

# Ashley Finan

## **Position/Department/Division/Institution/Organization**

Director, National Reactor Innovation Center

## **Country**

USA

## **Career history**

Ashley Finan is Director of the National Reactor Innovation Center. In this role, she is responsible for overseeing initiatives to provide resources to reactor innovators to test, demonstrate, and conduct performance assessments to accelerate the deployment of advanced nuclear technology concepts.

Dr. Finan most recently served as Executive Director for the Nuclear Innovation Alliance, where she was responsible for managing the organization's strategy, operations, policy and technical development, stakeholder outreach, and fundraising. She provided expert guidance to policymakers, academic teams, industry stakeholders, and NGOs. Dr. Finan previously served as a Director of Nuclear Innovation at Clean Air Task Force.

Dr. Finan earned her Ph.D. in Nuclear Science and Engineering at the Massachusetts Institute of Technology. Her doctoral work focused on energy innovation investment and policy optimization, both in nuclear and renewable energy technologies. She has played a key role in studies of the use of advanced nuclear energy to reduce greenhouse gas emissions in several applications, including hydrogen production, coal to liquids processes, and oil production methods. She has worked as a strategy and engineering consultant, primarily on nuclear energy applications. She has also contributed to analyses of the techno-economic potential of energy efficiency improvements in the residential and commercial sectors and several related topics.

Dr. Finan holds a Bachelor of Science degree in Physics as well as bachelor's and master's degrees in Nuclear Science and Engineering from MIT.

## **Awards/Publications**

1. "Nuclear Energy: Context and Outlook." Foreword for *The Bridge*. National Academy of Engineering. Volume 50 Issue 3. September 15, 2020.
2. "U.S. Leadership in Nuclear Energy." Testimony before the U.S. Senate Committee on

- Energy and Natural Resources. April 30, 2019.  
[https://www.energy.senate.gov/public/index.cfm/files/serve?File\\_id=45C53D54-80AD-4C4A-91B8-949B863A9A2B](https://www.energy.senate.gov/public/index.cfm/files/serve?File_id=45C53D54-80AD-4C4A-91B8-949B863A9A2B)
3. A. Finan, M. Bowen, M. Bunn. “Addressing Non-Proliferation Needs in Advanced Reactors.” Proceedings, IAEA International Safeguards Symposium. November 2018.
  4. “Pursuing Nuclear Innovation for Global Competitiveness.” Written testimony before the U.S. House of Representatives Energy and Commerce Committee, Subcommittee on Energy. February 6, 2018.  
[https://energycommerce.house.gov/sites/democrats.energycommerce.house.gov/files/documents/Testimony-Finan-EP-Hrg-on-DOE-Modernization-America’s-Nuclear-Infrastructure-2018-02-05\\_0.pdf](https://energycommerce.house.gov/sites/democrats.energycommerce.house.gov/files/documents/Testimony-Finan-EP-Hrg-on-DOE-Modernization-America’s-Nuclear-Infrastructure-2018-02-05_0.pdf)
  5. “Enabling Advanced Reactors.” Written testimony before the U.S. Senate Committee on Environment & Public Works. March 8, 2017.  
[https://www.epw.senate.gov/public/\\_cache/files/4/6/4690cc39-fda8-46c6-9ceb-3baff75f103b/7EF2274E16929265A23BB1C2EDAD9D65.finan-testimony-03.08.2017.pdf](https://www.epw.senate.gov/public/_cache/files/4/6/4690cc39-fda8-46c6-9ceb-3baff75f103b/7EF2274E16929265A23BB1C2EDAD9D65.finan-testimony-03.08.2017.pdf)
  6. “A Path to Updating the Regulatory Process for Advanced Nuclear Reactors.” *Nuclear Power International Magazine*, volume 9 issue 3, June 20, 2016.
  7. “Enabling Nuclear Innovation: Strategies for Advanced Reactor Licensing.” April 2016.  
<http://www.nuclearinnovationalliance.org/advanced-reactor-licensing>
  8. “The Future of Nuclear Energy.” Written testimony before the Subcommittee on Energy of the U.S. House of Representatives Committee on Science, Space, and Technology. December 11, 2014.  
<https://science.house.gov/imo/media/doc/Finan%20Testimony.pdf>
  9. A. Finan “Energy System Transformation: An Evaluation of Innovation Requirements and Policy Options.” Ph.D. dissertation, Massachusetts Institute of Technology, 2012.  
<https://dspace.mit.edu/handle/1721.1/77059>
  10. R. K. Lester and A. Finan “Quantifying the Impact of Proposed Carbon Emissions Reductions on the U.S. Energy Infrastructure” MIT Industrial Performance Center Energy Innovation Working Paper 09-006.  
<https://ipc.mit.edu/sites/default/files/2019-01/09-006.pdf> October, 2009.
  11. A. Finan and A. C. Kadak “Integration of Nuclear Energy into Oil Sands Projects” *Journal of Engineering for Gas Turbines and Power* Volume 132 Issue 4 April 2010.  
<http://gasturbinespower.asmedigitalcollection.asme.org/article.aspx?articleid=1427591>
  12. A. Finan and A. C. Kadak “Integration of Nuclear Energy with Oil Sands Projects for Reduced Greenhouse Gas Emissions and Natural Gas Consumption.” Center for Advanced Nuclear Energy Systems, MIT. August 2007.

13. A. Finan “Integration of Nuclear Power with Oil Sands Extraction Projects in Canada.” S.M. Thesis. May 2007 <https://dspace.mit.edu/handle/1721.1/41305>
14. O. Bolthrunis, R. W. Kuhr, A. E. Finan. “Using a PBMR to Heat a Steam-Methane Reformer: Technology and Economics.” Proceedings HTR2006: 3rd International Topical Meeting on High Temperature Reactor Technology October 1-4, 2006, Johannesburg, South Africa. I00000118.

### **Areas of expertise**

Energy Innovation, Advanced Nuclear Systems, Energy Policy