

**Japan-Canada Academic Consortium
Student Forum
Energy and Society**

February 13-21, 2016

Hosted by

Nagoya University, Nagoya Japan

In cooperation with

Prince Takamado Japan Centre, University of Alberta

and Meiji University

FINAL REPORT

Published: May 2016

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MESSAGE FROM THE ORGANIZER

Nagoya University took great pleasure in hosting the 28 students in the Japan-Canada Student Forum 2016. The event began on Sunday, February 14 with an orientation, lecture and welcome party in Nagoya. It wrapped up five days later on the evening of February 19 following a day of student presentations and a reception at the Canadian Embassy. Participants learned about this year's theme, "Energy and Society", by joining field trips around Nagoya and discussing different topics with natural and social scientists. We were fortunate to have Professor Hiroshi Amano, co-recipient of the Nobel Prize in Physics in 2014, deliver the keynote lecture. Participants also worked in groups of four proposing policies that might improve energy efficiency then presented their results at the Canadian embassy. We saw how in less than a week living together in the dormitory, engaging in lectures, traveling together on field trips, and preparing and delivering a group presentation could produce new international friendships.

The highlight of the Forum for most students was participating in the event at the Canadian Embassy. Each group presented their proposal in the Oscar Peterson Theater to an audience of colleagues and five judges, including Chief Judge, Senior Associate Professor Christopher Simons of International Christian University; Professor Yoshihito Watanabe, Trustee/Vice-President of Nagoya University; Ms. Kaori Umemoto, Japan Office, Government of Alberta; Mr. Cael Husband, Second Secretary (Public Affairs), Embassy of Canada; and Professor Walter Davis, Acting Director, Princess Takamado Center, University of Alberta. The President of Nagoya University, Professor Seiichi Matsuo, followed each presentation from the audience. Canadian Ambassador to Japan, Mackenzie Clugston, and Her Royal Highness Princess Takamado joined the event later to award the group selected by the judges with the top prize. Despite the difficulty of the assignment, and the short preparation period, both judges and audience members praised the work of the students.

The experience for students and organizers was overwhelmingly positive. We hope participants were inspired to spread awareness of JACAC to friends and colleagues and that some will join another study abroad program - perhaps in Japan. Nagoya University benefitted from hosting the Forum in two ways. Firstly, we could introduce our university to both Canadian and Japanese students. This chance to showcase some of the research being conducted on our campus to a wide audience was invaluable. Second, we could widen our network of international contacts. Many different institutions played a key role in the forum, including the Canadian Embassy in Tokyo, the Government of Alberta Office in Japan, and Meiji University. Getting to know representatives from these institutions is sure to be of great help in the future.

In conclusion, Nagoya University hopes that both participants and organizers enjoyed and

learned from the Forum. We were honoured to host the event and will continue to support JACAC into the future. We wish the organizers of the next Forum the best of luck and are ready to provide whatever advice we can.

Matthew Linley

Director, Department of International Programs

International Education and Exchange Center, Institute of International Education and Exchange

Nagoya University

April 2016

ABOUT THE FORUM

The Prince Takamado Japan Centre for Teaching and Research, University of Alberta was very pleased to co-organize the seventh annual Japan Canada Academic Consortium (JACAC) Student Forum. Since it started, the forum has provided students with optimal learning experience, offering a unique opportunity to exchange ideas with other students, business and government leaders, and scholars in Japan and Canada. Over seven years, the forum has produced 198 alumni, many of whom are playing an active role internationally.

The seventh forum was held at Nagoya University in Japan under the theme, “Energy and Society: Increasing Efficiency and Improving Our Quality of Life.” It featured a keynote speech by Professor Hiroshi Amano, a Nobel Prize winner in Physics in 2014, who kindly agreed to give a talk. Participants exchanged their ideas on one of the most significant issues in society: how to cope with energy in an economically and environmentally challenging world.

The forum plays an important role in the promotion of students’ mobility between Japan and Canada, which has been one of the major mandates of the Prince Takamado Memorial Fund since its inception. Thanks to JACAC membership universities and other generous supporters – the Embassy of Canada in Japan, the Government of Alberta, Canada-Japan Office, Japan Student Services Organization, and Mitsubishi UFJ Foundation – we have been able to pursue our goal successfully. We are hoping for the forum’s further development as a place that produces global leaders of the next generations.

Aya Fujiwara, Ph.D

Director,

Prince Takamado Japan Centre for Teaching and Research

ORGANIZING COMMITTEE

Academic Director:

Dr. Matthew Linley

Department Head, International Education & Exchange Center, Nagoya University

Program Coordinators from Nagoya University:

Ms. Miho Yamamoto *Student Exchange Division*

Tsutomu Nomizu *Department Head, International Education & Exchange Center*

Minako Nakashima *Designated Lecturer, International Education & Exchange Center*

Yukio Ishida *Designated Professor, Support Organizations International Education & Exchange*

Emanuel Leleito *Lecturer, Graduate School of Engineering*

Jun Murase *Associate professor, Graduate School of Bio agricultural Sciences*

Mitsuyoshi Yanagihara *Professor, Graduate School of Economics, Nagoya University*

Christina Lim *Associate Professor, Graduate School of Environmental Studies*

JACAC Secretariat Office:

Dr. Aya Fujiwara *Director, Prince Takamado Japan Centre, University of Alberta*

Ms. Ayako Minami *International Collaboration Office, Meiji University*

JACAC MEMBER UNIVERSITIES

Canadian Universities

University of Alberta

University of British Columbia

University of Manitoba

York University

Queen's University

Université de Montréal

Concordia University

Université Laval

University of Prince Edward Island

University of Waterloo & Renison

Japanese Universities

Meiji University

Josai International University

Sophia University

J.F. Oberlin University

Tsuda College

Kwansei Gakuin University

Hosei University

Ritsumeikan University

Nagoya University

Hokkaido University

Seinan Gakuin University

LIST OF PARTICIPANTS

Canada

Christina Caouette	University of Alberta
Kabir Mangesh Nadkarni	University of Alberta
Marie-Michele Chartier	Laval University
Joshua Christopher Chan	University of Waterloo
John Lenz	Queen's University
Victoria Clark	Queen's University
Rei Thi Fujiki Van	University of British Columbia
Sandra Morrell Andrews	University of British Columbia
Rosalie Nadeau	Universite de Montreal
Tristan Smythe	University of Manitoba
Sayjon Ariyaratnam	York University
Anouk Paradis	University of Prince Edward Island
Tristan Edouard Masson	Concordia University
Keoponnreay Kim	Concordia University

Japan

Khurelbaatar Sainsanaa	J.F. Oberlin University
Ryo Hasebe	Kwansei Gakuin University
Mio Nakago	Kwansei Gakuin University
Terutada Tsunoda	Josai International University
Miki Tajima	Seinan Gakuin University
Miho Tanaka	Seinan Gakuin University
Hiroki Fujiwara	Nagoya University
Kenta Natsume	Hosei University
Mami Tanaka	Hokkaido University
Tsubasa Shinohara	Meiji University
Daisuke Harada	Meiji University
Miori Hojo	Meiji University
Zhang Mushan	Ritsumeikan University
Toshihiro Takada	Ritsumeikan University

FORUM PROGRAM

Saturday, February 13th

Students Arrival in Nagoya

Sunday, February 14th

- 13:30-14:30 Welcome Remarks
Professor Yoshihito Watanabe
Trustee (International Planning, Public Relations, and Community Relations) and Vice President, Nagoya University
Orientation
Designated Lecturer Minako Nakashima
Administrative Support Organizations International Education & Exchange, Nagoya University
- 14:45-15:45 Lecture1 "How to Give a Presentation for the 2016 Japan-Canada Student Forum"
Associate Professor Mark Charles Weeks
Graduate School of Languages and Cultures, Nagoya University
- 16:00-17:00 Group Discussion
- 17:30-19:30 Welcome Party

Monday, February 15th

- Field Trip
- 8:45 Meeting time
- 10:20-13:30 Satoyama "Sugenosato"
Lecture 2 "Lives with energy supplied from local resources of Satoyama"
Professor Masao Takano
Graduate School of Environmental Studies, Nagoya University
Lunch
- 13:45-15:00 "Soranoie (house of self-sufficient living)"

Tuesday, February 16th

- 8:45-10:15 Lecture 3
"Energy and Society: Increasing Efficiency and Improving Our Quality of Life"
Professor Hiroshi Amano

Center for Integrated Research of Future Electronics, Institute of Materials and Systems for Sustainability, Nagoya University

- 10:30-12:00 Lecture 4 "The twilight of the oil era and its implications for international politics"
Assistant Professor James Brown
Advisor and Coordinator of International Affairs Majors, Temple University Japan Campus
- 13:00-14:30 Lecture 5 "The Weight of Society Over Time and Space"
Professor Hiroki Tanikawa
Graduate School of Environmental Studies, Nagoya University
- 14:45-17:00 Group work

Wednesday, February 17th

- Field Trip
- 8:45 Meeting time
- 9:30-12:30 "Toyota Commemorative Museum of Industry and Technology"
Lecture 6 "Energy-saving on Automobiles for Sustainable Society"
Mr Tatsuo Teratani
The Former Executive of Toyota Motor Corporation
Lunch
- 15:00-16:30 "Toyota Ecoful Town"

Thursday, February 18th

- 9:00-16:00 Group work
- 16:30 - Move to Tokyo

Friday, February 19th

- 9:00-11:00 Group work
- 13:00-19:00 Final Presentation, Closing Ceremony, Reception

Saturday, February 20th

Exploration Day

Sunday, February 21st

Departure from Tokyo

JACAC STUDENT FORUM GROUP PRESENTATIONS:

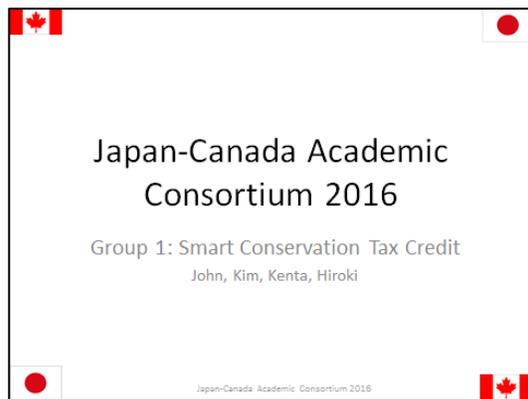
Group 1

Hiroki Fujiwara, Nagoya (J)

Kenta Natsume, Hosei (J)

John Lenz, Queen's (C)

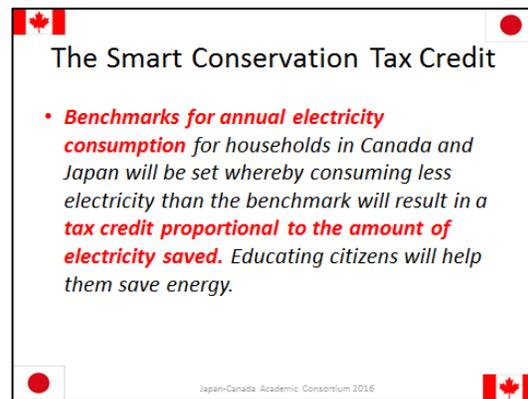
Keoponnreay Kim, Concordia (C)



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Group 1: Smart Conservation Tax Credit
John, Kim, Kenta, Hiroki

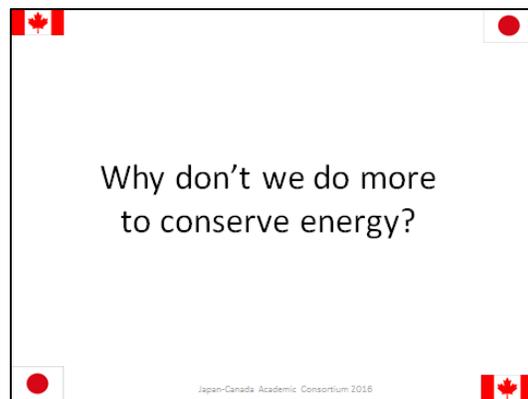
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The Smart Conservation Tax Credit

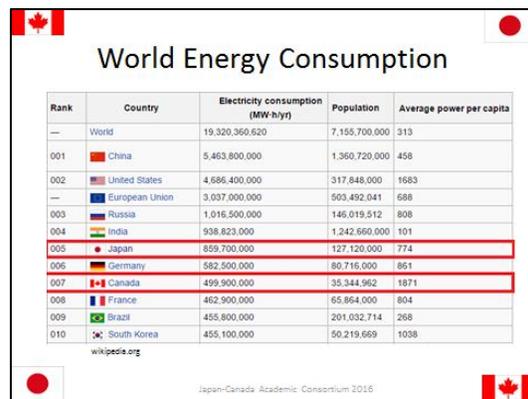
- **Benchmarks for annual electricity consumption** for households in Canada and Japan will be set whereby consuming less electricity than the benchmark will result in a **tax credit proportional to the amount of electricity saved**. Educating citizens will help them save energy.

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Why don't we do more to conserve energy?

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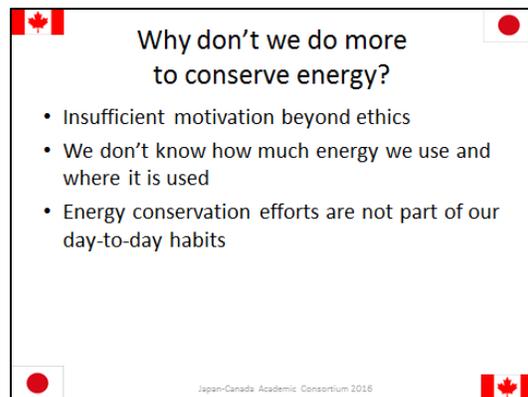


World Energy Consumption

Rank	Country	Electricity consumption (MW-h/yr)	Population	Average power per capita
---	World	19,320,360,620	7,155,700,000	313
001	China	5,463,800,000	1,360,720,000	456
002	United States	4,686,400,000	317,848,000	1683
---	European Union	3,037,000,000	503,492,041	688
003	Russia	1,016,500,000	146,019,512	808
004	India	938,823,000	1,242,660,000	101
005	Japan	859,700,000	127,120,000	774
006	Germany	582,500,000	80,716,000	861
007	Canada	499,900,000	35,344,962	1871
008	France	462,900,000	65,864,000	804
009	Brazil	455,800,000	201,032,714	268
010	South Korea	455,100,000	50,219,669	1038

wikipedia.org

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Why don't we do more to conserve energy?

- Insufficient motivation beyond ethics
- We don't know how much energy we use and where it is used
- Energy conservation efforts are not part of our day-to-day habits

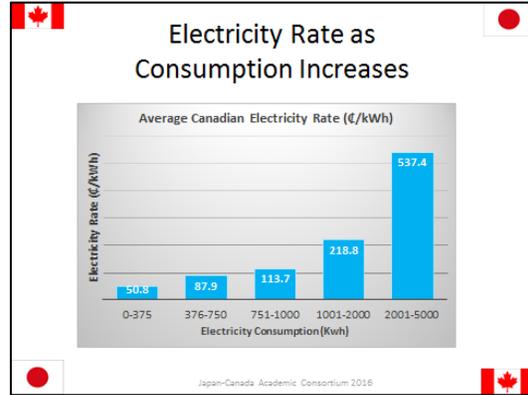
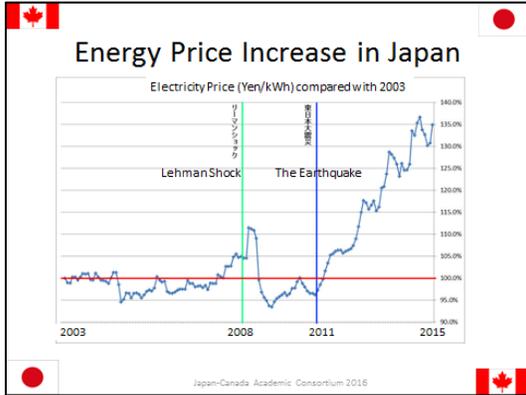
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Why Should You Participate?

- Financial incentives are proven to influence behaviour
- Reward-based policy will lead to popularity
- Clear goal to reach

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Smart Conservation Tax Credit Benchmark Levels

Setting	Benchmark Level (Annual Consumption)
Ontario Household	4 000 kWh/person
Tokyo Household	1 530 kWh/person
Nagoya Household	750 kWh/person

Other benchmark levels not shown. Benchmark levels vary by location.

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Money Awarded in Tax Credit

Region	Credit below benchmark	Selling Price
Ontario	\$ 0.70 /kWh	\$ 0.64 /kWh
Canada (average)	\$ 0.55 /kWh	\$ 0.50 /kWh
Nagoya	75 JPY/kWh	19.2JPY/kWh
Tokyo	75 JPY/kWh	19.2JPY/kWh

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A Typical Case

- Ontario household of 4
- Benchmark = 4000kWhX4people = 16 000kWh
- Tax credit rate in Ontario = 0.70\$/kWh
- 5% savings below benchmark gives a **tax credit of 440\$/year**

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Can We Afford This Policy?

- \$1.5 billion in tax credits in Ontario
- \$ 4 billion expenditure avoided thanks to \$ 2 billion spent on energy conservation (Ontario, 2011)
- 2.72 billion kWh conserved – roughly half of the output of one nuclear reactor at Pickering Nuclear Generating Station

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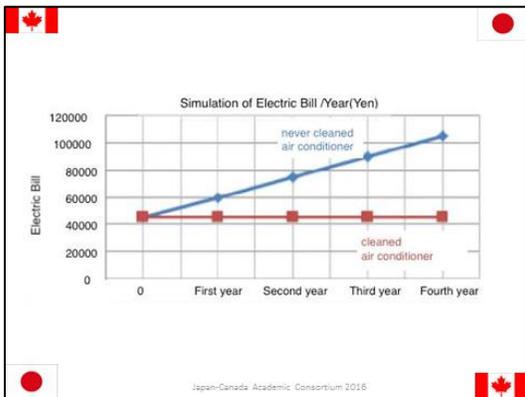
Is it Easy to Save Energy?

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	standard incandescent	CFL compact fluorescent lamp	LED
			
watts >>	60	18	10
lumens >>	840	825	800
life (years) >>	0.9	9.1	22.8
estimated annual energy cost* >>	\$7.23	\$5.18	\$1.56
initial cost per bulb >>	\$2.00	\$8.00	\$12.00

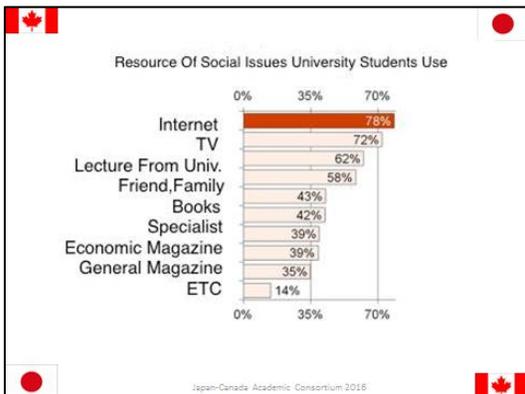
*based upon 3hrs/day and rate of \$0.11 per kilowatt hour

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Get hotter to save energy

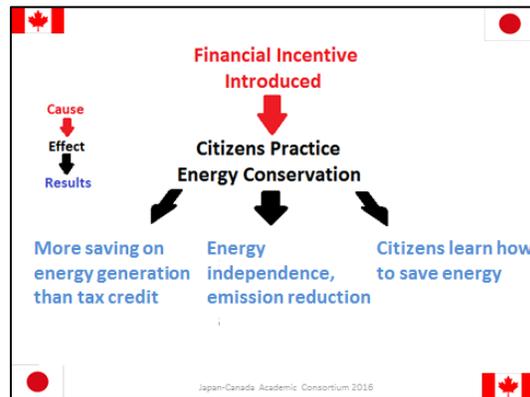
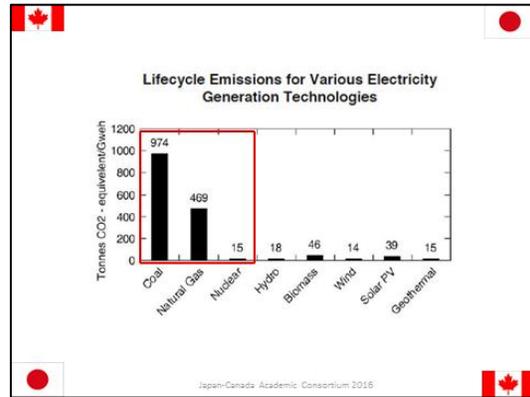
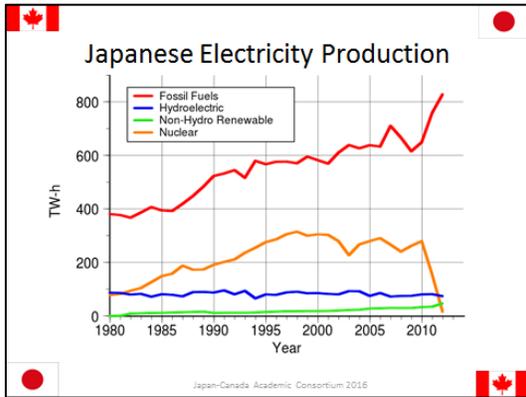
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Benefits of Our Policy

- Strong investment
- Voluntary action

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Thank you!
 ご清聴
 ありがとうございました

Special Thanks to
 Prince Takamado Japan Memorial Fund
 Canada Embassy
 JACAC office members
 (And Participants!)

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Group 2

Daisuke Harada, Meiji (J)

Toshihiro Takada, Ritsumeikan (J)

Kabir Mangesh Nadkarni, Alberta (C)

Victoria Clark, Queen's (C)

Increasing Alberta's Long-Term Capacity in Clean Technologies through Educational Funding by the CCEMC

Japan Canada Academic Consortium 2016

Daisuke Harada, Meiji University
Kabir Nadkarni, University of Alberta
Toshihiro Takada, Ritsumeikan University
Victoria Clark, Queen's University



Premise for the policy recommendation

Increase in educational funding by the CCEMC

↓

Increase in sustainable growth in Alberta's clean technology industry



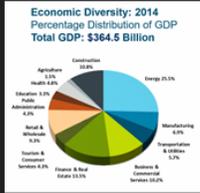
Contents

1. Background on Alberta and CCEMC
2. Problems
3. Policy Recommendation
4. Suggested Implementation Strategies
5. Feasibility of Solutions
6. Overall Benefits of the Policy
7. Conclusion
8. Next Steps



Background: Alberta's economic dependence on oil and gas

Alberta's 2014 GDP per industry indicates that the province's economic success is heavily dependent on the viability of oil and gas.

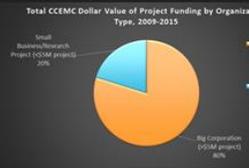



Background: Peak demand makes Alberta's oil industry inviable



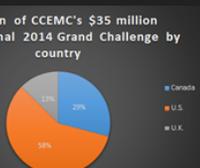

Problem: CCEMC funds primarily large corporations

There are not enough new entrepreneurs entering the clean energy industry in Alberta.




Problem: CCEMC funding is a capital loss for Alberta

Division of CCEMC's \$35 million International 2014 Grand Challenge by country



The Albertan engineer and scientist population does not have the required capacity in clean energy technologies.



Problem: Unemployment in Alberta is the highest in a decade




Policy recommendation

We propose that the Government of Alberta direct a portion of the CCEMC fund towards improving access to renewable energy education and support, to sustainably grow the province's clean technology industry.



Implementation Strategy 1: Investing in Clean Energy Education at University Level

Set-up programs and courses that educate in clean energy, e.g. Renewable Energy Engineering

Establish university centres for interdisciplinary excellence, cooperation and discussion of sustainable energy



Implementation Strategy 1: Investing in Clean Energy Education at University Level

Enbridge Centre for Corporate Sustainability

"I have the impression that Enbridge sees the centre as a PR machine for themselves, whereas I see it as an academic research centre"

- Joe Arvai, Former director of the Enbridge Centre for Corporate Sustainability



Implementation Strategy 2: Investing in Alberta's Business Incubators and Start-ups



Leveraged technology transfer and enhanced startup incubation in Alberta's clean energy industry

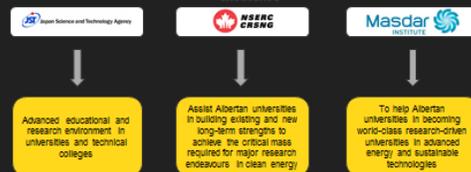
Implementation Strategy 3: Connecting CCEMC Projects with Albertan Students

Proposal to model a CCEMC student intern recruitment site after Japanese examples. For instance, every CCEMC funded project can hire at least one Albertan student intern.



Implementation Strategy 4: Investing in a Stronger Research Structure

Modelling research ecosystem structures after proven models of excellence



Feasibility

Easy aspects of implementation

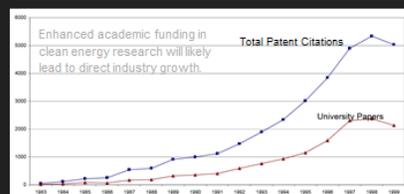
- Strong support from students
- Realistic proposal because it does not require new fundraising, but only redirecting of existing funds

Difficult aspects of implementation

- Potential for strong opposition to changes from oil companies
- Alberta's clean energy industry could gain access to knowledge from foreign academia instead



Feasibility: Correlation between university papers and patent citations in Japan: 1893-1999



Benefits

In the long term, there will be a better-educated generation in an industry that is more economically and environmentally sustainable.

The investment capital of the Government of Alberta through the CCEMC will be retained within the province of Alberta.

Alberta's economy will be diversified through a labour force transformation.



Conclusion

We propose that the Government of Alberta direct a portion of the CCEMC fund towards improving access to renewable energy education and support, to sustainably grow the province's clean technology industry.



Next Steps

1. Stakeholder consultation
2. Cost analysis to determine % of funds needed
3. Presentation to CCEMC



Questions?



Group 3

Khurelbaatar Sainsanaa, J.F. Oberlin (J)

Mami Tanaka, Hokkaido (J)

Tristan Smythe, Manitoba (C)

Anouk Paradis, PEI (C)

Improving Energy Conservation in the Residential Sector in Canada

JACAC 2016 - GROUP 3
Anouk, Mami, Sanaa, Tristan

Table of Contents

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4. Feasibility
5. Benefits
6. Conclusion



1. Introduction

Energy Conservation

- Incentivizing energy management
 - Energy Savings Tax (EST)
 - Subsidies: residential sector insulation, heating, ventilation, and/or cooling equipment retrofitting
 - Energy Awareness (EA) Program

2. Background

Energy Use

- Residential sector
 - 13% of total energy consumption used for lighting, heating, appliances
- Still have very cheap electricity (~15 CAD cents/kWh)
 - Japan average is ~26 cents/kWh

2. Background

Energy Waste

- 7th largest consumer of energy per capita in world
- Up to 60% of houses not retrofitted in Canada
 - Fewer houses investing in energy efficiency retrofits
 - Recognized as a significant source of energy waste
- Only 16% of Canadians very familiar with energy efficiency programs
 - Insufficient informational programs for energy saving

2. Background

A Cloudy Fate

- COP 21 agreement
 - 1.5°C global temperature increase maximum
 - Anthropocene
 - Prevent Kyoto Accord 2.0
- Continued increase in consumption
 - Shift in mentality needed in addition to new technologies

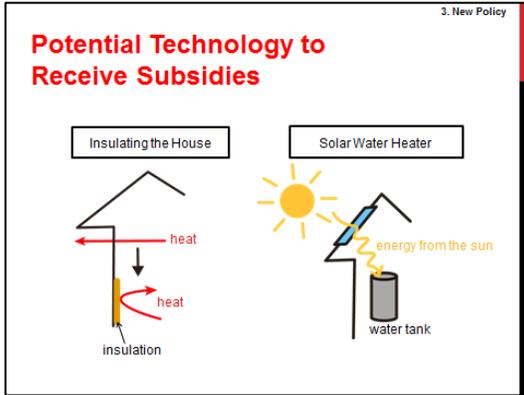
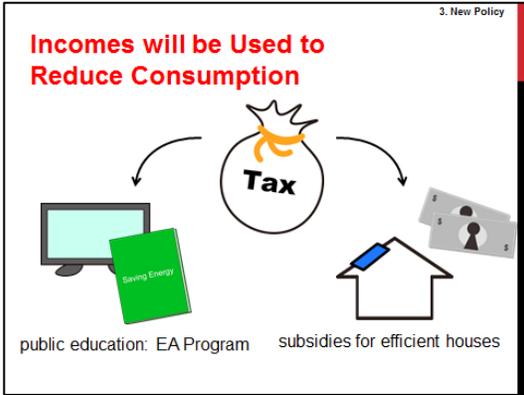
3. New Policy

Incentivizing Energy Management

3. New Policy

Prices are Determined by the Consumption

Estimated Price (cents/kWh)	Bracket 1	Bracket 2	Bracket 3	Bracket 4	Bracket 5
% of EST	-30%	-10%	0%	+10%	+30%
onpeak(7:00-11:00, 17:00-19:00)	12.25	15.75	17.50	19.25	21.00
midpeak(11:00-17:00)	8.96	11.52	12.80	14.56	15.36
offpeak(19:00-7:00)	5.81	7.47	8.30	9.13	9.96



3. New Policy

Examples of EA Program

Giving Tips to Reduce Energy Consumption

booklets TV commercial

Recognition of Energy Tax

3. New Policy

Your Electricity Bill Your Electricity Bill

Current Balance: XX CAN 5 Current Balance: XX CAN 6

Consumption table (Left Bill):

Consumption	Rate	MM cost	Amount
On peak	21.22		21.22
Mid peak	11.81		11.81
Off peak	5.21		5.21
Basic fee		702	702
EST	15	15	15
EST	15	15	15
Total			1050

EST Tax bracket (Left Bill):

Consumption	Amount	Amount	Amount	Amount
0-100 kWh	0.00	0.00	0.00	0.00
100-200 kWh	15.00	15.00	15.00	15.00
200-300 kWh	30.00	30.00	30.00	30.00
300-400 kWh	45.00	45.00	45.00	45.00
400-500 kWh	60.00	60.00	60.00	60.00
500-600 kWh	75.00	75.00	75.00	75.00
600-700 kWh	90.00	90.00	90.00	90.00
700-800 kWh	105.00	105.00	105.00	105.00
800-900 kWh	120.00	120.00	120.00	120.00
900-1000 kWh	135.00	135.00	135.00	135.00
1000 kWh or more	150.00	150.00	150.00	150.00

Consumption table (Right Bill):

Consumption	Rate	MM cost	Amount
On peak	11.22		11.22
Mid peak	5.81		5.81
Off peak	2.21		2.21
Basic fee		702	702
EST	15	15	15
EST	15	15	15
Total			1563

EST Tax bracket (Right Bill):

Consumption	Amount	Amount	Amount	Amount
0-100 kWh	0.00	0.00	0.00	0.00
100-200 kWh	15.00	15.00	15.00	15.00
200-300 kWh	30.00	30.00	30.00	30.00
300-400 kWh	45.00	45.00	45.00	45.00
400-500 kWh	60.00	60.00	60.00	60.00
500-600 kWh	75.00	75.00	75.00	75.00
600-700 kWh	90.00	90.00	90.00	90.00
700-800 kWh	105.00	105.00	105.00	105.00
800-900 kWh	120.00	120.00	120.00	120.00
900-1000 kWh	135.00	135.00	135.00	135.00
1000 kWh or more	150.00	150.00	150.00	150.00

4. Feasibility

Japan's Energy Conservation Policy

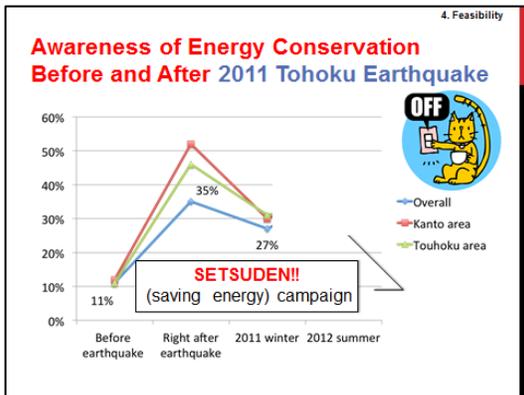
Setsuden (power saving) campaign

"Electricity Saving Manifesto by Households" on the website prepared by the government

Promote energy saving through education

tax incentives, subsidies

☆ Energy conservation law (1979)



4. Feasibility

SETSUDEN (power saving) Campaign

Advertisements on newspaper, commercials
 "Menu of Electricity Saving Measures by Households"
 (Government provided)

2011 2012 2013
 2014 2015

4. Feasibility

"Top runner" Program

Products which achieved the "Top Runner" standards carry a green "e" logo, while others carry an orange "e" logo

Energy saving label system

poor quality products with high energy cost

Average electricity consumption of air conditioner

Year	Average electricity consumption (kWh)
1997	1201
1999	1068
2000	990
2004	945
2007	865
2009	849

4. Feasibility

Effectiveness of Media

Topic	2012 Summer (n=2666)	2011 Winter (n=2263)
lower electricity cost	90%	80%
media exposure	41%	22%
global warming	59%	45%
other	4%	6%

↑ 2 times more !!

4. Feasibility

Tax Incentives

rebate = Construction cost × 10 %

5. Benefits

Building a Greener Future

- Long-term reduction of energy consumption
 - Subsequent GHG emissions decreased
- Increase in awareness of energy issues
- Support other environmental policies
 - COP 21

Improving Energy Conservation in the Residential Sector in Canada

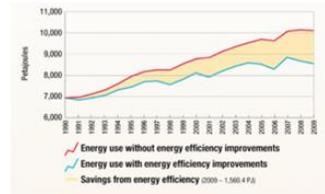
JACAC 2016 – GROUP 3
 Anouk, Mami, Sanaa, Tristan

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8. Extra

Decrease in Energy Usage



- ~1.5 GJ (14% of total) of energy saved through retrofits between 1990 and 2009 (across all sectors)

8. Extra

see a regression on energy use.

• **energy level effect** - Energy level refers to the penetration rate of devices and equipment. For example, the same device that use a higher frequency in commercial institutional buildings and appliances in homes or the amount of cellular phone usage. Although these devices are becoming more efficient, the overall effect of these devices would represent an increase in energy levels, which has resulted in higher energy consumption.

• **energy collection use effect** - Capacity collection use refers to the proportion of the overall generation capacity that is in use. In 2009, various such as cooling, transportation equipment and heat and fuel showed significant declines. For more details see slide on Appendix B.

• **energy efficiency effect** - Energy efficiency refers to how effectively energy is being used. It is, using less energy to provide the same level of energy service. Energy efficiency gains occur primarily with improvements in technology or processes. An example would be installing a heat pump for heating and cooling or replacing incandescent lights with fluorescent lights.

Figure 2.9 illustrates the relative impact of each effect on energy use over the 1990-2009 period for the residential and non-residential sectors. The following is a summary of each effect and its results:

• **energy level effect** - Canada's GDP grew 37 percent between 1990 and 2009. The overall growth in energy demand is estimated to have increased energy use by 39 percent, or 2,282 PJ, with a corresponding 104.8 M toe increase in CO₂ emissions.

• **energy collection use effect** - Over the 1990-2009 period, a shift in production toward industries that use less energy resulted in a decline of 694 PJ, or 11.8 M toe decrease in CO₂ emissions.

• **energy efficiency effect** - In 2009, the sector was cooler and the amount was cooler than in 1990. The result was an overall decline of 6.8 PJ of energy demand for temperature control and a 2.5 M toe increase in CO₂ emissions.

see energy use in all sectors and sub-sectors

Figure 2.10 shows the relative impact of each effect on energy use over the 1990-2009 period for the residential and non-residential sectors. The following is a summary of each effect and its results:

• **energy level effect** - From 1990 to 2009, changes in energy level (e.g. increased use of computers, printers and televisions in the non-residential sector) increased energy use by 153.4 PJ and increased CO₂ emissions by 5.1 M toe.

• **energy collection use effect** - The overall decline in the intensity of collection production over 19.5 PJ of energy waste and thereby increased CO₂ emissions by 0.6 M toe.

• **energy efficiency effect** - In total, above improvements in energy efficiency saved 2,068 PJ of energy and avoided 81.3 M toe of CO₂ emissions from 1990 to 2009.

Figure 2.11 shows the relative impact of each effect on energy use over the 1990-2009 period for the residential and non-residential sectors. The following is a summary of each effect and its results:

• **energy level effect** - From 1990 to 2009, changes in energy level (e.g. increased use of computers, printers and televisions in the non-residential sector) increased energy use by 153.4 PJ and increased CO₂ emissions by 5.1 M toe.

• **energy collection use effect** - The overall decline in the intensity of collection production over 19.5 PJ of energy waste and thereby increased CO₂ emissions by 0.6 M toe.

• **energy efficiency effect** - In total, above improvements in energy efficiency saved 2,068 PJ of energy and avoided 81.3 M toe of CO₂ emissions from 1990 to 2009.

Group 4

Tsubasa Shinohara, Meiji (J)

Zhang Mushan, Ritsumeikan (J)

Christina Caouette, Alberta (C)

Marie-Michele Chartier, Laval (C)

Paris Agreement

Christina Caouette
Marie-Michele Chartier
Molly Mushan Zhang
Tsubasa Shinohara

February 19, 2016
Japan-Canada Academic Consortium

Proposal

Countries are encouraged to cooperate in taking actions to enhance climate change **education, workplace cooperation, and public access to information**. Countries recognize the importance of these steps with respect to enhancing environmental awareness and taking appropriate actions under this Agreement.

Introduction



Paris Agreement

- 195 countries
- Paris, France
- November 30, 2015 - December 11, 2015



Article 11

Adoption of the Paris Agreement

Article 11

1. Capacity-building under this Agreement should enhance the capacity and ability of developing country Parties, in particular countries with the least capacity, such as the least developed countries, and those that are particularly vulnerable to the adverse effects of climate change, such as small island developing States, to take effective climate change action, including, inter alia, to implement adaptation and mitigation actions, and should facilitate technology development, dissemination and deployment, access to climate finance, relevant aspects of education, training and public awareness, and the transparent, timely and accurate communication of information.

United Nations - Framework Convention on climate change

Possible policy proposals

① Education



Green Building Education

② Workplace cooperation



1. Green machines
2. Green electricity
3. Company Environmental Policy
4. Recognizing Contribution

③ Access to information



Which proposal do you think is the most important?

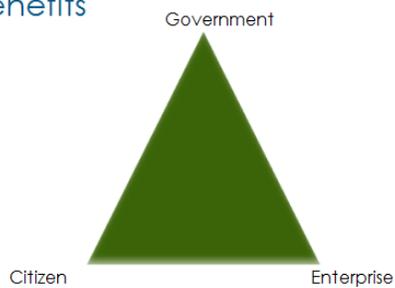
- Education ?
- Workplace cooperation ?
- Access to information ?

Proposal

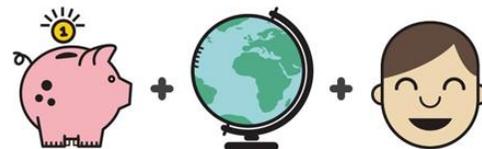
- Countries are encouraged to cooperate in taking actions to enhance climate change **education, workplace cooperation, and public access to information.** Countries recognize the importance of these steps with respect to enhancing environmental awareness and taking appropriate actions under this Agreement.

Recommendation

Benefits



Cost





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- <http://www.adrc.org/sem/ee/4-1.html>
- <http://www.ieef.or.jp/school/>
- <http://newsroom.unfccc.int/unfccc-newsroom/finale-cop21/>

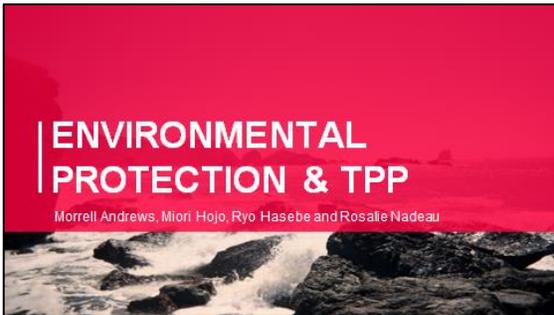
Group 5

Ryo Hasebe, Kwansai Gakuin (J)

Miori Hojo, Meiji (J)

Sandra Morrell Andrews, British Columbia (C)

Rosalie Nadeau, Montreal (C)



Policy Proposal Overview

The Trans-Pacific Partnership will increase the amount of goods exported and imported across the Pacific Rim, and with this increase in trade and transportation of goods comes the increased risks of oil and fuel spills...

 **Legally Binding Treaty** 

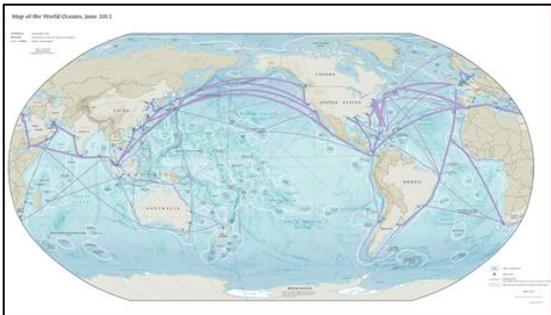


Focus on the TPP

- Constitutes 40% of the global economy
- Economic output of \$30 trillion
- Eliminates tariffs on environmentally beneficial products and technologies
- Still needs to be ratified by signatories

The Energy Sector And TPP

- Promotes investment
- Cooperative efforts to address energy efficiency
- Future prospects for increased North America-Asia trade
- Expanded energy infrastructure

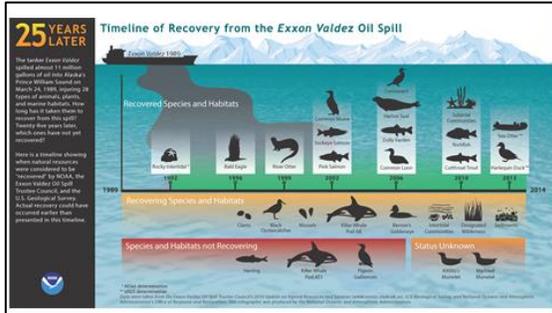


The Concern of Environmental Degradation

- Oil & Fuel Spills**
Tankers most often spill harmful materials by grounding or impacts with significant damage
- Greenhouse Gas Emissions**
More than 2% of the world's GHG emissions are attributed to shipping activities
- Drilling Accidents**
Creates new exploration, extraction and production opportunities

Large Environmental Impacts

- Negative impact on fisheries
- Effect on human food chains
- Mutations in marine life
- Toxic contamination
- High economic costs



Shortcomings of the Current Policy

"Each Party shall promote public awareness of its environmental laws and policies"

Ozone layer: "Each Party shall take measures to control the production and consumption of, and trade in, substances damageable to the ozone layer"

"Each Party shall take measures to prevent the pollution of the marine environment from ships."

"Corporate social responsibility: "Each Party should encourage enterprises operating within its territory or jurisdiction, to adopt voluntarily, into their policies and practices, principles of corporate social responsibility that are related to the environment, consistent with internationally recognised standards and guidelines that have been endorsed or are supported by that Party."

"Each Party shall promote and encourage the conservation and sustainable use of biological diversity, in accordance with its law or policy."

"The Parties acknowledge that transition to a low emissions economy requires collective action."

Excerpts from Chapter 20, "Environment", Trans-Pacific Partnership Agreement

Environmental Objectives of Japan and Canada

Japan's Environment Plan is:

- i. "To minimize the burdens on the environment generated at various stages of socioeconomic activities;
- ii. To restore the sound ecosystems and ensure harmonious coexistence between nature and human beings;
- iii. To build a society where all parties, including central and local governments, corporations, citizens and private organizations, participate voluntarily and actively in environmental conservation activities, cooperate and share burden fairly;
- iv. To promote international environmental efforts in cooperation with the other countries that share our common global environment."

Government of Japan, "Nanryo (Plan Nakari)" - The Basic Environment Plan

Canada's Environmental Objectives in entering trade negotiations are:

- i. "To preserve Canada's ability to protect the environment;
- ii. To ensure mutually supportive relationships between trade agreements and multilateral environmental agreements;
- iii. To stimulate the efficient allocation of resources to generate positive environmental impacts;
- iv. To strengthen respective national environmental systems."

Foreign Affairs and International Trade Canada, [Background Document: Environmental Aspects of Trade Agreements 2002](#)

The Possible Policy Options

Option #1
The Status Quo
Letting market forces freely dictate trade flows

Option #2
Setting Caps on Trade
Limit the exports of non-clean energy commodities

Option #3
Binding Treaty
A treaty to fulfill the environmental regulation flaws of the TPP

Treaty Components

Prevention

- Joint training & sharing of best practices
- open communication channels
- Stricter standards of transportation routes
- Joint system of surveillance of spills
- Traffic limitation in coastal regions
- Mapping comprehensive shipping routes and vectors for countries to be responsible for

Reaction

- Minimum intervention times
- After spills happen, reports on the causes, the conduct of the reaction and what should be done in the future, published for transparency and accountability
- sliding scale of sanctions for companies

The Best Fit

A treaty that would add explicit legal obligations and processes to prevent environmental damage

Feasibility of Implementation

Evaluation Criteria:

- Time
 - Institutional cooperation
 - Two and a half year of moratorium
 - Provisional enforcement
- Legislative Procedures
 - Opponents
 - Two years after the ratification
- Financial Resources
 - Alliance of the existing institutions
 - Taxation on corporations that fail to meet the governmental required standard

The Benefits of an Explicit Binding Treaty

- Put international pressure, especially other developed countries
- Creates a system of accountability
- Regulatory cooperation for efficient supply flows
 - Labelling, safety guidelines, refuelling procedures

CONCLUSION

Thank You

Group 6

Mio Nakago, Kwansei Gakuin (J)

Miki Tajima, Seinan Gakuin (J)

Rei Thi Fujiki Van, British Columbia (C)

Sayjon Ariyaratnam York (C)

Close your eyes...



Group 6:
Sayjon Ariyaratnam, Mio Nakago, Miki Tajima & Rei Van

Geothermal Energy





Our Proposal

- Solve the problem of cost for renewable technology
- Tap into geothermal energy in Japan
- Follows Ontario's Green Energy Act and Feed-In Tariffs for long-term technological advancement
- Feed-In Tariff
 - Long-term investment into research for new technology
 - Preferred energy rates for corporations that invest
 - Percentage of profits
- Tariff Digression
 - A means to monitor the technological cost reductions
- Help finance renewable technology

What is Geothermal Energy?

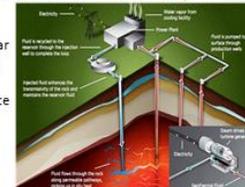
Definition: thermal energy generated from the heat of the earth
Used for: electricity production; hot water used to heat buildings

Pros (+):

- Readily available throughout the year
- the most "Green" energy available (13g CO₂ / kWh)
- Reliable electricity with a stable price

Cons (-):

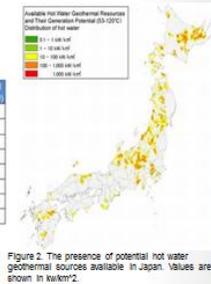
- Minor environmental issues
- Specific locations
- \$\$\$EXPENSIVE \$\$\$



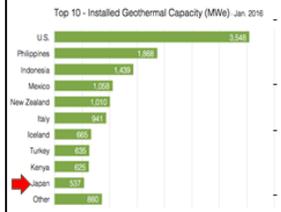
The Potential for Japan

Country	No. of active volcanoes	Geothermal	Installed geothermal capacity (as of 2010)
U.S.	160	20,000	3,083
Indonesia	148	27,795	1,197
Japan	119	23,476	536
Philippines	47	6,000	1,904
Mexico	39	6,000	958
Iceland	33	6,000	578
New Zealand	20	3,655	628
Italy	13	3,276	843

Table 1. Countries with potential Geothermal Resources where the available number of volcanoes correlates to geothermal energy according to New Energy and Industrial Technology Development (NEDO).



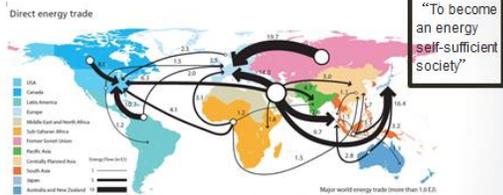
The Potential for Japan



- Japan switched to nuclear power after the oil shock while Iceland switched to geothermal
- Iceland is now self-sufficient because of geothermal energy
- Geothermal energy accounts for 25% of all energy produced in Iceland
- Geothermal energy accounts for 0.3% of all energy produced in Japan

Figure 3. Bar Graph representing installed geothermal capacities out of all readily available geothermal sites. Values are shown in Megawatts (MW).

Why GEOthermal energy?



GOAL:

"To become an energy self-sufficient society"

Proposal 1

Governmental Subsidies

Example: United States of America

- Federal government provides financial support for energy technologies
- Currently 200 geothermal energy projects in place funding by the government
- 20% of the renewable energy used in the US is generated from geothermal energy
- In 2010, U.S. Department of Energy (DOE) announced funding for \$338 million dollars to geothermal energy



Proposal 1

Governmental Subsidies

Why reject?

- Not long term sustainable funding
- Government cannot subsidize the full amount
- No effort to cultivate international relationships
- Labour issues associated with governmental control
 - Example: Hydro One in Canada



Proposal 2

Taxing Japanese Citizens

- Have citizens invest in their own renewable energy
- Increase interest by having direct stakeholders (citizens)

Example: Iceland

- 3.1% of total taxes collected goes to renewable energy
- 25% of energy is produced by geothermal technologies
- Investment in renewable energy
- Similar situation to Japan (being an importer)
- Now self-sufficient

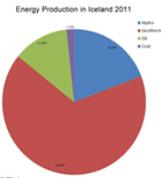


Figure 6. Pie chart representing different types of energy production in Iceland (2011). Values are measured in % with hydro, geothermal, oil and coal.

Proposal 2

Taxing Japanese Citizens

Why reject?

- Avoid having citizens pay more money
- Issues with government
 - Trust issues
 - Hidden funding policies
 - Turnover in leadership
- Difficult to control exact technology where the revenue is invested

Final Proposal - Feed-In Tariffs

- Follow Ontario's Green Energy Act, 2009 to amass investment
- Feed-In Tariffs
 - Accelerate investment into renewable energy
 - Long-term contracts to renewable energy producers
- Domestic Investment
 - Reduced rates on generated energy
 - Percentage of profits
- Foreign Direct Investments
 - Percentage of profits
- Tariff Digression to track success of reduced costs
- 50 other countries around the world use this policy

Final Remarks

- Capitalize on existing energy sources that have been neglected
- Stimulate technological growth
- Expand renewable energy production
- Encourage energy conservation and create green jobs
- Reduce taxes for citizens
- Maintain low costs

"Make Japan an energy self-sufficient society"

Questions?

Thank-you!
ありがとうございます！

Group 7

Terutada Tsunoda, Josai International (J)

Miho Tanaka, Seinan Gakuin (J)

Joshua Christopher Chan, f Waterloo (C)

Tristan Edouard Masson, Concordia (C)

Japan's electricity market: Rethinking the free-market approach

By Ted, Miho, Tristan, Josh



"Even if every major government were to put on huge taxes on carbon fuels which is not going to happen, it wouldn't do too much to halt climate change anytime soon. What it will do is cost us hundreds of billions – if not trillions – of dollars, because alternative energy technologies are not yet ready to take up the slack."

- Bjorn Lomborg, adjunct Professor at the Copenhagen Business School, Director of the Copenhagen Consensus Center and former director of the Danish Environmental Assessment Institute

Our Proposal

Miho Tanaka - offering you the background of the current issues related to liberalizing the energy market

Joshua Chan - outlining the possible policy routes

Tristan Masson - Recommendation of our chosen policy

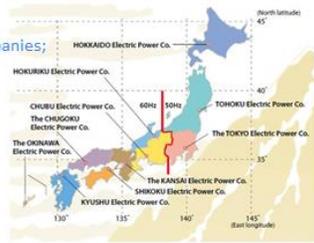
Terutada Tsunoda - Concluding presentation

Problems revealed by Great East Japan Earthquake

1. Cross-regional supply;
2. Monopolies and price-control;
3. Unchanging energy mix.

Japan's 10 Regional Power Companies by Service Area

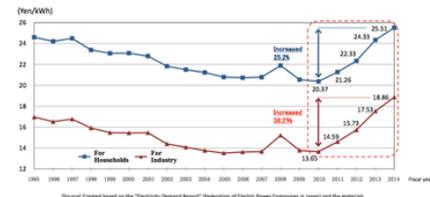
- 10 integrated Power Companies;
- 2 types of frequency: 50Hz and 60Hz



Source: The Federation of Electric Power Companies of Japan (FEPC)

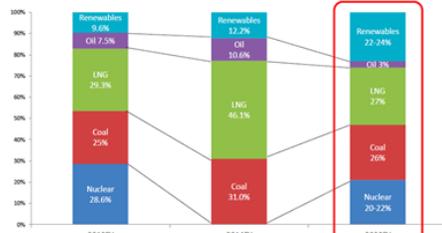
Background

Increase in electricity rates after 3.11



Source: Created based on the "Electricity Demand Report" (Separation of Electric Power Companies in Japan) and the materials concerning the power companies' final settlement reports, etc.

Japan's Generation Mix Target (Preliminary)



Policy Proposals

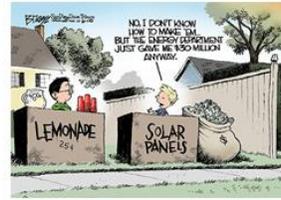
1. Status quo scheme
2. Tax/subsidies scheme
3. Multi-stakeholder scheme



Option 1: Unchanged Status Quo Scheme



Option 2: Tax-Subsidy Scheme

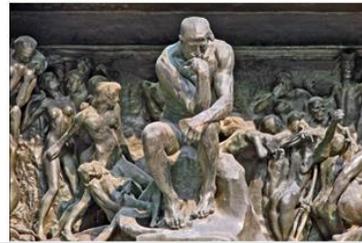


Option 3: Multi-stakeholder Scheme

- Flat tax on non renewables
- Renewable energy research
- Incentives for private sector



Which to choose?



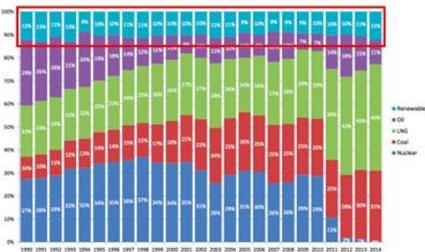
Option 1: Needs improvement



Fair competition?



Research and development?



Option 2: Insufficient measures

- Renewables are in their infancy;
- Long-term considerations;
- Restricted participation.



Option 3: The chosen one

- Renewables can realistically compete;
- "Mekiki": Support to R&D;
- Inclusiveness.



Conclusion



REPORT ON STUDENT EVALUATIONS

Matthew Linley
Department Head
Department of International Programs
International Education and Exchange Center
Institute for International Education and Exchange
Nagoya University

Introduction

Between February 15 and February 19, 2016 Nagoya University hosted the annual Japan-Canada Academic Consortium (JACAC) student forum. Apart from anecdotal evidence, however, we do not have a good idea of how students responded to the event. Understanding student satisfaction is important so we can evaluate the success of the program and to aid in future program improvements. While a few participants criticized the event, I use responses to both the multiple-choice and open-ended questions taken from survey data collected after the forum to argue that most students were satisfied.

The Survey

To ensure a representative survey and to encourage students to give their real opinion we shared an on-line anonymous survey with participants using Survey Monkey. So events were still fresh in the mind of respondents and to ensure a high response rate, the survey was open between February 21 (the day after the Forum ended) and March 10. Of the 28 students to join the forum, 26 responded.

The survey asked students a series of questions related to their views of the Forum. Though the original survey was longer, this report includes only responses to those questions related to satisfaction. We asked students how satisfied they were with particular parts of the forum or whether they agreed or disagreed with specific statements. Responses of "very satisfied" and "satisfied" folded into "satisfied" while responses of "very dissatisfied" and "dissatisfied" folded into "dissatisfied". Students also responded to open-ended questions to state in their own words how they felt about the event. For analysis, I coded these comments into broader categories and report on the number of students who gave similar responses. When citing responses to open-ended questions, I have integrated them into the text for readability. Sometimes I paraphrase without changing the original meaning while in other

places I use direct quotations. Although I edited some comments, I tried to stay close to the original and so spelling and grammatical errors remain. About terminology, when I use the term “Canadian student” or “Japanese student” this does not mean nationality. Some of the students from Canadian universities did not hold Canadian passports and some of the students from Japanese universities did not hold Japanese ones. Rather “Canadian student” refers to participants from Canadian universities and “Japanese student” refers to participants from Japanese universities.

Readers should use some caution interpreting the results of the survey. First, they are only a snapshot of opinion immediately after the event. We cannot conclude how views may have changed over time. Second, regarding both praise and criticism, it is useful to remember that all responses are subjective so no statements should be treated as fact without supporting evidence. Third, though participants replied while the event was still vivid, responses may be biased towards striking memories that triggered emotional responses rather than accurate or important ones. We now turn to evaluating how satisfied participants were with the educational part of the forum.

Satisfaction with Educational Activities during JACAC Forum

Despite criticism, most respondents regarded the forum’s educational activities positively. In this report, educational activities refer to those events with a learning ingredient including lectures, field trips, group presentations, group discussions, and the predeparture assignment. These events impressed the majority of respondents.

Overall Satisfaction

100% of respondents said they would recommend the JACAC forum to a friend. Four students remarked positively on the event as a whole in the open-ended questions. One expressed gratitude to the organizers, saying "thank you so much for this wonderful week that I'll [never] forget". Another student, embraced the tight schedule and effort as a worthwhile learning experience:

"The work load was heavy during the program, however I don't think that it was too much. It made it challenging, but stimulating and rewarding. Considering that it was a 10 days forum, we were able to manage this schedule. If it had been longer, we might have had some sleep and stress issues. I thought that it was very well-rounded. The topics, lectures, field trips covered a range of perspective on the topic of energy and the participants provided different insights." - Canadian student

One criticism though was the lack of free time. Four students lamented that they would have liked to see more of Tokyo and Nagoya. The inability of Canadian students to see more of Japan disappointed one Japanese student who stated "if possible, we wanted one more day for exploring in Tokyo...There were bunch of places we wanted Canadians to see, so it was kind of difficult to go around in one and a half days". Another agreed with this sentiment, commenting:

"I wanted more free day. I know we attended this consortium to study. I wanted Canadian students to go to around Tokyo or Nagoya. If you can provide money (not a ticket) as a transportation fee, we could do other thing."

The curfew at the hostel, according to another student, also made it difficult to explore Tokyo.

Satisfaction with Educational Activities

Table 1 ranks participant satisfaction with the various educational activities offered during the forum. Students were happiest with the lectures and group presentations while least excited by the pre-departure assignment.

Table 1: Student Views of Educational Activities

	Satisfied (%)	Dissatisfied (%)	Neither (%)
Lectures	91.3	0	17.4
Group Presentations	91.3	4.4	4.4
Field trip to Sugenosato & Soranoie	87.5	4.2	8.3
Field trip to Toyota Commemorative Museum of Industry and Technology	87.5	4.2	8.3
Field trip to Tokyo Ecoful Town	79.2	8.3	4.2
Group Discussions	78.2	8.7	13
Pre-Departure Assignment	56.5	21.7	21.7
Average	81.6	7.4	11.0

N=26

Note: Responses of "very satisfied" and satisfied were combined into a single category of satisfied. Responses of "Very dissatisfied" and "dissatisfied" were combined into a single category of "dissatisfied"

Lectures. Students were overwhelmingly (91.3%) satisfied with the lectures. Three students mentioned how impressed they were with the lecture by Professor Hiroshi Amano. One felt inspired to do their own research, saying:

"I have never heard of a lecture by the Nobel laureate before, that was so impressing and invaluable for me. Through the lecture, I have realized that how much the world highest level research is, and what I should and have to do for my own research from now. Although all of the contents in the JACAC Forum in 2016 was so fantastic, that lecture is still vivid in my memories." - Japanese student

Some participants still criticized the lectures. One Japanese student questioned their value because "we were not there to get new knowledges, but rather to gain many different perspectives, so as for the lectures, I felt more comfortable if they really made their point more clear." Another felt disappointed that "some professors that kindly gave us lectures did not understand about JACAC so much". One more disapproved of the format, preferring more student participation:

"I found lectures in this program very of a Japanese teaching style. Just the professors were talking and didn't really see the meaning of doing that with Canadian students. Would have been better if the program had been something of a debate style among students". - Japanese student

Group Presentations and Discussions. The process of preparing and presenting pleased 91.3% of respondents while 78.2% enjoyed the group discussions. One student relished that "everyone had chance to say their opinion and contribute to the group work" and that they could "have discussion at the same level, instead of having one just help the other which often happens when having international interchange." Another praised their colleagues and was enthused by sharing ideas with people from different perspectives:

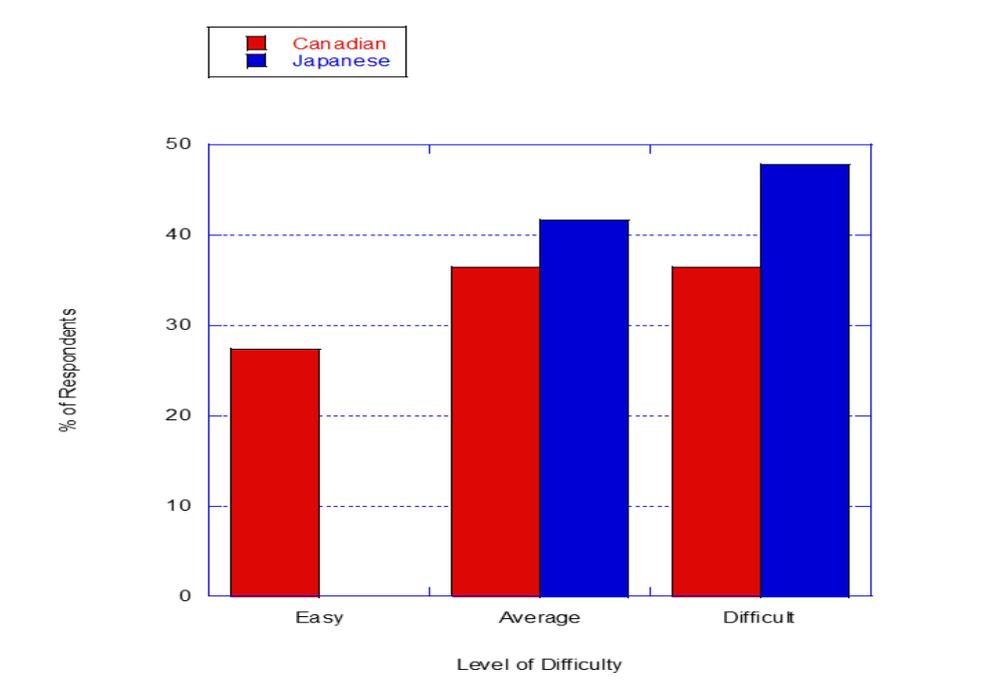
"I loved the high level intelligence among students. I gained so much by exchanging perspectives and ideas on the topic of Energy. Environmental issues are what I study, thus gaining knowledge on this topic was so stimulating. I come out of this with an eagerness to learn more and to act. More so, it opened my eyes to different aspects that I would never never have considered, such as the importance of interdisciplinary communication!" - Canadian student

One valued the chance to talk to people from different perspectives:

"It is a such a wonderful concept to get together good students from all different backgrounds. This diversity of passionate people who shared various interests was perceptible throughout the week, but was seen even more strongly in Friday's presentations. Mixing different approaches to tackle the same problem proved brilliant, and led to a variety of proposals and ideas that showed everyone's different background." - Canadian student

While most students enjoyed the presentations, a few decried the short preparation time. Figure 1 shows most students considered the presentation to be difficult.

Figure 1: Japanese and Canadian University Student Views on Difficulty of Presentation



N=26

Note: Responses of “very easy” and “easy” were combined into “easy”. Responses of “very difficult” and “difficult” were combined into “difficult”.

This was especially the case with Japanese students among whom almost half believed the presentations “difficult”. Most Canadian students found it “average” or “difficult”. Of course, difficult tasks are not necessarily unfair ones. Nonetheless, eleven respondents commented that the lack of preparation time was nerve-racking. For example, a Canadian student felt the schedule “made the situation very stressful and took away from having an

opportunity to enjoy being in Japan" while another complained they "didn't practice much for our presentation, it was kind of difficult to concentrate on our previous group's presentation because I was nervous and practiced in my head. " Another student would have preferred "more of a balance of group work / trips and lectures each day instead of doing all of our group work on Thursday, which was very stressful and not so nice." Two Canadian participants mentioned how the language barrier made it difficult to conduct group work:

"It was very difficult to prepare presentations with some of the Japanese students who had poorer English skills. While this was a learning experience for both the Canadian and Japanese students, in my team the Canadian students ended up doing much of the presentation prep and work because the Japanese students didn't have the same level of English required to concisely explain the concepts. The presentation required was a great experience but it was far too much work to fit nicely with the rest of the trip, and became a very stressful situation for everyone". - Canadian student

It is not clear whether students preferred working with others from similar or different backgrounds. One person enjoyed being with those of a similar academic background while another would have preferred being with those who were dissimilar. The small number of people watching the presentations disappointed one participant who opined that he or she "would be more motivated if there were a bigger audience...It was like just doing a presentation in class, having less motivation when delivering our presentation". Another participant disliked the competition and evaluation of presentation because "the background of the judges was somewhat biased, as they are mostly from political science field". The premise, however, is false since the panel included a Canadian English literature professor, a Japanese chemistry professor, a Canadian diplomat, an American art history professor, and the Japanese head of the Alberta Government office in Japan. Though most students enjoyed the presentations, for some they were a source of anxiety.

Field Trips. Despite the tight schedule, most participants liked the field trips around Nagoya. More than three out of four of respondents were satisfied with the visits to Sugenosato and Soranoie (87.5%), the visit to Toyota Commemorative Museum of Industry and Technology (87.5%), and the visit to Toyota Ecoful Town (79.2%). According to one student, "the field trips were very educational and brought the true essence of Nagoya and the topic revolving around 'energy and society'". Someone complained of too many, however, and how they were unrelated to the forum's theme. Another participant questioned visiting places that were so

impractical “since those kind of place is not very realistic to have in real world due to its cost and feasibility”. The same student was dubious about Toyota Ecoful Town, complaining that it was little more than corporate advertising. Perhaps preferring the part of the program with student participation, someone else remarked that they "didn't enjoy the field trips as they were something we just watch or read".

Pre-Departure Assignment. Students were unimpressed by the pre-departure assignment. Only 56.5% of students were satisfied and 21.7% were dissatisfied. Participants may not have understood the relevance of the assignments or they may have been too busy to complete them. According to one student, “the pre departure assignment was a bit much, considering that canadian students were also involved in school work at their home institution”.

Despite the criticism, most participants reported being satisfied with the forum’s educational activities.

Satisfaction with Organization

In this next section, I show that most students had a positive view of how the JACAC Forum was organized. Table 2 ranks the items from most satisfactory (travel arrangements, the venue at Nagoya University, the event at the Canadian Embassy) to least satisfactory (meals).

Table 2: Satisfaction with Organization

	Satisfied %	Dissatisfied %	Neither %
Travel Arrangements	95.8	0	4.2
Venue at Nagoya University	95.8	0	4.2
Event at Canadian Embassy	95.8	4.2	0
Pre-Departure Information	83.3	0	16.7
Accommodation	83.3	8.3	8.3
Orientation	82.6	0	17.4
Move from Nagoya to Tokyo	79.2	8.3	12.5
Communication with Organizers	73.9	8.7	17.4
Meals	54.2	25	20.8
Average	82.7	6.06	11.3

N=26

Note: Responses of "very satisfied" and satisfied were combined into a single category of satisfied. Responses of "Very dissatisfied" and "dissatisfied" were combined into a single category of "dissatisfied"

Event at Canadian Embassy. Participants were most satisfied (95.8%) with the event at the Canadian Embassy. Eight students wrote positive comments in the open-ended questions. One person cherished the event as a well-deserved celebration for participants:

"The closing ceremony and reception was definitely the highlight. Everyone's hard work was showcased in the most professional manner. And it was such an amazing opportunity to be able to meet the Imperial Highness Princess Takamado. At the same time, the reception was the fanciest that I've ever experienced, the food and bottom less flow of drinks was well deserving and showed much appreciation for the students' hard work. I was extremely fortunate to have a wonderful group where each member was dedicated and brought interdisciplinary studies together to tackle this year's topic." - Canadian student

Another student agreed the Embassy event was a good chance for the organizers to show appreciation for the hard work of the students:

"The last few days in Tokyo was the highlight of the forum because as mentioned before, the closing ceremony and reception showed much appreciation for the student's hard work over the course of a few days to finalize a 15 min group presentation. Everybody did such a wonderful job where presentations were of high quality. Overall, this experience will be remembered closely to my heart and I want to thank each and every sponsor, organizing committee and participant for making this all happen. Although it was a short while, it was the most memorable experience thus far. Every participant is truly like family to me. Now, I am proud to be apart of the JACAC alumni! Let the JACAC family live on~" - Canadian student

Travel Arrangements. The travel arrangements were also a major source of satisfaction for participants (95.8%). Students seemed happy with how the organizers got them to Nagoya, Tokyo and back home.

Venue at Nagoya University. Almost all students (95.8%) agreed that the setting at Nagoya University was suitable. One participant complimented "the set-up of the campus with the cafeteria" though was "struck by how little English was spoken on campus, and how little

English the Japanese professors were able to speak and understand". Although four students complained about the Wi-Fi connection at Nagoya University, most appeared content with the location.

Pre-Departure Information. 85.3% of respondents were pleased with the pre-departure information.

Accommodation. Most students (85.3%) enjoyed their stay in the dormitory at Nagoya University. One student praised the accommodation, "the dorm life was excellent...On campus food is much more tasty than the one from my home institution" and another admired how it was "clean, organized, good service". Two students, however, did not like the Wi-Fi and the curfew at the youth hostel in Tokyo.

Orientation. 82.6% of respondents were satisfied with the Nagoya University orientation program.

Move from Nagoya to Tokyo. Despite the challenge of guiding 28 students from Nagoya to Tokyo on public transport, almost four out of five (79.2%) were satisfied. One student remarked "the fact that we were in two different locations was a major plus point". But seven participants did criticize the use of public transport. One respondent complained of having to take so many of their bags on the subway and train:

"It was inconvenient especially for those travelling from Canada, as we didn't have a light luggage load compared to the Japanese students. I wished there was a bus that took us all of our stuff with us." – Canadian student

This view was supported by another student who recommended "a bus that would get from the dorm to Nagoya station".

Communication with Organizers. Despite the outbreak of influenza among the organizers at Nagoya University and the need for substitutes, almost three of four students (73.9%) were satisfied communicating with organizers. One student offered congratulations that "the organizers were very helpful and prepared". Three students, however, felt that one of the organizers (myself) patronized them. One student reported my attitude as belittling:

"Every interaction I had with Matthew Linley was negative. I felt disrespected and anxious

each time the organizers joined us in Tokyo. I wish they treated us as their equals since this was a professional event. I am discouraged from attending a Japanese university because of my experiences with the organizers of JASSO". – Canadian student

Someone else accused me of being "quite condescending at times, particularly with tone of voices" and that "it was frustrating being talked to at times as if we were a group of junior high school students, as opposed to top academic University students".

Meals. Students were most dissatisfied with the provision of meals in the evenings. Only 54.2% of students praised the food arrangements while in the open-ended questions seven panned them. Though the organizers provided dinner during the welcome party, box lunches during the field trips, and a buffet at the reception, some participants experienced problems getting food at other times. Three students regretted eating at convenience stores so frequently. Another said they would have preferred the organizers to plan dinners rather than depending on the Japanese students because "finding places for meals was somehow burden for Japanese students, and it would be easier if JACAC reserved places and went there together. (Not every meal, though)".

Satisfaction with Interaction with Other Students

A key part of any international educational exchange program are the friendships that develop between students from different countries. In this final section, I will show that the majority of students had a positive experience studying with fellow participants. One student saw the other members of the forum as key to its success:

"It is a such a wonderful concept to get together good students from all different backgrounds. This diversity of passionate people who shared various interests was perceptible throughout the week, but was seen even more strongly in Friday's presentations. Mixing different approaches to tackle the same problem proved brilliant, and led to a variety of proposals and ideas that showed everyone's different background."
- Canadian university student

Another student enjoyed bonding with Canadian and Japanese colleagues.

"JACAC offered me many things, but what I appreciated most was the chance to be with students from different parts of Canada, from Japan, and from different disciplines. It was

this dynamic between students and the cohesion that made for an excellent experience. For this reason, coupled with the fact that the forum was in Japan, the JACAC has been precious to me. " - Canadian university student

Canadian Students

The survey data suggests that the Canadian students enjoyed interacting with their Japanese counterparts.

Impression of Japan and Japanese People. 72.7% of Canadian students said their impression of Japan and the Japanese people was more positive after the forum than before. One student reported being "able to learn a lot about Japanese culture, while also sharing a lot of Canadian culture back". Another noted how "friendly and accommodating the Japanese students were" while a third was thankful for the hospitality:

"My favourite part about the JACAC forum was how enthusiastic the Japanese students were with helping the Canadians explore Japan. I especially enjoyed having free time to explore Nagoya and Tokyo with the Japanese students acting as excellent tour guides. Having them take us to the best places to eat was also a plus." – Canadian student

Not only did the Japanese students make an impression with their friendliness but another Canadian student was "really impressed by the quality of the Japanese students who attended JACAC".

Possibility of Studying Japanese Language. The experience of being in Japan and interacting with Japanese people may have stimulated interest in studying the Japanese language. It may never happen of course but 72.7% of Canadian respondents said that they would consider studying the Japanese language one day.

Willingness to Study in Japan. The positive experience of interacting with Japanese students may have reduced anxiety about future study abroad. 72.8% of Canadian students said that they would consider studying in Japan again, as either a graduate student (36.4%) or as an exchange student (36.4%).

Japanese Students

Japanese students were also satisfied with their chance to speak with their Canadian

counterparts.

Enjoyment of Time with Canadian Students. 100% of Japanese students enjoyed spending time with the Canadian students. One participant compared Canadian students favorably to students from other countries, complimenting them:

"I liked that Canadian students were open to interacting with Japanese students. I have participated in similar conferences before and in most of them students from an English speaking country often just participate the programs just because they wanted to go to other country for free, not trying to talk to Japanese students unless they were talked to." - Japanese student

Another expressed happiness at the Canadian students behaviour in Japan, saying:

"I really enjoyed having time with Canadian students who have different backgrounds and ideas and also who are eager to learn and explore our culture and country! They inspired me and motivated a lot in many ways. Group work helped us a lot to get to know each other and I felt that 4students in one group was the perfect number to work on together". - Japanese student

A third student took pleasure in playing tour guide by showing "Canadian students traditional spot in Japan...I'm really glad that they enjoy Japanese culture."

Image of Canada and Canadian People. 76.9% of Japanese participants responded that their image of Canada and the Canadian people was more positive after the forum than before.

Desire to Study English. It is possible that working closely with Canadian students on a group project may have encouraged some Japanese students to study English more. 84.6% of Japanese respondents reported a greater desire to study English than before the program began.

Willingness to Study in Canada. 92.3% of Japanese respondents said that they would consider studying in Canada. A majority (69.2%) would prefer to do so as a graduate student.

In sum, the survey data suggests that the Canadian and Japanese students were almost equally satisfied with their interactions with one another. There were no explicitly negative comments

about student interactions from either side.

Conclusion

Understanding how participants in the JACAC Forum felt about the event is an important part of its assessment. Most students were satisfied with the educational activities, the organization, and their interactions with other students. The results suggest a number of implications for future forums.

Implications for Educational Activities

Since most participants enjoyed the activities, the current structure needs only a few changes.

More time for presentation preparation. When our committee discussed the activities for students while in Nagoya, everyone agreed that we should emphasize off-campus experiences. We did not want the Canadian students to come all the way to Japan and then spend the whole trip preparing their presentations in the classroom. However, we underestimated the stress put on some students due to time pressure. Although the judges complimented all presentations, this was clearly a source of anxiety. Future organizers may consider increasing time for students to prepare for their presentations.

Revising pre-departure assignments. The pre-departure assignments were not popular among students. Both the Canadian and Japanese students had various other things at their home universities to do in January so many seem to have viewed this as an unnecessary burden. To prepare for the next event, I might recommend readings but not necessarily an assignment. One possibility is that students could write a short think piece after a field trip or lecture.

Implications for Organization

The survey indicates that the organization of the forum is generally good and so any changes that need to be made should be minor.

Challenges of Hosting Forum in Two Cities. Having the forum in two cities is great for students but offers a unique set of challenges. First, the time allotted for educational activities has to be shorter. Second, the logistics of moving so many students over such a long distance using public transport must be well-planned.

Communicating Expectations to Students. The fact that many participants were so disappointed with the provision of meals during the Forum suggests that expectation about food was not successfully communicated. Although we wrote in the pre-departure information that students would have to find their own dinners, and we hoped that some of the Japanese students would aid the Canadian students, this remained a problem. One reason may have been that students were too tired and hungry after the field trips to search for a place they could afford a meal. During future forums, it may be necessary for the organizers to do more to help students find places to dine.

Prepare for Contingencies. Most of the negative comments about the organizers were directed towards myself, for which I take responsibility. Due to my influenza, colleagues at Nagoya University and organizers from Meiji University and the University of Alberta kindly stepped in and took over the forum. For organizers in Japan, my advice would be to get influenza shots since the event is held during that ailment's high season. Other than that, organizers should have at least one or two people who can be substitutes should someone on the team become incapacitated.

Implication for Student Interaction

Given the satisfaction with the interactions between students, it does not appear that any major changes need to be made. Since students willingly apply to this program, it will tend to attract those who are already internationally minded. The bonding between some students during the field trips and the group work seem to have been important causes of satisfaction.

To conclude, I express hope that this survey and report are helpful for the JACAC Organizers and for any university that decides to host this event in the future. If you have any questions, or need any advice, then please do not hesitate to contact me. I wish all future forums the kind of success that we had at Nagoya University. We were most fortunate to have hosted a wonderful group of students and are pleased that they were satisfied with the experience.

PHOTOGRAPHS



Orientation



Key-note Lecture by Prof.Amano



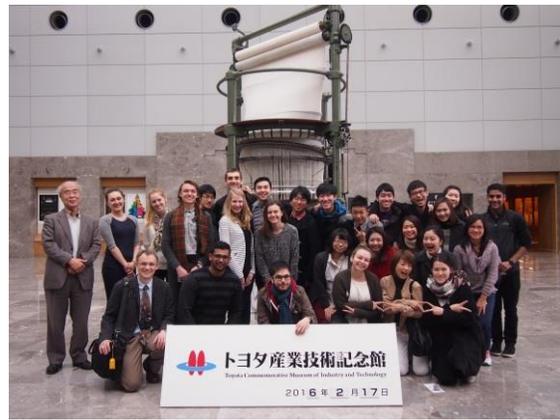
Discussions during the program



Group work



Field Trip to Satoyama "Sugenosato" and "Soranoie"



Toyota Commemorative Museum of Industry and Technology and Toyota Ecoful Town



Group Presentation at the Canadian Embassy



Judges for the final Presentation



Winning group team



Reception!



JACAC STUDENT FORUM 2016

IN APPRECIATION

The gathering of students and researchers at the Japan-Canada Academic Consortium Forum would not have been possible without the significant contributions of the following organizations:

Prince Takamado Japan Canada Memorial Fund

Mitsubishi UFJ Foundation

Japan Student Services Organization (JASSO)

Nagoya University

Meiji University

University of Alberta

Canadian & Japanese Consortium Member Institutions