

## PLANET BLUE PILOT BUILDING RESULTS

June 10, 2009



### **Background**

Steam and electricity are the primary energy sources for central campus buildings.

We monitor and track energy data by individual building.

We implement a wide variety of Energy Conservation Measures (ECMs) specific to each building. Some examples include:

- Occupancy sensors for lighting
- Optimization/interconnection of chillers
- HVAC scheduling adjustments
- Restroom water faucet modifications

### **Planet Blue**

Planet Blue began in 2007 with five pilot buildings.

The five pilot buildings were: Chemistry, Fleming, Institute for Social Research, Rackham and Space Research.

Planet Blue engages building occupants by educating them on "best practices" for conservation and ways to reduce consumption.

### **Results**

Energy consumption decreased by 6% for the five pilot buildings collectively.

Annualized cost avoidance is \$340K (based on the last 12 months).

Planet Blue is actively engaged in 30 buildings for FY09.

### **Details by Building**

We realized noticeable energy savings in three of the five pilot buildings:

	Energy Reduction	Cost Avoidance	Key ECMs and Activities
ISR	26%	\$191K	Chiller interconnection, HVAC scheduling, occupancy sensors
Rackham	32%	\$210K	Fan schedule reductions & equipment sequencing, occupancy sensors
Space Research	17%	\$62K	Air handler upgrades, steam trap replacements, building tune-ups

We encountered more challenging situations in two of the five pilot buildings that impacted potential savings:

Chemistry: Historical electric data are artificially low due to old meters that were replaced in February 2007.

New meters now provide more accurate readings, but consequently it appears that electric consumption is increasing.

While we have reduced steam usage, the net result to the building is negligible (\$17K). However, several projects are still in progress and we expect significantly lower usage in the future.

Fleming: Energy usage increase of 28% (\$106K) due to a variety of factors, including local server room cooling requirement.

A majority of the servers were relocated to a central location in May 2009 and we modified fan schedules accordingly.

Consumption is expected to decrease going forward.