

# Project profile

## City of Little Rock

### Little Rock, Arkansas



## Converting landfill methane gas to energy

Successful municipal projects are made even stronger through the leadership of elected and appointed officials, and that's certainly been the case in Little Rock. The mayor and city manager worked together to develop a public-private partnership with Johnson Controls, Inc. to construct a methane gas collection, compression and transmission system at the city landfill. Johnson Controls also helped negotiate a utility purchasing agreement between the city and a local manufacturer who is purchasing the landfill gas. The result: taxpayer dollars saved and a reduction in greenhouse gas emissions.

### Facing EPA deadlines

Under the Clean Air Act, the U.S. Environmental Protection Agency requires landfill owners to collect and combust landfill gases when they reach a certain capacity. To comply, Little Rock could have invested in gas collection equipment to just burn off the gas. But city leaders decided on an environmentally friendly approach – a system to collect the methane and sell it to power a production facility at a nearby company.

Johnson Controls provided its expertise so that the city didn't have to get into the energy business, and enabled the city to finance the costs of developing a methane collection and two-mile transmission pipeline over a period of years. The city is contracting with Johnson Controls to provide development, design, engineering, construction, monitoring, operations and maintenance, required reporting, billing data collection, and invoice generation for landfill gas sales.

It is expected that the costs incurred by the city to collect the landfill gas offset by selling gas to a local chemical company. The company is purchasing the gas at a lower price than natural gas, with an assured rate that provides a more stable manufacturing cost structure and allows the company to be more competitive in a volatile marketplace.

### Public and private benefits

By eliminating methane gas from the atmosphere, this project aligned with the city's focus on providing a positive environmental impact. Additionally, it is promoting a ready market for renewable energy, showing that helping the environment and economic development are compatible goals.