

## UNIT-IV THE GLOBAL IMPACT OF E-WASTE

Actions To Be Considered To Achieve Goals Of E-Waste Management → Actions that are listed in this section could be considered in India while making and implementing new legislation and initiate the use of suitable instruments for e-waste management according to stated goals.

### **Goal 1 Producers collect and recycle discarded appliances as well as provide necessary funding (implementing EPR)**

<u>Present Situation</u>	<u>Possible Actions</u>	<u>What is Needed</u>	<u>Results Are Depending On</u>
High costs of compliance and lack of regulation does not create favourable conditions for producers to accept EPR.	Imposing responsibilities expressed into targets to be achieved by producers.  Ensuring that all producers contribute to e-waste management equally.  Generate information on collecting and recycling of e-waste.	Legislation and enforcement have to encourage producers to accept responsibilities and assist producers to achieve targets.  EPR must be affordable; costs have to be proportionate to its purpose.  Targets have to be stated smart.	The willingness of producers to accept responsibilities.  The presence of sanctions in case producers fail to achieve their targets.
No reliable information on collection and recycling of e-waste	Generate information on collecting and recycling of e-waste.	Producers have to (be able to) provide reliable information on e-waste collected and recycled.	Availability of means to weigh and record waste.  proper information technology
Responsibilities are likely to be evaded.	Implementing effective EPR instruments and e-waste legislation.  Assessing and if required adapting instruments and legislation.	Monitoring responsibilities must take manageable effort for administration and enforcement.	The extent to which legislation and enforcement is helping producers to meet targets.  Effectiveness of monitoring by government

Goal 2 all producers own up responsibility and contribute to e-waste management			
<u>Present Situation</u>	<u>Possible Actions</u>	<u>What is Needed</u>	<u>Results Are Depending On</u>
Little understanding of producers and the numbers of appliances put on the market.	Introducing a system to register new appliances, how producers fulfil their obligations, and to evaluate results.	Monitoring and enforcement must require manageable effort from the government.  Producers have to provide reliable information on products put on the market as well as e-waste collected and recycled.	The presence of a register in which all producers of appliances are recorded as well as how each producer complies with obligations.

Goal 3 Tasks and duties for compliance are distributed effectively and clearly (creating compliance systems)			
<u>Present Situation</u>	<u>Possible Actions</u>	<u>What is Needed</u>	<u>Results Are Depending On</u>
an unregulated market of e-waste impedes regulated collection of appliances.	inviting parties to set up compliance systems.  authorizing parties to set up compliance systems.  creating a regulated take back system.  contracting collection points, transporters and recyclers that can process in the required way.	the number of compliance systems should be limited to be manageable.  the burden on governmental capacity should be manageable.  compliance systems should achieve the highest recycling targets and efficiencies.  compliance systems should operate independently of the individual interests of producers.	effectiveness of restrictions and government support to legal collection.

Goal 4 E-waste is collected and transported to authorised agencies/recyclers			
<u>Present Situation</u>	<u>Possible Actions</u>	<u>What is Needed</u>	<u>Results Are Depending On</u>
High value leads to an unregulated trade of e-waste and unregulated collection channels.	Creating closed (regulated) take back systems.	Regulated take back system must incorporate existing collection channels as much as possible.	The willingness of consumers to hand in discarded equipment depends on a financial reward equal to the market price.
Collection is profit-driven and e-waste is brought to the highest bidder.	Create legal collection centres that pay market prices.  Raising awareness regarding disposal facilities.  Raising awareness about impact on environment.	Equal financial reward to be paid out by legal recyclers.  Collection must remain affordable.  Regulated take back system must not lead to loss of employment.	Producers willing to fund appropriate recycling.
Lack of data collected e-waste.	Improve information on collecting and recycling of e-waste.	Effective monitoring of collected appliances and prices.	Producers willing to fund appropriate recycling.

Goal 5 E-waste is processed and recycled adequately			
<u>Present Situation</u>	<u>Possible Actions</u>	<u>What is Needed</u>	<u>Results Are Depending On</u>
processing and recycling of e-waste largely causes environmental issues and affects health of workers.	introducing recycling standards.	innovating recycling technologies must be affordable.	availability of funds to invest and buy technologies.
capacity and technologies of recyclers are insufficient	promote creation of large scale recycling plants.	new recycling facilities must take employment interests into account.	Willingness of investors to invest in recycling plants.
lack of data available on appliances processed and recycled.	innovating recycling technologies.	recyclers to provide reliable data.	the sharing of technologies by large (international) recyclers. a commitment of compliance systems for long-term cooperation with recyclers.

Goal 6 Good information to regulator and policy makers about compliance			
<u>Present Situation</u>	<u>Possible Actions</u>	<u>What is Needed</u>	<u>Results Are Depending On</u>
lack of information on whole cycle of e-waste management	creating register and monitoring agencies as part of producer's responsibility.	register and monitoring agencies must be reliable and independent of producers.	Generation of good quality information and indicators.
Government's capacity for monitoring is limited.	<p>Focusing monitoring tasks of government on:</p> <ul style="list-style-type: none"> <li>- assuring reliability of collection and recycling data and evaluating results;</li> <li>- equal contribution to e-waste management by producers;</li> <li>- mobilisation and use of funds by producers.</li> </ul>	<p>required information must be available and provided.</p> <p>sanctions must be in place if regulations are not adhered to.</p> <p>monitoring should be simple but still effective enough to be able to observe deviations.</p> <p>monitoring should include on-site examination.</p>	<p>availability of capacity and financial resources by government and independent monitoring agency.</p> <p>Willingness of producers to fund register and monitoring agency.</p>

Goal 7 Sufficient funding available for collecting and recycling			
<u>Present Situation</u>	<u>Possible Actions</u>	<u>What is Needed</u>	<u>Results Are Depending On</u>
<p>only e-waste with sufficient resale value is collected and recycled.</p> <p>prices do not take environmentally sound processing into account</p>	Fund the collection and recycling of all types of e-waste, particularly kinds with hazardous materials.	<p>Funding must be transparent and information made available to the public.</p> <p>Funds must be sufficient, yet not be excessive and strictly limited its purpose.</p> <p>direct access of producers to funds should be made impossible.</p> <p>Funding must be monitored by public bodies.</p>	<p>Willingness of consumer and/or producer to pay a fee.</p> <p>legislation implemented by government to regulate funding.</p>

Goal 8 awareness among citizens regarding toxicity and hazards of improper e-waste disposal			
<u>Present Situation</u>	<u>Possible Actions</u>	<u>What is Needed</u>	<u>Results Are Depending On</u>
<p>insufficient knowledge of the environmental impact and health risks of handling e-waste.</p> <p>disposal of appliances is driven by the value of the materials only.</p>	<p>selecting a party responsible for creating awareness (either government or producer).</p> <p>setting measurable goals.</p>	<p>use of various types of media to ensure that all layers of the population understand the message.</p> <p>smart targets to be achieved must be set by government.</p>	<p>effectiveness of the message and the chosen media.</p> <p>availability of financial resources</p>