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**COMMUNICATION FROM THE COMMISSION TO THE COUNCIL, THE  
EUROPEAN PARLIAMENT, THE EUROPEAN ECONOMIC AND SOCIAL  
COMMITTEE AND THE COMMITTEE OF THE REGIONS**

**Taking sustainable use of resources forward: A Thematic Strategy on the prevention  
and recycling of waste**

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**Taking sustainable use of resources forward: A Thematic Strategy on the prevention and recycling of waste**

**(Text with EEA relevance)**

**1. INTRODUCTION**

Waste is an environmental, social and economic challenge for Europeans. For some, it conjures up negative images: rubbish bags, litter and toxic waste dumps. For others, waste is an opportunity – Europe's drive to deal with waste in environmentally sound ways has generated jobs and business opportunities. The waste management and recycling sector has a high growth rate and has an estimated turnover of over €100 billion for EU-25. It is labour-intensive and provides between 1.2 and 1.5 million jobs. The recycling industry is providing increasing amounts of resources to manufacturing industry: at least 50% of the paper and steel, 43% of the glass and 40% of the non-ferrous metal produced in the EU are currently derived from recycled materials.

In the last 30 years waste has been at the centre of EU environment policy and substantial progress has been made. Heavily polluting landfills and incinerators are being cleaned up. New techniques have been developed for the treatment of hazardous waste. Hazardous substances are being removed from vehicles and electrical and electronic equipment. The levels of dioxins and other emissions from incineration are being reduced.

With time, waste is increasingly seen as a valuable resource for industry. Approaches such as re-use, recycling and energy recovery are starting to be applied to regulated wastes - packaging waste, end-of-life vehicles, waste electrical and electronic equipment, biodegradable waste and tyres. Diversion of biodegradable waste from landfills and increasing recycling and recovery are contributing to reducing greenhouse gas emissions.

However, despite these successes, waste remains a problem. Waste volumes continue to grow. Legislation is, in some cases, poorly implemented and there are significant differences between national approaches. The potential for waste prevention and recycling is not yet fully tapped. The emerging knowledge about the environmental impact of resource use is not yet fully reflected in waste policy.

The unsustainable trends in waste generation and the policy issues are causes for concern because the generation of waste can be a symptom of environmentally inefficient use of resources. Furthermore, waste management generates emissions to air, water and soil as well as noise and other nuisances which contribute to environmental problems and cause economic costs.

In addition, EU waste law often remains unclear despite Court jurisprudence and has been the subject of considerable litigation on its interpretation. This results in regulatory overlaps and

uncertainty for competent authorities and the waste industry and may impede necessary investments.

Taking all this into consideration, it is time to analyse and assess EU waste policy, with a view to setting the strategic framework for the future. As prescribed in the Sixth Environment Action Programme (EAP), this strategy sets objectives and outlines the means by which the EU can move towards improved waste management.

In the process, it substantially simplifies and clarifies the current legal framework, in line with the EU's better regulation objectives. Waste has been identified as a priority area for the simplification of Community legislation [COM(2005) 535]. This Strategy spells out the initial steps that this first revision exercise has shown to be necessary and lays down the approach the Commission will take to achieve better regulation in EU waste law.

Finally, the Strategy builds on existing legislation and extensive stakeholder consultation, and identifies full and effective implementation by Member States as a condition for making progress towards the goals set in this strategy.

## 2. THE CURRENT SITUATION

At present in the EU municipal waste is disposed of through landfill (49%), incineration (18%), recycling and composting (33%). In the new Member States, where major efforts and investments have been made to align with the EU *acquis*, the situation is evolving rapidly but still dominated by landfill. There are wide discrepancies between Member States, ranging from those which recycle least (90% landfill, 10% recycling and energy recovery) to those which are more environmentally friendly (10% landfill, 25% energy recovery and 65% recycling).

Current EU waste policy is based on a concept known as the waste hierarchy. This means that, ideally, waste should be prevented and what cannot be prevented should be re-used, recycled and recovered as much as feasible, with landfill being used as little as possible. Landfill is the worst option for the environment as it signifies a loss of resources and could turn into a future environmental liability. The waste hierarchy should not be seen as a hard-and-fast rule, particularly since different waste treatment methods can have different environmental impact. However, the aim of moving towards a recycling and recovery society means moving up the hierarchy, away from landfill and more and more to recycling and recovery.

The legal framework<sup>1</sup> underpinning this strategic approach includes horizontal legislation on waste management, e.g. the Waste Framework Directive, the Hazardous Waste Directive, as well as the Waste Shipment Regulation. These are complemented by more detailed legislation concerning waste treatment and disposal operations, such as the Landfill and Incineration Directives, and legislation to regulate the management of specific waste streams (waste oils, PCBs/PCTs and batteries). Recycling and recovery targets have been set for some key waste flows, i.e. packaging, end-of-life vehicles (ELVs) and waste electrical and electronic equipment (WEEE). See Annex III contained in the Commission Staff Document SEC(2005) 1682 for a chart setting out the relevant legislation.

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<sup>1</sup> See Annex III for detailed list of legal acts.

Despite the considerable progress which has been made, overall waste volumes are growing and the absolute amount of waste going into landfill is not decreasing. Between 1990 and 1995 total waste generation in the EU and EFTA increased by 10% whilst GDP increased by 6.5%. Municipal solid waste (MSW) generation has been contributing significantly to this increase and is coupled to the level of economic activity as both MSW generation and GDP in EU-25 increased by 19% between 1995 and 2003. Smaller but important waste streams are also growing: hazardous waste generation increased by 13% between 1998 and 2002 whilst GDP grew by 10%. With higher levels of economic growth anticipated, overall volume growth is predicted to continue and will concern most wastes. For example, the European Environment Agency predicts that paper/board, glass and plastic waste will increase by 40% by 2020 compared to 1990 levels. The OECD predicts that MSW generation will continue to grow until 2020 but at a slightly slower rate. The Joint Research Centre predicts an increase in MSW generation of 42.5% by 2020 compared to 1995 levels. Relatively faster MSW growth is predicted in the new EU-10 Member States.

While recycling and incineration are increasing, the absolute amounts of waste landfilled are not decreasing because of the growth in waste generation. For example, the amount of plastic waste going to landfill increased by 21.7% between 1990 and 2002 yet the percentage of plastic waste being landfilled dropped from 77% to 62%.

These unsustainable trends are due in part to unsatisfactory implementation of waste laws which, in turn, is due in part to certain elements of the policy and legal framework that could be improved.

There are a number of **implementation** problems, ranging from dumping of waste at mismanaged landfills to shipments of hazardous waste in violation of international conventions. Unclear definitions and differing views on how to implement the laws have not helped to improve implementation and have resulted in litigation. Despite rulings by the European Court of Justice, certain aspects, such as when waste ceases to be waste, are still not clear.

Although **waste prevention** has been the paramount objective of both national and EU waste management policies for many years, limited progress has been made so far in transforming this objective into practical action. Neither the Community nor the national targets set in the past have been satisfactorily met.

**Recycling and recovery** are increasing. However, they cover only a limited proportion of waste. Recycling Directives have so far targeted individual waste streams and have enabled Community waste policy to reduce environmental impact by promoting source separation and recycling of waste streams such as batteries, packaging, vehicles and waste electrical and electronic equipment. These fast-growing waste flows are of particular importance due to their hazardous nature and complexity. However, they account for only a limited proportion of all waste generated.

Furthermore, while the amount of waste being recycled is increasing, treatment standards exist only for landfills and incinerators and, partially, for recycling. This poses an environmental problem as some recycling facilities can cause pollution if badly operated. Standards are needed not only for environmental protection but also for business reasons – to promote a level playing field for recycled material.

Against this background, preparations for this Thematic Strategy involved a major review of the existing situation and identification of problems and issues. This has led to the proposals set out below for a more comprehensive approach to waste prevention and recycling.

### 3. AIMS OF AN EVOLVING EU POLICY ON WASTE

**EU waste policy has the potential to contribute to reducing the overall negative environmental impact of resource use.** Preventing waste generation and promoting recycling and recovery of waste will increase the resource efficiency of the European economy and reduce the negative environmental impact of use of natural resources. This will contribute to maintaining the resource base, essential for sustained economic growth.

**The basic objectives of current EU waste policy – to prevent waste and promote re-use, recycling and recovery so as to reduce the negative environmental impact – are still valid and will be supported by this impact-based approach.**

The long-term goal is for the EU to become a recycling society, that seeks to avoid waste and uses waste as a resource. With high environmental reference standards in place the internal market will facilitate recycling and recovery activities.

### 4. ACTION

In order to achieve these objectives and, hence, secure a higher level of environmental protection, the proposal is to modernise the existing legal framework – i.e. to introduce life-cycle analysis in policymaking and to clarify, simplify and streamline EU waste law. This will contribute to resolving current implementation problems and move the EU decisively onto the path of becoming an economically and environmentally efficient recycling society. The current level of environmental ambition will be maintained and enhanced while providing the basis for sustained growth.

This requires a combination of measures promoting waste prevention, recycling and re-use in such a way as to produce the optimum reduction in the accumulated impact over the life cycle of resources, including:

- **A renewed emphasis on full implementation of existing legislation.** There are different problems with implementation across the Member States, varying from the continued existence of illegal landfills in several Member States to differences of interpretation in others. Part of this strategy is designed to remove ambiguities, resolve disputed interpretations and amend legislation which has not brought the expected environmental benefits. The Commission will use the Waste Management Committee as a forum for exchange of information and best practice and also for bringing to light difficulties with implementation. It will continue to take legal action to ensure equal enforcement of the *acquis* across all Member States.

- **Simplification and modernisation of existing legislation** where experience has shown that this is necessary to reduce administrative burden while maintaining the level of environmental protection, in line with the objectives of better regulation. This will result in more cost-effective waste legislation and will involve several actions. Firstly, an amendment of the Waste Framework Directive merging it with the Hazardous Waste Directives, introducing life cycle thinking, clarifying when waste ceases to be waste and the definitions of

recovery and disposal, introducing a definition of recycling, and solving overlaps between different pieces of waste and other environmental legislation. Secondly, the repeal of the Waste Oils Directive and the transfer of its provisions on collection of waste oils in the Waste Framework Directive. Thirdly, a proposal in 2006, to consolidate the three Directives on waste from the titanium dioxide industry. Fourthly, beyond the proposals adopted together with this Strategy, in the context of a continuous and systematic review of EU waste legislation, the Commission will assess the need for additional steps taking the better regulation and simplification objectives further, in line with the time line planned in Communication COM(2005) 535. This shall *inter alia* include the upcoming reviews required by waste directives, such as the 2006 review of the Directive on end-of-life vehicles and the 2008 review of the Directive on waste electric and electronic equipment, and a review of the system of waste nomenclature. Finally, with the common standards proposed by this Strategy in place, there will be new opportunities to create a simplified regulatory regime for the shipment of waste that further encourages recycling and recovery of waste.

- **Introduction of life-cycle thinking into waste policy.** Environmental policy traditionally focused on the early and the final phases of the life cycle: extraction, processing and manufacturing at one end and waste management at the other. It is now recognised that the environmental impact of many resources is often linked to the use phase<sup>2</sup>. All phases in a resource's life cycle need to be taken into account as there can be trade-offs between different phases and measures adopted to reduce environmental impact in one phase can increase the impact in another. Clearly, environmental policy needs to ensure that negative environmental impact is minimised throughout the entire life cycle of resources. By applying the life-cycle approach, priorities can be identified more easily and policies can be targeted more effectively so that the maximum benefit for the environment is achieved relative to the effort expended.

The life-cycle approach will be incorporated in EU legislation by clarifying the objectives of the Waste Framework Directive so that they explicitly consider the life-cycle perspective. This will have significant consequences for framing new policy and for waste management principles and practices in the future. The recent review of recycling and recovery targets for packaging waste materials was the first example of using life-cycle thinking for policymaking. New targets are set for each material concerned by analysing the environmental and economic impact throughout the life cycle of the material. The review of the management of waste oil is another area in which life-cycle thinking was applied.

- **Promotion of more ambitious waste prevention policies** by clarifying Member States' obligations to develop publicly available waste prevention programmes. At EU level the Commission will promote the use of the IPPC Directive, IPP and other tools to encourage the spread of best practice.

- **Better knowledge and information** which will underpin the continued development of waste prevention policy.

- **Development of common reference standards for recycling.** In order to ensure the proper functioning of the internal market for recycling, the proposal is to set minimum standards across the Community for recycling activities and recycled materials so as to ensure a high level of environmental protection and to prevent the threat of "eco-dumping". This

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<sup>2</sup> COM(2003) 302, Integrated Product Policy.

approach will be based on amendments to the Waste Framework Directive and to the IPPC Directive. This approach will be applied to biowaste as a priority.

- **Further elaboration of the EU's recycling policy.** Building on the implementation of existing EU waste legislation, new ways to foster recycling will be sought. A detailed analysis of the long-term feasibility and viability of a material-specific approach will be undertaken. Member States will also be encouraged to make more use of economic instruments and to exchange experience/best practice through improved coordination in the Waste Management Committee.

The action and changes proposed are explained in greater detail in Annex I which also gives an indicative timetable for presentation of the various proposals to implement the Thematic Strategy.

## **5. WHAT WILL BE THE IMPACT OF THE PROPOSED CHANGES?**

This Thematic Strategy is expected to have implications for current practices in the Member States and to create new opportunities for waste management options other than landfill, thereby encouraging a general move up the waste hierarchy. These are summarised below (for more detail see the Impact Assessment which accompanies this strategy).

### **Less waste to landfill**

The action taken under the Thematic Strategy will contribute to continuing to move waste flows away from landfill. The stronger focus on implementation and on the promotion of economic instruments will help to bring landfill prices up to a level which better reflects the real environmental impact of this waste management option, with the result that less waste should go to landfill. But, as that waste management option is still the default solution in many Member States, moving away from landfill will take time. Furthermore, for some types of waste, landfill might remain the only viable option. The new Member States will need time to build up alternative infrastructure and to deal with the legacy of the past.

The amounts of waste going to landfill in the EU will be reviewed in 2010. If the amounts and types of wastes being landfilled remain unacceptable, and the move away from landfill is not progressing quickly enough, further landfill bans will be envisaged.

### **More compost and energy recovery from waste**

As waste moves away from landfill it will be channelled into a variety of options higher up the waste hierarchy, all of which will be better for the environment.

The development of quality benchmarks for composting facilities and for compost will increase the prospects for composting.

Where energy is recovered from waste the Strategy will increase energy efficiency. The Commission proposes to start introducing the use of efficiency thresholds to classify waste treatment in municipal incinerators either as recovery or disposal. This will also help the EU meet its targets under the Directive on the promotion of electricity produced from renewable energy sources.



It is for individual Member States to decide which option is the environmentally best option in given circumstances.

### **More and better recycling**

The next five years will be a key period in terms of implementation of the Recycling Directives. By setting minimum quality standards for some recycling facilities, a significant improvement is expected, moving from the current situation where only 8 to 10% of wastes are covered by minimum quality standards to a situation where a substantial part of waste for recycling is covered. This coverage will be adapted in proportion to the environmental risk. This will ensure that as recycling increasingly becomes the preferred option for waste, the environmental impact of the option is controlled and the market conditions to allow recycling to continue its current pace of growth are created.

Quality standards for recycling will stimulate demand for and acceptability of recycled materials. This will then pull waste flows towards recycling and re-use. In addition, an improved internal market for recycling based on EU standards will allow recycling to take place where it is most efficient. This will reduce costs and thereby further facilitate recycling and re-use.

Recycling of a number of materials is currently working well, with high market prices driving growth in recycling rates. For example, utilisation of waste paper for the production of new paper has doubled between 1991 (25%) and 2004 (50%). For other materials, obstacles appear to be preventing full development of the recycling market, and work is underway to remove them. The situation will be reviewed in 2010. If recycling of materials that would lead to an environmental benefit is not taking place, further action can be taken focussing on materials, using the policy tool that is most appropriate (economic instrument, producer responsibility, landfill ban, collection or recycling target).

### **Key benefits and positive impacts**

These efforts have the potential to improve the cost-effectiveness of EU waste policy and to deliver significant environmental and social benefits:

- waste policy will become more focused on environmental impact, thereby becoming more efficient and cost-effective;
- the regulatory environment of waste management activities will be improved, leading to decreased costs and reduced barriers for waste recycling and recovery activities;
- waste prevention policies will be implemented at national level, ensuring the highest environmental and economic efficiency and promoting action closest to the point of generation of the waste;
- increases in waste recovery will reduce emissions from waste disposal and result in environmental benefits such as reduction of greenhouse gas emissions.

These positive impacts can be illustrated by the following quantified examples:

- further diversion of municipal waste from landfill to composting, recycling and energy recovery could produce additional reductions in greenhouse gas emissions ranging from 40 to over 100 Mt CO<sub>2</sub> equivalent per year;

- clarifying when wastes cease to be waste could reduce part of the administrative costs related to waste legislation. For example, the aggregates recycling sector estimates these costs at roughly 1% of turnover;
- increased recycling creates jobs: recycling 10 000 tonnes of waste need up to 250 jobs compared with 20 to 40 jobs needed if the waste is incinerated and about 10 for landfill. Taking into account reduced job creation in the extraction and production of virgin materials this should result in a limited net creation of jobs.

## 6. THE INTERNATIONAL SITUATION

Most developed economies and many developing countries are pursuing the objective of improving waste management. Countries with less developed waste management systems usually aim at improving basic waste management practices, especially as regards landfilling of municipal waste and management of hazardous waste. Countries with more mature waste management systems seek to prevent waste generation and to increase recycling and recovery of waste.

The most important initiatives taken at international level are the Convention on the control of transboundary movements of hazardous wastes and their disposal (the Basel Convention) and the OECD work on controlling shipments of waste and developing internationally agreed benchmarks for environmentally sound management of waste. This aims inter alia at reinforcing institutional and non-institutional capacities in waste management in developing countries. The EU is contributing to the creation of a control system at international level through its policies and in particular by its waste shipment regulation that aims at ensuring a high level of environmental protection.

Recently, at the instigation of Japan, the G8 started work on reducing, re-using and recycling waste.

Examples of policies developed by other industrial countries:

- Japan has extensive legislation related to waste and other sustainable production and consumption policies under the “3Rs - reducing, re-using and recycling” umbrella. These include laws setting targets for general waste prevention, waste recycling and avoidance of final disposal. Japan aims to recycle 24% of municipal waste and to limit final disposal of waste to 50%. In addition to these targets, Japan has developed a number of recycling laws, some mirroring the objectives of the EU Recycling Directives (on packaging, WEEE and ELV), others on issues not covered by legislation in the EU (construction materials and food). At local level, some local governments set waste treatment fees and levy taxes on landfilled industrial wastes.
- The USA has developed policies at Federal and State levels. The Federal government has set a long-term indicative target of a national recycling rate of 35% of municipal waste and is supporting this through a number of mainly voluntary programmes. This includes efforts to foster smart design and reduce the environmental impact of products. Several individual States have developed legislation restricting landfill and promoting the recycling of various waste flows, including legislation mirroring the objectives of the EU Recycling Directives (on packaging and WEEE). Attention is also given to the high level of municipal waste generation.

- China has enacted a number of laws that relate to waste management. In particular, these are pursuing the objective of promoting “the circular economy”. Currently, China is developing medium-term and long-term plans for the development of this concept. There is also growing demand in China for recyclable materials. This has recently exerted pressure on the markets for these materials and is predicted to intensify in the future.

## **7. MONITORING AND EVALUATION**

The strategy will be monitored on an ongoing basis. This will require a continuous effort to improve statistics on landfill and recycling and to build a stronger knowledge base relative to environment impact and impact indicators. Assessment of national waste policies, analysis of Member States’ implementation reports and continued consultation of stakeholders will contribute to this.

## **8. REVIEW PROCESS**

The Commission will review the progress made towards achieving the strategy’s objective in 2010. This review will, in particular, assess progress on waste prevention policies, on applying life-cycle thinking to waste management – including management of biowaste – and towards a European recycling society and will feed into the final evaluation of the Sixth EAP.

## **ANNEX I: Main actions**

### **1. SIMPLIFICATION AND MODERNISATION OF EXISTING LEGISLATION**

#### **The definition of waste**

The Waste Framework Directive defines waste as products or materials that are discarded. In the light of extensive stakeholder consultation the Commission has concluded that there is no need substantively to amend the definition of waste, but that it is necessary to clarify when a waste ceases to be a waste (and becomes a new or secondary raw material). Therefore, an amendment to the Directive is proposed which would establish waste-stream-based environmental criteria to determine when a waste ceases to be a waste. This could both improve the environmental performance of recycled products, by encouraging businesses to produce recycled products that conform to these environmental criteria, and reduce unnecessary burdens for low-risk recycling activities. Additionally, the Commission will publish a Commission Communication containing guidelines, based on the jurisprudence of the European Court of Justice and addressing the issues of by-products in relevant industry sectors, on when by-products should or should not be considered as waste in order to clarify the legal situation for economic operators and competent authorities. Within the review of this strategy in 2010, the Commission will assess the effectiveness of the guidelines.

The current definition of waste sets no clear boundaries for when a waste has been adequately treated and should be considered a product. This is problematic, as it creates legal uncertainty and administrative costs for businesses and competent authorities. It can lead to diverging views from Member State to Member State and even from region to region, which creates problems for the internal market. On top of this, poor-quality recycled material circulates on the market, generating difficulties both for potential purchasers and also for reputable sellers.

Discussions with stakeholders and with the Member States as well as analysis by the Commission have revealed that a relatively small number of waste streams are concerned by this issue. This means that it is possible to select those waste streams for which criteria need to be set on the basis of potential environmental and economic benefit. The first wave of waste flows to be addressed by this system will include compost, recycled aggregates, and subject to the outcome of an ongoing study on environmental impacts, the use of tallow as a fuel.

The Commission proposes to take a two-step approach to this issue: firstly, to establish in the Waste Framework Directive the procedure for adoption of the criteria and, secondly, to propose specific waste streams for this system, selected on the basis of environmental and economic benefit. The Commission will conduct studies and stakeholder consultations before coming forward with a proposal.

This approach should result in:

- improved environmental performance of recycled products as economic operators seek to attain the level required for their recycled product no longer to be considered a waste;
- greater certainty and predictability for purchasers of recycled products or materials;
- regulatory simplification for low-risk wastes used as secondary materials.

One precondition for implementation of this approach will be to set environmental criteria at a high level to reduce environmental risk. In addition to environmental criteria, it will also be necessary to set fitness-for-use criteria to ensure that the recycled products can find a viable market. Such fitness-for-use criteria could be derived from existing CEN standards or other similar sources.

A range of factors will be considered in the selection of waste streams and development of criteria. Notably, these include the risk that the recycled product could be used in an inappropriate way, or transported outside the EU for sham use, or otherwise have an environmental impact which classification as waste would have prevented. Another factor is the existence of a viable market for the recycled product in question. The Commission will weigh up these factors when proposing waste streams and criteria.

### **The definition of recovery and disposal activities**

The main present problem with the definitions of recovery and disposal in the Waste Framework Directive is that they are used for different purposes. In the Recycling Directives they are used to set targets and in the Waste Shipment Regulation they are used to determine whether the internal market rules apply to shipments of waste.

Ideally they would only be used for setting targets and a simpler system would be used for shipments of waste. However, because of gaps in existing European waste management standards and because of the need for waste management structures and policies to adapt, it is too early for such a change to the waste legislation.

The definitions contained in the present legislation, as interpreted by the European Court of Justice, do not promote best environmental practice, for example as regards recovering energy from waste in municipal incinerators. The Commission considers that further definition is required and is therefore proposing an amendment to the Waste Framework Directive which will base the definition of recovery on the concept of substitution of resources in the economy as opposed to in the specific plant. In addition, the amendment will make it possible to deal with the environmental issues raised by new technologies and practices case by case through a committee procedure.

The Commission proposes to start introducing the use of efficiency thresholds to classify waste treatment in municipal incinerators either as recovery or as disposal. Current jurisprudence of the European Court of Justice classifies the overwhelming majority of municipal incinerators as disposal facilities. This classification could have negative implications, leading to a degradation of the environment. For example, incineration with energy recovery is usually considered a means of diverting biodegradable municipal waste from landfills. However, there are concerns that if incineration is defined in the same category as landfilling, some local authorities could be tempted to choose the cheapest option (landfilling), which will in turn degrade the environment. Additionally, municipal incinerators with high energy efficiency are negatively discriminated against compared with co-incineration operations with similar energy efficiencies but less stringent emission controls.

A definition of recovery that takes into account that energy produced by a municipal incinerator substitutes the use of resources in other power plants will better reflect the environmental benefits of incineration. However, the energy efficiency of municipal incinerators can vary dramatically. At low energy efficiencies incineration might not be more

favourable than landfill. At high energy efficiency incineration could be as favourable as mechanical recycling or composting of certain waste flows.

The Impact Assessment shows that application of an energy efficiency threshold for municipal incinerators could generate both economic and environmental benefits. Setting the level of the threshold by reference to the performance of a BAT (best available techniques) plant would facilitate achievement of the targets for diversion from landfill.

The Commission is proposing an amendment to the Waste Framework Directive to include an energy efficiency threshold above which municipal incineration is considered a recovery operation. The threshold takes BAT as guidance and takes into account the recommendation in the BREF (BAT reference document) on waste incineration to use an equivalence factor of 2.6 to compare energy in the form of electricity to energy in the form of heat, i.e. 1 kWh of electricity is equivalent to 2.6 kWh of heat, and a factor of 1.1 for district heating.

This proposal will promote diversion from landfills and the use of BAT for recovering energy from waste burned in municipal incinerators. It will also allow continuous improvement of the environmental performance of such energy recovery as the efficiency threshold will be regularly reviewed to reflect technological progress.

This clarification of definitions should facilitate the functioning of an internal market for recycling applying high environmental standards. At the same time, it is necessary to continue to review the situation.

Another example of the type of issues this system will be able to address are the cases in which use of waste materials to build landfills may be considered a recovery operation.

### **The definition of recycling**

A definition of recycling needs to be introduced in the Waste Framework Directive to serve as guidance in defining recycling policies and targets.

### **Other simplification measures**

With a view to better regulation:

- overlaps between the permit procedures set up in the Waste Framework Directive and the Integrated Pollution Prevention and Control Directive will be removed by indicating that if an IPPC permit is held, no additional waste permit is necessary;
- Directive 91/689/EEC on hazardous waste will be merged with the Waste Framework Directive with a view to clarifying and removing overlaps and obsolete provisions;
- the Commission will propose in 2006 a consolidation of the three Directives on waste from the titanium dioxide industry, modernising the provisions and removing any obsolete provisions

The Commission will take account of better regulation in the reviews of waste directives provided for in EU waste legislation, e.g. as regards the incineration, ELV, landfill, WEEE and RoHS directives, and, in the context of a systematic review of EU legislation on waste, propose amendments to existing EU legislation, as appropriate.

## **2. INTRODUCING LIFE-CYCLE THINKING IN WASTE POLICY**

The environmental benefits of waste policy are complex because they occur at different stages of the life cycle and in different forms and can consequently be difficult to quantify or compare. But, clearly, waste policy needs to contribute to minimising environmental impact throughout the entire life cycle of resources. In many cases this just means using common sense to look at the wider picture, but sometimes it could mean using assessment tools such as life-cycle assessments.

The Commission proposes to clarify the objectives of waste policy under the Waste Framework Directive in order explicitly to apply life-cycle thinking. EU waste policy should aim to reduce the negative environmental impact of waste generation and management and to contribute to an overall reduction of the environmental impact of the use of resources.

## **3. IMPROVING THE KNOWLEDGE BASE**

Life-cycle thinking requires an improved knowledge base on the impact of resource use, waste generation and management and more systematic forecasting and modelling.

This will be provided mainly through the mechanism described in the Thematic Strategy on resources and through initiatives taken in the context of Integrated Product Policy. Beyond this, the European Environment Agency, Eurostat and the Joint Research Centre will all continue to play a role in building a robust scientific and economic information base for waste policy.

Another important step will be to define, in consultation with the scientific and stakeholder community, basic guidelines to make life-cycle tools easily usable in waste policymaking, with an agreed approach and methodology. The aim is to make these tools easier to use in policy decisions from local to European level.

## **4. WASTE PREVENTION**

The potential for waste prevention depends on a number of factors - economic growth, the extent to which economic operators have already adopted best practice in reducing waste, etc. Prevention can only be achieved by influencing practical decisions taken at various stages of the life cycle: how a product is designed, manufactured, made available to the consumer and finally used. Production of municipal waste is also affected by consumer behaviour which is related to the social structure, personal income and societal wealth.

This strategy does not prescribe EU waste prevention targets as this would not be the most effective and eco-efficient way to foster waste prevention. This is because such targets fail to address the complexity of environmental impact: the weight of waste could be reduced yet the environmental impact could increase, whereas small weight reductions can bring large reductions in environmental impact. In addition, prevention policies should take into account national production and consumption patterns, their projected trends and their relation to economic growth.

This strategy prescribes a coordinated approach to waste prevention which will focus prevention policies on reducing environmental impact and set a framework for specific national policies. Action on waste prevention needs to be taken at all levels of governance. At



European level, the Integrated Pollution Prevention and Control (IPPC) Directive and Integrated Product Policy can make a major contribution to waste prevention. Best available technique reference documents (BREFs) developed under the IPPC provide useful information on waste prevention. These aspects of BREFs should be reinforced and Member States, industry and other stakeholders should exchange information on best practice on a more regular basis. Finally, the Commission intends to revisit the issue of developing a framework for eco-design initiatives in the framework of Integrated Product Policy.

Most prevention measures, however, will have to be taken at national, regional or local level. This could include waste prevention targets. The Waste Framework Directive will be amended to clarify the obligation for Member States to develop publicly available waste prevention programmes, in the context of sustainable production and consumption.

## **5. TOWARDS A EUROPEAN RECYCLING SOCIETY**

As resources placed on the market are bound, sooner or later, to become waste and any productive activity generates some form of waste, measures to put waste back in the economic cycle are necessary. The recycling sector needs a regulatory environment that encourages recycling activities.

The current trend is towards increasing controls and restrictions on shipments of waste on the internal market. This will not significantly improve the environmental situation and could lead to detailed legislation and micro-management of waste at national or regional level. This could potentially reduce availability of recyclable waste for the EU industry, especially in small Member States. To counter this trend a level playing field is needed for recycling activities throughout the EU. Recycling itself needs to be environmentally sound and this requires the introduction of standards.

While in certain cases market forces have fostered the development of recycling, market signals tend to push waste towards disposal. There is therefore a need for incentives for waste recycling and recovery. Economic instruments and national landfill taxes have high potential in this regard.

### **A level playing field for recycling**

Building an internal market for recycling applying high environmental standards would have the advantage of spreading good practice across the whole of the EU and would also assist the recycling industry by allowing it to benefit from the internal market.

A number of measures will complement existing legislation and enable the EU to fill the waste standards gap. They include:

- introducing efficiency criteria for selected recovery processes under the Waste Framework Directive and developing guidelines for the application of certain provisions of the Waste Shipment Regulation to combat sham recovery;
- spreading good practice through minimum standards in the Waste Framework Directive for relevant recovery processes and future extension of the scope of the IPPC Directive to selected waste management activities;

- adding a new provision to the Waste Framework Directive to allow the adoption of environmental criteria for specific waste flows in order to specify when they no longer fall under the scope of waste legislation but are to be considered products instead.

### **Improved exchange of information on national disposal taxes**

There is broad consensus that disposal taxes are cost-effective and can dramatically improve waste management. Moreover, large differences in disposal taxes between Member States could lead to unnecessary shipments of waste and affect competition between waste management operators in different Member States.

As the prospect of reaching agreement on action at EU level in this area is limited, a first step would be to encourage the Member States to use this type of economic instrument at national level. The Commission encourages Member States to exchange information on their approaches to disposal taxes while keeping the Commission fully informed.

### **New ways to foster recycling**

Recycling Directives adopted over the last decade are facilitating the setting-up and financing of recycling infrastructure for large waste streams. However, it is difficult to justify application of this approach to a new range of waste streams. For smaller waste streams or waste streams with less environmental impact, such an approach could create heavy administrative burdens compared to the environmental benefit obtained.

However, if organisation and promotion of recycling for all waste streams is left to the market it will not be possible to reap the full environmental benefits that recycling can deliver. While the present priority is to ensure complete implementation of the EU Recycling Directives, what is needed for the future is a complementary approach that is both more flexible and broader in its coverage. The review of this strategy will assess the need for further measures to promote recycling. In particular, it will consider moving towards a more material-based approach, possibly using producer responsibility. This would involve assessing whether the market is likely to drive the development of recycling of a given material adequately on its own or if measures are needed to overcome obstacles to recycling. In this context, a wide range of measures could be considered, and life-cycle thinking will contribute to ensuring that the environmental benefits of recycling are achieved at the lowest cost possible.

### **Recycling targets**

Recycling and recovery targets are used in several EU Waste Directives. The recent revision of the recycling and recovery targets contained in the Directive on packaging and packaging waste has shown the importance of setting targets at the appropriate levels in proportion to the scope of the definition and of taking into account the specifics of each material. Without such an analysis, there is a risk of setting targets that promote processes with little or no environmental benefit or which fail to promote technologies that could deliver sizable environmental benefits but find it difficult to break into the market.

Because of these complexities, the level of targets should be fixed taking into account the scope of the definition of recycling for the different materials as has already been the case in the review of the Packaging Directive targets, and should take into account the specific characteristics of each material. Future proposals for new or revised recycling or recovery

targets need to optimise the cost-efficiency of recycling and recovery and avoid promoting inappropriate technologies for given materials.

## **Management of biowaste**

The main negative impact of biowaste occurs when biowaste is landfilled. This produces methane, a greenhouse gas which is 21 times more potent than carbon dioxide. In order to tackle this environmental threat, Directive 1999/31/EC on the landfill of waste provides for redirecting two thirds of biodegradable municipal waste away from landfills and requires Member States to establish and regularly review national strategies for management of the waste diverted from landfill. Full implementation of this obligation will make a significant contribution to reducing the environmental impact of biowaste, in particular in terms of emissions of greenhouse gases.

However, the Commission's report on the national strategies concluded that "having analysed the strategies it is unclear whether the landfill reduction targets will be achieved for those Member States where this is not already the case. It looks like additional efforts will be necessary to achieve the targets. The Commission will pay particular attention to the attainment of the target of 2006 and take all appropriate measures to ensure good implementation of the directive"<sup>3</sup>.

There is no single environmentally best option for the management of biowaste that is diverted from landfills. The environmental balance of the various options available for management of this waste depends on a number of local factors, *inter alia* collection systems, waste composition and quality, climatic conditions, impact on climate change, the potential of compost to contribute to fighting soil degradation and other categories of environmental impact. Therefore strategies for management of this waste should be determined by the Member States using life-cycle thinking.

The Commission will produce guidelines on applying life-cycle thinking to management of biowaste and will communicate these guidelines to Member States and invite them to revisit their national strategies. These guidelines will also assist local and regional authorities that are generally responsible for drawing up plans for management of municipal waste.

Aspects related to waste standards also need to be addressed at EU level. Compost quality criteria will be adopted under the end-of-waste provision proposed for the Waste Framework Directive and the Commission will propose that biological treatment of waste be brought under the scope of the IPPC Directive when it is revised.

Council Directive 86/278/EEC on the protection of the environment, and in particular of the soil, when sewage sludge is used in agriculture will be revised with a view to tightening the quality standards under which such use is allowed following the adoption of the Thematic Strategy on soil and the associated measures.

The review of the strategy will, in particular, address the progress made on management of biowaste and assess the need for additional measures.

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<sup>3</sup> COM(2005) 105. Report from the Commission to the Council and the European Parliament on the national strategies for the reduction of biodegradable waste going to landfills pursuant to Article 5(1) of Directive 1999/31/EC on the landfill of waste.

## Management of waste oils

Life-cycle thinking has been applied to the waste oil legislation (Directive 75/439/EEC).

This Directive regulates the disposal of waste oils and prescribes waste oil regeneration. The law has not been well implemented, and several cases have been taken to the European Court of Justice which has ruled against five Member States. Recent analysis, using the life-cycle approach, has shown that the priority given to regeneration of waste oils over use as a fuel is not justified by any clear environmental advantage. In addition, waste oil collection rates remain too low. So while improper disposal of waste oils can have substantial negative impacts and should be avoided, the current law is not achieving the desired results. Therefore, it will be repealed and replaced by a new provision in the Waste Framework Directive, which will maintain the obligation for Member States to ensure collection of waste oils but will not give priority to regeneration. This will secure the full implementation by the Member States of the collection obligation that addresses the greatest environmental issue of waste oils.

### **Next steps: Timetable for action implementing the Thematic Strategy on the prevention and recycling of waste and other measures and activities that will contribute**

<b>Action proposed and/or planned by the Thematic Strategy on the prevention and recycling of waste</b>	<b>Timing</b>
Proposal for a directive amending the Waste Framework Directive and repealing the Waste Oils Directive	Proposed together with this strategy
Report on implementation of Directive 94/62/EC on packaging and packaging waste	2006
Review of the targets set under Directive 2000/53/EC on end-of-life vehicles	2006
Proposal for a directive bringing together in one directive the three Directives on waste from the titanium dioxide industry	2006
Publication of guidelines, based on the jurisprudence of the European Court of Justice, on the issue of when by-products should or should not be considered waste	2006
Publication of guidelines for Member States on applying life-cycle thinking to management of biodegradable waste that is diverted from landfill	2006
Improving the knowledge base on impact of resource use, waste generation and waste management and more systematic forecasting and modelling	Starting in 2006
Proposal to clarify and extend the scope of the IPPC Directive to additional waste management activities, including biological treatment for recovery of waste and preparation of hazardous waste for incineration and of incineration slags for recovery	2007, when the IPPC Directive will be subject to a general review

Proposal for revision of Council Directive 86/278/EEC on the protection of the environment, and in particular of the soil, when sewage sludge is used in agriculture	2007
Publication of basic guidelines to make life-cycle tools easily usable in waste policymaking, with an agreed approach and methodology	2007
Publication of guidelines on certain provisions of the Waste Shipment Regulation to combat sham recovery	2007
Publication of guidelines on minimum environmental standards for permits of installations that are not covered by the IPPC Directive and on best available techniques for the mixing of hazardous waste	2007
Assessment of the state of play and of the need for additional measures to stimulate the move to a European recycling society	2007
Review of the targets under Directive 2002/96/EC on waste electrical and electronic equipment	2008
Adoption of a first set of quality standards for defining when certain waste flows cease to be waste, starting with compost and recycled aggregates	2008 – subject to the entry into force of the revised Waste Framework Directive

**Other measures and activities that will contribute to the Thematic Strategy on the prevention and recycling of waste**

*Market development*

Several Member States have launched initiatives to develop the waste recycling market, aiming at removing technical and economic obstacles to recycling and at increasing the demand for recycled materials (e.g. development of standards, improving availability of market-relevant information and public procurement). Such approaches appear to have some potential to complement core recycling policies and could be taken on board in national roadmaps for implementation of the Environmental Technology Action Plan.

*Research and technology*

The Commission will ensure that the European funds available for research and development work on waste technology better tackle the key environmental impacts of waste.

*Best practices*

The Commission will support the dissemination and transfer of best practices concerning awareness, education and incentive initiatives and systems developed at national, regional and local level.

*State aid*

The guidelines on state aid for environmental protection will be reviewed. This review will, *inter alia*, clarify in which cases state aids may be granted to support waste recycling activities.

In addition, the review of the strategy in 2010 will, if necessary, identify additional measures needed to promote waste prevention and apply life-cycle thinking to waste management and to progress towards a European recycling society.

**ANNEX II**  
**LEGISLATIVE FINANCIAL STATEMENT**

**1. NAME OF THE PROPOSAL:**

Thematic Strategy on the prevention and recycling of waste

**2. ABM / ABB FRAMEWORK**

Policy Area: 07 – Environment

Activity: 07 04 – Implementation of environment policy

**3. BUDGET LINES**

**3.1. Budget lines (operational lines and related technical and administrative assistance lines (ex- B..A lines)) including headings:**

07 01 04 01 - Legislation, awareness-raising and other general actions based on the Community action programmes in the field of the environment - Expenditure on administrative management.

07 04 02 – Awareness raising and other general actions based on the Community action programmes in the field of the environment.

**3.2. Duration of the action and of the financial impact:**

The strategy has a time span of 10 years (2005-2015). The present LFS covers the financial aspects relative to the initial five years (2005-2010).

**3.3. Budgetary characteristics :**

Budget line	Type of expenditure		New	EFTA contribution	Contributions from applicant countries	Heading in financial perspective
07 04 02	Non-comp	Diff <sup>4</sup>	NO	NO	NO	No 3

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<sup>4</sup> Differentiated appropriations.

#### 4. SUMMARY OF RESOURCES

The needs for human and administrative resources shall be covered within the allocation granted to the managing DG (DG Environment) in the framework of the annual budget procedure.

##### 4.1. Financial Resources

##### 4.1.1. Summary of commitment appropriations (CA) and payment appropriations (PA)

EUR million (to 3 decimal places)

Expenditure type	Section no.		Year 2005	2006	2007	2008	2009	2010	Total
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##### Operational expenditure<sup>5</sup>

Commitment Appropriations (CA)	8.1	a		0.230	0.380	0.230	0.230	0.080	1.150
Payment Appropriations (PA)		b		0.130	0.280	0.330	0.230	0.180	1.150

##### Administrative expenditure within reference amount<sup>6</sup>

Technical & administrative assistance (NDA)	8.2.4	c		0	0	0	0	0	0
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##### TOTAL REFERENCE AMOUNT

Commitment Appropriations		a+c		0.230	0.380	0.230	0.230	0.080	1.150
Payment Appropriations		b+c		0.130	0.280	0.330	0.230	0.180	1.150

##### Administrative expenditure not included in reference amount<sup>7</sup>

Human resources and associated expenditure (NDA)	8.2.5	d	0.486	0.486	0.486	0.486	0.486	0.486	2.916
Administrative costs, other than human resources and associated costs, not included in reference amount (NDA)	8.2.6	e	0.002	0.088	0.088	0.090	0.086	0.084	0.438

<sup>5</sup> Expenditure that does not fall under Chapter xx 01 of the Title xx concerned.

<sup>6</sup> Expenditure within article xx 01 04 of Title xx.

<sup>7</sup> Expenditure within chapter xx 01 other than articles xx 01 04 or xx 01 05.



**Total indicative financial cost of intervention**

<b>TOTAL CA including cost of Human Resources</b>	a+c +d+ e	0.488	0.804	0.954	0.806	0.802	0.650	4.504
<b>TOTAL PA including cost of Human Resources</b>	b+c +d+ e	0.488	0.704	0.854	0.906	0.802	0.750	4.504

**Co-financing details**

If the proposal involves co-financing by Member States, or other bodies (please specify which), an estimate of the level of this co-financing should be indicated in the table below (additional lines may be added if different bodies are foreseen for the provision of the co-financing):

*EUR million (to 3 decimal places)*

Co-financing body		Year n	n + 1	n + 2	n + 3	n + 4	n + 5	Total
.....	f							
<b>TOTAL CA including co-financing</b>	a+c +d+ e+f							

**4.1.2. Compatibility with Financial Programming**

- Proposal is compatible with existing financial programming.
- Proposal will entail reprogramming of the relevant heading in the financial perspective.
- Proposal may require application of the provisions of the Interinstitutional Agreement<sup>8</sup> (i.e. flexibility instrument or revision of the financial perspective).

**4.1.3. Financial impact on Revenue**

- Proposal has no financial implications on revenue
- Proposal has financial impact – the effect on revenue is as follows:

*EUR million (to one decimal place)*

	Prior to	
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<sup>8</sup> See points 19 and 24 of the Interinstitutional agreement.

Budget line	Revenue	action [Year n-1]	[Year n]	[n+1]	[n+2]	[n+3 ]	[n+4]	[n+5] 9]
	a) Revenue in absolute terms							
	b) Change in revenue	$\Delta$						

**4.2. Human Resources FTE (including officials, temporary and external staff) – see detail under point 8.2.1.**

Annual requirements	Year 2005	2006	2007	2008	2009	2010
Total number of human resources	0.486	0.486	0.486	0.486	0.486	0.486

**5. CHARACTERISTICS AND OBJECTIVES**

**5.1. Need to be met in the short or long term**

Address the environmental concerns relative to the management of waste. The Strategy will launch actions to improve waste management and the regulatory environment within which the waste management activities take place.

**5.2. Value-added of Community involvement and coherence of the proposal with other financial instruments and possible synergy**

Waste management is an economic activity taking place in the internal market. This activity is highly regulated and common approaches are necessary to improve the efficiency of the market.

**5.3. Objectives, expected results and related indicators of the proposal in the context of the ABM framework**

The strategy's objective is to set out a series of actions that will allow reducing the environmental impacts of waste and contribute to reducing the environmental impacts of the use of resources.

In order to do that, a number of concrete actions are foreseen:

- 1) Simplification and modernisation of the regulatory environment of waste activities.
- 2) Improvement of the knowledge in this area.
- 3) Development of incentives to promote the prevention and the recycling of waste.

<sup>9</sup> Additional columns should be added if necessary i.e. if the duration of the action exceeds 6 years.

More details on the expected results and their impacts are in the Communication and in the impact assessment attached to it, respectively.

#### 5.4. Method of Implementation (indicative)

**X** *Centralised Management*

**X** directly by the Commission

indirectly by delegation to:

executive Agencies

bodies set up by the Communities as referred to in art. 185 of the Financial Regulation

national public-sector bodies/bodies with public-service mission

*Shared or decentralised management*

with Member states

with Third countries

*Joint management with international organisations (please specify)*

Relevant comments: The measures foreseen under the strategy will be directly implemented by the Commission (launch of studies, organisation of meetings, running of service contracts etc) and by Member States (implementation of legislation and recommendations).

## **6. MONITORING AND EVALUATION**

### **6.1. Monitoring system**

The Commission proposes to review the effectiveness of the Thematic Strategy five years after publication of the Communication. For this purpose the Commission will prepare a report which will be published and submitted to the Institutions.

### **6.2. Evaluation**

#### *6.2.1. Ex-ante evaluation*

The Thematic Strategy has been the object of an Impact Assessment that will be published at the same time as adoption of the Communication.

#### *6.2.2. Measures taken following an intermediate/ex-post evaluation (lessons learned from similar experiences in the past)*

The approach of policy-making using the tool of a Thematic Strategy is a novelty of the Sixth Environmental Action Programme<sup>10</sup>. However, the measures contained in this specific strategy do not go beyond normal administrative practice (launch of studies, organisation of expert meetings, service contracts of relatively small amounts of money) for which appropriate financial safeguard procedures are in place.

#### *6.2.3. Terms and frequency of future evaluation*

The Commission proposes to review the effectiveness of the Thematic Strategy five years after publication of the Communication. For this purpose the Commission will prepare a report which will be published and submitted to the Institutions.

## **7. ANTI-FRAUD MEASURES**

The proposed activities only consist of expenditure on personnel, expert meetings and study contracts. The latter will be subject to the Commission's usual control mechanisms and therefore there is no need for supplementary anti-fraud measures.

In particular, potential beneficiaries and contractors shall comply with the provisions of the Financial Regulation and provide the evidence of their financial and legal soundness. For grants, they are required to supply provisional statements of income and expenditure related to the project/activity for which funding is requested. Payments are made on the basis of the terms and conditions related to the grant agreement and on the basis of expenditure and income statements duly certified by the beneficiary and checked by the relevant service of the Commission. On the spot controls are also possible and beneficiaries are required to keep all details and supporting documents for a period of five years after the completion of the project.

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<sup>10</sup> Decision No 1600/2002/EC of the European Parliament and of the Council of 22 July 2002 laying down the Sixth Community Environment Action Programme (OJ L 242, 10.9.2002, p. 1).

## 8. DETAILS OF RESOURCES

### 8.1. Objectives of the proposal in terms of their financial cost

Commitment appropriations in EUR million (to 3 decimal places)

(Headings of Objectives, actions and outputs should be provided)	Type of output	Av. cost	Year 2005		Year 2006		Year 2007		Year 2008		Year 2009		Year 2010		TOTAL	
			No. outputs	Total cost	No. outputs	Total cost	No. outputs	Total cost	No. outputs	Total cost	No. outputs	Total cost	No. outputs	Total cost	No. outputs	Total cost
OBJECTIVE <sup>11</sup>																
Preparation of Commission decisions adopting implementation measures																
- Expert consultations	Reports	0.040			2	0.080	2	0.080	2	0.080	2	0.080	2	0.080	8	<b>0.400</b>
- Studies	Reports	0.150			1	0.150	2	0.300	1	0.150	1	0.150			5	<b>0.750</b>
<b>TOTAL COST</b>						<b>0.230</b>		<b>0.380</b>		<b>0.230</b>		<b>0.230</b>		<b>0.080</b>		<b>1.150</b>

<sup>11</sup> As described under Section 5.3.

## 8.2. Administrative Expenditure

### 8.2.1. Number and type of human resources

Types of post		Staff to be assigned to management of the action using existing and/or additional resources ( <b>number of posts/FTEs</b> )					
		Year 2005	Year 2006	Year 2007	Year 2008	Year 2009	Year 2010
Officials or temporary staff <sup>12</sup> (XX 01 01)	A*/AD	3.5	3.5	3.5	3.5	3.5	3.5
	B*, C*/AST	1	1	1	1	1	1
Staff financed <sup>13</sup> by art. XX 01 02							
Other staff <sup>14</sup> financed by art. XX 01 04/05							
<b>TOTAL</b>		<b>4.5</b>	<b>4.5</b>	<b>4.5</b>	<b>4.5</b>	<b>4.5</b>	<b>4.5</b>

### 8.2.2. Description of tasks deriving from the action

The tasks to be performed are within normal administrative practice and include launch of studies, organisation of expert meetings, management of service contracts, and the likes.

### 8.2.3. Sources of human resources (statutory)

- Posts currently allocated to the management of the programme to be replaced or extended
- Posts pre-allocated within the APS/PDB exercise for year n
- Posts to be requested in the next APS/PDB procedure
- Posts to be redeployed using existing resources within the managing service (internal redeployment)
- Posts required for year n although not foreseen in the APS/PDB exercise of the year in question

<sup>12</sup> Cost of which is NOT covered by the reference amount.

<sup>13</sup> Cost of which is NOT covered by the reference amount.

<sup>14</sup> Cost of which is included within the reference amount.

8.2.4. *Other Administrative expenditure included in reference amount (XX 01 04/05 – Expenditure on administrative management)*

EUR million (to 3 decimal places)

Budget line (number and heading)	Year 2005	Year 2006	Year 2007	Year 2008	Year 2009	Year 2010	TOTAL
<b>1 Technical and administrative assistance (including related staff costs)</b>							
Executive agencies <sup>15</sup>							
Other technical and administrative assistance							
- <i>intra muros</i>							
- <i>extra muros</i>							
<b>Total Technical and administrative assistance</b>							

8.2.5. *Financial cost of human resources and associated costs not included in the reference amount*

EUR million (to 3 decimal places)

Type of human resources	Year 2005	Year 2006	Year 2007	Year 2008	Year 2009	Year 2010r
Officials and temporary staff (XX 01 01)	0.486	0.486	0.486	0.486	0.486	2.430
Staff financed by Art XX 01 02 (auxiliary, END, contract staff, etc.)  (specify budget line)						
<b>Total cost of Human Resources and associated costs (NOT in reference amount)</b>	0.486	0.486	0.486	0.486	0.486	2.430

<sup>15</sup> Reference should be made to the specific legislative financial statement for the Executive Agency(ies) concerned.

Calculation– *Officials and Temporary agents*

Each FTE is rated at €108,000 per annum.

Calculation– *Staff financed under art. XX 01 02*

### 8.2.6 Other administrative expenditure not included in reference amount

*EUR million (to 3 decimal places)*

	Year 2005	Year 2006	Year 2007	Year 2008	Year 2009	Year 2010	TOTAL
XX 01 02 11 01 – Missions	0.002	0.008	0.008	0.010	0.006	0.004	0.038
XX 01 02 11 02 – Meetings & Conferences							
XX 01 02 11 03 – Committees <sup>16</sup>		0.080	0.080	0.080	0.080	0.080	0.400
XX 01 02 11 04 – Studies & consultations							
XX 01 02 11 05 - Information systems							
<b>2 Total Other Management Expenditure (XX 01 02 11)</b>	0.002	0.088	0.088	0.090	0.086	0.084	0.438
<b>3 Other expenditure of an administrative nature</b> (specify including reference to budget line)							
<b>Total Administrative expenditure, other than human resources and associated costs (NOT included in reference amount)</b>	0.002	0.088	0.088	0.090	0.086	0.084	0.438

Calculation - *Other administrative expenditure not included in reference amount*

It is assumed that an average mission would cost €1,000.

<sup>16</sup> Specify the type of committee and the group to which it belongs.