Building-by-Building Billing



Tim Kennedy & Lester Johnstone ESTU 471: Campus Planning Studio Western Washington University

What is Decentralized Billing?



- Internalized billing?
 - Currently One Energy Bill for Entire Campus
- Decentralized Billing?
 - Building/Billing/Energy
 - Incentives/Energy Reduction
 - Utility Monitoring
 - Departmental Interaction
 - Incentives



Purpose Behind Our Project





- Energy/Water Usage and Waste Reduction
- Environmental Awareness
- Campuses Economic Performance
- Energy Awareness on Campus
- Energy Management
- Benefits



Significance to WWU

"The universities standards and position on sustainability would be reflected through the active progress toward energy conservation practices, which would also potentiality generate cost saving that could be used for future projects concerning energy improvements on campus."



Case Studies

Iowa State University employed a "Live Green Revolving Loan Fund" in 2008.

Their first step was the decentralization of their campus billing structure.

- Transformed Accounting System
- Received Backing
- Volunteer Based / Non
 Competitive







Decentralized-Billing was one three initial plans for campus wide Climate Action.

- Similar data base program to Western's FAMIS.
- Their success
- Their failure
- Future?



Interviews

Tim Wynn the Director of Facilities Management

- Challenge of Multiple Departmental Sharing
- Three Year Time Line and Average
- Cost Savings and Energy Reduction



Interviews

Greg Hough the Quality Assurance Coordinator for Facilities

- Utilize Western's Facilities and Management (FAMIS)
 Data Base
 - Which Departments and Where
 - Calculate Square Footage
- Tracking Usage Difficulties
- Possible Technology Needed



Interviews

Kellen Rosburg the Resource Conservation Specialist at WWU

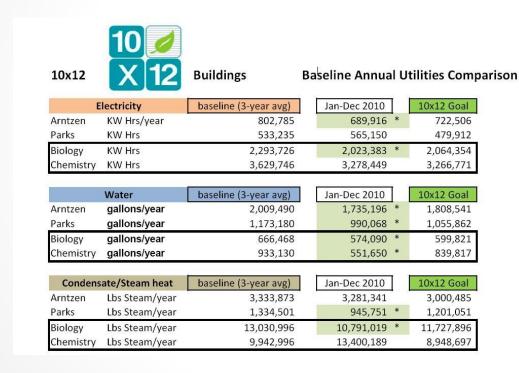
Carol Berry a Sustainable Program Manager at WWU

- Behavioral Practices Instead of Infrastructural
- Faculty and Office Staff Support
- The Word "Decentralize" Needs Interpretation



Research & Analysis

10x12 is a WWU utility conservation program, supporting the President's Climate Commitment and the WWU Climate Action Plan, designed to coordinate campus utility reduction awareness and action.





Conclusion

- Foundation
- 5-7 Year Timeline
- Further Research
- Billing Transition
- Funding Availability
- On-Site Inventory
- Departmental Cooperation
- Non-Competitive





Future Works

For Students and Staff:

- Finish Researching Project Details
- Departmental Usage and Budget
- How to Divide Billing
- Western's FAMIS Data Base
- Utilize Campus Assets
- Pilot Project
- Work Study/Educational Credit
- Start On-Site Inventory



Thank You!

