Social Networks and Climate Change Policy Preferences: Structural Location and Support for Fossil Fuel Production

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The COMPON Project

- Our Canada case study is part of a larger international comparative study involving about 20 different country cases as part of a larger project known as COMPON.

- The theoretical framework underpinning this research, is that climate change policy differences are shaped by the network linkages amongst policy actors and the types of frames used to interpret climate change problems.

- Information about the larger project can be found at: www.compon.org

Introduction

The Canada case studying involves the following components:

- a discourse network analysis of media coverage of climate change in Canada,
- an interview study with climate change policy network actors, and
- a social network analysis of climate change policy actors based on a questionnaire.

- Today's talk is based primarily on this latter set of data.

Canada’s contributions to GHGs.

- One of the highest per capita emissions. (Though a relatively small amount of total world emissions in absolute terms.)

- In terms of a recent analysis of climate change performance, Canada ranked 55th of 58 (and last amongst the G7, and second to last amongst the G20).

The Case: Canada and Climate Change.

- The Kyoto Agreement.
- Chretien/Martin/Dion Liberals.

- Harper Government.
- Withdrawal from Kyoto.
- Oil Sands development and pipelines as a key part of economic plan.

- Trudeau Liberals.
- Enthusiastic Support for the Paris Accord.
- Oil Sands development and pipelines as a key part of economic plan.
- Implementation of a nation-wide carbon pricing scheme.


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iclicker
AA
Carbon
Mitigation
Adaptation
Cleantech/innovation


Canada
Canada

Introduction

- This research will investigate the relationship between social structural location in a climate change discourse policy network, sector membership, and policy actor views about development of the oils sands in Alberta, and priorities regarding climate change actions in Canada.

Oil Sands

- The oil sand is a massive fossil fuel development based in Alberta, and has been a central part of both Canada and Alberta's economic development plans.

- Production of bitumen is more energy intensive than conventional oil.

- The proposed mark for bitumen produced from the oil sands is Asia. Consequently, the government has proposed a new oil pipeline, and increase oil tanker traffic will follow.


Dear Premier Clark,
please stand
for our
QUIT
OUR
the
CARBON
pipeline
Hey gir
listen
we sa
envir
does
pay
in th
DEFEND
OUR
CLIMATE
STOP THE
US CARBON PIPELINE
WE A
OUR
BROCCOI
NOW YO
FIX
HE
CLIMATE
carbon
exports
cause
climate
change!


We STILL Say NO KINDER MORGAN
For clean jobs. For climate solutions. For the coast.
CLEAN WATER RIGHTS
IS LIFE


WATER
IS LIFE
STOP
KINDER MORGAN
PIPE LINE

Some Qualitative Responses

- While this is not a qualitative focused paper, a number of interview respondents volunteered commentary regarding the oils sands.

- Here is some of the commentary:

Tension between Growing GDP and Curtailing Oil Sands

- Government official [Block 1]: …you're trying to grow an ever-growing pie anything that might slow that or change the nature of that growth which might mean that people who are now in the oil and gas sector are no longer able to be employed in the oil and gas sector and you know there's people don't like change. So as long as you're trying to achieve goals of jobs and GDP growth you're going to have conflict.

Oil Sands Drive GHG Emissions.

- ENGO Representative (Block 2): “[My] job is a combination of managing a small team that works on climate – primarily our focus is the tar sands as the fastest driver of greenhouse gas emissions and the main political barrier to climate action in the country.”

Critic of Government Policy

- University Researcher: “So I’m a strong critic of the of the federal government’s policy in respect to carbon intensive fuel, um fossil fuel extraction … in the oil sands. Um I’m interested in alternative energy sources and industries that Canada could develop in the absences of heavy reliance on fossil fuel extraction. For instances, ultra-deep geothermal energy…”

The Oil Sands is an Extremely Contentious Topic

- University Researcher: “The oil sands particularly in Canada is a third rail issue in Canada. And if you and you know aspire for instance to national political leadership in this country you know you have to you know you touch that rail and you die. And so you know the same is true for certain academics, for academics. So it really constrains the debate. There’s a real constraint on democratic conversation about these issues in Canada. When you define one industry as being in the Canadian, national interest and uh anybody who opposes that interests that industry as being somehow opposed to ah the national interest or anti-Canadian, then you are really dangerous in dangerous territory I think.”

Critic of Oil Sands

- University Researcher [Block 3]: “We are viewed internationally as a pariah, we’re viewed as rogues in the climate problem, and nobody takes us serious internationally anymore. This because the Harper focus has been on oil sands extraction of bitumen and shipping it to the highest bidder immediately, whoever that may be.”

Anti-Oil Sands

- ENGO representative [Block 2] “…so it’s basically two parts of what’s happening in Canada now. One is to challenge the fossil fuel industry which is the impediment to Canada taking action on climate change. And so to oppose tar sands development, pipeline development, those aspects which facilitate the continuing growth of greenhouse gas emissions in Canada. And the other is to advocate for particular policies and to get governments involved in taking action.”

Pro-Oil Sands

- Oil company representative: “…in the oil sands everyone’s kind of wringing their hands about emissions increasing you know as we increase our production and we’ve increased to over 2 million barrels a day now and you know the oil sands production is sort of demonized from the perspective that it is a growing source of emissions, right? But if you’re looking at liquid fuels, transportation fuels in particular, the production emissions are only around 20 percent of the emissions of every barrel and they are not an inherent quality of the fuel. The combustion emissions are.”

Pro-Oil Sands

- Oil company representative: “So you know Canada as a country could moth ball its oil sands industry tomorrow, just not produce another drop, but consumers would simply turn to other sources of oil to burn what they’re burning in vehicles. And so you know you’re going to get those production emissions happening somewhere else. They’ll happen either in the Balkan or they’ll happen Venezuela or they’ll happen in the North Sea. And they may be slightly more or slightly less carbon intensive than the oil sands, but that 80 percent of the barrel is gonna remain what it is.”

Misleading Rhetoric on both sides.

- University researcher: “So you have a lot of people saying Canada has just announced a set of weak targets and Canada should do more. But then you also have people who are applauding the policy packages imposed in Ontario, Quebec, B.C. what have you where either of those policies at those prices anyway imposed nationally wouldn’t get you anywhere close to the new target that Canada committed to. So you have people who I think underestimate the challenge of policy on or underestimate the challenge of targets on one hand and then of course you have the polarization of you know everything from the job-killing carbon tax rhetoric to those who suggest that you know Canada’s essentially or Canada’s oil sands are essentially causing global climate change. So no matter where you are there’s very strong opinions and a lot of misinformation.”

Theoretical Framework: A Policy Network Perspective.

- This analysis adopts a **policy network perspective.**

- Policy networks are a set of theoretical perspectives that focus on actors involved in policymaking and the relations among them. This focus involves studying the influence of different individuals and groups, such as government agencies, lobbyists, and nongovernmental organizations, in shaping policy outcomes (Knoke, 2011; Lubell, Scholz, Berardo, & Robins, 2012; Raab, 2002).

Social Network Analysis

- Traditional social science often focuses on **actor attributes** in explanations. Further, very often social scientists focus on individuals or aggregate of individuals. Social network scholars, by contrast, focus on relationships. For example rather than ascribing political attitudes to the socio-economic characteristics of individuals, network scholars are interested in how political attitudes are diffused and sustained through social networks.

Research Question and Guiding Hypothesis.

- *The central research question of this study is,* ***is the location of actors within a climate change policy network associated with their position on key policy issues?***

- Based on the social networks, and policy networks literatures, we develop the following guiding hypothesis: ***Social network location of actors is associated with their policy position.***

Research Question and Guiding Hypothesis.

- Our project examines the positions of actors on a variety of policy issues pertaining to climate change actions.

- One of these concerns support for developing the Oil Sands project in Alberta.

- Thus, with regard to this specific issue our hypothesis is: ***The location of actors within the climate change policy network is statistically associated with their support for the Oil Sands Project.***

Methods.

- Media Content Analysis.
- **Sampling Strategy.**
- Interview Data Collection.
- Thematic Coding Strategy.
- **Network Questionnaire Data Collection.**

Sampling

- **Organizational actors were included into the sample based on four criteria:**

1. **Participation in COP.**
2. **Participation in Testimony about Climate Bills.**
3. **Participation in the National Roundtable on the Environment and the Economy.**
4. **Appearance in national newspaper coverage (Globe and Mail, and National Post).**

Interviews and Questionnaires

- Interviews were conducted with 77 actors (representatives of organizations, and individual actors).

- 59 actors completed at least part of the online questionnaire.

- **44 actors completed the online survey. (With limited non-response for specific questions.) The analysis reported here focuses on these 44 actors.**

Interviewees

- The sample was designed to be representative.

- Interviewees generally covered the range of organizations in the sampling frame, including politicians, government bureaucrats, environmental activists, scientists, representatives from think tanks, business leaders, scientists, NGO leaders, and others.

The Questionnaire

- Inteviewees were then asked to complete an online questionnaire, which included questions on a variety of different topics pertaining to climate change, and climate change policy.

- In this presentation we will focus on the questions that dealt with social networks.

Social Network Questionnaire

Respondents were asked about five relational question regarding a list of policy actors (organizations and individuals) involved in climate change policy making:

1. Frequency of **communication** with different policy actors.
2. Perceptions about policy actor's **influence in domestic climate change policies**.
3. Indicate which policy actors **provide expert scientific advice**.
4. Indicate which policy actors have a strong **influence on R's org**.
5. Indicate which policy does R's org **collaborate** with regularly.

Section 4 - Continued. How frequently [do you] does your organization communicate with each of the following organizations or individuals?

The column choices are as follows:
1. **Never.** (You may either click on 'Never' or leave the row blank.)
2. **Occasionally** (A few times a year.)
3. **Regularly** (More than a few times a year, but less than once a month.)
4. **Often** (Once a month or more often.)

4.06 Business Groups/Trade Associations/Unions:

	1. Never	2. Occasionally (A few times a year)	3. Regularly (More than a few times a year)	4. Often (Monthly or more often)
BC Chamber of Commerce	○	○	○	○
Canadian Bar Association	○	○	○	○
Canadian Council of Chief Executives	○	○	○	○
Canadian Institute of Chartered Accountants	○	○	○	○
Canadian Taxpayers Federation	○	○	○	○
Other Business groups (Please specify by typing below):	○	○	○	○

4.07 Businesses:

27%

Section 4 - Continued. How frequently [do you] does your organization communicate with each of the following organizations or individuals?

The column choices are as follows:
1. **Never.** (You may either click on 'Never' or leave the row blank.)
2. **Occasionally** (A few times a year.)
3. **Regularly** (More than a few times a year, but less than once a month.)
4. **Often** (Once a month or more often.)

4.05 NGOs:

	1. Never	2. Occasionally (A few times a year)	3. Regularly (More than a few times a year)	4. Often (Monthly or more often)
CARE (Cooperative for Assistance and Relief Everywhere)	○	○	○	○
Climate Action Network Canada	○	○	○	○
Climate Reality Canada	○	○	○	○
David Suzuki Foundation	○	○	○	○
Ecojustice	○	○	○	○
Energy Probe	○	○	○	○
Environmental Defence	○	○	○	○

	1. Never	2. Occasionally (A few times a year)	3. Regularly (More than a few times a	4. Often (Monthly or more often)

Section 4 - Continued. How frequently [do you] does your organization communicate with each of the following organizations or individuals?

The column choices are as follows:
1. **Never.** (You may either click on 'Never' or leave the row blank.)
2. **Occasionally** (A few times a year.)
3. **Regularly** (More than a few times a year, but less than once a month.)
4. **Often** (Once a month or more often.)

4.10 Individuals:

	1. Never	2. Occasionally (A few times a year)	3. Regularly (More than a few times a year)	4. Often (Monthly or more often)
Andrew Coyne	○	○	○	○
Gordon Campbell	○	○	○	○
John Baird	○	○	○	○
John Bennett	○	○	○	○
Leona Aglukkaq	○	○	○	○
Michael Byers	○	○	○	○
Mike De Souza	○	○	○	○
Nathan Cullen	○	○	○	○
Roger Gibbins	○	○	○	○
Rona Ambrose	○	○	○	○
Stephane Dion	○	○	○	○

Government of Manitoba	☐	☐	☐	☐

	1. Influential in domestic climate change politics	2. Gives expert scientific info	3. Influences my org's policy positions	4. Collaborate with regularly
Government of Nova Scotia	☐	☐	☐	☐
Government of Nunavut	☐	☐	☐	☐
Government of Ontario	☐	☐	☐	☐
Government of Quebec	☐	☐	☐	☐
Government of Saskatchewan	☐	☐	☐	☐
Government of the Northwest Territories	☐	☐	☐	☐
Government of Yukon	☐	☐	☐	☐
ICLEI Canada - Local Governments for Sustainabilit	☐	☐	☐	☐
International Development Research Centre	☐	☐	☐	☐

	1. Influential in domestic climate change politics	2. Gives expert scientific info	3. Influences my org's policy positions	4. Collaborate with regularly
National Research Council	☐	☐	☐	☐
Natural Resources Canada	☐	☐	☐	☐
Royal BC Museum	☐	☐	☐	☐
Saskatchewan Research Council	☐	☐	☐	☐

Stephen Harper	☐	☐	☐	☐

	1. Influential in domestic climate change politics	2. Gives expert scientific info	3. Influences my org's policy positions	4. Collaborate with regularly
Kathryn Harrison	☐	☐	☐	☐
Thomas Homer-Dixon	☐	☐	☐	☐
Matt Horne	☐	☐	☐	☐
Will Horter	☐	☐	☐	☐
Mike Hudema	☐	☐	☐	☐
Mark Jaccard	☐	☐	☐	☐
Peter Kent	☐	☐	☐	☐
Naomi Klein	☐	☐	☐	☐
Andrew Leach	☐	☐	☐	☐
Marc Lee	☐	☐	☐	☐
Ezra Levant	☐	☐	☐	☐
Preston Manning	☐	☐	☐	☐
Ian Mauro	☐	☐	☐	☐
Elizabeth May	☐	☐	☐	☐

	1. Influential in

Dependent Variable

- **The main dependent variable we examine in this analysis is level of support for curtailing oil sands development.** More specifically, we asked survey respondents their organization's level of agreement on the statement: ***Canada should restrict mining and export of oil sands to cut greenhouse gas emissions.***

- A starting point for this is considering this issue in terms of Canada's actions to reduce carbon emissions. A number of analysts have argued that fully exploiting the fossil fuel contained in the oil sands could have devastating effects in terms of carbon emissions.

Dependent Variable

- First of all, the production of oil from the oil sands is more energy intensive than conventional oil production.

- Secondly, if all or most of the oil from the oil sands is ultimately burned, this will enormously to global carbon emissions.

Independent Variables

- Sector
- Network Block Membership
- Prioritizing Reducing Domestic Emissions

Analysis

- A **block model analysis** of the relational data was undertaken. Block membership was then used as a variable in a series of QAP multiple regressions.

Results

Results: Block Model Analysis.

- Block model analysis, a type of positional analysis in social network analysis, is a procedure that classifies actors as being similar if they have similar patterns of ties to other actors, regardless of their ties to one another.

- Thus, this is a distinct way of looking at social structure – relative to perspectives that focus on cohesion, and on direct ties amongst pairs of actors.

- We used an interactive version of the CONCOR procedure available on UCINET to identify structurally meaningful blocks.

Results: Block Model Analysis.

- Table 1 shows the blocks, the densities across blocks, and the within block densities (on the diagonal).

- Our analysis revealed four blocks: three meaningful, substantive blocks, and one mixed “peripheral” block.

Table 1. Results of Block Model Analysis. Block and Inter-block densities.				
	Block 1 – Business Dominated	**Block 2 – Environmental Dominated**	**Block 3 – Research Dominated**	**Block 4 – Mixed/periphery**
	0.1.1	0.1.2	0.2.1	0.2.2
Block 1 – Business Dominated	0.230994	0.168421	0.036842	0.010526
Block 2 – Environmental Dominated	0.121053	0.155556	0.01	0.02
Block 3 – Research Dominated	0.105263	0.17	0.022222	0
Block 4 – Mixed/periphery	0.168421	0.02	0	0

Results: Block Model Analysis.

- **Block 1 (Business Dominated):**

- Dominated by Business Oriented NGOs, Government Actors, and Thinktanks.

- High density within Block 1. Fairly strong ties to block 2 (Environmental Dominated).

Results: Block Model Analysis.

- **Block 2 (Environment Dominated):**

- Mostly environmental NGOs and environmentally oriented politicians.

- Relatively high density within block 2. Fairly strong ties to block 1 (Business Dominated).

Results: Block Model Analysis.

Block 3 (Researchers):

- University professors/researchers.
- Fairly high density within block 3.
- Strongly tied to blocks 1 (Business dominated) and block 2 (environment).

Results: Block Model Analysis.

Block 4 (Mixed – Periphery):

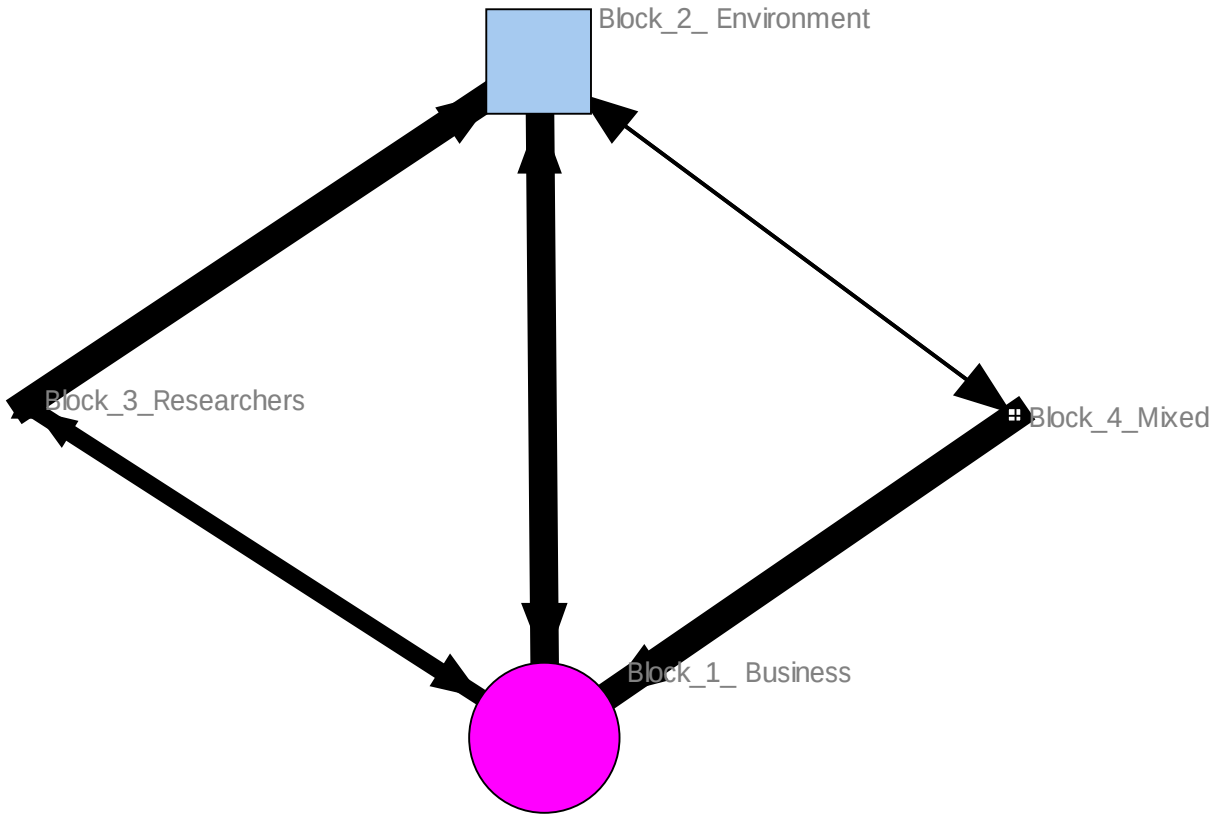
- Mix of university professors and researchers and government.

- No ties within Block 4, or to block 3 (Researchers). Weakly tied to Block 1 (Business Dominated) and 2 (Environment Dominated).

Results: Block Model Analysis.

- Figure 1, illustrates the density of relations within, and across the four blocks. The size of the node illustrates the within node density, while line thickness illustrates the density between blocks.

Figure 1. Densities within and across blocks.

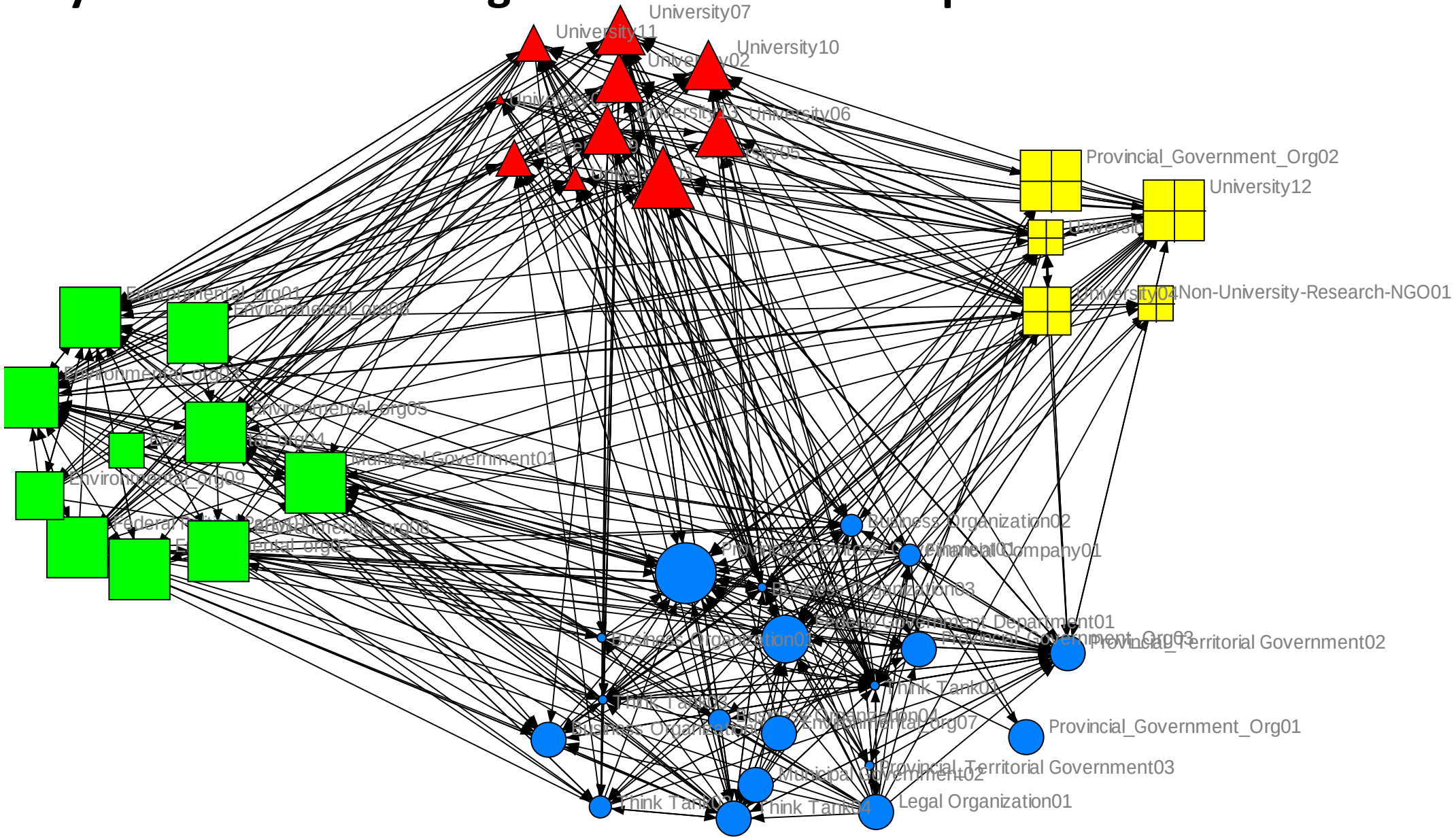


Block Membership and Support for Curtailing the Oil Sands.

- Figure 2 shows the network relations amongst climate change policy actors, their block membership, and their support for curtailing the oil sands development.

- Blue nodes, show actors in the business dominated block. Green nodes, show actors in the environment dominated nodes. Red nodes show university researchers. Yellow nodes are a mix of actors representing different sectors, in the periphery. Lines show social network ties amongst actors based on communication, perceived influence on domestic climate change policy, perceived influence on the respondent's organization, collaboration ties, and ties where scientific information is shared. Size of nodes is relative level of support for curtailing oil sands development.

Figure 2. Block membership, ties, and support amongst climate change policy actors for curtailing the oil sands development.



Prioritizing Dealing with Climate Change as an Explanatory Variable.

- In the questionnaire, we asked respondents about the extent to which Canada should prioritizing addressing climate change over other issues? (On a five point scale.)

- To begin our analyses, we calculated a QAP correlation between prioritizing climate change and support for curtailing the oil sands.

Prioritizing Dealing with Climate Change as an Explanatory Variable.

- As expected, our QAP correlation showed a significant, positive correlation between these variables: **r = .61, p. < .001.**

- Thus, the more priority that respondents gave to addressing climate change, the more supportive they were of curtaining oil sands development.

Sector

- A conventional mainstream social science approach, as noted above, is to focus on the attributes of actors. In this context we can think of sector as an attribute variable.

- **We categorized the organizations into five sectors: 1. Business, 2. Civil Society, 3. Government, 4. Research, and 5. Think Tanks.**

Using Sector for Explaining Support for Curtailing the Oil Sands

- We conducted a QAP regression using Sector membership as a dummy independent variable. For this analysis the Government category served as the reference category, and thus was excluded.

- Table 2 provides both bivariate correlations for the five sector categories with support for curtailing the oil sands development, and a multiple regression including 4 of the categories as independent variables predicting support for curtailing the oil sand development.

Table 2: QAP Correlations, and QAP Multiple Regression, Using Sector to Explain Support for Curtailing Oil Sands Development. (Standardized Regression Coefficients.)		
	QAP Bivariate Correlations	**QAP Multiple Regression**
Sector:		
Thinktank	-.37*	-.42***
Research	.10	-.06
Civil Society	.42***	.22
Business	-.43***	-.45***
Government (Reference Category)	.15	-----
R2	-----	.43****
Adjust R2	-----	.43****
N	44	44
Notes: * p. ≤ .05, ** p. ≤ .01, *** p. ≤. 005, **** p. ≤ .001		

Results: Using Sector for Explaining Support for Curtailing the Oil Sands

- **A negative coefficient means that the respondent disagrees with the statement that the oil sand development should be curtailed. A positive coefficient means that the respondent agrees with the statement that the oil sands development should be curtailed.**

- The first column of Table 2 shows that membership in a think tank is correlated with support for developing the oil sands (disagreement with the statement that the oil sands development should be curtailed). Similarly, membership in the business sector is correlated with support for developing the oil sands.

Results: Using Sector for Explaining Support for Curtailing the Oil Sands

- By contrast, membership in a civil society sector organization is correlated with support for the statement that the oil sands development should be curtailed.

- The effects for membership in the research sector, and in the government sector, are not significant.

Results: Using Sector for Explaining Support for Curtailing the Oil Sands

- In the QAP multiple regression, the effects for Thinktank sector membership and business sector membership persist, but the coefficient for civil society sector membership decreases in strength, and becomes non significant.

Full QAP Multiple Regression Model explaining Support for Curtailing Oil Sands Development.

- The main component of this analysis is provided in Table 3.

- Here we provide a series QAP multiple regressions statistically explaining support for curtailing the oil sands development. In these regressions we include sector, block membership, and position on prioritizing domestic emissions. Model 1 includes Block 1, Model 2 includes Block 2, Model 3 includes Block 3, and Model 4 includes Block 4 as the network block independent variable.

Table 3: QAP Multiple Regressions. Full Models Explaining Support for Curtailing Oil Sand Development. (Standardized Regression Coefficients.)				
	Model 1 Block 1	**Model 2 Block 2**	**Model 3 Block 3**	**Model 4 Block 4**
Sector:				
Thinktank	-.27*	-.30*	-.34**	.20
Research	-.33*	.05	.07	.13
Civil Society	-.13	-.16	.07	-.08
Business	-.32*	-.31*	-.37**	-.13
Government (Reference Category)	-----	-----	-----	-----
Network Variable:				
Block 1 Membership (Business Dominated).	-.47**	-----	-----	-----
Block 2 Membership (ENGO Dominated).		.37*	-----	-----
Block 3 Membership (Researcher Dominated).	-----	-----	-.12	-----
Block 4 Membership (Periphery – Mixed).	-----	-----	-----	-.01
Prioritizing Reducing Domestic Emissions	.34**	.36***	.41****	.46**
R2	.64****	.60****	.57****	.25***
Adjust R2	.64****	.60****	.57****	.25***
N	44	44	44	44
Notes: * p. ≤ .05, ** p. ≤ .01, *** p. ≤. 005, **** p. ≤ .001				

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Block 3 Membership (Researcher Dominated).	-----	-----	-.12	-----
Block 4 Membership (Periphery – Mixed).	-----	-----	-----	-.01
Prioritizing Reducing Domestic Emissions	.34**	.36***	.41****	.46**
R2	.64****	.60****	.57****	.25***
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Block 4 Membership (Periphery – Mixed).	-----	-----	-----	-.01
Prioritizing Reducing Domestic Emissions	.34**	.36***	.41****	.46**
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N	44	44	44	44
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Full QAP Multiple Regression Model explaining Support for Curtailing Oil Sands Development.

- In Model 1, there are statistically significant sector membership effects for Thinktank, Research, and Business.

- There is a positive and statistically significant effect for the respondents' position on prioritizing reducing domestic emissions.

- **The effect for Block 1 membership is negative, relatively strong, and statistically significant. In other words, those respondents who were part of block 1** (a block dominated by business actors, but also included some government officials, thinktanks, and civil society groups).

- The standardized coefficient for Block 1 is the strongest in the model.

Full QAP Multiple Regression Model explaining Support for Curtailing Oil Sands Development.

- The model explains an impressive amount of the variation in the dependent variable: 64%.

- These findings are theoretically interesting, and gives support for a network theoretical interpretation. While block 1 is dominated by business oriented actors, its composition is not solely made up of actors from the business sector. The business dominated block 1 is significant even controlling for the business sector dummy variable (which is also significant). So there is a network effect above and beyond the sector effect, and also above and beyond the position of the actors regarding prioritizing domestic emissions reductions.

Full QAP Multiple Regression Model explaining Support for Curtailing Oil Sands Development.

- In Model 2, we find similar effects (as for Model 1) for membership in the Thinktank sector, and for membership in the Business sector. Here, the effect for membership in the Research sector is not significant (in contrast to Model 1), and membership in the Civil Society Sector is also non-significant.

- Similar to Model 1, the effect for prioritizing reducing domestic emissions is moderately strong, positive, and significant.

Full QAP Multiple Regression Model explaining Support for Curtailing Oil Sands Development.

- **In Model 2, the effect for membership in Block 2 (the civil society dominated block) is positive and significant. In other words, members of this block supported curtailing oil sand development.**

- The effect for Block 2 is the mirror image of the effect for Block 1 in Model 1. Again, this effect holds controlling for sector, and prioritizing reducing domestic emissions, and again is the strongest standardized coefficient. Also, echoing the previous result, the full model explains a substantial amount of the variation in the dependent variable: 60%.

Full QAP Multiple Regression Model explaining Support for Curtailing Oil Sands Development.

- Models 3 and 4 are less substantively interesting, as the block variables (Block 3, the research dominated block, and block 4, the mixed block) are non-significant. So less detail will be provided about these models.

Conclusions

- Our goal here was to assess **whether there was a relationship between position in a network structure, and an actor's position on a particular climate change policy issue: curtailing oil sands development.**

- **We found substantial statistical support for the existence of such relationships (for the business dominated block, and the environment dominated block).**

Next Steps

- We do not claim that our findings explain policy outcomes in Canada. (Though it is intriguing that the orientation of the most connected block is to support oil sands development, and this is exactly what key governments have done.)

- However, policy network analysis do argue that policy network processes play a role in what policy options are discussed and adopted. (Though they are not the only factor.)

Next Steps

- Our data collection involved “rectangular matrices” where we collected information on ties beyond just those actors in the sample.

- In particular, we also have network data (not reported here) on ties between the respondents’ organizations, and various government and media actors.

Next Steps

- A next logical step it so examine the variation amongst the block we have identified in terms of their network connections to government and media actors.

The End!