

US Rep. Andy Biggs talks Arizona's energy path forward at ASU event

Congressional Dialogue Series brings federal representatives directly into conversation with community

By Marshall Terrill , ASU News
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Arizona's infrastructure needs to expand exponentially during the next decade with significantly more power and water — a big challenge in the desert. But some technological innovations are pointing the way forward, and the state needs to act now, according to a member of Congress who spoke at ASU last week.

Nuclear energy will play an important role in meeting the state's future needs, but no expansion of its generating capacity is planned until 2040.

"That's 15 years; hence, we will lose all of our potential market driving force and leadership," said [Andy Biggs](#), who has served as the U.S. representative for Arizona's 5th Congressional District since 2017. "Arizona and the Phoenix metro area are internationally considered one of the future tech growth areas (in the country). As long as we have the infrastructure to support that, waiting 15 years is way too long."

Biggs' remarks were made at the second installment of Arizona State University's Congressional Dialogue Series, hosted by the ASU [Office of Government and Community Engagement](#). The Aug. 15 event took place at the Walton Center for Planetary Health on ASU's Tempe campus.

In addition to a keynote address, Biggs also participated in a fireside chat with [Lara Ferry](#), vice president of research at ASU's Knowledge Enterprise. The two addressed topics that included how Biggs will shape his energy agenda to Congress; keeping the power grid strong; the role of [small modular reactors](#) (SMRs) and AI data centers; bringing these innovations to scale; and how federal agencies can better partner with universities like ASU.

Biggs, a longtime Arizona elected official who served in the state Legislature before moving on to Congress, said Arizona and Virginia are leading the nation in building data centers, which can

each generate hundreds of millions of dollars in tax revenue and economic input.

“Who wants to see that? I do. And you should want to see that, too,” Biggs said to an audience of about 100 people. “The economy will speed up, really moving very fast.”

But AI data centers require lots of energy and currently utilize about 9% of total U.S. electricity, according to [Scott Barclay](#), assistant vice president of research in ASU's Knowledge Enterprise and a political science professor. And within the next three years, Barclay told the audience Friday, these centers will consume more than 12%.

“At that point, AI data centers will collectively be drawing amounts of electricity similar to the current demand from both California and Texas combined,” Barclay said. “This is an unprecedented change in the demand placed on our electricity grid. And, given that Arizona is among the top states for data centers, the impacts will be more acutely felt here.”

Without innovation in energy in the short term, Barclay said commercial and residential consumers in Arizona will face higher electricity bills, the likelihood of brownouts and other grid instabilities.

Both Barclay and Biggs view SMRs as a game-changing answer to today's urgent energy challenges. Compact yet powerful, each SMR can generate up to 300 megawatts of electricity — roughly one-third the output of a traditional nuclear reactor — offering a more flexible way to meet the state's growing demand for power.

In conversation with leadership

For several years, ASU has hosted an annual conference each August to align with the congressional recess. These gatherings offered an opportunity to engage directly with Arizona's federal representatives and discuss critical national priorities, ranging from Arizona's water future to semiconductor leadership to space exploration and the role of universities in shaping the state's future economy. ASU recently shifted to a more frequent, deeper-dive format with its Congressional Dialogue Series.

“Our goal with the Congressional Dialogue Series is to bring Arizona's federal representatives directly into conversation with the ASU community on the most pressing issues facing our state and nation,” said [Matthew Simon](#), associate vice president for federal and state relations at ASU. “Congressman Biggs has long engaged with ASU on topics critical to Arizona's future, and his perspective on energy innovation offers valuable insight into how federal policy, industry and universities can work together to ensure a strong, reliable energy future.”

In addition to Biggs and Barclay, speakers also included [Adam Deguire](#), vice president in the ASU Office of Government and Community Engagement, and [Sally Morton](#), executive vice president of Knowledge Enterprise.

“These discussions are more than just a dialogue,” Deguire said. “They're a reflection of the partnership between ASU and those shaping policy in Washington, and our shared commitment to advancing research and innovation that serve the public good.”

Morton said that in 2024 ASU crossed the threshold of [\\$1 billion in annual research](#) expenditures, which puts the university in a very select group of institutions.

“Today’s topic — energy innovation — could not be more timely,” Morton said. “The ubiquitous nature of artificial intelligence and its centrality to our nation’s future and security are the driving need for energy at a pace we’ve never seen before. Our nation must be at the front of this innovation and maintain leadership and independence.”

Biggs said if Arizona can step into that leadership role, big business is likely to follow.

“You are starting to see companies like Westinghouse Electric, Coal Tech International, X-energy, Kairos Power, TerraPower, all wanting to come in with private dollars to help speed up the ability of SMRs to be developed and deployed,” Biggs said. “They want to get in there and attach power and water to that particular data center. You do that, and odds are, if done right, they’re going to have excess power.”

Biggs cautioned that without swift action from federal and state agencies to help streamline regulations to build and roll out SMRs, Arizona could face serious setbacks.

“I’m afraid to tell you that we will fall perhaps irrevocably behind in this new race,” Biggs said. “Arizona is meant to be, in my opinion, the leader. The only true competitor we have is Virginia.”

He also envisions ASU as a leading institution in energy research.

“All the Arizona universities bring something to the table and give us the skilled pipeline that come with these ideas,” Biggs said. “ASU is really doing a great job. They have a mega engineering school, and we are ready to go. We just have to get the power here.”

This story originally appeared on [ASU News](#).

Main image



U.S. Rep. Andy Biggs and Lara Ferry, Arizona State University vice president of research and President's Professor, speak during the Congressional Dialogue Series event at the Walton Center for Planetary Health in Tempe on Aug. 15. Photo by Emma Fitzgerald/ASU

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Adam Deguire, vice president in the Office of Government and Community Engagement, said ASU's Congressional Dialogue Series is a reflection of the partnership between the university and those shaping policy in Washington, D.C., and that it demonstrates their shared commitment to advancing research and innovation for the public good.



ASU Knowledge Enterprise Executive Vice President Sally Morton remarked at the Aug. 15 Congressional Dialogue Series that the topic of energy innovation was not only timely but central to our nation's future and security.



Scott Barclay, assistant vice president of research in ASU's Knowledge Enterprise and a political science professor, views small modular reactors — compact reactors that can generate up to 300 megawatts of electricity, roughly one-third the output of a traditional nuclear reactor — as a game-changing answer to today's urgent energy challenges.



Approximately 100 people attended the Congressional Dialogue Series event with U.S. Rep Andy Biggs at the Walton Center for Planetary Health auditorium in Tempe on Aug. 15.