

# Common (Destiny) but Differentiated Responsibilities:

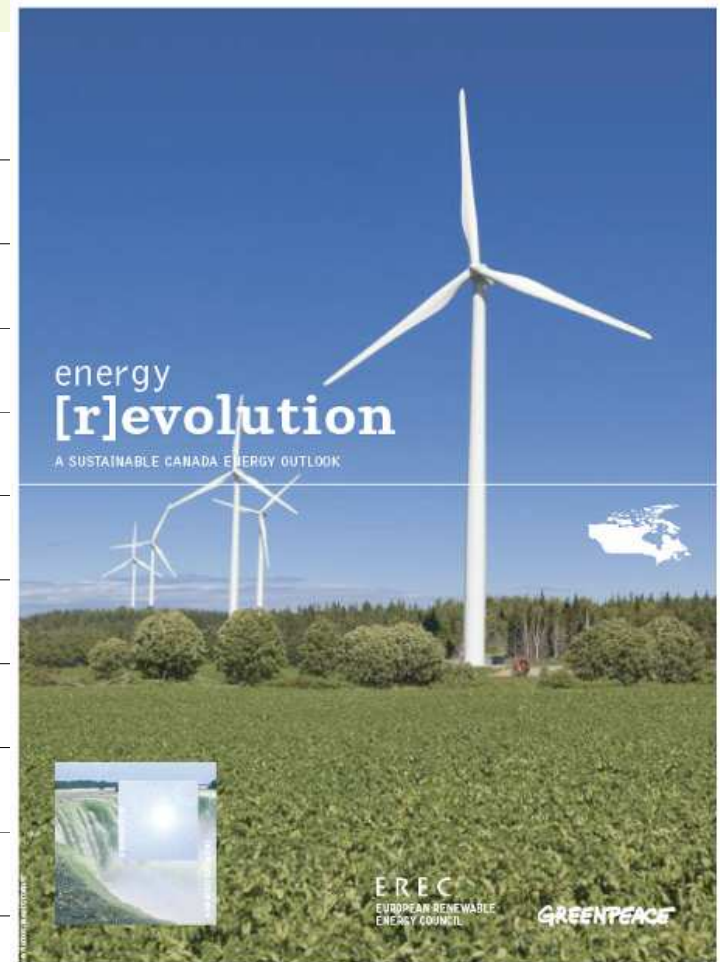
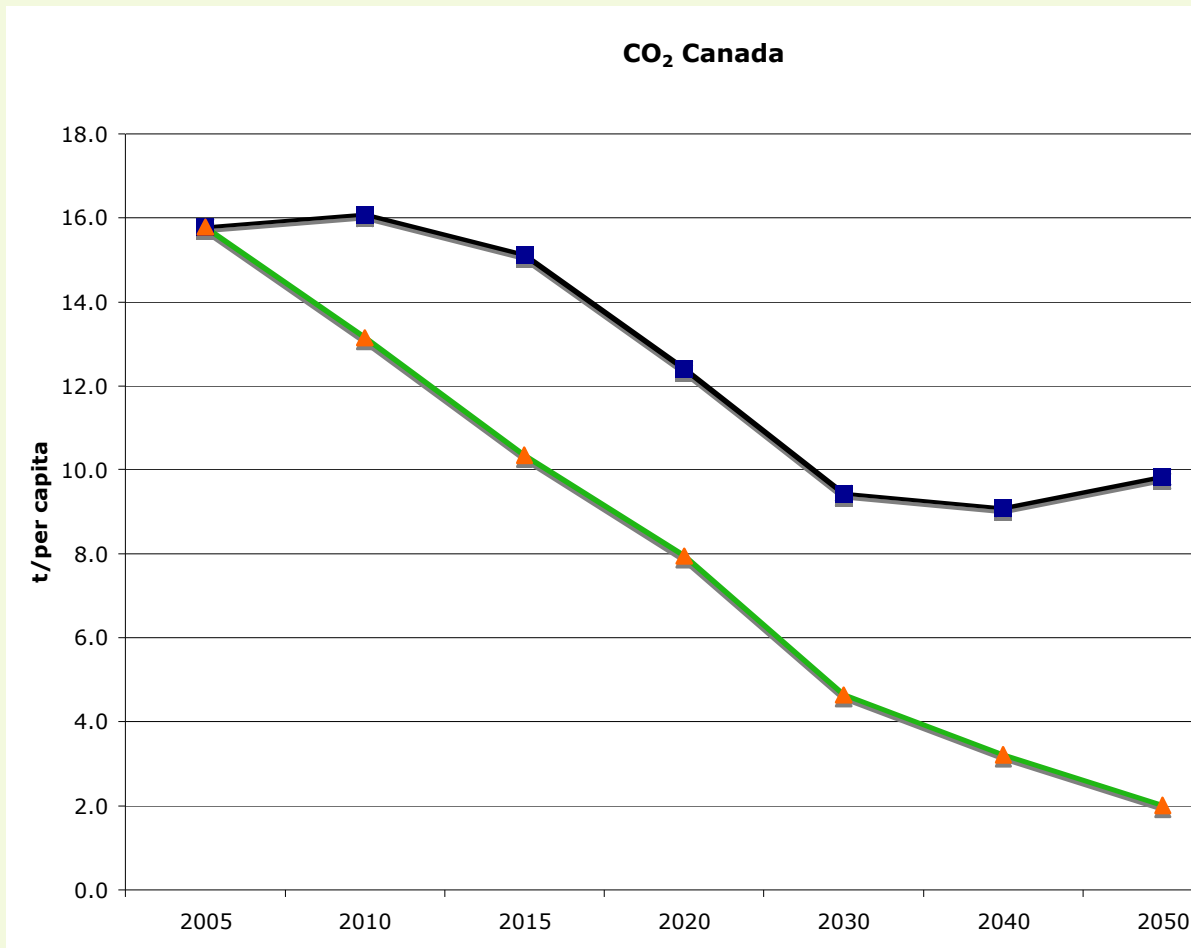
## Feed-in Tariffs to Address Climate Change, Enhance Energy Security and Increase Economic Prosperity in

## North America

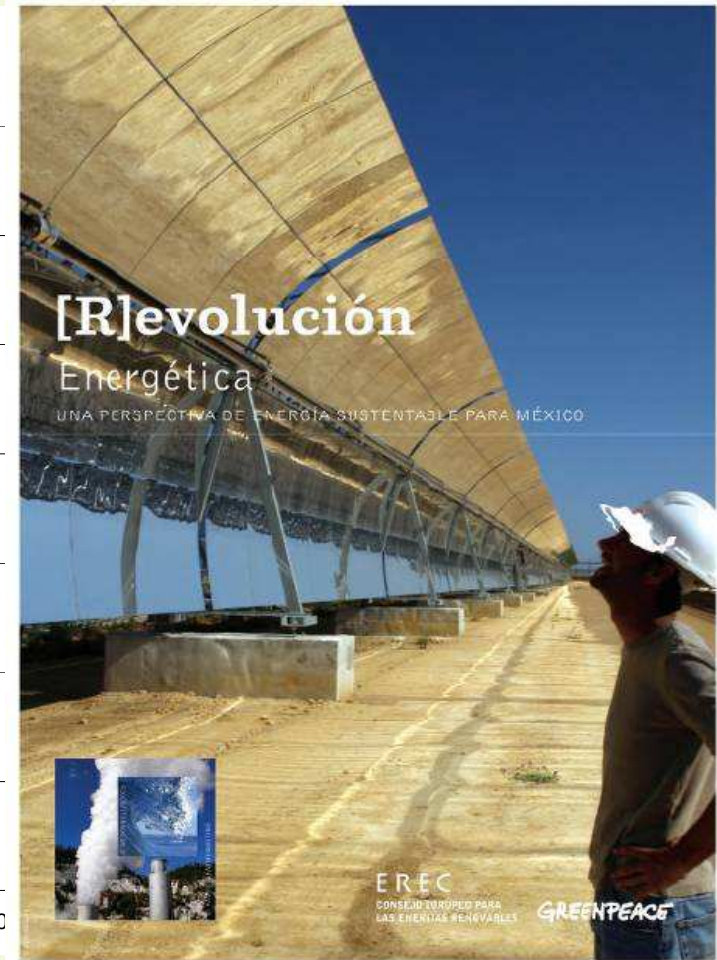
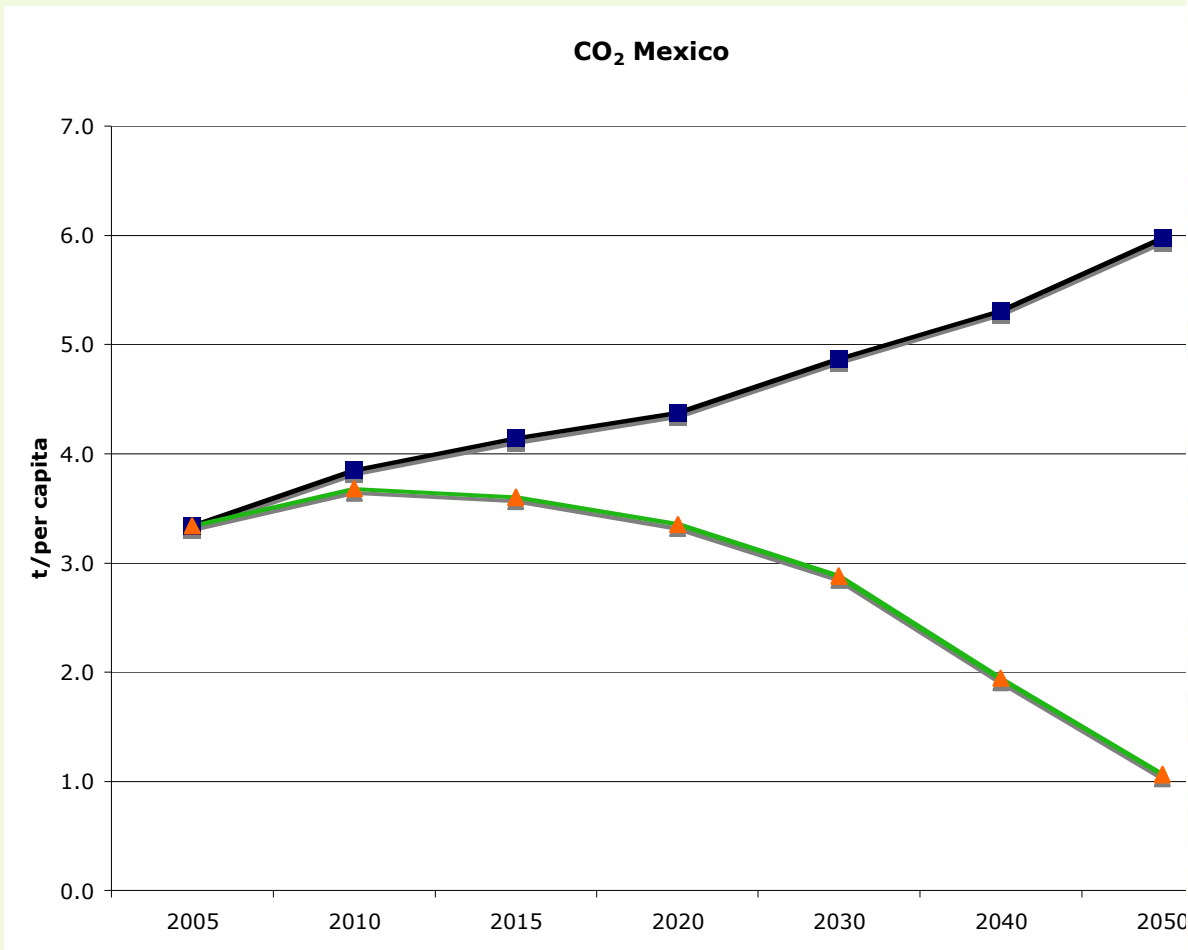
Jose Etcheverry Ph.D.  
December 8 2009



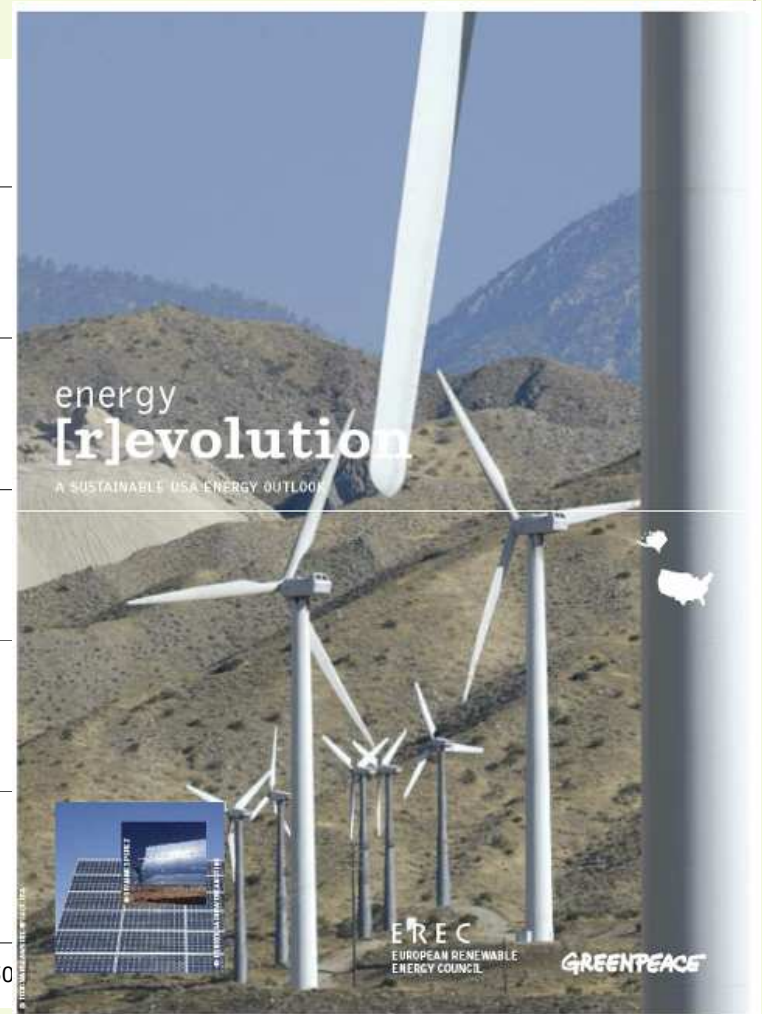
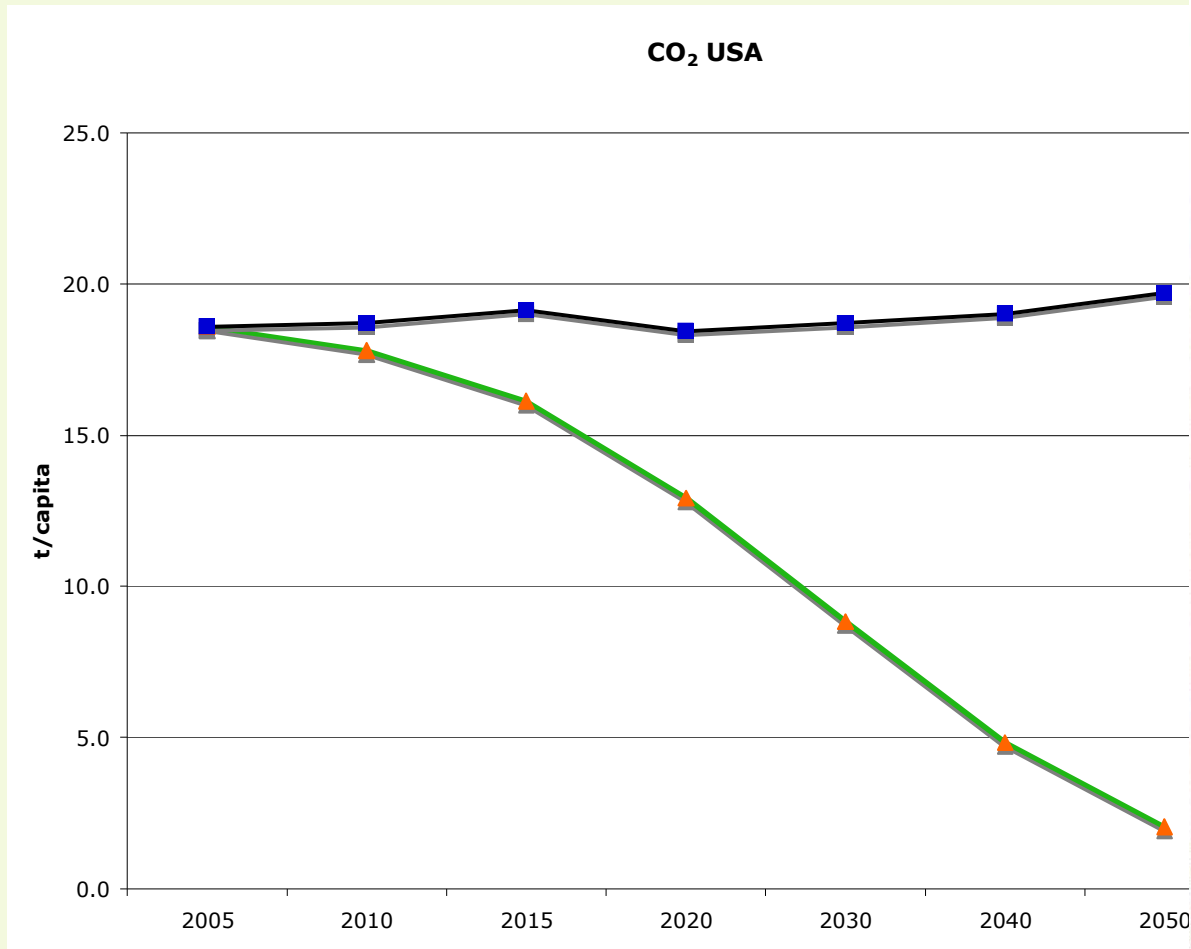
# Challenge for Canada



# Challenge for Mexico



# Challenge for USA



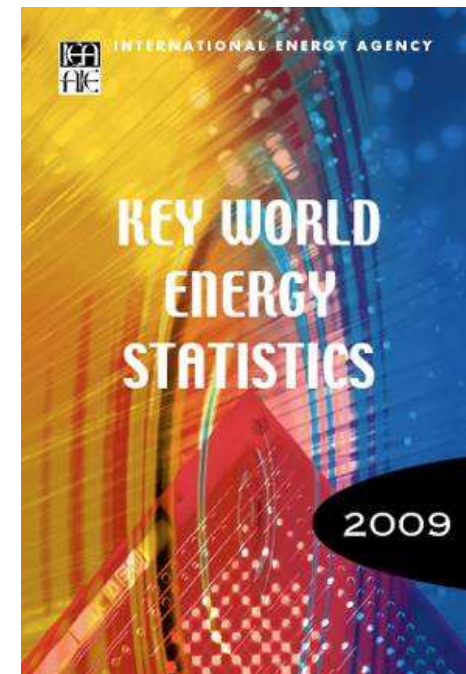
An aerial photograph of Earth from space, showing a vast expanse of white clouds over a blue ocean. The horizon line is visible, separating the dark blue of the sky from the lighter blue of the atmosphere and the white of the clouds. The text is overlaid on the left side of the image.

**The Solution to Climate Change...**

**...is Powerful**

# Strategic Parameters: Conservation/Efficiency

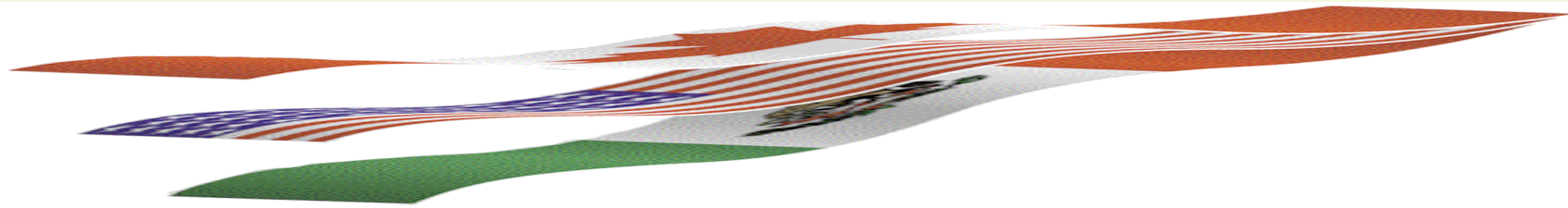
	Electricity Use (kWh/Cap)
Canada	<b>16,95</b>
Denmark	<b>6,67</b>
Germany	<b>7,18</b>
Spain	<b>6,29</b>
United States	<b>13,61</b>
Mexico	<b>2,02</b>



# Renewable Energy (RE) and Feed-in Tariffs (FITs) in North America



Photos Courtesy of Alex Doukas, Joyce Maclean and Paul Gipe



# Mexico: New RE Law: FIT Foundation?



Programa Especial para el  
Aprovechamiento de Energías Renovables



## LEY PARA EL APROVECHAMIENTO DE ENERGÍAS RENOVABLES Y EL FINANCIAMIENTO DE LA TRANSICIÓN ENERGÉTICA

CÁMARA DE DIPUTADOS DEL H. CONGRESO DE LA UNIÓN  
Secretaría General  
Secretaría de Servicios Parlamentarios  
Centro de Documentación, Información y Análisis

Nueva Ley DOF 28-11-2008

### LEY PARA EL APROVECHAMIENTO DE ENERGÍAS RENOVABLES Y EL FINANCIAMIENTO DE LA TRANSICIÓN ENERGÉTICA

TEXTO VIGENTE

Nueva Ley publicada en el Diario Oficial de la Federación el 28 de noviembre de 2008

Al margen un sello con el Escudo Nacional, que dice: Estados Unidos Mexicanos.- Presidencia de la República.

**FELIPE DE JESÚS CALDERÓN HINOJOSA**, Presidente de los Estados Unidos Mexicanos, a sus habitantes sabed:

Que el Honorable Congreso de la Unión, se ha servido dirigirme el siguiente

#### DECRETO

“EL CONGRESO GENERAL DE LOS ESTADOS UNIDOS MEXICANOS, D E C R E T A:

**SE EXPIDE LA LEY PARA EL APROVECHAMIENTO DE ENERGÍAS RENOVABLES Y EL FINANCIAMIENTO DE LA TRANSICIÓN ENERGÉTICA**

**ARTÍCULO ÚNICO.** Se expide la Ley para el Aprovechamiento de Energías Renovables y el Financiamiento de la Transición Energética, para quedar como sigue:

### LEY PARA EL APROVECHAMIENTO DE ENERGÍAS RENOVABLES Y EL FINANCIAMIENTO DE LA TRANSICIÓN ENERGÉTICA

#### Capítulo I.- Disposiciones Generales

**Artículo 1o.-** La presente Ley es de orden público y de observancia general en toda la República Mexicana. Tiene por objeto regular el aprovechamiento de fuentes de energía renovables y las tecnologías limpias para generar electricidad con fines distintos a la prestación del servicio público de energía eléctrica, así como establecer la estrategia nacional y los instrumentos para el financiamiento de la transición energética.

36 (Primera Sección)

DIARIO OFICIAL

Miércoles 2 de septiembre de 2009

## SECRETARÍA DE ENERGÍA

REGLAMENTO de la Ley para el Aprovechamiento de Energías Renovables y el Financiamiento de la Transición Energética.

Al margen un sello con el Escudo Nacional, que dice: Estados Unidos Mexicanos.- Presidencia de la República.

**FELIPE DE JESÚS CALDERÓN HINOJOSA**, Presidente de los Estados Unidos Mexicanos, en ejercicio de la facultad que me confiere el artículo 89, fracción I, de la Constitución Política de los Estados Unidos Mexicanos, con fundamento en los artículos 31, 32 bis, 33, 34, 35 y 39 de la Ley Orgánica de la Administración Pública Federal y 1, 2, 6, 7, 8, 11, 12, 14, 17, 20, 21 y 22 de la Ley para el Aprovechamiento de Energías Renovables y el Financiamiento de la Transición Energética, he tenido a bien expedir el siguiente:

### REGLAMENTO DE LA LEY PARA EL APROVECHAMIENTO DE ENERGÍAS RENOVABLES Y EL FINANCIAMIENTO DE LA TRANSICIÓN ENERGÉTICA

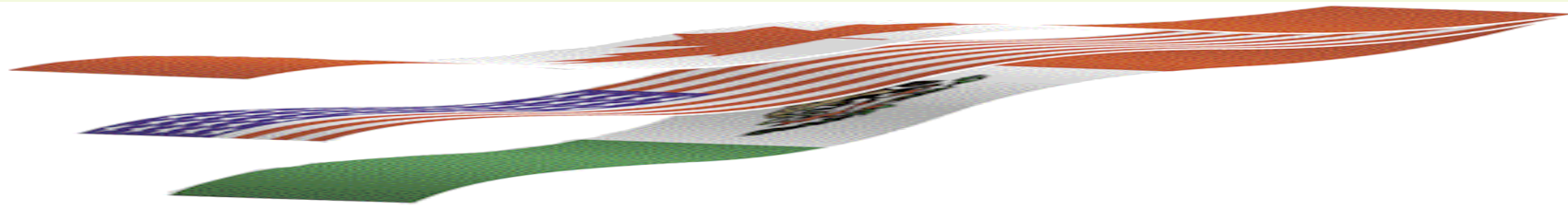
#### TÍTULO PRIMERO

Disposiciones generales.

#### Capítulo I

Disposiciones preliminares.

**Artículo 1.-** El presente ordenamiento tiene por objeto reglamentar la Ley para el Aprovechamiento de Energías renovables y el Financiamiento de la Transición Energética.



# United States: Strong FIT Foundations



California Energy Commission

## 2008 IEPR Recommendations for Feed-in Tariffs

1. The CPUC should immediately implement a feed-in tariff program for all RPS-eligible generating facilities up to 20 MW in size. Such a program should include must-take provisions as well as cost-based technology-specific prices that generally decline over time and are not linked to the CPUC's market price referent.
2. The Energy Commission and CPUC should continue to evaluate feed-in tariffs for renewable projects larger than 20 MW using the information in the Energy Commission's report on feed-in tariffs expected to be completed in early 2009.

Official CEC recommendation, released 1 Dec 08

Home About Contact Get Assistance Work in Congress Issues Press About the 1st District About Congress Privacy Policy S.E.E.C.

ISSUES

- » Boeing
- » Education
- » Energy
- » Environment
- » Families
- » Global warming
- » Health
- » Iraq
- » Japanese American Memorial
- » Media ownership
- » Miscellaneous
- » National Security

**Global warming**

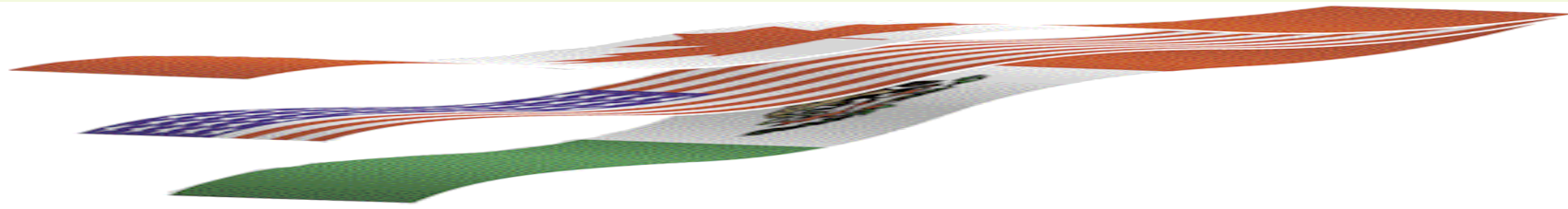
Due to Jay's longtime efforts to address climate change, he was appointed to the Select Committee on Energy Independence and Global Warming in March 2007. Below are links to aspects of his work on this important issue.

[New Apollo Energy Act](#)

**House bill would guarantee rates for clean-energy generators**  
June 26, 2008

U.S. Rep. Jay Inslee, along with three other House members, filed legislation that would provide much-needed investment security in the renewable-energy sector.

[more...](#)



# United States: New FIT Efforts

Back Forward Reload Stop Home DownloadHelper Alliance for Renewable Energy

Most Visited \* Getting Started Latest Headlines > http://www.allianceforrenewableenergy.org/whats-happening-in-the-us.html

## ALLIANCE FOR RENEWABLE ENERGY

promoting the world's most effective renewable energy policies: Renewable Energy Payments (REPs)

**REPs**

- Why REPs?
- Take Action
- Resources/Learn More
- Who supports REPs?
- What's Happening in the US and Canada?

**Design a Model REP Policy**

**PACT**  
Policy Action vs Climate Toolkit

### What's Happening in the US and Canada?

REP Report 2008—An Astonishing Year of Accomplishments

**United States**

- National REPs Legislation
- Status of REP Legislation in Each State
- US Renewable Energy Events and Conferences

**Canada**

- Status of REP Legislation in Each Province
- Canadian Renewable Energy Events and Conferences

## Get FIT to Win

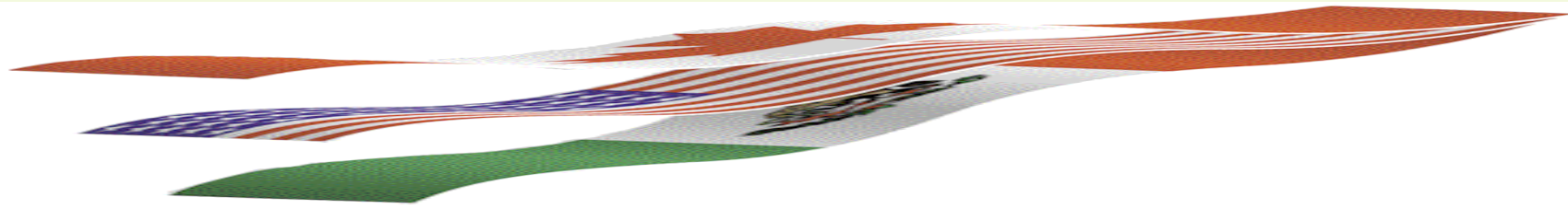


- **Municipalities**
  - Gainesville enacted a German-style FIT in early-2009
  - SMUD and San Antonio just announced FIT programs
- **States**
  - Vermont enacted the first statewide FIT in mid-2009
  - REESA and AB1106 in California
  - CPUC is under tremendous pressure to act
  - CEC, CARB, and new California Governor pointing to FITs
  - 10 additional states are in process
  - Ontario Canada has just enacted a comprehensive FIT
- **National**
  - HR6401 (Inslee) will be reintroduced next month

[www.fitcoalition.com](http://www.fitcoalition.com)

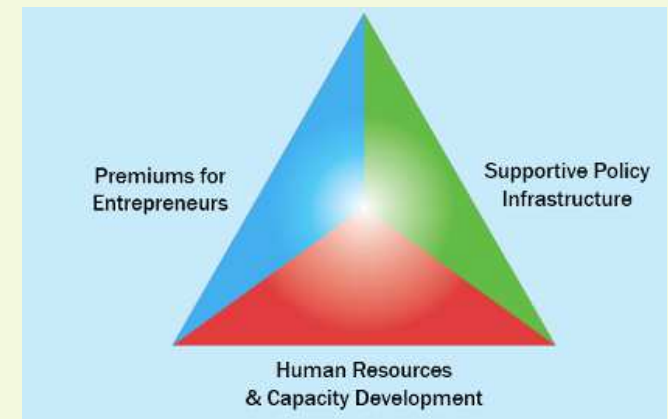
Relentless pursuit of a sustainable future

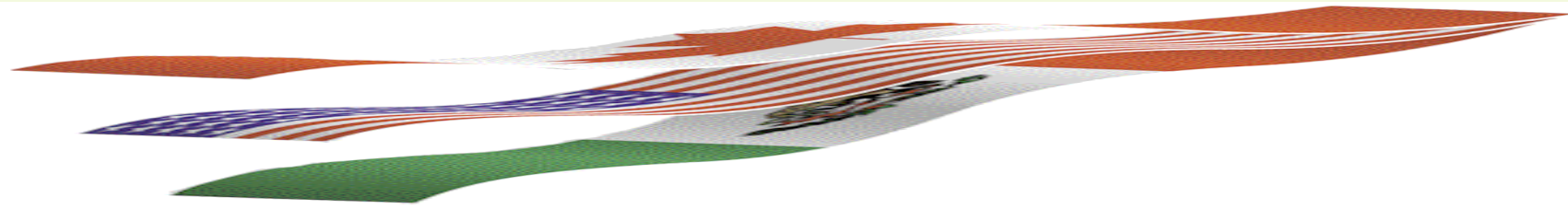
**Slide Credit:**  
**Craig Lewis**  
Founding Principal  
RightCycle & FIT Coalition  
650-204-9768 office  
[craig@rightcycle.com](mailto:craig@rightcycle.com)  
[www.rightcycle.com](http://www.rightcycle.com)  
[www.fitcoalition.com](http://www.fitcoalition.com)



## Canada: RE Leadership = Canadian Provinces

- Ontario
- Nova Scotia
- British Columbia and Quebec
- Alberta? and Saskatchewan?

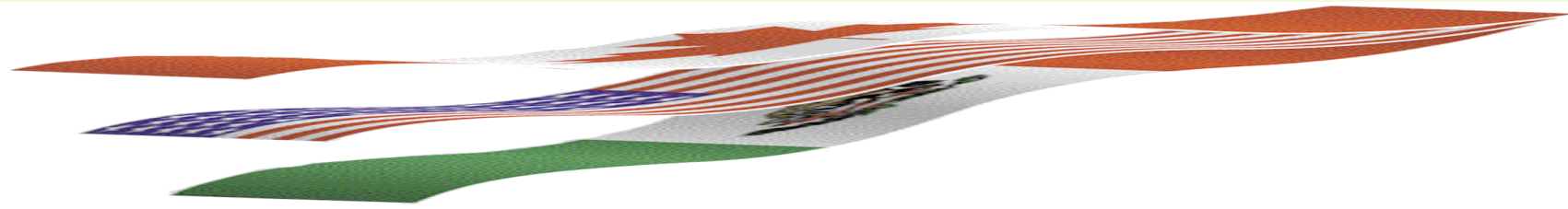




## Canada: Ontario Leading with North America's Most Comprehensive RE Initiatives

- How?
- Mandatory Coal Phase-Out by 2014 +
- Green Energy Act





## Canada: Ontario Leading in North America with the Most Comprehensive FIT Program and RE Law



OPA Ontario Power Authority

Renewable energy  
Feed-in tariff program

Planning | Generation | Conservation | Initiatives

**FIT Program**  
Projects over 10 kilowatts  
Information for renewable  
energy developers



[Click here to learn more](#)

**microFIT Program**  
Projects 10 kilowatts or less  
Information for homeowners,  
small businesses and others



[Click here to learn more](#)

<http://fit.powerauthority.on.ca/>

# Implementing a North American Feed-in Tariff Cooperation

- Partnering with the International Feed-in Cooperation and emulating its MO
- Collaboration between Ontario, Mexico, and United States to share best practice design and implementation know-how and develop local capacity
- Proposed next steps

# International Feed-in Cooperation



**Key factors of feed-in tariff systems,  
best practices of design options  
and comparison to other alternatives**

Mario Ragwitz, Arne Klein,  
Benjamin Pfluger, Anne Held

Fraunhofer Institute  
Systems and Innovation Research (Fh-ISI)

  
Fraunhofer Institute  
Systems and  
Innovation Research  
Nature Conservation and Nuclear Safety (BMU)

Authors:  
Arne Klein, Benjamin Pfluger, Anne Held,  
Mario Ragwitz (Fraunhofer ISI)  
Gustav Resch, Thomas Faber (EEG)



INSTITUTO PARA LA DIVERSIFICACIÓN Y AHORRO DE LA ENERGÍA

 Bundesministerium  
für Umwelt, Naturschutz  
und Reaktorsicherheit

 MINISTERIO  
DE INDUSTRIA, TURISMO  
Y COMERCIO

 REPUBLIC OF SLOVENIA  
Ministry of  
the Economy

  
INTERNATIONAL FEED-IN COOPERATION

**6<sup>th</sup> Workshop of the International Feed-in Cooperation  
3 – 4 November 2008, Brussels**

**Venue: Spanish Permanent Representation  
52 Bd. du Régent  
1000 - Brussels**

Hugo Lucas  
IDAE - International Relations Department

6th workshop of the International  
Feed-In Cooperation

 IDAE Instituto para la Diversificación y Ahorro de la Energía

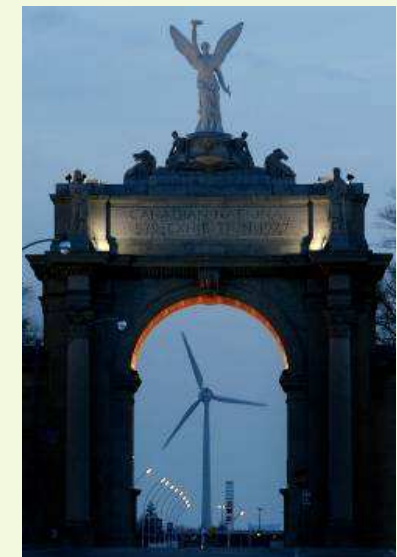
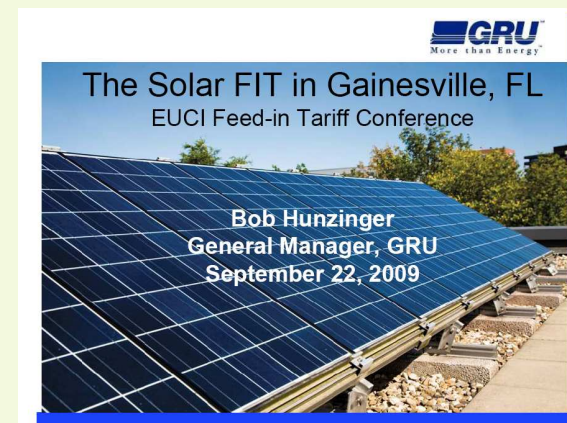
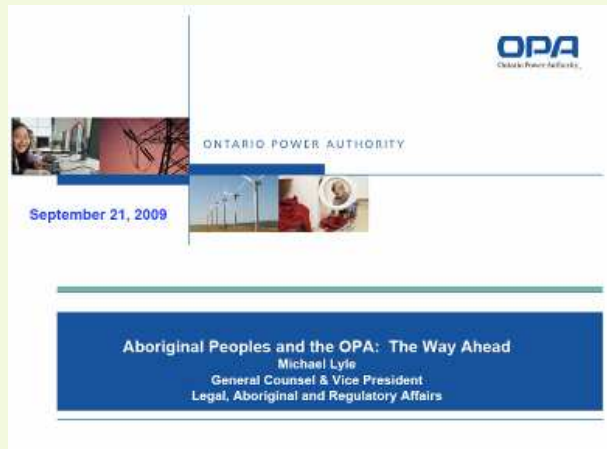
Brussels, November 3rd, 2008

1



# North American Feed-in Cooperation: Potential Participants

## Spring 2010 Workshop in Toronto



# Proposed North American Feed-in Tariff Cooperation represents a Great Initiative for the International Renewable Energy Agency (IRENA)



The screenshot shows the IRENA website with a search bar at the top right containing the text "international feed in". The main header features the IRENA logo and a navigation menu with links for Contact, FAQs, Jobs, Sitemap, Imprint, and Documents. A prominent red banner on the left side reads "REGISTER ONLINE Third Session of the Preparatory Commission 17 JANUARY 2010". The "News" section is active, displaying two articles. The first article, titled "Third Session of the Preparatory Commission", states that members will meet in Abu Dhabi on 17 January 2010. The second article, titled "IRENA Side Event at COP 15 in Copenhagen", mentions a meeting on 15 December 2009. A "REGISTERED USERS" section is visible at the bottom left of the page content.

**REGISTER ONLINE**  
Third Session of the Preparatory Commission  
17 JANUARY 2010

**News**

**Third Session of the Preparatory Commission**

Members of the Preparatory Commission for IRENA will meet in Abu Dhabi, United Arab Emirates, on 17 January 2010 for the Commission's third session.

The Preparatory Commission comprises all countries that signed the IRENA Statute, and acts as the main decision-making body until the entry into force of the Statute after 25 ratifications. The current number of ratifications is at eight, with the ratification process ongoing for several Member States. During the third session of the Preparatory Commission decisions will be made on the 2010 Work Programme and Budget as well as on the interim financial and staff regulations and rules. Observers interested in attending the session can apply for observer status [here](#).

One day prior to the session a meeting of IRENA's Administrative Committee will take place to finalise all documents that will be adopted at the third session. The Administrative Committee facilitates the effectiveness of the Preparatory Commission's work. Member States can register for both the third session of the Preparatory Commission and the meeting of the Administrative Committee [here](#).

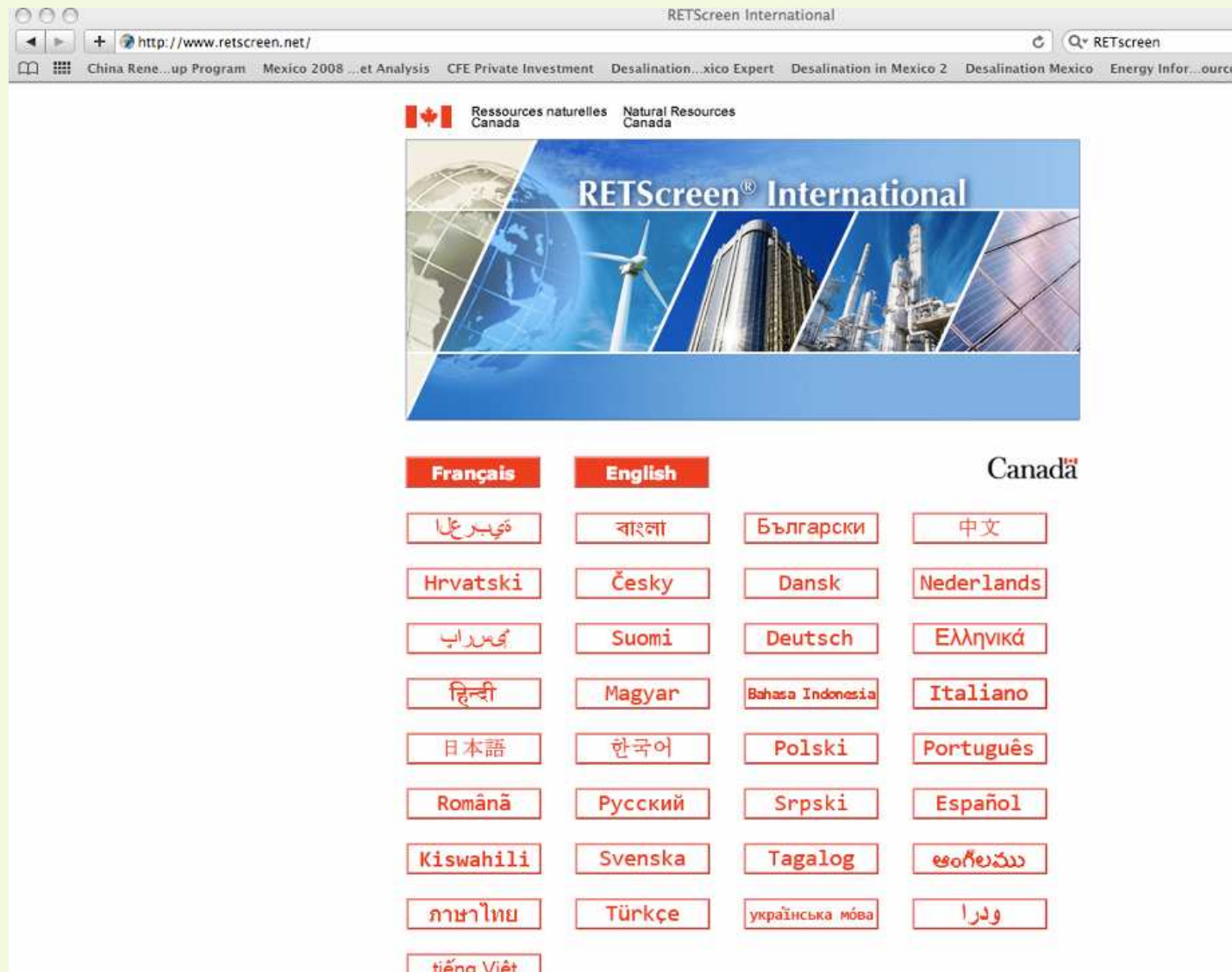
**IRENA Side Event at COP 15 in Copenhagen**

Meet IRENA: Renewable Energy – Our Chance to Mitigate Climate Change  
Tuesday, 15 December 2009, 20.00 - 21.30, room: Halfdan Rasmussen

IRENA will be present at the United Nations Climate Change Conference COP15 in Copenhagen.  
IRENA and REN21, the Renewable Energy Policy Network for the 21st Century, will host a side event on 15 December at 20.00.  
Together with the International Energy Agency (IEA), the IEA Implementing Agreement on Renewable Energy Technology Development (IRETD), and the European Renewable Energy Council (EREC) / Greenpeace, IRENA and REN21 will present the leading renewable energy scenarios to show how renewables can help meet CO2 reduction targets and secure affordable energy supply.

**REGISTERED USERS**

# Key Sources for FIT Design



The screenshot shows the RETScreen International website interface. At the top, there is a navigation bar with the text "RETScreen International" and a search bar containing "RETScreen". Below this, a banner features the RETScreen logo and a collage of renewable energy images including a globe, a wind turbine, a modern building, and solar panels. The main content area displays a language selection menu with two columns of buttons. The first column is headed "Français" and the second "English". To the right of these columns is the text "Canada". The language buttons are arranged in a grid and include: Français, English, Canada, العربية, বাংলা, Български, 中文, Hrvatski, Česky, Dansk, Nederlands, گجراتي, Suomi, Deutsch, Ελληνικά, हिन्दी, Magyar, Bahasa Indonesia, Italiano, 日本語, 한국어, Polski, Português, Română, Русский, Srpski, Español, Kiswahili, Svenska, Tagalog, తెలుగు, ภาษาไทย, Türkçe, українська мова, and وِدرَا. At the bottom of the grid is the button "tiếng Việt".

Français	English	Canada	
العربية	বাংলা	Български	中文
Hrvatski	Česky	Dansk	Nederlands
گجراتي	Suomi	Deutsch	Ελληνικά
हिन्दी	Magyar	Bahasa Indonesia	Italiano
日本語	한국어	Polski	Português
Română	Русский	Srpski	Español
Kiswahili	Svenska	Tagalog	తెలుగు
ภาษาไทย	Türkçe	українська мова	وِدرَا
tiếng Việt			



**Gracias por  
su amable atención**

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**[www.yorku.ca/fes](http://www.yorku.ca/fes)**

**President**

**[www.canrea.ca](http://www.canrea.ca)**

