

**FISCAL NOTE**  
**Requested by Legislative Council**  
**04/15/2019**

Amendment to: Engrossed HB 1439

- 1 A. **State fiscal effect:** *Identify the state fiscal effect and the fiscal effect on agency appropriations compared to funding levels and appropriations anticipated under current law.*

	2017-2019 Biennium		2019-2021 Biennium		2021-2023 Biennium	
	General Fund	Other Funds	General Fund	Other Funds	General Fund	Other Funds
Revenues						
Expenditures						
Appropriations						

- 1 B. **County, city, school district and township fiscal effect:** *Identify the fiscal effect on the appropriate political subdivision.*

	2017-2019 Biennium	2019-2021 Biennium	2021-2023 Biennium
Counties			
Cities			
School Districts			
Townships			

- 2 A. **Bill and fiscal impact summary:** *Provide a brief summary of the measure, including description of the provisions having fiscal impact (limited to 300 characters).*

Engrossed HB 1439 with Senate Amendments expands the oil extraction tax exemption for incremental production from certain tertiary recovery projects, creates a property tax exemption for qualifying pipelines and a sales tax exemption for materials used in secure geologic storage.

- B. **Fiscal impact sections:** *Identify and provide a brief description of the sections of the measure which have fiscal impact. Include any assumptions and comments relevant to the analysis.*

Engrossed HB 1439 with Senate Amendments creates an oil extraction tax exemption for incremental production from a tertiary recovery project that utilizes carbon dioxide from coal in a qualified project that has been certified by the industrial commission. The exemption is for twenty years for a project located outside the Bakken and Three Forks formations and ten years for a project located within the Bakken or Three Forks formations.

Because five- and ten-year tertiary recovery exemptions exist in current law, the provisions of Engrossed HB 1439 with Senate Amendments that expand the period of exemption to ten and twenty years would occur outside the biennium.

The provisions of the bill that grant a sales and property tax exemption for materials and pipelines, respectively, for the secure geologic storage of carbon dioxide would reduce state general fund revenues and shift property taxes to other property owners, but the timeline of any qualifying project is unknown and the potential impact cannot be determined.

There is likely no fiscal impact in the 2019-21 biennium.

3. **State fiscal effect detail:** *For information shown under state fiscal effect in 1A, please:*

- A. **Revenues:** *Explain the revenue amounts. Provide detail, when appropriate, for each revenue type and fund affected and any amounts included in the executive budget.*

- B. **Expenditures:** *Explain the expenditure amounts. Provide detail, when appropriate, for each agency, line item, and fund affected and the number of FTE positions affected.*
- C. **Appropriations:** *Explain the appropriation amounts. Provide detail, when appropriate, for each agency and fund affected. Explain the relationship between the amounts shown for expenditures and appropriations. Indicate whether the appropriation or a part of the appropriation is included in the executive budget or relates to a continuing appropriation.*

**Name:** Kathryn Strombeck

**Agency:** Office of Tax Commissioner

**Telephone:** 701.328.3402

**Date Prepared:** 04/17/2019

**FISCAL NOTE**  
**Requested by Legislative Council**  
**01/14/2019**

Amendment to: HB 1439

- 1 A. **State fiscal effect:** *Identify the state fiscal effect and the fiscal effect on agency appropriations compared to funding levels and appropriations anticipated under current law.*

	2017-2019 Biennium		2019-2021 Biennium		2021-2023 Biennium	
	General Fund	Other Funds	General Fund	Other Funds	General Fund	Other Funds
Revenues						
Expenditures						
Appropriations						

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Cities			
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- 2 A. **Bill and fiscal impact summary:** *Provide a brief summary of the measure, including description of the provisions having fiscal impact (limited to 300 characters).*

HB 1439 expands the oil extraction tax exemption for incremental production from a tertiary recovery project utilizing injected carbon dioxide produced from coal.

- B. **Fiscal impact sections:** *Identify and provide a brief description of the sections of the measure which have fiscal impact. Include any assumptions and comments relevant to the analysis.*

HB 1439 creates an oil extraction tax exemption for incremental production from a tertiary recovery project that utilizes carbon dioxide from coal in a qualified project that has been certified by the industrial commission. The exemption is for twenty years for a project located outside the Bakken and Three Forks formations and ten years for a project located within the Bakken or Three Forks formations.

Because five- and ten-year tertiary recovery exemptions exist in current law, the provisions of HB 1439, which expand the period of exemption to ten and twenty years, would occur outside the biennium. There is no fiscal impact in the 2019-21 biennium.

3. **State fiscal effect detail:** *For information shown under state fiscal effect in 1A, please:*

- A. **Revenues:** *Explain the revenue amounts. Provide detail, when appropriate, for each revenue type and fund affected and any amounts included in the executive budget.*

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**Name:** Kathryn Strombeck

**Agency:** Office of Tax Commissioner

**Telephone:** 701.328.3402

**Date Prepared:** 01/23/2019

**FISCAL NOTE**  
**Requested by Legislative Council**  
**01/14/2019**

Bill/Resolution No.: HB 1439

- 1 A. **State fiscal effect:** *Identify the state fiscal effect and the fiscal effect on agency appropriations compared to funding levels and appropriations anticipated under current law.*

	2017-2019 Biennium		2019-2021 Biennium		2021-2023 Biennium	
	General Fund	Other Funds	General Fund	Other Funds	General Fund	Other Funds
Revenues						
Expenditures						
Appropriations						

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	2017-2019 Biennium	2019-2021 Biennium	2021-2023 Biennium
Counties			
Cities			
School Districts			
Townships			

- 2 A. **Bill and fiscal impact summary:** *Provide a brief summary of the measure, including description of the provisions having fiscal impact (limited to 300 characters).*

HB 1439 expands the oil extraction tax exemption for incremental production from a tertiary recovery project utilizing injected carbon dioxide produced from coal.

- B. **Fiscal impact sections:** *Identify and provide a brief description of the sections of the measure which have fiscal impact. Include any assumptions and comments relevant to the analysis.*

HB 1439 creates an oil extraction tax exemption for incremental production from a tertiary recovery project that utilizes carbon dioxide from coal in a qualified project that has been certified by the industrial commission. The exemption is for twenty years for a project located outside the Bakken and Three Forks formations and ten years for a project located within the Bakken or Three Forks formations.

Because five- and ten-year tertiary recovery exemptions exist in current law, the provisions of HB 1439, which expand the period of exemption to ten and twenty years, would occur outside the biennium. There is no fiscal impact in the 2019-21 biennium.

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**Name:** Kathryn Strombeck

**Agency:** Office of Tax Commissioner

**Telephone:** 701.328.3402

**Date Prepared:** 01/23/2019

**2019 HOUSE ENERGY AND NATURAL RESOURCES COMMITTEE**

**HB 1439**

# 2019 HOUSE STANDING COMMITTEE MINUTES

## Energy and Natural Resources Committee

Coteau A Room, State Capitol

HB 1439

1/24/2019

31398

☐ Subcommittee

☐ Conference Committee

Committee Clerk

Kathleen Davis

### Explanation or reason for introduction of bill/resolution:

Relating to an oil extraction tax for the incremental production from tertiary recovery projects using carbon dioxide; and to provide an effective date

### Minutes:

Attachment 1,2,3,4,5,6

**Vice Chairman Damschen** called the hearing to order on HB 1439.

**Rep Porter, Dist. 34, Mandan:** Presented Attachment 1, an amendment to HB 1439. We've always had tertiary and incremental recovery systems in our oil fields. We've allowed them a tax exemption up to 10 years of the oil tax for that recovery because of the expenses involved in getting the oil out. We're not talking about Bakken wells; we're talking about traditional oil fields. They reach a critical point to unitize a field, to inject into the field something in order to get the rest of the oil out. Typically, we've used water. EERC, our primary source of information in the Bakken show us is that CO<sub>2</sub> is a valuable source to increase production in some of these traditional fields. Our problem is we don't have any large scale CO<sub>2</sub> inside ND. You have to get to WY where they have sources in the ground, drill a well, get CO<sub>2</sub> out. What we do have is a viable lignite industry, a lot of coal generate power plants and a target on them coming from WDC. This project not only enhances oil recovery inside ND in traditional fields, it's creating a beneficial use for our CO<sub>2</sub> from existing coal fired power plants. The technology is up and coming how to capture it and put it to beneficial use. It's a win-win for both industries and for ND. There is a war on coal and we have an 800 year supply of lignite in this state. We need to figure out a way to solidify our coal fired generation for jobs, taxes, baseload power provided, and we need to figure out how to get more oil out of the ground in these traditional oil fields and get them resources they need to do that. This bill asks that we extend the incremental tax, not a base tax. The Supreme Court has looked at that the bill was never intended to prevent the superior mining of the mineral estate in ways they see necessary. So water flooding, putting water back down in, the argument could be made that it belongs to the surface. It is part of the mineral. Same with this new CO<sub>2</sub> product. We need to make it clear if you're still using tertiary recoveries, that what you're putting down here is part of the recovery, not to store the CO<sub>2</sub>.

8:00



**Sen Unruh:** I am here to testify in favor of the bill. This bill is the dream. If we could take our CO<sub>2</sub> emissions from our coal fired power plants, inject it underground to get more oil out of the ground, that would be an awesome legacy. I hope with the development of technology over the years we can get there. It helps our conventional fields. I ran across a mistake in the Century Code that seems to have been carried over into this bill. Page 2 Line 3, to qualify for the exemption, under this subsection a project must be located outside the Bakken and 3 Forks formations. I believe that word should be or instead of and. This same mistake is found on Line 14 of the same page. Line 15 same page, says, "Bakken and Three Forks" certainly needs to be or.

**Vice Chairman Damschen:** questions? Further testimony

**Rep. Michael Howe,** Dist. 22, Cass County: The reason I signed on is because what happens in coal county has a trickledown effect of what happens in the eastern part of the state. This bill will help keep utility rates low for people in my district.

**Vice Chairman Damschen:** questions? Further

**Jason Bohrer,** president and CEO of the Lignite Energy Council: presented Attachment 2.

**Rep. Keiser:** The fiscal note has no fiscal impact because it won't happen during this biennium. Can you share your vision of the time table you project it happening?

**Bohrer:** How are we operating in all manners in a fiscally responsible way? We're only talking about incremental. There's never an impact because those barrels would stay in the ground but for this. We can anticipate projects in the field in the next 3-4 years. We're trying to make sure the science works, 4-5 years down the road.

**Rep. Roers Jones:** The barrels that would otherwise stay in the ground? How do you determine that for the wells inside the Bakken and Three Forks, will they have to use traditional production methods until they are not successful and then they'll use the CO<sub>2</sub> injection after that point and have the tax deductions going forward?

17:54

**Bohrer:** Making sure we are extracting the maximum value for the taxpayer and the state out of the Bakken is one of our primary priorities. That issue I think would unfold as you described.

**Vice Chairman Damschen:** further questions? Further testimony?

**Ron Ness, ND Petroleum Council:** This takes me back to a discussion I had back in about 2002, when are the oil companies going to utilize ND CO<sub>2</sub> which has been coming out of ND Gasification Plant and going through ND oil fields into Canada, and when are the coal companies going to provide us a reliable source of CO<sub>2</sub>. Then along comes EERC into the conversation. It's been 15 years of trying to get these stars aligned. Finally, technology is arriving to capture CO<sub>2</sub> off coal plants not just Dakota Gasification, which that CO<sub>2</sub> had been committed in long term contracts into Canada. You have aging retired ND declining oil fields

and now producing less than 5% of our oil productions. The fiscal note on this bill would not impact until a decade after the project begins and getting your first incremental barrel of oil. From the state's standpoint, there is no risk here. We support the concept. This bill makes ND sense and a move in the right direction.

**Vice Chairman Damschen:** questions.

**Rep. Roers Jones:** I understand the benefit. Are there other sources of CO<sub>2</sub> we should be considering rather than just limiting it to CO<sub>2</sub> from coal?

**Ness:** Certainly we hope there are. There's a pure source out of ethanol plants. There's another project coming up to MT and Bowman ND from WY, captured CO<sub>2</sub> off of a major gas processing plant.

**Vice Chairman Damschen** further questions? Testimony in favor of HB 1439?

**John Harju, Energy & Environment Research Center of UND:** Presented [Attachment 3](#)

28:30

**Rep. Roers Jones:** Can you give us an idea of the federal tax credits are?

**Harju:** Federal tax credits were enacted last year. Ultimately they'll escalate to \$35 per ton of CO<sub>2</sub> stored in an enhanced oil recovery project. There's a number of things the operator needs to prove up and some lagging guidelines from treasury to utilize that. We would need about ½ ton of CO<sub>2</sub> for each incremental barrel of oil, an incentive on a per barrel basis, that multiple of the 35. As a point of reference, we estimate the cost of capture and compression on the order of \$60-65 per ton and the value of CO<sub>2</sub> delivered to a field based on market prices to be on the order of \$20-30 ton. There's still a gap between what your federal tax credit might be, the intrinsic economic value and the actual cost of getting that CO<sub>2</sub>.

**Rep. Keiser:** If we have this growth, wouldn't we be able to use all the CO<sub>2</sub> produced in the current demand now be able to market that and if not, market it outside of the state?

**Harju:** I don't have all my data but, we don't believe the convention resource would support the capture of all CO<sub>2</sub> from all plants and a doubling the industry. However, in the Bakken resource, you may be able to start pointing through those kinds of numbers. The universe of CO<sub>2</sub> amenable oil in our conventional system's on the order of a billion, it's multiples of that in our system.

**Vice Chairman Damschen:** further questions? Further testimony?

**Stacey Dahl, Sr. Mgr of External Affairs** for Minnkota Power Cooperative, Grand Forks, ND and Milton R. Young Station, Center ND: presented [Attachment 4.](#)

**Vice Chairman Damschen:** questions? Further testimony?

**Lynn Helms, director of ND Dept. of Mineral Resources:** presented [Attachment 5.](#)

**Vice Chairman Damschen:** questions?

41:54

**Rep. Keiser:** Are any of those contributing factors expected to go up or down? In the end of 10 years when we're ready to go, is that \$5 proportionately turned into \$30?

**Helms:** Best case scenario is 6 years in the future. Some will improve, perhaps EERC will find a way to get more than 4 barrels from a ton of CO<sub>2</sub>. The capture cost could come down. Potentially with what we're going to learn we might be able to turn that \$10 into \$20 - \$30 and statewide applications.

**Rep. Roers Jones:** The phased approach they did in MT and Canada, would be certified as different phases by the Industrial Commission tax benefits would start with each new phase.

**Helms:** Each new phase would get its own 20 years' window.

**Vice Chairman Damschen:** Further testimony in favor?

**Wade Boeshans, president & GM of BNI Energy, Inc.:** presented [Attachment 6](#)

**Vice Chairman Damschen:** questions? Further testimony in favor? Any opposition?  
Closed the hearing.

# 2019 HOUSE STANDING COMMITTEE MINUTES

## Energy and Natural Resources Committee Coteau A Room, State Capitol

HB 1439  
1/25/2019  
31461

- ☐ Subcommittee  
☐ Conference Committee

Committee Clerk	Kathleen Davis
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### Explanation or reason for introduction of bill/resolution:

relating to an oil extraction tax exemption for the incremental production from tertiary recovery projects using carbon dioxide; and to provide for an effective date

### Minutes:

Attachment 1,2
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**Chairman Porter** called the hearing to order on HB 1439.

**Rep. Keiser:** I move the adoption of Amendment 19.8160.01001. Attachment 1

**Rep Ruby:** Second.

**Chairman Porter:** discussion? This differentiates between oil and gas development and the storage of products in the pore space. All those in favor say Aye, opposed? Motion carries.

**Rep. Keiser:** I move the adoption of Amendment 19.8160.01002, (Attachment 2) proposed by Sen. Unruh, which on Page 2 converts the and on line 4 to or; and on Line 15 the and to or. So it would be Bakken or Three Forks in both cases.

**Chairman Porter:** Before you make that motion the Lignite Energy Council had a technical change that was a mistake I would ask you include for Katie's clarification on Page 5, Line 23 at the end that should have been in instead of if.

**Rep. Keiser:** I move that inclusion in with the amendment.

**Rep Devlin:** Second.

**Chairman Porter:** is every one clear on what we're doing?

Page 2 Line 4 it will read, "Bakken or Three Forks" and

Page 2 Line 15 it will read, "Bakken or Three Forks", and

Page 5 Line 23 it will read, "for purposes of this paragraph in determining the most recent 12 months of normal production". Everybody clear on that?

All in favor say Aye, opposed? Motion carried.

We have an amended bill in front of us.

**Rep. Keiser:** I move a do pass on HB 1439 as amended.

**Rep Bosch:** Second.

**Chairman Porter:** We have motion and second for a Do Pass as Amended on HB 1439. Discussion?  
Clerk called roll. 13 yes 0 no 1 absent. Motion carried. Rep Bosch is carrier.

PROPOSED AMENDMENTS TO HOUSE BILL NO. 1439

Page 1, line 1, after "to" insert "create and enact section 47-31-09 of the North Dakota Century Code, relating to injecting substances for oil, gas, and mineral production; and to"

Page 1, after line 4, insert:

"**SECTION 1.** Section 47-31-09 of the North Dakota Century Code is created and enacted as follows:

**47-31-09. Injection of substances to facilitate production of oil, gas, or other minerals.**

This chapter may not be construed to limit the rights or dominance of a mineral estate to drill or recomplete a well under chapter 38-08. Injection or migration of substances into pore space for disposal operations, for secondary or tertiary oil recovery operations, or otherwise to facilitate production of oil, gas, or other minerals is not unlawful and, by itself, does not constitute trespass, nuisance, or other tort."

Renumber accordingly

DP 1/25/19

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Page 1, line 1, after "to" insert "create and enact section 47-31-09 of the North Dakota Century Code, relating to injecting substances for oil, gas, and mineral production; to"

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Page 2, line 4, replace "and" with "or"

Page 2, line 15, replace "and" with "or"

Page 5, line 23, replace "if" with "in"

Renumber accordingly

Date: 1-25-19  
Roll Call Vote #: 1

2019 HOUSE STANDING COMMITTEE  
ROLL CALL VOTES  
BILL/RESOLUTION NO. 1439

House Energy and Natural Resources Committee

☐ Subcommittee

Amendment LC# or Description: 19, §160.01001

Recommendation: ☒ Adopt Amendment  
☐ Do Pass ☐ Do Not Pass ☐ Without Committee Recommendation  
☒ As Amended ☐ Rerefer to Appropriations  
☐ Place on Consent Calendar  
Other Actions: ☐ Reconsider ☐

Motion Made By Keiser Seconded By Ruby

Representatives	Yes	No	Representatives	Yes	No
Chairman Porter			Rep. Lefor		
Vice Chairman Damschen			Rep. Marschall		
Rep. Anderson			Rep. Roers Jones		
Rep. Bosch			Rep. Ruby		
Rep. Devlin			Rep. Zubke		
Rep. Heinert					
Rep. Keiser			Rep. Mitskog		
			Rep. Eidson		

Total (Yes) \_\_\_\_\_ No \_\_\_\_\_

Absent Voice Vote

Floor Assignment \_\_\_\_\_

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

Motion Carried



Date: 1-25-19  
Roll Call Vote #: 2

**2019 HOUSE STANDING COMMITTEE  
ROLL CALL VOTES  
BILL/RESOLUTION NO. 1439**

House Energy and Natural Resources Committee

☐ Subcommittee

Amendment LC# or Description: 19.8160.01002

Recommendation: ☒ Adopt Amendment  
☐ Do Pass ☐ Do Not Pass ☐ Without Committee Recommendation  
☐ As Amended ☐ Rerefer to Appropriations  
☐ Place on Consent Calendar  
Other Actions: ☐ Reconsider ☐

Motion Made By Rep. Keiser Seconded By Rep. Devlin

Representatives	Yes	No	Representatives	Yes	No
Chairman Porter			Rep. Lefor		
Vice Chairman Damschen			Rep. Marschall		
Rep. Anderson			Rep. Roers Jones		
Rep. Bosch			Rep. Ruby		
Rep. Devlin			Rep. Zubke		
Rep. Heinert					
Rep. Keiser			Rep. Mitskog		
			Rep. Eidson		

Total (Yes)                      No                     

Absent                     

Floor Assignment                     

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

Page 2 Line 4 it will read, "Bakken or Three Forks" and  
Page 2 Line 15 it will read, "Bakken or Three Forks", and  
Page 5 Line 23 it will read, "for purposes of this paragraph in determining the most recent 12 months of normal production".

Date: 1-25-19  
Roll Call Vote #: 3

2019 HOUSE STANDING COMMITTEE  
ROLL CALL VOTES  
BILL/RESOLUTION NO. 1439

House Energy and Natural Resources Committee

☐ Subcommittee

Amendment LC# or Description: \_\_\_\_\_

Recommendation: ☐ Adopt Amendment  
☒ Do Pass ☐ Do Not Pass ☐ Without Committee Recommendation  
☒ As Amended ☐ Rerefer to Appropriations  
☐ Place on Consent Calendar  
Other Actions: ☐ Reconsider ☐ \_\_\_\_\_

Motion Made By Rep Keiser Seconded By Rep Bosch

Representatives	Yes	No	Representatives	Yes	No
Chairman Porter	✓		Rep. Lefor	✓	
Vice Chairman Damschen	✓		Rep. Marschall	✓	
Rep. Anderson	✓	AB	Rep. Roers Jones	✓	
Rep. Bosch	✓		Rep. Ruby	✓	
Rep. Devlin	✓		Rep. Zubke	✓	
Rep. Heinert	✓				
Rep. Keiser	✓		Rep. Mitskog	✓	
			Rep. Eidson	✓	

Total (Yes) 13 No 0

Absent 1

Floor Assignment Rep Bosch

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

**REPORT OF STANDING COMMITTEE**

**HB 1439: Energy and Natural Resources Committee (Rep. Porter, Chairman)** recommends **AMENDMENTS AS FOLLOWS** and when so amended, recommends **DO PASS** (13 YEAS, 0 NAYS, 1 ABSENT AND NOT VOTING). HB 1439 was placed on the Sixth order on the calendar.

Page 1, line 1, after "to" insert "create and enact section 47-31-09 of the North Dakota Century Code, relating to injecting substances for oil, gas, and mineral production; to"

Page 1, after line 4, insert:

**"SECTION 1.** Section 47-31-09 of the North Dakota Century Code is created and enacted as follows:

**47-31-09. Injection of substances to facilitate production of oil, gas, or other minerals.**

This chapter may not be construed to limit the rights or dominance of a mineral estate to drill or recomplete a well under chapter 38-08. Injection or migration of substances into pore space for disposal operations, for secondary or tertiary oil recovery operations, or otherwise to facilitate production of oil, gas, or other minerals is not unlawful and, by itself, does not constitute trespass, nuisance, or other tort."

Page 2, line 4, replace "and" with "or"

Page 2, line 15, replace "and" with "or"

Page 5, line 23, replace "if" with "in"

Renumber accordingly

**2019 SENATE FINANCE AND TAXATION**

**HB 1439**

# 2019 SENATE STANDING COMMITTEE MINUTES

## Finance and Taxation Committee Lewis and Clark Room, State Capitol

HB 1439  
3/4/2019  
Job #33085

- ☐ Subcommittee  
☐ Conference Committee

Committee Clerk: Alicia Larsgaard
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### Explanation or reason for introduction of bill/resolution:

A BILL for an Act to create and enact section 47-31-09 of the North Dakota Century Code, relating to injecting substances for oil, gas, and mineral production; to amend and reenact subsection 3 of section 57-51.1-03 of the North Dakota Century Code, relating to an oil extraction tax exemption for the incremental production from tertiary recovery projects using carbon dioxide; and to provide an effective date.

### Minutes:

Attachments: 6
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**Chairman Cook:** Called the committee to order on HB 1439.

**Vice Chairman Kannianen took over the hearing while Senator Cook went to introduced a bill in another committee.**

**(2:30) Senator Porter, District 34, Mandan:** Introduced HB 1439. This bill was worked on during the interim and it deals with CO2 enhanced oil injection along with the war on coal that has been going on since the mid-2000s. This was to figure out when the Supreme Court said the CO2 was problem emission to figure out a beneficial use of CO2 inside our existing coal fired power plants. You have a method before you to extend an exemption on the tax for the stripper well in order to allow them to use enhanced tertiary recovery. The hoax is that it will come from the coal fired power plants in Project Tundra and be piped out to the fields and then put into place. There are many experts behind me that are fully in favor of this. This bill benefits not only our coal fired power plant lignite industry, it also benefits our oil industry by using the technology developed at EERC to do enhanced oil recovery. Some of you are on Senate Energy. All of the senators were aware of the bill dealing with pore space. This bill has a component in it that deals with the definition of injecting CO2 down into the field that is still part of the mineral estate. When we did the bill on the pores base and CO2 storage, it bumped up against a little of the enhanced oil recovery whether it be a water flood or a CO2 secondary recovery. We wanted to make sure we are clear that that is still part of the mineral estate. I think that is in section 1 of the bill. With that, I will be happy to answer any questions. I know the industry is here and ready to go into the fine details of what we are doing.

**Chairman Cook took over the hearing back over.**

**Senator Patten:** As you know the pore space issue has become hot over the last few days in relation to SB 2344. I want to refer to section 1 on line 14-15. In 14-31-03 the title of pore space is specifically granted to the surface owner. Essentially you are authorizing the use of the pore space under this bill without considering the surface owner's interests, correct?

**Senator Porter:** No. This says how the existing law is and should be interpreted from the start of oil production. The pore space never existed until the mineral was brought out. All of the mineral is not out of that pore space. To use another solution for that mineral owner to get their property out of the ground, is not a trespass. Even though it has components of 2344, this one very specific component is not related to the bill you were citing in chapter 47 because this is the enhancement of the mineral estate, not the storage of a product in perpetuity. When we set that up in 2009, the oil and gas industry was very concerned while we were doing that. That was another component of the war on coal. We were looking for another way to inject CO2 into the ground for permanent storage. If you look into that chapter, you will see that at a point, once the field is certified, the ownership is turned over to the state of ND in perpetuity. It is severed at a point from the surface. In the beginning, it is the surface. Once that field is certified as a storage field, all of the liability for that field belongs to the state of ND in the end. This is very different in regard to chapter 47.

**Senator Kannianen:** I would like to ask about the economics of this. When we talk about exemptions, it is the idea that it wouldn't be economically viable or the dollars and cents would not quite add up on its own. Is that the case with this? If left on its own without an exemption, it wouldn't be used or economical to do so?

**Senator Porter:** When you look at the equipment out in the field that is necessary, in order to do this on those stripper wells, all we are exemption is the tertiary recovery. It was felt as we looked at this, that that would make it so it would be economically viable. It would be a great partnership between our coal industry and our oil industry on that enhanced recovery. They will do into that a little more.

**Jason Bohrer, President and CEO of the Lignite Energy Council:** Testified in favor of the bill. See attachment #1. Read word for word. (14:00) ended. Introduced Craig Bleth.

**Craig Bleth, Senior Manager, Power Production, Minnkota Power:** Testified in favor of the bill. See attachment #2. Minnkota is a nonprofit electricity generating and transmission cooperative serving eastern ND and western MN. We have about 130,000 customers and cover about a 35,000 square mile area. In recent years, I have also served on the leadership committee in the development of Project Tundra. This project is a proposed retrofit project on our unit 2 at the Milton Young Station to capture carbon Dioxide. This is an example of a project that can benefit from the policies in HB 1439. The project is in the research and development phase with our partners including Eagle Energy, BNI Energy, EERC, ND Industrial Commission, and the Department of Energy. If carbon capture and utilization projects like Tundra are built in the state, the benefits to the lignite petroleum industry in the state of ND are unquestionable. Minnkota wants to find a long term path for our Milton Young Station to operate. These plants are presently proposed to operate to 2042. Carbon regulation will eventually be a factor in how long these facilities are able to operate. We are seeking a technology solution to help position our facilities to bare the back and forth swings we have been seeing particularly in the last 5 years. These projects are complex, expensive,

and risk intensive. Every small advantage the project can get, helps. It is only a tax relief if these projects are built and actually applied. This target incentive will help coal and aligns with our state's petroleum industry for the future or economic growth in both of these industries. We are in support of this bill and encourage the committee to recommend a do pass this bill.

**Chairman Cook:** Can you explain where Project Tundra is at today?

**Craig Bleth:** We are involved in two separate projects with the EERC and other industry partners. It is in the pre front end engineering design state. Last fall, the ND Industrial Commission awarded the \$15 M for participation in a fee study which is the front end engineering design where the final design takes place contingent upon the same cost from the D.O.E. We are expecting an application from them later in the second quarter.

**Chairman Cook:** Has anything like this been done elsewhere?

**Craig Bleth:** Two projects come to mind, one in Texas and one at Boundary Dam 3 in Canada. In 2017, that is when petro nova came on. That is about half the size of what we are proposing from Young two but about the technology.

**Chairman Cook:** So the wheel has been invented and it works?

**Craig Bleth:** Yes.

**Senator Patten:** Can you tell me how the Project Tundra utilizes the service ownership of pore space and how the relationship is going as far as agreements and so on?

**Craig Bleth:** Those things we know. We are not nearly to that point yet as far as permitting and leasing. They are being contemplated. We are supportive of anything that will allow this to productively move forward.

**Brian Kalk, Energy Environment Research Center (EERC):** Testified in support. See attachment #3. We see this bill as a bridge in the gap from what the value of CO2 is now, to what the value of CO2 could be. The exemptions offered in 1439 along with federal exemptions could be the path to make Tundra a reality and get the additional billion barrels of oil out of the ground. We have great things going on in the lab. If we can get these tax credit into place that would be great for us.

**Senator Dotzenrod:** Have you done any work in the field? Is this all in the lab so far?

**Brian Kalk:** There has been a lot of work done in the field. We have an EERC team as well as part of Minnkota out in the field for the past year doing work out at the Young station. We have Project Carbon 1 which is ongoing. Project Carbon 2 in which the state has invested \$15 M in. This brings us into the next phase to have a full scale capture on the Young station. You need to move that CO2 in a pipeline to a field somewhere. You have to have a value of that CO2 to sell to the oil guys. This tax credit would be the bridge to pull it all together. Without them, it will be challenging. There have been a few of these out there but this would be the largest CO2 capture plant on a coal plant in the world. It is revolutionary technology.

We could do it right here in ND and get more oil out of the ground. We could have our lignite industry make a future. It is much more than the lab. It is ongoing. There is work in the lab and the field.

**Senator Dotzenrod:** When they go out into the fields, the lines that go into the ground will have to be a high amount within a unit. Do they use an existing core that has been drilled previously or do they have to drill a separate kind of line to get CO2 in the ground?

**Brian Kalk:** This is the area where I have about 0 expertise. I would refer to the oil industry.

**Chairman Cook:** Project Tundra will capture 100% of the CO2 correct?

**Brian Kalk:** We are working for 90% right now.

**Ron Ness, ND Petroleum Council:** Testified in favor of the bill. The lignite council has come up with a way to fund the project costs on their end which is the last missing star in the alignment to get this going. By doing this, you can create the economics to make it work on the capture side. If you do not have the capture, you do not have anything else. This has been the chicken and the egg issue forever. There are substantial costs on the oil producer side in terms of field preparation and readiness. Project Tundra is looking at old traditional ND oil fields. In terms of enhances oil recovery and using the tertiary method of CO2. You need the pipeline which is about \$1 M per mile. The focus of this bill is how to ensure the economics of the capture will work to get the oil and take the risk. The risk is on the production end for our oil producer who will likely do this. If you do not make it work with all these components, the bill won't have an impact on anything. At the end of the day, you have to produce a bill to get anything out of this. We stand in support of this bill. It has been a long time coming. EERC is the only thing that has made the technology available and possibly. We have to see if we can apply this in ND oil fields. This is only for the additional incremental benefit that is only on incremental oil. If I am getting 50 barrels a day, it is only on the oil that is produced about the 50 barrels. If I get 100, then I receive this tax exemption on the additional 50. I still pay the full 10% on the first 50 barrels. That work is done by the industrial commission when you unitize and bring this project forward. I will stand for any questions.

**Chairman Cook:** Can you answer Senator Dotzenrod's previous question?

**Ron Ness:** Senator Dotzenrod, can you ask the question again?

**Senator Dotzenrod:** It appears that in order to make this recovery work, you have to have a number of injection cites to get the oil to migrate to a place where it can be withdrawn from the ground. Those lines that carry CO2 down, are you going to use existing wells to take the CO2 down or does that have to be a separate operation to get that CO2 line into the ground?

**Ron Ness:** You have to go through your entire field and change over all the infrastructure and equipment in order to manage that CO2. I think in regards to the injection wells, you are going to use the existing wells you have. You are going to do this after you have done a water flood. You are going to convert your water injection wells into wells that will utilize CO2. Typically, you do these on a larger field in phases because of the size of the magnitude and the question if there is enough CO2 to do the whole field. You are going to phase your field



in over time. The key component is that it is a big risk on the operation end. We have to crack this code. The suppliers also have to find themselves an operator that is willing to take the risk. In this case, we currently have two ND entities coming together to do this. This is not easy. It is risky and expensive.

I also have a comment on Senator Patten's pore space question. We have been injecting water into oil fields for decades to get more oil with never any discussion about additional compensation to recover that. We have also injected air or other things. I think the pore space question is similar to air space above your home. You can fly through it all you want but until I am damaged, I do not really owe you anything. It is whether it is the water the state of ND owns or something being utilized to enhance that mineral estate which is owned separately.

**Senator Dotzenrod:** SB 2344, the issue with pore space is different than the pore space issue here if I understand what you are saying.

**Ron Ness:** I think you are right. This is in a separate chapter. This is about the injection of a substance to enhance the productivity and the recovery of the energy source.

**Senator Dotzenrod:** That is to using those as a storage.

**Ron Ness:** Yes. The intent of the original geological pore space issue in chapter 47 was all about geological equation of storage and not about mineral development or enhancement.

**Lynn Helms, Director, ND Industrial Commission Department of Mineral Resources:** Testified in favor of the bill. See attachment #4. You can see the prize at the top of the testimony. We are talking about utilization of captured carbon. If we put it into conventional resources, the potential is 1 billion barrels of recovery. Those resources are producing about 45,000 barrels a day. It is a diminishing resource. Over the last 15 years, half of the conventional well have been plugged. As time goes on and the infrastructure ages, we are losing that opportunity. That Bakken is producing 1.35 million barrels a day and potentially 7 billion barrels from CO2 recovery. That is much harder to get at. The oil industry can afford to pay a maximum of \$20 per ton for that captured CO2. There is a federal program called 45Q which by 2024 will contribute \$35 per to in tax credits. That still leaves you \$5 per ton short. Our calculations on the effects of this bill is that it will create a 10 dollar per ton tax credit. It will switch you from a \$5 deficit to a \$5 profit in terms of doing this type of work. Foreman Butte is the field 120 miles away where it is anticipated the EOR project will take place. It is currently being transferred from an Australian company to a ND company. There is a pilot water flood going on right now. In response to Senator Dotzenrod's question, there are lots well bores in that field ready to inject CO2 and to produce enhanced recovery. At the Tundra capture site, the modeling is underway. There was a well drilled this last year to core and evaluate the broom creek formation as back up storage. EERC is helping Minnkota to prepare a permit application. It could involve as many as 5 CO2 storage wells and their intention would be to amalgamate that pore space in Center ND and to lease and pay the pore space owners for the permanent storage of that CO2 plume. You can see the industrial commission already heavily involved. There are \$50 M in conjunction with D.O.E and Minnkota funds to support the feed study for this.

Section 2 of this bill lays out how the industrial commission is going to calculate incremental oil for these tertiary projects and how that tax will work and be transmitted to the tax department. The interesting thing about these projects is that they do not all happen all at once. Section two of the bill allows for an operator to come in and recertify each phase of the CO2 project so it tends to extend the impact on carbon capture and on the positive impact on the lignite industry. I will be happy to take questions.

**Senator Patten:** Can you talk about the effect of the CO2 injection in the tighter formations regarding feasibility. My understanding is that it is more challenging than it would be in Bowman County.

**Lynn Helms:** That is true. The Bakken and Three Forks CO2 recovery is still at laboratory scale. That is 90% recovery. There has not been a successful secondary project in the Bakken in Three Forks yet. There are two projects underway there is one at Ross and one at Tioga. I just heard some promising results of the one at Ross. We should be able to move CO2 out of the lab to some sort of field demonstration project in the Bakken and Three Forks. We are years away from that. We are ready to move CO2 recovery from demonstration projects to a field wide because is it a conventional resource.

**Senator Patten:** For everyone's benefit, could you walk through the stages of that production from a new well all the way down to the stripper wells as far as the stages in water flood and so on.

**Lynn Helms:** When the wells are drilled, they rely on formation pressure to move oil and gas to the surface. That is called pressure depletion. The recoveries can range from 10-20%. In the Foreman Butte area, I believe the recovery is in the 15-20% range. Just decreasing the pressure and letting the oil flow, you can get about 1/5 of it. Water floor typically follows where you pump water into the formation. Water and oil do not mix but water re pressures and pushed oil ahead of it. In the case of Foreman Butte, the anticipation is that we might get to 1/3. If that is successful, then you can put a solvent in.

**Senator Patten:** Can that water flood be fresh water or salt water?

**Lynn Helms:** It can be saltwater. It is best if it is formation water because that is known to be compatible with the fluids already in the reservoir. Sometimes, the fresh water reacts with the formation water and plugs it up. The preference is to use produced or formation water. Forman Butte is using Bakken produced water for this pilot water flood. Once that is demonstrated successfully, then a solvent like CO2 can be introduced. That actually mixes with the oil and changes the characteristics of it. It flows much easier. There are cases where the recovery is 65% in Texas using solvent methods like CO2. That is the hope here. We are ready to move this type of project out of the lab and into field demonstration. The economics do not work without some kind of tax incentive.

**Senator Dotzenrod:** The typical production curve on Bakken wells is that getting of a lot of production right away and then a pretty rapid decline. It is my understand that with the CO2 projects, it is almost the opposite. You will start a little slow and then it climbs up and levels up and you get a pretty steady production for an expanded period of time. This map you have here of Weyburn; is that what they experienced there?

**Lynn Hems:** In Weyburn and in Bell Creek that is true. Production was in decline when CO2 was introduced. Weyburn went on a continuous build in production for 11 years. Now it is stable. It has been stable now for almost 8 years with constant production. Bell Creek is still building because they are continuing to implement additional phases. They have been injecting now for 5.5 years. The production is continuing to increase. It will probably stabilize in the mid-20s and probably stay there for as much as a decade. It is a great way for offsetting those extreme declines.

**Senator Dotzenrod:** When you say it has been stable for 11 years, it has been stable at a fairly high level of production.

**Lynn Helms:** Yes. In Weyburn, it took them 11 years to build the production. It has been stable for 7 years. It is actually producing as much as it was at the peak of its water flood production. They create a long term stable income for the oil and gas industry as well as the carbon capture folks.

**Chairman Cook:** Any further testimony in support? Any testimony opposed?

**Connie Triplet, Grand Forks:** Testified neutrally to the bill. See attachment #5. I am not opposed to the entire bill. I have signed in as neutral on section 2 and opposed to section 1. The reason I am neutral on section 1 is not about the concept. I think those of you will recall my participation on this committee for many years and will know I was a proponent of this motion of integrating the coal and oil industries in ND around carbon capture and storage. I am not opposed to the concept. I am neutral to section 2 because I am not familiar with the economics. **(43:15)** Began reading from her testimony. **(47:15)** I am going to answer Senator Dotzenrod's question about this. My understanding is that when CO2 is used for EOR, it is a repeated process. When you inject CO2, oil comes up. When the oil comes up, some of the CO2 comes up too. Each time that happens, the CO2 is then separated from the new oil and reused. Each time it is recycled, some portion of it stays down into the subsurface. I believe that could be metered. They know how much they are injecting in and they know how much of it comes out when they separate it back out again. **(48:18)** Began reading from testimony again at the bottom of page 2. **(49:57)** Someone made a point that pore space does not actually exist until the oil is removed. Maybe there is a tradeoff. The oil companies may say they are creating pore space for the company owners by sucking this oil out. If they end of using 10% of storage, maybe the companies owe them instead of them owing the companies. I do not know how the economics of this are going to work out. I am just saying you have to honor the legal right of the surface owners to this pore space. The free market can decide these things. **(50:35)** Began reading from testimony on page 3.

**(51:20):** I would like to take a few more minutes to make some comments on some things I heard throughout the hearing so far. Representative Porter made the point that section 1 is a component of enhancing the mineral estate and it is not permanent storage. I think he was wrong about that to the extent I described. I think there is some component of permanent storage that has to be dealt with. Senator Dotzenrod asked Brian Kalk about work in the lab or in the field. I think they ended up clarifying that his question was about storage and his initial response was about the carbon capture at the coal industry end of it. I would like to answer his question about whether this work has been done in the lab or the field. I can

answer that will clarify because I am married to the fellow that was the director of the EERC. That project was huge and the Department of Energy put out bids for 7 separate projects across the country to study carbon capture. The EERC got one of those bids. Their piece of the country was the entire great plains. Two Canadian provinces joined in. It was a ten-year project. It was funded mostly by D.O.E. The main part of it was that it was a public private partnership so that many industry partners ended up joining in and providing an enormous amount of contributions including drilling wells for this project only. The end result is that up and down the Great Plains, something more than \$600 M was spent over a period of 10 years. This research is pretty thorough. Ron Ness made a point about the pore space question. He said we have been injected water and air into the wells for decades. He used the analogy of flying through the air and not harming anyone. I agree that the water and air floods are not something that should bring us to the concern about paying anyone for pore space. Those are both natural and harmless products. I think the question comes in when you talk about disposal. Disposal wells have no place in this conversation. If you are injecting hazardous material into the pore space, that is an issue where then someone's post mineral production pore space is degraded and used up. Those people should certainly be paid for that. The other issue is to the extent of the permanent storage of carbon dioxide or natural gas and the landowner would have to pay out. We have to try to maintain consistency and not split it out from multiple chapters. I request that you guys focus on the piece that you are good at which is the tax issue and leave the pore space to the natural resource committees.

**Chairman Cook:** Any further testimony? Hearing none, we will close the hearing on HB 1439.

**Connie Triplet later submitted further data to the committee. See attachment #6.**

# 2019 SENATE STANDING COMMITTEE MINUTES

## Finance and Taxation Committee Lewis and Clark Room, State Capitol

HB 1439  
4/1/2019  
Job #34389

- ☐ Subcommittee  
☐ Conference Committee

Committee Clerk: Alicia Larsgaard
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### Explanation or reason for introduction of bill/resolution:

A BILL for an Act to create and enact section 47-31-09 of the North Dakota Century Code, relating to injecting substances for oil, gas, and mineral production; to amend and reenact subsection 3 of section 57-51.1-03 of the North Dakota Century Code, relating to an oil extraction tax exemption for the incremental production from tertiary recovery projects using carbon dioxide; and to provide an effective date.

### Minutes:

Attachments: 2
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**Chairman Cook:** Called the committee to order on HB 1439.

**Chairman Cook:** Distributed proposed amendments. See attachment #1 and #2.

This is the project Tundra bill. It offers a 20-year junction from extraction tax on incremental oil produced in the tertiary oil well. The amendments you have are adding sales tax exemption on anything required for storage of CO2. That is underground storage that basically consists of a pipe and a pump to move the CO2. There was talk about removing section 1 dealing with pore space. I think we will leave that in place until we are closer to the finish line.

Committee, you can review these. We are going to get them in legislative form. We will come back tomorrow for final passage unless you have some questions.

**Senator Patten:** We are planning on working on 2344 tomorrow. Senator Unruh and I have some people coming into town. There will also be some people from the industry. We are looking for a timeframe tomorrow. I am not sure how long you are thinking this would take or maybe we want to wait until Wednesday.

**Chairman Cook:** I think we can come in at 11 AM tomorrow. That will give you all morning.

**Senator Patten:** Okay. If we are not done by then, we can go back to it.

**Chairman Cook:** Okay. Does anyone else have any questions on the amendments?

**Senator Dotzenrod:** If we have time, I can spend it with myself on this. However, it says near the bottom of page 1, "transport or inject carbon dioxide for secure geologic storage." Is that the pore space argument, again?

**Chairman Cook:** I do not know if I would say that is the pore space argument. We are talking about putting CO<sub>2</sub> in the ground for storage.

**Senator Unruh:** There are two things that you can do with the CO<sub>2</sub> once you capture it. You can take it to a conventional field and get more oil out of the ground or you can put it in secure geologic storage; basically a cavern under the ground. That is all that is referring to.

**Senator Dotzenrod:** I am not geologically educated enough to know if this storage takes place in something like a cavern or if it goes into the pore space and becomes part of that. This seems to be a debate this session. There are questions about who owns the pore space. I am assuming this does get wrapped into that argument.

**Chairman Cook:** I think it could.

**Senator Unruh:** Yes. That was also previously addressed in the 2009 session so part of that is already taken care of in the law.

**Chairman Cook:** We are going to have this drafted in council form. We are going to adjourn and come back at 11 AM tomorrow morning.

# 2019 SENATE STANDING COMMITTEE MINUTES

## Finance and Taxation Committee Lewis and Clark Room, State Capitol

HB 1439  
4/2/2019  
Job #34445

- ☐ Subcommittee  
☐ Conference Committee

Committee Clerk: Alicia Larsgaard
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### Explanation or reason for introduction of bill/resolution:

A BILL for an Act to create and enact section 47-31-09 of the North Dakota Century Code, relating to injecting substances for oil, gas, and mineral production; to amend and reenact subsection 3 of section 57-51.1-03 of the North Dakota Century Code, relating to an oil extraction tax exemption for the incremental production from tertiary recovery projects using carbon dioxide; and to provide an effective date.

### Minutes:

Attachments: 1
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**Chairman Cook:** Called the committee to order on HB 1439.

**Chairman Cook:** We had amendments handed out yesterday for your review. Are there any questions on the amendments?

I asked Claire to come down here from Legislative Council in case you have any amendments or questions on pore space.

**Senator Dotzenrod:** I asked a question yesterday about pore space. I was a little concerned if these amendments would get tangled up in that sort of dispute that is going on. I found that I do not think these amendments effect any part of that argument. Section 2 amendment 57-06 is a sales tax. It is a ten-year property tax break. Section 3 is in 57-39.2 which is sales tax. It uses that term "secure geologic storage". I was a little uncertain as to what the difference of that was a geologic storage. Secure geologic storage is more or less permanent. It is a specific term. This section 3 is just a sales tax break. It doesn't really get involved in the other argument. Section 5 is in 57-60 of coal conversion facilities privilege tax. As far as I can tell, the amendments are relating to tax matters and do not get involved in that other subject. Looking at it, it seemed like they were good amendments.

**Senator Unruh:** Moved to adopt amendment 19.8160.02001.

**Senator Meyer:** Seconded.

**Chairman Cook:** Any Discussion?

**A Voice Vote Was Taken**

## **Motion Carried**

**Senator Dotzenrod:** It looks like this section 1 does get into this difference of opinion on how to deal with the pore space. It looks like if we pass this bill with that section in there, we would be taking a position that the pore space for the purposes of using it as a secure geologic storage unit and still belonging to the property owner but with no fees or charges. It does not constitute trespass nuisance or other tort. I am concerned about the status of this property ownership question. I would like to get that out of there. I do not feel it works. It seems like it diminishes my whole perspective on the bill. You may have someone who wants to explain what this section does.

**Claire Ness, Legislative Council:** Spoke neutrally on the bill.

Section 1 of the bill does two things. It allows the mineral estate to drill or recomplete wells under chapter 38-08. It says that this bill will not change that in any way. Secondly, it says that injecting a substance into pore space for disposal operations or enhanced recovery or otherwise for oil, gas, or mineral production is not unlawful and removes the ability of a landowner to collect damages in court for any harm that may be caused. By itself, it does not constitute a trespass nuisance or other tort. Another tort means something that would allow the landowner to be compensated for that damage and there is that phrase by itself. Some may say that means that if there is no damage to the land, then there would be no reason to collect any money. However, that is not the way the words, by itself, would operate in this context. It does not allow a landowner to collect anything that might result from the injection of the CO<sub>2</sub>, storage of the CO<sub>2</sub>, or other substance because doing so is not an illegal act. That would be the effect of that second part of section 1. If there are any questions about that, I would be happy to answer them.

**Senator Dotzenrod:** The status of pore space being held by and belonging to the surface owner; is that something that has been controversial for a long time? Is it an old established thing? Does it have a long history? Is this something we are just trying to settle now?

**Claire Ness:** I do not know the answer to that but I can find out for you.

**Senator Patten:** Pore space has been used since 1951 in oil development. It is a long standing practice of using pore space. There have been different decisions along the way that have effected it. There are continued negotiations on 2344 to resolve the issue. It is not a new issue. The use has been there for longer than I have been alive.

**Senator Dotzenrod:** I have a question on the status of who owns it? I understand it has been used in various ways. That pore space and the liability that might go with it or the status of who owns it, is that clear in the law? Do we know who owns it?

**Claire Ness:** There are two separate issues involved. There is title ownership and then there are the bundle of rights that go with that. You may own a title to something but that doesn't mean you would have all the right to compensation for damages to that entity. Ownership and these rights are separable under the law.

**Senator Patten:** In 2009, the legislature identified pore space as a surface ownership issue as well as not being severable from the surface ownership. That took place in 2009.



**Senator Dotzenrod:** My understanding is that the pore space is not severable from the surface ownership right of that surface. The question of rights go with the ownership is a little bit unclear. That is, there might be some surface owners who feel they have some rights that are long standing, assumed rights that property owners have. There might be some rights for how it is used that are not completely clear. You might be able to clear up the ownership status but it doesn't look like we have a clear answer to what rights go with that ownership. That is, if I understand what Claire has said.

**Claire Ness:** That is correct.

**Chairman Cook:** Is it safe to say the level of rights would have determined in the court?

**Claire Ness:** It depends on what the legislation says. If the legislation makes it clear, then it wouldn't necessarily have to go to court.

**Senator Unruh:** Moved a do pass on HB 1439 as amended.

**Senator Patten:** Seconded.

**Chairman Cook:** Any Discussion?

**Senator Dotzenrod:** I have been a supporter of 1439. I think the ideas in this bill in trying to use the CO2 to promote secondary or tertiary recovery is a good idea. It provides some incentives. I think there are some good features to the bill. Section 1 troubles me. I think I will be voting no on the bill as it stands.

**A Roll Call Vote Was Taken: 5 yeas, 1 nay, 0 absent**

**Motion Carried**

**Senator Unruh will carry the bill**

# 2019 SENATE STANDING COMMITTEE MINUTES

## Finance and Taxation Committee Lewis and Clark Room, State Capitol

HB 1439  
4/15/2019  
Job #34730

- ☐ Subcommittee  
☐ Conference Committee

Committee Clerk: Alicia Larsgaard
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### Explanation or reason for introduction of bill/resolution:

A BILL for an Act to create and enact section 47-31-09 of the North Dakota Century Code, relating to injecting substances for oil, gas, and mineral production; to amend and reenact subsection 3 of section 57-51.1-03 of the North Dakota Century Code, relating to an oil extraction tax exemption for the incremental production from tertiary recovery projects using carbon dioxide; and to provide an effective date.

### Minutes:

Attachments: 0
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**Chairman Cook:** Called the committee to order on HB 1439.

**Chairman Cook:** Section 1 dealt with pore space. I have been holding this until 2344 gets to the finish line. I would like to reconsider our previous do pass action so we can remove section 1.

**Senator Unruh:** Moved to reconsider the previous do pass motion on HB 1439 as amended.

**Senator Patten:** Seconded.

**Chairman Cook:** Any Discussion?

**A Voice Vote Was Taken**

**Motion Carried**

**Senator Unruh:** When we dealt with this bill and kicked it out of committee a few weeks ago, there was a lot of discussion about leaving section 1 in the bill. At the time, we were still negotiating on 2344. That legislation is essential to making Project Tundra and other projects like this, work. That is why this section of the bill was included in there in the first place. As we have moved toward a final product for 2344, it looks different. It is more detailed then what we have left here in section 1. This would be duplicative language. I do not think this has changed at all. I do think it would be appropriate for us to pull section 1 out of the bill.

**Senator Unruh: Moved to amend 1439 to remove section 1 of the bill.**

**Senator Patten: Seconded.**

**Chairman Cook: Any Discussion?**

**A Voice Vote Was Taken**

**Motion Carried**

**Senator Unruh: Moved a Do Pass on HB 1439 as Amended.**

**Senator Patten: Seconded.**

**Chairman Cook: Any Discussion?**

**A Roll Call Vote Was Taken: 6 yeas, 0 nays, 0 absent**

**Motion Carried**

**Senator Unruh will carry the bill.**

April 1, 2019

4/2/19  
10/2

PROPOSED AMENDMENTS TO ENGROSSED HOUSE BILL NO. 1439

Page 1, line 2, after "reenact" insert "sections 57-06-17.1 and 57-39.2-04.14,"

Page 1, line 3, after "57-51.1-03" insert ", and section 57-60-06"

Page 1, line 3, after "to" insert "a property tax exemption for pipelines used for secure geologic storage, a sales and use tax exemption for materials used for secure geologic storage,"

Page 1, line 5, after "dioxide" insert ", and property classification of secure geologic storage equipment for coal conversion tax purposes"

Page 1, after line 15, insert:

**"SECTION 2. AMENDMENT.** Section 57-06-17.1 of the North Dakota Century Code is amended and reenacted as follows:

**57-06-17.1. Carbon dioxide pipeline exemption.**

Property, not including land, is exempt from taxation during construction and for the first ten full taxable years following initial operation if it consists of a pipeline, constructed after 1996, and necessary associated equipment for the transportation or storage of carbon dioxide for secure geologic storage or use in enhanced recovery of oil or natural gas.

**SECTION 3. AMENDMENT.** Section 57-39.2-04.14 of the North Dakota Century Code is amended and reenacted as follows:

**57-39.2-04.14. Sales and use tax exemption for materials used in compressing, gathering, collecting, storing, transporting, or injecting carbon dioxide for secure geologic storage or use in enhanced recovery of oil or natural gas.**

1. Gross receipts from sales of tangible personal property used to construct or expand a system used to compress, gather, collect, store, transport, or inject carbon dioxide for secure geologic storage or use in enhanced recovery of oil or natural gas in this state are exempt from taxes under this chapter. To be exempt, the tangible personal property must be incorporated into a system used to compress, gather, collect, store, transport, or inject carbon dioxide for secure geologic storage or use in enhanced recovery of oil or natural gas. Tangible personal property used to replace an existing system to compress, gather, collect, store, transport, or inject carbon dioxide for secure geologic storage or use in enhanced recovery of oil or natural gas does not qualify for exemption under this section unless the replacement creates an expansion of the system.
2. To receive the exemption under this section at the time of purchase, the owner of the gas compressing, gathering, collecting, storing, transporting, or injecting system must receive from the tax commissioner a certificate that the tangible personal property used to construct or expand a system used to compress, gather, collect, store, transport, or inject carbon dioxide for secure geologic storage or use in enhanced recovery of oil or natural

gas qualifies for the exemption. If a certificate is not received before the purchase, the owner shall pay the applicable tax imposed by this chapter and apply to the tax commissioner for a refund.

3. If the tangible personal property is purchased or installed by a contractor subject to the tax imposed by this chapter, the owner of the gas compressing, gathering, collecting, storing, transporting, or injecting system may apply to the tax commissioner for a refund of the difference between the amount remitted by the contractor and the exemption imposed or allowed by this section. Application for a refund must be made at the time and in the manner directed by the tax commissioner and must include sufficient information to permit the tax commissioner to verify the sales and use taxes paid and the exempt status of the sale or use.
4. This chapter and chapter 57-40.2 apply to the exemption under this section."

Page 6, after line 24, insert:

**"SECTION 5. AMENDMENT.** Section 57-60-06 of the North Dakota Century Code is amended and reenacted as follows:

**57-60-06. Property classified and exempted from ad valorem taxes - In lieu of certain other taxes - Credit for certain other taxes.**

Each coal conversion facility and any carbon dioxide capture system located at the coal conversion facility, and any equipment directly used for secure geologic storage of carbon dioxide or enhanced recovery of oil or natural gas must be classified as personal property and is exempt from all ad valorem taxes except for taxes on the land on which the facility, capture system, or equipment is located. The exemption provided by this section may not be interpreted to apply to tangible personal property incorporated as a component part of a carbon dioxide pipeline but this restriction does not affect eligibility of such a pipeline for the exemption under section 57-06-17.1. The taxes imposed by this chapter are in lieu of ad valorem taxes on the property so classified as personal property."

Page 6, line 25, replace "This Act becomes" with "Sections 1 and 4 of this Act become"

Page 6, line 25, after the period insert "Sections 2 and 5 of this Act are effective for taxable years beginning after December 31, 2018. Section 3 of this Act is effective for taxable events occurring after June 30, 2019."

Renumber accordingly

April 15, 2019

SK  
1007  
4/15

PROPOSED AMENDMENTS TO ENGROSSED HOUSE BILL NO. 1439

Page 1, line 1, remove "to create and enact section 47-31-09 of the North Dakota Century Code;"

Page 1, line 2, remove "relating to injecting substances for oil, gas, and mineral production;"

Page 1, line 2, after "reenact" insert "sections 57-06-17.1 and 57-39.2-04.14,"

Page 1, line 3, after "57-51.1-03" insert ", and section 57-60-06"

Page 1, line 3, after "to" insert "a property tax exemption for pipelines used for secure geologic storage, a sales and use tax exemption for materials used for secure geologic storage,"

Page 1, line 5, after "dioxide" insert ", and property classification of secure geologic storage equipment for coal conversion tax purposes"

Page 1, replace lines 7 through 15 with:

**"SECTION 1. AMENDMENT.** Section 57-06-17.1 of the North Dakota Century Code is amended and reenacted as follows:

**57-06-17.1. Carbon dioxide pipeline exemption.**

Property, not including land, is exempt from taxation during construction and for the first ten full taxable years following initial operation if it consists of a pipeline, constructed after 1996, and necessary associated equipment for the transportation or storage of carbon dioxide for secure geologic storage or use in enhanced recovery of oil or natural gas.

**SECTION 2. AMENDMENT.** Section 57-39.2-04.14 of the North Dakota Century Code is amended and reenacted as follows:

**57-39.2-04.14. Sales and use tax exemption for materials used in compressing, gathering, collecting, storing, transporting, or injecting carbon dioxide for secure geologic storage or use in enhanced recovery of oil or natural gas.**

1. Gross receipts from sales of tangible personal property used to construct or expand a system used to compress, gather, collect, store, transport, or inject carbon dioxide for secure geologic storage or use in enhanced recovery of oil or natural gas in this state are exempt from taxes under this chapter. To be exempt, the tangible personal property must be incorporated into a system used to compress, gather, collect, store, transport, or inject carbon dioxide for secure geologic storage or use in enhanced recovery of oil or natural gas. Tangible personal property used to replace an existing system to compress, gather, collect, store, transport, or inject carbon dioxide for secure geologic storage or use in enhanced recovery of oil or natural gas does not qualify for exemption under this section unless the replacement creates an expansion of the system.

2. To receive the exemption under this section at the time of purchase, the owner of the gas compressing, gathering, collecting, storing, transporting, or injecting system must receive from the tax commissioner a certificate that the tangible personal property used to construct or expand a system used to compress, gather, collect, store, transport, or inject carbon dioxide for secure geologic storage or use in enhanced recovery of oil or natural gas qualifies for the exemption. If a certificate is not received before the purchase, the owner shall pay the applicable tax imposed by this chapter and apply to the tax commissioner for a refund.
3. If the tangible personal property is purchased or installed by a contractor subject to the tax imposed by this chapter, the owner of the gas compressing, gathering, collecting, storing, transporting, or injecting system may apply to the tax commissioner for a refund of the difference between the amount remitted by the contractor and the exemption imposed or allowed by this section. Application for a refund must be made at the time and in the manner directed by the tax commissioner and must include sufficient information to permit the tax commissioner to verify the sales and use taxes paid and the exempt status of the sale or use.
4. This chapter and chapter 57-40.2 apply to the exemption under this section."

Page 6, after line 24, insert:

**"SECTION 4. AMENDMENT.** Section 57-60-06 of the North Dakota Century Code is amended and reenacted as follows:

**57-60-06. Property classified and exempted from ad valorem taxes - In lieu of certain other taxes - Credit for certain other taxes.**

Each coal conversion facility and any carbon dioxide capture system located at the coal conversion facility, and any equipment directly used for secure geologic storage of carbon dioxide or enhanced recovery of oil or natural gas must be classified as personal property and is exempt from all ad valorem taxes except for taxes on the land on which the facility, capture system, or equipment is located. The exemption provided by this section may not be interpreted to apply to tangible personal property incorporated as a component part of a carbon dioxide pipeline but this restriction does not affect eligibility of such a pipeline for the exemption under section 57-06-17.1. The taxes imposed by this chapter are in lieu of ad valorem taxes on the property so classified as personal property."

Page 6, line 25, replace "This Act becomes" with "Section 3 of this Act becomes"

Page 6, line 25, after the period insert "Sections 1 and 4 of this Act are effective for taxable years beginning after December 31, 2018. Section 2 of this Act is effective for taxable events occurring after June 30, 2019."

Renumber accordingly

Date: 4-2-19  
Roll Call Vote #: 1

2019 SENATE STANDING COMMITTEE  
ROLL CALL VOTES  
BILL/RESOLUTION NO. 1439

Senate	Finance and Taxation	Committee
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☐ Subcommittee

Amendment LC# or Description: 19.8160.02001

Recommendation: ☒ Adopt Amendment

☐ Do Pass    ☐ Do Not Pass    ☐ Without Committee Recommendation

☐ As Amended    ☐ Rerefer to Appropriations

☐ Place on Consent Calendar

Other Actions: ☐ Reconsider    ☐

Motion Made By Unruh Seconded By Meyer

[illegible]

Total (Yes) \_\_\_\_\_ No \_\_\_\_\_

Absent

## Floor Assignment

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



Date: 4-2-19  
Roll Call Vote #: 2

2019 SENATE STANDING COMMITTEE  
ROLL CALL VOTES  
BILL/RESOLUTION NO. 1439

Senate Finance and Taxation Committee

☐ Subcommittee

Amendment LC# or Description: \_\_\_\_\_

Recommendation: ☐ Adopt Amendment  
☒ Do Pass ☐ Do Not Pass ☐ Without Committee Recommendation  
☒ As Amended ☐ Rerefer to Appropriations  
☐ Place on Consent Calendar  
Other Actions: ☐ Reconsider ☐ \_\_\_\_\_

Motion Made By Unruh Seconded By Patten

Senators	Yes	No	Senators	Yes	No
Chairman Cook	✓		Senator Dotzenrod		✓
Vice Chairman Kannianen	✓				
Senator Meyer	✓				
Senator Patten	✓				
Senator Unruh	✓				

Total (Yes) 5 No 1

Absent 0

Floor Assignment Unruh

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

1

## 1439

## Senate Finance and Taxation

☐ Subcommittee

Amendment LC# or Description: \_\_\_\_\_

Recommendation: ☐ Adopt Amendment ☐ Do Pass ☐ Do Not Pass ☐ Without Committee Recommendation  
☐ As Amended ☐ Rerefer to Appropriations  
☐ Place on Consent Calendar

Other Actions: ☒ Reconsider previous  
do Pass action ☐

Motion Made By Unruh Seconded By Patten

[illegible]

Total (Yes) \_\_\_\_\_ No \_\_\_\_\_

Absent \_\_\_\_\_

## Floor Assignment

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

Date: \_\_\_\_\_  
Roll Call Vote #: \_\_\_\_\_

2019 SENATE STANDING COMMITTEE  
ROLL CALL VOTES  
BILL/RESOLUTION NO. 1439

Senate	Finance and Taxation	Committee
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☐ Subcommittee

Amendment LC# or Description: Remove Section 1

Recommendation: ☐ Adopt Amendment  
☐ Do Pass    ☐ Do Not Pass    ☐ Without Committee Recommendation  
☐ As Amended    ☐ Rerefer to Appropriations  
☐ Place on Consent Calendar  
Other Actions: ☐ Reconsider    ☐

Motion Made By Yinner Seconded By Patten

[illegible]

Total (Yes) \_\_\_\_\_ No \_\_\_\_\_

Absent \_\_\_\_\_

## Floor Assignment

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

Date: 4-15-19  
Roll Call Vote #: 3

2019 SENATE STANDING COMMITTEE  
ROLL CALL VOTES  
BILL/RESOLUTION NO. § 1439

Senate Finance and Taxation Committee

☐ Subcommittee

Amendment LC# or Description: \_\_\_\_\_

Recommendation: ☐ Adopt Amendment  
☒ Do Pass ☐ Do Not Pass ☐ Without Committee Recommendation  
☒ As Amended ☐ Rerefer to Appropriations  
☐ Place on Consent Calendar  
Other Actions: ☐ Reconsider ☐ \_\_\_\_\_

Motion Made By Unruh Seconded By Patten

Senators	Yes	No	Senators	Yes	No
Chairman Cook	✓		Senator Dotzenrod	✓	
Vice Chairman Kannianen	✓				
Senator Meyer	✓				
Senator Patten	✓				
Senator Unruh	✓				

Total (Yes) 6 No 0

Absent 0

Floor Assignment Unruh

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

**REPORT OF STANDING COMMITTEE**

**HB 1439, as engrossed: Finance and Taxation Committee (Sen. Cook, Chairman)** recommends **AMENDMENTS AS FOLLOWS** and when so amended, recommends **DO PASS** (6 YEAS, 0 NAYS, 0 ABSENT AND NOT VOTING). Engrossed HB 1439 was placed on the Sixth order on the calendar.

Page 1, line 1, remove "to create and enact section 47-31-09 of the North Dakota Century Code;"

Page 1, line 2, remove "relating to injecting substances for oil, gas, and mineral production;"

Page 1, line 2, after "reenact" insert "sections 57-06-17.1 and 57-39.2-04.14,"

Page 1, line 3, after "57-51.1-03" insert ", and section 57-60-06"

Page 1, line 3, after "to" insert "a property tax exemption for pipelines used for secure geologic storage, a sales and use tax exemption for materials used for secure geologic storage,"

Page 1, line 5, after "dioxide" insert ", and property classification of secure geologic storage equipment for coal conversion tax purposes"

Page 1, replace lines 7 through 15 with:

**"SECTION 1. AMENDMENT.** Section 57-06-17.1 of the North Dakota Century Code is amended and reenacted as follows:

**57-06-17.1. Carbon dioxide pipeline exemption.**

Property, not including land, is exempt from taxation during construction and for the first ten full taxable years following initial operation if it consists of a pipeline, constructed after 1996, and necessary associated equipment for the transportation or storage of carbon dioxide for secure geologic storage or use in enhanced recovery of oil or natural gas.

**SECTION 2. AMENDMENT.** Section 57-39.2-04.14 of the North Dakota Century Code is amended and reenacted as follows:

**57-39.2-04.14. Sales and use tax exemption for materials used in compressing, gathering, collecting, storing, transporting, or injecting carbon dioxide for secure geologic storage or use in enhanced recovery of oil or natural gas.**

1. Gross receipts from sales of tangible personal property used to construct or expand a system used to compress, gather, collect, store, transport, or inject carbon dioxide for secure geologic storage or use in enhanced recovery of oil or natural gas in this state are exempt from taxes under this chapter. To be exempt, the tangible personal property must be incorporated into a system used to compress, gather, collect, store, transport, or inject carbon dioxide for secure geologic storage or use in enhanced recovery of oil or natural gas. Tangible personal property used to replace an existing system to compress, gather, collect, store, transport, or inject carbon dioxide for secure geologic storage or use in enhanced recovery of oil or natural gas does not qualify for exemption under this section unless the replacement creates an expansion of the system.
2. To receive the exemption under this section at the time of purchase, the owner of the gas compressing, gathering, collecting, storing, transporting, or injecting system must receive from the tax commissioner a certificate that the tangible personal property used to construct or expand a system

used to compress, gather, collect, store, transport, or inject carbon dioxide for secure geologic storage or use in enhanced recovery of oil or natural gas qualifies for the exemption. If a certificate is not received before the purchase, the owner shall pay the applicable tax imposed by this chapter and apply to the tax commissioner for a refund.

3. If the tangible personal property is purchased or installed by a contractor subject to the tax imposed by this chapter, the owner of the gas compressing, gathering, collecting, storing, transporting, or injecting system may apply to the tax commissioner for a refund of the difference between the amount remitted by the contractor and the exemption imposed or allowed by this section. Application for a refund must be made at the time and in the manner directed by the tax commissioner and must include sufficient information to permit the tax commissioner to verify the sales and use taxes paid and the exempt status of the sale or use.
4. This chapter and chapter 57-40.2 apply to the exemption under this section."

Page 6, after line 24, insert:

**"SECTION 4. AMENDMENT.** Section 57-60-06 of the North Dakota Century Code is amended and reenacted as follows:

**57-60-06. Property classified and exempted from ad valorem taxes - In lieu of certain other taxes - Credit for certain other taxes.**

Each coal conversion facility and any carbon dioxide capture system located at the coal conversion facility, and any equipment directly used for secure geologic storage of carbon dioxide or enhanced recovery of oil or natural gas must be classified as personal property and is exempt from all ad valorem taxes except for taxes on the land on which the facility, capture system, or equipment is located. The exemption provided by this section may not be interpreted to apply to tangible personal property incorporated as a component part of a carbon dioxide pipeline but this restriction does not affect eligibility of such a pipeline for the exemption under section 57-06-17.1. The taxes imposed by this chapter are in lieu of ad valorem taxes on the property so classified as personal property."

Page 6, line 25, replace "This Act becomes" with "Section 3 of this Act becomes"

Page 6, line 25, after the period insert "Sections 1 and 4 of this Act are effective for taxable years beginning after December 31, 2018. Section 2 of this Act is effective for taxable events occurring after June 30, 2019."

Renumber accordingly

**2019 TESTIMONY**

**HB 1439**

PROPOSED AMENDMENTS TO HOUSE BILL NO. 1439

Page 1, line 1, after "to" insert "create and enact section 47-31-09 of the North Dakota Century Code, relating to injecting substances for oil, gas, and mineral production; and to"

Page 1, after line 4, insert:

"**SECTION 1.** Section 47-31-09 of the North Dakota Century Code is created and enacted as follows:

**47-31-09. Injection of substances to facilitate production of oil, gas, or other minerals.**

This chapter may not be construed to limit the rights or dominance of a mineral estate to drill or recomplete a well under chapter 38-08. Injection or migration of substances into pore space for disposal operations, for secondary or tertiary oil recovery operations, or otherwise to facilitate production of oil, gas, or other minerals is not unlawful and, by itself, does not constitute trespass, nuisance, or other tort."

Renumber accordingly





Good morning! My name is Jason Bohrer. I am the President and CEO of the Lignite Energy Council. We represent the lignite coal industry here in North Dakota—an industry that supports thousands of jobs and provides hundreds of millions of dollars in tax revenue. To give you an idea of the size of the industry, imagine if every student enrolled at NDSU and BSC was earning 80,000 a year. That's the size and impact of the coal workforce.

I come to you to speak in favor of House Bill 1439. Let me briefly outline our rationale for supporting this bill. The State of North Dakota has long had a vision of a symbiotic coal and oil industry—where CO<sub>2</sub> from coal flushed out barrels of oil that otherwise would be abandoned under ground. So decades ago, the first CO<sub>2</sub> incentive was adopted, but at first there wasn't much movement. Then, beginning about 7 years ago, the lignite industry went through a renewed focus on transformational technologies—which coincided with a period of intense anti-coal regulations coming from Washington DC. At one point, North Dakota faced cutting its coal workforce in half due to the Clean Power Plan which demand nearly 50 percent reduction in CO<sub>2</sub>.

Wanting to protect the thousands of jobs in the industry, the coal industry CEOs adopted a forward-looking strategic plan that embraced the pursuit of new, transformational technology and began seriously evaluating carbon-capture technologies.

What these leaders found is that although CO<sub>2</sub> is needed in the oil fields—due to the high cost to capture that CO<sub>2</sub> from coal facilities, the state isn't fully realizing the benefits of North Dakota's most abundant source of CO<sub>2</sub>. This bill opens the door to a whole new economy for North Dakota. The way this bill works is simple. It maintains the first incentives the legislature put in place by saying that if private industry makes an investment to bring CO<sub>2</sub> into an oil field, they will be exempt from the oil extraction tax for ten years (if in a traditional well) or five years in the Bakken. However, if the private industry makes an even larger investment in the state—by investing even more dollars to capture CO<sub>2</sub> from coal plants—the exemption from the extraction tax is extended to 20 years for traditional fields and ten for the Bakken. This longer exemption is in recognition of the increased risk and financial commitment required to get CO<sub>2</sub> from a coal plant but also the increased benefit to the state that comes not just from enhancing the oil industry, but also from protecting and preserving the coal industry. The greater the risk, and the greater the benefit, the longer the exemption.

Millions of barrels of oil have been stranded by traditional drilling methods—and are waiting to be freed by CO<sub>2</sub>. Meanwhile, coal plants are moving into the future—but that future is uncertain until we can turn that CO<sub>2</sub> that once was a hindrance into an asset.

Let me conclude by reminding this Committee where we came from. Just three years ago, communities like Beulah, Hazen and even Bismarck were struggling to cope with the thought of a coal workforce that was going to be cut in half. The bill before you today has the potential to turn that concern on its head—in fact, the EERC has estimated that if we could capture our CO<sub>2</sub> and market it, it would double the size of the coal industry—imagine a new city the size of Jamestown where every man, woman and child are making 80,000 a year. We aren't promising that this bill will get us there, but it's the next step on the journey to that reality.

House Energy and Natural Resources Committee

January 24, 2019

John Harju  
Vice President for Strategic Partnerships  
Energy & Environmental Research Center at the University of North Dakota

Chairman Porter and members of the committee, my name is John Harju, and I am the Vice President for Strategic Partnerships at the University of North Dakota's Energy & Environmental Research Center. Thank you for the invitation to provide brief commentary today regarding HB 1439.

My perspective on HB 1439 is that it seeks to bridge the gap between the economic value of CO<sub>2</sub> when utilized in enhanced oil recovery (EOR) and the cost of capturing that same CO<sub>2</sub> from a coal-fired power plant, compressing it, and pipelining it to that EOR project. In spite of bountiful opportunities to conduct CO<sub>2</sub> EOR projects here in the state, the substantial capital requirements to ready a field for CO<sub>2</sub> EOR, the high cost of CO<sub>2</sub>, and the long-term nature of these projects has proven to be a hindrance to their execution. I see the tertiary exemption offered by HB 1439, along with recently enacted federal tax credits, as key components in catalyzing the necessary industry investment to realize this potential.

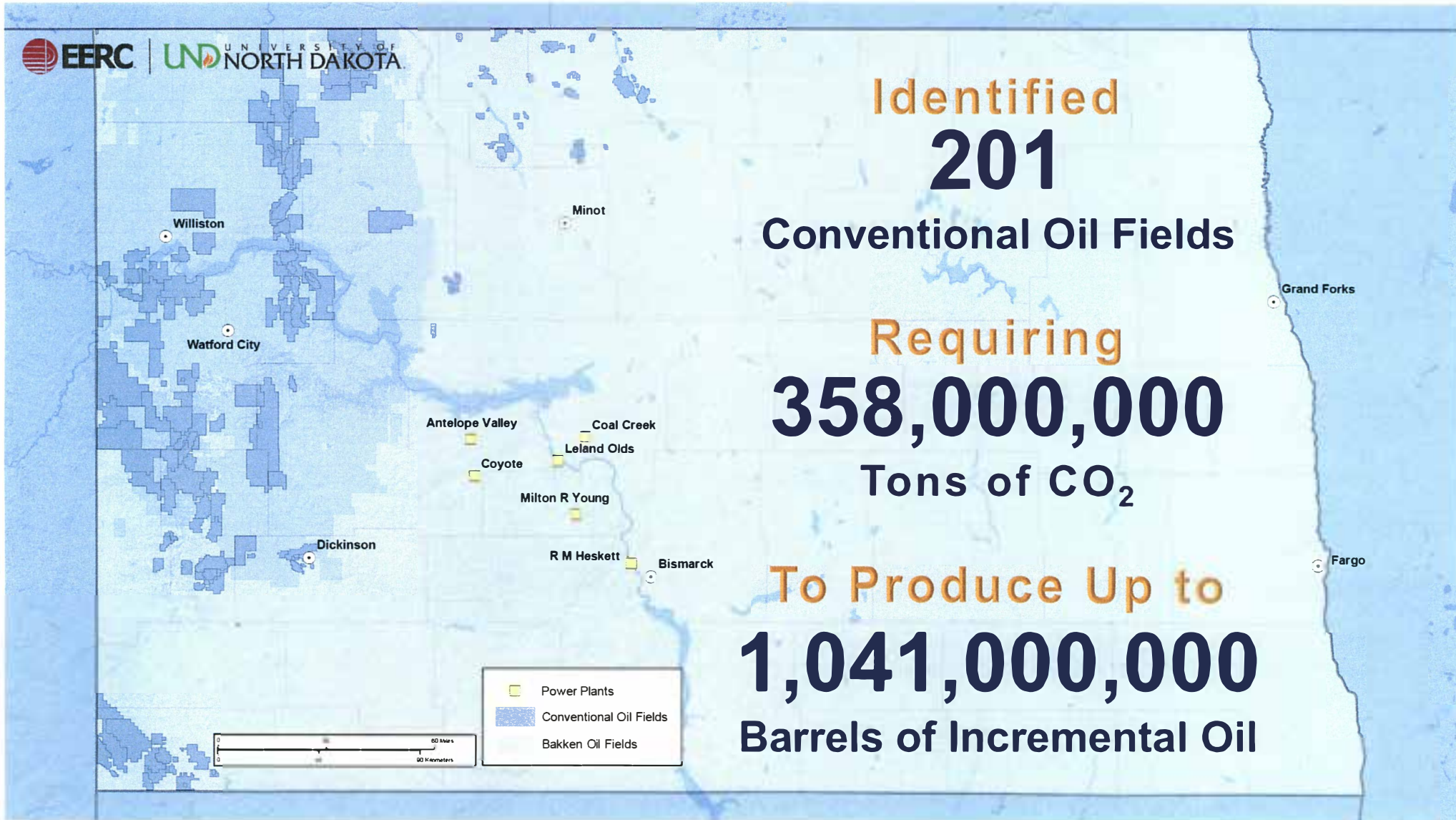
North Dakota's conventional oil fields hold on the order of 1 billion barrels of oil that cannot be produced without CO<sub>2</sub>, while the development and production of North Dakota's 25 billion tons of minable lignite are challenged for further development because of concerns over CO<sub>2</sub> emissions. Clearly, it is in the best interest of the state of North Dakota to unlock the economic

value that these resources hold, and CO<sub>2</sub> EOR is just the technology to do so. Further out, our state's Bakken resource could ultimately benefit from abundant, affordable CO<sub>2</sub>. However, the technology to utilize CO<sub>2</sub> in these complex reservoirs has not yet advanced to the point where projects can be implemented.

Identified  
**201**  
Conventional Oil Fields

Requiring  
**358,000,000**  
Tons of CO<sub>2</sub>

To Produce Up to  
**1,041,000,000**  
Barrels of Incremental Oil



**North Dakota House Bill 1439**

Testimony of Stacey Dahl – Minnkota Power Cooperative

House Natural Resources Committee

January 24, 2019

Chairman Porter and Members of the House Natural Resources Committee,

I work as Senior Manager of External Affairs for Minnkota Power Cooperative, based in Grand Forks. Minnkota is a non-profit electricity generation and transmission cooperative and is the sole supplier of electricity for eleven (11) non-profit cooperative distribution companies and the operating agent for Northern Municipal Power Agency which serves twelve (12) small cities in eastern North Dakota and northwest Minnesota. Minnkota serves approximately 130,000 customers over a 35,000 square mile area. In recent years, I have also had the privilege to serve on the leadership team developing Project Tundra.

Project Tundra, a proposed retrofit project to capture carbon dioxide on an existing lignite-fired unit, is an example of a project that could benefit from the policy proposed in HB 1439. Presently, the project is in a research and development phase with our partners – including Eagle Energy Partners, BNI Energy, EERC, State of North Dakota/NDIC, Department of Energy and others.

If carbon capture and utilization (CCUS) projects like Tundra are built in the state, the benefits to the lignite, petroleum industry and State of North Dakota are unquestionable. Specifically, Minnkota wants to find a long-term path for our Milton R. Young station to operate – it's currently one of our most cost-effective and reliable assets. We are seeking a technology solution that can help position that facility to bear the back and forth swings of carbon dioxide regulation. These types of projects can establish North Dakota as a leader in not just carbon capture, but also utilization in the carbon conversion to value-added process.

CCUS projects are complex, expensive and risk intensive. The targeted incentive within 1439 helps coal, a resource that is under significant environmental pressure, and aligns with our state's petroleum industry for a future of economic growth in both industries.

Minnkota Power Cooperative supports HB 1439, and encourages the Committee to recommend a Do Pass on this bill.



# Project Tundra

North Dakota has an opportunity to retain its vibrant coal industry that supports thousands of jobs and provides \$100 million in tax revenue to the state per year, and to contribute further to our nation's oil production and energy security. Synergies between the oil and gas and lignite coal industries create an opportunity for a continued strong future of economic growth in these industries across the state.

## What is Project Tundra?

- North Dakota-based Minnkota Power Cooperative is spearheading Project Tundra, a project to capture carbon dioxide emissions from a large, existing coal-fired power plant owned and operated by Minnkota in Center, North Dakota.
- Modeled after the successful Petra Nova initiative in Texas, the vision for Project Tundra is to retrofit Unit 2, a 477 MW unit at the lignite coal-based Milton R. Young Station, with technology that could capture up to 95 percent of its CO<sub>2</sub> emissions. The CO<sub>2</sub> would then be utilized for enhanced oil recovery (EOR) and/or permanent geologic storage.
- In the EOR application, the CO<sub>2</sub> would be transported by pipeline to be used in conventional oil fields, thereby substantially increasing oil production in depleted fields. Minnkota has partnered with Eagle Energy Partners to explore enhanced oil recovery opportunities in western North Dakota.

## Why should we pursue retrofit solutions like Project Tundra?

- The project builds upon prior federal investment in Petra Nova by scaling up the application to capture more flue gas, and apply to a cold weather climate, while utilizing a low-rank (lignite) coal. The ultimate goal is to create a new benchmark – a large-scale demonstration at an existing plant that can be commercially and economically replicated across the region, the country, and the world.
- Help provide continued reliability and affordability of electricity from the power plant, while also preserving prior plant infrastructure investment, enhancing the utilization of unavailable petroleum resources, and creating jobs and economic development opportunities.

## What is the status of development of Project Tundra?

- The project team is pursuing funding for the next phase, which is a front-end engineering design (approx. \$30 million)
- The project is presently conducting a feasibility review of key design considerations, including:
  - Advanced amine solvents
  - Economic modeling
  - Aerosol mitigation and management

## What will it cost?

- A large retrofit solution with the associated EOR infrastructure such as Project Tundra is estimated to cost approximately \$1.3-\$1.6 billion.
- In conjunction with federal and state of North Dakota investment, project support will also be required of industry participants.

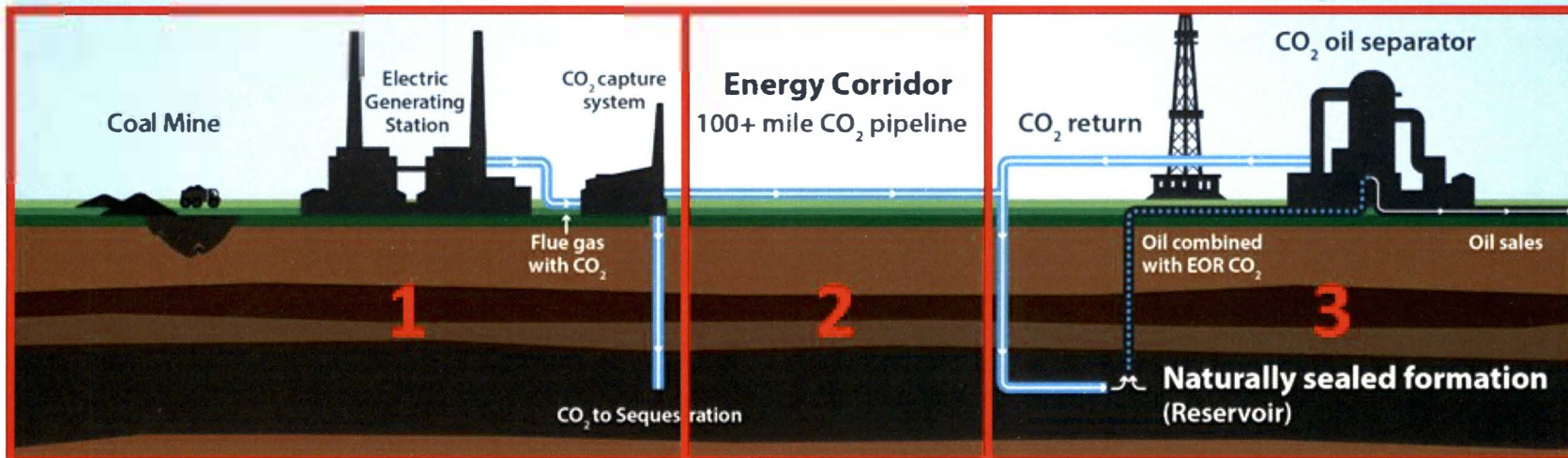
# Utility Industry Carbon Solutions—Project Tundra



**Milton R. Young Station**



**Williston Basin Oil & Gas Fields**



**Project Tundra  
Development  
Pathways**

**Develop Business Structure**

**State and Federal Policy Support**

**Secure CO<sub>2</sub> Source**

**Secure CO<sub>2</sub> Sink**

**Testimony of Lynn D. Helms**  
**Director, North Dakota Industrial Commission Department of Mineral Resources**  
**January 24, 2019**  
**House Energy and Natural Resources**  
**HB 1439**

HB 1439  
1.24.19  
Attachment 5

**The NDIC supports HB 1439 and urges a do pass from this committee.**

## North Dakota CC-\$-US

### Carbon Capture

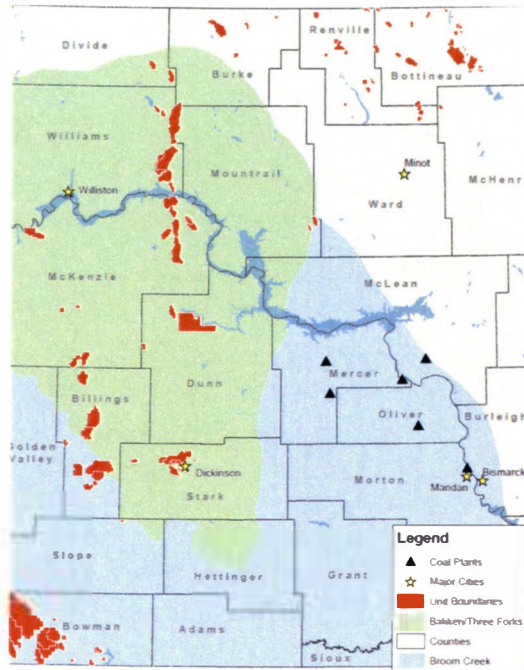
- 7 Electrical Generation Power Plants
- 800 year supply of lignite coal

### Utilization

- 115 Oil and Gas Units
  - 932 square miles
- Bakken/Three Forks
  - 13,262 Producing wells
  - 1.3 million barrels per day
  - 12,000 square miles

### Storage

- Williston Basin Geology
  - Broom Creek Formation



### Foreman Butte



### Project Tundra questions

- Economics for carbon capture at each plant
- Economics for pipelines and oil fields
- Specific technology evaluations for each plant, pipeline, and oil field

### CC-\$-US

Carbon Capture \$60-\$120 per ton

Utilization and Storage @ 4 barrels of oil per ton = \$15-20 per ton

45Q value is \$10-\$35 per ton

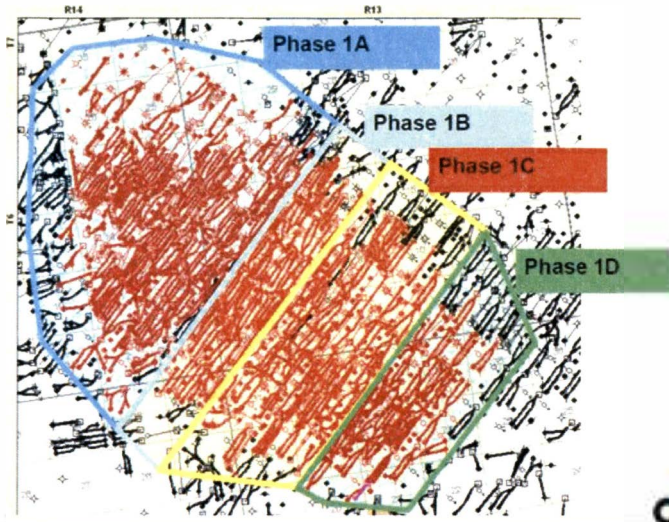
Best case = \$35 + \$20 - \$60 = (-) \$5 per ton

OET incentive @ \$50 per barrel oil price and 4 barrels per ton yield = \$10 per ton

The North Dakota Industrial Commission (NDIC) approved funding totaling over \$15 million for two lignite research projects. The larger of the two is a request for \$15 million to help fund a Front-End Engineering and Design (FEED) study for Project Tundra. Project Tundra is to retrofit Unit 2 at the Milton R. Young Station with technology that could capture up to 95 percent of its CO<sub>2</sub> emissions. The CO<sub>2</sub> captured at the Young Station would be pipelined approximately 120 miles to western North Dakota for use in enhanced oil recovery projects. The project would cost \$31 million and the proposal is asking for \$15 million from the Lignite Research Fund and another \$15 million will be requested from the U.S. Department of Energy's National Energy Technology Laboratory in early 2019. Minnkota Power Cooperative would also invest cash and in-kind contributions. Other participants include BNI Energy, Eagle Energy Partners, Mitsubishi Heavy Industries, Energy & Environmental Research Center (EERC), Burns & McDonnell and others.

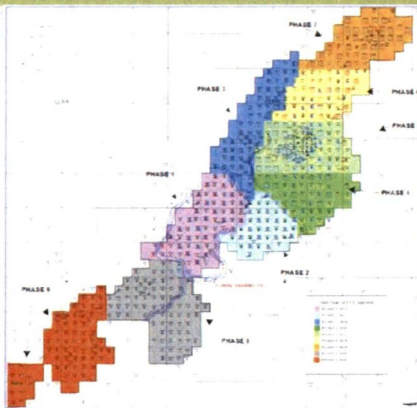


# Map of Weyburn CO<sub>2</sub> Phases



Weyburn - Implemented in 4 phases  
 1A started in 2000 – 16 sections – production peaked in 2007  
 1B started in 2002 – 4 sections – production peaked in 2010  
 1C started in 2003 – 10 sections – production peaked in 2010  
 1D started in 2004 – 6 sections – production peaked in 2011

## Bell Creek CO<sub>2</sub> Phase Development Map



Bell Creek - Implemented in 9 phases  
 1 – 4 started in 2013 – 12 sections – production has not yet peaked  
 5 started in 2017 – 4 sections – production has not yet peaked  
 6 start in 2019 – 4 sections  
 7 start in 2021 – 4 sections  
 8 start in 2023 – 6 sections  
 9 start in 2025 – 5 sections

Carbon dioxide utilization for enhanced oil recovery is rolled out in multiple phases across the unit.

HB 1439 adds language that clarifies how the incremental oil production is to be determined. It would apply to all tertiary recovery tax incentives and allow for each unit to apply a separate extraction tax window to each development phase. The important result for North Dakota's lignite industry is more carbon dioxide purchased over a longer period of time.

[illegible]

**BNI Energy Testimony on House Bill 1439  
January 24, 2019  
House Energy and Natural Resources Committee  
Representative Todd Porter, Chairman**

**Wade Boeshans – President & General Manager of BNI Energy, Inc. an ALLETE Company**

**SUPPORT of HB 1439**

Good Morning Chairman Porter and members of the committee. My name is Wade Boeshans. I am the President and General Manager of BNI Energy which is headquartered in Bismarck, ND. I also Chair the Board of Directors of the Lignite Energy Council. I am here today to request your support for HB 1439.

BNI Energy is a subsidiary of ALLETE, a diversified Energy Company Headquartered in Duluth MN. ALLETE subsidiaries, BNI Energy, Minnesota Power, ALLETE Clean Energy, and ALLETE Renewable Resources collectively own and operate over one billion dollars of assets in North Dakota and have invested over a billion dollars in North Dakota over the last decade. BNI Energy subsidiary, BNI Coal, started mining in northwestern North Dakota in 1930 and has been mining coal for the Milton R Young Station since 1970 at its Center Mine location. BNI Coal supplies 4 to 4.5 million tons of lignite coal annually to the Young Station and employs 180 people with an annual local spend of \$80 million.

ALLETE companies fully subscribe to all of the above energy policies that North Dakota has implemented. Our commitment to North Dakota and it's all of the above approach are reflected by our long history of investing in North Dakota including our recent investment of over \$150 million in BNI Coal, Minnesota Power's investments in the Center to Duluth DC transmission line, Square Butte Generating Station, Bison Wind Facility, and ALELTE Clean Energy's development and investments in the Thunder Spirit and Glen Ullin Wind Projects. ALLETE along with our Lignite Industry Partners are leading clean coal projects including Project Tundra and the Allam Cycle. I personally co-chaired the EmPower R&D subcommittee that authored the 2017 EmPower R&D funding recommendations advocating state funding support for critical research, development and demonstration of CO2 solutions for the Lignite Industry.

The Lignite Industry is facing significant market and regulatory challenges that have stymied growth and threaten to shut down the industry. While the Trump administration has provided critical regulatory relief and valuable time to develop technology solutions, some states have implemented policies that ban or reduce CO2 emissions and others including Minnesota are contemplating policies to further reduce emissions today. For North Dakota lignite to remain relevant, strong

and valued by customers in this carbon-constrained future, the lignite industry will need new technology solutions in these four areas:

- 1) **Advanced generation** – new transformational technologies that include carbon dioxide capture that can be used to build new lignite power plants
- 2) **Carbon dioxide scrubbing and capture** – technologies that can be retrofitted to existing lignite power plants
- 3) **Carbon dioxide utilization and sequestration** – technologies that utilize and permanently store the CO<sub>2</sub> eliminating atmospheric emission such as geologic storage or enhanced oil recovery
- 4) **Additional beneficial uses for lignite** – A variety of additional technology advances and market opportunities are being developed and implemented with lignite as a feedstock.

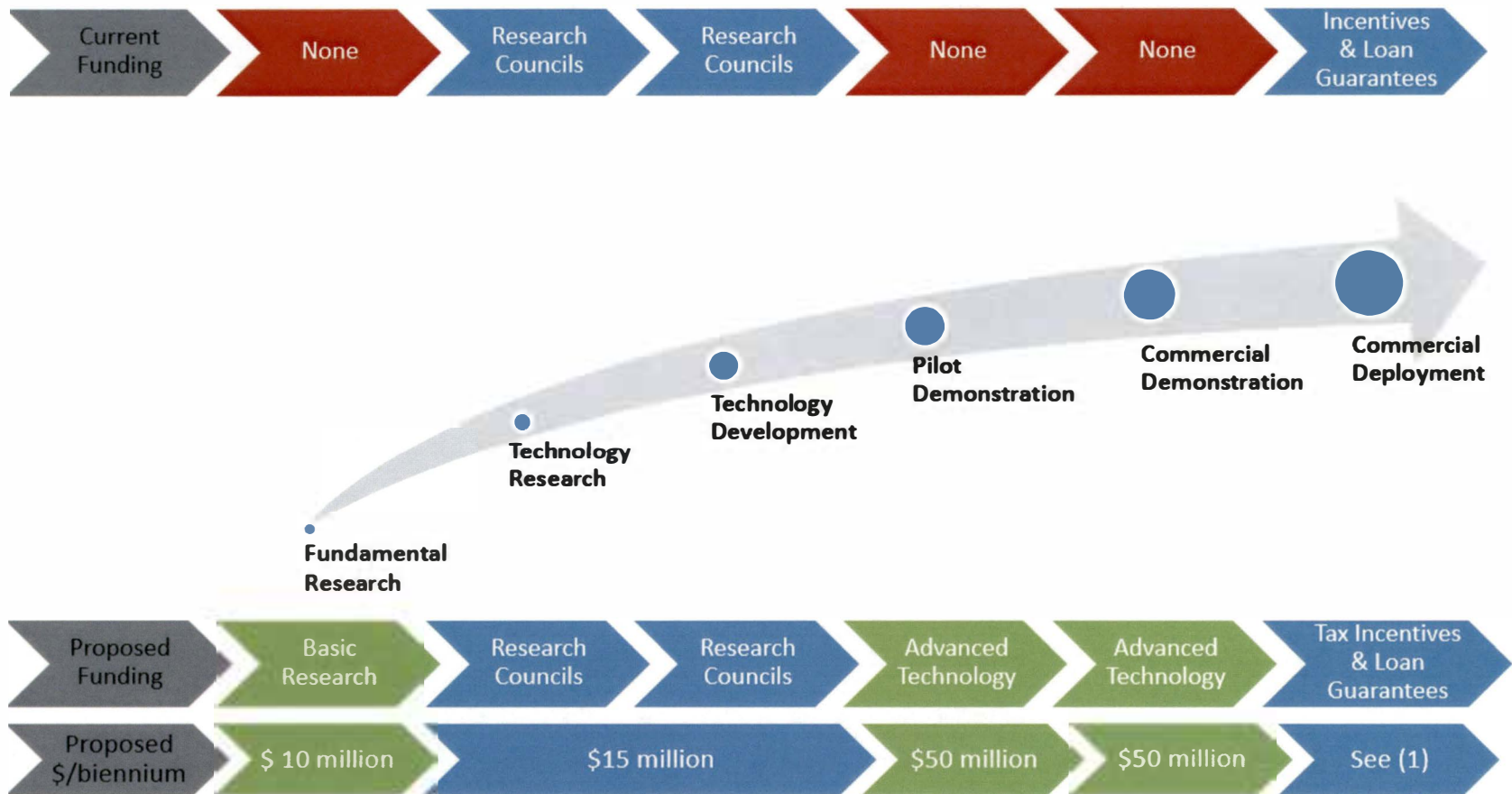
All of these technology and market needs require enabling policies and resources provided by strong private-public partnerships to maintain and grow our valued lignite industry. To this end, research, development, demonstration and commercialization of technologies that include the capture and utilization of carbon dioxide emissions from lignite based facilities are essential.

In 2017, the EmPower Commission developed the Technology Development and Pathway and Funding recommendations in attachment 1. The EmPower recommendations included new funding for basic research, demonstrations and commercial deployment incentives. The state of North Dakota has been a strong partner in technology research, development and deployment. In 2015, the North Dakota Legislature provided additional funding to the Research Councils for R&D. In 2017, the North Dakota Legislature created the Advanced Energy Technology Fund which provides funding support for technology demonstrations. These strategic investments by the North Dakota Legislature have enabled projects like Tundra to advance to the commercial deployment phase. HB 1439 proposes to provide a commercial deployment incentive that is needed to attract investment in the capture and utilization of CO<sub>2</sub> from Lignite facilities.

It is strategic to North Dakota to develop a CO<sub>2</sub> Enhanced Oil Recovery business in North Dakota and secure the future of its Lignite Industry. HB 1439 proposes to do this while creating tremendous value for North Dakota including thousands of new jobs and \$ billions in new tax revenue.

Chairman Porter and members of the committee, I respectfully ask for your support for research, development, and demonstration of high potential technologies that reduce emissions and improve competitiveness of Lignite. This concludes my testimony and I would be pleased to respond to any questions.

# Typical Technology Development Pathway & Funding



(1) Continue existing incentives and add an anthropogenic (man-made) CO2 utilization incentive

19.8160.01001  
Title.

Prepared by the Legislative Council staff for  
Representative Porter  
January 21, 2019

PROPOSED AMENDMENTS TO HOUSE BILL NO. 1439

Page 1, line 1, after "to" insert "create and enact section 47-31-09 of the North Dakota Century Code, relating to injecting substances for oil, gas, and mineral production; and to"

Page 1, after line 4, insert:

"**SECTION 1.** Section 47-31-09 of the North Dakota Century Code is created and enacted as follows:

**47-31-09. Injection of substances to facilitate production of oil, gas, or other minerals.**

This chapter may not be construed to limit the rights or dominance of a mineral estate to drill or recomplete a well under chapter 38-08. Injection or migration of substances into pore space for disposal operations, for secondary or tertiary oil recovery operations, or otherwise to facilitate production of oil, gas, or other minerals is not unlawful and, by itself, does not constitute trespass, nuisance, or other tort."

Renumber accordingly



19.8160.01002  
Title.02000

Prepared by the Legislative Council staff for  
House Energy and Natural Resources  
Committee

January 25, 2019

PROPOSED AMENDMENTS TO HOUSE BILL NO. 1439

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Page 2, line 4, replace "and" with "or"

Page 2, line 15, replace "and" with "or"

Page 5, line 23, replace "if" with "in"

Renumber accordingly



Good morning! My name is Jason Bohrer. I am the President and CEO of the Lignite Energy Council. We represent the lignite coal industry here in North Dakota—an industry that supports thousands of jobs and provides hundreds of millions of dollars in tax revenue. To give you an idea of the size of the industry, imagine if every student enrolled at NDSU and BSC was earning 80,000 a year. That's the size and impact of the coal workforce.

I come to you to speak in favor of House Bill 1439. Let me briefly outline our rationale for supporting this bill. The State of North Dakota has long had a vision of a symbiotic coal and oil industry—where CO2 from coal flushed out barrels of oil that otherwise would be abandoned under ground. So decades ago, the first CO2 incentive was adopted, but at first there wasn't much movement. Then, beginning about 7 years ago, the lignite industry went through a renewed focus on transformational technologies—which coincided with a period of intense anti-coal regulations coming from Washington DC. At one point, North Dakota faced cutting its coal workforce in half due to the Clean Power Plan which demand nearly 50 percent reduction in CO2.

Wanting to protect the thousands of jobs in the industry, the coal industry CEOs adopted a forward-looking strategic plan that embraced the pursuit of new, transformational technology and began seriously evaluating carbon-capture technologies.

What these leaders found is that although CO2 is needed in the oil fields—due to the high cost to capture that CO2 from coal facilities, the state isn't fully realizing the benefits of North Dakota's most abundant source of CO2. This bill opens the door to a whole new economy for North Dakota. The way this bill works is simple. It maintains the first incentives the legislature put in place by saying that if private industry makes an investment to bring CO2 into an oil field, they will be exempt from the oil extraction tax for ten years (if in a traditional well) or five years in the Bakken. However, if the private industry makes an even larger investment in the state—by investing even more dollars to capture CO2 from coal plants—the exemption from the extraction tax is extended to 20 years for traditional fields and ten for the Bakken. This longer exemption is in recognition of the increased risk and financial commitment required to get CO2 from a coal plant but also the increased benefit to the state that comes not just from enhancing the oil industry, but also from protecting and preserving the coal industry. The greater the risk, and the greater the benefit, the longer the exemption.

Millions of barrels of oil have been stranded by traditional drilling methods—and are waiting to be freed by CO2. Meanwhile, coal plants are moving into the future—but that future is uncertain until we can turn that CO2 that once was a hindrance into an asset.

Let me conclude by reminding this Committee where we came from. Just three years ago, communities like Beulah, Hazen and even Bismarck were struggling to cope with the thought of a coal workforce that was going to be cut in half. The bill before you today has the potential to turn that concern on its head—in fact, the EERC has estimated that if we could capture our CO2 and market it, it would double the size of the coal industry—imagine a new city the size of Jamestown where every man, woman and child are making 80,000 a year. We aren't promising that this bill will get us there, but it's the next step on the journey to that reality.



**North Dakota House Bill 1439**

Testimony of Craig Bleth – Minnkota Power Cooperative

House Natural Resources Committee

March 4, 2019

Chairman Cook and Members of the Senate Finance and Tax Committee,

I work as Senior Manager of Plant Production for Minnkota Power Cooperative, based in Grand Forks. Minnkota is a non-profit electricity generation and transmission cooperative and is the sole supplier of electricity for eleven (11) non-profit cooperative distribution companies and the operating agent for Northern Municipal Power Agency which serves twelve (12) small cities in eastern North Dakota and northwest Minnesota. Minnkota serves approximately 130,000 customers over a 35,000 square mile area. In recent years, I have also served on the leadership team to develop Project Tundra.

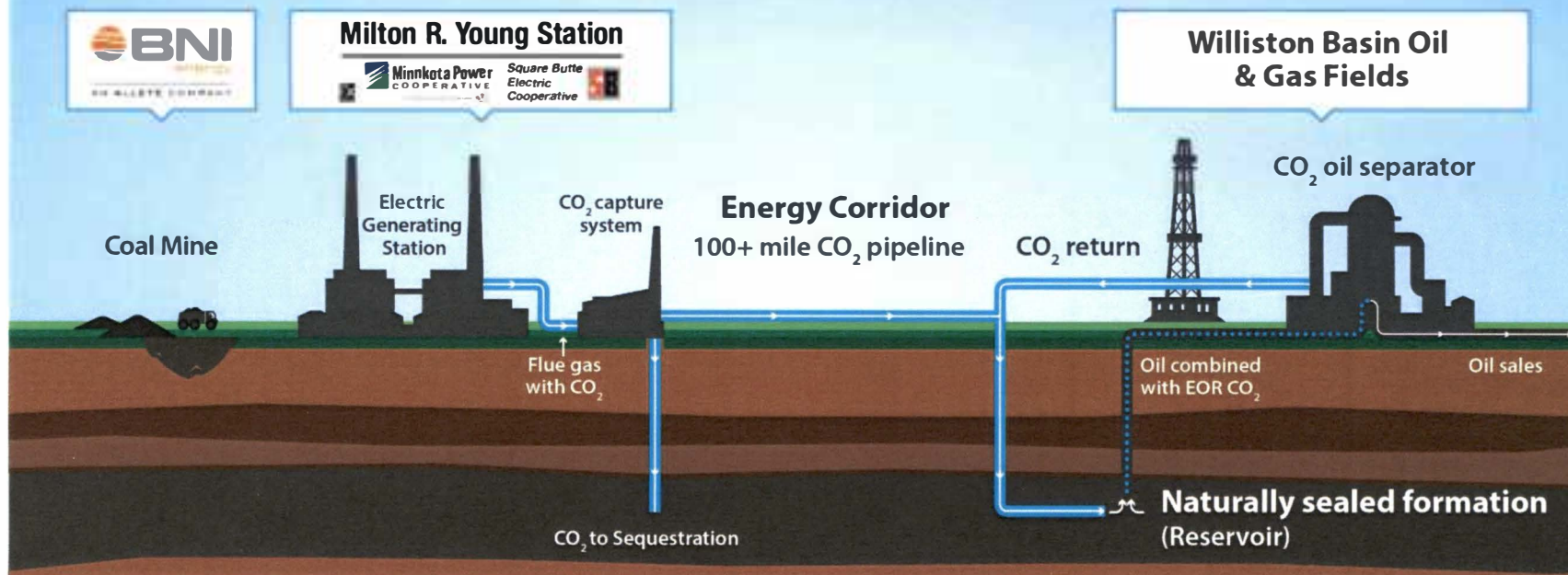
Project Tundra, a proposed retrofit project to capture carbon dioxide on an existing lignite-fired unit, is an example of a project that could benefit from the policy proposed in HB 1439. Presently, the project is in a research and development phase with our partners – including Eagle Energy Partners, BNI Energy, EERC, State of North Dakota/NDIC, Department of Energy and others.

If carbon capture and utilization (CCUS) projects like Tundra are built in the state, the benefits to the lignite, petroleum industry and State of North Dakota are unquestionable. Specifically, Minnkota wants to find a long-term path for our Milton R. Young station to operate – it's currently one of our most cost-effective and reliable assets. We are seeking a technology solution that can help position that facility to bear the back and forth swings of carbon dioxide regulation. Building out these projects in North Dakota can establish itself as a leader in carbon capture and utilization in the carbon conversion to value-added process.

CCUS projects are complex, expensive and risk intensive. The targeted incentive within 1439 helps coal, a resource that is under significant environmental pressure, and aligns with our state's petroleum industry for a future of economic growth in both of these industries.

Minnkota Power Cooperative supports HB 1439, and encourages the Committee to recommend a Do Pass on this matter.

# Utility Industry Carbon Solutions—Project Tundra



Project Tundra  
Development  
Pathways

Develop Business Structure

State and Federal Policy Support

Secure CO<sub>2</sub> Source

Secure CO<sub>2</sub> Sink

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Senate Finance and Taxation Committee

3/4 HB 1439 #3 pg.1

March 4, 2019

Brian Kalk

Director Energy Systems and Development

Energy & Environmental Research Center at the University of North Dakota

Chairman Cook and members of the committee. Thank you for the invitation to provide comments today regarding HB 1439.

My perspective on HB 1439 is that it seeks to bridge the gap between the economic value of CO<sub>2</sub> when utilized in enhanced oil recovery (EOR) and the cost of capturing that same CO<sub>2</sub> from a coal-fired power plant, compressing it, and pipelining it to that EOR project. In spite of bountiful opportunities to conduct CO<sub>2</sub> EOR projects here in the state, the substantial capital requirements to prepare a field for CO<sub>2</sub> EOR, the high cost of CO<sub>2</sub>, and the long-term nature of these projects has proven to be a hindrance to their execution. I see the exemption offered by HB 1439, along with recently enacted federal tax credits, as key components in ensuring the necessary industry investment to realize this potential.

North Dakota's conventional oil fields hold on the order of 1 billion barrels of oil that cannot be produced without CO<sub>2</sub>, while the development and production of North Dakota's 25 billion tons of minable lignite are challenged for further development because of concerns over CO<sub>2</sub> emissions. I believe, it is in the best interest of the state of North Dakota to unlock the economic value that these resources hold, and CO<sub>2</sub> EOR is just the technology to do so. Further out, our state's Bakken resource could ultimately benefit from abundant, affordable CO<sub>2</sub>. However, the technology to utilize CO<sub>2</sub> in these complex reservoirs has not yet advanced to the point where projects can be implemented. Thank you for the opportunity to provide comments today.



**Testimony of Lynn D. Helms**  
**Director, North Dakota Industrial Commission Department of Mineral Resources**  
**March 4, 2019**  
**Senate Energy and Natural Resources**  
**HB 1439**

**The NDIC supports HB 1439 and urges a do pass from this committee.**

3/4  
HB 1439  
#4 pg. 1

## North Dakota CC-\$-US

### Carbon Capture

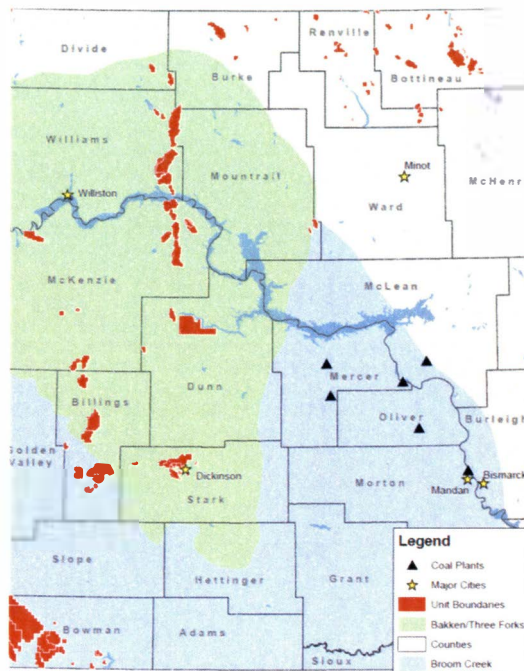
- 7 Electrical Generation Power Plants
- 800 year supply of lignite coal

### Utilization

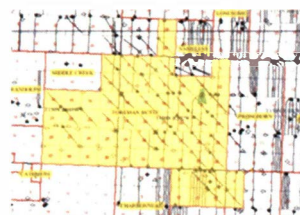
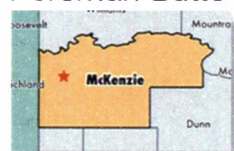
- 115 Oil and Gas Units
  - 932 square miles
- Bakken/Three Forks
  - 13,262 Producing wells
  - 1.3 million barrels per day
  - 12,000 square miles

### Storage

- Williston Basin Geology
  - Broom Creek Formation



### Foreman Butte



### Project Tundra questions

- Economics for carbon capture at each plant
- Economics for pipelines and oil fields
- Specific technology evaluations for each plant, pipeline, and oil field

### CC-\$-US

Carbon Capture \$60-\$120 per ton

Utilization and Storage @ 4 barrels of oil per ton = \$15-20 per ton

45Q value is \$10-\$35 per ton

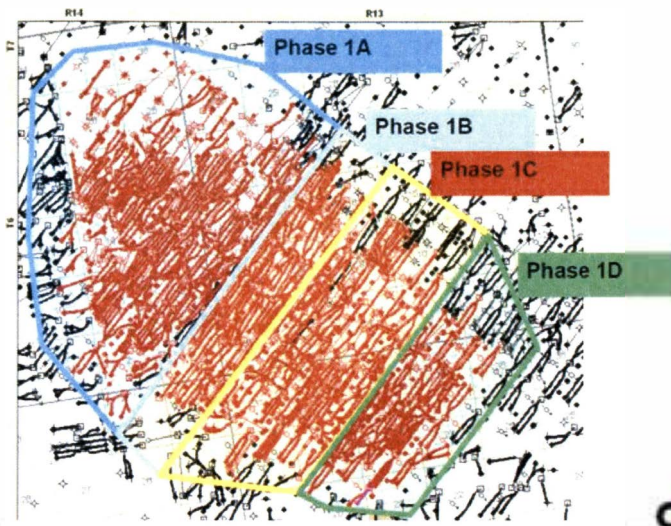
Best case = \$35 + \$20 - \$60 = (-) \$5 per ton

OET incentive @ \$50 per barrel oil price and 4 barrels per ton yield = \$10 per ton

The North Dakota Industrial Commission (NDIC) approved funding totaling over \$15 million for two lignite research projects. The larger of the two is a request for \$15 million to help fund a Front-End Engineering and Design (FEED) study for Project Tundra. Project Tundra is to retrofit Unit 2 at the Milton R. Young Station with technology that could capture up to 95 percent of its CO<sub>2</sub> emissions. The CO<sub>2</sub> captured at the Young Station would be pipelined approximately 120 miles to western North Dakota for use in enhanced oil recovery projects. The project would cost \$31 million and the proposal is asking for \$15 million from the Lignite Research Fund and another \$15 million will be requested from the U.S. Department of Energy's National Energy Technology Laboratory in early 2019. Minnkota Power Cooperative would also invest cash and in-kind contributions. Other participants include BNI Energy, Eagle Energy Partners, Mitsubishi Heavy Industries, Energy & Environmental Research Center (EERC), Burns & McDonnell and others.

# Map of Weyburn CO<sub>2</sub> Phases

3/4 HB 1439 #4 pg. 2



Weyburn - Implemented in 4 phases

1A started in 2000 – 16 sections – production peaked in 2007

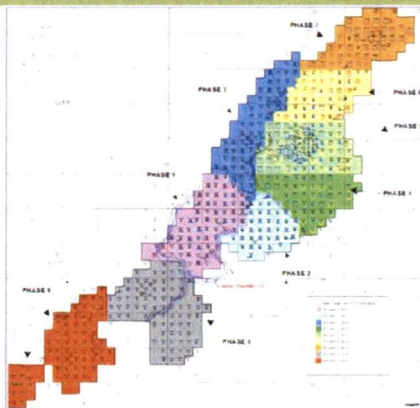
1B started in 2002 – 4 sections – production peaked in 2010

1C started in 2003 – 10 sections – production peaked in 2010

1D started in 2004 – 6 sections – production peaked in 2011

## Bell Creek CO<sub>2</sub> Phase Development Map

&



Bell Creek - Implemented in 9 phases

1 – 4 started in 2013 – 12 sections – production has not yet peaked

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HB 1439 adds language that clarifies how the incremental oil production is to be determined. It would apply to all tertiary recovery tax incentives and allow for each unit to apply a separate extraction tax window to each development phase. The important result for North Dakota's lignite industry is more carbon dioxide purchased over a longer period of time.

TESTIMONY OF CONNIE TRIPLET  
BEFORE THE NORTH DAKOTA SENATE  
FINANCE AND TAXATION COMMITTEE

Regarding House Bill 1439

Chairman Cook and Members of the committee:

My name is Connie Triplett; I reside in Grand Forks. I am opposed to Section 1 of Engrossed House Bill 1439.

I served on the Senate Natural Resources Committee (re-named Energy and Natural Resources Committee at some point) for five legislative sessions (2007, 2009, 2011, 2013, and 2015), including 2009 when the legislature first defined 'pore space.'

At that time, we considered two companion bills in the same hearing, SB 2095 which set up a regulatory structure for permitting the temporary or permanent storage of carbon dioxide (CO<sub>2</sub>) in the subsurface of the earth. The second bill, SB 2139, defined 'pore space' and clarified that it belongs to the surface owner.

Please note that, in passing SB 2139, which clearly vested ownership of pore space in the surface owner (now codified as Chapter 47-31, N.D.C.C.), the 2009 legislature ***did not give anything to surface owners which they did not already have.*** We only codified existing common law. Charles Carvell of the ND Attorney General's office testified that the consensus of lawyers around the country who were considering this issue was that the pore space was indeed already owned by the surface owner.

While the legislature did not grant any new rights to surface owners, it did ***take something away from them*** in the 2009 session in SB 2139: we took away their ability to sever the pore space beneath their land from the surface. We did that because there was so much confusion sown by the decades-long practice of severing mineral interests that legislators agreed it was a good idea to prohibit severing yet another part of the subsurface. The bill, however, did confirm the right of surface owners to lease pore space.

Now, generally, when an individual or other entity who owns a thing of value chooses to lease that thing to another individual or entity, the party of the first part would like to be compensated by the party of the second part for the leased premises. It is that notion of compensation for use of the surface owners' pore space which is at issue in Section 1.

We took something else from surface owners in 2009. We took away their right to refuse to cooperate in a carbon sequestration operation. SB 2095 provided that the NDIC can issue a permit for a carbon sequestration project if 60% of the affected landowners consent, so long as "the storage operator has made a good-faith effort to get the consent of all persons who own the storage reservoir's pore space." (Now codified at N.D.C.C. Section 38-02-08 (4).) All non-consenting pore space owners have to be equitably compensated for long-term storage of carbon dioxide (N.D.C.C. section 38-02-08 (14)), but surface owners cannot refuse to participate.

The bill before you, HB 1439, at Section 1, proposes to slide into the space between initial oil and gas production, at one end of the spectrum (in which a product is being extracted *from* the earth pursuant to the terms of a lease with the mineral owner), and long-term storage of CO<sub>2</sub>, on the other end of the spectrum (discussed above, in which a product is being permanently injected *into* the earth, with compensation to the owner of the pore space, *i.e.*, the surface owner). Proponents of Section 1 of this bill propose to create separate rules for the use of CO<sub>2</sub> for enhanced oil recovery (EOR) or for disposal operations. And for that middle ground, the proponents of Section 1 do not want to acknowledge the legal rights of the surface owner to control and lease the pore space.

One interesting aspect of setting out separate rules for CO<sub>2</sub> usage in EOR versus long-term storage of CO<sub>2</sub> is that there may be no clear way to completely differentiate between the two. My understanding is that each time CO<sub>2</sub> is injected into the subsurface for use in EOR, that some portion of the CO<sub>2</sub> stays behind in the subsurface, essentially being stored permanently. I do not know if all of it can reliably be returned to the surface, should anyone want to do so. If not, then current law requires equitable compensation to any non-consenting surface owner for that portion remaining in the subsurface.



The oil and gas industry and the coal industry together asked for the two bills that I have described in 2009. They formed a 'CO<sub>2</sub> Work Group' to write these two bills. They started with model legislation drafted by the Interstate Oil & Gas Compact Commission. The group went to the ND Industrial Commission prior to the beginning of the 2009 legislative session to get the blessing of the NDIC. The bills were formally introduced as agency bills at the behest of the NDIC.

Industry collectively indicated that it wanted clarity. We gave them clarity. They were at the table for the discussion of these two bills. They helped to draft the amendments. Industry has known about this issue since the end of the 2009 session. 2009 was fairly early in the development of the Bakken. A lot of the mineral acres were leased by that time, but a large portion of the leases were not yet held by production. 2009 would have been an opportune time for companies to plan for the eventual need to lease the pore space whose ownership we were then clarifying.

Oil companies operating in North Dakota certainly could have incorporated leases of pore space from surface owners into their regular operating procedures and their cost projections at that time. I expect that some companies may have done so. Those who haven't will have to deal with it. The free market will decide what the value of pore space is. Section 1 of HB 1439 is neither necessary nor appropriate when considered in context.

You are likely all aware of the crowd of landowners who appeared in the House Energy and Natural Resources Committee last week in opposition to very similar language in SB 2344. The topic of pore space and how it should be treated is the sole topic of that bill. I would urge this committee to remove Section 1 and let the Energy and Natural Resource Committees work out this particular issue. The House Energy and Natural Resources Committee is taking the matter seriously. At the conclusion of the hearing last week, Chairman Porter promptly appointed a sub-committee of four members to work on the bill. There is nothing in Section 1 of this bill which looks like a taxation question.

I will stand for questions.



3/4 HB 1439 #4 pg. 1

RE HB 1439

2019 SESSION  
OUTLINE OF TESTIMONY  
OF  
DENNIS EDWARD JOHNSON  
IN  
OPPOSITION OF SB2344

Submitted to  
Senate Finance &  
Taxation Committee  
03/04/2019 by  
Connie Triplett for  
use in considering  
Sec. 1 of HB 1439.

My name is Dennis Edward Johnson. My mailing address is P O Box 1260, Watford City, ND 58854. My house is at 11091 28th Street NW, Watford City, which is the same farm yard where my grandparents lived. I am a lifelong resident of McKenzie County and live on a farm. Four generations of my ancestors are buried in McKenzie County. I am the fifth generation to live and work there and my son is the sixth. I appear before you today as a concerned generational landowner with training and experience in law, especially oil and gas law. I am here opposing SB2344.

**GENERAL:**

My spoken testimony will vary from this, but this is offered as an outline or summary of what I will have said.

**GOOD INTENTIONS BAD RESULTS:**

The law as proposed had good intentions of reducing flaring by allowing storage of gas in underground geological formations. And as someone surrounded by flares I am in favor of not wasting that resource. But the actual result of SB2344 does not solve any problems and instead creates them. As written, SB2344 takes away private property from every landowner in the state and gives it to oil companies and others to use for free.

SB2344 redefines what land is by excluding Pore Space:

**3. "Land" means the solid material of earth, regardless of ingredients, but excludes pore space.**

It provides for a new definition what "pore space" is:

**7. "Pore space" means a cavity or void, naturally or artificially created, in a subsurface sedimentary stratum.**

And, it takes away the rights and the ability for a farmer or rancher to protect and preserve his or her property by adding this language:

47 - 31 - 09. Injection of substances to facilitate production of oil, gas, or other minerals. This chapter may not be construed to limit the rights or dominance of a mineral estate to drill or recomplete a well under chapter 38 - 08. Injection or migration of substances into pore space for disposal operations, for secondary or tertiary oil recovery operations, or otherwise to facilitate production of oil, gas, or other minerals is not unlawful and, by itself, does not constitute trespass, nuisance, or other tort.

#### WHAT IS PORE SPACE:

Let me bring this concept to you in very simple terms. I hold in my hand a sponge. The formations that lie below the surface that have tiny pockets of space are formations with pore space. This sponge is like one of those formations. It is capable of holding gas or fluids if they are injected, disposed or soaked up by the sponge. The definition in SB2344 does not explain whether it includes a cavity or void that is filled with air, saltwater, natural gas, or crude oil. That is the first place where the good intentions of the bill and its words do not match. But that does not matter. Assume that the bill is reworded to only include pore space that only contains ancient air trapped in the rock, just like my sponge has air in its pores now.

I bought this sponge. I own this sponge. It is my property. It belongs to me. It does not belong to the state, it does not belong to the Industrial Commission, and it does not belong to the company that wants to use it to store things. As the owner of this sponge, I can decide whether I will allow someone to use my sponge to clean up their spilled fluids or to store their fluids. But if someone uses my sponge without my permission, it is an illegal trespass on my property. It is my sponge and I have the property right to decide who can use it and on what terms.

As a landowner I also own that formation of rock that has sponge-like qualities. The patent for my farmland includes everything underneath my land unless it was reserved in the patent. The formation is a container, like a sponge, capable of holding fluids and gases. Like my sponge, the formation with pore space lying under my land belongs to me. If someone wants to use that sponge-like formation in my land to sop up and dispose of their waste fluids or to store their gases, they need to have my permission to do that. Otherwise, they are trespassing on my property rights.

The formation with pore space is like this sponge with pore space. It is empty, but it is a container that belongs to me and, as the owner of that container, it should be up to me whether I am going to allow someone to use it.

**THIS LEGISLATURE HAS ALREADY DEFINED AND DETERMINED WHO OWNS PORE SPACE:**

Chapter 47-31 NDCC had determined who owns pore space:

**Subsurface Pore Space Policy:**

47-31-01. Policy. Undivided estates in land and clarity in land titles reduce litigation, enhance comprehensive management, and promote the security and stability useful for economic development, environmental protection, and government operations.

47-31-02. Pore space defined. In this chapter "pore space" means a cavity or void, whether natural or artificially created, in a subsurface sedimentary stratum.

47-31-03. Title to pore space. **Title to pore space in all strata underlying the surface of lands and waters is vested in the owner of the overlying surface estate.** (emphasis added)

47-31-04. Conveyance of real property conveys pore space. A conveyance of title to the surface of real property conveys the pore space in all strata underlying the surface of the real property.

47-31-05. Severing pore space prohibited. Title to pore space may not be severed from title to the surface of the real property overlying the pore space. An instrument or arrangement that seeks to sever title to pore space from title to the surface is void as to the severance of the pore space from the surface interest.

47-31-06. Transactions allowed. Leasing pore space is not a severance prohibited by this chapter.

47-31-07. Application. This chapter does not affect transactions before April 9, 2009, that severed pore space from title to the surface estate.

47-31-08. Mineral and pore space estates - Relationship. In the relationship between a severed mineral owner and a pore space estate, this chapter does not change or alter the common law as of April 9, 2009, as it relates to the rights belonging to, or the dominance of, the mineral estate.

Chapter 47-31 NDCC was merely a recital of what the law has long been. The surface owner has always owned the subsurface formations lying under his or her land that have not been previously conveyed or reserved in the past.

**THE COURTS HAVE ALREADY RULED THAT PORE SPACE IN A FORMATION IS OWNED BY THE SURFACE OWNER:**

The North Dakota Supreme Court has already ruled that pore space belongs to the landowner as part of his property rights.

Mosser v Denbury, 2017 ND 169, 898 N.W.2d 406:

[¶14] The first certified question involves ownership of pore space beneath a surface estate, a predicate to potential liability in this case, and provides: 1. In North Dakota, does the owner of the surface estate own the pore space deep below the surface, absent some conveyance of the pore space to a third party and even when the mineral estate has been severed from the surface estate?

[¶15] Chapter 47-31, N.D.C.C., describes subsurface pore space policy in North Dakota and says “pore space’ means a cavity or void, whether natural or artificially created, in a subsurface sedimentary stratum.” N.D.C.C. § 47-31-02. See also N.D.C.C. § 38-22-02(5) (defining pore space for carbon dioxide underground storage). Under N.D.C.C. § 47-31-03, the “[t]itle to pore space in all strata underlying the surface of lands and waters is vested in the owner of the overlying surface estate.” *The conveyance of title to the surface of real property conveys the pore space in all strata underlying the surface and pore space may not be severed from the title of the overlying surface of real property except by transactions before April 9, 2009.* See N.D.C.C. §§ 47-31-04, 47-31-05, and 47-31-07. (emphasis added).

The federal court agrees as well:

Mosser v. Denbury Res., Inc., No. 1:13-CV-148, 2014 WL 11531329, at \*3 (D.N.D. Feb. 12, 2014):

In North Dakota, property rights extend to the sky and to the depths. See N.D.C.C. § 47-01-12. Title to subsurface pore space is vested in the owner of surface estate. N.D.C.C. § 47-31-03. Severance of the pore space from the surface estate is prohibited, but leasing of the pore



space is permitted. N.D.C.C. §§ 47-31-05 and 47-31-06. Chapter 47-31 of the North Dakota Century Code has an effective date of April 9, 2009, a date subsequent to the issuance of the fluid injection permit for the Mosser 1-26 well. Chapter 47-31 does not address damages for trespass to pore space. Interestingly, North Dakota's laws relating to the underground storage of carbon dioxide do address compensation for the pore space owner. See N.D.C.C. §§ 38-22-08(5) and 38-22-08(14).

\* \* \*

The Plaintiffs [Mosser] also rely upon Buchholz v. Burlington Resources Oil & Gas Co. LP, 755 N.W.2d 914 (N.D. 2008) to support their contention that Denbury must compensate them for the use of the pore space underneath their property. In Buchholz, two sets of surface owners brought actions against an oil and gas company for breach of their respective salt water disposal agreements. Id. at 915. The actions were consolidated. The oil and gas company took the position that a unitization order from the North Dakota Industrial Commission, which created a large spacing unit, nullified or modified the salt water disposal agreements and relieved the oil and gas company of its obligation to pay the per barrel fee required by the salt water disposal agreement. Id. at 916. The North Dakota Supreme Court upheld the trial court's determination that the salt water disposal agreements had not been modified or nullified by unitization. The North Dakota Supreme Court found the oil and gas company had misconstrued the authority granted it by the Industrial Commission's order, and rejected the notion that a unit operator has a general right to use the land and existing wells within the unit for salt water disposal. Id. at 917, 919.

Also informative is the federal court's reasoning as shown by two footnotes in the court decision:

At footnote 10 in Mosser v. Denbury Res., Inc., 112 F. Supp. 3d 906, 919 (D.N.D. 2015):

Even in the absence of a governing statute, the prevailing view in most jurisdictions appears to be that the subsurface pore space belongs to the surface owner. *See, e.g., Ellis v. Arkansas Louisiana Gas Co.*, 450 F.Supp. 412, 420 (E.D.Okla.1978); *Emeny v. United States*, 412 F.2d 1319, 1321–22 (Ct.Cl.1969) (applying Texas law); *Cassinis v. Union Oil Co. of California*, 14 Cal.App.4th 1770, 1782–83, 18 Cal.Rptr.2d 574 (Cal.Ct.App.2d Dist.1993); *Humble Oil & Refining Co. v. West*, 508 S.W.2d 812, 815 (Tex.1974); *cf. Dick Properties, LLC*, 221 P.3d at 620–22; *see generally* 1–2 *Williams & Meyers* at § 218; Owen L. Anderson,

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Kay Bailey Hutchison, & R. Lee Gresham, *Legal and Commercial Models for Pore-space Access and Use for Geologic Co2 Sequestration*, 2015 NO. 4 RMMLF-INST PAPER NO. 9 at \* \* 9-7-9-12 & n. 48 (May 2015).

At footnote 15 in Mosser v. Denbury Res., Inc., 112 F. Supp. 3d 906, 922 (D.N.D. 2015):

Pore space is not the only subsurface that may be utilized by the mineral developer. For example, the mineral developer might use the sand, gravel, scoria or clay underlying the surface, which ordinarily belongs to the surface owner unless they are the subject of a specific prior reservation or grant. *See, e.g., George v. Veeder*, 2012 ND 186, ¶ 10, 820 N.W.2d 731. And, if used by the mineral developer, the court is confident that the North Dakota Supreme Court would conclude that such use was compensable under ch. 38-11.1.

It has long been the law in this country and in this state that an owner of land owns everything under his land and above his land that has not been conveyed away or reserved prior to gaining title. This proposed law turns that concept upside down by taking away part of the land that has been part of the land from time immemorial, as recognized in our statutes and by our courts.

#### **SB2344 IS UNCONSTITUTIONAL:**

The Fifth Amendment to the United States Constitution states among many things that private property shall not be taken for public use, without just compensation.

Changing the definition of "Land" to exclude pore space is a taking of private property. The proposed law is unconstitutional and will face challenges in court at great expense to the state and to the farmers, ranchers, and other landowners who are forced by SB2344 to fight to keep their property rights intact from this unconstitutional taking.

#### **SB2344 RESULTS IN CONDEMNATION:**

Like many laws, the result is often more than what the written language says, or the law intended. By changing the definition of "Land" to exclude pore space, the legislature and the state will take private property away from landowners without just compensation.

North Dakota has long recognized that property acquired by patent cannot be acquired by the State without just compensation paid to the owner.

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By changing the definition of land to exclude pore space, the state of North Dakota will be taking a longstanding and legally recognized property right away from the landowners of this state. When the state takes private property, it must pay for it.

This law as written will result in a deluge of litigation for inverse condemnation, a type of lawsuit where aggrieved property owners seek compensation for what the state has taken away from them. So, instead of preventing litigation, the state will create litigation that will result in the state paying millions of dollars to every farmer, rancher, and other landowner in this state of taking their property without just compensation.

If one of the intentions of this proposed law was to prevent litigation, it is going to do just the opposite. SB2344 will open the flood gates of litigation on this issue and the State will be a party to all of the litigation.

**SB2344 TAKES AWAY THE RIGHTS AND ABILITY FOR A FARMER OR RANCHER TO PROTECT HIS PRIVATE PROPERTY RIGHTS:**

The proposed law states in part:

Injection or migration of substances into pore space for disposal operations, for secondary or tertiary oil recovery operations, or otherwise to facilitate production of oil, gas, or other minerals *is not unlawful and, by itself, does not constitute trespass, nuisance, or other tort.* (emphasis added)

Not only does the law as proposed steal private property rights, as written it would assure that a farmer or rancher could not use the court system to seek redress for the use of his private property by another private entity. In other words, an oil company that has salt water to dispose of can do it and there will be no claim allowed in court for "trespass, nuisance, or other tort".

It is fundamentally unfair to strip a citizen of his right to complain of a wrong by preventing him from seeking redress for the wrong in court. SB2344 not only seeks to legalize the theft of private property rights, but to prevent anyone from asking the court to right the wrong done to him. This is morally wrong and an affront to the rights of the landowners of our state. There is no moral difference between SB2344 and a law that allows strangers to stay in your house without your consent while you are on vacation or to drive your car without your consent while you are at work.

**SOCIALISM BY LEGISLATION:**

North Dakota has long recognized and respected the property rights of its citizens. North Dakotans do not agree on everything, but I have never met one who believes

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that the State should take away private property and give it to corporations. This proposed law flies in the face of tradition of respecting property ownership and protecting private property rights. The definition of socialism is the political theory that the government should own the means of production and distribution. SB2344 socializes the pore space by taking it away from the landowners and allowing the government to decide who can use it and what they can use it for, without any compensation to the landowner from whom it was taken.

Under SB2344, the State can decide to allow an oil company to dispose of saltwater or radioactive slurry underneath your land without your consent and without compensation. The companies that dispose of saltwater and slurry are paid to do so, and normally they have to work with private landowners to get permission to use their land to do it. SB2344 takes the private landowner out of the equation. As long as the company can find a surface location to drill from, it can drill under your land to dispose of these substances.

**THE PROPOSED LAW UNDER SB2344 IS UNNECESSARY:**

I have it from a reliable source that there are, as of February 28, 2019, 461 active salt water disposal wells in North Dakota, disposing of approximately 1,800,000 barrels of saltwater per day. The landowners and the industry have a system that is working. It is not broken. It has been this way for over 60 years.

The proposed law will have the effect of allowing one private industry to dispose of its saltwater, for which it is responsible, without paying just and reasonable compensation to the owner of the resource it uses to dispose of that saltwater, namely the pore space that the landowners will have owned from their patents until the passage of SB2344.

The current system is based on capitalism. The owner of the resource decides who can use it and on what terms. That system works. SB2344 will replace it with a form of socialism that redistributes wealth from the landowners with pore space to the oil companies who need the pore space. Socialism and redistribution of formerly private property is a system that does not work anywhere in the world and certainly is not right for North Dakota.

**THE STATE AND THE OIL INDUSTRY HAVE ANOTHER OPTION IF THEY BELIEVE THAT PRIVATE LANDOWNERS ARE INTERFERING WITH OIL PRODUCTION BY PROTECTING THEIR PORE SPACE:**

According to a report that I read this week on the website of the state Board of University and School Lands, the State has over 700,000 surface acres under lease. The State already owns the pore space in the formations under those acres. If there is an actual problem that SB2344 is trying to address, the State should first use its



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existing 700,000 acres of pore space to capacity before it starts to take away the pore space from private landowners.

The State can do with its land holdings as it sees fit. If it believes that oil companies should be allowed to dispose of saltwater and store gases in pore space free of charge, then the Legislature can pass a law allowing that to happen in the State's pore space. I do not believe the State should do that for free, but at least doing so would not forcibly deprive me of the land that I and my family have owned and lived on for generations and give part of that land to the oil companies to use without my consent. That is what SB2344 will do, and it is both wrong and unnecessary.

**REQUEST:**

I respectfully request this Committee to take one of two actions:

1. To respect private property rights and the right to defend private property rights by recommending a DO NOT PASS on SB2344;

Or, if the Committee believes that there is a real problem that needs to be addressed:

2. To recommend a legislative study of the issue of salt water disposal, private property rights, and state regulation of those rights, which the next legislative session can address if the study concludes that legislation is necessary.

Thank you for your time and consideration. I will now take my sponge that I own and leave others to state their opinions on this proposed law.

Dennis Edward Johnson

PROPOSED AMENDMENTS TO ENGROSSED HOUSE BILL NO. 1439

Page 1, line 2, after "reenact" insert "sections 57-06-17.1 and 57-39.2-04.14,"

Page 1, line 3, after "57-51.1-03" insert ", and section 57-60-06"

Page 1, line 3, after "relating to" insert "a property tax exemption for pipelines used for secure geologic storage, a sales and use tax exemption for materials used for secure geologic storage,"

Page 1, line 5, after "dioxide" insert ", and property classification of secure geologic storage equipment for coal conversion tax purposes"

Page 1, after line 15, insert:

**"SECTION 2. AMENDMENT.** Section 57-06-17.1 of the North Dakota Century Code is amended and reenacted as follows:

**57-06-17.1. Carbon dioxide pipeline exemption.**

Property, not including land, is exempt from taxation during construction and for the first ten full taxable years following initial operation if it consists of a pipeline, constructed after 1996, and necessary associated equipment for the transportation or storage of carbon dioxide for secure geologic storage or use in enhanced recovery of oil or natural gas.

**SECTION 3. AMENDMENT.** Section 57-39.2-04.14 of the North Dakota Century Code is amended and reenacted as follows:

**57-39.2-04.14. Sales and use tax exemption for materials used in compressing, gathering, collecting, storing, transporting, or injecting carbon dioxide for secure geologic storage or use in enhanced recovery of oil or natural gas.**

1. Gross receipts from sales of tangible personal property used to construct or expand a system used to compress, gather, collect, store, transport, or inject carbon dioxide for secure geologic storage or use in enhanced recovery of oil or natural gas in this state are exempt from taxes under this chapter. To be exempt, the tangible personal property must be incorporated into a system used to compress, gather, collect, store, transport, or inject carbon dioxide for secure geologic storage or use in enhanced recovery of oil or natural gas. Tangible personal property used to replace an existing system to compress, gather, collect, store, transport, or inject carbon dioxide for secure geologic storage or use in enhanced recovery of oil or natural gas does not qualify for exemption

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#1 pg. 2

- under this section unless the replacement creates an expansion of the system.
2. To receive the exemption under this section at the time of purchase, the owner of the gas compressing, gathering, collecting, storing, transporting, or injecting system must receive from the tax commissioner a certificate that the tangible personal property used to construct or expand a system used to compress, gather, collect, store, transport, or inject carbon dioxide for secure geologic storage or use in enhanced recovery of oil or natural gas qualifies for the exemption. If a certificate is not received before the purchase, the owner shall pay the applicable tax imposed by this chapter and apply to the tax commissioner for a refund.
  3. If the tangible personal property is purchased or installed by a contractor subject to the tax imposed by this chapter, the owner of the gas compressing, gathering, collecting, storing, transporting, or injecting system may apply to the tax commissioner for a refund of the difference between the amount remitted by the contractor and the exemption imposed or allowed by this section. Application for a refund must be made at the time and in the manner directed by the tax commissioner and must include sufficient information to permit the tax commissioner to verify the sales and use taxes paid and the exempt status of the sale or use.
  4. This chapter and chapter 57-40.2 apply to the exemption under this section."

Page 6, after line 24, insert:

**"SECTION 5. AMENDMENT.** Section 57-60-06 of the North Dakota Century Code is amended and reenacted as follows:

**57-60-06. Property classified and exempted from ad valorem taxes –  
In lieu of certain other taxes – Credit for certain other taxes.**

Each coal conversion facility and any carbon dioxide capture system located at the coal conversion facility, and any equipment directly used for secure geologic storage of carbon dioxide or enhanced recovery of oil or natural gas must be classified as personal property and is exempt from all ad valorem taxes except for taxes on the land on which the facility, capture system, or equipment is located. The exemption provided by this section may not be interpreted to apply to tangible personal property incorporated as a component part of a carbon dioxide pipeline but this restriction does not affect eligibility of such a pipeline for the exemption under section 57-06-17.1. The taxes imposed by this chapter are in lieu of ad valorem taxes on the property so classified as personal property."

Page 6, line 25, replace "This Act becomes" with "Sections 1 and 4 of this Act are"

Page 6, line 25, after the period insert: "Sections 2 and 5 of this Act are effective for taxable years beginning after December 31, 2018. Section 3 of this Act is effective for taxable events occurring after June 30, 2019."

Renumber accordingly

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**FIRST ENGROSSMENT**

Sixty-sixth  
Legislative Assembly  
of North Dakota

**ENGROSSED HOUSE BILL NO. 1439**

Introduced by

Representatives Porter, Delzer, Dockter, Headland, Howe, Mock, Pollert

Senators Cook, Dotzenrod, Meyer, Unruh, Wardner

1 A BILL for an Act to create and enact section 47-31-09 of the North Dakota Century Code,  
2 relating to injecting substances for oil, gas, and mineral production; to amend and reenact  
3 sections 57-06-17.1 and 57-39.2-04.14, subsection 3 of section 57-51.1-03, and section 57-60-  
4 06 of the North Dakota Century Code, relating to a property tax exemption for pipelines used for  
5 secure geologic storage, a sales and use tax exemption for materials used for secure geologic  
6 storage, an oil extraction tax exemption for the incremental production from tertiary recovery  
7 projects using carbon dioxide, and property classification of secure geologic storage equipment  
8 for coal conversion tax purposes; and to provide an effective date.

9 **BE IT ENACTED BY THE LEGISLATIVE ASSEMBLY OF NORTH DAKOTA:**

10 **SECTION 1.** Section 47-31-09 of the North Dakota Century Code is created and enacted  
11 as follows:

12 **47-31-09. Injection of substances to facilitate production of oil, gas, or other**  
13 **minerals.**

14 This chapter may not be construed to limit the rights or dominance of a mineral estate to  
15 drill or recomplete a well under chapter 38-08. Injection or migration of substances into pore  
16 space for disposal operations, for secondary or tertiary oil recovery operations, or otherwise to  
17 facilitate production of oil, gas, or other minerals is not unlawful and, by itself, does not  
18 constitute trespass, nuisance, or other tort.

19 **SECTION 2. AMENDMENT.** Section 57-06-17.1 of the North Dakota Century Code is  
20 amended and reenacted as follows:

21 **57-06-17.1. Carbon dioxide pipeline exemption.**  
22



Property, not including land, is exempt from taxation during construction and for the first ten full taxable years following initial operation if it consists of a pipeline, constructed after 1996, and necessary associated equipment for the transportation or storage of carbon dioxide for secure geologic storage or use in enhanced recovery of oil or natural gas.

**SECTION 3. AMENDMENT.** Section 57-39.2-04.14 of the North Dakota Century Code is amended and reenacted as follows:

**57-39.2-04.14. Sales and use tax exemption for materials used in compressing, gathering, collecting, storing, transporting, or injecting carbon dioxide for secure geologic storage or use in enhanced recovery of oil or natural gas.**

1. Gross receipts from sales of tangible personal property used to construct or expand a system used to compress, gather, collect, store, transport, or inject carbon dioxide for secure geologic storage or use in enhanced recovery of oil or natural gas in this state are exempt from taxes under this chapter. To be exempt, the tangible personal property must be incorporated into a system used to compress, gather, collect, store, transport, or inject carbon dioxide for secure geologic storage or use in enhanced recovery of oil or natural gas. Tangible personal property used to replace an existing system to compress, gather, collect, store, transport, or inject carbon dioxide for secure geologic storage or use in enhanced recovery of oil or natural gas does not qualify for exemption under this section unless the replacement creates an expansion of the system.
2. To receive the exemption under this section at the time of purchase, the owner of the gas compressing, gathering, collecting, storing, transporting, or injecting system must receive from the tax commissioner a certificate that the tangible personal property used to construct or expand a system used to compress, gather, collect, store, transport, or inject carbon dioxide for secure geologic storage or use in enhanced recovery of oil or natural gas qualifies for the exemption. If a certificate is not received before the purchase, the owner shall pay the applicable tax imposed by this chapter and apply to the tax commissioner for a refund.
3. If the tangible personal property is purchased or installed by a contractor subject to the tax imposed by this chapter, the owner of the gas compressing, gathering, collecting, storing, transporting, or injecting system may apply to the tax commissioner for a refund of the difference between the amount remitted by the contractor and the exemption imposed or allowed by this section. Application for

a refund must be made at the time and in the manner directed by the tax commissioner and must include sufficient information to permit the tax commissioner to verify the sales and use taxes paid and the exempt status of the sale or use.

4. This chapter and chapter 57-40.2 apply to the exemption under this section.

**SECTION 24. AMENDMENT.** Subsection 3 of section 57-51. 1-03 of the North Dakota Century Code is amended and reenacted as follows:

3. a. The incremental production from a secondary recovery project which has been certified as a qualified project by the industrial commission after July 1, 1991, is exempt from any taxes imposed under this chapter for a period of five years from the date the incremental production begins.
- b. The incremental production from a tertiary recovery project which has been certified as a qualified project by the industrial commission is exempt from any taxes imposed under this chapter for a period of ten years from the date the incremental production begins. Incremental production from a tertiary recovery project from a horizontal well drilled and completed within the Bakken and Three Forks formations which has been certified as a qualified project by the industrial commission is not exempt from July 1, 2015, through June 30, 2017, and is thereafter exempt from any taxes imposed under this chapter for a period of five years from July 1, 2017, or the date the incremental production begins, whichever is later.
- c. The incremental production from a tertiary recovery project that injects more than fifty percent carbon dioxide produced from coal and has been certified as a qualified project by the industrial commission is exempt from any taxes imposed under this chapter for a period of twenty years from the date the incremental production begins or from the date the project is certified by the industrial commission as meeting the fifty percent or more carbon dioxide produced from coal injection requirement, whichever is later. To qualify for the exemption under this subsection, the project must be located outside the Bakken or Three Forks formations and must use carbon dioxide produced from coal. The incremental production that has been certified by the industrial commission under this section must be used to calculate the exemption under this subdivision.

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d. The incremental production from a tertiary recovery project that injects more than fifty percent carbon dioxide produced from coal and has been certified as a qualified project by the industrial commission is exempt from any taxes imposed under this chapter for a period of ten years from the date the incremental production begins or from the date the project is certified by the industrial commission as meeting the fifty percent or more carbon dioxide produced from coal injection requirement, whichever is later. To qualify for the exemption under this subsection, the project must be located within the Bakken or Three Forks formations and must use carbon dioxide produced from coal. The incremental production that has been certified by the industrial commission under this section must be used to calculate the exemption under this subdivision.

e. For purposes of this subsection, incremental production is defined in the following manner:

- (1) For purposes of determining the exemption provided for in subdivision a and with respect to a unit where there has not been a secondary recovery project, incremental production means the difference between the total amount of oil produced from the unit during the secondary recovery project and the amount of primary production from the unit. For purposes of this paragraph, primary production means the amount of oil which would have been produced from the unit if the secondary recovery project had not been commenced. The industrial commission shall determine the amount of primary production in a manner which conforms to the practice and procedure used by the commission at the time the project is certified.
- (2) For purposes of determining the exemption provided for in subdivision a and with respect to a unit where a secondary recovery project was in existence prior to July 1, 1991, and where the industrial commission cannot establish an accurate production decline curve, incremental production means the difference between the total amount of oil produced from the unit during a new secondary recovery project and the amount of production which would be equivalent to the average monthly production from

the unit during the most recent twelve months of normal production reduced by a production decline rate of ten percent for each year. The industrial commission shall determine the average monthly production from the unit during the most recent twelve months of normal production and must upon request or upon its own motion hold a hearing to make this determination. For purposes of this paragraph, when determining the most recent twelve months of normal production the industrial commission is not required to use twelve consecutive months. In addition, the production decline rate of ten percent must be applied from the last month in the twelve-month period of time.

(3) For purposes of determining the exemption provided for in subdivision a and with respect to a unit where a secondary recovery project was in existence before July 1, 1991, and where the industrial commission can establish an accurate production decline curve, incremental production means the difference between the total amount of oil produced from the unit during the new secondary recovery project and the total amount of oil that would have been produced from the unit if the new secondary recovery project had not been commenced. For purposes of this paragraph, the total amount of oil that would have been produced from the unit if the new secondary recovery project had not been commenced includes both primary production and production that occurred as a result of the secondary recovery project that was in existence before July 1, 1991. The industrial commission shall determine the amount of oil that would have been produced from the unit if the new secondary recovery project had not been commenced in a manner that conforms to the practice and procedure used by the commission at the time the new secondary recovery project is certified.

(4) For purposes of determining the exemption provided for in subdivision b and with respect to a unit where there has not been a secondary recovery project, incremental production means the difference between the total amount of oil produced from the unit



1 during the tertiary recovery project and the amount of primary  
2 production from the unit. For purposes of this paragraph, primary  
3 production means the amount of oil which would have been  
4 produced from the unit if the tertiary recovery project had not been  
5 commenced. The industrial commission shall determine the  
6 amount of primary production in a manner which conforms to the  
7 practice and procedure used by the commission at the time the  
8 project is certified.

9 (5) For purposes of determining the exemption provided for in  
10 subdivision b and with respect to a unit where there is or has been  
11 a secondary recovery project, incremental production means the  
12 difference between the total amount of oil produced during the  
13 tertiary recovery project and the amount of production which  
14 would be equivalent to the average monthly production from the  
15 unit during the most recent twelve months of normal production  
16 reduced by a production decline rate of ten percent for each year.  
17 The industrial commission shall determine the average monthly  
18 production from the unit during the most recent twelve months of  
19 normal production and must upon request or upon its own motion  
20 hold a hearing to make this determination. For purposes of this  
21 paragraph, when determining the most recent twelve months of  
22 normal production the industrial commission is not required to use  
23 twelve consecutive months. In addition, the production decline  
24 rate of ten percent must be applied from the last month in the  
25 twelve-month period of time.

26 (6) For purposes of determining the exemption provided for in  
27 subdivision b and with respect to a unit where there is or has been  
28 a secondary recovery project and where the industrial commission  
29 can establish an accurate production decline curve, incremental  
30 production means the difference between the total amount of oil  
31 produced from the unit during the tertiary recovery project and the  
32 total amount of oil that would have been produced from the unit if  
33 the tertiary recovery project had not been commenced. For

1 purposes of this paragraph, the total amount of oil that would have  
2 been produced from the unit if the tertiary recovery project had not  
3 been commenced includes both primary production and  
4 production that occurred as a result of any secondary recovery  
5 project. The industrial commission shall determine the amount of  
6 oil that would have been produced from the unit if the tertiary  
7 recovery project had not been commenced in a manner  
8 that conforms to the practice and procedure used by the  
9 commission at the time the tertiary recovery project is certified.

10 (7) For purposes of determining the exemption provided for in  
11 subdivisions c and d, and with respect to a unit where a tertiary  
12 recovery project was in existence, and where the industrial  
13 commission cannot establish an accurate production decline  
14 curve, incremental production means the difference between the  
15 total amount of oil produced from the unit during a new tertiary  
16 recovery project and the amount of production which would be  
17 equivalent to the average monthly production from the unit during  
18 the most recent twelve months of normal production reduced by a  
19 production decline rate of ten percent for each year. The industrial  
20 commission shall determine the average monthly production from  
21 the unit during the most recent twelve months of normal  
22 production and shall upon request or upon its own motion  
23 hold a hearing to make this determination. For purposes of this  
24 paragraph, in determining the most recent twelve months of  
25 normal production the industrial commission is not required to use  
26 twelve consecutive months. In addition, the production decline  
27 rate of ten percent must be applied from the last month in the  
28 twelve-month period of time.

29 (8) For purposes of determining the exemption provided for in  
30 subdivisions c and d, and with respect to a unit where a tertiary  
31 recovery project was in existence, and where the industrial  
32 commission can establish an accurate production decline curve,  
33 incremental production means the difference between the total

amount of oil produced from the unit during the new tertiary recovery project and the total amount of oil that would have been produced from the unit if the new tertiary recovery project had not been commenced. For purposes of this paragraph, the total amount of oil that would have been produced from the unit if the new tertiary recovery project had not been commenced includes both primary production and production that occurred as a result of the tertiary recovery project that was previously in existence. The industrial commission shall determine the amount of oil that would have been produced from the unit if the new tertiary recovery project had not been commenced in a manner that conforms to the practice and procedure used by the commission at the time the new tertiary recovery project is certified.

d.f. The industrial commission shall adopt rules relating to this exemption ~~that~~which must include procedures for determining incremental production as defined in subdivision ee.

**SECTION 5. AMENDMENT.** Section 57-60-06 of the North Dakota Century Code is amended and reenacted as follows:

**57-60-06. Property classified and exempted from ad valorem taxes – In lieu of certain other taxes – Credit for certain other taxes.**

Each coal conversion facility and any carbon dioxide capture system located at the coal conversion facility, and any equipment directly used for secure geologic storage of carbon dioxide or enhanced recovery of oil or natural gas must be classified as personal property and is exempt from all ad valorem taxes except for taxes on the land on which the facility, capture system, or equipment is located. The exemption provided by this section may not be interpreted to apply to tangible personal property incorporated as a component part of a carbon dioxide pipeline but this restriction does not affect eligibility of such a pipeline for the exemption under section 57-06-17.1. The taxes imposed by this chapter are in lieu of ad valorem taxes on the property so classified as personal property.

**SECTION 36. EFFECTIVE DATE.** ~~This Act becomes~~ Sections 1 and 4 of this Act are effective on July 1, 2019. Sections 2 and 5 of this Act are effective for taxable years beginning after December 31, 2018. Section 3 of this Act is effective for taxable events occurring after June 30, 2019.

PROPOSED AMENDMENTS TO ENGROSSED HOUSE BILL NO. 1439

Page 1, line 2, after "reenact" insert "sections 57-06-17.1 and 57-39.2-04.14,"

Page 1, line 3, after "57-51.1-03" insert ", and section 57-60-06"

Page 1, line 3, after "to" insert "a property tax exemption for pipelines used for secure geologic storage, a sales and use tax exemption for materials used for secure geologic storage,"

Page 1, line 5, after "dioxide" insert ", and property classification of secure geologic storage equipment for coal conversion tax purposes"

Page 1, after line 15, insert:

**"SECTION 2. AMENDMENT.** Section 57-06-17.1 of the North Dakota Century Code is amended and reenacted as follows:

**57-06-17.1. Carbon dioxide pipeline exemption.**

Property, not including land, is exempt from taxation during construction and for the first ten full taxable years following initial operation if it consists of a pipeline, constructed after 1996, and necessary associated equipment for the transportation or storage of carbon dioxide for secure geologic storage or use in enhanced recovery of oil or natural gas.

**SECTION 3. AMENDMENT.** Section 57-39.2-04.14 of the North Dakota Century Code is amended and reenacted as follows:

**57-39.2-04.14. Sales and use tax exemption for materials used in compressing, gathering, collecting, storing, transporting, or injecting carbon dioxide for secure geologic storage or use in enhanced recovery of oil or natural gas.**

1. Gross receipts from sales of tangible personal property used to construct or expand a system used to compress, gather, collect, store, transport, or inject carbon dioxide for secure geologic storage or use in enhanced recovery of oil or natural gas in this state are exempt from taxes under this chapter. To be exempt, the tangible personal property must be incorporated into a system used to compress, gather, collect, store, transport, or inject carbon dioxide for secure geologic storage or use in enhanced recovery of oil or natural gas. Tangible personal property used to replace an existing system to compress, gather, collect, store, transport, or inject carbon dioxide for secure geologic storage or use in enhanced recovery of oil or natural gas does not qualify for exemption under this section unless the replacement creates an expansion of the system.
2. To receive the exemption under this section at the time of purchase, the owner of the gas compressing, gathering, collecting, storing, transporting, or injecting system must receive from the tax commissioner a certificate that the tangible personal property used to construct or expand a system used to compress, gather, collect, store, transport, or inject carbon dioxide for secure geologic storage or use in enhanced recovery of oil or natural

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gas qualifies for the exemption. If a certificate is not received before the purchase, the owner shall pay the applicable tax imposed by this chapter and apply to the tax commissioner for a refund.

3. If the tangible personal property is purchased or installed by a contractor subject to the tax imposed by this chapter, the owner of the gas compressing, gathering, collecting, storing, transporting, or injecting system may apply to the tax commissioner for a refund of the difference between the amount remitted by the contractor and the exemption imposed or allowed by this section. Application for a refund must be made at the time and in the manner directed by the tax commissioner and must include sufficient information to permit the tax commissioner to verify the sales and use taxes paid and the exempt status of the sale or use.
4. This chapter and chapter 57-40.2 apply to the exemption under this section."

Page 6, after line 24, insert:

**"SECTION 5. AMENDMENT.** Section 57-60-06 of the North Dakota Century Code is amended and reenacted as follows:

**57-60-06. Property classified and exempted from ad valorem taxes - In lieu of certain other taxes - Credit for certain other taxes.**

Each coal conversion facility and any carbon dioxide capture system located at the coal conversion facility, and any equipment directly used for secure geologic storage of carbon dioxide or enhanced recovery of oil or natural gas must be classified as personal property and is exempt from all ad valorem taxes except for taxes on the land on which the facility, capture system, or equipment is located. The exemption provided by this section may not be interpreted to apply to tangible personal property incorporated as a component part of a carbon dioxide pipeline but this restriction does not affect eligibility of such a pipeline for the exemption under section 57-06-17.1. The taxes imposed by this chapter are in lieu of ad valorem taxes on the property so classified as personal property."

Page 6, line 25, replace "This Act becomes" with "Sections 1 and 4 of this Act become"

Page 6, line 25, after the period insert "Sections 2 and 5 of this Act are effective for taxable years beginning after December 31, 2018. Section 3 of this Act is effective for taxable events occurring after June 30, 2019."

Renumber accordingly