

Gaziantep, Turkey

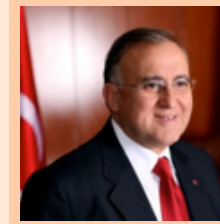
With a population of 1.7 million people, Gaziantep is one of the largest urban clusters in Europe and the 6th biggest city in Turkey. Its actions on reducing emissions and increasing local awareness about energy efficiency and renewable energy make it a role model to other mega-cities across the globe. Since developing a Climate Action Plan in 2010, Gaziantep has focused on decreasing emissions by insulating houses across the city and increasing access to public transport. The pre-existing train and tram infrastructure is of increasing importance to local commuters, while the purchase of 50 municipal buses and plans for a cycle highway will increase low-impact urban mobility in the city centre.



- **Low carbon vision**

Reduction of 20% GHG emissions as well as a reduction of 20% of energy consumption by 2023.

- **Area:** 6.819 km²
- **Population:** 1,799,558 (2013)
- **Population annual growth rate:** 4.25%
- **Final energy consumption in the community (GJ/year):** 13,932,000 GJ (3.87x10¹² watt hour)
- **GHG emissions from the community (tCO_{2e}/year):** 4,560,000 tCO_{2e}
- **Main economic activity:** Industry & services sector (electricity/gas supply, water supply, construction, transportation/storage, etc.)
- **Main priority sectors for Low Emission Urban Development:** Waste Management, Transport/Mobility, Housing, Water management, Services
- **Commitments:** 2011 Energy Efficiency in Buildings Law of the Municipal Public Works and Settlement, requiring that all new



“The Climate Change Action Plan is opening a new era for Gaziantep, which has huge population growth expectations. Gaziantep Metropolitan Municipality is planning to reduce greenhouse gas emissions by focusing on future development with an environmental-friendly approach. In order to achieve the Municipality's main public policy and to redefine its proposals, a re-organization is applied by combining the city's major areas of action with the energy-climate approach, analyzing GHG reduction, considering climate change to ensure compliance with the desired target. We had the chance to share our experience in 2010 Cancun, Mexico and Rio+20 in 2012 and continue with sustainable development in our City”.

Dr. Asım Güzelbey, Lord Mayor



buildings have an energy certificate that attests adequate energy performance above a set threshold.

- **Actions:**

- Analysis:
 - Gaziantep used the Tool for Rapid Assessment for City Energy (TRACE), which supported a quick diagnosis of inefficient energy performance across the city. It offered a range of potential solutions with implementation guidance and case studies. Gaziantep followed up accordingly (see 'actions' below), adopting a sectorial approach (residential, commercial, industrial, transportation, etc.) covering the entire cadastral perimeter of Gaziantep Municipality.
- Management of Urban Renewal:
 - Move to energy efficiency in the housing sector
 - Substitution of coal with gas for housing and services
 - Tertiary buildings rehabilitation with a focus on public buildings
 - Increasing the quality of public lighting with energy efficient appliance
- Planning for Urban Sprawl:
 - Encourage collective heating and cooling systems
 - Using the existing railway line for the daily travels to industrial zones
 - Development of alternative soft modes
 - Promoting the purchase of efficient vehicles
 - Reducing water consumption in general and for public buildings
 - Reducing water losses and energy saving in water management
 - Improved energy efficiency of sewage water treatment plant
 - Sustainable waste management
 - Integration of high speed train line to Aleppo project into the transport plan of the city
- Indirect Interventions:
 - Raising awareness and informing the public about energy efficiency and renewable sources
 - Creation of energy information points
 - Support the best available technologies
 - Creation of a Local Energy Agency for the service sector
 - Sustainable airport project
 - Promote local energy efficiency and renewable energy enterprises
 - Develop sustainability in the Organized Industrial Zone (OIZ)
 - Reinforcement of energy efficiency of methane recovery by landfill contractors (leachate purification)
- EU-GUGLE project: Sustainable renovation models for smarter cities to demonstrate the feasibility of nearly-zero energy building and renovation models easily transposable to other municipalities. Goal is 40-80% primary energy savings per pilot district and increasing the share of RE by 25%.

