

# ADA COUNTY FIVE-YEAR ACTION PLAN

# 3/27/2013

# for Energy Conservation and Resource Use

Produced by the Ada County Operations Department, <u>www.adaweb.net/Operations</u>



Barber Dam Spillway

# Ada County Five-Year Action Plan

# FOR ENERGY CONSERVATION AND RESOURCE USE

It's our commitment to incorporate "sustainability" into the daily operations of Ada County by proactively identifying and implementing methods to improve building efficiency, control utility costs, reduce waste, and conserve natural resources.

Ada County demonstrates to employees and the community that its buildings are operated in a cost-effective manner, saving resources and tax dollars. Management and staff work together to accurately measure energy efficiency and develop a phased approach for efficiency implementation.

# GOALS AND OBJECTIVES

The primary goal is to maintain a dynamic five-year plan for identifying cost-effective and economically sustainable energy and resource efficiency priorities for all Ada County facilities.

The objectives established by the Energy Plan Partnership benefit all citizens of Ada County. These priorities should meet the needs of County citizens, County Commissioners, Elected Officials, management, maintenance staff, and building occupants.

- Make County facilities as energy and resource efficient as reasonably possible.
- Make County buildings comfortable for staff and citizens.
- Identify building operation and efficiency improvements that require action.
- Incorporate building commissioning efforts into construction projects.
- Control the costs of utilities for long and short term.
- Utilize energy savings for other building and County purposes.
- Educate facility staff about building systems, energy efficient operations, maintenance principles and practices.
- Implement and promote County-wide recycling projects.
- Protect the environment through the proper disposal of waste.
- Educate County employees to make good energy and resource decisions.
- Promote and expand the partnership.

# Potential barriers to effective program implementation include:

- Identification of strategies that are not supported by the County staff who are key to their successful implementation.
- Appropriation of resources, staff, partners, and dollars, to produce effective and timely implementation of measures.

# ORGANIZATION AND RESPONSIBILITIES

The partnership is supported from the top down beginning with the Board of Ada County Commissioners. Financial support comes through the established County budgetary process. The continuing planning process is designed to bring on-going support from partners and other stakeholders as they are identified.

#### **Director of Operations**

The Director of Operations is the lead for the County Partnership. The Director's role is to provide the focus, leadership, staff and monetary resources that will support the development and implementation of a successful program.

# **Energy Specialist**

The Ada County Energy Specialist reports to the Director of Operations and is the lead for updating and implementing the County's action plan. Responsibilities also include:

- Maintaining utility management software and databases.
- Tracking utility costs and rate changes for budgeting purposes.
- Recommending operation and maintenance, resource, and efficiency changes.
- Providing measurement and verification reports for retrofit projects.
- Coordinating project and data requirements for LEED certification.
- Submitting applications and support documentation for utility incentives.
- Tracking revenue from green power projects.

# **Building Maintenance and Custodial Staff**

County building maintenance and custodial personnel responsible for carrying out the day-to-day operation and maintenance activities and are involved in the development and implementation of planned activities which can produce significant cost savings.

# **Building Occupants**

Each building occupant is important to the program as well, though not specifically listed as a partner. Their behavior, such as turning off unused lights and equipment etc., can reduce building energy use by 10%, a significant contribution to County expenditure reduction.

# PLAN PARTNERS

The Partnership includes service and business organizations within the community that provide annual input into the plan and its priorities. As members of the Ada County partnership, these organizations may provide program recommendations, planning resources, technical support, and services that are both in-kind or for pay. They are recognized as professional organizations that have an investment in the community.

Partners are "challenged" to actively participate in the creation and implementation of Ada County's fiveyear energy conservation and resource use action plan. Partners are specifically recruited and selected to bring their particular expertise and experience to the program. Each partner is requested or challenged to assist Ada County in determining both short and long range goals and objectives that can be accomplished.

#### Ada County Staff

Bob Batista Dave Case **Rick Emerson** Dolly Hall Ted Hutchinson Bruce Krisko Meg Leatherman Dave Logan Larry Maneely Selena O'Neal Angie Parra Leslie Penney **Bob Perkins** Larry Reiner John Traylor Jim Tibbs Jan Wallace Darby Weston Brian Wilbur Scott Williams **Rick Yzaguirre** 

#### **Business Partners**

Greg Allen Ken Baker Steve Benner Doug Cooper Karen Danley **Byron Defenbach** Dave Fisher Jon Gunnerson Matt Hightree Geoff Johnson Paul Johnson **Rachele Klein** Bill Kissinger **Richard Llewellyn** Sherry McKibben Kristi Pardue Bruce Poe Jennifer Pope Mark Snider Lew Staley Kevin VanDenWymelenberg Scott Wendell **Brian Wewers** Mike Wisdom Paul Woods

#### **Position / Department**

Director of Recreation and Event Services Board of Ada County Commissioners **Facility Maintenance Superintendent Operations, Office Manager** Solid Waste Management, Landfill Manager **Operations, Construction Manager Director of Development Services** Director of Operations and Solid Waste **BOCC Chief of Staff Operations, Energy Specialist Development Services, County Engineer** Director of Information Technology Director of Purchasina Trial Court Administrator **Director of Indigent Services** Board of Ada County Commissioners **Director of Juvenile Court Services** Acting Director of Paramedics Director of Weed, Pest, and Mosquito Abatement **Deputy Director of Operations** Board of Ada County Commissioners

#### Company / Organization

**Hummel Architects** K energy Consultant **CSHQA** McKibben+Cooper Architects Consultant Intermountain Gas Company **Republic Services** City of Boise, Public Works City of Boise, Public Works **Eidam & Associates** CH2M Hill **Republic Services** ATS Inland NW Consultant Sustainable Idaho Idaho Power Company **Modus Architecture** Idaho Office of Energy Resources United Water Fortistar Methane Group Integrated Design Lab Lombard Conrad Architects Idaho Power Company **Engineering Inc** City of Boise

# ANNUAL STRATEGIC PLAN

The Partnership produces an annual strategic plan that outlines goals and specific tasks to be accomplished during each fiscal year. This plan is presented to the Board of Ada County Commissioners and Elected Officials at a pre-determined public meeting progress and also updates the partners on the accomplishments and successes of the previous year's plan. The Partners may use portions of the plan or the information contained in it for newsletters and publications to promote the program.

#### **County Facilities**

Ada County owns and operates diverse portfolio of buildings to provide a variety of services to the general public, along with office space for its employees. Each facility is continually monitored and assessed, on an individual basis, to identify ways to make them more energy efficient.

#### Major County facilities:

- Courthouse and Administration Building
- Public Safety Building and Field Services
- ✤ Jail, Medical Unit, and Work Release Center
- Juvenile Court Services and Detention Facility
- Barber Park Administration Building and Raft Rental
- Barber Park Event Center
- Expo Idaho
- Solid Waste Management Landfill Office and Hazardous Waste Building
- Weed, Pest, and Mosquito Abatement Facility
- Morris Hill Morgue and Storage Facility
- The Justice Center / FACES
- Benjamin Bldg: Elections, Vehicle Licensing, Adult Drug Court, Juvenile Programs
- Paramedics Administration and Training Facility
- Paramedics Emergency Medical Stations

# **Energy Tracking and Reporting**

Monthly utility billing information is compiled in Utility Manager software for electricity, natural gas, water, sewer, and trash to establish a baseline of energy use for each buildings. This data is used to identify and prioritize buildings with high utility costs, determine potential energy-saving measures, evaluate future energy and resource use and savings, and assess post-improvement performance of retrofitted buildings.

# **Energy Use Index**

An Energy Use Index has been developed to measure a facility's energy performance on a per square foot basis. It is used to establish baseline energy consumption and quantify subsequent savings from ECMs. See page 9 for more information and to view the County's current EUI chart.

# **Building Assessments**

Building assessments are conducted on the County buildings identified in the plan using a variety of resources. Assessments identify specific building-by-building O&M's for maintenance staff implementation. Priority is based on analysis of utility data, County needs, and financial capabilities.

#### Selection criteria for building assessments:

- > The potential for building energy savings
- An estimate of time and dollars needed to perform the measures
- > The availability of time and resources to devote to the project
- > The potential of implementing effective ECMs

Assessments include an in-depth analysis of the whole building including the building envelope, lighting and control systems, engineering analysis of mechanical systems such as air flows and equipment operating efficiencies, metered water use and sewer billing, and trash records.

#### Assessment reports include:

- Recommended ECM's
- An estimated cost for ECM implementation and calculation of ECM simple payback
- Life Cycle Costing optimization where appropriate
- Identification of existing operating efficiencies
- Identification of funding options for measure implementation
- Identification of Operations & Maintenance's (O & M's)
- Recommendation to reduce water consumption and sewer bills
- Recommendation to reduce trash generation volumes

Under the direction of the Energy Specialist, a contract engineer may lead the assessment team along with County staff. An assessment report will be prepared with recommendations for ECM actions for the County's consideration. Life cycle cost analysis will be utilized for ECM assessment to facilitate Ada County in optimizing their return on investment. A 20% IRR (internal rate of return) will be programmed for each project.

#### **Building Retrofits**

Building retrofits can generate savings that enable the County to purchase new equipment, add new employees, or expand existing programs. In most circumstances, when retrofit objectives are identified in advance, the objectives can be incorporated and completed with other remodeling projects and building additions.

Retrofit projects designed to increase the efficiency of building systems will positively affect concerns that are important to Ada County officials. Concerns such as:

- Building safety
- Comfort and productivity of occupants
- Increased employee productivity
- Reductions in system failures
- Expansion of anticipated life-cycle or intended use
- Reduced maintenance and utility costs

# FACILITY AWARDS AND RECOGNITION

Ada County seeks opportunities to raise public awareness about its energy efficient operations and high performance facilities through various awards and certification programs.

# **ENERGY STAR Awards**

Portfolio Manager is a tool Ada County uses to track energy usage and achieve an ENERGY STAR rating.

82

2004	Courthouse & Administration Building
2005	Courthouse & Administration Building
2006-2008	Courthouse & Administration Building
2009-2010	Courthouse & Administration Building
2011	Courthouse & Administration Building
2012	Courthouse & Administration Building

# LEED<sup>®</sup> Certifications

Ada County is a member of the US Green Building Council and uses the Leadership in Energy and Efficiency Design to build green, high performance buildings.

EB - Existing Building, NC - New Construction, CI - Commercial Interior

# May in Motion Alternative Transportation Awards

Ada County partners with the Ada County Highway District and Valley Regional Transit to provide employees with alternatives to driving to work. May in Motion is an annual event that allows organizations to become Alternative Transportation Champions and gain recognition for their employee participation and transportation benefits.

2007	Alternative Transportation Champion Award	Bronze
2008-2012	Alternative Transportation Champion Award	Silver

# **Other Achievements**

 2004 EnviroGuard Award from the City of Boise
 2008 Award of Citation in Architecture from The American Institute of Architects, to McKibben+Cooper Architects for the Barber Park Administration and Raft Rental buildings
 2008 Best Green Building Project in Idaho under \$5 million from The Intermountain Contractors, to CSHQA Architects for the Civic Plaza TI project
 2010 ASHRAE High Performing Buildings Magazine, Summer edition, 10-page article on Courthouse
 2012 NACO Energy Efficient County Buildings study



ENFRGY ST



This page intentionally blank

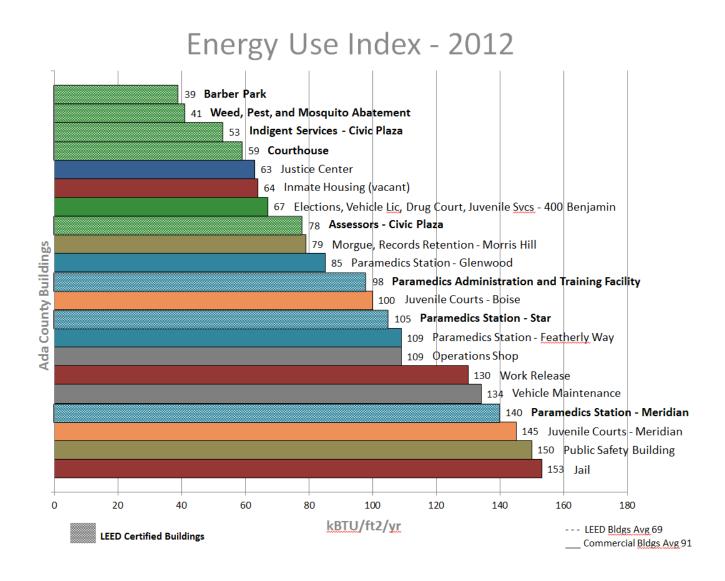
# ENERGY USE INDEX (EUI)

#### What is an EUI?

An Energy Use Index is a basic measure of a facility's energy performance on a per square foot basis. It is typically measured as kBTUs of energy used annually per square foot. A BTU, British Thermal Unit, is a basic measure of heat value (energy content) of fuels. All energy consumed by a particular building; i.e., electricity, natural gas, etc., is converted to thousand BTU's, added together, and divided by the total square footage.

Certain building types will always use more energy than others. For example, a park building uses relatively little energy compared to a paramedic station. Similarly, a small office building that supports 80 workers will use less energy than a jail facility that supports hundreds of people on a continual basis 24/7.

Below is a current EUI chart for most of Ada County's buildings. Generally, a low EUI signifies good energy performance.



# UTILITY INCENTIVES

Efficiency programs not only save the County money, but also defer the need to build new power plants and prevent the utility from acquiring power from more expensive sources to meet growing customer demand. Ada County takes advantage of Idaho Power's incentive programs in any new or remodel building project.

Extension Office Bldg         Jail Dorms 2 & 4         400 Benjamin         FY 09-10         Paramedics Admin, 370 Benjamin         Paramedics Shop, 370 Benjamin         Expo Idaho RV Park         Expo Idaho RV Park         Paramedics Station, Linder         FY 10-11         Public Safety Building Complex         Expo Idaho - Expo Building	\$4,490 \$2,000 \$455 <b>\$12,613</b> \$7,865 \$3,525 \$265 \$577 \$897 <b>\$13,129</b> \$23,760 \$10,000	Lighting, AC AC AC Vindows in SE corner, 2nd floor Lighting, AC, Roofing, Windows, Controls Lighting, AC, Roofing, Windows HVAC for the Laundry/Shower Bldg Lighting for the Laundry/Shower Bldg Lighting, AC, Roofing Lighting, AC, Roofing HVAC Controls	
Extension Office Bldg Jail Dorms 2 & 4 400 Benjamin FY 09-10 Paramedics Admin, 370 Benjamin Paramedics Shop, 370 Benjamin Expo Idaho RV Park Expo Idaho RV Park Paramedics Station, Linder FY 10-11	\$2,000 \$455 <b>\$12,613</b> \$7,865 \$3,525 \$265 \$577 \$897 <b>\$13,129</b>	AC Windows in SE corner, 2nd floor Lighting, AC, Roofing, Windows, Controls Lighting, AC, Roofing, Windows HVAC for the Laundry/Shower Bldg Lighting for the Laundry/Shower Bldg Lighting, AC, Roofing	
Extension Office Bldg Jail Dorms 2 & 4 400 Benjamin FY 09-10 Paramedics Admin, 370 Benjamin Paramedics Shop, 370 Benjamin Expo Idaho RV Park Expo Idaho RV Park Paramedics Station, Linder	\$2,000 \$455 <b>\$12,613</b> \$7,865 \$3,525 \$265 \$577 \$897	AC Windows in SE corner, 2nd floor Lighting, AC, Roofing, Windows, Controls Lighting, AC, Roofing, Windows HVAC for the Laundry/Shower Bldg Lighting for the Laundry/Shower Bldg	
Extension Office BldgJail Dorms 2 & 4400 BenjaminFY 09-10Paramedics Admin, 370 BenjaminParamedics Shop, 370 BenjaminExpo Idaho RV ParkExpo Idaho RV Park	\$2,000 \$455 <b>\$12,613</b> \$7,865 \$3,525 \$265 \$577	AC Windows in SE corner, 2nd floor Lighting, AC, Roofing, Windows, Controls Lighting, AC, Roofing, Windows HVAC for the Laundry/Shower Bldg Lighting for the Laundry/Shower Bldg	
Extension Office Bldg Jail Dorms 2 & 4 400 Benjamin FY 09-10 Paramedics Admin, 370 Benjamin Paramedics Shop, 370 Benjamin Expo Idaho RV Park	\$2,000 \$455 <b>\$12,613</b> \$7,865 \$3,525 \$265	AC Windows in SE corner, 2nd floor Lighting, AC, Roofing, Windows, Controls Lighting, AC, Roofing, Windows HVAC for the Laundry/Shower Bldg	
Extension Office Bldg Jail Dorms 2 & 4 400 Benjamin FY 09-10 Paramedics Admin, 370 Benjamin Paramedics Shop, 370 Benjamin	\$2,000 \$455 <b>\$12,613</b> \$7,865 \$3,525	AC Windows in SE corner, 2nd floor Lighting, AC, Roofing, Windows, Controls Lighting, AC, Roofing, Windows	
Extension Office Bldg Jail Dorms 2 & 4 400 Benjamin FY 09-10 Paramedics Admin, 370 Benjamin	\$2,000 \$455 <b>\$12,613</b> \$7,865	AC Windows in SE corner, 2nd floor Lighting, AC, Roofing, Windows, Controls	
Extension Office Bldg Jail Dorms 2 & 4 400 Benjamin FY 09-10	\$2,000 \$455 <b>\$12,613</b>	AC Windows in SE corner, 2nd floor	
Extension Office Bldg Jail Dorms 2 & 4 400 Benjamin	\$2,000 \$455	AC	
Extension Office Bldg Jail Dorms 2 & 4	\$2,000	AC	
Extension Office Bldg			
	-		
Jail Dorm 5	\$1,000	AC	
Benjamin Phase 3	\$4,668	Lighting, AC, Roofing	
FY 08-09	\$18,982		
Paramedics Station, Star	\$2,076	Lighting, AC, Roofing	
Juvenile West, Meridian	\$705	13 SEER AC w/ programmable Tstat	
Benjamin Phase 2*	\$12,601	Lighting, AC, Roofing	
Courthouse	\$3,600	Variable Speed Drives for HVAC pump	
FY 07-08	\$70,100	_	
Emergency Operations Center	\$480	Lighting retrofit - T12s to T8s	
Expo Idaho - North Wing	\$8,500	Lighting retrofit - T12s to T8s	
Benjamin Phase 1	\$13,528	Lighting, AC, Roofing	
Assessors Office	\$15,375	Lighting, AC, Controls	
Indigent Services	\$11,105	Lighting, AC, Controls	
Morris Hill Warehouse			
		Lighting, AC, Roofing, Windows	
	- · · · · · · · · · · · · · · · · · · ·		
Barber Park	\$2.374	Lighting AC Roofing Commissioning	
	Expo Idaho - South Wing Indigent Services Assessors Office Benjamin Phase 1 Expo Idaho - North Wing Emergency Operations Center FY 07-08 Courthouse Benjamin Phase 2* Juvenile West, Meridian Paramedics Station, Star FY 08-09	Barber Park	Barber Park\$2,374Lighting, AC, Roofing, CommissioningCourthouse\$2,223ControlsFY 06-07\$4,597Weed, Pest, and Mosquito\$7,896Lighting, AC, Roofing, WindowsParamedics Station, Meridian\$2,476Lighting, AC, Roofing, WindowsMorris Hill Warehouse\$4,440Lighting retrofit - T12s to T8sExpo Idaho - South Wing\$6,300Lighting, AC, ControlsIndigent Services\$11,105Lighting, AC, ControlsAssessors Office\$15,375Lighting, AC, ControlsBenjamin Phase 1\$13,528Lighting retrofit - T12s to T8sExpo Idaho - North Wing\$8,500Lighting retrofit - T12s to T8sEmergency Operations Center\$480Lighting retrofit - T12s to T8sFY 07-08\$70,100\$70,100Courthouse\$3,600Variable Speed Drives for HVAC pumpBenjamin Phase 2*\$12,601Lighting, AC, RoofingJuvenile West, Meridian\$70513 SEER AC w/ programmable TstatParamedics Station, Star\$18,982Lighting, AC, Roofing



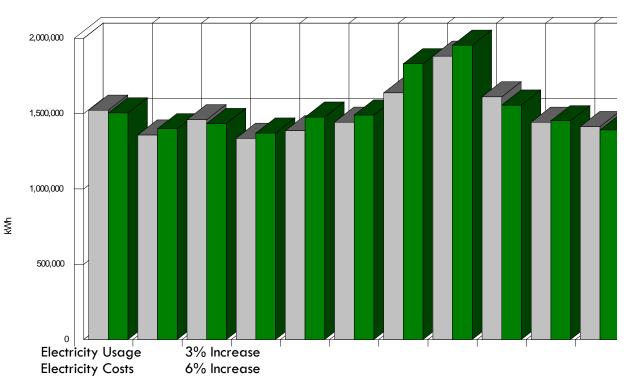
# UTILITY SUMMARY

The Ada County Operations Department now manages, maintains, and pays utilities for nearly 1.3 million sf of building space and more than 300,000 sf of parking facilities.

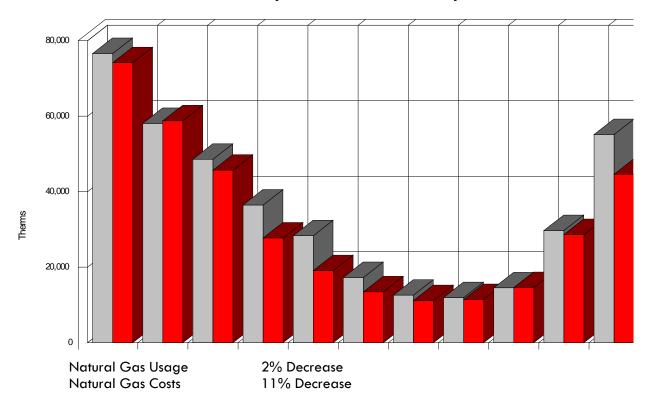
A new 15,000 sf Truck Storage building was recently built for Weed, Pest, and Mosquito Abatement and the Pod D Jail expansion will add another 14,000 sf to the total in 2013.

Overall energy consumption has remained fairly steady and commensurate with the additional square footage. The total cost for all utilities combined increased 2%, or \$40,000, from 2011 to 2012.

The following graphs compare usage and costs for the major utilities; i.e., electricity, natural gas, water, sewer, trash, for all County buildings combined for 12 months ending December 2011 and 2012.

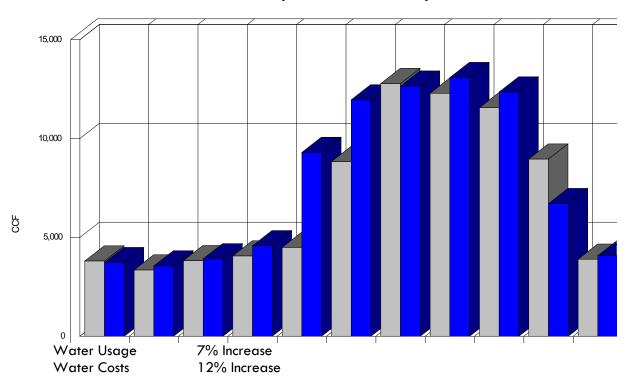


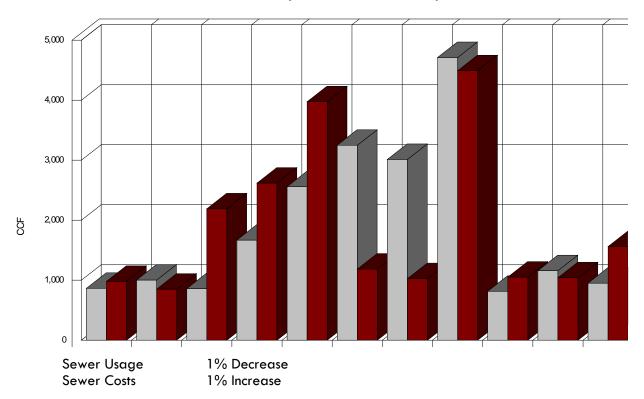
#### Monthly Electricity Use for Ada County





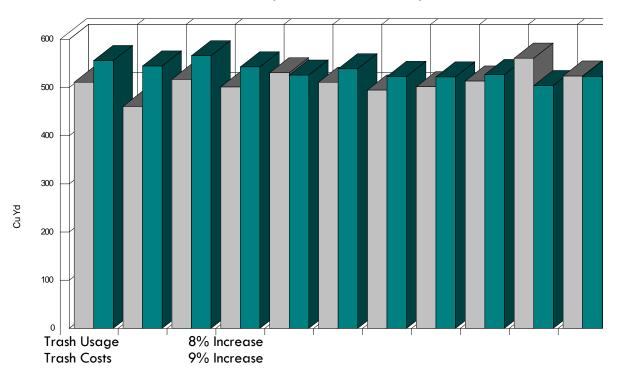




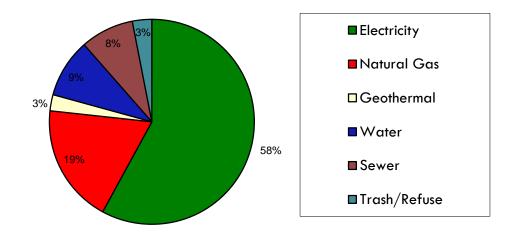


#### Monthly Sewer Use for Ada County





	FY 07-08	FY 08-09	FY 09-10	FY 10-11	FY 11-12
Electricity	\$694,831	\$897,766	\$943,379	\$930,072	\$987,201
Natural Gas	\$419,569	\$451,036	\$364,369	\$360,938	\$319,647
Geothermal	\$43,009	\$51,468	\$38,064	\$40,966	\$43,409
Water	\$127,056	\$131,543	\$133,247	\$141,412	\$157,853
Sewer	\$140,269	\$126,088	\$132,329	\$142,102	\$142,995
Trash/Refuse	\$41,195	\$44,179	\$48,186	\$47,840	\$52,248
Totals	\$1,465,929	\$1,702,080	\$1,659,574	\$1,663,330	\$1,703,353



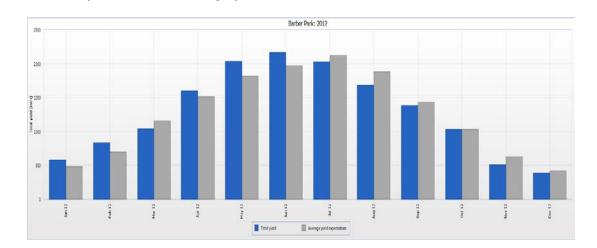
# RENEWABLE ENERGY - PHOTOVOLTAIC (PV) ROOFTOP SYSTEM

Ada County has an 11.5 KW solar photovoltaic (PV) system on the rooftop of the Barber Park Administration Building that is net-metered by Idaho Power. Each year hundreds of people launch their rafts and inflatables to float the scenic Boise River. Ada County maintains a launch site at Barber Park complete with free air pumps. The solar energy generated by the PV system offsets these costs with "free" energy from the sun.



The system was designed and installed in September 2011 using federal grant money from the American Recovery and Reinvestment Act. It generated 15,531 kWh's in the first 12 months of operation, 102% of the projected total.

<u>Solar PV System Specs:</u> 60 Solyndra Panels, @ 191 watts 1 Midnight Solar Combiner Box 2 5000-US SMA Inverters 1 SMA Sunny WebBox Monitoring System



# RENEWABLE ENERGY - LANDFILL GAS TO ENERGY PROJECT (LFGTE)

#### Overview

Harnessing the power of landfill gas (LFG) energy provides environmental and economic benefits to landfills, energy users, and Ada County. In particular, LFG energy projects:

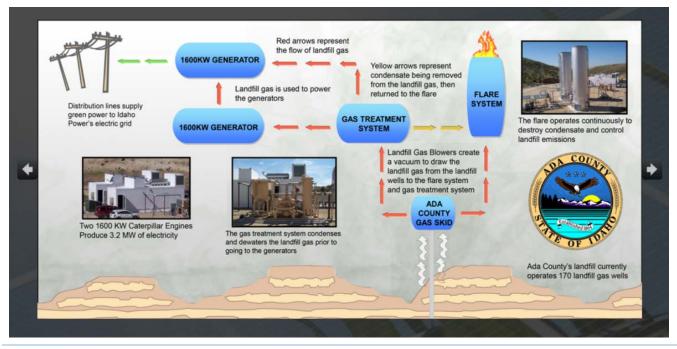
- Reduce emissions of greenhouse gases that contribute to global climate change.
- Offset the use of non-renewable resources, such as coal, oil and natural gas.
- Improve local air quality.
- Provide revenue for Ada County and energy cost savings for users of LFG energy.
- Create jobs and economic benefits for the communities and businesses.

#### What is LFG?

LFG is a natural byproduct of the decomposition of organic material in municipal solid waste (MSW) in anaerobic conditions. LFG contains roughly 50 percent methane and 50 percent carbon dioxide and trace amounts of inorganic and other compounds. When waste is first deposited in a landfill, it undergoes an aerobic (i.e., with oxygen) decomposition stage during which little methane is generated. Then, typically within less than one year, anaerobic (i.e., without oxygen) conditions are established and methane-producing bacteria decompose the waste and produce methane and carbon dioxide. Methane is a potent greenhouse (i.e., heat trapping) gas – over 20 times more potent than carbon dioxide, the primary cause of global warming. Landfills are the second largest human-caused source of methane in the United States. This is why LFG must either be burned via flare or controlled combustion at the Hidden Hollow site as heat input to produce electricity.

#### **Benefits to Ada County**

The 3.2 MW LFGTE system at the Hidden Hollow Landfill consists of two 1600 KW Caterpillar reciprocating engines generating almost 2,000,000 kWhs per year which is sold directly to Idaho Power. Hidden Hollow is planning to add two more engines to combust more LFG and increase the output to 6.4 MW. This expansion of the existing facility will provide enough electricity to power 4,800 area homes.



# **LFGTE REVENUE**

Engines @ 100%	kWh	Gas	Green Tags	County Revenue	Fortistar Revenue	County %
Jan-09	1,284,651	\$11,705.88	\$2,951.12	\$14,656.99	\$40,007.00	37%
Feb-09	1,471,229	\$13,405.99	\$3,382.36	\$16,788.35	\$45,853.03	37%
Mar-09	1,781,008	\$16,228.73	\$4,094.52	\$20,323.25	\$93,800.11	22%
Apr-09	1,731,434	\$15,777.01	\$3,975.82	\$19,752.83	\$13,051.07	151%
May-09	1,181,329	\$10,764.40	\$2,703.21	\$13,467.60	\$11,047.89	122%
Jun-09	1,817,404	\$16,560.38	\$4,177.67	\$20,738.05	\$110,599.38	19%
Jul-09	1,852,020	\$16,875.80	\$4,259.35		\$133,187.93	16%
Aug-09		\$18,447.86	\$4,655.93	\$21,135.15 \$23,103.79	\$133,187.93	16%
Sep-09	2,024,544 2,009,494	\$18,310.72		\$22,932.10		10%
Oct-09		\$18,298.04	\$4,621.38	•	\$121,286.05	
Nov-09	2,008,102	\$18,867.49	\$4,617.38	\$22,915.42 \$23,628.83	\$116,942.39	20%
	2,070,596		\$4,761.34	•	\$129,621.21	
Dec-09	2,139,103 21,370,914	\$19,491.73 \$194,734.04	\$4,919.11 \$49,119.17	\$24,410.84 \$243,853.21	\$125,498.14 \$880,905.17	19% 28%
	21,3/0,914	\$194,734.04	\$49,119.17	\$243,653.21	\$880,905.17	20%
				County	Fortistar	
Engines @ 100%	kWh	Gas	Green Tags	Revenue	Revenue	County %
Jan-10	2,101,502	\$19,589.20	\$5,462.93	\$25,052.13	\$125,475.30	20%
	1,972,578					
Feb-10		\$18,387.44	\$5,128.37	\$23,515.81	\$115,949.01	20%
Mar-10	2,102,382	\$19,597.41	\$5,464.65	\$25,062.06	\$95,381.03	26%
Apr-10	1,985,130	\$18,504.44	\$5,159.84	\$23,664.28	\$91,157.58	26%
May-10	1,959,659	\$18,267.01	\$5,091.26	\$23,358.27	\$89,589.97	26%
Jun-10	1,819,637	\$16,961.79	\$4,728.74	\$21,690.53	\$114,417.25	19%
Jul-10	1,627,911	\$15,174.61	\$4,231.06	\$19,405.67	\$140,536.25	14%
Aug-10	1,657,108	\$15,446.77	\$4,302.39	\$19,749.16	\$142,397.80	14%
Sep-10	1,821,658	\$16,980.63	\$4,735.48	\$21,716.11	\$114,580.31	19%
Oct-10	2,045,243	\$19,064.78	\$5,316.99	\$24,381.77	\$128,650.64	19%
Nov-10	1,915,732	\$17,857.54	\$4,980.21	\$22,837.76	\$142,108.50	16%
Dec-10	2,085,081	\$19,436.13	\$5,420.04	\$24,856.17	\$154,658.70	16%
	23,093,621	\$215,267.77	\$60,021.95	\$275,289.72	\$1,454,902.33	19%
				County	Fortistar	
Engines @ 100%	kWh	Gas	Green Tags	Revenue	Revenue	County %
Jan-11	2,063,300	\$19,677.03	\$5,360.13	\$25,037.16	\$132,374.57	19%
Feb-11	1,976,808	\$18,852.19	\$5,139.40	\$23,991.59	\$126,923.39	19%
Mar-11	2,147,379	\$20,478.87	\$5,583.16	\$26,062.03	\$105,049.34	25%
Apr-11	1,988,925	\$18,967.74	\$5,159.84	\$24,127.58	\$97,291.85	25%
May-11	2,132,282	\$20,334.89	\$5,091.26	\$25,426.16	\$104,304.00	24%
Jun-11	1,941,202	\$18,512.62	\$4,728.74	\$23,241.36	\$124,634.31	19%
Jul-11	1,855,352	\$17,693.90	\$4,823.69	\$22,517.59	\$140,536.25	16%
Aug-11	1,880,008	\$17,929.04	\$4,887.58	\$22,816.62	\$142,397.80	16%
Sep-11	1,912,854	\$18,242.28	\$4,972.83	\$23,215.10	\$122,809.65	19%
Oct-11	2,034,558	\$19,402.93	\$5,289.60	\$24,692.53	\$117,408.69	21%
Nov-11	1,749,393	\$16,683.40	\$4,547.64	\$21,231.04	\$121,124.62	18%
Dec-11	2,001,841	\$19,090.92	\$5,203.98	\$24,294.90	\$138,606.09	18%
	23,683,902	\$225,865.82	\$60,787.84	\$286,653.67	\$1,473,460.55	19%
				County	Fortistar	
Engines @ 100%	kWh	Gas	Green Tags	Revenue	Revenue	County %
Jan-12	1,996,159	\$19,475.76	\$5,189.87	\$24,665.63	\$130,824.66	19%
Feb-12	1,740,711	\$16,983.45	\$4,525.64	\$21,509.09	\$114,080.89	19%
	1,295,479	\$12,639.49	\$3,366.62	\$16,006.11	\$64,600.17	25%
Mar-12		÷,,/	\$0,000.0Z	\$23,205.24		25%
Mar-12 Apr-12		\$18 322 74	\$4 882 10		SO3 487 18	ZJ /0
Apr-12	1,877,981	\$18,322.74 \$19,535,28	\$4,882.49 \$5,205,73	•	\$93,687.48	250/
Apr-12 May-12	1,877,981 2,002,259	\$19,535.28	\$5,205.73	\$24,741.01	\$99,890.01	
Apr-12 May-12 Jun-12	1,877,981 2,002,259 1,794,196	\$19,535.28 \$17,505.29	\$5,205.73 \$4,664.15	\$24,741.01 \$22,169.44	\$99,890.01 \$117,572.47	19%
Apr-12 May-12 Jun-12 Jul-12	1,877,981 2,002,259 1,794,196 1,724,630	\$19,535.28 \$17,505.29 \$16,826.56	\$5,205.73 \$4,664.15 \$4,483.74	\$24,741.01 \$22,169.44 \$21,310.30	\$99,890.01 \$117,572.47 \$133,391.39	19% 16%
Apr-12 May-12 Jun-12 Jul-12 Aug-12	1,877,981 2,002,259 1,794,196 1,724,630 1,839,833	\$19,535.28 \$17,505.29 \$16,826.56 \$17,950.55	\$5,205.73 \$4,664.15 \$4,483.74 \$4,783.03	\$24,741.01 \$22,169.44 \$21,310.30 \$22,733.58	\$99,890.01 \$117,572.47 \$133,391.39 \$142,295.07	19% 16% 16%
Apr-12 May-12 Jun-12 Jul-12 Aug-12 Sep-12	1,877,981 2,002,259 1,794,196 1,724,630 1,839,833 1,880,142	\$19,535.28 \$17,505.29 \$16,826.56 \$17,950.55 \$18,343.83	\$5,205.73 \$4,664.15 \$4,483.74 \$4,783.03 \$4,888.15	\$24,741.01 \$22,169.44 \$21,310.30 \$22,733.58 \$23,231.98	\$99,890.01 \$117,572.47 \$133,391.39 \$142,295.07 \$123,218.94	19% 16% 16% 19%
Apr-12 May-12 Jun-12 Jul-12 Aug-12 Sep-12 Oct-12	1,877,981 2,002,259 1,794,196 1,724,630 1,839,833 1,880,142 1,964,260	\$19,535.28 \$17,505.29 \$16,826.56 \$17,950.55 \$18,343.83 \$19,164.54	\$5,205.73 \$4,664.15 \$4,483.74 \$4,783.03 \$4,888.15 \$5,107.01	\$24,741.01 \$22,169.44 \$21,310.30 \$22,733.58 \$23,231.98 \$24,271.54	\$99,890.01 \$117,572.47 \$133,391.39 \$142,295.07 \$123,218.94 \$128,735.83	19% 16% 16% 19%
Apr-12 May-12 Jun-12 Jul-12 Aug-12 Sep-12 Oct-12 Nov-12	1,877,981 2,002,259 1,794,196 1,724,630 1,839,833 1,880,142 1,964,260 1,906,932	\$19,535.28 \$17,505.29 \$16,826.56 \$17,950.55 \$18,343.83 \$19,164.54 \$18,605.21	\$5,205.73 \$4,664.15 \$4,483.74 \$4,783.03 \$4,888.15 \$5,107.01 \$4,957.76	\$24,741.01 \$22,169.44 \$21,310.30 \$22,733.58 \$23,231.98 \$24,271.54 \$23,562.97	\$99,890.01 \$117,572.47 \$133,391.39 \$142,295.07 \$123,218.94 \$128,735.83 \$147,493.46	19% 16% 16% 19% 19% 16%
Apr-12 May-12 Jun-12 Jul-12 Aug-12 Sep-12 Oct-12	1,877,981 2,002,259 1,794,196 1,724,630 1,839,833 1,880,142 1,964,260 1,906,932 1,699,869	\$19,535.28 \$17,505.29 \$16,826.56 \$17,950.55 \$18,343.83 \$19,164.54 \$18,605.21 \$16,584.97	\$5,205.73 \$4,664.15 \$4,483.74 \$4,783.03 \$4,888.15 \$5,107.01 \$4,957.76 \$4,417.23	\$24,741.01 \$22,169.44 \$21,310.30 \$22,733.58 \$23,231.98 \$24,271.54 \$23,562.97 \$21,002.20	\$99,890.01 \$117,572.47 \$133,391.39 \$142,295.07 \$123,218.94 \$128,735.83 \$147,493.46 \$131,412.47	19% 16% 16% 19% 19% 16% 16%
Apr-12 May-12 Jun-12 Jul-12 Aug-12 Sep-12 Oct-12 Nov-12	1,877,981 2,002,259 1,794,196 1,724,630 1,839,833 1,880,142 1,964,260 1,906,932	\$19,535.28 \$17,505.29 \$16,826.56 \$17,950.55 \$18,343.83 \$19,164.54 \$18,605.21	\$5,205.73 \$4,664.15 \$4,483.74 \$4,783.03 \$4,888.15 \$5,107.01 \$4,957.76	\$24,741.01 \$22,169.44 \$21,310.30 \$22,733.58 \$23,231.98 \$24,271.54 \$23,562.97	\$99,890.01 \$117,572.47 \$133,391.39 \$142,295.07 \$123,218.94 \$128,735.83 \$147,493.46	19% 16% 16% 19% 19% 16% 16%
Apr-12 May-12 Jun-12 Jul-12 Aug-12 Sep-12 Oct-12 Nov-12	1,877,981 2,002,259 1,794,196 1,724,630 1,839,833 1,880,142 1,964,260 1,906,932 1,699,869 21,722,451	\$19,535.28 \$17,505.29 \$16,826.56 \$17,950.55 \$18,343.83 \$19,164.54 \$18,605.21 \$16,584.97	\$5,205.73 \$4,664.15 \$4,483.74 \$4,783.03 \$4,888.15 \$5,107.01 \$4,957.76 \$4,417.23	\$24,741.01 \$22,169.44 \$21,310.30 \$22,733.58 \$23,231.98 \$24,271.54 \$23,562.97 \$21,002.20	\$99,890.01 \$117,572.47 \$133,391.39 \$142,295.07 \$123,218.94 \$128,735.83 \$147,493.46 \$131,412.47	25% 19% 16% 19% 19% 19% 16% 19%

Page 18

# EMPLOYEE TRANSPORTATION AND PARKING PROGRAM

Ada County partners with the Ada County Highway District, Valley Regional Transit, and others to bring employees some great alternatives to driving to work. While employee parking is available at all County facilities, Ada County also provides easy, affordable alternative transportation options to reduce the need for parking and reduce commuter traffic, while improving air quality in Ada County.

#### **Bicycles**

Bike racks are located at all Ada County facilities for public and employee use. Free, secured bike storage is available to employees in the Civic Plaza parking garage, east of the Courthouse in downtown Boise. Shower facilities are provided in some County locations for employees who walk or bicycle to work. Contact the Operations Department for locations and access codes.

#### **Bus Passes**

All regular Ada County employees can ride the bus for FREE using their employee id card, including employees who commute between Ada and Canyon counties. Just hop on and present your id card!

#### **Commuteride Vanpools**

Commuteride is a local vanpool program run by the Ada County Highway District. Ada County employees are eligible for a free 1-month trial. New regular riders then receive a \$20 transi-check for months 2-4

(provided by ACHD) plus a \$32 voucher (provided every month by Ada County BOCC) which are applied toward the monthly fare. The rider pays any remaining amount. Fees vary depending on routes. Checks and vouchers are distributed each month by the Operations Dept.

Note: The \$20 transi-checks are only for first time riders.

The \$32 vouchers are provided every month to every rider.

#### **Guaranteed Ride Home**

BE SURE TO SIGN UP FOR THE GUARANTEED RIDE HOME PROGRAM IF YOU REGULARLY USE ALTERNATIVE

TRANSPORTATION. Commuters in carpools, vanpools, buses - even cyclists and walkers - are eligible for reimbursement for a taxi ride home for emergencies or overtime situations. The participant must be registered with Commuteride prior to the taxi ride and must have arrived to work using one of the modes listed above. An annual maximum benefit per participant is six taxi rides or a total cost of \$300.00. This program is funded by ACHD.

#### Parking - Downtown

Limited free or metered parking is available on downtown streets near the Courthouse on a first-come, firstserved basis. Employees may purchase a parking space for \$10/month in a surface lot or \$20/month in the parking garage.

Free monthly parking is available downtown for employees who carpool with at least 1 other County employee. Drivers must share a single keycard, but there is no fee for the card. Vanpools and vanpool drivers are also eligible for free, preferred parking.

#### **County Fleet**

The County owns over 430 vehicles for use by employees, with more than 200 of them driven by the Sheriff's Office. The County operates two fuel islands and several vehicle shops to support its fleet. Replacing old vehicles allows the County to reduce fuel costs through increased efficiency and alternative fuel choices. As of 2012, 19% of the County's vehicles were either hybrid or flex fuel (able to run on 85% ethanol fuel).

Contact the Employee Transportation Coordinator at (208) 287-7100 for additional information.









# Contacts

ADA COUNTY OPERATIONS

Dave Logan, Director, <u>dlogan@adaweb.net</u>

Scott Williams, Deputy Director, opwillis@adaweb.net

Selena O'Neal, Energy Specialist, <u>soneal@adaweb.net</u>

Bruce Krisko, Construction Manager, <u>bkrisko@adaweb.net</u>

Phone: 208.287.7100



2013 BOARD OF ADA COUNTY COMMISSIONERS

Dave Case, Chairman

Jim Tibbs, Commissioner

Rick Yzaguirre, Commissioner

Website: <u>www.adaweb.net</u>

Email: boccl@adaweb.net

Phone: 208.287.7000

# Table of Contents

GOALS AND OBJECTIVES	1
ORGANIZATION AND RESPONSIBILITIES	2
PLAN PARTNERS	2
ANNUAL STRATEGIC PLAN	4
FACILITY AWARDS AND RECOGNITION	6
ENERGY USE INDEX	9
UTILITY INCENTIVES	10
UTILITY SUMMARY	11
RENEWABLE ENERGY – PHOTOVOLTAIC ROOFTOP SYSTEM	15
RENEWABLE ENERGY – LANDFILL GAS TO ENERGY PROJECT	16
EMPLOYEE TRANSPORTATION AND PARKING PROGRAM	18