

### **DEFINITIONS**

#### WHAT IS SOLAR ENERGY?

Solar energy is the conversion of the sun's radiation into sources of power, like electricity. A location's solar radition depends on numerous factors: geographic location, time of year, landscape, and weather. Alabama receives sufficient radiation to produce ample solar energy.

#### WHAT IS INSOLATION?

The solar power density incident on a surface of stated area and orientation, usually expressed as Watts per square meter or Btu per square foot per hour.

#### WHAT IS IRRADIANCE?

The direct, diffuse, and reflected solar radiation that strikes a surface. Usually expressed in kilowatts per square meter. Irradiance multiplied by time equals insolation.

## **ALABAMA'S SOLAR POTENTIAL**



#### **MONTGOMERY**

The average solar insolation is 4.23 hours per day. The highest irradiance is in July, at **5.70**. The lowest is in January, at 2.32.

#### **BIRMINGHAM**

Birmingham's highest monthly irradiance is **5.75** (in July). The lowest is in January, at 2.31.



#### **HOW DO WE COMPARE?**



Germany is the #1 solar energy producer in the world. Muenchen has a July irradiance of **5.29** and a January irradiance of 1.12.



### JOBS, JOBS, JOBS!

**Alabama ranks 42nd** in solar jobs — with only 420 solar jobs since 2012. Arizona State University ranked Alabama 8th among states that would benefit most from solar energy deployment.

### SOLAR JOBS RANKINGS



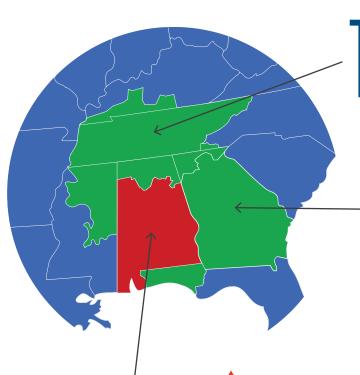








### **SOLAR INCENTIVES**



TVA

TVA buys green energy output from its customers at a premium. TVA pays an average of 17¢ per kWh for the first 10 years of a 20-year agreement.



A SOUTHERN COMPANY

Alabama Power's sister company pays their customers an average of 17¢ per kWh for generating their own electricity.

ALABAMA POWER

A SOUTHERN COMPANY

ALABAMA disincentivizes solar

- \$5/mo. contract fee
- \$5/kW charge
- 2.97¢ and 5.10¢ per kWh

\$20/MO. simply for having a 4 kW system solar system installed

THE PUBLIC SERVICE COMMISSION ALLOWS ALABAMA POWER TO TAX THE SUN!

# **SOLAR WORKS IN ALABAMA**

Clean, renewable energy will improve our health, our economy and our environment.