

# Utility Benchmarking / RETScreen Suite

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# What Motivates Action?

- Accurate analysis
- Effective communication

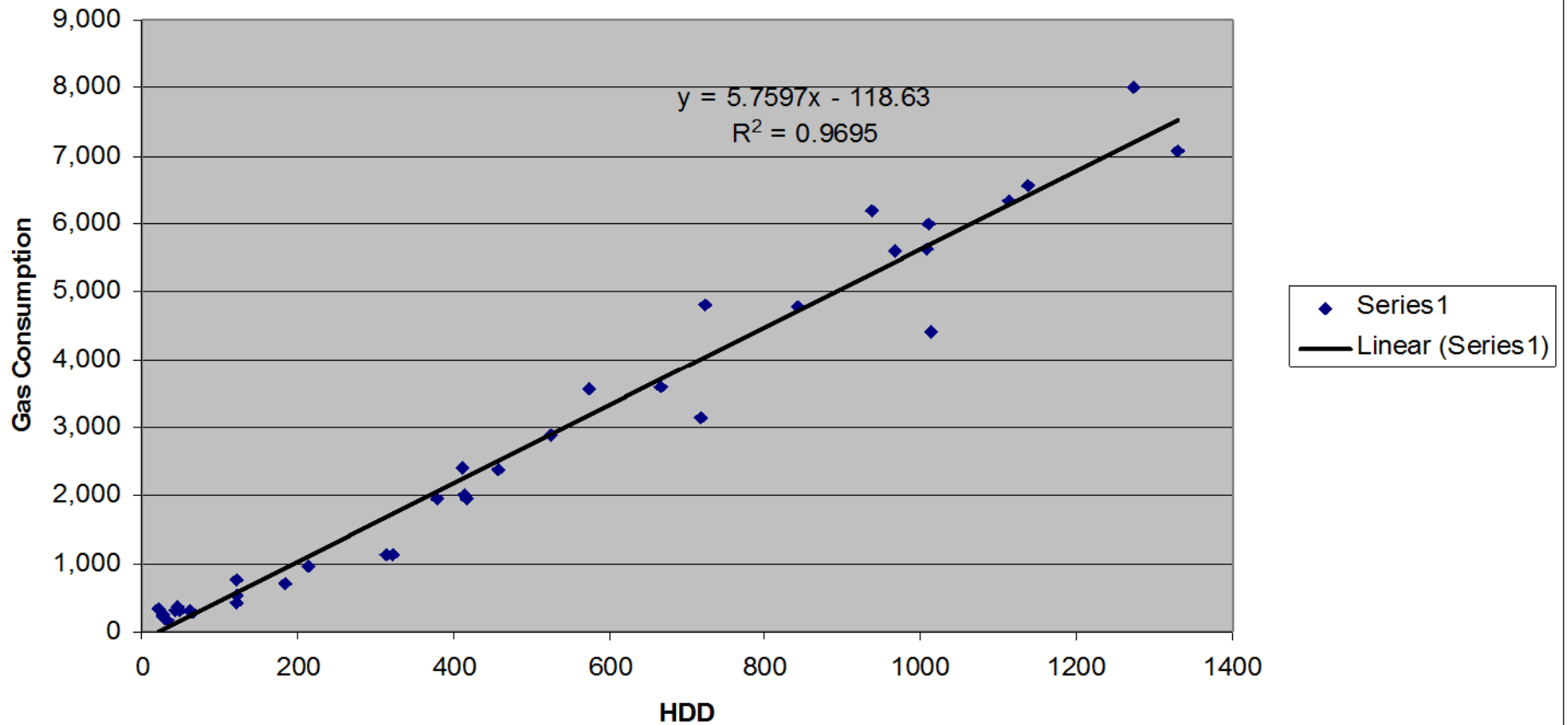
# Business Questions

- What are my fixed and variable costs and how does production impact those costs?
- If \_\_\_\_\_ isn't influencing my costs, what is?
  - Production quantities
  - Weather
  - Attendance
  - Schedule

# What if:

- We could accurately correlate energy use to a particular variable (or set of variables)?
- What if we could accurately prove that a particular variable had no correlation to energy use?

# Fun with Linear Regression

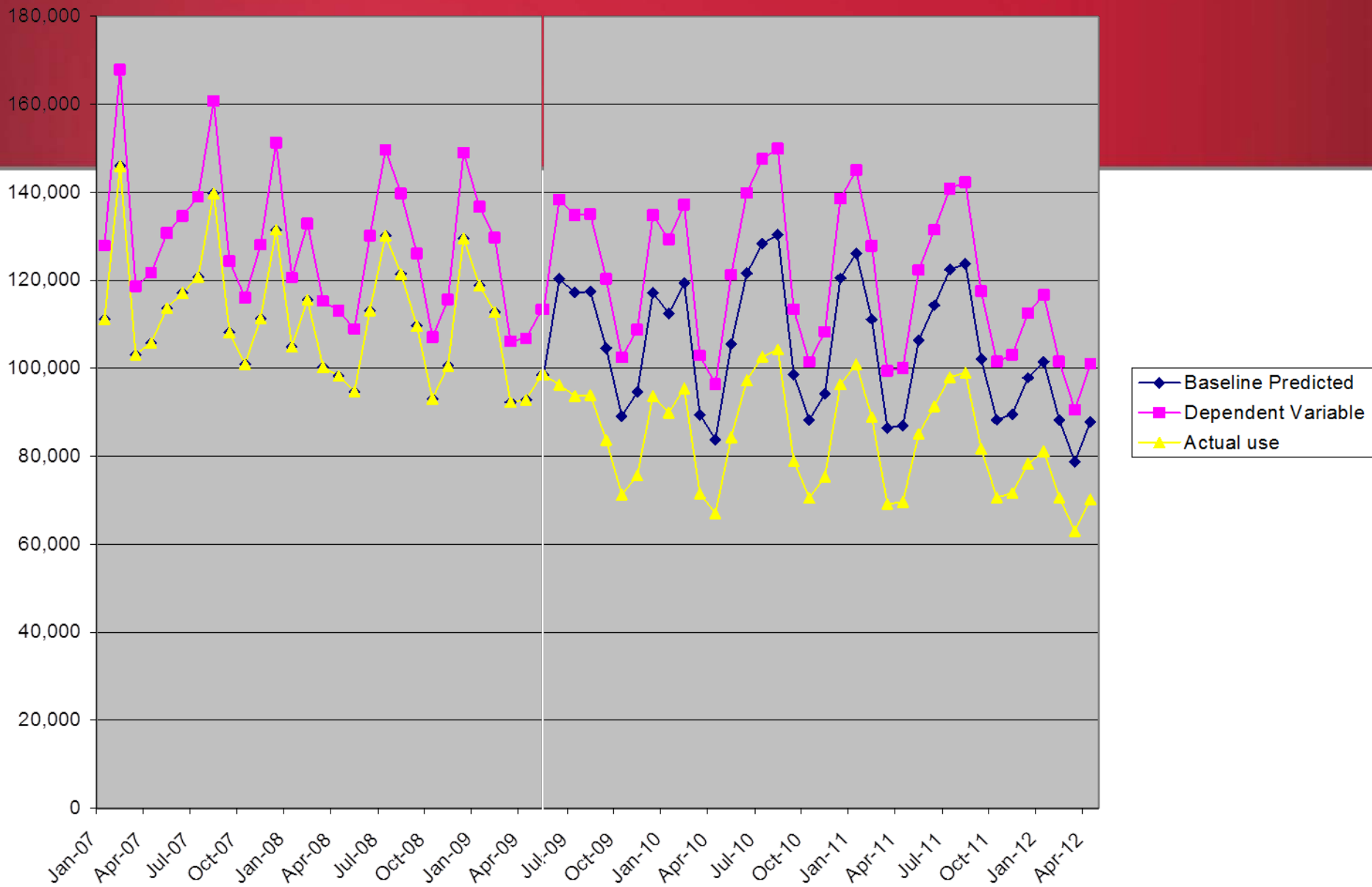


# The Power of Metrics

- Quote from CEO “I see all of this data but is the patient getting better or worse?”
- Units of energy consumption per \_\_\_\_\_ can be a powerful tool and means of communication

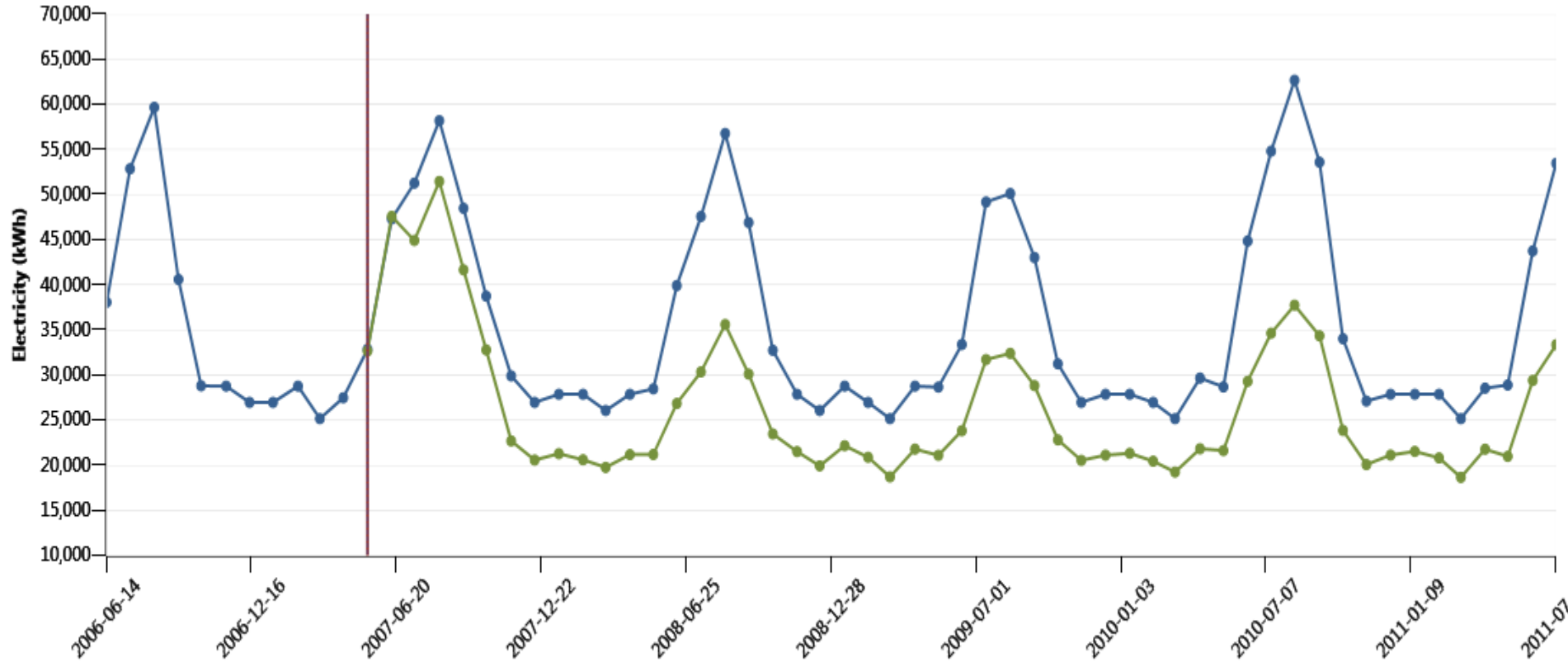
# Predicting the Future

- **IF** we can develop an accurate correlation **THEN** we can predict future performance
- **AND** we can compare what would have been, with what we have influenced via implementation of change
- Some might even call it M&V





# Here's Where We are Headed



**Legend**  
●— Baseline Predicted   
 ●— Actual Electricity   
 Baseline Predicted ┆ Actual   
 | Commissioning date



# Risk Analysis

- Why do clients have a hard time investing money in energy projects?
- What if your calculations aren't quite accurate?
- How do we communicate risk in quantitative terms?

# RETScreen

- What is it?
  - Renewable-energy and Energy-efficient Technologies (RET)
  - Free decision support tool developed by Canadian Government and support from NASA, UNEP, GEF, and REEEP
  - Two parts: energy and financial analysis (RETScreen), Benchmarking (RETScreen Plus)

# RETScreen

- Why was it developed?
  - To reduce the costs (both financial and time) associated with identifying and assessing potential energy projects
  - Quickly access project viability (feasibility)
- What portions will we focus on today?
  - Fast example of compressed air (RETScreen)
  - Benchmarking example (RETScreen Plus)

# RetScreen

- ..\..\..\All Users\Desktop\RETScreen Plus.Ink

