

Ranking Member Frank Lucas Opening Statement at Energy Subcommittee Hearing on Energy- Water Nexus

Mar 7, 2019

Thank you, Chairman Lamb, for holding this hearing today and thank you to our witnesses for being here.

There might not be two more important and interconnected pieces to our every day health and economic stability than energy and water. Water is used to produce energy, and energy is required to treat and distribute clean water. Both are essential, and both depend on the other.

That is why this Congress I joined my colleague, Chairwoman Johnson, in introducing H.R. 34, the Energy and Water Research Integration Act – which is the subject of today's hearing.

This bill will improve our understanding of the relationship between water use and energy production while encouraging the development of innovative technologies that could improve efficiency and production in both sectors.

It is important to remember that many of the issues surrounding the energy-water nexus are regional, and so require consideration of local factors. For example, in Oklahoma, agriculture is clearly a third part of this relationship. While agriculture is the single largest consumer of water, it is also a crucial piece of the national economy and contributes indirectly to the energy sector through the production of biofuels.

Additionally, oil and gas operations – especially horizontal drilling and hydraulic fracturing, which are vital in the pursuit of cleaner energy markets – require large volumes of water and can also produce water. While this presents localized water management challenges, it also leads to opportunities for beneficial reuse of water through fluid lifecycle management.

Today Dr. Raman Singh will provide a valuable perspective from the research community on ways to improve water management and energy efficiency by developing carbon and water neutral fossil energy technologies. I look forward to hearing how this collaborative multi-university effort, led by Oklahoma State,

can conduct transformative research while working with industry to safely implement new approaches in the field.

This research can also complement the work being conducted at our national labs. I'm pleased to see DOE pursuing work in this area, both through the multi-agency Water Security Grand Challenge and the recently announced DOE Energy-Water Desalination Hub. By focusing on early stage R&D, this hub will work to develop novel filtration membranes that can transform brackish or produced water into water communities can reuse.

Because of the complex relationship between energy and water systems, this challenge will require a multi-disciplinary approach. Interactions between chemists, engineers, geologists, legislators, and others will be required along with collaboration between government, industry, and universities.

I believe the legislation introduced by Chairwoman Johnson and myself can help to streamline and prioritize this work.

I thank our witnesses for being here today, and I look forward to our discussion this morning.