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**Joint Intersectoral Task Force on Environmental Indicators** 

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### NATIONAL REVIEW OF THE APPLICATION OF ENVIRONMENTAL INDICATORS

Submitted by Georgia

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### **EVALUATION OF FURTHER SIX INDICATORS FROM THE UNECE INDICATOR GUIDELINES**

Indicator	A. Effective inter-agency cooperation mechanisms to produce the indicator	B. Data quality assurance and control procedures for the production of the indicator	C. Publication of the indicator in statistical compendiums and state-of-the-environment reports
Waste generation	The last national inventory of waste was conducted in 2007 in frames of International project. Unfortunately, there are no revised data. Moreover, the problem is related to the generated waste statistics. There is no data collection system, as well as information exchange system among relevant governmental institutions. Information on wastes is scattered. Namely the Ministry of Agriculture, as the responsible governmental body on the development of pesticides state catalogues, has information about obsolete pesticides and agrochemicals. The Revenue service of the Ministry of Finances with the Ministry of Environment controls Trans-boundary movement of wastes. The Technical and Construction Inspection of the Ministry of Economy and Sustainable development is responsible for issuing permits and control on waste import export and transit. Local Municipalities have information regarding the generated household wastes.		This indicator currently is not published
Final waste disposal	According to the Georgian legislation, Local Municipalities are responsible for service and final disposal of household wastes. Only big cities monitor the amount of waste entering the dumpsites daily. In all other municipalities, waste registration is unsystematic. Furthermore, every village not covered by waste collection from the nearest municipal services, sets up its own spontaneous dumpsite. Moreover, there are no operated hazardous or inert waste disposal sites in Georgia. Existing one from soviet time hazardous waste dumpsite was closed in 1985. Industrial wastes are disposed of mainly at the industrial sites and in their vicinity, without following environmental requirements. There are no treatment facilities for industrial waste. Only medical waste treatment devices are operational.		This indicator currently is not published

Transboundary movements of hazardous waste	Georgia is the party of Basel Convention on the Control of Trans-boundary Movements of Hazardous Wastes and Disposal. Country follows Convention requirements, furthermore was adopted the Law on the Transit and Import of Waste within the Territory of Georgia (1995). According the law the transit and import of industrial, municipal or other type of hazardous and radioactive waste are prohibited. The Revenue service of the Ministry of Finance with the Ministry of Environment control Trans-boundary movement of waste. The Technical and Construction Inspection of the Ministry of Economy and Sustainable development is responsible for issuing permit and control waste import export and transit.		This indicator currently is not published
Ambient air quality in urban areas	All of the mentioned above data was obtained based on the air pollution monitoring results at air pollution control posts belonging to the National Environment Agency of Ministry of Environment Protection of Georgia.	Observations of air pollution are carried out on the basis of " A Guide to Air Pollution Control " - RD 5204 186-89 The main problem is insufficient quantity of air pollution control posts, as well as the lack of an automatic station.	Data on air pollution is published on a monthly basis in the information bulletin "Short Review on Environmental Pollution of Georgia" and is available on the website of the Aarhus Center.  Information is available in State of Environment (SoE) reports on the web-pages: www.moe.gov.ge; http://www.aarhus.ge
Threatened and protected species	The administration of each protected area provides Agency of Protected Areas and the Statistics Department with annual records for major bird and mammal species as well as plants and animals included in the Red List of Georgia.  The Commission of Endangered Species at the Academy of Sciences of Georgia completed the evaluation of species' status, based upon IUCN criteria, in 2006 and this provided the basis for the new Red List of Georgia		Red List of Georgia: http://chm.moe.gov.ge/webmill/data/file/citeli %20nusxa.pdf
Trends in the number and distribution of selected species			

Question A.

Effective inter-agency cooperation mechanisms to produce the indicator

Please describe cooperation arrangements, if any, which have been established in your country to collect the necessary data for the indicator. These may involve statistical agencies, ministries of water management, agriculture, transport, interior, environment, economic development and energy, hydro-meteorological services and agencies on geology, as appropriate. The description should cover problems met, solutions found and possible further steps envisaged or needed.

Question B.

Data quality assurance and control procedures for the production of the indicator

Please describe data quality assurance and control procedures for the production of the indicator. The description should cover problems met, solutions found and possible further steps envisaged or needed. References should be made to any international methodologies and guidelines that are followed to ensure data quality and control.

Question C.

Publication of the indicator in statistical compendiums and state-of-the-environment reports

Please present the evidence of the indicator publication in statistical compendiums and state-of-the-environment reports (titles, names of the publishing houses, cities and years of the publications, languages, number of copies published, Internet addresses, and whether time-series data was published on the indicator.

The description of the indicators is available online at: www.unece.org/env/documents/2007/ece/ece.belgrade.conf.2007.inf.6.e.pdf

# Time series data on the indicators for 1990-2010, Table 1. Waste generation: Georgia

	Unit	1990	1995	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
				W	aste gene	ration by s	ource							
Agriculture, forestry and fishing (ISIC	1000 t/													
01-03)	year													
Mining and quarrying (ISIC 05-09)	1000 t/										11777.3			
31 1 411 7 3(11111)	year													
Manufacturing (ISIC 10 - 33)	1000 t/ year													
Electricity, gas, steam and air	1000 t/													
conditioning supply (ISIC 35)	year													
Construction (ISIC 41 - 43)	1000 t/ year										35.7			
Other economic activities excluding	1000 t/										873.24			
ISIC 38	year													
Municipal waste	1000 t/ year										855	875	880	
Of which from households	1000 t/ year													
Total waste generation (5 + 6 + 7 +8	1000 t/													
+ 9 + 10 + 11)	year													
Of which hazardous waste	1000t/ year										908.74			
	y cu.													
Population of the country	Million										4 394,7	4 382,1	4 385,4	
Municipal waste per capita (11/16 x 1000)	kg/capita										0.194	0.199	0.2	
GDP constant prices (2005)	USD million													
Industrial (manufacturing) waste per unit GDP (7/18)	kg/ 1000 USD													
Total waste per unit of GDP (13/18)	kg/ 1000 USD													
Hazardous waste per unit of GDP (14/18)	kg/1000 USD													

#### Notes:

This table asks for data on the total amount of waste (both non-hazardous and hazardous), generated by various economic activities and by households. The breakdown follows the International Standard Industrial Classification of all Economic Activities (ISIC Rev.4).

(URL: http://unstats.un.org/unsd/cr/registry/regcst.asp?Cl=27).

The table refers to all primary waste originating from the mentioned sectors including waste for recovery and recycling, but excluding direct internal recycling and re-use. Waste from secondary sources should be excluded.

The amount reported under 'Total waste generation' should be equal to the sum of the waste amounts reported under the various economic activities and household waste. Waste generated by an economic activity includes all kinds of waste generated by economic units within this activity. If data are not collected according to ISIC, please provide data for household waste generation (line 11) and total waste generation (line 13). If data do not cover all waste sources, please leave the total waste generation cell blank (line13 8). Waste generated by ISIC 38 (waste collection, treatment and disposal activities; and

materials recovery) is from secondary sources, i.e., residual materials from recovery and disposal operations such as incineration and composting residues.

To avoid double counting, waste generated by ISIC 38 should be excluded from this table.

Separately, the table describes the total amount of hazardous waste generated during the individual year.

If the requested data are not available, please leave the cell blank. If the requested variable is not applicable (the phenomenon is not relevant) to the

country or the value is less than half the unit of measurement, the cell should be filled with "0".

Definitions are presented in sheet t1a. In case your country apples other definitions than those presented in sheet t1a, specify, please.

#### List of definitions

Waste: Materials that are not prime products (i.e., products produced for the market) for which the generator has no further use for his own purpose of production, transformation or consumption, and which he discards, or intends or is required to discard.

It excludes material directly recycled or reused at the place of generation (i.e., establishment) and waste materials that are directly discharged into ambient water or air as wastewater or air pollution.

(Waste from) **Agriculture, forestry and fishing**: All waste from agricultural, forestry and fishing activities. Manure used as fertilizer is excluded (i.e., only excess manure which is disposed of should be included). This category refers to ISIC divisions 01 to 03.

(Waste from) Manufacturing: All waste from manufacturing activities. This category refers to ISIC divisions 10 to 33.

(Waste from) Electricity, gas, steam and air conditioning supply: All waste from electricity, gas, steam and air conditioning supply. Waste from the production of nuclear energy should be excluded. This category refers to ISIC division 35.

(Waste from) Construction: All waste from construction activities. This category refers to waste generated in ISIC division 41 to 43.

(Waste from) Other economic activities excluding ISIC 38: All waste from all other economic activities not specified before and excluding ISIC division 38. This category refers to waste generated in ISIC divisions 36. 37. 39. and ISIC 45 to 99.

Municipal waste: Municipal waste, collected by or on behalf of municipalities, by public or private enterprises, includes waste originating from: households, commerce and trade, small businesses, office buildings and institutions (schools, hospitals, government buildings). It also includes bulky waste (e.g., white goods, old furniture, mattresses) and waste from selected municipal services, e.g., waste from park and garden maintenance, waste from street cleaning services (street sweepings, the content of litter containers, market cleaning waste), if managed as waste. The definition excludes waste from municipal sewage network and treatment, municipal construction and demolition waste.

(Waste from) Households: Waste material usually generated in the normal functioning of households.

Hazardous waste: Hazardous waste refers to the categories of waste to be controlled according to the Basel Convention on the control of transboundary movements of hazardous waste and their disposal (Article 1 and Annex I).

Management of waste: Collection, transport, treatment and disposal of waste, including after-care of disposal sites.

Recycling: Any reprocessing of waste material in a production process that diverts it from the waste stream, except reuse as fuel. Both reprocessing as the same type of product, and for different purposes should be included. Recycling within industrial plants i.e., at the place of generation should be excluded.

**Composting:** A biological process that submits biodegradable waste to anaerobic or aerobic decomposition, and that results in a product that is recovered and can be used to increase soil fertility.

Incineration: The controlled combustion of waste with or without energy recovery.

Landfilling: Final placement of waste into or onto the land in a controlled or uncontrolled way. The definition covers both landfilling in internal sites (i.e., where a generator of waste is carrying out its own waste disposal at the place of generation) and in external sites.

Controlled landfilling: Final placement of waste into or onto the land in a controlled landfill site.

Other waste treatment: Any final treatment or disposal different from recycling, incineration and landfilling. Physical/chemical treatment, biological treatment, releasing into water bodies and permanent storage are included here.

Non hazardous industrial waste: Manufacturing waste (ISIC 10 - 33) excluding hazardous waste

	Unit	1990	1995	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Municipal waste														
Municial waste collected	1000 t/										855	875	880	
	year													
Municipal waste managed	1000 t/										855	875	880	
	year													
Of which recycling	1000 t/													
	year													
Of which composting	1000 t/													
	year													
Of which Incineration-	1000 t/													
without energy recovery	year													
Of which Incineration with	1000 t/													
energy recovery	year													
Of which landfilling on a	1000 t/													
controlled site	year													
Of which landfilling on a	1000 t/													
non- controlled site	year													
Of which other disposal	1000 t/													
(specify in the footnote,	year													
please)														

Note: Definitions are presented in sheet t1a. In case different definitions are applied in the country, specify, please. Please explain the category "Other disposal". Please insert any additional information necessary for explanation of figures presented.

Time series data on the i	ries data on the indicators for 1990-2010, Table 2b. Final waste disposal: Management of non-hazardous industrial waste:									Georgia				
	Unit	1990	1995	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Total amount generated	1000 t/										908.74			
	year													
Of which recycling	1000 t/													
	year													
Of which composting	1000 t/													
	year													
Of which incineration-	1000 t/													
without energy recovery	year													
Of which Incineration with	1000 t/													
energy recovery	year													
Of which landfilling on a	1000 t/													
controlled site	year													
Of which landfilling on a non-	1000 t/													
controlled site	year													
Of which other disposal	1000 t/													
(specify in the footnote, please)	year													

Note: Definitions are presented in sheet t1a. In case different definitions are applied in the country, specify, please. Please explain the category "Other disposal". Please insert any additional information necessary for explanation of figures presented.

### Time series data on the indicators for 1990-2010, Table 3. Transboundary movements of hazardous waste: Georgia

	Unit	1990	1995	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Import of hazadous waste	1000 t/													
	year													
Export of hazardous waste	1000 t/										1,030	0.7	0,55	
	year													
Import - export	1000 t/													
	year													
Total hazardous waste	1000 t/													
managed	year													
Of which recycling	1000 t/													
	year													
Of which incineration	1000 t/													
	year													
Of which landfilling	1000 t/													
	year													
Of which other disposal	1000 t/year													
(specify in footnote, please)														

### Notes:

Please use the definion of hazardous waste in accordance with the Basel Convention. If data according to the Basel Convention are not available, amounts can be given according to national or any other international definition, but should be labelled accordingly. Other definitions are presented in sheet t1a. In the case that different definitions are applied in the country, specify, please. Please explain the category "Other disposal". Please insert any additional information necessary for explanation of figures presented.