



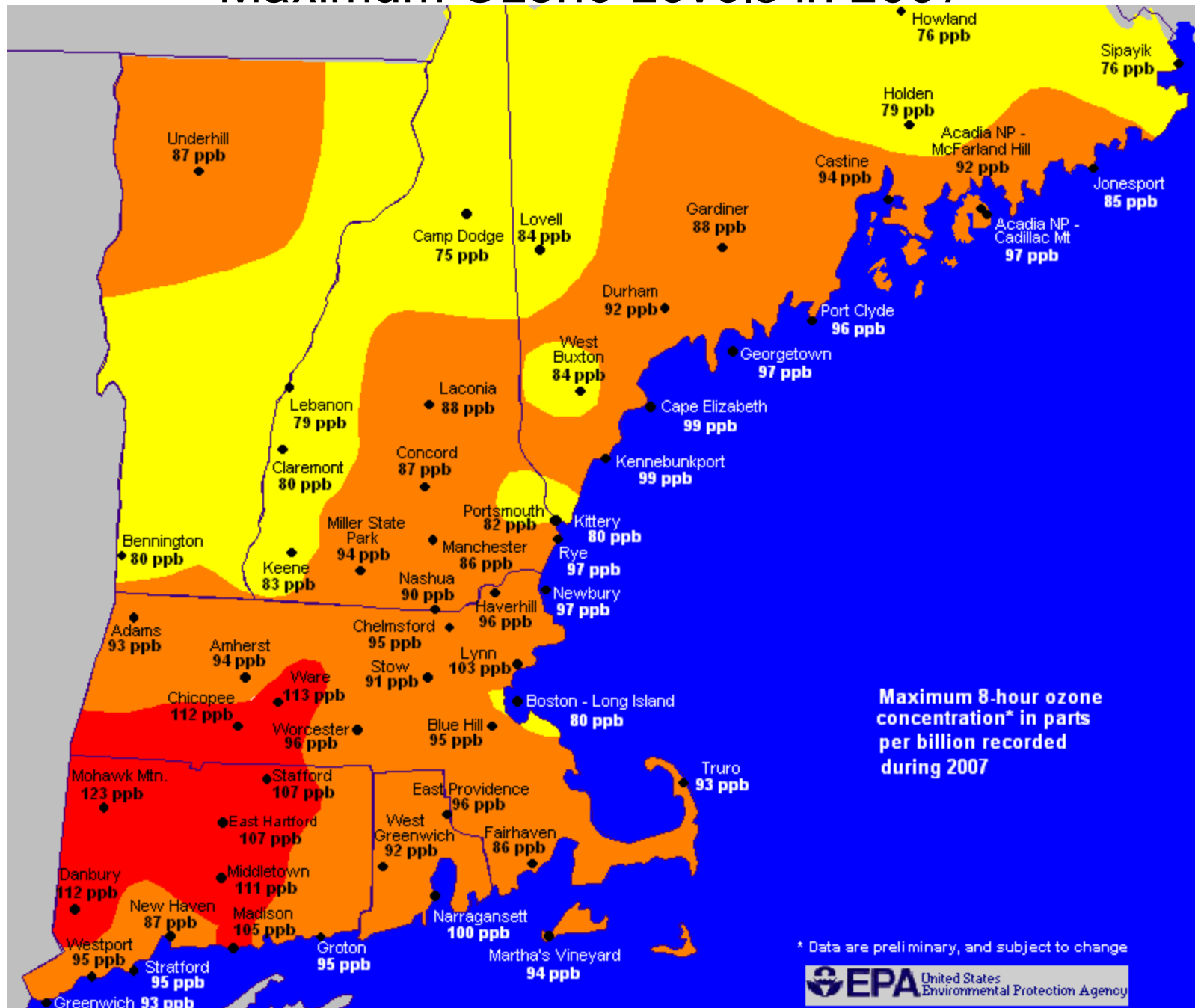
Opportunities To Reduce Energy Use and Greenhouse Gas Emissions in Wastewater Treatment Plants

*Jason Turgeon
US Environmental Protection Agency
Energy-Environment Technical Forum
1/15/2009*



Learn more at energystar.gov

Maximum Ozone Levels in 2007







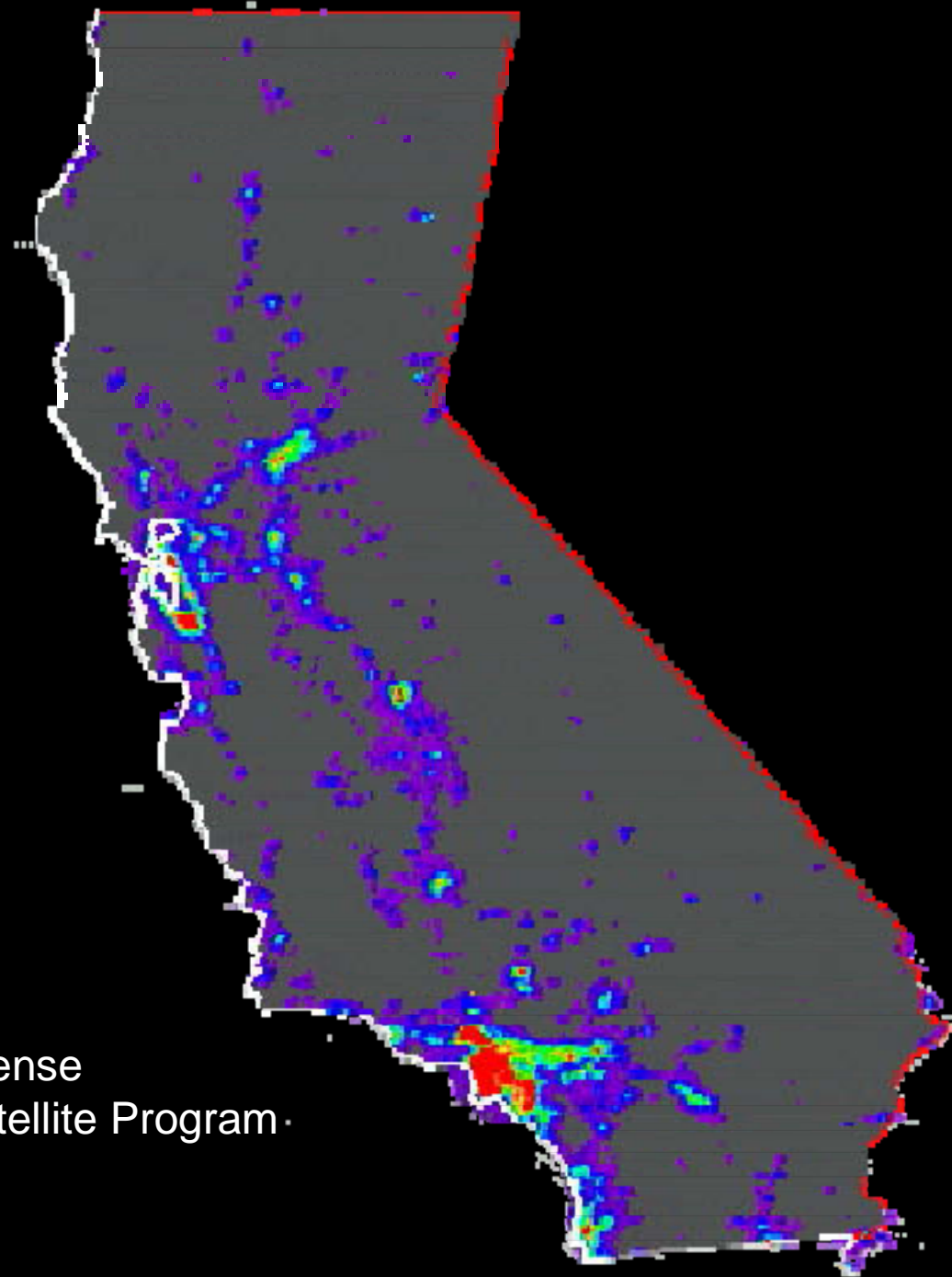
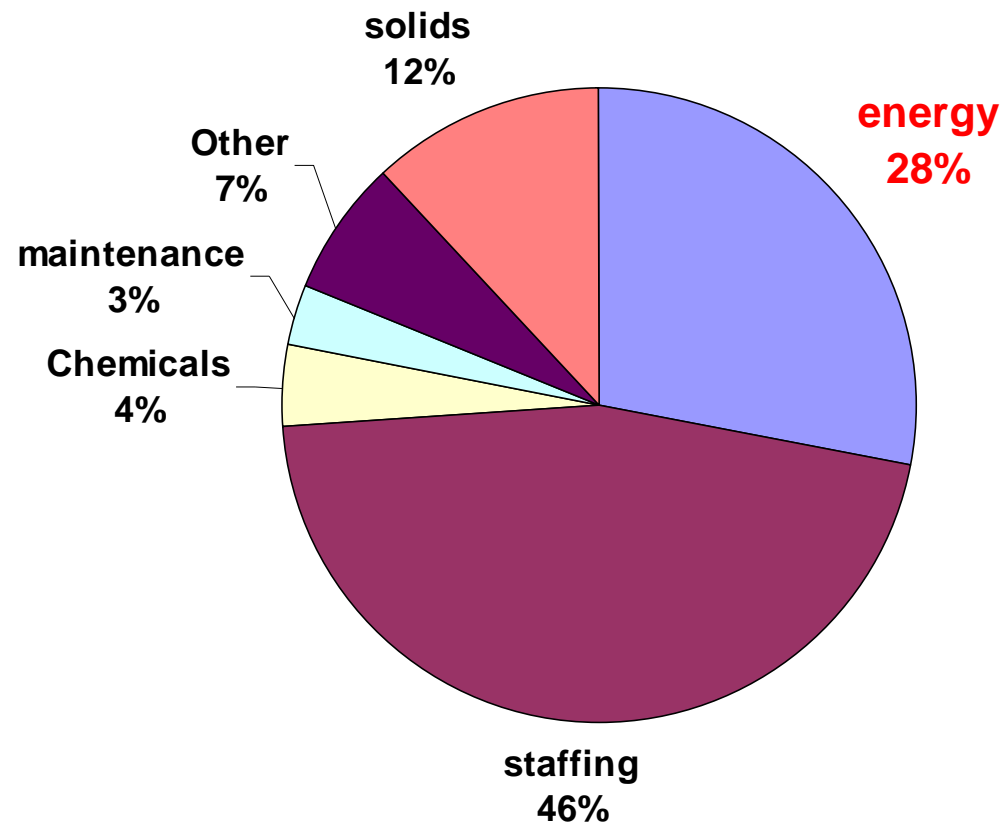


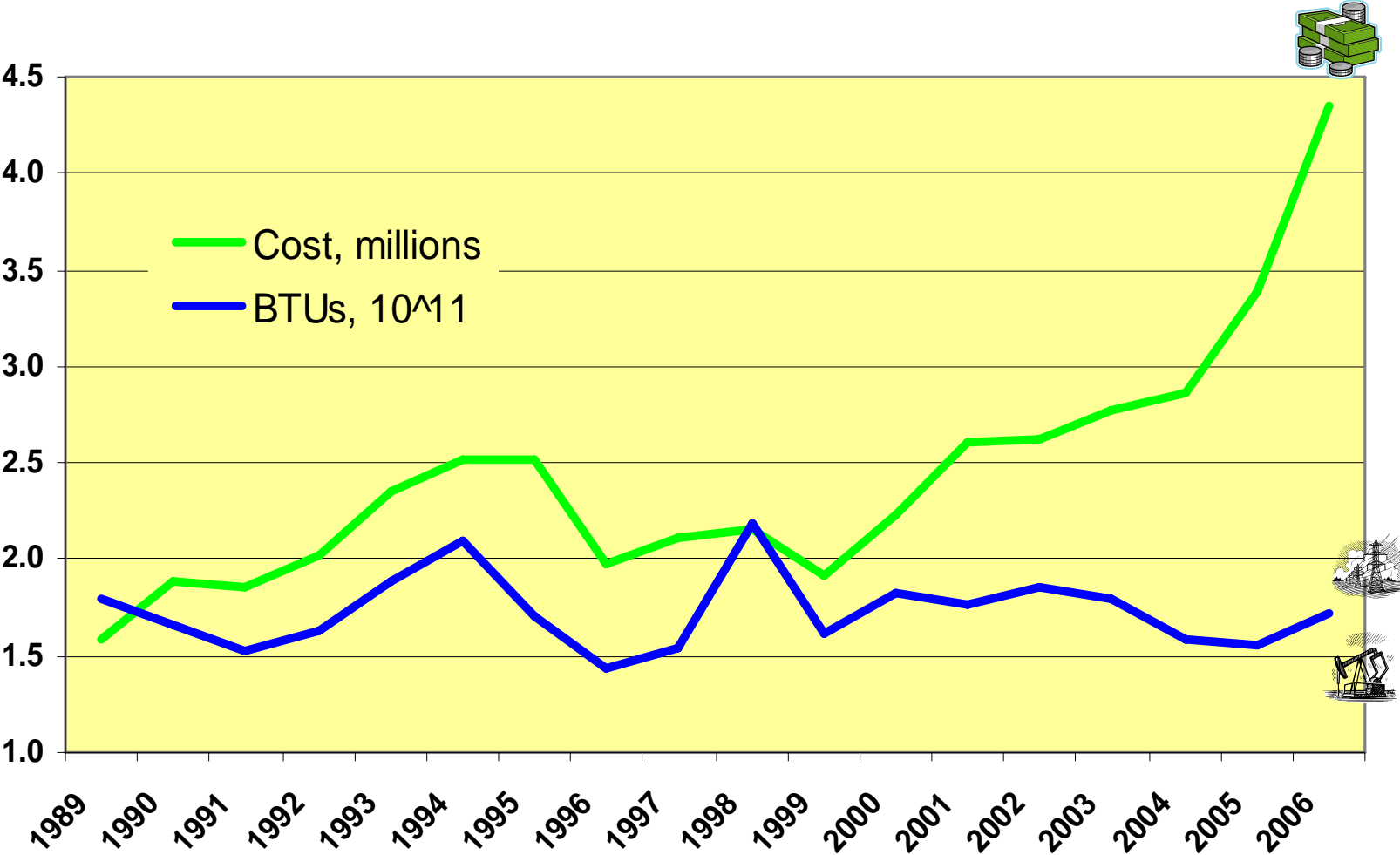
Image: USAF Defense
Meteorological Satellite Program.

Industry Average O&M Budgets

Wastewater Plant



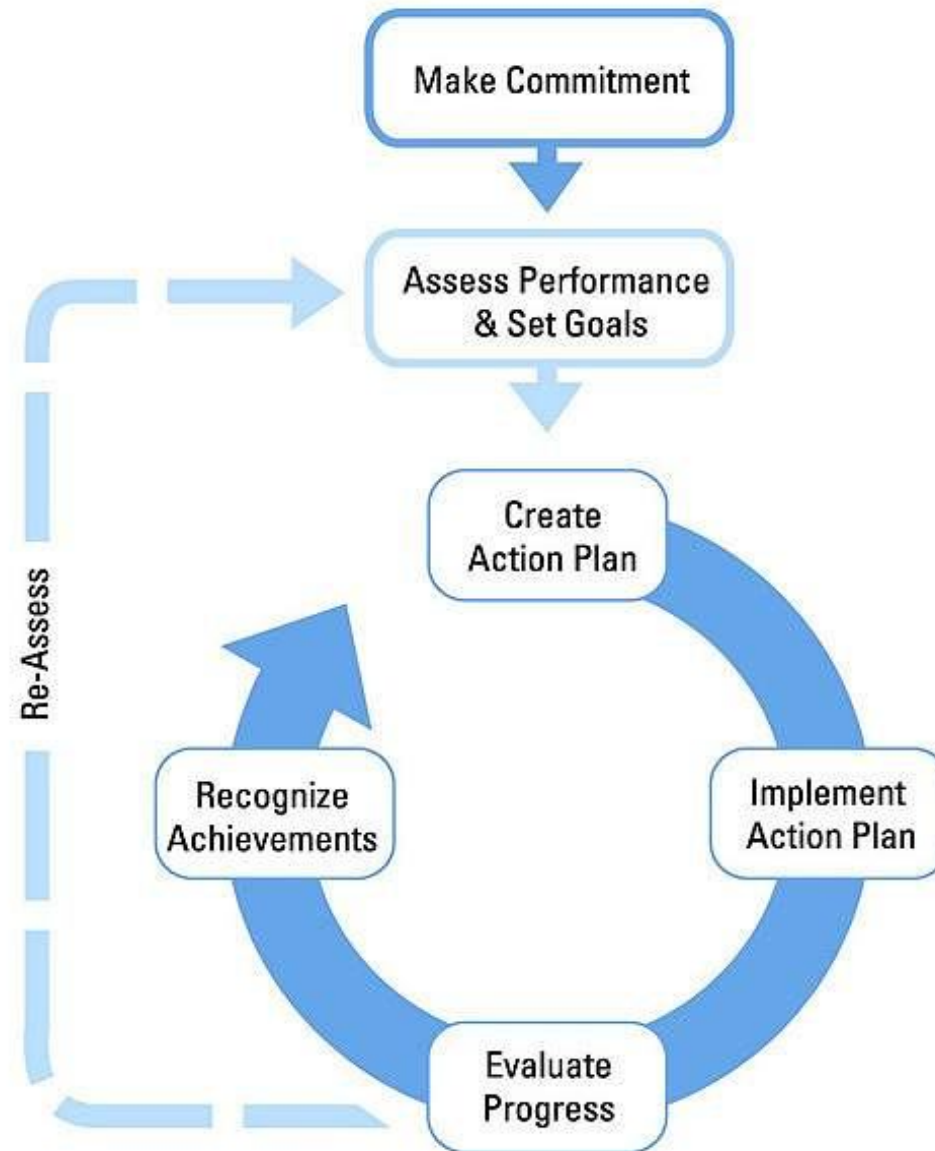
Hartford WPCF Energy Cost vs. Use





**New Regulations May
Drive Energy Use**

Successful Energy Management





Helle

H.

Fear of Commitment





[www.energystar.gov/
benchmark](http://www.energystar.gov/benchmark)

Portfolio Manager



What Does it Do?



Slide 14

JT3

Uses 1999 Commercial Building Energy Consumption Survey (CBECS) data

Compares subject building to similar buildings

Provides a statistically normalized score from 1 to 100

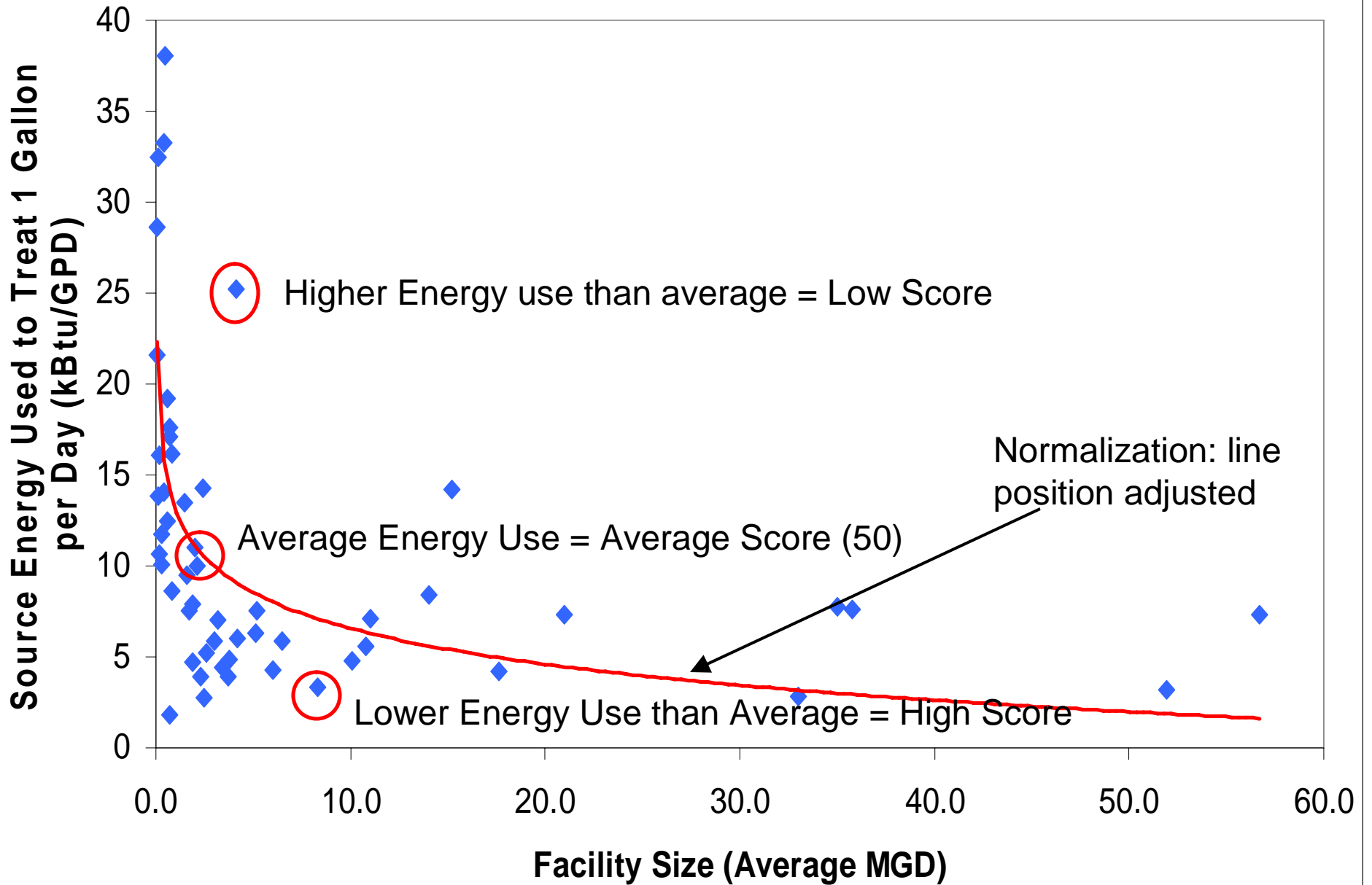
Calculates annual energy use intensity (kBtu/sq. ft)

Normalizes data for weather and climate

Securely hosts user's database of building data

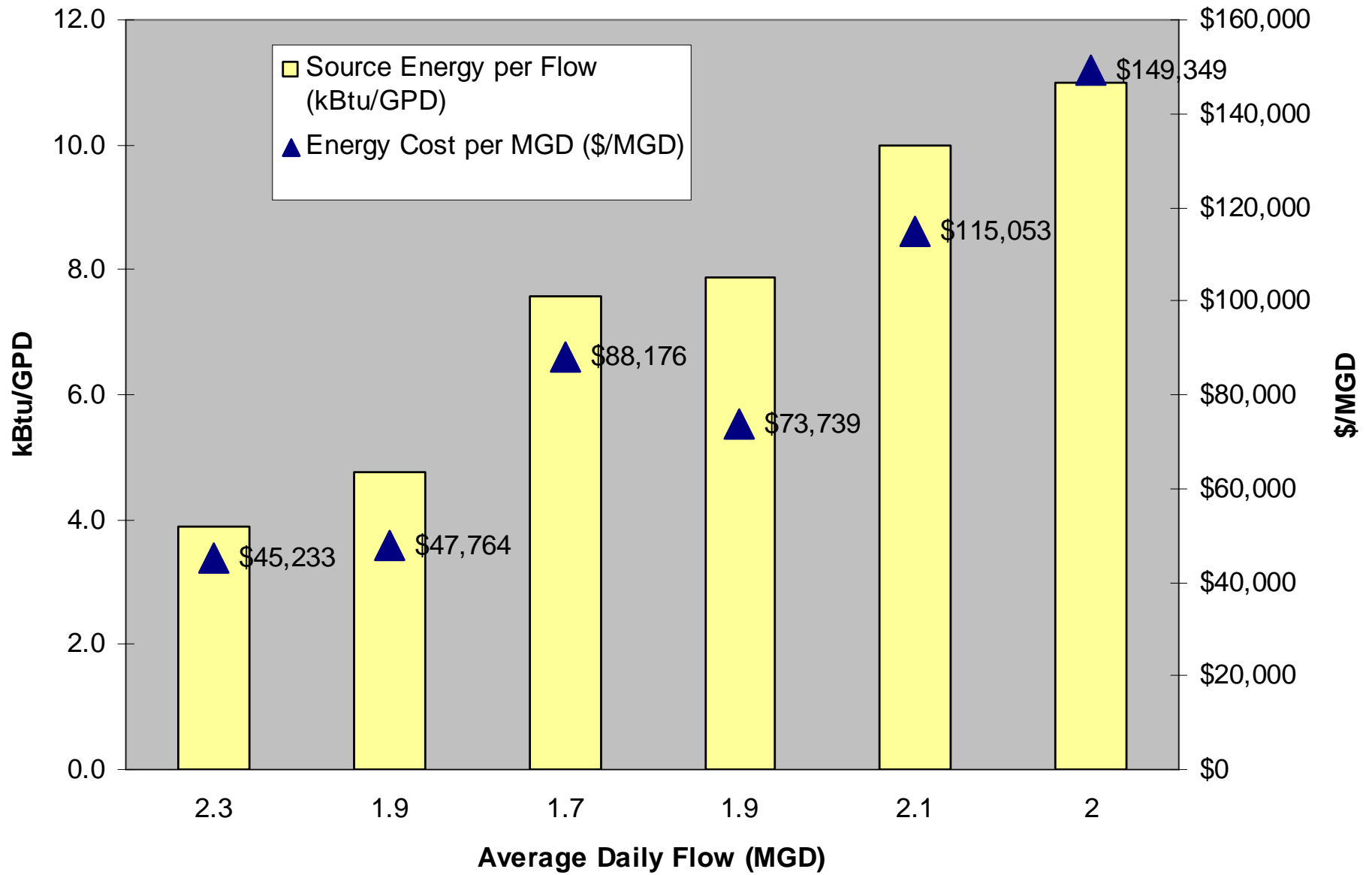
Jason TURGEON, 8/7/2007

Energy Use per Flow vs. Facility Size



Energy Use and Cost vs Flow at similar sized plants

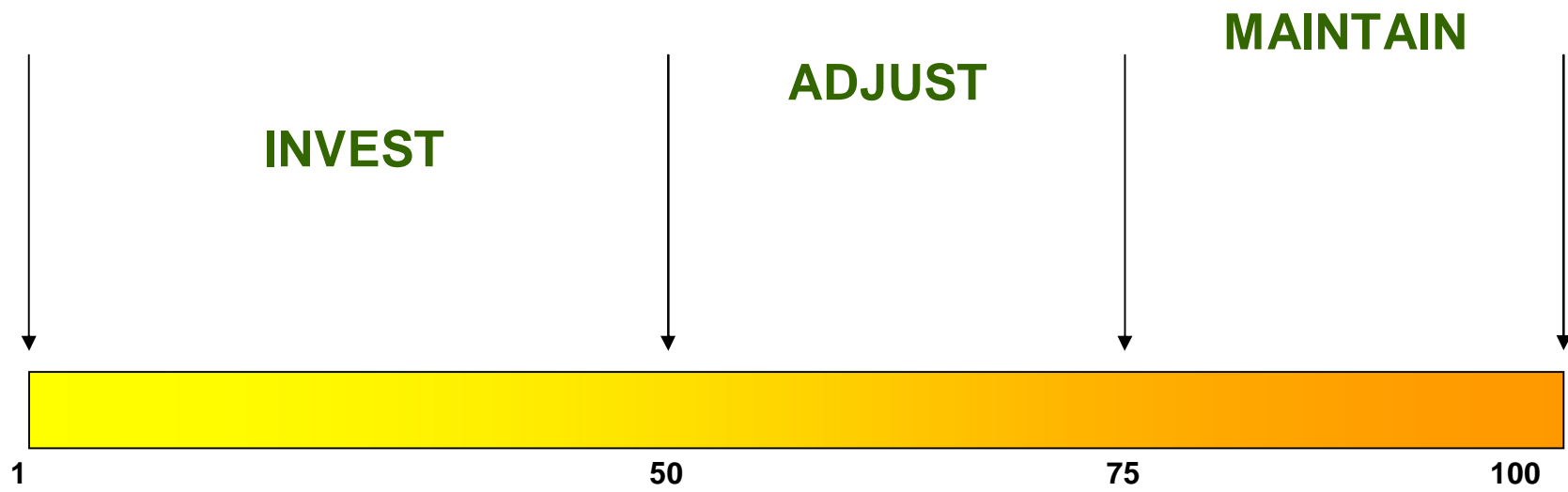
FY 2006 data



Plan



Now What?



ENERGY PERFORMANCE RATING



Do



Do!

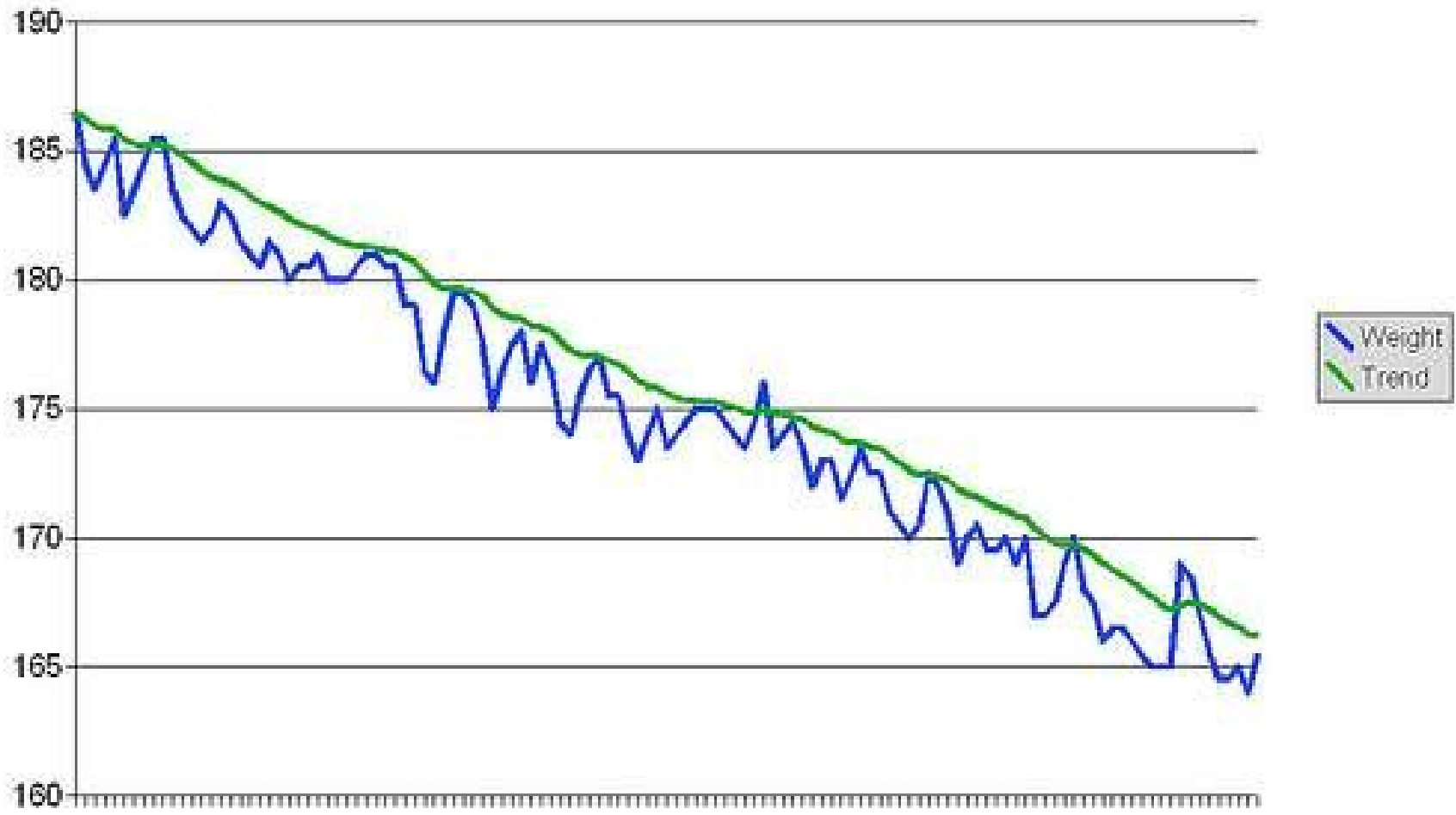




DO!!!

Check

Weight Loss



Act





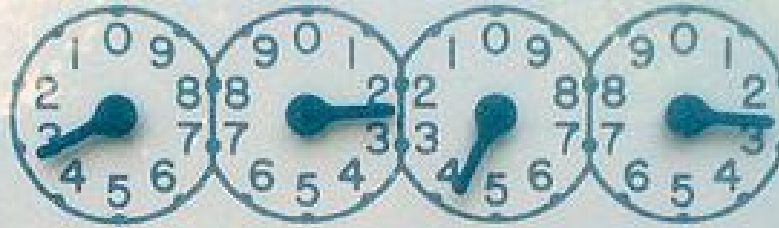
PITTSFIELD, MA
IS
READY

GREEN JOBS
NOW





KILOWATT HOURS



DUNCAN

15 AMP TYPE MK-S 60~
240 VOLTS 7 7 8 1 9 9 9 SINGLE PHASE
3 WIRE WATTHOUR METER K_h 3.6

256856

$R_7 27 \frac{7}{8} K_1$
DUNCAN ELECTRIC MFG. CO. LAFAYETTE, IND. U.S.A. 58

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- Plumber: NoMoTo
- Roller Coaster: Sven Werk
- Downward Trend: nogwater
- Target: Matthew McVickar
- Award: shannonmary
- Fine Current Adjustment Dial: thespacesuitcatalyst
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Contact Us

If it's not energy efficient ...



...it's not sustainable

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[www.epa.gov/region01/
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