Question 5. Reduction/Elimination of generation of hazardous/other wastes

2005. Africa. (Parties which did not report are not listed).

Algeria:

Policies: The Law no 01-19 of 12/12/2001 set up a National Plan of Management of Special Wastes which defines the choice of options related to wastes treatment trend.

Legislation: With Law n° 01-19 of 12/12/2001 related to the management, control and disposal of wastes its 2nd article said the management, the control and the elimination of wastes is based on the following principles: the prevention and the reduction of the production of the noxiousness of the waste in the source; the organization of the sort, the collect, the transport and treatment of the waste; the ecological and rational treatment of the waste; the information and the citizen sensitization. Text of application of the law referred to above: Executive decree n03-478 of 9 December 2003 defining the methods of management of waste of activities of care. Executive decree n04-410 of 14 December 2004 fixing the general rules of installation and installation operation of processing the waste and the admission requirements of this waste at the level of these installations. Executive decree n06-104 of 28 February 2006 fixing the nomenclature of waste, including dangerous special waste. Executive decree n05-315 of 10 September 2005 laying down the methods of declaration of dangerous special waste. Executive decree n05-314 of 10 September 2005 laying down the methods of approval of the groupings in charge of the management of special waste. Executive decree n05-314 of 10 September 2005 laying down the methods of approval of the groupings in charge of the management of special waste. Inter-ministerial decree fixing the contents of the file of request for authorization of transport of dangerous special waste, the methods of granting of the authorization like its design features. Inter-ministerial decree laying down the methods of elimination of the anatomic specimens of human origin. Inter-ministerial decree fixing the characteristics of the document of movement of dangerous special waste. Inter-ministerial decree fixing the contents of the file of request for authorization of transport of dangerous special waste, the methods of granting of the authorization like its design features.

Economy: Tax on pollutant and hazardous activities; Incentive tax encouraging the reduction of stocks of industrials wastes and Incentive tax encouraging waste care activities. (financial law of 2002- moratorium of 02 years); Incentive tax encouraging the reduction of stocks of industrials wastes and Incentive tax encouraging waste care activities. (financial law of 2005- moratorium of 03 years);

Industry: The generators and/or holders of hazardous special wastes are required to insure or ensure by their own the collection, sorting, transport, stocking, valorization and the elimination of their wastes.

Others: Environmental performance contract; Environmental performance contract; Certification ISO; Environmental audit; Danger survey (Intervention Internal Plan (PII), Internal Particular Plan (PPI)).

Botswana:

Policies: Waste Management Strategy which has adopted the internationally acclaimed waste management hierarchy and cleaner production technologies for industry.

Legislation: Enforcement of the Waste Management Act 1998.

Industry: Adoption of the waste management hierarchy and cleaner production technologies.

Others: Enforcement through enforcement agencies such as the police.

Burundi:

Policies: · Inventaire des Déchets déjà faits dans les industries; · Plan de gestion des déchets biomédicaux est entrain d'être préparé par le Ministère de la Santé Publique; · Station d'épuration fonctionnelle dans la capitale Bujumbura; · Décharges contrôlées; et · Gestion des déchets: Ramassage, triage, transport, sensibilisation est faite.

Legislation: Le code de l'environnement prévoit les obligations générales en matière de déchets en son chapitre 2, art 120, 121, 122 à 126.

Economy: Il y des subventions de l'Etat offert pour les services de techniques municipaux en vue de collecter et de transporter les déchets produits dans les sites de décharges. Le FEM a financé depuis 2005, le projet pour la gestion des produits organiques persistants (POP).

Industry: · Avant toute installation d'un projet ou d'une unité industrielle, il faut préalablement une étude d'impact environnemental; · Il est strictement interdit d'installer des stations de carburant ou des points de lavage des véhicules à côté des cours d'eau;

Others: Des campagnes de sensibilisation pour la population et les industriels sont prévues dans la politique sectorielle du Ministère de l'Aménagement du Territoire, du Tourisme et de l'Environnement pour la gestion rationnelle des déchets.

Cameroon:

Policies: Incentive measures as reduction of custom duty on equipment are prescribed by above mentioned

Environmental Law to industrial establishments that choose pollution reduction technology or good practices in their manufacturing process. But as for now, no inventory has been done yet to determine the quantities and qualities of the hazardous waste present in the country. Need for both technical and financial assistance to carry out this inventory.

Legislation: Law N° 96/12 of 5th August 1996 relating to Environmental management in Cameroon and Loi N° 89/027 du 29 décembre 1989 portant sur les déchets toxiques et dangereux don't give Cameroon an adequate framework for sustainable management of hazardous wastes in particular or wastes in general.

Djibouti:

Policies: Les stratégies élaborées jusqu'à présent ne traitent de façon générale que de la protection de l'environnement mais reflètent peu les mouvements transfrontiéres des déchets dangereux et autres déchets couverts par la Convention de Bâle. Le Gouvernement par le biais du Ministère en charge de l'Environnement est en cours d' examiner une stratégie globale visant la réduction des déchets dangereux et autres déchets. Le Ministère de la santé a élaboré un plan national de gestion des déchets dangereux.

Legislation: Décret n°2005-0056/PR/MHUEAT portant approbation du plan de gestion intégrée de la zone côtière Décret n°2004-0066/PR/MHUEAT portant réglementation de l'importation des substances appauvrissant la couche d'ozone Décret n°2004-0065/PR/MHUEAT portant convention de la Biodiversité Décret n°2003-0212/PR/MHUEAT portant réglementation du transport des produits dangereux Loi n°56/AN/04/5ème L portant adhésion aux documents X, XI et les nouvelles dispositions du chapitre XI – 2 de convention internationale pour la sauvegarde de la vie humaine en mer. Décret n°2001-0098/PR/MHUEAT portant approbation de la stratégie et Programme d'Action National pour la conservation de la Biodiversité Loi n°010/AN/03/5ème L portant ratification de la Convention des espèces migratrices appartenant à la faune sauvage. Décret n°2004-0065/PR/MHUEAT portant protection de la Biodiversité Décret n°2002-0075/PR/MHUEAT portant approbation de la Communication Nationale sur les changements climatiques. Loi n° 0148/AN/01/4ème L portant ratification pour la République de Djibouti du Protocole de Kyoto relatif à la Convention Cadre des Nations-Unies sur les changements climatiques Décret n°2001-0098/PR/MHUEAT portant approbation de la stratégie d'Action Nationale pour la conservation de la Biodiversité. Loi n°012/AN/01/4ème L portant approbation du plan d'Action National pour l'Environnement 2001-2010 Décret n°2001-0011/PR/MHUEAT portant définition de ces procédures d'Etudes d'Impact environnemental Loi n°106/AN/00/4ème L cadre de l'Environnement Selon article 46 de la loi cadre sur l'Environnement : Tout déchet provenant d'une unité industrielle ou semi industrielle de transformation doit être : - soit traité avant rejet ou entreposage de manière à se conformer aux valeurs limites autorisées, - soit entreposé dans un site d'élimination ou d'entreposage approuvé par le Ministère en charge de l'Environnement. Article 47 : Le ministère chargé de l'Environnement peut faire procéder à l'élimination des déchets contrevenants aux dispositions de la présente loi aux frais de leurs propriétaires. Les sociétés, entreprises intervenant dans le transport, traitement des déchets ainsi que les techniques et modalités utilisées sont agrées par le Ministère chargé de l'Environnement. Par ailleurs Selon la loi cadre sur l'Environnement : Article 33 : tout déversement ou épandage de substance de nature à modifier les caractéristiques des sols et sous-sols est soumis, sans préjudice des dispositions légales et réglementaires spécifiques, à étude d'impact environnementale préalable. Article 34 : toute émission de substances toxiques ou dangereuses sur ou dans le sol est interdite. La liste de ces substances est fixée par voie réglementaire. Article 35 : toute activité portant préjudice à une installation légitime ou reconnue sur le sol ou dans le sous sol engage la responsabilité de son auteur. Ce préjudice donne droit à réparation

Economy: La création du Fonds National de l'Environnement permettra de mettre en place des taxes environnementales (taxes de mise en décharge, programmes d'aide financière , subventions, dégrèvements fiscaux etc.) favorisant la protection et la surveillance de l'Environnement et incitant les industriels à réduire leurs rejets des émissions et transferts des polluants dans l'environnement

Industry: Centrale électrique de Djibouti : Mise en place d'incinérateur pour l'élimination des huiles usées Hôpital Général Peltier : mise en place d'incinérateur pour les déchets sanitaires

Ethiopia:

Policies: The Environmental Policy of Ethiopia and the Conservation Strategy of Ethiopia provide for the application of the said measures.

Legislation: Environmental Pollution Control Proclamation, Proclamation No. 300/2002. Two draft regulations on persistent organic pollutants and Industrial Pollution Control and Prevention are prepared.

Economy: These are provided for under each legal instrument, e.g. Article 3 Sub-article 4 of the Pollution Control Proclamation.

Industry: Certain tanneries have installed waste treatment facilities making use of a revolving fund made available by UNIDO. Some industries have begun implementation of ISO 14001.

Gambia:

Policies: Gambia Environmental Action Plan (1992); Gambia Waste Management Strategy (1997); and Environmental Quality Monitoring and Enforcement strategy (1997).

Legislation: National Environment Management Act (1994); Environmental Management Discharge Permit Regulations (2001); Environmental Quality Standards Regulations (1999); and Ozone Depleting Substances Regulations 2000.

Economy: Monthly Environmental Tax on all salaried workers; Environmental tax on all imported second hand items except used clothing; and National Environment Agency conducts an Annual National Environmental Award Scheme.

Industry: The Gambia Tourism Authority has embarked on a yearly award for the Most Environmentally Friendly hotel. The National Environment Agency has also embarked on a few demonstration projects to promote best practices in industry.

Others: Sensitization and information campaigns under the Environmental Education and Communication Programme of the National Environment Agency; and Integration of Environmental Education in the school curricular at all levels.

Lesotho:

Policies: Development of Integrated Waste Management Strategies in the pipeline.

Legislation: - Development of Hazardous Wastes Management Bill and Regulations in process. - Draft Toxic & Hazardous Chemicals Bill and Regulations under development.

Economy: Introduction of tax incentives and enforcement of Polluter-Pays-Principle under consideration.

Industry: Establishment of pretreatment facilities with the purpose of delisting such waste from hazardous status. Introduction of Cleaner Production Concept under consideration.

Madagascar:

Policies: In preparation. On 18 June 1998, the National Committee for the Management of hazardous wastes (GNGPC) was officially created (Decret N°98-444). This committee has been, since this date, the official national mechanism responsible for chemical management in terms of safety.

Legislation: A National Law to reduce hazardous wastes is currently being elaborated.

Economy: A National Law Ecotax is currently being elaborated.

Industry: Decree of application MECI, Law N°99-954 of 15/12/99. (Accountability of investments towards the environment).

Others: Le Ministère de l'Environnement, des Eaux et Forêts est en cours d'éalboration de la politique nationale de gestion de déchets dangereux ou non dangereux (année 2005) .

Morocco:

Policies: Le Maroc a lancé un projet en vue de mettre en place un centre de traitement et d'élimination des déchets. Le site pour l'installation de ce centre a été choisi et l'étude de faisabilité du projet ainsi que l'étude d'impact ont été réalisées. Dans le cadre de la convention de Stockholm sur les POPs, le Maroc a bénéficié d'un don du GEF pour l'élaboration du plan de mise en œuvre de ladite convention, notamment un plan d'action pour la gestion écologiquement rationnelle des déchets POPs. The CMPP plays a coordinating as well as catalytic role of a natural cleaner production market by means of : The promotion and dissemination of the concept of sustainable ecological industrial development; improvement of the performance and competittiveness of the enterprise; and making public opinion sensitive and aware of cleaner production technologies.

Legislation: législation en matière de gestion des déchets : loi cadre sur la protection et la mise en valeur de l'environnement promulguée et en vigueur depuis 2003 qui vise l'obligation d'une gestion écologiquement rationnelle des déchets. Loi 28-00 sur la gestion et l'élimination des déchets qui a été promulguée en décembre 2006. Quatre décrets d'application de cette loi sont en cours de préparation, à savoir: Décret sur les décharges; Décret sur les déchets médicaux et pharmaceutiques ; Décret sur la classification des déchets ; Décret sur la co-incinération des déchets. Directives et plans élaborés pour une gestion écologiquement rationnelle des déchets Guide sur la gestion des déchets ménagers, directives sur les déchets hospitaliers, guide sur le choix du site des décharges contrôlées pour les déchets ménagers, guide pratique sur l'amélioration de la gestion des déchets hospitaliers, quatre directives en cours de préparation en collaboration avec le centre de formation et de transfert de technologie de la convention de Bâle du Caire. Plan National de la mise en oeuvre de la Convention de Stockholm

Economy: Creation within the Department of Environment of the Fund for Industrial Depollution (FODEP). The Fund is destined for industrial enterprises willing to engage in depollution projects. 80% of the cost of the project can be financed by FODEP according to the project type: Integrated project (20% donation and 20-60% of credit at medium or at long term and; Approved Project (40% donation and 20-40% of credit at medium or at long term). Le centre marocain de production propre qui a pour attribution la sensibilisation et la formation des industriels pour minimiser la production des déchets à la source.

Industry: Certaines unités industrielles ont adopté le concept de production propre en utilisant de nouvelles technologies pour réduire à la source la production d es déchets notamment celles qui ont bénéficié du FODEP.

Others: Some wastes are incinerated at the furnace of cement factories and; A project to create a waste stock market is currently being developed. Présence d'unités industrielles spécialisées dans le

recyclage de déchets, notamment, plastique, papier, verre, déchets de textiles. Création d'une coopérative spécialisée dans le recyclage des déchets.

Mozambique:

Legislation: The Article 9, Decree 13/2006, the Regulation of Waste Management, obliges the producers of waste to minimize the production of their waste and the details how that waste should be minimized will be set in waste management guidelines which still in preparation . In addition to that, the Environmental Law 20/97 imposes strict liability on people who damage the environment. The government has responsibility to set the amount for compensation and the person causing environmental damage is responsible to pay the amount needed to repair or to compensate the affected environment. The provision does not related to hazardous wastes only. On the other hand, the General Guideline for Environmental Impact Assessment proponents are obliged to present in EIA details about the waste to be produced and minimization measures of that waste before the project is implemented.

Industry: Many companies and industries apply for ISO systems and clean production technology which help in waste minimization by their own initiatives or in order to fulfill the requirements from financial institutions. On the other hand, both Cleaner Production Center and Forum Empresarial para o Meio Ambiente (FEMA) which is an Environmentally aware group representing Mozambican Industry promote environmental sound practices including waste minimization.

Senegal:

Policies: - Adoption of a complete legislation on the management of the network (sic); - Elaboration of a management plan; and - Development of cooperation with other programmes and awareness.

Legislation: Environmental Code (Law 200-1-01 of 15 January 2001); Decree 282-2001 of 12 April 2001; Sanitation Code; Local Municipalities Code; and Regulation concerning management (under application). Decree (in preparation) for wasted oils

Industry: - Awareness and information; - Establishment of a sanitation and security committee; - Auditing and ISO certification; and - Cooperation among industries.

Tunisia:

Policies: The National strategy on wastes has four objectives. They are: (i) to ensure that wastes management takes place without endangering public health and the environment; (ii) to encourage the reduction in wastes in both qualitative and quantitative terms; (iii) to encourage recycling and re-use of wastes; and (iv) to establish methods and infrastructure to ensure wastes disposal to the lowest possible cost in environmental and economic terms. The National Programme for Solid Wastes Management (PRONAGDES) was launched in 1993. The aim of the Programme is to provide the country with units for the treatment of household wastes, facilities for the treatment of hazardous wastes, and produce appropriate solutions and management plans for all categories of wastes.

Legislation: - Waste and waste treatment fall under the law n°96-41 of 1996 in which the following general objectives are defined: (i) prevention and reduction of wastes especially during fabrication and distribution of products (ii) valorization of wastes by re-use and recycling both as materials or energy source (iii) controlled final landfill as a last resort; - Decree n°97-1102 laying down conditions and methods for the collection and management of used bags and packaging; - Decree n°2002-693 (dated April 1st, 2002) laying down conditions and methods for the collection and the management of used lubricating oils and used oil filters. This decree defines the criteria and methods of recovery and regeneration of used lubricating oils, the collection and the valorization of the used oil filters; - Decree n°2005-3395 of 26 December 2005 laying down conditions and methods for the collection of used batteries and accumulators. - Following enactment of law 96-41 on wastes and the control of wastes management and disposal, legal instruments (decrees) on the management of categories of hazardous wastes, based on the polluter pays and producer recovers principles, are in the process of drafting; - Standards on the concentration of pollutants in the industrial wastewater (metals, heavy metals, halogenated solvents, hydrocarbons, mineral oils, phenols, etc.) before junction to the public sewage works or abandon in the hydraulic and maritime property; and - The environmental impact assessment (EIA) mandatory is obligatory for all activities (industrial, agricultural or commercial) that cause risks for pollution or degradation of the environment.

Economy: - Companies that carry out hazardous activities are obliged to pay taxes on a yearly basis; - Companies that take measures to abate pollution may profit from special investment and tax tariffs; - Exoneration of import tariffs and VAT for equipment that has to be imported and cannot be locally produced, and for VAT for locally produced equipment; - Deduction of taxes of a maximum of 50% of profits reinvested or investment realized for equipment mentioned by decree n°94-1191; and - The Fund on Pollution Abatement (FODEP). This fund has been installed by law n°92-122. It aims at helping the industries to invest in pollution abatement techniques. Projects are financed through this fund with the following financial scheme: 30% of the total project costs are to be financed with companies own means, up to 20% subsidy and for the remainder 50%, soft bank loans may be obtained. Projects are judged by the Ministry for the Environment through a fixed procedure. As of 2005, the FODEP has contributed in extending funds to 393 pollution mitigation projects, waste collection, treatment and recycling projects and clean technologies projects, which received total

grants to about 23 million TND and total investment costs estimated as 115 million TND. The total FODEP interventions as of 31 December 2005 are distributed per sector as follows: Tanning industries: 9 - Food-processing: 96 - Mechanical and electrical industries: 32 - Textiles: 42 - Construction materials industries: 59 - Waste collection, treatment and recycling: 105 - Chemical industries: 47 - Other industries: 3 It is worth pointing out that the amount of self-financing by industrialists has reached 59.6 million TND, that is around 50% of the total investment amount. This figure attests to the extent of voluntary adhesion by project developers to the national effort invested in environmental protection.

Industry: - The only-one industry of pulp and paper has replaced the Denora-Permelec process of electrolysis for the production of chlorine used to whiten pulp by a membrane process, which presents less risk for the environment. Thus, the release of significant quantities of mercury in wastewater has been avoided; - The new process of SOTULUB (the Tunisian Company of Lubricating Oils) specialized in the re-refining and regeneration of waste mineral oil has permitted the avoidance of the generation of a significant quantity of hazardous wastes especially acid tars and used acid-treated clay; - The Tunisian industry of electric transforms has avoided the use of mineral oils containing PCB; - Two industries of asbestos-cement pipes, over three in Tunisia, have abandoned this process to the profit of plastic pipe process; - The Tunisia's only refinery has set up: (i) pre-treatment facilities to remove chemical pollutants (sulphur base chemicals, acids, etc.) and oil from wastewater (ii) treatment unit of sludge (high lead content); - The two industries of car batteries are recycling the lead fraction of the dead batteries; - By 2005, 45 industrial enterprises (electronics, mechanics, chemicals, oil extraction, etc.) have obtained ISO 14001 Certification.

Others: - Hundreds of companies in Tunisia are working in the field of the management of wastes: household wastes, wastewater, plastic wastes, metal wastes, health care wastes, dead batteries and accumulators, used printer cartridges, radiological films, paper, sludge of wastewater treatment facilities. 105 companies received subventions from the National Fund on Pollution Abatement (FODEP); - The Tunisian Company of Lubricating Oils owns and operates a 16000 metric tonnes/year capacity plant for the re-refining and regeneration of used mineral oils; - A public system (ECO-LEF) for the collection (remunerated collection) of used packaging and its treatment, recycling and reuse was created. It is financed by contributions from members (producers, packagers, distributors and importers). Major indicators of the ECO-LEF system (for the year 2005): - Number of "ECO-LEF" used packaging collection points: 200 points; - Volumes collected: 11000 tonnes of used packaging. - A public system (Eco-Zit) for the collection and the regeneration of the lubricating used oils was created. It is financed by contributions from oil companies. . In 2005, 14000 tons of lubricating used oils have been collected and regenerated. - A public system (Eco-Filtre) for the collection, the treatment and the recovery of the used oil filters was created. The system is financed from contributions from involved private companies. - Experimental operation of a pilot unit for the treatment of used oil filters (500 tons/year). Industries involved in this project are the Tunisian Company of Lubricating Oils which takes care of recovery and regeneration of the oil fraction; a cement plant which collects the synthetic fraction and assures recovery of its energy content; and a foundry which handles the metal fraction; and - 21 old industrial zones have been rehabilitated and renovated. In response to the aspirations of industrialists, the Tunis International Centre for Environmental Technologies (CITET) has granted priority order to capacity building in matter of environmental management, either based on ISO 14001, or on adopting efficient environmental management.

Uganda:

Policies: Uganda has a national environment policy and an environment sector 5 year plan/programme that is reviewed every 5 years.

Legislation: The National Environment Act, Cap. 153 established the National Environment Management Authority (NEMA) as the principal agency in Uganda for the coordination, monitoring, overseeing enforcement of environmental laws and standards and supervision of all environmental matters in the country. Under Section 53 of this Act, NEMA is mandated to make regulations and guidelines for the classification and management of hazardous wastes. NEMA released the following regulations and guidelines: - The National Environment (Waste Management) Regulations 1999. These regulations apply to all categories of hazardous and non-hazardous waste; the storage and disposal of hazardous waste and their movement into and out of Uganda; and all waste disposal facilities, landfills, sanitary fills and incinerators; - The National Environment (Standards for Discharge of Effluent into Water or on Land) Regulations, 1999; - Environmental Audit Guidelines for Uganda, 1999; - Environmental Audit Regulation for Uganda, 2006; - Environmental Impact Assessment Regulations, 1998; - Environmental Impact Assessment Guidelines, - Draft Environmental Oil Spillers Liability Regulations, - Draft Environmental Oil Spillers Liability Guidelines, and - Draft Solid Waste Management Guidelines.

Economy: Uganda currently has incentives and/or import duty /sales tax exemptions fo "Appropriate-technology" as outlined in the investment code. Other economic incentives/disincentives are currently being discussed.

Industry: - Adoption of cleaner production techniques; - A national cleaner production centre has been established with assistance from UNIDO (2000-2001); - Voluntary adoption of environment Management systems (ISO 14000); and - Adoption of environmentally sustainable industrial development thinking/approach.

Others: - Undertaking of environmental audits and in particular, waste audits; - NEMA is involved in

compliance assistance programmes with industry; - Awareness creation and increased information disseminations; and Harmonisation of other sectoral policies and laws.

Zambia:

Policies: The National Waste Management Strategy is complete. The Environmental Council of Zambia in conjunction with the National Chambers of commerce and Industry has been conducting training on cleaner production techniques. The Environmental Council of Zambia conducts public awareness on proper management of hazardous wastes. The Environmental Council of Zambia has also conducted projects that aim at disposal of hazardous and other wastes and reduction of generation of hazardous and other wastes. Conditional licensing system for generation of hazardous waste has been introduced; the higher the amount waste generated, the higher the license fees. Basically the Polluter Pays Principle is employed.

Legislation: The Zambian Government has an Environmental Protection and Pollution Control Act which was enacted in 1990; Hazardous Waste Management Regulations, 2001 have been developed to address all aspects of hazardous waste management; The pesticides and Toxic Substances Regulation came into effect in 1994. It addresses all aspects of chemicals management; Guidelines on management of used oil, lead acid batteries and health care waste being developed; and The Ozone Depleting Substances regulations of 27 of 2001 restricts importation of ODS and equipment containing ODS and management of Obsolete equipment.

Economy: Still to be developed.

Industry: Implementation of cleaner production techniques; and setting up of environmental departments.

Others: Public awareness programmes.

Question 5. Reduction/Elimination of generation of hazardous/other wastes

2005. Asia and Pacific. (Parties which did not report are not listed).

Azerbaijan:

Policies: National Hazardous Wastes Management Strategy was adopted by the decree of Cabinet of Ministers of the Republic of Azerbaijan on 25th August 2004.

Legislation: It provides and includes international principles, a policy and decision-making framework for the environmentally sound management of hazardous wastes and a system for the collection, treatment, recycling and disposal of hazardous wastes according to international practice and standards.

Industry: Facilities and devices are constructed by organizations, which are dealing with neutralization and utilization of hazardous wastes.

Bahrain:

Policies: A new incineration system for treating the generated healthcare wastes (i.e. clinical, pharmaceutical, infectious anatomical and chemical wastes) has been commissioned and is operating since April 2002 ,which is considered as a major milestone in environmental protection and part of national strategy to reduce and treat the hazardous wastes in the country; and Environmental Affairs (EA) is approaching international agencies and organizations to assist in minimizing the quantity of industrial / hazardous of wastes generated in the country. Many meetings have been held with the major industries to chalk out practical and achievable plans and programs for waste minimization utilizing efficient and environmental friendly processes, methodologies and equipment.

Legislation: Healthcare Waste Management Standards: Ministerial Order No.1 of 2001 has been issued highlighting the collection, transportation, storage, transfer, treatment and disposal of hazardous healthcare waste generated in Kingdom of Bahrain. The emissions from healthcare treatment facilities are also streamlined as well as the management and disposal of effluent and solid waste residues; Article 5 states : The waste producer shall seek to reduce the generation levels of such waste in quantity and quality through developing the appliances and equipment used, adopt and use a clean technology, select the alternatives and raw materials that cause less damage to the environment and public health; Used Oil Management Standards: Ministerial Order No.4 of 2005 has been issued highlighting the collection, storage, handling, treatment, disposal, recycling and reuse of oil and related products. Hazardous Waste Management Standard: Ministerial Order No.3 of 2006 has been issued highlighting the collection, storage, handling, transportation, transfer, treatment, disposal, recycling and reuse.

Economy: None.

Industry: Several industrial companies (ALBA and GPIC) adopted ISO 14000 standards and were certified by ISO, in addition to the implementation of environment management systems.

Others: Ongoing projects on cleaner production, recycling, reduction of hazardous waste and elimination of hazardous waste.

Brunei Darussalam:

Policies: This subject matter will be covered in the Draft Environmental Order of Negara Brunei Darussalam.

Legislation: This subject matter will be covered in the Draft Environmental Order of Negara Brunei Darussalam.

Economy: None.

Cambodia:

Policies: Application of the environmental assessment system and environmental license to new and ongoing industrial activities with regard to the hazardous waste management.

Legislation: Solid Waste Management Sub-Decree, 1999; Water Quality Management Sub-Decree, 1999; and Air Pollution Control and Noise Disturber Management Sub-Decree, 2001.

Economy: Polluter pays principle have been applied for some individuals and industrial sectors. Licensed charges for some industries.

Industry: Industries and waste generator have been complied with Cambodian Regulation and Provision of Basel Convention. Some industries have been awarded with the ISO 14000 series certification.

Others: None.

China:

Policies: China The State encourages and supports cleaner production and minimization of the generation of solid wastes. In recent years, SEPA make great efforts to promote cleaner production, including policy and regulation making, technical training, advanced experience spreading and etc. Law of the

People's Republic of China on Prevention of Environmental Pollution Caused by Solid Waste, effective on April 1st, 2005, stipulates: The principle of prevention of environmental pollution caused by solid waste in China includes reduction of the generation and harm of solid waste, recycling and disposal of solid waste in environmentally sound manner. The state takes measures to promote cleaner production and circular economy. The state manages to promote research on techniques and facility reducing generation and harm of industrial solid waste, publicizing the catalog of unadvanced techniques and facilities need to be eliminated. Industrial corporation should choose and use materials, energy and other resources properly, reduce generation and harm of industrial solid waste. SEPA has done lots of work to facilitate establishment of hazardous waste market and enhance domestic hazardous waste disposal capacity. For this purpose, we are carrying out a program of hazardous waste and medical waste disposal facility constructing throughout China. Hong Kong Special Administrative Region, China A Waste Reduction Framework Plan was launched in November 1998 to minimize the amount of waste produced that requires disposal and to promote recycling of different types of wastes. One initiative being undertaken is to study waste management tools and technologies that can reduce the amount of waste requiring final disposal. The Government has reserved land to set up a Recovery Park and encourage development of waste minimization and recycling technologies. A Policy Framework for the Management of Municipal Solid Waste for 2005-2014 has been published in 2005 to advocate waste avoidance and minimization in Hong Kong and outline the HKSAR Government's three-tier approach to achieve a sustainable waste-management strategy: waste avoidance and minimization; reuse, recovery and recycling; and bulk reduction and disposal of unavoidable waste. Waste charging, producer-responsibility schemes and landfill-disposal bans underpin the framework, with sustained public education and partnership, and legislative backing for support. It also proposes to develop state-of-the-art Integrated Waste Management Facilities with incineration as the core technology for final waste treatment. A territory-wide waste recovery programme was introduced in January 2005 to facilitate separation of different types of wastes at sources. A 20-hectare EcoPark is being developed by the HKSAR Government to provide long term land for the recycling industry, which would facilitate local recycling of recovered wastes. In parallel, the feasibility of introducing a producer responsibility scheme on handling of obsolete electrical and electronic equipment is being studied. HKSAR Government provides funding support to the development of recycling technologies through the Environment and Conservation Fund and the Innovation and Technology Fund. In addition, Hong Kong Productivity Council (HKPC), a statutory organization of the HKSAR, has since 1979 been developing and promoting cleaner production practices and technologies to assist local industries and business sectors in minimization/elimination of their generation of hazardous wastes and other wastes. Relevant examples include provision of the technical support to electrical and electronic equipment manufacturers to comply with the European Union's Directives on the Waste Electrical and Electronic Equipment and the Restriction on the Use of Certain Hazardous Substances in Electrical and Electronic Equipment, and development of various technologies/techniques to help various industries to reduce the discharge of hazardous wastes. Under the Policy Framework for the Management of Municipal Solid Waste (MSW), a multi-technology Integrated Waste Management Facilities (IWMF) will be commissioned in mid 2010s. The three existing landfills will be extended to provide the final repository for the waste which cannot be recycled or treated, or for the residues after treatment at the IWMF.

Legislation: China In August 1996, the State Council enacted "Decisions of State Council on Several Issues of Environmental Protection" which demands to ban, close and stop 15 kinds of enterprises which cause serious pollution to the environment. In January 1999, the State Commission of Economy and Trade issued "List of the backward technology and products for elimination". In June 2002, the 28th session of the Ninth National People's Congress Standing Committee of the People's Republic of China, enacted the Law of Cleaner Production Promotion. On April 1st, 2005, China enacted the law on the Prevention and Control of Environmental Pollution by Solid Waste of the People's Republic of China.

Cyprus:

Policies: A National Strategy for the Management of Wastes has been prepared, taking into consideration all the necessary measures for the reduction of the generation of wastes, as provided in the relevant E.U legislation. The National Strategy for the Management sets the basic principle of the waste hierarchy "Generation of waste shall be avoided whenever possible, wastes shall be recovered/ recycled whenever possible and wastes shall be disposed of in an environmentally compatible way".

Legislation: In accordance with the E.U and national legislation the environmental standards and the criteria to reduce and eliminate generation of hazardous wastes and other wastes are in elaboration.

Economy: Actions have been made to the Ministry of Finance using economic instruments to encourage environmentally friendly activities or discourage polluting activities.

Industry: Economic and consumer pressures have moved industry to introduce methods of waste reduction on a voluntary basis. Some of the initiatives that are in place include: total Quality Management programs such as ISO standards. These programs improve the overall operations of businesses and as a partial result of these efforts; a net reduction in wastes is achieved.

Indonesia:

Policies: 1. Encourage generators to implement hazardous waste minimization and avoidance strategies in their activities; 2. Promote waste exchanges; 3. Encourage establishment recycling facilities for

hazardous wastes; and 4. Implement environmental compliance program for industries.

Legislation: Article 9 (1), Article 27 (1), and Article 33 (1) of Government Regulation No. 18/1999 Jo 85/1999.

Economy: Existence of commercial treatment facilities for hazardous wastes give generators opportunity to calculate the costs to manage their hazardous waste properly. High costs faced by generators, in turn, could be the reason for industries to reduce generation of hazardous waste. On the other hand, they have to pay more for treatment of more waste their produce. Articles 9, 27, 33 and 18-22 of the GR No. 18/1999 encourage activities to utilization/minimization and 3R of waste. As the specification of the waste is conform with the need of other industries for raw material, generators would gain benefits from it. To discourage improper management of waste, Chapter IX of the Law of Republic of Indonesia No 23/1997 states that any recklessness and or intentional mismanagement of (hazardous) wastes that violate applicable environmental and other rules might be liable for imprisonment and fine. Range of fine is at minimum IDR100,000,000 Rupiah to IDR450,000,000, depend on the crimes committed, and so the the length of imprisonment.

Industry: An Environmental compliance program, called PROPER, has launched by the Ministry of Environment in cooperation with local governments to encourage industries to comply with Indonesian environmental regulations. Inspectors conduct compliance audits to industries, ranked them into five categories (black, red, blue, green, and gold) and the results then announced publicly every year. Black and Red represent insufficient compliance, Blue indicates fully compliance, while Green and Gold represent beyond compliance. Announcement creates incentives and disincentives reputation for industry. Industries ranked Black and Red usually are under pressure since they might face problem with their financial resources such as banks. In this case, they will increase their efforts to comply with applicable regulations such as water and air pollution control and hazardous waste management.

Japan:

Policies: Government of Japan established the Basic Environment Plan in 1994, and it was amended in 2000. At the same time, the Basic Law for Establishing a Sound Material-Cycle Society was enacted. The Basic Law aims to promote sound cyclical use and disposal of waste and the like, and prioritize the following actions in order of number: (1) restricting generation, (2) reuse, (3) recycling, (4) heat recovery, and (5) the correct disposal of waste and the like. A new socioeconomic system needs to be created where responsibilities and costs on waste treatment and recycling are shared among industries, consumers, local governments and the national government as necessary. In such system, there should be incentives to reduce waste generation and recycle at each stage of product development, manufacturing, import, distribution, consumption, collection and recovery.

Legislation: "Waste Management and Public Cleansing Law", "Law for Promotion of Effective Utilization of Resources", "Container and Packaging Recycling Law", "Electric Household Appliance Recycling Law" etc.

Economy: Policy financing for establishment of treatment facilities; and preferential tax treatment.

Industry: Under the Voluntary Action Plan on the Environment adopted by the Keidanren (Japan Federation of Economic Organization), measures are taken on promoting recycling and limiting the discharge of wastes.

Malaysia:

Policies: Malaysian Agenda for Waste Reduction (MAWAR); and promotion cleaner production.

Legislation: In preparation to enhance existing provision in the Environmental Quality (Scheduled Wastes) Regulations 2005 to reduce wastes using best practicable means.

Economy: Special capital allowance incentive to companies which generate wastes and intend to set up facilities to treat their own wastes covering all capital expenditure incurred.

Industry: Cleaner production, waste minimization and ISO 14001 certification.

Mongolia:

Policies: - To define the generation of hazardous wastes; - Transport collection and from household, industries and hospitals

Legislation: - Mongolian Law on Environmental protection 1995 - Mongolian Law on Environmental impact assessment 1998 - Mongolian Law on Banning import, transit of hazardous waste and its export 2000 - Mongolian Law on wastes of household and industries 2003 - Regulation passport of hazardous waste 2006 - Classification and Category of hazardous wastes 2006

Pakistan:

Policies: Formulation and implementation of National Conservation Strategy and National Environmental Action Plan, National Cleaner Production Centres n various sectors.

Legislation: Pakistan Environmental Protection Act-1997; Self Monitoring and Reporting Rules-1998; Industrial Pollution charge (Calculations and Collection Rules)-1998; Draft Hazardous Substances Rules-2003; Revised National Environmental Quality Standards-2000; Import Trade and Procedure Order – 2000; and Draft Hospital Waste Management Rules-2003.

Economy: The Government has reduced import duty on pollution abatement equipment from 30% to 10%.

Industry: Federation of Pakistan Chambers and Commerce has included environment services as one of its principal function and also established its Standing Committee on Environment; A number of Industrial Sectors/units have established environment cells; Pakistan Tanners Association contributed about 28% of the total cost of construction of Korangi Combined Effluent Treatment Plant in Karachi; · Local Tanneries Associations in Lahore have contributed about 4% of the total cost of construction of Kasur Tanneries Pollution Control Project; Other industry-supported initiatives include Environmental Technology Program for Industry, National cleaner Production Center for fuels and Clean Production Program; and A number of hospitals have installed incinerators for disposal of infectious waste.

Philippines:

Policies: a. Implementation of programs/ projects assisting industrial facilities in coming up with an Environment Management System; b. Philippines developed a Business Agenda 21, promoting the use of cleaner production or cleaner technologies using waste minimization concepts; and c. promotion of the Philippine Environmental Partnership program (PEPP).

Legislation: a. Presidential Decree 984: Pollution Control law of 1976; b. Presidential Decree 1586: Environmental Impact Statement (EIS) System; c. Republic Act 6969;Toxic Substances and Hazardous and Nuclear Wastes Control Act of 1990; d. Republic Act 8749: Clean Air Act of 1999; e. Republic Act 9003: Solid Waste Management Act of 2000; and f. Republic Act 9275: Philippine Clean Water Act of 2004.

Industry: Compliance to Republic Act 6969 specifically on the registration and reporting requirements for hazardous waste generators.

Qatar:

Policies: Industries have been suggested to recycle and re-use wastes wherever possible. Any new industry on operation is required to take a consent to establish as part of EIA procedure.

Legislation: The generator would make continuous effort towards minimization of hazardous waste and other wastes and make annual assessment of the efforts for submission to the Supreme Council For The Environment in Qatar.

Industry: Spent catalysts are sold or given to recycling companies; and Waste oils are collected and taken offsite by contractor for recycling.

Republic of Korea:

Policies: The Korean government has prepared the 2nd Comprehensive National Waste Management Plan (2002~2011) in which the firm establishment of a sustainable and resource circulating socioeconomic foundation is outlined as a major policy objective. Based on this Plan efforts are being systematically undertaken to minimize waste generation, reuse waste as a resource, and establish infrastructure for safe waste management.

Legislation: Many laws, regulations and guidelines are being enforced with the objective of reducing and discouraging the generation of hazardous waste, of which some of the major examples are the following: - The Waste Management Act; - Act on the Promotion of Saving and Recycling of Resources; and - Guidelines on the Reduction of Industrial Wastes (Public Notice by MOE and the Ministry of Commerce, Industry and Energy, 2001).

Economy: The Extended Producer Responsibility (EPR) system and the Waste Charge System have been in effect for recyclable and non-recyclable products, respectively. The Volume-Based Waste Fee System has been in place since 1995 to facilitate the reduction of household waste and the separate collection of recyclable wastes from non-recyclable wastes.

Industry: Industries and waste generators are making efforts to minimize the generation of wastes, both to cut down the financial burden in their disposal and to comply with the Public Notice by MOE and the Ministry of Commerce, Industry and Energy, announced on 21 December 2001. Some retailers, such as department stores, have signed a voluntary agreement with the MOE that they will steadily reduce the use of disposable goods, and some fast food restaurants have decided not to use them at all.

Singapore:

Policies: The strategies taken to manage hazardous wastes include: Avoid/reduce generation of hazardous wastes; Use less hazardous chemicals;and Use clean technology and recycle/re-use toxic industrial wastes where appropriate. National Recycling Programme (NRP) for households was launched in April 2001 to increase recycling rate for household wastes. An interagency task force led by the Economic Development Board was formed in May 2001 to draw up the framework and action plans to develop Singapore into a Centre of Excellence for waste recycling in the region in 10 years' time. The task force recommended a framework comprising the following four strategic thrusts: To create a pro-environment culture both in the corporate world and in the community; To develop an effective supporting infrastructure to help nurture the waste recycling industry; To build a strong foundation for technology development and innovative application of technologies; and To create a vibrant waste management industry. (http://www.nea.gov.sg/cms/pcd/EPDAnnualReport2005.pdf)

Legislation: Prior to Singapore's notification to the Basel Convention, the Pollution Control Department applied the Environmental Public Health (Toxic Industrial Waste) Regulations to regulate the export, import and transit of hazardous wastes. In November 1997, Singapore enacted the Hazardous Waste (Control of Export, Import and Transit) Act (HWA) and its regulations that came into operation on 16 March 1998. The Act and its regulations enable Singapore to fulfill the obligations of the Basel Convention. Under the Act and its regulations, a permit is required for the export, import and transit of hazardous wastes scheduled under the Basel Convention.

Economy: Private companies can apply to Agency for Science, Technology and Research (A *STAR) for research funding on reduction of hazardous waste generation or recycling of hazardous wastes. The National Environment Agency (NEA) has continued to provide a $20 million Innovation for Environmental Sustainability (IES) Fund in 2002. Through this fund, NEA will provide seed funding for innovative projects undertaken by the industry and in the community that will help Singapore attain its goals of environmental sustainability. Companies could seek assistance in the development and test bedding of promising and innovative technologies on waste recycling. (http://app.nea.gov.sg/cms/htdocs/category_sub.asp?cid=42)

Industry: Cleaner production; and waste minimization/reduction/recycling/recovery programs. The Waste Management and Recycling Association of Singapore (WMRAS) was established on 8 August 2001. Members of the association include companies in the waste management and recycling industry. WMRAS serves as a platform for the waste recycling companies to pool their resources, to collaborate and to work together to upgrade and raise the professionalism of the waste management and recycling industry. (http://www.nea.gov.sg/cms/pcd/EPDAnnualReport2005.pdf)

Sri Lanka:

Policies: A National Strategy for Solid Waste Management has been formulated, where waste avoidance is prioritized over other forms of treatment and disposal. The National Cleaner Production Policy & Strategy and the sectoral Cleaner Production Policies which cover major economic sectors (health, agriculture, Fisheries, tourism) of the country. A National Industrial Pollution Management Policy is in place. The National Environmental Action Plan has advocated the establishment of a Cleaner Production Center as the first priority for waste reduction, and accordingly, a National Cleaner Production Center has been established under the Ministry of Industries. A National Plan for Hazardous waste management has been prepared. National Cleaner Production Policy in place. Database of Municipal Solid Waste in SriLanka has been updated. Approval for importation of pesticides are granted on consignment basis. At the time of granting approval, attention is paid to the amount of the product available with the consignee in order to avoid the accumulation of unwanted or obsolete stocks within he country. Further consignments which are older than three months at the time of export from the country of origin are not allowed to import into the country.

Legislation: Internal Management of Hazardous waste regulations are in place. These regulations have been revised to incorporate List A & List B Wastes. Guidelines for the implementation of hazardous waste management regulations are in place. A guidance manual for safe and effective detection and investigation of illegal traffic and transboundary movement of hazardous wastes and other wastes has been prepared. Environmental Protection License scheme and the Environmental Impact Assessment scheme under the National Environmental Act are in place. Guidelines for siting of industries have been formulated.

Economy: The Ministry of Industries facilitates ISO 14,000 certification for industries. The environmental licensing scheme (EPL) and the EIA process have been introduced for the polluting industries under National Environment Act. Arrangements are being made for implementation of the load based licensing scheme to minimize the discharge of hazardous and other wastes under the EPL System. The National Cleaner Production Center is functioning to reduce the generation of wastes from industries.

Industry: The industrialists make an effort to obtain ISO 14000 Certification and adopt cleaner production approaches. The government as well as the private hospitals are in the process of obtaining the ISO 14000 certification. Industrialists plan to cluster their industries at industrial parks and common waste treatment plants are established in industrial estates.

Thailand:

Policies: On 23 March 2005, the Prime Minister of Thailand has presented the government policies delivered to the National Assembly. As to the Natural Resources and Environmental Policy regarding the waste aspect, the Government will implement an environment-friendly waste disposal system and enhance waste disposal capacity of local administrative authorities. The Government will also promote the private sector's role in research and development for recycling of raw materials and clean technology. In addition, the Government will not allow Thailand to become an end receiver of waste, which has to bear the costs of waste and pollution. Recently, Thailand has drafted the national integrated waste management plan, which has been focused on the sustainable consumption of the natural resources and the application of the 'cradle to cradle' concept, including control of waste generation at sources, increase on waste segregation and enhancement of waste utilization efficiency prior to the final disposal. The targets of waste minimization in this plan are to have the waste reduction scheme, to have the waste segregation system for reuse and recycling in every community over the country, and to minimize 30% of total waste generated within 2009. In addition, based on the integrated waste management and life cycle approach, Thailand has also

developed the strategic plan on special wastes, such as packaging wastes and waste from electrical and electronic equipments, which has introduced the Polluter Pays Principle by taking into account the responsibility of producer, importer and consumer and the promotion of 3Rs as a vital tools for the environmentally sound management.

Legislation: According to the Notification of the Ministry of Industry B.E. 2548 (2005) issued pursuant to the Factory Act B.E. 2535 (1992) on Disposal of Wastes or Unusable Materials, Factory operators having hazardous wastes which have such characteristics and properties as defined in the notification must carry out the disposal of the wastes or unusable materials as defined as follows: - Wastes and unusable materials shall not be stored in the factory longer than 90 days without prior approval by the Department of Industiral Works (DIW). The storage of wastes and unusable materials in the factory shall comply with the provisions in the Notification of the Ministry of Industry B.E. 2547 (2004) on Manifest System. - Wastes and unusable materials shall not be taken out of the factory except with prior approval from the Director-General of DIW or the person assigned by the Director-General to take them out to disposal or recovery by method and at the place according to the criterion and the method defined in Annex 4 of the Notification and only by the permitted waste collector, transporter, and processor. If the treatment and disposal of wastes and unusable materials within the factory shall comply with the provisions provided in section 4, article 17 and article 21-24 of the Notification.; and - Details on type, quantity, characteristics, properties and storing place of such hazardous wastes or unusable materials concerned as well as method of storage, detoxification, disposal, discarding, landfilling and transport according to "Form Sor Kor 3", attached to the notification must be yearly notified to the Department of Industrial Works within the third of March of the next calendar year. Additionally, the separation, collection, transportation, treatment and disposal of infectious wastes generated from hospitals, clinics and health care service centers have been complied with the Regulation of the Ministry of Health on the Disposal of Infectious Waste B.E. 2545 (2002).

Economy: Tax differentiate, e.g. the different excise tax rate for recyclable batteries production which is rebated 5% of the excise tax, unleaded gasoline (ULG); Tax exemption, e.g. equipment for the control, treatment or eliminate pollutans; Deposit-refund system, e.g. bring-back program, this system will be used as a tool for subsidizing the consumer to return the remains of products containing hazardous substances such as batteries for final disposal or recovery; The environmental fund is established for the environmental sound management activities in accordance with item 2 "Environmental Fund" of the Enhancement and Conservation of the National Environment Quality Act B.E. 2535 (1992); and The Thai green label scheme project is established for developing the criteria on the clean or waste minimized products (e.g. no mercury added dry cell batteries, recyclable plastic products, etc.).

Industry: In cooperation and support from relevant authorized agencies, 6 categories including plastics, agro, pulp and paper, electroplating, dyeing and tannery industries have been in the process of developing clean technologies and waste minimization methods. The co-incineration of wastes in cement kilns as one optional waste disposal other than landfilling, since 2001. The benefits of this program are both energy and material recovery. The program also included the energy replacement for coal/coke and the material replacement for raw material used in the cement kiln process. There are currently seven cement manufacturers expanded their capability in co-incinerators of hazardous wastes. Currently, pilot project on waste exchange programs are being conducted in Thailand to encourage recycling in industries. This program is based on the premise that one industry's waste is another industry's raw material. Companies match their waste disposal and their raw material needs through a computerized database, and subsequently exchange waste. For the supplier of the waste, these types of transactions avoid disposal costs, while the user; the purchase of used raw materials can be done at lower prices than that of new materials and can be reduced the energy needed during the manufacturing processes. As of 2004, over 400 industries had registered on the waste exchange database established by Ministry of Industry. Additionally, at the local level many successful programs have been implementing, for example. Some local communities have conducted their own waste management program based on the 3Rs, such as source separation program, waste recycling in school. Such programs can reduce more than 30% of total waste generated in the community.

Others: The following methods have been used as support tools to reduce and/or eliminate generation of wastes: ISO 14000s, ISO 18000, Life cycle Assessment and Greening of Supply Chain etc.; Research on clean technologies and waste minimization e.g. research on cleaner production in the dyeing and synthetic rubber industries; and Technical guidelines on the environmental sound management of hazardous wastes generated from communities e.g. laboratory waste, commercial waste, infectious waste, vessel and port waste.

Viet Nam:

Policies: National Strategy on Environmental Protection until 2010 and Vision toward 2020: The first specific objective is pollution reduction and the first main task is pollution prevention and control. Waste recycling is encouraged. Resolution 41-NQ/TW dated 15 November 2004 of the Politburo on enhancement of environmental protection in the industrialization and modernization of the country: aims at pollution reduction, including pollution control at source and waste recycling.

Legislation: Law on Environmental Protection in 2005 (entered into force since 1 July 2006) encourages waste reduction and recycling as well as stipulates responsibility of generators for waste minimization. Regulations on Hazardous Wastes Management issued by Decision No. 155/1999/QD-TTg dated

July 16, 1999 of the Prime Minister (under amendment process) stipulates that generators are responsible for reducing and separating hazardous waste at source (will expire soon).

Economy: Law on Environmental Protection in 2005 (entered into force since 1 July 2006): - Organizations, households and/or individuals that have production or business of products related to long term adverse impact on environment and human health have to pay environmental tax. - Individuals and/or organizations that discharge into environment or cause harm to environment have to pay environmental fee. Decree No 67/2003/ND-CP dated June 13, 2003 on environmental fees for waste water.

Industry: In carrying out production, business and other activities, all organizations and individuals must implement measures for environmental sanitation and have appropriate waste treatment equipment to ensure compliance with environment standards and to prevent and combat environmental degradation, environmental pollution and environmental incidents (Law on Environmental Protection in 2005). Application of Cleaner Production and ISO 140000 is increasing.

Question 5. Reduction/Elimination of generation of hazardous/other wastes

2005. Central and Eastern Europe. (Parties which did not report are not listed).

Albania:

Policies: The National Environmental Action Plan was approved since 2001; Solid Waste Management Plan; The Law for the Management of Hazardous Chemical Substances will be completed in 2001; and The approval in July 2001 of the "Strategic Action Plan for healthcare waste management in Tirana city". This document is prepared from ECAT-Tirana (Environmental Center for Administration and Technology), and it is approved from Minister of Health. A few municipalities have prepared the Local Plans on Waste Management. Regarding the national policies and strategies should explain: 1- The National Plan on waste Management is an old plan, approved since 1996. Actually, Albania is working to prepare the National Strategy on Waste Management, and local plans, as well as New National Waste Management Plan. Albania is expecting to have these important documents in the end of 2006. 3- During the year 2005 was prepared the draft-National Strategy on Hazardous Waste Management and draft-law on Hazardous Waste Management. They may will be approved soon.

Legislation: Environmental Protection Law No. 7664 1/21/1993; New Environmental Protection Law No.8934 date 05/09/2002; Law no. 9010 date 13/02/2003 "On environmental management of solid waste"; Law no.8990 date 23/01/03 "On environmental impact assessment"; Decision of Council of Ministers No 26 1/31/1994 on Hazardous Waste and Residues; Decision No. 541 of Council of Ministers dated 25 September 1995 "On Duties that Ministers, Institutions and Physical and Juridical Persons have in Environmental Monitoring and Control Process"; Law no.9108, date 17/07/2003 "On the Chemical Substances and their compounds" ·Decision of Council of Ministers 'On classification, packaging, labeling and storage of hazardous chemicals". The Albanian Waste Catalogue was prepared in 2004 according the European Waste Catalogue and was approved from Council of Ministers on 18/2/2005. The list define the hazardous waste with *, and it has annexes which define hazardous characteristics and hazardous components(in compliance with Council Directive 91/689/EEC on hazardous waste).

Economy: According the Law no.9010 date 13/02/2003 "On environmental management of solid waste", the activities that recycle waste, will be excluded from the tariff of Environmental Permit , and will be supported from MoE.

Industry: 1- The several projects financed from EU started in 2004 for remediation of environmental hot-spots, which was defined from UNEP Report in 2001 in Albania. 2- According to the Law no.8990 date 23/01/03 "On environmental impact assessment", the activities and industries should apply for Environmental Permit before they start work, and they have obligation to prepare a plan-measures for management and limit waste generation (which should be present in Environmental Impact Assessment Report). 3- According the Law no.9010 date 13/02/2003 "On environmental management of solid waste",-article 10- the activities that generate waste should ensure separate collection of hazardous waste and temporary storage them in special conditions until their final disposal. 4-There are a few enterprises which are collecting and recycling paper and plastic. 5- There are a number of small enterprises that recover the used tyres.

Others: 1. There is a project financed from CARDS 2002 "Design and construction of a landfill for hazardous waste in Albania". The project started in August 2004. 2. Another project finished the feasibility study for management of hazardous waste and construction of a landfill for waste generated from Oil Refinery in Ballsh. 3. Project "Management of solid waste in Albania with pilot zone Korca region", financed from Swedish International Development Agency - Sida, and was approved from Council of Minister in 22.12.2004. The project aim to support the MoE to fulfill the legislation for waste, as well as the establishment of national waste database and to support the Korca region on waste management (on separate collection, recycling, composting center, remediation of old dumpsites ect.).

Belarus:

Policies: National Action Plan on Rational Use of Natural Resources and Environmental Protection in the Republic of Belarus for 2001-2005 years, adopted 21.06.2001. National Action Plan on Rational Use of Natural Resources and Environmental Protection in the Republic of Belarus for 2006-2010 years, adopted 05.05.2006 by the Decree of the President of Republic of Belarus ?302. in which one of priorities specifies the organization of gathering, uses and neutralizations of waste products; perfection of the economic mechanism of wildlife management. The National plan of action on rational use of natural resources and preservations of the environment of Belarus on 2006 - 2010 is authorized by the Decree of the President of Belarus ?302 from May, 5, 2006 By the basic directions of activity in sphere of the management with waste products for 2006-2010 have been allocated: perfection of the legislation on maintenance ecologically safe handling of waste products; the organization ecologically safe handling of the waste products formed by manufacture of potash fertilizers; development and introduction of technologies on use of waste products; construction of the basic objects providing a safe burial place and processing of waste products; the organization of ecologically safe storage and neutralization of dangerous waste products; the organization of ecologically safe storage of waste products and the used equipment, containing polychlorinated biphenyl.

Legislation: The Law of Republic of Belarus «About the tax for using natural resources (the ecological tax)» from December, 23, 1991 in edition of the Low of Republic of Belarus from 31.12.2005 ?80-3 ; The Waste

Law, which entered into force from November, 25th, 2003 in edition of the Low of Republic of Belarus from 18.11.2004 ?338-3 ;introduces the general obligation to prevent waste generation and to reduce its quantity and harmfulness. In order to implement the general obligation of the Law a number of normative legal documents have been accepted: - the Decree of the President of Belarus from 15.06.2005 ? 275 "About rates of the tax for using of natural resources (the ecological tax) and some questions of its collection". - the Decree of the President of Belarus from 10.07.2006 ? 437" About some measures on perfection of the organization of gathering (preparation) and use of waste as a secondary raw material"; - the Decision of the Ministry of Natural Resources and Environmental Protection from 28.03.2002 ? 4 «About State Register of Technologies for Waste Recycling and on State Register of Facilities for Waste Neutralization and Disposal»; - the Decision of the Ministry of Natural Resources and Environmental Protection from 28.11.2001 ? 21 «About the adoption of Rules for Development, Agreement and Approval of Instruction for management of Industrial Waste»; - the Decision of the Ministry of Natural Resources and Environmental Protection from 16.11.2001 ? 26 «About the adoption of Instructions on Procedure for Registration of Transactions for Alienation and Assignation (except transportation) of Waste to Another Person for a Certain Period of Time»; - the Decision of the Government 23.01.2002 ? 29 « About the statement of the List of waste on Procedure for Registration of Transactions for Alienation and Assignation (except transportation) of Waste to Another Person for a Certain Period of Time»; - the Decision of Ministry of Health and Ministry of Natural Resources and Environmental Protection from 30.10200162/23/13 «About the adoption of Order on Determination of Level of Hazard of Waste and Establishing the Class of Hazard»; - the Decision of the Ministry of Natural Resources and Environmental Protection from 13.11.2001 ? 25 «About the adoption of List of Waste that should have Passports»; - the Decision of the Ministry of Natural Resources and Environmental Protection from 08.10.2001 ? 17 « About the adoption of Form of Special Document for Accompanying of Transportation of Waste»; - the Decision of the Ministry of Health of the Republic of Belarus from 22.11.2002 ? 81 «About the approval of Instruction about Rules and Methods of Neutralization of Waste Pharmaceuticals, Drugs and Medicines, of Products of Medical Purpose and Clinical Equipment»; - the Decision of the Government 27.02.2003 ? 269 « About the perfection of the System of Collection and Processing of Some Kinds of Secondary Raw Material»; - the Decision of the Ministry of Housing and Communal Services from 30.07.2003 ? 26 «About the adoption of Instruction on the Organization of Separate Collection, Storage and Transportation of Municipal Waste»; - the Decision of Ministerial council from 20.10.2003 ? 1371 «About the adoption of Regulations about Licensing of the Activity Connected to Use of Natural Resources and Influence on the Environment»; - the Decision of Plenum of the Supreme Court of Republic of Belarus from 18.12.2003 ? 13 " About the application by Courts of the Legislation on the Responsibility for Offences Against Ecological Safety and the Environment"; - the Decision of the Trade Ministry from 20.02.2004 ? 8 « About the adoption of Procedure for Payments for Organization of the Glass, Paper and Cardboard Packing Waste Collecting and Recycling»; - the Decision of the Ministry of Housing and Communal Services from 28.12.2004 ? 38 «About the adoption of the Program of Municipal Solid Waste Management for 2004-2006»; - the Decision of the Ministry of Natural Resources and Environmental Protection and the Ministry of Housing and Communal Services from 20.12.2004 ? 38|37 «About the adoption of Environmental Requests for Seating and Operation of the Municipal Waste Sorting and Processing Facilities»;

Economy: The economic mechanism in the field of waste management is defined by the Law "About Environmental Protection" of the Republic of Belarus, the Law " About Waste ", the Law "About Tax on Natural Resource Usage (Ecological Tax) " and other legislative documents of the Republic of Belarus. Article 38. Provision of economic incentives in the field of waste management: - Exemption from taxes according to the legislation of the Republic of Belarus to persons during which economic activities the waste management is carried out through application of cleaner technologies and realization of other innovative activity in the field of waste management; - Allocation according to the legislation of the Republic of Belarus of means from republican and local budgets, budgetary environmental funds for performance of actions for neutralization of hazardous waste; - Applications of the accelerated amortization of the basic production assets of the persons who are carrying out during economic activities use or neutralization of waste products; - Other kinds of provision of economic incentives according to the legislation of the Republic of Belarus. The procedure of the measures connected to provision of economic incentives for introduction of cleaner-production technologies in manufacture, is defined by the legislation of the Republic of Belarus. According to the legislation the ecological tax are assessed: volumes of the production wastes placed on objects of accommodation of waste; volumes of the placed goods which placed under a customs mode of destruction and has lost the consumer properties, and also the waste formed as a result of destruction of the goods, placed under this mode; volumes made and (or) imported plastic container and other goods, after loss of consumer properties are formed the waste rendering harmful influence on an environment and demanding the organization of systems of their gathering, neutralization and (or) uses. The list made and (or) imported plastic container and other goods, after loss of which consumer properties the waste rendering harmful influence on an environment and demanding the organization of systems of their gathering, neutralization are formed and (or) uses, is established by the President of Republic of Belarus; The size of a payment is established under the rates of the tax differentiated on a degree of toxicity of a withdrawal. Limits on waste accommodation are established. For accommodation of production wastes over the established limits or without the established limits if their establishment is provided by the legislation, the tax is raised in the 15-fold size of the established rate of the tax. In order to improve the ecological situation and increase the level of waste collection and recycling, gathering on the organization of preparation of glass, paper and cardboard containers as a secondary raw material is used from July1, 2006.

Industry: The generators of waste should develop the norms for waste generation and get agreement on them

from territorial bodies of the Ministry of Natural Resources and Environmental Protection. The waste generation norms help with operational quantitative control on waste generation and are used for development of waste disposal limits. Legal persons and individual businessmen carrying out economic and other activity rendering harmful influence on an environment implement ecological control. One of the primary goals of the industrial ecological control, over the industrial analytical control is the control over the reference with dangerous substances, waste products. Besides sources of formation (generation) of waste products, including manufactures, shops, sites, technological processes and separate technological stages are included in the list of objects of the industrial ecological control subject to regular supervision and a rating.

Bosnia & Herzegovina:

Policies: National strategies for hazardous waste is not prepared.

Legislation: None

Economy: None

Industry: None

Others: None

Bulgaria:

Policies: National Waste Management Program (2003-2007).

Legislation: -Regulation on the order and procedure for import, export and transit of waste, and for the cases when a bank guarantee or insurance is required (promulgated, SG, ? 102/19.11.2004); -Regulation on the requirements for marketing of batteries and accumulators and for treatment and transportation of spent batteries and accumulators (promulgated, SG, ? 58/15.07.2005); - Regulation on the requirements for treatment and transportation of spent oils and waste oil products (promulgated, SG, ? 90/11.11.2005)-Regulation ? 6 on the conditions and requirements for the construction and operation of waste incineration and co-incineration plants (promulgated, SG, ? 78/07.09.2004);-Regulation ? 7 on the requirements, which must be met by the waste treatment facility sites (promulgated, SG, ? 81/17.09.2004); -Regulation ? 8 on the conditions and requirements towards the construction and operation of waste landfills and other facilities and installations for waste recovery and disposal (promulgated, SG, ? 83/24.09.2004);-Regulation on the requirements for treatment and transportation of waste from production of titanium dioxide (promulgated, SG, ? 39/12.05.2004);-Regulation on the requirements for soil protection when using sludge originating from waste water treatment plants for the purposes of agriculture (promulgated, SG, ? 112/23.12.2004);-Regulation on the way of collection and treatment of end-of–life vehicles (promulgated, SG, ? 104/26.11.2004);-Regulation on the treatment and transportation of industrial and hazardous waste (promulgated, SG, ? 29/19.03.1999);-Regulation on Packaging and Packaging Waste (promulgated, SG, ? 19/09.03.2004), transposes the requirements of Directive 94/62/?? on packaging and packaging waste;-Regulation on the requirements for making an inventory of PCB containing equipment, marking and cleaning as well as for treatment and transportation of PCB containing waste; and-Ordinance on the conditions and procedure for issuing of permits for construction and operation of new establishments or installations and for operation of existing establishments and installations implementing a system for the prevention of major accidents involving dangerous substances or the limitation of their consequences.

Economy: Product charge for putting on the market of batteries and accumulators, tires and vehicles.

Croatia:

Policies: The Waste Management Strategy of the Republic of Croatia adopted on 14th October 2005. by the Croatian Parliament, contains instruments for: - avoiding and reducing the generation of waste and reducing the hazardous properties of waste at source (cleaner production), - developing and establishing programmes of systematic education on waste, - recovering the valuable properties of waste for material or energy purposes National Waste Management Plan is in drafting process.

Legislation: Waste Act, Official Gazette, No. 178/04: Article 5 (1) The objectives of waste management are: 1. avoiding and reducing the generation of waste and reducing the hazardous properties of waste, particularly through: - the development of clean technologies that exploit less natural resources, - technical development and promotion of products that do not contribute or minimally contribute to the increase of adverse effects of waste and the risk of pollution, - the development of appropriate methods for the disposal of hazardous substances contained in waste intended for recovery, 2. waste recovery through recycling, reuse or reclamation, or through some other procedure that allows separating secondary raw materials, or use of waste for energy purposes, 3. waste disposal in the prescribed manner, 4. remediation of environment polluted by waste. (2) In the achievement of the objectives referred to in paragraph 1 of this Article only the most efficient available technology and its economic feasibility shall be taken into consideration, in accordance with the principles referred to in Article 6 of this Act. Article 12 (1) A producer of waste who produces more than 150 tons of non-hazardous waste or more than 200 kilograms of hazardous waste shall be obliged to plan waste management for a four year period.

Economy: 1. Croatian Environmental Protection and Energy Efficiency Fund (CEPEEF) established by a decision of the Government of the Republic of Croatia is State Non-Budget Fund in charge for financing and co-financing projects, programmers and investments related to improvement environment and energy efficiency. 2. The Croatian Environmental Protection and Energy Efficiency Fund in 2004 started to

collect the charges on burdening the environment with hazardous waste from companies producing hazardous waste. This charges are defined according to the Article 15 of the Environmental Protection and Energy Efficiency Fund Act (Official Gazette, No.107/03). This Article sets the obligation to companies to pay the charge on the basis of quantities of hazardous waste produced but untreated and not exported, and on the basis of hazardous waste characteristics. 3. In 2005. Ordinance on packaging and packaging waste has been adopted. Also, during 2006. Ordinances have been adopted which shall regulate the method of handling waste batteries and accumulators (OG 133/06), waste oils (OG 124/06) and end-of-life vehicles (OG 136/06) and waste tires (OG 40/06) .

Industry: Certain facilities have established ISO 14001 Environmental Management System. Some of the companies have taken part in cleaner production programmes initiated by the Croatian Center for Cleaner Production. Companies are preparing waste management plans in accordance to the Waste Act, Article 12.

Estonia:

Policies: The environmental policy of the Estonian government has been provided by the National Environmental Strategy (1997) and the National Environmental Action Plan (NEAP: 1998), which also set guidelines for legal development.National Waste Management Plan (2002).

Legislation: Waste act, Packaging Act, etc.

Hungary:

Policies: The National Environmental Program contains 19 measures for waste reduction and recycling/reuse measures, including hazardous wastes. The National Waste Management Plan was accepted by the Hungarian Parliament on November 2002. This Plan contains the financial and technical measures for implementation till 2008. Based on the NWMP the regional environmental authorities have created the regional waste management plans for the seven statistical regions. These plans were issued due to the prescriptions, given in the Decree of Ministry of Environment and Water 15/2003 (XI. 7.)KvVM. Local authorities and companies have also obligation for preparing similar waste management plans. Regional environmental authorities have to control the plans of local municipalities and these plans have to be published in the form of municipal decrees. In order to keep the plans of different levels harmonised, the structure and content requirements of these plans are laid down in Decree 126/2003. (VIII. 15.)Korm.

Legislation: Unless a legal rule provides otherwise, the producer shall prepare a three-year waste management plan for the prevention of the generation of its hazardous wastes, for the reduction of the hazard level and the quantity of its hazardous wastes, and for the recuperation and disposal thereof. Unless a legal rule provides otherwise, the producer of hazardous waste shall draw up a material balance in respect of each of its activities resulting in hazardous waste. On application, the National Inspectorate for Environment and Nature may authorize the drawing up of the material balance in a simplified form.

Economy: The Ministry of Environment administers the financial fund that contributes to the development of municipalities waste management tasks, supports the investments that lead to reduce, eliminate, recycling or final disposal of hazardous wastes. In 2004 the subsidy system changed, the seven regional centres determine the aims of support and award the main part of the subsidy. From this year on, the regional development councils will do the tendering of the national environmental fund and the special subsidies.

Industry: Companies having considerable influence on waste management also have to create individual waste management plans and forward them to the regional environmental authorities.

Others: None.

Latvia:

Policies: National Waste Management Plan, 2006-2012.

Legislation: Waste Management Law, Law on Natural Resource tax.

Economy: Natural resource tax for disposal of hazardous waste, natural resource tax exemption for collection and for recovery of hazardous wastes.

Lithuania:

Policies: Government Resolution No 519 On National Strategic Waste Management Plan adopted on 12 April 2002, with amendments and last one in 2004 adopted on 10 October 2004 by the Government Resolution No 1252. The National Hazardous Waste Management Programme, approved on 22 February 1993 by Government Resolution No 98 (as amended on 9 June 1999 by the Governmental Resolution No 761).

Legislation: Law No VIII-787 on Waste Management adopted on 16 June 1998; Order No 217 on Rules of Waste Management adopted on 14 July 1999 by the Minister of Environment (as amended on 30 December 2003 by the Order No 722 of the Minister of Environment); The Order No 80 on Rules of issuance, renovation and cancellation of Integrated Pollution Prevention and Control permits adopted on February 2002 by the Minister of Environment and; Law No IX-720 On the Amendment of the Law On Environmental Pollution Charges, adopted on 22 January 2002.

Economy: Product charges.

Poland:

Policies: The reduction of hazards posed by hazardous waste is one of the priorities of the "II National Ecological Policy". The National Plan on Waste Management is based on the intents of "II National Ecological Policy". The National Plan on Waste Management was established as the result of the provision contained in the Article 14 3 par. 4 of the Act on Waste of 27 April 2001. Resolution of 29 October 2002 No 219 of the Council of Ministers on the National Plan on Waste Management came into force in October 2002 (Journal of Law and Provision of 2003, No 11, Item 159). Currently the National Plan on Waste Management is been updated, and will include the data on waste management since 2004.

Legislation: The new Act on Waste regulates the issues related to hazardous waste management. Compared with the previous Act, the new Act imposes more demanding standards for landfill and incineration of waste (in line with the EU requirements). The system of permits for the generation and further handling of hazardous waste will be maintained. The obligations of economic operators and the administration in the scope of information are expanded.

Economy: The Act of 11 May 2001on Economic Operators' Obligations in the Scope of Managing Certain Types of Waste and on the Product and Deposit Charges (O.J. of 2001, No.63, Item 639, as amended), came into force on 1 January 2002. It contains legal and economic instruments (the obligation to recover waste - or pay product charges) promoting the establishment of a system for collection and recovery of certain types of hazardous waste (waste oils, discharge lamps, batteries and accumulators).

Republic of Moldova:

Policies: National Program for Waste Utilization, the principles of which are: To prevent the generation of waste and reduce its harmfulness; Waste materials should be reused, recycled or recovered, or used as a source of energy; and Waste should be disposed of safely (by incineration or in landfill sites).

Legislation: The Law nr. 1515-XII of 16.06.93 on Environmental Protection; The Law nr. 1236-XIII of 3.07.97 on Regime of Harmful Substances and Products; The Law nr. 1347-XIII of 9.10.97 on Waste of Production and Consumption; and Guidelines "ABC of waste".

Economy: Payments for Environmental Pollution, including waste disposal, Law No. 1540-XIII of 25.02.1998 on payment for environmental pollution, based on the principle "polluter pays."

Industry: In accordance to the national legislation, the industry/waste generator are obliged to use cleaner technologies; take in evidence all waste; use waste without any risk; and ensure waste disposal and recovery on the basis of the contract between economical agents and respective license owner etc.

Romania:

Policies: The Emergency Ordinance no. 78 / 2000 on Waste regime modified and completed by Emergency Ordinance no.61/2006. In accordance with art. 8 of this Emergency Ordinance the national competent authority was elaborated Plans for management of wastes. In accordance with art. 19 (2) of the Emergency Ordinance no. 78/2000 modified and completed by Emergency Ordinance no.61/2006, producers of wastes shall adopt technologies and solutions for reduction and elimination of generation of wastes.

Legislation: In accordance with art. 54 of the Emergency Ordinance no. 78 / 2000 modifed and completed by Emergency Ordinance no.61/2006, by Governmental Decisions, at proposal of national competent authority are regulated: different ways of management for waste categories existed in this ordinance, functional conditions of waste treatment and disposal plant, conditions of waste shipment, conditions of waste import/export/transit and other aspect which can appear in waste management activity. The Governmental Decision no. 173 / 2000 on regulation of PCB and similar compounds modify by Governmental Decision no. 291/2005. The Governmental Decision 662/2001 on waste oils modify by Governmental Decision no 441/2002. The Governmental Decision 1057 on used batteries and accumulators was adopted on 18th October 2001. The Governmental Decision 128/2002 on waste incineration modify by Governmental Decision no. 268/2005. The Governmental Decision no. 349/2005 which reapeled the Governmental Decision 162/2002 on landfilling of waste. The Governmental Decision 856/2002 regarding waste lists and inventory of waste (transposition of the New European Waste Catalogue).

Economy: Economic instruments for reduction and elimination of generation of wastes are in preparation. These economic instruments shall be in relationships with provisions of the Emergency Governmental Ordinance no.196/2005 on Environmental Found approved by Law no. 105/2006.

Serbia and Montenegro:

Policies: National Strategy for Wastes on Republic of Serbia level is adopted in 2003. National Strategy is basic document providing conditions for the rational and sustainable republic waste management. In the following phase, the Strategy has to be supported by several implementation plans for collecting, transport, treatment and disposal of controlled waste. The strategy covers waste management legal framework, policy analyses, waste management options, strategies, priority activities and instruments. Republic of Montenegro has on the 26th of February 2004 adopted National Waste Management Policy which supplements the vision, principles and goals set out in the Environmental Programme as well as in already existing national regulations and standards. This policy of integrated and sustainable waste management in Montenegro sets out a vision for the future waste management and defines objectives and strategies facilitating its achievement.

Legislation: Federal legislation -The Law on Confirmation of Basel Convention, adopted by Federal Parliament at 24th December 1999 - "Off.Gazette FRY", International Agreements, No.2/990; - -The Rules on Import, Export and Transit of Wastes ("Off.Gazette FRY", No.69/99), based on the Law on the Basis of the Environmental Protection, regulate the transboundary movements of hazardous and other wastes (import, export and transit and obligations of the performer of this activity, lists of hazardous and other wastes, harmonized with BC annexes and EU/OECD lists, control system through the notification procedure and movement document); Republican legislation - The Law on Environmental Protection "Off.Gazette FRY", No.135/04) is the framework for waste management in compliance with UN and EU. Ministry prescribes the conditions of transboundary movement of hazardous and other wastes and control movement of wastes through the territory of Serbia; -The Rules on the Treatment of Wastes having Hazardous Characteristics ("Off.Herald RS", No.12/95) prescribe the treatment of certain categories of wastes having properties of hazardous substances and established the mandatory accounting of the types and quantities of such substances in production, use, transportation, movement, storage, and disposal processes. Waste generators have obligation to report the quantity of each reportable waste streams/categories generated and transferred, to competent authorities. The frequency of reporting is in most cases one month. Under development is system of information of transboundary waste streams movement, as well as upgraded of existing systems; -The Regulation on Criteria for Determining Location and Disposition of Waste Materials Deposit Sites ("Off.Herald RS", No. 54/92), which sets out criteria for selecting disposal sites for hazardous waste materials. -The Law on Waste Management of the Republic of Serbia ("Off.Herald RS", No.25/96) stipulates handling of waste substances that may be used as secondary raw materials, the way of collection, treatment and storage (Article 1). Monitoring and controlling the use of secondary raw materials, keeping respective records, undertaking protection measures will be carried out by special republican organization-Recycling agency (Article 6 and 22-24). The Law also governs handling of wastes - secondary raw materials (Article 11.17). - Customs Act ("Off. Herald RS", No.73/2003) is enter info force on 1. January 2004. - The Law on the Environment ("Off. Gazette RCG", No.16/96) prohibits the application and use of technology, products, semi-products or raw material that are forbidden in the country of export or in the country in which they are produced; disposal of all types of waste, except at the places selected for the purpose (Article 9, paragraph 2 and 6). It restricts import of waste substances except upon the permit issued by the Ministry in charge of environment protection, for disposal of the wastes having the properties of deleterious and hazardous substances at the designated sites and upon the preliminary consent of the Ministry (Article 10, paragraph 1 and 2). - Law on Waste Management of the Republic of Montenegro"Off. Gazette RCG", No. 80/05) has to be applied from 1. November 2008. -The Regulation on Criteria for Selection of Localities, Methods and Procedures for Depositing Waste Materials ("Official Journal of RM", No.56/00) sets out the conditions for selecting both temporary and permanent storage sites of waste containing hazardous material.

Economy: Economic instruments were initiated in Strategy on Waste Management in Serbia (2003), as well as in republics (Serbia and Montenegro) laws on environmental protection. According Law on Environmental Protection (2004) the Environmental Fund is established.

Industry: Our country produces relatively large quantities of different types of waste, which, in view of their quantity or properties, are a threat to the environment. Major generators of hazardous wastes are the chemical, oil, petrochemical, metal, paper, leather and textile and transport industries. Minor generators include car, repair shops, surface metal working shops, dry cleaners, etc. Many wastes have a high content of non-degradable products and chemicals that pollute the environment. Processing technologies are inadequately developed or elaborated. Pressure of staying on international market has forced the raise of the environmental and service standards within industries and municipalities, as well as has increased waste management through promotion of transfers of environmental technologies and cleaner production. However, currently most of the industries/waste generators are dealing with after war clean-up activities, rather than with measures leading to pollution prevention.

Others: Environmental security, in particular, characterization, safe removal and permanent storing of all categories wastes resulting from war activities is a difficult and expensive process.

Slovakia:

Policies: Taking into account new waste management legislation valid since 1 July, 2001, after Act No. 223/2001 on wastes and amendment of certain acts has entered into force and taking into account deep changes in waste management the Waste Management Programme of the Slovak Republic (WMP of the SR) until 2005 was prepared instead of WMP until 2000. According to the new Act of waste the purpose of waste management is - to prevent and reduce waste generation by: 1) development of technologies saving natural resources; 2) production of products which, as well as final products, increases the amount of waste in a minimal possible way and reduces environment pollution in a maximal possible way; and 3) development of suitable methods of disposal of hazardous substances found in waste dedicated to disposal. - to recover waste by recycling, reusing or by other processes allowing to gain secondary raw materials if prevention of waste generation is not feasible to achieve; - to use waste as a source of energy if material recovery is not feasible to achieve; and- to dispose of waste in environmentally sound manner and not endangering human health.

Legislation: Current legal status is covered by following regulations: - Act of the National Council of SR No 223/2001 Coll. of Laws on Waste and on Amendment of Certain Acts as amended by subsequent regulations; - Decree of MoE SR No 283/2001 on Implementing Certain Provisions of the Act on Wastes as amended by subsequent regulations; - Decree of MoE SR No 284/2001 Coll. of Laws on Waste Catalogue as amended by subsequent regulations; - Decree of MoE SR No 126/2004 Coll. of Laws on authorisation,

issuing expert opinions and authorized persons in waste management as amended by subsequent regulations; - Act of the National Council of SR No 17/2004 Coll. of Laws on fees for waste landfilling; - Act of the National Council of SR No. 529/2002 Coll. of Laws on Packages and on Change and Amendment of Certain Acts as amended by subsequent regulations; - Decree of MoE SR No 732/2002 Coll. of Laws on list of returnable packaging that are not re-used with regard to a financial deposit for them and for returnable re-used packaging; - Decree of MoE SR No 5/2003 Coll. of Laws on implementing certain provisions of the Act on packages; - Decree of MoE SR No 210/2005 Coll. of Laws on implementation of certain provisions of the packaging Act; - Government Order of the SR No 220/2005 Coll. of Laws on establishing binding targets on packaging waste recovery and recycling; - Decree of MoE SR No 25/2003 Coll. of Laws on specifications of end-of life vehicles treatment as amended by subsequent regulations; - Decree of MoE SR No 125/2004 Coll of Laws establishing details on ELV treatment and some requirements to car manufacture; - Government Order of the SR No 153/2004 establishing binding limits on reuse of parts of end-of life vehicles and on recovery and recycling of wastes from ELV treatment (i.e. recovery and recycling targets) - Decree of the MoE No 208/2005 Coll. of Laws on WEEE management - Government Order of the SR No 388/2005 Coll. of Laws on obligatory limits for WEEE recovery, re-use and recycling of components, materials and substances; - Notification of the MoE SR No 75/2002 Coll. of Laws on issuing the Decree No. 1/2002 which establishes the unified methods for analytical control of wastes; - Decree of the MoE SR No 127/2004 Coll. of Laws on calculation of fees for Recycling Fund amended by Decree of the MoE SR No 359/2005 Coll. of Laws; - Decree of MoE SR No. 516/2001 Coll. of Laws on tariffs for calculation of financial contribution to the Recycling Fund as amended subsequent regulations; - Act of the National Council of SR No 245/2003 Coll. of Laws on IPPC; - Decree of MoE SR No 391/2003 Coll. of Laws on IPPC as amended by subsequent regulations; - Communication of Ministry of Foreign Affairs No 60/1995 Col. on Acceding of Slovak Republic in Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and their Disposal; - Communication of Ministry of Foreign Affairs No 132/2000 Coll. of Laws on a change in Annex 1 and on adoption of two new Annexes No. VIII and IX to the Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and their Disposal was issued; - Waste Management Programme (WMF) of the Slovak Republic until 2005; - Council Regulation (EEC) No 259/1993 on the supervision and control of shipments of waste within, into and out of the European Community; - Treaty of Accession of the SR to the EU (Annex XIV, 9(B) (1); - Decree of MoE SR No. 135/2004 Coll. of Laws on decontamination of facilities containing polychlorinated biphenyls.

Economy: - A fee for landfilling of wastes; - An EU programmes (Transition Facility, Structural Funds) and bilateral cooperation (Netherlands - Matra-flex and PSO short programmes, Norway) focused on improvement of waste management in Slovakia - Fees paid to Recycling Fund will be used for recovery of waste; - Local fees paid to the municipalities for collection, transport and disposal of municipal waste and construction waste (generators of municipal waste pay local fees); - Financial guarantee covering the costs of re-import and disposal, in case when transboundary movement cannot be completed.

Industry: According to the WMP of the SR until 2005 the most important technological and production measures allowing to achieve the prevention of waste generation are: - implementation of BATNEEC in production; - implementation of BATNEEC in infrastructure of the waste management; - implementation of EMS/EMAS; - introduction of gas fuel into both the municipal and production spheres; - reduction of the fossil fuels use; and - exploitation of alternative energy sources (e.g. geothermal water). Implementation of BATNEEC in waste management belongs to basic principles of the waste management strategy that can significantly prevent waste generation in production as well as in waste processing in the future. Besides the quantitative indicators, also the positive influence on waste characteristics is the goal of the implementation of BATNEEC in order to minimize the risk of negative impacts on the environment and human health.

Others: Promotion activities organized at state, local, non-governmental levels, as follows: trainings, advisory services, information campaigns aimed at elimination of non-hazardous and hazardous waste generation.

Slovenia:

Policies: - Resolution on National Environmental Action Program for period 2005-2012 (2006); - Environmental Performance Reviews (1997); - Strategic Plan for Slovenia in the Area of Waste Management (1996); - Operational plan concerning the management of spent batteries and accumulators for period 2003 - 2006 (2004); - Operational plan concerning the management of PCB and PCT for period 2003 - 2006 (2003); - Operational plan concerning the management of waste oils for the period from 2003 - 2006 (2003); - Operational plan concerning the management of packaging and packaging waste for period 2002 - 2007 (2002); - Operational plan concerning the reduction and prevention of pollution caused by waste from TiO2 production for the period 2004 -2007 (2004), - Operational plan concerning management of reconstruction and demolition waste for the period 2004 -2008 (2004), - Operational plan concerning disposal of waste with the purpose of decreasing quantities of biodegradable waste till the end of 2008 (2004), - Operational plan concerning management of waste electrical and electronic equipment for the period 2006-2008 (2006). See also : http://www.mop.gov.si/si/zakonodaja_in_dokumenti/okolje/zakon_o_varstvu_okolja/operativni_programi/ Measures taken for the reduction and/or elimination of the amount of hazardous wastes and other wastes generated are in accordance with EU waste management polices.

Legislation: Environmental Protection Act (2006) and from it deriving legislation on the field of waste management.

Economy: Eco-dues for WEEE, end of life vehicles, old tires,waste disposal,; use of lubricating oils,and liquids,

waste packaging and other eco-dues and financial instruments (e.g. advantageous credits for environmental investments, joint investments into project for reduction of environmental burdens).

Industry: ISO; EMAS registration system (ECO- Management and Audit Scheme); ECO-LABELING; - European flower ; and awards for achievements on the field of protection of the environment and introduction of cleaner technologies.

Ukraine:

Policies: - Verkhovna Rada (Parliament) of Ukraine 05.04.1998 adopted the national strategy of wastes generation minimization. This strategy was included into the legislative document "The main directions of the state policy in the field of environment protection, natural resources use and ecological safety ensuring"; and - Verkhovna Rada of Ukraine 14.01.2000 passed the law "On the withdrawal from circulation, treatment, utilization, elimination or further use of unsound and hazardous products".

Legislation: - Verkhovna Rada of Ukraine 14.09.2000 passed the law "On the National program of toxic waste management"; - The Cabinet of Ministers of Ukraine issued a resolution of 24.01.01 No 50 "General requirements on the treatment, utilization, elimination or further use of withdrawn from circulation unsound and hazardous products"; and - The Cabinet of Ministers of Ukraine issued a resolution of 26.07.01 No 915 (amended 26.07.02 No 1084) "On the introduction of the system for wastes collection, sorting, transportation, treatment and utilization as secondary raw materials".

Economy: - The Cabinet of Ministers of Ukraine adopted the Resolution on the levies for waste disposal on the landfills (1999); and - The Ministry of Environment and Natural Resources issued an Order No 181 of 15.05.2001 "On the adoption of the provisional method for the determination of expected losses from the environment pollution during the transportation of hazardous substances and wastes".

Industry: Preparatory activity for inventory and certification concerning waste generation is continuing by industries. The results of it will by used for the development of wastes generation decrease plans.

Others: - On the basis of (iv) the Oblast (Regional) Administrations will identify the whole quantity of waste generated in the region and develop the regional plan on the waste generation decrease measures. This plan must by adopted by the Regional Council; and - Beginning from the 1994 a number of educational measures was held in Ukraine (seminars, training courses) under the sponsorship of Lund University (Sweden), IDRC-AGRA (Canada), The World Bank, TACIS (Tebodin, ERM), etc. This activity is continuing.

Question 5. Reduction/Elimination of generation of hazardous/other wastes

2005. Latin America and The Caribbean. (Parties which did not report are not listed).

Argentina:

Policies: Hazardous Waste generators have to present a plan to reduce the generation of hazardous wastes by means of change of technology; segregation of streams; and recycling, when it is possible, in an environmentally sound manner. The Environmental Authority (Competent Authority), has designed a National Plan of Reduction and Elimination of PCBs, which is under appliance. Additional Plans of Elimination (other POPs and PTS, such as mercury compounds and articles such as batteries) are under preparation.

Legislation: National Law 24.051 - Decree 831/93.

Economy: Environmental tax for generators, transporters of hazardous wastes and hazardous waste treatment plants. This tax is decreased in accordance with reduction of the generation of hazardous waste.

Industry: Industries are making efforts to replace the electrical devices with PCB and to eliminate them.

Others: Establishment of a Sub-Regional Centre for Training and Technology Transfer in Buenos Aires.

Barbados:

Policies: The Policy Paper for Chemical Management was recently reviewed and updated. The paper is now entitled "Policy Paper: Management of Toxic Chemicals and Hazardous Waste". The policy paper now provides a policy statement and policy objectives for the management of hazardous waste. The overall aim would be to achieve life cycle management of chemicals and hazardous waste generated locally. The paper mainly makes provisions for shipment of hazardous waste off shore to certified facilities.

Legislation: The "Policy Paper: Management of Toxic Chemicals and Hazardous Waste" identifies four broad areas for legislative development. These areas are Import/Export/Re-Export; Handling and Transport; Business Operation; and Disposal.

Bolivia:

Policies: Se ha preparado un Plan Nacional de Implementación sobre el Convenio de Estocolmo, en el mismo se ha considerado otros convenios que están relacionados, como el Convenio de Basilea y Rotterdam. Dicho Plan Nacional considera 8 pilares de los cuales dos están relacionados con los tratamientos que se deben dar a los desechos de los COP´s.

Legislation: Para el área agrícola se ha emitido una Resolución Administrativa, mediante la cual prohíben la introducción, uso y manejo de plaguicidas COP´s. A la fecha se viene trabajando en una normativa especifica de COP´s en Bolivia. Asimismo se ha preparado guía para técnicos que están relacionados con el manejo de PCB´s, pero el mismo aún no ha sido impreso.

Economy: ninguno.

Industry: La Cámara Nacional de Industrias después de iniciar actividades con un proyecto para la prevención de la Contaminación Ambiental, posteriormente se logro crear el Centro de Promoción de Tecnologías Limpias (CPTS), a la fecha el CPTS, funciona con apoyo internacional como una asociación civil sin fines de lucro.

Brazil:

Policies: The Federal Government is discussing a National Waste Policy Project which will be submitted to the National Congress; The State Industrial Wastes Inventory is being implemented in 12 out of the major waste generator States in Brazil.

Legislation: a) Law nr. 7802/1989 and Regulation nr. 4074/2002 - Agro toxic b) Resolution CONAMA nr. 375/2006 and 380/2006 - Sewage sludge c) Resolution CONAMA nr. 357/2005 - Liquids effluents d) Resolution CONAMA nr. 358/2005 - Health Care Wastes e) Resolution CONAMA nr. 362/2005 - Lubricant oil or contaminated f) Resolution CONAMA nr. 348/2004, 09/1988 and 07/1987 - asbestos g)Resolution CONAMA nr. 316/2002 - Thermal treatment of wastes system h) Resolution CONAMA nr. 313/2002 - National inventory of industrials solid wastes i) Resolution CONAMA nr. 307/2002 - Civil construction wastes j) Resolution CONAMA nr. 301/2002 - Tires k) Resolution CONAMA nr. 264/1999 - Co-processing of wastes l) Resolution CONAMA nr. 258/99 - Tires m) Resolution CONAMA nr. 257/1999 - Pile and battery n) Resolution CONAMA nr. 05/1993 - Wastes of ports, airports and rail/bus terminal o) Resolution CONAMA nr. 08/1991 - Ban importation of wastes for incineration and final disposal p) Resolution CONAMA nr. 06/1991 - Wastes of ports, airports and rail/bus terminal q) Resolution CONAMA nr. 02/1991 - Treatment and final disposal of deteriorated, contaminated, out of specification or abandoned cargoes r) Resolution CONAMA nr. 1A/1986 - Hazardous wastes transportation Obs.1 - Items a - b - c - d - e - f - g - h - l - j - k - l - p - q still waiting for translation. Asap we will send the resolutions. Obs.2 - Items m - n - o - r attached. In process of discussion: Mercury fluorescent lamp wastes Interstate movement of hazardous wastes Polluted air emission of fixed source Contaminated area management

Economy: ICMS ecológico (State VAT) IR ecológico - Ecological tax revenue in discussion in the National Congress

Industry: Several industries, amounting almost 200 now, have been awarded with the ISO 14000 series certification. Cleaner Production and Eco-efficiency Programs. Initiatives and actions for reduction of waste production in the industrial process.

Chile:

Policies: Chile has implemented a policy of clean production in some production sectors.

Legislation: Guidelines have been developed for each sector included in the clean production programmes. Guidelines for recycling of used oils are under preparation.

Economy: None.

Industry: Sound environmental management for pesticide containers; and Hazardous waste components segregation in some waste streams.

Others: None.

Colombia:

Policies: On December 16 of 2005, the National Environmental Council approved the Environmental Policy for the Integrated Management of Hazardous Wastes, which has as objective prevent the production of Hazardous Wastes and the promotion of the adequate environmental management of those originated, reducing the risks to human health and environment contributing to a sustainable development. The following are the specific objectives of this Policy: To prevent and minimize the generation of Hazardous Wastes. This objective intends to prevent the origination of Hazardous Wastes by the promotion and implementation of cleaner production strategies in priority sectors, this Policy also promotes that all productive sectors develop actions that conduct to the reduction of the quantity and dangerousness of this Hazardous Wastes, taking in account the technical, economic and environmental viability. This objective will be developed in an articulated way with the strategies established in the Cleaner Production Policy and in the Hazardous Wastes Integrated Management Policy. To promote the operation and the integrated management of Hazardous Wastes. This objective is orientated to encourage that each of the upcoming stages of the integrated management, be developed in an environmental secure manner and that the utilization and valorization be fomented as a way to operate the Hazardous Wastes so that they can be reincorporated into the productive processes from an environmental, economic and social feasible perspective. To implement the commitments of the International Agreements which Colombia ratified considering Hazardous Wastes. Taking in account that the commitments of the Basel Convention are included in the objectives of this Policy, this specific objective is orientated to the harmonization, cooperation and the application of strategies and actions that are directed to the accomplishment and implementation of the National Plan for the Application of the Stockholm Convention and the Plan for the Elimination of the use of Ozone Depleting Substances and their wastes in accordance with the Montreal Protocol. Strategies for Integral Management of Hazardous Wastes: a) The action Plan of the Environmental Policy for the Integrated Management of Hazardous Wastes includes the following goals and strategies First objective: To Prevent and minimize the generation of Hazardous Wastes Goal: reduce the emergence of Hazardous Wastes in a 5% (this goal can be adjusted in accordance with the information base line that will be defined in the first years of the implementation of this Policy) Strategies To prevent the origination of hazardous wastes promoting and implementing the cleaner production strategies; reducing the generation of Hazardous Wastes from the source by the formulation and implementation of the Integrated Management Plans of Hazardous Wastes. Second objective: Promote the operation and integrated management of the originated Hazardous Wastes Goal: Increase in a 10% the offer of the services to operate the Hazardous Wastes and to promote the environmental sound management of three prioritized waste stream for the country. Strategies Promote the exploitation and valorization of Hazardous Wastes; management of the Hazardous Wastes that come from the massive consumption of products with a dangerous characteristic and; the promotion of the treatment and the final disposition of Hazardous Wastes in an environmental secure manner. Third objective: To Implement the international commitments related with Hazardous Wastes. Goal: Formulation of the National Plan for the Application of the Stockholm Convention and two (2) action plans for the elimination of the Persistent Organic Pollutants – POP – and the wastes polluted with Ozone Depleting Substances – (ODS). Strategies The National Program for the Application of the Stockholm Convention on Persistent Organic Pollutants – POP; prevention of the contamination and the operation in polluted places; the Environmental Sound Management of wastes polluted with Ozone Depleting Substances – (ODS). B) Pesticide Management and Use Policy Guidelines: The main objective of this Policy Guidelines is the articulation of the efforts of the environmental organizations with farming sector development policies. In this Policy Guidelines, programs for the suitable handling and packaging of pesticides were developed jointly with the private sector. Centers for Storage and Reception of Discarded Pesticide Packages: Twelve (12) storing centers were started up for the reception of packages contaminated with pesticides in sectors and high-priority regions, within the framework of the Agreement of Cleaner Production with the sector of pesticides. c) Model of Integral Management of Hospital Residues (2002): Decree 2676 of 2000 established that generators of hospital residues, and providers of special services of decontamination and cleanup of this type of residues, have the legal obligation to prepare an

internal Institutional Plan for the handling this kind of wastes. The Plan should incorporate principles of continuous improvement. Since the promulgation of the decree, 10 projects were implemented in the cities of Santa Marta, Barranquilla and Cartagena. With the purpose of improving enforcement of existing regulations, sanitary and environmental authorities were trained in 10 cities of the country and a Handbook on Procedures for Integral Management of Hospital Residues was published (2002).

Legislation: Regulations: - Decree 4741 of 2005, issued by the National Government,"by which the prevention and management of Hazardous Wastes are partially regulated in the integrated management frame" - Resolution 1446 of 2005 and resolution 415 of 1998, establish cases and conditions which the combustion of used oils is authorized - Decree 1443 of 2004, by which the prevention and control of the environmental contamination by the handling of pesticides and residues or hazardous residues is regulated. - Decree No. 2676 of 2000,"regulates the integral management of hospital and similar residues". The Decree includes the principles of biosafety, integral management, minimization, the non-garbage culture, prevention and clean technologies, as well as the precautionary principle. - Resolution 1096 of 2000, issued by the Ministry of Industry and Development, establishes the technical requirements for the management and final disposal of the other wastes and general guidelines about hazardous wastes. - Resolution 1164 of 2002, trough this resolution a handbook on procedures for integral management of hospital and similar residues in Colombia was adopted. - Law 430 of 1998, establishes norms related environmental issues referring to Hazardous Wastes. - Resolution 2309 of 1986, issued by the Ministry of Health, establishes rules for "special wastes", which are pathological, toxic, flammable, explosive, radioactive or volatile. Guidelines: Environmental Guideline for Battery Producers and Recoveries (1998) The objective of this Guideline, elaborated by the Regional Environmental Authority of Cundinamarca (CAR), is to promote and facilitate the adoption of environmental management systems in small and medium sized industries. It also seeks to supply the small entrepreneurs with the technical and operative tools to design an Environmental Management Plan oriented at minimize the environmental impacts of the wastes generated during their productive activities and promoting the rational use of natural resources. The Guideline contains information on: the sanitary, environmental and health effects of the activities involved in battery recuperation; the valuation of impacts; and the conceptual, methodological and procedural parameters for the elaboration of an Environmental Management Plan. Handbook on PCB Handling for Colombia (1999) The purpose of the manual is to help the proprietors of PCBs (e.g., companies, governmental entities, individuals, etc., that own PCB equipment, oil contaminated with PCB or any other PCB waste) and those who may have responsibility in the handling of PCBs in view of protecting the environment and the human health. Handbook on procedures for the Integral Management of Hospital Residues (2002). This handbook considers internal and external component of hospital residues, with emphasis in strategies of automatic control, clean technologies and rational use of resources, concerted with the different stakeholders. Environmental guides of Storage and Transport by Highway of Dangerous Chemical Substances and Residues (2003). These guides arise as an initiative to create awareness for those who are involved in the activities of storage and transport of this type of materials, with the aim of highlighting environmental aspects to be considered in their execution. Guides for Safe Handling and Environmental Management of 25 Chemical Substances (2003). 25 high-priority chemical substances in Colombia were selected and a guide for safe handling and environmental management was prepared for each one, with an informative network that serves as a base to acquire the general knowledge of each one of these substances, with respect to its properties, characteristics of danger, effects on the health, measures of prevention and response to emergencies. Other elaborated guidelines are: - Guidelines of Best Environmental Practices for the sector of Graphical Arts - Guidelines of Best Environmental Practices for the sector of Galvanoplasty - Guidelines of Best Environmental Practices for the Textile sector - Guide of Cleaner Production for the Sector of Electrolytic Coverings in Colombia - Environmental guides for the sub-sector of Pesticides (storage, transport, aerial and terrestrial application, handling of packages and remainders) - Guide of Cleaner Production for the Health Sector

Economy: Law 141 of 1994: it establishes the National Fund of Royalties financed by resources from the exploitation of hydrocarbons, in which part of the resources are used for environmental local projects, focused on the development integral solid residues and residual waters management; Law 142 of 1994, on utilities (water, electricity etc.), establishes tariffs based on the weight and volume of the consumed resources, which therefore constitutes an economic incentive to minimize the generation of wastes; Law 223 of 1995, exempts payment of the sales tax for the national and imported equipments, when they are intended to be used and in general for pollution control; and monitoring. Law 511 of 1999, establishes the national day of the recycling people and the activity of recycling, and the Decree 2395 of 2000 sets an award for the persons who are involved in recycling in the categories of industry, investigation, Organizations covering people who are active in recycling, and workers in the public cleaning service. Decree 2532 of 2001: Exempts from Added Value Tax (AVT) sales of equipment or machinery used for the development of actions oriented to obtain measurable results of the diminution of the demand of renewable natural resources and of prevention and/or reduction of the volume and/or the improvement of the quality of the liquid residues, emissions or solid residues. Law 788 of 2002, establishes an income tax exemption of up to a 20% to the natural or legal person investing in environmental improvement and control.

Industry: Conventions for Cleaner Production: These are voluntary agreements that support concrete actions for the improvement of public and private sectors management, they are directed to the prevention and control of pollution. This objective is to be reached by the adoption of cleaner production and environmentally safer and healthier processes. It aims at the reduction of pollution levels and risks

to the environment in industrial activities, by the optimization of the use of natural resources and the improvement of internal and external industrial competitiveness. The cleaner production agreements have established inter-institutional working teams with the participation of the Ministry of the Environment, other Ministries, the regional and local environmental authorities, the private sector and, in some cases, the civil society. The conventions have created new spaces for dialogue and coordination amongst the actors involved in the analysis of environmental issues, which contributes to the establishment of rules and policies for a more transparent environmental management, and to the definition and accomplishment of the goals related to environmental improvement. In addition to it above mentioned, these conventions anticipate action related to environmental rules and accelerate the reduction of the pollutant emissions, and to the definition of environmental management priorities, sectorial policies and goals. To the present date, 20 of these national conventions have been signed, 14 of which are sectorial and 6 are regional. Instruments for the adoption of Voluntary Codes of Environmental Management: - The Cleaner Production Policy considered, as instruments for the promotion of such cleaner production, the adoption of voluntary codes of environmental management as initiatives of producers, oriented to the continuous improvement of environmental management, based on schemes of self-regulation and self-management. - At the moment three regional environmental authorities have implemented programs of recognition to the improvement in management and environmental performance. - In Colombia several enterprises are adopting voluntary codes, such as Responsible Care, and other corporate codes. - In order to promote these iniatives, the Ministry of Environment, Housing and Territorial Development, has also set up the "National Program of Recognition of Excellence and Leadership in Environmental Management and Performance". Specifically the program aims to: - Improve compliance beyond standards established in the environmental legislation - To improve management and environmental performance indicators. - To publicly recognize and to encourage the continuous improvement in management and environmental performance - To publicly recognize and to encourage commitment, leadership and environmental excellence - To recognize and to encourage the adoption of cleaner production - To recognize and to encourage the improvement of competitiveness. One of the mechanisms through which the MAVDT has set out to encourage the companies for the inclusion of environmental criteria within their production, is by environmental certification schemes. The Ministry (MAVDT) has been working in the structuring of a national eco-labeling system with the purpose of encouraging supply and demand of environmentally friendly products and services by differentiating these products, to facilitate their access to the market and to promote the use of clean or sustainable processes, techniques and technologies. The environmental criteria for the certification will have to be additional to the requirements established by the legislation.

Others: Preliminary Inventory of obsolete pesticides and burials of pesticides: With the purpose of designing viable solutions to the serious problems associated to the inadequate historical handling of pesticides, a preliminary inventory of obsolete pesticides and burials of pesticides was completed in regions with agricultural tradition, with the support of the FAO. In the same way and under schemes that the Basel Convention provides, an action plan for the elimination of one of the most serious storage of obsolete pesticides in the country, located in the Copey - Cesar, was designed, which will allow its definitive management. Regional Strategy for the environmentally sound management of used lead-acid Batteries in Central America and the Caribbean. Colombia participated in the formulation of this Strategy.

Costa Rica:

Policies: Policy: Risk to control any factor related with contamination, insecurity and dangers to the environment, the human health and the life of the population; Prevention, mitigation and response to the population needs in disaster situations; Assure the quality of potable water at national scale; and Technical and sanitary management of solid, organic, chemical, biological, radioactive and toxic wastes, among others, in the health, industry and commerce facilities, and houses.

Legislation: General Health Law of Costa Rica. Strategies: Strengthening of the sanitary regulation based on main standards and technical recommendations; Sanitary monitoring on achieving sanitary regulations; and Development of scientific research towards the protection and the improvement of the human environment.

Economy: None.

Industry: Application of some environmental principles (sustainable development, precautionary principle, preventive principle); and Development of some mechanisms to reduce the generation of wastes in the starting point.

Others: Efforts have been made to obtain a significant reduction in the quantity of hazardous wastes in industry and agriculture; these initiatives have received support from the National Cleaner Production Centre (CNP+L), which is seeking to implant alternative technologies in industry, which might be less pollutting and more environmentally-friendly and better for human health.

Cuba:

Policies: Promoting the use of cleaner productions. Using cement kilns to eliminate hazardous wastes (Y2, Y3 and Y8).

Legislation: National Guidelines for Y8, Y9, Y1, Y2, and Y3 wastes. Resolutions 32/2005.and 73/2006

Industry: Recovering and recycling. Using of existing national facilities.

Others: New industries are using technologies which are reducing pollution and some technological changes in older industries are being made in order to reduce waste generation.

Dominican Republic:

Policies: The Sub secretariat of Environmental Management is the institution responsible for imposing penalties on companies that generate wastes and do not manage them in an environmentally sound manner. Administrative Sanctions like: a) Fines b) Activities Restrictions c) Objects Appropriation d) Temporal Suspections or provisional prohibits of activities that generated environment damaged or risk.

Legislation: Application of the law 64-00, Articled 97-105 concerning to Substances and Hazardous Products Manner. Title V / Reference to "Judgmental and sanctions in administrative Material" Chapter II / Reference to "Administrative Sanctions". National Norm for the Environmental Management of remainders non dangerous that was edited in Santo Domingo, Dominican republic on June 2003 by thee Secretary of State of Environment and Naturals Resources.

Industry: Some industries manage their own wastes (they have treatment plants), others send their wastes to another country for disposal, and others engage in publicity campaigns for the conservation of the environment.

Ecuador:

Policies: - Action Plan for the implementation of the National Regimen for Hazardous Chemical Products; - Application of regulations about clinical wastes; - Development of policies for cleaner production; and · National Policy of solid wast.

Legislation: National Regimen for Hazardous Chemical Products; Regulation on clinical wastes; Regulations about storage, transport and handling of dangerous chemical products; Regulations about hazardous industrial chemicals, precautionary labeling, specifications; Regulation for prevention and control of contamination of dangerous hazardous wastes; National list of chemical products controlled & severely restricted by Environmental Ministry and National List of chemical products banned in Ecuador; Interinstitutional Cooperation and Coordination Committee for residue management; Ordinance management oil wastes Management System for hazardous wastes.

Economy: Annual Awards for environmental management industry performance

Industry: Chemical industry is implementing the Responsible Care Program; Implementation of the Cleaner Production Center in Ecuador; and Some enterprises have adopted the ISO 14000.

Guyana:

Policies: - Collection of data (relating to mercury and other substances).

Legislation: - Implement Environmental Protection Hazardous Waste Regulations 2000 under the Environmental Protection Act.; - Implement Mining Environmental Regulations which address hazardous waste from mining activities e.g mercury and cyanide; - Implement Pesticides and Toxic ChemicalsAct; and - Develop guidelines and codes of practice for certain wastes such as Asbestos, Mercury, etc.

Industry: - Industries (distributors) collect certain waste such as used batteries and return to suppliers; and - Storage of some hazardous materials is practiced until proper disposal can be done.

Others: - EPA funded by IDB conducted a Needs Assessment for the hazardous waste sector and developed an Implementation Plan at the Agency level; and - Possibility of having a hazardous waste component in a new landfill site is being explored.

Honduras:

Policies: Development of the National Implementation Plan for the Persistent Organic Pollutants which include a PCBs and pesticides inventory (2007-2008). Inventory of POPs pesticides specifically 40 tons of DDT pesticide to be exported and disposed internationally. Exportation of 3,360 tons of lead acid batteries to be recovered in El Salvador (2007).

Legislation: Health code Penalties code General Law on Environment A regulation for the hazardous wastes is in preparation

Economy: Central America and Dominican Republic Free Trade Convention (CAFTA-DR)

Industry: Some industries implement the Cleaner Production, ISO 14000. Participation of the National Electric Company (ENEE) in the development of PCB inventory (public sector)

Others: Industrial initiative for the energetic valorization through wastes in cement heat chambers.

Jamaica:

Policies: Policies: National Policy and Strategy for Environmental Management Systems (draft); National Hazardous Substances and Hazardous Wastes Management Policy (draft); and National Solid Waste Management Policy.

Legislation: National Solid Waste Management Act.

Economy: Effective June 1, 2007, Jamaica instituted an environmental levy of 0.5% of the CIF value of all imports. This levy will, inter alia, assist in financing national wastes management projects and

programmes.

Mexico:

Policies: Promoting of the Management Plans of hazardous wastes Development and support of capacity building for the management of hazardous wastes at national level to minimize the transboundary movements; Implementing at national level the Convention amendments relating to transboundary movements of hazardous wastes among signatory countries; Adequacy of the Legal Framework on wastes (General Law for Prevention and Integral Management of Wastes) and; Prohibition for importing hazardous wastes which objective is the final disposal.

Legislation: Ley General de Prevención y Gestión Integral de Residuos, publicada en el Diario Oficial de la federación el 8 de octubre de 2003. General Law of Ecological Equilibrium and Environmental protection (LGEEPA);•LGEEPA regulations on hazardous wastes; General Law for Prevention and Integral Management of Wastes (It will operate as of January 2004) and; Development of technical guides for hazardous wastes sound management within the Basel Convention framework (BPC'S, Leads Batteries, Electronic trash, etc).

Economy: Promoting with the Secretary of Economy (that regulates industries and commerce) the deregulation of the Maquila Industry (Mexican assembly plants located near the USA-Mexican boarder where most production is exported to the United States) to avoid the wastes return to the country of origin (Exemption PITEX)*.* PITEX is the importing Temporary Program to produce Articles for Exportation, which is implemented in the Mexico's boarder with the United States of America.

Industry: Implementation of the Management Plans of hazardous wastes Technology development to treat the hazardous wastes in situ. Demonstrate to authorities the no hazard of wastes, in order to reuse or recycle them. Request management plans to demonstrate environmentally sound management

Others: None.

Paraguay:

Policies: Exigencia en el cumplimiento de la Ley de Impacto Ambiental, aplicación de la Ley de Delito Ecológico, trabajo conjunto con el Ministerio de Salud Publica Y Bienestar Social, estudio e implementación del sistema armonizado de control, con ADUANAS, la Policía Ecológica, diseño y elaboración de medidas de control. Diseño y promulgación de una Política Ambiental Nacional, PAN.

Legislation: Ley 294/93. Impacto Ambiental Ley 716/00 Delito Ecológico

Economy: Presupuesto General de la Nación

Trinidad and Tobago:

Policies: Only for domestic solid waste.

Legislation: Legislation in preparation.

Economy: Economic instruments in preparation.

Industry: Individual companies have used their own in house practices to reduce/minimize the waste.

Venezuela:

Policies: Adaptation policies under Title IV of the Adaptation Regime for Generators of Hazardous Materials and Hazardous Wastes (Decree 2635).

Legislation: Decree 2635 containing the "Norms for the Control and Recovery of Hazardous Materials and the Management of Hazardous Wastes", Law on Substances, Dangerous Materials and Remainders published in the Official Gazette Extraordinary No. 5245 of 3 August 1998. Ratificación de la agenda 21 en el capitulo 21: Gestión ecológicamente racional de los desechos sólidos y cuestiones relacionadas con las aguas cloacales. La gestión ecológicamente racional de los desechos debe ir más allá de la simple eliminación o el aprovechamiento por métodos seguros de los desechos producidos y procurar resolver la causa fundamental del problema intentando cambiar las pautas no sostenibles de producción y consumo. Ello entraña la aplicación del concepto de gestión integrada del ciclo vital que representa una oportunidad única de conciliar el desarrollo con la protección del medio ambiente. Ratificación de dos convenios uno de Rótterdam y plan nacional de implementación del convenio de Estocolmo.

Economy: For the specific case of lead-acid batteries, this is a small economic incentive to return used batteries and there are collection centres nationally (private initiative).

Industry: Some companies are modifying their process or bringing in new processes aimed at cleaner production.

Question 5. Reduction/Elimination of generation of hazardous/other wastes

2005. Western Europe and Others. (Parties which did not report are not listed).

Andorra:

Policies: During 2001 and 2002, the Department of Environment started a campaign at the end waste producer, which began with the skiing resorts, toxic waste producers enterprises like vehicle repair shops, printing houses, photo laboratories etc. National Waste Plan (2000), which came into force in 2001, defines the government policy in the field of solid wastes. A very precise diagnostic has been done, and on that basis, recovery objectives have been fixed. The plan also foresees all the basic and essential facilities that must exist in the country. The National Waste Plan must be reviewed every 5 years. During 2004 a campaign was carried out to reduce waste to a minimum among the population at large and large supermarkets. Specific action has also been taken directed at school children.

Legislation: In 2004 a "Manual for best practice for managing building waste in Andorra" was produced.

Economy: See article 48

Australia:

Policies: The eight Australian States and Territories have economic measures/initiatives in place to reduce and/or eliminate the generation of hazardous wastes and other wastes. In Australia, municipal waste management is generally the responsibility of state, territory and local governments. Sector specific Product Stewardship arrangements: Through the Environment Protection and Heritage Council (EPHC), Australian governments are working with the relevant industry associations to negotiate voluntary product stewardship agreements for the tyres, televisions, computers and mobile phone sectors. In parallel with these negotiations, officials are also developing a national co-regulatory framework for product stewardship. Importantly, if agreed, the national framework would recognise these products are part of national markets and deliver a nationally coordinated solution for the improved management of the various products at end-of-life. In addition, the framework would provide for regulation of those parties within a sector that chose not to participate in the voluntary agreement to ensure those parties doing the right thing are not competitively disadvantaged in the market place. Also, through the EPHC, governments are considering how Australia might harmonise with current international efforts to restrict the use of certain hazardous materials in electronic products that include TVs, computers and mobile phones. Australia's EnviroNET is a directory of Australia's environment industries including databases of environment management expertise, industry applications for environmental technologies, environmental education; plus a range of other resources to support development and uptake of Australian solutions to industry's environmental issues.

Economy: Product Stewardship Arrangements for Used Oil: These arrangements were introduced in 2001 by the Australian Government to provide incentives to increase used oil recycling. The arrangements comprise a levy-benefit system, where a 5.449-cent per liter levy on new lubricating oil underwrites benefit payments to used oil recyclers and a 7-year $34.5 million transitional assistance grants scheme. The Arrangements, administered by the Australian Taxation Office and the Department of the Environment and Water Resources aim to encourage the environmentally sustainable management and re-refining of used oil and its re-use. In the year 2005 Australians recycled approximately 221 million liters, or some 89%, of their used oil.

Austria:

Policies: Waste avoidance was already a basic principle of the Austrian Waste Management Act 1990. New legislation was including the principles of sustainable development was prepared in 2001 and enforced in 2002 (Act on sustainable Waste Management; Fed. Law Gaz. I 2002/102). The national strategy is laid down in the Federal Waste Management Plan (latest edition 2006).

Legislation: Branch specific concepts for hazardous waste management (including waste avoidance) (based o the Federal Waste Management Act and the Act on Chemical Substances (Fed. Law Gaz. I Nr. 53/1997 as amended) where drafted by the Federal Ministry. Detailed information is available via the home page www.lebensministerium.at A specific Ordinance on Waste Treatment Obligations was published (Fed. Law. Gaz. II 2004/459) and enacted 13th August 2005. The Ordinance on Waste Treatment Obligations defines minimum requirements for the collection, storage and treatment of the following waste streams: • batteries and accumulators • solvents and wastes containing solvents, waste paints and varnishes • medical wastes involving the risk of injury • residual amalgam • PCB-containing electrical equipment and other PCB-containing wastes The party obligated is the waste holder (original waste producer, waste collector or waste treatment operator). If the waste holder is not authorised or able to treat the waste appropriately, he shall according to § 15 Par. 5 Waste Management Act 2002 hand over the waste to a party authorised to collect or treat the waste within due time to prevent impairments of the public interest (§ 1 Par. 3 Waste Management Act 2002). The text of the Ordinance is available via Internet: http://www.lebensministerium.at/filemanager/download/10707/ (German)

http://www.lebensministerium.at/filemanager/download/12255/ (English)

Economy: Federal Act on the Financing and Implementation of the Remediation of Contaminated Sites (ALSAG, Fed. Law Gaz. 289/1989 as amended). The charge is donated for clean up procedures. Several funds for subsidies for environmentally sound treatment/production exist.

Industry: Waste management concepts provided by each company with more than 20 employees.

Belgium:

Policies: Prevention of waste is very important in the European and the Belgian waste policy. Also the use of certain dangerous products is forbidden by European legislation.

Legislation: Flanders: It is an aim of the Flemish policy to protect public and environmental health against damaging influences of wastes and to prevent dissipation of raw materials and energy by (in the following order of priority): - Preventing and reducing waste production and preventing or reducing the damaging features of wastes; - Promotion of waste recycling; and - Organising the disposal of all the wastes which cannot be prevented or recycled. (article 5 of the Waste Management Decree of 20.04.94). On prevention: The first PRESTI program wanted to offer practical and usable information to a group of enterprises in the same activity-sector. To achieve this, PRESTI 1 choose federations as partners. Federations are a suitable partner to develop a program to stimulate enterprises concerning prevention. PRESTI 1 also wanted to achieve a knowledge development on prevention in federations that lasted also after the ending of PRESTI 1. Federations who wanted to develop a project on prevention, could receive financial support in the PRESTI program. The first PRESTI program ended in 1997. 32 Projects were executed. The projects started with a research on some sector specific aspects, and resulted in 2 publications: a sector study and a manual with concrete prevention measures for the SME's. So, a first phase consisted in a gathering of information and the development of a strategy, the second phase consisted in spreading the obtained information (via workshops, publications, training, etc.). PRESTI 1 reached 15.262 enterprises, on a total of 40.505 potentially reachable enterprises. The benefits of the program are a higher awareness and knowledge level on prevention. The second PRESTI program gave financial support to federations for demonstration projects, a step that lacked in PRESTI 1. Pilot enterprises were screened and some prevention measures were executed. Afterwards, the measures were evaluated on ecological value and on technical and economical feasibility. Again, the information was spread to SME's. PRESTI 2 ended in 2001. 13 Projects were executed. Research on the effectiveness of the program, showed that 2000 enterprises were positively affected by the program. PRESTI 3 offered support to individual SME's. Participating SME's developed a prevention plan. In a second phase, this plan was possibly implemented. PRESTI 3 ended in 2002 and supported 50 SME's. In 2003, the program is evaluated. PRESTI 4 started in 1998 and supports intermediary organisations that develop systems to promote prevention and environmental management in enterprises. Every Flemish province has its own PRESTI 4 program, meaning that every Flemish enterprise can participate in a program developed by one of the supported intermediaries. 324 enterprises have participated up to now. A 'certificate' is handed out to enterprises that can show good results. This certificate is the same for every province. The easy recognisable certificate and logo are a strong communication towards the general public, other enterprises, etc. The success stories of PRESTI 4 are gathered in 2 publications that seek to inspire other non-participating enterprises. PRESTI 4 ends in 2004. An evaluation will define if the program will be continued. PRESTI 5 started in 2002 and ends in 2006. PRESTI 5 (version 2003) supports research, demonstration projects and pilot projects. Supported projects have to integrate a strong 'information and experience spreading' phase. New in PRESTI 5 is that not only enterprises and their intermediaries can receive support, but also research and education institutions, environmental and socio-cultural associations, etc. PRESTI 5 is a dynamical program that has the possibility to change per year supported types and themes of projects. The main goal of PRESTI was spreading the message that prevention is worth while and showing executed prevention projects. Through the intermediaries, a lot of enterprises were reached. For PRESTI 1 and 2, we have exact figures (vide supra). PRESTI 3 and 4 are still under evaluation. The first lesson learned in the new PRESTI 5, target group and projects eligible for support, are defined in a larger way. This because past programs learned that the target groups are in the best position to identify the needs to develop an interesting project. A second lesson learned, is that prevention takes time. Time to reflect about action plans, time to analyse production processes and products. This time aspect makes it difficult to convince enterprises to take action in prevention, especially because prevention does not always guarantee a short-term benefit (in general, it does pay of on a longer-term bases). Significant economic aspects of the initiative (E.g. economic costs or benefits for the authorities and other stakeholders): Subsidies granted for the projects per program: 3.200.000 Euro (PRESTI 1), 560.000 Euro (PRESTI 2), 407.000 Euro (PRESTI 3), 1.622.000 Euro (PRESTI 4) en ca 2.980.000 Euro (PRESTI 5). Cost reductions are not known in every enterprise. On recycling / recovery and final disposal: For waste management the Flemish Region disposes of a large variety of policy instruments to succeed in the objectives – namely to prevent as much waste as possible, and to recycle the waste that is still produced as materials or as energy and to use dumping only as the last resort. - Since 1995 OVAM constructed a network of 35 reuse centres with 101 shops. Local authorities were financially stimulated to cooperate with these centres. They collect reusable furniture, electrical and electronical equipment, toys and leisure items, clothing for free and resell those goods at a low price. In 2005 they've collected more than 36.205 tons reusable goods whose end-of-life has been postponed for a certain time. - Awareness-raising for local authorities: publication of CD-rom with helpful ideas to prevent waste. - Factor 10: Due to the increasing

pressure of the actual world economy on the global ecosystem, action is needed for the future. Present pressure should be halved. In 2040 this pressure will be increased to five times the actual pressure. Our products should only need a factor 10 then of what they need now on materials, energy... This is possible by designing the products of tomorrow using ecodesign. The objective of Factor10 is to provide information and support on ecodesign to designers and companies in Flanders. - Awareness-raising in schools: MOS-schools try to integrate environmental care in school life. They help to raise the demand for environmental friendly school supplies and learn the kids another attitude towards environment. The project was started in 2002 and is renewed annually. - Ecolizer: The ecolizer is a new ecodesign draft tool from OVAM that uses the eco-indicator method '99. With the ecolizer the OVAM aims to all designers and agencies who design products and who are searching for the assessment of the environmental impact of it. For its waste management, the Flemish Region does not only dispose of agreements on environment management, but also of environmental levies on waste elimination, of landfilling and incineration bans, of duties of acceptance, return collection duties, environment licenses, subsidies, etc. Wallonia: The Walloon Government's action plan reflects the wish to reduce the quantity of hazardous waste and the degree of hazard represented by waste that are produced. In order to reduce the quantity of waste, the Government is introducing a new waste reduction target: - The "polluter pays" principle and the principle of producer responsibility in accordance with waste management plan; - Lowest priority to landfilling and introduction of landfill tax; - Highest priority to the waste treatment in the form of recycling encouraged by regional authority investments and increase in the private undertaking; - Adoption of cleaner process techniques by industries, using of resources more effectively and re-using or sale of by-products; - Adoption of more suitable consumption patterns by consumers, for example, buying products with minimal packaging or/and re-use; and - Use of agreements as management tools to promote the overall principle of answerability of waste generators and market orientation in the field of waste and recycling. In order to reduce the degree of hazard represented by waste to be landfilled, following suitable treatment are used: physical treatment (solidification/ stabilization and deshydratation); biological treatment (biological activity); and physico-chemical treatment (dechlorination; dechromatisation; and decyanurisation). These objectives were translated into Government Action Plan and into a decree on waste on 27 June 1996. Brussels: The cadre directive of the Brussels Government on waste prevention and management of 1991 allows the Government to take measures to prevent or reduce production of waste and their harmfulness: - by encouraging development of cleaner technologies and technologies needing less natural resources, - by encouraging development of products conceived in a way that their production, their use or elimination provokes the minimum on waste, - by developing appropriate techniques for elimination of hazardous substances in waste. The third waste prevention and management plan 2003-2007 was adopted in November 2003. This plan confirms the waste management hierarchy, it gives priority to prevention and re-use, followed by recycling and energy recuperation, and disposal coming as a last resort. It introduces the concept of dematerialisation of waste. The aim of dematerialisation is to maintain current levels of economic development and well-being while consuming fewer material and energy resources. By focusing on a policy of dematerialisation, the Region will create an important link between waste policy and product and resource policies and will help to uncouple increased waste production and economic growth. The principle of producer's liability is reiterated. Its extension to hazardous waste flows is planned, including hazardous waste produced in scattered amounts, such as neon tubes, waste from do-it-yourself products, etc. For the management of non-household waste, the new plan provides for public awareness measures to favor the elimination of hazardous waste from small and medium-sized enterprises and a study of incentives to promote proper disposal of hazardous waste (private financing, positive economic return and "return" brand). The Region likes to set up a network of voluntary return of waste (hazardous or not) by self-employed persons and SMEs, better control on the disposal of hazardous waste. Sector-based prevention plans will be promoted and debated with the public. On prevention, some actions aiming at the reduction of the waste generation are carried out in three phases: providing information and research on sustainable consumption, putting in place pilot projects to demonstrate results, informing and creating awareness among the public. 90% of SMEs are active in the administrative or service sectors, in the Region. Therefore three preferential targets have been selected: households, schools and businesses. For the households, several aspects are under scrutiny at the moment: - interior pollution, - alternatives for hazardous domestic products, - well considered purchasing, - well considered uses. Several programs are implemented: - the eco-construction strategy takes into account the interior pollution and the use of ecological alternatives for construction materials, - the awareness raising campaigns aim at certain products as generator of hazardous waste (i.e. batteries),hazardous products used at home,health and environment with his green ambulance "Regional cell for intervention concerning interior pollution." Awareness raising in businesses: Training is organized for companies applying for the "Eco-dynamic Business" label. This training focuses on subjects such as waste take back obligations or purchases of environmentally friendly products or services for office maintenance. Awareness raising campaigns are organized per activity sector for the prevention and management of the waste streams (dry cleaning, coach work, garage, construction sector....). Information is distributed by 'The Business and Environment Bulletin', sector publications, 'good practices' publications,...

Economy: - Ecotax: Since July 1993 a national law introduced taxes on certain consuming products that are considered to be harmful to the environment (soda packaging, batteries, pesticides, paper etc.). - MAMBO: MAMBO is the Dutch abbreviation of "Less Waste, More Profit". By means of a software package developed by the Flemish Waste Agency, companies are able to calculate the exact cost of their waste production. The objective is to bring about awareness about this topic and to focus on

waste prevention. - Flanders applies the 'polluter pays' principle. Simultaneously, a price-differentiation distinguishes between the fraction for incineration or landfilling (the 'rest-fraction' or residual waste stream) and the fractions collected separately for recycling. The Flemish Government has also imposed additional environmental taxes on the residual waste stream. The purpose of these taxes is to stimulate prevention and recycling, and also to finance regional environmental policy. - Implementation of tax legislation on waste: In Flanders, environmental taxes are put on final disposal of waste materials, i.e. on incineration and landfilling, with exemptions on recycling. It constitutes a good instrument for discouraging production of waste materials at source and accordingly promote prevention. - The registration obligation holds each producer or importer, who brings certain products on the market, responsible for the entire life cycle of the product until the phase of which the product becomes waste. The VLAREA points out the products (paper, cars, tires, batteries, WEEE, frying fats, waste oils, ...) and specifies the objectives whom have to be made in the area of prevention, selective collection and assimilation of his (waste)products. By putting the costs of the waste-disposal with the producers or importers, ecodesign will be stimulated. The lower disposal-costs whom will be achieved by this and will be deducted towards the customer, must work steering towards his buying behaviour. Producers and importers give in rule a collective interpretation to their registration obligation by means of a Environmental Policy Agreement (EPA). An Environmental Policy Agreement is an agreement between the government and the parties (whom represent the industrial sector) in which there will agree how prevention, selective collection and assimilation will be realized in the sector, who this will finance and who this will follow up and report. The EPA is different than the traditional legislation. It gives the government the opportunity to make an appeal on the expertise's and efforts of the company world. For the enterprises the EPA offers a benefit of involvement with the policy, legal security and the possibility to build a positive environmental image. - The producer liability system is a key element of the Third Waste Prevention and Management Plan (2003-2007) of Brussels. The plan provides that manufacturers must bear the real and full cost of waste created by their products. - Brussels has one incinerator. Fees for collecting and treating non-household waste are variable so as to encourage the sorting and recycling of waste. - Brussels will study different economic instruments to improve the management of hazardous waste: positive economic return, private financing, introduction of a "return brand", and soon.

Industry: Packaging prevention plans by packaging companies.

Others: Flanders: The environmental management plan MINA 2003-2007 which indicates the environmental policy of Flanders, describes some actions to reduce and/or eliminate generation of hazardous and other wastes: - action 9: Determine goals for the prevention, reuse and recycling of industrial waste that has to be tackled first - action 10: Reduce the disposal of high calory waste to a minimum- force up the energy recovery of non-recycable waste to a maximum, with respect for the environment - action 11: Develop a source oriented waste policy approach - action 12: Obtain the objective of 13% prevention in 2007 of household waste compared with 2000. The aim is to uncouple the growth of the amount of waste from the economic growth. Wallonia: - Development of production technology to minimize the production of hazardous waste; and - Development of technology to neutralize hazardous waste.

Canada:

Policies: In Canada, both mandatory and voluntary plans and programs exist. They are set up by the federal and provincial governments and by municipalities. In general, provincial and municipal plans tend to be mandatory, whereas federal plans are voluntary. Some examples are as follows: Section 188 of the CEPA 1999 gives the authority to the Minister of the Environment to require an exporter or class of exporters of hazardous waste or non-hazardous waste for final disposal to submit and implement a plan "for the purpose of reducing or phasing out" those exports. Once such a requirement is imposed, the Minister may refuse to issue an export permit if the plan is not submitted or implemented. Section 191(g) authorizes the Government to develop regulations respecting these plans referred to subsection 188(1), "taking into account: i) the benefit of using the nearest appropriate facility, and ii) changes in the quantity of goods the production of which generates hazardous waste to be disposed of by an exporter or class of exporters." The Toxic Substances Management Policy will continue to work for the health of Canadians and for the environment. This policy provides a two track approach to managing toxic substances. The first track is the "virtual elimination from the environment of toxics substances that result predominantly from human activity and that are persistent and bioaccumulative" and the second track encourages "management of other toxic substances and substances of concern, throughout their entire life cycles, to prevent or minimize their release into the environment". The National Pollutant Release Inventory (NPRI) collects and makes publicly available information from industrial facilities on their releases, disposals and recycling of over 300 pollutants. Reporting is mandatory, under the Canadian Environmental Protection Act 1999, for those facilities that meet the reporting requirements identified in the annual NPRI Notice in the Canada Gazette. The NPRI includes reporting on amounts of NPRI substances contained in waste that is transferred off-site, as well as the destination of the transfer. Information about the NPRI can be found at; http://www.ec.gc.ca/pdb/npri/npri_home_e.cfm.

Economy: A variety of economic instruments are used in Canada to promote waste reduction. Some examples include: Tipping fees are levied on waste disposal at landfill sites, incinerators and waste processing facilities by both municipalities and private sector facility operators. These fees are subject to provincial and federal value added tax (Goods and Services Tax, Provincial Sales Tax, Harmonized

Sales Tax). One province in particular has introduced a regulation requiring $10 CDN for each tonne of residuals going for disposal. The collected money will be used to finance waste management activities. Many municipalities use a partial or full user-pay system for residential solid waste management above a basic collection service of one or two bags per week with additional charges for every extra container. Deposit return systems are also widely used for beverage containers and have proven to be very efficient ways to divert material from landfills. Extended Producer Responsibility (EPR) programs are commonly funded by advance disposal fees commonly applied at the point of purchase. These monies are managed by not for profit industry producer responsibility programs to pay for the recovery, recycling and environmentally sound management of the designated wastes. In some cases, these fees are not visible to the consumer but are applied at some other point in the supply chain. EPR programs operating at both a national and provincial level exist for pesticide containers, tires, paint, crankcase oil, packaging, refrigerants, and electronics. http://www.ec.gc.ca/epr/. As an example, Stewardship Ontario was formed in response to the Province of Ontario's Waste Diversion Act that requires all companies that introduce packaging and printed paper into Ontario's consumer marketplace ("Stewards") to share in paying 50% of the funding of Ontario's municipal Blue Box waste (recyclable materials) diversion programs. Stewardship Ontario was established to manage the funds collected from Stewards. http://www.stewardshipontario.ca/ Municipal solid waste and hazardous waste minimization projects are eligible for funding under various programs. Some examples include: The Federation of Canadian Municipalities Green Municipal Fund offers grants for feasibility studies and low-interest loans for innovative environmental infrastructure initiatives. http://www.fcm.ca/ The EcoAction Community Funding Program, a federal government initiative led by Environment Canada, provides financial support to community groups for projects that have measurable, positive impacts on the environment. Funding support can be requested for projects that have an action focus, a community capacity building focus, or a combination of both objectives. http://www.ec.gc.ca/ecoaction/ Technology Partnerships Canada - Environmental Technologies is a federal investment support program for business in the form of interest-free loans. Support is given to the development of new technologies, processes and products. http://tpc-ptc.ic.gc.ca/ Sustainable Development Technology Canada is a federal foundation that acts as a catalyst for demonstration technologies. Waste management is included as one of the program's sectors for funding. http://www.sdtc.ca/ The Cities and Communities Agenda includes a targeted redistribution of a portion of the federal tax, known as the Gas Tax, to support sustainable infrastructure including waste management initiatives in cities and communities. http://www.infrastructure.gc.ca/

Industry: Economic and consumer pressures have moved industry to advocate waste reduction on a voluntary basis. Some of the initiatives include: Environment Canada's Environmental Choice Program has developed environmental criteria against which over 150 categories of products and services are assessed for leading environmental performance. The program meets the requirements of ISO 14024 Type 1 eco-labels. Companies whose product or service passes the independent third party verification process are licensed to use the EcoLogo. http://www.environmentalchoice.com/ Corporations Sharing Responsibility (CSR) is a national organization representing the stewardship interests of their Canada-wide members. CSR monitors extended producer responsibility (EPR) policies that are currently in place, and the developments in emerging policies that will face companies operating in the Canadian marketplace in the future. http://www.csr.org/ The Composting Council of Canada (CCC) is a national non-profit, member-driven organization with a charter to advocate and advance composting and compost usage. It serves as the central resource and network for the composting industry in Canada and, through its members, contributes to the environmental sustainability of the communities in which they operate. http://www.compost.org/ The Environment and Plastics Industry Council (EPIC) is an industry initiative dedicated to sustainable plastics recycling and to minimizing plastic waste sent to landfill. EPIC facilitates the development of sustainable programs to effectively manage plastics waste and acts as a resource to individuals, groups, companies and the educational community. EPIC is a council of the Canadian Plastics Industry Association (CPIA). http://www.plastics.ca/epic/ The Rechargeable Battery Recycling Corporation (RBRC) is dedicated to recycling small rechargeable batteries found in portable electronic products such as cellule and cordless phone, power tools, laptop computers, camcorders, two-way radios and remote control toys. http://www.rbrc.org/

Others: In Canada, waste minimization is promoted by various organizations such as: The Waste As a Resource Guide was developed by the Federation of Canadian Municipalities with support from Environment Canada. The Guide is designed to help municipalities implement sustainable municipal solid waste management practices and its use is being promoted through a series of workshops held across the country. http://www.sustainablecommunities.ca. Provinces and Territories mandate a certain level of diversion for municipal governments through legislation. Municipalities provide information on waste reduction and recycling programs in their local community including household hazardous waste management. Waste Diversion Ontario (WDO) is a provincial initiative that was created in 2002 under the Province of Ontario's Waste Diversion Act (WDA). WDO is a non-crown corporation that was established to develop, implement and operate waste diversion programs for a wide range of materials. Blue Box Waste (household recyclables), used tires, used oil material and waste electronic and electrical equipment (e-waste) have been designated under the WDA by the Ontario Minister of the Environment. Possible future designated materials include household special (hazardous) waste, organic materials, pharmaceuticals and fluorescent tubes. WDO has been authorized by the Act to work co-operatively with those industries that produce and distribute products that result in designated materials to establish diversion programs. http://www.wdo.ca/ Waste Reduction Week (WRW) in Canada is a national program that focuses on the 3Es of the 3Rs

- Education, Engagement, and Empowerment. WRW brings together many partners including organizations, municipalities, businesses, schools, and individuals. The program's educational resources and "take action" messaging empowers Canadians to adopt more environmentally conscious choices, and in turn, reduce waste. http://www.wrwcanada.com Not-for-Profit Organizations such as recycling councils promote and facilitate waste reduction, recycling, and resource conservation in their provinces and territories. http://www.wrwcanada.com/links.htm

Finland:

Policies: The National Waste Plan Until 2005, which came into force on 1 August 1998, sets targets, among other things, for the reduction of the amounts and harmful properties of waste. The Plan presents the administrative and legal, economic and informative instruments to be used in implementation. The targets are set for and the measures geared to the years 2000 and 2005. The plan has been updated in 2002. Regional waste management plans have been drawn out for 13 regions. The plans specify measures to be taken in the regions in order to carry out and develop the tasks provided for or regulated in or under the Waste Act. They present data on wastes and the current state of waste management, the developing targets set and measures necessary to achieve them. One of the developing targets dealt with in the plans is the minimization of generation of wastes. A proposal for the new National Waste Plan was drafted during the year 2006 and was assigned to the Ministy of the Environment in January 2007 for further action.

Legislation: The Waste Act (1072/1993), which entered into force on 1 January 1994, introduces the general obligation to prevent waste generation and to reduce its quantity and harmfulness. In order to implement the general obligation, the Government may issue general regulations concerning the production and marketing of products. Such regulations have so far been issued for example on batteries and accumulators, ozone depleting substances, asbestos and impregnated wood. The Environment Protection Act (86/2000) sets general regulations on the licensing of industrial facilities including waste disposal and recovery plants and major waste-generating industries. The Act aims at the reduction of the burden to the environment caused by various industrial operations as well as at the prevention of waste generation and reduction of their harmful effects. The Act replaced several previous regulations on facility licensing. According to the Act, the environment permit shall contain necessary regulations, among other things, in order to minimize the waste generated and diminish the harmful properties of wastes. The Act came into force on 1 March 2000.

Economy: The Waste Tax Act (495/1996) came into force on September 1, 1996. The Act was amended in December 2002. According to the Act, from 1 January 2003 a State tax of 23 euros per tonne shall be paid on waste deposited at landfills operated by municipality or a body appointed by the municipality or a landfill which is operated primarily for the purpose of receiving waste by another party. The tax was raised to 30 euros per tonne on 1 January 2005. Some waste types are exempt from waste tax. Some subsidies are awarded by the government to projects aiming at environmental protection. Among waste management projects, in general, the priority is given to those projects which aim at the prevention of waste generation and the reduction of hazardousness of wastes.

Industry: Various industrial establishments and waste generators continuously develop their process technologies e.g. in order to eliminate generation of hazardous and other wastes. In recent years a number of industrial establishments have also created their own environmental management systems on voluntary basis, for example, in accordance with the European Community Eco-management and Audit Scheme (EMAS), ISO 14001 or branch-specific programmes such as "Responsible Care" by the chemical industry. In December 2005, there were 53 EMAS-registered sites in Finland, and the number is continuously growing.

Others: Waste and hazardous waste minimisation are also promoted by: education and advisory services: it is a legal obligation for the Finnish Environmental administration (especially the Finnish Environment Institute and regional environment centres) and local authorities to provide advisory services on wastes to all interested parties (industry, commerce, households etc.). Advisory services include preparation and dissemination of information material (brochures, guidebooks, websites etc.), information campaigns, on-line advise, and training courses. Advise is given on all necessary issues related to wastes and their management but the main focus nowadays is on preventive measures. Advisory services are also provided by regional waste management organisations, private companies, producer corporations and environmental NGOs; and ecolabelling, such as Nordic Swan Label and European Union Ecolabel, research programmes and R & D projects, such as the Environmental Cluster Research Programme co-financed by several ministries and academies which aim at seeking new ways of saving the environment and natural resources and at developing them into environmentally friendly products, production technologies and infrastructure, and various R & D projects financed by the National Technology Agency TEKES (www.tekes.fi/eng/).

France:

Policies: Policies on packaging waste, used tyres, batteries, vehicles and electronic waste.

Legislation: Decree No. 98-638 from July 20th 1998 about how to take into account the environment requirements in the design and the manufacturing of packaging; · Decree No. 99-374 from May 12th 1999 about introducing batteries in the market and their disposal; · Decree No. 2002-1563 from December 24th 2002 about the disposal of used tyres; · Decree No. 2003-727 from August 1st 2003 about the treatment of end-of-life vehicles; and · Decree 2005-829 from July 2005 relating to the

composition of electrical and electronic equipment and to the disposal of waste from this equipment.

Economy: Taxes (General tax on polluting activities) on the disposal of hazardous wastes and other wastes.

Industry: Agreement on the treatment of end-of-life vehicles, from March 10th 1993.

Others: None.

Germany:

Legislation: Recycling Management and Waste Act (1994, amended in 2006) with supplementary regulations, in particular: Sewage Sludge Ordinance (1992, amended in 2002); Battery Ordinance (1998, amended in 2001); Waste Oil Ordinance (1987, amended in 2002); CFC-Ordinance (1991, amended in 2001); Ordinance on Bio-wastes (1998); Packaging Ordinance (1998, amended in 2006); Ordinance on the management of waste wood (2003); PCB-waste Ordinance (2000); Ordinance on Underground Waste Stowage (2002, amended in 2004); Technical Instruction on the Management of Hazardous Waste (1991); Commercial Wastes Ordinance (2002); Waste Management Plans issued by the Federal States; Landfill Ordinance (2002, amended in 2004); Ordinance on Environmentally Compatible Storage of Waste from Human Settlements (2001, amended in 2002); and Ordinance pertaining to the recovery of waste at surface landfills (2005). Federal Immission Control Act (1974, amended in 2005) with supplementary regulations; in particular: Ordinance on Waste Incineration Plants (1990, amended in 2003). End-of-Life-Vehicle Act (2002) and End-of-Life-Vehicle Ordinance (1997, amended in 2006). Waste Electrical and Electronic Equipment Act (2005). Regulation of the European Parliament and the Council (EEC) No 761/2001 of 19 March 2001 allowing voluntary participation by organisations in a Community eco-management and audit scheme (EMAS).

Industry: Environmental aspects are implemented in many German Industrial Standards (DIN). There is a "Manual on the Consideration of Environmental Aspects in Standardization and Development of New Products" (2001; DIN-Fachbericht 108). Many enterprises from different branches of industry and administration participate in the eco-management and audit scheme (EMAS) or have achieved an ISO 14001 certification. More information is available from the Focal Point or http://www.emas-register.de and http://www.iso14001-register.de. The German Environmental Label comprises more than 100 different product criteria (e.g. tires, copiers, paper) and several thousand labeled products. For further information see http://www.blauer-engel.de.

Others: Program of the Federal Government "Research for the environment" from 1997 with emphasis on environmentally sound products, reduction of littering, ecological and social causes of waste generation, waste avoidance, precautionary waste management and closed loop recycling management. Expenditures for research oriented to environmentally compatible, sustainable development were 690 Million Euros in the year 2004. Research projects by the Federal Ministry of Research and Education on sustainable business and integrated environmental protection in several industrial branches (e.g. plastics and rubber industry, metallurgical processes, agriculture, packaging industry, foundries, food processing, textile industry, wood processing). For further information http://www.bmbf.de or http://www.fona.de.

Greece:

Policies: Based on EU legislation. Care is taken for the prevention and reduction of production of hazardous wastes by use of clean technologies and minimization of hazardous characteristics of the waste.

Legislation: Common Ministerial Decision 11014/703/F104/20-3-2003, implementing Directive 96/61/EC concerning integrated pollution prevention and control (IPPC).

Economy: Financial support for the use of clean technologies is given to all parties involved.

Ireland:

Policies: Local Authority Waste Management Plans (since 1998) Responsible: Local authorities Under the Waste Management Act, 1996, all local authorities are required to prepare and implement a Waste Management Plan. These plans include objectives in relation to prevention and minimization of wastes. They also include objectives in relation to the recovery of waste. National Hazardous Waste Management Plan Responsible: Environmental Protection Agency (EPA) Under the Waste Management Act 1996, as amended, the EPA is required to prepare a Hazardous Waste Management Plan for the country. This plan, which was published on 5 July 2001, has regard to the prevention and minimization of hazardous waste and sets objectives and, where appropriate, targets in relation to the prevention and the minimization of hazardous waste, the minimization of the harmful nature of such waste and the recovery of hazardous waste. National Waste Prevention Programme Responsible: Environmental Protection Agency The National Waste Prevention Programme aims to deliver substantive results on waste prevention and minimisation and will integrate a range of initiatives addressing awareness-raising, technical and financial assistance, training and incentive mechanisms. An Outline Work Plan 2004-2008 has been prepared. The programme will build on initiatives such as Cleaner Greener Production Programme. A certified training programme in Waste Prevention and Minimisation has been developed in consultation with IBEC and the Clean Technology Centre. "Preventing and Recycling Waste: Delivering Change" The policy statement on the prevention and recycling of waste, Preventing and Recycling Waste: Delivering Change, published in March 2002, addresses in detail the factors and practical considerations that are relevant to the achievement of Government policy objectives for the prevention of waste and for the re-use and recycling of the waste that is produced. The policy

statement specifically - highlights the necessary disciplines that must be imposed within waste management systems to secure real progress on waste prevention, re-use and recovery; - outlines a range of measures that will be undertaken in the interests of minimising waste generation and ensuring a sustained expansion in re-use and recycling performance; and - identifies issues and possible actions which require further systematic consideration.

Legislation: Waste Management Act 1996, as amended Responsible: Department of Environment, Heritage & Local Government Part III of the Waste Management Act 1996 provides for wide-ranging regulatory measure to promote waste prevention and recovery which may involve obligations upon producers, distributors, retailers and consumers. There is a basic obligation on persons involved in industrial, commercial and agricultural activities to have due regard to the need to prevent or minimize the production of waste from that activity and to take reasonable steps for that purpose, including steps relating to product design. Integrated Pollution Control Licensing (since 1994) Responsible: Environmental Protection Agency (EPA) Under the Environmental Protection Agency Act, 1992, the EPA is responsible for Integrated Pollution Control licensing of scheduled activities. These include all major manufacturing activities in the country. Each license contains a specific condition relating to the establishment of an Environmental Management System (EMS). Through the EMS the license must assess all operations and review all practicable options for the use of cleaner technology, cleaner production and the reduction and minimization of the waste at the facility. Waste Licensing (since 1997) Responsible: Environmental Protection Agency (EPA) Under the Waste Management Act, 1996, the EPA is responsible for licensing scheduled waste recovery and disposal activities. Each license requires that the licensee establish an Environmental Management System (EMS). The EMS provides a mechanism for ongoing improvement in environmental performance by the licensee. For instance, transfer stations are required to introduce or extend recycling of wastes handled by the facility. Landfill site operators are required to provide for recycling of wastes such as construction and demolition waste, to assess and introduce, if possible, the utilization of landfill gas, and to introduce methods for the recovery of sewage sludge. Packaging Regulations (Since 1997) Responsible: Local authoritiesThe Waste Management (Packaging) Regulations 1997, as amended, impose obligations on persons and businesses which supply packaging (i.e. packaging materials, packaging or packaged goods) to the Irish market, whether as retailers, packers, fillers or manufacturers. The Regulations require suppliers to either participate in an approved packaging waste recovery scheme or to implement steps themselves to assist the recovery of packaging waste. The regulations provide that a person may not supply packaging or packaged products to the Irish market unless the packaging concerned complies with essential requirements as to its nature and composition. Plastic Bag Regulations (Since 2001) Responsible: Local authorities The Waste Management (Environmental Levy) (Plastic Bag) Regulations,2001 provide for the imposition of an environmental Levy of 15 cent on plastic bags from 4 March 2002. The purpose of the levy is to reduce consumption of plastic shopping bags dispensed at retail outlets. Revenues raised from the plastic shopping bag levy will be assigned to the new Environment Fund – which will also receive funding from the proposed landfill levy. This fund will be used for supporting appropriate waste management, litter and other environmental initiatives.

Economy: Cleaner Production Pilot Demonstration Programme (June 1997) Responsible: Environmental Protection Agency (EPA) This programme, administered on behalf of the Department of the Environment, Heritage and Local Government by the EPA, was established to promote a more environmentally friendly approach to production in the manufacturing and services industries in Ireland. Cleaner Greener Production Programme (2000-2006) Responsible: Environmental Protection Agency (EPA) The Environmental Protection Agency implemented the Clearner Greener Production Programme (CGPP) in 2001 under the ERDTI programme which is funded by the National Development Plan (2000-2006). This programme focuses on the prevention and reduction of environmental impact arising from industrial activities. Further details are available on www.clearnerproduction.ie. Demonstration Scheme for the Development of Environmentally Superior Products (1999) Responsible: Enterprise Ireland A grant-assisted pilot demonstration scheme which was operated by Enterprise Ireland and directed towards indigenous small to medium sized enterprises engaged in manufacturing. Environmentally Superior Products Initiative (1999 – To date) Responsible: Enterprise Ireland Continuing on from the Demonstration scheme for the development of Environmentally Superior Products (ESP), this initiative is aimed at improving the environmental and hence business performance of Irish SME manufacturing industry. It also aims to improve the strategic capability of SME's through the exploitation of the market for ESP's. European Union Eco-Labelling Scheme Responsibility: National Standards Authority of Ireland The objectives of the scheme are to promote the design, production, marketing and use of products which have a reduced environmental impact during their life-cycle; and to provide consumers with better information on the environmental impact of products and to encourage preferential consideration of eco-labelled products in purchasing decisions. Environmental Management System Grant Scheme (1998 – to date) Responsible: Enterprise Ireland This grant scheme provides financial assistance to small and medium sized indigenous Irish manufacturing industries to enable them to engage independent consultants to support and train the company's management in the installation and running of an Environmental Management System to either EMAS or ISO 14001. The aim of the scheme is to improve the environmental performance of Irish industry while at the same time maintaining business competitiveness. ISO 14001 Environmental Management Standards Responsible: National Standards Authority of Ireland (NSAI) Third party registration of environmental management systems (EMS) provides confidence that environmental issues are being managed in accordance with internationally recognized standards and procedures.ISO 14001 requires organisations to define their environmental policy and review their activities, products,

processes and services, in order to identify the environmental issues and associated impacts, which can be controlled. NASI is accredited to assess and certify organizations to ISO 14001. NSAI offers training workshops that outline the requirement sof the standard, the interpretation of those requirements and their application in an EMS. Enterprise Ireland-NSAI EMS Initative NSAI conducts technical environmental assessments, in line with Enterprise Ireland scheme requirements for SME's engaging in environmental performance improvement. Environmental Research, Technological Development and Innovation Programme (2000-2006) Responsible: Environmental Protection Agency (EPA) The Environmental Research Technological Development and Innovation Programme was allocated €32 million by the Irish Government under the National Development Plan 2000-2006. The funding is being invested in the following research areas: - Environmentally Sustainable Resource Management - Sustainable Development - Cleaner Production - National Environmental Research Centre

Industry: Individual measures taken by industries and waste generators in accordance with Environmental Management Systems established under IPC and waste licenses issued by the EPA.

Others: Environmental Awareness Programme Responsible: Department of the Environment, Heritage and Local Government A new phase of the environmental awareness campaign was launched in 2003 to build upon the general awareness of environmental issues raised during 1999-2002, and to refocus the campaign exclusively on waste management and awareness of waste issues generally. Entitled the "Race Against Waste" the campaign comprises two separate but related elements, a media campaign and a communications strategy. The media campaign is designed to complement the issues raised in the waste communications strategy, i.e. the need for people to prevent, reduce, re-use, and, recycle or compost their waste ultimately to reduce quantities for final disposal. The Communications Strategy addresses general public misunderstandings/ misconceptions on waste issues and the measures required to deal with waste. Information, Advice, Awareness Raising, Guidance & Tools Responsible: Enterprise Ireland (EI) EI provides a range of environmental supports designed to improve the environmental performance of indigenous Irish industry, with a particular focus on SMEs, such as: Information and advice on industry environmental issues including waste provide via phone, email or site visits and site environmental audits and eco-efficiency assessments on waste and other environmental issues. Online waste information and tools are available on www.envirocentre.ie. Environmental training and awareness on waste prevention/minimization and management through events and Regional Environmental Industrial Fora.

Israel:

Policies: A policy for waste reduction was adopted. More permits were issued for recycling and reuse of hazardous waste. The Ministry of the Environment encourages reduction, recycling and reuse of hazardous waste.

Legislation: In process.

Economy: The Ministry of the Environment funded up to 40% of the cost for industry (facilities) that invested in hazardous waste reduction.

Industry: A facility for the recovery of used automobile oil filters by the encouragement of our ministry.

Italy:

Legislation: Legislative Decree No. 22/97, Art. 3, Legislative Decree No. 152/06, Artt.179,180 and 181 Legislative Decree No 151/2005 (Directives 2002/95/EC, 2002/96/EC, 2003/108/EC)

Liechtenstein:

Policies: Different measures: For information: see Official Web site: www.aus.llv.li / or contact the competent authority.

Legislation: Different measures: For information: see Official Web site: www.aus.llv.li / or contact the competent authority.

Economy: Different measures: For information: see Official Web site: www.aus.llv.li / or contact the competent authority.

Industry: Different measures: For information: see Official Web site: www.aus.llv.li / or contact the competent authority.

Luxembourg:

Policies: National Waste Management Plan adopted by Government on 15th December 2000; and Obligation for industries and Small and Medium Enterprises (SME) to establish internal waste management plans with the view of reduction and recycling of waste.

Legislation: Modified Waste Management Law of 17th June 1994.

Economy: "SuperDrecksKëscht fiir Betriiber" initiative taken since 1992 by the Ministry of Environment and the Chamber of Handicraft with the aims of: advising industries and Small and Medium Enterprises (SME) in good ecological practice of internal waste management; and giving a quality label to the companies with a good waste management practice.

Industry: Internal waste management according to internal Waste Management Plan and/or waste

management practice according to "SuperDrecksKëscht fiir Betriiber" - concept.

Others: None.

Monaco:

Policies: No measures

Legislation: No measures

Economy: No measures

Industry: No measures

Others: No measures

Netherlands:

Policies: The waste policy plan 2002-2012 dedicates several chapters to the subject of waste prevention and reduction, which is a first goal of the waste policy in the Netherlands. The ministry agreed with industry on Integrated Environmental Tasks on waste reduction; there was a program on "Cleaner production"; a project named "industrial successes with waste prevention"; a strategy named "with prevention there is a lot to gain"; and an information campaign under the name "less waste, you have it in your own hand". In the waste policy plan 2002-2012 a number of challenges have been indicated, like: - a further reduction in the growth of the total amount of waste; - to stimulate separate collection of waste from households and the trade/services/government sector; - to stimulate recycling of waste;- to stimulate the innovation of waste treatment techniques.

Legislation: Decree on landfill ban for specific hazardous and other waste.

Economy: Tax on landfill; decision to increase tax for landfill of household waste and combustible non-hazardous waste; and Tax-reduction for companies investing in environmentally friendly technology, specified in an official tax-regulation. Hundreds of machines, systems, or specific additional installations are mentioned.

Industry: Specific measures at polluting industries and voluntary agreements with industry to reduce the amount of waste.

Others: Governmental support: subsidies on quick scans focused on possibilities to reduce waste, advises to industry; and Regulatory instruments: permitting procedures also take waste prevention into account. General rules for small and intermediate sized companies.

New Zealand:

Policies: The New Zealand Waste Strategy has been developed to look for ways to minimise New Zealand's waste and improve its management. The Strategy includes four main work programmes: Institutions and legislation - ensuring we have a sound legal framework for waste minimisation and management, with clear roles for central, regional and local government; ensuring good planning, and compliance with international conventions. Waste reduction and materials efficiency - developing tools and techniques to reduce waste and maximise re-use, recycling and recovery; removing obstacles to the use of recovered materials, and developing economic incentives to change wasteful behaviour. Information and communication - collecting the right information on waste minimisation and management; enhancing community understanding of waste issues, and encouraging individual efforts to reduce waste. Standards and guidelines - setting consistently high environmental performance standards for waste treatment and disposal, transport and storage; having all waste facilities account for the full cost of their operation and charge accordingly. The strategy sets national targets for dealing with various waste streams. Some key targets relate to: - Re-using and recycling high-volume wastes (eg, organic wastes, sewage sludge, and construction and demolition wastes); - Minimising and managing hazardous wastes (eg, organochlorines, contaminated sites, and hazardous components in business waste); - Upgrading waste disposal facilities (eg, closing or upgrading substandard landfills and wastewater treatment plants); and - Charging waste generators the true environmental cost of treatment and disposal (eg, charging full cost at landfills). A review of the policy framework that covers reductions, transport, treatment and disposal of hazardous waste to effectively manage the risks to people and the environment was completed. This policy framework (Policy Framework to Reduce and Safely Manage Hazardous Wastes in New Zealand) was finalized in December 2005 and outlines the elements that are in place to reduce and improve the management of these wastes. The policy framework outlines legislation, regulation, policy and voluntary tools which are in action to improve the management of hazardous waste. New Zealand has adopted a decentralised approach to hazardous waste management resulting in many agencies having a role in the management. It also outlines the roles and responsibilities of these agencies. As a result of the review two gaps were identified in the management of hazardous waste. These gaps were national tracking of hazardous waste and the regulation on the storage, treatment and disposal of hazardous waste. Work programmes were initiated to fill these gaps. A tracking system for hazardous waste was successfully trialled in 2005. This will improve data on the amount of hazardous waste generated. A new regulatory mechanism to control the storage, transport and disposal of hazardous waste, under the Hazardous Substances and New Organisms Act, was introduced.

Legislation: Resource Management Act 1991; Hazardous Substances and New Organisms Act 1996; Local Government Act 1974; The New Zealand Waste Strategy 2002; Guidelines for the Management of

Hazardous Waste 2002 & 2004; and Landfill Full Cost Accounting Guide for New Zealand.

Economy: Guidelines (Landfill Full Cost Accounting Guide) and encouragement for appropriate disposal pricing initiatives at disposal facilities.

Industry: Sector based cleaner production initiatives.

Norway:

Policies: No specific measures are taken to reduce the amount of hazardous wastes which are generated. National policies are focused on collection and disposal of hazardous wastes to avoid that hazardous waste are spread in nature or disposed together with non-hazardous waste, thus causing potential pollution.

Legislation: The Pollution Control Act, and the regulation on waste, chap 11, are the two main legislation documents on hazardous waste. Several other chapters in the regulation on waste concern specific types of waste which may contain hazardous substances or represent a risk for human health or the environment, e.g. batteries, PCBs, CFCs, WEEE. The product regulation sets restrictions on the manufacture, import, export, sale and use of hazardous chemicals and products (PCBs, heavy metals etc). In the longer term, it will contribute to reduce the generation of hazardous waste, even if, in the short run, the amount of hazardous waste may increase. The pollution regulation also contains terms which may influence the generation and disposal of hazardous waste (amalgam, photographic chemicals etc). Unofficial translations of these regulations may be found at http://www.sft.no/seksjonsartikkel____30215.aspx and http://www.sft.no/seksjonsartikkel____30217.aspx

Economy: Taxes or deposits are imposed on products that will generate hazardous waste, such as lubrication oil, trichloroethylene, and perchloroethene. Refunds are provided when some types of hazardous waste as used lube oils and trichloroethylene, are delivered to approved facilities

Industry: The industrial batteries importers have developed a return scheme for used lead accumulators, and the windows producers and importers have developed at return scheme for discarded insulated windows containing PCBs. Both are compulsory. The implementation of the WEEE-directive in the Norwegian waste regulation settles that producers shall establish a return scheme for WEEE

Others: The hazardous waste regulation demands registration (declaration) of all hazardous waste when delivered by enterprises to firms authorized for handling such waste.

Spain:

Policies: The national strategy on municipal wastes in Spain is set on the National Plan on Municipal Wastes (2000-2006), published in the Official Gazette of 2 February 2000. Its objectives are, inter alia: to maintain in the year 2002, the quantity of municipal wastes generated, at the 1996 level, thereby reducing by 6 per cent the quantity of waste per inhabitant per year; to reduce, prior to 30 June 2001, by 10 per cent, the annual generation of packaging wastes in relation to the quantity generated in 1996; to ensure other levels of reuse, recycling and recovery for specific wastes selectively collected (glass, paper/carton, packaging of various origins, etc.) set out in the Plan; to eliminate the uncontrolled spillage of wastes by the end of 2006 and in the same year, eliminate in controlled landfill sites 33 per cent of the municipal wastes generated, and in landfill sites which comply with directive 1999/31/EC of the European Community; and to build bring points" for the selective collection of domestic hazardous wastes (paint, solvents , oils, etc.). The Plan foresees a total investment of 3.000 million Euros. In addition to the National Plan on Municipal Wastes, several plans on specific waste streams have been issued through 2001, namely: used tires (Official Gazette of 30/10/2001); end of life vehicles (16/10/2001); construction and demolition wastes (12/07/2001); and sludge from sewage treatment plants (12/07/2001). The National Integrated Waste Plan (PNIR) 2007-2015 is under preparation. The document gathers, in an integrated manner, management plans for: - Municipal wastes - Hazardous wastes - End of life vehicles - End of life tires - Sewage sludge - Construction and demoliciton wastes - PCB/PCT and PCB/PCT containing equipment - Wastes from accumulators and batteries - Electric and electronic equipment wastes - Wastes from extractive industries (mining activities) - Wastes from agricultural plastics - Non hazardous industrial wastes - Contaminated soils A draft (in Spanish) can be accessed through the web site of the Ministry of Environment of Spain: www.mma.es

Legislation: (Note: most part of applicable spanish legislation, wether EU legislation, national or regional legislation, can be accessed or downloaded through the webpage of the Ministry of Environment of Spain: www.mma.es) Act 10/98 on Wastes is aimed, inter alia, at preventing the production of wastes and encouraging, in this order, its minimization, reuse, recycling and other forms of recovery, with the view to protecting the environment and human health. To that end, the Government will be able to establish norms for the various types of wastes, including specific provisions on the production and management of wastes. Industries and activities generating hazardous wastes are subject to administrative authorization. The permit must determine the maximum quantity per unit of production as well as the characteristics of the wastes which can be generated, on the basis of certain criteria, including, the use of less contaminating technologies under economic and technically viable conditions, as well as technical characteristics of the installation in question. When applying the criteria for deciding on the less contaminating technologies, priority will be given to the principle of prevention of wastes. To that end, the Act foresees the use of various instruments as voluntary agreements on the management of wastes by those responsible for launching on the market products which after use become waste. Voluntary

agreements should be approved or authorized by the relevant competent authorities, which in some cases may themselves participate in the agreements. The Act expressly requires that any potentially recyclable or recoverable waste should be destined for that purpose and its elimination avoided as far as possible (in the case of hazardous wastes, this requirement will be applicable from 1 January 2000). The regional authorities of the Spanish State should have to draw up regional plans on waste. The national government, by integrating these regional plans, should draw up national plans on waste which should establish the goals relating to reduction, reuse, recycling, other forms of recover and elimination, the measures to adopt in order to attain these goals, the financial means and the procedure for reviewing the plans. Act 11/97 on packaging and packaging wastes lays down goals for reducing the generation of packaging and recovering those produced, as well as requirements for reducing the content of certain hazardous substances in the packages (lead, cadmium, mercury and hexavalent chromium). Royal Decree 782/1998, which develops and implements the above mentioned Act 11/97 on packaging and packaging wastes requires packaging industries to prepare triennial forecasts indicating the goals for reducing the generation of packaging waste and their content of hazardous substances. The attainment of previous goals will be ensured through voluntary sectoral agreements (between packers, dealers in packaging products, those involved in recycling activities, etc.) reached by establishing integrated management systems for packaging wastes and used packages. Royal Decree 1378/1999 provides for measures for eliminating and managing PCB/PCTs as well as apparatus containing them. It sets the year 2010 as the deadline for the gradual elimination of PCBs, either directly, including apparatus that contain them, or indirectly through decontamination. Further rules are being prepared including sectoral agreements on other specific wastes streams such as out-of-use vehicles or used batteries and accumulators, which incorporate measures on the minimization of the generation of hazardous wastes. In 27th December the 2001, Decree 1481/2001 regulating the landfilling of wastes has been passed in Spain (it is the transposition of directive 1999/31/EEC) The costs supported today by users of landfills are, in general terms, far from reflecting the real cost of final disposal of wastes through landfilling, which in fact means a transfer of environmental costs to the society as a whole and to future generations. The new regulation will means that the price the user of a landfill will pay for the elimination of his wastes will be the real price, including the cost of controlling the landfill for a minimum period of 30 years after it has been closed. This measure will apply to all new landfills and gradually (before the year 2009) to all existing ones. The rise in the cost of the landfilling of wastes will have a positive effect on more appropriate alternative methods of waste management from an environmental point of view (reuse, recycling, energy recovery), as well as on the prevention of the generation of wastes. There are also other regulations which apply to specific waste flows and/or waste treatments, i.e.: - Management of Used Industrial Oils: Royal Decree 679/2006 (Official Gazette num 132 of 03/06/06); - Used Batteries and Accumulators: Royal Decree 45/1996 (Official Gazette num. 48 of 24/02/96) as modified by Ministerial Order of 25/10/2000 (Official Gazette num. 258 of 27/10/2000); - Management of End of Life Vehicles: Royal Decree 1383/2002 (Official Gazette num. 3 of 03/01/2003) Transposition into Spanish legislation of EU Directive 2000/53/CE on End of Life Vehicles; - Incineration of Wastes: Royal Decree 653/2003 (Official Gazette num. 142 of 14/06/2003 and num. 224 of 18/09/2003). - Electrical and Electronic Equipment and the Management of their Wastes: Royal Decree 208/2005 (Official Gazette num. 49 of 26/02/2005 and num. 76 of 30/03/2005). Transposition of EU Directive 2002/96/CE on Wastes from Electrical and Electronic Equipment; - Management of Used Tires: Royal Decree 1619/2006 (Official Gazette num 2 of 03/01/06); and - Contaminated soils: Royal Decree 9/2005 (Official Gazette num 15 of 18/01/2005). Royal Decree 679/2006, of 2 June 2006, on the management of used industrial oils (Official Gazette of 3 June 2006), requires that industrial oil producers shall adopt, before June 2010, plans for the prevention of used industrial oils, including: - measures to get longer service life for oils - better characteristics of oils, which will promote used oil regeneration, recycling and recovery When purchasing a new oil, the invoice given to the customer should separately quote the cost of the management of the used oil. For the management of waste oils Royal Decree 679/2006 applies the extended producer responsibility principle. According to respective market share, oil producers should guaranty that the following targets are met: - 1st July 2006: recovery of 100% of used oils - 1st January 2007: regeneration of 55% of used oils - 1st January 2008: regeneration of 65% of used oils The Royal Decree establishes that, in Spain, used industrial oils should priorily be sent to regeneration. The order of preference for used industrial oils treatment is: regeneration, other forms of recycling and energy recovery. Producer responsibilities (prevention plans, used oils management) can be fulfilled individually or through collective non-profit Producer Responsibility Organizations authorised by competent authorities (regional governments in Spain). Royal Decree 1619/2005, of 30 December 2005, on the management of end of life tires (Official Gazette of 3 January 2006), requires producers of new tires to prepare, before July 2007, plans for the prevention of end of life tires, including: - measures to get longer service life for tires - measures to promote used tires reuse, recycling and recovery When purchasing a new tire, the invoice given to the customer should separately quote the cost of the management of the end of life tire. For the management of waste tires, Royal Decree 1619/2005 applies the extended producer responsibility principle. According to respective market share, producers should guarantee that targets established in the End of Life Tires National Plan in force are met. By 16 July 2006, a complete ban on the landfilling in Spain of end of life tires should be applied Producer responsibilities (prevention plans, end of life tire management) can be fulfilled individually or through collective non-profit Producer Responsibility Organizations authorised by competent authorities (regional governments in Spain).

Economy: Besides the above mentioned legal or planning instruments, there are other specific economic

instruments or initiatives already in place, as: - deduction in taxes for companies, by 10%, of their investments in environmental assets (in place since 2001); - landfill taxes in some regions (i.e. Madrid, Cataluña, Murcia, Andalucía) for non hazardous and hazardous wastes; - voluntary agreements with stakeholders; and - promotion of Environmental Management Systems and Schemes (ISO-14000 /EMAS). Every year the State grants subsidies for the environmentally sound collection and management of used industrial oils, on a quantity which typically averages 6 million Euros. These subsidies will be ending in 2007 with the Producer responsibility instrument put in place through Royal Decree 679/2006 on the management of used industrial oils.

Industry: Voluntary sectoral agreements on the management of wastes (mentioned above); and Certification of Environmental Management Systems. As of 2005, 528 organizations -668 installations- are registered under the EU Environmental Management Audit System (EMAS). 199 of these organizations belong to the industrial sector. 329 to non industrial sectors.

Sweden:

Policies: EU Waste management strategy: Prevention of generation of waste; Reduce content of hazardous material in the waste; Reuse or recovery of material or energy; and Safe and adequate disposal of the waste.

Legislation: Producer responsibility of different kinds of waste; Ban on landfill of sorted combustible waste from 1 January 2002; Ban on landfill of organic waste from 1 January 2005; and Ordinance on wastes sent to landfills.

Economy: Tax on waste sent to landfill from 1 January 2000.

Switzerland:

Policies: Different measures. For information: see Official Web site: http://www.umwelt-schweiz.ch/ or contact the competent authority.

Legislation: Different measures. For information: see Official Web site: http://www.umwelt-schweiz.ch/ or contact the competent authority.

Economy: Different measures. For information: see Official Web site: http://www.umwelt-schweiz.ch/ or contact the competent authority.

Industry: Different measures. For information: see Official Web site: http://www.umwelt-schweiz.ch/ or contact the competent authority.

Turkey:

Policies: Minimization of the waste production at the source; The recovery and reuse of waste is the principle of our national regulation if recovery and reuse of wastes are impossible as technical and financial prospective. The wastes shall be eliminated without causing and damage to the environment and human health. Elimination systems must be selected based on the waste characteristics and the corresponding technologies; and Establishment of sufficient elimination facilities, and control of such facilities in an environmentally sound manner.

Legislation: Communiqué on the Rules for the Incineration of Wastes as Alternative or Additive Fuels in Cement Rotary Kilns; By-law on the Control of Hazardous Wastes (published on 14 march 2005); By-law on the Control of Clinical Wastes (published on 22 July 2005); By-law on the Control of Solid Wastes (published on 14 March 1991); By-law on the Control of used batteries and accumulators (published on 31 August 2004); By-law on control of waste oils (published on 21 January 2004); By-law on control of package and packaging waste (published on 30 July of 2004); By-law on control of edible waste oils (published on 19 April 2004); and By-law on control of demolition waste (published on 18 March 2004).

Industry: The waste generators shall be liable to adopt the necessary measures for the minimization of waste production and to ensure waste management in a manner so that the harmful effects of wastes on the environment and the human health shall be minimized in accordance with the provisions of national regulation. Also waste generators have to fill the waste declaration form every year and forward it to Ministry of Environment using the waste description code issued by the Ministry. Responsible care is being implemented among the industrialists. There has been also Environmental Voluntary Declaration applied by the Ministry of Environment and Forestry to some industries. Also, efforts are made by the industries/waste generators through recycling/recovery to reduce the generation of hazardous wastes.

Others: In order to enhance the recovery of waste pilot projects have been initiated in Istanbul, Kocaeli and Bursa provinces by the coordination of the Ministry under the umbrella of Turkish Union of Stock Markets and Chambers Commerce and Industry regarding the waste stock exchange.

United Kingdom of Great Britain and Northern Ireland:

Policies: Waste Strategy 2007 for England was published in May 2007; see http://www.defra.gov.uk/environment/waste/strategy/ Waste Strategies also exist for other parts of the United Kingdom and Northern Ireland . Each strategy sets up a long term framework with challenging targets underpinned by realistic programmes to deliver more sustainable waste management; raising the awareness and participation of all stakeholders, including the public. The

emphasis is on prioritising waste minimisation, achieving substantial increases in the recovery of value through recycling, composting, anaerobic digestion, and various Energy-from-Waste technologies.

Legislation: The Producer Responsibility Obligations (Packaging Waste) Regulations 1997 (as amended) implemented part of the EC Directive on Packaging and Packaging Waste 94/62/EC, in particular the recovery and recycling targets. These required that, by 2001, between 50% and 65% recovery and between 25% and 45% recycling of packaging waste had to be achieved and within this, a minimum of 15% of each material was to be recycled; - A revised Packaging Directive 2004/12/EC came into force in February 2004 and set new recovery and recycling targets to be met by 31 December 2008. - A revised and consolidated set of packaging Regulations "the Producer Responsibility Obligations (Packaging Waste) Regulations 2007" came into force on 16 March 2007 and implement the new requirements in Directive 2004/12/EC: - The GB Regulations, and parallel legislation in Northern Ireland, place obligations on certain businesses who place packaging on the market including, in particular, a requirement to carry out target levels of packaging waste recovery and recycling each year. - The Packaging Waste Recovery Note (PRN) is an evidence note used by obligated businesses to demonstrate compliance with their recovery and recycling obligations. These is also a Packaging Waste Export Recovery Note (PERN) which is issued in respect of tonnages of packaging waste exported for recycling overseas (within and outside the EC). Only reprocessors and exporters who have been accredited by the relevant Agency (Environment Agency in England and Wales or Scottish Environment Protection Agency in Scotland and Environment and Heritage Service in Northern Ireland) may issue PRNs or PERNs respectively; - The Packaging (Essential Requirements) Regulations 1998 took full effect in January 1999 and were superseded by revised Regulations in 2003. They implement the Directive Provisions specifying essential requirements for packaging placed on the market, which cover minimisation, avoidance of noxious and hazardous substances and the need for packaging to be recoverable (through at least one of the following: material recycling, incineration with energy recovery, composting or biodegradation); WEEE, RoHS and ELV - Two sets of Regulations implementing the EU Waste Electrical and Electronic Equipment (WEEE) Directive came into force at the beginning of January 2007. The Waste Electrical and Electronic Equipment Regulations 2006 and the Waste Electrical and Electronic Equipment (Waste Management Licensing)(England and Wales) Regulations 2006. From 1 July 2007, these Regulations will require that producers of electrical and electronic equipment finance its collection treatment at appropriately permitted facilities and recycling to target levels when it becomes waste. - The Restriction of the use of certain Hazardous Substances in Electrical and Electronic Equipment Regulations 2006 came into force on 1 July 2006. The Regulations ban the placing on the market of new electrical and electronic equipment containing more than agreed levels of six hazardous substances. - The The End-of-Life Vehicles Regulations 2003 and ELV (Producer Responsibility) Regulations 2005 together implement the requirements of the EU End of Life Vehicles Directive, which from 1 January 2007, requires vehicle manufacturers to finance the takeback, treatment and recycling of waste vehicles. - On 1 August 2000, the Pollution, Prevention and Control (PPC) Regulations entered into force in England and Wales implementing the EU Integrated Pollution, Prevention and Control Directive (96/61/EC) . This progressively replaced the Integrated Pollution Control (IPC) regulatory regime in a process which is now virtually complete. , applicable to the most potentially polluting industrial processes, which requires the Separate Regulations have been made to apply the IPPC Directive to Scotland, Northern Ireland and the offshore oil and gas industries. About 4,300 installations are covered by IPPC, which requires each to have an operating permit based on the use of BAT (best available techniques)and incorporating conditions - The technical and regulatory aspects of Council Directive 99/31/EC on the Landfill of Waste were implemented in England and Wales by the Landfill (England and Wales) Regulations 2002 (as amended). The terms of the Landfill Directive require a major change in the way the UK manages its wastes. For example, the Landfill Directive bans specific types of waste from landfill, such as liquid waste, tyres, infectious clinical wastes and certain hazardous wastes. It also bans the co-disposal of hazardous and non-hazardous waste and places strict controls on landfill sites, particularly those for hazardous waste. The Landfill Directive also requires the treatment of waste before disposal to landfill and the introduction of waste acceptance criteria have had a strong influence on the treatment options, particularly for hazardous wastes. One likely effect of the implementation of the Landfill Directive is the increase in the cost of landfill disposal of hazardous waste, providing an incentive for waste producers to reduce the amount of hazardous waste generated

Economy: Articles 5 (1) and (2) of the Landfill Directive deal with strategies for the reduction of biodegradable waste and sets targets to reduce the amount of biodegradable municipal waste going to landfill. These aspects of the Directive were implemented in the UK by the Waste and Emissions Trading Act 2003 and and the Landfill Allowance Trading Scheme 2004. The Landfill Allowances Trading Scheme (LATS) is the principle mechanism to ensure England meets the EU Landfill Directive targets. This system draws on the power of the market to reduce pollution in a cost-effective and flexible manner. The scheme is designed to incentivise local authorities to reach their targets during scheme and target years by investing in alternative waste treatments and diverting biodegradable waste from landfill. The Landfill Tax was introduced in October 1996 as the first UK tax with an explicit environmental objective. It was designed to promote the 'polluter-pays' principle by increasing the price of landfill to better reflect its environmental cost, and to promote a more sustainable approach to waste management. The 1998 Budget introduced changes to the Landfill Tax including an increase from £7 to £10 per tonne for active waste from 1 April 1999. The 1999 Budget introduced an automatic escalator which will increase the rate of tax for active waste by £1

per year, until the rate reaches £15 per tonne in 2004/5. The 2003 Budget announced that the rate will be increased by £3 in 2005-06 to £18 per tonne, and by at least £3 per tonne in the years thereafter, on the way to a medium- to- long-term rate of £35 per tonne. The 2006 Pre-Budget report announced that the Government will consider whether this rate needs to increase more steeply from 2008 onwards, or go beyond £35 per tonne. The rate of tax for inactive waste remains frozen at £2 per tonne.

Industry: Envirowise: Envirowise programme is a Government funded programme offering UK businesses, free, confidential, practical advice, minimise waste, reduce environmental impact and save money (converting turnover to profit). The programme is available to any UK business, completely free of charge. Envirowise offers a range of free waste minimisation consultation and reference products to businesses in the UK including the environment and energy helpline, publications (case studies, best practice guides and datasheets written by experts provide up-to-date information on waste minimisation issues, methods and successes) and Resource Efficiency Clubs. Www.envirowise.gov.uk. Envirowise programme involves a number of cross-sector initiatives to promote resource efficiency, especially in the hazardous waste sector. It advocates for the implementation of best practice measures (with associated reductions in waste and pollution). The programme in this sector is helping companies realise cost savings and reducing environmental impact whilst remaining compliance with EU and national legislations. Envirowise is a partner in the HAZRED European project that aims to help small and medium sized enterprises (SMEs) prevent and reduce their production of hazardous wastes, saving them money in the process. EMAS: At the end of 2004 there were 61 organisations registered for EMAS. This data relates to companies in all sectors and not exclusively to companies dealing with hazardous waste or waste management companies generally.

Others: The Waste Implementation Programme (WIP) was set up in May 2003 following a report published the Strategy Unit in November 2002 entitled 'Waste Not, Want Not'. The remit of WIP is to divert biodegradable municipal waste (BMW) from landfill in England and help meet the requirements of Article 5 of the EU Landfill Directive. WIP seeks to achieve this through waste reduction, recycling and home composting in close cooperation with Local Authorities. The targets of Article 5 require that: - The UK, by 2010, reduce BMW landfilled to 75% of that produced in 1995. - By 2013, the UK reduce BMW landfilled to 50% of that produced in 1995. - By 2020, to reduce BMW landfilled in the UK to 35% of that produced in 1995. Waste Infrastructure Delivery Programme (WIDP): More recently the WIP programme established the Waste Infrastructure Delivery Programme (WIDP). Working in Partnership with 4Ps and PUK the programme aims to accelerate the delivery by LA's of necessary waste management infrastructure to divert waste (particularly residual waste) from landfill. The success of this programme will greatly depend on a successful CSR07 bid. Waste and Resources Action Programme (WRAP): WRAP is a government funded organisation which aims to remove barriers to waste minimisation, re-use and recycling, and to create stable and efficient markets for recycled materials and products. WRAP works with consumers, waste generators and re-processors, manufacturers, businesses and government. It has several work streams, focusing on generic recycling issues (financial mechanisms, procurement, waste minimization, collection and waste awareness) and specific material streams (paper, glass, organics wood,plastic and aggregates). More information on WRAP is available at http://www.wrap.org.uk.