

# Ontario Smart Grid Forum: Report back From the Working Group

Monday, May 2<sup>nd</sup> 2011



- The Smart Grid Forum Working Group met on Monday, April 26<sup>th</sup> to discuss two main topics as follows:
  1. The consumer engagement survey
  2. Working Group activities stemming from the Forum's second report

# Consumer Engagement Survey



- The SGF report contains a specific recommendation regarding a consumer engagement survey as follows:

*“The Ontario Ministry of Energy should conduct an annual smart grid consumer engagement survey to gain insight into how smart grid products/services are benefitting consumers and influencing consumption behaviour. The results of this survey should be shared with industry.”*

- The survey **may** consist of two different approaches as follows:

1) A **focus group** component:

- In-depth analysis of reactions and responses to complex topics and ideas:



2) A **survey** component:

- Benchmark indicators for future studies: awareness, attitudes, purchase patterns, etc.



## **Survey components already discussed:**

- Survey should be repeatable from year to year to evaluate longer-term trends
- Broad categories:
  - Overall awareness,
  - Consumer attitudes,
  - Perceived barriers to adoption (including price points for various products and services) and
  - Customer expectations


- The survey is of little or no use unless it is focused on Ontario - or - the Ontario-specific results are statistically significant and severable from a national survey.
- Any questions regarding electric vehicles should further be distinguishable between urban and rural customers. This is probably a good idea for the survey design as a whole.
- No particular need to examine customer perceptions of smart metering because it's an existing program that's been in the public domain for a while and already heavily studied

- The survey generally should NOT touch on security or privacy issues.
- Some questions that gauge consumer attitudes towards the role of the LDC vs. third party service providers would be helpful.
- The focus group would be a good way to gauge customer reactions to different types of demand response programs.

# Working Group activities stemming from the Forum's second report

## Modernizing Ontario's Electricity System: Next Steps

Second Report of the Ontario Smart Grid Forum  
May 2011



- The upcoming report of the Forum contains 15 recommendations in 8 categories.
- Many of these recommendations imply both direct and indirect actions for the Forum and the Corporate Partners Committee
- **The questions discussed:**  
Where and how can the Working Group assist?  
What are the top priorities? <sub>10</sub>

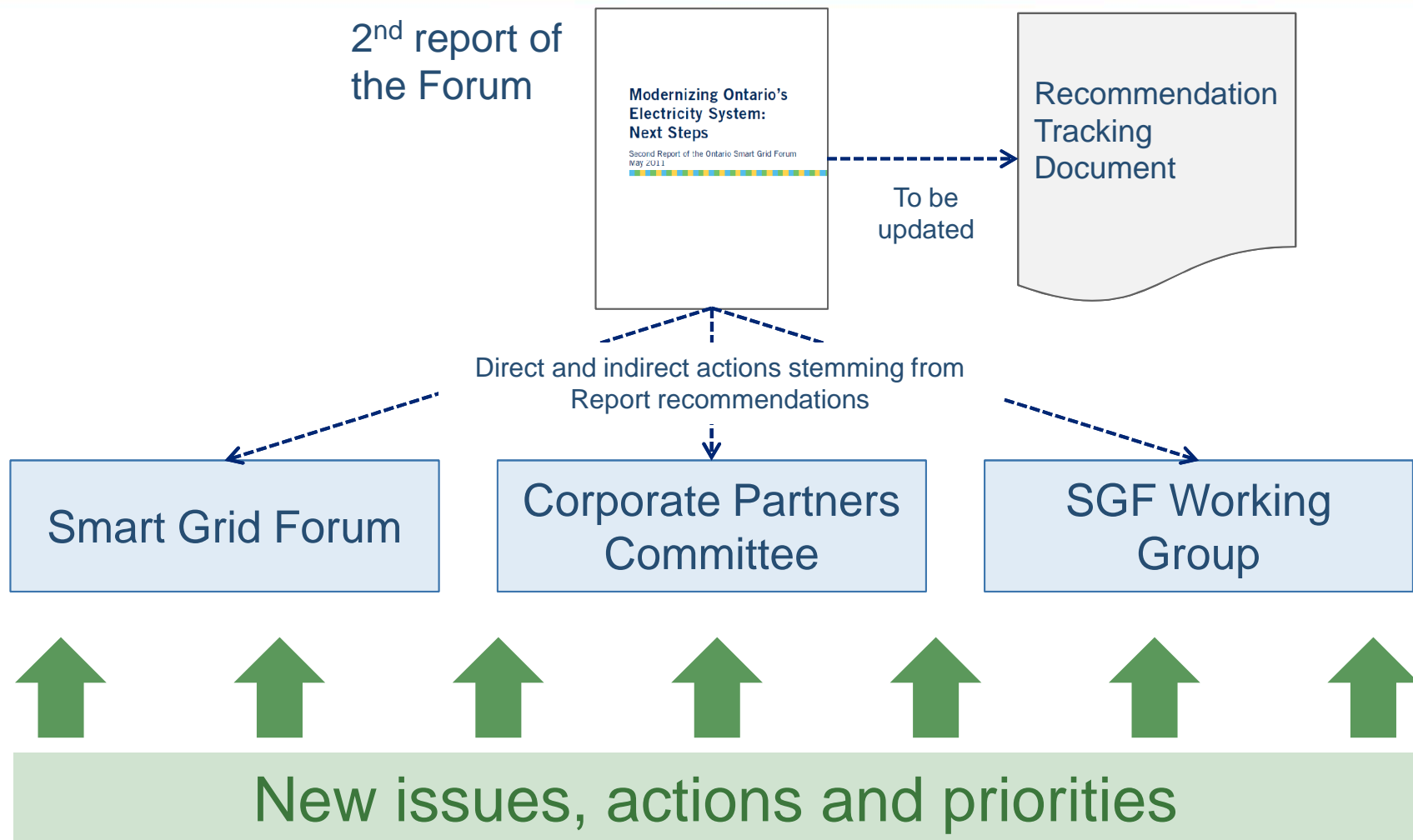
- Factors taken into consideration in setting work plan priorities:
  - Specific actions within the recommendations themselves
  - Work of the Corporate Partners Committee and other, external organizations
  - Desire to leverage previous work
  - Areas of expertise of the Working Group – particularly within the distribution domain

# Summary: Where the Priorities are...

Category	Recommendation	<u>Working Group</u> Priority
<b>Privacy and Security</b>	PbD Recognition	<b>n/a - Ongoing Activity</b>
	Complaints tracking	<b>Low</b>
<b>Third-Party Access</b>	Remove barriers to access	<b>High</b>
	AMI test bed tacitly	<b>Medium</b>
<b>Consumer Engagement</b>	Smart Home Roadmap	<b>Medium</b>
	LDCs and 3 <sup>rd</sup> party service providers	<b>Medium</b>
	Aggregators framework	<b>Medium</b>
	Identify knowledge gaps	<b>n/a - Ongoing Activity</b>
	Consumer Engagement Survey	<b>High</b>
<b>Electric Vehicle (EV) Integration</b>	Track EV registrations	<b>Medium</b>
	Track Charging Stations	<b>Medium</b>
<b>Storage Integration</b>	Develop Integration Framework	<b>High</b>
<b>Standards</b>	Use existing interop. Standards	<b>n/a - Ongoing Activity</b>
<b>Innovation &amp; Economic Development</b>	New Task Force	<b>TBD</b>
<b>Measuring Smart Grid Success</b>	Success Metrics	<b>Medium</b>

- Increasingly, the Forum, the Working Group and Corporate Partners Committee will be working on issues/recommendations of mutual interest to all three groups.
- A growing body of work between the three groups on specific topics areas, stemming from both this year's Forum report and the 2009 report.
- This may increase the need for a joint issue management process between the three groups.

# The emerging need for coordination...



- Bring the Recommendation Tracking document up to date with final recommendations from the Report of the Forum
- Augment the Recommendation Tracking document and/or create an issue management mechanism to track progress and activities of the Forum, Working Group and Corporate Partners
- Periodic review of major developments, new work priorities and coordination issues by the Forum

## APPENDIX:

# Specific activities associated with each Forum Report recommendation



**Modernizing Ontario's  
Electricity System:  
Next Steps**

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*Recognizing that the 7 Privacy by Design principles developed by the Ontario Information and Privacy Commissioner provide valuable guidance with respect to compliance with applicable privacy laws and protecting consumers, these principles should be considered as best practice in the implementation of the smart grid in Ontario for both regulated and unregulated service providers.*

Category:	Privacy and Security
Specific Actions for the Forum:	None
Specific Actions for the Corporate Partners Committee:	None – but ties in with ongoing work on 3 <sup>rd</sup> party access.
<b>Possible actions for the Working Group:</b>	None – but ties in with ongoing work on 3 <sup>rd</sup> party access.
Recommended Priority:	n/a

*The Ontario Information and Privacy Commissioner should begin tracking smart-grid related consumer complaints with respect to how utilities and third parties use their information.*

<b>Category:</b>	Privacy and Security
Specific Actions for the Forum:	None.
Specific Actions for the Corporate Partners Committee:	None
<b>Possible actions for the Working Group:</b>	<ul style="list-style-type: none"> <li>- Possibly offer help to the privacy commission as what information should be tracked</li> <li>- but possibly review statistical data on complaints at a later date.</li> </ul>
Recommended Priority:	Low

*Barriers to facilitating third-party access to electricity consumers and their real-time consumption information should be addressed. The Forum and its Corporate Partners Committee will work with industry to resolve outstanding access issues, consistent with the Smart Grid Objectives set out in the government's directive to the Ontario Energy Board.*

Category:	Third Party Access
Specific Actions for the Forum:	None.
Specific Actions for the Corporate Partners Committee:	Sub-group on use cases
<b>Possible actions for the Working Group:</b>	Assist CPC work on use cases – particularly from the standpoint of LDC's
Recommended Priority:	HIGH

*A test bed environment should be established devoted to furthering interoperability between emerging products and services, as well as the various proprietary Advanced Metering Infrastructure (AMI) systems deployed across the province as part of the Smart Metering Initiative. The Forum and its Corporate Partners Committee will work with industry to investigate the best path forward.*

Category:	Third Party Access
Specific Actions for the Forum:	None.
Specific Actions for the Corporate Partners Committee:	Test bed sub-group.
<b>Possible actions for the Working Group:</b>	Interest of the working group is directly dependent on the scope of the test bed facility. Anything involving LDC network access is of high interest to the Working Group
Recommended Priority:	MEDIUM

*Industry and government should work toward meeting the development timelines established in the Smart Home Roadmap to bring greater control, choice, market participation and other benefits to electricity consumers. The Forum will facilitate timely development.*

Category:	Consumer Engagement
Specific Actions for the Forum:	<ul style="list-style-type: none"> <li>• Facilitation of government and industry dialogue.</li> <li>• Possible issue management role?</li> </ul>
Specific Actions for the Corporate Partners Committee:	<ul style="list-style-type: none"> <li>• Potential consultations with government as per recommendation.</li> </ul>
<b>Possible actions for the Working Group:</b>	<ul style="list-style-type: none"> <li>• Help articulate the role of the LDC with respect to the Smart Home</li> <li>• Strong tie-in with CPC use case work</li> <li>• Detailed look at timelines</li> </ul>
Recommended Priority:	MEDIUM

*The interactions between LDCs and third-party service providers in each area of the smart grid value chain, including support for electric vehicles, should be examined with an eye to removing barriers to consumer service adoption. The Forum and its Corporate Partners Committee will work with industry to facilitate this effort.*

Category:	Consumer Engagement
Specific Actions for the Forum:	<ul style="list-style-type: none"> <li>• Facilitation of industry dialogue.</li> <li>• Possible issue management role</li> </ul>
Specific Actions for the Corporate Partners Committee:	<ul style="list-style-type: none"> <li>• Potential consultations with Forum as per recommendation</li> </ul>
<b>Possible actions for the Working Group:</b>	<ul style="list-style-type: none"> <li>• Strong tie-in with CPC use case work</li> <li>• Examine LDC role.</li> <li>• Develop technical recommendations for consideration by the Forum.</li> </ul>
Recommended Priority:	MEDIUM

*The role that aggregators can play in delivering benefits to consumers via the smart grid should be investigated and, where appropriate, specific recommendations should be developed to facilitate their participation in the market. The Forum and its Corporate Partners Committee will work with industry to address this issue.*

Category:	Consumer Engagement
Specific Actions for the Forum:	<ul style="list-style-type: none"> <li>• Facilitation of industry dialogue.</li> <li>• Possible issue management role</li> </ul>
Specific Actions for the Corporate Partners Committee:	<ul style="list-style-type: none"> <li>• Potential consultations with Forum as per recommendation</li> </ul>
<b>Possible actions for the Working Group:</b>	<ul style="list-style-type: none"> <li>• Provide insight into LDC role.</li> <li>• Develop technical recommendations for consideration by the Forum.</li> </ul>
Recommended Priority:	MEDIUM

*Gaps in knowledge specific to the development of the smart grid in Ontario should be identified and, where applicable, research should be advocated aimed at filling those gaps. The Forum will work closely with industry to identify and close knowledge gaps.*

Category:	Consumer Engagement
Specific Actions for the Forum:	<ul style="list-style-type: none"> <li>• Possible issue management role</li> </ul>
Specific Actions for the Corporate Partners Committee:	<ul style="list-style-type: none"> <li>• Possible issue management role</li> </ul>
<b>Possible actions for the Working Group:</b>	<ul style="list-style-type: none"> <li>• Possible issue management role</li> <li>• Revisit the demand response problem tree work from last year</li> </ul>
Recommended Priority:	Ongoing issue

*The Ontario Ministry of Energy should conduct an annual smart grid consumer engagement survey to gain insight into how smart grid products/services are benefitting consumers and influencing consumption behaviour. The results of this survey should be shared with industry.*

Category:	Consumer Engagement
Specific Actions for the Forum:	<ul style="list-style-type: none"> <li>• None</li> </ul>
Specific Actions for the Corporate Partners Committee:	<ul style="list-style-type: none"> <li>• Possible contribution to the development of the survey</li> </ul>
<b>Possible actions for the Working Group:</b>	<ul style="list-style-type: none"> <li>• Contribution to the development of the survey (started, April 26th)</li> </ul>
Recommended Priority:	<ul style="list-style-type: none"> <li>• HIGH</li> </ul>

*The Ministry of Transportation should track the registration of electric vehicles and ensure that necessary information is provided to the electricity industry in a meaningful and timely manner. Where necessary, legislation and regulatory changes that facilitate this information exchange and protect consumer privacy should be made.*

Category:	E.V. Integration
Specific Actions for the Forum:	<ul style="list-style-type: none"> <li>• None</li> </ul>
Specific Actions for the CPC:	<ul style="list-style-type: none"> <li>• None</li> </ul>
<b>Possible actions for the Working Group:</b>	<ul style="list-style-type: none"> <li>• Possible contribution to the development of the technical aspects of this recommendation (e.g. Form of info., timeliness, level of detail, etc.)</li> <li>• Possible joint meeting with Ministry of Transport and Energy</li> </ul>
Recommended Priority:	MEDIUM

*The source of accurate and timely information about the installation of Level 2 and higher charging stations should be identified and made available to assure the safe and reliable operation of LDC networks. The Forum will work with the automotive and electricity sectors to identify and recommend the appropriate parties and mechanisms for supplying this information.*

Category:	E.V. Integration
Specific Actions for the Forum:	<ul style="list-style-type: none"> <li>• Develop a detailed recommendation.</li> </ul>
Specific Actions for the CPC:	<ul style="list-style-type: none"> <li>• Assist Forum in development of recommendation.</li> </ul>
<b>Possible actions for the Working Group:</b>	<ul style="list-style-type: none"> <li>• Possible contribution to the development of the technical aspects of this recommendation (e.g. form, timeliness, level of detail, etc.)</li> <li>• Possible joint meeting with Ministry of Transport and Energy</li> </ul>
Recommended Priority:	<ul style="list-style-type: none"> <li>• MEDIUM</li> </ul>

*The Ontario Power Authority (OPA) and Independent Electricity System Operator (IESO), in consultation with industry and the Ontario Energy Board (OEB), should jointly develop a framework to promote the integration of distributed energy storage with the grid where it is cost-effective.*

Category:	Storage Integration
Specific Actions for the Forum:	<ul style="list-style-type: none"> <li>• None</li> </ul>
Specific Actions for the CPC:	<ul style="list-style-type: none"> <li>• None</li> </ul>
<b>Possible actions for the Working Group:</b>	<ul style="list-style-type: none"> <li>• Possible identification of technical integration barriers insofar as the distribution system is concerned.</li> <li>• Identify areas that should be locally determined by the LDC vs. province-wide authorities.</li> </ul>
Recommended Priority:	HIGH

*Industry should take advantage of widely used interoperability standards for defining smart grid specifications. Attention should be paid to the upcoming national recommendations from the Canadian National Committee of the International Electrotechnical Commission and its Task Force on Smart Grid Technology and Standards (facilitated by the Standards Council of Canada), which is monitoring international standards discussions.*

Category:	Standards
Specific Actions for the Forum:	<ul style="list-style-type: none"> <li>• None</li> </ul>
Specific Actions for the Corporate Partners Committee:	<ul style="list-style-type: none"> <li>• Related to work on Long-term architecture sub-group.</li> </ul>
<b>Possible actions for the Working Group:</b>	<ul style="list-style-type: none"> <li>• Identify Ontario-specific interests and issues of concern to the Forum</li> </ul>
Recommended Priority:	Ongoing issue.

*A new Task Force should be established to foster smart grid innovation, technology commercialization and related economic development opportunities, capitalizing on the province’s public infrastructure investment in grid modernization. The Task Force, facilitated by the Forum but not exclusive to its members, would seek the active participation of public- and private-sector organizations in a position to help Ontario realize the broader economic development potential, including export opportunities, related to the smart grid over the longer term.*

Category:	Innovation and Economic Development
Specific Actions for the Forum:	<ul style="list-style-type: none"> <li>• None – but possibly contribute to the Task Force.</li> </ul>
Specific Actions for the Corporate Partners Committee:	<ul style="list-style-type: none"> <li>• None – but possibly contribute to the Task Force.</li> </ul>
<b>Possible actions for the Working Group:</b>	<ul style="list-style-type: none"> <li>• None – but possibly contribute to the Task Force.</li> </ul>
Recommended Priority:	Dependent upon establishment of task force

*Industry and Government, in collaboration with the Forum, should facilitate the gathering of data to support the early benchmarking and ongoing tracking of smart grid “Success Metrics. These metrics will be used to assess, over time, whether smart grid investments are delivering promised benefits.*

Category:	Measuring Smart Grid Success
Specific Actions for the Forum:	<ul style="list-style-type: none"> <li>• Identify and recommend responsible parties</li> </ul>
Specific Actions for the Corporate Partners Committee:	<ul style="list-style-type: none"> <li>• Assist in ongoing work to identify and recommend responsible parties</li> </ul>
<b>Possible actions for the Working Group:</b>	<ul style="list-style-type: none"> <li>• Assist in ongoing work to identify and recommend responsible parties</li> </ul>
Recommended Priority:	MEDIUM

Thank you.