



Sustainability in Real Estate Asset Management

A Case Study

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Why Stay?

- Learn what the best asset managers are doing for their portfolios
- Learn five steps to a permanent process of building performance improvement
- Gain at least one good idea for immediate action to improve your buildings



What is Chelsea Group

- US-based team of building science experts
 - ④ Combine engineering, architectural, industrial hygiene skills
- Serves commercial and institutional buildings
 - ④ Assessment, planning, capital project oversight, measurement and verification
- Specialties in mechanical and control aspects
 - ④ Sustainability, disaster response, physical asset value optimization



Case Study Outline

- Real estate portfolio manager sees value in environmental sustainability
- Systematic “Sustainability Management Program” provides needed touch points
- Learning process is an eye-opener
- Outcomes exceed expectations

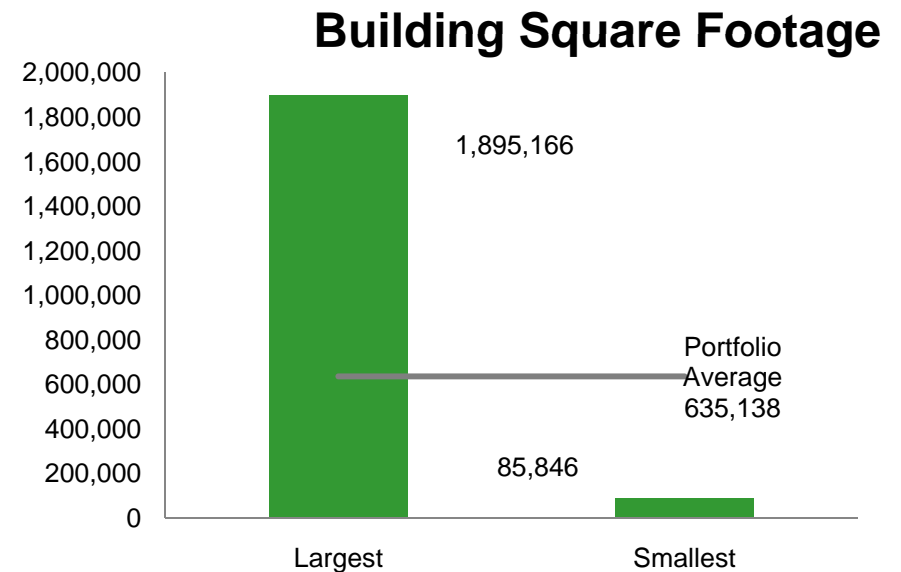


“The Call”

“We need to get our arms around this carbon footprint stuff and the whole sustainability picture”

- Whole portfolio
- Actionable
- Affordable

- 24 Office buildings*
- 15.2 Million square feet



* Note: Actual buildings from multiple clients to “blind” data



“The Plan”

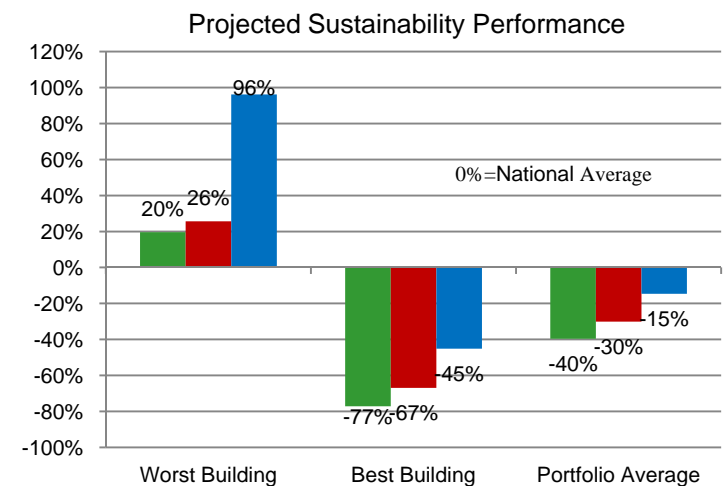
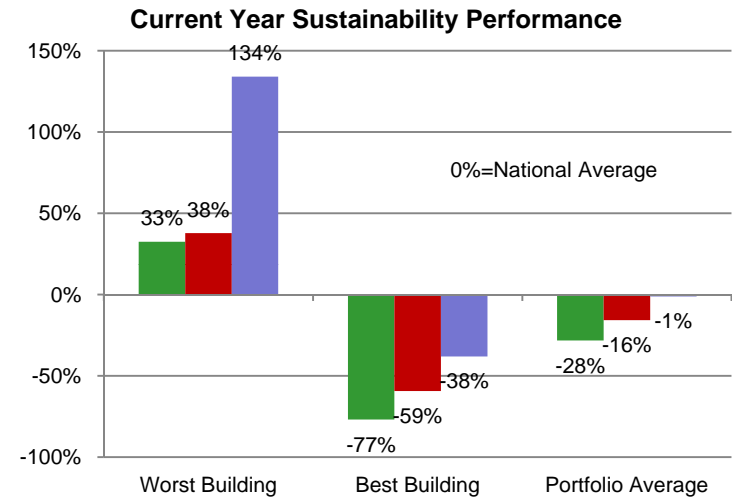
Five Phase Sustainability Management Program

1. Assess
2. Plan and budget
3. Get “Green Badge”
4. Capital projects
5. Verification and tracking



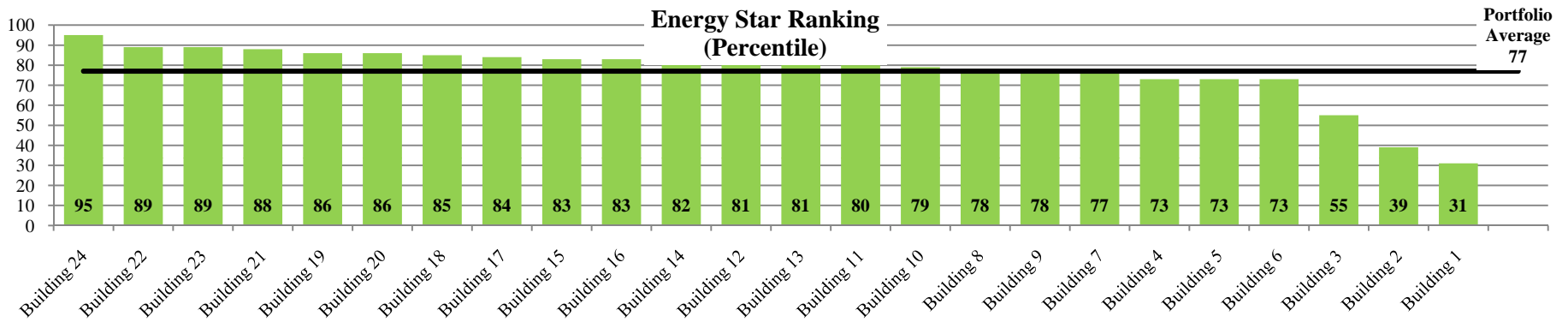
Portfolio Outcomes

- Energy drives building economics for sustainability
- Resource orientation rather than “soft issue” focus
 - Energy
 - Carbon
 - Water
 - Solid waste
- Financially optimized on IRR and NPV





Energy Star Benchmark

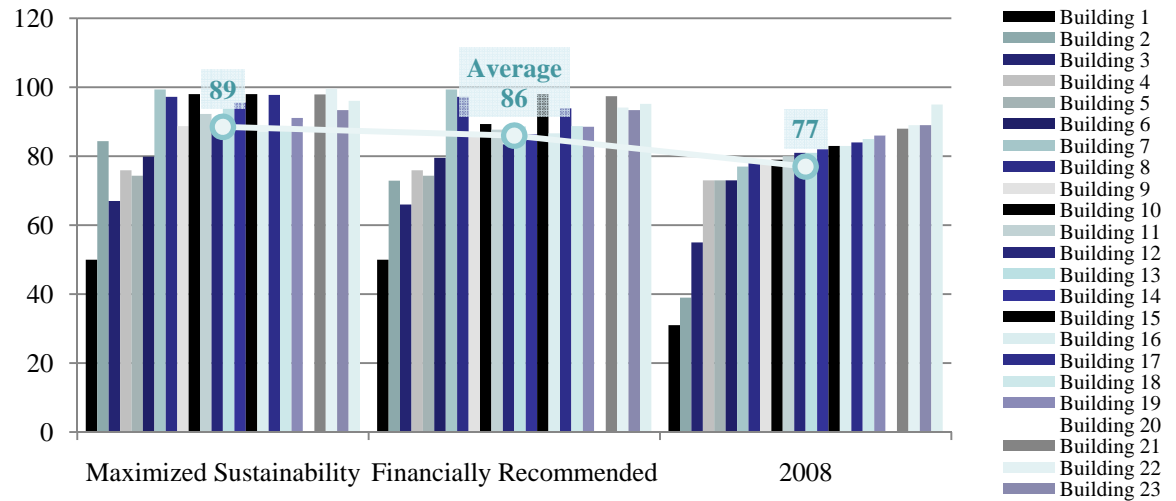


Average Rank

 **Current: 77**

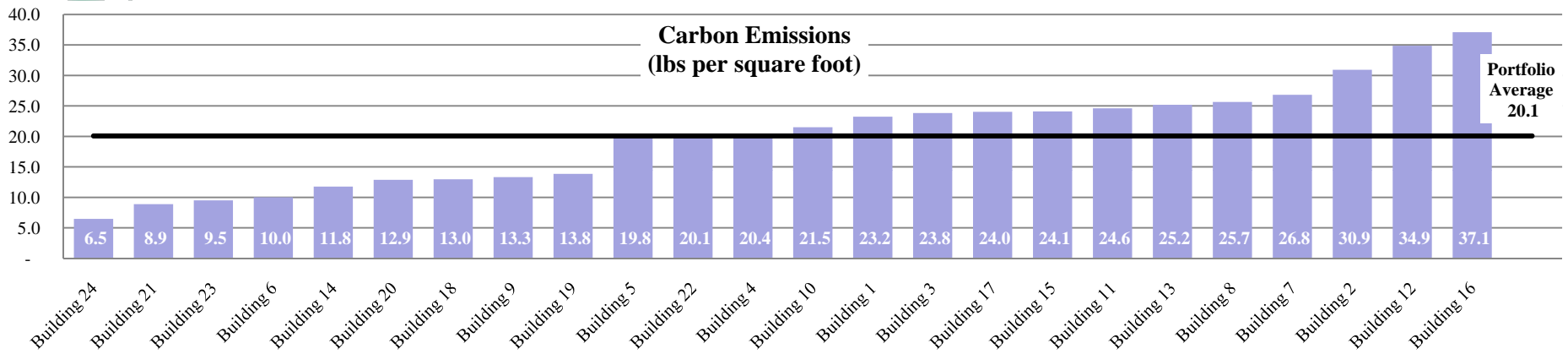
 **Target: 86**

 **Potential: 89**





Carbon Emissions Intensity and Footprint



Average CEI



Current: 20.1

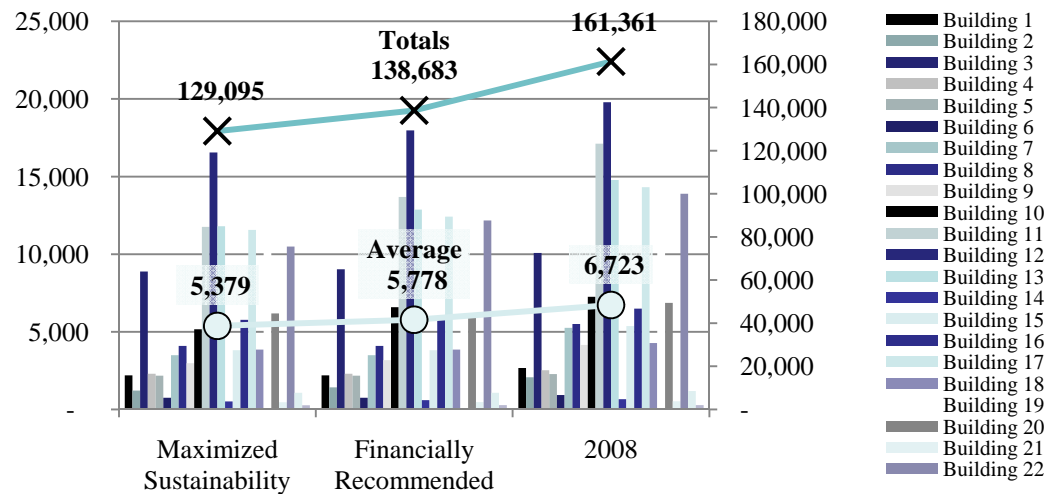


Target: 16.9



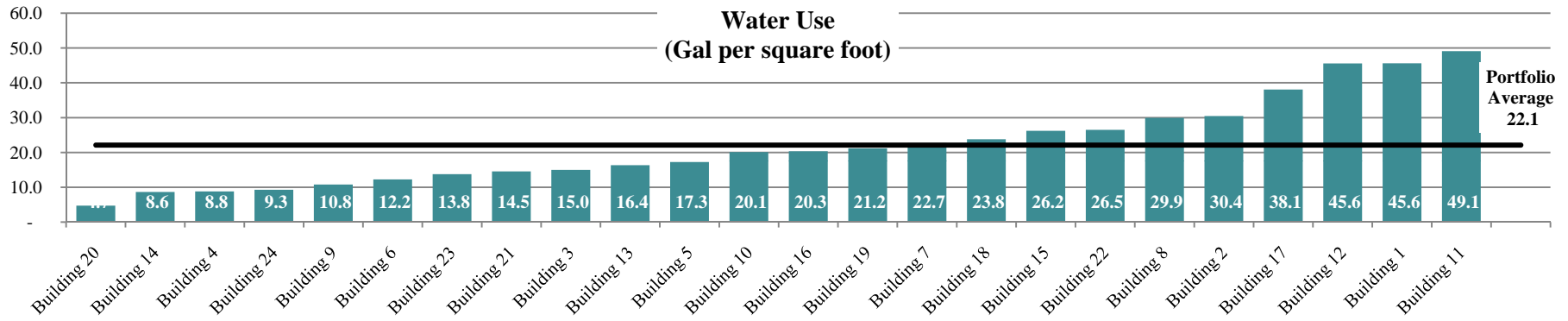
Potential: 16.0

Carbon Footprint





Water Use Intensity and Footprint

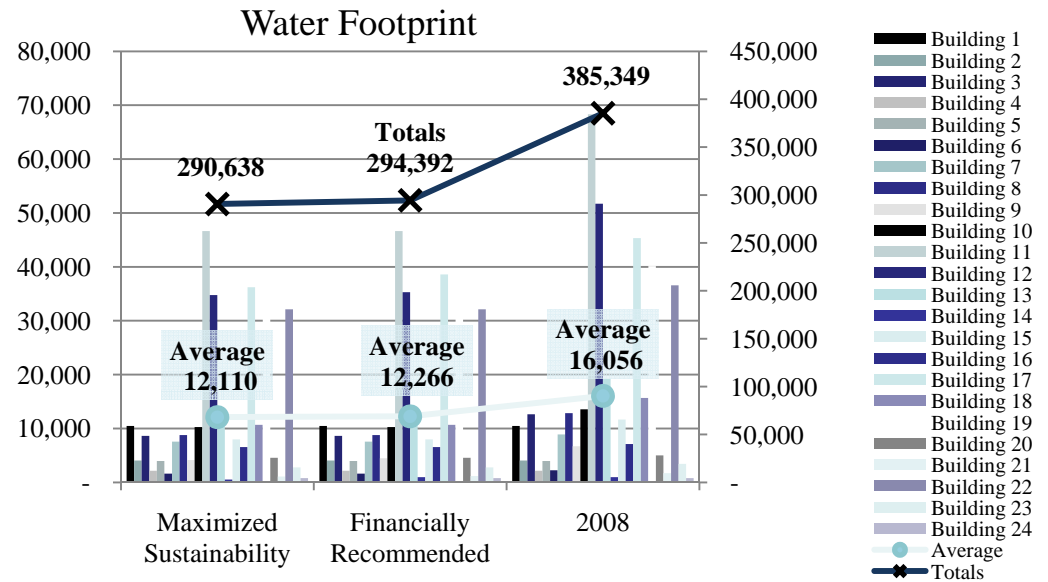


Average WUI

● Current: 22.1

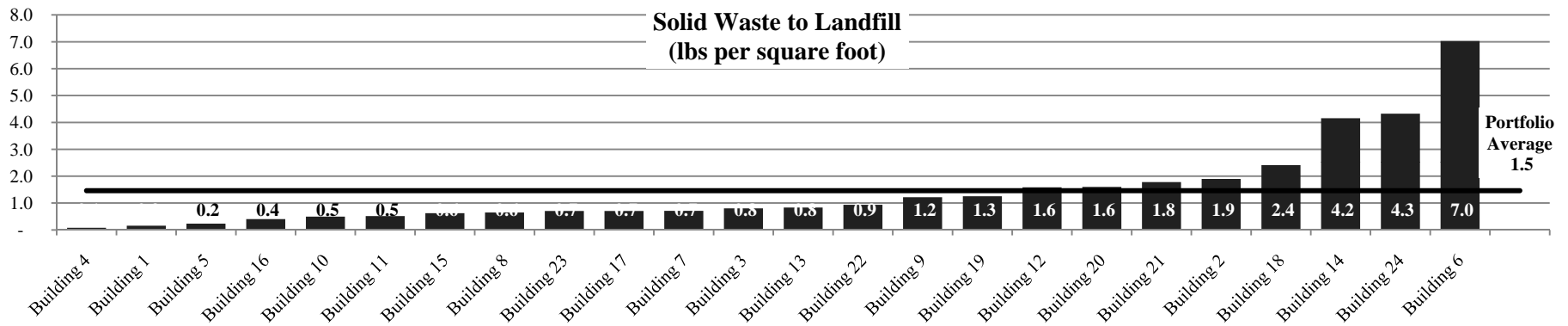
● Target: 18.0

● Potential: 17.5





Solid Waste Intensity and Footprint

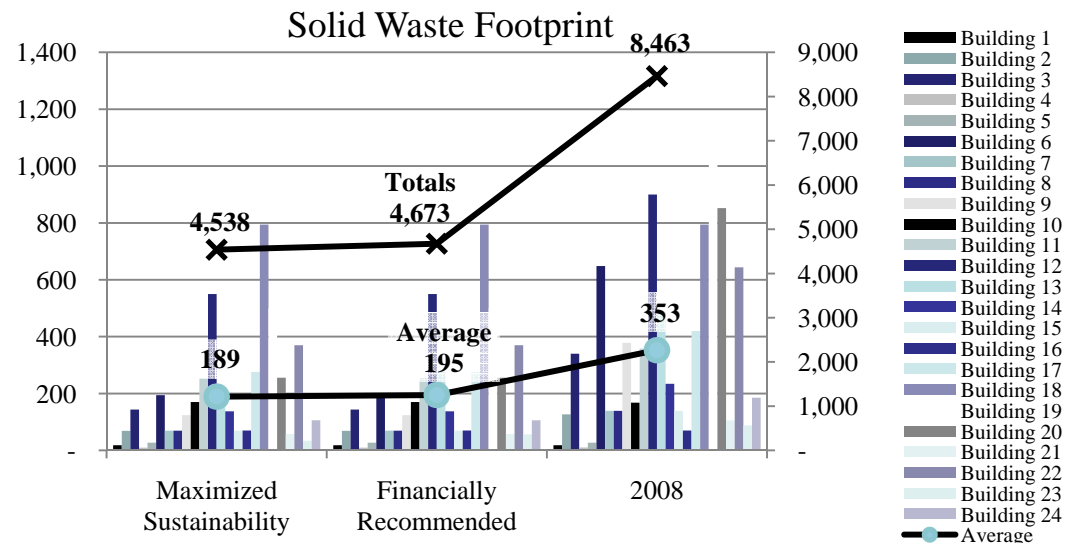


Average SWI

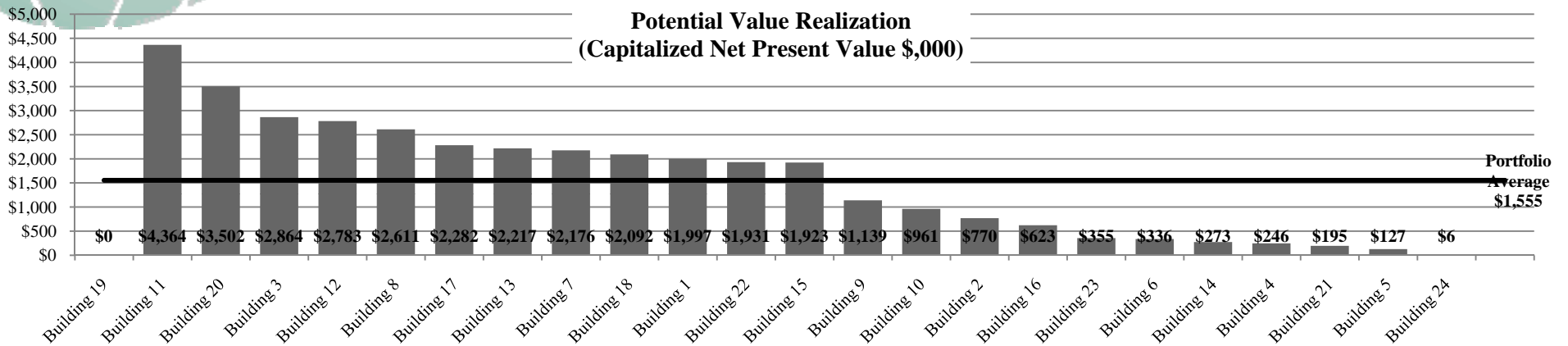
● Current: 1.5

● Target: 0.8

● Potential: 0.8

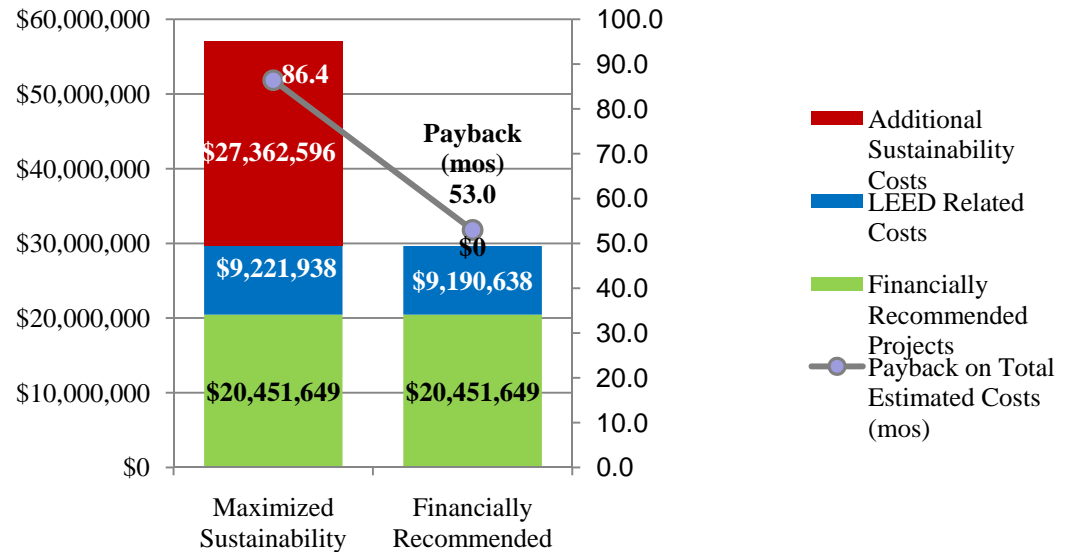


Financial Outcomes



Recommended Results

- Invest: \$21 million
- NPV: \$36 million
- IRR: 41%





Your Next Step?

- Where are you today?
- Benchmarking and tracking for the long term
- Your need for a third-party in the mix



Thank You



Let us walk you to a
smaller carbon
footprint



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