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News, Research and Events

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What will it take to win the tech race with China?

America's national security and prosperity increasingly depend on its ability to lead in key technologies ranging from artificial intelligence and quantum computing to synthetic biology. With China rapidly closing the gap in several critical technical areas, how can the U.S. hold its advantage?

Former Google CEO Eric Schmidt, now chair of the National Security Commission on Artificial Intelligence, and Norman Augustine, retired CEO and chairman of Lockheed Martin, discussed this important question in a webinar hosted last week by the Baker Institute Science and Technology Policy Program. John Hennessy, former president of Stanford University and chair of the board of Alphabet Inc., moderated the talk and Neal F. Lane, senior fellow in science and technology policy, provided welcome remarks.

If the U.S. is to maintain its lead, Augustine and Schmidt agreed, it must do more than increase federal investment in basic research — funding that has been stagnant for decades. The solution will also require a multipronged effort to invest in both domestic and foreign talent, increase collaboration among government, universities and private industry, and drastically improve the quality of our K-12 public schools. "It's popular among our politicians to blame China for our troubles," said Augustine. "But this is our problem to solve."

This Civic Scientist event was a follow-up to the release of "Perils of Complacency: America at a Tipping Point in Science and Engineering," a joint report from the American Academy of Arts and Sciences and the Baker Institute that examined challenges to America's preeminence in science, engineering, technology and innovation.

Click here to watch the full webinar.

A capital gains tax hike "would be expected to slow long-term growth. I don't think by a substantial amount, but it's not insignificant. It's not just a story of hey, we're taxing the rich and no one else gets hurt by this."

John Diamond, Edward A. and Hermena Hancock Kelly Fellow in Public Finance, in the Wall Street Journal

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Advanced recycling: A sustainable solution to help deliver on climate goals

From plastic shopping bags to food containers to water bottles, our society creates enormous amounts of plastic waste, and only about 9% of it actually ends up being recycled. Much of the rest ends up in landfills, incinerators or as litter, eventually polluting rivers, lakes and oceans. How can we ensure that plastic products stay in the economy and out of the environment?

In a recent blog post, Rachel Meidl, fellow in energy and environment, writes that as much as half of all global plastics packaging could be recycled by 2040 if advanced recycling technologies were widely adopted. Unlike traditional recycling, advanced recycling — also known as "chemical recycling" — can handle contamination, impurities, mixed polymers and low-quality, low-density plastics. However, recent federal policy proposals are threatening the advancement of chemical recycling technologies. Meidl argues that it is important that policies keep pace with innovation, are data-driven and consider systems-level impacts. This, she writes, is ultimately what will shepherd the U.S. toward economic, social and environmental sustainability in the circular plastics economy.

Read the full post on the Baker Institute Blog, and check out more of Meidl's research on plastic waste in the Baker Institute's online research library.

Upcoming Events

Webinar — International Scientific Collaboration: Critical Tasks for the Biden Administration. Panelists discuss policies the Biden administration can implement to bolster international scientific collaboration and strengthen the U.S. science and technology enterprise. **May 12 | 3:30 p.m. CDT**

Webinar — Offshore Exploration and Production and the Global Energy Transition. Executive leaders from three international energy companies at the forefront of addressing greenhouse gas emissions consider the challenges and opportunities of transitioning to a low-carbon energy future. **May 14 | 9 a.m. CDT**

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