

Annex B - Waste legislation and regulation

Overview

This annex provides a list of the main legislation, regulation and policies impacting on waste management and the circular economy.

European Waste Legislation

- Directive 2008/98/EC (Waste Framework Directive) of the European Parliament and of the Council of 19 November 2008 on waste and repealing certain Directives. This Directive repealed Directive 2006/12/EC of the European Parliament and of the Council of 5 April 2006 on waste (the codified version of Directive 75/442/EEC as amended), hazardous waste Directive 91/689/EEC, and the Waste Oils Directive 75/439/EEC. It provides for a general framework of waste management requirements and sets the basic waste management definitions for the EU.
- Directive Concerning Integrated Pollution Prevention and Control (IPPC) (96/61/EC)
- Directive on the Landfill of Waste (1999/31/EC)
- Directive on Waste Incineration (2000/76/EC)
- Directive on Batteries and Accumulators (91/157/EEC, as amended)
- Packaging and Packaging Waste Directive (94/62/EC)
- Directive on the Restriction of the Use of Certain Hazardous Substances in Electrical and Electronic Equipment (2002/95/EC)
- Waste Electrical and Electronic Equipment (WEEE) Directive (2002/96/EC)
- End of Life Vehicles (ELV) Directive (2000/53/EC)

UK Waste Regulations

- Hazardous Waste (England and Wales) Regulations 2005 and the List of Wastes (England) Regulations 2005 (replacing the Special Waste Regulations 1996, as amended)
- The Waste Management Licensing Regulations 1994 (as amended)
- The Controlled Waste (Registration of Carriers and Seizure of Vehicles) Regulations 1991
- Pollution Prevention and Control Act 1999 and Pollution Prevention and Control (England and Wales) Regulations 2000 as amended
- The Environmental Protection Act 1990 and the Environmental Protection (Duty of Care) Regulations 1991
- The Control of Pollution (Amendment) Act 1989
- Landfill (England and Wales) Regulations 2002
- Waste incineration (England and Wales) regulations 2002
- Environment Act 1995
- Information on the Waste and Emissions Trading Act 2003
- Producer responsibility obligations (packaging waste) regulations 1997

- The Producer Responsibility Obligations (Packaging Waste) Regulations 1997, as amended and The Packaging (Essential Requirements) Regulations 1998
- End of Life Vehicle (ELV) Regulations 2003
- Waste (Scotland) Regulations 2012

Other national bodies' legislation

United States Environmental Protection Agency (EPA)

The United States Environmental Protection Agency is an agency of the U.S. federal government which was created for the purpose of protecting human health and the environment by writing and enforcing regulations based on laws passed by Congress. It regulates generation and disposal of hazardous waste

The agency conducts environmental assessment, research, and education. It has the responsibility of maintaining and enforcing national standards under a variety of environmental laws, in consultation with state, tribal, and local governments.

United States Department of Transportation (DOT)

The United States Department of Transportation (USDOT or DOT) is a federal Cabinet department of the U.S. government concerned with transportation. It is governed by the United States Secretary of Transportation.

Its mission is to "Serve the United States by ensuring a fast, safe, efficient, accessible, and convenient transportation system that meets our vital national interests and enhances the quality of life of the American people, today and into the future."

It regulates transportation of hazardous waste.

Nuclear Regulatory Commission (NRC)

The Nuclear Regulatory Commission (NRC) is an independent agency of the United States government that was established by the Energy Reorganization Act of 1974, first beginning operations on January 19, 1975.

As one of two successor agencies to the United States Atomic Energy Commission, the NRC was charged with overseeing reactor safety and security, reactor licensing and renewal, radioactive material safety, and spent fuel management (storage, security, recycling, and disposal). It regulates nuclear waste.

US waste legislation and regulations

- Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) "Superfund"
- Medical Waste Tracking Act
- National Environmental Policy Act (NEPA) - Established the Environmental Protection Agency, set out requirements for Environmental Impact Reporting for various kinds of development.
- Resource Conservation and Recovery Act (RCRA) - One of the main pieces of Legislation regarding municipal solid waste, hazardous wastes, and disposal issues.
- Solid waste policy

It is aimed at developing and implementing proper mechanisms to effectively manage solid waste. For solid waste policy to be effective, inputs should come from stakeholders, including citizens,

businesses, community based organizations, non-governmental organizations, government agencies, universities, and other research organizations. These inputs form the basis of policy frameworks that influence solid waste management decisions.

The Environmental Protection Agency (EPA) regulates household, industrial, manufacturing and commercial solid and hazardous wastes under the Resource Conservation and Recovery Act (RCRA). Effective solid waste management is a cooperative effort involving federal, state, regional, and local entities. Thus the RCRA's Solid Waste program section D encourages the environmental departments of each state to develop comprehensive plans to manage non-hazardous industrial and municipal solid waste.

Legislative Recycling Mandates

- Federal Legislative Mandates for Electronics Recovery: At present, there is no Federal mandate to recycle e-waste. There have been numerous attempts to develop a Federal law. However, to date, there is no consensus on a Federal approach.
- State Mandatory Electronics Recovery Programs: Many states have instituted mandatory electronics recovery programs. The following website provides regularly updated information on state e-waste legislation:
- National Electronics Recycling Infrastructure Clearinghouse

US state laws:

In addition to laws implementing or advancing portions of the US laws some US states have enacted laws on other waste and environmental subjects.

- California Proposition 65 "The Safe Drinking Water and Toxic Enforcement Act of 1986" - a 1986 California initiative prohibiting the discharge of toxic substances into drinking water sources
- Electronic Waste Recycling Act - a 2003 California law regarding disposal of consumer electronic wastes
- EPA's Office of Resource Conservation and Recovery participates in a number of projects to promote the safe handling of waste imports and exports.

The projects include voluntary and regulatory initiatives:

- OECD Waste Program - The Working Group on Waste Prevention and Recycling (WPR) of the Organization for Economic Cooperation and Development (OECD) is tackling some of the most challenging issues regarding waste today, including: the prevention and minimization of waste generation; removing barriers to recycling; the management of unavoidable waste in an environmentally sound and economically efficient way; and the control and streamlining of exports and imports of hazardous waste recyclables among OECD Member countries.
- US- Mexico Border 2012 Program - The US EPA and the Mexican government are implementing the 3rd US-Mexico Border agreement, entitled Border 2012 Program. The Border 2012 Program includes the development of policy on solid and hazardous waste issues through the Waste Policy Forum. The Waste Policy Forum is a border-wide advisory group charged with carrying out Goal # 3 the US-Mexico Border 2012 Program: The Reduction of Land Contamination.
- Commission for Environmental Cooperation (CEC) Waste Program - The CEC was established through the North American Free Trade Agreement. The Hazardous Waste Task Force (HWTF) of the CEC is developing a North American approach to the application of principles on environmentally sound management, taking into account the special relationship among NAFTA countries. The HWTF is also working to improve the tracking of transboundary hazardous

waste shipments among North American countries, based on an integrated and timely exchange of information in order to improve compliance, enhance border security, and minimize the administrative burden and costs to both the private sector and government agencies.

Canada Legislation

In Canada, responsibility for the protection of the environment and human health is shared among all levels of government. In order to achieve the goals of environmental protection, governments are putting pollution prevention into practice through a combination of regulatory and non-regulatory instruments. This includes legislation, policy, and voluntary initiatives.

- Canadian Environmental Protection Act, 1999, including Federal Hazardous Waste Regulations

China Legislation

China RoHS (Restriction of Hazardous Substances)

It is officially known as Administrative Measure on the Control of Pollution Caused by Electronic Information Products. It is a Chinese government regulation to control certain materials, including lead.

All items shipped to China now have to be marked as to whether the items contained in the box are compliant or non-compliant. The Electronic Information Products (EIP) logo or other label is used to mark parts and assemblies that do not contain unacceptable amounts of substances identified by the regulations, and that are environmentally safe. Units that do contain hazardous substances are marked with the EIP logo including an Environment Friendly.

The Restriction of Hazardous Substances Directive 2002/95/EC, RoHS, short for Directive on the restriction of the use of certain hazardous substances in electrical and electronic equipment, was adopted in February 2003 by the European Union.

The RoHS directive took effect on 1 July 2006, and is required to be enforced and become law in each member state. This directive restricts (with exceptions) the use of six hazardous materials in the manufacture of various types of electronic and electrical equipment.

It is closely linked with the Waste Electrical and Electronic Equipment Directive (WEEE) 2002/96/EC which sets collection, recycling and recovery targets for electrical goods and is part of a legislative initiative to solve the problem of huge amounts of toxic e-waste.

Circular Economy Promotion Law, 2009

Re-use of industrial waste in China is already being implemented via the enforcement of a 'Circular Economy Promotion Law' in 2009, with theories of 'industrial symbiosis'93 put into practice by national and provincial governments who plan the agricultural, industrial, service, and other sectors. Numerous eco-industrial parks have also been implemented94 95.

China plans to spend some US\$454bn over the next five years on environmental protection, a doubling over the previous period, and a signal of a growing market for environmentally effective manufacturing technologies.

Japan legislation

Japan's 'Basic Act for Establishing a Sound Material-Cycle Society', 2000, is also highly relevant and has a long track record. Article 2 of the Act states: "For the purpose of this Act, a "Sound Material-Cycle Society" means a society in which the consumption of natural resources will be conserved

and the environmental load will be reduced to the greatest extent possible, by preventing or reducing the generation of wastes, etc. from products, etc., by promoting proper cyclical use of products, etc. when these products, etc. have become circular resources, and by ensuring proper disposal of ... resources not put into cyclical use...".¹

¹ English translation of the Basic Act for Establishing a Sound Material-Cycle Society (Effective June 2, 2000). Full translation available at <http://www.env.go.jp/en/laws/recycle/12.pdf>.