Integrated Solid Waste Management (ISWM)

Process to Develop

ISWM Plan

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Need for ISWM

- **Cities are facing an increasing growth in population, and shares in GDP growth, resulting in – among other things – increasing quantities of waste being generated**
- **Due to changing lifestyles and consumption patterns, the quantity of waste generated has increased with quality and composition of waste becoming more varied and changing.**
- **Industrialization and economic growth has produced more amounts of waste, including hazardous and toxic wastes.**
- **There is a growing realization of the negative impacts that wastes have had on the local environment (air, water, land, human health etc.)**
- **Complexity, costs and coordination of waste management has necessitated multi-stakeholder involvement in every stage of the waste stream. This calls for an integrated approach to waste management.**
- **Local Governments are now looking at waste as a *business opportunity*, (a) to extract valuable resources contained within it that can still be used and (b) to safely process and dispose wastes with a minimum impact on the environment**

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Defining ISWM

Integrated solid waste management refers to the strategic approach to sustainable management of solid wastes covering all sources and all aspects, covering generation, segregation, transfer, sorting, treatment, recovery and disposal in an integrated manner, with an emphasis on maximizing resource use efficiency

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Coverage of ISWM

An ISWM Plan per se is a package consisting of a Management System including:

Policies (regulatory, fiscal, etc.),

Technologies (basic equipment and operational aspects) &

Voluntary measures (awareness raising, self regulations)

A management System covers all aspects of waste management; from waste generation through collection, transfer, transportation, sorting, treatment and disposal.

Data and information on waste characterization and quantification (including future trends), and assessment of current solid waste management system for operational stages provide the basis for developing a concrete and locality-specific management system.

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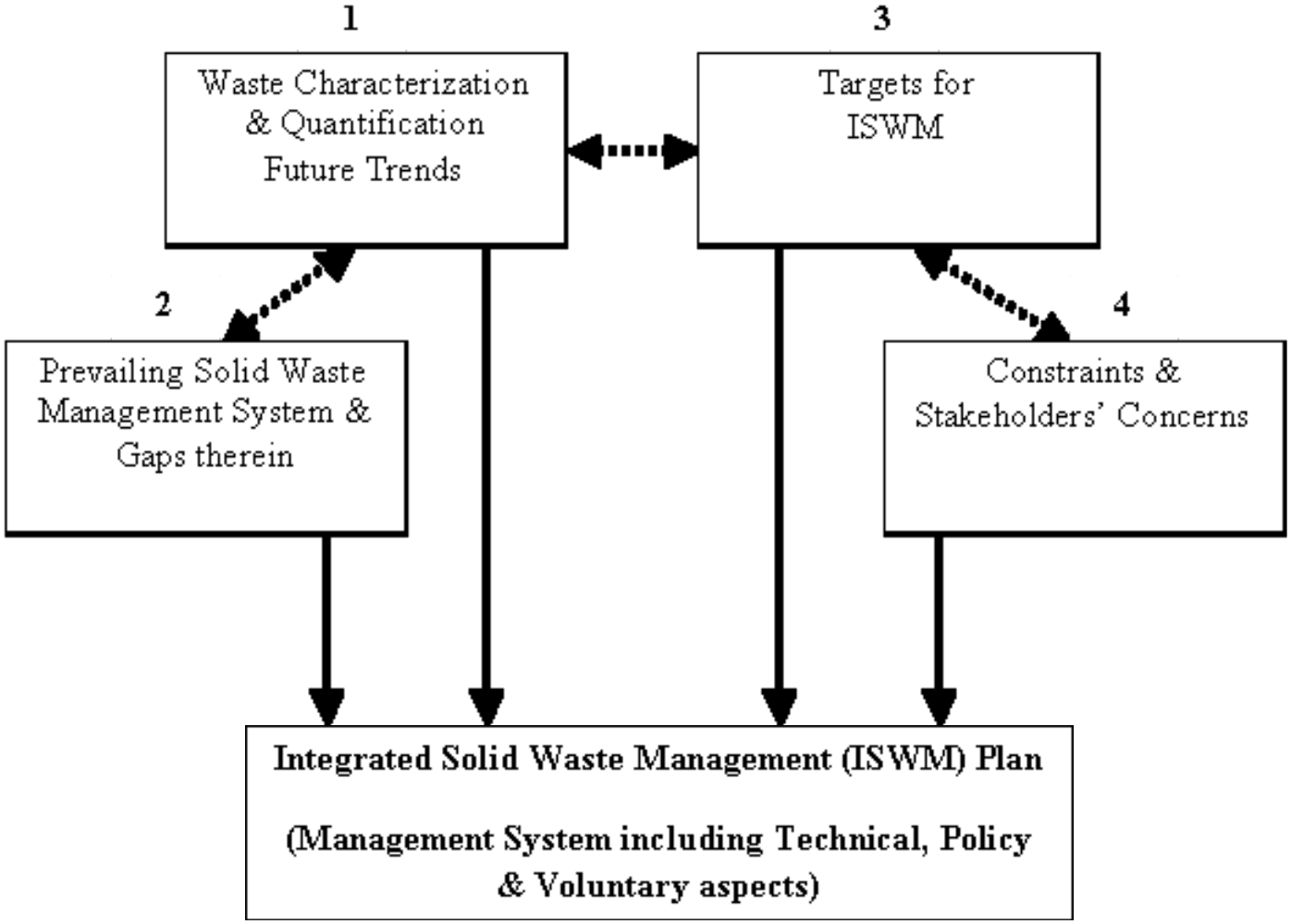
Required Information



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Elements of ISWM Plan

I. Baseline data on waste characterization and quantification with future trends and baseline data on prevailing waste management systems and gaps there in

II. A list of targets to be achieved through the ISWM System

III. A Plan with details of the Management System covering policies, technologies (and voluntary measures

IV. Implementation Aspects such as time schedules, costs, institutional requirements etc.

V. Monitoring and feedback mechanism

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Development of Sub-management Systems

1. Generation Level
2. Collection & Transportation
3. Sorting, Treatment and Recovery
4. Final Disposal

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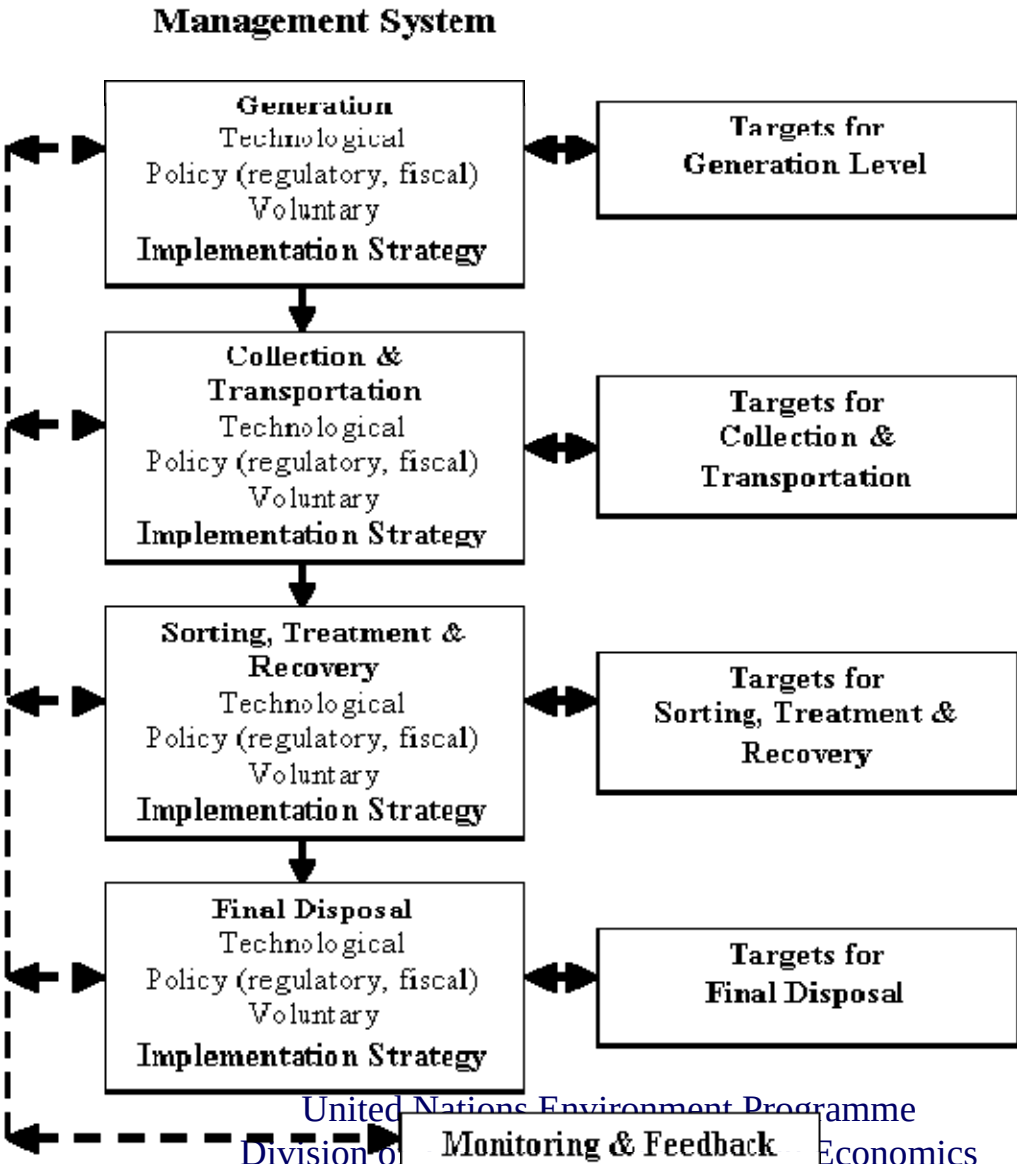
Overall Management System



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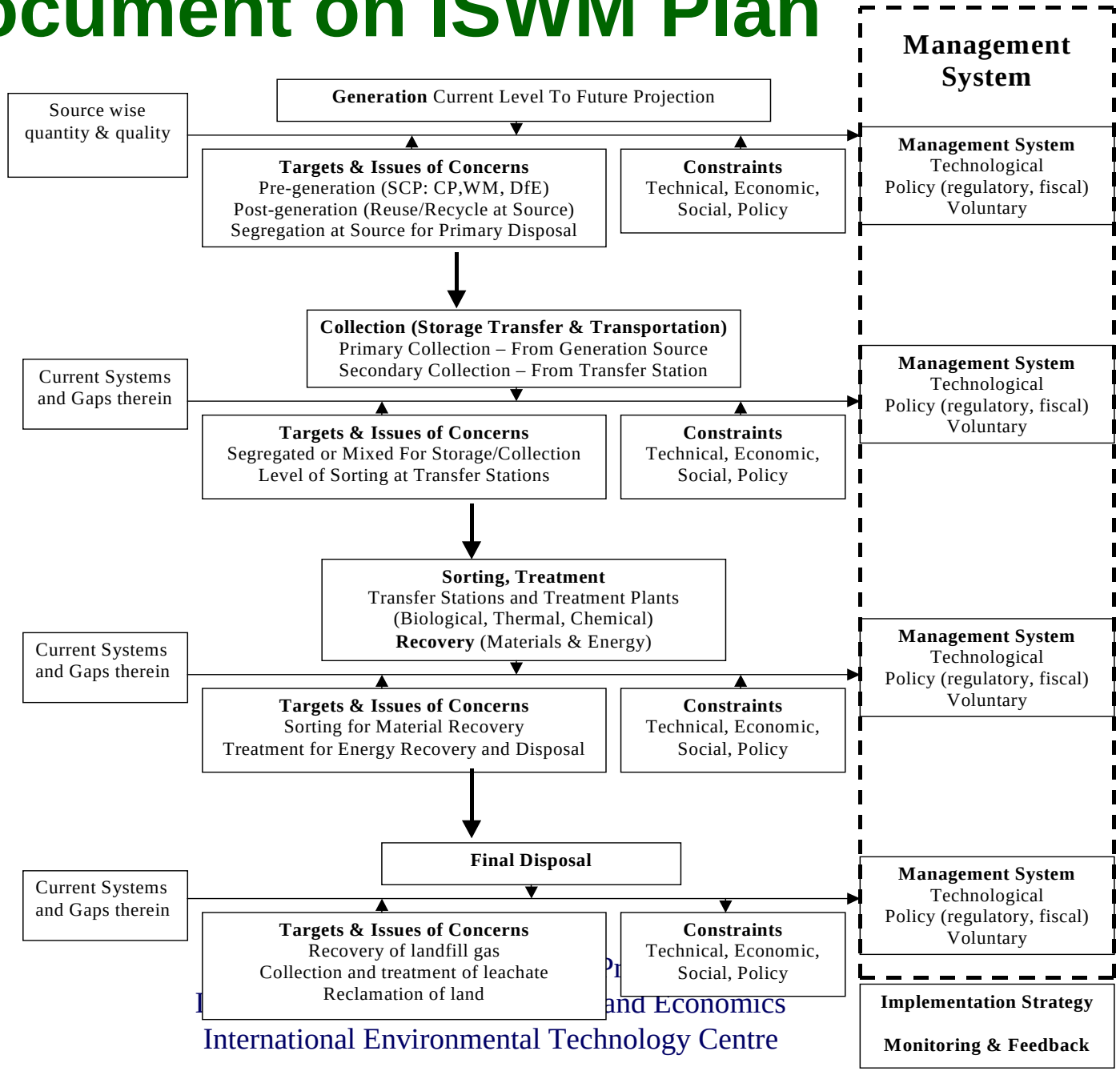
Document on ISWM Plan



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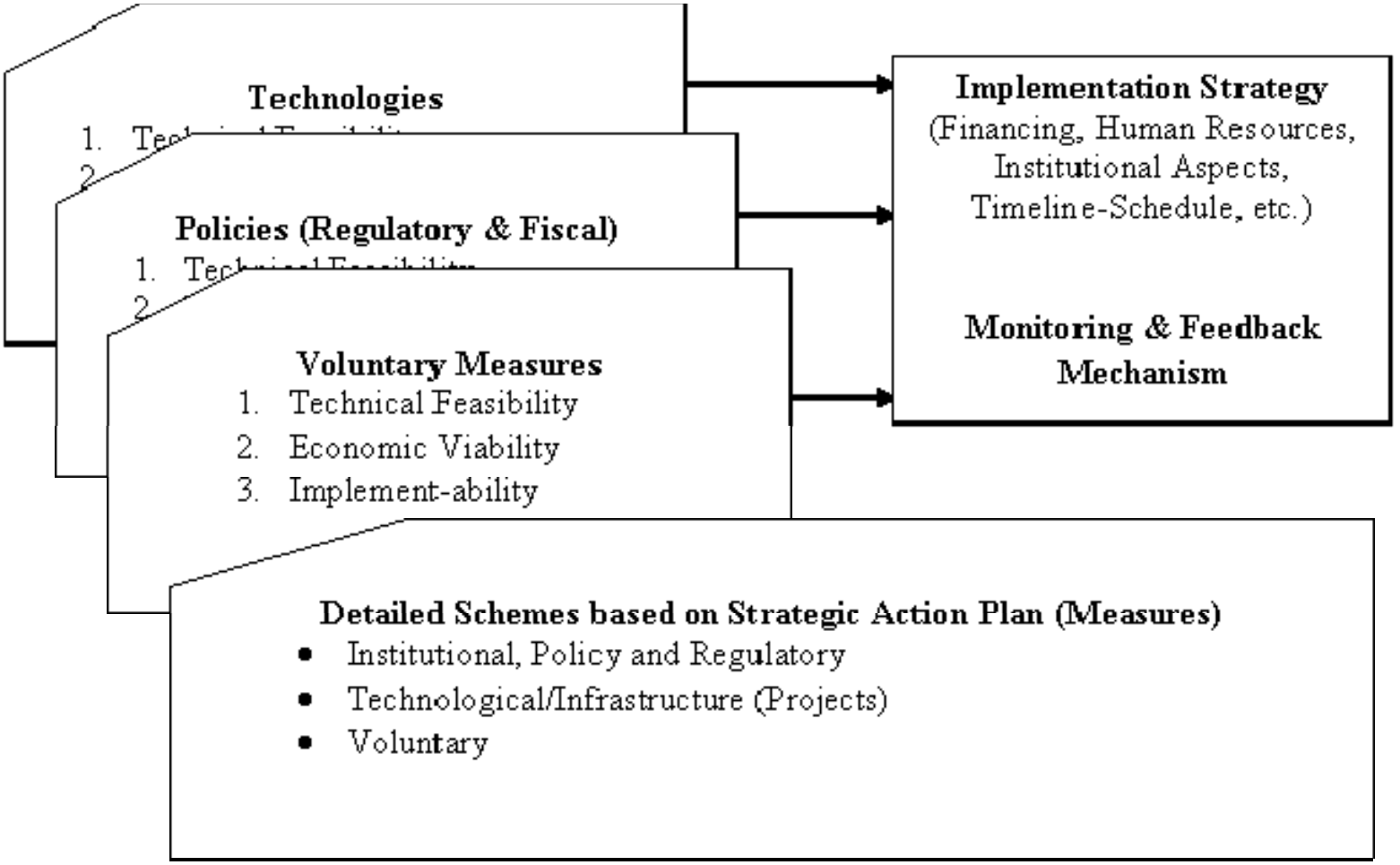
ISWM Plan



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Steps for Developing ISWM Plan

Steps	Status of Matale ISWM Plan
Collection of baseline data on waste characterization and quantification and to analyze future trends;	*Target:*
Collection of baseline data on prevailing management systems and to identify gaps there in;	*Target:*
Setting up the targets to be achieved through the ISWM System – targets are set for each operational level (generation, collection and transportation, sorting and material recovery, treatment and resource generation, and final disposal) and for coverage and efficiency of services, as well as for efficiency of efforts and management system;	*Target:*
Identification of the constraints – technical, socioeconomic and policy constraints – which should be kept in mind when designing the elements of an ISWM System;	*Target:*
Identification of issues of concerns of the stakeholders – financial, social, technical and environmental – which they consider as very important to be addressed while designing the ISWM System;	*Target:*
Designing the elements of the ISWM System - policies (regulatory, fiscal, etc.), technologies (basic equipment and operational strategies) and voluntary measures (awareness raising, self regulation, etc.) – and their technical feasibility, economic viability and implementability;	*Target:*
Developing an implementation strategy including financing strategy, human resources, institutional aspects, and timeline (schedule of implementation);	*Target:*
Developing a monitoring and feedback system for periodic feedback to improve the ISWM system and its implementation or to modify the targets	*Target:*
Developing detailed schemes based on strategic action plan (measures)	*Target:*

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Thank You…

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