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# 2016's Top Presidential Science, Engineering, Technology, Health and Environmental Questions

Scientific, engineering, tech, health and environmental issues now affect voters' lives at least as much as the foreign policy, economic policy, and faith and values views that candidates traditionally share on the campaign trail. America's leading science and engineering organizations are urging the candidates and the press to give equal priority to discussion of these important issues in the national dialogue, so that well-informed voters may continue to guide the democratic process. We offer twenty questions.

| Category | # | Questions |
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| **Innovation** | **1** | Science and engineering have been responsible for over half of the growth of the U.S. economy since WWII. But some reports question America's continued leadership in these areas. What policies will best ensure that America remains at the forefront of innovation? |
| **Research** | **2** | Many scientific advances require long-term investment to fund research over a period of longer than the two, four, or six year terms that govern political cycles. In the current climate of budgetary constraints, what are your science and engineering research priorities and how will you balance short-term versus long-term funding? |
| **Climate Change** | **3** | The Earth's climate is changing and political discussion has become divided over both the science and the best response. What are your views on climate change, and how would your administration act on those views? |
| **Biodiversity** | **4** | Biological diversity provides food, fiber, medicines, clean water and many other products and services on which we depend every day. Scientists are finding that the variety and variability of life is diminishing at an alarming rate as a result of human activity. What steps will you take to protect biological diversity? |

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| **Internet** | **5** | The Internet has become a foundation of economic, social, law enforcement, and military activity. What steps will you take to protect vulnerable infrastructure and institutions from cyber attack, and to provide for national security while protecting personal privacy on electronic devices and the internet? |
| **Mental Health** | **6** | Mental illness is among the most painful and stigmatized diseases, and the National Institute of Mental Health estimates it costs America more than $300 billion per year. What will you do to reduce the human and economic costs of mental illness? |
| **Energy** | **7** | Strategic management of the US energy portfolio can have powerful economic, environmental, and foreign policy impacts. How do you see the energy landscape evolving over the next 4 to 8 years, and, as President, what will your energy strategy be? |
| **Education** | **8** | American students have fallen in many international rankings of science and math performance, and the public in general is being faced with an expanding array of major policy challenges that are heavily influenced by complex science. How would your administration work to ensure all students including women and minorities are prepared to address 21st century challenges and, further, that the public has an adequate level of STEM literacy in an age dominated by complex science and technology? |
| **Public Health** | **9** | Public health efforts like smoking cessation, drunk driving laws, vaccination, and water fluoridation have improved health and productivity and save millions of lives. How would you improve federal research and our public health system to better protect Americans from emerging diseases and other public health threats, such as antibiotic resistant superbugs? |
| **Water** | **10** | The long-term security of water supplies is threatened by a dizzying array of aging infrastructure, aquifer depletion, pollution, and climate variability. Some American communities have lost access to water, affecting their viability and destroying home values. If you are elected, what steps will you take to ensure access to clean water for all Americans? |
| **Nuclear Power** | **11** | Nuclear power can meet electricity demand without producing greenhouse gases, but it raises national security and environmental concerns. What is your plan for the use, expansion, or phasing out of nuclear power, and what steps will you take to monitor, manage and secure nuclear materials over their life cycle? |
| **Food** | **12** | Agriculture involves a complex balance of land and energy use, worker health and safety, water use and quality, and access to healthy and affordable food, all of which have inputs of objective knowledge from science. How would you manage the US agricultural enterprise to our highest benefit in the most sustainable way? |

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| **Global Challenges** | **13** | We now live in a global economy with a large and growing human population. These factors create economic, public health, and environmental challenges that do not respect national borders. How would your administration balance national interests with global cooperation when tackling threats made clear by science such as pandemic diseases and climate change, that cross national borders? |
| **Regulations** | **14** | Science is essential to many of the laws and policies that keep Americans safe and secure. How would science inform your administration's decisions to add, modify, or remove federal regulations, and how would you encourage a thriving business sector while protecting Americans vulnerable to public health and environmental threats? |
| **Vaccination** | **15** | Public health officials warn that we need to take more steps to prevent international epidemics from viruses such as Ebola and Zika. Meanwhile, measles is resurgent due to decreasing vaccination rates. How will your administration support vaccine science? |
| **Space** | **16** | There is a political debate over America's national approach to space exploration and use. What should America's national goals be for space exploration and Earth observation from space, and what steps would your administration take to achieve them? |
| **Opioids** | **17** | There is a growing opioid problem in the United States, with tragic costs to lives, families, and society. How would your administration enlist researchers, medical doctors and pharmaceutical companies in addressing this issue? |
| **Ocean Health** | **18** | There is growing concern over the decline of fisheries and the overall health of the ocean: scientists estimate that 90% of stocks are fished at or beyond sustainable limits, habitats like coral reefs are threatened by ocean acidification, and large areas of ocean and coastlines are polluted. What efforts would your administration make to improve the health of our ocean and coastlines and increase the long-term sustainability of ocean fisheries? |
| **Immigration** | **19** | There is much current political discussion about immigration policy and border controls. Would you support any changes in immigration policy regarding scientists and engineers who receive their graduate degree at an American university? Conversely, what is your opinion of recent controversy over employment and the H-1B Visa program? |
| **Scientific Integrity** | **20** | Evidence from science is the surest basis for fair and just public policy, but that is predicated on the integrity of that evidence and of the scientific process used to produce it, which must be both transparent and free from political bias and pressure. How will you foster a culture of scientific transparency and accountability in government, while protecting scientists and federal agencies from political interference in their work? |