GPG FINDINGS

OPTOPORTUNITY
How much energy is generated by photovoltaics in GSA buildings?

1% OF GSA’S ENERGY COMES FROM SOLAR

TECHNOLOGY
How does PV work?

CAPTURES ENERGY FROM THE SUN
CONVERTS 13-19% INTO ELECTRICITY

M&V
Where did Measurement and Verification occur?

SANDIA NATIONAL LABORATORIES and NEW MEXICO STATE UNIVERSITY’S COLLEGE OF ENGINEERING assessed performance of 5 PV installations provided by Sunpower, Evergreen Solar, Solyndra, United Solar Ovonic, and Abound Solar at the Major General Emmett J. Bean Federal Center in Indianapolis, Indiana.

RESULTS
How did photovoltaics perform in M&V?

Laboratory Systems Perform Similarly Under Cloudy Skies
PV System Yield on Cloudy Day, March 3, 2012

PARITY AMONG SYSTEMS UNDER CLOUDY SKIES
8% OF SITE LOAD ENERGY GENERATED FROM PV

19 YEAR PAYBACK
Steady decline in PV cost will further improve payback

DEPLOYMENT
Where does M&V recommend deploying photovoltaics?

PV EFFECTIVE EVEN IN DIFFUSE, 4-SEASON CLIMATES
PRICE SHOULD DRIVE PV SELECTION

Modeling tools produce accurate simulations for both sunny and cloudy climates.