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

2006. 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 n003-477 of 09 Decemebr 2003 fixing the Nation Plan of Management of Special Wastes which defines the choice of options related to wastes treatment trend Executive Decree n04-409 of 14 December 2004 fixing the mothods of transport of dangerous special waste 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. 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 (2002) 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 (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. Environmental performance contract (volunteers). Certification ISO (volunteers).

Others: Environmental audit Study of danger (Intervention Internal Plan (PII), Internal Particular Plan (PPI)). (lawful obligation to have an authorization of exploitation)

Botswana:

Policies: Annually awareness campaigns at ports of entry (border posts), police, schools, industry and generators on general provisions of Basel convention, institutional roles and monitoring of hazardous waste. Awareness workshops and seminars on the general management of hazardous waste. The polluter pays principle is also enforced as all polluters are monitored and incur all rehabilitation process. Conducted awareness workshops in all schools and industry in view of conducting hazardous waste inventory.

Legislation: Waste Management Act 1998 was promulgated to manage controlled waste and Section 45 of the act incorporates the provisions of the Basel Convention.

Economy: n/a

Industry: Regular inspections done and all polluting industries do rehabilitate contaminated sites, arrangements are also made through the department for disposal at recognized hazardous sites in the region. Industries are requirement to produce environmental and waste management plans for all wastes produced and disposed.

Others: Botswana imports finished products and just repackage for the market.

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. National Strategy for Waste Management prescribed to industries measures they can take to reduce and/or eliminate hazardous waste.

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.

Economy: 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.

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.

Ghana:

Policies: The policy statement on the environment requires that appropriate measures are taken to control pollution and the importation and use of potentially toxic chemicals including waste. Developing a cleaner production center to promote waste minimisation.

Legislation: Environmental protection agency act, 1994 (act 490) provides for the establishments of a hazardous chemicals committee to deal with the management of hazardous chemicals including reduction and elimination.

Industry: Industries and waste generators are required to comply with existing guidelines on industrial waste.

Lesotho:

Policies: Integrated Waste Management Plan developed and funding being sourced for its implementation.

Legislation: - Development of Hazardous Wastes Management Bill and Regulations in process. - Draft Toxic & Hazardous Chemicals Bill and Regulations under development. - Environmental Bill 2007 before the Parliament for finalization.

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) .

Mali:

Policies: Politique Nationale de l'assainissement. Stratégie Nationale de Gestion des Déchets Spéciaux.

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 are ISO systems certified and have 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.

Nigeria:

Policies: - Promotion for the adoption of cleaner production techniques; - Establishment of Cleaner Production Centre; and - Installation of incinerators for hazardous (hospital) wastes. - Sustained awareness- raising - Commissioning of Basel Convention Coordinating Centre at the Unversity of Ibadan, Nigeria. - National Action Plan on: Biomedical Wastes.

Legislation: There are existing legislations, regulations and guidelines for the reduction and/or elimination of hazards waste generation in Nigeria. They include: - FEPA Harmful Wastes Provision Decree 42, 1988; - National Guidelines and Standards for Environmental Pollution Control in Nigeria 1990; - National Effluent Limitations Regulations S.1.8 1991; - National Pollution Abatement in Industries and Facilities Generating Wastes Regulations S. 1.9 1991; - S.1. 15 National Environmental Protection Management of Solid and Hazardous Wastes Regulations 1991; - FEPA (Amendment) Decree No. 59 of 1992; - Decree 86, 1992 Environmental Impact Assessment; - National Guidelines and Standards on Industrial Effluents, Gaseous Emissions and Hazardous Waste Management in Nigeria 1991; - National Guidelines and Standards on Water Quality; - National Guidelines and Standards on Water Disposal through Underground Injection; - National Guidelines on Spilled Oil Fingerprinting; - National Guidelines on Registration of Environmental Friendly Products and Eco-labelling; - National Guidelines on Environmental Audit in Nigeria; - National Guidelines on Environmental Management System; - Guidelines on Hazardous Chemicals Management; - The Blue Print on Environmental Enforcement: A Citizen's Guide; - Blue Print on Municipal Solid Waste Management in Nigeria 2000; - The Blue Print on Compliance Monitoring Inspections; - Guidelines on Pesticides Management/Hand Book on Safe and Effective use of Pesticide 2000; and - The Blue Print on Waste Management in Nigeria.

Economy: - Environment-friendly awards to industries/facilities that comply with existing rules and regulations on environmental protection; and - Compulsory waste audit of facilities/industries every three(3)

years

Industry: - Installation of waste treatment facilities (e.g incinerators, thermal de-sorption units, waste water treatment plants); - Self-monitoring; - Compliance programs; and - Waste Auditing

Seychelles:

Policies: Government invested heavily in solid waste management throughout the nineties, especially as part of the implementation of the Environment Management Plan 1990 - 2000. There are now four major landfills in operation, two of which are fully engineered landfills. Hazardous waste management is addressed as part of the overall plan for waste management on the islands (Solid Waste Master Plan), especially since most hazardous is produced in small volumes. There are collection systems for waste oil, scrap metal, lead acid batteries and pesticide containers, and also sorting out of the organic fraction of municipal waste for composting. These are mostly eliminated through export, and in the case of pesticide containers, through recycling. The following additions to the locally available facilities are being explored: incinerator, larger storage facilities for oil and Kraft paper recycling plant. The generation of waste is addressed through a 'reduce, reuse, and recycle policy'. Waste reduction initiatives can be done through the environmental assessment process under the Environment Protection Act. The potential for waste generation, waste reduction, and recycling are three criteria that are used to assess large projects or initiatives. The ministry also regularly engages different sectors of the economy in waste reduction efforts, for example, reduction of throwaway of soft drinks and mineral water bottles, reduction of construction waste reaching the landfill, reduction of pesticide waste through proper stock management etc. The generation of waste at the household level is addressed through educational programs and in some instances through house-to-house campaigns. A varied set of activities is organized throughout the year by this ministry and the agency responsible for waste. Educational/sensitisation programs are carried out in schools, and TV, radio and newspaper items (of which a large part has to do with the generation of waste) are released on a weekly basis. There are also annual events such as the Cleanup the World Campaign, Environment Week, and Recycle fair. In addition, certain products, such as asbestos roofing sheets and POPs pesticides are not allowed in Seychelles, thus the problem with their elimination or treatment does not exist. With regards to avoidance, importers and consumers (also through NGOs) are being continuously encouraged to opt for less dangerous products. 2 new incinerator has been installed, one at the port and the other at the airport for the incineration of phytosanitary waste. The Ministry of Health has also installed an incinerator at their center for the elimination of medical waste. A program is being drafted to monitor the existing landfills for the purpose of mitigating the effects of leachate in the surrounding marine environment.A new system has also been put in place for the control of hazardous waste importation by screening. All application for chemicals should receive authorization from the environment authority prior to importation. Seychelles is preparing to ratify Decision III/1 of the Basel Convention and also the Stockholm Convention before the close of 2005.

Legislation: Environment Protection Act, 1994: at section 12 establishes the agency responsible for waste and defines its functions, and at section 13 onwards establishes other obligations for waste minimization by the authority. Pesticides Act 1996. Seychelles Bureau of Standards guidelines on the storage and handling of dangerous products.

Economy: There are presently few economic initiatives to encourage waste minimization. The legal instruments of licensing, environmental authorizations and Public Health are frequently used to force persons to comply with the requirements. The company that exports scrap metal is being encouraged to collect and export all scrap at no cost. Responsible organizations are now being asked to cater for their own waste. The ministry of health will install a new incinerator for the elimination of medical waste. Under the French corporation the ministry of Environment will install 2 incinerators at the port and airport for the elimination of phytosanitary waste.

Industry: The Public Utilities Corporation has invested in a waste oil incinerator at the central electricity generating plant. On smaller islands that are not connected with the main waste collection system, owners and managers continue to invest in waste separation, minimization of incoming products, waste transfer, incineration and/or composting.

South Africa:

Policies: The Department of Environmental Affairs and Tourism is in the process of promulgating new waste legislation which will provide among other provisions for: - The recycling of waste by municipalities; - The requirement for industries to produce industrial waste management plans; - The development of a waste management strategy which sets waste minimization targets; - The remediation of conta inated land; - The identification of priority waste streams; and - The focusing of waste management in line with the waste management hierarchy.

Legislation: South Africa adopted the Polokwane Declaration that is targeting zero waste by 2020 and this will include waste minimization techniques.

Economy: South Africa promulgated and is implementing plastic bag regulations which require manufacturers of flat carrier bags to pay a levy on each bag produced.

Industry: The tyre manufactures are about to apply a voluntary levy on tyre to provide funds to manage waste tyres in a responsible manner. A similar initiative is being planned by the pesticide industry.

Others: Training courses offered to industry's middle management by the Basel Convention Regional

Centre, Pretoria on the above and Environmental Sound Management of hazardous waste.

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. A center for processing industrial and hazardous waste has been established in Jradou governorate of Zaghoun in Tunisia with an annual capacity of 90,000 tons. The center will process waste from all governorates of Tunisia. Three transfer centers are also established to complete the system, and limit transport distances to between 120 km and 180 km. The main sections of the center are as follows: - An administrative zone, with reception, office space, laboratory and car parks. - A processing area, with installations for physico-chemical processing and solidification/stabilization. The physico-chemical processing installation will be able to process 17,500 tons of liquid per annum. The exploitation of this platform is intended to commence on 2008. Implementation of pilot project: Africa Stockpile Programme for Tunisia (Total cost: 5,5 million US$, Period: November 2005 - November 2009). Components: - Establishment of a functional project management unit; - Inventory of obsolete pesticides; - Disposal of obsolete pesticides (repackaging, transport, intermediate storage taking safe measures and export stock of obsolete pesticides to Europe for incineration); - Set-up measures to present the re-emergency of obsolete pesticides and promotion of alternative pest control strategies; - Capacity building in management of obsolete pesticides field and communication and raising awareness of sound management and rational use of pesticides. The year 2006, reported the following actions: - Organization of training sessions in the inventory of obsolete pesticides stocks; - Conducting an inventory of obsolete pesticides stored in depots (around 1,200 tons in 200 stores on May- October 2006).

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. - Promulgation of law n°97-37 dated June 02, 1997 related to road transport of hazardous products which has been completed by decree in this regard. - Starting a study on revising and updating Tunisian standards in the environment field.

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 2006, the FODEP has contributed in extending funds to 420 pollution mitigation projects, waste collection, treatment and recycling projects and clean technologies projects, which received total grants amounting to about 25 million TND and total investment costs estimated as 128 million TND.

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; - Around 50 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. Creation of the National Waste Management Agency (established by decree n°2005-2137 dated August 22, 2005) which is entrusted with the design and implementation of the measures provided in the national waste management programmes, contributing in technical and financial assistance to municipalities, technical coaching of industrialists, oversight of the public systems related to waste management, operation and maintenance of the facilities dedicated to dangerous wastes, as well as drafting of "Terms and conditions" documents and authorization requirements in relation to waste management.

Zambia:

Policies: The National Waste Management Strategy is complete. The Environmental Council of Zambia in conjunction with other stakeholders has drafted Technical guidelines on the Sound Management of Health Care Waste and Minimum Specifications for Health Care Waste Incineration. 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

2006. Asia and Pacific. (Parties which did not report are not listed).

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.

Iran (Islamic Republic of):

Policies: -Waste Management Strategy which was developed in 2000 and approved by the supreme Environment Council. -Elimination or decrease in the generation of hazardous wastes. - Setting up the Committee of Recycling. -Developing research and pilot projects on recovery and final disposal of hazardous wastes in cooperation with industry and universities.

Legislation: -Ratification of national waste management legislation and its national implementation bylaw - Implementing of article 11 of the national waste management law. -Regulations and standards have been established to prevent, control and monitor environmental damage and pollution by industrial sector and health-care wastes or any other kind of hazardous waste generators. -Guidance for clinical waste management has been prepared by Department of Environment. -Guidelines for separation, collection and proper disposal of industrial hazardous waste is being prepared by Department of Environment. -Defining projects based on article 11 of the national waste management law in order to prepare regulations and guidelines on management of hazardous waste.

Economy: - Environmental penalty for the industries and other pollutant centers that violate the national hazardous waste laws on collection, transportation and disposal. Hazardous waste penalty is paid for a cleaner environment and environmental training (article 16 of Waste management bylaws) - financial support for companies that introduce an initiative regarding ESM by public banks and ministry of Industries & Mined

Industry: -Industrial sectors and other waste generators try to minimize their wastes. -collection and disposal of waste in industries based on basis of waste management bylaws. - Industries are promoting to apply ISO systems. - Industrial sectors try to utilize clean production technologies and provide an atmosphere for green industries. - Environmental impact assessment is required prior to any industrial development projects.(Environmental impact assessment is carried out in accordance with the provisions stipulated in the Law "On Environmental impact assessment", passed on October 14, 1998)

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.

Kazakhstan:

Policies: At January 2003 on Security council under chairmanship Chapters state were considered questions to ecological safety and one of the main threats were named "history environment pollution ion" and progressing accumulation wastes production and consumptions. In strategic plan of the development of the Republic Kazakhstan before 2030 (the Edict of the President of the Republic Kazakhstan from August 15 2003 N 1165) of one of the tasks in the field of environment protection cost(stand)s increasing a level use wastes: "For the reason reinforcements of the state supervision for accommodation and salvaging wastes, as well as reduction their bad influence on environment is provided: work out the united state approaches to decision of the problem wastes production and consumptions; develop the managerial system a wastes on different level; introduce the system of

the collection, keeping and controlled salvaging everyday wastes on the whole territory of the republic; develop the measures on development of the system of the monitoring vault wastes". The Reduction of the volumes of the accumulations, liquidations and conversions industrial and everyday wastes are provided in Plan action on 2004-2006 on realization of the Concepts to ecological safety of the Republic Kazakhstan on 2004-2015, in Program" Environment protection of the Republic of Kazakhstan on 2005-2007" In Concepts of ecological safety of the Republic Kazakhstan on 2004-2015, which is approved by President of the Republic Kazakhstan (the Edict of the President of the Republic Kazakhstan from December 3 2003 1241) these questions are in detail considered and is intended way of their decision. At present Program are realized on liquidations radioactive mould board extractive uranium industry and Program on liquidations ownerless oil and self-emission hydro geological of the bore holes.

Legislation: ZRK from June 26 1998 233-I "About national safety of the Republic Kazakhstan" is determined that in purpose of the provision to ecological safety, preventions radioactive, chemical environment pollution ion, bacteriological poisoning the territory of the country, uncontrolled import in Kazakhstan ecological dangerous technology, material and material is forbidden. The Main legislative acts of the Republic Kazakhstan, adjusting relations in the field of wastes production and consumptions are laws "About environment protection" and "About depths and subsoil use ", but on nuclear waste by Law "About use the atomic energy". Accepted Law of the Republic Kazakhstan from. June 24 1999 "About ratifications Convince about prohibition of the development, production, accumulations and using the chemical weapon and his (its) destruction", which was perfect in Paris January 13 1993 The Resolution Government Republics Kazakhstan from April 15 1996 439 are accepted rules "About prohibition of the use in Republic Kazakhstan ecological bad pesticides and order their burial" is forbidden use in Republic Kazakhstan highly toxic pesticides, possessing expressed cumulative, carcinogenic, mutagenic, teratogenic, amryo- and gonadotoxical characteristic and having ability be accumulated in plants, ground and water ambience . The Resolution Government Republics Kazakhstan from April 28 1997 670 are approved Agreement on supervision for translimit by transportation dangerous and the other wastes, signed state - a participant Commonwealth Independent State (C.I.S.) of the April 12 1996 in city Moscow. Hereto agreement, founding on positions Basel convention, attached lists of the main groups' dangerous wastes and dangerous characteristic. The Resolution Government Republics Kazakhstan from June 9 2000 N 878 is approved National plan action on hygiene environment of the Republic of Kazakhstan (with change, contributed by resolution Government RK from 12.09.03 N 922) , which is provided provision sanitary-epidemiological safety of ground and clear territory from everyday and production wastes. The Law of the Republic Kazakhstan from July 15 1997 (with additions by change) "About environment protection" are entered ecological requirements to economic and other activity, including when referencing with wastes production and consumptions, to military and defense object, military activity, "Sanitary-epidemiological requirements to collection, use, neutralization, transportation, keeping and burial wastes medical organization" (is Approved by order i.e. The Minister of the public health of the Republic Kazakhstan from January 13 2004 N 19) to wastes, depending on their class of the dangers, are presented different requirements on collection, temporary keeping and transportation. The Melange wastes different classes on all stages of their collection, keeping and transportation is forbidden. The Rules of transportation dangerous wastes, including performing the cargo handlings. The Order of the Minister of the transport and communication of the Republic Kazakhstan from February 172006 N 48. "Rule of safe transportation radioactive material" (is Approved by Order of the Chairman of the Committee on atomic energy Ministry energy and mineral resource of the Republic Kazakhstan from September 3 2002 65). The Item 2. The Rules are entered in action on territory of the Republic Kazakhstan as the main regulative document on transportation any type radioactive material by all means of transport (overland, water, air). The Requirements of the Rules on safety are binding on performance by all juridical persons, realizing activity in the field of transportation radioactive material in Kazakhstan, and serves as a reference for revising all acting normative document in this area. In accordance with Roll NP A MOOS RK at present in act following NMD on wastes: 1. The Instruction on supervision for technical condition hydraulic engineering buildings of the drives wastes (the products) industrial enterprise Republics Kazakhstan; 2. The Instruction on realization of the state supervision for OOS from environment pollution ion industrial wastes enterprise RND 03.7.0.6.02-94) 09.12.1995r; 3. "Order of the standardization of the formation and accommodations wastes" in a part of the determination of the estimation of the influence on ground with provision for background concentration RND 03.1.0.3.01-96; 4. The Rules of the development physical and juridical persons project standard of the address with wastes and presentations them on statement in representative organ in the field of environment protection of the Republic of Kazakhstan". 5. The Methodical instructions on standardization of the volumes of the formation and accommodations wastes enrichments is blazed- concentrating enterprise RND 03.1.4.3.01-96; 6. The Methodical instructions on determination level environment pollution IOn component environment toxic material wastes production and consumptions RND 03.3.0.0.4.01-96. 7. The Managing normative documents. The Waste production and consumptions. The System of the normative requirements. RND 03.0.0.0.01-93. 8. Methodical instructions on estimation of the influence upon environment placed in drive production object, as well as stored under opened by sky of the products and material RND 03.3.04.01-95 9. Methodical instructions on supervision for translimit by transportation dangerous wastes and their accommodation (removing) RND 03.7.0.6.03-95 10. The Ecological requirements to items of keeping and burial nuclear waste. 14. The Qualifier toxic industrial wastes production enterprise RK RND 03.0.0.2.01-96 At period 2005-2006 is designed following documents: The Methodical instructions on determination of the referring dangerous wastes be generated in process

of activity physical and juridical persons to concrete class of the dangers (is approved by order of the Minister environment protection from December 08 2005 331-p); The Rules of transportation dangerous wastes, including performing the cargo handlings (is approved by order of the Minister Ministry transport and communications RK February 17 2006 4103). The Order of the Minister guard environment protection of the Republic of Kazakhstan from 23.05. 2006 163-P are approved "Methodical instructions on development physical and juridical persons project standard of the address with wastes and presentations them on statement in representative organ in the field of environment protection of the Republic of Kazakhstan" . They Are Given effect order of the Minister environment protection ambiences of the Republic of Kazakhstan 162-p from 23 May 2006r. "Methodical instructions on filling the form of the passport wastes". They Are Found on stage of the co-ordination "Rules of the realization of international transportation wastes", designed by Ministry of the transport and communications RK. In Republic Kazakhstan are introduced international standards quality to product ISO9000 (662 enterprises) and managerial system environment IS014000. On condition on 01.12.2006 this system has introduced 32 enterprises that use natural resources.

Economy: One of the reasons of the significant annual increase solid wastes production, small volumes of their use in public facilities, is an imperfection legislative-legal basis in RK. In Law RK "About environment protection" in s1,32 declarative is said about economic stimulation environment protection: In the other law about this is not mentioned. Practically, some measures of the stimulation do not be taken. Legislation about depths waste mining enterprise or man-caused mineral formation are leveled to unexplored ore deposits useful fossilized and, accordingly, is provided bulky and long procedure on time of the registration license and signing contract on conversion wastes, preliminary undertaking the geological exploring spare. Tax legislation is provided charging all type payments and taxes with ore deposits useful fossilized in analogy, economic practicability of the development which in over and over again above. In accordance with Statue 95 "Economic stimulation of environment protection" Ecological Code, residing on stage of consideration in Parliament RK: The Economic stimulation of the efficient realization enterprises that use natural resources action on environment protection is produced by means of measures, provided by legislative acts of the Republic of Kazakhstan. Thereby, in acting legislation and designed Ecological Code encouraging measures for work on reduction wastes, their conversion, wasteless production carry only declarative nature.

Industry: At present in area is realized only statistical account industrial and solid everyday wastes. To realization of the programs in the field of address with wastes in 1998 - 2002 were attracted international organizations. Environmental actions, directed on reduction of the negative influence upon environment wastes production and consumptions are enclosed in concept Umbellate project on component "Reduction industrial wastes in g.g. THE Mouth-Kamenogorske, Pavlodare and Karagande". In 2000 - 2002 is organized work on salvaging and burial mercuryferous and nuclear waste, pesticides, pesticide on project of the salvaging to quick silvers, burial radioactive sources on complex "Baikal" Semipalatinskogo test nucleus firing range.

Others: On budgetary program of the research functioning by Ministry of environment protection is formed Ecology-geochemical atlas city and industrial centre Kazakhstan, 2001; projects of the functioning "Scientific studies is prepared in 2005 on estimation of the ecological situation in Kazakhstan, degree of the use natural resource, influence to economic activity on environment , measures, undertaken for reduction of the negative influence on it", "On organizations and provision of conduct of the monitoring the influence on environment production, receptions, keeping and salvaging the sulphur, got when clearing hydrocarbon cheese"; and others functioning. In them in one or another measure are considered questions on wastes production and consumptions, be generated as a result of economic activity enterprises that use natural resources Republics Kazakhstan.

Kiribati:

Policies: The Environment and Conservation Division has developed a National Waste Management Strategy (Draft) that covers sound disposal management of medical waste and e-waste. There is also the Health Care Waste Management Committee now being established to develop a health care waste disposal management plan. Wet cell batteries and waste oils are shipped to Australia through Te Kaoki Maange Recycling Facility and Kiribati Oil Company (KOIL). Kiribati also participates in the regional e-waste project coordinated by the Secretariat of the Pacific Regional Environment Program (SPREP).

Legislation: The Environment Act 1999 (as amended in 2007) lays framework for environment protection in Kiribati. No provisions for management of hazardous wastes. The current legislative review is likely to address some of the requirements with respect to hazardous wastes.

Economy: There is now a container deposit system which includes a deposit on imported lead/acid batteries and so encourages the return of these batteries for exportation and recycling.

Industry: Industry in Kiribati is limited and work on improving practices is ongoing. However, no formal processes are as yet in place. Currently local and relevant stakeholders steering committees look after waste issues usually coordinated by the relevant ministry in many cases for waste control MELAD is the coordinating ministry for example: 1. Hospital wastes issues are now attended to by the Health Care Waste Committee coordinated by the Ministry of Health and Medical Services; 2. Waste oil committee looks after waste oil issues coordinated by MELAD; 3.Acid lead batteries are being dealt with by Te Kaoki Maange Recycling Facility run by the One Stop Shop private sector; and 4. In addition some hazardous wastes have been removed by the POPs PICs team (South

Tarawa and the Kanton mission).

Others: The National Marine Contingency Plan (NATPLAN) is now being revised with guidance from SPREP and will be submitted to seek Cabinet's approval soon. The plan deals mainly with oil spills in the marine environment. Some of the regional/international projects related to hazardous waste management which Kiribati also participate in include SAICM, e-waste, disposal management of products contained with mercur and POPs (NIP)

Malaysia:

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

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-2007; Revised National Environmental Quality Standards-2000; Import Policy Order – 2006 issued by Ministry of Commerce; and Draft Hospital Waste Management Rules-2005.

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 inKasur have contributed about 54% 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.

Republic of Korea:

Policies: The Korean government has revised the 2nd Comprehensive National Waste Management Plan (2002~2011) in July 2007 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). - Act for Resource Recycling Electrical and Electronic Equipment and Automobiles(2008)

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/EPDAnnualReport2006.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. 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/EPDAnnualReport2006.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 Sri Lanka has been updated. Approval for importation of pesticides is 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 the 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. A decision was taken to introduce Load Based Licensing scheme under the Environmental protecting license program. Cleaner Production activities are promoted island wide.

Legislation: Internal Management of Hazardous waste regulations are in place. These regulations have been revised to incorporate a prescribed list of hazardous waste identified under Non specific sources and Specific sources (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. Legislation for the implementation of the Load Based Licensing Scheme has been drafted.

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.

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 encourages waste reduction and recycling as well as stipulates responsibility of generators for waste minimization. Decision No. 23/2006/QĐ-BTNMT dated 26 December 2006 of Minister of Natural Resources and Environment issues the List of

Hazardous Waste Circular No. 12/2006/TT-BTNMT dated 26 December 2006 of Minister of Natural Resources and Environment on guidance of professional conditions and procedure for application, register, permit and registry number of hazardous waste management.

Economy: Law on Environmental Protection in 2005: - 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

2006. Central and Eastern Europe. (Parties which did not report are not listed).

Armenia:

Policies: National policy is aimed at minimizing wastes generation and increasing their utilization. The National "Law on Wastes" adopted on November 24, 2004 (AL-159-N) presupposes economic incentive measures for the enterprise carrying-out activity for the wastes recycling and utilization.

Legislation: The National "Law on Wastes" was prepared, taking into account the incentive measures for the elimination and/or reduction of hazardous wastes generation and other types of wastes. The national legislation presupposes penalty for the violation in the sphere of wastes management according to the Administrative Codex (article 201, paragraph 1; article 201, paragraph 2) and Crime Codex (article 237, paragraph 6) of the Republic of Armenia. The Crime Codex was amended on June 9, 2004 and issues on chemicals and hazardous wastes management are set out in Chapter 27 «Crimes against Environment safety», articles 281-298, where the types and scopes of criminal penalties are determined in case of environmental pollution by chemicals and hazardous wastes as well as chemicals and hazardous wastes illegal management.

Economy: According to the Chapter V "Provision of economic incentives on measures on wastes utilization and minimization of their generating volumes" article 23 "Stimulation of measures aimed at wastes utilization and minimization of their generating volumes" of the National "Law on Wastes", there are economic incentive measures, providing privileges to those enterprises, at which activities for the wastes recycling and utilization are implemented. According to system on license issuing ("Order of licensing for recycling, treatment, storage, transport and disposal actions on hazardous wastes in the Republic of Armenia" approved by the No 121-N Governmental Decision of January 30, 2003), legal and natural persons engaged in recycling, treatment, storage, transport and disposal of hazardous wastes are obliged to apply for obtaining the license.

Industry: In accordance with the Chapter V "Provision of economic incentives on measures on wastes utilization and minimization of their generating volumes", article 23 "Stimulation of measures/actions aimed at wastes utilization and minimizing the volumes of their generation" of the National "Law on Wastes" there are privileges for wastes recycling, reusing, recuperating enterprises.

Others: In order to regulate the issues on hazardous wastes management and in accordance with the Basel Convention requirements the following documents were approved: Decree of the Ministry of Nature Protection of the Republic of Armenia "On designation of Hazardous substances and Wastes Management Department of the Ministry of Nature Protection as competent body for information exchange on the Basel Convention issues" (No. 49 dated August 8, 2000); Decision of the Government of the Republic of Armenia "On the order of licensing for activity on processing, treatment, storage, transportation, and placement of hazardous wastes in the Republic of Armenia" (No.121-N dated January 30, 2003); Decision of the Prime Minister of the Republic of Armenia "On setting-up the working group on regulation of the issues dealing with destruction of obsolete, inappropriate-for-use chemical plant protection substances and working-out action plan for destruction thereof" (No. 452-A dated September 22, 2003); Decision of Prime-Minister of the Republic of Armenia "Establishment of inter-agency committee" to deal with issues on inventory and actions on disposal of existing stockpiles of expired medicine in the Republic of Armenia (No645-? dated December 12, 2003); Decision of the Prime Minister of the Republic of Armenia "On approval of the membership and order of activity of inter-departmental commission on licensing of activity on recycling, treatment, storage, transportation and placement of hazardous wastes in the Republic of Armenia" (No. 46-N dated February 5, 2004); Decision of the Government of the Republic of Armenia "On approval of measures ensuring security of obsolete pesticides burial and on assigning funds from Republic of Armenia state budget for FY 2004" (No. 526-A dated April 22, 2004); The Governmental Decision of the Republic of Armenia "Approval of the List of hazardous wastes of the Republic of Armenia" (No. 874-N dated May 8, 2004); The Governmental Decision of the Republic of Armenia on "Amendment to the Governmental Decision of the Republic of Armenia No97 on December 8, 1995 and approval of the List of Banned Hazardous Wastes of the Republic of Armenia" (No.1093-N dated July 8, 2004); Protocol Decision of the Government of the Republic of Armenia "Endorsement of the National Profile on Chemicals and Waste Management" (No. 26 dated July 8, 2004); Decision of the Government of the Republic of Armenia "On approval of the List of actions to implement Republic of Armenia obligations under a number of International Environmental Conventions (No. 1840-N dated December 2, 2004); Decision of the Government of the Republic of Armenia "On assignment of the designated body in the waste management area" (No 599-N dated May 19, 2005); Decision of the Government of the Republic of Armenia "On establishment of the State non-commercial organization "Waste Research Center" (No. 670-N dated May 19, 2005); Decision of the Prime Minister of the Republic of Armenia "On measures ensuring realization of the Republic of Armenia "Law on Waste" (No 380-? dated May 30, 2005); Protocol Decision of the Republic of Armenia Government «On approval of the Programme for development of a normative regulating document "Waste Classification according to Hazard" (No 33 dated August 18, 2005); Decision of the Government of the Republic of Armenia "On approval of the order to approve draft standards for waste generation and placement limits" (No 2291-N dated December 9, 2005); Decision of the Government of the Republic of Armenia "On approval of the order for waste passportisation" (No 47-N dated January 19, 2006); Decision of the Government of the

Republic of Armenia "On approval of the order for maintenance of the Registry on waste generation, processing and utilization entities" (No 500-N dated April 20, 2006?.); Decision of the Government of the Republic of Armenia "On approval of the order for maintenance of the Registry on waste disposal sites" (No 1180-N dated July 13, 2006); Decision of the Government of the Republic of Armenia "On approval of the order for registration of wastes generation, disposal (destruction, treatment, placement) and utilization " (No 1343-N dated September 14, 2006); Decision of the Government of the Republic of Armenia "On approval of the order for state registration of wastes" (No 1739-N dated December 7, 2006); "List of production and consumption wastes generated on the territory of the Republic of Armenia" (The Order of the Ministry of Nature Protection No342-N dated October 26, 2006; state registration No10506373 dated November 3, 2006); "On approval of book forms for register maintenance and accounts for register recordings on waste generation, processing and utilization entities" (The Order of the Ministry of Nature Protection No359-N dated November 7, 2006; state registration No10506391 dated November 23, 2006); "On approval of book forms for register maintenance and forms for register recordings on wastes disposal sites" (The Order of the Ministry of Nature Protection No387-N November 24, 2006; state registration No10506407 dated December 06, 2006); "List of wastes classified by hazard"(The Order of the Ministry of Nature Protection No430-N dated December 25, 2006; state registration No10506440 dated December 28, 2006). The Ministry of Nature Protection of the Republic of Armenia in cooperation with UNITAR has fulfilled the "Developing and Sustaining an Integrated National Programme for Sound Chemicals and Waste Management in the Republic of Armenia" (2004-2006). The Programme aim is to provide the sustainable basis for efficient and coordinated actions on key issues, to establish the system of harmonized chemicals and wastes management, capacity building and to strengthen the legislative in this area at national level. The Ministry of Nature Protection of the Republic of Armenia jointly with the UNDP Country Office (Armenia) has implemented the Project "Strengthening waste integrated management in Armenia" (2006). The Project was addressed to facilitate development of the policy for efficient approaches and to fulfill complex measures targeted at improvement of environmentally sound management of wastes in Armenia

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

Croatia:

Policies: The National strategy on waste 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 The

National Plan on waste adopted on 19th July 2007 on the basis of National Strategy on waste. It contains instruments for: - avoiding the generation of waste (apply measures which aim is to decrease amount of waste) - education and communication with administrative structures, experts and public - separate collection of waste at the source of production - avoiding and reduce of waste wich is generated in production processes (develop different tehnological and logistical solutions in production processes; systematic control of all phases in processes where waste is produced; apply tehnological processess which produce the smallest amount of waste - cleaner production)

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. Also, during 2006 Ordinances were adopted wich shall regulate the method of handling waste batteries and accumulators (OG No. 133/06), waste oils (OG No. 124/06), end-of-life vehicles (OG No.136/06) and during 2007 asbestos waste (OG No. 42/07), medicine waste (OG No. 72/07) and electrical and electronic waste (OG No. 74/07).

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.

Czech Republic:

Policies: State Environmental Policy (2004-2010) In this policy, the target to reduce the specific generation of hazardous wastes by 20 % by the year 2010 as well as other targets aimed at selected of hazardous waste streams have been set. The targets are closely interconnected to those of the Waste Management Plan of the Czech Republic (see below). Evaluation of the State Environmental Policy (2004–2010) for the period 2004-2006 has been performed. It has been concluded that all targets concerning hazardous wastes are being met. National Environmental Management Programme; National Eco-labelling Programme; and National Programme of Cleaner Production; Green public procurement ;the Czech Republic Strategy for Sustainable Development.

Legislation: Act on Waste No. 185/2001 Coll., as last amended by Act No. 34/2008 Coll. Waste Management Plan of the Czech Republic (Government Decree No. 197/2003 Coll.) - evaluated for 2005 and 2006. Regional Waste Management Plans for all 14 regions of the Czech Republic. Implementation programmes for selected waste streams (hazardous wastes, biomedical and healthcare wastes, sewage sludge, end-of life vehicles, biodegradable wastes, waste electrical and electronic equipment, plastic wastes, decontamination and disposal of PCB-containing equipments, economical instruments for the support of material recovery of wastes). National Implementation Plan of the Stockholm Convention on Persistent Organic Pollutants.

Economy: Operation programme "Environment" with a priority axis "Improvement of management of wastes and contaminated sites", aimed at financial support of activities in the field of the environment from EU Cohesion Fund. Different areas of co-financing of hazardous and other wastes management are envisaged in this programme. Programme of the Czech Moravian Guarantee and Development Bank: Promotion of EMAS in Small and Medium Enterprises. Fee for landfill of waste (basic component of fee - for depositing of waste, risk component - for depositing of hazardous waste). Financial reserve for reclamation of landfills.

Industry: Implementation of cleaner production projects. Implementation of environmental management systems (EMS/EMAS).

Others: Voluntary agreements between Ministry of the Environment of the Czech Republic and the following partners: Czech Soap and Detergent Products Association (regarding gradual reduction in environmental impact of detergents) Confederation of Industry of the Czech Republic and Czech Business Council for Sustainable Development Czech Portable Battery Association (regarding batteries collection) Czech Dental Chamber (regarding reduction in mercury load from dental medical institutions)

Association of Entrepreneurs in Building Industries and Association for Eco-building Economic Chamber (common section for the environment at the Economic Chamber)

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.

Georgia:

Policies: None.

Legislation: None.

Economy: None.

Industry: None.

Others: None.

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.

Poland:

Policies: The reduction of hazards posed by hazardous waste is one of the priorities of the National Environmental Policy and waste management plans. The Polish Act of 27 April 2001 on waste (Official Journal No. 62, item 628, further amended) introduce obligation to prepare waste management plans which are subject to at least each 4 years updating. The first such national management plan (NWMP) was approved by resolution No. 219 of the Council of Ministers of Republic of Poland, of 29 October 2002 (Governmental Gazette of 2003, No.11, item 159). The second NWMP "National Waste Management Plan 2010" has been prepared according to the legal status as of 15 October 2006. The NWMP 2010 covers waste generated domestically, particularly municipal waste, hazardous waste, packaging waste and municipal sewage sludge, as well as waste imported into the national territory. The objectives and tasks presented in the Plan relate to the period 2007 – 2010 and in the 2011-2018 perspective.

Legislation: The Polish Act of 27 April 2001 regulates the issues related to waste management including reduction and elimination of generation of hazardous waste and other waste. The Act imposes standards for recovery and disposal of waste (in line with the EU requirements) and defines system of permits for the

generation and further handling of hazardous waste. The Act of 11 May 2001 on Economic Operators' Obligations in the Scope of Managing Certain Types of waste and on the Product and Deposit Charges (Official Journal No. 63, item 639, further amended), the Act of 20 January 2005 on recycling of End-of Life Vehicles (Official Journal 2005, No. 25, item 202, further amended) and the Act of 20 October 2005 of Waste Electrical and Electronic Equipment (Official Journal No. 180, item 1495) also regulates the issues related to this specific types of hazardous waste.

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, further 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 approved with modifications by Law 426/2001, 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 Law 426/2001 and 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, approved with modifications by Law 426/2001, modified 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 repealed the Governmental Decision 162/2002 on landfill 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.

Slovakia:

Policies: Taking into account a 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 the building up of the waste management the Waste Management Programme of the Slovak Republic for the time period 2006 - 2010 (WMP 2006-2010) was prepared instead of WMP until 2005. According to the Waste Act the purpose of waste management is - to prevent and reduce waste generation by: • development of technologies saving natural resources; • 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 • 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; - to dispose of waste in environmentally sound manner and not endangering human health. Obligatory part of the WMP 2006-2010 prescribes following goals for the time period 2006-2010: - to achieve a material recovery for 70 % of wastes in relation to the amount of wastes generated in Slovakia in the year 2010 - to increase energy recovery of wastes up to the rank of 15 % in relation to the total amount of wastes generated in Slovakia in the year 2010 - to decrease amount of landfilled wastes up to 13 % for an amount of wastes generated entirely in the year 2010 - to prefer waste incineration with energy recovey wholly.

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. 359/2005 Coll. Of Laws on tariffs for calculation of financial contribution to the Recycling Fund as amended subsequent regulations; - 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; - 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 210/2005 Coll. Of Laws on implementing certain provisions of the Act on packages; - Decree of MoE SR No 125/2004 Coll. Of Laws on specifications of end-of life vehicles treatment as amended by 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; - Act of the National Council of SR No 17/2004 Coll. Of Laws on fees for waste landfilling; - Decree of MoE SR No 125/2004 Coll of Laws establishing details on ELV treatment and some requirements to car manufacture; - Decree of MoE SR No 126/2004 Coll. Of Laws on authorization, issuing expert opinions and authorized persons in waste management as amended by subsequent regulations; - 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; - 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 MoE SR No. 135/2004 Coll. of Laws on decontamination of facilities containing polychlorinated biphenyls; - Act of the National Council of SR No 582/2004 Coll. of Laws on local taxes and a local tariff for municipal waste and small construction wastes as amended by subsequent regulations; - Decree of the MoE No 208/2005 Coll. of Laws on WEEE management; - 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; - 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; - Government Decree of the Slovak Republic No 118/2006 on Waste Management Programme (WMP) of the Slovak Republic for the time period 2006-2010; - 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; - 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);

Economy: - A fee for landfilling of wastes; - An EU financial instruments - PHARE twinning projects, PHARE – Unallocated Institution Building Facility (UIBF), Transition Facility 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: The priorities given in the guiding part of the WMP 2006-2010 regarding waste recovery/disposal facilities are as follows: for the industrial field: - To apply waste recycling technologies in practice that are not used sufficiently in conditions of Slovakia; - To build up missing capacities for waste recovery and to replace technical obsolete technologies with new BAT, BATNEEC; - To increase technical/technological level of hazardous waste handling; - To target the technologies with higher degree of recovery for output commodities resulting from wastes consisting different materials (e.g. consumer electronic: plastics, glass, non-ferrous metals, etc.); - To optimize hazardous waste incineration capacities to essential extent responding to the industrial structure and waste generation in other areas. for the municipal field: - To improve a technical equipment for waste separate collection in the cities and municipalities - To increase effectiveness of collection systems – to collect more fractions from municipal waste - To solve the collection system of hazardous fractions inhere in a municipal waste from the view of the technical-organizational arrangement

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.

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

2006. Latin America and The Caribbean. (Parties which did not report are not listed).

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.

Belize:

Legislation: Environmental Protection Act (Effluent Limitations) Regulations Environmental Protection (Pollution) Regulations

Brazil:

Policies: - The National Environment Council is discussing policy projects dealing with civil construction wastes, incinerators, landfilling procedures and mercury fluorescent lamp wastes; - The National Environment Council is discussing a national waste policy project that will be submitted to the National Congress; and The State Industrial Wastes Inventory is being implemented in 12 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 - I - 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. -- Resolution 1164 of 2002, trough this resolution a handbook on procedures for integral management of hospital and similar residues in Colombia was adopted. - 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. - 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: Technical Handbook for the management of used lubricating oils. It includes technical aspects of the different stages of management, (collection, packing, storage, transport, treatment and final disposal), which must be applied for the protection of the human health and the environment. 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: During 2006, according Decree 4741 of 2005, the generators of hazardous wastes started the formulation of their Integral Management Plans to prevent and minimize the hazardous wastes in the source, and the rational ecologic management and elimination such wastes. It promotes the self-management in the productive activities. At the same time, local and regional environmental authorities are formulating Integral Management Plans of hazardous wastes in their jurisdiction to promote the accomplishment of the reduction of the amount of hazardous waste goals. 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 initiatives, 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: o Improve compliance beyond standards established in the environmental legislation o To improve management and environmental performance indicators. o To publicly recognize and to encourage the continuous improvement in management and environmental performance o To publicly recognize and to encourage commitment, leadership and environmental excellence o To recognize and to encourage the adoption of cleaner production o 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 Polychlorinated Biphenyls PCBs (2006). The principal subjects of this inventory were, - to quantify the existences in the country of oils, equipments and residues which are contaminated with PCBs; - to determine the geographic location and the present conditions of handling of those existence, - to establish the guidelines of rational ecologic management. 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: In the country unique used oil residues are eliminated. No other dangerous remainder is treated within the country. A regulation for the handling of used oils exists. 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.

Economy: Economic instruments are not applied at present. Initiatives contemplated in Law 64-00 are had, 70 Art.s pag. 60.

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.

El Salvador:

Policies: Encouragement of cleaner production by means of workshops, seminars, campaigns organized by the National Cleaner Production Centre in Coordination with the Subregional Centre for Central America and Mexico (Basel Convention) Application of the Environmental Assessment System to new and ongoing activities related to the use, generation, collection, storage, reuse, recycling, marketing, transport, processing or final elimination of hazardous wastes, must obtain an Environmental Permit.

Legislation: - Environment Act, article 59, 13 May 1998; - Special Regulation Relating to Hazardous Substances, Residues and Wastes, 9 June 2000; - Special Regulation Relating to Integrated Management of Solid Wastes, 9 June 2000; and - Special Regulation Relating to Waste Water, 9 June 2000.

Economy: Programme of economic and environmental incentives and disincentives being prepared.

Industry: Preparation of environmental diagnoses in order to obtain the environmental permit, search for advisory services through the Subregional Centre for Central America and Mexico (Basel Convention) and the National Cleaner Production Centre.

Guyana:

Policies: - Collection of data (relating to mercury and other substances). - Consultancy to develop a National Hazardous Waste Inventory and Management Strategy (UNDP Funded-Currently sourcing technical assistance)

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 15 tons of DDT pesticide to be exported and disposed internationally.

Legislation: - Stockholm Convention on Persistent Organic Pollutants - 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: To adapt and to complete the Legal Framework according with the General Law for Prevention and Integral Management of Wastes, for example: During biennium 2006-2007, Mexico orchestrated the

management of hazardous wastes looking for on the one hand, to privilege the minimization of the generation of these or to valorize such. To foment and to establish the mechanism for the registry of handling plans of hazardous wastes. Development and support of capacity building for the handling 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; Prohibition for importing hazardous wastes which objective is the final disposal.

Legislation: General Law of Prevention and Integral Management of Wastes, published in the Official Newspaper of the Federation the 08 of October of 2003; It will operate as of January 2004 General Law of Ecological Equilibrium and Environmental Protection (LGEEPA);•LGEEPA regulations on hazardous wastes; Specific Regulation about the General Law of Prevention and Integral Management of Wastes, published in the Official Newspaper of the Federation in November 30 of 2006. Development of technical guides for hazardous wastes sound management within the Basel Convention framework (PCB, Leads Batteries, Electronic Wastes, etc).

Economy: The Economy Secretariat operates the program that regulates industries and commerce, the deregulation of the Industry Assembly (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: IMMEX* before PITEX & MAQUILA) * IMMEX is a Decree for Foment of the Manufacturing Industry, Assembly plant and of Services of Export (Decree IMMEX), with the objective to fortify the competitiveness of the Mexican exporting sector, and to grant certainty, transparency and continuity to the operations of the companies, needing the fulfillment factors and simplifying them; allowing them to adopt new forms to operate and to make businesses; to diminish its logistic and administrative costs; to modernize, to make agile and to reduce the proceedings, with the purpose of elevating the capacity of control in surroundings that encourage to the attraction and retention of investments in the country. This Integra instrument the programs for Foment and Operation of the Industry Assembly plant of Export (It assembles) and the one that Establishes Programs of Temporary Import to produce Articles of Exportation (PITEX), whose companies represent as a whole 85% of the manufacturing exports of Mexico.

Industry: Some industrial and generating groups have chosen to implant voluntary systems that allow to reduce the generation of hazardous wastes. Development and implementation of handling plans of hazardous wastes. Technology development to treat the hazardous wastes in situ or ex situ. To annually report the handling of hazardous wastes by means of the called instrument Certificate of Annual Operation.

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: La Ley Sobre Sustancias, Materiales y Desechos Peligrosos establece en el Articulo 14. indica que el Estado apoyará e incentivará las acciones de las personas naturales o jurídicas que conlleven a la recuperación de los materiales peligrosos recuperables y la adecuada disposición final de los desechos peligrosos, así como el desarrollo de aquellas tecnologías que conduzcan a la optimización de los procesos y a la minimización de la generación de desechos peligrosos mediante incentivos económicos o fiscales, siempre que se mejoren los parámetros de calidad ambiental establecidos en la reglamentación técnica, a fin de minimizar los riesgos a la salud y al ambiente. La recuperación y disposición final de los desechos peligrosos son una responsabilidad compartida del Estado y de los particulares.

Legislation: Se cuenta con el Decreto N° 2635, Normas para el control de la recuperación de materiales peligrosos y el manejo de los desechos peligrosos (Gaceta Oficial Extraordinaria No 5245 del 3 de agosto de 1998), y se Ratificaron dos convenios internacionales: • Convenio de Rótterdam sobre el Procedimiento de Consentimiento Fundamentado Previo a Aplicable a Ciertos Plaguicidas y Productos Químicos Peligrosos Objeto de Comercio Internacional, (Gaceta Oficial No 38092 del 22 de Diciembre de 2004). • Convenio de Estocolmo sobre Contaminates Orgánicos Persistentes, (Gaceta Oficial N° 38.098 del 3 de Enero de 2005). Además, Venezuela Ratifico la Agenda 21 sobre la Gestión ecológicamente racional de los desechos sólidos y cuestiones relacionadas con

las aguas cloacales, donde 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.

Economy: La Republica Bolivariana de Venezuela está promoviendo políticas, donde se prevé una disminución en el impuesto sobre la renta, tal como lo señala la Ley de Impuesto sobre la Renta (Gaceta Oficial Nº 3828 del 16 de Febrero de 2007), En el Artículo 57.Se concederá una rebaja de impuesto del diez por ciento (10%), adicional a la prevista en este artículo del monto de las inversiones en activos, programas y actividades destinadas a la conservación, defensa y mejoramiento del ambiente.

Others: 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

2006. Western Europe and Others. (Parties which did not report are not listed).

Andorra:

Policies: The article 4 of the waste law "Llei 25/2004, del 14 de desembre, de residus", establishes a hierarchical criterion for waste management and the order is as follows: Prevention, reuse, recycling, energetic valorisation and elimination. 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.

Economy: See article 48 (law: "Llei 25/2004, del 14 de desembre, de residus ")

Industry: Legislation about hazardous waste management (13-07-2005)

Australia:

Policies: In Australia, municipal waste management is generally the responsibility of state, territory and local governments. 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. Sector specific product stewardship arrangements: Through the Environment Protection and Heritage Council (EPHC), Australian governments are working with the relevant industry associations to negotiate co-regulatory product stewardship arrangements for the tyre, television and computer sectors. A voluntary scheme is already in place for mobile phones. If agreed, the co-regulatory product stewardship arrangements would recognise these products are part of national markets and deliver through sector wide agreements nationally coordinated voluntary solutions for these products at end-of-life. The arrangements would provide for regulation of those companies that choose not to participate in the voluntary schemes. This would ensure those parties participating in the voluntary schemes 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. One option that is being explored in earnest is a voluntary industry Code of Practice. 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 litre 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, Water, Heritage and the Arts aim to encourage the environmentally sustainable management and re-refining of used oil and its re-use. In the year 2006 Australians recycled approximately 214 million litres of their used oil which is a slight drop from the 221 million litres reported for 2005.

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 authorized 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 authorized 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/article/articleview/32554/1/6969/ (German and 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 ended in 2004. PRESTI 5 started in 2002 and ends in 2006. 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 is spreading the message that prevention is worth while and showing executed prevention projects. Through the intermediaries, a lot of enterprises are reached. For PRESTI 1, 2, 3 and 4 evaluation studies are available. PRESTI 5 is 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. - Ecodesign: 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 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. In 2006 MAMBO was evaluated and optimized. An update of the software is now available. - Flanders: Eco-efficiency scan program. In 2006 the Flemish Waste Agency developed the Eco-efficiency scanprogram for small and medium-sized enterprises (SME's) in Flanders. Over a

period of 3 years the Eco-efficiency scanprogram aims at the participation of 1.000 Flemish SME's. For these companies the program must make clear what is the potential for improvements towards eco-efficiency. This program wants to encourage SME's to invest in an eco-efficient policy. In this way they combine environmental profit with economic advantage. The program consists of an audit and 2 follow-up moments. These three steps of the program are undertaken by a SME in a period of one year. To professionally support SME's, the Flemish Public Waste Office contracts out to consultants annually the realization of the eco-efficiency scanprogram. The Flemish Government bears the expenses for this professional guidance. This means that the program is free of charge for the SME's. The basis of the program is the audit, by means of an eco-efficiency scaninstrument. The scan is a checklist with questions divided into 5 modules. Those modules refer to the 5 fields of eco-efficiency: processes, products (ecodesign), waste valorisation, market and management. The five modules have been subdivided into several aspects, 35 in total. The module 'processes', for example, is subdivided into 'waste', 'air pollution', 'energy use', 'water use and waste water', ... - 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 puts forwards a precautionary and preventive approach to deal with substances that enter the environment and could harm the environment and/or human health. It provides a framework for making science-based decisions on the effective management of toxic substances by a two track approach. 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. Pollution Prevention The Canadian Government believes that pollution prevention is the most effective means of protecting the environment and minimising costly waste. Pollution prevention is defined in CEPA 1999 as "the use of processes, practices, materials, products, substances or energy that avoid or minimize the creation of pollutants and waste and reduce the overall risk to the environment or human health." Pollution prevention planning is a systematic, comprehensive method of identifying and implementing pollution prevention options to minimize or avoid the creation of pollutants or waste. For example, Environment Canada will require pollution prevention plans from vehicle manufacturers and steel mills for mercury releases from mercury switches in end-of-life vehicles processed by steel mills. Program details can be found on the following website: http://www.ec.gc.ca/cppic/en/index.cfm Enhanced Recycling Program The Enhanced Recycling Program was designed to stimulate recycling activities across Canada by seeking like-minded partners to participate in projects that take current recycling activities to higher levels. It refines the data on the extent and potential for recycling across many sectors of the economy, brings together the various diverse players (municipalities, provinces, recycling organisations and companies, consumer associations), addresses such issues as standards for recycled materials and life cycle analyses to quantify costs and benefits, and organizes seminars and workshops to transfer information and technology. The Program has been critical in raising awareness of the efficiencies realized from reducing material and energy wastes throughout the product life cycle and of issues that are currently limiting sustainable recovery efforts. Through strong partnerships, the program has developed projects that strive for higher recovery rates, and the associated GHG emission reductions, across targeted product streams and sectors. Over 35 projects were carried out across Canada. Work related to the enhanced recycling program is continuing in three key sub sectors in order to increase the regional uptake of recycling initiatives: • Recovery of scrap metal from municipal, northern and remote sources • As part of a broader construction, renovation and demolition initiative, end-of-life roofing materials have been targeted due to the large tonnage currently going to landfill. • The use of procurement mechanisms to recover end-of-life government electronic equipment. Program details can be found on the Natural Resources Enhanced Recycling Website: http://www.recycle.nrcan.gc.ca/enhanced_e.htm Metals and Minerals Policy The Minerals and Metals Policy of the Government of Canada outlines a number of policy options for the sustainable development of Canada's mineral and metal resources. The policy was developed in the mid 1990's and approved in 1996 to address the economic, social and environmental challenges and opportunities for this important sector of the Canadian economy and is the product of intense consultations. With respect to materials management, the Policy recognises the use of risk assessment and risk management together with life cycle management. The Policy contains the Safe Use Principle for minerals and metals, which is designed to address human health and environmental issues through a life-cycle thinking approach that incorporates both risk-assessment and risk- management principles. The Safe Use Principle recognises that inorganic materials such as minerals and metals and their products can be produced, used, re-used, recycled and returned to the environment in a manner that is consistent with sustainable development. Canada's response to the risks associated with the sources and uses of mercury is an example of the application of this Principle. English: http://www.nrcan.gc.ca/mms/policy/mmp-e.pdf French: http://www.nrcan.gc.ca/mms/policy/mmp-f.pdf Environmentally Sound Management of Electrical and Electronic Equipment (EEE) Canada is moving toward an EEE product life cycle approach to ensuring reduced toxic content through product design for environment, maximizing environmentally sound reuse and recycling, and ensuring risks posed to human health and the environment are effectively managed. "Front-end" work is focusing on reducing toxic substance content, encouraging environmentally-conscious product design, and enhancing green procurement, while "back-end work" is focusing on enhancing waste diversion and domestic infrastructure capacity to support reuse and recycling, identifying risks of end-of-life products, ensuring effective risk management measures are in place, and ensuring compliance with existing domestic and international obligations. Provinces have also been instrumental in mandating Extended Producer Responsibility programs for selected electronic equipments.

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 ton of residuals going for disposal. The collected money is 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. Many Canadian provinces are using this

system. Please refer to the following link for information on the Ontario deposit return program http://www.bagitback.ca/bagitback/en/index.shtml 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 (GMF). The GMF was established by the Government of Canada to stimulate municipal investment in innovative environmental infrastructure projects and practices by offering grants for feasibility studies and low-interest loans to: improve air, water and soil quality; protect the climate; remediate brownfields; and promote the use of renewable resources. Additional information is available on the FCM website at 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 Technology Partnerships Canada is a special operating agency of Industry Canada with a mandate to provide funding support for strategic research and development, and demonstration projects that will produce economic, social and environmental benefits to Canadians. http://tpc-ptc.ic.gc.ca/ Sustainable Development Technology Established by the Government of Canada in 2001, the sustainable development technology is a Foundation whose mandate is to foster the rapid development and demonstration of innovative sustainable development technologies that address greenhouse gas emissions and that protect the quality of Canada's air, water and soil. Waste management is included as one of the program's sectors for funding. More information can be found on the SDTC website at 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 influenced industry and the non-for-profit sector to advocate waste reduction on a voluntary basis. Some of the initiatives include: Environmental Choice Program (ECP) The ECP is Environment Canada's eco-labelling program, which may be of assistance to companies in validating and marketing their products. The Program determines and promotes higher standards of environmental performance against which products and services can be assessed. Once a product or service is certified by the ECP, the company is entitled to incorporate Environment Canada's official mark of environmental leadership, the EcoLogo, in their advertising and promotional efforts. This label helps to assist purchasing offices and consumers in making informed, environmentally conscious choices when selecting products and services. The program meets the requirements of ISO 14024 Type 1 eco-labels http://www.environmentalchoice.com/ Corporations Sharing Responsibility (CSR) This 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) It's 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) This 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) The Corporation 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/ Industrial Research Assistance Program (IRAP) The National Research Council's IRAP is a federally sponsored innovation assistance program for small- and medium-sized Canadian enterprises (SMEs). Through a network of Industrial Technology Advisors, IRAP provides Canadian SMEs with technological and business advice, as well as a range of other innovation support, including financial assistance. Additional information is available on the IRAP website: http://irap-pari.nrc-cnrc.gc.ca/ Enviroclub Program The program developed by Environment Canada and Canada Economic Development helps small- and medium-sized companies (SMEs) improve profitability and competitiveness through environmental performance. The general program objective is to make SMEs aware of pollution prevention and environmental management in order to improve their profitability and competitiveness. Program details can be found on the following

website: http://www.enviroclub.ca/en/stories/index.php Responsible Care Launched in 1985 by the Canadian Chemical Producers' Association (CCPA), Responsible Care is a unique "ethic" for the safe and environmentally sound management of chemicals. It is guided towards environmental, societal, and economic sustainability and represents a global commitment to the responsible management of chemicals through their entire life cycle and to social responsibility. http://www.ccpa.ca/ResponsibleCare/

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 They 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 The government of Alberta recently published the report Municipal Solid Waste (MSW) options, which presents how integrating organics management and residual treatment/disposal will assist municipalities in moving their integrated waste management system to the next level in order to further conserve resources, reduce environmental impacts, reduce greenhouse gas emissions, produce energy, lessen dependence on landfills and improve social acceptability. http://www.recycle.ab.ca/Download/MSW_Options_Report.pdf

Denmark:

Policies: The Government's National Waste Plan 2005-2008 sets out the overall strategy for waste management and introduces a series of initiatives for treatment of waste. The reduction and/or elimination of hazardous waste is not only based on a separate strategy but is also based on bans and phasing out of chemicals which is implemented through the national strategy of chemicals.

Industry: Environmentally sound management, ISO- and EMAS- systems are widespread in industries.New initiatives are set out in the coming strategy for waste prevention.

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 is due to be accepted by the Finnish Government in 2008.

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 2007, there were 48 EMAS-registered sites in Finland.

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/).

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; amended in 2006); 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 2006); 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 organizations 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: The German Federal Government adopted the National Sustainability Strategy on 17 April 2002. With its guiding principle as well as 21 goals and indicators for sustainable development it points out paths and prospects for a viable Germany in the 21st century. On 30 June 2004, the Federal Cabinet adopted a new framework programme entitled "Research for Sustainability". Over the next five years, an average of €160 million will be made available for research for sustainable development in Germany under this framework programme for sustainability research, which is a major element of the innovation initiative for growth and employment as well as a sustainable society. For further information on research, see 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 (as amended), 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. The 2001 National Hazardous Waste Management Plan is currently under review and a proposed plan was published by the EPA on 7 November 2007. 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; - identifies issues and possible actions which require further systematic consideration. "National Strategy on Biodegradable Waste" The National Strategy on Biodegradable Waste was published in April 2006 and provides the blueprint to achieve Ireland's targets for the diversion of biodegradable municipal waste from landfill in accordance with the requirements of Directive 1999/31/EC on the landfill of waste. The Strategy sets out a wide range of integrated measures designed in accordance with the waste hierarchy to support biodegradable waste minimisation and diversion from landfill. Prevention targets have been established to reduce arisings of biodegradable municipal waste that will require subsequent treatment and recovery while ambitious targets for the recycling of waste paper/cardboard and the biological treatment of food and garden wastes have been put in place for both the domestic and commercial sectors over the timeframe of the Strategy. A range of treatment technologies are also proposed to facilitate the diversion of the organic fraction of residual waste from landfill.

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 authorities & the Environmental Protection Agency The Waste Management (Packaging) Regulations 2007 consolidate previous regulations made in 2003, 2004 and 2006 (which replaced the original regulations of 1997 and 1998 respectively) and impose a wide range of obligations on all producers placing packaging on the Irish market (i.e. importers, manufacturers, packer/fillers, distributors and retailers). The regulations are intended to facilitate, inter alia, the achievement by Ireland of the end 2011 recovery and recycling targets for packaging waste as set out in Directive 94/62/EC on packaging and packaging waste as amended by Directive 2004/12/EC. These Regulations provide the necessary legal framework to facilitate the recovery and recycling of packaging waste in Ireland. Article 28 of the regulations provides that packaging placed on the market in Ireland must comply with the essential requirements of packaging set out in accordance with Annex II of Directive 94/62/EC on packaging and packaging waste while article 29 prescribes

restrictions on the aggregate concentration levels of lead, cadmium, mercury and hexavalent chromium in packaging materials and packaging imported or manufactured in Ireland. End-of-Life Vehicle Regulations (Since 2006) Responsible: Local authorities The Waste Management (End-of-Life Vehicles) Regulations 2006 are designed to implement the provisions of Directive 2000/53/EC of the European Parliament and of the Council on end-of-life vehicles. In particular, they are intended to facilitate the achievement of specified targets for the reuse/recovery and the reuse/recycling of end-of-life vehicles at authorised treatment facilities which operate to the minimum technical requirements set out in Annex I of Directive 2000/53/EC on end-of-life vehicles. Part IV of the regulations imposes a range of obligations on vehicle producers to ensure that the materials and components of specified vehicles placed on the market in Ireland do not contain lead, mercury, cadmium or hexavalent chromium other than in cases specifically exempted in accordance with the provisions of Annex II (as amended) of Directive 2000/53/EC on end-of-life vehicles and that technical documentation must be made available on request by producers to verify compliance with these requirements. Plastic Bag Regulations (Since 2001) Responsible: Local authorities The Waste Management (Environmental Levy) (Plastic Bag) Regulations,2001 to 2007 provide for the imposition of an environmental Levy of 22 cent on plastic bags.. The purpose of the levy is to reduce consumption of plastic shopping bags dispensed at retail outlets. Revenues raised from the plastic shopping bag is assigned to the Environment Fund – which also receives funding from the landfill levy. This fund is used for supporting appropriate waste management, litter and other environmental initiatives. Best Practice Guidelines on the Preparation of Waste Management Plans for Construction & Demolition Projects Responsible: Local authorities The purpose of the Best Practice Guidelines on the Preparation of Waste Management Plans for Construction & Demolition Projects is to promote an integrated approach to construction and demolition waste management practice throughout the duration of a project. They are designed to promote sustainable development, environmental protection and the optimum use of resources. The Guidelines introduce the concept of on-site waste management planning for projects above certain thresholds and provide a blueprint for designers, developers, practitioners and competent authorities, for the proper management of construction and demolition wastes. Detailed guidance is provided on the essential components of a construction and demolition waste management plan including material on tracking, through internal auditing and the submission of summary reports to local authorities. Ultimately, this will assist in improving information on waste flows in the construction industry sector. Under the Development Management Guidelines for Local Authorities (June 2007), planning authorities should have regard to the Best Practice Guidelines on the Preparation of Waste Management Plans for Construction & Demolition Projects when considering applications for development works above the specified thresholds in order to facilitate the proper management of construction and demolition wastes.

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. The Race Against Waste Campaign, which was the most extensive waste information campaign ever run in Ireland, took place over the period 2003 – 2007. The campaign, which was launched in October 2003, combined a multi-media national awareness campaign and a supporting communications strategy and aimed to get people acting to reduce, reuse and recycle waste. The campaign directly engaged specific audiences who are creating waste – communities, businesses, large organisations and homes – with the objective of improving environmental behaviour. It provided advice and information directly to the public through a lo-call telephone line and e-mail; ran a programme of action for businesses, including nationwide seminars; and informed the public through on-going public relations and advertising campaigns. The main RAW campaign concluded in October 2006, while some elements will continue in 2007 such as the RAW web site, waste audit tool and distribution of RAW waste information materials. 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.

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)

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 2002 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). The Strategy set three goals for managing and minimising hazardous waste. These are: • By December 2005, an integrated and comprehensive national hazardous waste management policy will be in place that covers reduction, transport, treatment and disposal of hazardous wastes to effectively manage risks to people and the environment. • By December 2004, hazardous wastes will be appropriately treated before disposal at licensed facilities, and current recovery and recycling rates will be established for a list of priority hazardous wastes. • Recovery and recycling rates for priority hazardous waste will increase 20 percent by December 2012. 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. A review of the policy framework was completed in June 2006 to reflect recent developments in hazardous waste policy and changes suggested by the Ministry's Hazardous Waste Advisory Group. 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. In 2004 the Ministry for the Environment began work to develop a tracking system for New Zealand. Following a successful trial of a tracking system for hazardous waste in 2005, the Ministry purchased a licence to operate this tracking system. This will improve data on the amount of hazardous waste generated. During 2006 the tracking system was rolled out across a number of territorial authorities. In 2005 a new regulatory mechanism to control the storage, transport and disposal of hazardous waste was introduced, under the Hazardous Substances and New Organisms Act. This allows hazardous waste regulations to be developed under the Act. Initial work on these regulations was completed in 2006. In order to meet its Stockholm Convention requirements the Ministry has undertaken a programme to remove historical Persistent Organic Pollutants which are largely in the form of agricultural chemicals. The aim of the programme is to address the historical legacy of unnecessary, and in some cases unsafe, storage of unwanted or old agrichemicals on rural properties.Since 2003 more than 225 tonnes of agrichemicals have been collected and removed from New Zealand's rural areas. Approximately 80% of these agrichemicals have been intractable, requiring high temperature incineration as disposal. The remainder of this material has been treated and disposed of in New Zealand. Funding is committed to remove the remainder of the identified agrichemicals by 2009.

Legislation: Resource Management Act 1991; Hazardous Substances and New Organisms Act 1996; Local Government Act 1974 and 2002; 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. The chapter establishing producer responsibility for WEEE has been revised and strengthens to reduce numbers of free riders and give authorities better possibilities for compliance control. 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.

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. Tax on household waste to incineration from 1 July 2006.

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 packaging waste (published on 24 June of 2007); 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). By Law on Control of The Tyres which have completed their life-cycles (published on 18 November 2006).

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 responsibility on filling the waste declaration forms anually and forwarding it to Ministry of Environment and Forestry 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: Since the waste strategy in 2000, (due for revision in May 2007), England has made significant progress. Recycling and composting of waste has nearly quadrupled since 1996-97, achieving 27% in 2005-06. The recycling of packaging waste has increased from 27% to 56% since 1998. Less waste is being landfilled, with a 9% fall between 2000-01 and 2004-05. Waste growth is also being reduced with municipal waste growing much less quickly than the economy at 0.5% per year. This progress has been driven by significant changes in policy. The landfill tax escalator and the introduction of the Landfill Allowance Trading Scheme (LATS) has created sharp incentives to divert waste from landfill. Additional funding for local authorities, including through the private finance initiative, has led to a major increase in kerbside recycling facilities and new waste treatment facilities. European directives are targeting sectors, including vehicles, electrical and electronic equipment and packaging. New delivery arrangements have helped to drive the strategy, including the Waste Implementation Programme (WIP), the Waste and Resources Action Programme (WRAP) and the Business Resource Efficiency and Waste (BREW) programme. Wales: The Welsh Assembly Government published its National Waste Strategy "Wise about Waste" in June 2002 which can be viewed on www.wales.gov.uk. The emphasis is on waste minimisation and re-use of materials, and includes targets to: achieve combined recycling and composting of municipal waste of 15% in 2003-04, 25% in 2006-07, and 40% in 2009-10 (with only compost derived from source segregated materials counting); reduce the landfill of industrial and commercial waste to less than 85% of 1998 levels by 2005, and less than 80% of 1998 levels by 2010; reduce; reduce hazardous waste by 2010 by at least 20% compared with 2000. The Welsh Assembly Government has so far allocated £79 million in additional resources to improve waste management in Wales for the period 2001/02 to 2004/05. Northern Ireland The Waste Management Strategy for Northern Ireland sets provisional targets for the reduction of waste to landfill and for increases in recycling and composting. These include targets to: recover 25% of household waste by 2005; recover 40% of household waste by 2010, of which 25% shall be by recycling or composting; reduce the landfilling of industrial and commercial wastes to 85% of 1998 levels by 2005; and, reduce the quantities of biodegradable municipal wastes being landfilled to 75% of 1995 baseline levels by 2010, 50% by 2013 and 35% by 2020. It is intended for these targets to become mandatory at the first Strategy Review point in 2003.

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" will come 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 preprocessors 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 will come 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 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 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 take back, 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 to protect the environment and human health. In April 2008 a new Environmental Permitting system will be introduced in England and Wales. This all encompassing system will incorporate and supersede the PPC permitting and waste management licensing regimes (see The Environmental Permitting (England and Wales) Regulations 2007). - 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 Council Directive 1999/31/EC on the landfill of waste require national strategies for the reduction of biodegradable waste and set 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. The Landfill Allowances Trading Scheme (LATS) was introduced in 2005 to help local authorities in England to reduce the amount of biodegradable municipal waste sent to landfill through the use of tradable allowances. The Scheme is a tool to enable local authorities in England to reduce the amount of biodegradable municipal waste sent to landfill in the most cost effective way, whilst reassuring Government that necessary progress towards the national targets is being made. The Scheme offers an alternative to a regulatory system of inflexible targets by allowing authorities the opportunity to tailor the required reductions to their specific strategy through the flexibilities of banking, borrowing and trading. 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. Landfill Tax for active waste is £24 per tonne in 2007 – 08. The 2007 Budget announced that the rate of tax will increase by £8 per tonne each year until at least 2010-11, by which time it will be £48 per tonne-twice the current rate. The rate of tax for inactive waste will also increase to £2.50 per tonne (from its current rate of £2.00 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: Waste Implementation Programme The Waste Implementation Programme (WIP) was set up in May 2003 to accelerate progress towards the Landfill targets in England and support activities to meet PSA 6. Over the last three years the programme has distributed £4.6 million of Direct Consultancy Support (DCS), received by over 294 local authorities. DCS has delivered support in the areas of procurement, planning, strategy development and waste composition. WIP's main recycling activities are delivered through the Waste and Resources Action Programme (WRAP), who run major programmes of work advising local authorities on kerbside collection systems, providing advice and support for waste minimization efforts such as the home composting campaign and working with retailers under the 'Courtald Commitment', as well as also developing and running the 'Recycle Now' national awareness campaign. Best practice on waste management and procurement activities is encouraged through the WIP led Environmental Services Efficiency Programme and delivered through the Regional Improvement & Efficiency Partnerships. This work is helping to deliver the forecast £350 million per annum of efficiency gains in local authority environmental services by the end of 2007-08. Councils have already registered £448 million total efficiencies over the last three years. The Waste and Resources Action Programme (WRAP) The Waste and Resources Action Programme (WRAP) is a major UK programme established to promote resource efficiency. WRAP works in partnership, to encourage and enable businesses and consumers to be more efficient in their use of materials, and to recycle more things more often. This

helps to divert waste from landfill, reduce carbon emissions and improve the environment. WRAP, a not-for-profit UK company, is funded by Defra and the devolved governments. WRAP runs seven main programmes, addressing waste reduction and recycling issues across the construction, manufacturing and retail sectors; working on organic waste derived compost; promoting the growth recycling businesses; supporting local authorities; and promoting behavioural change. As a result of WRAP's interventions: - £182 million has been invested in the recycling sector from commercial sources; The annual turnover for the recycling sector is now £1.3 billion – nearly double its value when WRAP was founded; - 64% of people in England now describe themselves as committed recyclers, compared to less than half in 2004. - Over 86 million tones of recycling will be diverted from disposal over the lifetime of WRAP projects already commissioned, saving over 12 million tones of CO2 equivalent. WRAP has secured signatures from 12 leading grocery retailers and fifteen leading brands and suppliers to the Courtauld Commitment, expressing their commitment to working with WRAP to achieve WRAP's waste minimization objectives as follows: - to design out packaging waste growth by 2008; - to deliver absolute reductions in packaging waste by 2010; and - to identify ways to tackle the problem of food waste. The Courtauld Commitment is backed by an Innovation Fund which leverages research and development by retailers and their supply chains to develop, test and trial innovative packaging to reduce consumer products packaging and food waste in the home. WRAP has supplied over 1 million home composting bins to householders across England and they are backing this up with a composting support service. During 2007/08, WRAP launched a consumer-facing 'love Food Hate Waste' campaign to encourage behavioral change. They are working with the UK grocery sector, food industry, Government and organizations such as the Food Standards Agency, to develop practical solutions and improved communications to make it easier for consumers to get the most from the food they buy, and to waste less of it. WRAP's aim is to reduce the 6.7 million tones of consumer food waste produced each year in the UK by 100,000 tonnes by March 2008. Waste infrastructure Defra's Waste Infrastructure Delivery Programme (WIDP) brings together the project delivery activities of Defra's Waste Implementation Programme, Partnerships UK and 4ps. The programme is supporting local authorities to accelerate the investment in the large-scale infrastructure required for processing residual waste, without compromising efforts to minimize waste and allow the UK to meet its obligations in relation to Biodegradable Municipal Waste (BMW) under the Landfill Directive. With WIDP support, local authorities will be better placed to take difficult decisions around these issues – for example balancing opinion with choice of technology/recycling targets, affordability and funding. WIDP is promoting the availability in England of cutting-edge technologies capable of processing waste diverted from landfill through its provision of pilot demonstrator projects. These schemes fun in partnership with local authorities and industry, will help establish the technical and commercial viability of emerging and near-market waste technologies. So far, Defra has committed over £1bn to support 23 waste PFI projects. There are currently 15 waste PFI projects in operation and 8 in procurement. Defra was given a further £2 billion of funding through PFI credits in the recent Comprehensive Spending Review which will be available to help local authorities invest in sustainable waste management options. The level of PFI credits will rise from £280 million in 2007/08 to £600 million in 2008/09, £700 million in 2009/10 and £700 million in 2010/11. For more information: www.defra.gov.uk/environment/waste/wip/newtech www.defra.gov.uk/environment/waste/wip/widp