

**Greensburg City Council
Special Meeting
November 12, 2014
City Hall**

Item 1: Opening Session

Call to Order; Roll Call

Mayor Robert Dixon called the meeting to order at 6:00 p.m. on November 12, 2014. Council present: Matt Christenson, Mark Trummel, and Sandy Jungemann. Rick Schaffer and Haley Kern were absent.

Item 2: Items of Business

A. Consider a proposal from Canopy Planet, to establish an Eco-Industrial Cluster in the City of Greensburg.

Council received Neva Murtha, Canopy, and Wade Chute, Techfibre Industries, to discuss the viability of establishing a wheat straw and sorghum stalk pulp plant and Eco-Industrial Cluster in Greensburg. Canopy and Techfibre Industries are Canadian organizations working to establish a North American straw/agricultural pulp product for a range of paper and textile, and other co-products. Canopy works with 700+ leading brands internationally. 350+ companies have purchasing policies with Canopy that state a preference to buy North American produced agricultural residue paper when it is available and priced. A great deal of research has been done, including collecting data on Kiowa County and the surrounding area, from 2009 to the fall of 2014. To date, Canopy surveying has identified just under 1.3 million short tons of annual North American unmet demand for agricultural residue paper. Wheat and flax straw pulps leave a lighter ecological footprint than aspen and spruce pulps. The proposed process has been around for thousands of years. China and India are some of the largest investors in non-wood pulps and papers, making about 20% of their papers with wheat straw.

Murtha and Chute described the creation of an Eco-Industrial Cluster. The goal would be to find companies of like mind that share a common feedstock, common resource needs, and have a natural relationship to each other's outputs (finished products, intermediate products and waste products). Communities can be included in the cluster, providing items such as power, water and wastewater treatment, while gaining employment opportunities through the various entities involved in the cluster. The proposed pulp plant would be smaller than facilities of the average wood pulp plant. Murtha and Chute would like to discuss a vision, connect with companies who have a need for the pulp and already established markets, creating "over-the-fence" relationships (i.e. fertilizer byproduct sent to an anhydrous ammonia plant). In addition to the potential for added industry to the area, Murtha and Chute plan to develop a business case in partnership with the City, with a goal of profiling Greensburg as the Green Innovation Icon, aligned with Greensburg's 20 year vision.

A Class 5 engineering plan has been completed based on using patented pulping technique that's proven at the pilot scale. Murtha and Chute presented two plant size scenarios. Scenario A presented a \$100 million capital cost and ended with a net \$10 million cumulative cash flow in year 4. Scenario B presented a \$270 million capital cost and ended with a net \$96 million cumulative cash flow in year 3. These estimates were for pulp production only and did not include other products that could be produced. A plant similar in size to Scenario A was recommended.

The question of whether or not the area has enough feedstock available to sustain such a plant was discussed. Research based on conservative, low-end volume estimates, shows at least 750,000 tons of "residue" available in a 100 mile radius. Mill feed stock needs are approximated at 8.5% - 35%,

depending on mill size and based on conservative estimates. A better understanding of what is available will come from answers to the survey that will be distributed to local farmers at the meeting to be held with them tomorrow evening. Class 3 and 4 estimates, which is more of a “study estimate” will be done next. Technical and pilot scale studies to finalize input costs and generate samples for consideration by customers are part of Class 4. There will also be a market assessment for all of the products involved. Estimated cost of this phase is \$250,000. 25% of that cost could come from private interests and 75% could come from jointly engaged state and federal government sources. Murtha and Chute would like to release an announcement of government support in February or March 2015.

To accomplish the Eco-Industrial Vision, Greensburg can bring to the table partners in research for details on items such as available fiber and transportations costs; community support and feedstock for products and by-products; spokespeople; and partners in funding. The City already possesses many items needed for the project to succeed, including land in the industrial park, tax incentives through the Neighborhood Revitalization Program, space in the SunChips Business Incubator, utilities, access to major transportation corridors, supporting industries, producers for feedstock, access to skilled labor and supporting services, and the ability to market the business through co-branding Greensburg with the companies.

Additional discussion with Council included the possibility of utilizing surplus CRP as feedstock; the willingness of local producers to provide straw; the ability to pay producers enough that they are willing to provide product; the effects of drought on such a plant; and the length of time product could be stored and still be viable for pulping (at least one year if kept dry). Water needed to operate the mill was also discussed. According to the local Extension Agent, water consumption would be less than irrigating $\frac{1}{4}$ of a quarter of ground. Murtha and Chute believe that NREL and local numbers prove that there is plenty of feedstock available locally, even in drought years and without including possible CRP product. One utility the City does not provide that will be needed is Natural Gas.

Item 3: Adjournment

Dixson declared the meeting adjourned at 7:00 pm.

Robert A. Dixon, Mayor

Christy Pyatt, City Clerk