



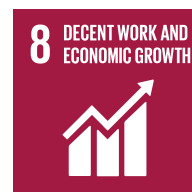
ZONGULDAK LANDFILL GAS TO ELECTRICITY PROJECT (VCS ID-4469)

Zonguldak Landfill Gas to Electricity Project) is located at Zonguldak Landfill Site in Sofular Neighborhood, Central District, Zonguldak Province in Türkiye. Greenhouse gas (GHG) emissions will be reduced by avoiding CO2 emissions from those fossil fuel-based power plants connected to the grid and by avoiding GHG emissions from releasing LFG into atmosphere at the landfill site

The facility has a capacity of 3.088 MWm / 3.002 MWe with two gas engines. The total installed capacity will be 4.539 MWm / 4.415 MWe in near future.

Prior to the implementation of the project, the landfill site did not have gas extraction and utilization systems installed, and the LFG was directly emitted to the atmosphere. The project collects and utilizes LFG generated by Zonguldak landfill for power generation. Therefore, the project drastically reduces methane emissions, and at the same time, electricity is generated from the collected gas. Electricity generated is provided to the grid and the facility utilizes electricity generated by the project instead of drawing electricity from the grid.

The project contributes significantly to three Sustainable Development Goals (SDGs):



SDG 7

The project transforms a previously unmanaged landfill into a biogas-to-energy facility, providing a clean and efficient solution for waste management. It also supplies renewable energy to the grid, reducing dependency on fossil fuels.

By utilizing methane in engine, total of 27,777 MWh renewable energy has been generated during the monitoring period.

SDG 8

By creating employment opportunities for the management, operation, and maintenance of the landfill and energy systems, the project supports local job creation. Additionally, by reducing Türkiye's energy dependency, it contributes to the nation's economic growth.

During the monitoring period, total of 22 workers has been employed in this monitoring period.

SDG 13

The project will mitigate greenhouse gas (GHG) emissions by capturing and utilizing methane, a potent GHG that contributes significantly to climate change. It is projected that the project will achieve an average annual emission reduction of approximately 68,125 tCO2eq. 186,998 tCO2eq emission reduction has been provided during the monitoring period.

about eos climate

EOS Climate is a premier sustainability consultancy firm dedicated to addressing and mitigating climate crisis with a strong commitment for a comprehensive climate strategy. EOS Climate maintains a focused approach towards effective environmental solutions. Built over 15 successful years, our services encompass a broad range of specialized areas including the development of Voluntary Carbon Market projects, strategizing companies' journeys towards net zero emissions, expert supply chain carbon management solutions, in-depth carbon footprint analysis, strategic offsetting, and all-inclusive sustainability reporting.

