

WHAT DO WE SEE IN THE FIRST SLIDE?

THE SUN ?

A PANEL ?

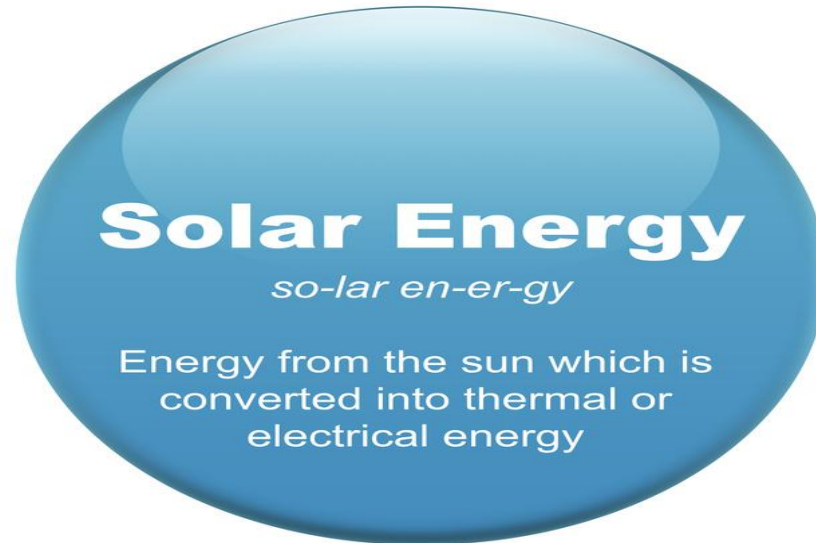
YES, BOTH ARE OBVIOUS

WHAT DO I SEE ?

SOLAR POWER

AND

**A SOLAR ENERGY COLLECTION
DEVICE WITH NO MOVING PARTS**



FREE
CLEAN
SUSTAINABLE

DIFFERENT MODELS FOR DIFFERENT APPLICATIONS

- SOLAR THERMAL.....HOT WATER HEATING
- SOLAR PHOTO-VOLTAIC (PV)....ELECTRICITY
- SOLAR GEO-THERMAL...using the earth's natural below surface heat to heat water or for climate controls

Gaylord's Application

- Solar Thermal for domestic hot water heating purposes.
- Gaylord consumes 30K gallons of potable water daily.
- 60% is hot water (patient care, food preparations, bathrooms, shower rooms)

Gaylord's Concerns

- How can we pay for this project?
- What is the ROI (return on investment)?
- Will the system perform as advertised?
- What maintenance schedule is required?
- How complex is the system to maintain?
- Risk to the hospital/ our patients/ our staff

After 1st Full Year of Operation

- CEFIA (Ct energy finance and investment authority) grant for \$323,000.
- YES.....SYSTEM PERFORMING TO SPEC
- MINIMAL MAINTENANCE REQUIRED
- NO MOVING/ VERY FEW MOVING PARTS
- MINIMAL RISK TO THE HOSPITAL, OUR PATIENTS, OR OUR STAFF.

RESULTS!

- REDUCTION OF 5-7K GALLONS OF NO.2 OIL
- REDUCTION IN OIL EQUATES TO ~\$20-28K YEARLY REDUCTION IN OUR FUEL BUDGET LINE.
- REDUCTION IN HOSPITAL'S CARBON FOOTPRINT.
- A COMPONENT OF A LONGER TERM HOSPITAL ENERGY STRATEGY.

GH STRATEGIC ENERGY PLAN

2007-2013

- REMOVAL OF BULK HOT WATER STORAGE TANKS; 2007, 08, 09,10
- INSTALLATION OF INSTANTANEOUS HOT WATER HEATERS,2007,08,09.
- Replacement of 100+ patient room toilets with “Low Flow” units.
- RELAMP THE MAIN CAMPUS-CONTIGUOUS BLDS.
- 1800 FIXTURES RETRO-FITTED FROM T-12 TO T-8
- INSTALLATION OF MOTION SENSORS IN OFFICES
- SOLAR THERMAL HOT WATER HEATING SYSTEM; 2010-11
- DUEL FUEL CAPABILITY FOR CENTRAL HEATING BOILERS; 2012-13
- HIGH VOLTAGE TRANSFORMER UPGRADE; 2012,13,14.

NEXT STEPS

- Develop a 5-yr Facility Master plan, beginning 2015, incorporating infrastructure and energy efficiency upgrades into 1-comprehensive plan.
- COMMISSION A COMPREHENSIVE ENERGY SURVEY (FY2015) TO DETERMINE AND IDENTIFY OPPORTUNITIES, EFFICIENCIES AND COST REDUCTION THROUGH INTEGRATION OF CRITICAL SYSTEMS (HVAC; FIRE NOTIFICATION; SECURITY) MANAGED BY A AUTOMATED BLD MANAGEMENT CONTROL PROGRAM.

THANK YOU!

- FOR ATTENDING THIS MORNING
- TO ALL OUR PRESENTERS
- FOR YOUR INTEREST IN GAYLORD HOSPITAL
- TO DEEP & CT GBC FOR SPONSORING THIS EVENT
- QUESTIONS?