

WASTE AND WASTE MANAGEMENT

PROGRESS AND ACHEIVEMENTS

Policy measures for the prevention and minimization of hazardous wastes

1. At the international level, Mongolia joined “The Basel Convention on the Control of Trans-boundary Movement of Hazardous Wastes” in 1996, “Rotterdam Convention on the Prior Informed Consent Procedure for Certain Hazardous Chemicals and Pesticides in International Trade” in 2001 and “Stockholm Convention on Persistent Organic Pollutant” in 2004.
2. The “Law on prohibition of importing, transit and export of hazardous waste” was approved in 2000 and the “Law on household and industrial waste” in 2003.
3. In line with the international conventions on hazardous wastes, the Government of Mongolia approved the “The National Program on Waste Reduction” for 10 years in 2000 and has been implementing the program. It has planned to develop and implement strategy that consider revision of the national program and introduction of 3R principles (reduce, reuse and recycle) starting from 2010.
4. With an aim to improve the waste management, Mongolia developed the following regulations: “A rule on classification, collection, temporary storage, transportation, treatment of hazardous wastes” (2002); “Regulation and procedures on disposal and landfill of hazardous waste of business entities, and requirements on waste containers and waste disposal sites” (2006); “Methodology for calculating waste norms” (2006); “Payment calculation methodology for hazardous waste” (2006); “Classification and characteristics and hazard level of waste” with joint order No. 324/318/336 of Ministers for environment, health, and education, culture and science (2006); “Regulation on labeling hazardous waste” (2006); “Regulation on national reporting and inventory of hazardous waste” (2009)

Initiatives to treat, recycle, reuse and dispose of waste at its source of generation and regulatory mechanisms (Polluter-pays principle)

5. Since 2004, with the support from the Government of Japan, and JICA “The Solid Waste Master Plan of Ulaanbaatar” was developed, and as a result of the project “Improvement of Ulaanbaatar City Waste Management System” approximately 4 ha of area in Ulaanchuluut disposal point was cleaned land filled and restored with soil and planting. Also a new disposal site was created in an environmentally friendly way. And at the next stage, project will focus more on implementing 3R principle management at individual, households and business entity levels and promoting reduction of excess consumption by supporting products reuse practices based on certain economic incentives.
6. With an objective to create a nationwide network of small and medium scale waste recycling factories, the Bureau on Advanced Technology Support, in cooperation with private companies such as “San Orgiu” and “New Cycling” has installed plastic bag recycling facilities in Dornod, Tuv and Dundgobi aimags.
7. To reduce waste and improve waste management of Ulaanbaatar city, the following projects namely World Bank loan project “Public Services improvement of Ulaanbaatar city” grant project of Australian Government “Waste Composition study of Ulaanbaatar” in cooperation with the WHO and American “Cal Recovery” company; “Green Productivity Training” in cooperation with Asian

Productivity Organization have been implemented which promoted methodologies and technologies for waste management.

Treatment, reuse and recycling of hazardous waste and transforming it into useful thing

8. “Kornezit”, A Hungarian Company, winner of government organized international and national bidding, has carried out a technical and economic feasibility study on Establishing centralized treatment plant for hazardous waste

9. In total, more than 200 trucks are serving for waste transportation service in Ulaanbaatar. 10 types of 1568 waste bins, which produced in Russia, China, Korea and Mongolia, have been placed in city streets. A new system that provides on call service to transport classified waste from residents by packing it in bags in the building entrance and apartment is functioning. 2 factories to produce bags for food and household use are operating now in Ulaanbaatar.

10. Local initiatives to build waste treatment and disposal facilities at aimag centers next to industrial areas were supported by the government and donor funded projects. For example: San-Orgiu LLC at Darkhan town was granted funding to implement an initiative to recycle plastic bags and produce fence, street benches.

Environmentally friendly waste disposal and treatment

11. According to the Ulaanbaatar city Solid Waste Management Master Plan developed by JICA, Japanese specialists are assisting in the project “Improvement of Ulaanbaatar City Waste Management System” and planning to introduce 3R waste management principle, to establish central waste disposal site at Narangiin Enger and to improve the chain of waste collection and transportation facilities.

Census on hazardous waste production and its treatment/ disposal and contaminated sites

12. Ministry of Health, MNET and Ulaanbaatar City Municipality have been developed together a plan to establish a designated treatment plant for medical hazardous waste and in addition to this, they developed a Joint Strategic Plan for Medical Waste Management and the plan is now being realized.

Stopping illegal trans-boundary transportation of hazardous waste

13. As per the obligation of a party to the Basel convention, MNET organizes control and tracking trans-boundary transportation of hazardous waste together with the recipient country’s Ministry in charge for environment. An example is Glori International LLC had exported 3,000 ton lead acid battery disposal to Republic of Korea under the control of both countries’ ministries.

Policy on stopping, reducing, reusing and recycling waste

14. Annually 97, 5 thousand tons of waste is collected and transported from apartment buildings, *gher* district, families and organizations, economic entities and roads by public service companies to the central disposal site. According to the *Polluter-pay* principle, MNET submitted and approved the law “Prohibition of use and importing of some plastic bags” by the State Great *Khural* and it decided to restrict the import and use of plastic bags thinner than 0.025mm for household and packing purposes from January, 2010.

15. Kokusai Kogyo, a Japanese company has been providing waste management capacity building support in order to ensure the implementation of the “Law on Household and Industrial Waste” and to increase participation and competition among private sector in waste disposal and collection activities. “Ulaanbaatar Waste Service Fund” was established in 5 districts of Ulaanbaatar city. It is a system where waste payment of the residents collected into the fund and used for reimbursing the waste transportation costs of servicing companies based on the number of transportation routes. An integrated database for waste disposal is being created that will record the number of disposal transports by companies and other relevant information, to make

the waste collection and transportation services beneficial for both society and service providers.

Radioactive wastes and their environmentally sound management (safe storage, transportation and disposal of radioactive waste)

16. As there is no nuclear power station or any other industry that release radioactive waste in Mongolia, there was no incidence of direct radioactive waste. However, ashes produced from coal power plants and coal burning households and heat only boilers that use raw coal from certain mines have radioactive characteristics. To avoid negative impacts of these disposals to human and environment, thermal power plants use landfill to dispose their ash waste and carrying out biological restoration in around landfill sites.

CURRENT EMERGING ISSUES, CHALLENGES AND TRENDS

17. There are some constraints in improving techniques and technologies of city waste water treatment facility and facilities that treat waste water from tanneries and food factories, in clarifying the roles and participation of private sector and in introducing *Polluter-pays* market principles.

18. According WHO survey results, it was established that one citizen of a city produces 0,354-0,535 kg waste a day. 75% of total waste is collected by city waste maintenance organizations and 15% is transported by the organizations with their own trucks and 5-10% of waste is left without being transported.

19. Waste management reform is in its early stage of development since Mongolia's transition to market economy. The relevant legislative acts for this sector were started to be developed from 2000. But stakeholders' coordination mechanism is not perfect yet and some solid waste infrastructures are still under the state ownership. The Government has not fully reviewed and amended provisions to increase private sector participation in the relevant laws, regulations and programs and it still bears most of the responsibilities on its shoulders.

20. Currently, there are 103 wastewater treatment facilities. 41 of them are operating more or less normally and 35 malfunctioning because of financial and technical problems. Most of the 29 underground engineering pipes of total 877 km are being repaired step by step. However, it is far from completion and there is still needs to attract private sector investments. There are only eight biological treatment facilities functioning and they treat only 200 million m³ wastewater, annually. "Khargia" treatment facility was established in 1972 with a purpose to mechanically treat industrial waste water from tanneries and other industries. However, it has stopped functioning due to out-dated techniques and technologies. Ulaanbaatar municipality is planning to re-own releasing former private management and renovate the techniques and technologies. In spite of this, the municipality experiences difficulty with finding proper technical and technological solutions for renovation of this important treatment plant.

21. Residents of *gher* district dispose ashes and waste water directly in the streets, especially in winter time. Because of this bad habit, 60% of the waste is spread in streets of peri-urban area of Ulaanbaatar city. Therefore, to reduce such waste, there is a high demand to establish reliable private sector based waste collection system in *gher* district area in Ulaanbaatar.

22. Water and waste water issue is dealt by different ministries, and it is not clear distribution of responsibilities related to waste water treatment and reducing waste disposal in water and soil, the measures to be taken for improving waste water and toilet condition, improving sanitation infrastructure of tourist companies and decreasing environmental problem etc are left without solution.

23. In connection to the high rate of imported second hand transportation means and bicycles from abroad, environmental pollution is increasing a lot.

24. Mining companies and auto technical repair centers do not handle properly their used oil and technical devices, which cause a big spillage of waste. Currently recycling factories are in their early stage, and most of the recycling materials are collected by the initiatives from the private companies and exports to neighbouring countries.

25. The Governmental Action Plan does include waste disposal, treatment and landfill activities in the socio-economic development section. However a few aimags have public funding to dispose waste in environmentally friendly ways. There is no factory that possesses full recycling capacity for solid waste in Mongolia.

Potential ways for improvement

26. Solid waste traditionally was buried in the ground in Ulaanbaatar city and other aimags levels in a simple way. Although there are proposals on building of waste processing facilities, unfortunately they lack funding due to economic difficulties . Therefore it is a priority to attract donor funding in creating market responsibility system to reduce waste, in carrying out appropriate studies on waste recycling and processing in an environmentally friendly way and in introducing advanced techniques and technologies to produce energy based on solid waste.

27. Also it is needed to implement principles of sustainable consumption and production through reducing certain import products and their packages.

28. There is a need to shift current strategy reduction, recycling and reuse of waste to a strategy on minimization waste at its source in all sectors and establish a corporate social responsibility system on waste reduction.

29. Promote choosing green products and services options that do not produce waste, introduce green product and eco-labeling system, increase awareness of the public on reducing waste amount.

30. As dominant part of solid waste consists of ash, it is required to introduce technology on processing of ash and to promote ash minimization activities.

31. A feasibility study on establishing a centralized water supply and sewage system in gher districts was developed in the framework of Ulaanbaatar City Master Plan, and it is required to clarify responsibilities of public and private institutions and find funding resources. There is a need to conduct feasibility studies on introducing eco

friendly sanitation facilities to tourist camps and gher districts to reduce pollution and on producing bio-fertilizer

32. It is required to continue establishing landfill sites in urban areas and in connection with a policy on transition to waste classification system, it is required to build factories that recycle, reuse and dispose of solid waste.