Factors Affecting Acceptance of Renewable Energy and Transmission Projects
Focus Groups

April 2022

Prepared for: Conservation Council of New Brunswick

Summary Results

The following presents a summary of the findings from seven online focus groups with selected men and women from across Canada. The purpose of the focus groups was to: discuss renewable energy projects and arguments to encourage acceptance of these projects. All of the sessions were conducted between March 1st and March 8th 2022. Eight participants were recruited for each session and 47 participated across all sessions. Sessions were conducted online using Zoom as the platform. Each session lasted approximately 90 minutes and each participant received a $100 honorarium for their time. Sessions were recruited as follows:

- *Group 1 Males in NS and NB – 6 participants*
- *Group 2 Males in SK and MB – 7 participants*
- *Group 3 Females in NS and NB – 8 participants*
- *Group 4 Females in SK and MB – 7 participants*
- *Group 5 Mixed Male and Female Atlantic – 7 participants*
- *Group 6 Females in BC and AB – 5 participants*
- *Group 7 Males in BC and AB – 7 participants*

As part of the recruiting process, those with a (self-assessed) high level of knowledge about energy production in their province were screened out of the sessions. Otherwise, recruiting was conducted to include participants representing different ages, income levels and education levels.

A number of energy-related topics were included in the discussion. These ranged from factors that would encourage and discourage residents in a community in allowing renewable energy projects to be developed in their community, to benefits expected from such a project to finally, a review of several arguments designed to encourage development of renewable energy and transmission lines. The qualitative research was also used to develop and refine a survey to be administered nationally on the same topic.

Qualitative techniques are used in marketing research as a means of developing insight and direction, rather than collecting quantitatively precise data or absolute measures. As such, results cannot be applied to the overall population under study, and must be used as directional insight only.

Key Findings

Support for Renewable Energy

- A poll early in the sessions that asked participants for their level of support for the development of renewable energy in their community, using a 10-point scale (10 is completely support and 1 is not support at all) showed a high level of support for renewable energy projects in their community amongst most of the participants. A solid majority of the ratings were 8 or higher and fewer than ten participants gave ratings of 6 or lower. These lower ratings were sprinkled across the groups and not concentrated in any one area.

Background Information

- Background information dealing with renewable energy, how electricity is generated and positive changes that are already being done across Canada was presented. The main purpose of reviewing this information was to have all participants provided with similar information.

- In general, participants indicated there was nothing controversial in the information they were given and most accepted it without issue and in many cases were already familiar with it. Interestingly, there were two types of information that seemed to make more of an impact on participants:

    - The comparisons of greenhouse gas levels when provinces are more reliant on coal and other fossil fuels than their neighbours.

    - The impact on emissions from electric vehicles when those vehicles are charged in a province with higher greenhouse gas emissions from electricity production.

Factors to Encourage and Discourage Renewable Energy Projects

- Across sessions, participants were consistent in identifying factors that would encourage support for the development of renewable energy in communities. The main factors were:

    - Money in the form of lower rates or a rebate of some kind.

    - Renewable energy being better for the environment and the planet and therefore, benefiting and protecting future generations.

    - Educating/informing about the advantages and any disadvantages of the project being proposed.

    - Jobs during the construction of the project and also once it is operating.

    - Energy security and a higher degree of self-sufficiency.

- The discussions on what factors would discourage the development of renewable energy projects were also generally consistent across sessions. The first two factors listed below were noted frequently and consistently.
    - A lack of education/awareness about renewable energy projects and this was frequently described as "being afraid of what we don't know" and "just not knowing enough about it."
    - The projects not looking good (from a physical appearance perspective) and for wind turbines, the noise that they create.
    - At least in the short term, the investment to build the infrastructure resulting in energy that costs more than current options.
    - Potential environmental impacts such as clear cutting or affecting farm land to establish the project.
    - The reality that not many jobs might be created and they might not be locally-sourced if particular skills are needed.

Solar vs Wind and Onshore vs Offshore

- Aside from practical or technical considerations (not putting a solar farm in an area with little sun as an example), many participants did not have a preference for solar projects over wind projects. Even those who did have a preference, did not seem to be strong in their preference. That said, when participants did have a preference, it tended to favour solar projects because of the noise associated with wind installations.

- There a high degree of willingness to defer to (or at least listen to) experts; scientists and environmentalists, when considering where to locate renewable energy projects and which types to consider. Note that there was some suspicion of politicians and provincial utilities promoting certain technologies because they were seen as having a vested interest in the outcome.

- Participants were also asked about preferences between onshore and offshore locations. There was mixed reaction to this question and again not strong positions. Some opted for offshore because it would be more out of sight, but often also stipulated "as long as it doesn't impact the environment and the fish/animals". Others felt the cost of construction offshore would be much higher and might not be as feasible as a land-based project.

Community Influence

- Participants across all sessions felt members of the community should have some say or influence over the presence/location of a renewable energy project. That said there was general reluctance to allow a small group of people to stop a project that most supported.

  The consensus was that the community should be provided information and consulted with and the overall opinion should be included in any decision. If there was disagreement, in some groups, the consensus was a "majority rule," but in other cases there was concern about majority decisions. A few verbatim comments might help with understanding the nuances of this discussion.

"Like kind of, it's not like a majority thing. It's just kind of like taking all sides into account and just kind of weighing down each like each option and stuff like that."

"Yeah. Yeah, I guess I would lean more towards voting for options, because that way we're still have a say, but it's also being decided by people who in the field who know what they're doing, what they're talking about, right?"

"Oh, I don't know about. That's a really tough one for me, like I think everyone should be involved in every step of the process and be able to see those environmental assessments and everything and make judgments on that. But I think at the end of the day, sometimes there also has to be just someone that makes these decisions or it's not going to get done."

Expected Benefits

- Interestingly, there was not even one person who suggested a renewable energy project should proceed without some benefit flowing to the community where it was being built. Across all sessions, there was a general expectation that the community will benefit from a renewable energy project locating in or close to their community and here are some of the ways they suggested the community would benefits:
    - Jobs/hiring people in the local community: this would be for the building phase as well as ongoing operations.
    - Lower cost of energy for local industry and homeowners: this was in the form of a reduction or rebate on costs.
    - Something the community needs: suggestions were for a community centre or a park, school sponsorships or a pool. These were just suggestions and the actual community project would depend on the needs in each community.

Pricing Expectations

- Participants "hoped" they would see their electricity rates go down with the addition of renewable generation. They also "understood" that prices might increase in the short term and then go down later. This is because of the need for upfront investment to create the project. Interestingly though, there was almost no expectation that this would actually happen. Participants were resigned to the idea that "nothing goes down in price." Even if the cost of production did eventually go down, there was an expectation that the company would keep this extra profit for themselves and not return it in to the consumer by lowering rates.

Power Sovereignty

- The topic of whether it was necessary for every province to generate their own electricity and the acceptability of buying power from another jurisdiction that is producing cleaner power was covered in most sessions. This should be tested further using quantitative research, but in these sessions, there was some agreement with the idea of buying electricity from another province, but also strong worries about it. The main concerns were the lack of control over supply and vulnerability on pricing. In a situation with a

shortage of electricity, the concern was the producing province would supply their own needs first. There was also an assumption that anyone who produced the power would want to make a profit on it and the buying province would be paying more than if they produced it themselves.

Transmission Lines

- The main issue with transmission lines is their appearance and the following comment largely sums up the general feeling across sessions:
    - "No, they are not pretty to look at, but I realize they are necessary."
- In situations where transmission lines were running along highways or other areas that are already developed, the concern with their appearance was reduced.
- Other concerns about transmission lines included environmental concerns (tree cutting to install them and spraying and cutting to keep trees and bushes from interfering with maintenance efforts) and danger to animals (birds being killed primarily). There were also infrequent mentions of health concerns arising from having transmission lines too close to homes and living areas.
- At the end of the discussion about transmission lines, participants were shown the argument below and asked whether they accepted the argument. A majority accepted the argument in every group except the final one where only half accepted (this was the male session in AB and BC). Even in that group, they described transmission lines as "a necessary evil." Accepting the argument is not the same as supporting transmission lines. Participants did not like them from a visual perspective and often wondered if they could be buried, but felt the lines were necessary.

  Energy experts say we need transmission lines to increase the reliability of renewable energy either to bring in hydro power when the sun is not shining or the wind is not blowing or when other storage technologies are not available.

Evaluation of Arguments

- Two sets of arguments were presented in the sessions and in each case, participants were asked to rank them from most convincing to least based on their effectiveness in making the respondent more willing to consider renewable energy projects and transmission lines:

1. ***Electricity made by burning coal, oil, and gas pollutes the air and makes weather extreme. We see how floods, heatwaves, and forest fires harm the health and safety of Canadians.***

   This argument was rarely rated as a first choice and was frequently rated as a last choice. It had several issues:

   - People already know this and are growing tired of hearing it.
   - The first sentence is negative and includes "burning coal," which caused some to not read further.

- It does not present any solutions.

2. *Scientists tell us the world has about 10 years to change how we use energy if we are to keep people and nature safe. Recycling is not enough. Canada is among the world's top 10 greenhouse gas polluters. There are risks to our economy and jobs as the world uses less of the energy we export.*

   Arguments 2 and 4 were ranked very similarly and just very slightly lower than the third argument which was ranked first or second by just 2 – 3 more people than options 2 and 4. In terms of first place rankings only, the three options were very similar.

   Argument 2 was ranked very similarly in the first six groups and was considered just slightly more compelling in the final group which was the males in BC and Alberta.

   There was considerable mixed reaction to the four short statements comprising this argument. Starting with the 10 years; most reacted that we only have a very short time to reduce emissions and the message was one of urgency. However, a minority (that emerged in the male group in the Maritimes) felt the ten years was far enough away that there was no need to act urgently, while others indicated they had been hearing the 10-year warning for several years and wondered if there were really 10 years left and still others felt the 10 years meant we were already out of time and therefore there was little sense in trying to do anything.

   There was some disbelief that Canada could be one of the world's top 10 greenhouse gas producers given our relatively small population, but many of these people seemed to accept the claim simply based on the fact that we are in a cold climate, are affluent (and so all have vehicles) and because of the tar sands in Alberta. It seems that for some, a rationale for why Canada is amongst the world's top greenhouse gas emitters needs to be offered with a statement about our inclusion in that group.

   The final statement about risks to our economy, seemed out of place and in some ways a counter-argument to the rest of the statements. While seen as true, for some, it detracted from the impact of the other statements.

3. *Electricity made using wind turbines is cheaper than coal, oil, gas, and nuclear. When transmission lines connect provinces, non-polluting power reliably reaches more Canadians. Non-polluting electricity can power our electric vehicles, homes and businesses.*

   This argument received more first and second place rankings than any of the remaining three arguments (although just a few more than arguments 2 and 4) and it received the smallest number of last place rankings. It was perceived as a simpler and more positive message and it made sense without any confusion.

   Interestingly, its position was stated without any supporting statistics. This prevented some participants from picking one statement with which they considered untrue and then being able to dismiss the entire argument because of it.

4. *Renewing Canada's electricity system will be hard work, but we are on our way. We are building wind and solar projects today. Existing hydro and nuclear can help, but we need to do much more. There will be jobs for workers, and economic and cost of living benefits from being prepared.*

   While this argument performed similarly to arguments 2 and 3 in terms of the proportion of first and second rankings compared with third and fourth, it did generate more divided reaction because it had approximately the same number of first and fourth place rankings.

   Participants generally found the statements to be believable and liked that we were already doing some things already. Also, like argument 3, it was considered less "preachy" which was appreciated.

- The second set of arguments is included below. In this case, there were three:

   1. *To solve climate change, we need non-polluting sources of electricity to power electric vehicles and transit systems, and our homes and businesses. Electricity made in our provinces using wind turbines is cheaper than using coal, oil, gas, and nuclear. Hydro and solar technologies also help. When transmission lines connect provinces, non-polluting power reliably reaches more Canadians.*

      All three of the arguments in the second set performed reasonably strongly and several participants noted it was difficult to rank the arguments because all three made good points. That said, this first argument was ranked first more frequently in the first and fifth sessions (men in NS and NB and the mixed Atlantic session).

      It was liked because it was considered logical and it was easy to follow. However, there were comments that the first line (solving climate change) is too strong in that there is skepticism that it will be solved. In addition, particularly in the final group (men in BC and AB) there is fatigue around the term "climate change" and a tendency not to read further when they see it.

   2. *We need billions of dollars of investment to renew Canada's electricity system over the next 10 to 15 years. To keep power bills affordable, we must use electricity efficiently. We have the expertise to retrofit homes and businesses so they use half the energy they use today. We can pay up to 80 per cent less to power an electric vehicle, compared to a gasoline vehicle.*

      This argument had more third place rankings than either of the other arguments in this set, but it also had a comparable number of first place rankings as compared with the first argument. There was considerable discussion about using specific numbers/statistics to make a point. This is based on qualitative research and so should be tested further in quantitative research, but it appeared that use of numbers (like 10 – 15 years, half the energy for the homes and 80% less to power an electric vehicle) are challenged by some participants and when they do not accept a number, they tend to dismiss the rest of the argument. Another issue with the use of too many numbers is a tendency for the audience to get lost or gloss over the message because they do not really pay attention to the numbers.

      The use of ranges, instead of specific numbers, was also discussed and this seemed to be generally more acceptable. It does seem to depend what the range is referring to; if it is about the time remaining to act, there is some concern that offering a range will allow people to procrastinate.

3. *It costs money to secure energy savings. Canadians need financial incentives so electric vehicles and retrofitting homes are affordable. We need to train and transition workers. Citizens and communities must have a say about project location, the size of projects, and a chance to partner and profit from projects.*

   This argument was ranked first more frequently than the others in this set, partly because it presented its case without a lot of facts and was therefore less controversial. It was also aligned with general perceptions about citizens having say and some sort of stake in projects, workers being trained and the need for financial incentives. It was described as both hopeful and realistic.

Summary and Observations

- These observations are based on seven online focus groups conducted in early March. To reiterate, focus groups are used to provide insight and depth of understanding about topics of interest, but because of the nature of qualitative research, should not projected to the population at large without first verifying with quantitative research.

- Within the background information that was presented was information on the levels of greenhouse gases emitted in neighbouring provinces because of the methods used to generate electricity and because of these differences, the impact on emissions for electric vehicles when charging sources are considered. Perhaps because it was new and specific to most participants, this information seemed to make more of an impact on participants.

- Factors that would both encourage and discourage the development of renewable energy projects in a community were discussed and consistently showed:

  - An expectation of benefits flowing to the community in the form lower energy costs, jobs for locals and other benefits to the community such as facilities.

  - An appreciation for projects delivering environmental benefits.

  - A continued need for education and information about the project.

  - Concerns about environmental impacts including view and noise impacts.

- There is a clear expectation that communities will be consulted about and have influence over the specific location of a renewable energy project and whether or not it proceeds. Equally, there is little tolerance to allow a small group of people to block a project that will deliver benefits to the community.

- Participants generally did not have strong preferences for wind versus solar projects and onshore versus offshore installations and appeared willing to be influenced by credible experts (scientists and environmentalists) with technical knowledge. That said, and in the absence of a clear reason to select wind over water (a particularly windy or sunny location as an example) there was slight preference for solar because of noise factors associated with wind turbines.

- Messages about renewable energy costing less than current methods do not seem to be readily accepted. While participants "hope" lower costs will result with renewable energy (specifically the cost to the rate payer here without factoring in environmental benefits) they do not actually expect it to happen. This is because of the upfront costs of developing the project and because of the desire of any developer/owner to earn profit.

- There was some acceptance of the concept of one province acquiring electricity from a neighbour who has a "cleaner" supply. However, overall, in the sessions, there were two main issues that created a high level of concern with pursuing this idea and not being in control of one's own electricity supply. These were:

    - Concerns that if faced with an overall shortage, the producing province would supply their own needs first and the receiving province might not get all they needed.

    - The concern that the receiving province would end up paying more than they would if they produced themselves because the producing province would want to make a profit.

- While there were definitely concerns with transmission lines, based mainly on their appearance in the environment and some concerns about health issues (if living too close to them), they were generally considered a necessity.

- Two sets of arguments were presented for evaluation in the sessions and while all of them offered some elements that were compelling, there were two that emerged as stronger than the others and they were:

    - *Electricity made using wind turbines is cheaper than coal, oil, gas, and nuclear. When transmission lines connect provinces, non-polluting power reliably reaches more Canadians. Non-polluting electricity can power our electric vehicles, homes and businesses.*

    - *It costs money to secure energy savings. Canadians need financial incentives so electric vehicles and retrofitting homes are affordable. We need to train and transition workers. Citizens and communities must have a say about project location, the size of projects, and a chance to partner and profit from projects.*

- Again, there is a need for further testing of the hypotheses drawn from the discussion of the arguments, but based on the sessions, it seems:

    - People may be growing weary of arguments that mainly focus on proving there is climate change that is causing extreme weather without presenting any solutions.

    - Arguments that focus on one main theme (with supporting points) rather than a number of different and even contradictory points perform better. The two that were ranked first were viewed as most inclined to do this, but as an example the last line in the second argument in set one, "There are risks to our economy and jobs as the world uses less of the energy we export" was considered accurate, but contradictory to the rest of the message.

- The use of facts and figures to support an argument was debated, but not resolved. Some saw the inclusion of clear numbers and time frames as an incentive to react quickly, but others had a tendency to be skeptical of just one claim and then dismiss the whole argument. It is noteworthy that both of the arguments that performed most strongly did not rely on numbers.
- The use of too many numbers or ranges of numbers appears to make an argument more difficult to convey because some will tune out. Ranges can also be used as an excuse to delay acting right away ("we still have time, so no need to act yet").
- A realistic, but hopeful message is preferred.
- Mention of nuclear energy as part of a solution seems to discourage some from considering the whole argument.