Approved: March 24, 2009
Date

MINUTES OF THE HOUSE ENERGY AND UTILITIES COMMITTEE

The meeting was called to order by Chairman Carl Holmes at 9:00 a.m. on March 17, 2009, in Room 783 of the Docking State Office Building.

All members were present except:
Representative Josh Svaty-excused

Committee staff present:
Melissa Doeblin, Office of the Revisor of Statutes
Sean Ostrow, Office of the Revisor of Statutes
Mary Torrence, Office of the Revisor of Statutes
Mary Galligan, Kansas Legislative Research Department
Cindy Lash, Kansas Legislative Research Department
Renae Hansen, Committee Assistant

Conferees appearing before the Committee:
Thomas V. Thornton, Bio-Science Authority
Bret Healy, Bio-Science Authority

Others attending:
Twenty including the attached list.

BIO-Science Authority

Thomas V. Thornton, Bio-Science Authority, spoke to the committee on the general workings of the Authority, and how funds are disbursed. He noted that they will work with Kansas companies to the extent that they express interest in pursuing research. Concerning bio-energy they have a very focused approach where Kansas has an existing strength in educational research in their state educational institutions and where Kansas industries focus on quality research.

Bret Healy, Bio-Science Authority, (Attachment 1),spoke to the committee about the Bio-Science Authority overview, scope of work, and industry leadership. Mr. Healy noted that the purpose of this authority is to create ideas that will be functional and benefit the state of Kansas economically.

Questions were asked and comments made by Representatives: Vern Swanson, Forrest Knox, Tom Moxley, Joe Seiwert, Don Myers, and Carl Holmes.

Representative Tom Sloan recommended the committee read the March issue of the National Geographic as the issue focuses on energy.

Action on:

HR 6011 - Requesting the State Corporation Commission to convene a group of stakeholders to study certain aspects of energy storage and to address cost recovery for and earnings on investments relating to energy storage.

Representative Tom Sloan moved to recommend **HB6011** for passage and it be placed on the house consent calendar. Seconded by Representative Rob Olson.

Discussion ensued by Representatives Annie Kuether, and Tom Sloan.

The motion was withdrawn by Representatives Tom Sloan and Rob Olson.

Representative Tom Sloan move to amend **HR 6011** by striking on line 25 from after the year 2010 to the ";". Seconded by Representative Annie Kuether.

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Comments were made by Representatives: Mike Burgess, and Annie Kuether.

The Motion to amend **HR 6011** passed.

Representative Tom Sloan moved to recommend **HR 6011** favorable for passage as amended. Representative Annie Kuether seconded the Motion. Motion carried.

Chairman Carl Holmes expressed to committee what the committee would be doing for the rest of this week and next week for the tour to Jeffrey energy center.

The next meeting is scheduled for March 18, 2009.

The meeting was adjourned at 10:31 a.m.

HOUSE ENERGY AND UTILITIES COMMITTEE
GUEST LIST

DATE: March 17, 2009

NAME	REPRESENTING
Tom Day	KCC
Mari Tucker	Dept of Commerce
Joe Mossman	Hein Law
Mike Reecht	KCPL
Scott Jones	KCPL
Mike Murray	EMBARQ
Ron Seeber	KS Ag.
Jim Gartner	ATT
LON STANTON	NORTHERN NATURAL GAS
Chris Gigsted	Federico Consulting
Margie Petty	KCC
Ryan Young	
Bret Healy	KPA

Testimony of Bret J. Healy
Kansas Bioscience Authority
Hearing of the House Energy and Utilities Committee
March 17, 2009

Chairman Holmes and Vice Chairman Knox, thank you for your invitation to address this distinguished committee on possible funding from the American Recovery and Reinvestment Act and the establishment of the Kansas Bioenergy and Biorefining Center of Innovation.

Regarding the federal stimulus package, the Kansas Bioscience Authority receives no funding from the American Recovery and Reinvestment Act. There are formulaic funds that will go to Kansas, and we are working with a number of organizations statewide to maximize funding for the state under the competitive programs, although funds will not flow through the KBA.

I will utilize the majority of my testimony to outline the establishment and proposed plan of action for the Kansas Bioenergy and Biorefining Center of Innovation, or KBBCI for short.

The hub of the KBA's research capacity investment strategy is the Kansas Bioscience Center of Innovation program. Through this program, Kansas can address its dual needs to build world-class bioscience research centers in its research institutions and to assist existing and emerging bioscience industries in capturing new knowledge and research findings for their product and production functions.

The intent of these centers of innovation is to focus on research and development in core technology areas that establish national and international research excellence and lead to high commercial payoff in new products and processes.

KBA funds will leverage significant private and federal funds and enable Kansas to have several large-scale national and international centers within 10 years. This "scaling up" of Kansas' R&D to a world-class level with connectivity to Kansas industry can jump start the state's knowledge economy.

The R&D agenda of these centers will focus on areas of interest to Kansas companies and potential entrepreneurs. They are designed not only for

excellent research, but also for productive commercialization. Centers will operate as consortia of industry, higher education, and other private research organizations driven by strong industry involvement.

The KBBCI, one of the first two Kansas Bioscience Centers of Innovation approved, is a successful combination of industry leadership and university collaboration in bioenergy and biorefining.

Overview

The KBBCI is uniting key industry players with the world-class research and development efforts underway at the University of Kansas and Kansas State University. United, these groups enable the state of Kansas to make a significant impact on biorefining and bioenergy.

The grand vision of the KBBCI is to:

- Lead the replacement of fossil-based fuels and chemicals through the use of commercial biorefining;
- Commercialize efficient biomass resources to produce cost-effective quality power; and
- Improve the carbon capture and sequestration of greenhouse gases.

This vision will focus on Kansas' comparative advantages and position our state to be a leader in the commercialization of innovation in bioenergy and biorefining. The KBBCI's challenge is to command a share of bioenergy and biorefining resources and markets by creating commercially viable bioenergy and value-added chemicals that benefit the Kansas economy and, ultimately, the world.

From its inception, the Kansas Bioenergy and Biorefining Center of Innovation has deployed an industry group to develop the center's structure and strategy to meet this challenge. With industry leadership, the center will seek disruptive or transformative inventions from Kansas universities, companies, and entrepreneurs and invest in bringing them to market. Resulting products will be high-value technologies that use bioscience or biological resources to create alternative energy, fuel, co-products, food and non-fuel chemicals. The center will be operated in a sustainable manner focused on developing bioenergy and biorefining that benefits Kansas through economic development and technology development.

The resulting benefits to Kansas and our nation from investments in bioenergy will be tremendous. In the next five years alone, focused efforts in bioenergy as envisioned by the KBBCI will lead to $2.4 billion in economic benefit for Kansas, with most of that coming in rural areas near the biomass crop centers. Kansas will be on a path of leading the nation to true energy independence — meaning a stronger United States, a freer world, and a cleaner environment for future generations.

Scope of Work

The biofuels and biorefining industry is a growth industry. Initial markets and production systems are established, but these are very dynamic and volatile. Much larger markets exist on the horizon. To reach and sustain these markets, the industry will require major amounts of investment, as well as innovative business models and technology platforms.

Future growth in biofuels and bio-derived chemicals will be innovation driven. Up to this point, the underlying innovation for first generation biofuel production has been singular and simple. The next generations of biofuels and chemicals will require more innovation in terms of business models, feedstocks, processing and conversion technologies, and development of new fuel and chemical products. This will provide for the necessary flexibility to respond to changing markets, significantly improve operating efficiencies, and offer a broader range of fuel and chemical products. This overall approach will provide for long-term sustainability similar to that enjoyed by the petroleum and chemical refining industry.

There potential for the biorefining industry is clearly huge. The Energy Independence and Security Act of 2007 challenged the U.S. to produce 36 billion gallons of renewable fuels annually by 2022, four times the 2008 estimated production level of 9 billion gallons.

These new "advanced biofuels" will be based upon cellulosic feedstocks and other new technologies. Additionally, similar to the current petroleum and chemical refining industry, there will be a huge potential market for industrial bio-derived chemicals used in plastics, pharmaceuticals, adhesives, coatings, solvents, and paints. These will be "green" products.

To meet these markets, the biorefining industry will require various kinds of innovation across multiple industry segments (feedstocks, conversion, and

products). The KCBBI addresses this need by becoming a nexus of university researchers and companies involved in each of the major segments of biorefining.

Equally important is that the center will foster applied research collaboration with companies involved in biorefining in each of the three industry segments. Each year, the center will promote industry-university collaboration via a portfolio of applied, research projects. This portfolio approach is very significant. It will provide for short- to long-term, applied research projects with each having industry collaboration and a commercialization focus.

The KCBBI plans to generate commercialization opportunities for companies in the first year of operations. The goal is to continually expand these opportunities during the first five years. This will provide the base to generate the expected economic development outcomes in Kansas.

Industry Leadership

The KBBCI will be governed by a board of directors with 11 members: seven representing industry collaborators, the KBBCI chief executive officer, one Kansas Bioscience Authority member, and two university members. In addition, two people from the University of Kansas and Kansas State University will have *ex-officio* representation on the board without voting rights.

The board is heavily weighted toward industry to ensure industry players are driving research funding and that the focus remains on commercialization. Board members will include industry leaders such as Paul Bloom of Archer Daniels Midland, Tim Cesarek of Koch Genesis, and Tom Robb of Abengoa. Drs. Steve Warren and Ron Trewyn will represent KU and K-State, respectively.

Kansas is on the right track with the establishment of the KBBCI. From research to commercialization to expansion, the KBBCI will help assert Kansas's leadership in bioenergy and biorefining. This will lead to academic researchers collaborating with industry researchers and companies; to companies solving national challenges and attracting capital; and to bioenergy and biorefining companies all across Kansas expanding.

We know the market opportunity is before us. We know Kansas has the natural resources and expertise to lead. And we know that now is the time to move forward aggressively with our state's bioenergy center of innovation to ensure we take full advantage of this unique growth opportunity.