

ISTANBUL LANDFILL GAS TO ENERGY TURKEY

Turning waste into electricity in Turkey

The project captures landfill gas at two solid waste disposal sites close to Istanbul and uses it to generate clean electricity, which is supplied to the Turkish national grid. It involves the construction and operation of a 33 MW power plant in Kemberburgaz-Odayeri and a 14 MW power plant in Sile-Komurcuoda. As a result, the project enables the reduction of around 938,003 tonnes of carbon dioxide equivalents per year.



The project is an excellent example of the impressive economic, social and environmental benefits of implementing low-carbon urban development strategies.

Prior to the project, Municipal Solid Waste (MSW) from 14 million inhabitants of Istanbul was disposed at the uncovered landfill, allowing large quantities of the harmful greenhouse gas methane to escape directly into the atmosphere. This led to local air quality degradation and an increased risk of landfill fires in the adjoining developing urban space. Today, a landfill gas system collects the methane and uses it to generate electricity, thus mitigating greenhouse gas emissions and improving local air quality.

The project helps Turkey to build up know-how on comprehensive waste disposal management and establishes sustainable energy generation technologies that reduce the country's dependence on a fossil fuel heavy energy mix. Alongside the emission reduction benefits and an increased grid stability, the project contributes to sustainable development in the region. It creates permanent jobs for locals, offers training for employees and provides funding for local school libraries.

Gold Standard®
7 AFFORDABLE AND CLEAN ENERGY

200,000

MWh renewable energy generated per year

8 DECENT WORK AND ECONOMIC GROWTH

90+

Permanent jobs have been created for locals

11 SUSTAINABLE CITIES AND COMMUNITIES

COMMUNITIES

Know-how on low carbon urban development built up

13 CLIMATE ACTION

938,003

GHG emissions mitigated per year (tCO₂e)

PROJECT HIGHLIGHTS

For more information on the UN Sustainable Development Goals please visit: <http://www.un.org/sustainabledevelopment/sustainable-development-goals/>