



# MIYAKOJIMA

Population	Area	Mid-Term Reduction Goal	Long-Term Reduction Goal	Base Year
55,000	205 km <sup>2</sup>	30-40% (2030)	70-80% (2050)	2003

## Energy from Sugar Cane Produced Locally

### About Miyakojima

Part of Okinawa Prefecture, Miyakojima is a tourist destination visited by more than 400,000 people annually. Situated on an elevated coral reef and surrounded by water on all sides, the city has a low and flat topography. Sugarcane, the local natural resource, is exploited to the utmost extent in order to create a self-sufficient energy supply system.

### Self-Sufficient Energy Through Sugarcane

#### Bio-Ethanol from Molasses

Sugarcane is Miyakojima's chief crop and the molasses from sugarcane is used to manufacture bio-ethanol. Sugarcane production is increased through methods like selective breeding to increase the supply available for conversion into fuel. The results is a reduction in gasoline consumption on the island.

#### Energy from Biomass

Power generation facilities on the island dependent on fossil fuels are being converted into a biomass generation system that uses bagasse, the byproduct of sugarcane production, as its source, which reduces emissions and guarantees a steady energy supply.



### CO2 Free Transportation

#### Clean Cars Running On Clean Energy

Together with making official vehicles either electric or bio-ethanol-based, the energy used by the cars themselves will also be generated from renewable sources like biomass, solar, or wind. The long-term goal is a transportation sector without any CO<sub>2</sub> emissions.

#### Renewable Energy Storage

To ensure a stable supply of energy for fueling cars, a system will be installed to store the renewable energy generated from biomass, solar, and wind power.

### Using Solar and Community Energy

#### Sunshine Heating and Cooling

The civilian sector will take advantage of the abundant sunshine of the southern region to transition on a large scale to energy-efficient air conditioning and hot-water heating powered by solar heat.

#### Eco-Networking

The Miyakojima Eco-Model City Association allows for networking and the strengthening of cooperation with and between the eco-activities

