Renewables

ALABAMA POWER
A SOUTHERN COMPANY

Alabama Power supports the development and use of cost-effective renewable energy. We are taking action to increase the role of renewables in the generation of electricity, consistent with the availability of resources, to ensure a continued supply of reliable and affordable energy.

For years, Alabama Power has been researching renewable energy in the Southeast, where the cloudy and humid climate, lack of sustained winds and other factors limit the economic viability of some existing technologies. On the other hand, we're staying abreast of emerging technologies to ensure that renewable energy plays a greater role in providing electricity to Alabama Power customers – when it makes economic sense.

HYDRO

Alabama Power was founded on renewable hydro energy, which typically supplies about 6 percent of the company's annual energy needs. In fact, Alabama is ranked sixth in the nation for renewable energy capacity because of its existing hydro generation, according to the U.S. Energy Information Administration. Projects are under way now to improve turbine efficiency at several of our hydro plants, so we can produce more energy from the same amount of water.

BIOMASS

Alabama Power is a leader in biomass research, with nearly a decade of experience at our generating plant in Gadsden. We also have partnered with companies in Alabama on projects that will produce about 22 megawatts of biomass energy for our customers. That's enough energy to power nearly 9,000 homes. Alabama Power customers can also sign up for our Renewable Energy Rate, and help add biomass-based renewable energy to our fuel mix.

SOLAR

The company is moving forward on several solar energy research projects. Four types of solar panels are already installed on the roof of our corporate headquarters in Birmingham, with additional solar research projects under development for other locations in our service territory. Customers with small solar systems, meanwhile, can sign up for Rate PAE in which we will buy their excess solar-generated electricity.

WIND

We are also looking more closely at wind power, despite its limited applications in Alabama using current technologies. A wind turbine has been installed at corporate headquarters in Birmingham, with additional wind turbine research projects in the development stage. The company has partnered on a wind project in Oklahoma that is expected to provide enough energy to serve about 50,000 homes in Alabama, beginning in 2013.