2011 SENATE NATURAL RESOURCES

SCR 4011

2011 SENATE STANDING COMMITTEE MINUTES

Senate Natural Resources Committee
Fort Lincoln Room, State Capitol

SCR 4011
February 10, 2011
Job #14368

☐ Conference Committee

Committee Clerk Signature

Explanation or reason for introduction of bill/resolution:
To study the feasibility and desirability of creating a 25-year sustainability vision plan for state facilities with the intent to lower our energy usage, energy costs, and improve the environment.

Minutes: **No Attachments**

Chairman Lyson opened the hearing on SCR 4011.

Senator Laffen, District 43, Grand Forks, is the sponsor of SCR 4011. The state of ND doesn't have any policy looking forward in terms of energy management or sustainability of our state's $22 million square feet. Almost all of the state's 22 million sq. ft. were built long before any of these new energy ideas have come along. Our belief is that we have about a $22 million a year annual savings out there waiting for us if we can start implementing some of these changes that we have discovered over the past 10 years. The idea of this study is to try and see if there is a way to write "how to do all of this". We felt we needed to be "better stewards" of the resources of our state. Most states have done this already. There is a group that has ranked all of the states in terms of their energy policy and environmental policies for their facilities, and of the 50 states and District of Columbia, North Dakota ranked 51st. We do not have any plan of how we are going to be better stewards of energy use and conservation in our buildings. We felt a study group would be appropriate and this is what SCR 4011 is about.

Senator Triplett asks, "Could you describe the other two bills that you have so everyone can see the package of things you are working on in energy efficiency this year?"

Senator Laffen states that SCR 4011 is part of 3 bills we introduced. The first one, which passed the Senate yesterday, creates a database for information of what these buildings use in electricity, water, or gas. As we make changes and moving forward, we will be able to tell if these improvements work. We will also be able to see where our "energy hogs" are. It will direct us to how to use our resources right away. The second one creates a "revolving loan fund" of $10 million that would be used in $100,000 increments by state facilities to make some of these small changes within their complex, $100,000 loan per building. The idea is that the state buildings could continually make improvements, continually lower their costs and continually replenish the "loan pool". We have a state program already that lets private industry come into any of our state buildings, propose an energy reduction project, and then

they can do and fund that project themselves and pay themselves back from the savings that we have in the energy use. Those companies tend to pick the big projects, those in the 2-3-4 million dollar range per building. A lot of our energy saving measures can come in smaller pieces, like changing out the digital thermostats. All of our states facilities need appropriated money or some money in some fashion to do that. The data base, the loan fund, and the study for a "bigger plan going forward" are the three parts.

Senator Burckhart asks Senator Laffen to give the senate bill numbers of the bills.

Senator Laffen states they are SB 2299 (revolving loan fund), SB 2296 (database).

Scott Skokus, on behalf of the Dakota Resource Council, spoke in support of SCR 4011.

Dennis Hill, with the ND Association of Rural Electric Cooperatives supports SCR 4011.

No opposition to SCR 4011.

Closed hearing on SCR 4011.

Senator Triplett makes a motion DO PASS on SCR 4011.

Senator Schneider seconds the motion.

Vote: 7-0-0

Carrier is Senator Burckhard.

Date: 2-10-11
Roll Call Vote # 1

2011 SENATE STANDING COMMITTEE ROLL CALL VOTES
BILL/RESOLUTION NO. 4011

Senate Natural Resources Committee

Legislative Council Amendment Number _____

Action Taken: ☒ Do Pass ☐ Do Not Pass ☐ Amended ☐ Adopt Amendment

☐ Rerefer to Appropriations ☐ Reconsider

Motion Made By Senator Triplett Seconded By Senator Schneider

Senators	Yes	No	Senators	Yes	No
Chairman Lyson	✓		Senator Schneider	✓	
Vice-Chair Hogue	✓		Senator Triplett	✓	
Senator Burckhard	✓				
Senator Freborg	✓				
Senator Uglem	✓				

Total (Yes) 7 No 0

Absent 0

Floor Assignment Senator Burckhard

If the vote is on an amendment, briefly indicate intent:

REPORT OF STANDING COMMITTEE

SCR 4011: Natural Resources Committee (Sen. Lyson, Chairman) recommends **DO PASS** (7 YEAS, 0 NAYS, 0 ABSENT AND NOT VOTING). SCR 4011 was placed on the Eleventh order on the calendar.

2011 HOUSE ENERGY AND NATURAL RESOURCES

SCR 4011

2011 HOUSE STANDING COMMITTEE MINUTES

House Energy and Natural Resources Committee
Pioneer Room, State Capitol

SCR 4011
3/17/2011
15560

☐ Conference Committee

Committee Clerk Signature

Minutes:

Rep. Porter: We will open SCR 4011.

Senator Laffen: I represent district 43, I am an architect and you will notice 2 credentials behind my name. I am passionate about energy conservation as it relates to buildings today I am bringing you an idea that relates to that. North Dakota owns and operates 22 million square feet of building space. All of it build prior to today's energy conservation break through such as high efficiency lighting, digital temperature controls and heat recovery systems. We have learned over the last ten years that it is possible to significantly reduce our energy consumption by making small physical and operational changes to our buildings. The average is about $1.00 a square foot. If you do the math that is twenty-two million dollars per year for North Dakota if we can make these changes. I am purposing 2 steps to help start process and have introduced 2 bills. I would like to explain them so that you can how they relate. The first step is SB 2296 which would create a data that tracks the annual usage of gas, steam, electricity and water for each one of our state's buildings. This would do 3 things it will give us a bench mark to see where we stand today; it will quickly highlight our energy hogs and help us focus our efforts on where we will get our quickest payback. It will give us an ongoing record to see what works and what doesn't and verify that we are in fact getting value and savings as we implement changes going forward. The data base would be administered by the North Dakota Office of Renewable Energy within the Department of Commerce. We intend to keep it simple just to keep track of the numbers. The idea is that we can't manage what we can't measure. That is step one. (See attachment 1)

The second step of this resolution would study and create a plan to reduce our energy use and create a more sustainable plan going forward. The plan would likely have 2 components. The first would be to create policy for the ongoing operations. This is mostly educating the people who run our buildings and making small changes like programmable thermostats. I heard a seminar by the energy officials at Oklahoma State University; they created such a plan about 5 years ago. That campus has 8 million square feet of space and spent about 1.9 million dollars hiring a couple of people and making small changes and they have since saved 12 million dollars in energy on that one campus alone. The second part would also set new standards for new construction. LEED might be one of the standard rating systems that we could choose. There a number of them that one is the most nationally recognized, it rates the new construction on how well it performs once it is

in place. Of the 50 states and the District of Columbia North Dakota was racked 51st on the energy efficient scorecard for the American Council for an Energy Efficient Economy. To make matters worse North Dakota has more heating degree days than anywhere else. While that sounds really bad the good news is that we just have more opportunity to save money than anyone else.

Rep. Kreun: Have we had successes in the state in others areas but to conform some of the statements that were make here?

Senator Laffen: The best examples that we have currently in our state is at the University of North Dakota. Ten years ago they recognized the ability to save money. They started requiring LEED Silver ratings for all of the new buildings. We have some of the data, the University of North Dakota runs at about 66% of the energy of all of the rest of the state buildings.

Rep. Brabandt: Does LEED add cost to the new construction?

Senator Laffen: It is hard to say that it does or doesn't. If you look at national standards you would say it does. In North Dakota we do most of these things on the higher-end buildings. On a 10 million dollar project we saved about $75,000.00

Rep. Nathe: On the second page you talked about a 25 year sustainability vision plan. Is that what the other states have used? Why is it 25 years?

Senator Laffen: I picked 25 years as a number. The state of Minnesota did this in 2000 and did a 30 year plan and is in about the tenth year of the plan. Part of their plan is that they will use no fossil fuel and emit no carbon dioxide from any of their buildings by 2030.

Rep. Nathe: Who would determine what is in that plan?

Senator Laffen: The people who would execute this plan would be the facility coordinators at each of one our state agencies.

Rep. Brabandt: Is it still true that the biggest energy waste is the roof and windows on the buildings?

Senator Laffen: That is correct. It is about 75% of the energy.

Rep. Porter: Are you aware that we studied this during the last interim?

Senator Laffen: I am not.

Rep.Porter: I asked the intern to pull that information. The Energy and Transmission Interim Committee studied this and we actually had a vote on a bill draft to go to the LEED standard and it failed. (See attachment 2)

Senator Laffen: My experience is that we would save money.

Rep. Porter: I don't disagree with that comment but when you look at the buildings that the State of North Dakota has built in the last 5 years they are right up there. It seems like as far as our new construction we have already accepted those savings. Great Energy came in and gave us quite a nice presentation on their building that is behind Job Service. I think that one is a platinum level.

Senator Laffen: No the only platinum building is their headquarters.

Rep. Porter: They gave us their overview on that one and then their building over there is at the gold level.

Senator Laffen: The state energy engineer Zach Weiss heads that division and I would expect that is where we would put this work.

Scott Skokos: I am here in behalf of the North Dakota Resource Council. This will get North Dakota over the hump. The last two of these studies the American Council for Energy Efficient Economy North Dakota was 51st this year and in 49th in 2009. That is pretty clear that something needs to be improved upon. A lot of these improvements are going to be on new buildings build to conserve energy this will be a short term investment that is going to be slightly higher than what you are going to normally pay. With that short investment you will end up saving a lot more money. In the long run you are going to save money.

Senator Laffen: Part of the study would be to look at a plan of how to take our existing facilities and manage them more efficiently.

Rep. Porter: We will close the hearing on SCR 4011. Written testimony was handed out by Kim Christianson representing The North Dakota for Renewable Energy and are in support of SCR 4011.

2011 HOUSE STANDING COMMITTEE MINUTES

House Energy and Natural Resources Committee
Pioneer Room, State Capitol

SCR 4011
3/24/2011
15960

☐ Conference Committee

Committee Clerk Signature

Minutes:

no "attached testimony."

Rep. Porter: We will open SCR 4011 they talked about energy conservation and efficiency standards for public buildings. The study that we did talking about the LEED certification and this entire concept was studied last session. We had discussion in the House that was defeated that talked about doing this same thing and the discussion came up that if you want to do it you can call any utility company and they will come in and do a audit on the building. We have a state agency that also does energy audits on state buildings.

Rep. Anderson: I move a Do Not Pass

Rep. DeKrey: Second.

Rep. Porter: Is there any discussion? Voice vote taken motion carries to put on the consent calendar. Carrier: Rep. Porter

Date: 3-24-11
Roll Call Vote # 1

2011 HOUSE STANDING COMMITTEE ROLL CALL VOTES
BILL/RESOLUTION NO. SCR4011

House House Energy and Natural Resources Committee

Legislative Council Amendment Number _____

Action Taken: ☐ Do Pass ☒ Do Not Pass ☐ Amended ☐ Adopt Amendment

☐ Rerefer to Appropriations ☐ Reconsider

Motion Made By Rep. Anderson Seconded By Rep. DeKrey

Representatives	Yes	No	Representatives	Yes	No
Chairman Porter			Rep. Hanson		
Vice Chairman Damschen			Rep. Hunskor		
Rep. Brabandt			Rep. Kelsh		
Rep. Clark			Rep. Nelson		
Rep. DeKrey					
Rep. Hofstad					
Rep. Kasper					
Rep. Keiser	X				
Rep. Kreun					
Rep. Nathe					
Rep. Anderson					

Total (Yes) 14 No 0

Absent 1

Floor Assignment Rep. Porter

If the vote is on an amendment, briefly indicate intent:

Voice vote taken Do pass pass to SCR4011 on consent Calander

motion carries

REPORT OF STANDING COMMITTEE

SCR 4011: Energy and Natural Resources Committee (Rep. Porter, Chairman) recommends **DO NOT PASS** and **BE PLACED ON THE CONSENT CALENDAR** (14 YEAS, 0 NAYS, 1 ABSENT AND NOT VOTING). SCR 4011 was placed on the Tenth order on the calendar.

2011 TESTIMONY

SCR 4011

NDARE TESTIMONY IN SUPPORT OF SCR 4011
HOUSE NATURAL RESOURCES COMMITTEE
THURSDAY, MARCH 17, 2011
Submitted by: Kim Christianson, Vice Chair

Chairman Porter and members of the Committee:

The North Dakota Alliance for Renewable Energy is in support of SCR 4011.

The North Dakota Alliance for Renewable Energy (NDARE) is an advocacy organization with members representing growers groups, investor-owned utility companies, rural electric cooperatives, state agencies, economic development groups, colleges and universities, banks, manufacturers, and the general public. Its purpose is to find common ground, explore opportunities, and develop strategies to make North Dakota the preeminent state for development and use of renewable energy.

We believe it's important for North Dakota state government to lead by example in reducing the energy use and costs of its buildings. North Dakota is a leader in many forms of both fossil fuel and renewable energy resource development, and there is no reason for our state not to take a leadership role with energy efficiency and sustainable development. This is one of three bills sponsored by Senator Laffen which, taken together, would have greatly enhanced North Dakota's efforts to not only reduce energy use and costs, but also to improve comfort and working conditions for its employees. Unfortunately, SB 2299, which would have provided a small percentage of funding from the Resources Trust Fund for a revolving loan program for efficiency projects in state and other public buildings, did not pass the full ND Senate.

Earlier in the session all of you were provided with copies of NDARE's 2011 energy efficiency policy recommendations, along with the results of a statewide public opinion survey on energy efficiency. North Dakota citizens overwhelmingly confirmed energy efficiency is an important issue, with over 97% of respondents indicating energy efficiency is either very or somewhat important to them. The survey also indicated very strong support (85%) for high standards of energy efficiency in public buildings. The full survey can be viewed at www.ndare.org.

North Dakota lags behind most other states when it comes to programs and policies relative to energy efficiency and sustainable development. This is true even though we have the highest average number of heating degree days of any state outside of Alaska. SCR 4011 will assist in providing the information necessary to move us in a direction to improve that standing. But more importantly, it will demonstrate to North Dakota citizens that their elected representatives recognize the importance of carefully managing our precious energy resources.

We ask the committee's support of SCR 4011.

SCR 4011 - TESTIMONY TO THE HOUSE NATURAL RESOURCES COMMITTEE
MARCH 17, 2011
LONNIE J. LAFFEN, AIA, LEED AP

My name is Lonnie Laffen, Senator from District 43 in Grand Forks. In my other life I am an architect of 27 years. You will notice two credentials behind my name. AIA stands for American Institute of Architects and LEED stands for Leadership in Energy and Environmental Design. The two would suggest that I am passionate about energy conservation as it relates to buildings, so today I bring to you an idea intended to reduce our state's energy consumption and save money.

North Dakota owns and operates 22 million square feet of building space. Virtually all of it was built prior to today's energy conservation breakthroughs such as high efficiency lighting, digital temperature controls and heat recovery systems. We have learned over the past ten years that it is possible to significantly reduce our energy consumption by making small physical and operational changes to our buildings. The average savings is typically $1 per square foot. That would equate to an annual savings of $22M for ND.

I am proposing two steps to help start that process and have introduced two bills. This bill is actually the second step but I'd like to explain both.

1. The first step is SB2296 which would create a database that will track the annual usage of gas or steam, electricity and water for each of the state's buildings. This will do three things:
    a. It will give us a benchmark of where we stand today.
    b. It will quickly highlight our energy hogs and help us focus our efforts where we will get the quickest payback.
    c. It will give us an ongoing record to see what works, what doesn't and verify that we are, in fact, getting value and savings as we implement changes going forward.

The data base would be administered by ND's Office of Renewable Energy within the Department of Commerce. The intent is to keep it simple and just track the numbers annually for each building (of which we have 1,400). We simply can't manage what we can't measure.

2. The second step is this Bill SCR 4011 which would study and create a plan to reduce our energy use and create a more sustainable plan going forward. The plan would likely have two components:
    a. Create policy for our ongoing operations. This is mostly education and small changes like programmable thermostats. Oklahoma State University has created and implemented such a plan. They have 8M square feet of space, have spent $1.9M and saved $12M. The numbers are easily verified because they too started by creating the database that this bill would create.
    b. Set standards for new construction. LEED would be one standard rating system we could choose. It is a national program that rates new construction on how well it will perform once in place. It places emphasis on such things as
        1. Optimizing energy performance
        2. Well insulated exterior envelope
        3. Using locally produced materials which lowers the cost of transportation
        4. Recycling of construction waste
        5. Using daylighting solutions which lower the need for using electric lights

North Dakota ranks dead last in the number of LEED Implemented projects and Of the 50 states and the District of Columbia - North Dakota was ranked 51st on the Energy Efficiency Scorecard by the American Council for an Energy Efficient Economy (http://www.aceee.org/node/820). To make matters worse - North Dakota has more heating degree days than any other state in the lower 48. While that all sounds bad, the good news is that we have more opportunity to save money than anyone else. If we pass this bill we put that into motion.

ACEEE
American Council for an Energy-Efficient Economy

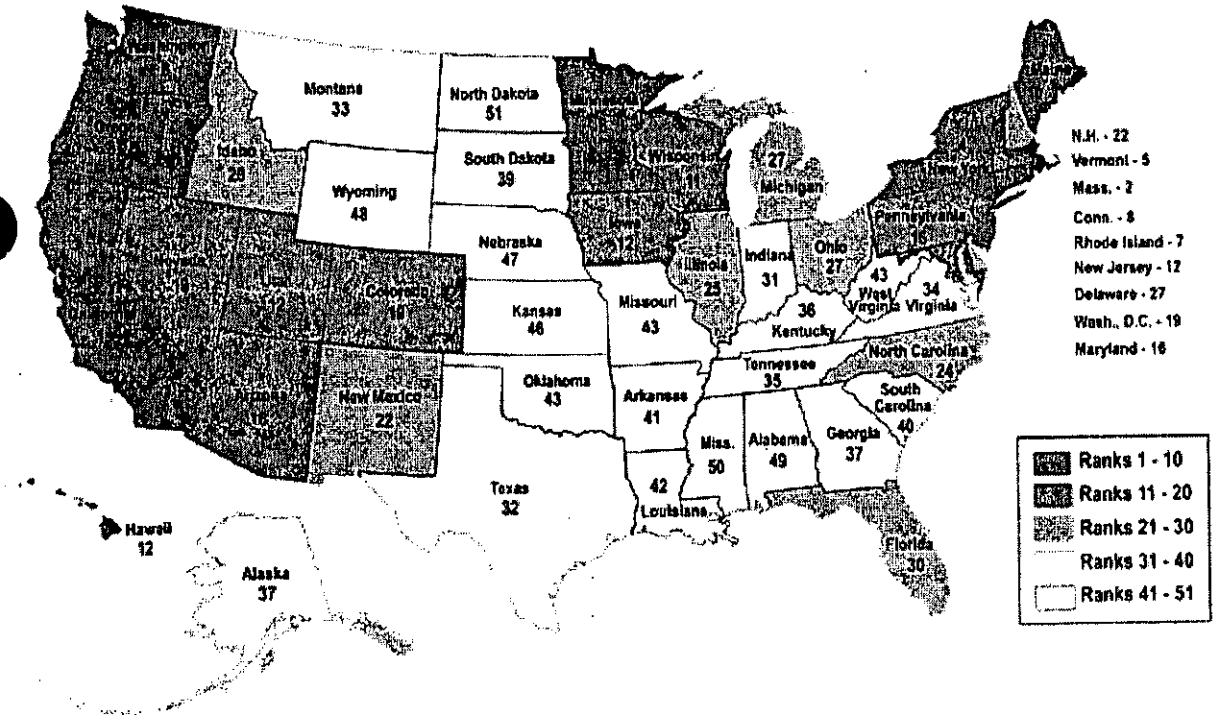
ACEEE State Energy Efficiency Scorecard

Washington Gridlock on Climate/Energy Issues Not Seen in States, Which Are Moving Ahead Strongly on Energy Efficiency; UT, AZ, NM and AK Most Improved; OR, NY, VT, WA, RI, CT, MN and ME Are Balance of Top 10; LA, MO, OK, WV, KS, NE, WY and AL Round Out Bottom 10; TX and NH Drop Farthest

Washington, D.C. (October 13, 2010): Even as Congress failed to take major action on climate and energy legislation in 2010, states across the United States achieved major new strides in energy efficiency, according to the 2010 State Energy Efficiency Scorecard from the nonprofit and independent American Council for an Energy-Efficient Economy (ACEEE). View the full press release.

Click on a state to view its energy efficiency policies and ranking in the 2010 Scorecard report

View the Full 2010 Scorecard Rankings



State Energy Efficiency Scorecards

- **2010 State Energy Efficiency Scorecard**
- 2009 State Energy Efficiency Scorecard
- 2008 State Energy Efficiency Scorecard
- 2006 State Energy Efficiency Scorecard

Media Resources

- Executive Summary
- Fact Sheet
- Download the Free Report **(log-in required)**
- Download the 2010 Scorecard Map (JPEG)
- Listen to the audio of the press event
- **Spread the news on Twitter**

  Best hashtags: #energy, #energyefficiency, #green, #eco

  MA gives CA a run for its #energyefficiency money. ACEEE report tells all http://bit.ly/adjpDl #energy #eco #green

  States show feds how it's done on #energyefficiency.

  New report! http://bit.ly/ #climate #e #green #eco

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  ACEEE 2010 State

Committee discussion included that the fund may be $100 million next biennium and be reduced near $8 million over time. Committee discussion included that the oil and gas impact grant fund was raised from $6 million to $8 million last legislative session. The Governor proposed $20 million last session. It was argued that the impact funding cap is an arbitrary number, and one solution would be to remove the cap. In addition, changing the percentage that goes into the impact fund without a cap may be a solution. Committee discussion included that the percentage is meaningless because the cap is hit in two months.

The committee amended the bill draft to remove the section on impact funding. Committee discussion included that the reason for the amendment was to deal with only the policy issues. This way the money issues would be a separate bill draft when there is better information.

Energy Conservation and Efficiency Standards for Public Buildings Bill Draft

The committee considered, but does not recommend, a bill draft that would have required the Department o Commerce Division of Community Services to adopt construction standards that are consistent with the silver building rating of the leadership in energy and environmental design (LEED) rating system. The standards would have applied to new public buildings in excess of $2 million and to modifications in excess of $500,000. The bill draft provided for an exemption if a written analysis is provided that proves the cost of compliance significantly outweighs the benefits.

The bill draft was based on legislation from other states, and many other states have a similar system. The lower level of the silver rating was chosen because it was a lesser standard as compared to other states. Committee discussion included that there needs to be something in the law for efficiency in public buildings.

Committee discussion included that the standards will create expense, and the committee should know the actual standards before voting on the bill draft. The committee received testimony on the LEED system. The LEED system is a point-based system. The committee was informed that the silver standard was recently updated and increased from 33 points to 38 points needed to 50 points to 59 points needed. The committee was informed that the silver certification includes sustainable sites, water efficiency, energy performance, material selection, indoor environmental quality, and innovation in design. These requirements make it mandatory to incorporate construction activity pollution prevention; storage and collection for recyclables; and a sustainable purchasing policy, for example, the use of green building cleaners.

The committee received testimony in opposition to the bill draft. It was argued that the exemption provision needed to be defined better. It was argued that other standards were more appropriate for efficiency.

The committee was informed that there are different opinions as to which standard to use when building. The committee was informed that the United States Green Building Council is the leader in sustainable buildings, but there is competition. Other standards include Green Globes, Energy Star, Green Star, American Society of Heating, Refrigerating and Air-Conditioning Engineers, and the International Green Building Code. However, the American Society of Heating, Refrigerating and Air-Conditioning Engineers is referenced in the LEED standards and is complementary not competing.

The committee was informed that a building may be energy-efficient without being a LEED building. The committee was informed that the Energy Star standard primarily relates to energy use. An Energy Star building is 75 percent more efficient than a building of a similar type.

The committee was informed that the State Building Code will include portions of the International Energy Conservation Code by January 2011. The Energy Conservation Code is for residential and commercial buildings. The committee was informed that the building industry has a lot of work learning the new changes.

The committee was informed that one contentious area of the Energy Conservation Code is the requirement of basement insulation. Committee discussion included that insulating a basement may be unwise because some people do not wire a basement and would need to deal with the insulation when finishing the basement at a date later than building the home.

Committee discussion included that there were more concerns with the bill draft because it placed a nongovernmental agency in charge of setting a changing standard in the North Dakota Century Code. This raised the issue of what happens if the standard changes.

Committee discussion included that the bill draft last session received a lot of questions relating to modifications, which made the bill draft more complex. It was suggested that modifications be removed from the bill draft or the dollar threshold on modifications be raised. The committee amended the bill draft to address only new building construction and not the modification of an existing structure.

The committee received testimony in favor of LEED standards because energy efficiency is the cheapest energy and is good for customers. The committee was informed that the additional cost for a LEED-certified building is approximately 1 percent to 10 percent. The certification process costs less than 1 percent, and the payback is in five years to seven years. The most expensive portion of the building is a geothermal heating and cooling system. Because it is difficult to extract what would have been done without using the LEED-certified system, it is difficult to determine the additional cost of being LEED-certified. In addition, the building owner generally chooses points that are easily obtained.

The committee was informed that the third-party certification system helps push the sustainability issue when building. It was argued that if there is not a third-party certification system, people start sacrificing sustainability for cost.

The committee was informed that the standards have changed three times during the construction of a building in Bismarck. The certification gets tougher over time because expectations are increased over time.

However, some standards have been lessened. There are changes approximately every three years, which is comparable to the State Building Code. However, a building does not lose its LEED certification if the standards change after the process has begun. In addition, the LEED standards vary across the United States. There are regional priority credits that focus on regional issues.

The committee received testimony in favor of the bill draft. The committee was informed that 34 states have used the LEED standard. However, the United States Green Building Council recommended the bill draft be amended to be modeled after South Dakota's law.

Recommendations

The committee recommends Senate Bill No. 2030 to create a biodiesel plant production incentive.

The committee recommends Senate Bill No. 2031 to remove the sunset on the sales tax exemption for wind facilities.

The committee recommends Senate Bill No. 2032 to allow the Oil and Gas Research Council to promote innovation in safety, enhancement of environment, and an increase in education concerning the distribution of petroleum products and allowing the Industrial Commission, as manager of the Oil and Gas Research Council, to provide financial assistance for processes and activities directly related to the refining industry and the petroleum marketing industry.

The committee recommends Senate Bill No. 2033 to allow oil and gas impact fund grants for long-term planning and engineering studies associated with road infrastructure, water, sewer, housing, local services, and other needs. The bill changes the administration of the funds by having the Board of University and School Lands make the grants instead of the director of the Energy Development Impact Office.

The committee recommends Senate Bill No. 2034 to treat green diesel the same as biodiesel with a clawback provision for the biofuels PACE grant upon a change in ownership within five years of the grant that negates the agricultural producer or resident ownership requirements.