

Environmentally Sound Management of Solid Waste and Sewage-related Issues

Agenda 21: Chapter 21 and UN Commission on Sustainable Development

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4.1 Waste management

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1. Stakeholders: Governments in cooperation with the United Nations and relevant organizations

1.1 Minimizing waste				
1.1.1 Activities				
1.1.1.1 Management-related activities				
Source	Recommendation	Target Group	Target Date	Reference
Agenda 21 Art 21.10 (a)	Has the government (in cooperation with the United Nations and relevant organizations) developed and strengthened national capacities in research and design of environmentally sound technologies, was well as adopt measures to reduce wastes to a minimum?		2000	
	1.) If yes: a.) How and When? b.) What was the impact? c.) How was it measured? 2.) If not: Why not?			
Source	Recommendation	Target Group	Target Date	Reference
Agenda 21 Art 21.10 (b)	Has the government (in cooperation with the United Nations and relevant organizations) provided for incentives to reduce unsustainable patterns of production and consumption?			
	1.) If yes: a.) How and When? b.) What was the impact? c.) How was it measured? 2.) If not: Why not?			
Source	Recommendation	Target Group	Target Date	Reference
Agenda 21 Art 21.10 (c)	Has the government (in cooperation with the United Nations and relevant organizations) developed, where necessary, national plans to minimize waste generation as part of overall national development plans?		2000	
	1.) If yes: a.) How and When? b.) What was the impact? c.) How was it measured? 2.) If not: Why not?			
Source	Recommendation	Target Group	Target Date	Reference
Agenda 21 Art 21.10 (d)	Has the government (in cooperation with the United Nations and relevant organizations) emphasized waste minimization considerations in procurement within the United Nations system?			
	1.) If yes: a.) How and When? b.) What was the impact? c.) How was it measured? 2.) If not: Why not?			
1.1.1.2 Data and information				
Source	Recommendation	Target Group	Target Date	Reference
Agenda 21 Art 21.11 (a)	Have the government (in cooperation with the United Nations and relevant organizations) developed and applied methodologies for country-level waste monitoring?		2000	

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	<p>1.) If yes: a.) How and When? b.) What was the impact? c.) How was it measured?</p> <p>2.) If not: Why not?</p>			
Source	Recommendation	Target Group	Target Date	Reference
Agenda 21 Art 21.11 (b)	Has the government (in cooperation with the United Nations and relevant organizations) undertaken data gathering and analysis, established national goals and monitored progress?		2000	
	<p>1.) If yes: a.) How and When? b.) What was the impact? c.) How was it measured?</p> <p>2.) If not: Why not?</p>			
Source	Recommendation	Target Group	Target Date	Reference
Agenda 21 Art 21.11 (c)	Has the government (in cooperation with the United Nations and relevant organizations) utilized data to assess environmental soundness of national waste policies as a basis for corrective action?		2000	
	<p>1.) If yes: a.) How and When? b.) What was the impact? c.) How was it measured?</p> <p>2.) If not: Why not?</p>			
Source	Recommendation	Target Group	Target Date	Reference
Agenda 21 Art 21.11 (d)	Has the government (in cooperation with the United Nations and relevant organizations) inputted information into global information systems?		2000	
	<p>1.) If yes: a.) How and When? b.) What was the impact? c.) How was it measured?</p> <p>2.) If not: Why not?</p>			
1.1.1.3 International and regional cooperation and coordination				
Source	Recommendation	Target Group	Target Date	Reference
Agenda 21 Art 21.12 (a)	Has the government (in cooperation with the United Nations and relevant organizations) identified, developed and harmonized methodologies for waste monitoring and transferring such methodologies to countries?		2000	
	<p>1.) If yes: a.) How and When? b.) What was the impact? c.) How was it measured?</p> <p>2.) If not: Why not?</p>			
Source	Recommendation	Target Group	Target Date	Reference
Agenda 21 Art 21.12 (b)	Has the government (in cooperation with the United Nations and relevant organizations) identified and further developed the activities of existing information networks on clean technologies and waste minimization?		2000	
	<p>1.) If yes: a.) How and When? b.) What was the impact? c.) How was it measured?</p> <p>2.) If not: Why not?</p>			
Source	Recommendation	Target Group	Target Date	Reference

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Agenda 21 Art 21.12 (c)	Has the government (in cooperation with the United Nations and relevant organizations) undertaken periodic assessments, collating and analysing country data and reporting systematically, in an appropriate United Nations forum, to the countries concerned?	Concerned Countries	2000	
	1.) If yes: a.) How and When? b.) What was the impact? c.) How was it measured? 2.) If not: Why not?			
Source	Recommendation	Target Group	Target Date	Reference
Agenda 21 Art 21.12 (d)	Has the government (in cooperation with the United Nations and relevant organizations) reviewed the effectiveness of all waste minimization instruments and identified potential new instruments that could be used and techniques by which they could be made operational at the country level?		2000	
	Have guidelines and codes of practice been developed?			
	1.) If yes: a.) How and When? b.) What was the impact? c.) How was it measured? 2.) If not: Why not?			
Source	Recommendation	Target Group	Target Date	Reference
Agenda 21 Art 21.12 (e)	Has the government (in cooperation with the United Nations and relevant organizations) undertaken research on the social and economic impact of waste minimization at the consumer level?	consumers		
	1.) If yes: a.) How and When? b.) What was the impact? c.) How was it measured? 2.) If not: Why not?			
1.1.2 Means of implementation				
1.1.2.1 Scientific and technological means				
Source	Recommendation	Target Group	Target Date	Reference
Agenda 21 Art 21.14 (a)	Has the government (in cooperation with the United Nations and relevant organizations) undertaken a continuous review of the effectiveness of all waste minimization instruments and identifying potential new instruments that could be used and techniques by which instruments could be made operational at the country level?			
	Have guidelines and codes of practice been developed?			
	1.) If yes: a.) How and When? b.) What was the impact? c.) How was it measured? 2.) If not: Why not?			
Source	Recommendation	Target Group	Target Date	Reference
Agenda 21 Art 21.14 (b)	Has the government (in cooperation with the United Nations and relevant organizations) promoted waste prevention and minimization as the principal objective of national waste management programmes?			
	1.) If yes: a.) How and When? b.) What was the impact? c.) How was it measured? 2.) If not: Why not?			
Source	Recommendation	Target Group	Target Date	Reference

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Agenda 21 Art 21.14 (c)	Has the government (in cooperation with the United Nations and relevant organizations) promoted public education and a range of regulatory and non-regulatory incentives to encourage industry to change product design and reduce industrial process wastes through cleaner production technologies and good housekeeping practices an to encourage industries and consumers to use types of packaging that can be safely reused?	Industry		
	<p>1.) If yes: a.) How and When? b.) What was the impact? c.) How was it measured?</p> <p>2.) If not: Why not?</p>			
Source	Recommendation	Target Group	Target Date	Reference
Agenda 21 Art 21.14 (d)	Has the government (in cooperation with the United Nations and relevant organizations) executed, in accordance with national capacities, demonstration and pilot programmes to optimise waste minimization instruments?			
	<p>1.) If yes: a.) How and When? b.) What was the impact? c.) How was it measured?</p> <p>2.) If not: Why not?</p>			
Source	Recommendation	Target Group	Target Date	Reference
Agenda 21 Art 21.14 (e)	Has the government (in cooperation with the United Nations and relevant organizations) established procedures for adequate transport, storage, conservation and management of agricultural products, foodstuffs and other perishable goods in order to reduce the loss of those products, which results in the production of solid waste?		2000	
	<p>1.) If yes: a.) How and When? b.) What was the impact? c.) How was it measured?</p> <p>2.) If not: Why not?</p>			
Source	Recommendation	Target Group	Target Date	Reference
Agenda 21 Art 21.14 (f)	Has the government (in cooperation with the United Nations and relevant organizations) facilitated the transfer of waste-reduction technologies to industry, particularly in developing countries, and establishing concrete national standards for effluents and solid waste, taking into account, <i>inter alia</i> , raw material use and energy consumption?	Industry and developing countries		
	<p>1.) If yes: a.) How and When? b.) What was the impact? c.) How was it measured?</p> <p>2.) If not: Why not?</p>			
1.1.2.2 Human resource development				
Source	Recommendation	Target Group	Target Date	Reference
Agenda 21 Art 21.15	<p>Has the government (in cooperation with the United Nations and relevant organizations) targeted professionals in the water management sector and tried to obtain the support of citizens and industry?</p> <p>Has the government (in cooperation with the United Nations and relevant organizations) aimed to raise consciousness and educate and inform concerned groups and the public in general?</p> <p>Has the government (in cooperation with the United Nations and relevant organizations) incorporated within school curricula, where appropriate, the principles and practices of preventing and minimizing wastes and material on the environmental impacts of waste?</p>	Professionals in water management, industry, concerned groups, and the general public		
	<p>1.) If yes: a.) How and When? b.) What was the impact? c.) How was it measured?</p> <p>2.) If not: Why not?</p>			
1.1.3 Financing and cost evaluation				

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Source	Recommendation	Target Group	Target Date	Reference
Agenda 21 Art 19.30	How much of the average annual total cost (1993-2000) of implementing the activities of this programme has the government (in cooperation with the United Nations and relevant organizations) contributed? The activities of this programme are estimated to be about \$6.5 billion, including \$1.8 billion related to minimizing municipal solid waste.			
	1.) If yes: a.) How and When? b.) What was the impact? c.) How was it measured? 2.) If not: Why not?			
1.2 Extending waste service coverage				
1.2.1 Activities				
1.2.1.1 Management-related activities				
Source	Recommendation	Target Group	Target Date	Reference
Agenda 21 Art 21.40 (a)	Has the government (in cooperation with the United Nations and relevant organizations) established financing mechanisms for waste management service development in deprived areas, including appropriate modes of revenue generation?		2000	
	1.) If yes: a.) How and When? b.) What was the impact? c.) How was it measured? 2.) If not: Why not?			
Source	Recommendation	Target Group	Target Date	Reference
Agenda 21 Art 21.40 (b)	Has the government (in cooperation with the United Nations and relevant organizations) applied the “polluter pays” principle, where appropriate, by setting waste management charges at rates that reflect the cost of providing the service and ensure that those who generate the wastes pay the full cost of disposal in an environmentally safe way?		2000	
	1.) If yes: a.) How and When? b.) What was the impact? c.) How was it measured? 2.) If not: Why not?			
Source	Recommendation	Target Group	Target Date	Reference
Agenda 21 Art 21.40 (c)	Has the government (in cooperation with the United Nations and relevant organizations) encouraged institutionalisation of communities’ participation in planning and implementation procedures for solid waste management?	Local communities		
	1.) If yes: a.) How and When? b.) What was the impact? c.) How was it measured? 2.) If not: Why not?			
1.2.1.2 Data and information				
Source	Recommendation	Target Group	Target Date	Reference
Agenda 21 Art 21.41 (a)	Has the government (in cooperation with the United Nations and relevant organizations) developed and applied methodologies for waste monitoring?			
	1.) If yes: a.) How and When? b.) What was the impact? c.) How was it measured? 2.) If not: Why not?			

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Source	Recommendation	Target Group	Target Date	Reference
Agenda 21 Art 21.41 (b)	Has the government (in cooperation with the United Nations and relevant organizations) used data gathering and analysis to establish goals and monitor progress?			
	1.) If yes: a.) How and When? b.) What was the impact? c.) How was it measured? 2.) If not: Why not?			
Source	Recommendation	Target Group	Target Date	Reference
Agenda 21 Art 21.41 (c)	Has the government (in cooperation with the United Nations and relevant organizations) been inputting information into a global information system building upon existing systems?			
	1.) If yes: a.) How and When? b.) What was the impact? c.) How was it measured? 2.) If not: Why not?			
Source	Recommendation	Target Group	Target Date	Reference
Agenda 21 Art 21.41 (d)	Has the government (in cooperation with the United Nations and relevant organizations) strengthened the activities of existing information networks in order to disseminate focused information on the application of innovative and low-cost alternatives for waste disposal to targeted audiences?			
	1.) If yes: a.) How and When? b.) What was the impact? c.) How was it measured? 2.) If not: Why not?			
1.2.1.3 International and regional cooperation and coordination				
Source	Recommendation	Target Group	Target Date	Reference
Agenda 21 Art 21.42 (a)	Has the government (in cooperation with the United Nations and relevant organizations) launched a settlement infrastructure and environment programme following the United Nations Conference on Environment and Development to coordinate the activities of all organizations of the United Nations system involved in this area and include a clearing-house for information dissemination on all waste management issues?			
	1.) If yes: a.) How and When? b.) What was the impact? c.) How was it measured? 2.) If not: Why not?			
Source	Recommendation	Target Group	Target Date	Reference
Agenda 21 Art 21.42 (b)	Has the government (in cooperation with the United Nations and relevant organizations) undertaken and systematically reported on progress in providing waste services to those without such services?			
	1.) If yes: a.) How and When? b.) What was the impact? c.) How was it measured? 2.) If not: Why not?			
Source	Recommendation	Target Group	Target Date	Reference
Agenda 21 Art 21.42 (c)	Has the government (in cooperation with the United Nations and relevant organizations) reviewed the effectiveness of techniques for and approaches to increasing coverage and identify innovative ways of accelerating the process?			

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	<p>1.) If yes: a.) How and When? b.) What was the impact? c.) How was it measured?</p> <p>2.) If not: Why not?</p>			
1.2.2 Means of implementation				
1.2.2.1 Scientific and technological means				
Source	Recommendation	Target Group	Target Date	Reference
Agenda 21 Art 21.44	<p>Has the government (in cooperation with the United Nations and relevant organizations) launched programmes in different parts of the developing world to extend waste services to the unserved populations?</p> <p>Do these programmes, whenever necessary, build upon and reorient existing or planned activities?</p>	Unserved populations		
	<p>1.) If yes: a.) How and When? b.) What was the impact? c.) How was it measured?</p> <p>2.) If not: Why not?</p>			
Source	Recommendation	Target Group	Target Date	Reference
Agenda 21 Art 21.45 (a)	<p>Has the government (in cooperation with the United Nations and relevant organizations) given full recognition to and using the full range of low-cost options for waste management, including, where appropriate, their institutionalisation and incorporation within codes of practice and regulation?</p>			
	<p>1.) If yes: a.) How and When? b.) What was the impact? c.) How was it measured?</p> <p>2.) If not: Why not?</p>			
Source	Recommendation	Target Group	Target Date	Reference
Agenda 21 Art 21.45 (b)	<p>Has the government (in cooperation with the United Nations and relevant organizations) assigned high priority to the extension of waste management services, as necessary and appropriate, to all settlements irrespective of their legal status, giving due emphasis to meeting the waste disposal needs of the unserved, especially the unserved urban poor?</p>	Urban poor		
	<p>1.) If yes: a.) How and When? b.) What was the impact? c.) How was it measured?</p> <p>2.) If not: Why not?</p>			
Source	Recommendation	Target Group	Target Date	Reference
Agenda 21 Art 21.45 (c)	<p>Has the government (in cooperation with the United Nations and relevant organizations) integrated the provision and maintenance of waste management services with other basic services such as water-supply and storm-water drainage?</p>			
	<p>1.) If yes: a.) How and When? b.) What was the impact? c.) How was it measured?</p> <p>2.) If not: Why not?</p>			
Source	Recommendation	Target Group	Target Date	Reference
Agenda 21 Art 21.46 (a)	<p>Has the government (in cooperation with the United Nations and relevant organizations) found solutions and equipment for managing wastes in areas of concentrated populations and on small islands?</p> <p>Is there a need for appropriate refuse storage and collection systems and cost-effective and hygienic human waste disposal options?</p>	Concentrated populations and small islands		

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	<p>1.) If yes: a.) How and When? b.) What was the impact? c.) How was it measured?</p> <p>2.) If not: Why not?</p>			
Source	Recommendation	Target Group	Target Date	Reference
Agenda 21 Art 21.46 (b)	Has the government (in cooperation with the United Nations and relevant organizations) prepared and disseminated guidelines, case-studies, policy reviews and technical reports on appropriate solutions and modes of service delivery to unserved low-income areas?	Unserved low-income areas		
	<p>1.) If yes: a.) How and When? b.) What was the impact? c.) How was it measured?</p> <p>2.) If not: Why not?</p>			
Source	Recommendation	Target Group	Target Date	Reference
Agenda 21 Art 21.46 (c)	Has the government (in cooperation with the United Nations and relevant organizations) launched campaigns to encourage active community participation involving women's health and youth groups in the management of waste, particularly household waste?	Women and youth		
	<p>1.) If yes: a.) How and When? b.) What was the impact? c.) How was it measured?</p> <p>2.) If not: Why not?</p>			
Source	Recommendation	Target Group	Target Date	Reference
Agenda 21 Art 21.46 (d)	Has the government (in cooperation with the United Nations and relevant organizations) promoted intercountry transfer of relevant technologies, especially technologies for high-density settlements?			
	<p>1.) If yes: a.) How and When? b.) What was the impact? c.) How was it measured?</p> <p>2.) If not: Why not?</p>			
1.2.2.2 Human resource development				
Source	Recommendation	Target Group	Target Date	Reference
Agenda 21 Art 21.47	<p>Has the government (in cooperation with the United Nations and relevant organizations) focused training on low-cost waste collection and disposal options, particularly techniques for their planning and delivery?</p> <p>Have intercountry staff exchange programmes among developing countries been promoted?</p> <p>Has particular attention been given to upgrading the status and skills of management-level personnel in waste management agencies?</p>	Waste management agencies		
	<p>1.) If yes: a.) How and When? b.) What was the impact? c.) How was it measured?</p> <p>2.) If not: Why not?</p>			
Source	Recommendation	Target Group	Target Date	Reference
Agenda 21 Art 21.48	Has the government (in cooperation with the United Nations and relevant organizations) developed and rendered operational management information systems for municipal record keeping and accounting and for efficiency and effectiveness assessment?			
	<p>1.) If yes: a.) How and When? b.) What was the impact? c.) How was it measured?</p> <p>2.) If not: Why not?</p>			

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1.2.2.3 Capacity-building				
Source	Recommendation	Target Group	Target Date	Reference
Agenda 21 Art 21.49 (a)	Has the government (in cooperation with the United Nations and relevant organizations) established a special unit within current institutions arrangements to plan and deliver services to the unserved poor communities, with their involvement and participation?	Poor communities		
	1.) If yes: a.) How and When? b.) What was the impact? c.) How was it measured? 2.) If not: Why not?			
Source	Recommendation	Target Group	Target Date	Reference
Agenda 21 Art 21.49 (b)	Has the government (in cooperation with the United Nations and relevant organizations) made revisions to existing codes and regulations to permit the use of the full range of low-cost alternative technologies for waste disposal?			
	1.) If yes: a.) How and When? b.) What was the impact? c.) How was it measured? 2.) If not: Why not?			
Source	Recommendation	Target Group	Target Date	Reference
Agenda 21 Art 21.49 (c)	Has the government (in cooperation with the United Nations and relevant organizations) built institutional capacity and developing procedures for undertaking service planning and delivery?			
	1.) If yes: a.) How and When? b.) What was the impact? c.) How was it measured? 2.) If not: Why not?			
1.2.3 Financing and cost evaluation				
Source	Recommendation	Target Group	Target Date	Reference
Agenda 21 Art 21.43	How much of the average annual total cost (1993-2000) of implementing the activities of this programmed have you contributed? The activities of this programme are estimated to be about \$7.5 billion, including \$2.6 billion from the international community on grant or concessional terms.			
	1.) If yes: a.) How and When? b.) What was the impact? c.) How was it measured? 2.) If not: Why not?			

2. Stakeholders: Governments and NGO's in collaboration with appropriate United Nations organizations

2.1 Maximizing environmentally sound waste reuse and recycling

2.1.1 Activities

2.1.1.1 Management-related activities

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Source	Recommendation	Target Group	Target Date	Reference
Agenda 21 Art 21.19 (a)	Has the government (and NGO's in collaboration with appropriate United Nations organizations) developed and strengthened national capacity to reuse and recycle an increasing proportion of wastes?			
	1.) If yes: a.) How and When? b.) What was the impact? c.) How was it measured? 2.) If not: Why not?			
Source	Recommendation	Target Group	Target Date	Reference
Agenda 21 Art 21.19 (b)	Has the government (and NGO's in collaboration with appropriate United Nations organizations) reviewed and reformed national waste policies to provide incentives for waste reuse and recycling?		2000	
	1.) If yes: a.) How and When? b.) What was the impact? c.) How was it measured? 2.) If not: Why not?			
Source	Recommendation	Target Group	Target Date	Reference
Agenda 21 Art 21.19 (c)	Has the government (and NGO's in collaboration with appropriate United Nations organizations) developed and implemented national plans for waste management that take advantage of, and give priority to, waste reuse and recycling?		2000	
	1.) If yes: a.) How and When? b.) What was the impact? c.) How was it measured? 2.) If not: Why not?			
Source	Recommendation	Target Group	Target Date	Reference
Agenda 21 Art 21.19 (d)	Has the government (and NGO's in collaboration with appropriate United Nations organizations) modified existing standards or purchased specifications to avoid discrimination against recycled materials, taking into account the saving in energy and raw materials?			
	1.) If yes: a.) How and When? b.) What was the impact? c.) How was it measured? 2.) If not: Why not?			
Source	Recommendation	Target Group	Target Date	Reference
Agenda 21 Art 21.19 (e)	Has the government (and NGO's in collaboration with appropriate United Nations organizations) developed public education and awareness programmes to promote the use of recycled products?			
	1.) If yes: a.) How and When? b.) What was the impact? c.) How was it measured? 2.) If not: Why not?			
2.1.1.2 Data and information				
Source	Recommendation	Target Group	Target Date	Reference
Agenda 21 Art 21.20 (a)	Has the government (and NGO's in collaboration with appropriate United Nations organizations) undertaken an extensive review of options and techniques for reuse and recycling all forms of municipal waste?			
	Are these policies for reuse and recycling an integral component of national and local waste management programmes?			

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	<p>1.) If yes: a.) How and When? b.) What was the impact? c.) How was it measured?</p> <p>2.) If not: Why not?</p>			
Source	Recommendation	Target Group	Target Date	Reference
Agenda 21 Art 21.20 (b)	Has the government (and NGO's in collaboration with appropriate United Nations organizations) assessed the extent and practice of waste reuse and recycling operations currently undertaken and identifying ways by which these could be increased and supported?			
	<p>1.) If yes: a.) How and When? b.) What was the impact? c.) How was it measured?</p> <p>2.) If not: Why not?</p>			
Source	Recommendation	Target Group	Target Date	Reference
Agenda 21 Art 21.20 (c)	Has the government (and NGO's in collaboration with appropriate United Nations organizations) increased funding for research pilot programmes to test various options for reuse and recycling, including the use of small-scale, cottage-based recycling industries; compost production; treated waste-water irrigation; and energy recovery from wastes?		2000	
	<p>1.) If yes: a.) How and When? b.) What was the impact? c.) How was it measured?</p> <p>2.) If not: Why not?</p>			
Source	Recommendation	Target Group	Target Date	Reference
Agenda 21 Art 21.20 (d)	Has the government (and NGO's in collaboration with appropriate United Nations organizations) produced guidelines and best practices for waste reuse and recycling?			
	<p>1.) If yes: a.) How and When? b.) What was the impact? c.) How was it measured?</p> <p>2.) If not: Why not?</p>			
Source	Recommendation	Target Group	Target Date	Reference
Agenda 21 Art 21.20 (e)	Has the government (and NGO's in collaboration with appropriate United Nations organizations) intensified efforts, at collecting, analysing and disseminating, to key target groups, relevant information on waste issues?		2000	
	Have special research grants been made available on a competitive basis for innovative research projects on recycling techniques?			
	<p>1.) If yes: a.) How and When? b.) What was the impact? c.) How was it measured?</p> <p>2.) If not: Why not?</p>			
Source	Recommendation	Target Group	Target Date	Reference
Agenda 21 Art 21.20 (f)	Has the government (and NGO's in collaboration with appropriate United Nations organizations) identified potential markets for recycled products?			
	<p>1.) If yes: a.) How and When? b.) What was the impact? c.) How was it measured?</p> <p>2.) If not: Why not?</p>			
2.1.1.3 International and regional cooperation and coordination				
Source	Recommendation	Target Group	Target Date	Reference

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Agenda 21 Art 21.21 (a)	Has the government (and NGO's in collaboration with appropriate United Nations organizations) undertaken a periodic review of the extent to which countries reuse and recycle their wastes?			
	1.) If yes: a.) How and When? b.) What was the impact? c.) How was it measured? 2.) If not: Why not?			
Source	Recommendation	Target Group	Target Date	Reference
Agenda 21 Art 21.21 (b)	Has the government (and NGO's in collaboration with appropriate United Nations organizations) reviewed the effectiveness of techniques for and approaches to waste reuse and recycling and ways of enhancing their application in countries?	Countries		
	1.) If yes: a.) How and When? b.) What was the impact? c.) How was it measured? 2.) If not: Why not?			
Source	Recommendation	Target Group	Target Date	Reference
Agenda 21 Art 21.21 (c)	Has the government (and NGO's in collaboration with appropriate United Nations organizations) reviewed and updated international guidelines for the safe use of wastes?			
	1.) If yes: a.) How and When? b.) What was the impact? c.) How was it measured? 2.) If not: Why not?			
Source	Recommendation	Target Group	Target Date	Reference
Agenda 21 Art 21.21 (d)	Has the government (and NGO's in collaboration with appropriate United Nations organizations) established appropriate programmes to support small communities' waste reuse and recycling industries in developing countries?	Developing countries		
	1.) If yes: a.) How and When? b.) What was the impact? c.) How was it measured? 2.) If not: Why not?			
2.1.2 Means of implementation				
2.1.2.1 Scientific and technological means				
Source	Recommendation	Target Group	Target Date	Reference
Agenda 21 Art 21.23 (a)	Has the government (and NGO's in collaboration with appropriate United Nations organizations) supported waste and recycling and reuse by including the transfer of recycling technologies, such as machinery for reusing plastics, rubber and paper, within bilateral and multilateral technical cooperation and aid programmes?			
	1.) If yes: a.) How and When? b.) What was the impact? c.) How was it measured? 2.) If not: Why not?			
Source	Recommendation	Target Group	Target Date	Reference
Agenda 21 Art 21.23 (b)	Has the government (and NGO's in collaboration with appropriate United Nations organizations) developed and improved existing technologies, especially indigenous technologies, and facilitating their transfer under ongoing regional and interregional technical assistance programmes?			

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Source	Recommendation	Target Group	Target Date	Reference
Agenda 21 Art 21.23 (c)	Has the government (and NGO's in collaboration with appropriate United Nations organizations) facilitated the transfer of waste reuse and recycling technology?			
	1.) If yes: a.) How and When? b.) What was the impact? c.) How was it measured? 2.) If not: Why not?			
Agenda 21 Art 21.24 (a)	Has the government (and NGO's in collaboration with appropriate United Nations organizations) offered incentives to local and municipal authorities that recycle the maximum proportion of their wastes?	Local and municipal authorities		
	1.) If yes: a.) How and When? b.) What was the impact? c.) How was it measured? 2.) If not: Why not?			
Agenda 21 Art 21.24 (b)	Has the government (and NGO's in collaboration with appropriate United Nations organizations) provided technical assistance to informal waste reuse and recycling operations?			
	1.) If yes: a.) How and When? b.) What was the impact? c.) How was it measured? 2.) If not: Why not?			
Agenda 21 Art 21.24 (c)	Has the government (and NGO's in collaboration with appropriate United Nations organizations) applied economic and regulatory instruments, including tax incentives, to support the principle that generators of wastes pay for their disposal?		2000	
	1.) If yes: a.) How and When? b.) What was the impact? c.) How was it measured? 2.) If not: Why not?			
Agenda 21 Art 21.24 (d)	Has the government (and NGO's in collaboration with appropriate United Nations organizations) provided legal and economic conditions conducive to investments in waste reuse and recycling?			
	1.) If yes: a.) How and When? b.) What was the impact? c.) How was it measured? 2.) If not: Why not?			
Agenda 21 Art 21.24 (e)	Has the government (and NGO's in collaboration with appropriate United Nations organizations) implemented specific mechanisms such as deposit/refund systems as incentives for reuse and recycling?			

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	<p>1.) If yes: a.) How and When? b.) What was the impact? c.) How was it measured?</p> <p>2.) If not: Why not?</p>			
Source	Recommendation	Target Group	Target Date	Reference
Agenda 21 Art 21.24 (f)	Has the government (and NGO's in collaboration with appropriate United Nations organizations) promoted the separate collection of recyclable parts of household wastes?			
	<p>1.) If yes: a.) How and When? b.) What was the impact? c.) How was it measured?</p> <p>2.) If not: Why not?</p>			
Source	Recommendation	Target Group	Target Date	Reference
Agenda 21 Art 21.24 (g)	Has the government (and NGO's in collaboration with appropriate United Nations organizations) provided incentives to improve the marketability of technically recyclable waste?			
	<p>1.) If yes: a.) How and When? b.) What was the impact? c.) How was it measured?</p> <p>2.) If not: Why not?</p>			
Source	Recommendation	Target Group	Target Date	Reference
Agenda 21 Art 21.24 (h)	Has the government (and NGO's in collaboration with appropriate United Nations organizations) encouraged the use of recyclable materials, particularly in packaging, where feasible?			
	<p>1.) If yes: a.) How and When? b.) What was the impact? c.) How was it measured?</p> <p>2.) If not: Why not?</p>			
Source	Recommendation	Target Group	Target Date	Reference
Agenda 21 Art 21.24 (i)	Has the government (and NGO's in collaboration with appropriate United Nations organizations) encouraged the development of markets for recycled goods by establishing programmes?			
	<p>1.) If yes: a.) How and When? b.) What was the impact? c.) How was it measured?</p> <p>2.) If not: Why not?</p>			
2.1.2.2 Human resource development				
Source	Recommendation	Target Group	Target Date	Reference
Agenda 21 Art 21.25 (a)	Has the government (and NGO's in collaboration with appropriate United Nations organizations) included waste reuse and recycling in in-service training programmes as integral components of technical cooperation programmes on urban management and infrastructure development?			
	<p>1.) If yes: a.) How and When? b.) What was the impact? c.) How was it measured?</p> <p>2.) If not: Why not?</p>			
Source	Recommendation	Target Group	Target Date	Reference

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Agenda 21 Art 21.25 (b)	Has the government (and NGO's in collaboration with appropriate United Nations organizations) expanded training programmes on water supply and sanitation to incorporate techniques and policies for waste reuse and recycling?			
	<p>1.) If yes: a.) How and When? b.) What was the impact? c.) How was it measured?</p> <p>2.) If not: Why not?</p>			
Source	Recommendation	Target Group	Target Date	Reference
Agenda 21 Art 21.25 (c)	Has the government (and NGO's in collaboration with appropriate United Nations organizations) included the advantages and civic obligations associated with waste reuse and recycling in school curricula and relevant general educational courses?	Schools		
	<p>1.) If yes: a.) How and When? b.) What was the impact? c.) How was it measured?</p> <p>2.) If not: Why not?</p>			
Source	Recommendation	Target Group	Target Date	Reference
Agenda 21 Art 21.25 (d)	Has the government (and NGO's in collaboration with appropriate United Nations organizations) encouraged non-governmental organizations, community-based organizations and women's, youth and public interest groups programmes, in collaboration with local municipal authorities, to mobilize community support for waste reuse and recycling through focused community-level campaigns?	Communities		
	<p>1.) If yes: a.) How and When? b.) What was the impact? c.) How was it measured?</p> <p>2.) If not: Why not?</p>			
2.1.2.3 Capacity-building				
Source	Recommendation	Target Group	Target Date	Reference
Agenda 21 Art 21.26 (a)	Has the government (and NGO's in collaboration with appropriate United Nations organizations) made operational national policies and incentives for waste management?		2000 (Dev) 2010 (Undev.)	
	<p>1.) If yes: a.) How and When? b.) What was the impact? c.) How was it measured?</p> <p>2.) If not: Why not?</p>			
Source	Recommendation	Target Group	Target Date	Reference
Agenda 21 Art 21.26 (b)	Has the government (and NGO's in collaboration with appropriate United Nations organizations) enabled local and municipal authorities to mobilize community support for waste reuse and recycling by involving and assisting informal sector waste reuse and recycling operations and undertaking waste management planning that incorporates resource recovery practices?	Local municipal authorities		
	<p>1.) If yes: a.) How and When? b.) What was the impact? c.) How was it measured?</p> <p>2.) If not: Why not?</p>			
2.1.3 Financing and cost evaluation				
Source	Recommendation	Target Group	Target Date	Reference
Agenda 21 Art 21.23	How much of the average annual total cost (1993-2000) of implementing the activities of this programme have you contributed?			
	The activities of this programme are estimated to be \$850 million from the international community on grant or concessional terms. The Conference secretariat has estimated that if the equivalent of 1 percent of waste-related municipal expenditures was devoted to safe waste reuse schemes, worldwide expenditures for this purpose would amount \$8 billion dollars.			

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	1.) If yes: a.) How and When? b.) What was the impact? c.) How was it measured? 2.) If not: Why not?	
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3. Stakeholders: Governments, NGO's, and industries in collaboration with the United Nations system

3.1 Promoting environmentally sound waste disposal and treatment

3.1.1 Activities

3.1.1.1 Management-related activities

Source	Recommendation	Target Group	Target Date	Reference
Agenda 21 Art 21.30 (a)	Has the government (NGO's, and industries in collaboration with the United Nations system) developed and strengthened national capacity to treat and safely dispose of wastes?			
	1.) If yes: a.) How and When? b.) What was the impact? c.) How was it measured? 2.) If not: Why not?			
Source	Recommendation	Target Group	Target Date	Reference
Agenda 21 Art 21.30 (b)	Has the government (NGO's, and industries in collaboration with the United Nations system) reviewed and reformed national waste management policies to gain control over waste-related pollution?			
	1.) If yes: a.) How and When? b.) What was the impact? c.) How was it measured? 2.) If not: Why not?			
Source	Recommendation	Target Group	Target Date	Reference
Agenda 21 Art 21.30 (c)	Has the government (NGO's, and industries in collaboration with the United Nations system) encouraged countries to seek waste disposal solutions within their sovereign territory and as close as possible to the sources of origin that are compatible with environmentally sound and efficient management? Are transboundary movements needed to ensure that wastes are managed in an environmentally sound and efficient way? Do such movements observe the relevant conventions, including those that apply to areas that are not under national jurisdiction?	Countries	2000	
	1.) If yes: a.) How and When? b.) What was the impact? c.) How was it measured? 2.) If not: Why not?			

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Source	Recommendation	Target Group	Target Date	Reference
Agenda 21 Art 21.30 (d)	Has the government (NGO's, and industries in collaboration with the United Nations system) developed human wastes management plans, giving due attention to the development and application of appropriate technologies and the availability of resources for implementation?			
	1.) If yes: a.) How and When? b.) What was the impact? c.) How was it measured? 2.) If not: Why not?			
3.1.1.2 Data and information				
Source	Recommendation	Target Group	Target Date	Reference
Agenda 21 Art 21.31 (a)	Has the government (NGO's, and industries in collaboration with the United Nations system) assembled and analysed the scientific evidence and pollution impacts of wastes in the environment in order to formulate and disseminate recommended scientific criteria and guidelines for the environmentally sound management of solid waste?		2000	
	1.) If yes: a.) How and When? b.) What was the impact? c.) How was it measured? 2.) If not: Why not?			
Source	Recommendation	Target Group	Target Date	Reference
Agenda 21 Art 21.31 (b)	Has the government (NGO's, and industries in collaboration with the United Nations system) recommended national and, where relevant, local environmental quality standards based on scientific criteria and guidelines?		2000	
	1.) If yes: a.) How and When? b.) What was the impact? c.) How was it measured? 2.) If not: Why not?			
Source	Recommendation	Target Group	Target Date	Reference
Agenda 21 Art 21.31 (c)	Has the government (NGO's, and industries in collaboration with the United Nations system) included within technical cooperation programmes and agreements the provision for monitoring equipment and for the requisite training in its use?		2000	
	1.) If yes: a.) How and When? b.) What was the impact? c.) How was it measured? 2.) If not: Why not?			
Source	Recommendation	Target Group	Target Date	Reference
Agenda 21 Art 21.31 (d)	Has the government (NGO's, and industries in collaboration with the United Nations system) established an information clearing-house with extensive networks at the regional, national and local levels to collect and disseminate information on all aspects of waste management, including safe disposal?		2000	
	1.) If yes: a.) How and When? b.) What was the impact? c.) How was it measured? 2.) If not: Why not?			
3.1.1.3 International and regional cooperation and coordination				

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Source	Recommendation	Target Group	Target Date	Reference
Agenda 21 Art 21.32 (a)	Has the government (NGO's, and industries in collaboration with the United Nations system) identified, developed and harmonize methodologies and environmental quality and health guidelines for safe waste discharge and disposal? 1.) If yes: a.) How and When? b.) What was the impact? c.) How was it measured? 2.) If not: Why not?		1995 (Dev.) 2005 (Undev.)	
Source	Recommendation	Target Group	Target Date	Reference
Agenda 21 Art 21.32 (b)	Has the government (NGO's, and industries in collaboration with the United Nations system) reviewed and kept abreast of developments and disseminated information on the effectiveness of techniques and approaches to safe waste disposal and ways of supporting their application in countries? 1.) If yes: a.) How and When? b.) What was the impact? c.) How was it measured? 2.) If not: Why not?			
3.1.2 Means of implementation				
3.1.2.1 Scientific and technological means				
Source	Recommendation	Target Group	Target Date	Reference
Agenda 21 Art 21.35 (a)	Has the government (NGO's, and industries in collaboration with the United Nations system) prepared guidelines and technical reports on subjects such as the integration of land-use planning in human settlements with waste disposal, environmental quality criteria and standards, waste disposal options, industrial waste treatment and landfill operations? 1.) If yes: a.) How and When? b.) What was the impact? c.) How was it measured? 2.) If not: Why not?		2000	
Source	Recommendation	Target Group	Target Date	Reference
Agenda 21 Art 21.35 (b)	Has the government (NGO's, and industries in collaboration with the United Nations system) undertaken research on critical subjects such as low-cost, low-maintenance waste-water treatment systems; safe sludge disposal options; industrial waste treatment; and low-technology, ecologically safe waste disposal options? 1.) If yes: a.) How and When? b.) What was the impact? c.) How was it measured? 2.) If not: Why not?		2000	
Source	Recommendation	Target Group	Target Date	Reference
Agenda 21 Art 21.35 (c)	Has the government (NGO's, and industries in collaboration with the United Nations system) transferred technologies, in conformity with the terms as well as the provisions of chapter 34 (Transfer of environmentally sound technology, cooperation, and capacity-building), on industrial waste treatment processes through bilateral and multilateral technical cooperation programmes and in cooperation with business and industry, including large and transnational corporations, as appropriate?			

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	<p>1.) If yes: a.) How and When? b.) What was the impact? c.) How was it measured?</p> <p>2.) If not: Why not?</p>			
Source	Recommendation	Target Group	Target Date	Reference
Agenda 21 Art 21.35 (d)	Has the government (NGO's, and industries in collaboration with the United Nations system) focused on the rehabilitation, operation and maintenance of existing facilities and technical assistance on improved maintenance practices and techniques followed by the planning and construction of waster treatment facilities?			
	<p>1.) If yes: a.) How and When? b.) What was the impact? c.) How was it measured?</p> <p>2.) If not: Why not?</p>			
Source	Recommendation	Target Group	Target Date	Reference
Agenda 21 Art 21.35 (e)	Has the government (NGO's, and industries in collaboration with the United Nations system) established programmes to maximize the source segregation and safe disposal of the hazardous components of municipal solid waste?			
	<p>1.) If yes: a.) How and When? b.) What was the impact? c.) How was it measured?</p> <p>2.) If not: Why not?</p>			
Source	Recommendation	Target Group	Target Date	Reference
Agenda 21 Art 21.35 (f)	Has the government (NGO's, and industries in collaboration with the United Nations system) ensured the investment and provision of waste collection facilities with the concomitant provision of water services and with an equal and parallel investment and provision of waste treatment facilities?			
	<p>1.) If yes: a.) How and When? b.) What was the impact? c.) How was it measured?</p> <p>2.) If not: Why not?</p>			
3.1.2.2 Human resource development				
Source	Recommendation	Target Group	Target Date	Reference
Agenda 21 Art 21.36 (a)	Has the government (NGO's, and industries in collaboration with the United Nations system) provided both formal and in-service training, focused on pollution control, waste treatment and disposal technologies, and operation and maintaining waste-relating infrastructure?			
	Have intercountry staff exchange programmes been established?			
	<p>1.) If yes: a.) How and When? b.) What was the impact? c.) How was it measured?</p> <p>2.) If not: Why not?</p>			
Source	Recommendation	Target Group	Target Date	Reference
Agenda 21 Art 21.36 (b)	Has the government (NGO's, and industries in collaboration with the United Nations system) undertaken the requisite training for waste-relation pollution for waste-related pollution monitoring and control enforcement?			

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	<p>1.) If yes: a.) How and When? b.) What was the impact? c.) How was it measured?</p> <p>2.) If not: Why not?</p>			
3.1.2.3 Capacity-building				
Source	Recommendation	Target Group	Target Date	Reference
Agenda 21 Art 21.37 (a)	<p>Has the government (NGO's, and industries in collaboration with the United Nations system) created and strengthened independent environment control bodies at the national and local levels?</p> <p>Have international organizations and donors supported needed upgrading of manpower skills and provision of equipment?</p>	environment control bodies		
	<p>1.) If yes: a.) How and When? b.) What was the impact? c.) How was it measured?</p> <p>2.) If not: Why not?</p>			
Source	Recommendation	Target Group	Target Date	Reference
Agenda 21 Art 21.37 (b)	<p>Has the government (NGO's, and industries in collaboration with the United Nations system) empowered pollution control agencies with the requisite legal mandate and financial capacities to carry out their duties effectively?</p>	Pollution control agencies		
	<p>1.) If yes: a.) How and When? b.) What was the impact? c.) How was it measured?</p> <p>2.) If not: Why not?</p>			
3.1.3 Financing and cost evaluation				
Source	Recommendation	Target Group	Target Date	Reference
Agenda 21 Art 21.34	<p>How much of the average annual total cost (1993-2000) of implementing the activities of this programme has the government (NGO's, and industries in collaboration with the United Nations system) contributed?</p> <p>The activities of this programme are estimated to be about \$15 billion, including \$3.4 billion from the international community on grant or concessional terms.</p>			
	<p>1.) If yes: a.) How and When? b.) What was the impact? c.) How was it measured?</p> <p>2.) If not: Why not?</p>			

4. Stakeholders: Governments and International Organizations

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4.1 Waste management				
Source	Recommendation	Target Group	Target Date	Reference
CSD II Art 132(g)	Have the government and international organizations given more concerted attention to the management of solid wastes, including promoting greater awareness of the environmental and health risks from solid waste and the impact of changes in production and consumption patterns on the volume and type of such waste, as well as utilizing the resources and potential of the private sector, including the formal and informal sectors, and using indigenous technologies and techniques?		2000	
	1.) If yes: a.) How and When? b.) What was the impact? c.) How was it measured? 2.) If not: Why not?			