

OTHER ADA COUNTY  
INITIATIVES TO PROMOTE  
ENERGY CONSERVATION  
AND SUSTAINABLE  
CONSTRUCTION

1. 2004 and 2005 ENERGY STARs for the Ada County Courthouse and Administration Building
2. 2005 LEED Silver Certification for the Ada County Courthouse and Administration Building
3. LEED certification (pending) for Development Services remodel
4. LEED certification (pending) for Phase II of the Barber Park Improvement Project
5. Green Roof on new Raft Rental and Administration Building in Barber Park
6. LEED design and construction of new Weed, Pest and Mosquito Abatement Facility
7. Building Commissioning on all projects over 10,000 square feet of occupied space
8. Construction Waste Management program for all construction projects
9. Storage and Collection of Recyclables at all major facilities

WHAT ELSE SHOULD I  
KNOW?

For more information about Ada County's energy plans, go to [www.adaweb.net/](http://www.adaweb.net/) and click on Operations, or contact our Energy Specialist, Selena O'Neal, at (208) 287-7100.

Ada County  
Solid Waste Management  
10300 N Seaman's Gulch Road  
Boise, ID 83703  
Phone (208) 577-4725



Updated 1/5/2006

**ADA COUNTY  
LANDFILL  
GAS-TO-  
ENERGY**

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**GREEN POWER  
PROJECT**

**TO BE DEVELOPED AND  
CONSTRUCTED 2006**

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# WHAT IS THE LANDFILL GAS-TO-ENERGY PROJECT?

The Board of Ada County Commissioners and G2 Energy LLC have agreed to develop a landfill gas to energy (LFGTE) project at the Hidden Hollow Landfill in Boise, Idaho. Landfill gas is the natural by-product of the decomposition of solid waste in landfills and is comprised primarily of carbon dioxide and methane.

Currently, the landfill gas is collected and burned off in an enclosed flare. Ada County will now sell the gas to G2 Energy as fuel for specially designed landfill gas engines and the flare will burn only useless condensate. Under the agreement, G2 Energy will purchase the landfill methane gas from Ada County, use it to power two Caterpillar engines situated at the landfill, and then sell the electricity generated to Idaho Power.

This project joins a growing list of LFGTE projects around the country. The US Environmental Protection Agency (EPA) encourages the use of landfill methane as an energy source in order to keep the methane out of the atmosphere. It promotes the use of landfill gas as a renewable, green energy source. EPA's Landfill Methane Outreach Program (LMOP) tracks LFGTE projects nationwide which, to date, have prevented the release of 18 million metric tons of carbon equivalent. This is equivalent to taking 14.5 million cars off of US roads.

# PROJECT SCOPE AND BENEFITS

The project consists of installing two (2) Caterpillar 1.6 MW engines and inter-connecting with the existing electric grid. Site development begins January 3rd, 2006 and construction should take about 6 months to complete. G2 Energy will fund the entire project and there will be no cost to Ada County taxpayers. The facility will generate about as much energy needed to power 2,400 average residential homes.

The total annual environmental benefits for an electricity generation project this size (approximately 3 MW) are equal to removing emissions from approximately 25,000 vehicles or planting about 36,000 acres of forest. Preventing emissions of methane through the development of LFGTE projects, helps counties, businesses, energy providers, and communities protect the environment and build a sustainable future.

# TEAM MEMBERS

## ***Board of Ada County Commissioners:***

Rick Yzaguirre, Chairman  
Judy Peavey-Derr  
Fred Tilman

## ***General Counsel:***

Ted Argyle, Ada County Prosecutor

## ***Solid Waste Management Department:***

Dave Neal, Director

## ***Operations Department:***

Dave Logan, Director  
Selena O'Neal, Energy Specialist

## ***General Contractor:***

# G2 Energy Hidden Hollow, LLC WHY LANDFILL GAS?

Municipal solid waste landfills are the largest human-generated source of methane emissions in the United States. Given that all landfills generate methane, it makes sense to use the gas for the beneficial purpose of making energy rather than emitting it to the atmosphere. Methane is a very potent greenhouse gas that is a key contributor to global climate change (over 21 times stronger than CO<sub>2</sub>). Methane also has a short atmospheric life of 10 years. Because methane is both potent and short-lived, reducing methane emissions from MSW landfills is one of the best ways to achieve a near-term beneficial impact in mitigating global climate change.

Landfill-gas-to-energy embodies the ideal solution for an environmental problem. It turns a nuisance waste into a product with a practical use and economic value. G2 Energy uses state-of-the-art Caterpillar equipment exclusively. According to G2, the operating performance of this equipment has been exceptional. Key to the success of these installations is the ability of these engines to operate virtually full-time with limited maintenance required. Caterpillar generators have been field tested in hundreds of installation over several years – in many countries.

**For more information,  
call Ada County's Energy  
Specialist, Selena O'Neal,  
(208) 287-7100.**