

**Arpad Horvath, Ph.D.**

Professor

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***Education and Training:***

<b>Institution</b>	<b>Major</b>	<b>Degree</b>	<b>Year</b>
Technical University of Budapest	Civil Engineering	B.S./M.S.	1993
Carnegie Mellon University	Civil & Environmental Engineering	M.S.	1995
Carnegie Mellon University	Civil & Environmental Engineering	Ph.D.	1997

***Research and Professional Experience:***

Fall 2013 – present	<b>Sustainability advisor</b> to University of California President Janet Napolitano
2013 – present	<b>Member</b> , Committee on Beneficial Reuse of Graywater and Stormwater: An Assessment of Risks, Costs, and Benefits, National Research Council, The National Academies
2012 – present	<b>Member</b> , Editorial Advisory Board, <i>Environmental Research Letters</i>
2011	Chair, <i>2011 Conference of the International Society for Industrial Ecology</i>
2010 – present	<b>Member</b> , Editorial Advisory Board, <i>Environmental Science and Technology</i>
2011 – present	<b>Member</b> , Science Advisory Board, Scientific and Technological Achievement Awards Committee, U.S. Environmental Protection Agency
2009 – present	<b>Member</b> , Science Advisory Board, Environmental Engineering Committee, U.S. Environmental Protection Agency
2005 – 2007	<b>Member</b> , Committee on Environmental Impacts of Wind Energy Projects, National Research Council, The National Academies
2010 – present	<b>Professor</b> , UC Berkeley
1999 – 2010	<b>Assistant and Associate Professor</b> , UC Berkeley
2005 – present	<b>Editorial Board Member</b> , <i>J. of Industrial Ecology</i>
2002 – present	<b>Associate Editor</b> , ASCE <i>J. of Infrastructure Systems</i>
2000 – present	<b>Director</b> , Consortium on Green Design and Manufacturing, UC Berkeley
1998 – 1999	<b>Research Faculty</b> , Carnegie Mellon University
1997	<b>Postdoctoral Researcher</b> , Carnegie Mellon University

***Publications:***

1. Stokes, J., Hendrickson, T. and **Horvath, A.** (2014), Save Water to Save Carbon and Money: Developing Abatement Costs for Expanded Greenhouse Gas Portfolios. *Environmental Science & Technology*, 48(23), 13583-13591.
2. Hendrickson, T. and **Horvath, A.** (2014), A Perspective on Cost-Effectiveness of Greenhouse Gas Reduction Solutions in Water Distribution Systems. *Environmental Research Letters*, 9(1), 024017.

3. Scown, C. D., Gokhale, A., Willems, P., **Horvath, A.** and McKone, T. E. (2014), Role of Lignin in Reducing Life-cycle Carbon Emissions, Water Use and Cost for United States Cellulosic Biofuels. *Environmental Science & Technology*, 48(15), 8446-8455.
4. Stokes, J, **Horvath, A.** and Sturm, R. (2013), Water Loss Control Using Pressure Management: Life-cycle Energy and Air Emission Effects. *Environmental Science & Technology*, 47(19), 10771-10780.
5. Scown, C. D., Taptich, M., **Horvath, A.**, McKone, T. E., and Nazaroff, W. W (2013), Achieving Deep Cuts in the Carbon Intensity of US Automobile Transportation by 2050: Complementary Roles for Electricity and Biofuels. *Environmental Science & Technology*, 47(16), 9044-9052.
6. Shehabi, A., Stokes, J. and **Horvath, A.** (2012), Energy and Air Emission Implications of a Decentralized Wastewater System. *Environmental Research Letters*, 7(2), 024007.
7. Stokes, J. and **Horvath, A.** (2011), Life-cycle Assessment of Urban Water Provision: Tool and Case Study in California. *J. of Infrastructure Systems*, 17(1), 15-24.
8. Scown, C., **Horvath, A.**, and McKone, T. (2011), Water Footprint of U.S. Transportation Fuels. *Environmental Science & Technology*, 45(7), 2541-2553.
9. Stokes, J. and **Horvath, A.** (2010), Supply Chain Environmental Effects of Wastewater Utilities. *Environmental Research Letters*, 5(1), 014015.
10. Stokes, J. and **Horvath, A.** (2009), Energy and Air Emission Effects of Water Supply. *Environmental Science & Technology*, 43(8), 2680-2687.

#### **Synergistic Activities:**

1. Project leader for life-cycle environmental and economic assessment of water and wastewater systems and carbon abatement cost curves within ReNUWIT, the NSF-funded Engineering Research Center (2011-2021).
2. Co-developed a new graduate program in Civil and Environmental Engineering: “Energy, Civil Infrastructure and Climate,” which has as one of its main foci the sustainability of urban systems, including energy systems and water and wastewater (2010-11).
3. Developed the “Engineering and Business for Sustainability” certificate program at UC Berkeley (<http://sustainable-engineering.berkeley.edu>) (2007).
4. Developed and is teaching the course *CE 268E Civil Systems and the Environment*, which is the first and only course on campus dedicated to life-cycle environmental and economic assessment (2000-present).
5. Co-developed (with others at Carnegie Mellon) the life-cycle assessment (LCA) model based on economic input-output analysis (EIO-LCA) and the first free Web-based LCA software ([www.eiolca.net](http://www.eiolca.net)) (1995-2008).