

PREPARING FOR THE REVIEW OF THE THEMATIC STRATEGY ON THE PREVENTION AND RECYCLING OF WASTE

Report from stakeholder event - 22 June 2010, Brussels

Supporting the Review of the Thematic Strategy on Waste Prevention and Recycling

1. INTRODUCTION

On the 22 June 2010 the European Commission held a stakeholder event to help inform the review of the Thematic Strategy (TS) on Waste Prevention and Recycling. Soledad Blanco, Director of Environment Directorate C, provided an introduction to the day by explaining the general policy context and the focus on resource efficiency. Klaus Kogler, Head of the Sustainable Production and Consumption Unit (C2), then presented on the anticipated approach to the review. They were followed by a technical presentation from Catherine Bowyer, a senior policy analysis at the Institute for European Environmental policy (IEEP). This set out the context for the day's discussions in terms of key waste trends in the EU and their anticipated evolution up to 2030. The presentations, along with the background report for the day, can be downloaded from <http://www.eu-smr.eu/tswpr/meetings.php>, general information on the review process can be found from <http://ec.europa.eu/environment/waste/strategy.htm>.

Four working groups took up the main part of the day. This paper presents the main points of discussion in each of the working groups. The groups were formed of invited stakeholders active in the field of waste policy and included representatives from industry (both production and waste management), NGOs, Member States, local and regional authorities and the research community. The four working groups were:

1. Practicalities of implementing the Waste TS and its objectives
2. Prevention of waste
3. International influence and impact of EU waste management policy
4. The EU recycling market

The outcome of each working group was presented and discussed in a plenary session. The event was concluded by Michel Sponar, European Commission policy officer in charge of coordinating the TS review.

This paper is not intended to be a full set of minutes, but rather a summary of the key areas of discussion amongst the working group participants. The discussions were held under 'Chatham House Rules' ie that participants are free to use the information received, but neither the identity nor the affiliation of the speakers may be revealed. As a consequence comments made are summarised below but are not attributed to individual working group members.

The outcomes from discussions, and subsequent additional feedback from stakeholders, will be used to inform the study being completed by IEEP, and partners, to help support the review of the waste TS.

We would like to take this opportunity to thank all stakeholders for their active and open participation in the working groups.

2. SUMMARY OF KEY MESSAGES

The following represents a brief summary of the main points raised by stakeholders on 22nd June. This consists of a summary of key messages and brief points of interest under each of the four working groups. Detailed summaries of discussions are annexed in section 4 of this note. For more information and background information on discussions that took place on the 22nd June a background paper can be downloaded at <http://www.eu-smr.eu/tswpr/docs/meetings/Background%20Report-final.doc>

2.1 KEY OVERARCHING MESSAGES

Throughout the day several themes continually emerged during discussions, these included the following:

- That the TS was considered to have been useful for fixing a clear frame for waste management in the EU. The TS had some impact on the diffusion of key concepts such as the waste hierarchy or the LCA approach. The main action of consequence notes was the adoption of the Waste Framework Directive (WFD);
- That further efforts should be made to ensure that waste policies are based on sound knowledge by improving the reliability of statistics and developing new indicators that better reflect the progress made in applying the waste hierarchy and achieving a "recycling society";
- That further efforts are needed in order to effectively address the question of waste prevention and that new policy solutions are needed to deliver this; that some progress has been achieved in terms of recycling and landfill reduction, but that large differences persist between Member States which should be addressed;
- That EU policies are leading to higher levels of exports to third countries of materials for recycling and reuse; better mechanisms should be put in place to address the potential environmental and economic (missed opportunities, possible risks in terms of raw material supply) consequences of this trend. It was considered that the transformation of waste management solutions represents an opportunity for the EU as a whole, but we need additional instruments to help bring about sustainable improvements
- That promoting markets for secondary raw materials is important in helping deliver more environmentally sustainable waste management, however, delivering such a market is dependent upon product design, collection, processing, and economic factors;
- That a clear link should be established between waste, design and resources/climate policies.

2.2 IMPLEMENTATION OF THE THEMATIC STRATEGY

Reflecting on the main achievement/limitations of the Thematic Strategy:

- The TS was felt to have increased debate and led to the diffusion of key concepts (waste hierarchy, LCA approaches) and increased awareness;
- Stakeholders noted that there has been progress in terms of reductions in landfill and increases in recycling, however, extent of progress and speed varies significantly between Member States
- The new WFD was noted to have made a significant difference in policy terms, and need to now await its full implementation
- Limited results in terms of prevention, with quantitative waste prevention not happening to any significant degree
- Even if the collection and reliability of data has improved, significant limitations remain in terms of data quality and availability.

Main stakeholder recommendations to improve TS implementation

- Improve the knowledge base, this should include: the better collection and verification of data particularly on the prevention and export of waste; and the development of a new set of indicators related to resource efficiency.

- Improved integration ie better linkage between waste policy and product policies (ecolabel, ecodesign, GPP, REACH) and a need to better link future EU waste objectives with resource objectives (including the delivery of Greenhouse gas emission reduction).
- Optimal use of instruments, there was a need identified to better combine economic instruments (mainly in the hands of the MS and local/regional authorities) with legal instruments

2.3 DELIVERING WASTE PREVENTION

Considering the state of action on prevention

- Stakeholders noted that this is not an isolated goal and should be linked to efforts on resource use, consumption etc
- Some reduction in the generation of harmful waste was considered to have taken place but major breakthroughs have yet to be achieved in terms of both quantitative and qualitative prevention of waste.
- Role of the new WFD – this was noted to have made a direct link between waste management and waste prevention activities (specifically Article 29 of the Directive) and considered as definite progress, providing a framework for ongoing action. However, stakeholders felt that dedicated enabling mechanism are needed to deliver change.

Barriers to/Enabling prevention progress

- Barriers were noted both in terms of preventing waste (from high consumption trends offsetting efficiency gains to consumer reluctance to change their preferences) and measuring prevention progress (including a lack of comparability of measurement approaches across Europe and difficulties in measuring the environment impact of change).
- Stakeholders considered that there is no one overarching policy solution and that there is a need for different options to address different needs across society from the consumption patterns of consumers to the resource intensity of different industries
- There was division on the question of prevention targets, some felt that these are useful tools for focusing attention (even if they are largely aspirational). It was commented that there is a need not for one overarching target but some degree of specificity in order to drive action in different sectors.

2.4 INTERNATIONAL INFLUENCE

Patterns of export

- The level of trade in materials for recycling and reuse with third countries was noted to be rising, driven by: targets promoting increased rates of recycling; demand for raw materials in international market places; and pricing factors including the lower cost of labour and lower environmental standards in some regions outside the EU.
- Stakeholders noted that increasing levels of international flows in goods for recycling and reuse is not necessarily a bad thing, but this depends on the quality of processing delivered and quality of materials shipped ie reducing the levels of disposal of poorly sorted or inappropriate materials in the receiving country.

Options for addressing this question

- It was noted that the EU has a limited ability to impact on economic cycles ie to prevent export if materials are needed elsewhere, there is a need to find other mechanisms by which Europe can influence trade in recycling and secondary raw materials.
- Usefulness should be added as a condition applied to products exported for reuse to avoid products with short remaining life times or with no obvious use being exported under the guise of reuse. This is intended to close loopholes surrounding export of goods for reuse.
- Key tools noted for improving the situation were: the tightening of export standards for materials for recycling to ensure clarity of origin and processing; developing BAT mechanisms for processing and integrating these into shipment requirements; and to ensure more effective producer responsibility throughout all product lifecycles leading to an overall reduction in environmental impact

2.5 DELIVERING A RECYCLING SOCIETY AND RECYCLING MARKETS

Defining a recycling society

- It was considered that this should be more than simply reducing the level of waste disposed of, and should lead to a situation where management of resources is better considered.
- That Member States are likely to be at different stages along the road to achieving this.
- That such a society should: be reusing/recycling products unless there is a good reason not to; have in place effective mechanisms to implement and enforce relevant legislation; and should promote high quality recycling and good sorting of recyclables.
- Delivering recycling markets Key is ensuring quality throughout the chain in order to make the market for secondary raw materials more robust and reliable
- Exports are needed in order to support a circulate economy ie one where we import most of our goods from abroad, but we need to have mechanisms in Europe to support the quality of this market.

Tools for promoting improved recycling markets

- Addressing market distortions – this might include addressing perversities in the market for green certificates, that apply to energy from waste but not recycling; using VAT adjustment/other fiscal tools to take account of the environmental impact of recycled goods; focus more effort on preventing illegal exports, harmonising standards of implementation across MS.
- Dealing with the question of exports – developing a new system for ensuring the traceability of materials to provide a basis for quality processing; requiring preparation for recycling and reuse to occur in the EU to increase quality of material flows; and developing a system to ensure that the quality of recyclables is raised.
- Building on existing policies – analysis should be conducted to identify which policy mechanisms are currently working most effectively, in addition stakeholders highlighted the need: to centralise guidance to ensure each waste stream is dealt with in the most environmentally efficient way; apply extended producer responsibility to additional waste streams; increase targets to further drive the markets; set up voluntary schemes to approve the most environmentally responsible recycling chains.
- Improve demand for recycled goods – improved schemes for labelling recycled content, demonstrating/certifying the environmental responsibility of the recycling products and further supporting green public procurement.

3. NEXT STEPS

The outcomes from discussions will be integrated into the study to support the review on the Thematic Strategy on waste prevention and recycling led by IEEP¹ due to be completed by the end of August 2010. Should you have any further comments or questions regarding the event summarised within this note please contact Catherine Bowyer of IEEP (cbowyer@ieep.eu).

¹ This is being completed by a consortium contracted to the Commission consisting of the Institute for European Environmental Policy (IEEP), Ecologic, Arcadis, Umweltbundesamt, BIO Intelligence Services (under a framework contract lead by BIO) and VITO, under contract ENV.G.4/FRA/2008/0112

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4.1 WORKING GROUP ONE: IMPLEMENTATION OF THE WASTE THEMATIC STRATEGY

This session aimed to investigate stakeholder's perceptions regarding the impact of the TS on waste prevention and recycling, the coverage of existing EU policies and whether additional action is needed to deliver the objectives of the TS. The overall goal of the Strategy is seen as moving waste management up the waste hierarchy and in so doing limiting the environmental impact of waste. The chair for the session was Alexander Neubauer of Ecologic.

Question 1: What would you consider to be the key impacts of implementing the Waste TS since its adoption in 2005?

Summary: The revised Waste Framework Directive (WFD) represents the major impact of the Waste TS; the decrease in landfilling should also be considered an achievement; providing a single document detailing the strategic direction of waste prevention and recycling policy had value to stakeholders; the Waste TS raised the awareness in Member States of key concepts such as the waste hierarchy, waste prevention and LCT; problems remain with regards to waste prevention, enforcement of waste law and simplification, meaning that there are still potential improvements.

- The Commission stated that the aim of the Waste TS was to provide a clear single vision for EU waste policy over a longer time-scale than was previously the case.
- Stakeholders agreed that the Waste TS provided a framework to signal consistency and coherence within the Commission's actions and that this was appreciated.
- Stakeholders felt that the Waste TS connected different building blocks; the extent of success as a result of this is unclear, but it has likely had some impact.
- The revision of the Waste Framework Directive (WFD) was seen to be the major impact of the Waste TS; some stakeholders saw the WFD in hindsight as a revolutionary document (the revision went beyond the proposals of the Waste TS), but it is now firmly established.
- Others felt that much of the drive for improvement appears to have come from other legislation, specifically the recycling Directives, and not necessarily from the Waste TS or the revised WFD.
- The encouragement of waste prevention programmes (as provided for in the revised WFD) is another important impact of the Waste TS.
- The Waste TS has helped to raise awareness in the Member States of the implications of the hierarchy and the Landfill Directive.
- Progress has been made in decreasing the amount of waste going to landfill.
- The inclusion of Life Cycle Assessment (LCA), and perhaps more importantly Life Cycle Thinking (LCT), is also important.
- The definition of recycling that stemmed from the Waste TS helped crystallise what is done with waste and had a practical effect. The definition has also helped with data generation.
- The focus on simplification and modernisation was seen by stakeholders as a potential benefit of the Waste TS, but some questioned whether the EU was the right level for proposing national prevention plans, given that there is no intention for EU level prevention plans.

Question 2: Have there been any limitations in terms of actions delivered and their contribution to meeting the aims of the Waste TS?

Summary: Greater integration across non-waste sectors and Directives would promote the aims of EU waste policy; implementation of existing Directives could be improved and there a range of options to achieve this; improved collection and quality of data is needed; information and best practice exchange should be promoted, through existing or new forums; specific guidance on key issues such as LCA/LCT would be useful; an EU lead on waste prevention could be beneficial; significant scope remains for simplification and better regulation.

- Promoting the recycling society requires deliberate development between Directives in a wide range of areas (e.g. chemicals, energy, pollution prevention and control). Not including end of waste and resource use elements within these Directive represents a missed opportunity. Synergies do exist but there is no obvious attempt to drive cross-Directive integration.
- Better consistency is needed across all Best Available Technology Reference Documents (BREFs); there is currently no mention of waste prevention within these documents.
- Knowledge and information circulation throughout the EU has not improved as a result of the Waste TS.
- Greater coherence between the main objectives of Directives in different areas would require more information and best practice exchange, which could be facilitated by the Commission. Existing forums (e.g. the Waste Management Committee and various informal and thematic networks) could be utilised better, and a wider forum of excellence to develop the big picture and promote integration could be convened (the European Chemicals Agency's REACH Forum for the Exchange of Information on Enforcement was cited as a potentially useful model).
- The lack of/poor implementation of existing legislation by Member States is of critical importance. There was some suspicion that non-compliance may currently be underreported, but it was recognised that this is difficult to measure and verify.
- A 'tougher' and more coherent approach to reporting may be required, to ensure more comparable and accurate data to enable comparative assessment of implementation.
- As the revised WFD has not yet been fully transposed in all Member States, it is difficult to assess whether there are (or will be) limitations related to this.
- Some stakeholders felt that local government/municipalities have a very limited role or voice within policy discussions, and that this is problematic as they are responsible for much of the implementation.
- Life Cycle Assessment (LCA) and Life Cycle Thinking (LCT) remain very abstract concepts and as a result the approach to their application appears to be on a case by case basis rather than the development of a consistent policy. A clearer definition of LCA/LCT is needed, as is better information and best practice exchange; these could be provided/supported at the EU level. LCT must consider the whole of the resource cycle, including waste considerations.
- There appears to be very little practical application of LCA at any level; it would be beneficial to consider defined waste treatment options for each product.
- Waste prevention policies are lacking at the EU level, and stakeholders were uncertain whether ongoing actions are enough to achieve the objective of decoupling waste from economic growth. Some stakeholders felt that if the EU took the lead and developed prevention policies, Member States might be more inclined to follow; however it was also suggested that the subsidiarity principle means that EU level targets may not be feasible or even desirable.

- Simplification has advanced since adoption of the Waste TS, but scope for further simplification still exists, in particular when relevant legislation is subject to review. It is also still too soon to assess whether 'simplification attempts' have really led to simplification.
- End of waste (EoW) criteria could promote the advancement of the internal recycling market; the impact of the Waste TS has been limited in this area. More work could be done on waste streams with an important market impact (e.g. metal and paper) as opposed to those with more local market potential (e.g. compost and aggregate).
- The approach of the Waste TS does not represent a change from the negative perception of waste management. As the 'waste treatment' sector becomes more integrated and influential, waste treatment/management should be seen as an industrial opportunity, and the wording/approach of the Waste TS needs to reflect this better.
- Some stakeholders (generally industry and NGOs) were supportive of the creation of a Waste Implementation Agency; others (generally Member States) were however less supportive.
- The development of common standards could help to expand internal markets for high quality secondary materials. Standards could relate to treatment processes and/or the outputs of treatment.

Question 3: Where do you consider the existing set of EU policy will lead us in the next 20 years? Is it sufficient to address the anticipated challenges in terms of waste prevention and management?

Summary: Member States should be allowed to develop and implement new waste prevention and recycling policies (according to the new Waste Framework Directive) before the EU takes further action; the prevention issue should be considered from various angles (resource efficiency, innovation, design etc), not just from the waste perspective; there is currently a gap between the state of discussion and actual application of waste prevention policies; new business models may be required; the EU's external environmental impacts are important; the EU is not yet utilising all the tools at its disposal to improve waste policy and management.

- The current waste focus approach in the Waste TS was considered by some stakeholders to be 'old fashioned'; the links to broader environmental and social aims, e.g. sustainability, energy and resource management should be considered.
- It is important to look at the problem of waste prevention from different angles, including resource efficiency, innovation, design approach, use and obsolescence. The tendency of the Waste TS to only look at the problem from a waste perspective is not enough as the sector waste sector cannot adequately influence overall consumption patterns; the 'inputs' into the waste sector (i.e. consumption) must also be managed.
- Some stakeholders felt that a shift beyond waste management and the seeking of synergies within 'clusters of legislation' could support the current aims of the Waste TS, including improving implementation without the need for a complete overhaul of the Waste TS.
- There is a gap between the state of discussion and application regarding waste prevention policies. It was suggested that absolute decoupling is required to address the anticipated challenges; this should be enforced by prevention policy. It would be possible to create indicators and gather data, and this would be required prior to the creation of any waste prevention targets.
- New business models are required at the macro level to shift from a focus on growth, and at the micro level to shift from selling goods to selling services.

- The environmental impacts generated outside the EU as a result of EU consumption were also seen as important; attempts could be made to highlight the negative impacts of no policy intervention by highlighting or pricing externalities.
- Stakeholders felt that the EU is not yet utilising all the tools at its disposal, and that harmonised waste standards will not be achieved while waste (and relevant non-waste) instruments (including economic instruments such as disposal taxes) remain unharmonised.
- The EU could potentially address the identified challenges in different ways; this will depend on the role the EU should play, whether the objective is to consolidate the situation and improve the waste management performance of certain Member States, or to advance performance in willing Member States which would hopefully pull poorer performing Member States along with them.
- As the revised WFD is still to be implemented, many prevention and recycling policies are yet to be produced. Member States should therefore perhaps be given the opportunity to implement waste prevention and recycling policies, then the effects of these policies could be assessed before considering the need for pushing the agenda forward.

Question 4: What action do you consider necessary to encourage further movement up the waste hierarchy?

Summary: The waste agenda could be better aligned with other strategies, e.g. jobs, green procurement and energy etc; there can be no ‘one size fits all’ solution to waste management; treatment taxes applied at the lower stages of the waste hierarchy are effective, and economic instruments seem most effective when linked to policy instruments; producer responsibility has potential, particularly when supported by fiscal incentives; market and fiscal instruments could be encouraged at the EU level; consumer pricing may change behaviour more effectively than taxation; disposal or landfill bans could be seen as a pre-condition for movement up the waste hierarchy; some actions remain outside the scope of the Waste TS as they occur outside the EU (e.g. shipments of waste); some level of residual waste should be recognised as a reality.

- To promote an internal market for waste, the waste agenda could be better aligned with other strategies, e.g. jobs, green procurement and energy etc; waste management is currently disconnected from the sources and reasons of generation. Quality standards could help to create demand.
- Due to the complexities of waste management, there can be no ‘one size fits all’ solution. Flanders and Denmark provide two examples where a range of instruments have been applied with good results. Treatment taxes applied at the lower stages of the hierarchy were considered very effective, and stakeholders agreed that economic instruments seem to be most effective when linked to policy instruments.
- Several existing tools and instruments could be used to promote the aims of the Waste TS, in particular producer responsibility. Stakeholders felt this may be most effective when supported by fiscal incentives. There was no agreement as to whether producer responsibility saved municipalities money.
- Market and fiscal instruments could be encouraged at the EU level.
- Some stakeholders felt that the application of economic instruments was more effective through consumer pricing, as this provides greater opportunities to change behaviour than taxation.

- Using the prospect of greenhouse gas reductions to promote better waste management was seen as representing only one single view of the waste problem, and stakeholders therefore felt it was too simplistic an approach.
- Much of the debate regarding secondary materials is 'passive'; the EU's role has been about 'pushing' Member States up the waste hierarchy (e.g. through collection and recycling targets) rather than 'pulling' them up (kindling the interest in recovering valuable material from waste). Good examples of 'pulling' type actions include public procurement measures, the UK's aggregate tax including revenue recycling and WRAP in the UK (which encourages research and provides project funding). Many stakeholders agreed that state interventions are necessary to drive interest in secondary materials.
- Many actions remain outside the scope of the Waste TS as they occur outside the EU; the most notable example is shipments of waste. The debate here has largely focused on illegal shipments, rather than considering that shipments are symptomatic of a failure to generate an adequate internal market.
- There was some discussion of the concept of 'lock-in', i.e. Member States investing in certain techniques or infrastructure which may reduce their ability to move up the waste hierarchy. Some stakeholders felt that the concept ignored the reality of the phased or gradual movement up the hierarchy that is likely in most Member States. Some degree of residual waste is also a reality, and certain infrastructure will always be required to utilise this. There has to be a mix of waste treatment methods combined to treat waste, there will not be a 100% recycling approach replacing former landfilling, there will be a mixture of recycling and energy recovery.

Question 5: What do you consider to be the main reasons for different levels of implementation across Member States both in terms of (a) EU waste legislation and (b) the 'waste hierarchy' principles?

Summary: The rate of improvement by Member States should be considered rather than absolute level of performance, to ensure that improvements are encouraged; the waste hierarchy has hitherto been somewhat flexible, making it harder to measure the progress of Member States; different factors determine Member States' different rates of movement up the hierarchy, including geology, historical circumstances, resource availability, health impacts, environmental awareness and secondary material costs; Member States are at different stages of the shift from focusing on control and formalisation of waste treatment, to protecting health, to focusing on prevention; the European Court of Justice may have a greater role to play in enforcement.

- The relative rate of improvement/change within Member States is important when comparing Member States' performance; this should be considered rather than absolute level of performance, to ensure that improvements are encouraged rather than solely focussing on the negatives.
- The waste hierarchy (in the previous incarnation of the Waste Framework Directive, rather than the binding hierarchy in the revised WFD) is somewhat flexible, which makes it harder to measure; it could however be investigated whether Member States have conducted a waste hierarchy assessment to measure their progress.
- As the hierarchy was not formally binding, stakeholders felt that other factors, which vary between Member States, determined the different rates of movement up the hierarchy, as they influence perceptions and responses to waste management. These include: geology, resource (air, water,

land) availability, health impacts from waste management, shifts in environmental awareness, and the stability of secondary material costs. Local and historical factors play an eminent role (e.g. in the UK holes from mining need to be filled and were thus used as landfill sites).

- As waste is viewed as a problem, finding ‘solutions’ (i.e. waste treatment/management) has been the predominant approach, rather than addressing the underlying causes of the problem (i.e. waste prevention).
- Changes in the environmental impact and potential economic value of waste streams over time has had an impact on waste management, changing the focus from control and formalisation to protecting health to focusing on prevention; the Member States are at different stages of this process.
- It was suggested that the Commission reinforces their infringement procedure activities. Member States would feel consequences for their poor performance by sanctions imposed by the European Court of Justice. More generally the consequences of non-compliance could be made clearer and enacted more regularly, although this approach was not supported by all stakeholders.

Question 6: How might these differences be addressed and more effective waste management across the EU be promoted? Would there be a role for further initiative, and if so what would be the added value of such an approach?

Summary: The Commission should set long-term objectives and assess tools to achieve them; all waste and relevant plans and strategies could be incorporated into a single complete waste strategy to provide direction; legislation should set the minimum standard; consistent interpretation of legislation could be facilitated; poor implementation and transposition by Member States should be addressed; step-by-step targets could be considered rather than one-off targets; a legislative ‘consolidation phase’ for Member States could be beneficial before moving on to new legislation; the benefits of improved waste management should be stressed; political will is needed to improve recycling rates; non-waste legislation and cohesion funding could contribute to recycling and waste prevention; the Commission could facilitate information and best practice exchange.

- Stakeholders felt that the Commission needs to set long-term objectives and assess what tools exist and compare the costs and benefits of different tools and combinations of tools.
- All waste and relevant plans and strategies could be incorporated into a single complete waste strategy to provide direction.
- The Commission pointed out that legislation should ideally set the minimum standard, whilst other mechanisms drive improvements forward.
- Consistent interpretation of legislation could be facilitated; the degree of interpretation is currently very broad due to internal subjectivities and the complex nature of legislation.
- Stakeholders felt that the Commission was justified in raising the issue of implementation, due to historically high infringement rates and the significance of the problems caused.
- Some transposition by Member States is not purposive i.e. not taken in the spirit in which it is intended; rather it is more focused on transposing the words accurately.
- Poor implementation in some Member States may be due to perception problems rather than policy problems, linked to limited understanding of the aims of the WFD and available human capital. One possible solution could be to set institutional requirements to facilitate the

implementation of key objectives of the Directive, e.g. a waste prevention officer at the relevant Ministry in each Member State.

- To tackle differences in implementation, a step-by-step approach could be facilitated, i.e. a 10% cumulative recycling target each year for five years rather than a 50% recycling target by 2015. Some legislation is already using this approach.
- There could be an argument for allowing a consolidation phase for Member States to focus on existing legislation, especially the new Directive on Waste, rather than preparing new Directives; not all stakeholders agreed on this point.
- Rather than just focusing on compliance as a means to avoid pressure or criticism from the Commission, waste management should be promoted in terms of the benefits that can be achieved through improvements, i.e. point out the benefits of policy rather than just focusing on regulatory requirements.
- Motivating Member States to improve their recycling rates is a long-term process dependent on political will; progress at the EU level is often based on the lowest common denominator, whereas it is technically possible to move much more quickly.
- There is potential for a broad range of non-waste legislation to contribute to recycling and waste prevention.
- Institutional capacity may be limiting the ability to improve.
- Cohesion funding should be used to promote recycling and prevention work rather than focusing on infrastructure lower down the waste hierarchy, e.g. incinerators.
- Most stakeholders agreed that a change in attitudes is required.
- The Waste Forum which met briefly in the 1990s was considered to have been a useful forum for knowledge exchange, but stakeholders generally agreed that better use could be made of existing systems rather than creating new ones. The Commission could potentially take on this facilitating role to aid capacity building in Member States and provision of advice, e.g. peer review of national waste and waste prevention strategies.
- The EU's role in facilitating information and best practice exchange was deemed by many stakeholders to be as important as its enforcement role.

4.2 WORKING GROUP TWO: WASTE PREVENTION

The waste TS contains the clear goal to promote the prevention of waste, which can be achieved in one of three ways:

- reduce the quantity of waste, including through the re-use of products or the extension of the life span of products;
- reduce the adverse impacts of the generated waste on the environment and human health; or
- reduce the content of harmful substances in materials and products.

This working group focused on whether the TS had been successful in promoting waste prevention. It went on to examine the barriers and potential policy solutions that might be employed to better promote prevention. The chair for this session was Hubert Reisinger of the Umweltbundesamt.

Question 1: Do you consider that there have been successes in terms of delivering waste prevention since the adoption of the Waste TS (i.e. since 2005)? If so what would you consider to be the key achievements?

Summary: Some successes and key achievements in waste prevention can be identified, but these are mostly not related to the Waste TS; only after the revised Waste Framework Directive (in particular Article 29) was issued can Member State activities be directly linked to the Waste TS; waste prevention is not an isolated goal, need to look at e.g. environmental impacts and life cycle thinking; revised WFD (Article 29) represents definite progress; major breakthroughs yet to be achieved on quantitative and qualitative waste prevention, although some reductions seen in harmful waste; question mark over whether 'coupling' between waste generation and growth in income has actually been proved.

Successes and key achievements since 2005 are:

- Prevention is on the agenda again.
- The revised Waste Framework Directive (in particular Article 29) which was provided for in the Waste TS represents definite progress.
- In the UK a better understanding of the reasons for food waste generation and the options for prevention was achieved. Unrelated to the Waste TS, the 'Love food, hate waste' campaign run by WRAP in the UK was launched two years ago, and its impact is starting to be measured.
- In Germany 270 existing waste prevention initiatives have been running; however, their impacts are as yet unknown.

Further comments on the topic were as follows:

- Waste prevention is not an isolated goal. The aim is to decouple waste generation from economic development. Looking at waste prevention alone means less without looking at the environmental impacts; life cycle thinking is needed.
- Some questions were raised by stakeholders as to how 'success' should be defined, e.g. in terms of environmental impacts rather than quantitative assessment of waste generation/prevention.
- A major breakthrough on quantitative waste prevention has not yet been achieved, according to data of waste generation; however, it may still be too early to assess this.
- On qualitative prevention (the reduction of harmful waste) some reduction can be seen although again there has not been a major breakthrough.
- There is much talk of 'decoupling', but the question was raised whether 'coupling' between waste generation and growth in income has actually been proved. In Germany and Austria there is a 1:1 relationship between income and waste generation, but the situation in the UK is different. Data in the UK is poor, but garden waste is now being separated from food waste collection, and it seems fairly certain that landfill tax is driving a reduction in waste.

Question 2: Do you consider that the Waste TS has helped in promoting concepts of waste prevention?

Summary: The Waste TS provides a framework for action going forward but needs implementation by legislation; only the revised Waste Framework Directive 2008/98/EC made the difference; if we are recycling, do we need to prevent waste altogether?; the Waste TS contained little or nothing new in terms of prevention that wasn't covered by previous waste legislation; the Waste TS did provide an umbrella for future prevention policies; dedicated enabling mechanisms are needed; prevention should not be diluted in resource efficiency or recycling policy.

- The Waste TS provides a framework for action going forward but needs implementation by legislation. Therefore only the revised framework directive 2008/98/EC made the difference. It was suggested that although it was agreed to review progress after five years, it may still be too soon to assess real progress.
- One individual felt that the Waste TS had not helped to promote waste prevention concepts.
- One individual felt that the Waste TS should have aimed to prevent sending waste to landfill; the question was raised as to whether we need to prevent waste altogether if we are recycling the waste that is created.
- Some stakeholders argued that a strategy means nothing without deployment and implementation. The Waste TS contained nothing new in terms of prevention that wasn't covered by previous waste legislation, but it did provide an umbrella for future prevention policies.
- Some useful mechanisms were enabled, e.g. money from landfill could be dedicated to prevention measures.
- It is important that prevention is in the Waste TS, but dedicated enabling mechanisms are needed. Prevention should not be diluted in resource efficiency or recycling policy.

Question 3: What are the major barriers to promoting and measuring waste prevention and how might these be overcome? Can waste prevention be reconciled with economic growth, and how?

Summary: Barriers to waste prevention: The motivation for action must be identified, to identify the right people to speak to; incentives must be well-targeted; industry is more sensitive to prices than other sectors; there may not be an incentive for prevention while money can be made from recycling; production efficiency is increasing but higher consumption means no overall change in resource use or waste; it is not easy to legislate on consumption but the goal could be seen as lessening the impacts of consumption; marketing should be used, in particular to tackle lack of self-perception by consumers; we need business models focussed on something other than mass volume; food industry/supermarkets are not catering to smaller households; it is unclear who is responsible for waste prevention; there are lots of local/small-scale measures but very few national policies; a shift is needed from waste policy to product policy; people/consumers are resistant to change; household waste prevention is easier to achieve than e.g. mining waste prevention but has less impact; many items classified as waste need not be; it will be challenging to create an EU-wide prevention policy.

Barriers to measuring waste prevention: Lack of comparability across cities and countries, common definitions are needed; environmental impacts are very difficult to measure, and different types of environmental impacts would need to be measured; indicators are needed to measure both cause and effect; lack of measurement techniques does not justify lack of action; waste to landfill can be measured very easily; industry must be involved; lack of a framework to provide incentives; consumers have power but a limited number will make the effort to make the 'right' choices.

Barriers to promoting waste prevention

- It is important to identify the motivation for action. You need to talk to the right people about the right things, e.g. if you want to extend the lifespans of products you need to talk to businesses about business models.

- It is important to target incentives well.
- Industry is more sensitive to prices than other sectors; waste can be a price signal for industry as it represents wasted raw materials which can impact profitability. Commercial waste is more difficult as the cost of dealing with waste is not necessarily linked to profitability.
- There may not be an incentive for prevention while money can be made from recycling.
- Although the efficiency of production is increasing, we are also consuming more products, resulting in no overall change in resource use or waste. Behaviour must be changed to consume less, or to create products with longer lifespans.
- It is not easy to legislate on consumption; industry dictates what we buy and industry is generally not interested in reducing consumption.
- However, the goal could be seen as lessening the impacts of consumption (of goods and services) on the environment rather than reducing consumption *per se*.
- Marketing is very effective and should be used, in particular to tackle lack of self-perception by consumers, i.e. people not realising what they're doing, in particular with food waste.
- We need business models focussed on something other than mass volume, that can deliver maximised profit per unit to enable lower production levels (this is the opposite to what we have now, less profit per unit, and higher and higher production levels).
- There are now more and smaller households (one or two persons). Many in the food industry/supermarkets have not followed this pattern, meaning that consumers have to buy a lot or in large packs, resulting in high levels of waste.
- Assessment needs to be made on who is responsible for waste prevention, in order to work out who should pay; at present there is 'multi-person irresponsibility'.
- Although there are lots of local/small-scale measures, re-use, home composting etc, there are not many national policies that have tried to tackle waste prevention, even though prevention has been at the top of the waste hierarchy for many years. There appears to have been a shift away from hard policy measures (taxes, bans) to smaller ways of collaborating across industries, integrating 'lifecycle thinking' into the supply chain and so on.
- A shift is needed from waste policy to product policy. The most successful measures are where bridges can be built between design and waste thinking.
- It is difficult for one country to act alone in a global market.
- People/consumers say they want to prevent waste, but they don't always mean it; people also don't like change, in particular when it is imposed by the State.
- Household waste prevention is easier to achieve but has less impact on overall waste reduction than e.g. say mining waste; the latter is harder to do but there are bigger savings to be realised. However, if you consumption is reduced at the household level, that has a knock-on effect on production throughout the chain.
- A lot of 'waste' is actually perfectly good; many items are classified as waste but need not be.
- It is/will be a challenge for the Waste TS to draw up or promote policies that are acceptable across all 27 EU Member States.
- More instruments are needed that are not based on monetary measures, e.g. the WEEE Directive.

Barriers to measuring waste prevention

- There is a lack of comparability across cities and countries; common definitions are needed, e.g. for 'municipal' waste.

- Statistics are actually the easiest part of measurement; the environmental impacts are very difficult to measure even when statistics are available and reliable.
- Measuring either the cause or the effect does not necessarily mean you can explain the other; indicators are needed to measure the cause, and indicators are needed to measure the effect.
- There is no model that allows us to predict what will happen in five years time, or even how the world would look in the absence of existing policy, but just because we cannot measure prevention does not mean we shouldn't try to achieve it; lack of data is not an excuse for doing nothing.
- There are very concrete targets set in the Landfill Directive and waste to landfill can be measured very easily.
- As we are talking about products and production, we need to talk to industry.
- In every Member State someone different is responsible for sustainable consumption at the government level. What is lacking is a framework to provide incentives.
- Whilst consumers do have power, it is possible that only 5-10 per cent will make the effort to make the 'right' choices.
- We need to consider what environmental impacts we are talking about, e.g. minimising carbon emissions, water footprint etc. There is a great deal of difficulty in grouping such different environmental impacts together, which poses an important impediment to measurement.

Question 4: What action do we recommend to the Commission? What would be the most effective actions to promote quantitative and qualitative waste prevention, at Member State and EU level?

Summary: Options discussed included: imposing 100% VAT on everything; placing landfill restrictions on certain materials/products; emulating the Flemish residual waste reduction target; setting up hire schemes for certain products, e.g. power tools; tackling the 'throwaway society' attitude by linking waste prevention to purchasing thinking; pay-as-you-throw schemes; encouraging industry to respond to (good) consumer behaviour; considering whether particular products need to be put on the market at all. No single measure can reach everyone.

- One effective, however unrealistic, measure to promote waste prevention would be to impose 100% VAT on everything.
- One end of pipe possibility is placing landfill restrictions on certain materials/products.
- The Flemish target for reducing residual waste (landfill + recycling + MBT etc) per household inhabitant has been very successful.
- Renting schemes could be set up for certain products, e.g. drills so that users don't have to buy their own. This would reduce consumption, which you could assume will also reduce waste.
- The 'throwaway society' needs to be addressed, e.g. people who buy three pairs of shoes a month and throw them away because they don't last, but because they're not made to and they're cheap, they don't care. Waste prevention needs to be linked to purchasing thinking.
- The question was raised as to how extended producer responsibility can be applied at the EU level? This would make the EU into an 'island'; the issue must be tackled at a global level. The market of Europe is wide-reaching, but shrinking.
- 'Pay-as-you-throw' schemes were discussed, and proved to be very controversial. It was argued that having a fee at all is more important than the level of the fee; any fee will raise awareness of the prevention issue. Others argued that the system works where there are other ways of dealing with

waste, as it only needs to be a little more expensive than the other options. Price elasticity plays a role; it is not linear.

- In Switzerland, packaging has become more streamlined as industry responds to consumer behaviour change, due to charges for their waste disposal.
- Payments by weight can be problematic e.g. for blocks of flats; however a payment could be imposed each time the waste container is opened – this is possible and it does work.
- It could be worth the EU considering whether particular products need to be put on the market at all, although EU policy may not be able to intervene in the markets in this way.
- Higher recycling rates are generally found where more waste is produced. In Wallonia a levy has been set on residual waste per inhabitant.
- No one measure will ever reach everyone.

Question 5: Is it feasible – or even desirable – to set quantitative / qualitative targets for waste prevention? If yes, for any particular waste streams? If no, what alternative policy approaches might be adopted?

Summary: Stakeholders were divided on this question; targets can be good to focus attention on a subject, even if they are largely aspirational; but much harm would be done to credibility of waste prevention policy if targets turn out to be really unrealistic; waste prevention policy should focus on incentives and measures and not on targets; Japanese resource efficiency targets are continually revised and resource efficiency there is improving; industry must be involved for such a resource efficiency scheme to work; qualitative targets already exist in some forms in the EU, e.g. for hazardous waste, REACH; some degree of sectoral specificity would be necessary to ensure fairness; EU level targets would be difficult to set – an overall target could be set with subsidiary measures to be determined at the local level.

- Stakeholders were divided on this question.
- Some stakeholders felt that if nothing else, targets are good to focus attention on a subject, even if they're largely aspirational.
- Other stakeholders felt that targets may be nice politically, but can be unrealistic and damaging to credibility of waste prevention policy; yet they often have to be reached even after the party that introduced them have gone. Waste prevention policy should focus on incentives and measures and not on targets.
- Japan has resource efficiency targets that are continually revised, and resource efficiency there is improving. Industry must be behind a scheme like this in order for it to work, in the form of an agreement between State and industry.
- There is an argument that quantitative targets do not/would not work. Targets prohibiting things cannot be used when dealing with products.
- Germany has a target to double resource efficiency by 2020 (as compared to 1994), but by 2007 only 10% of it has been reached, not 50%.
- Qualitative targets already exist in some forms in the EU, e.g. for hazardous waste, REACH.
- Some degree of sectoral specificity would be necessary in order to ensure fairness.
- It would be very difficult to set targets on a European scale; perhaps an overall target could be set, with subsidiary measures to be determined at the local level.

Question 6: What are the best methods and instruments for integrating life-cycle analysis/thinking into waste prevention policies?

Summary: Life cycle thinking must be integrated into non-waste policy areas; material use or environmental impact hierarchies could be developed; there is a gap between what is technologically feasible and what people will accept.

- Life cycle thinking needs to be integrated into other policy areas outside waste prevention.
- A material use hierarchy could be developed, e.g. with waste dematerialisation at the top.
- DG Environment has already considered ideas of environmental impact hierarchies, for methods of growth.
- There remains a gap between what is technologically feasible in theory and what people will actually accept in practice.

4.3 WORKING GROUP THREE: INTERNATIONAL ASPECTS

The impact of EU waste policy is felt beyond the geographical borders of the EU, both in terms of rising exports of waste for processing in third countries and the diffusion of EU policy concepts. This session examined the question of the EU's international influence considering how best to promote the safe, environmentally responsible recovery in third countries and improved waste management globally. The chair for this working group was Emma Watkins of IEEP.

Question 1: What factors are contributing to the high levels of waste exports from EU Member States?

Summary: Waste exports from the EU are certainly increasing. Possible reasons identified include: EU recycling targets that lead to higher quantities of recyclables; the existence of major markets for recyclables overseas; economic factors/pricing for certain materials (e.g. plastics); cheaper labour costs for sorting and treatment of waste in third countries; improved EU definitions and better application of those definitions; the lack of clear definitions of when some materials/products become waste (e.g. WEEE, ELV and waste shipment legislation) has allowed 'grey areas' to develop, resulting in higher levels of waste exports.

- The amount of waste being exported from EU Member States and placed on third country recycling markets is certainly increasing.
- EU recycling targets lead to higher quantities of recyclables becoming available/being placed on the market. These recyclables then have to go somewhere, and if the market does not exist for their use in the EU, this results in exports.
- The majority of stakeholders agreed that the fact that major markets for recyclables exist overseas (e.g. for metals, paper and plastics) is a significant contributing factor towards the high levels of waste exports from EU Member States.
- Economic factors/pricing play a role, in particular for some materials, e.g. plastics.
- Cheap labour costs for the sorting of waste in third countries arguably incentivises EU countries to export their waste.

- The increase of exports of some materials/waste streams (e.g. WEEE) could simply be a result of improved definitions and better application of those definitions.
- However, many stakeholders also argued that the lack of a clear definition of when a material/product has reached the end of its useful life (e.g. 'grey areas' in WEEE, ELV and waste shipment legislation) means that a substantial amount of material which cannot necessarily be reused/recovered is being exported from the EU, leading to higher than necessary levels of EU waste/material exports. One example given was how to differentiate between a vehicle that has reached the end of its life and one that can be (partly) recovered/reused.

Question 2: How do you foresee the generation of waste evolving internationally? What might be the opportunities and challenges associated with this for the EU and its Member States?

Summary: With economic growth in third countries, waste generation tends to increase; flows of materials/products are not necessarily bad where international markets exist; some products (e.g. EEE) exported for reused are so close to the end of their useful life that they become waste almost immediately – 'usefulness' criteria could address this; exports can have a detrimental environmental effect in countries without adequate technical capacity for recycling, leading to the EU 'exporting pollution'; there is a problem in defining and verifying what is an 'equal environmental standard' of reuse or treatment to that which occurs in the EU – guidelines or formal standards here would be useful; there are also problems of incorrectly labelled exports; some countries e.g. Japan offer particularly interesting opportunities for cooperation/collaboration/best practice exchange with the EU; accurate apportioning of emissions reductions (to either the EU or the country of treatment) could have an impact on the impact assessment process related to EU policy-making.

- Waste generation in third countries, in particular quickly developing countries with high rates of economic growth (e.g. China and India), is increasing rapidly.
- Waste generation is ultimately dependent on levels of consumption; consumption and waste generation patterns are evolving rapidly both in the EU and internationally, and the opportunity of collaboration between certain countries must be utilised.
- A constant flow of materials between the EU and third countries is inevitable as goods are traded in global markets. The movement of such materials (e.g. scrap metals) between countries is beneficial because it enables materials to be sent to those places where their recovery/reuse can be maximised for economic value.
- Some stakeholders pointed out that some products (e.g. computers) that are legitimately sent to third countries as products (not WEEE) are so close to the end of their useful life that they can only be reused for a very short time, and become waste almost immediately. It was suggested that some sort of criteria for the 'usefulness' of exported items could address this, e.g. a computer that is over 8 years old is classified as WEEE even if it is in working order, because it is/will soon become obsolete.
- Concerns were expressed that exports are having a detrimental effect on some third countries that do not have the technical capacity to recycle certain types of waste and are therefore resorting to less desirable parts of the waste hierarchy (or environmentally damaging methods). One example is precious metals (e.g. platinum) not being adequately recovered in some third countries due to lack

of necessary technology. This raises the question of whether the EU is effectively 'exporting pollution'.

- The problem exists of how to define and verify what is an 'equal environmental standard' of reuse or treatment to that which occurs in the EU; it is very well to have this requirement in the waste shipment Regulation, but if it is not enforced it becomes meaningless.
- Guidelines to clarify exactly what EU environmental standards are would be beneficial and make comparisons easier. The development of a database of third country facilities that have been checked by EU inspectors was also suggested. Similarly the European Committee for Standardization (CEN) could be called upon to draw up international recycling standards.
- The EU is not the only part of the world that has issues with incorrectly labelled exports; problematic exports of WEEE have also been observed from Japan and the US.
- Japan is one country with which more systematic/direct collaboration and best practice/information exchange could be beneficial; Japan and the EU both have increasing shortages of raw materials and share similar economic standards. Japan also has a very efficient and advanced manufacturing industry from which the EU could learn.
- The issue of quantifying and apportioning greenhouse gas emissions reductions from recycling of EU waste was raised; accurate apportioning of emissions reductions could have an impact on the impact assessment process related to EU policy-making.

Question 3: What are the key tools, at EU and Member State level, for addressing concerns about the EU's footprint in terms of the export of waste for processing and the illegal export of waste?

Summary: Defined standards for the value and/or quality of exported materials would be useful; clearer legal definitions/guidelines are needed for when a used good becomes waste (some are currently being drawn up for ELVs); false or incorrect labelling of exported waste/second hand goods is an issue; EU efforts could usefully be focussed on major importing countries; some countries (e.g. China, India, Taiwan, Malaysia) have already taken action to protect themselves from environmentally-harmful exports from other countries; the EU could engage in capacity building to increase standards of treatment of waste materials in third countries; tighter extended producer responsibility principles applied across the whole life cycle of products could lessen the impact of the final product on importing countries; better application and enforcement of rules, in particular the waste shipment Regulation, would help to tackle environmental issues arising from waste exports; a questionnaire could be sent to third countries to gather views on whether they want imports of reusables/recyclables, and if so how much.

- Defined standards for the value and/or quality of the materials being exported would be useful. Low quality material (e.g. some EEE) which is not worth processing for reuse/recovery is quite often exported to third countries.
- All stakeholders agreed on the need for clear legal definitions of when a used good becomes waste; such definitions may help to differentiate between cars that are ELVs and those that are 'second hand' and can be recovered and/or reused. A representative from the Commission pointed out that correspondents' guidelines (under the waste shipment Regulation) are currently being drawn up for ELVs, although these will not be legally binding.
- False or incorrect labelling of exported waste/second hand goods is an issue; clearer definitions would also help to address this.

- The amount of waste being exported to non-EU countries will most likely continue to increase; EU efforts could therefore usefully be focussed on protecting these importing countries in the future.
- Some countries have already taken action on protecting themselves from exports from other countries. China has a Quality Standards governing body (the General Administration of Quality Supervision, Inspection and Quarantine, AQSIQ) which imposes quality standards on imported products. China also has pre-inspection processes, with officers located around the world to ensure that quality standards are met before materials/waste are exported to China.
- India has (less detailed) pre-shipment inspections carried out by Directorate-General of Foreign Trade-approved inspectors, and tests metal scraps for levels of radioactivity.
- Taiwan and Malaysia have set standards on imports of computers for reuse.
- Capacity building and increasing standards of treatment of waste materials in third countries should be encouraged. Pilot projects in India and China based on increasing the recovery of WEEE materials have been successful in improving the collection and treatment of waste.
- Some stakeholders suggested applying tighter extended producer responsibility principles across the whole life cycle of a product in order to lessen the impact of the final product on importing countries. This could be done by somehow incentivising producers to better consider potential environmental impacts of their products.
- Better application and enforcement of rules, in particular the waste shipment Regulation, would help to tackle environmental issues arising from exports of waste. One particular example given was that in some cases when ships are sent to third countries for dismantling, they are often filled with hazardous waste which then creates problems in the country of destination.
- It was suggested that a form of questionnaire could be sent to third countries to allow them to express their views on whether they want imports of reusables/recyclables, if so how much, etc.

Question 4: Are EU policies sufficient to influence the closing of the resource loop both in Europe and internationally i.e. while we are generating materials for recycling are we also positively contributing to the development of markets for secondary raw materials?

Summary: There was general consensus that current EU policies are not sufficient to influence the closing of the resource loop; some argued that minimum targets for the use of secondary raw materials are necessary – others felt this would result in distortions or be unrealistic for some waste/material streams (e.g. metals); incentives (e.g. lower tax) could be put in place to encourage higher levels of recycled content; measures should not lead to unsustainable trade of recycled materials just to meet targets; sustainable materials management/eco-design principles should be applied across all products placed on the market.

- Most stakeholders agreed that current policies are not sufficient to influence the closing of the resource loop in the EU and beyond.
- Some stakeholders argued that minimum legislative targets need to be introduced to force producers to incorporate more secondary raw materials into their products, but others expressed concern that this would result in distortions among some waste/material streams. It would not be desirable, for example, for some producer countries to have to import recyclables to incorporate into products just to meet targets.

- One particular point was raised with regard to targets for recycled content, with regards to metal. It was stressed that there is negligible difference between the quality of virgin and recycled metal, so targets for a percentage of recycled metal content in products would be nonsensical.
- Targets for recycled content could work, however, for tyres.
- Rather than targets for recycled content, incentives (e.g. lower tax) could be put in place to encourage higher levels of recycled content.
- It is dangerous to assume that secondary raw materials will not become scarce. If sufficient secondary raw materials are not readily available, as is currently the case for scrap metals, it will not be possible for minimum targets to be met and this will lead to unsustainable trade of recycled materials just to meet targets.
- Sustainable materials management should be applied across all products that are placed on the market, with better integration of eco-design to ensure that waste materials are able to be recycled or reused. The example was given of plasma TVs, for which there are currently no known and tested recycling methods.

Question 5: In your opinion, are there any interesting developments in waste and recycling policy occurring outside the EU that the EU could learn from?

Summary: Some non-OECD countries have very modern and efficient waste treatment techniques; Japan uses some interesting technologies; some towns/villages have gone 'plastic-free' (but this may not always be feasible); BAT (Best Available Technique) guidelines, and guidelines related to the Stockholm and Basel Conventions could be made legally binding.

- Some non-OECD countries have made very good progress in the environmentally sound treatment of waste, with investments bringing about modern and efficient techniques.
- Japan has some interesting technologies from which the EU could learn.
- One town in Australia has banned all plastic drinks containers; there are also some 'plastic-free' villages in Greece. However this may not be practical in all cases; some lifecycle analysis is required to take into account different transport costs etc before imposing blanket bans of this kind.
- The BAT (Best Available Technique) guidelines, and guidelines related to the Stockholm and Basel Conventions are very good and could be made legally binding.

Question 6: What do you consider to be the key sources of the EU or Member States' international influence on waste management, in particular in relation to spreading environmental standards? And what effect does this have on trade and the international playing field?

Summary: EU legislation has an impact internationally on waste management and products (e.g. hazardous content of products); in some instances (e.g. WEEE, China), EU legislation has almost been directly 'copied' into third country legislation; 'exporting' EU standards on technical requirements for waste treatment facilities could be interesting; the EU has limited potential (if any) to influence economic cycles; other instruments such as voluntary producer schemes could be encouraged; the EU could attempt to take action to influence the quantity of recycled content, or to ban certain materials going to landfill, but the complexity of material flows and end-markets must be taken into account; some countries may be more willing to accept standards/practices developed internationally at the UN level.

- The EU's body of legislation undoubtedly has an impact internationally on waste management and products. One clear example is the need for countries exporting products to the EU to meet EU standards, e.g. in terms of levels of hazardous substances in ELVs.
- In some instances it is clear that EU legislation has almost been directly 'copied' into the national legislation of third countries, e.g. provisions on WEEE in China.
- 'Exporting' EU standards on technical requirements for waste treatment facilities could be interesting; in some cases the EU can be considered a global leader, but this raises the question of whether this kind of practice could be seen as a trade barrier.
- It was suggested that the EU has limited potential (if any) to influence economic cycles, but that other instruments such as voluntary producer schemes could be encouraged.
- The EU has potential to influence action on the quantity of recycled content incorporated into products and also bans of certain materials sent to landfill. However, the complexity of material flows and end-markets means that not all waste streams/materials/products could or indeed should be regulated in this way.
- It was argued that some countries may be more willing to accept standards/practices developed internationally at the UN level, rather than taking up EU standards/practices.

Question 7: What mechanisms or methods could the EU adopt to improve approaches to waste management in third countries?

Summary: The EU should offer more support to improve recycling and waste management technologies through financing and/or best practice exchange; some EU technologies could usefully be exported to third countries; the EU could look to offer support for projects on biogas/collection of gas from landfills in countries with higher levels of biodegradable/organic waste.

- Lack of technical capacity is in some cases a key factor contributing to high levels of waste production in third countries.
- The EU should offer more support to improve recycling and waste management technologies in third countries, through financing and/or best practice exchange. It is currently much easier for third countries to obtain funding for landfill/incineration than for recycling schemes.
- The EU has some technologies that could usefully be exported to third countries, e.g. extracting metals from incinerator bottom ash, sampling technologies and extracting metals from ELV shredder waste.
- One stakeholder pointed out that many developing countries have much higher levels of biodegradable/organic waste than the EU; the EU could therefore look to offer support for projects on biogas/collection of gas from landfills in those countries.

4.4 WORKING GROUP FOUR: RECYCLING MARKETS AND RECYCLING SOCIETY

The promotion of a recycling society in Europe was a key goal of the waste TS. Moreover, in order to deliver increasing levels of recycling in the EU there is a need to promote an effective market place for both the recyclates themselves and the secondary raw materials that result. This working group investigated the question of what could be considered a recycling society and best this might be promoted. It then moved on to consider explicitly the question of the recycling market and particularly policy solutions that might be used to deal with the question of international processing of recyclates

and promoting the use of secondary raw materials. The chair of this working group was Catherine Bowyer of IEEP.

Question 1: What would you consider to be the key characteristics of a recycling society? What indicators could be used to assess whether we are moving towards a recycling society?

Summary: The term 'recycling society' is too simplistic and does not explain the exact aim; the term may be advantageous in terms of communicating to the public (simpler than Life Cycle Analysis); characteristics for a recycling society could include: reuse/recycling of products unless there is a good reason not to; tools to implement and enforce effective recycling legislation; tools to further stimulate the growth of the recycling sector (e.g. green public procurement, minimum levels of recycled material in products, VAT adjustments/levies for recycled/primary materials in goods; high quality recycling and good sorting of recyclables. It was commented that a recycling society should be more than simply reducing the level of waste disposed of but lead to a situation where management of resources is better considered.

- Many stakeholders felt that the term 'recycling society' is too simplistic and does not explain the exact aim societies should have when it comes to dealing with waste. However, it was agreed that the term is advantageous in that it can be clearly communicated to the public in a way that Life Cycle Analysis can not.

The following characteristics for a recycling society were suggested:

- A society where products are reused and recycled, except in cases where there are good reasons not to.
- A society with tools to implement and enforce effective recycling legislation.
- A society with tools to further stimulate the growth of the recycling sector, potentially including: green public procurement, inclusion of minimum levels of recycled material in products, VAT adjustments for recycled goods or levies on products produced with primary materials.
- Ideally a society where goods are recycled to a high standard, as a result of sufficient sorting to produce a high quality recyclate.
- The emphasis was placed on delivering quality recycling rather than recycling as an end point, the goal is environmental protection and the better use of resources.
- Importantly a recycling society should have mainstreamed into the consciousness of citizens, not simply separate industries working alone but a whole chain aimed at delivering an economy wide solution.
- That avoiding landfill or disposal is the old conception of what such a society should be, it needs to encompass priorities of prevention and reuse.
- It was considered to be a society that not only better recycles its waste but then makes use of the emerging secondary raw materials in an efficient way leading to better resource management.
- That new ways of properly measuring a recycling society are needed, for example, collection/capture rates are insufficient there need to be different assessment tools to evaluate the total collected, the efficiency of processing plant and the ultimate level of recycling. On this basis society can act to improve in an informed way

Question 2: What do you consider to be the key barriers to the further development of recycling markets and a recycling society in the EU?

Summary: A number of barriers were identified: lack of knowledge and confidence to invest in technologies; volatility of raw materials prices; market distortions (e.g. no green certificates for recovered material, differences in Member State implementation and interpretation of end of waste criteria); inadequate controls to prevent illegal waste exports; lack of value of some resources and consequent lack of incentive to recycle; complexity of asking people to consider the waste hierarchy and life cycle thinking; existing EU policies that promote consumption; lack of data and knowledge/understanding of the problem.

- Lack of knowledge and confidence to invest – generally the technology is now available; however uncertainty and a lack of knowledge means that few local authorities have the confidence invest in these technologies, which can include significant up-front costs.
- Market volatility – variations in prices of raw materials scare off investors.
- Market distortions – including the following specific examples:
 - Green certificates being allocated to energy produced from waste, but not to recovered material;
 - Member States implementing legislation differently; and
 - Member States interpreting end of waste criteria differently.
- Customs control not preventing illegal export of waste that would otherwise have been dealt with in the EU and in many cases recycled.
- Lack of value of some resources and consequent lack of incentive to recycle.
- Lack of awareness and the complexity of asking people to consider the waste hierarchy and life cycle thinking. However, it was highlighted that awareness is not always necessary to drive recycling; willingness to sort waste may be enough.
- Existing EU policies that promote consumption, which drives waste generation.
- Issues with data and knowledge/understanding of the problem.
- Lack of emphasis on quality both in terms of promoting best practice by material recyclers both in Europe and outside Europe and delivering a quality secondary raw material product that can be widely used.

Question 3: What are the needs in terms of overcoming barriers to recycling markets and a recycling society? Specifically, do you foresee a potential role for the following and if so what might this be: economic instruments (taxes, allowances, credits); product policies (ecolabels, ecodesign, green public procurement); climate policies (comparative advantage for the use of recycled materials); waste policies (end-of-waste criteria for certain waste streams in the Waste Framework Directive); and other policies? Which of these instruments could be addressed by EU policy?

[It should be noted that responses to this question also covered the more positive goal of creating the conditions for a functioning recycling market]

Summary: Each material stream may need different tools; targets are rather a crude tool but can be effective in driving change, and the extension of existing targets should be reviewed; the economic

advantages of illegally exporting or processing waste need to be removed; exports legislation could be simplified; landfill taxes/aggregate taxes appear to be in place in all Member States which are recycling large volumes of low value goods; the producer pays and producer responsibility systems could be extended to all applicable areas (e.g. furniture, toys); pay-as-you-throw schemes, and taxation schemes which favour recycled content over virgin material use; centralised research on the most environmentally beneficial ways of treating each waste stream; extending green certificates to recycling; integrating 'recycling society' concept into other policy areas e.g. industry, chemicals, ecodesign; promoting a good image of recycling; ring-fencing money from environmental taxes to generate environmental benefits; ensuring quality through sufficient sorting, to make recycling markets more robust.

- Variation between material streams means that the most appropriate tools for one waste stream will not necessarily prove effective in another waste stream.

The following measures were discussed:

- Further extension of existing targets – targets are a crude tool and Member States may not consider the bigger picture when trying to meet them; however it was highlighted that targets have been an effective driver for change and extension of existing targets should be reviewed.
- Better implementation to reduce the economic advantages of illegally exporting or processing waste.
- Better grasp of exports, potentially through simplification of legislation related to export so that it is much easier to apply in practice.
- Landfill tax/aggregate tax; these taxes appear to be in place in all Member States which are recycling large volumes of low value goods.
- Extension of producer pays and producer responsibility systems to all applicable areas; furniture and toys should be considered for inclusion. It was highlighted that extended producer responsibility systems become environmentally unproductive when these schemes are extended past the point where producers can influence production methods.
- Pay as you throw schemes, or taxation schemes which favour recycled content over virgin material use.
- The creation of centralised research on the most environmentally beneficial ways of treating each waste stream.
- Extending green certificates to recycling and implementing the system uniformly across all Member States.

The following needs were highlighted:

- The integration of recycling society into other policy areas to facilitate a more efficient recycling society, including: industrial policies, REACH, ecodesign and the consideration of the waste stage in the design phase of products.
- Promotion of a good image of recycling – need to steer away from the negative image that could be generated through shipping our recycling overseas to be sorted/treated in unsatisfactory conditions.
- Ideally taxes generated for environmental reasons should be ring fenced and reinvested to generate environmental benefits and consequently public support.
- Ensuring quality through sufficient sorting, to make recycling markets more robust during economic down turns.

Question 4: How could we link waste and resource policies in order to ensure a secure supply of raw materials whilst limiting negative environmental impacts?

Question 5: What policy mechanisms are available to help reduce the uncertainties associated with the international trade in recyclables and secondary raw materials?

Question 6: What can the EU do to improve understanding of EU exports of waste and their impacts?

[Given the relative overlaps between the questions it was decided to discuss these issues in the round, therefore the following summary applied to all the above questions]

Summary: Import levels mean that exports are necessary to create a circular economy; environmental harm caused by exports needs to be addressed; quality of exports could be ensured by requiring that preparation for recycling occurs in the EU, and by making end of waste criteria easier to implement; extra training of customs officials could help raise awareness of negative impacts of illegal shipments and ensure efficiency in identifying illegal shipments; traceability could be ensured by legislating to require ships to declare where they are going; mandatory certificates on waste for export could be created, to be awarded by independent registered bodies; data collection needs to be improved.

- The quantity of goods that we import means we need to export goods/waste if we are going to create a circular economy. However we need to crack down on the environmental harm caused by these exports by ensuring exports are of a high quality and that we can trace their destination.
- Quality could be ensured by requiring that preparation for recycling occurs in the EU, and by making end of waste criteria easier to implement on the ground. In addition, extra training of customs officials could help to ensure they are aware of the negative impacts of illegal waste shipments and ensure that they are efficient at identifying illegal shipments.
- Traceability could be ensured by legislating to require waste producers to declare where materials are being shipped for processing. It was proposed that a system for simple mandatory certificates on waste for export could be created to provide information regarding the chain of custody of wastes. These certificates could be awarded by independent registered bodies. It was commented that certification systems are being put in place to assess the environmental impact of materials imported into the EU ie biofuels, and that perhaps a mechanism for ensuring our exports would also be useful and beneficial.
- Data collection generally needs to be improved in this area.
- The possibility, currently under investigation, of a European Waste Agency or inspectorate was raised and its potential role was discussed. It was commented that training is key to aid understanding of customs officials etc to increase awareness of the issues related to illegal export of waste.
- Ensuring consistency of policies across the promotion of raw materials, the sustainable use of resources etc.
- Increased pressure from consumers to raise the level of demand for not just recycled products but products that can be shown to be sustainably produced, shift from simply that recycling is good to the emphasis being also on the quality of recycling.

