

ISRAEL: TALIA LANDFILL GAS RECOVERY PROJECT AND ELECTRICITY PRODUCTION

Kyoto Mechanism:	Clean Development Mechanism
Project Category (UNFCCC):	Waste Management
Location:	Kibbuz Menahamia
Emission Reductions purchased:	245,000 t CO _{2e}

The Talia landfill project consists of the construction of a landfill gas capture system combined with electricity production.

The Talia landfill site is located in the Jordan valley and was established in 1977 by 5 municipal authorities: city of Tiberias, the local authority of Beit-Shean valley, the local authority of Jordan valley, municipality of Migdal and Menahamia. By the end of 1999, the site was closed. Between 1977 and 1993 about 800,000 tons of municipal solid waste were deposited at Talia landfill and from 1994 to 1999 2.2 Mill. tons.

After closure, the site was covered with a layer of dirt. There was no other remedial action taken. The landfill is to be reopened and from 2009-2024 annually 300,000 t of municipal solid waste shall be dumped at the Talia landfill. This would lead to additional emissions of substantial amounts of methane in future.

The project will generate between 2007 till 2012 emission reductions of app. 245,000 tons CO_{2e}. The annual landfill gas capture is estimated conservatively around 7.6 Mio m³. The annual electricity production with two Jenbacher gas engines (1 MW each) will be around 16GWh. The electricity will be fed into the local grid. It is estimated that the plant will run for 21 years.

The project developer used Austrian GE Jenbacher gas engines for the project. Additionally an Austrian based consultant was working for the project.



Talia landfill



*Israeli-occupied with current status subject to the Israeli-Palestinian Interim Agreement – permanent status to be determined through further negotiation.