AZERBAIJAN

National Solid Waste Management Sector Assessment

Faiq Sadigov – February 5th, 2013
In National Level SWM improvement activities started with Greater Baku area.

- new joint stock SWM company (Tamiz Shahar ASC – Clean City JSC);
- new waste-to-energy facility (capacity of 500 000 t/year of municipal wastes and 10 000 t/year medical wastes);
- new MRF (capacity of 200 000 t/year);
- upgraded Balakhani landfill (120 ha);
- Solid Waste Management Strategy for Greater Baku Area is ready.
Context

- **National Solid Waste Management Strategy does not exist.**

- **Solid Waste Management (SWM) has become a Government priority** — Environmental State Program issued by Presidential Decree (# 1697) in 2006.

- **A National Solid Municipal Waste Strategy is intended to be prepared in 2013** - the strategy will only cover solid municipal wastes. Other types of wastes will be included to another strategies, which is being prepared by relevant ministries.

- **As a first step a National Solid Waste Management Assessment is being undertaken** - the World Bank is the leading organization.
Objectives of the assessment

• Identify shortcomings in existing SWM system to be addressed;
• Recommendation on institutional arrangements;
• Recommendation on implementation of suitable integrated SWM program resulting in reasonable waste collection and disposal practices;
• Assist in defining future investment program;
• Effective and affordable level of service for all municipal solid waste generators throughout Azerbaijan;
• Close coordination with other ongoing solid waste management consultancies and initiatives in Azerbaijan.
Methodology

• Phase 1 – Baseline evaluation – data collection and analysis (September 2011 to February 2012)
  Data collection from 3 regions (one rural, one mixed, one highly urbanized/economically active) and 3 cities (small city, mid-size and large city) selected by MED and WB.

• Phase 2 – Recommendations for National strategy development and implementation (March 2012 to December 2012)
  Recommendations submitted to the Government and expected commence date for preparation of national strategy is mid of 2013.
Challenges in national level

• Unresolved policy issues continue to hamper sector modernization:
  - Modern SWM principles have yet to be put in place
  - Current institutional structure is highly fragmented
  - Sector financing insufficient

• Overall, low service levels and negative environmental impacts
NEED for SWM STRATEGY in AZ (I)

- Waste generation in AZ will double in less than 20 years, based on a conservative 3% GDP growth rate assumption.
- Achieving internationally accepted minimum sector standards will require large investments and a long-term strategy.

Waste Generation Projections in Azerbaijan (in tons)

- When generated waste will be double the current level.
NEED for SWM STRATEGY in AZ (2)

- System selection has significant implications for overall costs (capital and operating expenditure).
- Different scenarios and cost drivers have been developed to assess options: local or regional landfills; with or without transfer stations; mixed or separate collection.

System cost optimization (size vs. distance)
Preliminary SWM Investment Needs Estimates for Azerbaijan
(in AZN without VAT)
Scenarios analyzed

- **Scenario 1**: Ordinary waste collection and disposal at up to date sanitary landfills in each city/rayon

- **Scenario 2**: Dual waste collection with recycling and local disposal at a up to date sanitary landfill in each city/rayon

- **Scenario 3**: Ordinary waste collection and disposal at up to date regional sanitary landfills covering several cities/rayons

- **Scenario 4**: Ordinary waste collection, transfer station and disposal at up to date regional sanitary landfills covering several cities/rayons

- **Scenario 5**: Dual waste collection with recycling and regional sanitary landfills covering several cities and rayons
• **SWM sector reform** is a key Government priority in Azerbaijan, but will require **defining the ambition level** to be successful.

• Achieving **basic environmental standards** includes:
  - **expand collection services** to cover entire population
  - dispose of waste in **sanitary landfills and close wild dump sites**

• Even basic improvements to the current system will require **key policy decisions** for:
  - Establishing a **regulatory and institutional framework** with clear accountability structure
  - Leveraging economies of scale and a **sustainable financing structure** to maintain the system
  - Investing in continuous sector **capacity building** to improve technical operation and allow for learning and innovation
KEY BUILDING BLOCKS of SWM STRATEGY

Expand collection coverage and introduce sanitary disposal

Create POLICY FRAMEWORK, addressing legal, regulatory, institutional and financial issues

REGIONAL COOPERATION to establish affordable modern system

Clarify responsibilities for waste generators, service providers, planning and enforcement bodies

Sustainable Financing

Expand collection coverage and introduce sanitary disposal
FROM STRATEGY to ACTIONS

• Establish national institutional framework

• Introduce regional waste management systems anchored in the Regional Executive Powers, and gradually increase responsibilities for municipalities (communication and outreach, collection, supervision)

• Focus on collection and waste disposal improvements

• Introduce environmental control measures at existing uncontrolled dumps and selected new disposal sites

• Consider gradual introduction of waste separation and recycling

• Allocate budget for skills development and capacity building

• Roll-out public communication and outreach campaign