

Wastewater Treatment Update TURKEY

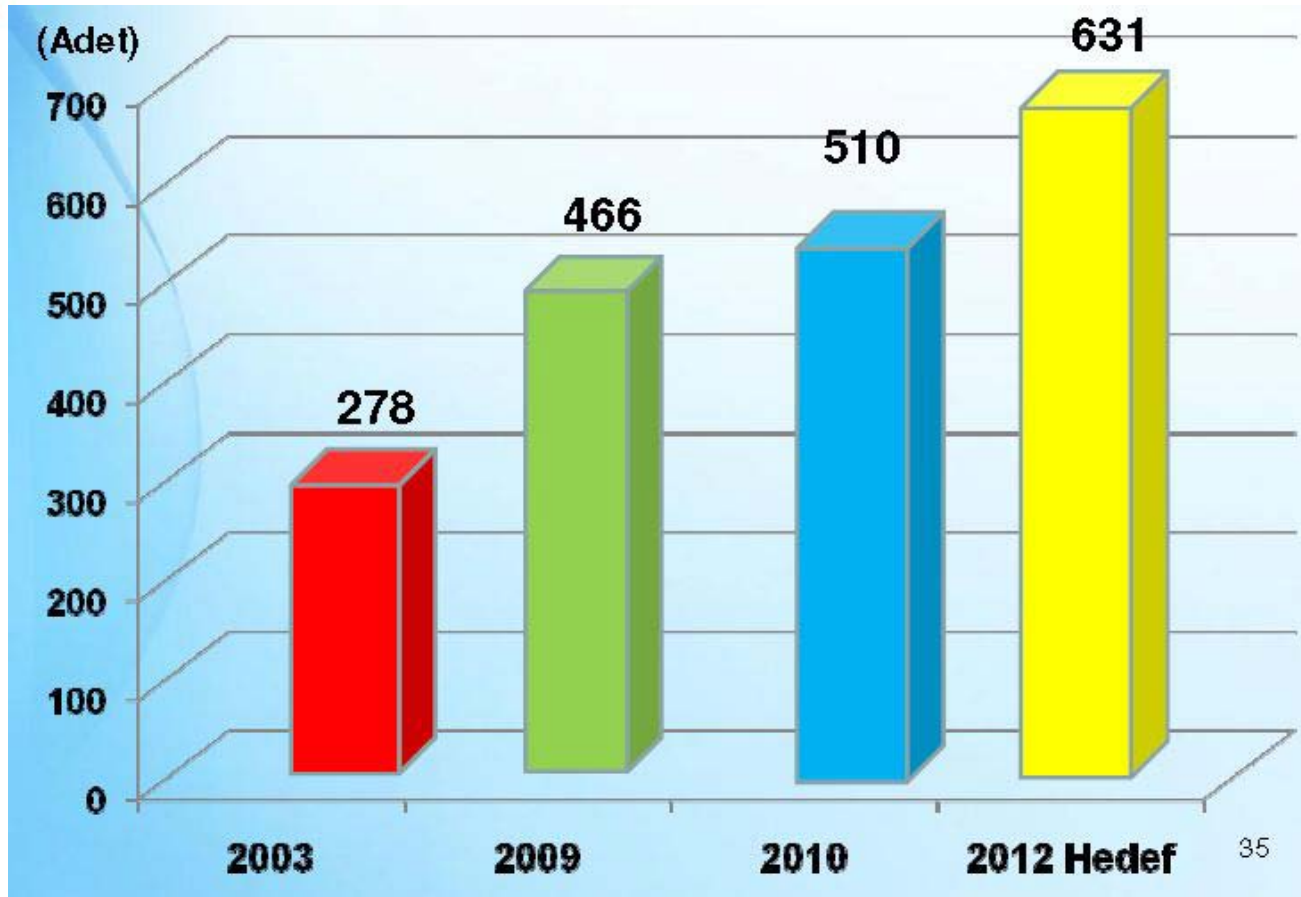
ERKAN KARISLI
GMI Municipal Wastewater Subcommittee Meeting
Singapore, 2-3 July 2012



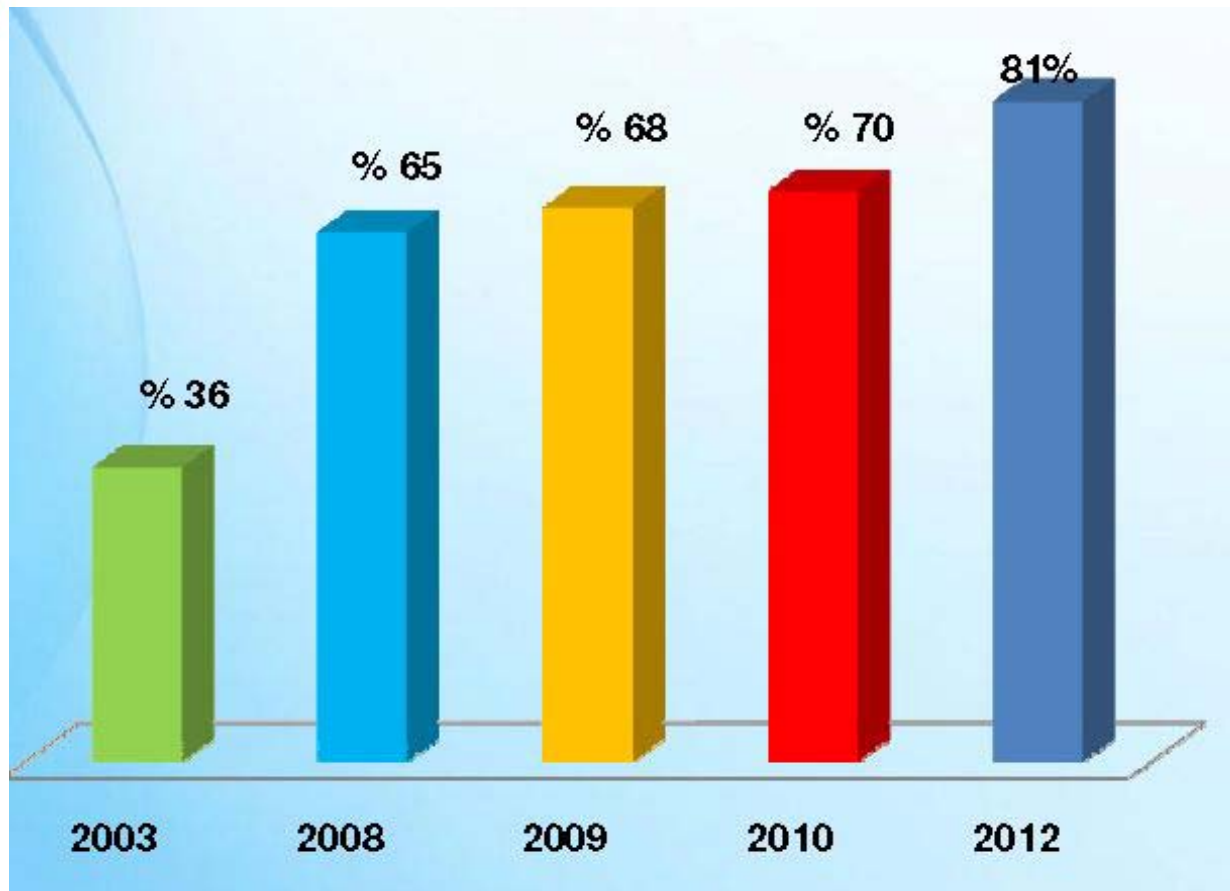
Wastewater Treatment

- Turkey, in general, uses aeration activated sludge tanks.
- However, different systems have been used in recent years. (sequent beatch reaktor, i.e.....)
- At the moment, there are 631 wastewater treatment plants active onside. New Wastewater Treatment Plants are under constant designs and construction for the future...

Number of Municipalities with THE WASTEWATER TREATMENT PLANTS



RATE OF (%) WASTEWATER TREATMENT FOR MUNICIPAL POPULATION



Methane Reduction, Recovery, and Use Initiatives

- Within the framework of Turkey's National Climate Change Plan is increasing efforts to produce energy from methane.
- There are **seven** methane-producing wastewater treatment plant in Turkiye. In the Last 10 years, the interest in this kind of energy sources is gradually growing in Turkiye.

ANKARA (Capital) WASTEWATER TREATMENT PLANT

- Population; 5 Million
- Capacity : 1.000.000 m³/day
- Biogas Power Station produces electricity by using biogas tanks,
- 1.65 MW gas engines, each with 2 pieces of approximately 80% of the plant's electricity needs are produced.
- 21 million kWh of electricity are produced per year.



Barriers/Challenges to Methane Reduction, Recovery, and Use

- Ministry of Environment, project and the construction of wastewater treatment plants provides technical and financial support
- Renewable energy sources are subsidized by government . the electrical energy produced via these energy sources are purchased by the government, i.e the produced energy is under governmental quarentee.
- Most of these treatment plants is between 50,000 to 150,000 people.

Our strategy on climate change for 2013-2023 years

- In our country the document for Climate Change Strategy has been prepared. According to a 10-year strategy, our policy is set up on national mitigation, technology, compliance, capacity. In accordance with Framework Convention on Climate Change sets a goal to contribute.
- Developed A Turkish National Climate Change Action Plan Project in 2011

Government programs related to wastewater and methane

- Some of the projects worked on in Turkey
 - *Irregular dump sites in Turkey control project
 - *Animal Wastes for Biogas Production Project
 - *Domestic / Municipal Sewage Sludge Management Project
 - *National Air Pollution Emission Development of a Project Management System
 - *Values of the National Emission Ceiling determination of the project
 - *to combat climate change Of Capacity Increase Project
 - *Turkey's National Climate Change Action Development of a Project Plan
 - *Impacts of Climate Change and Adaptation Increasing awareness of the Project
 - *Monitoring for Greenhouse Gas Emissions Mechanism Technical Assistance Project.
 - *Substances that Deplete the Ozone Layer disposal Project

Those made on climate change in Turkiye,

- Energy (energy efficiency, renewable energy ...)
- Industry (clean production technologies, ...)
- Transport (fuel quality, public transport ...)
- Waste (Landfill ...)
- Land Use and Forestry (afforestation ...)



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Thank you...