



WHAT WAS SAID REPORT

NB POWER

2020 INTEGRATED RESOURCE PLAN
PUBLIC ENGAGEMENT PROGRAM

SUBMITTED BY
NATIONAL PUBLIC RELATIONS

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INTRODUCTION

Every three years NB Power develops an Integrated Resource Plan (IRP) and engages with customers to understand what is important to them as we consider New Brunswick's electricity future. With input from customers and the public, the IRP guides our decision making as we seek to understand current conditions and forecasts over the next 20 years.

As part of the IRP planning process, it is important to gain a deeper understanding of options to meet projected electricity demand while ensuring that we are providing affordable, reliable, and safe electricity for all New Brunswickers. This means seeking feedback on key considerations such as integrating renewable electricity into the grid, climate change and the transition from traditional fuels to more clean energy sources, and the important role NB Power customers can play in managing future energy needs by using electricity more efficiently, generating it, or storing it themselves.

METHODOLOGY

Customer and public engagement for NB Power's 2020 Integrated Resource Plan was carried out between November 1st and November 30th, 2019 and is reflected in this report. This included an online survey hosted on OurEnergyFutureNB.ca and in-person engagement sessions throughout New Brunswick. Efforts to raise awareness of the engagement process and invite participation were extended in both English and French. The design and analysis of the engagement process, along with the survey design, was a collaborative effort between the NB Power team and NATIONAL Public Relations.

Goal

To gather values-based input from New Brunswickers about the province's electricity future to inform NB Power's 2020 Integrated Resource Plan.

Objectives

- ✓ Gain a deeper understanding of what is most important to customers as they consider the province's energy future, and the role they're willing to play to achieve those objectives.
- ✓ Provide sufficient and appropriate contextual information—in an easy to understand format—about the province's energy landscape, the scope of the IRP process, and what can be influenced.
- ✓ Host a values-based engagement process online or in-person that allows New Brunswickers to contribute based on their own perspectives, experiences, ideas, and what matters most to them.
- ✓ Be transparent in sharing what emerges from the engagement effort.

Scope of Engagement

The engagement program consisted of an online survey hosted on the website ourenergyfutureNB.ca and in-person customer engagement across the province. The engagements were designed to be easy for participants to understand. Efforts to raise awareness of the engagement process and to invite participation were extended in both official languages through the following tactics:

Social Media

NB Power leveraged their social media channels to inform and engage New Brunswickers. Facebook was the primary paid social media channel used with the goal of connecting with key audiences in the channel of their choice. See results section on page seven for details.

Email Engagement

An email was sent to 8,000+ NB Power customers who have consented to receiving ongoing communications from NB Power. These customers were invited to participate in the IRP engagement opportunity and lend their voice to the IRP process.

Video

NB Power leveraged 2017 IRP videos on the website and across social media. The video was a key component of the education process of the survey engagement tool.

inQueue Messaging

NB Power developed a recording for the inQueue messaging system, the message encouraged NB Power customers on hold for customer service to visit the landing page and complete the IRP engagement survey. A script was also developed for customer service representatives should they be asked questions about the IRP while talking with customers on the phone.

Stakeholder Email

Leveraging the lists developed during the Smart Meter engagement process, an email was shared with leaders of key stakeholder groups to encourage community groups to participate.

Paid Media and Digital Ads

Paid digital ads were executed across Google Ads and The Weather Network. This ensured that NB Power was targeting the right people, at the right place, at the right time. Paid ads were run on the Google Display Network, Facebook, and The Weather Network to engage New Brunswickers and drive them to the webpage to complete the survey. Paid media performance can be found on page seven.

First Nations Engagement

NB Power respects the significance, distinct interests, and culture of New Brunswick's First Nations communities and continues to work hard to build and strengthen positive relations. Conversations with some First Nations communities occurred throughout the province when NB Power attended open houses in seven communities. First Nation communities were invited to participate in the survey and open invitations for face-to-face meetings were extended.



Community Events

NB Power attended events throughout the province to meet customers where they were spending their time. Community events and activities such as farmers' markets and community arenas were attended by NB Power representatives and included tactics such as postcard handouts, pop-up banners, and experiential activations like an in-person prize wheel that included AIR MILES® reward miles and contest entry cards to engage participants. In-person engagement also included stakeholder meetings and municipal workshops.

Survey Approach

Engagement Tool – ourenergyfutureNB.ca

NB Power deployed an online survey to learn more about what New Brunswickers were thinking about when it comes to their energy needs and the energy future of the province. It included a series of questions that explored three key areas:

- Affordability
- Clean energy
- Customer options

Engagement participants were also provided with an opportunity to provide verbatim comments.

The engagement tool lived on a landing page connected to the NB Power website and was promoted as ourenergyfutureNB.ca. All tactics drove New Brunswickers to the engagement tool to complete the survey over the four-week campaign period.

Analytics

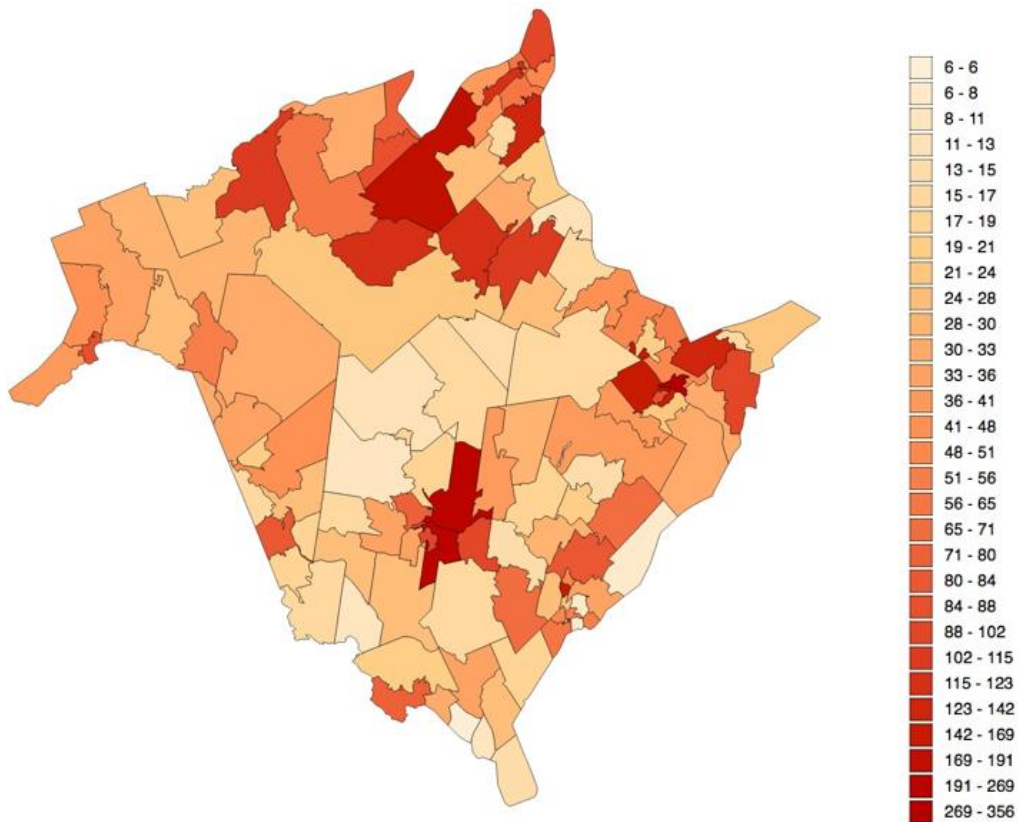
NB Power's objective was to increase survey responses to 3,500 responses—more than double the 1,221 responses in 2017. The survey was open to New Brunswick residents between November 1st to 30th, 2019. Overall, 7,674 residents started the survey, with 6,263 completed responses collected. 1,409 residents completed the survey in French and 4,854 residents completed the survey in English. On average, the survey took approximately five minutes to complete.

For further information, see Appendix B for the full questionnaire and Appendix C for data tables.

Provincial Representation

Residents were asked to provide demographic information, including a question to provide the first three digits of their postal code. This code is called a Forward Sortation Area, or FSA. These codes were analyzed using mapping software, which enables a visual representation of survey response location. The output gives insight into where responses came from throughout New Brunswick. 96% of survey responses provided their FSA. Responses were collected throughout 110 of the 111 FSAs for New Brunswick. The missing FSA is from a small industrial area of Saint John.

Mapping analysis was utilized to showcase the volume of survey responses from each area of New Brunswick. The below map indicated the volume of responses, with concentrations within the Greater Moncton area, Greater Fredericton area, and a strong response from the Fundy Coast and Northern New Brunswick.



IN-PERSON ENGAGEMENT APPROACH & FINDINGS

Summary

During the month of November 2019, NB Power engaged with customers in-person across the province. From meeting customers where they were spending their time (i.e. farmers’ markets and arenas) to inviting customers to share their thoughts at face-to-face meetings, NB Power was dedicated to engaging with New Brunswickers in as many ways as possible.

Using iPads, customers and the public were invited to complete the survey on-site during engagement sessions at community events and open houses. Participants had the opportunity to win an iPad once they completed the survey. Materials such as postcard handouts, pop-up banners, contest entry cards, and others, were developed and leveraged to promote the online engagement tool and to raise awareness around IRP and what it means for New Brunswickers.



FACE-TO-FACE CONVERSATIONS WITH CUSTOMERS

NB Power wanted to engage people in places that they naturally gather and socialize, to capture the attention of more New Brunswickers. During the campaign, NB Power delivered four in-person engagements at well-attended community events to gather feedback for the 2020 IRP.

Event Schedule

Event	Date	Estimated # Engagements
Fredericton Boyce Farmers’ Market	November 9, 2019	50
Moncton Farmers’ Market	November 16, 2019	200
Restigouche Farmers’ Market	November 23, 2019	30
Grand Falls – Hockey Rink (E&P Senechal Centre)	November 24, 2019	35
Total Engagement		315

Attendance

Across the four events, approximately 315 engagements (interactions with New Brunswickers) were made. Through these engagements, many education-based conversations were had with customers. The overall sentiment of customers at all events was reported to be positive with very few concerns. Most attendees seemed genuinely interested in hearing about New Brunswick’s energy future.

Branding and Awareness

The event set-up was easily recognizable as an NB Power booth. A spinning wheel game was onsite that included questions on IRP. In addition to the opportunity to win an iPad for completing the survey, there was also an opportunity for attendees to opt for an AIR MILES® giveaway card.



FIRST NATIONS ENGAGEMENT

NB Power respects the significance, distinct interests, and culture of New Brunswick’s First Nations communities and continues to work hard to build and strengthen positive relations. Conversations with some First Nations communities occurred throughout the province when NB Power attended open houses in seven communities. First Nations communities were invited to participate in the survey and open invitations for face-to-face meetings were extended.

Date	Location	Engagements
November 14, 2019	Eel River	18
November 15, 2019	Esgenoôpetitj	8
November 18, 2019	Fort Folly	0
November 26, 2019	Eel Ground	8
November 26, 2019	Metepenagiag	25
November 27, 2019	Indian Island	13
November 27, 2019	Bouc touche	3
Total Engagements		75

QUEST COMMUNITY ENERGY MUNICIPAL WORKSHOPS

NB Power presented at a number of municipal-level community workshops in the province. Attendees were informed that the Integrated Resource Plan was being updated and their feedback was welcomed in the process. Attendees were also directed to the online engagement survey.

Date	Location	Engagements
November 12, 2019	Grand Bay-Westfield	2
November 13, 2019	Quispamsis	12
November 14, 2019	Petitcodiac	3
November 21, 2019	Campbellton	9
November 22, 2019	Sussex	4
November 22, 2019	Saint John	12
Total Engagement		42

ONE-ON-ONE STAKEHOLDER MEETINGS

While the online engagement tool mainly targeted residential and small business customers, face-to-face meetings were held with other customer classes and interested stakeholders during the month of November to ensure representative balance and avoidance of gaps in engagement. Feedback was captured on the basis that it wouldn't be attributed back to the stakeholder in order to create an environment where thoughts and ideas could be shared freely and honestly.

Stakeholder	Engagements
Small industrial customers	2
Large industrial customers	2
Wholesale customers	3
Other customers and stakeholders	3
Total Engagements	10

EVENT GOALS AND OBJECTIVES

The goal of these engagement events was to increase awareness about NB Power's IRP planning process and encourage participation in the online engagement tool. The objective was to increase the number of New Brunswickers engaged through face-to-face communication by 50%. This objective was exceeded as NB Power engaged with 442 people at in-person engagement sessions versus 52 people in 2017.

Through the 2019 engagement process, NB Power has met the below objectives they identified at the outset:

- ✓ Gained a deeper understanding of what is most important to customers as they consider the province's energy future through online and in-person engagements.
- ✓ Provided easy to understand content through online ads, postcards, and website to inform people about the IRP process and encourage participation.



- ✓ Successfully engaged New Brunswickers through a values-based engagement process online and in-person so we can better understand what matters most to them.
- ✓ Openly and transparently sharing the results of these engagement efforts in a summary report.

Discussion & What Was Said

During the one-on-one stakeholder meetings, a number of topics were discussed including affordability, debt repayment, clean energy, and customer options. You'll find customer comments and discussion points on these and other areas of interest noted in Appendix A.



SURVEY FINDINGS

Survey Summary

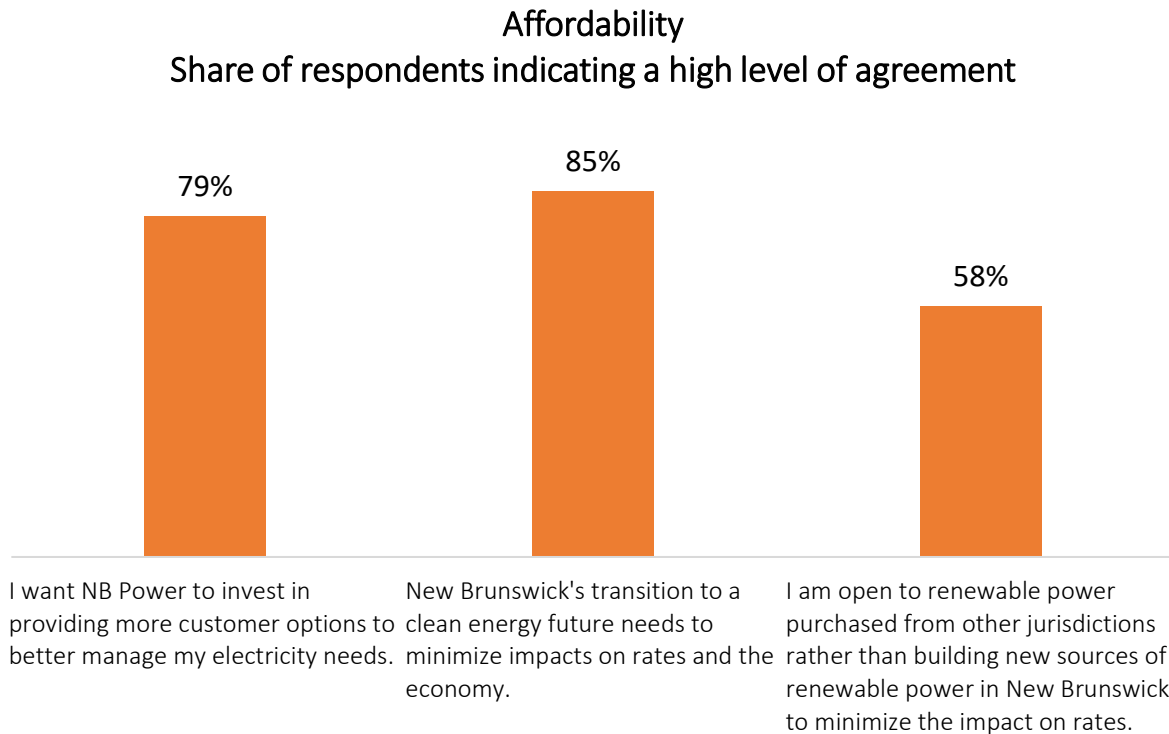
The results of the online survey indicate that clean energy and affordability are priorities among New Brunswickers who participated in the survey.

New Brunswickers agreed that *New Brunswick's transition to a clean energy future needs to minimize impacts on rates and the economy* (85%). New Brunswickers are looking to NB Power to become a *leader in energy efficiency* (85%) and a *leader in clean energy* (82%). Climate change was identified as a priority for New Brunswickers, as they feel they *have a responsibility to make changes to help address climate change* (84%).

Survey participants indicated that one third of New Brunswickers are interested in *purchasing an electric car* (33%) and almost half have an interest in *producing their own electricity* (49%). There was less agreement with the statement *I am personally willing to pay more for clean energy* (30%).

Affordability

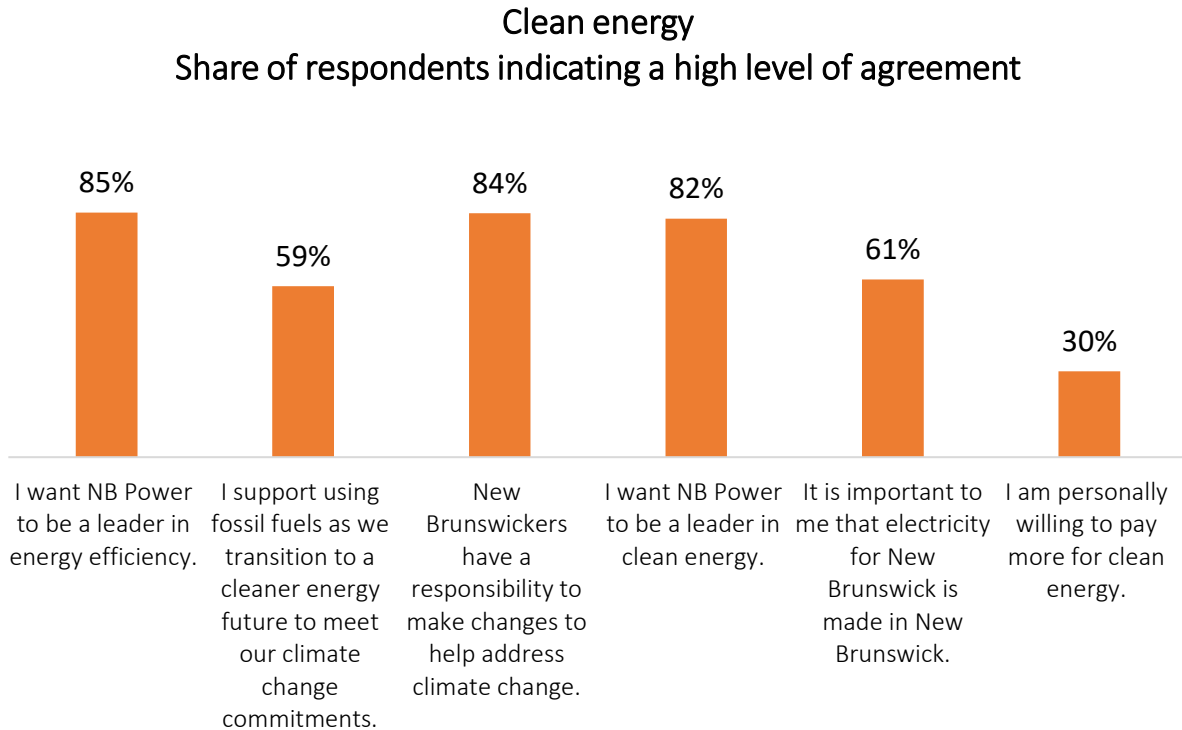
Utilizing top-2 box analysis*, the chart below represents the level of agreement New Brunswickers have with each statement. Top box analysis combines the agreement scores (4-5). Full results for each statement can be found in Appendix C–Data Tables.



**Top 2 Box score, used throughout this report, is a way of summarizing positive responses from a Likert scale survey question. Because of its simple calculation and the value it brings to survey analysis, Top-2 box scores are used in a variety of ways across research methods.*

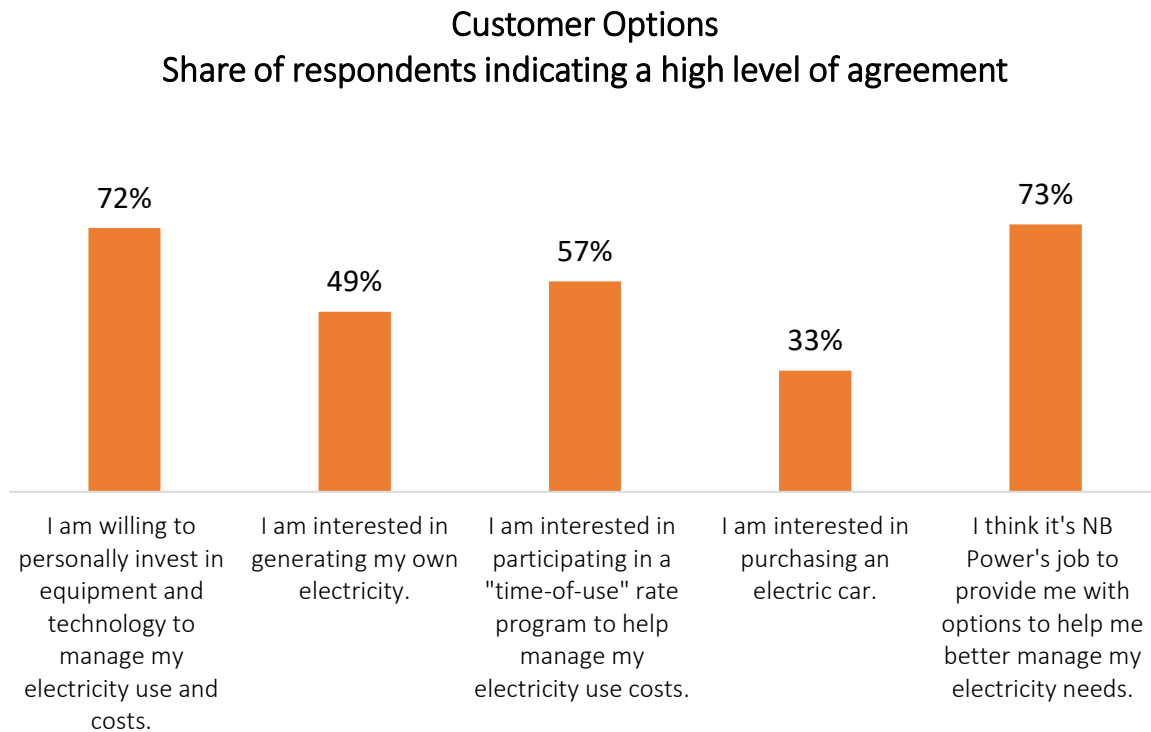
Clean Energy

Utilizing top-2 box analysis, the below chart represents the agreements New Brunswickers have with each statement. Top box analysis combines the agreement scores (4-5). Full results for each statement can be found in Appendix C–Data Tables.



Customer Options

Utilizing top-2 box analysis, the below chart represents the agreements New Brunswickers have with each statement. Top box analysis combines the agreement scores (4-5). Full results for each statement can be found in Appendix C–Data Tables.

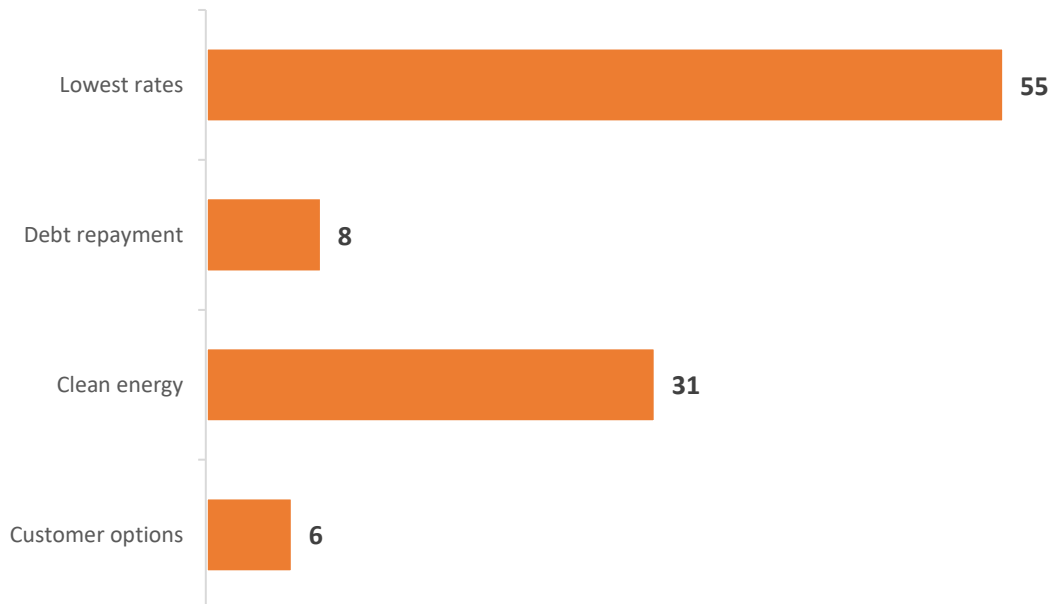


Allocation

Residents were asked which of the following statements were important to them. Using a scale of 1-100, *Lowest rates* were most important to New Brunswickers, followed by *Clean energy*.

There were differences when reviewing results by different age categories. While all age categories felt *Lowest Rates* are most important, followed by *Clean energy*, respondents who are between the ages of 35–54 (58 points) assigned more points to *Lowest rates* than those between the ages of 18–34 (49 points). Those who are NB Power electricity customers assigned more points to *Lowest rates* (55.2 points) versus non-customers (43.9 points).

When looking at *Clean energy* responses, the 18–34 age category (39 points) felt stronger about *Clean energy* than any of the other age categories.



Other Comments

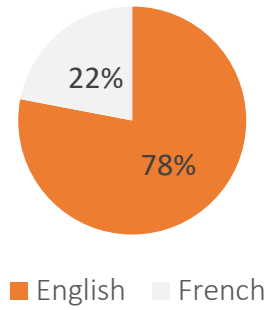
New Brunswickers were asked “Is there anything else you’d like to add?”, with an option to provide their own comments. 1,403 New Brunswickers provided a response. There were 1,177 responses in English and 226 responses in French. The responses shown below are from the 226 verbatim responses in French and a random sample of 500 verbatim responses in English.

Categories	Percentage (n=726)
Sustainability/Renewables/Clean Energy (Pro)	22.4%
Pensioners/Low-income/Concerns about affordability	17.7%
Pay CEO and executive less/Waste of public funding/Disgruntled with NB Power	16.0%
Rebate programs/Different payment models/Subsidies	11.1%
Concern about (past/potential) power losses	4.2%
Positive comments about NB Power	3.1%
Anti-smart meter	2.5%
Pro-nuclear	2.0%
Stop sending the mail outs for neighbour comparisons	2.0%
Negative clean energy comments	1.2%
Buy from QC/Collaborate with QC	1.0%
Keep it in NB	0.9%
Unique concerns	0.7%
Displeased with French survey translation	0.6%
Sell power/Store power	0.6%
Anti-nuclear comments	0.5%
Operations	0.2%
Lack of technology & scientific evidence	0.2%
Additional comments	12.8%

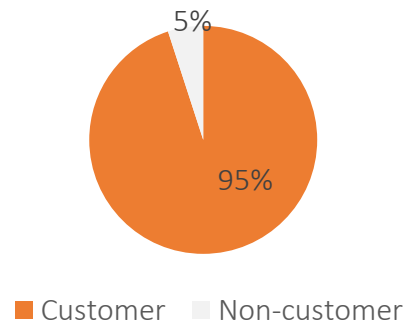
Demographics

Below is a summary of the key demographics for survey participants including gender, income, and age.

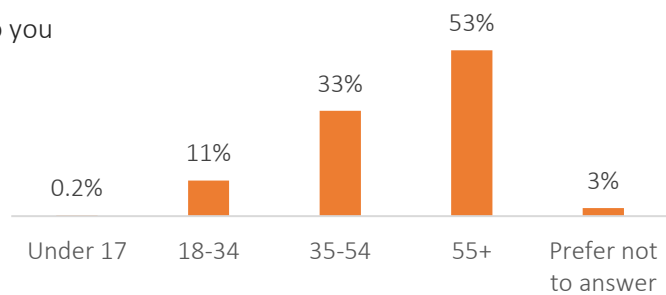
D1. Survey completion: English or French



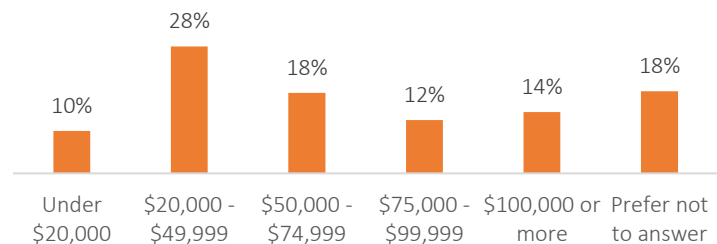
D2. Are you a current NB Power electricity customer?



D3. Which of the following age categories do you fall into?



D4. Which of the following broad ranges represents your total household income?



COMPARISON ANALYSIS

Survey Approach

Engagement Tool – ourenergyfutureNB.ca

In both 2017 and 2019, NB Power deployed an online survey to learn more about what New Brunswickers were thinking about when it comes to their energy needs and the energy future of the province. It included a series of questions that explored three key areas:

- Affordability
- Clean energy
- Customer options

The following summary outlines the changed between the 2017 and 2019 survey results.

Responses	
2017	1,221 Responses
2019	6,263 Responses

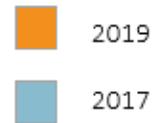
Caution

The survey used for the 2019 engagement differs slightly from the 2017 survey. Changes to the 2019 survey questions, methodology, promotion of the survey, and the amount of responses collected were significantly different. While many questions remained the same, others were changed to provide greater clarity to the reader. Due to the changes in the survey, methodology, promotion, and the amount of responses, it is recommended to use caution when directly comparing results between the two surveys.

Top Box Analysis

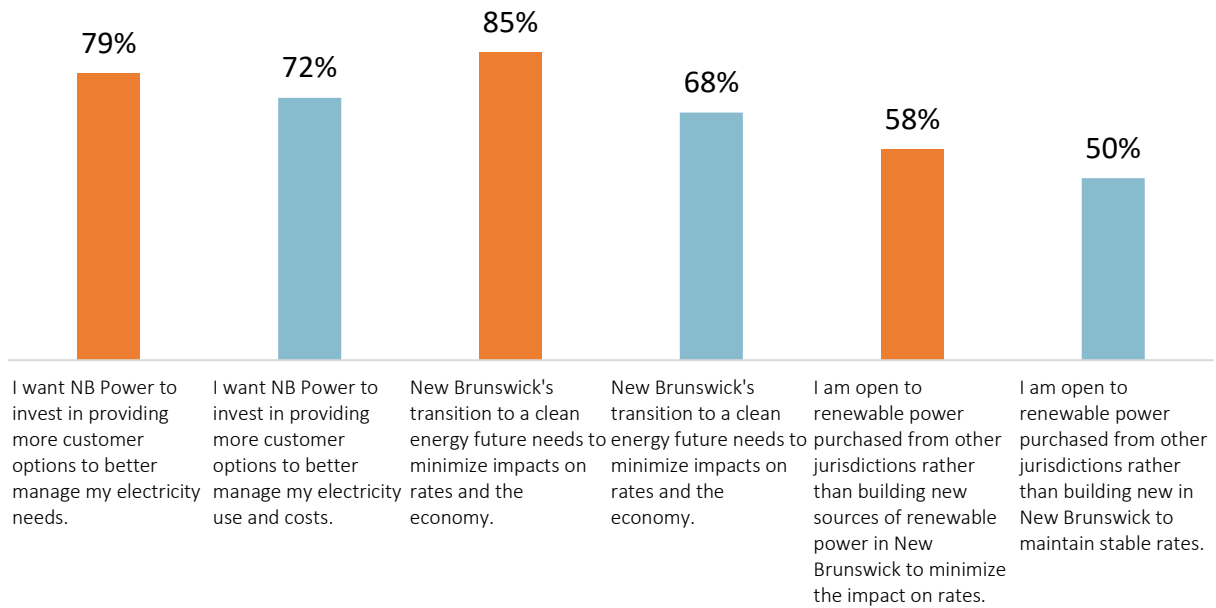
The following graphs are presented using Top-2 box analysis. This is a way of summarizing positive responses from a Likert scale survey question. Because of its simple calculation and the value it brings to survey analysis, Top-2 box scores are used in a variety of ways across research methods. The Top-2 box analysis utilized here combines the 4-5 scores for Agreement for the following statements.

Affordability

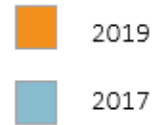


In 2019, New Brunswickers are in more agreement that *New Brunswick's transition to a clean energy future needs to minimize impacts on rates and the economy* (85% vs 68%).

Affordability
Share of respondents indicating a high level of agreement

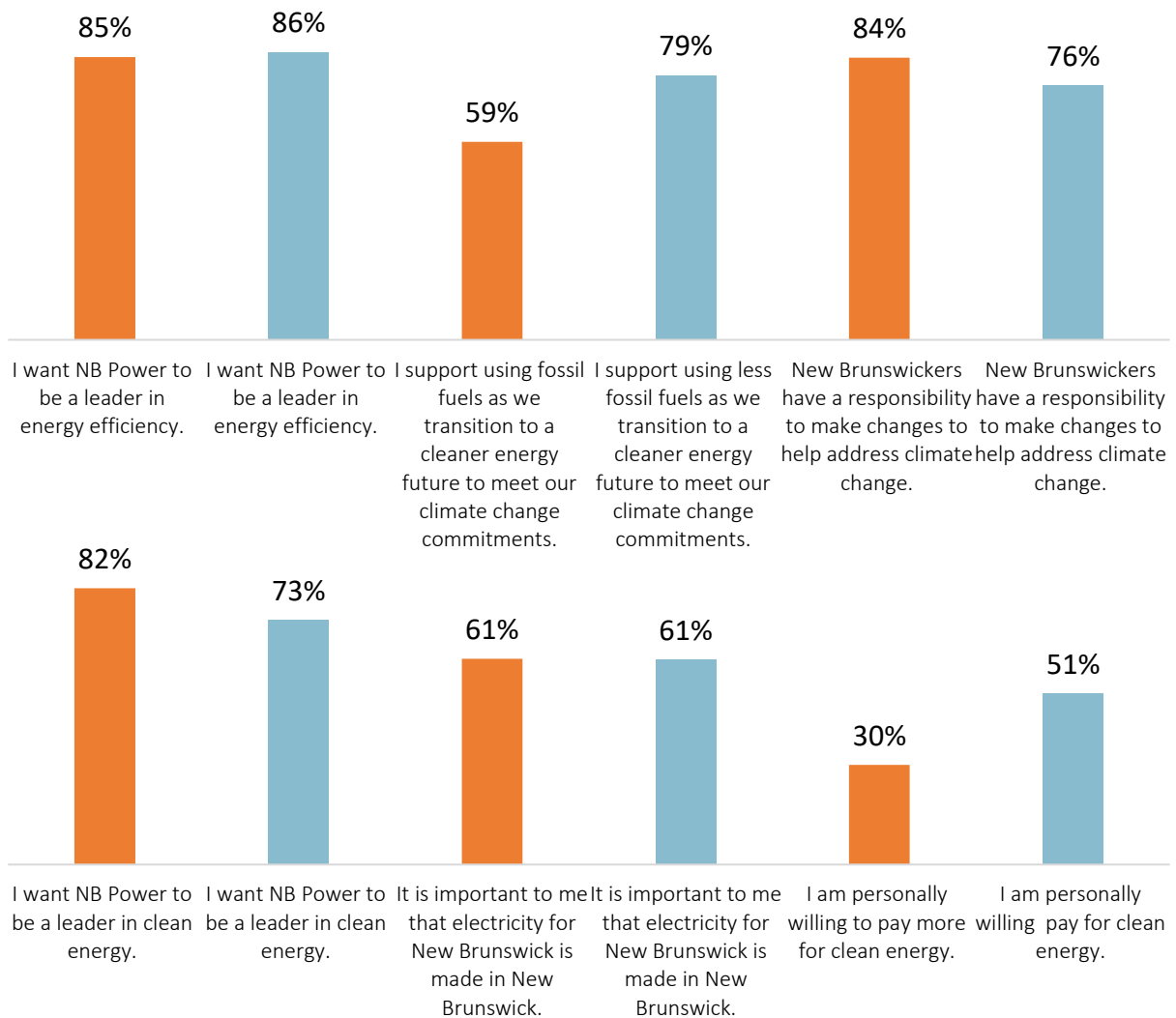


Clean Energy

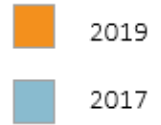


New Brunswickers are less interested in paying more for clean energy in 2019 than in 2017 (30% vs 51%). Support for using fossil fuels also declined by 20% in 2019, as compared to 2017.

Clean energy
Share of respondents indicating a high level of agreement

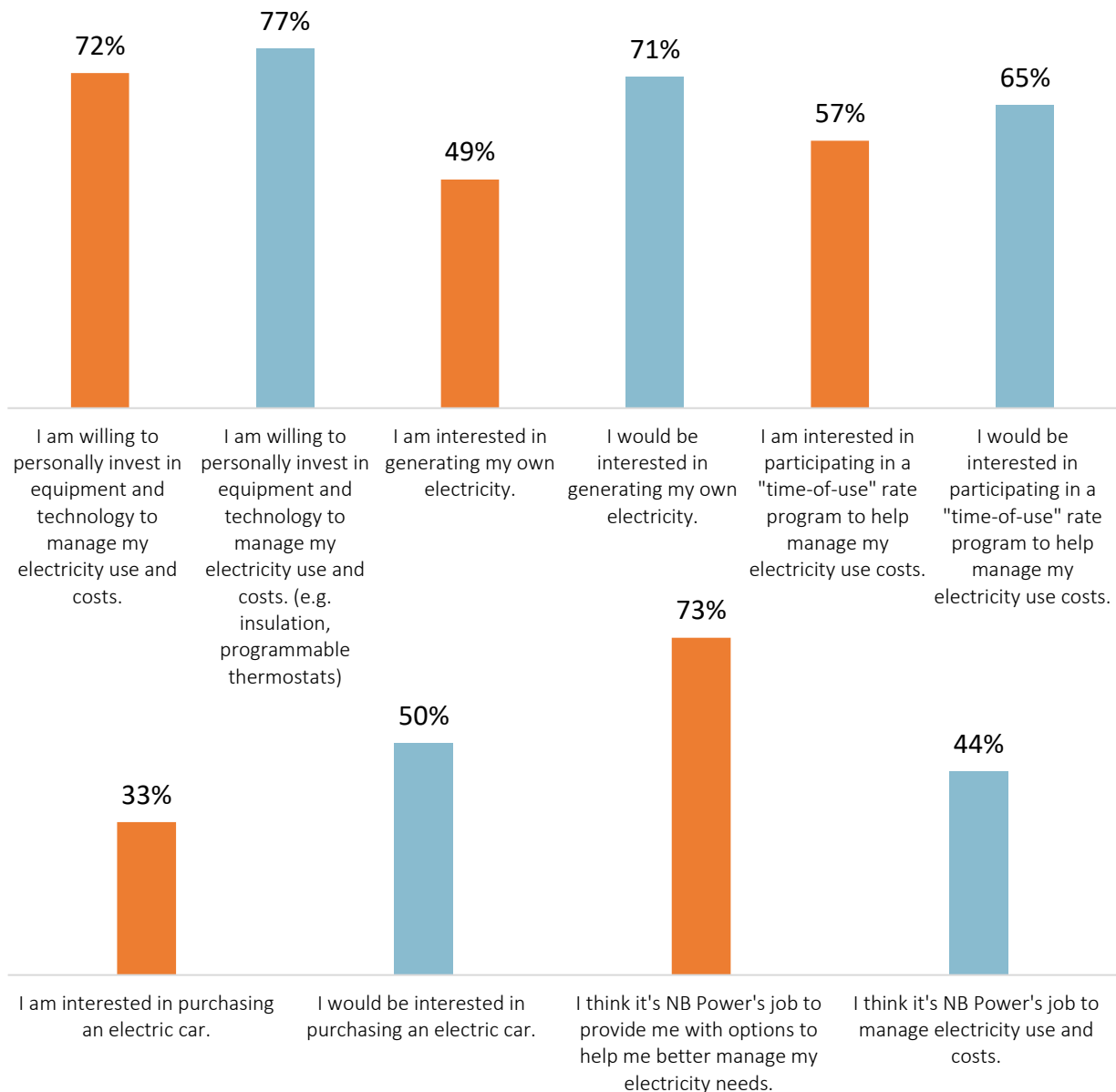


Customer Options

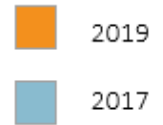


New Brunswickers interest in generating their own electricity declined to 49% in 2019, from 71% in 2017. They also have less interest in owning an electric car (33% vs 50%). New Brunswickers feel it is NB Power's job to provide customers with options to help manage electricity usage (73% vs 44%).

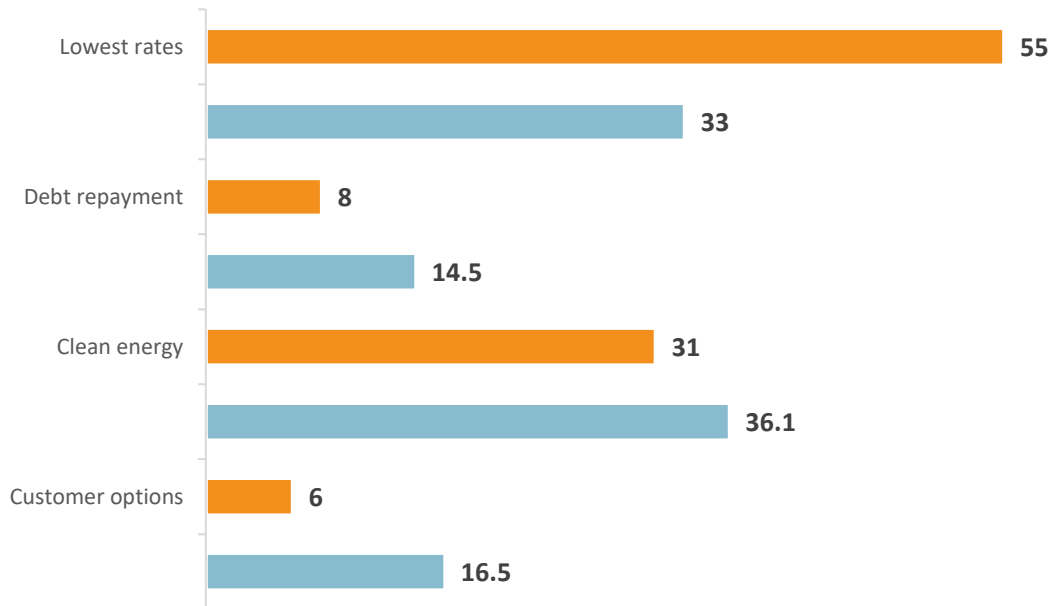
Customer Options
Share of respondents indicating a high level of agreement



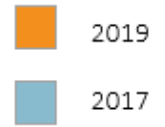
Allocation



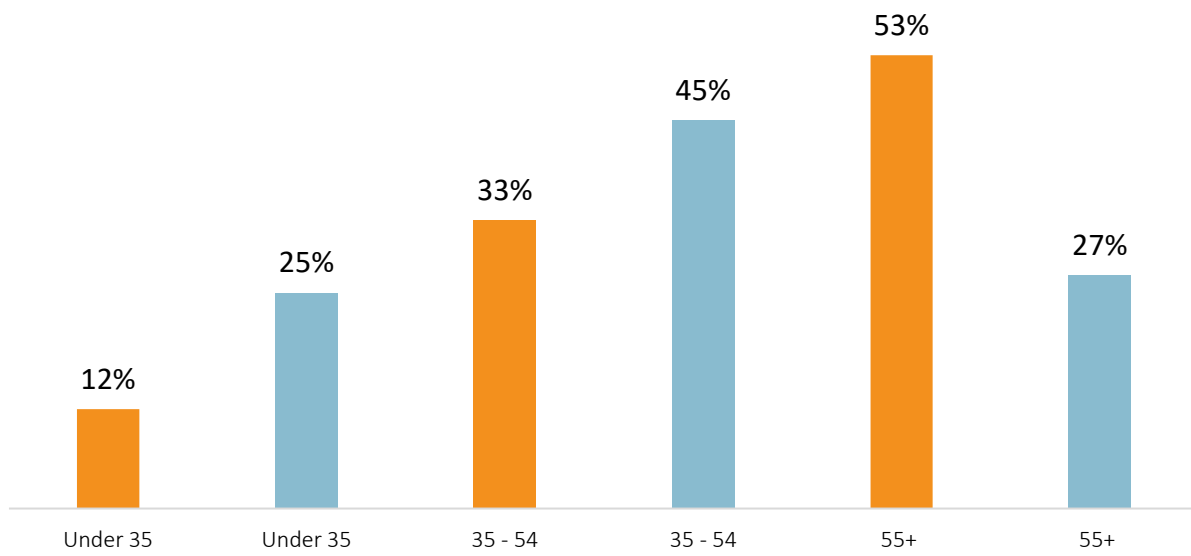
Residents were asked which of the following statements were important to them, using a scale of 1-100. Importance shifted for New Brunswickers between 2017 to 2019. In 2019, the most important statement was *Lowest rates*, whereas *Clean energy* was the most important in 2017.



Demographics



The 2019 survey gathered the most responses from those aged 55 and over whereas, the 2017 survey gathered more responses from those aged 35 to 54.



APPENDIX A – ONE-ON-ONE STAKEHOLDER MEETINGS

At the one-on-one stakeholder meetings, staff connected with the public and had conversations around the key areas of interest that the online engagement tool also focused on including affordability, clean energy, customer options, and others. The key topics of discussion were: Affordability, customer options, debt repayment, and other. Below you'll find the notes from the staff at the in-person engagement sessions.

AFFORDABILITY:

Affordability is a key topic of interest for NB Power customers. Conversations during in-person events around affordability are highlighted below. Conversations included topics such as rate comparison, regulation changes, and the consistency of rates, among other topics.

- Rate stability is the most important factor. As an input to their process, even small changes in rates can have a significant impact on their competitive position.
- Carbon taxing and its implications on electrical rates are concerning for customers whose operations are export driven and compete with producers that are not subject to these costs.
- Concerned about emerging regulation like the clean fuel standard and its impact on New Brunswick.
- Worried that new regulation will disadvantage investment.
- The future of how NB Power sells energy may have to change. Rather than \$ per kilowatt hour, NB Power may need to sell blocks of energy (similar to cellphone data plans) or move to time-of-use rates.
- Perhaps show graphs on electric vehicle costs vs gasoline per liter (quantify the advantage).
- Use dollars and cents to communicate with people. Not everyone understands complicated units like kilowatt hours.
- There is no comparison on power bills – people don't know if they are getting a good deal. A comparison graph to other jurisdictions offered as an idea.
- The Integrated Resource Plan is a long and complex document. NB Power should consider summarizing in a presentation or brochure.
- Electricity cost is number one concern for this stakeholder.
- Concerned about the cost of carbon pricing and renewable/embedded generation programs being passed on to customers.
- Concerned about funding the potential closure Belledune in 2030 and the upcoming Mactaquac Life Achievement project.
- Should consider seasonal rates to pass system costs on to those with low load factors.
- Look at global competitiveness. Compare rates with the best in North America.
- Struggle to see how NB Power can be competitive with a low load factor, relatively small size, high fixed cost and rates that are too high to attract business.
- Electricity is a significant cost input in the customers manufacturing processes.
- Unable to pass increasing costs on to customers – end product prices are fixed.



- Do not have an issue with current rates – viewed as a cost of business.
- No complaints regarding rates.
- Cost is the main concern for operation – predictable low cost is important.
- Operations will find the lowest cost jurisdictions.
- Electricity cost in New Brunswick is okay – not great. Natural gas costs are higher in New Brunswick compared to other jurisdictions.
- Their rates are already too high, and they feel that rates in New Brunswick are artificially low based on the financial position of NB Power.
- With good government policy it is possible to have green energy and low rates.
- There needs to be enough of a rate increase to cover inflation to avoid large increases in the future.

DEBT REPAYMENT:

Along with rates, debt repayment is an area that New Brunswickers are interested in. Overall, there is concern that there is a lack of understanding around debt repayment for NB Power, and what the future of energy in New Brunswick looks like.

- NB Power needs to get in front of industry change to prevent stranded assets (i.e. Consider renting solar rather than not participating).
- Shareholders of NB Power are the people of New Brunswick. People do not want to have stranded assets.
- Debt is not really a concern as long as NB Power is servicing and making reductions to it over time. However, a disruptive change would be a problem with the level of debt that NB Power has.
- Rates are likely too low for the level of debt that NB Power has.
- Need to be more nimble and consider shutting down units earlier than planned.
- Not overly concerned about NB Power's debt levels. Viewed as NB Power's role to manage debt.
- Feels that NB Powers debt is somewhat due to political factors.
- They believe that most people do not care about debt repayment – they believe it is a lack of understanding.
- Private investment in electrical resources is not good for New Brunswick.
- The 2017 Integrated Resource Plan deferred investments in generation too far – investments should be made sooner to build up capacity. Schedule investments so NB Power does not have multiple retirements occurring around the same time (i.e. Belledune, Point Lepreau, Coleson Cove)
- Prefers debt financing over privatization – keeps the profits with NB Power which is better for New Brunswick in the long run.
- NB Power should look at what other utilities are doing. NB Power should not own all generation. There are opportunities in other jurisdictions for energy, capacity and ancillary services. For example, NB Power can enter into a power purchase agreement with an external jurisdiction.
- In regard to the stranded cost issue, there should be some support from government for forcing retirements when there is support being provided for various renewable projects.



- They hope that the federal government will provide support for Belledune as a stranded asset and replace it with wind and natural gas.
- In regard to debt, there needs to be a multi-pronged approach – raising rates would be difficult politically. NB Power should be more committed to cost reduction and be a fast follower in regards to research and development.

CLEAN ENERGY:

Clean energy is not just a regional issue, but a global one. New Brunswickers have great interest in the impacts clean energy have on the environment. Education and technology are top-of-mind for New Brunswickers.

- In other jurisdictions, private industry is investing in renewable generation but opportunities appear to be unavailable in New Brunswick.
- Of the opinion that New Brunswick is currently maxed out on wind.
- Advancing technology is important but it should be done at the correct pace. For example, NB Power should hold off on adding more wind until systems to properly manage it are in place.
- Can see a future with more renewable with storage capability and smart grid.
- Government needs to recognize investments NB Power has made to date in things like scrubbers at Belledune and Coleson.
- Perhaps NB Power should offer green solutions to people that are willing to pay more for them and keep base assets for those that are happy with what they have and don't want to pay more – this would help NB Power avoid stranded assets.
- Recognize that intermittent sources of supply like wind do not provide a reliable source of electricity. New Brunswick needs a strong and predictable base load supply.
- New Brunswick does not have the natural resources of Quebec yet has a very aggressive environmental policy.
- Should provide public education on the rate impact of renewables.
- Customers are unaware of how expensive renewable energy is.
- It is important to keep aware of carbon policy.
- NB Power is viewed as great environmentally.
- Likes the idea of buying green energy.
- There don't seem to be as many jobs in renewable energy as compared to traditional generation.
- There is a limit as to how much they would pay for green energy.
- Customers want to be green, but they do not want to pay more for it.
- Would like to see a renewable portfolio standard of 90-95% by 2050 and we should aim to achieve 100% by some point.
- Any carbon taxes collected by government should be reinvested into NB Power for the development of green energy projects such as wind and geothermal.
- The savings generated by burning less fossil fuel should be reinvested. Estimates that \$300 million of wind can displace approx. \$30 million of fuel and purchased power cost annually.
- These reinvestments would mean jobs for New Brunswick.



- The province needs to advance electrification to truly get off carbon (electric vehicles and industry). Apply carbon tax at the pump and to industry to encourage electrification.
- Feels that efficiency programs are not accessible. Other options like on bill financing for efficiency upgrades or solar may be a better option.
- Efficiency perceived as not reducing emissions.
- Community energy projects are a good thing if NB Power owns the assets.
- Geothermal should receive more attention – New Brunswick has some of the best thermal in eastern North America.
- Feels that adding green energy without increasing cost is possible.
- Feels that New Brunswick is rich with natural gas and wind.
- They desire more renewables and they like green energy.
- NB Power is doing a good job in providing clean energy – Point Lepreau should be given credit.
- Can do more in a cost-effective way – comes down to stranded assets – look beyond New Brunswick for bridging options.
- Energy efficiency programs should be based on economics.
- Electrification – New Brunswick needs to be at the front of the line. The federal government is poised to invest billions in green energy – we need to remove barriers that will keep us from getting a piece.
- Carbon intensity of supply has no impact on decision to locate.
- Decisions to locate are based on the clarity of process, existence of a market and certainty of cost and NB Power is the best they have seen in this regard.
- Carbon is only a concern if the cost is significant.

CUSTOMER OPTIONS:

Like all products and services, customers are looking for options. Smart Meters, green energy, and new technology are options that New Brunswickers are looking for.

- They are interested in playing a role in the value chain as electrification takes hold.
- Be mindful that people moving to solar will not be paying their fair share of using public assets (using the NB Power system like a battery).
- The tipping point for electric vehicles is coming soon and it will have a huge impact. Fast adoption will be disruptive, and drive demand up.
- Concerned that NB Power will have stranded assets (plants, people and other assets) if things like self-generation and rooftop solar can proliferate.
- Smart meters will help people become more energy literate. Smart meters could help customers identify when usage is up.
- Regulation is too slow for technological change – needs to be faster.
- Electric vehicles are a game changer and they see it happening soon. Suggested that NB Power review publicly available long-term outlooks.
- Do not agree with Energy Smart in 2017 Integrated Resource Plan – it is built around an early retirement of Bayside and is too expensive.



- They do not have a lot of flexibility in their processes which limits their ability to participate in demand response programs. They have participated in the past but found that they can be more disruptive than its worth.
- They are not interested in self-generation.
- Supportive of smart meters.
- They want customer self-supply options but are concerned with net metering. They recognize the issues that would be created if rooftop solar prices came down and customers disconnected. They would like to see entire province work together to prepare and address the impact of net metering.
- Net metered customers are being subsidized by other customers.
- Not in favour of projects where only those with means can afford to invest.
- Not in favour of the Locally Owned Renewable Energy Projects that Are Small Scale (LORESS) program (with the exception of the First Nations portion). NB Power should be making investments, not private investors.
- Solar rental programs should be entered into carefully.
- NB Power's net metering program is too generous.
- Recognizes that there is a big role to play in the electric vehicle space (charging, renting, leasing, etc.).

OTHER:

- Reliability is important to this customer and this customer has taken steps to mitigate reliability issues.
- Concerns raised that public energy awareness could be greater.
- NB Power's strategic direction is not clear from their point of view as it is saddled with debt and needing to make large investments in Mactaquac.
- Load is stable to falling due to closing industrials, but this is being partially offset by the economy becoming more electrified.
- Efficiency measures having a lowering impact on demand.
- The population in general has low knowledge of how the electrical system and storage really work.
- The public needs to know the true cost of energy solutions to better appreciate the value offered by NB Power.
- NB Power should focus on regional collaboration with other utilities in Atlantic Canada, Quebec and Maine.
- NB Power should consider closing plants and focusing on transmission and distribution.
- Small modular reactors may be a good option, but NB Power should consider letting private industry handle to avoid a situation like cost overruns. No Provincial money should go into small modular reactors.
- Load growth in current plan is too high – should be flat at best.
- The industrial rate class is not growing.
- NB Power has good fuel diversity.
- NB Power is a good system operator.
- NB Power should have been sold to Quebec.



- Natural Gas is expensive in New Brunswick.
- Bayside's useful life should be extended.
- NB Power should publish an Integrated Resource Plan with a base case that has the highest likelihood of occurring.
- Growing since 2008 and expected to continue. Beginning to have some issues with power quality (low voltage alarms on sensitive equipment).
- NB Power customer service and response time has been good.
- NB Power has been good about scheduling work around operational requirements.
- Reliability is the most important factor for this customer. They did experience some issues with reliability 3-5 years ago that has since been addressed by NB Power.
- They view New Brunswick as a strategic location.
- They are supportive of the Mactaquac Life Achievement project.
- They want to see the good working relationship that they have had with NB Power continue into the future.
- Interested in working with NB Power on projects in the future.
- Open to sharing information.
- Over the next 10-20 years they expect growth to be stable.
- They have no issues with reliability and power quality is good.
- Their opinion on Mactaquac is that we should keep it as it is a green source of energy. Something else would be required if it wasn't there.
- Their opinion on coal is that it needs to be replaced but New Brunswick needs something that can be relied upon – the replacement of Belledune needs to be balanced with cost and a reliable, on demand, option.
- Satisfied with service.
- Uncertainty around future regulatory barriers.
- Regulatory is very costly. There has got to be a better way to do regulation. Perhaps if the rate increase is below 2% then there is no hearing.
- Opinion on the Mactaquac Life Achievement project – how realistic is the budget? Is it less expensive than the alternative?
- Not sure if people really care about energy being produced in Province.
- Reliability has not been a concern.
- Energy consumption is growing.
- Since the Integrated Resource Plan is only updated every three years some of the data becomes outdated.
- It would be helpful if the various sources of supply were overlapped with New Brunswick's load profile to show the various sources used to meet demand (now and into the future). It may be useful for the public to understand this to see if the options they are talking about fit in the NB profile.



- Is there always a real need to replace current generation (like the Millbank and Ste Rose combustion turbines) – we need to factor in what other options are available to determine if all the capacity is necessary.
- Provide more education and information around the variability of intermittent options.
- Provide readers with more of an understanding of how things like the \$10 ancillary service cost for wind relate to the costs in the Open Access Transmission Tariff (OATT).
- Provide more information on how much wind can really be brought onto the system. How much ancillary services can NB Power provide and at what cost.
- The assumptions are key in long term planning.
- They would like to see how sensitivities impact expansion plans so that you can answer questions like “under what circumstances are the refurbishments of Millbank and Ste Rose not required?”
- They would like to see additional cost/benefit analysis for some of the projects like the Coleson Cove and Millbank extensions – showing some of the alternatives.
- Would like to see something like “when battery storage is \$X, the Millbank extension would not make sense”.
- It would be useful to know what significant changes have occurred since the last Integrated Resource Plan and some explanation.
- Indicated that there will be more supply of natural gas in the future. Having a section on this explaining what it is and what it means would be useful.
- They indicated that they would like to see more scenarios with discussion and detail. For example, a rapid climate change scenario.
- Would like to see a high renewable scenario.
- The Integrated Resource Plan will be a key document for future engagement.
- The document layout is fine, but they believe a basic summarized version would be helpful to make information more accessible. Perhaps an online tool to demonstrate cost impacts of various decisions may get people more engaged.
- Prefers small projects.
- Would like to see a four scenario format included in the 2020 Integrated Resource Plan.
- NB Power should look at strategic priorities and aim to be good at one or two things.
- Wants to see at least 10 years of financial information for the Integrated Resource Plan scenarios and use of detailed PROMOD production modelling software for early years.
- Wants to see emission profiles for each scenario included in the Integrated Resource Plan.
- Wants to see average rates for each scenario in the Integrated Resource Plan.
- Noted that net present value alone is not sufficient for decision making.
- Should not force options in the Integrated Resource Plan.
- There should be a chance to provide more feedback later in the process.
- Rate structures are incenting behavior that is not in the best interest of the Province (inefficient price signals).
- There can be more done on the demand side.



- NB Power's valuing of customers could be better.
- They are happy with reliability – it has been improving.
- Good experience collaborating with NB Power.
- In regard to the Mactaquac Life Achievement project, they worry that there could be cost overruns. Perhaps NB Power should sell it and enter into a power purchase agreement - maybe for the entire fleet.
- Mactaquac belongs in the mix – providing balancing – the focus should be on who owns it and it should be an economic decision.
- More opportunities to collaborate exist.
- Should not expect growth in New Brunswick for this sector for some time.
- The connection process and regulatory environment are also very important.
- Smaller utilities are good to work with – very happy with the service that NB Power has provided.
- Power quality and reliability is good – no issues.
- Where possible they have installed natural gas units, oil units and batteries to shave peak.
- Proponent of batteries – can be done with third party (if opportunities exist) with little to no capital investment to reduce critical peaks.
- Batteries are portable – great for balancing and can help you defer investments.

APPENDIX B – SURVEY QUESTIONS

WHAT WAS SAID SURVEY QUESTIONS (2019 SURVEY)

Statements

Using a scale of 1 – 5, where 1 is Disagree and 5 is Agree, or Don't know or N/A
Tell us how much you agree or disagree with the statements below:

Affordability

- Q1a. I want NB Power to invest in providing more customer options to better manage my electricity needs.
- Q1b. New Brunswick's transition to a clean energy future needs to minimize impacts on rates and the economy.
- Q1c. I am open to renewable power purchased from other jurisdictions rather than building new sources of renewable power in New Brunswick to minimize the impact on rates.

Clean Energy

- Q2a. I want NB Power to be a leader in energy efficiency.
- Q2b. I support using fossil fuels as we transition to a cleaner energy future to meet our climate change commitments.
- Q2c. New Brunswickers have a responsibility to make changes to help address climate change.
- Q2d. I want NB Power to be a leader in clean energy.
- Q2e. It is important to me that electricity for New Brunswick is made in New Brunswick.
- Q2f. I am personally willing to pay more for clean energy.

Customer Options

- Q3a. I am willing to personally invest in equipment and technology to manage my electricity use and costs (e.g. insulation, programmable thermostats).
- Q3b. I am interested in generating my own electricity.
- Q3c. I am interested in participating in a "time-of-use" rate program to help manage my electricity use costs.
- Q3d. I am interested in purchasing an electric car.
- Q3e. I think it's NB Power's job to provide me with options to help me better manage my electricity needs.



Allocation

Q4. Please tell us what's most important to you by assigning a value to each topic. You've got 100 points to share between all four

- Lowest rates
- Debt repayment
- Clean energy
- Customer options

Verbatim

Q5. Is there anything else you'd like to add?

Demographics

D1. Are you a current NB Power electricity customer?

- Yes
- No

D2. Which of the following age categories do you fall into?

- 0-17
- 18-34
- 35-54
- 55+
- Prefer not to answer

D3. Which of the following broad ranges represents your total household income?

- Under \$20,000
- \$20,000 - \$49,999
- \$50,000 - \$74,999
- \$75,000 - \$99,999
- \$100,000 or more
- Prefer not to answer

D4. Enter the first three digits of your postal code? (i.e. A1A)

APPENDIX C – 2019 DATA TABLES

Throughout the report, top box analysis was utilized to highlight the overall levels of agreement with each statement. The following tables showcase the full results for each statement question. Results are represented by percentages.

Statements (percentages)		Disagree 1	2	3	4	Agree 5	DK/ N/A	Mean
Affordability								
Q1a	I want NB Power to invest in providing more customer options to better manage my electricity needs.	2.6	2.5	14.0	25.9	52.8	2.2	4.27
Q1b	New Brunswick's transition to a clean energy future needs to minimize impacts on rates and the economy.	1.4	2.7	10.5	21.4	63.1	0.8	4.43
Q1c	I am open to renewable power purchased from other jurisdictions rather than building new sources of renewable power in New Brunswick to minimize the impact on rates.	10.0	8.4	21.2	20.1	37.8	2.5	3.69

Statements (percentages)		Disagree 1	2	3	4	Agree 5	DK/ N/A	Mean
Clean energy								
Q2a	I want NB Power to be a leader in energy efficiency.	1.4	1.8	11.2	22.0	62.5	1.1	4.44
Q2b	I support using fossil fuels as we transition to a cleaner energy future to meet our climate change commitments.	8.0	7.9	22.1	24.9	34.2	2.9	3.71
Q2c	New Brunswickers have a responsibility to make changes to help address climate change.	2.5	2.3	10.2	23.1	61.2	0.6	4.39
Q2d	I want NB Power to be a leader in clean energy.	2.3	2.4	12.2	21.9	60.4	0.8	4.36
Q2e	It is important to me that electricity for New Brunswick is made in New Brunswick.	7.8	6.2	23.5	20.2	41.2	1.2	3.82
Q2f	I am personally willing to pay more for clean energy.	24.0	14.3	30.4	17.9	11.8	1.6	2.79

Statements (percentages)		Disagree 1	2	3	4	Agree 5	DK/ N/A	Mean
Customer options								
Q3a	I am willing to personally invest in equipment and technology to manage my electricity use and costs (e.g. insulation, programmable thermostats).	4.8	4.5	16.0	28.6	43.2	2.9	4.04
Q3b	I am interested in generating my own electricity.	13.7	10.9	20.4	18.6	30.4	5.9	3.44
Q3c	I am interested in participating in a “time-of-use” rate program to help manage my electricity use costs.	10.0	6.0	22.4	25.7	31.6	4.2	3.66
Q3d	I am interested in purchasing an electric car.	26.4	12.6	21.4	14.1	18.8	6.6	2.85
Q3e	I think its NB Power’s job to provide me with options to help me better manage my electricity needs.	3.2	3.1	20.0	30.2	42.6	0.9	4.07

APPENDIX D – GLOSSARY OF TERMS (PAID MEDIA)

AD CLICK THROUGH RATE: The number of users who click on a link versus the number of users receiving the advertisements.

CHANNEL: The digital platform on which you engage with audiences (i.e. website, blog, Facebook, Twitter, LinkedIn).

ENGAGEMENT: A metric that captures how many times users have interacted with the post and/or ad. Key metrics include: likes, retweets, comments, shares, link clicks.

GOALS: Measure how well your site or app fulfills your target objectives. A goal represents a completed activity, called a conversion, that contributes to the success of your business.

MEDIA BUY: The purchase of advertising from a media company or social media channel.

PAID MEDIA: Media gained through advertising (i.e. online digital ads, paid newspaper ads).

PERFORMANCE-BASED: A type of marketing and advertising that is adjusted based on performance. Unlike traditional forms of advertising like newsprint, television or billboards where you would purchase the space and have little room for adjustment, performance-based only charges you when people engage (watch a video, click an ad, etc.) allowing marketers to enhance, update, and change during a campaign.

UNIQUE PAGEVIEWS: The number of visits during which the specific page was visited at least once.

IMPRESSIONS: The number of times a paid search ad was delivered to users.

APPENDIX E – PAID MEDIA PERFORMANCE

Summary

During the month of November, a total of 16,570 users visited the ourenergyfutureNB.ca website. Most of those users were directed to the site via paid media ads (7,624 via Facebook, 6,563 via Google).

Using Google Analytics, we can determine the rate at which users landed on the homepage and continued through to the survey. Approximately 47 per cent of website visitors continued on to the survey. In terms of conversion rates, this is exceptional.

Facebook

Ad set name	Impressions	Reach	Link clicks	CTR (link click-through rate)
ENG	218,729	68,816	5,617	2.57%
FRE	138,130	35,936	2,890	2.09%

Ad name	Impressions	Link clicks	CTR (click-through rate)
ipad-moncton	154,375	3,694	2.39%
ipad-coast	100,343	2,733	2.72%
ipad-lighthouse	81,242	1,680	2.07%
Win	11,169	222	1.99%
ipad-boardwalk	7,196	151	2.10%
ipad-boarwalk	2,534	27	1.07%

Note: These results include both French and English ads. The top performing ad was 'ipad-moncton'.



NB Power / Énergie NB
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Help map our journey to New Brunswick's energy future and you could win!

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Win an iPad!
We want to hear your input. Co...

LEARN MORE

👍 🤔 🍷 307 113 Comments 109 Shares

Google Display Network

Campaign name	Impressions	Clicks	CTR (click-through rate)
ENG	815,625	6,505	0.80%
FRE	588,566	5,247	0.89%

The top performing ads were the following:



Complete the survey

New Brunswick Power is planning for how to meet our energy needs for the next 20 years.



Répondez au sondage

Énergie NB planifie pour répondre aux besoins énergie pour les 20 prochaines années

The Weather Network

	Creative size	Ad server impressions	Ad server clicks	Ad server CTR
ENG	300 x 250	57,175	149	0.26%
ENG	728 x 90	15,289	43	0.28%
FRE	300 x 250	55,573	119	0.21%
FRE	728 x 90	16,750	52	0.31%
Total		144,787	363	0.25%