ENERGY TECHNOLOGY PARTNERSHIP FORUM APRIL 13, ALUMNI HOUSE COLLEGE OF WILLIAM AND MARY

REGISTRATION SITE: TECHNOLOGY HAMPTON ROAD

8:00-8:45 **Registration, refreshments**

8:45-9:00 Welcome, Opening Remarks

9:00-9:20 **Opening/Keynote Speaker**: Mary Doswell, Senior Vice President, Alternative Energy Solutions, Dominion Resources Services, Inc.

 How advancements in energy technology are transforming the energy industry and challenging the nation's current energy policies and business models

9:20-10:30 Plenary Panel on Energy Technology; an overview

- Biofuels: Albert C. Weed, Chairman and Co-Executive Director, Public Policy Virginia, Inc.
 - o Biomass Energy: The Promise and Challenge
- Renewable Energy: George Hagerman, Director of Research, Virginia Coastal Energy Research Consortium
 - Recent findings/studies related to centralized wind farms offshore and small distributed solar systems on shore.
- Nuclear Energy: In process of confirming speaker

10:30-10:45 Break

10:45-12:00 Plenary Session on Energy Users, Environment Impact, Conservation and Efficiency; an overview

- Major Investors/Users of Energy: Vladimir Atanasov, College of William and Mary
 - Overview of modern business valuation techniques and their applications in the analysis of conventional and alternative energy technologies

- Environmental Impact Mitigation: Hunter Fanney, Chief, Building Environment Division, Engineering Laboratory, National Institute of Standards and Technology
 - NET Zero sustainable living provides a high quality of life using natural resources on site
- Energy Conservation and Efficiency: Dennis Bushnell, Chief Scientist, NASA Langley Research Center
 - Energy conservation and reduced U.S. energy consumption

12:00-12:45 **Box Lunch**

12:50-2:15 Parallel Session I/Energy Technology

- Biofuels
 - Pat Hatcher, Old Dominion University
 - Biodiesel and hydrocarbons from algae
 - Sandeep Kumar, Old Dominion University
 - Microalgae to biofuels using sub and supercritical water technology
 - Karl Kuschner, College of William and Mary
 - High productivity biomass accumulation without arable land use, phosphate or nitrate supplies, using environmentally friendly algae production methods
 - Al Weed, Public Policy Virginia

Renewable Energy

- George Hagerman, Virginia Coastal Energy Research Consortium
 - Offshore wind energy
- John Mankins, Artemis Solutions
 - The Future of Renewable Energy

Nuclear Energy

- o Ray Turcotte, NASA Langley Research Center
- George Bischof, site Vice President, Surry Power Station
- o Roy Whitney, Thomas Jefferson National Laboratory

2:15-2:30 Break

2:30-3:55 Parallel Sessions II/Energy Users, Environment Impact, Conservation and Efficiency,

Major Investors/Users of Energy

- Mary Doswell, Senior Vice President, Alternative Energy Sollutions,
 Dominion Resources Services, Inc.
 - What technologies Are and Aren't Ready for Prime Time?
- Vladimir Atanasov, College of William and Mary
 - Analysis of US and foreign policies designed to influence investments in renewable energy
- Marco Rubin, Center for Innovative Technology/C.I.T.
 - Emerging Energy Ventures: Strategies To Attract Professional Equity Investment

Environmental Impact Mitigation

- Hunter Fanney, National Institute of Standards and Technology
 - NIST's Research Program and the NETZero Energy Residential Test Facility: further reflection building on the plenary briefing
- o Doris Hamill, NASA Langley Research Center
 - "Biochar" to convert wood waste to a very stable char material useful for mulch, etc. and is the only thing that has a realistic chance of reversing carbon dioxide buildup in the atmosphere. Currently very expensive process but small scale efforts/pilots can foster support for expanded testing.

Energy Conservation and Efficiency

- Dennis Bushnell, Chief Scientist, NASA Langley Research Center
 - Energy conservation: why and why not
- Erick Sheppard, Dean, School of Engineering and Technology, Hampton University
 - Moving towards energy efficient communities
- o Stuart Rose, builder and architect of garden atriums
 - Use of renewable resources for energy efficient homes

4:00 Closing remarks, adjourn formal meeting

4:00-4:30 Informal networking