with, other existing instruments?
• If Ecodesign is extended to non-energy related products which of these should be given priority?
• Whether current provisions and mechanisms within the Ecodesign directive are suitable in the case of non-energy related products?
• If not, what are the necessary changes required and how feasible are they?

Amended Ecodesign Working Plan Study
According to article 16(1) of Ecodesign Directive 2009/125/EC the Commission is required to establish a Working Plan. This Working Plan sets out an indicative list of product groups which are considered as priorities for the adoption of implementing measures for the following three years. This includes the remaining energy using products and new energy related products76.

This aims to provide the Commission and the members of the Consultation Forum with background information and analysis to allow the Commission to establish this (amended) Working Plan for the years 2012-14. This includes a list of energy related product groups which are considered priorities for the adoption of implementing measures under the Ecodesign Directive. The study contributes to this by identifying twenty-five energy related product groups, ranked by environmental impact potential. This ranking is being developed over a 4 stage process, but is currently only half complete.

Methodology for the Ecodesign of Energy-using Products (MEEuP) study
The aim of this study is to update and potentially extend the existing Methodology for the Ecodesign of Energy-using Products (MEEuP) to arrive at a Methodology for the Ecodesign of Energy-related Products (MEErP), to be used in future preparatory studies for measures under the recast of the Ecodesign Directive 2009/125/EC77.

The objective of the study is twofold:
• To review the effectiveness and update, whenever necessary of the Ecodesign Methodology based on experience gleaned and lessons learnt through its use over recent years. For example, the review covers the effectiveness of the methodology for the identification and coverage of significant environmental parameters. This includes issues such as resource efficiency and other environmental parameters having emerged in EU policies since 2005, including trade-offs between environmental impacts and taking into account the whole life cycle of products (raw material selection and use; manufacturing; packaging, transport and distribution; installation and maintenance; use; and end-of-life);
• To extend the Ecodesign Methodology to Energy-related Products to evaluate whether, and to what extent, new energy-related products fulfil certain criteria for implementing measures under the Ecodesign Directive 2009/125/EC.

This study is currently underway and a research questionnaire on the existing methodology is available for download. However, preliminary results are not available at this time. The final report is due in September 2011.

Empirical Evidence of Progress
Due to the recent and evolving nature of the Ecodesign Directive there is limited verified data on actual environmental impacts i.e. energy savings and associated carbon reductions. This issue has

also been encountered by research consultants who are currently carrying out an assessment of the Ecodesign Directive. A study by the Wuppertal Institute reveals that the already adopted regulations within the Ecodesign framework claim to reduce GHG emissions by approximately 135-138 Mt CO₂ eq in 2020 compared to the business as usual scenario. However, this data has not been verified and is only an estimate. Their own estimates indicate that GHG reductions of between 211-265 million t CO₂ eq can be achieved by Ecodesign implementing measures in 2020 compared to business as usual development scenarios.

A 2010 UK study on behalf of DEFRA also indicated that minimum performance standards appear to have been more effective in stimulating improvements in energy efficiency than demand side measures. The introduction of minimum standards has a rapid and significant affect on average product energy efficiency, whereas measures such as labelling are less clear cut and inherently more difficult to attribute.

The Energy Labelling Directive (ELD)

Context
This Directive imposes a mandatory label that provides information on the consumption of energy and of other essential resources during the use phase. The Energy Labelling Directive (ELD) (92/75/EEC, recast 2010/30/EU), the Ecolabel Regulation (No 1980/2000), and the Energy Star Regulation (No 106/2008) provide consumers with labels that identify the environmental performance of products. It intends to ‘pull’ the take-up of best-performers up in the market.

The ELD provides consumers with a scale from 7 classes and colours (G – A) assessing the performance of all energy-related products. The Directive went through a recast in 2010 since technological developments in for example domestic dishwashers, washing machines and refrigerators have pushed over 90 percent of the products into class A. The revised Directive was thoroughly discussed in terms of lay-out and categories within the new directive. In the end, the highest class was extended with plusses resulting in the most energy efficient products now receiving A++. These new scales will be applied from July 2011 and in the meanwhile double labels will be used in sales.

The EU’s Ecolabel and the Energy Star Regulation both introduced voluntary labelling for products. They both aim to provide consumers with assurance that the labelled product represents the best-in-class in terms of energy usage and environmental impact through-out its life-cycle.

Progress
In November 2009 the European parliament backed a widening of the energy efficiency labelling scheme by extending the A-G framework by adding an additional three “A” classes, the image below outlines what the new labels will look like. Updating the scale became necessary because a
large number of products were ending up in the highest energy-efficiency class after years of technological development. The different classes are to be marked with a colour code ranging from dark green for most efficient products to red for the least efficient. This is designed to help consumers navigate their way towards the most efficient products.

The most significant change to the Directive is its extension from household energy-using products to the broader definition of “energy related products”. The scheme was to include products such as windows and doors that do not directly use energy, but can help to save it. A range of commercial and industrial energy using products will also come under the labelling scheme.

The agreement also requires advertisements promoting the price, or energy efficiency of white goods, to indicate the product’s energy class. In addition all manuals, brochures and technical information will have to indicate the products energy efficiency class so that consumers could make informed energy saving purchases.81

Despite being approved by member-state representatives, the new classes ran into resistance from MEPs, so the proposal was eventually withdrawn.

In September 2010 The European Commission adopted delegated acts for dishwashers, refrigerators, washing machines and televisions to supplement the existing Directive 2010/30/EU with regards energy labeling OJ L314, 30/11/10.82 This will introduce A-G energy labeling standards to televisions for the first time and require them to declare this standard on the TV set and in any advertising when the price is mentioned. The delegated acts also extend the existing labeling scheme for Dishwashers, refrigerators and washing machines to include A+, A++ and A+++ grades to further incentivise technological innovation by manufacturers.83

Providing harmonised, ever improving Energy Labelling on energy using products allows the EU, and member states, to create additional regulations and incentives to increase the market demand for top performing products. Past experience reveals that clear labelling can act as a facilitator to increased uptake when incorporated into a well designed incentive scheme. A public private rebate

82 http://www.europe.org.uk/europa/view/-/id/2065
scheme in the Netherlands saw the uptake of energy efficient products grow dramatically from 26% in 1999 to 67% in 2001. A similar change in purchasing decisions will need to be achieved within the public sector throughout the EU, if it is to meet its 20-20-20 targets.

Ecolabel regulation

Context
The European Ecolabel is a voluntary scheme, established in 1992, to encourage businesses to market products and services that are environmentally better performing. A major revision of the regulation took place in 2009. An impact assessment was carried out as part of the revisions to the Ecolabel scheme84 in 2008. The overall conclusions were that the Ecolabel scheme as it existed was a good idea, but significantly hampered by a number of major barriers, including the complexity of the regulation and its dispersion across a number of DGs. Simplification was identified as the key requirement and it was hoped that this would greatly increase the success of the scheme and the resultant benefits. The main changes that followed in the revision were as follows:

- More product groups / quicker criteria development process / product group development by the Commission;
- Reduction of annual fees;
- Simplification of assessment procedure;
- More focus on the most significant environmental impacts of products, while keeping the ambition levels high.

The revision also aimed at better integrating the label into the AP and its other initiatives. The specific aims set out for the Ecolabel scheme include: to represent 40/50 product groups by 2015 and to be well harmonised with other labels, nationally and globally. Furthermore, it aims to achieve a higher market share for goods bearing the Ecolabel and to reduce the cost and effort required by companies to join the scheme, while still maintaining a high level of quality.

Progress
As of December 2010, 1,126 individual licences have been awarded, with tourist accommodation services representing the largest product group at 37% of the total. A study is currently ongoing and expected to be released by the end of 2011 on whether to expand the label to food items. The figure below charts the continued growth in product registrations under the Ecolabel scheme, with a growth of over 50% since 2008 and the introduction of the AP.

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In the online survey related to this revision, stakeholders from industry and trade were asked to state whether the AP has improved the administrative procedures associated with obtaining an Ecolabel. Only 15% of them believe that this has happened to some extent, 29% think that no improvement has taken place. Furthermore, 18% of the same group of respondents stated that the costs for Ecolabel registration are “fair”, a further 18% found costs to be high.

**Green Public Procurement (GPP)**

*Context*

Green Public Procurement (GPP) is “a process whereby public authorities seek to procure goods, services and works with a reduced environmental impact throughout their life cycle when compared to goods, services and works with the same primary function that would otherwise be procured.”

EU legislation on public procurement from 2004 outlines the regulatory framework for including environmental criteria into public procurement.

Greening public procurement has strong potential to accelerate the up-take of energy efficient and green products. In 2009, the public sector spent over EUR 2 100 billion on goods, services and works – amounting to around 19% of EU GDP. In 2008, the Commission proposed that 50 percent of all public procurement should be green by 2010. “Green” was then supposed to be defined by a set of GPP criteria which has remained a key challenge for GPP policy. The 2010 target is linked with the development of criteria for 10 priority groups including: construction, food and catering services; transport; electricity; office IT equipment; textiles; copying and graphics paper; furniture; cleaning products and services; and, gardening products and services.

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86 Directive 2004/18/EC on the coordination of procedures for the award of public works contracts, public supply contracts and public service contracts.
The AP stipulates that GPP should be further strengthened by voluntary measures and that these will complement further mandatory measures. The action plan states that the Commission will:

- Provide guidance and tools for public authorities to "green" their procurement practices including:
  - setting indicative targets based on the level of best performing Member States;
  - providing model tender specifications, which are in line with Internal Market legislation;
  - creating a process of cooperation with the Member States to identify and agree upon common GPP criteria for products and services for endorsement in national action plans and guidance on GPP.
- Monitoring of targets will be based on compliance with these criteria;
- Voluntary common GPP criteria will be set for services and for those products for which mandatory levels, as foreseen under Section 2.3 of the Action Plan, will not, or have not yet, been established;
- Common GPP criteria will be based on the benchmarks of environmental performance and relevant labels;
- A separate Communication on Green Public Procurement details these measures.

**Progress**

During the years 2008-2010, the Commission has taken a number of steps in the field of GPP. The first milestone was the launch of the Communication: Public procurement for a better environment in mid 2008, published in parallel with the AP. This communication created a framework for a formalised further development of GPP in an EU context. This communication outlines the following, more concrete, actions to be taken in this field than the overall AP:

- Common GPP criteria and lists priority sectors;
- GPP targets;
- Potential mandatory measures;
- Guidance in the GPP process hereunder;
- GPP as a tool to stimulate innovation;
- Greening private procurement;
- Indicators for monitoring and benchmarking.

Efforts have mainly focussed on training and guidance regarding GPP as well as the development of criteria and an overall target. In order to provide guidance to stakeholders the following actions have been launched between 2008 and 2010:

- A Web based Training Toolkit on GPP has been produced. The kit contains three modules:
  - A strategic module which seeks to raise the political support for GPP;
  - A legal module which seeks to clarify legal issues;
  - An operational module aimed at purchasing officers.
- Program to train GPP experts and raise awareness about GPP in EU Member States. A first round of training was held in June 2009, with the first GPP Training for Trainers Programme. With participation of 20 national experts from 10 of the EU Member States (the new MS except Cyprus). In February 2010 a second round of training was launched with participation of experts from 9 Member States; all together 40 national GPP experts were trained;
- Early 2010, a Helpdesk was launched to promote and disseminate information about GPP, and to provide timely and accurate answers to stakeholders' enquiries. The helpdesk also covers Ecolabel, EMAS and ECAP.

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89 COM (2008) 400 Final Public procurement for a better environment.
As regards guidance, the handbook ‘Buying Green!’ on environmental public procurement was published in 2004\textsuperscript{92}. It explains “how best to integrate environmental considerations into public procurement procedures based on the provisions of the Public Procurement Directives of 31 March 2004”. A new version of the handbook is due for publication in September 2011 (or soon after).

As mentioned above, voluntary targets for GPP have been set: by 2010, 50% of all tenders will be compliant with endorsed common “core” GPP criteria\textsuperscript{93}. Two sets of GPP criteria have been launched. The first set of GPP criteria which covers 10 priority sectors was launched in 2008\textsuperscript{94} and the second, covering eight sectors, was launched in 2010\textsuperscript{95}. Furthermore, a new procedure to develop EU GPP and EU Ecolabel criteria at the same time has been initiated with the Institute for Prospective Technological Studies (IPTS) and the Joint Research Centre (JRC) in Seville, leading this work\textsuperscript{96}. A new product team, dealing with both criteria has been set up.

A number of relevant studies have been supported by the Commission in this area\textsuperscript{97} including; “Collection of statistical information on GPP in EU” (PWC 2009) and the 2010 analysis: “Assessment and Comparison of National Green and Sustainable Public Procurement Criteria and Underlying Schemes-- (9MS and Norway)” (AEA group 2010) and the 2011 study for DG Market on Strategic use of Public Procurement\textsuperscript{98}.

Dialogue with MSs and experts on GPP has been formalised through a working group\textsuperscript{99} and an informal advisory group (established 2010) with these groups being merged in April 2011 under the name informal GPP Advisory Group. The focus of this group is to exchange knowledge and best practice. The EC seeks opinions on certain issues from national GPP experts, and MSs get information in order to assist their progress in the field of the GPP\textsuperscript{100}.

Overall, progress appears to have been made with regard to the uptake of GPP measures, particularly following the 2008 communication. Stakeholders still mention that complexity and lack of knowledge is a barrier to take up\textsuperscript{101}. Another comment that is raised concerns the inclusion of social aspects and issues in procurement priorities under the AP as this is an important pillar in order to achieve sustainability which is a common international goal. These issues include the affordability of more sustainable products and the working and employment conditions of those involved in their manufacture.

Other Instruments

*Development of a method for and collection of consistent and reliable product data*

**Context**

The European Commission Joint Research Centre (JRC) has recently developed the International Reference Life Cycle Data System Handbook which provides governments and businesses with a...
basis for assuring quality and consistency of life cycle data, methods and assessments. The document provides technical guidance for detailed Life Cycle Assessment (LCA) studies and provides the technical basis to derive product-specific criteria, guides, and simplified tools. The principle target audience for the guide are LCA practitioners, as well as technical experts in the public and private sector, dealing with environmental decision support related to products, resources, and waste management.

**Progress**

Two other recent studies followed, with the objective to identify and analyse the existing leading methodologies and initiatives in the field of product carbon footprinting and company GHG reporting. These studies reached the following conclusions:

- None of the standards were comprehensive enough to be all encompassing – and regarded as a standard. They mapped the gaps in the various standards;
- Clear message that carbon footprinting was not enough – and the standards need to consider wider environmental issues;
- Some qualitative analysis of costs and benefits, though this would benefit from further analysis.

**Establishment of a harmonised base for incentives**

**Context**

A harmonized base for incentives has been identified as a necessary tool with which to better harmonize some of the initiatives and instruments within the AP. The fact that different tools have different reporting requirements creates increased work for participating SMEs and affects the utility of the individual instruments. One of the opportunities identified in this area relates to utilizing Ecodesign and Ecolabel standards which could be used and specified within GPP procurement decisions.

**Progress**

In relation to this activity there appears to have been limited results to date. The revisions to the Ecolabel regulation in 2009, under Article 11 did include provisions for some harmonization of the instrument, stating that national labels must at least adhere to the EU Ecolabel standard. In addition there was an attempt to oblige MSs to set minimum criteria based on Energy labelling standards within their public procurement activities. However, this approach was rejected by most MSs, mainly on the grounds of cost.

**Market based instruments for getting price right**

**Context**

Market-based instruments (MBI), such as environmental taxes, tradable permit systems or targeted subsidies, represent a cost-effective way to protect and improve the environment. They lead companies and consumers to make more environmentally friendly buying and production decisions. In 2007, the European Commission published a green paper on the use of MBI to achieve environmental goals. The more intensive use of MBI has also been advocated in the EU’s 6th Environment Action Programme (6th EAP) and the renewed EU Sustainable Development Strategy as well as in the Europe 2020 strategy for smart, sustainable and inclusive growth introduced in 2010. In the latter strategy MBI are part of the flagship initiative “Resource efficient Europe”, requesting for the implementation of instruments at EU and Member State level.

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**Progress**

One example is the initiative of several Member States that have started to lobby for a reduction of VAT taxes for green products to 5%. The initiative was however stalled in 2009 due to objections from other Member States. The European VAT system is still under review and a future inclusion of a “Green VAT” might still be possible. In 2009, a public consultation on the use of MBI confirmed that there is considerable interest in further use of MBI in many areas of environmental policy and that more transparency, information and even coordination would be needed within the EU.

**Europa Diary**

**Context**

DG SANCO has funded the Europa Diary since 2003. It is a paper based publication targeted at schools, teachers and students aged 15-18. The publication contains approximately 100 pages of content, sponsored by all the DGs of the European Commission covering EU policies and EU level background information. This section is followed by an agenda for students to use, which contains snippets of information linked to consumer affairs and consumer issues.

**Progress**

The Diary is circulated to schools with 3.2 million copies of the 2010-11 edition distributed. Demand regularly outstrips supply for this Diary, with the ability to increase supply limited by funding. However, patterns of take-up also vary considerably between EU member states, from a low of 13% of students in the UK to a high of 92% of students in Slovenia. The reasons for these differences are understood to be closely related to the amount of alternative support available to consumers in each member state, with high levels reflecting a lower perceived need for the diary.

The Diary is currently subject to an evaluation commissioned by DG SANCO, conducted by Ecorys, which is considering the relevance, effectiveness and efficiency of the resource. The evaluation is also considering whether a paper version of the Diary is still relevant or whether or not new channels of communication might be employed, such as social media or mobile phone applications. The evaluation is currently at the interim stage and therefore no findings are available for wider review.

With regard to relevance to the AP it should be borne in mind that the Europa Diary only addresses sustainable consumption as a small aspect of wider consumer information.

**Dolceta**

**Context**

Dolceta is a pan-European consumer affairs online portal / website, covering 29 EU countries, with content translated into relevant languages. Dolceta has been funded by DG SANCO since 2002. It covers consumer topics such as consumer rights, financial capability, and green consumption. It contains a series of modules with country specific content and a ‘teacher’s corner’ with teaching materials. Dolceta is targeted at primary, secondary and adult education, but also at the general public. It provides some links to nationally relevant resources and websites.

**Progress**

With regard to the relevance of Dolceta the AP appears to be greater than the Europa Diary, with green consumption a focus area among the wider information provided. Dolceta is currently subject to an evaluation commissioned by DG SANCO, also being conducted by Ecorys, which is considering the relevance, effectiveness and efficiency of the resource. This evaluation is currently

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105  http://www.europa-nu.nl/id/v7fgian8am3/commission_staff_working_document.
at the interim stage and therefore the findings are only preliminary and not available for wider circulation.

**Retail Forum**

**Context**

Approximately 11% of EU's GDP originates from the retail sector. Therefore, it is crucial to minimise the environmental impact of this sector in order to achieve the EU's sustainable development goals. In 2006, the European Commission presented a communication on "making Europe a centre of excellence on corporate social responsibility", which alongside their Sustainable Consumption and Production, and Sustainable Industrial Policy action plans have led to the formation of the Retail Forum. The purpose of the Retail Forum is to facilitate voluntary measures for the retail sector to minimise their impacts upon the environment, including "to a series of ambitious and concrete actions with clear objectives, timelines, deliverables, and monitoring indicators."

The Retail Forum was launched in March 2009 and introduces a platform for stakeholders in the retail sector. The members of the platform as of December 2010 are shown in the figure below.

The platform should be used to exchange best practices on sustainability in the European retail sector. Further a mapping of the opportunities and barriers will help the sector to mitigate optimally. The retailers have a unique position to reach the consumers and can therefore play a key role in promoting sustainable consumption. This is not only through their interaction and contact with the consumer but also through their own action and choices of suppliers.

The Retail Forum was set up with a timeframe of three years. That timeframe should be used to provide a greater availability of environmentally friendly and energy-efficient products as well as better information on environmental friendly use of products. The Action Plan specifies states that a Retail Forum "is being" set up, and that it should do the following:

1. identify key areas to be tackled and define the baseline of existing initiatives;

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109  Ibid.
2. share best practices, extend the geographical coverage of existing initiatives and look to launch new initiatives; and
3. report on progress of their actions on an individual basis.

**Progress**

The Retail Forum was launched in 2009 following close cooperation and dialogue between the Commission and various retail stakeholders. According to the Forum's ToR “retailers do not attempt to harmonise retail environmental actions across the sector, or across the European Union. Instead, they favour an approach that champions innovation and development where it counts – at company level, “leading to a significant improvement overall when individual companies’ results are aggregated.” The forum is used to share knowledge and inspire other retailers to action. Actions are taken by individual companies on a voluntary basis, and the extent to which the actions are significant can be discussed. E.g. the environmental NGOs have been sceptical as regards the progress as there are no binding targets and the commitments made are solely up to the individual companies.

As part of the process Retailers have established the “Retailers’ Environmental Action Programme” (REAP), of which the Retail Forum is a part. In addition to the Retail Forum, the REAP consists of a Matrix of environmental Action Points (MAP). The MAPs constitutes an “open, dynamic summary of retail actions and initiatives” of the individual retailers focussing on what they sell, how they sell and how they communicate.

The terms of reference of the Forum also points out that the forum should obtain scientific and indicator based knowledge from relevant EU bodies about the evaluation of environmentally-sound products. The retailers can make use of tools to optimise their activities such as helping them focus on resource efficiency, support innovation and EMAS. All three actions outlined in the action plan regarding the Retail Forum has been carried out as indicated in the table below:

<table>
<thead>
<tr>
<th>Actions outlined in the Action plan</th>
<th>Actions taken</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>Identify key areas to be tackled and define the baseline of existing initiatives;</td>
<td>Yes</td>
<td>Identification of topics for the issue papers.</td>
</tr>
<tr>
<td>Share best practices, extend the geographical coverage of existing initiatives and look to launch new initiatives;</td>
<td>Yes</td>
<td>Best practices are shared in workshops and meetings. The REAP was launched following the agreement on the Retail Forum.</td>
</tr>
<tr>
<td>Report on progress of their actions on an individual basis</td>
<td>Yes</td>
<td>Done through monitoring and through the ENAPs</td>
</tr>
</tbody>
</table>

By the end of 2010, 20 retailers and seven retail federations were member of the Retail Forum. In addition there is frequent participation of NGOs and industry representatives from other parts of the supply chain as well as the Commission in the meetings of the Forum.

All three Retail Forum actions stipulated in the AP have been carried out. Both retailers and the Commission state that this is a useful forum which has contributed to improved dialogue and understanding among the involved parties. Nevertheless, the Commission as well as environmental NGOs are pushing for more progress and stronger commitment from the retailers including the possibility of mandatory targets.

European Food Sustainable Consumption and Production Roundtable

Context
The aim of the European Food SCP Round Table is to establish the food chain as a major contributor towards sustainable consumption and production in Europe. The European Food SCP Round Table's activities will not only help to strengthen the long-term competitiveness of Europe’s food chain, but also support EU policy objectives, notably those outlined in the European Commission’s AP. The European Food SCP Round Table is also taking into account the global SCP agenda, including the initiatives facilitated by UNEP and other organisations to advance resource efficiency, sustainable value chains and social responsibility. The guiding principle is to communicate environmental information along the food chain (including to customers) in a scientifically reliable, consistent and non-misleading manner, so as to support informed customer choice.

Progress
Since the AP was launched, a food industry specific European-wide best practice exchange has also been established. The European Food Sustainable Consumption and Production Roundtable, as it is known, was launched in May 2009 and is co-chaired by the European Commission, the United Nations Environment Program and the European Environment Agency.

Tools to monitor, benchmark and promote resource efficiency

Context
Topten is a voluntary, international, non-profit making project aiming to stimulate the market demand for highly efficient products. It does this by creating a dynamic benchmark and promoting the ten top performing products in a range of product groups on its website, including fridges, washing machines, cars etc. Since being established in Switzerland in 2000, member state specific sites have been developed for 20 European countries thanks to funding support from Intelligent Energy Europe under the Eurotopten and Eurotopten plus projects.

Progress
The concept has proven itself so much that sites have now been developed for the USA and China in 2009 and 2010 respectively. Therefore, this can be seen a successful tool for monitoring top performing products, benchmarking best practice and promoting SCP and resource efficiency to a wider audience.

Revision of EMAS Regulation

Context
EMAS (the Eco-Management and Audit Scheme) is a European environmental management system and has been through multiple revisions. However, traditionally it has been a niche player in a competitive marketplace where National and international standards also exist. It is a voluntary initiative that aims to recognize and reward those organizations that go beyond minimum legal compliance and continuously improve their environmental performance.

Progress
The EMAS regulation has been revised since the AP was introduced with the EMAS III regulation entering into force in 2010. The main changes to EMAS II can be summarised as follows:

- An improvement of the applicability of the scheme
  - Transitional registration procedures to facilitate introduction of EMAS III;

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Revised audit cycles to further improve applicability for small organisations;
- Single corporate registration to ease administrative and financial burdens on organisations with sites in more than one Member State;
- Cluster approach to provide specific assistance to clusters of organisations in the development and implementation phases of EMAS registration;
- Environmental core indicators to thoroughly document environmental performance and to help organisations apply adequate indicators;
- Reference documents to provide guidance to organisations and to facilitate practical implementation of EMAS requirements.

**Strengthening EMAS visibility and outreach:**
- Single EMAS logo to communicate EMAS in one coherent and distinctive way;
- ‘Global EMAS’ to encourage global uptake of the scheme by making EMAS certification possible for organisations and sites located outside the EU;
- Information and promotion activities of EU Member States and European Commission to support EMAS III.

It was hoped that these changes would increase take-up of EMAS in the EU. The figure below presents the take-up statistics for EMAS, with the dates of the introduction of the AP and EMAS revisions highlighted. While the trends are for continued increases in registrations, there appears to be little acceleration in their increase since the introduction of the revisions. Given these have now been active for over one year, it appears they have not had the intended effects.

Figure 18 EMAS take-up statistics to end of Q1 2011


Two important studies on EMAS have been carried out since the introduction of the AP, their main findings can be summarised as follows:
“Step up to EMAS”: Study on Guidelines for Transition from Non-Formal EMS and ISO 14001 to EMAS\textsuperscript{114}: this provides a summary of 20 environmental management systems from around Europe and the world, comparing and contrasting them to EMAS. The goals of this project were to identify complementarities between the other schemes and EMAS to allow mutual accreditation, therefore encouraging firms to progress from other schemes to EMAS. It was also intended to be of use to member states in submitting existing schemes for recognition under the revised EMAS III regulation.

**Study on costs and benefits of EMAS to registered organisations\textsuperscript{115}:** by looking at costs/benefits this study explored the drivers and barriers to registration for EMAS and the benefits and incentives of registration. It highlighted that a desire to improve resource efficiency was the biggest driver to register for EMAS; other factors included a perception of improved reputation, legislative compliance, meeting supplier requirements and competitiveness across the EU. Barriers to registration were found to be a lack of clarity on what the benefits are, the costs of registration and the low levels of awareness among consumers regarding EMAS.

The benefits from those registered for EMAS were primarily experienced in reduced material and energy costs, though many of the gains were experienced after initial changes, later improvements becoming harder to achieve. Other benefits included market access, customer retention, reduced number of environmental incidents and improved relations with regulators. Greater financial support was identified as a potential incentive to improve the number of registrations.

The online survey included questions to stakeholders from industry and trade on the EMAS revisions. None of the respondents believed that the revisions have considerably reduced the administrative burden on SMEs, reduced the cost of participation or increased the participation of companies. Only about a quarter of the respondents found that this has happened to some extent. 18% think that the participation of companies has not been improved at all. A large share of more than 50% did however not possess enough information or knowledge to make judgments about the EMAS revisions.

**Tools to monitor, benchmark and boost the uptake of eco-innovation in the EU Context**

Although the following instruments and programmes are not under the direct auspices of the AP they are discussed here to illustrate the other activity relevant to this aim that the Commission is involved in.

**Progress**

Between 2008 and 2013 nearly EUR 200 million has, and will be, made available to fund projects under the eco-innovation initiative. A two year Measuring Eco-Innovation OECD funded report was completed in 2009\textsuperscript{116}. This report addressed the following issues:

- Review the concepts of sustainable manufacturing and eco-innovation and build a framework for analysis;
- Analyse eco-innovation processes on the basis of existing examples from manufacturing companies;
- Benchmark the sets of indicators that have been used by industry to achieve sustainable manufacturing;

\textsuperscript{115} Milieu, RPA (2009) Study on costs and benefits of EMAS to registered organisations.  
• Analyse the strengths and weaknesses of existing methodologies for measuring eco-innovation at the macro level;
• Take stock of national strategies and policy initiatives to promote eco-innovation in OECD countries.

The reports findings have identified areas for further research and provided the most definitive synthesis to date on Eco-Innovation research.

The Eco-Innovation Observatory
The Eco-Innovation Observatory functions as a platform for the structured collection and analysis of an extensive range of eco-innovation information, gathered from across the European Union. The 3 year initiative is funded through DG ENV Competitiveness and Innovation Framework Program (CIP). The Eco-innovation Observatory combines data from multiple sources to develop an integrated information resource and a series of eco-innovation trends and markets targeting business, innovation service providers, policy makers as well as researchers and analysts. The observatory also directly informs two major European initiatives: The Environmental Technologies Action Plan (ETAP) and Europe INNOVA. The observatory provides a comprehensive database of relevant figures from across Europe and provides national scorecards, comparisons, best practice examples and annual reporting of EU wide trends.\(^{117}\)

Eco-Innovera
Eco-innovera is a joint research and dissemination initiative involving 25 partner organizations throughout 20 European countries. It currently has funding to support research projects from 2010-2014. It aims to co-ordinate national Eco-innovation research programs and foster transnational cooperation whilst providing platform for Eco-innovation networking. Some of the key research areas include joint understanding of eco-innovation, national program co-ordination, best practice funding for Eco-innovation, joint transnational funding of projects, common metrics and evaluation procedures, R&I strategy of eco-innovation and to create a self-sustaining network of practitioners.

In addition, Eurostat is also currently drafting a compilation guide for collecting statistics on the Environmental Goods and Services Sector (EGSS), so they are also in the process of defining the sector from the activities viewpoint (the NACE codes). They have defined a “core” industry group (NACE 25.12, 37, 41, 51.57 and 90), but the much larger “non-core” group of industries is yet to be defined\(^{118}\). This will likely inform future benchmarking and performance review of European Eco-Innovation.

Establish an Environmental Technology Verification (ETV) scheme

Context
The ETV scheme has been developed through EU research projects between 2004 and 2009 and in 2007 the Commission’s Joint Research Centre published a report analysing various ETV systems already in place outside the EU, mainly the USA and Canada and a feasibility study to implement ETV in Europe. Another project, the TRITECH pilot, funded under LIFE+ in 2006-09, tested an operational procedure for technology verification in a number of areas.


Mid-term evaluation of the SCP/SIP Action Plan

Progress
A new project, Advance ETV, started in 2009 and aims to help implement an EU scheme and support the international harmonisation of ETV. Some EU Member States have also implemented pilots on ETV, such as the Nordic Water Technology Verification Center's NOWATECH and DanETV schemes.

The scheme foresees the setting up of accredited Verification Bodies (VBs), who will receive requests from manufacturers (proposers), to define the performance parameters, assess the test data and issue ‘Statements of Verification’. When additional tests need to be carried out, the manufacturer will nominate a testing body to perform these tests. The ETV process is thus not to carry out actual testing, but to review test results. The VBs will be accredited by national Accreditation Bodies, in order to ensure their capacity and independence. There will be between 15-20 VBs in total, and it is foreseen that an organisation may not be both a VB and a testing facility. The Commission will also set up technical groups to coordinate the VBs, as well as an Advisory Forum to advise on the process and the results, and which will include purchasers and users.

The costs of verification will vary depending on the technology and the quality of data, though they are expected to range from EUR 5 000 for simple energy saving equipment to EUR 100 000 for more complex water treatment processes. The programme is financed through the EU budget and the Competitiveness and Innovation Framework Programme (CIP). The costs for SMEs is a key issue and the Commission aims to limit the average final contribution of SMEs to a maximum of EUR 20 000. There will not be any possibility to apply for EU support directly, however, but applicants are rather advised to make use of other EU funding programmes, such as CIP and LIFE+, or national grant and loan schemes.

Timeline and next steps
The Commission stressed that it is still possible to change some details with the scheme, as it is a pre-programme (explained as something between a pilot and a programme) and not completely finalised:

- **End of 2010** – The Commission will finalise a decision on the accreditation framework and the scope of technologies to be included, including an Environmental Technology Verification (ETV) Information Event;
- **1st half of 2011** – Accreditation of VBs, through calls for proposals; Setting up of technical groups;
- **2nd half of 2011** – The ETV pre-programme will be operational and accept proposals from manufacturers; An advisory forum will also be set up;
- **2013-14** – The pre-programme will be evaluated to establish what the future need for EU level support and public sector involvement will be. This will cover issues such as:
  - Should it become a private initiative?
  - Will we need a legislative instrument?
  - Should it be turned into a standardisation process?
  - How to promote its international recognition?

Develop an industrial policy for environmental industries

Context
A feature of the AP is to address the market failures and regulatory barriers that hinder the competitiveness of the environmental industries whilst influencing the uptake of more sustainable solutions. The first step in the process of developing policy initiatives in this area is to carry out a competitiveness analysis of environmental industries across Europe, in order to identify areas for future policy initiatives.
**Progress**

A comprehensive analysis of the Competitiveness of EU Eco-Industry was completed in October 2009 as requested by DG ENTR. The executive summary outlined the following ten policy recommendations:

1. Improve the statistical observation of the EU Eco-industry;
2. Deepen the SCP/SIP Action Plan;
3. Improve the functioning of internal markets for EU Eco-industry by harmonising directives, standards and certification procedures;
4. Introduce EU-wide functional performance criteria;
5. Promote environmental skills development;
6. Work to reduce information asymmetries between industry and its customers;
7. Promote Eco-innovation and R&D;
8. Provide financial support framework for strategically important Eco-innovation R&D;
9. Harmonize and promote green procurement;
10. Promote open markets at a global scale to support the creation of a level playing field.

Progress is being made in a number of these identified areas, however due to the complexity and size of the Eco-industries marketplace no overarching industrial policy exists at this time. Much of the difficulty in this area stems from the fact that there is currently no precise definition of what “Eco-industries” actually are.

The Lead Market Initiative was launched in 2007 and represented the first comprehensive effort at EU level for a coordinated demand-side innovation policy approach. The related mid-term evaluation has been completed in 2009. One the major findings of the evaluation was that the choice of demand-side innovation instruments (regulation, public procurement, standardization and complementary activities) for the ‘policy mix’ of each action plan in the six different lead markets seems to be appropriate. A final evaluation will take place in 2011.

**Additional assistance to Small and Medium Size Enterprises**

**Context**

SMEs generally find it harder to comply with environmental and resource efficiency legislation than larger companies. SMEs often lack the resources, knowledge and competencies to do so. Nevertheless, SMEs can benefit from complying with legislation in terms of lowering energy bills and increased effectiveness in production. They also hold a great potential to address several environmental problems as they represent 99% of the EU’s total economic added value and about 64% of environmental impact from industrial pollution throughout Europe. To support SMEs in getting greener the Commission set up the Environmental Compliance Assistance Programme (ECAP) in 2007. It includes a set of measures which intend to reduce compliance burdens for SMEs by helping them to design policies and instruments to be introduced in their core activities. The measures are focused on helping with funding, spreading know-how and best-practice, and better regulation.

Assistance to SMEs is mentioned as important under the heading of “Enhancing the environmental potential of industry” (pt 3.3. in the AP). However, the AP only makes a vague reference to a programme to help small and medium-sized enterprises comply with environmental legislation established in 2007. ECAP aims to support SMEs in complying with environmental legislation.

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and improving their environmental performance. According to the Action Plan, SMEs lack information, have insufficient expertise and scarcity of financial and human resources making it “difficult for SMEs to fully exploit the business opportunities offered by a sound environmental management”. Under ECAP, action to improve environmental compliance of SMEs has been focussed where it is believed to have the biggest impact and ECAP is currently being evaluated with the results due at the end of June 2011.

The Environmental Compliance Assistance Programme aims to deliver the following:

- Providing targeted information through the ECAP website, participation at events, establishment of a Helpdesk (also covering GPP and Ecolabel). Some tools were developed to support the new initiatives like a database with best practice, a forum for discussing topics related to all aspects of ECAP and a possibility to search for partners;
- Building local environmental expertise:
  - Training activities for SME support organisations (e.g. chambers of commerce and business association, local authorities, etc), including capacity building seminars (“Awareness raising tour” – addressing SME support organisations in all member states and 2 series of workshops focussed on best practice exchange. One of the aims of the latter was to trigger cooperation between successful initiatives and regions where there has been little or no activity in this area;
  - Active cooperation with DG Enterprise and Enterprise Europe Network. Through the first seven projects which began in early 2010, it is expected that Network partners will deliver services to about 7 500 SMEs in 55 territories for selected sectors of activity (nine in total), and sign cooperation agreements with more than 400 environmental service providers. One of the aims of the latter was to trigger cooperation between successful initiatives and regions where there has been little or no activity in this area;
- Targeted funding: including the priority “SMEs and the environment” and promoting funding streams, i.e. through LIFE +, the Structural Funds, ERDF, The Competitiveness and Innovation framework Programme (CIP) and FP7;
- Tailor-made environmental management systems for SMEs including: promotion of EMAS Easy, a simplified methodology for the implementation of EMAS developed for SMEs specifically; addressing locally recognised environmental management initiatives as best practices on the website and during training and workshops;
- Better regulation to help SMEs fulfil legislative requirements concerning the environment simplification through design of the legislation and thereby to minimise the administrative burden for the SMEs: in this case, the activities of DG Enterprise in the area of better regulation, i.e. the introduction of the SME Test was considered as fulfilling this action.

Progress

The EU can mainly have a coordinating and enhancing role in efforts aimed to improve environmental performance in SMEs. SMEs need local/national level actions tailored to their size, which can be only offered at national/local level. The lack of commitment by Member States for ECAP-related actions is the most important gap in the implementation of the programme.

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122 SCP/SIP AP p 11.
123 Interview DG Environment, 20 April 2011.
126 Interview DG Environment, 20 April 2011.
EMAS certification for SMEs is facilitated through EMASeasy, introduced years before the AP. However, according to the Commission “the SCP Action Plan, EMAS III and ECAP have emphasised the importance of this initiative which has then been further developed”\textsuperscript{128}.

In order to improve the communication with the SMEs a multilingual website\textsuperscript{129} has been set up by the Commission. The website is used to gather all relevant information such as examples of best practice, funding sources, events and useful links etc. in one place. The website includes inter alia\textsuperscript{130}:

- Links to relevant tools for the improvement of SMEs’ environmental performance (e.g. On-line toolkit for SME funding, EMAS SME handbook, EMAS Energy Efficiency Toolkit for SMEs);
- Information on EU environmental legislation relevant for SMEs;
- Relevant local contact points.

Funding information directing SMEs toward the following sources of funding:

- The LIFE + programme;
- Regional Policy: Cohesion and Structural Funds;
- ERDF;
- The Competitiveness and Innovation framework Programme (CIP);
- FP7;
- Eurostars.

Cooperation between ECAP and the EEN (Enterprise Europe Network projects) has also been established. Through this, seven projects have been funded through the EEN with an EU contribution of EUR 5.75 million. 55 partners are involved in providing services to turn environmental challenges into economic opportunities. Typical activities are:

- Preparatory regional studies, which aim researching existing support programmes, identifying Environmental Service Providers (ESPs) as well as target SMEs;
- The establishment of local cooperation agreements with ESPs;
- The development of regional service concepts;
- The organisation of workshops;
- Mediation activities between SMEs and ESPs;
- Environmental service provisioning.

It is estimated that agreements will be signed with more than 400 environmental service providers over the next two years. Most of the services and activities are due to be carried out in 2011 and hence outside the scope of this evaluation.

In a newsletter in 2009\textsuperscript{131}, the ECAP team published that they had been working on new ways to boost environmental practices amongst SMEs and raise awareness of the benefits. Three workshops were held to communicate the new initiatives. Tools have been developed to support the new initiatives including a database of best practice, a forum for discussing topics related to all aspects of ECAP and a partner search facility. Local know-how will be accessed through capacity-building seminars in individual Member States. Further to this, the European Information Centres (EIC) were, and are, being used to promote public private partnerships and proactively engage with SMEs.

\textsuperscript{128} E-mail from Commission staff 21 June-2011.
\textsuperscript{129} http://www.emas-easy.eu.
\textsuperscript{130} http://ec.europa.eu/environment/sme/toolkits/toolkits_en.htm.
\textsuperscript{131} ECAP Newsletter, Issue 3, November 2009.
Overall, based on the information gathered during this mid-term evaluation, ECAP seems to be a useful and relevant instrument. However, its effectiveness and efficiency could be increased by developing knowledge around where support is required and by obtaining increased Member State commitments in this area.

**Global actions and Promotion of sectoral approaches in international climate negotiations**

**Context**

The Global Sectoral Approaches study\(^\text{132}\), initiated in May 2008 with support from the European Commission, was designed to provide a "proof-of-concept" of the feasibility of sectoral approaches in a post-2012 international framework for climate policy. The study initially investigated a transnational approach in which all countries face similar benchmarks, a sectoral Clean Development Mechanism (CDM) approach emphasizing carbon credits, and a bottom-up approach envisaging financial and technology assistance from advanced economies to support ambitious no-lose crediting baselines in developing countries.

International negotiations regarding a post-2012 framework have developed the idea of Nationally Appropriate Mitigation Actions (NAMAs), using concepts borrowed from previous work on sectoral approaches. NAMAs are now seen as including unilateral actions by developing countries, actions that are supported by finance and technology assistance from advanced economies, and NAMAs that can earn international credits. The concept of supported NAMAs has considerable flexibility and may include activities ranging from capacity building to multi-sector efficiency programs to goals for specific types of technologies within a single sector. They may also include a variety of metrics to measure and verify success.

Supported NAMAs have thus borrowed from, broadened, and largely superseded, the idea of supported activities that originated in the bottom-up sectoral approach. However, sectoral approaches to crediting continue to have key advantages over the idea of credit generation for all types of NAMAs. Crediting on the basis of sector average performance would help to create a common carbon price for all types of emission mitigation within a sector and would eliminate conflicts that could otherwise occur among supported NAMAs, credits for individual projects, and credits for different types of NAMAs within a sector.

**Progress**

An increase in interest in global sectoral approaches to address climate change has been experienced since 2005. Key developments have been the 2005 OECD roundtable on transnational sectoral agreements for climate policy and the July 2005 G8 Gleneagles Plan of Action. In 2007, the Bali Action Plan included a specific reference to sectoral approaches, thereby ensuring that they are part of the negotiations for the post-2012 agreement\(^\text{133}\). The way forward for sectoral approaches seems likely to be through the development of sectoral Nationally Appropriate Mitigation Actions (NAMAs) for international funding. In the so-called Copenhagen communication the European Commission suggested to use sectoral approaches as “a tool in the analysis and development of mitigation options” and generally remains open to use these in a number of additional ways including to aggregate developed countries’ national targets, or even to strike binding sectoral agreements among different countries\(^\text{134}\). Sector crediting is likely to become more


\(^{133}\) Sectoral approaches to address climate change: more than wishful thinking? 2009, EREM.

\(^{134}\) Towards a comprehensive climate change agreement in Copenhagen, 2009, European Commission.
important in the immediate post-2012 period, and it may involve a successor treaty to the Kyoto Protocol, or a more informal approach to crediting agreed upon among major buyer countries.\textsuperscript{135}

**Promote good SCP practice internationally**

**Context**

The Commission’s Regional Strategy Paper for EU-Asia Cooperation (2007-2013) has identified the environment as a sector in need of major support. Funding of about EUR 775 million has been indicatively earmarked for regional assistance.\textsuperscript{136} Part of this regional assistance is represented by the SWITCH Asia initiative which focuses on sustainable consumption and production (SCP) and FLEGT Asia which promotes sustainable forest management.

**Progress**

The aim of the SWITCH-Asia Programme is to promote sustainable consumption and production in Asia. To achieve this objective, the programme works simultaneously on the ground with projects that target producers and consumers. At the same time the programme addresses the level of policy-making through support for formulation and implementation of SCP-related policies.\textsuperscript{137} These policy support components are currently being tendered. The total programme will fund 30 projects between 2007 and 2013 with a total budget of EUR 150 million. Funded projects should incorporate major SCP schemes such as product improvement via Ecodesign or the procurement (public and private) of eco-friendly products.

The EUR 6 million regional development programme FLEGT Asia was started in 2008 and has an expected duration of four years. FLEGT Asia aims at improving forest governance and thus at contributing to poverty reduction and sustainable natural resources management in Asia. Some areas of action are the development of cooperation, better regulation of trade in timber and the promotion of better due diligence for financial institutions involved in the forest sector.

Next to these programs, the European Commission in conjunction with UNEP initiated several roundtables on sustainable consumption and production in India and China. The first round of these meetings was held in both countries in 2006, followed by further consultations in 2008, 2009 and 2010. In accordance with the UN Marrakesh process, the aim of this initiative is to increase awareness for the topic in these important emerging markets and to identify regional SCP priorities and needs.\textsuperscript{138}

**Promote international trade in environmental goods and services**

**Context**

The EU is has continued its efforts to liberalise trade in environmental goods and services in World Trade Organisation (WTO) negotiations under the Doha Development Agenda, and in the context of bilateral trade negotiations. Since the inception of the AP in 2008 the Doha negotiations have stalled due to several disputes about trade issues, mostly between developed and developing countries. As soon as these issues are overcome and the negotiations are restarted, the EU shall continue to use this forum to promote the trade in environmental goods and services.

\textsuperscript{135} GLOBAL SECTORAL STUDY, Center for clean air policy, 2010.

\textsuperscript{136} REGIONAL PROGRAMMING FOR ASIA, Strategy document, 2007.

\textsuperscript{137} http://www.switch-asia.eu/switch-info/basic-information-on-switch.html.

\textsuperscript{138} Background Paper, National Roundtable on Sustainable Consumption and Production (SCP), 2009.
Progress
In addition to WTO negotiations, the Environmental Technologies Action Plan (ETAP) works to support eco-technologies in developing countries and promote foreign investment to encourage sustainable development at the global level.

Tools to monitor, benchmark and boost the uptake of Eco-innovation in the EU

Context
The eco-innovation initiative bridges the gap between research and the market. It helps good ideas for innovative products, services and processes that protect the environment become fully-fledged commercial prospects, ready for use by business and industry. In doing so the initiative not only helps the EU meet its environmental objectives but also boosts economic growth.\(^\text{139}\)

Eco-innovation is about reducing our environmental impact and making better use of resources. This means developing products, techniques, services and processes that reduce CO2 emissions, use resources more efficiently, and promote recycling. There are four main strands to this initiative:

- Materials recycling and recycling processes;
- Sustainable building products;
- Food and drink sector;
- Water efficiency, treatment and distribution;
- Greening business.

The EU is looking to maximize the impact of Eco-innovation and make every euro go as far as possible. The best Eco-innovation projects are those that can be replicated across the EU. Eco-innovation projects are not research projects. The ideas must be developed, feasible and also viable in the long-term to qualify for funding.

Progress
Launched in 2008, the Eco-innovation initiative is part of the EU's Entrepreneurship and Innovation Programme (EIP) set up to support innovation among SMEs and to improve their competitiveness. It is included in the EIP's annual work programmes. The EIP is part of the wider Competitiveness and Innovation Framework Programme (CIP) aimed at encouraging the competitiveness of European companies, in particular SMEs. The Eco-innovation initiative is one of the measures designed to implement the EU's Environmental Technologies Action Plan (ETAP).

\(^{139}\) [http://ec.europa.eu/environment/eco-innovation/about/index_en.htm](http://ec.europa.eu/environment/eco-innovation/about/index_en.htm)
Annex B: Progress on High Level SCP Indicators

This section presents an analysis of progress against some high level SCP indicators since 2000. As noted previously, the data in many cases does not allow for direct examination of the impact of the SCP since 2008. It does however provide some useful contextual information on some of the major production and consumption trends and their environmental (sustainability) impact.

Final energy consumption decreased slightly between 2000 and 2009 with a 18% decrease in industrial energy use, 8% increase in transport energy use and little change in household energy use

Final energy consumption (FEC) is an indicator that covers the total energy supplied for all uses and is the sum of final energy consumption of all sectors. These are disaggregated to cover industry, transport, households and other (services, agriculture and other). As shown in Figure 19, total final energy consumption slightly decreased (-0.6%) from 1 120 to 1 114 million tonnes of oil equivalent (mtoe) between 2000 and 2009. While this reduction can be welcomed in general, it is not clear from these figures whether this improvement came solely from efficiency improvements or also from offshoring of industrial activities. In addition the economic downturn will have had an impact, indeed viewing the total change in EU27 FEC from 2000-2007 (+4.2%) or 2000-2008 (+4.9%) gives a considerably different picture, one of a continuing long term trend for increased FEC.

At the sectoral level, between 2000-2009, by far the largest decrease in FEC (-18%) took place in industry. The largest increase over the period was recorded in the other sector (+15.8%), within this declines in agricultural FEC (-11.3%) being more than offset by increases in FEC by services (+22.3%). Transport was also an area of increasing FEC (+7.7%). Household FEC remained fairly stable (+0.9%) over the entire period. Looking only from 2000-2008, the positive trend in industry is weaker (-4.1%), the negative trend in transport stronger (+10.7%), while other trends remained broadly similar.

Figure 19  EU27 Final Energy Consumption, Total by sector 2000-2009, million tonnes of oil equivalent (TOE)

Source: Ecorys based on Eurostat.
On a Member State basis, per capita FEC varies significantly from an EU average of 2.2 thousand tonnes of oil equivalent per capita. The newer and Mediterranean Member States of the EU tending to have lower per capita FEC, with Romania lowest at slightly more than 1 thousand TOE per capita in 2009. The highest energy consumers tend to be Western and Northern Member States, particularly those with colder climates, requiring higher energy use in winter. Finland having a TOE figure more that twice as high (4.5 thousand TOE per capita). Luxemburg has by far the largest final energy consumption of all 27 Member States, at 8.3 thousand TOE per capita.

Figure 20  EU Member State per capita final energy consumption, 2009, thousand tonnes of oil equivalent

Source: Ecorys based on Eurostat.

Municipal waste generated decreased very slightly between 2000 and 2009

The amount of municipal waste generated in the EU fluctuated only very slightly (-2.1%) in the period between 2000 and 2009. It hit a peak in 2002 with a total of 526kg of waste generated per capita and reached its lowest value in 2009 with a total generation of 512kg. The small nature of the changes illustrates that there is little overall trend towards more sustainable consumption by households, as measured by per capita waste generation.
As shown in Figure 22 there is again considerable variance across member states, ranging from 831kg of waste per capita generated in Denmark, compared to 316kg in Poland. The most general link across this is that waste generation correlates relatively closely with levels of per capita GDP, although it also points to less sustainable consumption behaviour in certain countries, particularly the top 5 on the list.
More sustainable waste treatment methods are being employed
Obviously the actual impact and sustainability of waste generation is very closely related to the treatment methods applied to the waste. Re-use, recycling, composting and energy recovery (through incineration) in almost all cases preferable to landfill or other discharge to the environment. Figure 23 presents data on this which shows that those that generate the least waste per capita, at the same time typically landfill the most waste. Conversely, many of the biggest waste generators are also those that use more sustainable methods of waste treatment. By these measures it could be argued the best performer is Sweden, generating relatively little waste and then treating it in a way where only a very small fraction is sent to landfill for disposal. Cyprus and Malta are notably poor performers by both measures, though as smaller island states their situation is complex and options more limited due to scale and financing issues.

Figure 23  EU-27 Waste treatment methods by Member State in 2007, kg per capita

Source: Ecorys based on Eurostat.

Domestic material consumption increased by 7.9% between 2000 and 2007.
Domestic material consumption (DMC) measures the total amount of materials directly used by an economy which is defined as the total annual amount of resources extracted domestically plus all physical material imports minus all physical exports. Thereby the DMC indicator provides an assessment of the absolute level of a countries’ resource consumption, distinguishing between domestic demand and demand driven by the export market.
As highlighted in Figure 24, after decreasing in the period from 2000 to 2003, DMC continued to increase until 2007. This unfavourable trend was driven by increases in direct material input (domestic extraction + imports) that was not offset by the increase in exports. In total, DMC rose to 8.2 billion tonnes in 2007, a 7.9% increase from the year 2000.

Figure 24   EU-27 Domestic Material Consumption 2000-2007, billion tonnes

Source: Ecorys based on Eurostat.

Figure 25 presents DMC at the Member State level. This shows that per capita DMC is highest in Ireland, with 53 tonnes of DMC per capita in 2007, followed by Finland with 39 tonnes per capita. The EU-27 average stood at 16.5 tonnes per capita in 2007, with most of the larger Member States (DE, FR, IT, UK) reporting below average values. The levels of DMC in the various countries can be linked to the level of resource productivity, an indicator that will be elaborated on later in this section.

Figure 25   EU-27 per capita DMC in 2007, by Member State, tonnes

Source: Ecorys based on Eurostat.
Resource productivity (gross domestic product divided by domestic material consumption) increased by 7.4% between 2000 and 2007 indicating slight positive improvements in the efficiency with which the EU turns energy and materials into economic output.

Resource productivity measures the efficiency with which an economy uses energy and materials. It further shows the natural resource inputs needed to achieve a given economic output. It is calculated by dividing the gross domestic product (GDP) by domestic material consumption.

Resource productivity is one of the EU sustainable development indicators for policy evaluation, and between 2000-2007 it increased by 7.4% in the EU-27, standing at 1.3 euros of GDP per kg of DMC. The improvement in resource productivity does point towards more efficient, and perhaps sustainable, production.

Figure 26 EU-27 Resource Productivity 2000-2007, Euros of GDP per kg of DMC

Source: Ecorys based on Eurostat.

The resource productivity figures for all Member States can be seen in Figure 27, this shows that Luxembourg, the Netherlands and the United Kingdom have the highest resource productivities, possibly reflecting economies more geared towards low resource use, high GDP sectors such as financial services. The EU-27 average lies at €1.3 per kg in 2007. Most of the newer EU members (BG, RO, EE, LV, PL) have significantly lower resource productivity figures, as low as €0.14 per kg, but it should also be noted that these Member States are among those most rapidly improving.

Figure 27 EU-27 Resource Productivity in 2007 by Member State, Euros GDP per kg DMC

Source: Ecorys based on Eurostat.
Decoupling of resource use from economic growth is evident in almost all Member States

One of the major goals of the SCP/SIP Action Plan is to foster the decoupling of economic growth from resource consumption. Figure 28 plots total GDP growth against the growth in DMC of all 27 EU Member States over the period 2000-2007. The graph reveals that low GDP growth rates more typically correlate with stable or even decreasing levels of DMC, whereas higher GDP growth rates correlate with higher DMC growth rates. Correlation does not equal causation, but it is logical to assume that GDP, a measure of economic consumption, is related in some way to DMC, a measure of material consumption.

Notably, most of the countries with the highest resource productivity levels (UK, Netherlands, Germany, and Italy) can all be categorised to be on track towards absolute decoupling. At the other end of the scale, it is evident that the recent increases in resource productivity in the Baltic countries (Estonia, Lithuania and Latvia) are a result of exceptionally high GDP growth rates coupled with modest increases in DMC. It can also be seen in the graph that relative decoupling is taking place in the vast majority of Member States, a positive indication of sustainable economic development.

Figure 28 Total DMC % growth and total GDP % growth, EU-27
Annex C: SCP SIP Action Plan – instruments and actions

Full list of policy instruments and actions under the SCP/SIP Action Plan

The SCP/SIP Action Plan framework includes a broad range of policies and policy instruments. The following table summarises the different policies under the SCP/SIP framework and offers some insights into the updates and changes that have been undertaken since the AP was introduced.

<table>
<thead>
<tr>
<th>Instrument</th>
<th>Description</th>
<th>Progress to date</th>
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<tbody>
<tr>
<td>Ecodesign Directive for Energy-using Products (EuP)</td>
<td>The Ecodesign Directive for Energy-using Products defines conditions and criteria for setting, through subsequent implementing measures, minimum requirements regarding environmentally relevant product characteristics of energy using products.</td>
<td>In 2009: parliament backs widening of product list to include all products with an impact on the energy consumption during use: Windows, insulation material and water-using devices. A Working Plan (2009-2011) setting out an indicative list of energy-using products which will be considered in priority for the adoption of implementing measures. 2010 - Evaluation of the Ecodesign Directive, first progress report published April 2011. 2011 - A study on the next Working Plan has been commissioned including preparatory work to help the Commission to identify and select the priority product groups to be investigated under the revised Ecodesign Directive.</td>
</tr>
<tr>
<td>The Energy Labeling Directive (ELD)</td>
<td>Imposes a mandatory label for energy related products. The label provides information on the consumption of energy and of other essential resources during the use phase.</td>
<td>In 2009: The European parliament backed a widening of the energy efficiency labeling scheme by extending the A-G framework by adding an additional three “A” classes. 2010: The European Commission adopted delegated acts for dishwashers, refrigerators, washing machines and televisions to supplement the existing Directive 2010/30/EU with regards energy labeling OJ L314, 30/11/10.</td>
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<tr>
<td>Ecolabel regulation</td>
<td>Voluntary scheme that identifies products or services with the highest overall environmental performance based on life cycle considerations (production, use and disposal). Similar labels are also awarded in some Member States (such as the Swan label in Sweden, Blauer Engel label in Germany)</td>
<td>2009 revision: More product groups / quicker criteria development process / product group development by the Commission: • Reduction of annual fees; • Simplification of assessment procedure; • More focus on the most significant environmental impacts of products, while keeping the ambition levels high. End of 2011: Study on whether to expand label to food items.</td>
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**List of measures, explanations, progress to date**

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<tr>
<th>Instrument</th>
<th>Description</th>
<th>Progress to date</th>
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<tr>
<td>Green Public Procurement (GPP)</td>
<td>Aims at making public procurement more environmentally friendly by providing information to public procurers on how to purchase green products and services and by facilitating exchanges between national experts on GPP.</td>
<td>A number of relevant studies have been supported by the Commission in this area including; “Collection of statistical information on GPP in EU” (PWC 2009) and the 2010 analysis: “Assessment and Comparison of National Green and Sustainable Public Procurement Criteria and Underlying Schemes – (9MS and Norway)” (AEA group 2010). 2011 has also seen a push to reform GPP throughout Europe.</td>
</tr>
<tr>
<td>Guidance and tools for public authorities to green their procurement practices. common environmental criteria, providing model tender specifications. (this is part of GPP).</td>
<td></td>
<td>Handbook and guide available from Commission.</td>
</tr>
<tr>
<td>Development of a method for and collection of consistent and reliable product data</td>
<td>The implementation of the Ecolabel, Ecodesign and Energy Efficiency labeling schemes will be linked closely to ensure that the data and scientific knowledge are used efficiently and that the information given to consumers is consistent.</td>
<td>The European Commission Joint Research Centre (JRC) has recently developed the International Reference Life Cycle Data System (ILCD) Handbook which provides governments and businesses with a basis for assuring quality and consistency of life cycle data, methods and assessments.</td>
</tr>
<tr>
<td>Establishment of an harmonised base for incentives</td>
<td>Aligning (fiscal) incentives, e.g. By identifying one of the labelling classes as a level below which Member States would not be allowed to set incentives.</td>
<td>Ecolabel: (2009) Article 11 states that national labels must at least adhere to the EU ecolabel standard.</td>
</tr>
<tr>
<td>Market based instruments for getting price right</td>
<td>Development of instruments to get prices right and internalize environmental costs, thereby supporting the uptake of energy and environmentally efficient products</td>
<td>The more intensive use of MBI has also been advocated in the EU’s 6th Environment Action Programme (6th EAP) and the renewed EU Sustainable Development Strategy as well as in the Europe 2020 strategy for smart, sustainable and inclusive growth introduced in 2010.</td>
</tr>
<tr>
<td>Europa Diary</td>
<td>Information for schools, awareness creation</td>
<td>The Diary is circulated to schools and in the 2010-11 edition 3.2 million have been distributed. Demand regularly outstrips supply for this Diary, however patterns of distribution vary between EU member states.</td>
</tr>
<tr>
<td>Dolceta</td>
<td>Consumer awareness campaign</td>
<td>Possible push to expand campaign</td>
</tr>
<tr>
<td>Work with the retail sector to promote the purchase of greener products and the greening of their supply chains - Retailer</td>
<td>Include the retail sector into the SCP/SIP framework</td>
<td>Revision of progress is planned for 2011 Forum has expanded recently, initial success REAP (2009): voluntarily to reducing the environmental footprint of the retail sector and its supply chain, promoting more sustainable products, and better informing consumers.</td>
</tr>
<tr>
<td>Instrument</td>
<td>Description</td>
<td>Progress to date</td>
</tr>
<tr>
<td>------------</td>
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<tr>
<td>Forum self-commitments and agreement on a code of conduct, as well as additional information campaigns aimed at consumers.</td>
<td>The ultimate goal is the decoupling of economic growth from resource consumption.</td>
<td>The Resource Efficiency flagship initiative is the seventh and last initiative under the Europe 2020 strategy. It was adopted in January of 2011 and will be accompanied by a roadmap to a resource-efficient Europe due to be released in mid-2011.</td>
</tr>
<tr>
<td>Tool to monitor, benchmark and promote resource efficiency</td>
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</tr>
<tr>
<td>Revise EMAS Regulation</td>
<td>Management tool for companies and other organizations to evaluate report and improve their environmental performance.</td>
<td>2010: New regulation entered into force (EMASIII) includes larger scale and scope, new label, introduction of environmental core indicators, with which environmental performance can be thoroughly documented. Single corporate registration also possible.</td>
</tr>
<tr>
<td>Tools to monitor, benchmark and boost the uptake of eco-innovation in the EU</td>
<td>Eco-innovation is about reducing our environmental impact and making better use of resources. This means developing products, techniques, services and processes that reduce CO2 emissions, use resources efficiently, promote recycling and so on.</td>
<td>Between 2008 and 2013 nearly EUR 200 million is being made available to fund projects under the eco-innovation initiative. A 2 year Measuring Eco-Innovation (MEI) OECD funded report was completed in 2009.</td>
</tr>
<tr>
<td>Establish an Environmental Technology Verification scheme</td>
<td>Aims to provide technology developers and vendors with the possibility to have an independent, credible validation of the performance claims related to their new environmental technologies. Additionally, it aims to accelerate the market penetration of green technologies</td>
<td>ETV pre-programme has been launched in context of ETAP. Expansion to the wider economy is planned. Several EU-funded research projects have been funded recently. Business plan for an EU-wide ETV scheme, developed by TRITECH (2009).</td>
</tr>
<tr>
<td>Develop an industrial policy for environmental industries</td>
<td>Use various tools to promote the EU’s environmental industries and develop a coherent policy</td>
<td>Competitiveness of Eco-industries report (2009, Ecorys). 2010: Environment included into the new EU industrial policy. Study on Programmes to promote environmental skills (2010, Ecorys). Lead Market Initiative: Launched in 2007, Mid-term evaluation has been completed in 2009. A final</td>
</tr>
<tr>
<td>Instrument</td>
<td>Description</td>
<td>Progress to date:</td>
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</table>
| Additional assistance to Small and Medium Size Enterprises | Helping Environmental SME's to become more competitive and to cope with EU regulation | 2007: ECAP: Environmental Compliance Assistance Programme is launched.  
June 2008: The 'Small Business Act' for Europe was launched.  
Enterprise Europe Network helps SME's. |
| Global actions | Global actions to promote Sustainable Consumption and Production | 2010: The Global Sectoral Approaches study. Goal: To investigate a transnational approach in which all countries face similar benchmarks. |
| Promote sectoral approaches in international climate negotiations | |  |
| Promote good SCP practice internationally. | | Ongoing SWITCH Asia initiative. |
| Promote international trade in environmental goods and services | | 2010: Doha negotiations still progressing slowly. EU does highlight further commitment to promote trade in EGS's. |
*The questionnaire in this annex was used for member state policy staff. Similar questionnaires were used for other stakeholders, but have been excluded in order to save space.

Thank you for participating in our survey. It consists of 15-20 multiple choice questions and will take approximately 10-15 minutes to complete. All of your answers will be kept private and confidential.

Before answering the questionnaire, please review the headline objectives of the Sustainable Consumption and Production and Sustainable Industrial Policy (SCP/SIP) Action Plan listed below. These may be helpful to keep in mind while answering the questionnaire.

**The five high level objectives of the Action Plan are to:**

* Raise the market share of products with a lesser (Life Cycle Analysis [LCA] justified) environmental impact, while improving the competitiveness of the European economy
* Provide consumers with relevant information on product environmental performance
* To improve alignment and consistency between incentives and stimuli
* To enhance the potential of industry to reduce its environmental impact
* Promote SCP good practices internationally as well as the international trade of environmental goods and services

If you encounter any difficulties during the survey or need further information, please send an email to: Matthew.Smith@ecorys.com

* Please specify your type of organisation/background:
  - European Commission
  - Member State policy staff
  - Company / Trade Organisation
  - Charity / NGO / Pressure Group
  - Consumer Group / Other
In order to achieve the objectives of the Action Plan, a number of policy measures have been introduced (listed below). Please select the policy areas you are most familiar with/are interested in/are inline with your area of business:

- Extension of Eco-design directive
- Labeling of products (e.g. Extension of Energy Efficiency Labeling Directive (ELD) and amendment to Ecolabel regulation
- Streamlining incentives (e.g. green procurement and market based instruments)
- Produce consistent data and methods on products
- Retail and producers sector involvement
- Boosting resource efficiency (e.g. Environmental Technology Verification scheme, etc….)
- Support for Eco-innovation
- Enhance the environmental potential of industry (Revision of EMAS regulation, industrial policy development, raise SME awareness, etc….)
- Working towards global markets for sustainable products (developing sectoral approaches in international climate change negotiations, promote good practices, etc….)
- None of the above
- All of the above
If the policy actions introduced by the action plan were to be prioritised, in your opinion, what would be the most important ones? (Please rank the five most important policy actions)

<table>
<thead>
<tr>
<th>Policy Action</th>
<th>Rank 1</th>
<th>Rank 2</th>
<th>Rank 3</th>
<th>Rank 4</th>
<th>Rank 5</th>
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</thead>
<tbody>
<tr>
<td>Extension of Ecodesign directive</td>
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<td>Retail and producers sector involvement</td>
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<tr>
<td>Support Eco-innovation</td>
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<tr>
<td>Enhance the environmental potential of industry (Revision of EMAS regulation industrial policy development, raise SME awareness, etc...)</td>
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<tr>
<td>Working towards global markets for sustainable products (developing sectoral approaches in international climate change negotiations, promote good practices, etc...)</td>
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<tr>
<td>No prioritisation needed</td>
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</table>

If the policy actions were to be prioritised, on what basis should this be? (Please tick all that are relevant)

- [ ] GHG (Greenhouse gas) emission reductions
- [ ] Job creation
- [ ] Increasing the competitiveness of European industries
- [ ] Don’t know / N/A
- [ ] Other, please specify

............................................................
### What progress do you think has been made towards the following Action Plan objectives since 2008?

<table>
<thead>
<tr>
<th>Objective</th>
<th>1: Significant progress</th>
<th>2: Some progress</th>
<th>3: No change</th>
<th>4: Gone backwards</th>
<th>5: Don't know</th>
</tr>
</thead>
<tbody>
<tr>
<td>Raising the market share of products with a lesser (Life Cycle Analysis justified) environmental impact, while improving the competitiveness of the European economy</td>
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<tr>
<td>Providing consumers with relevant information on product environmental performance</td>
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<tr>
<td>Promote SCP good practices internationally as well as the international trade of environmental goods and services</td>
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<tr>
<td>Providing more information about sustainable consumption and production practices</td>
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<tr>
<td>Making production and consumption practices more sustainable</td>
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<tr>
<td>Improving the environmental performance of products</td>
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<tr>
<td>If progress has been made, to what extent has the SCP/SIP Action Plan contributed to it?</td>
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<tr>
<td>Raising the market share of products with a lesser (Life Cycle Analysis justified) environmental impact, while improving the competitiveness of the European economy</td>
<td>1 Major contribution</td>
<td>2 Some contribution</td>
<td>3 No contribution</td>
<td>4 Negative contribution</td>
<td>5 No progress</td>
</tr>
<tr>
<td>Providing consumers with relevant information on product environmental performance</td>
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<td>Improving the environmental performance of products</td>
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</tbody>
</table>
In your opinion, what impact has the Action Plan had on the following environmental and social objectives, in your country?

<table>
<thead>
<tr>
<th></th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>If possible, please provide an example:</th>
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</thead>
<tbody>
<tr>
<td>Reducing materials used in production:</td>
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<td>Reducing emissions to air:</td>
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<tr>
<td>Reducing emissions to water:</td>
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<td>Reducing the amount of waste generated:</td>
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<td>Changing people's behaviour towards sustainable consumption:</td>
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<tr>
<td>Changing costs to households (positive = lower cost):</td>
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<tr>
<td>Other, please specify</td>
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</tbody>
</table>

In your opinion, how useful was the guidance on green public procurement provided within the Action Plan? (On a scale from 1 to 5, 1=excellent, 5=poor)

<table>
<thead>
<tr>
<th></th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>I was not aware of the guidance</th>
</tr>
</thead>
</table>
### How would you describe the implementation of each of the policy actions in your country, in terms of timeliness?

<table>
<thead>
<tr>
<th>Policy Area</th>
<th>1 Implemented in a timely manner</th>
<th>2 Implemented with delays</th>
<th>3 Not implemented at all</th>
<th>4 I do not know/not applicable to my area of work</th>
<th>If possible, please provide an example:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Streamlining incentives (e.g. green procurement and market based instruments)</td>
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<tr>
<td>Boosting resource efficiency (e.g. Environmental Technology Verification scheme, etc...)</td>
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<tr>
<td>Enhance the environmental potential of industry (Revision of EMAS regulation, industrial policy development, raise SME awareness, etc...)</td>
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</tbody>
</table>

### How would you describe the ease of implementation in each of the policy areas in your country?

<table>
<thead>
<tr>
<th>Policy Area</th>
<th>1 Easy</th>
<th>2 Average</th>
<th>3 Difficult</th>
<th>4 Not implemented at all</th>
<th>5 Don't know</th>
<th>If possible, please provide an example:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Streamlining incentives (e.g. green procurement and market based instruments)</td>
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</tr>
</tbody>
</table>
How would you describe the cost of implementation in each of the policy areas in your country?

<table>
<thead>
<tr>
<th>Policy Area</th>
<th>1 Inexpensive</th>
<th>2 Average</th>
<th>3 Costly</th>
<th>4 I don't know</th>
<th>If possible, please provide an example:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Streamlining incentives (e.g. green procurement and market based instruments)</td>
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</tbody>
</table>

In your opinion, has the Action Plan contributed to increasing efficiency in the implementation of other policies in your area of specialisation:

<table>
<thead>
<tr>
<th>Benefit</th>
<th>1 Considerably</th>
<th>2 Slightly</th>
<th>3 Neutral</th>
<th>4 Don't know / N/A</th>
<th>If possible, please provide an example:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reducing costs and time</td>
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<tr>
<td>Reducing the administrative burden</td>
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<tr>
<td>Eliminating duplication of policies and actions</td>
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</tbody>
</table>

If you think that the implementation of the Action Plan was inefficient, please indicate the main sources of inefficiency:

- [ ] Communication between EU and MS
- [ ] Conflicts between policies
- [ ] Lack of dedicated resources for implementation
- [ ] Lack of knowledge
- [ ] The process was efficient
- [ ] Other, please specify

............................................................
Returning to the measures covered by the Action Plan:

- Extension of Eco-design directive
- Labeling of products (e.g. Extension of Energy Efficiency Labeling Directive (ELD) and amendment to Ecolabel regulation
- Streamlining incentives (e.g. green procurement and market based instruments)
- Produce consistent data and methods on products
- Retail and producer sector involvement
- Boosting resource efficiency (e.g. Environmental Technology Verification scheme, etc...)
- Support for Eco-innovation
- Enhance the environmental potential of industry (Revision of EMAS regulation, industrial policy development, raise SME awareness, etc...)
- Working towards global markets for sustainable products (developing sectoral approaches in international climate change negotiations, promote good practices, etc...)

To what extent do you think the Action Plan has improved the synergy and coherence between these instruments?

- To a large extent
- To some extent
- Not at all
- Don’t know

In your view, to what extent do the instruments under the Action Plan contradict other initiatives in your country/region or at an EU level?

<table>
<thead>
<tr>
<th>1</th>
<th>2</th>
<th>3</th>
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<th>If possible, please provide an example:</th>
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<tr>
<td>To a large extent</td>
<td>To some extent</td>
<td>Not at all</td>
<td>I don't know</td>
<td></td>
</tr>
</tbody>
</table>

At your country level:

At EU policies level:

In your opinion, to what extent has the Action Plan played a role in:

- The preparation of legislative actions in your country
- The establishment of improved cooperation between your country and other Member States
In your opinion, what is the likelihood that the instruments introduced by the Action Plan will have long lasting effects on the sustainability of production and consumption in your country?

<table>
<thead>
<tr>
<th>Instrument</th>
<th>1 Very likely</th>
<th>2 To some extent</th>
<th>3 Unlikely</th>
<th>4 Very unlikely</th>
<th>5 Don't know</th>
</tr>
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<td>Extension of Ecodesign directive</td>
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<tr>
<td>Support Eco-innovation</td>
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<tr>
<td>Working towards global markets for sustainable products (developing sectoral approaches in international climate change negotiations, promote good practices, etc...)</td>
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<tr>
<td>None of the above will have a long lasting effect on sustainable production and consumption</td>
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</table>

How well do you think the following elements are shared and disseminated in your country?

<table>
<thead>
<tr>
<th>Element</th>
<th>1 Very well</th>
<th>2 Moderately well</th>
<th>3 Not very well</th>
<th>4 Not at all</th>
<th>5 Don't know</th>
</tr>
</thead>
<tbody>
<tr>
<td>Best practice on green procurement for EU Member States</td>
<td></td>
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</tr>
<tr>
<td>Know how and expertise in the field of resource efficiency among industries and particularly SMEs</td>
<td></td>
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<td></td>
</tr>
<tr>
<td>Data and information on products and their related environmental impacts</td>
<td></td>
<td></td>
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</tr>
</tbody>
</table>

Do you have any other comments relevant to this evaluation of the Action Plan on Sustainable Consumption and Production and Sustainable Industrial Policy (SCP/SIP)?

---

Mid-term evaluation of the SCP/SIP Action Plan
## Annex E: Table of interviewees

<table>
<thead>
<tr>
<th>Organisation</th>
<th>Relevant instrument</th>
</tr>
</thead>
<tbody>
<tr>
<td>European Commission</td>
<td>ETV/ETAP, EMAS, Resource efficiency, Ecodesign, IPP ECAP, GPP, Ecolabel, Retail Forum</td>
</tr>
<tr>
<td>ENTR x 3</td>
<td>Ecolabel, SCP/SIP in general ECAP</td>
</tr>
<tr>
<td>ENER x 2</td>
<td>SCP/SIP in general, Ecodesign, Energy Labelling</td>
</tr>
<tr>
<td>Stakeholders</td>
<td></td>
</tr>
<tr>
<td>ERRT</td>
<td>GPP, SCP/SIP AP</td>
</tr>
<tr>
<td>UEAPME</td>
<td>GPP, SCP/SIP AP</td>
</tr>
<tr>
<td>EUROCOMMERCE</td>
<td>GPP, SCP/SIP AP</td>
</tr>
<tr>
<td>Food and Drink Europe</td>
<td>Retail forum, Ecolabel</td>
</tr>
<tr>
<td>The European Consumers Organisation Bureau (BEUC)</td>
<td>Sustainable Consumption</td>
</tr>
<tr>
<td>The European Organisation for Packaging and the Environment x 2</td>
<td>All SCP areas</td>
</tr>
<tr>
<td>European Environmental Bureau x 2</td>
<td></td>
</tr>
<tr>
<td>European SCP Food Roundtable</td>
<td></td>
</tr>
<tr>
<td>PU Europe: the European voice of the polyurethane (PUR / PIR) insulation industry</td>
<td>All SCP areas</td>
</tr>
<tr>
<td>Member State representatives</td>
<td></td>
</tr>
<tr>
<td>Finnish Ministry for the Environment</td>
<td>Finland</td>
</tr>
<tr>
<td>French Ministry of Sustainable Development</td>
<td>France</td>
</tr>
<tr>
<td>Netherlands Ministry of International Environmental Affairs</td>
<td>Netherlands</td>
</tr>
<tr>
<td>Environmental Agency of the Basque Country</td>
<td>Spain</td>
</tr>
<tr>
<td>Department for Environment, Food and Rural Affairs/ DG ENV</td>
<td>UK/Europe</td>
</tr>
<tr>
<td>Department for Environment, Food and Rural Affairs (DEFRA) x 5</td>
<td>UK (SCP)</td>
</tr>
</tbody>
</table>
## Annex F: Detailed Intervention Logic*

Table 11 Draft intervention logic for SCP / SIP Action Plan

<table>
<thead>
<tr>
<th>High Level Objectives</th>
<th>Specific objectives</th>
<th>Activities/outputs</th>
<th>Expected Results (outcomes)</th>
<th>Impact</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Raise the market share of products with a lesser (LCA justified) environmental impact</td>
<td>Enlarge the framework of the Ecodesign directive to include more products using energy</td>
<td>Identification of targeted products</td>
<td>Closing policy gaps and create uniform criteria for EU products (addressing the market fragmentation problem)</td>
<td>Environmental impact: significant savings on energy</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Setting minimum requirements for acceptance in internal market</td>
<td>Consistency of legislations across the EU MS</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Setting advanced benchmarks for environmental performance</td>
<td>Raise market share of products with environmentally performing features</td>
<td>Social impact: higher purchasing prices for consumers and buyers, affecting low income households</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Boost innovation in energy efficiency solutions</td>
<td></td>
</tr>
<tr>
<td>2 Provide consumers with relevant information on product performance</td>
<td>Extend the Energy Labelling directive to cover a wider range of products</td>
<td>Identification of Energy-labelling categories and modalities of the label</td>
<td>Improved information to consumers including young people and adults on more products which will enable consumers to make informed decisions about their purchases.</td>
<td>Environmental impact: improved environmental performance of products</td>
</tr>
<tr>
<td>3 To improve alignment and consistency between incentives and stimuli</td>
<td>Revision of the Ecolabel Regulation</td>
<td>Simplified and streamlined process for obtaining an Ecolabell</td>
<td>Closing policy gaps and create uniform criteria for EU products (addressing the market fragmentation problem)</td>
<td>Economic Impact: higher costs for companies</td>
</tr>
<tr>
<td></td>
<td>Engage retailers and producers to commit to ambitious actions towards more sustainable production while the EU supports actions to increase consumer’s awareness</td>
<td>Retailers and producers commit to ambitious actions towards more sustainable production</td>
<td>Producers have easier access to an Ecolabel</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Extend the geographical coverage of</td>
<td></td>
<td>Raise market share of products with environmentally performing features</td>
<td></td>
</tr>
<tr>
<td>High Level Objectives</td>
<td>Specific objectives</td>
<td>Activities/outputs</td>
<td>Expected Results (outcomes)</td>
<td>Impact</td>
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<tr>
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</tr>
<tr>
<td></td>
<td></td>
<td>successful initiatives</td>
<td>Reduce footprint of the retail sector and supply chain</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Tools are developed to inform young people to increase their awareness On-line education modules are developed for adults</td>
<td></td>
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</tr>
<tr>
<td></td>
<td>Consistent data and methods on products: Make data and methods to assess environmental performance of products available Sharing of data on products and their related environmental impacts</td>
<td>Data and methods are developed and are shared</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Incentives</td>
<td>Establish a harmonised base for public procurement (in the EU and the MS) Establish a harmonized base for incentives (in the EU and the MS)</td>
<td>Identify one of the labelling classes as a minimum below which public authorities are not allowed to purchase</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Alignment of incentives across the EU</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Promote green procurement</td>
<td>Commission provides guidance and tools to public authorities to green their procurement practices</td>
<td>Identify one of the labelling classes as a minimum below which MS are not allowed to set incentives</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Setting the right price of products (through positive or negative MBI) Sets of GPP tools are developed and shared with public authorities</td>
<td></td>
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<tr>
<td></td>
<td></td>
<td></td>
<td>Induced innovation towards sustainable production Induced economies of scale Increased awareness and improved green procurement practices</td>
<td></td>
</tr>
<tr>
<td></td>
<td>To enhance the potential of industry to reduce its environmental impact</td>
<td>Boosting resource efficiency Developing tools to monitor, benchmark and promote resource efficiency taking into account a life cycle approach and including trade Development of detailed material-based analysis and targets</td>
<td>Resource efficiency monitoring, benchmarking and promotion tools are developed and are in place</td>
<td></td>
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<tr>
<td></td>
<td></td>
<td></td>
<td>Promote resource efficiency</td>
<td></td>
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<tr>
<td></td>
<td></td>
<td></td>
<td>Environmental impact: Improved resource efficiency</td>
<td></td>
</tr>
</tbody>
</table>

Mid-term evaluation of the SCP/SIP Action Plan
<table>
<thead>
<tr>
<th>High Level Objectives</th>
<th>Specific objectives</th>
<th>Activities/outputs</th>
<th>Expected Results (outcomes)</th>
<th>Impact</th>
</tr>
</thead>
<tbody>
<tr>
<td>Support eco innovation</td>
<td>Development of tools to monitor, benchmark and boost eco-innovation and its uptake in the EU</td>
<td>Monitoring tools are developed</td>
<td>Improved confidence and uptake of new technology in the market</td>
<td>Environmental impact: improved performance of products</td>
</tr>
<tr>
<td>Development of an EU wide Environmental Technology Verification Scheme</td>
<td>An EU-wide Environmental Technology Verification System (ETVS) is developed</td>
<td></td>
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</tr>
<tr>
<td>Enhancing the environmental potential of industry</td>
<td>Revise the EMAS</td>
<td>The EMAS is revised</td>
<td>Increased participation of companies in the EMAS scheme</td>
<td>Environmental impact: Improved environmental performance of products</td>
</tr>
<tr>
<td>Developing industrial policy initiatives for environmental industries</td>
<td></td>
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</tr>
<tr>
<td>Helping SMES by raising awareness and disseminating the Know-how and expertise gained through other initiatives in the EU in the filed of environment and energy</td>
<td>Initiatives are developed. These will address: Internal Market, Better regulation, standardization and access to finance</td>
<td></td>
<td>Improve competitiveness of environmental industries and their uptake by other sectors of the economy.</td>
<td>Economic impact: Growth of EU industries</td>
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<tr>
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<tr>
<td></td>
<td>Awareness raising and sharing information events/tools are developed to SMES</td>
<td></td>
<td>Improved SMEs performance on the environmental front</td>
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<tr>
<td></td>
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<td></td>
<td>Better movement of better performing products across the EU</td>
<td></td>
</tr>
<tr>
<td>Maximize the international contribution of the EU's SCP standards and the economic and environmental benefits from the EU’s environmental goods and services</td>
<td>Grow the global Markets for sustainable products. Promote sectoral approaches in international climate negotiations Promote good practices internationally Promote international trade in environmentally friendly goods and services on the basis of international standards</td>
<td>Governments and industries develop sectoral approaches and commit to specific performance standards (specific energy-efficiency benchmarks or specific emissions) UN Consumption and production 10-year Framework; EU-Asia partnership; support to international roundtables and panels; Establishment of the IPEEC between</td>
<td>Uptake of good practices for green consumption and production outside the EU and adoption of green technology</td>
<td>Environmental impact: Improved environmental performance of production in developing countries Economic impact: Growth of EU industries</td>
</tr>
<tr>
<td>High Level Objectives</td>
<td>Specific Objectives</td>
<td>Activities/Outputs</td>
<td>Expected Results (Outcomes)</td>
<td>Impact</td>
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<tr>
<td>-----------------------</td>
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</tr>
<tr>
<td>services sector</td>
<td></td>
<td>the EU, China, India and South Korea</td>
<td>Liberalization of trade in environmental goods and services in WTO negotiations</td>
<td></td>
</tr>
</tbody>
</table>
Annex G: List of Acronyms

<table>
<thead>
<tr>
<th>Acronym</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>AP</td>
<td>Sustainable Consumption &amp; Production/Sustainable Industrial Policy Action Plan</td>
</tr>
<tr>
<td>ANEC</td>
<td>European Association for the Co-ordination of Consumer Representation in Standardisation</td>
</tr>
<tr>
<td>BEUC</td>
<td>European Consumers Organisation</td>
</tr>
<tr>
<td>BREAM</td>
<td>Building Research Establishment Environmental Assessment Method</td>
</tr>
<tr>
<td>CIP</td>
<td>Competitiveness and Innovation Framework Programme</td>
</tr>
<tr>
<td>CDM</td>
<td>Clean Development Mechanism</td>
</tr>
<tr>
<td>CSR</td>
<td>Corporate Social Responsibility</td>
</tr>
<tr>
<td>DEFRA</td>
<td>Department for Environment, Food and Rural Affairs</td>
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<tr>
<td>DMC</td>
<td>Domestic Material Consumption</td>
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<tr>
<td>EC</td>
<td>European Commission</td>
</tr>
<tr>
<td>ECAP</td>
<td>Environmental Assistance Compliance Programme</td>
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<tr>
<td>EEA</td>
<td>European Environment Agency</td>
</tr>
<tr>
<td>EEB</td>
<td>European Environmental Bureau</td>
</tr>
<tr>
<td>EGSS</td>
<td>Environmental Goods and Services Sector</td>
</tr>
<tr>
<td>EIC</td>
<td>European Information Centre</td>
</tr>
<tr>
<td>EIP</td>
<td>Entrepreneurship and Innovation Programme</td>
</tr>
<tr>
<td>ELD</td>
<td>Energy Labelling Directive</td>
</tr>
<tr>
<td>EMAS</td>
<td>Eco-Management and Audit Scheme</td>
</tr>
<tr>
<td>EMS</td>
<td>Environmental Management system</td>
</tr>
<tr>
<td>EPC</td>
<td>Energy Performance Certificate</td>
</tr>
<tr>
<td>ESP</td>
<td>Environmental Service Provider</td>
</tr>
<tr>
<td>ETAP</td>
<td>Environmental Technologies Action Plan</td>
</tr>
<tr>
<td>ETV</td>
<td>Environmental Technology Verification Scheme</td>
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<tr>
<td>EU</td>
<td>European Union</td>
</tr>
<tr>
<td>EU ETS</td>
<td>European Union Emissions Trading Scheme</td>
</tr>
<tr>
<td>EuP</td>
<td>Energy using Products</td>
</tr>
<tr>
<td>EU SDS</td>
<td>European Union Sustainable Development Strategy</td>
</tr>
<tr>
<td>FEC</td>
<td>Final Energy Consumption</td>
</tr>
<tr>
<td>GDP</td>
<td>Gross Domestic Product</td>
</tr>
<tr>
<td>GHG</td>
<td>Greenhouse Gas</td>
</tr>
<tr>
<td>GPP</td>
<td>Green Public Procurement</td>
</tr>
<tr>
<td>HDI</td>
<td>Human Development Index</td>
</tr>
<tr>
<td>IPP</td>
<td>Integrated Product Policy</td>
</tr>
<tr>
<td>IPPC</td>
<td>Integrated Pollution Prevention and Control</td>
</tr>
<tr>
<td>IPST</td>
<td>Institute of Prospective Technological Studies</td>
</tr>
<tr>
<td>JRC</td>
<td>Joint Research Council</td>
</tr>
<tr>
<td>LCA</td>
<td>Life Cycle Assessment</td>
</tr>
<tr>
<td>LEED</td>
<td>Leadership in Energy and Environmental Design</td>
</tr>
<tr>
<td>MBI</td>
<td>Market Based Instruments</td>
</tr>
<tr>
<td>MDGs</td>
<td>Millennium Development Goals</td>
</tr>
<tr>
<td>MEEuP</td>
<td>Methodology for the Ecodesign of Energy using Products</td>
</tr>
<tr>
<td>MEErP</td>
<td>Methodology for the Ecodesign of Energy related Products</td>
</tr>
<tr>
<td>MEPS</td>
<td>Minimum Energy Performance Standards</td>
</tr>
<tr>
<td>MS</td>
<td>Member State</td>
</tr>
<tr>
<td>Abbreviation</td>
<td>Full Form</td>
</tr>
<tr>
<td>--------------</td>
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</tr>
<tr>
<td>Mtoe</td>
<td>Million tonnes of oil equivalent</td>
</tr>
<tr>
<td>NAMAs</td>
<td>Nationally Appropriate Mitigation Actions</td>
</tr>
<tr>
<td>NAP</td>
<td>National Action Plan</td>
</tr>
<tr>
<td>NEEAPs</td>
<td>National Energy Efficiency Action Plans</td>
</tr>
<tr>
<td>NGO</td>
<td>Non-Governmental Organisation</td>
</tr>
<tr>
<td>NMS</td>
<td>New Member State</td>
</tr>
<tr>
<td>NSPPP</td>
<td>National Sustainable Public Procurement Programme</td>
</tr>
<tr>
<td>OECD</td>
<td>Organisation for Economic Cooperation and Development</td>
</tr>
<tr>
<td>PPPI</td>
<td>Public Procurement Promoting Innovation</td>
</tr>
<tr>
<td>REAP</td>
<td>Retailers Environmental Action Programme</td>
</tr>
<tr>
<td>RoHS</td>
<td>Restriction of Hazardous Substances</td>
</tr>
<tr>
<td>SCP</td>
<td>Sustainable Consumption and Production</td>
</tr>
<tr>
<td>SME</td>
<td>Small and medium sized enterprise</td>
</tr>
<tr>
<td>SPP</td>
<td>Sustainable Public Procurement</td>
</tr>
<tr>
<td>SRPP</td>
<td>Socially Responsible Public Procurement</td>
</tr>
<tr>
<td>TWh</td>
<td>Terra Watt hour</td>
</tr>
<tr>
<td>UEAPME</td>
<td>European Association of Craft, Small and Medium-sized Enterprises</td>
</tr>
<tr>
<td>UNEP</td>
<td>United Nations Environment Programme</td>
</tr>
<tr>
<td>VAT</td>
<td>Value Added Tax</td>
</tr>
<tr>
<td>WEEE</td>
<td>Waste Electrical and Electronic equipment</td>
</tr>
<tr>
<td>WTO</td>
<td>World Trade Organisation</td>
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</table>