



# AUSONIO

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## Green Building & Ag Sustainability

*The Triple Bottom Line: People, Planet, and Profits*

Joe Piedimonte

LEED Accredited Professional

LEED = Leadership in Energy & Environmental Design

USGBC = United States Green Building Council



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# Green Building & Ag

- Green Building Relevance to Ag
- Green Building Standards
- New Construction/Renovations
- Existing Buildings & Operations
- Impact on Real Estate Market



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# Energy & Water Demand

Facilities: Offices, Warehouses, & Coolers

*Planet & Profits*

- Ag facilities represent a segment of total building demand which accounts for:
  - 40% of primary energy use
  - 72% of electric consumption
  - 13.6% of potable water consumption



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# Rocky Mountain Institute Study on the Salinas Valley

- #1 Initiative: Energy-Efficient Building Retrofits and Tune-Ups
- Other initiatives involve water management, waste management and cooler buildings.



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# Healthier & More Productive Building Occupants

People

- We spend 90% of our time indoors
- Green buildings have better indoor air quality and lighting
- LEED certified projects case studies demonstrate 2-16% increase in worker and student productivity
- Salaries/Square Feet are 5-10 greater than rent



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# How do you know it's green?

- *What are the standards to measure?*

- Build It Green

- Residential



- Energy Star Buildings:

- Existing Buildings & renovations: profiles/benchmark



- LEED Certification:

- Commercial & Residential; Existing & New



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# USGBC LEED

Common types:

- New Construction (NC)
  - Core and Shell
  - Schools
  - Medical
- Existing Buildings (O&M)



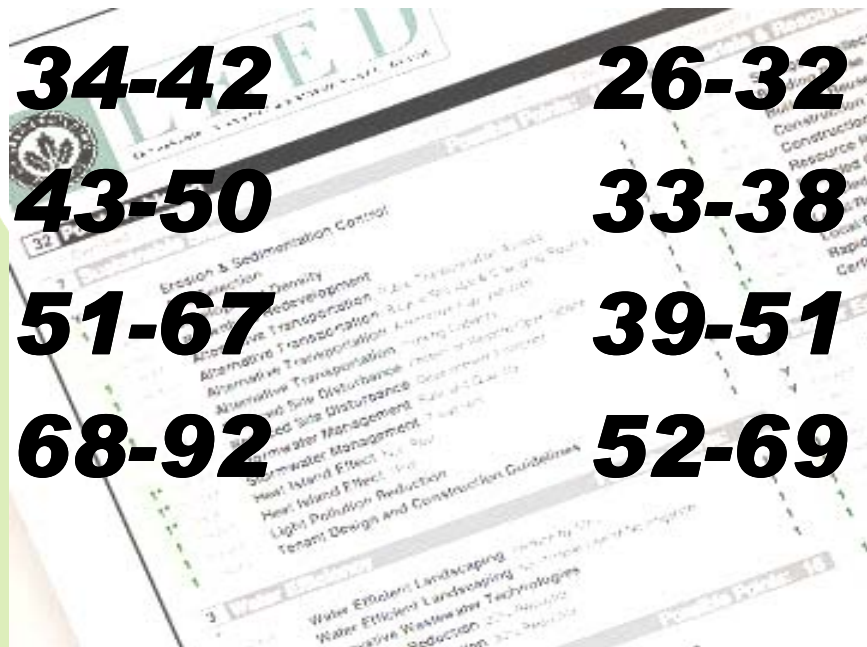
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# LEED Levels (in points)

	<b>O&amp;M</b>	<b>NC</b>
• <b>Certified</b>	<b>34-42</b>	<b>26-32</b>
• <b>Silver</b>	<b>43-50</b>	<b>33-38</b>
• <b>Gold</b>	<b>51-67</b>	<b>39-51</b>
• <b>Platinum</b>	<b>68-92</b>	<b>52-69</b>



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# Beyond the Checklist

- “LEED equivalent”: helpful guideline for small projects. Tendency to be compromised and not validated on bigger projects.
- Fees and Certification amount to an audit of the sustainability of the project, just as a financial audit confirms generally accepted accounting principles.

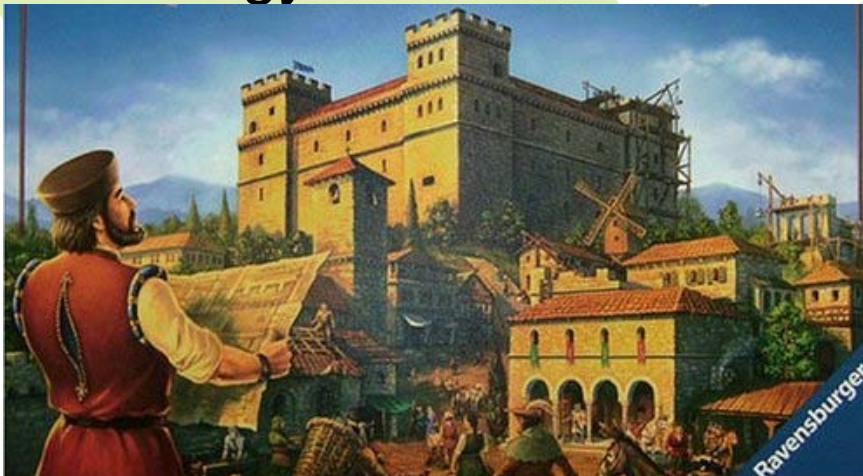


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# LEED Green Building Design & Construction *Return of the Master Builder*

- Current Design Process
- LEED Design Process – An Integrated Approach  
How efficient? How do design and construction elements interact? Is there a benefit to renewable energy?



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# LEED Existing Buildings

- Monterey Conference Center – 98,600 sqft
- Portola Hotel - 369 Guest Rooms & 10 Suites. 7 Floors, +200,000 sqft Co-gen
- Ausonio Building – 20,000 sqft Energy Star Rated Building
- Moss Landing Marina Lab – 60,000 sqft LEED Gold



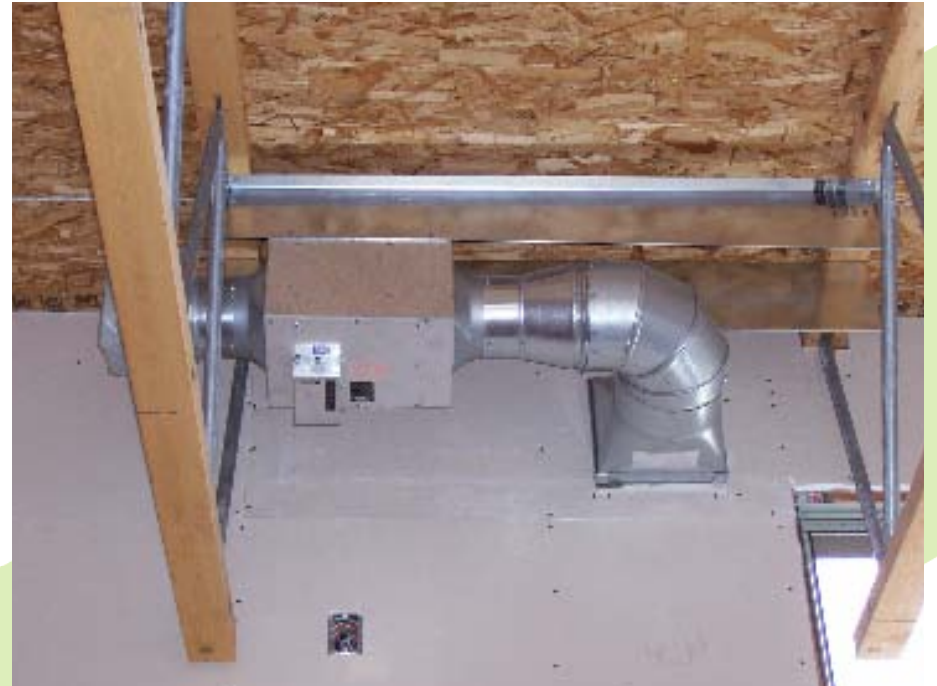
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# Energy-Efficient Buildings

- Commissioning
  - Warranty
  - Automated Controls
  - Power quality
  - Retrocommissioning
- Energy Audits
  - Rate Plan & Usage
  - No cost / low cost
  - Capital projects



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# Savings on Lighting



- Cooler Lighting Strategies
- Advanced lighting controls
- Daylighting
- Motion Sensors
- Parking lots



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# Higher Rents, Lower Vacancies & Higher Appreciation

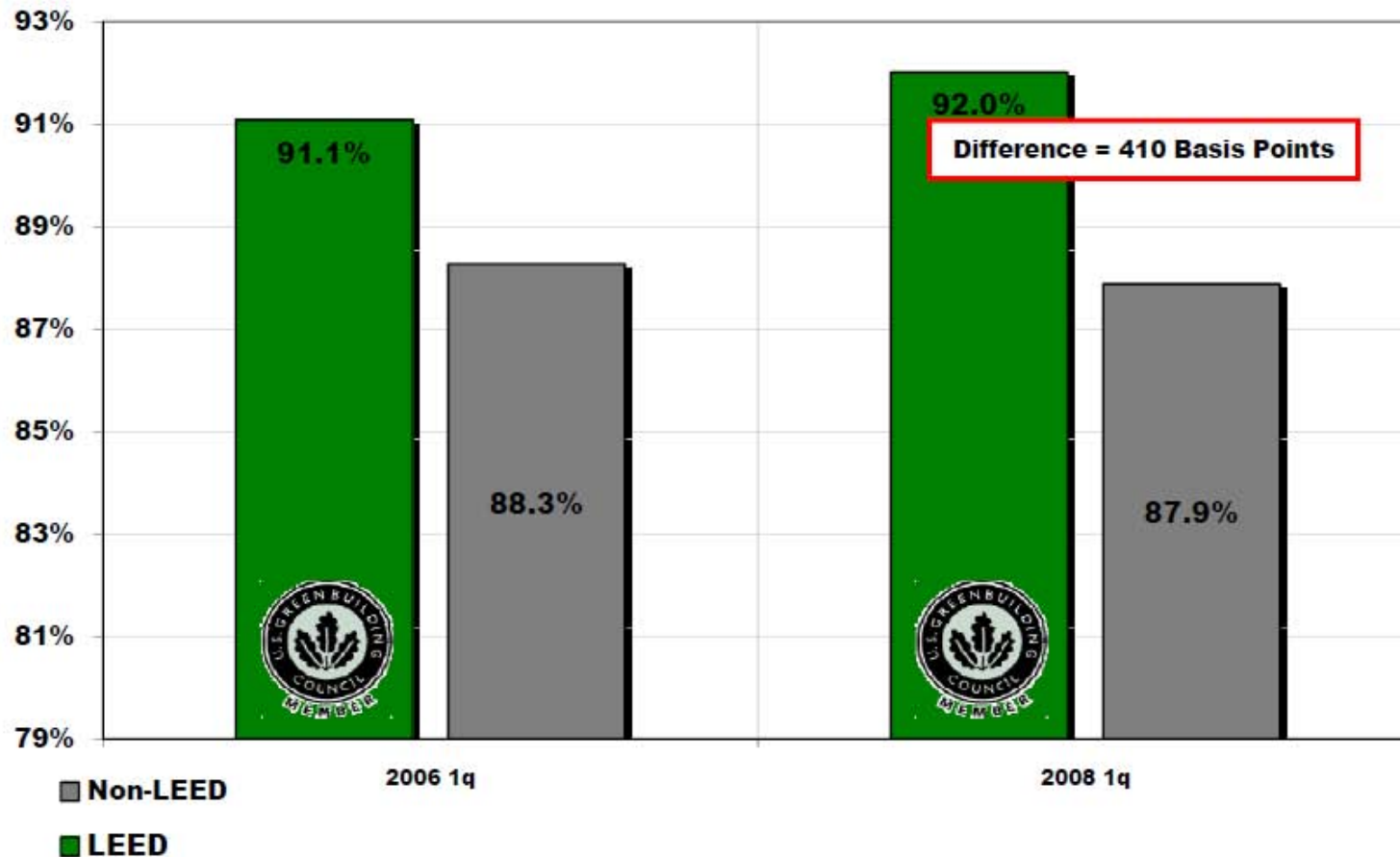
- Methodology: Using CoStar's commercial property database of roughly 44 billion square feet, the study analyzed over 1,300 LEED Certified and ENERGY STAR buildings that totaled about 351 million sq ft. These were compared with non-green properties with similar size, location, class, tenancy and year-built characteristics to generate the results.



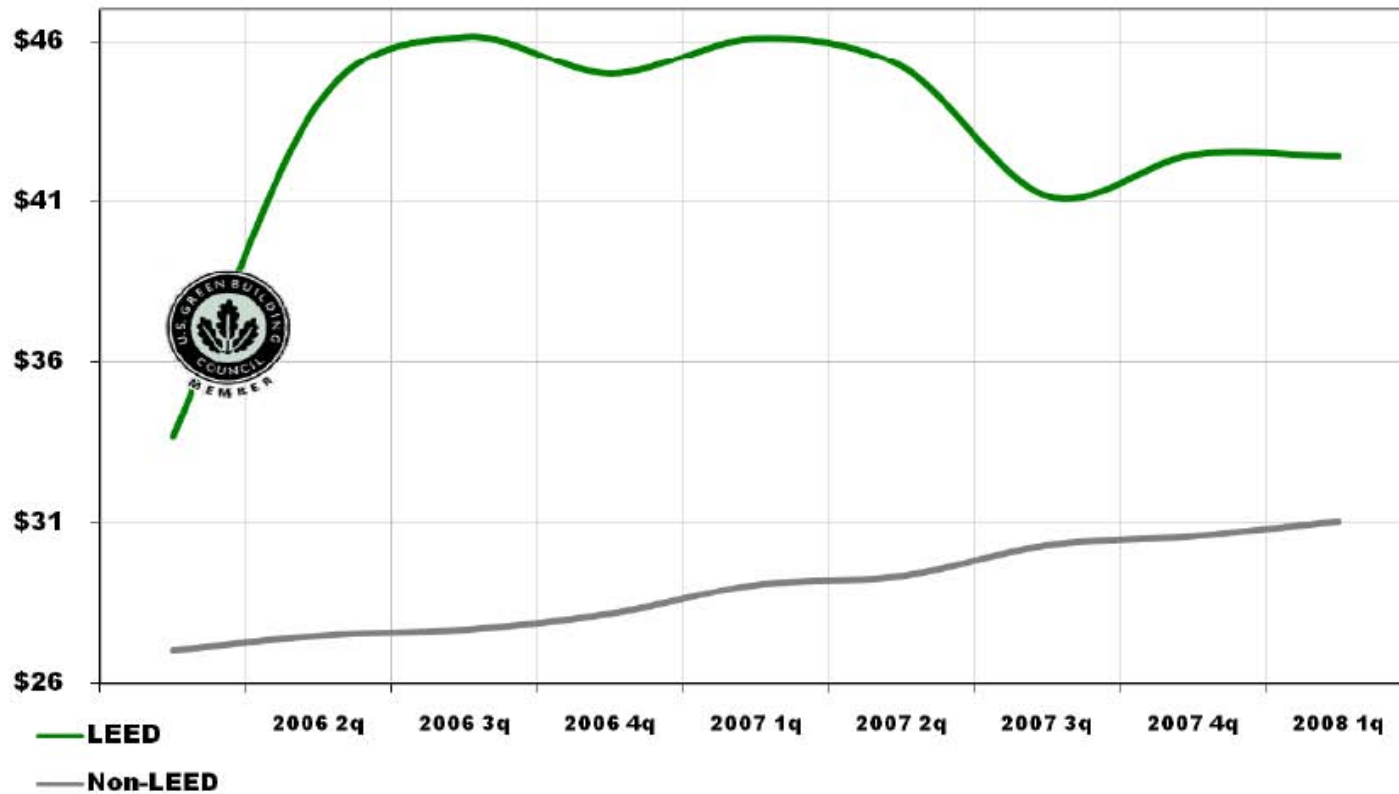
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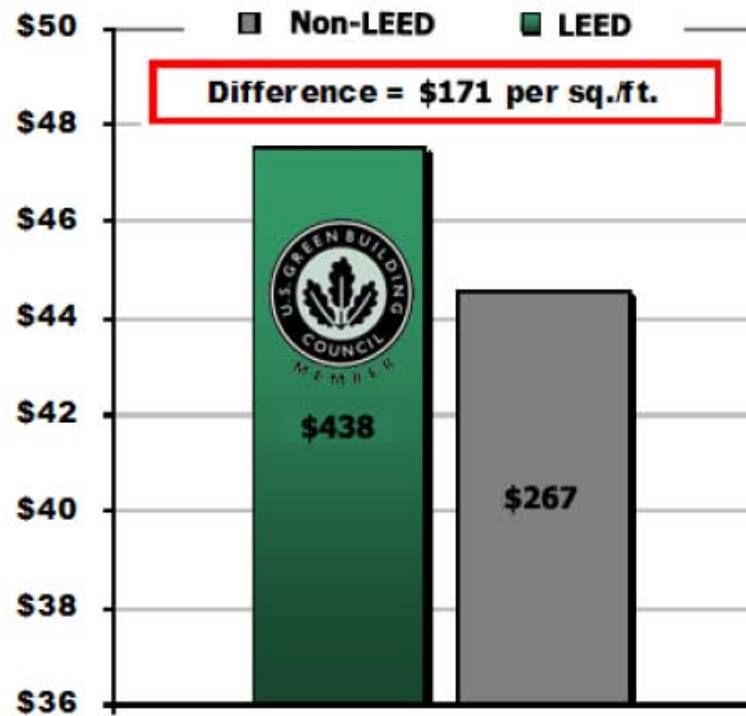
# Occupancy Rates National - LEED Rated Buildings



# Direct Rental Rates National - LEED Rated Buildings



# Sales Price / Square Foot – LEED Rated Buildings Nationally



# Questions

More information:

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