# Tom Baker Meeting Room \*\* July 11, 2009\*\*9:00 a.m. – 12:00 p.m.

# **Enabling Strategy for all Global Initiatives**

# Subcommittee on Funding, Communication, and Branding evaluates practical application and viability for implementation

(Ellen Huber, Kelvin Hullet & Tim Moore)

### I. Global Initiative: Quality of Life Subcommittee

- 1. Environment (public safety, transportation, air quality, natural resources, landscape, safety), Curb Appeal. (Chuck Peterson)
- **2.** Arts, culture, programs, history, events, entertainment. (Jerry Haas)
- **3.** Education/ Communiversity. (Diane Fladeland, Greta Nelson, Larry Skogen and Russell Swagger)

### II. Global Initiative: Sustainable Infrastructure Development Subcommittee

- **4.** Public and open space. (Steve Neu)
- **5.** Energy and transportation. (Mike Seminary)
- **6.** Community Core Downtown, Place to Gather, Facilities, Current Plans. (Bruce Whittey)

## III. Global Initiative: Opportunity Development Subcommittee

- **7.** Enable, foster, support economic development and local entrepreneurial development in the area. (Julie Kuennen)
- **8.** Reactivate the MBBM (Morton, Burleigh, Bismarck, and Mandan) committee. Organize efforts to enhance cooperative and collaboration between all boards, commissions, and other government entities. (Bruce Strinden, Jerry Woodcox, Mike Seminary, Sandra Tibke)
- 9. Promote the development of the Mandan Events Center and the expansion of the Bismarck Civic Center from the perspective of promoting the Bismarck-Mandan area. (Paul Govig)
- **10.** Enhance coordination of regional sporting and cultural opportunities and facilities. (Jerry Splonskowski)
- 11. Continued support of Applied Energy Technology Center. (Niles Hushka)

## IV. Global Initiative: Support Mandan Forward

Initiatives and outcomes of the Mandan Vision Plan.

## **Enabling Strategy for all Global Initiatives**

### I. Global Initiative: Quality of Life Subcommittee

2. Arts, culture, programs, history, events, entertainment.

Our focus group came up with the following recommendations on improving the arts, culture, programs, history, events, and entertainment in Bismarck-Mandan:

#### 1. Establish an Arts, Culture, Entertainment, & Humanities Commission for Bismarck-Mandan.

- \* Volunteer based, 10 members.
- \* Positions open for young people to get involved on the commission.
- \* Commission would help strengthen existing programs, come up with ideas for new programs and events.
- Create a website to better promote arts, culture, and entertainment in Bismarck-Mandan.

#### 2. Showcase Artwork.

- \* Organize an "art walk" where local artists would have an open house on some weekend for the public to stop in and check out their work.
- \* Encourage local businesses and restaurants to display the work of local artists, this would help promote the arts to our community.

#### 3. German Culture Festival.

- \* City was named after Otto Von Bismarck, a festival would be a great way to celebrate our heritage.
- \* Connect with a "sister city" in Germany to get additional ideas.
- \* Perhaps have a German/Native American festival; include Mandan.
- \* Program similar to U-Mary's Circle of Cultures Program.
- \* Ethnic dances, food, homemade brewing competition.
- \* Discussion centered around having the event sometime between Oct-March.
- \* Maybe have the festival in the winter? ice sculpture-snowman contests?
- \* Two-three day event.
- \* Possibility of applying for grants through the arts council and humanities council for this event.

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### II. Global Initiative: Sustainable Infrastructure Development Subcommittee

5. Energy and transportation.

Given the current need for national energy independence and the demand for meaningful energy conservation practices, we believe now is the time for our community to permanently deploy the Renew, Conserve and Sustain Task Force. It could be renamed the RCS Committee and its mission is to: explore and recommend practical opportunities and practices for the city to conserve all natural resources, further its environmental stewardship and strive to continually improve the wonderful community we enjoy.

#### Steps to consider for short term implementation:

- **1.** Adopt and enforce land-use policies that reduce sprawl, preserve open space, and create a compact and a more walkable community.
- 2. Promote transportation options such as bicycle trails and complete streets design.
- **3.** Increase the use of clean, alternative energy by, for example, advocating for the development of renewable energy resources, recovering landfill methane for energy production, and supporting the use of waste to energy technology.
- **4.** Make energy efficiency a priority through building code improvements, retrofitting city facilities with energy efficient lighting, and urging employees to conserve energy and save money.
- 5. Purchase only Energy Star equipment and appliances for City use.
- **6.** Increase the average fuel efficiency of municipal fleet vehicles; reduce the number of vehicles; convert diesel vehicles to bio-diesel.
- **7.** In a collaborative effort with internal and external stakeholders, develop a city energy strategy.
- 8. Implement a recycling program.

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## II. Global Initiative: Sustainable Infrastructure Development Subcommittee

**6.** Community Core Downtown, Place to Gather, Facilities, Current Plans.

#### The Core Downtown must enhance and develop a sense of place through the support of:

- Performing arts.
- \* Gathering spaces.
- \* Housing.
- \* Visual arts.
- \* Entertainment.

#### Immediate implementation:

- \* Completion of the Downtown Development Plan 5th Street corridor with the Civic Center expansion, Kirkwood Mall extension, and visual arts.
- \* Retention of the UND School of Medicine in the Downtown Core.
- \* Continued support of the Renaissance Zone and Core Initiatives.
- \* Support of Quiet Rail on 3rd and 5th Street.
- \* Support for public private partnerships in developing parking structures, skyways, and convention facilities.
- \* Appointment of an ombudsman to facilitate the Downtown Development Plan--funded by the City through the BMDA.

## **Enabling Strategy for all Global Initiatives**

### III. Global Initiative: Opportunity Development Subcommittee

**7.** Enable, foster, support economic development and local entrepreneurial development in the area

The entrepreneur support initiative committee envisions moving forward on developing solutions for the challenges identified in a study performed in 2005 for our community.

#### The core challenges from the study in 2005 were organized into six categories:

- \* Communication/Cooperation.
- \* Marketing of Agency Services.
- Mentoring/Experience.
- \* Promoting Entrepreneurship.
- \* Financing/Investment Support.
- \* Follow-up/Business Retention.

#### The entrepreneur support initiative committee plans focusing on the following objectives:

- \* Develop Advisory Panel responsible for the knowledge share of agency offerings by September 2009.
- \* Create web-based central resource area for entrepreneurs to research and obtain information on who to go to for what by December 2009 web site. This could be eMentor.com.
- \* Create central resource area for Mentors to meet entrepreneurs and entrepreneurs to meet Mentors by December 2009.
- \* Partner with publications and develop new ones to help promote, improve and tell the stories of entrepreneurs going through the process by December 2009.
- \* Create a long term relationship with publications to help keep the pulse on entrepreneur stories in the community by December 2009.
- \* Create coordinator position to guarantee information provided by advisory panel is carried through to central resource area, and that new stories are made available to publications on a regular basis by August 2009.

# **Enabling Strategy for all Global Initiatives**

### III. Global Initiative: Opportunity Development Subcommittee

**8.** Reactivate the MBBM (Morton, Burleigh, Bismarck, and Mandan) committee. Organize efforts to enhance cooperative and collaboration between all boards, commissions, and other government entities.

Reactivate the MBBM (Morton, Burleigh, Bismarck, and Mandan) committee. Organize efforts to enhance collaboration between all boards, commissions, and other government entities. In short provide a platform to provide sustainable government: present high-quality and efficient government and cost-effective services, meet the needs of our citizens, protect the environment, and collaborate with other governments.

## **Objectives:**

- 1. Create an open forum setting to enable communication between commissions and tax payer-supported local government entities.
- 2. Encourage citizen input in developing the MBBM meeting agenda.
- 3. Develop an active citizens group that provides a mechanism which enables longevity and energy beyond elected officials term of service.
- **4.** Explore significant and meaningful consolidation prospects.
- **5.** Develop a legislative agenda 6-8 months in advance of the session.

#### Goals:

- 1. Provide meaningful and long-term savings to tax payers by establishing consolidation practices.
- **2.** Provide a sustainable methodology for resource conservation strategies.
- 3. Build greater unity and purpose among the legislators in the MSA and region.
- **4.** Create a common vision among citizens and leaders.

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## III. Global Initiative: Opportunity Development Subcommittee

**9.** Promote the development of the Mandan Events Center and the expansion of the Bismarck Civic Center from the perspective of promoting the Bismarck-Mandan area.

#### **Develop Event Centers.**

Select a five member board. Representation on the Board could include Bismarck Civic Center, Mandan Events Center, CVB, Downtowners Association, Young Professionals Network, BMDA and the Chamber. The Board should be empowered to do the following:

- 1. Develop a joint strategic plan for the promotion and coordination of the two Centers;
- Develop a public information campaign to educate citizens and business owners on the benefits of developing the events centers; including adding a motel on to the Bismarck Civic Center;
- 3. Support/justify the implementation of the 2009 Master Plan for the expansion of the Bismarck Civic Center;
- 4. Enhance coordination of regional sporting and cultural opportunities and facilities;
- 5. Rebrand the Bismarck Civic Center; and
- 6. Establish the necessary funding source.

## **Enabling Strategy for all Global Initiatives**

### III. Global Initiative: Opportunity Development Subcommittee

**11.** Continued support of Applied Energy Technology Center.

#### Introduction.

Over the past six months a steering Committee under the direction of Mayor John Warford of Bismarck, North Dakota has advanced a proposal to create The Great Plains Applied Energy Technology Center (the Center). We met with the Sandia National Lab, research universities and other stakeholders. We have been encouraged to move forward and to create an Applied Technology Center led by energy businesses and focused on the integration of renewable energy and the associated mass storage requirements for electrical transmission grids where energy is generated primarily for long distance export. A group of energy companies has elected to join the leadership team and together we have secured an EDA grant to fund a Feasibility Study and a separate Business Plan. The following project summary suggests the purpose, governance and other details.

#### **Purpose**

The City of Bismarck is moving forward to secure future economic development centered on one of our strongest industries...*ENERGY*. We will strive to create an Applied Energy Technology Center that further enhances and develops our National Energy Center of Excellence and the Great Plains Energy Corridor headquartered in Bismarck. The Center will accomplish the following goals for our city and region:

- Create a technology application center led by energy companies who will coordinate
  multiple combinations of existing research to create full-scale solutions; then share the
  knowledge to enhance their competitive edge and support the economic growth of their
  companies and this region.
- Capitalize on the federal administration's energy development priorities to bring applied technology dollars to our community and state, focusing on to-scale development, deployment and testing of assets that drive the integration of renewable energy and the associated mass storage.
- 3. In conjunction with the State of North Dakota, provide leadership in the development of transmission systems capable of balancing and storing wind energy and exporting excess capacity into growing markets throughout the US.
- 4. Coordinate with Energy Companies and other Partners to proactively develop public policy regarding transmission and technologies that facilitate the export of renewable energy in this region.
- Provide facilities, national laboratories and regional energy company's opportunities to partner with leading international research entities in the development of cutting-edge, commercially viable integration and mass storage technologies for national and global deployment.

The Center will focus on balancing generation with mass storage enabling renewable energy.

#### Governance

The Great Plains Applied Energy Technology Center will be managed by its business partners as a component of The Great Plains Energy Corridor. The Great Plains Energy Coordination Office located at Bismarck State College will provide management, operations and administrative support. The Center will solicit members from the energy industry, establishing multiple membership categories and therefore encouraging businesses to participate. A Board will be created, one from each founding partner, and the rest selected at large by The Mayor.

The first major task for this Board will be to solicit vendors to complete a feasibility assessment and develop a business plan. The City of Bismarck has applied for an EDA grant which will provide approximately 50% of the estimated \$200,000 required for the development of a sustainable business plan. The City of Bismarck will provide 66% and the founding partners will provide the remaining 33 %.

The Feasibility Assessment will be completed within three months of receipt of grant funds. In order to proceed within grant guidelines, the City of Bismarck will issue a Request for Proposal and the Board will select a consultant based on City of Bismarck and Federal standards. A consultant will be selected and a detailed scope of service developed prior to negotiating a fee. The Board will submit their recommendation and fee contract to the City of Bismarck for review and approval. The Great Plains Energy Coordination Office will administrate this process and coordinate other actions on behalf of the Center and its Board.

The Board will determine future actions based on the details developed during this planning stage.

The Business Plan will address the following items:

- \* Confirm our specific purpose and vision for The Center.
- \* Identify competition and identify potential partnerships.
- \* Identify short- and long-term operational goals.
- \* Identify short and long-term infrastructure needs.
- \* Identify potential funding resources and develop strategies for securing adequate funding applications for all potential programs and operations.
- \* Identify long-term sustainability programs and processes.
- \* Identify potential partners and their specific roles.
- \* Develop staffing plans and operations budgets.
- \* Define the conditions which will allow for successful long-term operation.
- \* Develop bylaws and other governance processes and procedures.

#### **Project Flow.**

The Center will be unique within this region because of the following characteristics:

- 1. The Center will be business-led, owned and operated by the partners who act cooperatively to develop, build, test and perfect to-scale technologies and the public policy required operating these successfully.
- 2. The Center will identify the applications and the deployment location and partner for each project. The Center will identify the technologies that must be integrated, determine new research required and then select competitively the best research entities to complete the development of missing components.
- 3. Projects sponsored by The Center will be managed either by the company recommending the technology or by private consultants selected by The Center.

The Center will generally complete the following functions:

- 1. Create Project Flow/Innovation Planning. A Development Team will be appointed by the Board that includes staff members, energy partners, business partners and other creative people who will be asked to generate, review and prioritize projects. These projects will address existing or future issues initially focused specifically on renewable power integration and mass storage systems. This group will act as a screening group reviewing outside proposals and generating new ones.
- 2. Manage all Projects. Projects in the Center will be managed by outside consultants selected by the Board based on professional selection criteria. Consultants will generally be companies familiar with the technology to be demonstrated; however, they will most importantly provide the proven ability to manage projects on time and within budget. Consultants will be selected as soon as the Development Team identifies projects as a priority and therefore project management consultants will be asked to assist with grant applications and other preliminary work. Energy Partners may also elect to supply Project Management teams to lead demonstration projects.
- 3. Provide Operations. The Board will select a Director who will manage the Center utilizing partners whenever possible and adding staff as required. The Center shall provide physical space, shared facilities like conference rooms, network structures and phones and meet other needs of its partners. The costs of providing these services will be collected as lease payments, through patents on technology jointly developed at the Center and through project administration fees.
- 4. Lead Project Funding. The Center will provide grant expertise and political support for all projects selected by the Development Team.

#### Competition

We have completed a preliminary review of global research and technology centers focused on the integration of renewable energy and the associated mass storage requirements. The following summarizes this review:

- 1. There are no operational centers within the Great Plains. The nearest center that demonstrates technology is located in Boulder, Colorado.
- 2. The majority of these centers were created within the last two years and many are being contemplated today.

- 3. None of these centers offer any specific experience with the integration of renewable power for electrical grids where energy is generated primarily for long-distance export.
- 4. None of these centers are industry-led.

There exists a unique opportunity for The Great Plains Applied Energy Technology Center!

#### Long-Term Mission.

The Obama Administration has made it clear that energy will be a very high priority. Research will be rapidly accelerated and new technologies will be developed in record numbers. Independent power producers will continue to develop wind farms and then seek transmission solutions. As this occurs, the energy industry will be faced with many unknowns. Individual energy companies will be hesitant to implement unproven technologies and to develop new transmission for power export because the risks will be too high, the costs too large and the repayment scenarios unproven. Cooperative development and knowledge sharing will be required to reduce costs to consumers while providing a means to export power. Energy integration issues will vary greatly between regions. The Center, located right in the middle of a significant energy production area, will create an environment where industry-led competitive collaboration will drive rapid demonstration and integration of new components, transmission and systems.

The Center will be an innovation hub testing to scale production assets and recommending public policy regarding transmission and mass storage systems. More specifically we shall:

- 1. Develop operational systems that allow wind energy to be centrally controlled, optimizing individual wind turbine and wind farm performance and creating the systems to predict and integrate renewable energy.
- 2. Develop new wind farm architectures focused on the specific characteristics of this region including the integration of large output (3 megawatt and above) turbines.
- 3. Determine the best practices necessary to monitor power electronics and power conditioning systems, ensuring safe, efficient grid performance.
- 4. Assess regional mass storage potential, identify the best purposes of mass storage within operational grids and then determine the methods and sizes of the systems that are required within rural grids and generation sites that export power with limited local consumer benefit.
- 5. Create a regional clearinghouse focused specifically on the integration of renewable energy and the associated mass storage requirements for electric transmission grids where energy is generated primarily for long-distance export.

#### Moving Forward.

The Great Plains Applied Energy Technology Center should be considered a key component within The Great Plains Energy Corridor. The Center will allow regional energy companies to cooperatively solve complex problems facing a region that is being asked to integrate renewable energy primarily for export purposes. The Center must however be driven by industry.

A business plan will be developed under the direction of the City of Bismarck, the Great Plains Energy Coordination Office and energy partners.

The GPAETC Board will name a technical team to identify an initial project for the Center to apply for grant funding from DOE under the auspices of the energy company members.

#### Goals

- 1. Secure financing for a Feasibility Study and Business Plan.
- 2. Select and empower a creditable consultant to assess the feasibility of this proposal.
- 3. Select and empower a consultant that can put together a sustainable Business Plan.
- 4. Begin Industry Partner meetings where we collectively select projects and then develop funding proposals.
- 5. Organize operational unit and select the Director.