Citizen Perceptions of Smart Meters:

Comparing Survey Results Across Canadian Regions
- Preliminary results: please do not quote or cite

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Outline

1. My research
2. Survey design
3. Survey findings
4. Discussion
Research Objective

- Explore the socio-political influences on smart grid deployment in British Columbia
- Inform key stakeholders how to effectively deploy environmentally beneficial smart grid initiatives
Media Analysis

Stakeholder Interviews

Consumer Survey
Smart grid growth in news media

- Sun
- Province
Media Analysis

Stakeholder Interviews

Consumer Survey
Stakeholder Interviews

- Explore how stakeholders perceive smart grid opportunities and obstacles
- Possible interviewees include:
  - BC hydro (utility)
  - Utilities Commission
  - Smart meter industry
  - Smart grid research institutes
  - Consumer groups (stopsmartmeters)
Media Analysis

Stakeholder Interviews

Consumer Survey
Brief BC Context

- Clean Energy Act of 2010
  - 1.8 million smart meters installed

- However, smart meters are only one possible smart grid initiative

BC’s Energy Minister: “I’ve said it clearly: We’re not going to time of use”
Smart Meter Survey

n = 1786
Awareness of smart meters varies regionally

- Atlantic: Familiar - 20%, Limited Knowledge - 80%
- Alberta: Familiar - 20%, Limited Knowledge - 80%
- BC: Familiar - 60%, Limited Knowledge - 40%
- Ontario: Familiar - 60%, Limited Knowledge - 40%
Many citizens are unaware of smart meter installation or requirement in their homes.
Opposition and support varies regionally

- **Atlantic**
  - Support: 40%
  - Oppose: 20%

- **Alberta**
  - Support: 30%
  - Oppose: 20%

- **Ontario**
  - Support: 40%
  - Oppose: 20%

- **BC**
  - Support: 40%
  - Oppose: 20%
Regional Comparison – “smart meters will...”

- **Cultural**: invade privacy. (Atlantic: 15%, Alb: 10%, Ont: 20%, BC: 30%)
- **Economic**: increase electricity costs. (Atlantic: 5%, Alb: 15%, Ont: 30%, BC: 40%)
- **Environment**: harm environment. (Atlantic: 10%, Alb: 5%, Ont: 15%, BC: 20%)
- **Health/Safety**: harm health. (Atlantic: 5%, Alb: 10%, Ont: 15%, BC: 20%)
Regional Comparison – “smart meters will...”

- **provide useful info**
- **reduce electricity usage.**
- **help manage demand.**

<table>
<thead>
<tr>
<th>Region</th>
<th>Atlantic</th>
<th>Alb</th>
<th>Ont</th>
<th>BC</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>provide useful info</strong></td>
<td>65%</td>
<td>60%</td>
<td>70%</td>
<td>55%</td>
</tr>
<tr>
<td><strong>reduce electricity usage.</strong></td>
<td>50%</td>
<td>45%</td>
<td>60%</td>
<td>40%</td>
</tr>
<tr>
<td><strong>help manage demand.</strong></td>
<td>60%</td>
<td>55%</td>
<td>70%</td>
<td>50%</td>
</tr>
</tbody>
</table>
Smart meter reframing

- In our last question we asked:
- If smart meters were designed to reduce environmental impact of electricity without increasing the cost of electricity, would you support?
Smart meter support impacted by reframing

BC before
Smart meter support impacted by reframing

BC after

BC before
Smart meter support impacted by reframing

- Ontario before
- BC after
- BC before
Smart meter support impacted by reframing

- Ontario after
- Ontario before
- BC after
- BC before

The graph shows the impact of smart meter support in Ontario and BC before and after reframing.
Smart meter support impacted by reframing

Alberta before

Ontario after

Ontario before

BC after

BC before
Smart meter support impacted by reframing

- Alberta after
- Alberta before
- Ontario after
- Ontario before
- BC after
- BC before

The graph shows the change in support for smart meters before and after a reframing strategy, categorized by province: Alberta, Ontario, and BC. The red and blue bars represent the percentage change in support, with red indicating a decrease and blue indicating an increase.
Smart meter support impacted by reframing

Atlantic before
Alberta after
Alberta before
Ontario after
Ontario before
BC after
BC before

-40% -20% 0% 20% 40% 60%
Smart meter support impacted by reframing

Atlantic after
Atlantic before
Alberta after
Alberta before
Ontario after
Ontario before
BC after
BC before
Survey take aways

1. Canadian’s knowledge of smart meters is limited.
2. There are regional differences in smart meter perception.
3. Reframing the smart meter context has an impact on perception and support.
Conclusion

1. Integrate these survey findings with stakeholder interviews and media analysis to build awareness of smart grid obstacles and opportunities.
2. Hope to inform the deployment of environmentally beneficial smart grid initiatives.