Recommended Energy Conservation Measures (ECMs)

Proposed to Fort Bend County, Texas

Building	ECM #	Descriptoin	kWh Saved	Energy $ Saved	Investment	Avg Payback (Yrs)
Mustang	ECM 1	Occupancy Sensors				Lifetime
	ECM 2	AC Units		$ 2,000.00	$ 25,000.00	12.5
	ECM 3	Programmable Themostats				
Lutts Library	ECM 1	Occupancy Sensors	3,241	$ 264.83	$ 1,115.72	4.2
Heritage House	ECM 1	Occupancy Sensors	362	$ 44.87	$ 648.56	14.5
East End Annex	ECM 1	Occupancy Sensors	9300	$ 1,032.35	$ 7,070.49	6.8
	ECM 2	Replace T-12 lamps w/T-8	33135	$ 3,678.00	$ 30,259.48	8.2
	ECM 3	Variable Frequency Drives	6971	$ 773.74	$ 4,950.00	6.4
MS City Library	ECM 1	Occupancy Sensors				
	ECM 2	Retrofit Faucets (12)	$76 water	$64 Energy	$ 124.00	1.34
	ECM 3	Flow Restrictors (Maintenance)				
AGeorge Library	ECM 1	Occupancy Sensors	1994	$ 267.22	$ 864.75	3.2
	ECM 2	Split System Scheduling	14104	$ 1,890.00	$ 569.08	0.3
Courthou Annex	ECM 1	RTU Scheduling	50182	$ 6,473.44	$ 676.96	0.1
	ECM 2	Occupancy Sensors	7769	$ 1,009.94	$ 6,013.00	6
	ECM 3	Replace T-12s with T-8s	21635	$ 2,813.00	$ 19,757.66	7
Rd/Bridge Dept	ECM 1	Occupancy Sensors	5205	$ 593.35	$ 2,187.00	3.7
	ECM 2	RTU Scheduling	59970	$ 6,837.00	$ 1,580.00	0.2
Juv Detention	ECM 1	Occupancy Sensors	12566	$ 1,533.00	$ 7,642.00	5
	ECM 2	Replace T-12s with T-8s	87904	$ 10,724.34	$ 80,277.00	7.5
	ECM 3	Replace Photocell maintenance)				
Gmem Library	ECM 1	Occupancy Sensors	62058	$ 7,856.00	$ 21,671.00	2.8
	ECM 2	AHU Economizers	59442.8	$ 6,479.26	$ 20,350.00	3.14
	ECM 3	VFD on Coling Tower fans	5462	$ 595.35	$ 5,170.00	8.68
	ECM 4	Condnser Water Temp reset	10108.8	$ 1,101.86	$ 3,000.00	2.72
	ECM 5	Prem-Efficiency Motors	5924	$ 646.00	$ 5,956.00	9.2
Jury Assembly	ECM 1	Split System Scheduling	4217	$ 586.00	$ 569.00	1
	ECM 2	Occupancy Sensors	4394	$ 593.21	$ 2,745.00	4.6
	ECM 3	Replace T-12s with T-8s	13449	$ 1,815.59	$ 12,282.00	6.8
	ECM 4	Replace Incandes w/CFLs				
Clerk's Office	ECM 1	RTU Scheduling	57532	$ 7,191.00	$ -	-
	ECM 2	Occupancy Sensors	1292	$ 161.00	$ 540.00	3.3
Jane Long Annex	ECM 1	Occupancy Sensors	12067	$ 1,315.27	$ 4,866.00	3.7
Fac Mgmt & Plan	ECM 1	Occupancy Sensors	2780	$ 389.13	$ 2,378.00	6.1
	ECM 2	Replace Incandes w/CFLs				
Jail	ECM 1	Occupancy Sensors	44093	$ 4,485.67	$ 7,970.00	1.7
Old Jail	ECM 1	Replace Boilers-Install Solar	842.8	$ 5,899.00	$ 39,100.00	6.63
Travis	ECM 1	Occupancy Sensors	34902	$ 6,058.00	$ 18,501.00	3.1
	ECM 2	VFDs on AHU Fans	993	$ 102.29	$ 35,625.00	6.42
	ECM 3	AHU Economizers	117413.1	$ 12,093.55	$ 60,500.00	5
	ECM 4	Chilled Water Reset	15015	$ 1,546.55	$ 3,000.00	1.94
	ECM 5	VFDs on Chilled Water Pumps	7448	$ 767.15	$ 6,700.00	8.73

EMS Ceter	ECM 1	RTU Scheduling	65378	$	7,584.00	$	-	0
	ECM 2	Occupancy Sensors	6075	$	704.69	$	2,295.59	
	ECM 3	Replace T-12 lamps w/T-8	19296	$	2,238.35	$	17,621.70	7.9
O'Shields Center	ECM 1	RTU Scheduling	53897	$	6,144.00	$	1,354.00	0.2
	ECM 2	Occupancy Sensors	9062	$	1,033.00	$	3,837.00	3.7
	ECM 3	Install control system						
	ECM 4	Replace condensing Unit						
Agriculture Ctr	ECM 1	Occupancy Sensors	16800	$	2,016.00	$	6,007.00	3
	ECM 2	De-lamp lobby lights						
Old Office Bldg	ECM 1	RTU Scheduling	25657	$	3,592.00	$	1,128.00	0.3
	ECM 2	Occupancy Sensors	1540	$	216.00	$	1,431.00	6.6
Alternative Schoo	ECM 1	RTU Scheduling	11616	$	1,742.00	$	451.00	0.3
	ECM 2	Occupancy Sensors	2033	$	305.00	$	865.00	2.8
Counseling Ctr	ECM 1	RTU Scheduling	10206	$	1,455.00	$	451.00	0.3
	ECM 2	Occupancy Sensors	1132	$	144.00	$	973.00	6.8
	ECM 3	Replace T-12s with T-8s	3898	$	495.00	$	3,560.00	7.2
	ECM 4	Replace Incandes w/CFLs						
	ECM 5	Repair duct ro restore service						
Youth Facility	ECM 1	RTU Scheduling	31314	$	4,697.00	$	903.00	0.2
	ECM 2	Occupancy Sensors	4553	$	683.00	$	1,156.00	1.7
	ECM 3	Replace T-12 lamps w/T-8	10330	$	1,550.00	$	9,434.00	6.1
Drainage Dept	ECM 1	Split System Scheduling	3694	$	550.00	$	285.00	0.5
	ECM 2	Occupancy Sensors	3192	$	476.00	$	1,323.00	2.8
	ECM 3	Replace T-12 lamps w/T-8	9940	$	1,481.00	$	9,078.00	6.1
Gold3 Mainten	ECM1	Split System Scheduling	5921	$	675.00	$	285.00	0.4
	ECM 2	Occupancy Sensors	3867	$	441.00	$	1,497.00	3.4
	ECM 3	Replace T-12 lamps w/T-8	17347	$	1,978.00	$	15,842.00	8
Animal Control	ECM 1	Split System Scheduling	4181	$	485.00	$	285.00	0.6
	ECM 2	Occupancy Sensors	2207	$	256.00	$	1,081.00	4.2
	ECM 3	Replace T-12 lamps w/T-8	11695	$	1,356.57	$	10,679.82	7.9
	ECM 4	Use daylight -Use phtocell						
Eng. Adm Office	ECM 1	Split System Scheduling	14215	$	1,677.00	$	240.00	
	ECM 2	Occupancy Sensors	9231	$	1,089.00	$	4,525.00	4.2
	ECM 3	Replace T-12 lamps w/T-8	28457	$	3,358.00	$	25,988.00	7.7
	ECM 4	De-lamp area w/high illumination						
Exhibit Bldg B	ECM 1	Occupancy Sensors	647	$	94.00	$	302.00	3.2
Exhibit Bldg C								
Fairgrounds Adm	ECM 1	Occupancy Sensors	2333	$	341.00	$	1,141.00	3.4
	ECM 2	Replace T-12 lamps w/T-8	21357	$	3,118.00	$	8,188.00	2.6
Exhibit Bldg D	ECM 1	Occupancy Sensors	139	$	20.00	$	104.00	5.1
Exhibit Bldg E								
Rosenberg Annex	ECM 1	Occupancy Sensors	29,289	$	3,222.00	$	21,388.00	6.6
Mamie G Library	ECM 1	RTU Scheduling	12104	$	1,513.00			
	ECM 2	Occupancy Sensors	839	$	105.00	$	540.00	5.2
5th St Comm Ctr	ECM 1	Split System Scheduling	67143	$	9,131.00			
	ECM 2	Occupancy Sensors	12634	$	1,718.00	$	2,338.00	1.4
	ECM 3	Replace Incandes w/CFLs						
1st Colony Library	ECM 1	Occupancy Sensors	4748	$	594.00	$	1,024.00	1.7
	ECM 2	Prem Efficiency Motors	2720	$	340.00	$	1,637.00	4.8

	ECM 3	AHU Economizers	69796.8	$	8,724.60	$	8,736.00	1
Precinct 4 Bldg	ECM 1	Occupancy Sensors	12167	$	1,557.00	$	4,923.00	3.2
Sugar Land Librar	ECM 1	Occupancy Sensors	7791	$	888.00	$	2,237.00	2.5
	ECM 2	AHU Economizers	89738.7	$	10,230.70	$	8,736.00	0.85
	ECM 3	VFDs on AHU Fans	14896	$	1,698.16	$	7,850.00	4.62
Sugar Land Annex	ECM 1	Occupancy Sensors	9601	$	1,229.00	$	7,171.00	5.8
	ECM 2	Replace T-12 lamps w/T-8	40931	$	5,239.00	$	37,379.00	7.1
Sugar Creek Anne	ECM 1	Split System Scheduling	4217	$	538.00	$	854.00	1.6
	ECM 2	Occupancy Sensors	2957	$	358.00	$	1,697.00	4.7
	ECM 3	Replace T-12 lamps w/T-8	7991	$	967.00	$	7,298.00	7.5
SUMMARY	**99 ECMs**		**1574545**	**$**	**199,664.03**	**$**	**685,777.81**	**3.41686869**
			kWhs saved		**Energy $ saved**		**Investment**	**Average payback**