25x’25 Virginia State Alliance Organizational Meeting
James Madison University East Campus
June 10, 2009

Attachments:

1. Member Contact Information
2. June 10 Meeting Agenda

Proceedings:

1. Meeting called to order by Dr. John Noftsinger, Vice Provost of James Madison University at 9:30 am
   - John greeted the group and welcomed the participants to Harrisonburg and James Madison University

2. Mr. Ken Newbold, Director of Research Development at James Madison University presented an overview of the day’s activities, including the meeting objectives

3. Mr. Brent Bailey, the southeastern region state alliance coordinator of 25x’25 presented an overview of the 25x’25 Initiative
   - Mr. Michael Bowman of the national 25x’25 Steering Committee shared a few words on his experience developing the initiative

4. Dr. Chris Bachmann, Associate Professor of Integrated Science and Technology gave an overview of JMU’s involvement in the 25x’25 effort
   - Dr. Bachmann engaged the audience in his description of the resources both in the Shenandoah Valley and the Commonwealth of Virginia that can help make Virginia a national leader in alternative energy research and activism
   - Dr. Bachmann specifically made the case to the participants that the Shenandoah Valley was given the go-ahead by the national 25x’25 leadership to set up a demonstration project, in partnership with California’s San Joaquin Valley Regional Demonstration Project

5. At 11:00 am, participants organized into four groups to discuss a series of questions related to the 25x’25 Initiative
   - The goal of this breakout session was to capture the questions, thoughts, concerns and overall interest of the stakeholders present in forming a state-wide alliance in support of the mission of 25x’25
   - JMU electronically recorded the discussions and organized them into a master document of notes (Attachment A)

6. Due to time constraints, the group broke for lunch at noon, with individual group reporting taking place after lunch, facilitated by Mr. Ken Newbold
   - Dr. Roger Stough presented for Group 1 (Brown)
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- Mr. Al Weed presented for Group 2 (Green)
- Dr. CJ Brodrick-Hartman presented for Group 3 (Blue)
- Dr. Jeff Tang presented for Group 4 (Red)

7. Dr. Krishna Kodukula, Executive Director of the Center for Advanced Drug Research at SRI Shenandoah introduced keynote speaker, Dr. Ripudaman Malhotra of SRI International
   - The title of Dr. Malhotra’s presentation is *A Cubic Mile of Oil: Realities and Options for Averting the Global Energy Crisis*

8. Mr. Ken Newbold provided a brief recap of the day’s activities and adjourned the meeting at 2:30 pm
   - With affirmation from the audience, Ken declared that Virginia is indeed interested in forming a State Alliance in support of the 25x’25 Initiative
   - An announcement was made to reconvene the group in late summer to address the following items of this minutes report

**Action Items:**

1. Construct the Alliance
   - Committees/Leadership
   - Advisory Board
   - Charter
   - Strategic Plan

2. Data Gathering
   - Determine both where Virginia and the Shenandoah Valley currently stand in terms of renewable energy production as a percent of total energy production
   - Virginia specific data on consumption/conservation
   - Develop a mechanism to support partnerships within the Alliance to pursue funding opportunities and carry out alternative energy projects

3. JMU will provide the administrative home for Virginia 25x’25 State Alliance
   - Develop a website to store relevant information, potentially including an information portal for funding opportunities, documentation of the State Alliance and Virginia’s strengths to be a leader in renewable energy policy, research and implementation.

4. Reconvene the Alliance in late summer/early fall

**Breakout Session Notes:**

1. a. What are the strengths of a Virginia State Alliance focused on the goals of the 25x’25 Initiative?
   b. Weaknesses?

   - Hard to identify strengths when alliance isn’t formed yet. Flexibility is an issue. Can learn from others and say that we care about what they want to do. Many local
discussions regarding the strength of support from universities, industry, and politics working together. Put all senators and congressmen from Virginia together to give group access that they couldn’t otherwise have.

- Pull together areas such as Ferrum and southside Virginia. Would be a valuable strength. This alliance could make this happen.

- Serrell - Poultry #1 in Shenandoah Valley. Starting to be outsourced to areas where grain is grown. Need to find a way to reduce costs and increase revenue for farmers. Need to take waste products and turn into fuels. If not helped, farms will all turn into developments. Freedom House – septic system has zero impact on the land. Cost of house is slightly higher than an average house. You can have growth without burdening the infrastructure and utilities. What can we do with what we can build? Build by sharing education with each other. Universities can fit in to show how sustainability can be applied. City of Harrisonburg is using biodiesel in their buses because of a JMU program. Maintenance costs are lower when biodiesel is used in buses. This is the information that the alliance can help get out to others.

- Dorries - Family has 35 acres in Staunton District. Converting switch grass for hybrids. Farmers need incentive or best practices model using earlier models.

- How are ideas of the alliance being spread into institutions of higher learning?

- Marry theory of practice – look at academics vs. operational side. Get out of classroom to see if what you have learned actually works in practice.

- Tang - JMU students working on real-world projects. We can show what works, but in the end it comes down to the businessmen and corporations, farmers, and those who drive the economy. JMU is not too vested in any one given option.

- SRI - Nonprofit model of innovation. Identify the question to be solved. Is the goal to minimize oil imports? If questions not answered, may not be able to achieve goal. Must be a customer need for business sustainability. Gap is very huge. Opportunity to develop technologies that can be adopted. See if test cases can go forward with some support.

- What is the state alliance?
  - Forming, hope to have organizational structure coming out today. Nature is up to us. Lots of people see renewable energy as being very important now. Involves industry, as well as agriculture. In the process of forming what we decide.

- Whoever involved needs to work together and function as a group. Need to work together on funding, etc.

- Is initiative already developed regarding transportation? No—all options are on the table at this point.
• Better to focus on a statewide coalition for this meeting.

• Ferrum College in negotiation regarding biomass fuels. Second largest dairy producing county in VA, but not in a good position. Looking for other sources of income. Lots of timber available for wood chips and pellets, which is a good source of biofuels.

• Balanced resources (microcosm of the nation)

• Cuts across political spectrum
• Virginia strong efficient state
  o Many groups (university, industry, commissions, non-profit) already have initiatives
  o Proximity to D.C.
  o Governor Kaine party leader
  o State alliance can mold message to match state needs
  o Alliance connected to national organization

• Weaknesses?
  o no cohesive message from groups consistent with current policy issues
  o data over emphasizes biomass and under emphasizes wind, solar, transportation
  o need more focus on energy consumption/conservation
  o Virginia is conservative state and Valley is more conservative
  o VA has lots of resources, but NIMBY (weaknesses)

• What is the action plan? How do we move forward? What are financially viable options to improve the energy efficiency of businesses? How do we free up our healthcare facilities to have a stable energy source for options?

• Maintaining the diversity and agricultural heritage of the Valley and Virginia.

• Strengths were well covered in presentation we need to better understand the weaknesses
  o A demonstration process could be a strength in proving cost effectiveness to general populos
  o Having a collaboration/alliance must help to serve issues between different forms of renewable energy before they become legal/public

• Weakness is voluntary RPS (renewable portfolio standards)
  o Not sure there is a desire in business to comply
    ▪ Because we don’t want to raise energy costs
      • Especially because this is used to attract economic development
      • How do we manage these competing interests
  o Legislature on the national or state level must pass in order to force us to accept
  o Price signals are what will drive change
    ▪ Unpopular to allow prices to rise
  o We need to work with localities to determine what they like philosophically on the state level and what they are willing to house in their areas
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- What is the gap in VA (between where we are today and where we are supposed to be)? And what modeling framework is being used to determine this?
  - Use this to make expert judgments as to what part of the gap can be filled by each type of renewable energy
- What are our base resources and how do we address the environmental impact of these? (nuclear, coal)

  - Development of nutrient banking streams (nitrogen capping trades) look at the problem as a whole watershed
    - Can we use poultry litter as fuel?
    - Can we harvest algae and turn it into biofuel
      - And can we reward those who harvest excess algae?
- Benefit is leaving 75% to the traditional fuel
- There is a rural bias to this, we need to include metro areas (Richmond, Nova, Tidewater) we can’t leave this out
  - Could be additional focus of the broader
- Need to involve the people at the Department of Mines, Minerals, and Energy

2. What opportunities might be available through supporting and participating in the Alliance?

- Information exchange. Internet is a great tool.
- Help different regions of the state understand what their local resources are—wind, etc. What options would be in future. Could do asset assessment for state to see what resources are most available in what areas.
- What do you have they we aren’t paying attention to? Is there someone who has a need for the monies available for projects?
- Educating the public as a whole on what works and what doesn’t. Plenty of fuel left in the world.
- Clean Cities – implementing biodiesel program for the state. Propane corridor project to be started in the Fall. Would be helpful to have a group to help identify the needs. Much focus lately on smart grids. No medium for everyone to get together.
- Tang - How big should a state alliance be? There are advantages to having a bigger group, but it can make it harder to move. What would the best construction be?
- Need the voice of all stakeholders.
• Needs to be a representative group (ex. Southside), but want their group to be heard at a statewide level. Entire organization should be fairly large. State and local government people, etc.

• Clear water or ag. forum method could be utilized.

• National support for the demonstration project

• Harness local support for energy initiatives

• Sustainable economic development

• Easier to share research and knowledge around the Commonwealth

• Opportunity to inform and connect research and demonstration efforts to planning process

• Synergy through small initiatives currently existing across the Alliance.
  o Use the lessons learned from smaller projects to open pathways for other entities/areas to move an effort forward.

• Energy initiative w/ a focused goal and key players identified. 25x’25 as the initiative.

• Information clearinghouse for all stakeholders working toward alternative energy implementation.

• Opportunity to really pull industry into the bidding process

• Also using universities to diffuse the findings

• Chesapeake Bay Observing Project
  o This way clean up, energy resources, can actual have measured effects
  o This can be done on different levels there could be a Shenandoah Valley Observing project to collect data and prove through coherent scientific data.

• Wind consortium
  o Should be led by JMU

• Ocean Current Potential

• Algae bio diesel

• GMU is doing Potomac river funding proposal for algae study
- Nuclear project at GMU with Korea for development of US support team for nuclear engineering

- The more diffusible innovations which can be pushed through the network the better

3. a. **Do you have existing alternative energy / sustainability projects in place at your organization?**
b. **If yes, in what area(s)?**

- Dept. of Housing and Community Dev. offering stimulus money to weatherize houses. Individuals can find out more by contacting that agency.

- SRI International research project in CA...vision for biofuels/bioenergy program in metabolic engineering of fuels in the Shenandoah Valley

- JMU energy and sustainability programs in academic units..application programs

- JMU brings strong K-12 educational component

- Community participation at all levels:
  - Camp Horizons educational programs in energy
  - Cool Cities Coalition strong in building expertise (program with Chambers for Green Business Certification). Role to education and change behavior.
  - MillerCoors Green Team Initiative and Renewable Energy Team
  - Antares Group expertise in biofuels, renewable energy engineering
  - VEDP green energy recruitment initiative, VDACS renewable/waste to energy
  - Columbia Gas conservation and energy plan to incentivize residential conservation

- Sustainability, maintaining the agricultural economy of the Valley, through environmentally-friendly practices. Improving water quality.

- William and Mary has an algae project through dep of marine science which they are hoping will be funded by Norwegian company
  - Hoping to clean the bay and then convert to bio fuel
  - Students have voted for their parents to pay a green fee which generates 200k for sustainability research
  - Algae cleanup of on campus impoundment lake to show before and after effects

- JMU has recently formed sustainable engineering focus
  - Wind advocacy group focused on offshore wind
  - Combine heat and power where wood fuel can supply electricity and heat because so much of electricity heat is wasted

- City of Staunton
  - LED lights
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- Switchgrass energy (interested in not yet doing)

- Al Weed has been working on the implementation of 25x’25
  - Speaking with ODEC to use biomass to fire the poser plants
    - Very encouraging meeting last week
    - Especially when carbon pricing comes into effect

- JMU
  - In November STEM Center and VA Tech will hold a governor’s conference on STEM education
    - How do we change behaviors in the k12 sector? While getting more students interested in these programs

- GMU has a climate change behavior center

- Blacksburg
  - Know they need to change behavior
  - Put geothermal in a building
  - Small changes and social marketing

- Camp Horizons
  - Bio diesel
  - Starting to use wind to power the camp
  - All is with the idea of educating children who will go change their parents’ perspectives

- VMI
  - Working with Washington and Lee
  - Need to see how other universities fund these initiatives
  - Wants to see incremental targets come out of the alliance
    - How do we create better awareness for the go green VA effort

- VA economic partnership
  - Sees funding as the real issue preventing progress
  - Policy changes need to be enacted in order to separate VA from other states
    - Create incentives to tackle the demand side

- Business incentives to bring alternative energy and convert tobacco through research

4. a. Are you interested in becoming a member of the 25x’25 Virginia State Alliance?
   b. Is the effort worth your and your organization’s valuable time?
   c. Do you view the effort as fair to all those involved?

- NO RESPONSES
5. What do you view as the potential themes or focus areas of collaboration within the Alliance?


- All of the above
- Community Education and Engagement
- Ag/Forestry to Energy
- National wind consortium, wind collaborative which is being done on the JMU level
- We should be applying to be the national test site

6. What do you view as the top 3 25x’25 concepts, specific to the Commonwealth?

- NO RESPONSES

7. Additional Thoughts

- What are the energy projects available to the Alliance?
  - Differentiate b/w Shenandoah Valley Project and State Alliance
- Develop a defined charter with specific goals.
- What resources does the Alliance and the Commonwealth possess that will bring us closer to the goal of 25x’25?
- All members need to understand who the members of the Alliance are.
- We need good baseline information on where we are starting. The State Energy Plan started this process, but it needs to be refined.
- Develop a clearinghouse for information on the alternative energy resources specific to Va.
  - Biomass clearinghouse is currently being developed.
    - Waste products are someone else’s potential input.
    - Forum for different stakeholders to air out their concerns.
      - Competition with others for resources.
  - Can serve the localities in which each member resides.
- Replicate the Open Space Mayor’s Sustainability Summit, which took place the weekend of May 30th in Harrisonburg.
- How do we obtain broad state-wide buy-in?
The Alliance is meeting b/c they are a passionate group focused on the issue of alternative energy.
  - Find other equally passionate groups to partner with so that both groups’ goals are met.
    - Healthcare?