

Michelle Manion is the Program Manager of the Climate and Energy team at NESCAUM/NESCCAF, where she works closely with the New England states, New York and New Jersey to support their efforts on state and regional energy, climate, and air quality policy and programs. Michelle is a policy analyst with over twelve years of experience in economic analysis of climate, energy, and natural resource policies, and she is currently leading NESCAUM's analysis of the economic and sustainability impacts of a regional Low Carbon Fuel Standard for the northeastern states. Prior to NESCAUM, Michelle was a Sr. Analyst at the Union of Concerned Scientists (UCS) working on the development of programs to conserve forest carbon, and has also worked as an environmental consultant for a variety of governmental, industry, and non-profit clients including the US Environmental Protection Agency, the US Department of the Interior, the World Bank, the World Commission on Dams, and Conservation International.

Michelle holds Master's degrees in natural resources and public policy/applied economics from the University of Michigan, and a B.A. in economics and English literature from Bucknell University.



Michelle Manion

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PROFESSIONAL EXPERIENCE

NESCAUM (Boston, MA)

Climate and Energy Team Leader

2005 – present

- Program manager responsible for leading NESCAUM's technical and policy support of Northeast states' climate change and clean energy policies and programs. Recent projects include: the Northeast/Mid-Atlantic Low Carbon Fuel Standard, The Climate Registry, and the Regional Energy Efficiency Workforce Development Forum
- Develops policy analyses and recommendations to states' on climate mitigation, energy efficiency, multi-pollutant planning, and a variety of energy and climate plans.
- Leads NESCAUM modeling team applying integrated modeling tools to assess environmental and economic benefits of climate and energy policies.
- Conducts fundraising and grant-writing in support of NESCAUM's climate and energy work.
- Member of NESCAUM's Senior Management Team

Union of Concerned Scientists (Cambridge, MA)

Senior Analyst, Global Environment Program

2001 – 2005

- Project manager responsible for planning and implementing UCS policy on market-based approaches to mitigate climate change and conserve tropical forest biodiversity.
- Co-led UCS strategy and policy development on market-based climate change policies at state, federal, and international level.
- Provided technical input and advocacy to policymakers and other stakeholders in the Northeast, California, and U.S. Congress on cap-and-trade policy, greenhouse gas registries, biomass, and forest policy.
- Successful fundraising and grant-writing in support of UCS climate change work.

Industrial Economics, Incorporated (Cambridge, MA)

Senior Associate

1996 – 2001

- Managed multiple projects, including client management, contract management, project budgeting and scheduling, staff and subcontractor supervision, review, and mentoring.
- Conducted economic, financial, and policy analyses of a variety of environmental and natural resource issues on behalf of federal (US EPA, US Dept of Interior), state, and non-profit clients.
- Directed analytic design and implementation of projects; contributed original analysis and final review of analytic content and quality of client deliverables.
- Developed quantitative models.

- Wrote and produced high-quality written analyses, supervised and mentored junior staff, and conducted initial project management (budgeting/scheduling).
- Promoted on the basis of consistently strong performance.

University of Michigan (Ann Arbor, MI)

Research Assistant, *National Pollution Prevention Center* 1994 – 1995

- Coordinated and implemented a seminar series on industrial ecology of the automobile.
- Researched white paper on environmental and other public policies affecting auto manufacturing.
- Collaborated with General Motors on lifecycle analysis of alternative fuel tank materials.

Arthur Andersen & Co., S.C. (Detroit, MI)

Staff Consultant, International Trade and Customs Service 1994

- Provided research and analysis on issues of duty drawback, dutiability of interest payments, and GATT/NAFTA rules of origin for General Motors and other clients engaging in international trade.

Institute of International Finance, Inc. (Washington, DC)

Research Associate, Comparative Country Analysis 1991 – 1993

- Conducted research and analysis on middle-income developing countries' macroeconomic performance, debt restructuring, and fiscal and monetary policies for leading international commercial banks.

EDUCATION

University of Michigan (Ann Arbor, MI)

Ford School of Public Policy/School of Natural Resources and Environment
Master of Public Policy, Master of Science in Natural Resources, 1995

Bucknell University (Lewisburg, PA)

Bachelor of Arts in Economics and English Literature, 1990
Bucknell University Talent Grant (athletics)

PUBLICATIONS, PRESENTATIONS AND MEDIA

- “The Northeast’s Low Carbon Fuel Standard: Approaches to Sustainability,” presentation to woody biomass industry, July 1, 2009 at Society for Protection of New Hampshire Forests (Concord, New Hampshire).
- “Energy & Transportation Policies: Advancing GHG Reductions,” presentation to the Climate Change Steering Committee, New England Governors Conference/Eastern Canadian Premiers, January 26-27, 2006 (Montreal, Canada).
- “Primer on the Regional Greenhouse Gas Initiative,” presentation at States and SubNationals side event, UNFCCC Conference of the Parties, December 2005 (Montreal, Canada).

- “Strategies for Achieving Success on Climate Change,” presentation and panel discussion, University of Michigan Ross School of Business, “Reframing the Debate: Jobs, Trade, and Security,” Climate Change Forum, (Ann Arbor, Michigan), 3 June 2005.
- “The Cost of Carbon Mitigation under Emerging GHG Policy,” presentation to the Yale School of Forestry (New Haven, CT), 2 November 2003.
- “Carbon Offset Projects within the Massachusetts Bank-and-Trade: Opportunities and Challenges,” presentation to Commissioner Lauren Liss, Department of Environmental Protection (Boston, MA), 11 April 2002.
- Niesten, E., P. Frumhoff, **M. Manion**, and J. Hardner. "Designing a carbon market that protects forests in developing countries," *Phil. Trans. R. Soc. Lond. A* (2002) 360: 1561-1590.

**Low Carbon Fuel Standard
Expert Workgroup Member Application Form
Please submit a CV along with this form**

APPLICANT: Michelle Maureen Manion

Employer: NESCAUM (Northeast States for Coordinated Air Use Management)

Current Job Title: Climate and Energy Team Leader

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Broad Areas of Expertise: Ms. Manion's background is in environmental and resource economics, and she has 14 years of experience working on climate and energy policy and other environmental issues, first as a consultant to EPA and the US Department of the Interior, then at the Union of Concerned Scientists (UCS), and currently with NESCAUM.

Michelle is presently managing NESCAUM's project to assist 11 Northeast/Mid-Atlantic states in the development of a regional Low Carbon Fuel Standard (LCFS), and is leading the states' LCFS workgroup on sustainability. This workgroup is charged with developing a framework for addressing land use change and feedstock sustainability as well as other sustainability concerns related to LCFS implementation in the region. Michelle is also evaluating the Northeast's existing markets for biomass and comparing these market demands to best available estimates of sustainable biomass supply. While at UCS, Michelle worked to develop methods for crediting tropical forest conservation within the Kyoto international climate protocol. Michelle also has experience in economic and energy modeling, and currently co-manages the application of NESCAUM's linked modeling tools—the Northeast-MARKAL (NE-MARKAL) energy model and the REMI™ regional economic model—for analysis of state and regional climate, air quality, and energy policies.

Comments: Because the Northeast/Mid-Atlantic states lack the resources to conduct our own modeling of land use change impacts, we are relying heavily on the efforts of ARB and US EPA to develop and refine estimates of the GHG impacts of land use change resulting from the expansion of biofuel production. As such, it would be highly advantageous for the Northeast states to participate in ARB's expert workgroup, in order to track the latest developments on modeling refinements and also to provide input on key concerns regarding the application of the ARB's modeling efforts and results to our region's LCFS. Based on her strong background in the climate impacts of

land use change and also in economic modeling, Michelle is uniquely well-suited to represent the Northeastern states on ARB's expert workgroup.

Years of Relevant Experience: 14

Please return to:

Ms. Manisha Singh, Air Pollution Specialist
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