Clean Energy Solutions
Center and 21st Century
Power Partnership and KTH
Royal Institute of Technology

Open Source Energy System Modelling with OSeMOSYS

December 10, 2013

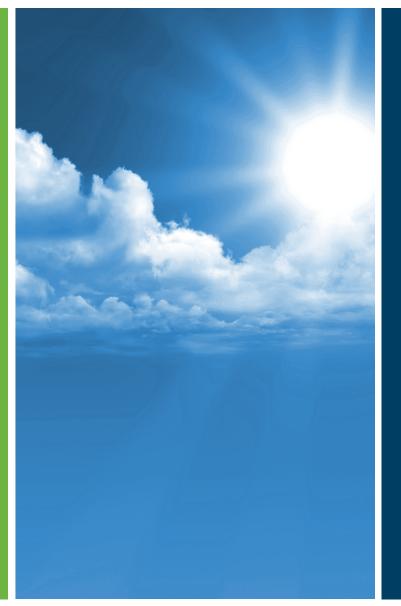
Sean Esterly - Moderator

Panelist:

Neil Strachan - Professor of Energy Economics and Modelling at the University College London (UCL) Energy Institute

Manuel Welsch - Lead Researcher KTH Royal Institute of Technology

Tom Alfstad – International Atomic Energy Agency









Disclaimer

 The Clean Energy Solutions Center does not endorse or recommend specific products or services. Information provided in this webinar is featured in the Solutions Center's resource library as one of many best practices resources reviewed and selected by technical experts







Some Housekeeping items

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- https://cleanenergysolutions.org/training/open-source-energy-systemmodelling-osemosys







Agenda

- ✓ Welcome and Introductory Remarks
- ✓ Overview of the <u>Clean Energy Solutions Center</u> and the <u>21st Century</u> Power Partnership
 - > Sean Esterly: National Renewable Energy Laboratory
- ✓ Presentations Panelists:
 - ➤ **Neil Strachan -** Professor of Energy Economics and Modelling at the University College London (UCL) Energy Institute
 - Manuel Welsch Lead Researcher KTH Royal Institute of Technology
 - > Tom Alfstad International Atomic Energy Agency
- ✓ Question & Answer
- ✓ Closing Remarks
- ✓ Survey







Clean Energy Ministerial & UN Partnership Supporting the Solutions Center

- Clean Energy Ministerial (CEM) launched the Clean Energy Solutions Center in April, 2011 for major economy countries
 - One of eleven CEM Initiatives
 - Led by Australia and U.S. with other CEM partners
- Partnership with UN-Energy is extending scope to support all developing countries
 - Enhance resources on policies relating to energy access, small to medium enterprises (SMEs), and financing programs
 - Offer expert policy assistance to all countries
 - Expand peer to peer learning and training

















Clean Energy Solutions Center http://www.CleanEnergySolutions.org

Goals

- Serve as a first-stop clearinghouse of clean energy policy resources.
- Share policy best practices, data, and analysis tools across countries.
- Deliver dynamic services that will enable expert assistance, learning, and peer to peer sharing of experiences
- Foster dialogue on emerging policy issues and innovation across the globe.

Target Audiences

- Primary:
 - Energy policy makers and advisors
 - Analysts
- Secondary:
 - Private sector companies,
 - Energy entrepreneurs and investors
 - Non Governmental Organizations
 - Civil society
 - Others engaged in clean energy









Ask an Expert: Our Experts in Action



















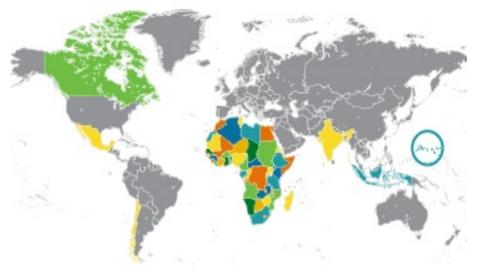




We connect you to a global network of energy experts for personalized attention and quick response technical assistance on **strategies**, **regulations**, **standards**, **financial incentives**, **and deployment programs** for a broad range of clean energy sectors and technologies including:



- ➤ Renewable Energy
- ➤ Energy Access
- ➤ Energy Efficiency
- ➤ Smart Grid
- **>** Utilities



Requesting Assistance:

Register on http://cleanenergysolutions.org/expert









21st Century Power Partnership

Overview and Key Activities





The 21st Century Power Partnership

Accelerating the transition to clean, efficient, reliable and cost-effective power systems

The 21CPP is a multilateral effort of the Clean Energy Ministerial (CEM) that serves as a platform for international efforts to advance integrated policy, regulatory, financial, and technical solutions for the deployment of renewable energy in combination with large-scale energy efficiency and smart grid solutions.





The 21st Century Power Partnership

The Partnership aims to synthesize lessons learned from various CEM initiatives, and advance integrated policy development through four areas of activity:

Faster Learning

Developing and sharing knowledge on key topics related to power system transformation.

Better Tools

Strengthening and disseminating technical tools to accelerate policy and regulatory analysis.

Capacity Building

Bolstering the capacity of experts to advance the policies, programs, and practices.

Meaningful Partnerships

Establishing applied multilateral partnership engagements to leverage knowledge, tools, and capacity.





Core 21CPP Resources & Capabilities

Leveraging synergies across CEM Initiatives:



Multilateral Solar and Wind Working Group



International Smart Grid Action Network



Super-Efficient Equipment and Appliance Deployment



Global Superior Energy Performance
Partnership



Clean Energy Solutions Center

Networking External Resources:

Global affiliate network of technical and policy experts

Global private sector affiliate network

Research, policy, and technical tool library





For more information about 21CPP activities, please visit:

http://www.21stcenturypower.org

For questions about 21CPP participation, please contact: 21stcenturypower@nrel.gov



Neil Strachan - Professor of Energy Economics and Modelling at the University College London (UCL) Energy Institute



Professor Neil Strachan is an interdisciplinary energy economist. He is a Professor of Energy Economics and Modelling at the University College London (UCL) Energy Institute where he also serves as Director of Teaching. He received his PhD in Engineering and Public Policy from Carnegie Mellon University in 2000. At the UCL Energy Institute, Neil's research interests revolve around energy-environment-economic modelling, the quantification of scenarios and transitions pathways, and interdisciplinary issues in energy economics and policy. Over the last 7 years he has been principal or co-investigator on research projects worth over £9 million. He is a lead author of the Energy Systems chapter of the IPCC's 5th Assessment Report. He is the author of over 30 peer reviewed journal papers, and over 100 book chapters and technical reports







Manuel Welsch – Lead Researcher KTH Royal Institute of Technology



Manuel Welsch works as lead researcher in the Division of Energy Systems Analysis at KTH, focusing on the development and application of energy models. Before joining KTH, Manuel worked at the United Nations Industrial Development Organization (UNIDO) on UN-Energy, the Energy Facility of the European Commission, and at Bernard Engineers on the design of hydro power projects.







Tom Alfstad – Energy systems analyst, International Atomic Energy Agency



Tom Alfstad is an energy systems analyst with the Planning and Economic Studies Section at the International Atomic Energy Agency (IAEA) where he manages the Climate, Land-use, Energy and Water initiative for integrated analysis of resource systems. Before joining the IAEA he was an energy policy analyst with Brookhaven National Laboratories where he was responsible for projects focusing on US federal energy policy. Prior to this he served as a research officer at the University of Cape Town where his research mainly focused on power sector investment and assessment of policies and measures for sustainable energy development







Time for Q&A

Questions









Survey

- How did we do?
- Your feedback is important!











Your participation is appreciated!

Thank you!

An audio recording of this Webinar will be available following the webinar

Please visit:

 https://cleanenergysolutions.org/training/opensource-energy-system-modelling-osemosys





