

Start Time **13:00**

End Time **14:00**



Green Manufacturing Insights

William (Bill) Mateer



Industry Operations Leadership &
Management Program

ENGINEERING

W. Booth School of
Engineering Practice
and Technology

Industry Operations Leadership & Management

Panel Discussion

Intro

1. Approach to Energy Conservation
2. Process Improvements & Waste Reduction

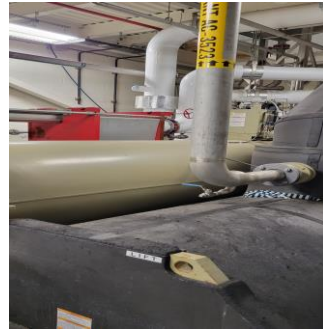


Building Panels Heat recovery to 0 C



Boiler Chimney Heat recovery for Feed Water

Other opportunities:
Plant & Parking wide LED re-lamping
Cafeteria kitchen ventilation upgrades with air make-up



High efficiency
Condensing
water heaters



Variable speed
Drive
compressors



Seasonal process water cooling

Process waste reduction-

- Chem Mill acid neutralization
- Ferric chloride enhanced flocculation

- Transition to water based cutting fluids
- Internal vs external waste treatment
- Health & safety considerations

For consideration:

- Energy providers subsidies
- Government grant programs
- Lean waste treasure hunts

Thank you