

Morgantown Taking Steps to Decrease Energy Consumption

In 2008, the City of Morgantown issued a Request for Proposals for a company to perform an energy audit of city owned buildings and facilities. This audit would evaluate current energy consumption and determine how savings could be achieved through retrofitting buildings and replacing equipment. These measures would save the city money in the long term and would reduce their carbon emissions. Mitigation of carbon dioxide production is key to achieving the goals of the U.S. Mayors Climate Protection Agreement of which Morgantown is a signatory.

The proposal from CLT Efficient Technologies Group was ultimately accepted and they began performing the audit in late 2008. CLT is a Pennsylvania-based firm that specializes in energy performance. (CLT stands for Conserve. Leverage. Transform.) The audit was completed in April 2009 and a report containing all of the proposed Energy Conservation Measures was submitted to the City. A brief summary of these measures along with their costs and anticipated savings can be found in the table below.

Among the minor updates are the installation of programmable thermostats that can be set to a more moderate temperature at night when no one is in the building; light emitting diode (LED) traffic lights were also included. Two major renovations that will occur are the installation of a new HVAC system at the municipal airport and a new ice plant at the skating rink in White Park. The contract for CLT to proceed with these updates was approved unanimously by the City Council on May 25, 2009.

Once completed all of the renovations are expected to save the city a total of \$184,181 annually in energy and operational costs. It is also expected to reduce carbon dioxide emissions by approximately 20%, which is a significant amount.

Building	Energy Conservation Measure	Cost	Annual Savings	Simple Payback (Years)
MGW Airport	Lighting Upgrade	\$472,053	\$35,957	13.1
	Pipe Insulation			
	ATC Upgrades			
	HVAC Upgrade – Fl 1 South			
City Hall	Lighting Upgrade	\$91,380	\$8,165	11.2
	Pipe Insulation			
	ATC Upgrades			
Southside Fire Station	Lighting Upgrade	\$14,561	\$1,490	9.8
	Pipe Insulation			
Maintenance Building	Lighting Upgrade	\$422,853	\$27,209	15.5
	ATC Upgrades			
	New Metal Roof			
	New Garage Panel Doors			
Public Safety Building	Lighting Upgrade	\$244,427	\$43,370	5.6
	Pipe Insulation			
	ATC Upgrades			
	VFD Air Handling			
	Boiler Upgrade			
Ice Rink	Lighting Upgrade	\$993,939	\$14,834	67.0
	HHW Boiler & Fill Upgrades			
	Rouston Ice Plant			
Public Safety Parking	Lighting Upgrade	\$61,827	\$6,419	9.6
Parking Garage (Chestnut)	Lighting Upgrade	\$98,066	\$9,882	9.9
Parking Garage (Wharf)	Lighting Upgrade	\$57,473	\$5,916	9.7
Parking Garage (D Parking)	Lighting Upgrade	\$10,396	\$2,018	5.2
Signs & Signals Building	Lighting Upgrade	\$8,224	\$1,838	4.5
Norwood Fire Station	Lighting Upgrade	\$10,431	\$1,597	6.5
Metropolitan Theatre	Lighting Upgrade	\$20,325	\$3,702	5.5
Garlow House	Lighting Upgrade	\$1,027	\$645	1.6
City Library	Lighting Upgrade	\$44,559	\$5,611	7.9
City Wide	Traffic Signals	\$228,532	\$15,528	14.7
PROJECT SUMMARY		\$2,780,073	\$184,181	15.0