



CORENET GLOBAL NEW YORK CITY CHAPTER

Cutting Edge Energy Practices for the Corporate End User:

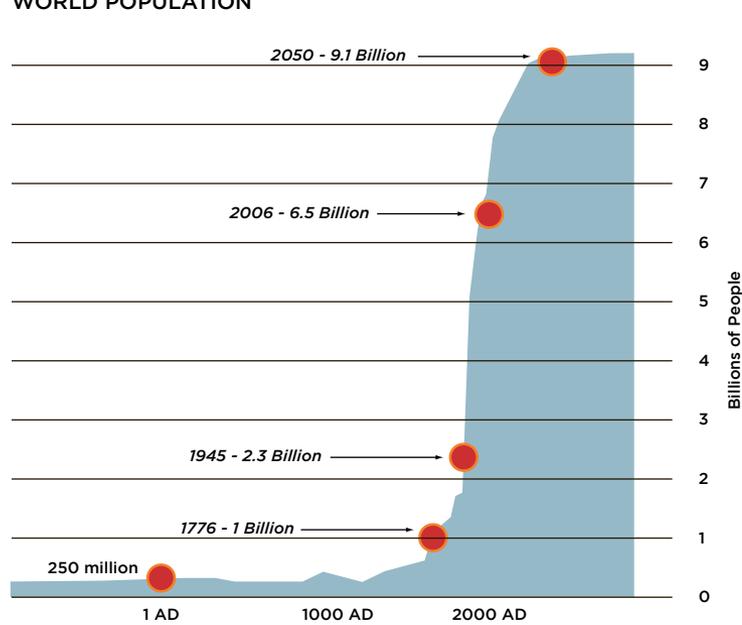
Everything You Need to Know About Energy and Aren't Afraid to Ask

FXFOWLE ARCHITECTS Guy Geier, FAIA, FIIDA, LEED AP, Managing Partner

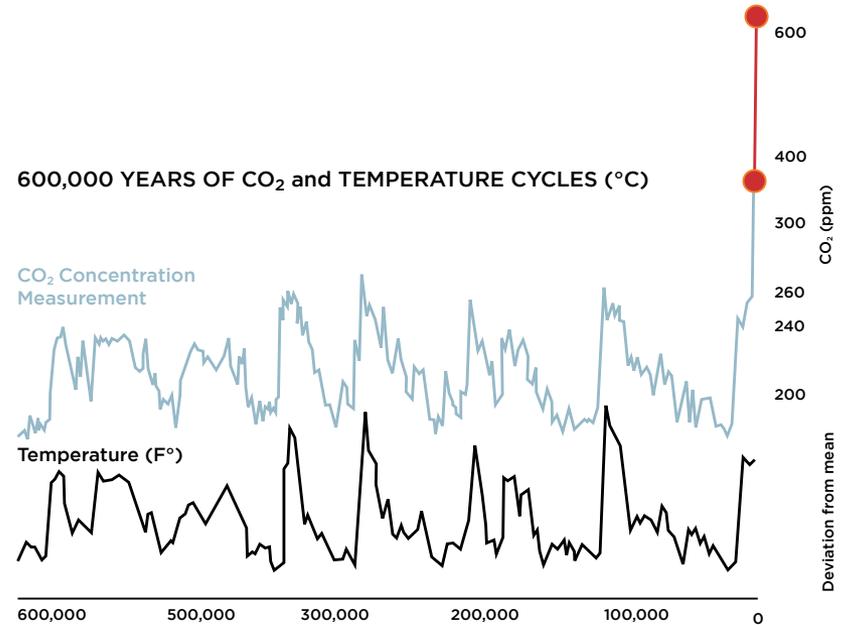
Why Build Sustainably?—Reduce Impact on the Planet

World Population, CO₂ Concentration, Temperature

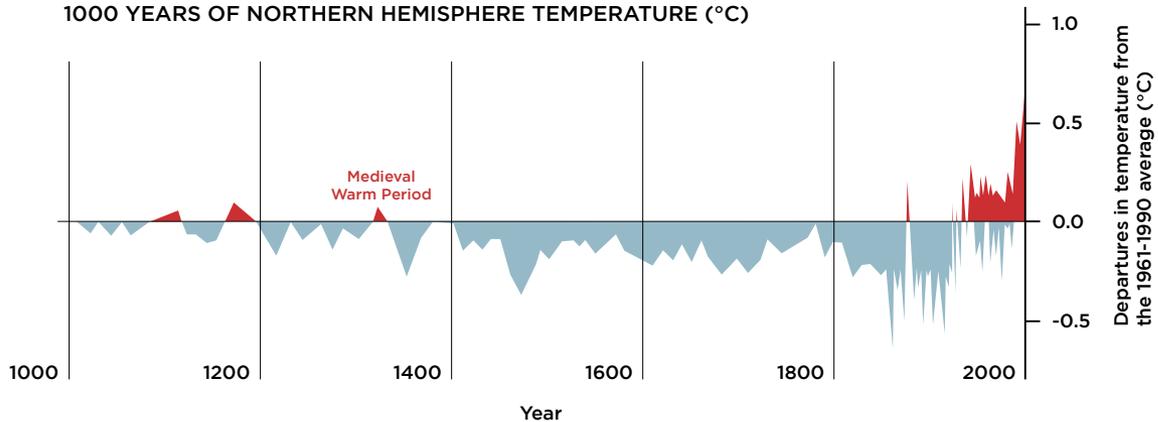
WORLD POPULATION



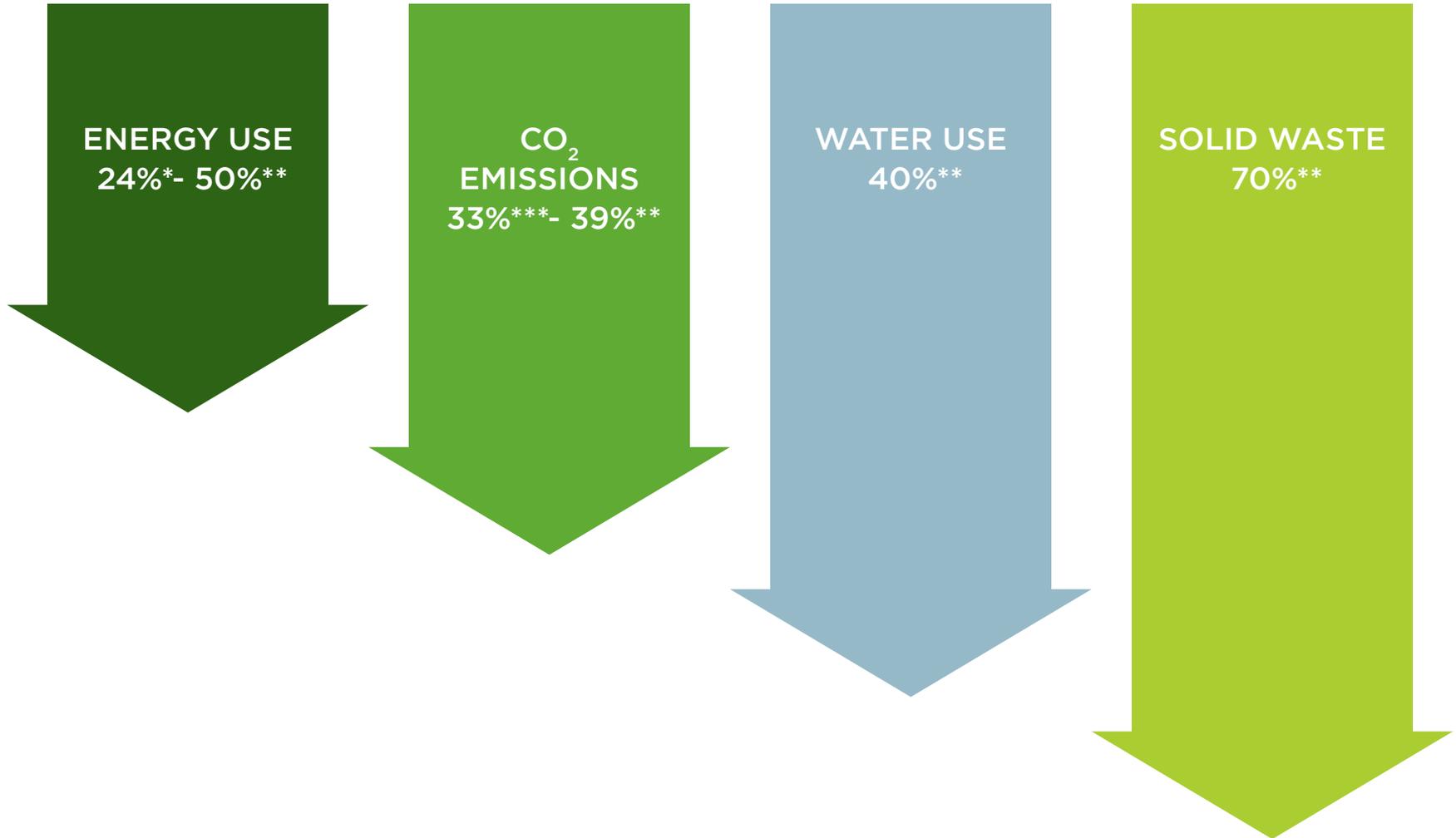
600,000 YEARS OF CO₂ and TEMPERATURE CYCLES (°C)



1000 YEARS OF NORTHERN HEMISPHERE TEMPERATURE (°C)



Green Buildings Can Reduce...



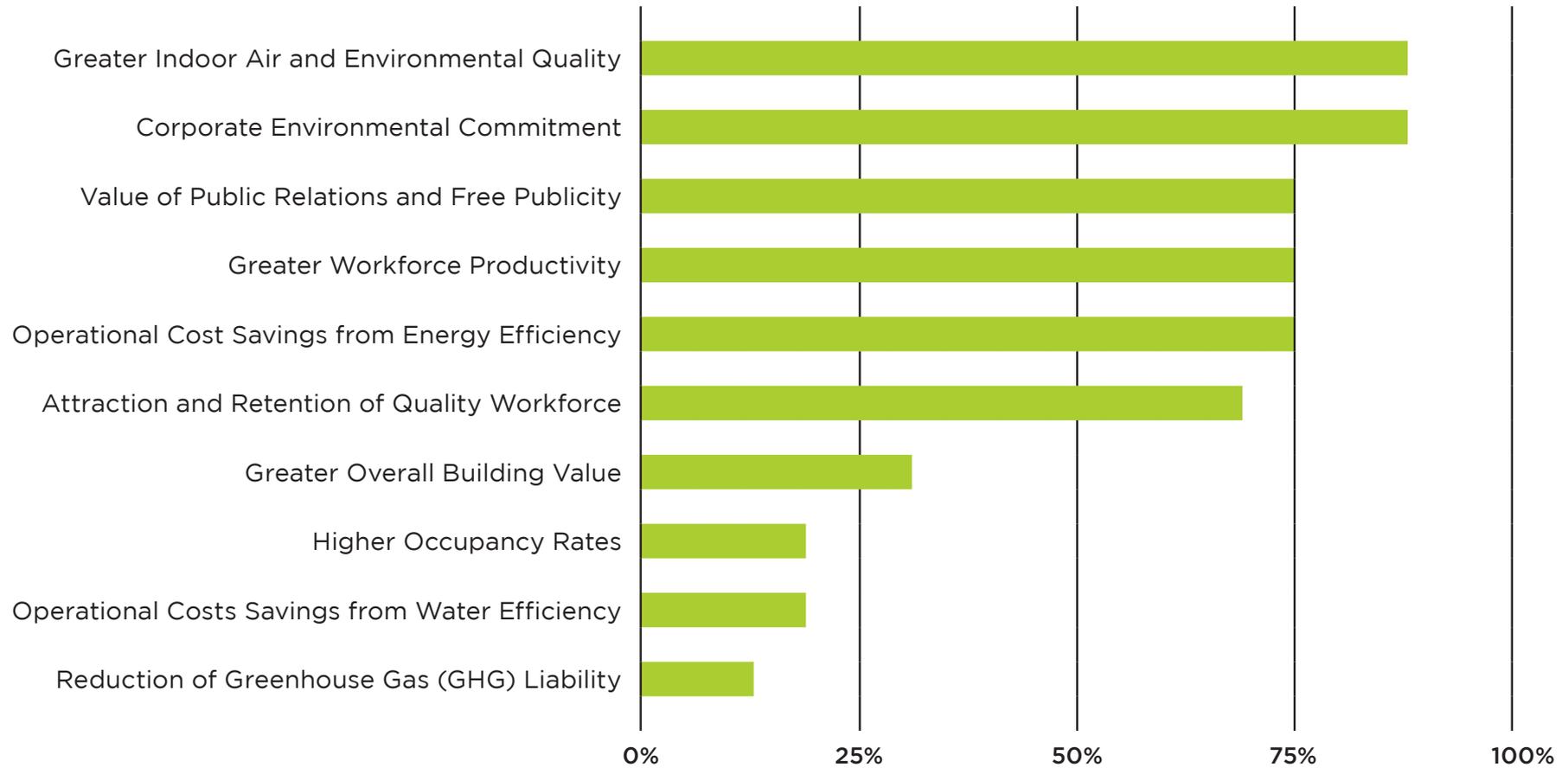
*Turner, C. & Frankel, M. (2008). Energy performance of LEED for New Construction buildings: Final report.

**Kats, G. (2003). The Costs and Financial Benefits of Green Building: A Report to California's Sustainable Building Task Force.

***GSA Public Buildings Service (2008). Assessing green building performance: A post occupancy evaluation of 12 GSA buildings.

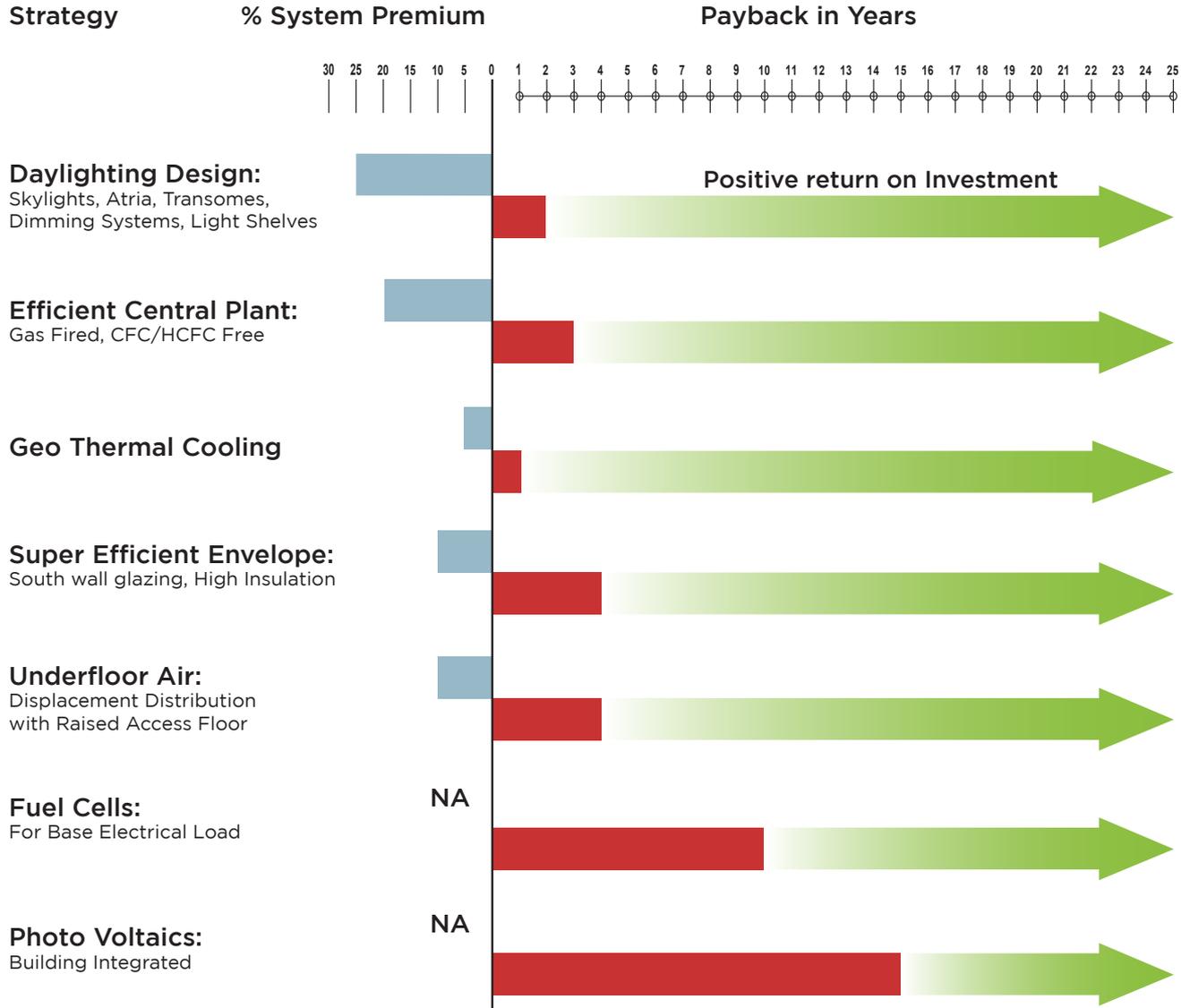
Why Build Sustainably?—Business Advantages

Client Motives for Undergoing a Green Retrofit



Source: Deloitte

Sustainable Systems Payback



Business Results of Building Green

8-9% operating cost decreases*

7.5% building value increases*

6.6% return on investment improves*

3.5% occupancy ratio increases*

3% rent ratio increases**

*Source: McGraw-Hill Construction, Key Trends in the European and U.S. Construction Marketplace SmartMarket Report, 2008

**McGraw-Hill Construction, Greening of Corporate America SmartMarket Report, 2007

Savings Over Conventional Buildings

Energy

Certified - 28% savings

Silver - 30% savings

Gold - 48% savings

Platinum - 50% ++ savings

Water

50% savings typical

\$0.50/sf - 20 year Present Value

Operations & Maintenance

\$0.68/sf per year or **\$8/sf** 20 year Present Value (5% savings)

Pollution

\$1/sf per ton of **CO₂** savings (estimated cost of global warming \$3B/yr)

Incentives—Federal + State (www.dsire.com)



Federal Energy policy act deduction - up to \$1.80/sq. ft for energy reduction >50% than ASHRAE 2001

Federal energy tax credits - 10-30% tax credit for investment in solar energy, fuel cell and micro turbine property

NYS green building tax credits - Up to \$2 million per building**

NYS Solar and Fuel Cell tax credit - 20-25% cost of equipment and installation

NYS Solar Property Tax Abatement - 20 or 35%** of installed cost of PV system

NYS green roof tax abatement - \$4.50/sq.ft of planted roof up to \$100,000

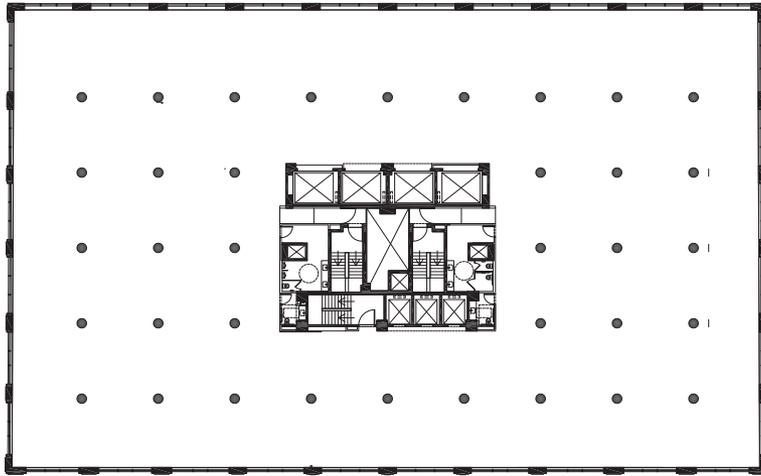
NYS Property tax exemption - 15-year real property tax exemption for solar, biomass, and wind energy systems constructed in New York State

NYSERDA incentives - grants, energy rebates, loan interest rate reduction, and others for energy-efficiency, peak load reduction, on-site renewable energy, alternative fuel vehicles, and water efficiency

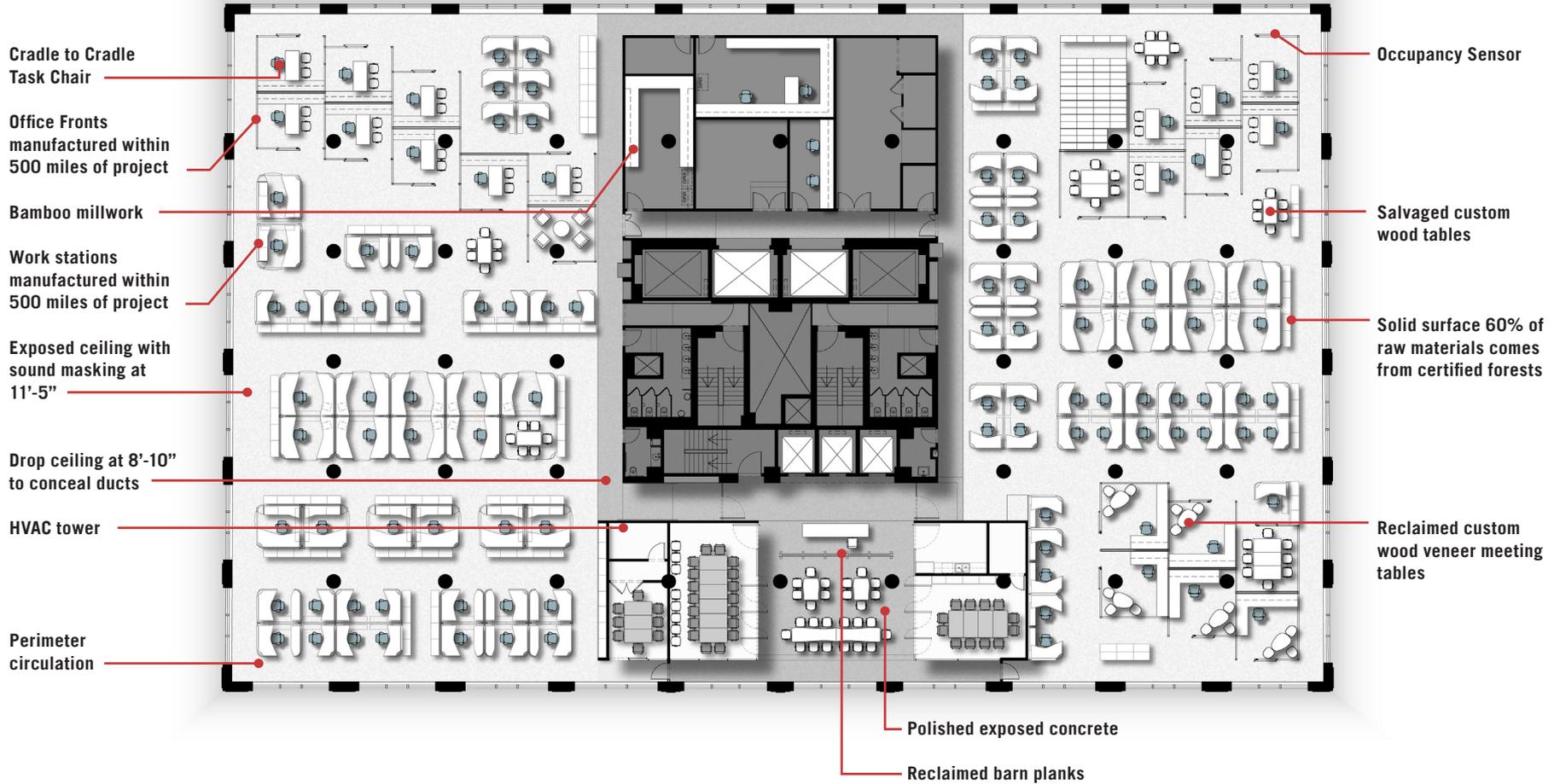
** until the end of 2010

National Audubon Society Headquarters

New York, NY
225 Varick Existing Conditions



Sustainable Features



LEED Checklist

National Audubon Society Headquarters				
48	16	LEED-Civ2.0 Total Project Score		
		Certified 21 to 26 points Silver 27 to 31 points Gold 32 to 41 points Platinum 42 to 57 points		
YES	NO	LEED Credit	LEED Credit Name	Credit Value
4	10	(SS) Sustainable Sites 7		
2	0	(WE) Water Efficiency 2		
11	1	(EA) Energy & Atmosphere 12		
10	4	(MR) Materials & Resources 14		
16	1	(IEQ) Indoor Environmental Quality 17		
5	0	Innovation & Design Process 5		
48	16	LEED-Civ2.0 Total Project Score Platinum 42 to 57 points		









The Rockefeller Brothers Fund Headquarters

New York, NY













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