

Making Cents of Energy

Indiana Renewable Energy Conference – July 20, 2011

Gordon Moore
Vice President
McCormick Motors, Inc.



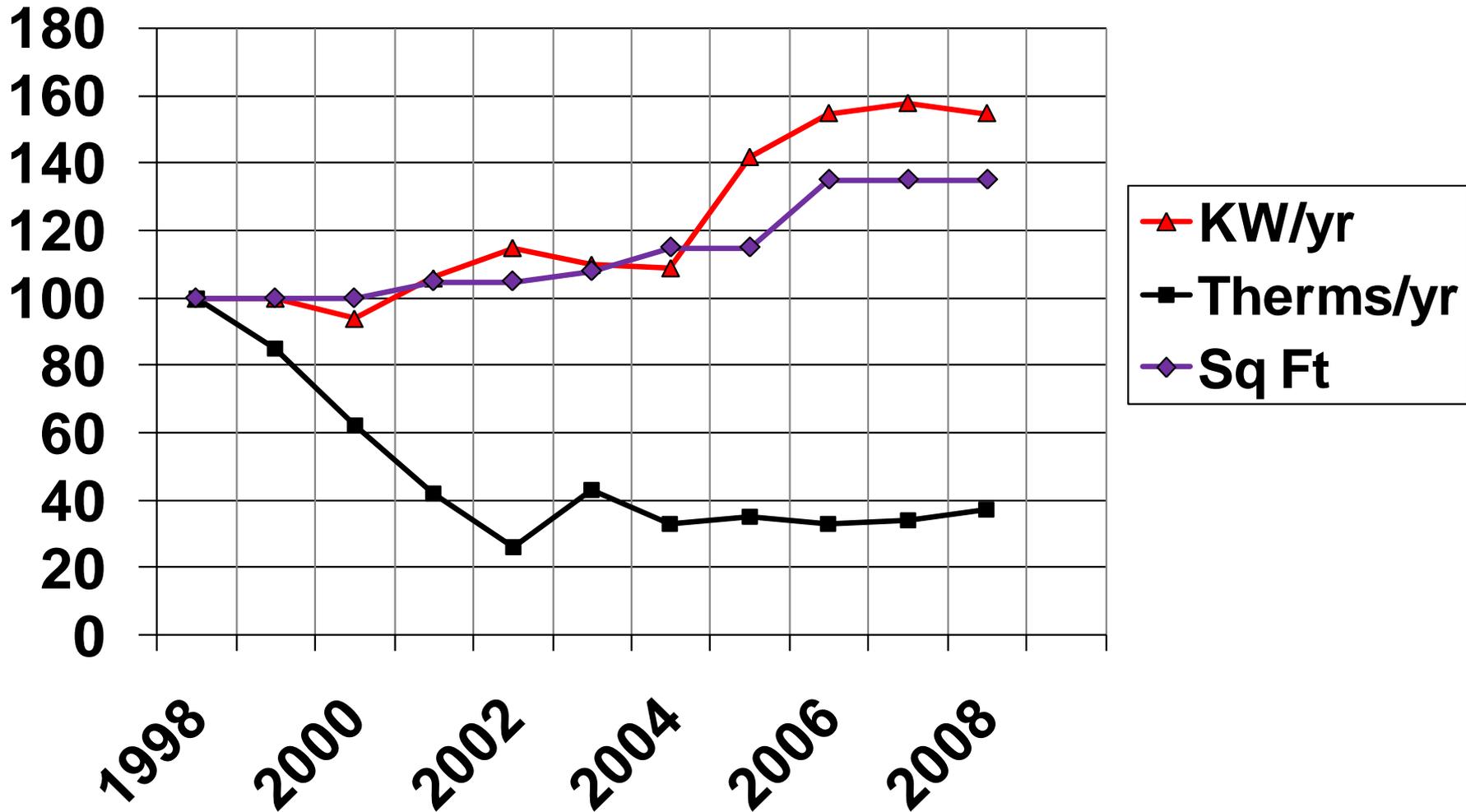
Energy Goal – 50%

Liquid Recycling Goal – 50%

Solid Waste Goal – 25%

- **Conducted Audits (Where; How Much; When)**
- **Rolling Five Year Plan**
 - Low cost - High pay off (LCHP)
 - High cost – High pay off (HCHP)
 - Low cost – Low pay off (LCLP)
 - High cost – Low pay off (HCLP)
- **Three Month Assessments**
- **Steady Progress**
- **The First Decade**
 - 22 energy saving initiatives
 - 17 recycling initiatives

KW & Therm Use

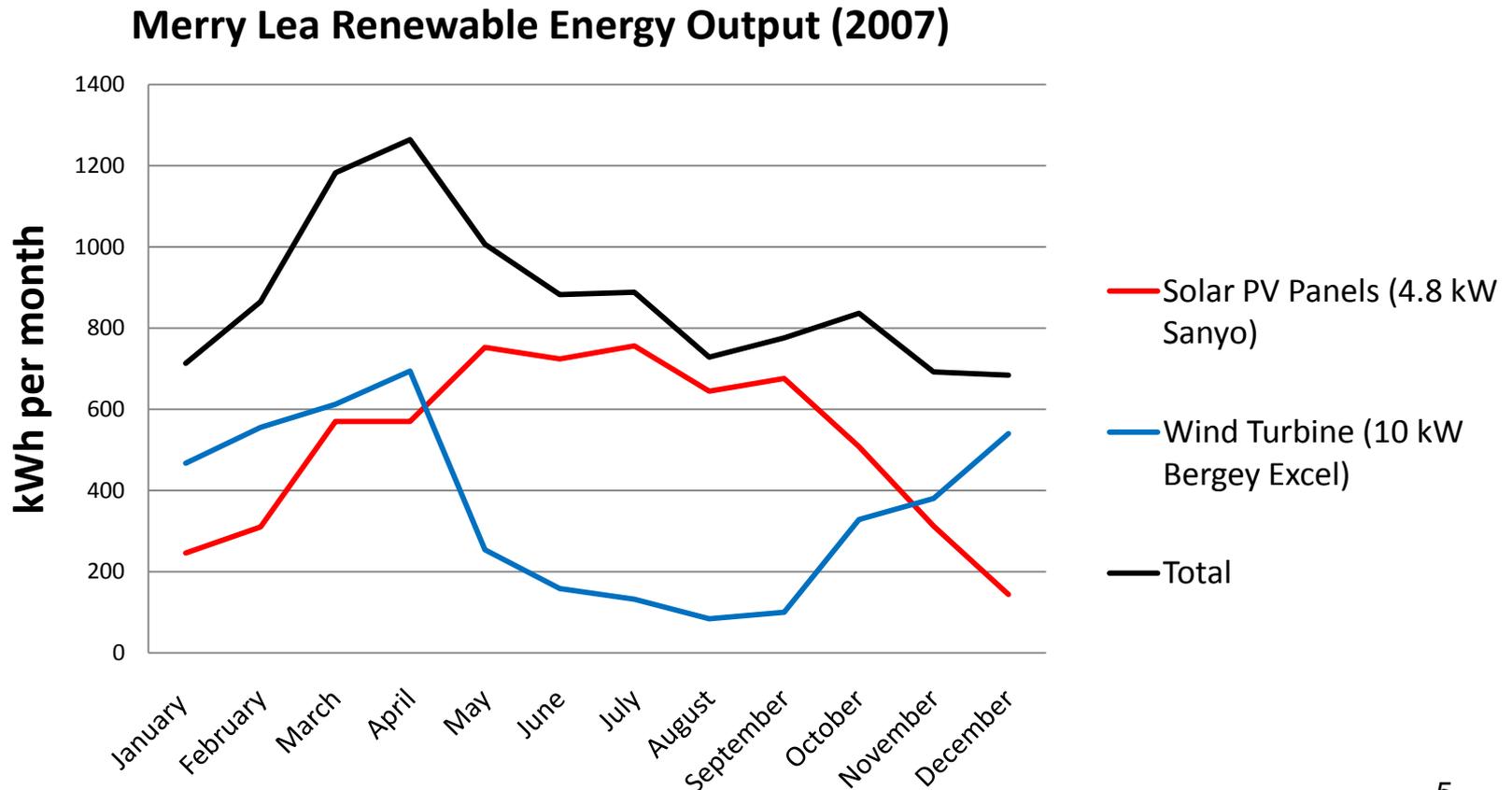


Conservation/Efficiency (C/E) or Production?

- **C/E Air Compressor Initiative (\$27K)**
 - Reduced electric by 14%
 - Annual savings \$13,200
 - Return on Investment (ROI) 2.1 years
- **Production from Wind or Solar (\$50K systems)**
 - Wind offset electric by 1%; 45 yr ROI
 - Solar offset electric by 3%; 15 yr ROI
- **Long Range Objective**
 - 50% reduction in electric by 2020

Evidence from Merry Lea

- Wind & Solar Technologies are Complementary
- Solar Outperformed Wind in 2007 (6,212 vs. 4,304 kWh)



Generation Choices

- **Where?**
- **How much?**
- **When?**
- **Our analysis—**
 - **Showroom (9K kWh, Summer, Day)**
 - **Svc Building (25K kWh, Summer, Day)**
 - **Body Shop (7K kWh, Winter, Day)**
 - **Off Site Lot (1K kWh, Winter, Night)**

Solar Plant – 6.0 kWh System



Design: 500 kWh per month

Actual Production: 665 kWh per month

Solar Plant



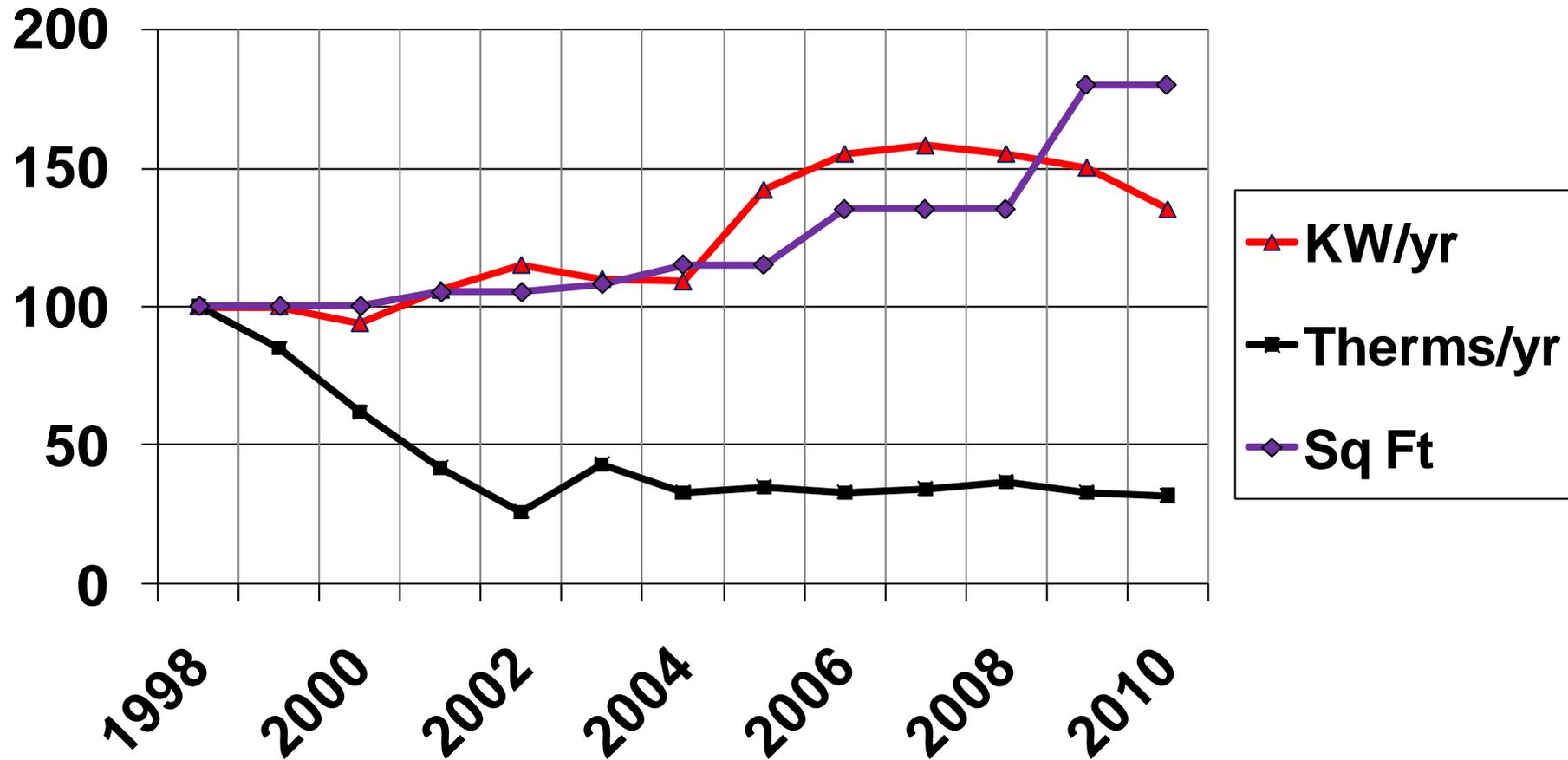
31.6 kW System of 150 Solar Panels

Solar Plant



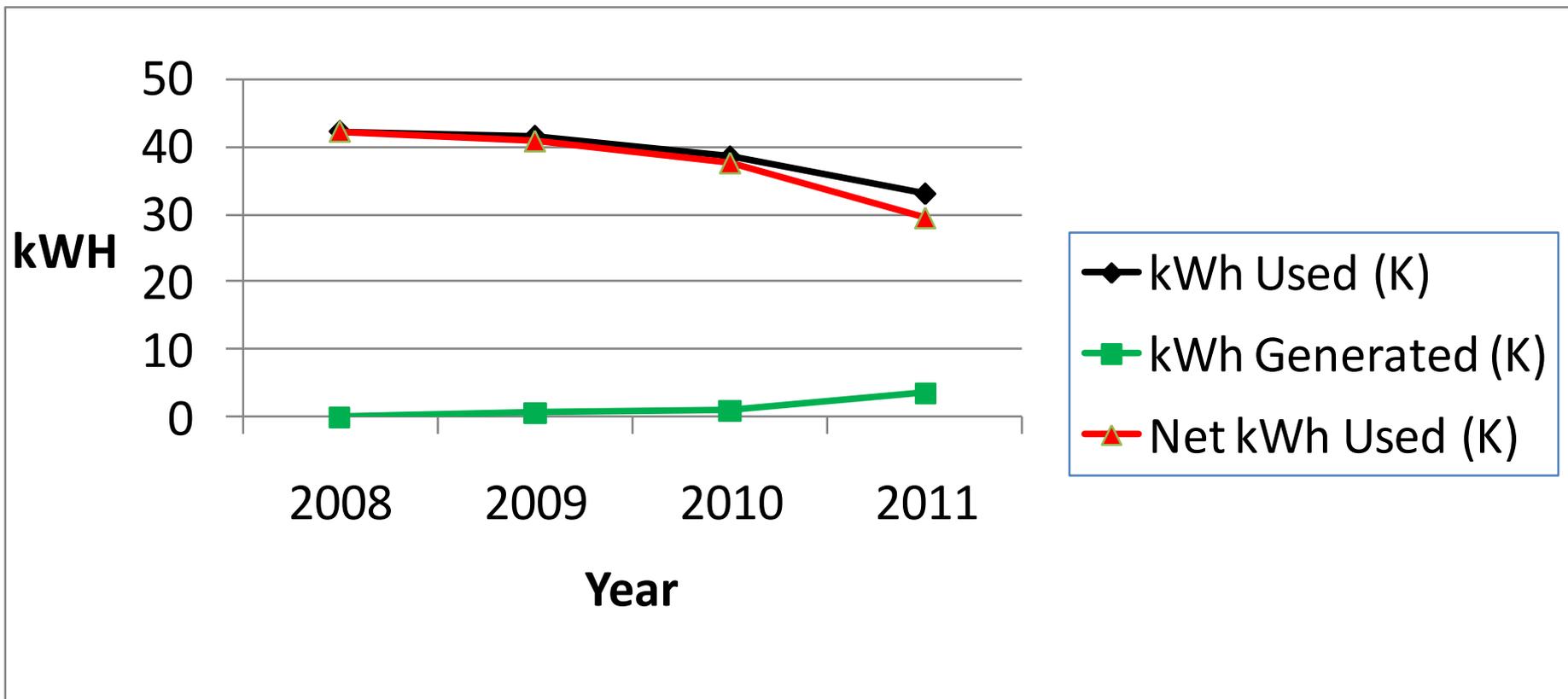
31.6 kW System Generating 4 MWh/month

KW & Therm Use



Electricity . . .

What We Use . . . What We Produce



Employee Benefit

Energy Conservation & Efficiency Fund

- **Established in March 2009**
- **Employees**
 - **Complete Home Energy Audit**
 - **Present a plan to save energy**
 - **Reimbursed 35% of cost up to a maximum of \$700**
- **Since March 2009**
 - **\$5,600 reimbursed**
 - **\$33,000+ in home energy improvements**