



LEED Existing Building

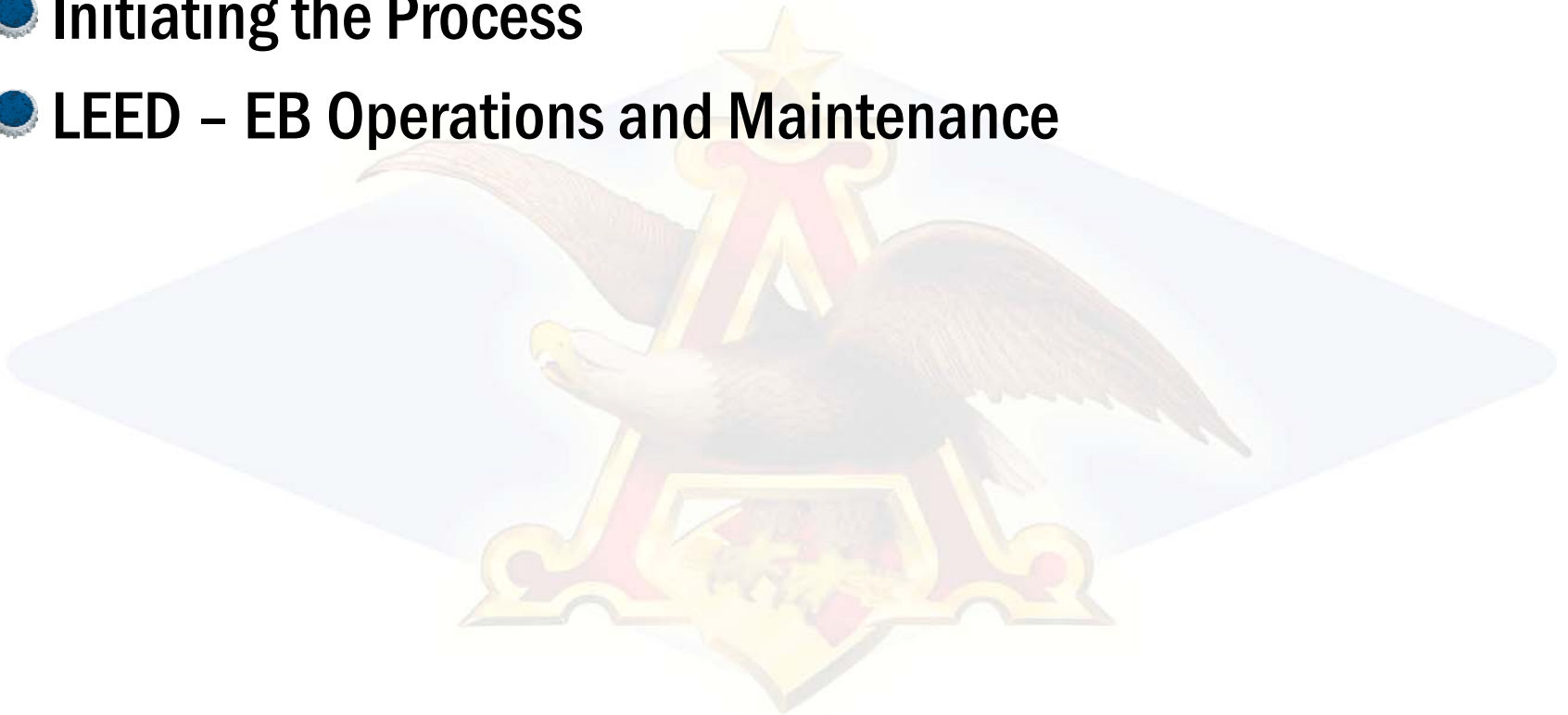
The Baldwinville Anheuser-Busch Experience

Michael Younis



Overview

- **Our Brewery**
- **Initiating the Process**
- **LEED – EB Operations and Maintenance**





Baldwinsville Brewery

Capacity:

- 8.6mm bbls maximum capacity or the equivalent of 118 million cases.
- 2008 budgeted volume is 7.2 million bbls or the equivalent of 100 million cases.
- The brewery is operating near its effective capacity.

Employment:

- Approximately 850 employees: The plant has never had a strike or any permanent layoffs during 25 years in operation.
- There 614 full time employees. The plant has additional employees who work on weekends when the full time employees choose to not work. We avoid any forced overtime work with this weekend staff.



Baldwinsville Brewery

- Since its purchase in 1980 through the end of 2007, Anheuser-Busch has made over \$1.1 billion in Capital Investments at the Baldwinsville Brewery.
- Since 2003, capital investments have averaged \$34.4 million/year.
- On average 75 to 80 building trade workers have been employed in construction work at the facility during 2007.
- The brewery and treatment plant are situated on 330 acres of land in the Town of Lysander, Onondaga County.
- The brewery and treatment plant have 1,600,000 sq. ft. of buildings.
- Anheuser-Busch is the world's largest operator of anaerobic digesters
 - ⇒ Convert SCOD to methane gas (biogas)
 - ⇒ Supply 19.5% of the brewery's fuel
- There are 37 buildings on the campus



Getting Started

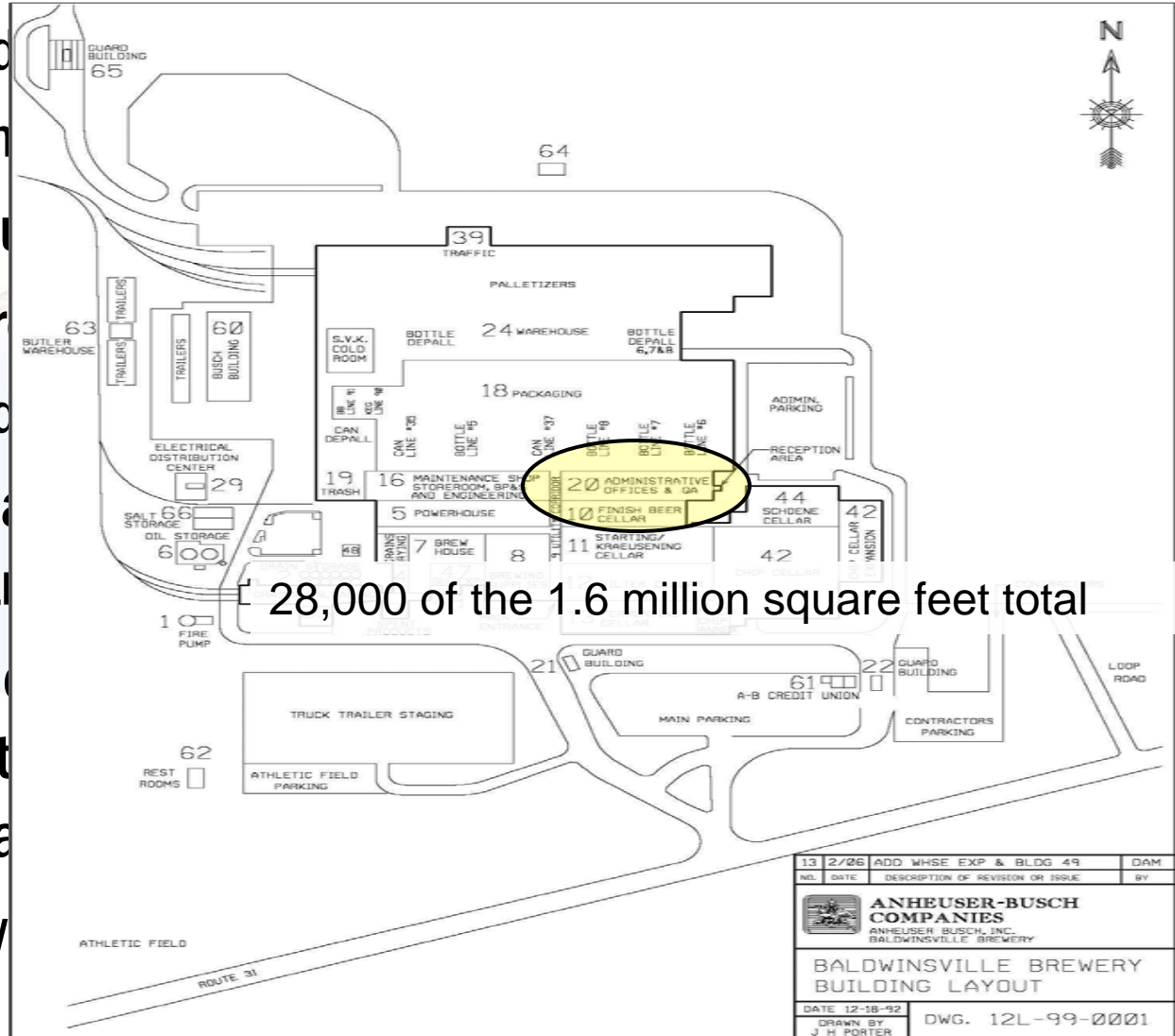
Define Your Build

— Certify the En

- All 37 B
- Large Pr

— Certify the Ac

- Use squa
- Administ
- Use the
- then subt
- energy da
- Check w





Getting Started

● Define Your Building

— Certify the Entire Campus?

- All 37 Buildings
- Large Process Energy Component

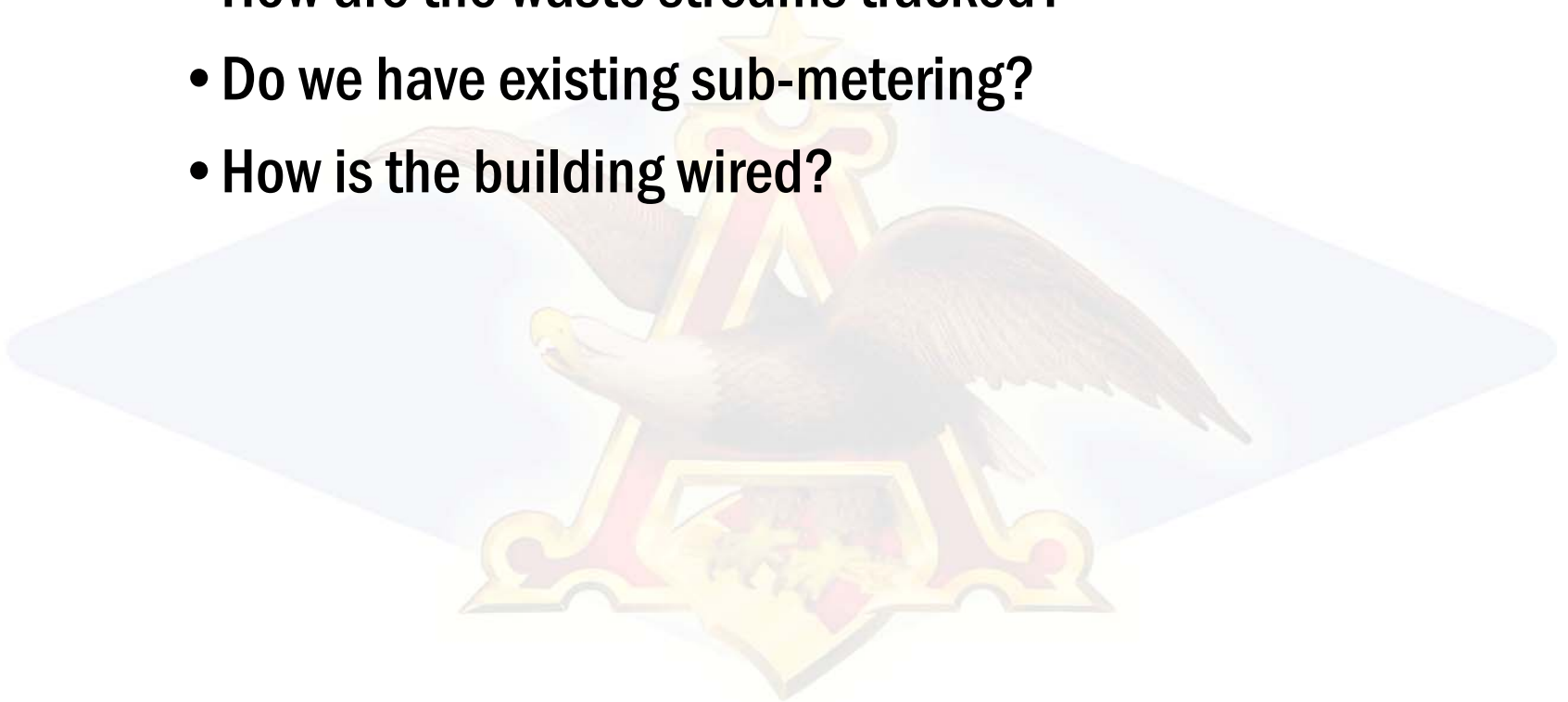
— Certify the Administration Building Only?

- Use square footage and energy data from the Administration Building only?
- Use the entire campus' square footage and energy data; then subtract the process area square footage and energy data?
- Check with USGBC



Building Considerations

- **Certify the Administration Building Only?**
 - **How are the waste streams tracked?**
 - **Do we have existing sub-metering?**
 - **How is the building wired?**





Getting Started

● Determine Your Goal

Level	Points
• Certified	34-42
• Silver	43-50
• Gold	51-67
• Platinum	68-92





Minimum Program Requirements

- **Occupied for 12 Continuous Months prior to application**
- **Scope Must Included 100% of the Total Floor Area**
- **Operate in compliance with Federal, State and local Environmental laws and Regulations**





LEED – EB Operations and Maintenance

Criteria	Possible Points
● Sustainable Site	12
● Water Efficiency	10
● Energy and Atmosphere	30
● Materials and Resources	14
● Indoor Environmental Quality	19
● Innovation in Operations	<u>7</u>
	92



Sustainable Site – 12 Points

Description	Points
● LEED Certified Design and Construction	1
● Building Exterior and Hardscape Management Plan	1
● Integrated Pest Management, Erosion Control, and Landscape Management Plan	1
● Alternative Commuting Transportation	1
● Reduced Site Disturbance	1
● Stormwater Management	1
● Heat Island Reduction, Non-Roof	1
● Heat Island Reduction, Roof	1
● Light Pollution Reduction	1



Water Efficiency – 10 Points

Description	Points
● Minimum Indoor Plumbing Fixture and Fitting Efficiency	Required
● Water Performance Measurement, Whole Building Metering	1
● Water Performance Measurement, Submetering	1
● Additional Indoor Plumbing Fixture and Fitting Efficiency	1-3
● Water Efficient Landscaping	1-3
● Cooling Tower Management, Chemical Management	1
● Cooling Tower Management, Non-Potable Water Source Use	1



Energy and Atmosphere – 30 Points

Description	Points
● Energy Efficiency Best Practice Management Practices	Required
● Minimum Energy Efficiency Performance	Required
● Refrigerant Management, Ozone Protection	Required
● Optimize Energy Efficiency Performance	1-15
● Existing Building Commissioning	
= Investigation and Analysis	2
= Implementation	2
= Ongoing Commissioning	2



Energy and Atmosphere – 30 Points

Description	Points
● Performance Measurement	
= Building Automation System	1
= System Level Metering	1-2
● Renewable Energy	1-4
● Refrigerant Management	1
● Emission Reduction Reporting	1





Materials and Resources – 14 Points

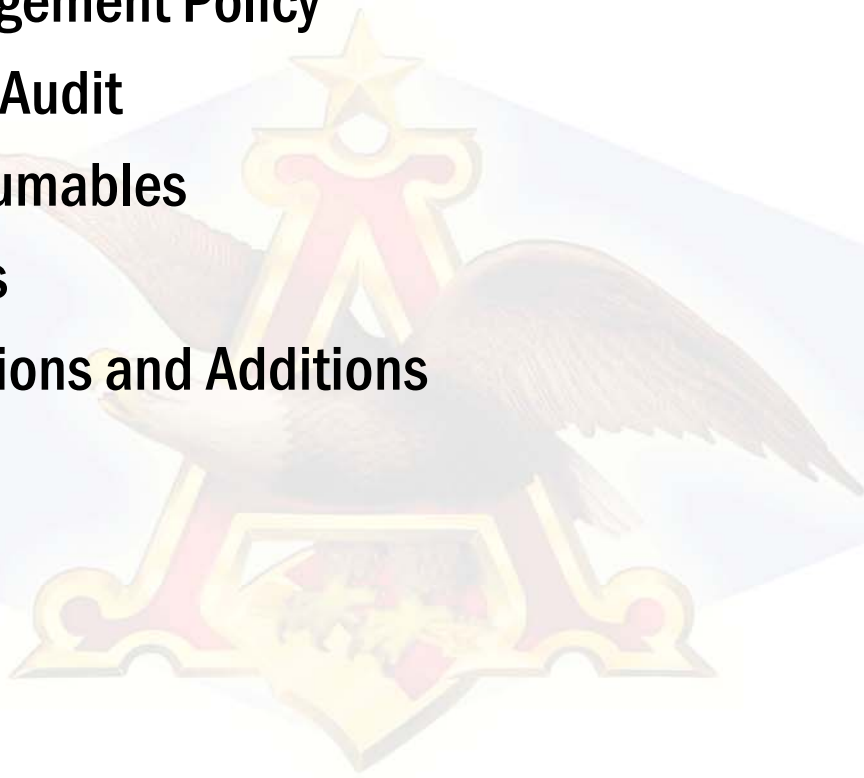
Description	Points
● Sustainable Purchasing Policy	Required
= Ongoing Consumables	1-3
= Durable Goods, Electric	1
= Durable Goods, Furniture	1
= Facility Alterations and Additions	1
= Reduced Mercury in Lamps	1-2
= Food	1





Materials and Resources – 14 Points

Description	Points
● Solid Waste Management Policy	Required
= Waste Stream Audit	1
= Ongoing Consumables	1-2
= Durable Goods	1
= Facility Alterations and Additions	1





Indoor Environmental Quality – 19 Points

Description	Points
● Outdoor Air Introduction and Exhaust Systems	Required
● Environmental Tobacco Smoke Control	Required
● Green Cleaning Policy	Required
● Indoor Air Quality Best Management Practices	
= Indoor Air Quality Management Program	1
= Outdoor Air Delivery Monitoring	1
= Increased Ventilation	1
= Reduced Particulates in Air Distribution	1
= Facility Alterations and Additions	1



Indoor Environmental Quality – 19 Points

Description	Points
● Occupant Comfort	
= Occupant Survey	1
= Occupant Controlled Lighting	1
= Thermal Comfort Monitoring	1
= Daylight and Views	1-2





Indoor Environmental Quality – 19 Points

Description

Points

Description	Points
● Green Cleaning	
⇒ High Performance Cleaning Program	1
⇒ Custodial Effectiveness Assessment	1-2
⇒ Sustainable Cleaning Products and Materials	1-3
⇒ Sustainable Cleaning Equipment	1
⇒ Entry Systems	1
⇒ Indoor Integrated Pest Management	1



Innovation in Operations – 7 Points

Description	Points
● Innovations in Operations	1
● Innovations in Operations	1
● Innovations in Operations	1
● Innovations in Operations	1
● LEED Accredited Professional	1
● Documenting and Sustaining Building Cost Impacts	1

