

Study debunks 6 myths about electricity in the South

December 1 2011

Clean energy can help meet growing electricity demand and minimize pollution in the Southern United States, but progress to adopt renewable energy strategies has been hindered by a number of myths, according to a new study by Duke and Georgia Tech researchers.

These myths, encompassing both sides of the <u>clean energy</u> debate, may affect how the South responds to what is expected to be a 28 percent rise in population within the next 20 years.

A study by researchers at Duke University and the Georgia Institute of Technology, published in the journal *Energy Policy*, spells out and debunks popular myths about clean energy that have been promulgated by policymakers, business leaders and <u>advocacy groups</u> in the South.

"Myths about clean electricity shape perceptions and have delayed progress in the South," said Etan Gumerman, the study's co-author and senior policy analyst at Duke's Nicholas Institute for Environmental Policy Solutions. "We hope that by casting doubt on these myths, we can begin a productive discussion about affordable clean electricity and how it could shape public policies."

Using an energy-economic modeling tool, researchers analyzed the following six myths, identified through their earlier research on energy in the South:

• Energy efficiency and <u>renewable energy</u> by themselves cannot



meet the South's growing electricity demand;

- The South does not have sufficient renewable energy resources to meet a Federal Renewable Energy Standard;
- Renewable energy cannot be promoted without escalating electricity rates;
- Energy efficiency and renewable energy policies are not compatible;
- Cost-effective energy efficiency and renewable energy policies are sufficient to retire existing <u>coal plants</u> and reduce <u>air pollution</u>;
- Power resource decisions have little impact on water resources.

The researchers found that energy efficiency and renewable energy can work together to meet projected growth without escalating electricity rates.

They say that implementing renewable electricity standards and other complementary policies could stabilize greenhouse gas emissions. Coupling these policies with stronger regulations, such as a \$15 per ton carbon tax, could help retire coal-fired power plants and reduce emissions by 23 percent compared to today's levels. And they found that while energy impacts on water usage are largely ignored, renewable and efficiency options could hold water-saving benefits -- up to one trillion liters in 2030 --for this drought-prone region.

"The South has an abundance of sustainable energy technologies and resources, but misperceptions about their availability and readiness result in support for conventional energy systems," said Marilyn Brown, coauthor and professor in Georgia Tech's School of Public Policy. "Our research is motivated by the hope that promoting fact-informed dialogue can tackle such barriers and clear the way for a more sustainable energy future."



More information: *Energy Policy*, Volume 40, January 2012, Pages 231-241. doi:10.1016/j.enpol.2011.09.061

Provided by Duke University

Citation: Study debunks 6 myths about electricity in the South (2011, December 1) retrieved 17 April 2024 from https://phys.org/news/2011-12-debunks-myths-electricity-south.html

This document is subject to copyright. Apart from any fair dealing for the purpose of private study or research, no part may be reproduced without the written permission. The content is provided for information purposes only.