

Greening Your Building Toward The Bottom Line

LEED CERTIFICATION FOR REAL ESTATE
PEOPLE BY REAL ESTATE PEOPLE



Presented By:
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EN VISION
REALTY SERVICES

THE GREEN BUILDING EXPERTS

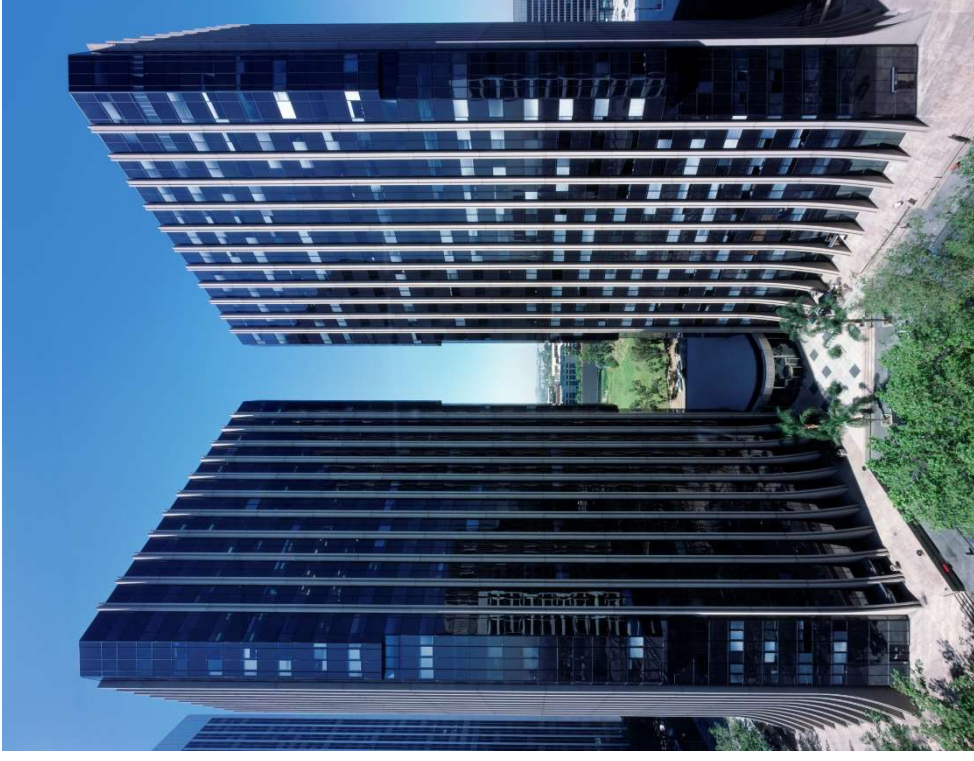


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2011 Sustainability Trends

GREEN BUILDINGS BECOME THE TIE BREAKER

- Generally Perform 20% - 30% better
- Many Corporate, State & Federal Tenants are Requiring LEED
- When Comparing Building A (LEED Certified) to Building B (Brown Building) If Buildings are Similar My Personal Feeling has Always Been The LEED Building Would Get 8 Out of Every 10 Deals
- Productivity Benefits – What If the Studies Are True?

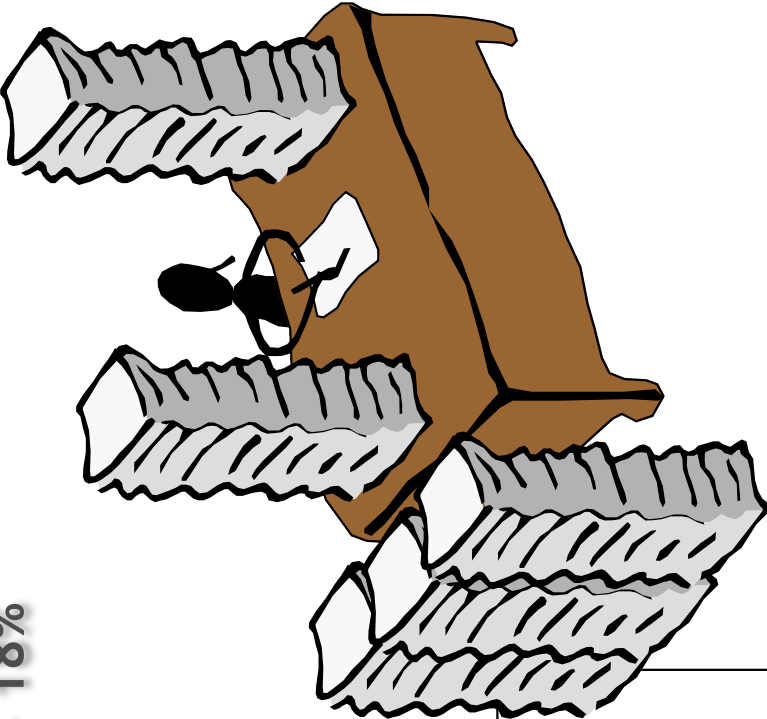


Financial Benefits Of Productivity Increase

Carnegie Mellon Studies have shown productivity increases ranging from 0.4% - 18%

Average Cost for a U.S. Office Building

Salaries	\$318.00 p.s.f.
Technology	50.00
Mortgage/Lease	32.00
Energy	2.35
Total	\$402.35



Findings

- 1% increase = \$4.02 p.s.f.
- 5% increase = \$20.12 p.s.f.
- 1% inc. in 100,000 s.f. Bldg. = \$400,000 p/year
- 5% inc. in 100,000 s.f. Bldg. = \$2,000,000 p/year

20 Week LEED EB O&M Submittal Program

- Charette: 1 month
- Performance Period: months 2- 4
- Submit to USGBC: month 5
- Property Management will Work 1 Hour a Week on LEED
- Engineering will Work 2 Hours a Week on LEED
- USGBC Review: 25 Days
- Consultant Answers: 25 Days
- Final Certification Level: 15 Days



The Ease of LEED LEED EB Operations & Maintenance Version 3

AVERAGE CLASS A HIGH RISE

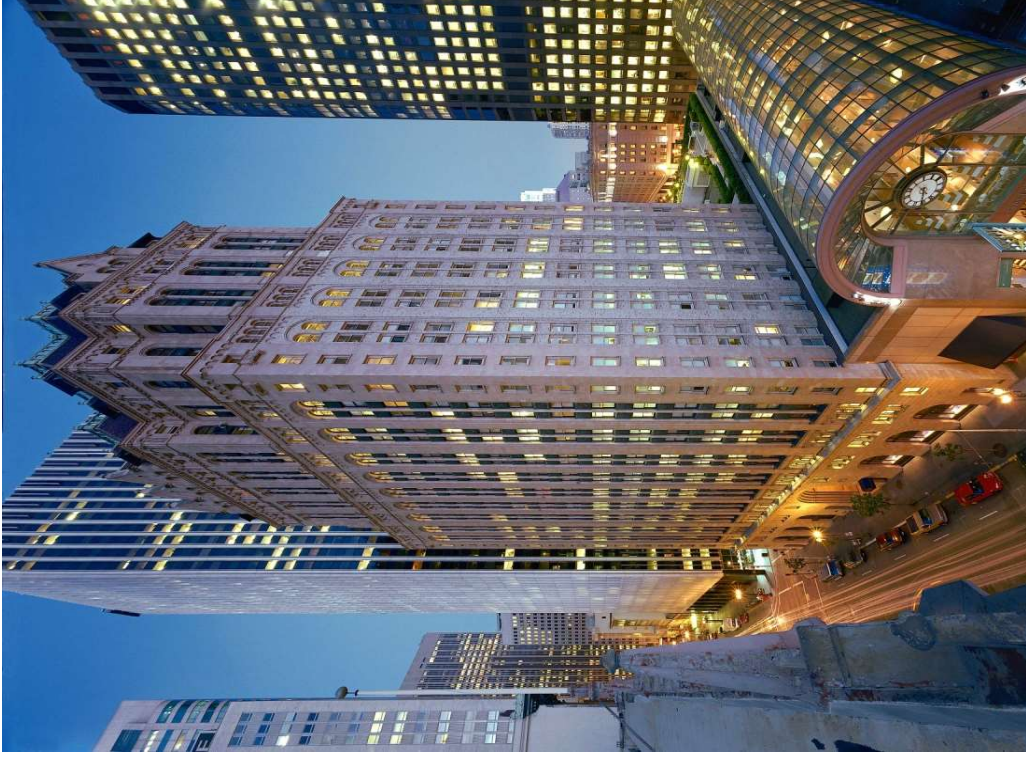
- **3 Points.** - Sustainable Sites
 - 2 Pts. – Policies & Procedure on Exterior & Hardscape and Pest & Erosion Control
 - 1 Pt. – Parking Garage
- **4 Points.** – Water Efficiency
 - 2 Pts. – Water Meters
 - 1 Pt. – 10% Water Savings
 - 1 Pt. – Cooling Tower Chemical



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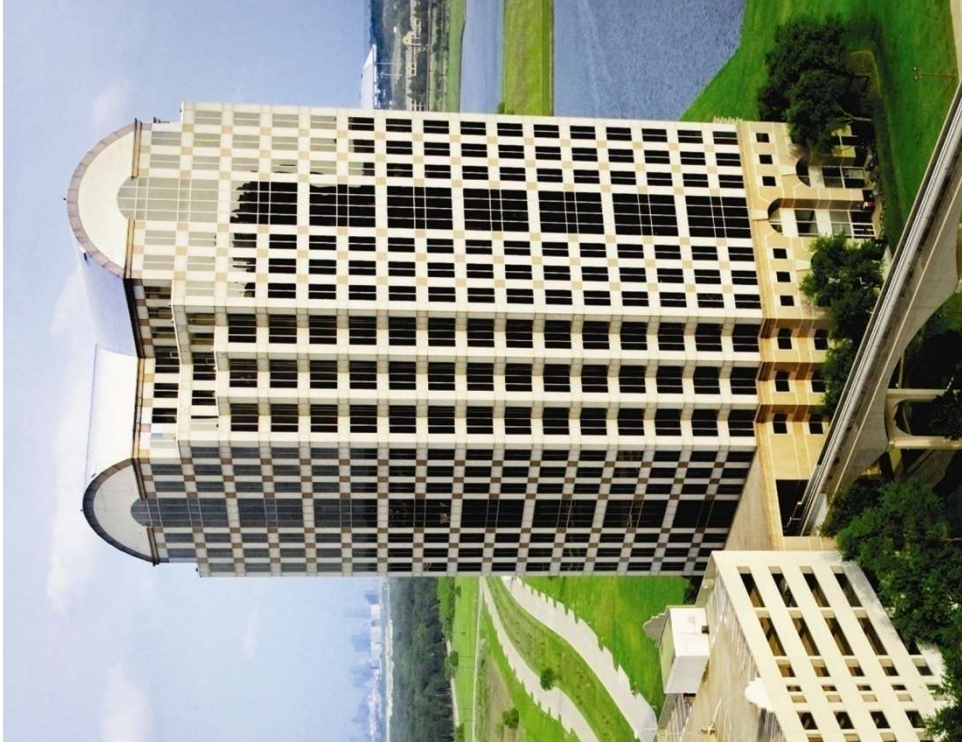
- 13 Pts. – Energy & Atmosphere
 - 10 Pts.– Energy Star Score - 81
 - 1 Pt. – Emissions Reporting
- 4 Pts. – Re-Commissioning
 - ASHRAE Level II Audit - \$15,000
 - Implement Measures with 1 Yr. Payback



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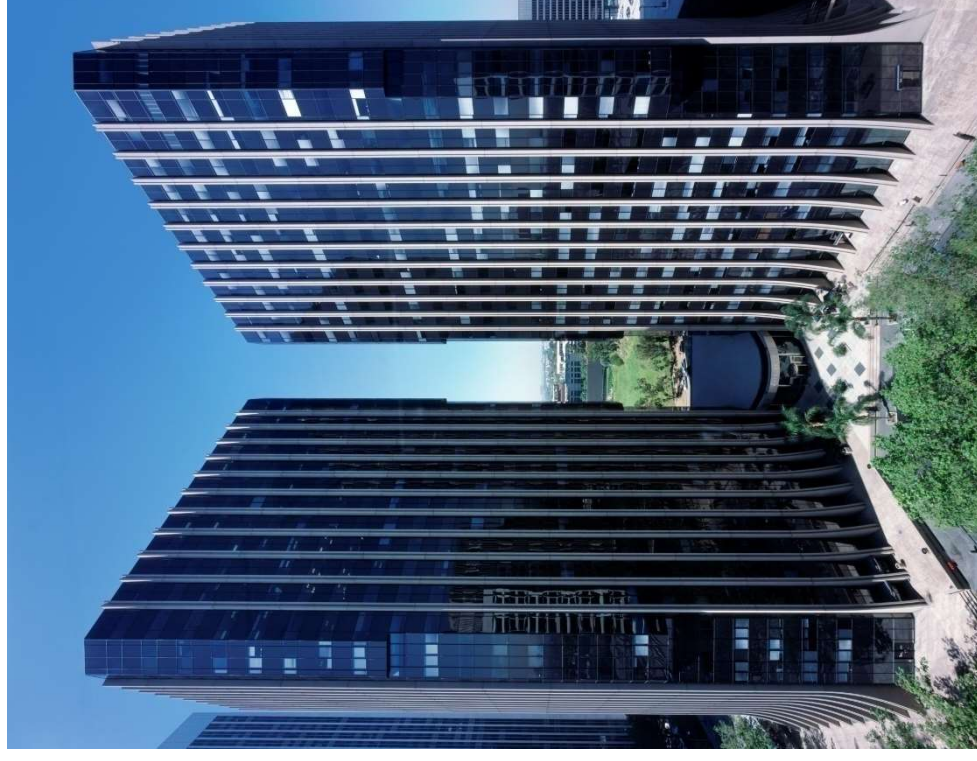
- 4 Pts. – Materials & Resources
 - 1 Pt. – Low Mercury Bulbs
 - 1 Pt. – Waste Stream Audit
 - 1 Pt. – Recycling at 50%
 - 1 Pt. – E-Waste Recycling Day
- 2 Low Cost Pts. – Facility Alteration
 - Paint & Carpet 1 room and demo waste



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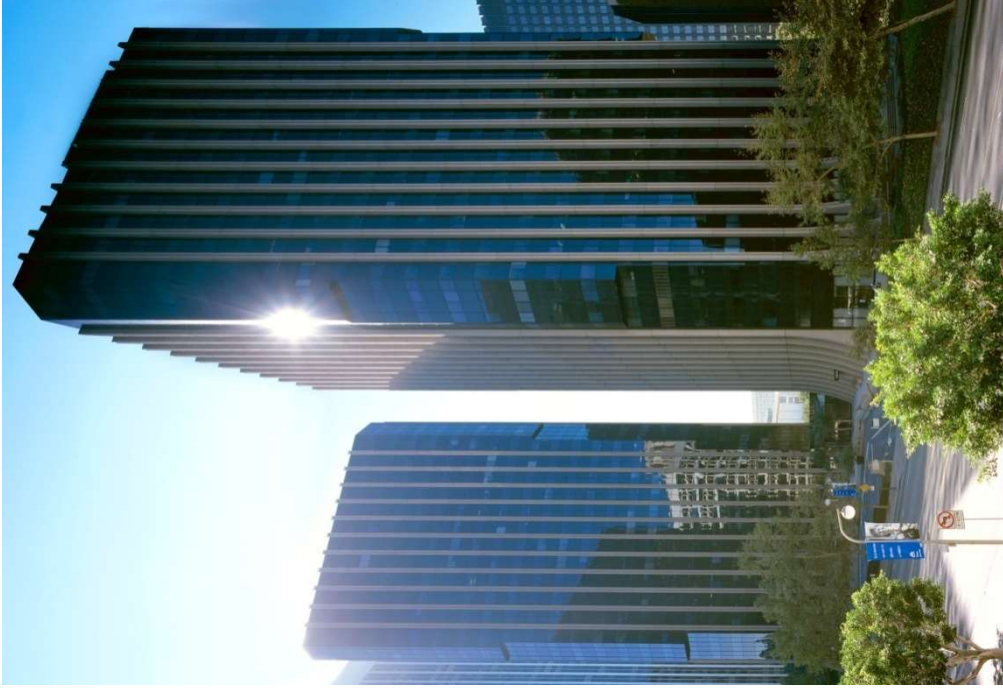
- 8 Pts. – Indoor Environmental
 - I-Beam Survey – Eng. can do at desk
 - Lighting Controls – 50% of cubicles have task lighting
 - Green Cleaning Program
 - Custodial Effectiveness Survey
 - Purchase Green Chemicals
 - Sustainable Cleaning Equipment
 - Roll Off Mats
 - Pest Management Plan



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AVERAGE CLASS A HIGH RISE

- 4 Pts. – Innovations
 - 1 Pt. – Green Education
 - 1 Pt. – LEED AP
 - 1 Pt. – Provide 2 years of Op. Expenses & also during Performance Period.
 - 1 Pt. – Regional Credit (usually one easy point here)

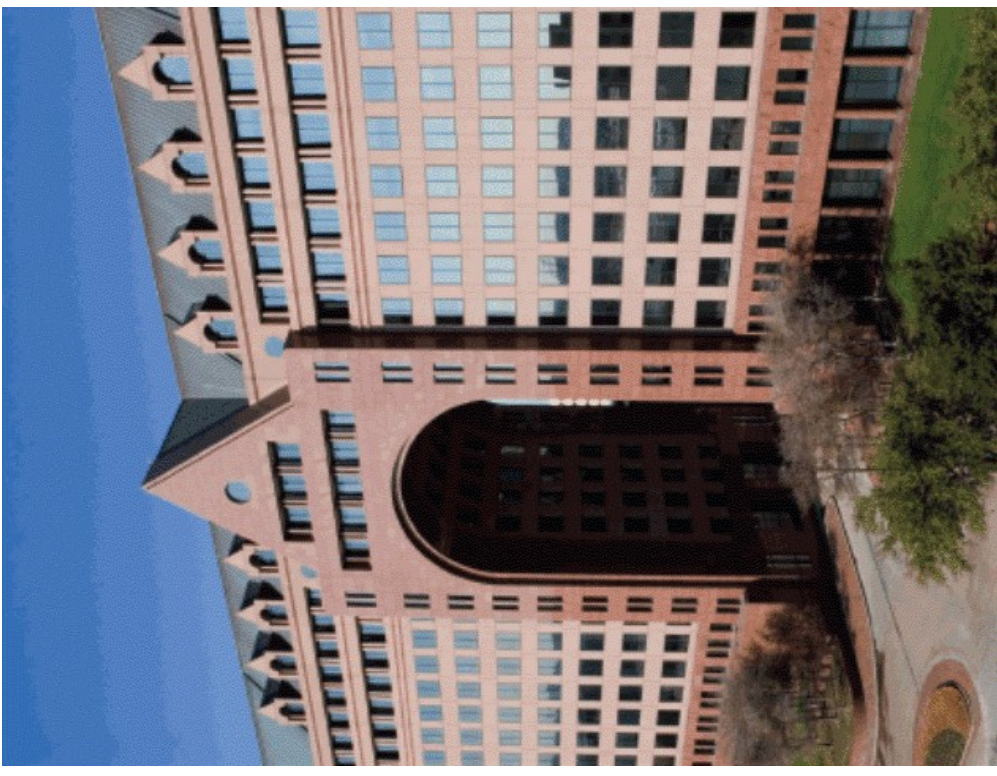


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TOTAL PTS. FROM PREVIOUS SLIDES

42 TOTAL POINTS = CERTIFIED

- **Additional Costs:**
 - Waste Audit - \$2,000
 - Outside Air Measurement - \$4,000 - \$7,000
 - Restroom Retrofits
 - Aerators, flush valves, full retrofit
 - ASHRAE Level II Audit
 - Assume \$15,000

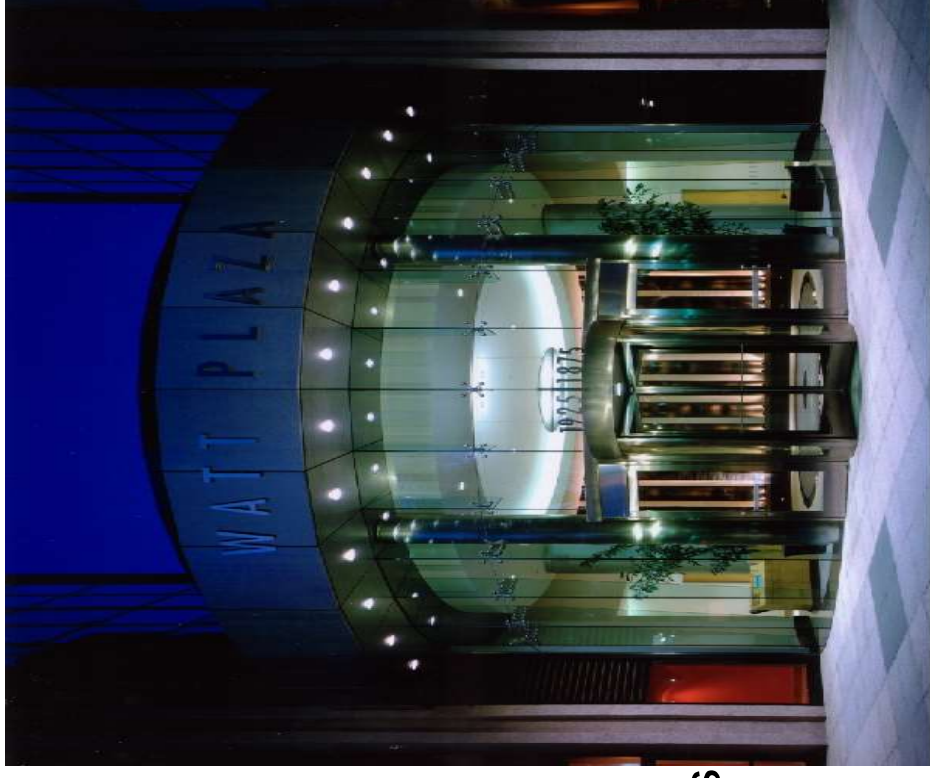


Envision Realty Services' Economics of LEED EB

ECONOMIC SUMMARY

(DETAILED SHEET ON NEXT SLIDE)

- Ave. Sq. Ft. - 333,800
- Ave. certification cost - \$77,091
 - Includes Registration, Certification, Consultation & needed retrofits
- Ave. cost per Sq. Ft. - \$0.23
- Ave. savings per Bldg. - \$89,965
 - Includes operational and energy savings
- Ave. payback - < 1 year
- Ave. ROI – 117%



Average LEED Costs and Savings

City	State	Energy Star	Level Of Certification	S.F.	Cost	Cost PSF	Annual Savings	Payback (Years)	ROI
LEED Certification with ASHRAE Report									
Washington	DC	74	Silver	345,501	\$ 81,805.00	\$ 0.24	\$ 108,500.00	0.8	133%
Miami	FL	82	Gold	462,997	\$ 70,429.91	\$ 0.15	\$ 110,000.00	0.6	156%
Washington	DC	91	Gold	427,463	\$ 80,673.00	\$ 0.19	\$ 110,820.00	0.7	137%
Tustin	CA	89	Silver	96,356	\$ 72,322.00	\$ 0.75	\$ 71,867.00	1.0	99%
Miami	FL	79	Silver	223,435	\$ 63,302.00	\$ 0.28	\$ 59,050.00	1.1	93%
Washington	DC	80	Silver	202,638	\$ 69,059.14	\$ 0.34	\$ 68,400.00	1.0	99%
Walnut Creek	CA	93	Gold	188,507	\$ 44,479.69	\$ 0.24	\$ 101,296.00	0.4	228%
Walnut Creek	CA	97	Gold	188,507	\$ 44,479.00	\$ 0.24	\$ 101,295.87	0.4	228%
Fort Lauderdale	FL	86	Gold	269,925	\$ 66,253.60	\$ 0.25	\$ 138,130.08	0.5	208%
Fort Lauderdale	FL	90	Gold	208,267	\$ 67,594.47	\$ 0.32	\$ 99,200.00	0.7	147%
Addison	TX	86	Silver	1,051,641	\$ 102,990.00	\$ 0.10	\$ 197,000.00	0.5	191%
Austin	TX	80	Silver	195,449	\$ 66,903.22	\$ 0.34	\$ 37,520.00	1.8	56%
Boca Raton	FL	85	Gold	631,795	\$ 111,560.00	\$ 0.18	\$ 150,500.00	0.7	135%
Burlingame	CA	87	Silver	122,278	\$ 71,450.00	\$ 0.58	\$ 43,000.00	1.7	60%
Chelmsford	MA	85	Silver	291,000	\$ 70,130.00	\$ 0.24	\$ 39,200.00	1.8	56%
Coral Gables	FL	87	Gold	258,736	\$ 75,064.00	\$ 0.29	\$ 52,200.00	1.4	70%
Coral Gables	FL	87	Gold	325,005	\$ 73,830.00	\$ 0.23	\$ 62,650.00	1.2	85%
Glendale	CA	93	Gold	336,510	\$ 61,500.00	\$ 0.18	\$ 69,000.00	0.9	112%
Miami	FL	86	Gold	545,712	\$ 90,307.00	\$ 0.17	\$ 192,051.00	0.5	213%
Rancho Cordova	CA	96	Silver	110,882	\$ 61,000.00	\$ 0.55	\$ 126,200.00	0.5	207%
Sacramento	CA	88	Platinum	394,330	\$ 71,822.00	\$ 0.18	\$ 78,000.00	0.9	109%
Sacramento	CA	90	Silver	134,524	\$ 63,305.00	\$ 0.47	\$ 31,200.00	2.0	49%
San Antonio	TX	90	Gold	138,540	\$ 64,974.00	\$ 0.47	\$ 75,100.00	0.9	116%
San Francisco	CA	95	Gold	760,565	\$ 133,950.00	\$ 0.18	\$ 22,100.00	6.1	16%
San Francisco	CA	82	Gold	303,139	\$ 61,000.00	\$ 0.20	\$ 35,100.00	1.7	58%
San Jose	CA	80	Gold	100,841	\$ 64,788.00	\$ 0.64	\$ 34,860.00	1.9	54%
Washington	DC	72	Silver	203,955	\$ 68,600.00	\$ 0.34	\$ 59,200.00	1.2	86%
Fort Lauderdale	FL	88	Silver	261,676	\$ 70,780.00	\$ 0.27	\$ 93,250.00	0.8	132%
Washington	DC	81	Silver	236,717	\$ 91,500.00	\$ 0.39	\$ 88,540.00	1.0	97%
Washington	DC	81	Gold	271,532	\$ 94,345.96	\$ 0.35	\$ 125,342.00	0.8	133%
Long Island City	NY	75	Silver	275,252	\$ 80,107.56	\$ 0.29	\$ 35,957.00	2.2	45%
Cincinnati	OH	89	Gold	800,000	\$ 81,920.00	\$ 0.10	\$ 162,000.00	0.5	198%
Charlotte	NC	96	Silver	343,137	\$ 96,194.00	\$ 0.28	\$ 70,900.00	1.4	74%
Charlotte	NC	91	Silver	234,235	\$ 82,767.00	\$ 0.35	\$ 57,400.00	1.4	69%
Miami	FL	81	Silver	455,144	\$ 81,964.00	\$ 0.18	\$ 27,864.00	2.9	34%
San Jose	CA	97	Gold	400,000	\$ 96,100.00	\$ 0.24	\$ 247,400.00	0.4	257%
West Palm Beach	FL	91	Gold	312,188	\$ 93,210.00	\$ 0.30	\$ 181,620.00	0.5	195%
Denver	CO	95	Gold	278,539	\$ 83,146.00	\$ 0.30	\$ 137,675.00	0.6	166%
Denver	CO	92	Gold	151,853	\$ 67,331.00	\$ 0.44	\$ 84,375.00	0.8	125%
San Francisco	CA	91	Gold	562,370	\$ 94,450.00	\$ 0.17	\$ 66,950.00	1.4	71%
San Francisco	CA	87	Gold	584,663	\$ 73,350.00	\$ 0.13	\$ 35,891.00	2.0	49%
				Avg. S.F.	Avg. Cost	Avg. Cost PSF	Avg. Savings	Avg. Payback	Avg. ROI
				333,800.10	\$77,091.14	\$0.23	\$89,965.95	0.86	117%
ASHRAE Report Only									
Houston	TX	73		300,264	\$ 22,670.00	\$ 0.08	\$ 109,376.00	0.2	482%
Norfolk	VA	49		59,000	\$ 15,600.00	\$ 0.26	\$ 49,064.00	0.3	315%
Providence	RI	74		201,620	\$ 55,000.00	\$ 0.27	\$ 63,400.00	0.9	115%
Richmond	VA	78		190,080	\$ 21,000.00	\$ 0.11	\$ 123,700.00	0.2	589%
Tampa	FL	94	Gold *	386,830	\$ 18,000.00	\$ 0.05	\$ 85,800.00	0.2	477%
				Avg. S.F.	Avg. Cost	Avg. Cost PSF	Avg. Savings	Avg. Payback	Avg. ROI
				227,559	\$26,454.00	\$0.15	\$86,268.00	0.35	396%

Costs include registration, certification, consultation and any retrofits needed. Savings are based on energy, water and operational efficiencies determined through an ASHRAE Level II Energy Audit

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Examples of Actual Savings		
	Cal/EPA Sacramento	2005Downtown EER
Waste Removal	\$0.00	\$0.06
Cleaning Supplies	\$0.05	\$0.14
Electricity	\$0.99	\$2.05
Misc. Jan/Eng/Admin	\$0.10	\$0.31
Water	\$0.02	\$0.06
Landscape	<u>\$0.05</u>	<u>\$0.09</u>
Partial Total	\$1.21	\$2.71
Difference	\$1.50 p.s.f. annually	
Annual Savings	\$1,425,000	
7% Cap Rate =	\$20,035,142 of additional value	

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