



**Opening Statement**  
**Hearing on Energy Innovation and Economic Growth**  
**Chairman Lisa Murkowski**  
**July 25, 2019**

Good morning, everyone. The committee will come to order as we begin our hearing to examine the importance of energy innovation to economic growth and our nation's long-term competitiveness.

So you'll note that I'm not joined by my ranking member yet this morning. He is in executive session in Senate Armed Services and has asked that I go ahead and begin the hearing this morning, he will be here. He was actually the one who first presented this idea to me that the committee should examine as we are looking at our priorities here. We have held hearings on innovation throughout the year, and while we have largely focused on what we see as our best policymaking opportunities, today we will be looking more broadly at why it matters for the economy and Senator Manchin has been very, very focused in that effort and we were pleased to be able to put together such a solid panel here this morning to help us with that. So, Senator Manchin will be in and we expect others as well but it's a busy Thursday morning in the United States Senate so we're going to kick off the conversation.

This is an important connection as we think about why innovation and specifically energy innovation is such a significant contributor to our economic growth. We may not always realize or appreciate it, but energy innovation is critical to our success as a nation. Historically, it enabled higher standards of living and the development of modern society, from electrification to long-distance transportation.

I often share the story and perspective that is contained in one of Robert Caro's books, and this is Master of the Senate, and there is one chapter and it is called "Sad Irons" and when I'm speaking to women's groups I will often reference this specific chapter because it speaks about life in Eastern Texas before electrification in the 30's and what the life of a woman was like. And I haven't spent any time in East Texas, but I can imagine this time of year, it's not particularly pleasant when it's really hot.

And when the men go off to herd the cattle or do whatever they do on the range, the woman – the women – are left to keep the home. And keeping the home means first going down and hauling the water and boiling the water, but you got to stoke the fire, make a fire, in order to do that. It speaks about the physical damage to a woman's body after years of hauling heavy water, multiple trips back and forth. The rigors of just this very heavy, heavy work and labor.

And they talk about the, I'm telling a story about [inaudible] no, no, no... But they talk about the various days and how the worst day of the week is Thursday because Thursday is the day they do the ironing. And so it's not only hauling the wood and making the fire, it's standing over the hot fire with the hot iron and ironing the stiff jeans that have been hung out to dry, and the repetition and the heat. And you think about that – these are-- some of these women are still alive today. Whose physical aspects are still apparent in that labor they endured every day because they didn't have energy. They couldn't turn the stove on, they couldn't turn the faucet on. So when you think about those ways that women have truly become empowered they are the true beneficiaries of what we see in energy innovation.

Today, on a national scale, new energy technologies are lowering costs, reducing environmental pollution, and supporting hundreds of thousands of well-paying jobs in the process.

Energy innovation will be no less important going forward. I happen to believe it is the best way to address the challenges that we face on both energy security and climate change. Whether we are looking to bolster our energy supply or reduce our greenhouse gas emissions, innovation will need to be front and center and recognized as our best solution.

And as we consider energy innovation, we want to place special emphasis on our rural areas. We've taken care to include their perspective in our discussion today, because we recognize there are tremendous opportunities for energy innovation in rural America that are worthy of our attention and our discussion.

I think this is particularly true in our state of Alaska. We have already seen how new, innovative technologies can reduce our reliance on costly diesel fuel, but we know we've got great potential, enormous potential, for more. The sheer size of Alaska makes it very expensive to transport fuel, and many of our communities are paying upwards of \$7-\$8 per gallon. New technologies, whether in renewables or microreactors, I look at these and say these innovations will help to make a real difference in the local economies and the lives of so many Alaskans.

Earlier this summer I was up North in the community of Cordova, this is a small coastal fishing community. And they were cutting the ribbon on a new grid-scale battery there. This is not interconnected to a terrestrial grid and they have to maintain their own microgrid, there in Cordova. The town has always relied on diesel generation to back up their small hydro— but thanks to this new energy storage facility, they now have lower costs, they are able to utilize much much more of their abundant hydropower resource, they've got far fewer fluctuations in the electricity. And what this has done, what this cheaper, more reliable, affordable power, I guess affordable cheaper, it has allowed this fishing community to grow in a way that they could otherwise not. They are now the fifth largest fishing port by volume in the state. Why? Because the processors can locate there, they can make ice in a way that is affordable, they can do the processing that they need. They can't do that if they don't have power. That fishing community would be bypassed if they didn't have that power.

We up North have always been innovators and we don't just because we have to, but we're pioneers, we like breaking new trail I think that's an important part of it. Yesterday, we had some good news, out of the Department of Energy's Office of Indian Energy they announced competitive grants for the communities of Igiugig, Kwethluk, and Togiak. Igiugig is now on everybody's map everyone can pronounce Igiugig because its home to this new RivGen system where we are going to be tapping into that marine hydrokinetic energy there for this small community, getting them once again off of diesel.

Lots of good stories to be told. I'm looking forward to hearing more from you, Mr. Vanderburg, with the all the innovation that is coming out of Launch Alaska. We're pleased to have you here and tell us more about how his startup incubator is enabling companies to be successful in Alaska. Mr. Vanderburg is joined this morning by:

- Dr. Brian Anderson, the Director of the National Energy Technology Laboratory;
- Dr. John Deskins, the Director of the Bureau of Business and Economic Research at West Virginia University;
- Dr. David Hart, Senior Fellow at the Information Technology and Innovation Foundation; and
- Mr. Lee Ragsdale, Senior Vice President for Grid Infrastructure and Compliance for North Carolina's Electric Cooperatives.

I appreciate you all being here, and am looking forward to hearing about ways that we can continue to make America the global leader in energy technology.

Senator Manchin?

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