



BEXAR COUNTY ADMINISTRATIVE POLICY

ADMINISTRATIVE POLICY NO. 4.5

TITLE: ENERGY CONSERVATION AND
RECYCLING POLICY

PREPARED BY: INFRASTRUCTURE SERVICES DEPT.
ENERGY MANAGEMENT DIVISION

EFFECTIVE DATE: OCTOBER 23, 2007

REVISED DATE: OCTOBER 23, 2007

ORIGINAL DATE: MAY 2, 1995

REVISION (check one): As Needed Annually

I. PURPOSE

This policy sets guidelines for the efficient use of the County's energy resources and establishes a County recycling program. The primary goals are to reduce and conserve energy and promote environmental responsibility throughout Bexar County. This policy is not intended to reduce necessary lighting, heating or air conditioning that is required to perform tasks and duties of the employees and citizens of Bexar County.

II. SCOPE

All Bexar County Offices/Departments and all County facilities are subject to this policy. County offices and departments in leased facilities must comply with this policy to the extent that they exercise control of those facilities. All County employees are responsible for reducing energy cost and waste in their respective areas.

(Definitions of terms used in this policy begin on page 10 in Section VII)

III. ENERGY CONSERVATION

A. Lighting

1. Except for security lighting during non-work hours, all lights must be turned off in unoccupied rooms at all times. Normal office hours for employees are from 8:00 a.m. to 5:00 p.m., Monday through Friday. Employees who use offices or shop areas outside of normal hours should minimize unnecessary overhead lighting by the use of switches and automatic lighting controls.
2. Planned lighting maintenance must be performed, including regular cleaning and timely lamp replacement. Group relamping will be implemented wherever feasible, especially in areas of critical sight.
3. Lighting in all County facilities must incorporate day-lighting techniques wherever possible.
4. Both manual and automatic lighting controls will be used to manage electrical usage during occupied and unoccupied periods. Additional lighting zone controls or switches will be incorporated where practical and feasible to reduce energy consumption in unoccupied areas.
5. All existing lighting systems will be evaluated to identify opportunities for increasing efficiency. Incandescent bulbs will be replaced with fluorescent lamps where practical and feasible. Electromagnetic ballasts will be replaced with energy-efficient electronic ballasts as failure occur and/or as part of lighting upgrade projects.
6. Expended fluorescent lamps containing mercury must be disposed of or recycled properly and in such a manner to capture mercury and mercury vapors. This may be performed through a contracted service, or by utilizing equipment specifically designed for this purpose.
7. Lighting levels (measured in footcandles) in buildings, public parking garages, on surface parking lots, and in outdoor areas must be kept as close as feasible to the acceptable minimum standards set by the Illuminating Engineering Society of North America (IESNA).
8. All exterior lighting must be controlled by photocells, electronic astronomic timers, or other automatic lighting controls. Exterior lighting not required for egress or security must not be operated during daylight hours.
9. Decorative lighting (i.e., Christmas lights, lamps, etc.) must be minimized, and may be used by employees only with the approval of the Elected Official/Department Head.

B. Office Equipment

1. To the extent possible, and in compliance with procurement regulations, all new office equipment purchased must be either Energy-Star compliant or have some type of energy-saving feature.
2. All items of office equipment that have Energy-Star features must have them enabled. Energy-efficient equipment and operational procedures must not be defeated, removed, modified, changed, or discontinued without prior written notification and concurrency of the Energy Manager.
2. All printers, copiers, scanners and fax machines must be turned off at the end of the workday, except for fax machines when fax transmittals are routinely received or expected to be received outside normal working hours. Due to the nature of necessary computer housekeeping that is performed after hours (i.e., virus scans, upgrades, etc.), personal computers are to remain on.
3. Use of personal equipment must be minimized. Employees should use work-group level equipment whenever possible (i.e., network printers versus personal printers.)
4. Copiers and printers must be used to make double-sided copies whenever feasible.
5. All personal-computer monitors must be set for the “sleep” mode after ten minutes of non-operation. “Sleep” mode reduces power to the monitor without shutting down the PC, and is to be used as an energy-saving alternative to screen savers.
6. Screen savers on personal computers must be disabled if they interfere with the “sleep” mode feature.
7. Each work area must have an individual assigned the responsibility of ensuring that copiers, printers, scanners, fax machines and room lights are turned off at the end of the workday.
8. Use of personal equipment (i.e., space heaters, fans, mini-refrigerators, etc.) must be minimized, and may be used by employees only with the approval of the Elected Official/Department Head.

C. Heating and Air Conditioning

1. Maintenance personnel shall adjust thermostats in order to maintain the best possible comfort level for all employees. The table below shows guidelines for target temperatures to be maintained in all applicable areas (i.e., offices, conference rooms, break rooms, hallway, etc.).

Temperatures for specialized areas will be maintained accordingly.

Season	Mode	Temperature Range
Summer	Occupied	74 - 76 °F
	Unoccupied	82 - 84 °F
Winter	Occupied	68 - 70 °F
	Unoccupied	62 - 64 °F

2. Where available, an Energy Management System (EMS) must be used to reduce energy consumption by scheduling shut down of appropriate HVAC equipment serving spaces during unoccupied periods.
3. All Heating and Air Conditioning equipment to be installed or purchased for use in County facilities must meet or exceed the energy efficiencies listed in the American Society of Heating, Refrigerating and Air-Conditioning Engineers (ASHRAE) Standard 90.1 – 2004 - - Energy Standard for Buildings Except Low-Rise Residential Buildings (or most recent version) Tables 6.8.1A through 6.8.1J.

D. Water Conservation

1. Facilities being constructed and/or renovated must incorporate low-flow plumbing fixtures. Where feasible, the fixtures shall be equipped with automatic sensors.
2. Employees should immediately report any water leaks, faulty flush valves, or any plumbing fixture anomalies to Facilities Maintenance to initiate repair action.
3. Automatic irrigation systems must be installed and used for all landscape watering.
4. To minimize unnecessary water use, rain sensors must be installed on all irrigation systems.
5. When designing landscaping, Xeriscape plants must be incorporated wherever feasible and practical to minimize the necessity for irrigation and maintenance. All landscaping should be designed with climate-tolerant plants that can survive on natural rainfall quantities after initial establishment. The amount of site area covered with turf should be minimized, and techniques such as mulching and composting should be used to maintain plant health.
6. Release or “blow-down” of mineral-saturated water in cooling tower systems will be fully automated and activated based on specific

conductivity requirements in relation to total dissolved solids (TDS) readings.

7. Water usage meters will be utilized on all make-up and blow-down system equipment. Meters will be monitored and readings documented to monitor usage rates and to identify anomalies that may require immediate corrective action or equipment repair.
8. Chilled water supply temperatures on water-cooled chiller applications will be closely monitored daily and controlled by an Energy Management System (EMS). Manual changes to supply temperature setting will only be approved by the Facilities Manager, or Facilities Maintenance Section Chief of the Infrastructure Services Department. Proper management will reduce water evaporation rates associated with cooling towers.

E. Renewable/Alternative Products and Transportation

1. Renewable energy such as solar, wind, and fuel cell will be incorporated in all new construction and renovation projects where cost effective.
2. County fleet purchases will include alternative-fuel (i.e., E-85, solar electric, natural gas, etc.) vehicles in order to help reduce vehicle emissions in Bexar County. San Antonio/Bexar County is currently considered "Near Non-attainment" with EPA air-quality standards.
3. Employees are encouraged to use VIA Metropolitan Transit or car pool to work.

F. New Construction and Renovations

1. Major renovations by County Departments such as office additions and/or large equipment installation must be coordinated with the Energy Council for review and support.
2. All County buildings must be designed, constructed, renovated, and maintained in accordance with the International Energy Conservation Code (IECC) and shall accomplish a minimum rating of Leadership in Energy and Environmental Design (LEED) Silver.
3. No modifications may be implemented that violate any of the appropriate standards including the IECC, or that would void the LEED Silver rating.
4. The County Architect in conjunction with the Facility Maintenance Manager and Energy Manager shall review all new construction and renovation projects prior to construction and make recommendations wherever possible environmental awareness and energy conservation

IV. RECYCLING

A. Paper and Cardboard Recycling

1. Each Office or Department is encouraged to:
 - a. Increase paper recycling each year until 80% of its annual paper order is recycled;
 - b. Reduce amount of paper being used by developing alternative electronic processes; and
 - c. Order 30% recycled content paper
2. The Infrastructure Services Department will oversee paper and cardboard recycling, including telephone books, magazines and manuals through the Green Teams.

B. Plastic, Glass and Aluminum Recycling

1. The Infrastructure Services Department will establish and operate plastic, glass and aluminum recycling in break rooms and cafeterias.

C. Electronic Recycling

1. Inoperable and/or outdated electronic equipment will be declared surplus and turned into the Purchasing Department for disposition in accordance with Local Government Code Section 263.152.
2. The Purchasing Department will insure that disposition of inoperable and/or outdated electronic equipment is in accordance with applicable environmental regulations.
3. BCIS will report recycled materials traded in to the original equipment manufacture.

D. Vehicle Service Centers Recycling

1. At the direction of Infrastructure Services, vehicle service centers will establish formal recycling programs and will report monthly to Infrastructure Services:
 - a. The recycling of tires, batteries, and oil; and
 - b. The disposition of hazardous materials.

V. EMPLOYEE TRAINING/OUTREACH

The training and outreach programs established within this policy are designed to engender and foster a culture of environmental awareness and energy conservation.

Training and outreach can take any of the following forms:

- County-sponsored Speaker Forums in partnership with CPS Energy, SAWS, Solar San Antonio (SSA), Metropolitan Partnership for Energy (MPE) and other energy-conservation and recycling organizations
- Posters, stickers, conservation campaign t-shirts, etc.
- Formal classroom training
- Distance Learning (on-line programs, DVDs, cassettes, etc.)
- In-house training using Conservation-Committee-approved materials
- Brown bag lunches with a focus on conservation
- Self-development
- County and Department Employee Orientation
- Managerial Training

A. Employee Responsibility:

1. Participate in training opportunities to improve the knowledge of conservation and recycling at least once a year;
2. Obtain approval from supervisor to attend training programs; and
3. Follow office/department procedures when registering for energy conservation and/or recycling training programs.

B. Training Administration

1. Planning and Resource Management (PRM) - Human Resources Division will:
 - a. Schedule formal training sessions on energy conservation and recycling in coordination with Infrastructure Services and the Purchasing Department;
 - b. Document training in the personnel system; and
 - c. Provide annual training analysis and reports.
2. Infrastructure Services Department – Energy Division will:
 - a. Develop and maintain a library of conservation and recycling films (DVDS, etc) for use in orientation, staff meetings, etc.;
 - b. Acquire and distribute posters promoting energy conservation and recycling for each floor of each County facility;
 - c. Provide stickers that remind employees to turn off lights,

- d. appliances, computers, etc., and to recycle; and
- d. Facilitate the identification and scheduling of energy conservation and recycling programs.
- 3. The Public Information Officer will support the implementation of this policy through press and media support.
- 4. Departments and Offices will:
 - a. Ensure that employee orientations address conservation and recycling efforts within their purview;
 - b. Appoint a conservation and recycling officer to coordinate annual training efforts;
 - c. Provide and schedule annual training events;
 - d. Allow employees to participate in training during work hours when possible; and
 - e. Ensure documentation of all training.

VI. ENERGY COUNCIL

A. The Energy Council will advise and make recommendations to Commissioners Court regarding policies and procedures pertaining to energy conservation and recycling in all County facilities.

The membership of the Council will consist of the following individuals:

- 1. One Commissioner
- 2. Energy Manager
- 3. County Architect
- 4. Executive Director of Infrastructure Services
- 5. Executive Director of Planning and Resource Management
- 6. Executive Director of Information Services
- 7. Executive Director of Economic Development
- 8. Executive Director of Criminal Justice Planning and Coordination
- 9. Executive Director of Community and Development Program
- 10. Representatives from:
 - a. County Clerk
 - b. District Clerk
 - c. Purchasing Agent
 - d. County Auditor
 - e. Tax Assessor-Collector
 - f. Sheriff
 - g. Juvenile Probation
 - h. Adult Probation
 - i. District Attorney
 - j. Administrative Offices of the Courts

B. The Council will meet once a quarter to:

1. Assess the current activity and status of the recycling program and the energy-reduction initiatives throughout the County;
2. Set progressive benchmarks for improving energy efficiency and recycling efforts; and
3. Review progress and produce quarterly status reports for the Commissioners Court.

C. The **Infrastructure Services Department** – Energy Management Division will perform the following functions in order to support the Energy Council recommendations to Commissioners Court:

1. **Energy**

- a. Develop energy baseline and benchmarks for all County-owned facilities;
- b. Oversee energy audits and develop and implement cost-effective, energy-saving projects;
- c. Establish streamlined acquisition protocols for energy conservation (i.e., establishing service contracts);
- f. Select alternative funding/financing methods for cost-effective retrofit projects (i.e., LoanSTAR or performance contracting);
- g. Develop 5-Year Energy Reduction Strategy that combines quick-payback projects with more expensive projects;
- h. Assist in setting maintenance procedures/protocols to ensure maintenance of savings from implemented energy-saving projects
- i. File annual Senate Bill 5 energy report to the State Energy Conservation Office (SECO); and
- j. Institute program for recognizing employees who bring new energy-saving and recycling ideas to the attention of the Commissioners Court.

2. **Recycling**

- a. Implement and manage the recycling program;
- b. Establish and maintain a communication process with Offices and Departments to involve them in the recycling process;
- c. Perform Waste Management Assessments;
- d. Provide education and training on recycling for janitorial-services employees;
- e. Develop New-Employee Orientation recycling presentations;
- f. Develop and implement educational and training programs for Offices and Departments to increase participation in the recycling program;
- g. Establish viable recycling collection alternatives for Offices and Departments, including:

1. Source separation for Offices and Departments that produce minimal recyclable materials, and
 2. Commingled Collection for Offices and Departments that use trash compactors; and
- h. Establish Green Teams:
1. Request volunteers to participate and act as liaisons for the recycling program;
 2. Establish training for Team members;
 3. Provide marketing tools for Team members; and
 4. Establish an award system for participation and recognition of outstanding achievement.

D. The **Purchasing Department** will perform the following functions in order to support the Energy Council recommendations to Commissioners Court:

- a. Assist in the management of the recycling program and monitor County, supplier and contract participation;
- b. Assist in the performance of Waste Management Assessments;
- c. Provide surplus disposal documentation and data management;
- d. Assist in developing and implementing an educational and training program for the Offices and Departments to increase participation in the recycling program;
- e. Monitor contract compliance for the recycling program; and
- f. Implement a Green Purchasing Program:
 1. Identify and provide sourcing to customers for Environmentally-Preferable Products;
 2. Purchase fuel-efficient and alternative-fuel vehicles;
 3. Purchase Energy-Star-Qualified equipment and materials
 4. Require trade-ins when purchasing replacement equipment and furnishings;
 5. Purchase items with minimal packaging materials or toxicity;
 6. Purchase longer warranties on items;
 7. Provide training to end users on Green products and sourcing; and
 8. Ensure that contractors and their subcontractors are required to comply with the County Recycling Program.

VII. DEFINITIONS

1. alternative funding/financing – funding such as a loan provided by the State of Texas or some other outside source that the County is responsible for repaying in installments. This reduces the immediate impact on the County's operating budget, and allows the loan to be repaid with the benefit of budget savings generated by reduced energy use.

2. areas of critical sight – places where the ability to see and perform fine tasks is of very high importance. Examples would be reading (such as libraries), accounting, some repair shops, and areas where safety is an issue. In many cases, this is best accomplished by task lighting. These light levels are established by IESNA.
3. ASHRAE –American Society of Heating, Refrigerating and Air-Conditioning Engineers. Develop standards regarding building environment.
4. automatic lighting controls – devices that turn lighting circuits on and off, based on a pre-established set of conditions, such as time delay, time of day, daylight, darkness, or movement/occupancy of an area.
5. County facilities – all new, renovated, and existing facilities owned or leased by the County, both present and future.
6. cost-effective retrofit projects – retrofits deemed to be “cost-effective” are projects that meet predetermined payback criteria. It is generally accepted that a payback of 5 years or less complies with this requirement; however, these criteria are based on Life-Cycle Cost and may vary for specific Energy Conservation Measures. These measures may include retrofits that reduce electric use, natural gas use, or water use, however, it is required that the retrofit pay back in 75% or less of the average rated or useful life of the equipment.
7. daylighting – the use of available natural sunlight to supplement and/or replace electric lighting sources when possible and where appropriate.
8. demand-control ventilation – the controlled introduction of outside air into the return air stream, based on the CO₂ levels in the return air. This automatically increases or decreases the amount of outside air required for good indoor air quality, based on the actual occupancy and the resulting internal CO₂ levels. Constant outside air based on a “worst case” calculation, regardless of the occupant load, will not be allowed.
9. energy audit – the process of examining a building’s energy usage by conduction site analysis, benchmarking and calculations.
10. energy baseline – a 12-month data that serves as the basis of reference prior to the implementation of energy-retrofit projects. It is used to verify actual energy reduction.
11. energy benchmarking – the collection of historical baseline energy consumption and cost data, for the purpose of evaluating current and future energy use. This can also involve calculating various energy use indexes such as Cost per Square Foot (\$/SF), kilo-Watt-hours per Square Foot (kWh/SF), or Million British Thermal Units per Square Foot (MBtu/SF). This allows comparison of the most recent energy use and cost to the historical data, and to other similar facilities, for the purpose of evaluating a facility’s “energy performance”.

12. ECMs (Energy Conservation Measures) – terminology used to describe changes in equipment, control, operational methodology, etc, that reduces or “conserves” energy. Example: Changing out an old, inefficient air conditioning unit with a new, high-efficiency unit or installing a new programmable thermostat that reduces the operating hours by turning the unit off when it is not needed.
13. EMS (Energy Management System) – an HVAC control that monitors and control building mechanical system in order to operate, maintain and conserve.
14. ESCO (Energy Service Company) – a firm that performs or organizes turnkey services such as performance contracting, shared savings, or guaranteed savings type projects. The ESCO may perform much of the work itself, or function like a general contractor and subcontractor for much of the work to be performed. These type of services frequently include: initial engineering study and recommendations, design, construction, financing, and guarantee or insuring savings.
15. Energy Star – Energy Star is a joint program of the U.S. Environmental Protection Agency and the U.S. Department of Energy that established energy efficient products and practices. Energy Star provides over 50 product categories (and thousands of models) for the home and office. These products deliver the same or better performance as comparable models while using less energy.
16. footcandle – A unit of measure of the intensity of light falling on a surface, equal to one lumen per square foot and originally defined with reference to a standardized candle burning at one foot from a given surface (IESNA 2000).
17. Green Purchasing – purchasing Environmentally Preferable Products (EPP) or services by purchasing materials containing recycled content.
18. Green Team – County Office and Department representatives participating as liaisons of the recycling program.
19. group relamping – the regularly scheduled cleaning and replacement of lamps in a specific area instead of replacing lamps only as they fail. In the average office with fluorescent lighting where the lights burn 12 hours/day and 260 days per year, the fixtures would be cleaned and relamped every 6 to 7 years.
20. guarantee of savings – a contract between an ESCO and a facility owner, that guarantees the estimated savings of energy conservation upgrade projects. This may take the form of an insurance policy through a third party, or it may be offered directly by the ESCO to the owner. These types of agreements always contain operating constraints such as heating and cooling setpoint minimum/maximums, and penalties for failing to operate an “insured” facility within the prescribed parameters.

21. IECC (International Energy Conservation Code) – an international code that addresses energy efficiency in both residential and commercial buildings.
22. IESNA (Illuminating Engineering Society of North America) - the recognized technical authority on illumination. IESNA sets standards for lighting application in areas such as office and commercial buildings, outdoor and security.
23. LEED (Leadership in Energy and Environmental Design) - the nationally accepted benchmark for the design, construction, and operation of high performance green buildings. LEED promotes a whole-building approach to sustainability by recognizing performance in five key areas of human and environmental health: sustainable site development, water savings, energy efficiency, materials selection, and indoor environmental quality.
24. LEED Silver – A part of the LEED Green Building Rating System that establishes a building efficiency based on a point system criteria. Building with LEED Silver ratings must achieve 33-38 points.
25. life-cycle cost – The cost of owning a particular system or piece of equipment over the course of its useful life. This would include the initial purchase price and the cost of operation including energy use. Maintenance cost savings may be included also, but will not normally be a consideration. These calculations may require normalization to a common denominator such as rated life to be usable in a true comparison. A simplified example is shown below.

incandescent lamp: cost = \$0.39, Load = 60 watts, Life = 750 hours
 Life-Cycle Cost = $(\$0.39 + (((60/1000) \times 750 \text{ hours}) \times \$0.07/\text{kWh})) = \$3.62$

compact fluorescent lamp: cost = \$4.00, Load = 14 watts, Life = 10,000 hours
 Life-Cycle Cost = $(\$4.00 + (((14/1000) \times 10,000 \text{ hours}) \times \$0.07/\text{kWh})) = \$14.04$

rated life adjustment – incandescent lamp life-cycle cost = $\$3.62 / 750 \text{ hours} = \$0.0048 / \text{hour}$
 $(\$0.0048 / \text{hour} \times 10,000 \text{ hours}) = \48.27 cost to operate 10,000 hours

Result: While the incandescent lamp cost is only ~10% of a compact fluorescent lamp, the compact fluorescent's Life-Cycle Cost is approximately 29% of the incandescent, with an estimated savings of \$34.23 (\$48.27-\$14.04) over the rated life of the lamp. This makes the Compact Fluorescent Lamp preferable over the incandescent in spite of the initial cost difference.

26. LoanSTAR Program – The Texas LoanSTAR (loans to Save Taxes And Resources) Program was initiated by the Texas Energy Office in 1988 and

approved by the U. S. Department of Energy (DOE) as a statewide energy efficiency demonstration program. LoanSTAR uses a revolving loan mechanism used to finance energy retrofit projects.

27. maintenance and operational procedures – Maintenance and Operational Procedures can cover a wide range of actions including modifying operating schedule and/or setpoints, or implementing differed maintenance and repairs.
28. maintenance of savings –the maintenance of savings generated by cost-effective energy conservation retrofits. This type of maintenance involves making sure that the energy efficient equipment and operational procedures implemented are not defeated, removed, modified, changed, or discontinued. In shared-savings and guaranteed-savings contracts, the contractor may require additional conditions such as setpoint limits as part of the savings contract or insurance agreement that “guarantees” the savings. The agreement may be voided or penalties charged if these conditions are not met.
29. monitoring and verification – the collection of energy use data for a facility or an energy consuming system, and comparison of the data to a predetermined data set, for the purpose of verifying the facility or system’s energy savings or increased costs. This is normally a required part of a performance contract.
30. Non-Attainment and near Non-Attainment areas –Non-Attainment areas (counties in the case of Senate Bill 5) have been designated by the US Environmental Agency (EPA) as violating the standards for outdoor air quality. Near Non-Attainment Areas are locations such as San Antonio/Bexar County where the air quality approaches the US EPA established threshold on Ozone Action Days.
31. obsolete light sources – Light sources that are deemed to be no longer energy-efficient. Examples are Mercury Vapor, T-12 fluorescent lamps and magnetic ballasts and incandescent lighting.
32. payback or simple payback – as used in this document, this refers to the cost of a project energy conservation measure divided by the savings per year.
 $(\text{Project Cost}/\text{Energy Savings per Year}) = \text{Payback in years}$
 $(\$1,000 \text{ cost}/\$400 \text{ savings per year}) = 2.5 \text{ Year Payback}$
33. payback, composite or combined payback – the result of bundling several retrofit projects together into a single calculation.

Example:

Project	Cost	Savings	Simple Payback
1. Lighting Retrofit	\$25,000	\$5,000	5.0 years
2. Demand Ventilation	\$900	\$400	2.25 years
3. HVAC Retrofit	\$30,000	\$2,500	12.0 years

TOTAL \$35,900 \$7,900

Composite or Combined Payback 7.1Years

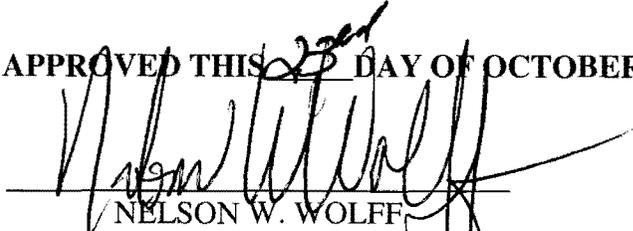
34. performance contracting – the process of implementing energy conservation upgrade projects that “perform” by repaying the project costs by reducing annual energy costs. These are normally turnkey projects that can include the engineering, funding, installation of energy upgrades, and a guarantee of savings. State law sets the maximum term for this type of agreement at 15 years.

These types of projects are sometimes called “shared” savings agreements, because the Energy Service Company (“ESCO”) may take a third of the savings in addition to profits derived from the implementation phase of the contract. For example: Because this is a turnkey process, the ESCO makes management fees and a margin on implementing the retrofits. If a project’s composite payback is 10 years, loan payments to the ESCO may be spread out over a 15-year period. Thus the ESCO “shares” the savings.

35. recommissioning – the on-site observation and confirmation of proper operation (as designed and/or intended) of a facility’s systems, including the building envelope, lighting, and HVAC systems. In cases where these systems are inoperable, modifications and/or repairs may be recommended to make these systems usable again.
36. recycle – to collect, separate, and process materials so they can be used again in another manufacturing process.
37. recycled – material that has been removed and separated from the waste stream and reprocessed into a new product.
38. recycled content – the amount of a product's weight or package’s weight that is composed of materials that has been recovered from waste, usually expressed in a percentage.
39. Senate Bill 5 (SB5) – A bill enacted by the Texas Legislature in 2001 requiring Political Subdivisions (such as cities and counties) in non-attainment and near non-attainment areas to set a goal to reduce their energy consumption by 5% per year for 5 years. SB5 was passed as part of the State of Texas’ Air Quality Plan for the US EPA.
40. task lighting – Lighting that provides illumination on the specific work surface such as a desk or workbench. This can be accomplished in various ways, including under-counter cubicle lighting, desk lamps, portable lights, etc.
41. waste management assessment – reviewing the waste products generated by your area to determine alternatives to reduce, reuse and recycle those materials. This process establishes a waste “benchmark” for your area that will result in setting up waste reduction measures.

Acknowledgement: Information provided in this policy was taken in part from the City of Austin Administrative Bulletin No. 05-01: Designation of Energy Manager and Establishment of Energy Efficiency Policy prepared by Austin Energy, dated August 26, 2004.

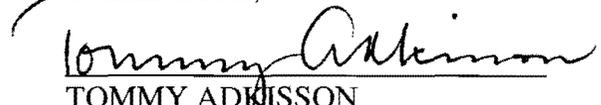
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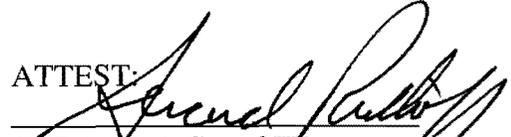

NELSON W. WOLFF
County Judge


SERGIO "CHICO" RODRIGUEZ
Commissioner, Precinct 1


PAUL ELIZONDO
Commissioner, Precinct 2

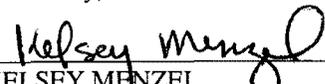

LYLE LARSON
Commissioner, Precinct 3


TOMMY ADKISSON
Commissioner, Precinct 4

ATTEST:

GERARD RICKHOFF
County Clerk

Approved By: 
JOE ACEVES
Executive Director
Infrastructure Services

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SUSAN D. REED
Criminal District Attorney
Bexar County, Texas

By: 
KELSEY MENZEL
Assistant Criminal District Attorney - Civil Section