Background

- In Quebec, deployment of smart grids have been limited by production, supply and market issues
  - Quasi monopoly structure – Hydro-Québec
  - Low electricity prices and production of renewable hydroelectricity
- Growing number of smart grid initiatives
- Perceptions and acceptance of smart grids / smart meters
- Raising concerns: health and safety, privacy, energy efficiency, economic issues
Smart grid initiatives in Québec

- IBM Smart Energy Research Institute (partner with IREQ)
- Equation: Mobilizing Project EcoloTic
- Experimental project on vehicle-to-grid (V2G) and vehicle-to-home (V2H)
- Development of charging stations for electric vehicles
- CanMet Energy research project to enable the integration of renewable energy to the electricity grid by the smart grid technology
- Hydro-Québec's smart meters installation project
Social resistance
Methodology (1)

- Provincial level media analysis
- Resonance and evolution of smart grid issues in Quebec over time
  - Are smart grid salient issues?
  - How are they framed?
  - Who are the key actors?
  - What are the key drivers?
  - What are the key frames?
Methodology (2)

- Methods based on US media analysis
- Search engine: Eureka.cc
- Newspaper: La Presse & Le Devoir
- Date range: January 1st, 1990 to December 31st, 2012
- Content analysis software: Nvivo 10
- Keywords: smart grid(s); réseau(x) intelligent(s); réseau(x) électrique(s) intelligent(s); compteur(s) intelligent(s)
Smart grid/smarter meter articles over time

La Presse
Media coverage

Number of articles La Presse – smart grid(s) / Smart meter(s)

- Total: 55
- Smart grid: 8
- Smart meter: 47
Type of articles

- Categorized articles:
  - A: primarily about the smart grid or smart grid technologies
  - B: discusses smart grid or an aspect in a subsection
  - C: mentions the search term(s) without further information

- A & B articles coded

Number of article La Presse by category

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Most frequent terms

- meters
- consumers
- hydro
- Québec
- smart
- day
- millions
- install
- megawatts
- hydrostate
- d'hydro
- effect
- subsidiary
- government
- electric bill
- radiofrequencies
- board
- grid
- health society
tariff
pricing
rates
- technology
- time
- Toronto
- trilliant
- power plant
- cents
- account
- business year
- consumption
- costs
- electricity
demand
- energy
- state
- Ontario peak project
- quèbecois qu'hídro
Policies and programs over time
Key triggers over time

- Ontario GEGEA & FiT
- Protest
- Quebec's Energy Strategy
- Smart Meter Health Risks
- Smart meter installation
- Smart Meter Pilot
- Time-of-use pricing
- None
Perception of smart grid risks and benefits
Risk and Benefit’s media coverage
Component focus over time

- Consumer appliances or electronics
- Electric Vehicles
- Generation
- ITC components
- Meter
- Storage
- Transmission and Distribution
Governments’ media coverage

- Federal: 3
- Municipal: 2
- Ontario: 11
- Provincial: 105
- US State: 1
Private sector’s media coverage
Non-governmental actors’ coverage

- Environmental Organizations
- Individuals
- Labor Unions
- Municipal Association
- Public Health Advocacy Groups
- Professional Associations
- Research and Academia
- Other
Utilities coverage over time

- BC Hydro
- Foreign Electric Utility
- Hydro One
- Hydro Quebec
- Local Distribution Company
Preliminary conclusion

• Smart grid is mostly framed as a smart meters issue
  • Predominance of Hydro-Québec’s smart meters installation project in the media

• Perception of smart meters/Smart grid:
  • Health & safety risks
  • Balanced perception of economic risks and benefits
  • Environmental benefits
  • Technological benefits