Viewpoint: Wood pellet demand in U.K. holds promise for Georgia's forest industry

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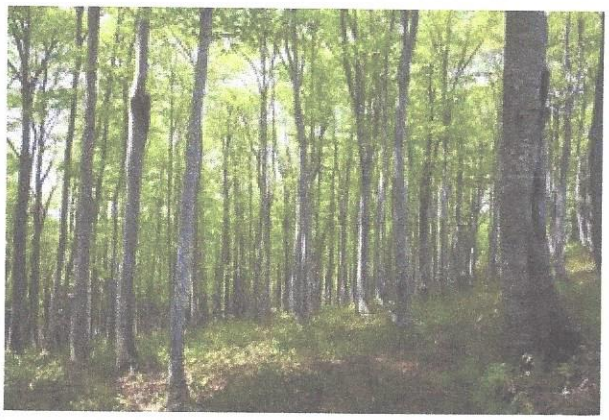

KEITA SAWAKI/THINKSTOCK

For decades, generating electricity has been all about boiling water. Typically, you can boil water by burning coal, oil or natural gas or even through a nuclear reaction using uranium. That steam turns a turbine which turns a generator creating our electricity.

On a recent trip to the United Kingdom, I had the opportunity to see a Georgia product being burned to produce electricity for the British. It is something we may need to consider in our own state one day.

I visited the Drax Power Station in Selby, North Yorkshire. First opening its doors in 1974, Drax is the largest power station in the UK, responsible for supplying around 8% of the country's electricity. While the power station was originally constructed as a coal-burning facility, Drax embarked on a journey in 2003 to shift toward using renewable biomass as the primary fuel source for its power generation.

Today, two of the six units run entirely on biomass, and a third unit is running on 90 percent biomass. This transformation is remarkable not only for its scale – Drax has reduced its coal usage by over 6.5 million tons per year – but also for its technological breakthroughs.

The engineers at Drax achieved this transformation from coal to biomass with no impact to the plant's generation capacity and almost no impact to plant efficiency. Today, Drax represents Europe's single largest decarbonization project, and serves as an example of the important role that biomass can play in a diverse, reliable, low-carbon energy portfolio, while drastically reducing sulfur oxides (SOx) and nitrogen oxides (NOx) emissions.

This change stems in part from the UK's passage of the Climate Change Act in 2008 which established a rigid framework to reduce the country's carbon emissions.

In the U.K. and at home in Georgia, a diverse set of energy sources is the best way to ensure energy security, which is paramount to a vibrant economy.

Over-reliance on any singular energy source can foster supply interruptions as well as making energy consumers more susceptible to rate increases.

Whether the motivation is carbon reduction or energy security through diverse sourcing options, wood energy is a critical part of Europe's solution. We should be using it more as well.

Among the most promising and cost-effective forms of biomass energy are wood pellets manufactured from sustainably grown trees and mill residues. I toured a pellet plant in Waycross, Ga., that uses this manufacturing process of drying and grinding the woody material into a uniform consistency and moisture level, and then compresses it under high pressure to form a compact, naturally durable pellet.

Wood pellets are also easily transported, making them a reliable source of baseload energy to complement more intermittent sources like wind and solar.

Data from the US Energy Information Administration illustrates the increasing demand for wood energy in the UK, as well as growth in pellet exports from the US. In 2014, the UK accounted for nearly three quarters of the US's export of wood pellets for renewable wood energy. According to a 2014 economic analysis , Georgia is the largest timber-producing state in the Southeast with nearly 25 million square acres of forest land.

Demonstrating the growing promise of this renewable energy source, there are 14 existing and proposed pellet mills in Georgia that together can produce a total of 3.9 million tons of wood pellets today and in the near future. With an estimated global demand for 35 million tons by 2020, Georgia's contribution to the total supply is as significant as the economic boost this industry provides the state. While this is a significant part of the overall supply, it represents just 3% of all timber harvested in the South and the wood is only taken from working managed forests that are replanted over time.

Ultimately, this market for renewable wood energy is adding to the good paying jobs the forest industry is providing to rural communities where the economic recovery is lagging. A recent study conducted by the National Alliance of Forest Owners found that privately owned and managed forests contributed 160,224 jobs in Georgia alone, generating more than $6.5 billion in wages.

Having served as a Georgia Public Service Commissioner since 2011, I have closely followed these issues and I am very proud of the positive contributions Georgia companies and the employees at Drax, Georgia Biomass, Fram Renewable Fuels, and the many other wood pellet producers are making as we work towards cleaner energy solutions to meet the world demand. I've long been a supporter of renewable wood energy like wood pellets, because it has been shown to provide a reliable energy source, reduce our dependence on fossil fuels and adds diversity to our energy sources.

Wood energy is an important element within the broader solution to utilize more renewable sourced energy in the UK and may be part renewable energy solutions being developed by states here in the U.S. While the public policy process in the UK is advancing, the wood energy market represents an opportunity for Georgia and its industries to further solidify our partnership. I look forward to seeing this mutually beneficial relationship continue to flourish economically while we all work for more environmentally conscious, reliable, and renewable sources of energy.