

Science, Technology, and Foreign Diplomacy: The Shifting Political Landscape and US-Japan Relations

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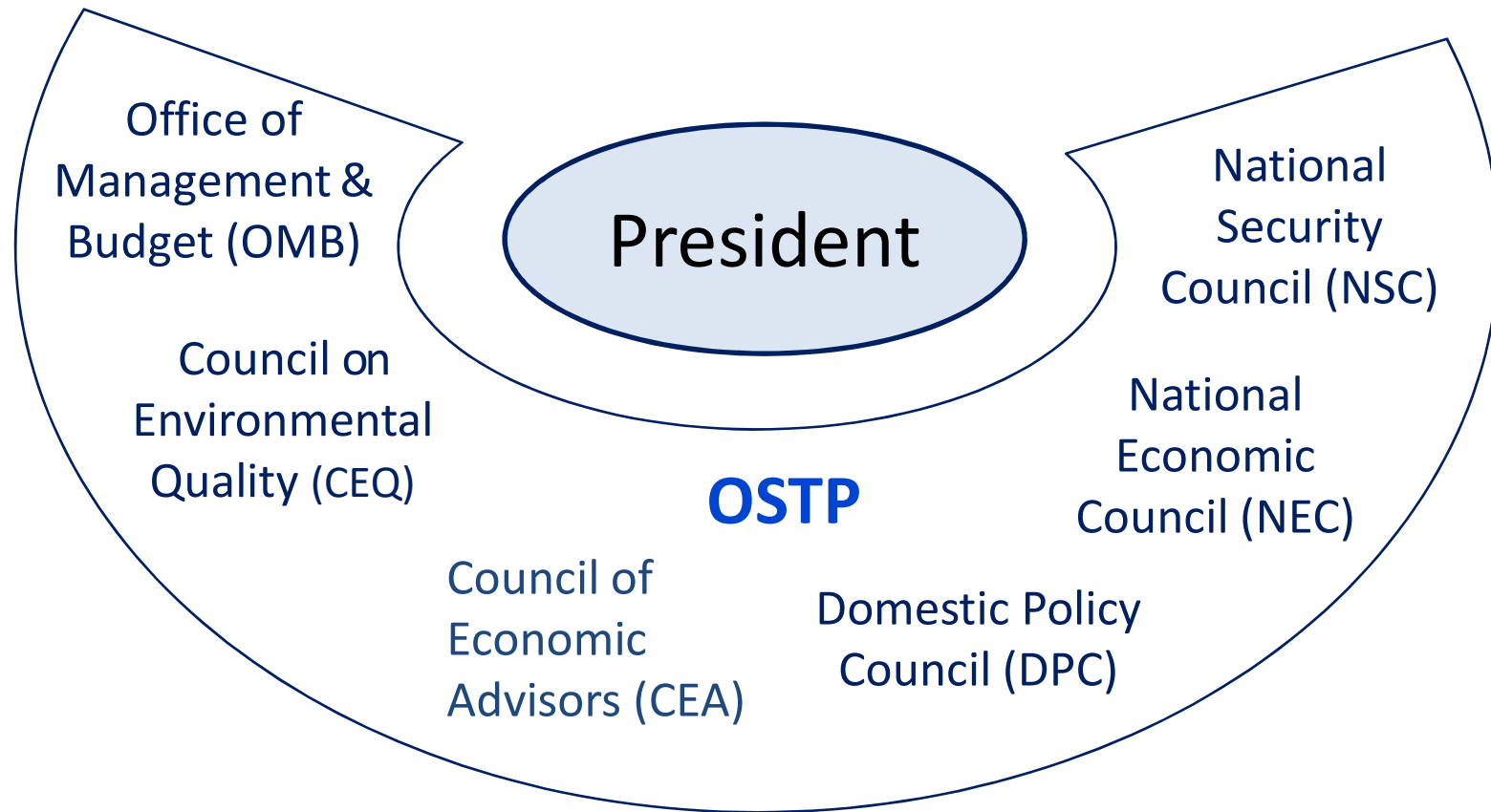
Outline of these remarks

- Context: Science & technology advice in the White House
- Science, technology, and foreign diplomacy in the Obama-Biden and Trump-Pence administrations
- What can we expect from the Biden-Harris administration?
- The U.S.-Japan dimension.

Science and Technology Advice in the White House

OSTP and the President's Science Advisor

The Office of Science & Technology Policy (OSTP) sits in the Executive Office of the President (“the White House”) alongside other key offices.



OSTP's Senate-confirmed Director may be “dual-hatted” as Assistant to the President for S&T (“the President's Science Advisor”), with direct access to the President.

The need for S&T advice in the White House

Given the many capable scientists and technologists in Executive Branch agencies, why does the President need a separate S&T advisor and supporting office inside the White House?

- Without a capable scientist on the President's senior staff, he/she might not recognize the relevance of science to the choices on the table, thus might not know when to ask an agency a science question...or what question to ask.
- Detailed knowledge of the science missions & competencies in the agencies is needed to know whom to ask.
- It's often helpful for the President to have a trusted source of science information independent of agency agendas.

The 3 classes of responsibilities of OSTP and the Science Advisor

1. Science and technology for policy

Independent advice for the President & heads of other White House offices, providing whatever facts/insights from natural & social science may be germane to the policy issues with which they are concerned.

2. Policy for science and technology

Analysis, recommendations, and coordination with OMB and other White House offices on: R&D budgets & related policies; S&T education and workforce issues: scientific integrity & transparency; S&T to improve gov't operations.

3. Serving as the President's representative on S&T to...

Executive Branch agencies with S&T roles; Congress; the nongovernmental S&T community (nationally & internationally); and foreign governments

OSTP's specific responsibilities include...

- providing White House oversight for NSF and NASA;
- overseeing U.S. S&T cooperation with other countries (in partnership with the State Department); and
- carrying out a range of classified functions in support of national security communications.

The OSTP Director also...

- serves as Chairman of the interagency National Science and Technology Council (responsible for all interagency initiatives);
- serves as Co-Chair of the President's Council of Advisors on Science and Technology (PCAST), the other members of which are S&T leaders in industry, academia, and civil society who advise the President on a part-time basis; and
- leads US participation in the ministerial-level S&T agreements with Brazil, China, India, Japan, Korea, and Russia.

**Science, Technology, and
Foreign Diplomacy in the
Obama-Biden Administration**

At the start of his Administration, Obama...

- Appointed 5 Nobel laureates in science and 25 members of the National Academies of Science, Engineering, and Medicine to key positions in his Administration.
- Issued memoranda and Executive Orders requiring all Executive Branch departments & agencies to allow their scientists to speak freely and to make scientific data on which decisions are based available to the public.
- Shared with his Cabinet his view about the importance of S&T in addressing the country's biggest challenges and asked that they all appoint their own science advisors.
- Instructed me, as his OSTP Director and Science Advisor, to re-invigorate U.S. S&T cooperation with our most important international partners...including Japan.

Obama and his team subsequently...

- Achieved large increases in Federal support for R&D in general, and biomedical science, clean-energy technology, and climate science in particular.
- Launched an unprecedented array of S&T initiatives in, *e.g.*, brain science, precision medicine, advanced manufacturing, advanced computing, and STEM (science, technology, engineering, & math) education.
- Used Executive Orders, regulations, and other executive authority to support increases in energy efficiency, reductions in greenhouse-gas emissions, preparedness & resilience against climate change, climate assistance to countries in need, and marine & terrestrial protected areas.
- Leveraged international relationships to gain the consensus that made the Paris Climate Agreement possible.

**Science, Technology, and
Foreign Diplomacy in the
Trump-Pence Administration**

President Trump, by contrast, has...

- appointed unqualified ideologues and climate-change deniers to key Executive Branch S&T positions, and drove out the few exceptions when they refused to endorse his rejection of science, long-standing U.S. norms & values, and the U.S. Constitution;
- failed to appoint a Director of OSTP at all for the 1st two years of the administration and then failed to give the appointee the Assistant to the President rank;
- repeatedly proposed deep cuts in the budgets of Federal science agencies (proposals largely rejected by the U.S. Congress);
- imposed changes in U.S. immigration & visa regulations and enforcement that have reduced attractiveness & accessibility of U.S. universities to foreign students and hobbled foreign attendance at international STEM conferences held in the United States; and

President Trump has also...

- announced U.S. withdrawal from the Paris Agreement and halted all U.S. measures intended to comply with it (including termination of U.S. climate assistance to developing countries);
- reversed nearly all of the Obama administration's other climate-change mitigation & adaptation measures, as well as a huge array of other environmental regulations;
- contradicted the advice of the U.S. government's public health agencies and leading outside experts on measures to address the Covid-19 pandemic, refused to put forward a national strategy for dealing with it, and withdrew from the World Health Organization;
- intervened politically to demand changes in science-based policies in Federal agencies; and
- discontinued or neglected many of the programs for international S&T collaboration pursued by previous administrations.

What Can We Expect from the Biden-Harris Administration?

Joe Biden and Kamala Harris...

- are science savvy and fact friendly, and understand how & why S&T matter to practically every issue on the U.S. and global agendas;
- will restore the Obama principles on scientific integrity and transparency about data in the government's S&T decision-making;
- have already developed detailed plans for a comprehensive U.S. national response to the Covid-19 pandemic and for rebuilding and expanding U.S. Federal efforts on climate change;
- are strongly committed to international S&T collaboration and will re-invigorate U.S. cooperative activities with key partners;
- will immediately rejoin the Paris Agreement and the World Health Organization and will engage fully in the international assistance and collaboration programs of both.

The U.S.-Japan Dimension

The Japan-US Science and Technology Agreement

- The Agreement was signed in 1988, but it had a number of predecessors, for example...
 - The Committee on Scientific Dialogue (1961)
 - The Cooperative Science Program (1963)
 - The Cooperative Medical Sciences Program (1965)
- The agreement is implemented through...
 - the Joint High-Level Committee (JHLC), led on the US side by OSTP, with support from the State Department, and on Japan's side by MEXT, with support from MOFA and the Cabinet Office; and
 - the Joint Working-Level Committee (JWLC), led on the US side by the State Department, supported by OSTP, and on Japan's side by MOFA and the Cabinet Office, supported by MEXT
- JHLC is supposed to meet every two years, JWLC in between.
- The agreement focuses on civil S&T; defense S&T are not included

US-Japan S&T Cooperation Agreement

Committee Structure Based on U.S.-Japan Agreement on Cooperation in Research and Development in Science and Technology (1988)



Focuses of work under the S&T Agreement

- There have been more than 160 joint projects between 1988 and the present, focused on...
 - biomedical science, information S&T, automation & process control
 - global geoscience and environment, Earth observation, space
 - advanced materials, joint database development
- Discussions at the meetings of the JHLC and JWLC touch a wider variety of topics, including...
 - energy and climate change, robotics, sustainable agriculture
 - government-industry-academic partnerships, the role of national laboratories, STEM education, support of women in STEM fields
- Historically, the meetings have been more frequent and more broadly focused during Democratic US administrations than under Republican ones. (Republican administrations have leaned toward “techno-nationalism”, Democratic ones toward globalization.)

Differences between Obama and Trump

- US-Japan S&T cooperation flourished under Obama because...
 - he quickly appointed globalists to the top positions in OSTP, the Department of State, the National Institutes of Health, the National Science Foundation, and NASA;
 - he gave orders to all of us to rebuild international partnerships;
 - our Japanese partners were ready, willing, and able; and
 - the collaboration was cemented by a very high degree of communication and cooperation after the Fukushima accident
- The cooperation has been less active under Trump because...
 - Trump has been a techno-nationalist and drove out a number of globalists from key positions (e.g., replacing Tillerson with Pompeo);
 - he left the OSTP Director position empty for two years, with the result that the JHLC met only once in four years; and
 - his unpredictability and unreliability on matters of foreign policy left our partners confused and uncertain.

**I am confident that President Biden will
work quickly to strengthen and broaden
US-Japan S&T cooperation
(starting with appointment of a respected
scientific globalist as Director of OSTP and
Assistant to the President for S&T)!**

Thank You!