### ADIYAMAN LANDFILL PLANT

# PROJECT INFORMATION NOTE & SUSTAINABLE DEVELOPMENT EVALUATION FORM

The energy demand of Türkiye is increasing rapidly due to industrialization, economical development and population growth. Since the local sources (natural gas, petroleum, etc.) required to generate electricity are inadequate, Türkiye is a foreign-dependent country in terms of energy.

Biogas Power Plants (BPPs) are preferred over thermal power plants using fossil fuels in meeting the rapidly increasing energy demand, since they allow the use of domestic resources, reduce the dependence on imported fuel, are economical and not causing greenhouse gas emissions.

**Adiyaman Landfill Plant** project is located in Merkez District of Adiyaman Province and it is a biogas power plant utilizing the methane produced by existing municipal solid wastes to generate electricity for the National grid of Türkiye. The total capacity of the project is 4.680 MW.



Figure 1. Adıyaman Landfill Plant

Since the installed capacity of the project is less than the threshold value stated in the Environmental Impact Assessment Regulation, the project was considered out of the scope of EIA. Necessary measures have been taken to minimize the effects that may arise during the construction and operation of the project.

The amount of electrical energy to be produced has been determined as approximately 35.100 GWh per year. This amount is at a level to meet the electricity needs of a settlement with a population of approximately 12,000.

**Tablo 1. Properties of the plant** 

	Installed	Electricity	Emission
	Capacity	Generation	Reduction
	(MW)	(MWh/yıl)	(tCO <sub>2</sub> )
Adıyaman Landfill Plant	4.680	35,100	198,117

According to the calculations based on the amount of electricity generation, the project activity will significantly contribute to the environment, air quality and especially the reduction of greenhouse gases that cause climate change by reducing approximately 198,117 tons of carbon dioxide  $(CO_2)$  per year due to the use of renewable resources.

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### SUSTAINABLE DEVELOPMENT EVALUATION FORM

	Feedback		
Sustainable Development Indicators	Positive	Negative	N/A
Air quality (Sulfur dioxide, nitrogen oxides, soot, etc.)			
Water quality and quantity (Access to water resources)			
Soil quality (Fight against erosion, soil pollution, etc.)			
Other pollution sources (noise, light, etc. pollution sources)			
Biodiversity (Effect on protected species)			
Employment Quality (Working conditions, job security)			
Fight Against Poverty (Impact on the standard of living, access to health services, etc.)			
Access to clean energy sources (Reliable, cheap energy, impact on energy imports)			
Personal and institutional capacity (Education, awareness raising)			
Contribution to employment and income level (New job opportunity, income increase)			
Balance of Payments (Reducing foreign dependency, increasing investment)			
Technology transfer and technological competence (Using and adapting new technologies, etc.)			

	Name Surname				
Evaluator Information	Phone				
	Organization/Title				
What are the aspects of the project that you find positive?					
What are the aspects of	the project that you fin	d negative?			
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#### **Communication Information:**

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