



# Maximizing Our Renewable Future:

A Plan for Development of the Renewable Energy Industry in Newfoundland and Labrador

## What We Heard

November 2021

## Acknowledgments

The Department of Industry, Energy and Technology would like to acknowledge and thank the public, Indigenous Governments and Organizations, industry and stakeholder participants that submitted their input into the development of a renewable energy plan for Newfoundland and Labrador. The notable volume and depth of input received through questionnaires and written submissions illustrates the value our residents, industry and stakeholders place on an informed, long-term sustainable plan for our province's renewable energy resources.

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## Executive Summary

Through the Government of Newfoundland and Labrador's fall 2021 renewable energy plan engageNL consultation process, the Department of Industry, Energy and Technology obtained: 57 Industry and Stakeholder Questionnaires, 145 Public Questionnaires, and 39 Written Submissions).

Based upon a review of this feedback, it is clear that Newfoundlanders and Labradorians want to be the recipients of the benefits of the province's renewable energy resources. Further, respondents want to use its renewable energy resources to be a leader in reducing provincial greenhouse gas emissions, while protecting the environment. This includes a desire to electrify the province's fossil-fueled transportation and space-heating, as well as using renewables to reducing diesel-generated electricity in the province's isolated coastal communities.

In developing future renewable energy projects, respondents seek to respect Indigenous rights and ensure their early consultation and participation, and support community-led projects.

To forward the province's position as a renewable energy leader, respondents want to support and grow the research and development space. Respondents also want to support business development, and ensure the province's residents are provided the training they need to participate in, and grow, Newfoundland and Labrador's renewable energy industry, including transitioning for its oil and gas workers.

## Overview

Newfoundland and Labrador possesses valuable and abundant developed and undeveloped renewable energy resources, as well as experience and expertise in the province's technology and energy sectors.

The Department of Industry, Energy and Technology committed to work with industry and stakeholders to deliver a provincial renewable energy Plan by end of 2021, focused on creating employment opportunities and further positioning Newfoundland and Labrador as an energy supplier. As such, the present, What We Heard document provides an overview of Industry, Energy and Technology's fall 2021 consultation process and findings. Data from this process will be used to inform the development of a renewable energy plan for Newfoundland and Labrador.

## Methodology

### Consultation Preparation

To inform the development of consultation documents, in October 2019 and March 2020, Industry, Energy and Technology met with eight targeted industry leaders and stakeholders to obtain their initial ideas for a renewable energy plan, to assist in developing ideas and documentation to inform broader industry and stakeholder consultation.

### Consultation Process

In determining the appropriate consultation approach for developing a renewable energy plan for the province, Industry, Energy and Technology considered the following factors:

- Public, industry and stakeholder interest in renewable energy resources;
- Industry, Energy and Technology's desire to provide all residents of the province with an opportunity to provide input into the development of a renewable energy plan;
- Industry, Energy and Technology's desire to ensure early and meaningful Indigenous consultation and participation in energy projects; and,
- The evolving nature of in-person restrictions related to COVID-19.

Based on the above factors, the following consultation approach was used to obtain input on a renewable energy plan for Newfoundland and Labrador.

### **Indigenous Governments and Organizations:**

On October 4, 2021, Industry, Energy and Technology sent a letter to Indigenous governments and organizations, inviting input in the development of a renewable energy plan for Newfoundland and Labrador. Input was invited in a manner of the organization's preference (e.g. letter, call, etc.), and was requested by November 4, 2021. A reminder email was sent one day prior to the feedback date. Staff of Industry, Energy and Technology also followed up by phone, inviting feedback and offering an extension to provide feedback.

### **Public, Industry and Stakeholders:**

Industry, Energy and Technology requested input from the public, industry and stakeholders through the province's virtual web portal, engageNL.ca, from October 14 to November 4, 2021. This site included a(n):

- landing page which provided an overview of the consultation process;
- presentation in pdf format, which included an overview of the: province's electricity system; developed and undeveloped renewable energy resources; and, potential markets and opportunities;
- industry and stakeholder questionnaire;
- public questionnaire; and,
- option of providing a further submission to Industry, Energy and Technology by email, mail, phone or virtual meeting. Any feedback provided after the closing of engageNL was accepted until November 13, 2021.

To promote and encourage high participation in the engageNL consultation process, Industry, Energy and Technology sent an email to industry and stakeholders two weeks before the launch, on launch day, and two days before close of engageNL. These emails were sent to: industry associations (i.e. econext, Noia, Chambers of Commerce, TechNL); post-secondary institutions; women and equity seeking organizations; municipal governments and organizations; and nearly 70 industry representatives. Similar emails were also sent to Members of the House of Assembly and relevant Members of Parliament, encouraging them to distribute the invite to their constituents. Industry, Energy and Technology also issued a news release on the engageNL launch day and posted to social media (i.e. Twitter and Facebook) throughout the engageNL consultation process. Further, Industry, Energy and Technology encouraged participation during econext's annual conference on October 22, 2021.

### **Premier's Youth Council:**

On November 22, 2021, the Premier, Minister of Industry, Energy and Technology, and staff had a meeting with the Premier's Youth Council on renewable energy in Newfoundland and Labrador. The Premier's Youth Council provides government advice by bringing a youth perspective to select topics of importance. The input provided during this meeting is included in the present document.<sup>1</sup>

<sup>1</sup> Premier's Youth Council - Public Engagement and Planning Division: [gov.nl.ca/pep/pyc](https://gov.nl.ca/pep/pyc)

## Industry and Stakeholder Questionnaire

A total of 57 industry and stakeholder members completed the questionnaire. A breakdown is as follows.

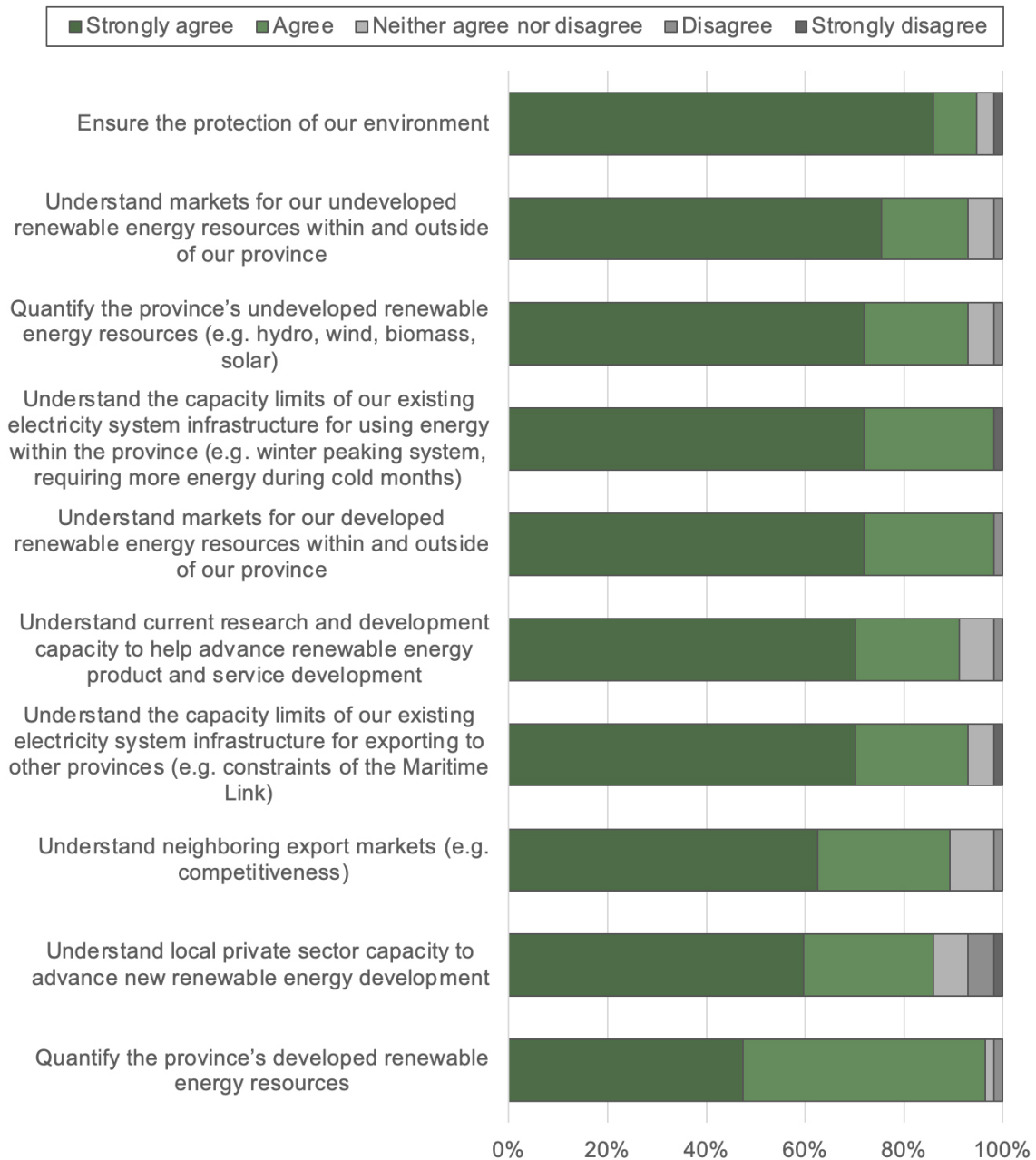
Industry and Stakeholder Questionnaires	
16	Renewable energy company
15	Newfoundland and Labrador private sector business
5	Member of an industry association or business interest group
5	Member of academic and/or research community
4	Member of a community organization
4	Out-of-province private sector business
2	Municipal government official
1	Member of an Indigenous Government or Organization
5	Other
<b>57</b>	<b>Total</b>

A small minority of the above respondents did not answer every question. As such, the below chart data for this questionnaires reflects the percentage of respondents that responded under each individual question. Items within each chart are also in order to reflect the highest percentage of respondents who indicated “Strongly agree” or “Very important.” Finally, for open-ended questions (e.g. “If other, please specify”), Industry, Energy and Technology has rolled this information into categories to assist the reader.

A summary of the data received under each question in the Industry and Stakeholder Questionnaires is as follows on the next page.

## Renewable Energy

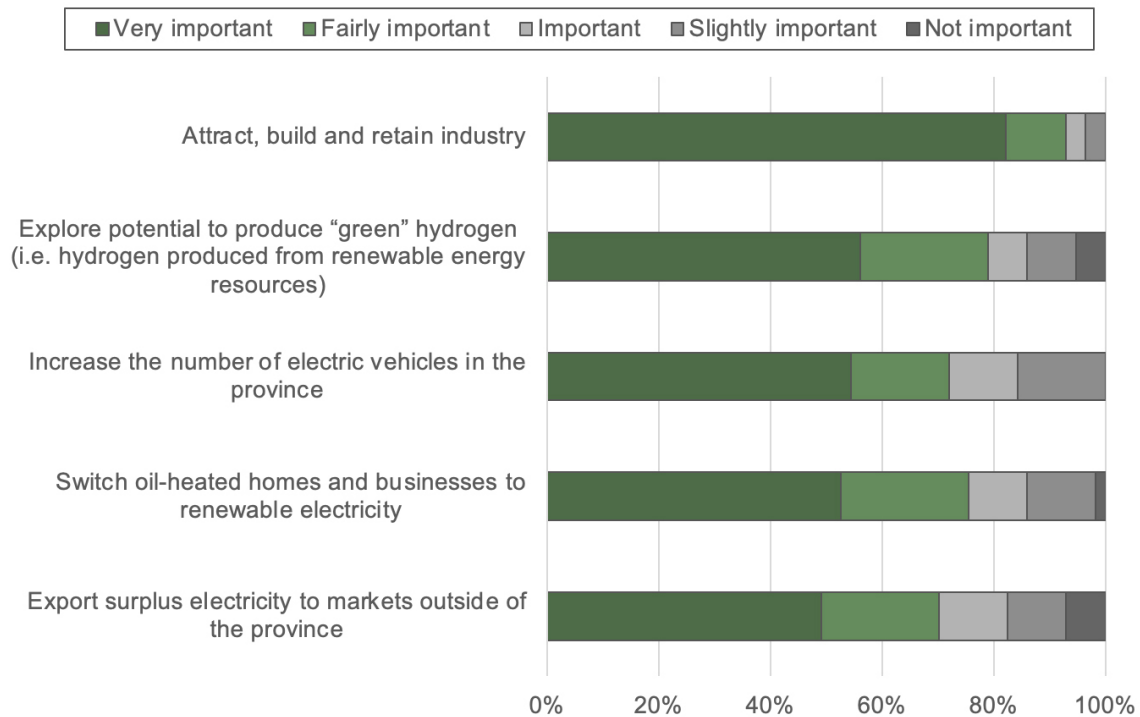
1. To maximize current and future market opportunities, we must:





## Developed Renewable Resources

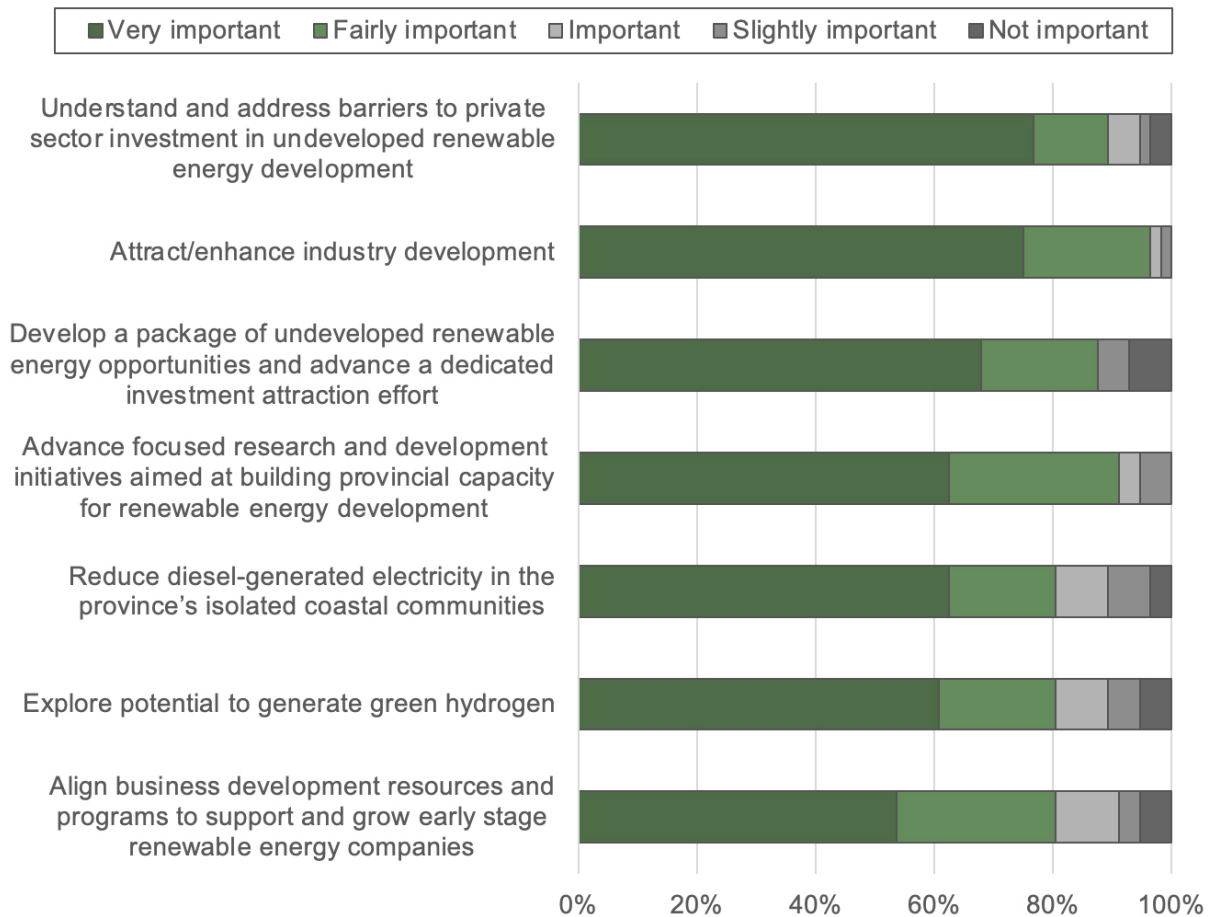
2a. Please indicate your interest in the province pursuing the following market opportunities for our surplus renewable electricity:



2b. If you have other market opportunity suggestions for our surplus renewable electricity, please specify.	
Suggestion	# of Responses
Data centres	4
Industry/Mining/Green ammonia/steel	4
Electrify heavy duty (e.g. public transit, med-large transport)	2
Collaboration	1
Do not impose higher costs on industry	1
Electric vehicles	1
Electrify offshore	1
Energy storage	1
HVDC links	1
Natural gas	1
Port electrification	1
Revise legislation	1
<b>Total</b>	<b>19</b>

## Undeveloped Renewable Resources

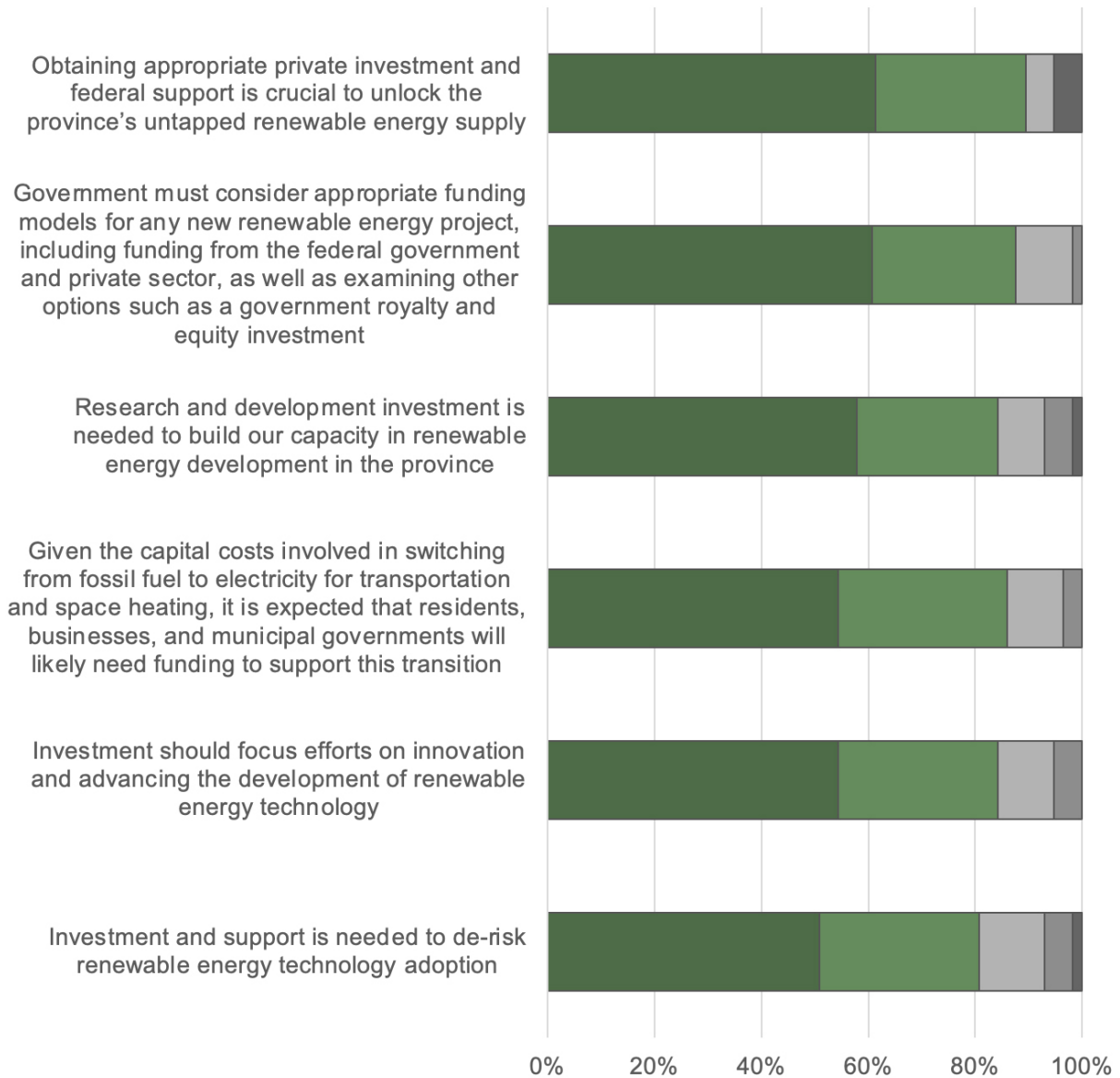
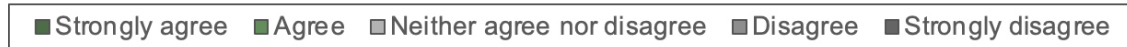
3a. Please indicate your interest in the province pursuing the following opportunities for our undeveloped renewable energy resources:



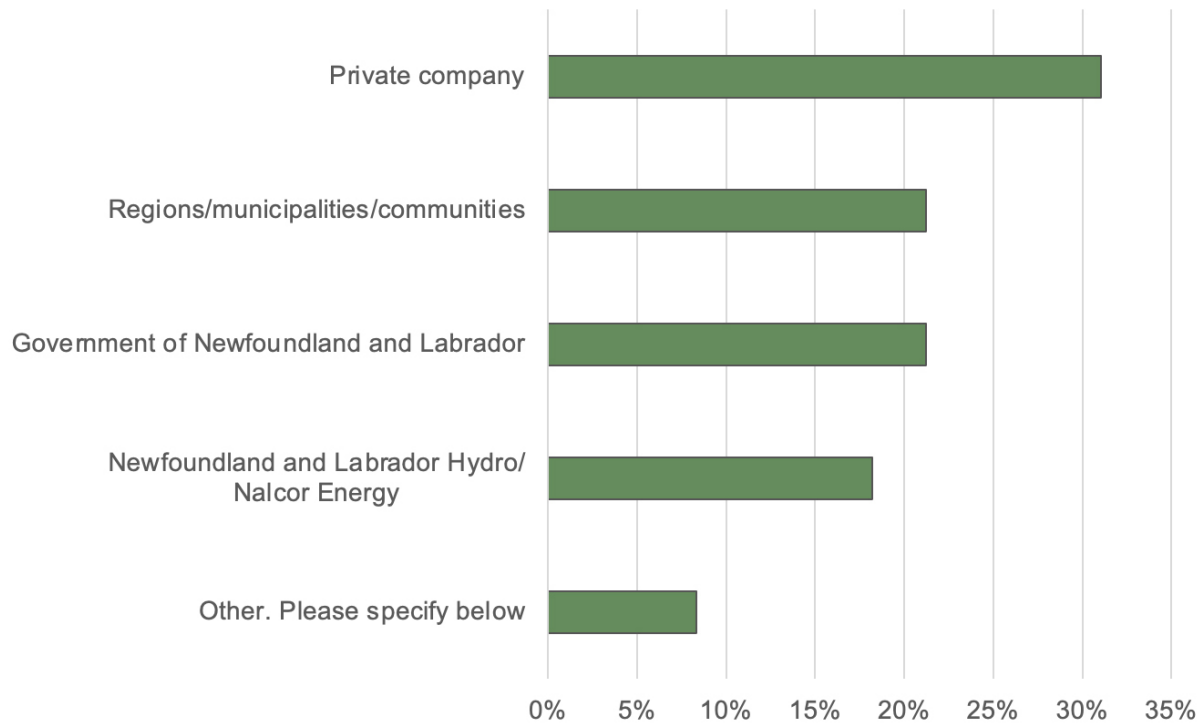
<b>3b. If you have other suggestions for opportunities to pursue regarding our undeveloped renewable energy resources, please specify below.</b>	
<b>Suggestion</b>	<b># of Responses</b>
Green hydrogen	2
Gull Island	2
Isolated diesel electricity systems	2
Private development/investment	2
Quantify/market resources	2
Natural gas/Ultra-low sulphur liquid fuel	2
Technology/Batteries	2
Aquaculture	1
Blockchain	1
Atlantic collaboration	1
Electrify offshore	1
Fund energy audits	1
Mirror oil and gas regime	1
Revise legislation	1
Work with customers to reduce peak	1
<b>Total</b>	<b>22</b>

## Investment and Financial Support

4. For each statement below, please indicate your level of agreement:

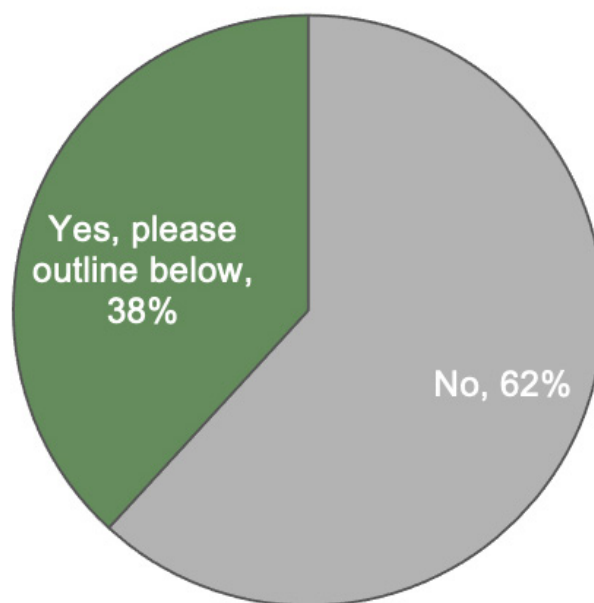


5. Who should be the owner(s) of future large scale renewable energy projects (i.e. above one megawatt)? (Please select all that apply)



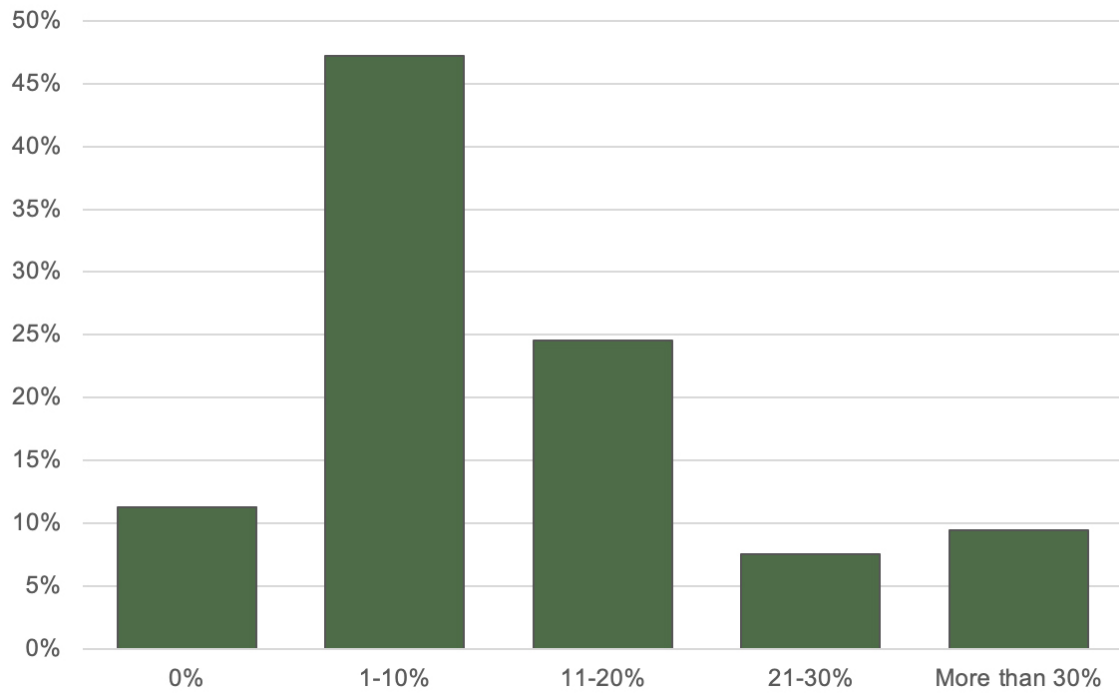
<b>5b. If other, please specify.</b>	
<b>Theme</b>	<b># of Responses</b>
Public private partnership	6
Indigenous participation/ownership	2
Private Company	1
Gull Island	1
Home owners	1
Net metering	1
Utility contract out construction	1
<b>Total</b>	<b>13</b>

6. Do you have any further suggestions/clarification regarding investment and financial support that you would like to provide?



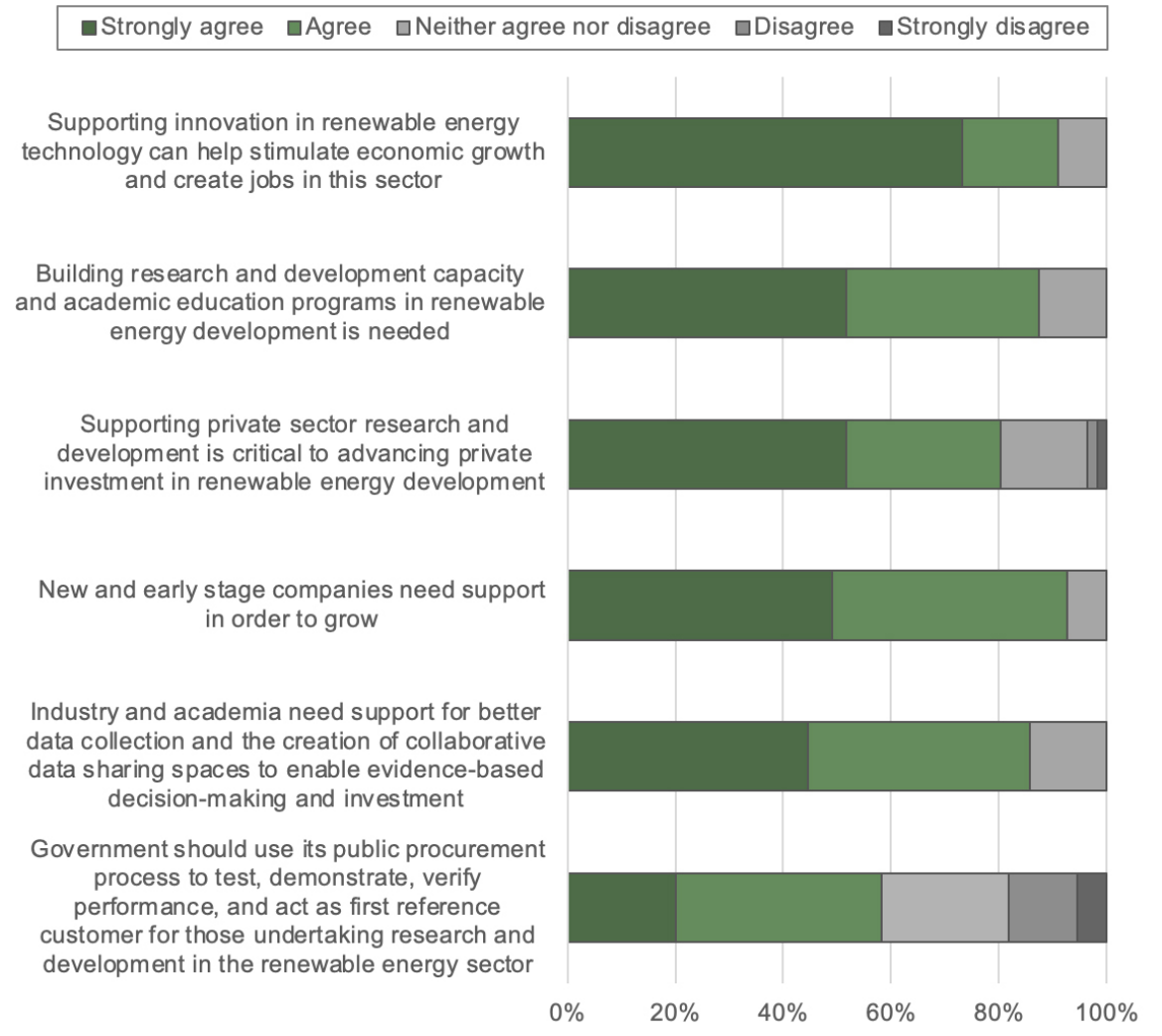
6b. Please outline your suggestions/clarity regarding investment and financial support.	
Suggestion/Clarity	# of Responses
Enabling policies/legislation/incentives/rates	5
Power purchase agreements	3
Leverage oil and gas expertise/retrain workers	2
Vary ownership model based on project	2
PT governments/crown utilities only	1
Collaboration	1
Companies need to maintain current technology/training	1
Early community/Indigenous engagement	1
Lessons learned from other jurisdictions	1
Provide companies carbon reduction tips	1
Public private partnership	1
Require experience in large projects	1
Value propositions	1
<b>Total</b>	<b>21</b>

7. What is the maximum percentage increase in your electricity bill that you are willing to pay to further increase the penetration of renewable energy in the province?



## Lead Innovation, and Research and Development

8. Please indicate your level of agreement for the following statements:

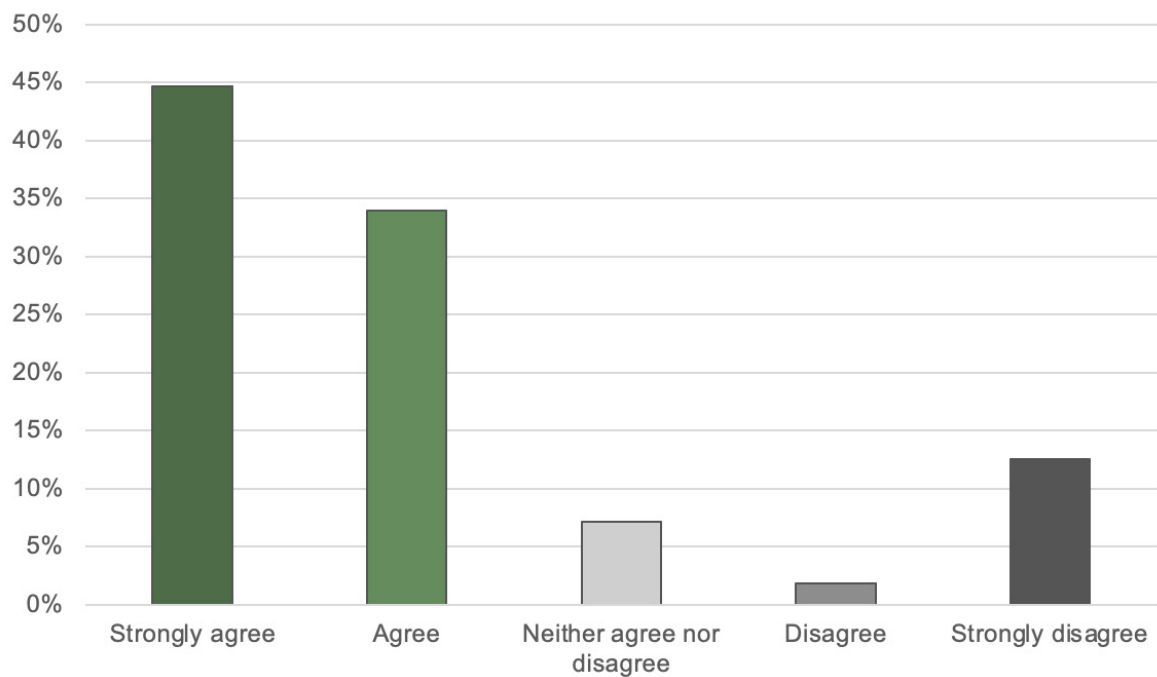




<b>9b. If respondents selected 'Agree' or 'Strongly agree' to any statements in Question 8, they were asked if there were specific ways they believe Government should support renewable energy companies in order to facilitate economic growth and new jobs.</b>	
<b>Theme</b>	<b># of Responses</b>
Incentives/funding/tax breaks/wage subsidies	14
Change legislation	6
NL Research & Development portal	3
Power purchase agreements	3
Enable development	2
Expand net metering	2
Provide training	2
Balance cost	1
Be flexible and thoughtful in planning	1
Conduct export market analysis	1
Electrify government-owned space-heating	1
Engagement and collaboration	1
Flexible	1
Focus on current technology	1
Prioritize	1
Targeted R&D funding	1
Utility oversight	1
<b>Total</b>	<b>42</b>

## Public Education

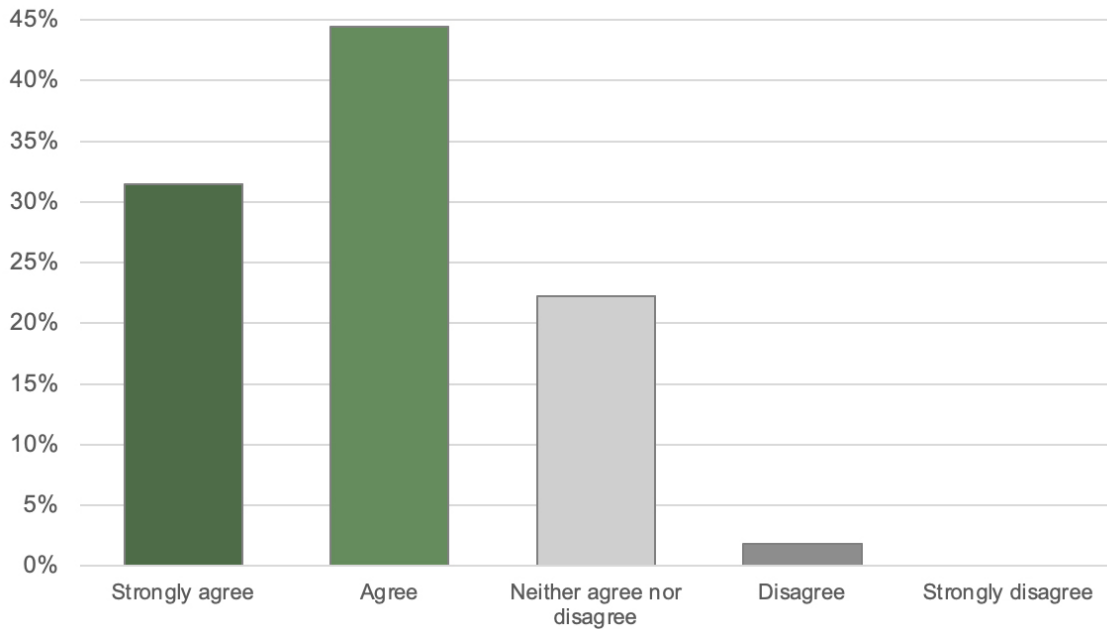
10. For the following statement, please indicate your level of agreement. By educating the public on the uses and benefits of our renewable energy resources (e.g. electric cars, fuel switching/electrification), we can maximize the provincial use of our renewable electricity grid.



10b. If a person selects “Agree” or “Strongly agree” above: What method(s) do you believe Government should use to help education the public on the uses and benefits of our renewable energy resources?	
Theme	# of Responses
Community consultation	2
Public reports/briefings	2
GNL electrify own space heating and transport	1
<b>Total</b>	<b>5</b>

## Vision

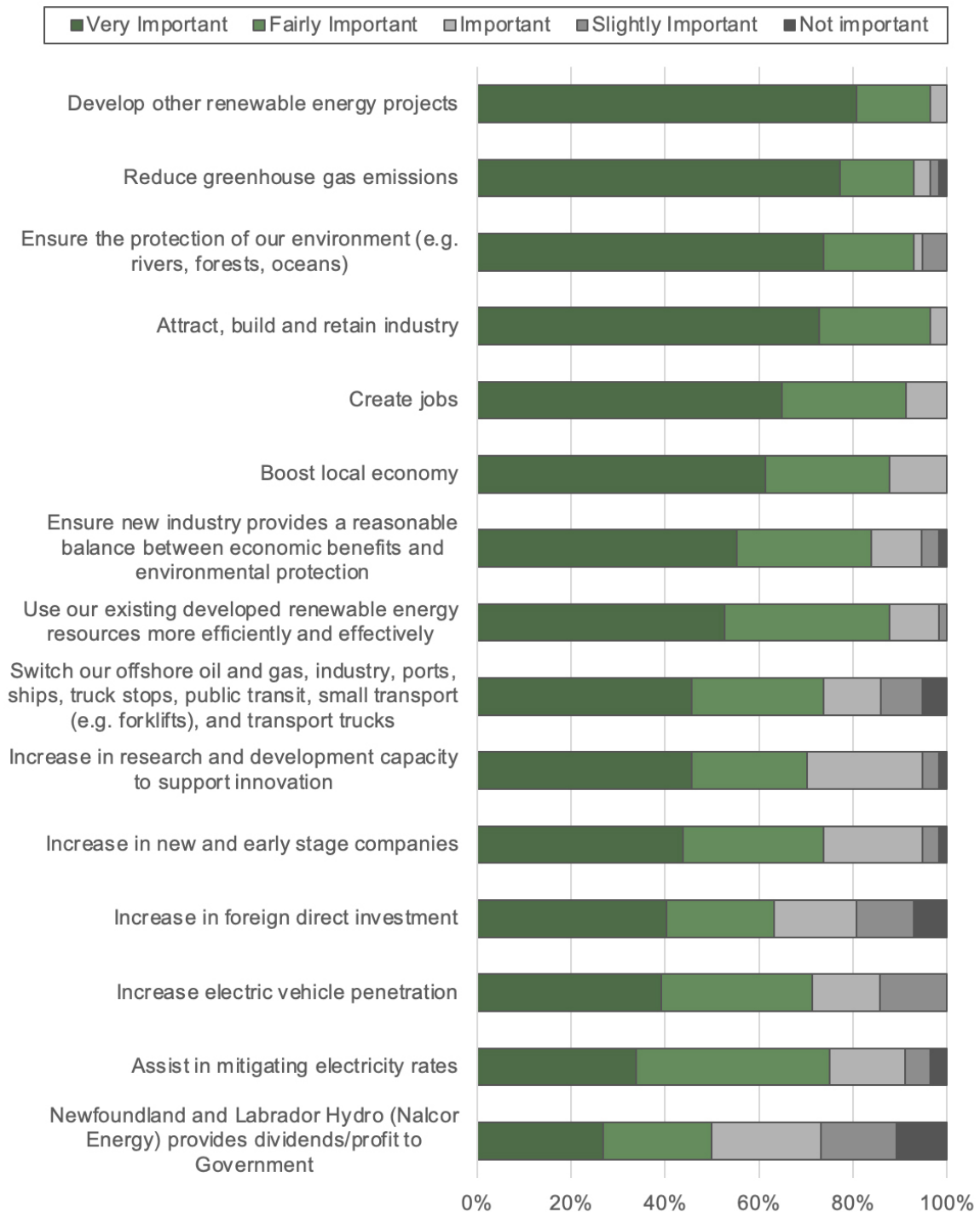
11. Please indicate your level of agreement to the below draft vision:  
 “Newfoundland and Labrador is a thriving energy supplier, maximizing the sustainable development and use of its renewable energy resources and systems to deliver affordable and reliable renewable energy to the people of the province and beyond.”



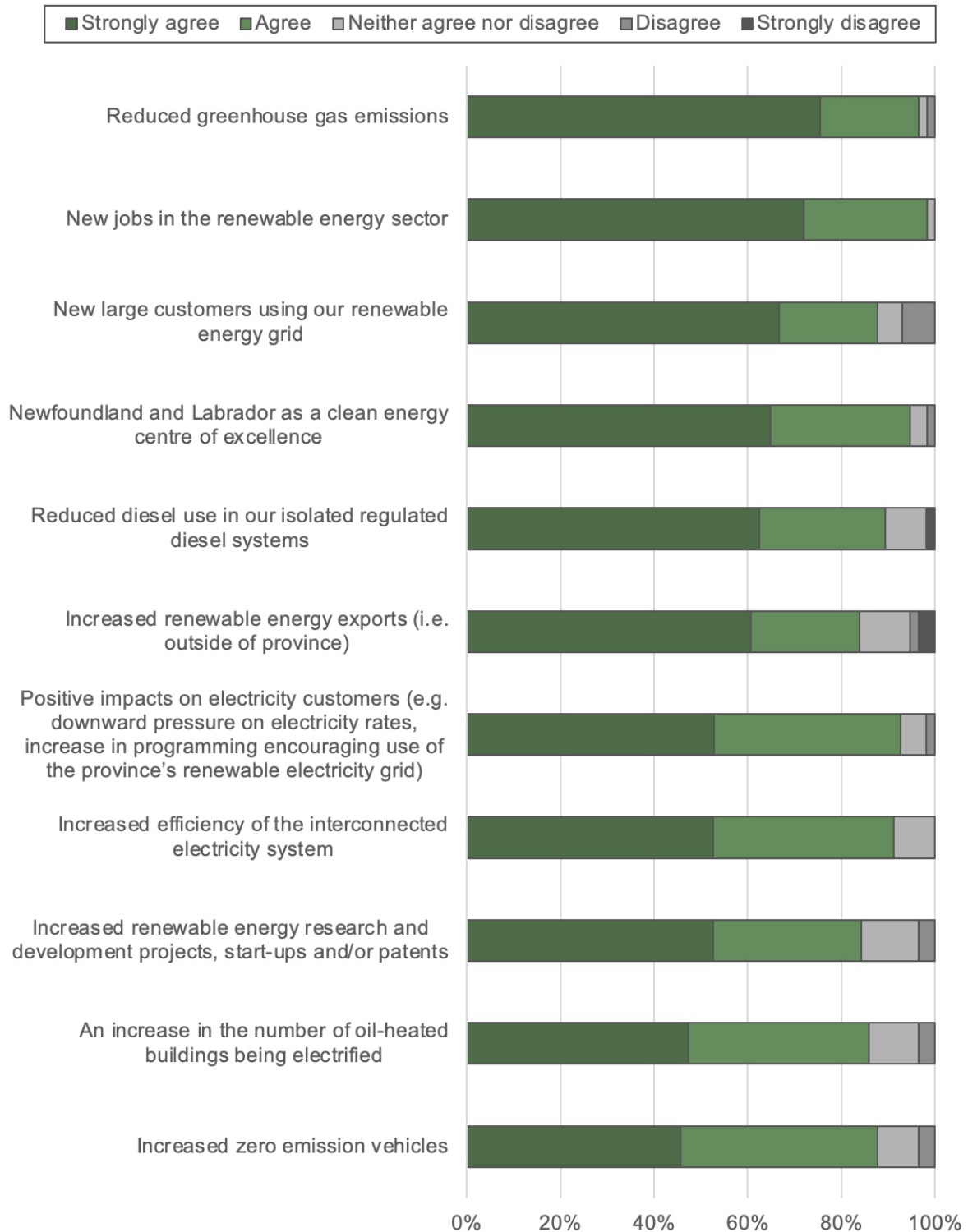
12. If there are any wording changes you would like to see to the draft vision, please specify below:	
Word Changes	# of Responses
Add job component	3
Add benefits to industry	1
Add commitment to eliminate fossil fuel	1
Add environmental component	1
Add export	1
Add green	1
Add maximize development	1
Add to the people and industry	1
Delete thriving	1
Include niche areas (e.g. offshore)	1
Other	9
<b>Total</b>	<b>21</b>

## Measuring Success

13. How important are the following in a Renewable Energy Plan for Newfoundland and Labrador?

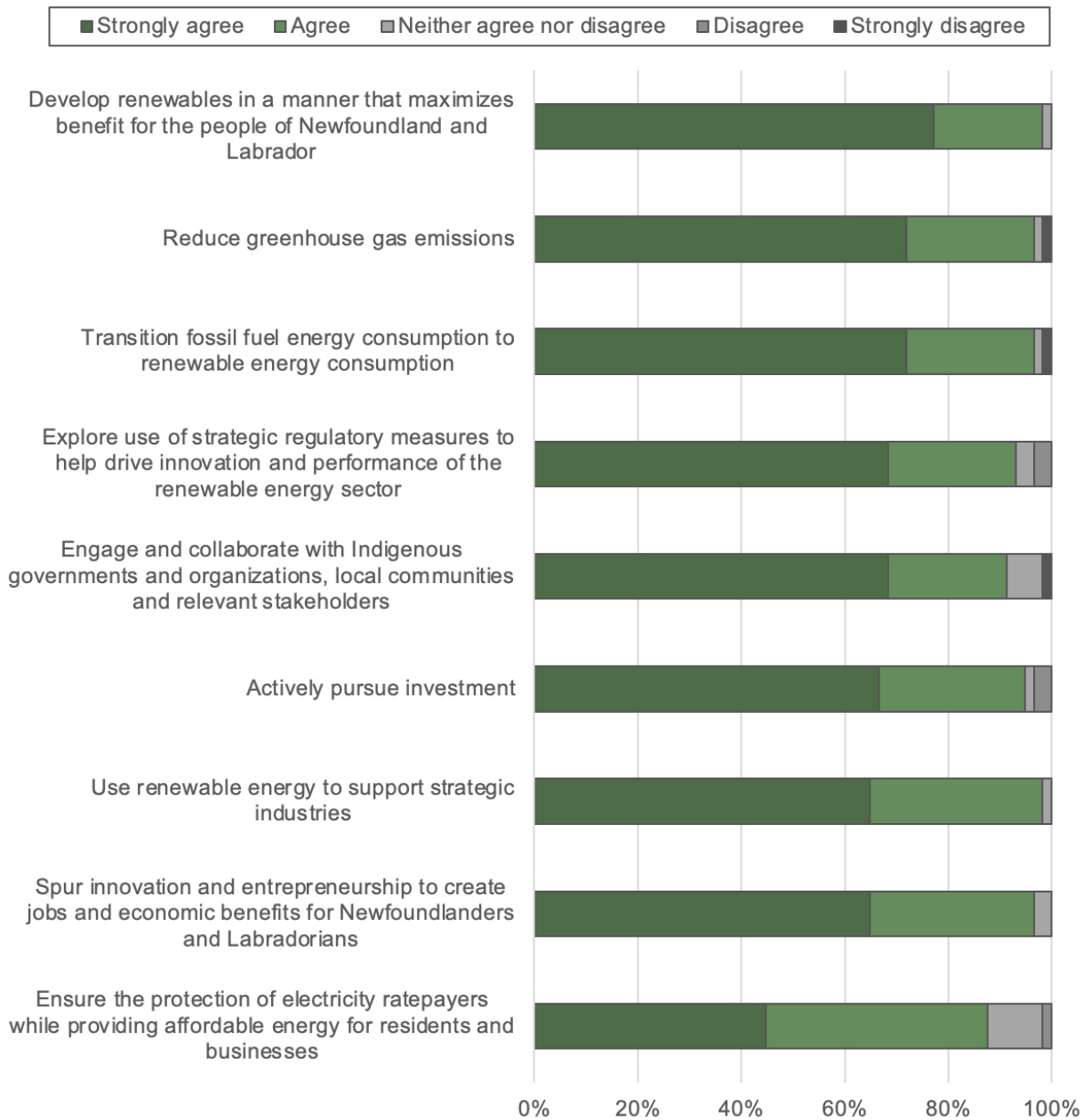


14. For each of the potential principles below, please indicate your level of agreement. By 2030, we envision:



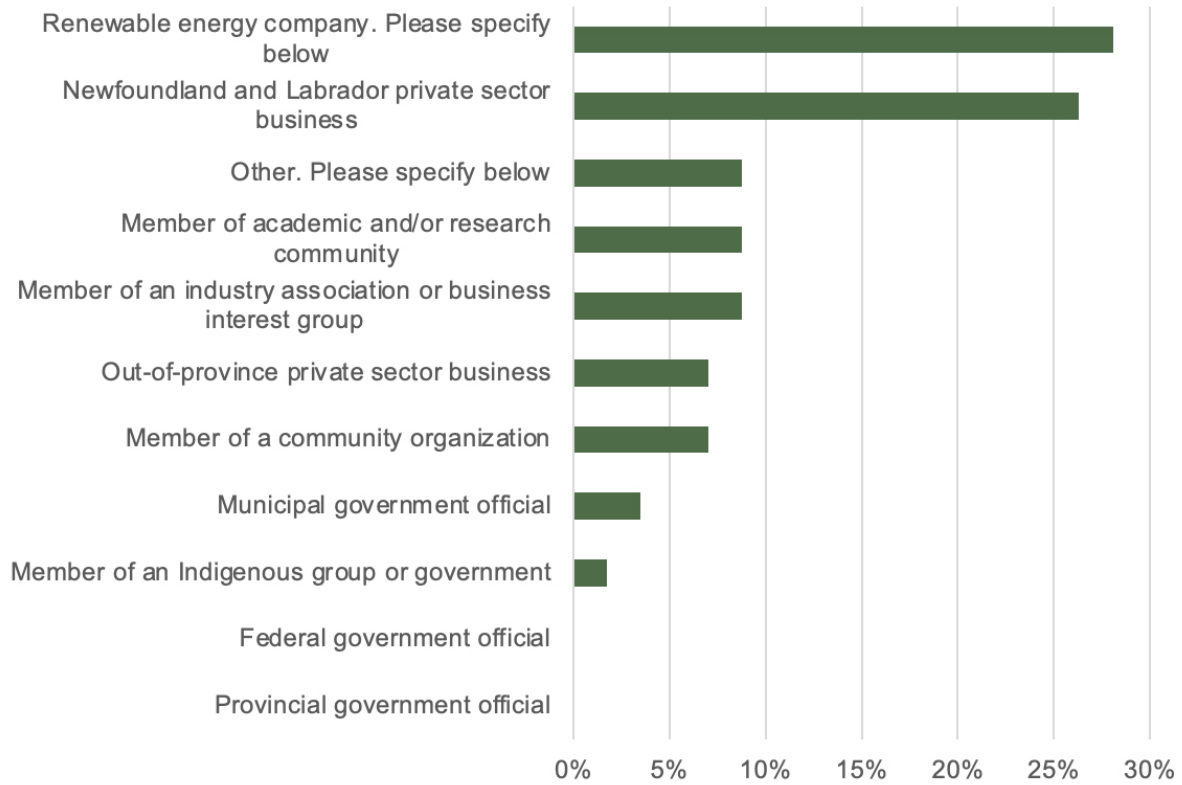
## Principles

15. Actions to achieve our objectives will be guided by principles. For each of the below statements, please indicate your level of agreement. We will:



## Demographics

16. I am answering these questions primarily as a:



<b>16b. If you are answering primarily as a representative of a Renewable Energy Company, please specify (wind, solar, etc.)</b>	
<b>Renewable Energy Company Type</b>	<b># of Responses</b>
More than one	7
Wind	3
Green hydrogen/ammonia	1
Hydro	1
Hydrogen	1
Biofuel	1
Recovered waste fuel	1
Solar	1
<b>Total</b>	<b>16</b>

<b>16c. If other, please specify.</b>	
<b>Type</b>	<b># of Responses</b>
Renewable Energy Company	1
Municipal government employee	1
Port Authority	1
Utility	1
Industry Association	1
<b>Total</b>	<b>5</b>



## Public Questionnaire

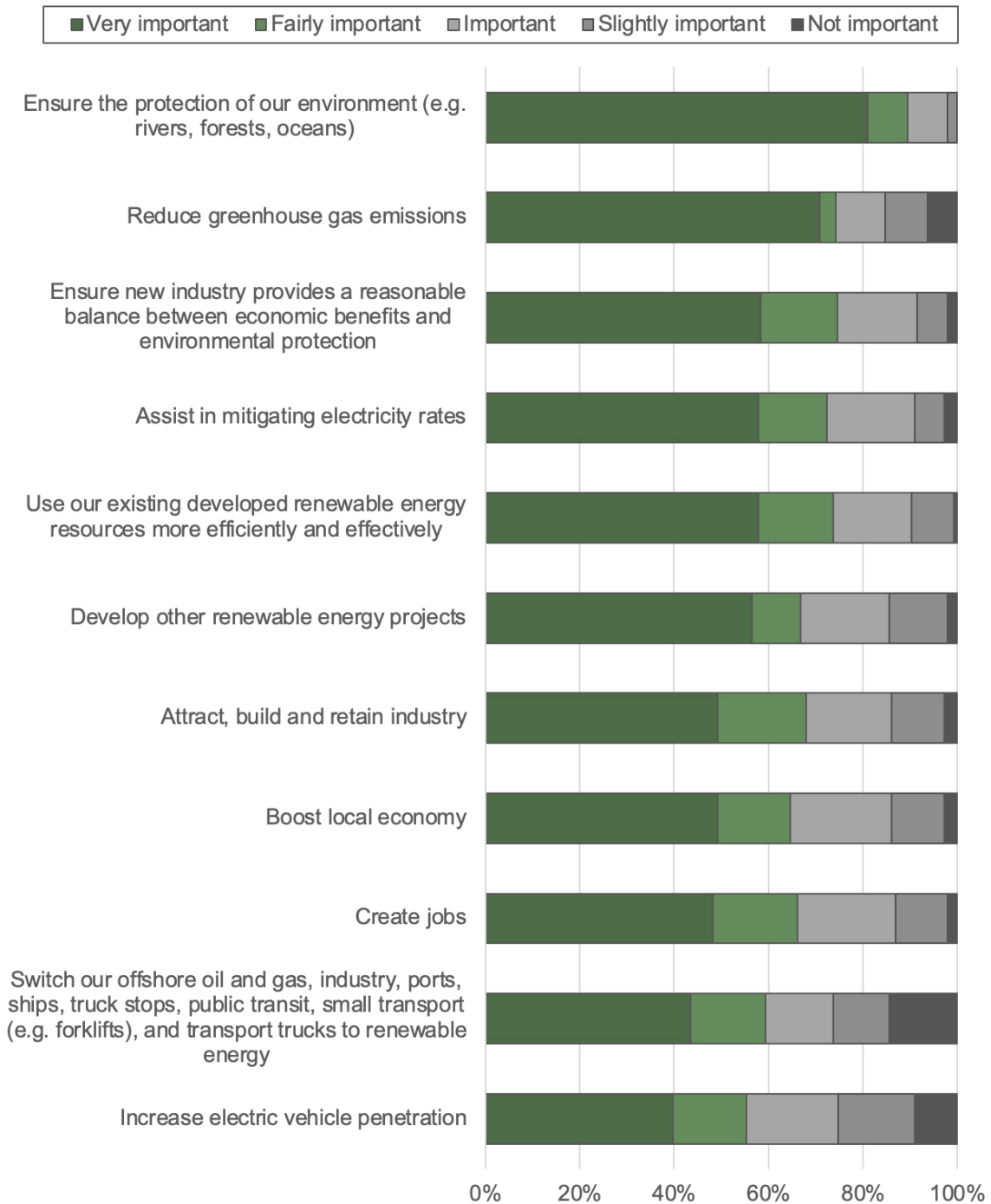
A total of 145 industry and stakeholder members completed the questionnaire. The breakdown is as follows:

Public Questionnaires	
132	Public
3	Business
2	Members of a community organization
4	Member of an Indigenous Government or Organization
4	Other
<b>145</b>	<b>Total</b>

A small minority of the above respondents did not answer every question. As such, below chart data for the questionnaire reflects the percentage of respondents that responded under each individual question. Items within each chart are also in order to reflect the highest percentage of respondents who indicated “Strongly agree” or “Very important.” Finally, for open-ended questions (e.g. “If other, please specify”), Industry, Energy and Technology has rolled this information into categories to assist the reader.

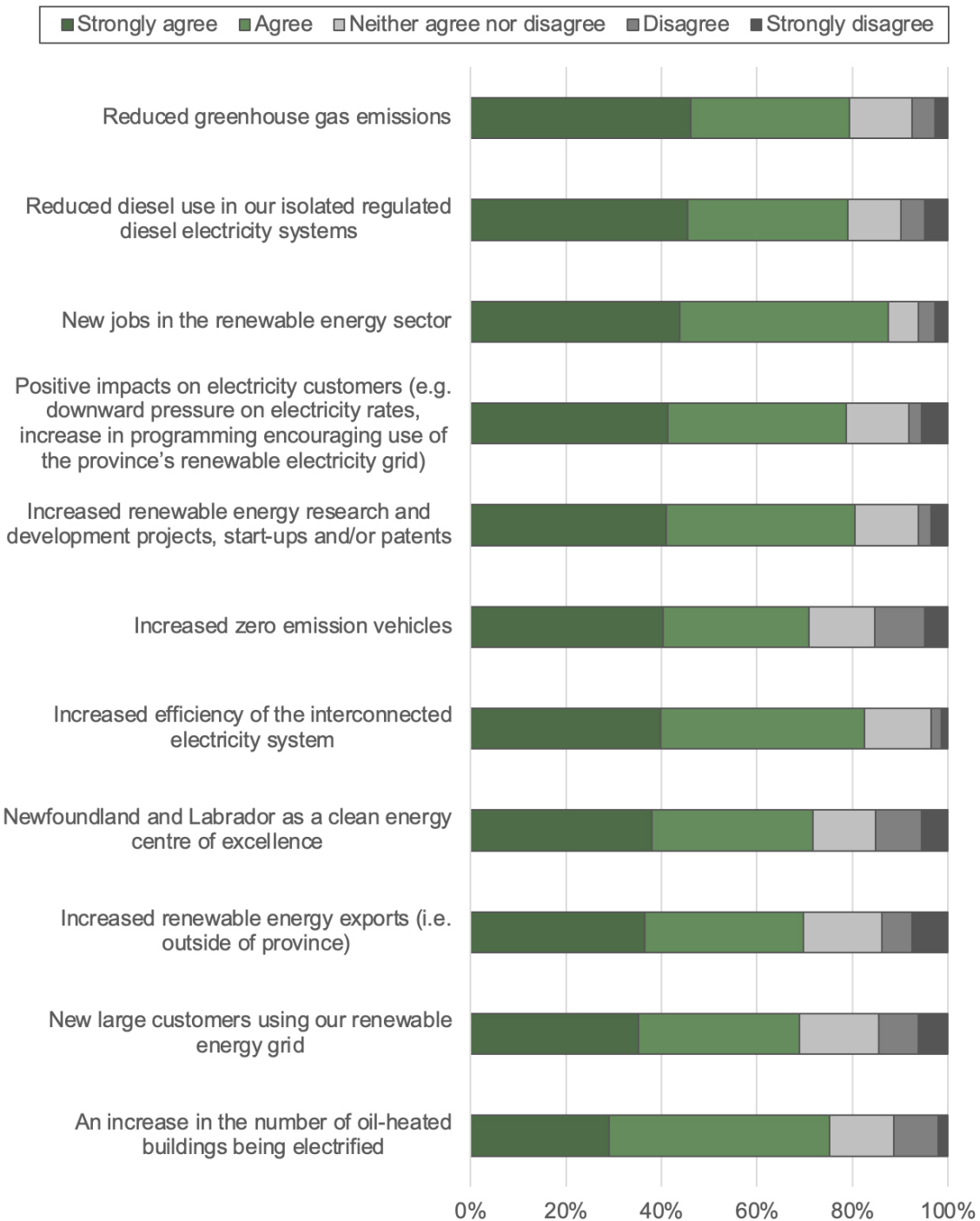
A summary of the data received under each question of the Public Questionnaire is as follows on the next page.

## 1. How important are the following in a Renewable Energy Plan for Newfoundland and Labrador?



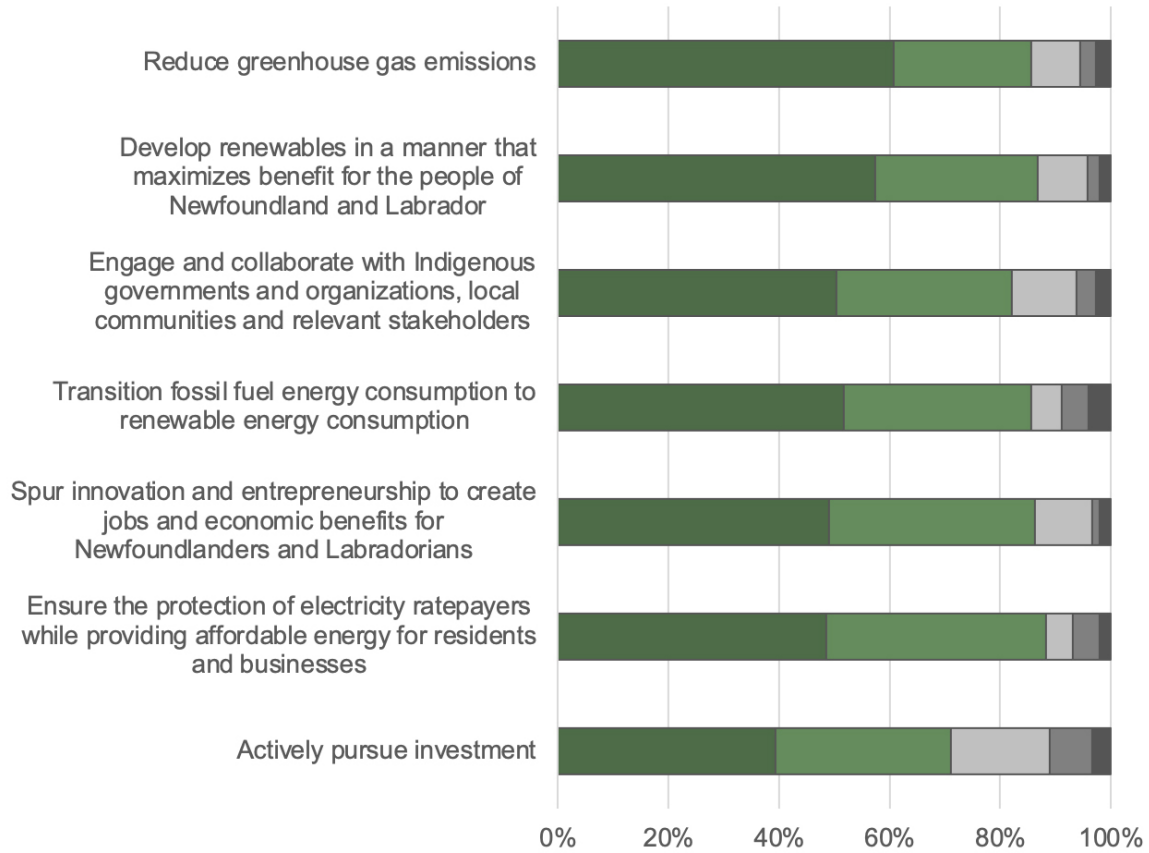
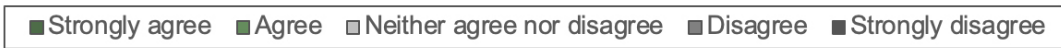
## Measuring Success

2. For each of the potential principles below, please indicate your level of agreement. By 2030, we envision:



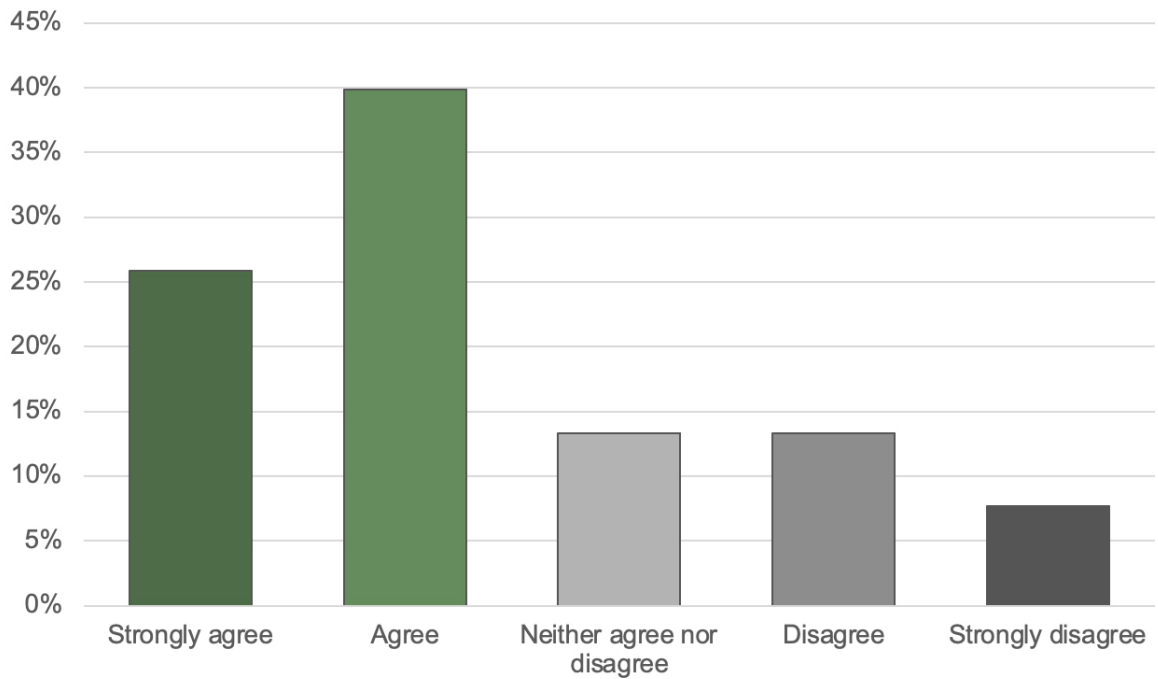
## Principles

3. Actions to achieve our objectives will be guided by principles. For each of the below statements, please indicate your level of agreement. We will:



## Vision

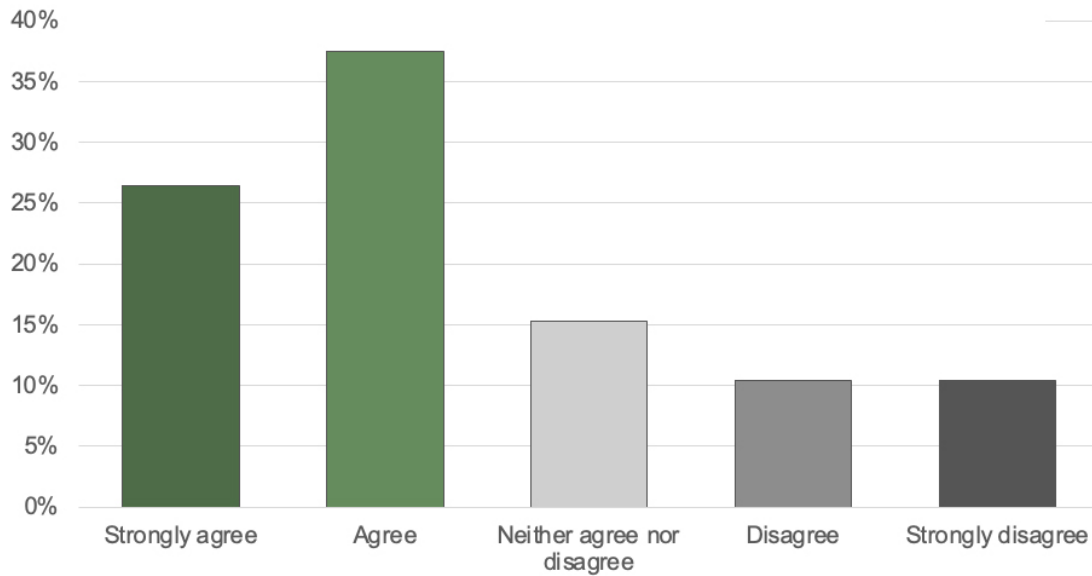
4. “Newfoundland and Labrador is a thriving energy supplier, maximizing the sustainable development and use of its renewable energy resources and systems to deliver affordable and reliable renewable energy to the people of the province and beyond.”



<b>4b. If there are any wording changes you would like to see, please specify below:</b>	
<b>Word Changes</b>	<b># of Responses</b>
Add environmental component	7
Add Indigenous	5
Add commitment to eliminate fossil fuel	4
Delete thriving	4
Other	4
Add value of NL oil and gas industry	3
Delete and beyond	3
Add net zero/GHG reduction commitment	3
Add export	2
Add commitment to electrify GNL space heating/transport	1
Add energy efficiency	1
Add focus on Labrador	1
Add global energy supplier	1
Add intends	1
Add private investment	1
Add pursuit of technology	1
Add renewable	1
Shorten	1
<b>Total</b>	<b>44</b>

## Public Education

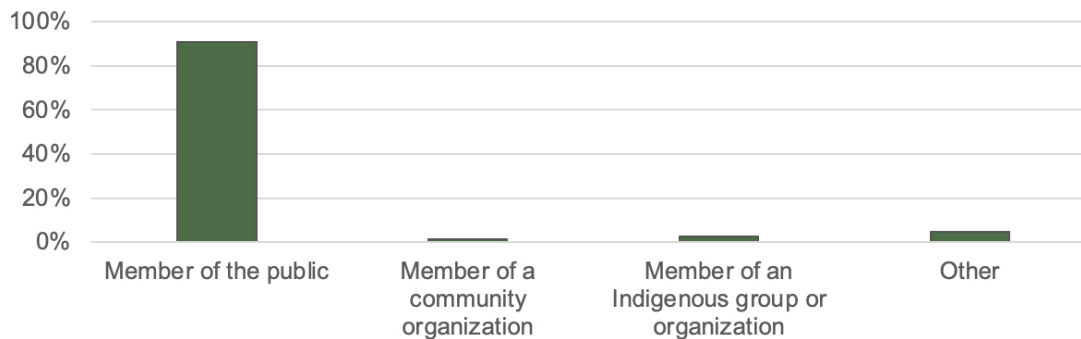
5. Please indicate your level of agreement for the following statement: By educating the public on the uses and benefits of our renewable energy resources (e.g. electric cars, fuel switching/electrification), we can maximize the provincial use of our renewable electricity grid.



<b>5b: If there are any wording changes you would like to see, please specify.</b>	
<b>Word Changes</b>	<b># of Responses</b>
School curriculum (K-12)	5
Demonstration projects	3
Incentives	3
School curriculum (post-secondary)	2
Assessment tool	1
Community Outreach (e.g. Town Hall Meetings)	1
Discuss CC	1
Educate public on carbon emissions	1
Politicians	1
Remove incentives to oil companies	1
Renewable Energy Fair	1
<b>Total</b>	<b>20</b>

## Demographics

6. I am answering these questions primarily as a:



<b>6b: If other, please specify:</b>	
<b>Other</b>	<b># of Respondents</b>
Energy efficiency business	2
Environmental organization	1
Government employee	1
Political affiliate	1
Renewable energy company	1
Labradorian, volunteer or Indigenous Person	1
<b>Total</b>	<b>7</b>



## Written Submissions

As part of its fall 2021 consultation process, Industry, Energy and Technology received 39 written submissions from the public, industry and stakeholders (i.e. respondents). While the majority of submissions were received by the close of the engageNL consultation process on November 4, 2021, Industry, Energy and Technology provided an extension upon request, up to November 29, 2021. A breakdown of the written submissions is as follows.

**“Newfoundland and Labrador have unique renewable energy advantages that can be developed to extend its status as a Clean Energy Centre of Excellence.”**

These submissions ranged from a one-page email, to three-page letters, to reports. Upon request, Industry, Energy and Technology also held calls or virtual meetings with written submission respondents, to receive further clarity on their input.

### Themes

Feedback from written submissions identified the following themes for Industry, Energy and Technology to consider in the development of a renewable energy plan:

1. Project size and type
2. Energy uses/markets
3. Indigenous engagement and participation
4. Regulatory framework
5. Industry support and partnership
6. Research and development
7. Training and jobs
8. Link to environment/net zero

The following subsections provide an overview of the input received under each of the above themes.

#### **1. Preferred project size and type**

Of the 35 written submission respondents, 16 identified preferences for the type and size of future

**“With its abundance of renewable resources, NL well positioned to be a leader in this green transition”**

renewable energy projects in the province. While some recommended the province “think big” to attract investment, others recommended the development of small scale renewables first to address the province’s current electricity needs and to reduce the risk of cost overruns. Options put forward for development included: hydro, wind, biomass, solar, and wave/ tidal. Further, some submissions suggested that the province’s renewable energy plan should include energy efficiency, and the consideration of non-renewables. A summary of the written submission views is as follows.

### **Large-Scale Hydro (e.g. Gull Island):**

- Pursue development to enable further electricity export and/or the development of new industry in the province. This was mainly suggested by industry and industry associations.
- Avoid large-scale hydro in favor of smaller renewable energy developments (e.g. small hydro, wind). This was raised by two Indigenous Governments/ Organizations, and numerous members of the public.

### **Small-Scale Hydro:**

- Pursue small hydro projects, specifically run of river, as it will likely have: a smaller environmental impact than large-scale hydro; a reduced risk of cost overruns; socio-economic development opportunities for rural communities; and the ability to increase the reliability of the electrical system.
- Avoid small hydro on salmon rivers and/or the use of dams, to ensure no impact on the province’s salmon fishery.

### **Wind:**

- The province has a consistently strong wind resource that few can match.
- Onshore wind development, in conjunction with batteries, can enable industry development, and provide reliability to the electricity grid.
- Offshore wind has the potential to electrify the offshore oil and gas industry, and develop new industry, including produce green hydrogen/ ammonia for export.

### **Biomass:**

- Use saw mill by-products (i.e. steam, hot water, biomass) to displace fossil fuel heating in buildings.
- Ensure sustainable forest management.
- Avoid including wood in a renewable energy plan, as burning wood releases the carbon dioxide that has been sequestered by the trees.

### **Wave/Tidal:**

- Very powerful resources offshore - more dense, predictable and reliable than other renewables.

### **Solar:**

- Opportunities for small-scale community-based solar in certain areas of the province (e.g. parts of northern Labrador).
- Government may wish to consider installing solar panels on public buildings.

### **Energy Efficiency:**

- Numerous submissions indicated that energy efficiency provides the best value per investment dollar, and provides opportunities to flatten peak, making more efficient use of the province's current developed renewables. As such, a number of respondents felt a renewable energy plan would not be complete without including it. For example, including targets for the energy retrofit of commercial and residential buildings.

### **Consider Non-Renewables:**

- While the majority of the feedback focused on renewable energy projects, three submissions also outlined opportunities related to natural gas as a transitional fuel. A further submission also recommendation developing a holistic plan, considering renewables and non-renewables.

## **2. Energy uses/markets**

Respondents indicated that uses and markets for the province's developed and undeveloped renewable energy resources exist within and outside of Newfoundland and Labrador. Uses and markets identified by respondents are outlined as follows.

### **Diesel-Generated Electricity Systems:**

While the majority of the province's electricity is generated from renewables, there are still a number of isolated communities along the province's coasts that receive their electricity through diesel-generation provided by Newfoundland and Labrador Hydro. Of the respondents that identified uses or markets for the province's renewable energy resources, reducing or eliminating diesel-generated electricity in the province's isolated diesel systems was mentioned most frequently.

### **Considerations raised by respondents in pursuing this opportunity included:**

- Support community-led projects.
- Support Indigenous involvement/participation/ownership.
- Avoid building new diesel plants in favor of renewable or hybrid systems (e.g. halt Newfoundland and Labrador Hydro's application for a regional diesel in southern Labrador).

### **Export:**

- Use electricity transmission lines with neighboring provinces to export the province's excess energy for sale outside of Newfoundland and Labrador.
- Use the province's renewable electricity resources (e.g. onshore and/or offshore wind) to generate new green products such as green hydrogen, green ammonia or biofuel, and export the energy via ship.

### **Industry:**

- Use the province's high energy mix (approximately 98 percent renewable with the in-service of Muskrat Falls) as a marketing and branding tool to attract and retain industry.
- Find customers that will use energy, but not put upward pressure on peak.
- Help industry transition their fossil fuel powered operations to renewable energy (e.g. renewables for diesel-generated electricity, and other fossil fueled operations).

### **Electrify Transport and Space-Heating:**

- Use the renewable electricity grid to switch from fossil fuel use to green electricity, including for various forms of transportation (i.e. light, medium and heavy duty road vehicles, and marine vessels, including ferries), and oil-fueled space-heating in homes and buildings.
- Determine opportunities for port electrification (i.e. using electricity to power ships when idling at port).
- Explore the potential of electric public transit and an electric train across the Island.
- Better to use surplus energy within the province, as it provides greater value to ratepayers and can reduce our provincial greenhouse gas emissions.
- Establish short-term targets and policies to increase mass transit construction, zero-emission charging stations, and ferry electrification.

### **Current and Future Grid Needs:**

- The province's undeveloped renewables can: provide firm energy for its residents, increase reliability and resilience of the grid, and, provide power during periods of peak demand.
- Ensure all future provincial needs will be met by renewable energy.
- To maximize renewable energy opportunities, the province must explore the potential need to enhance its transmission system, and use tools to build a more flexible and modern electrical grid.

## **3. Indigenous engagement and participation**

Industry, Energy and Technology received written submissions from a number of the province's Indigenous governments and organizations.

Recommendations are outlined as follows.

- Enact a Diesel-Displacement Strategy for communities with Indigenous membership.
- Ensure strategy is built on the recognition of rights, partnership, and cooperation, consistent with the United Nations Declaration on the Rights of Indigenous Peoples, including free, prior, and informed consent.
- Create an independent power producer policy for remote communities, retaining provisions for Indigenous community ownership/control, and including a per kilowatt hour price of at least 90 per cent of the avoided cost of diesel fuel, with additional considerations for emissions reductions, improved local air quality, lessened wear-and-tear on equipment, etc.
- Mandate that renewable energy projects maintain majority community equity ownership.
- Establish project sizing caps to encourage distributed, small-scale projects.
- Focus on, and formalize support for, Indigenous-preferred sustainable and renewable energy priorities.
- Work with NL Hydro to overcome 'minimum load variation' challenges in remote communities via direct financial support or mandated renewable energy targets.
- Establish an energy security working group for each interested Indigenous government/organization, to meet quarterly, with representatives from NLH, Industry, Energy and Technology and relevant others.
- Ensure energy projects in a region with Indigenous representation are: community-led; renewable energy-based; follow relevant agreements and permits; and are affordable.
- Do not focus on hydrogen in short-term.
- Renewable energy projects should not proceed without the free, prior and informed consent of relevant Indigenous governments/organizations.
- Support the capacity building needs of Indigenous governments/ organizations as efforts to scale up commercial energy occurs.
- Provide opportunity for the province's Indigenous people to fully participate in the green economic recovery.
- Partnerships between the provincial and federal governments, and Indigenous governments/organizations, should focus on forging constructive relationships based on open dialogue and trust.
- Establish tangible steps to advance education and training for Indigenous people (e.g. project planning, skilled trades, evaluation, and project oversight), to ensure the successful development of any future large-scale renewable projects.
- Work together to obtain federal funding to support development of renewable energy resources.

#### 4. Regulatory framework

A number of respondents recommended that Industry, Energy and Technology review the province's legislation, regulations and policies to ensure it enables renewable energy development.

##### Submissions included:

- Review/change/simplify the current regulatory framework, including legislation (e.g. Electrical Power and Control Act, 1994), to enable generation and transmission by parties other than a utility.
- Establish a dedicated and streamlined wind/hydrogen workstream for: Crown Lands Division; EA process; and Indigenous/community consultation.
- Revise legislation/policy to:
  - Ensure the regulator and utility consider factors, including: social license, environment and economic development impacts.
  - Require Newfoundland and Labrador Hydro to support renewable energy growth.
  - Use the private sector for new generation.
  - Ensure the province maintains its 98 percent renewable generation.
  - Lift the wind moratorium.
  - Consider wind capacity factors in decision-making.
  - Expand the utility's net metering programs (i.e. allow meter aggregation and increase 100 kW limit).
  - Develop regulatory frameworks for renewable development (e.g. offshore wind, tidal).
- Align other Government policies to use/complement renewable energy (e.g. revise building codes to increase electrification).
- Obtain regulatory lessons learned from the: province's current joint oil and gas regulatory framework; Atlantic Accord; and enabling legislation in other jurisdictions (e.g. Alberta's Renewable Electricity Act and Alberta Electric System Operator).
- Form a provincial renewable energy development corporation.
- Work with the Government of Canada to establish legislation/regulations to enable offshore wind development.
- Ensure any changes do not result in higher electricity rates.
- Halt any further private investment and the privatization of provincial renewable energy assets or infrastructure.

#### 5. Industry support and partnership

##### Examples of ways to support and work with the renewable energy industry included:

- Explore the use of tax incentives and low electricity rates to enable industrial development (e.g. hydrogen).
- Create a targeted feed-in-tariff for isolated diesel systems.

- Consider exploring various partnership models with private sector to enable collaboration and innovation (e.g. direct equity participation).
- Leverage local expertise and partnerships (e.g. econext).
- Create a Provincial Council for Climate Transition including union, environmental, and community representatives to conduct assessments of current energy and climate policy, review job and skill requirements for the province, and make recommendations.
- Work with global experts with heavily capitalized strategic partners to bring large-scale projects to commercialization.
- Attract industry by: creating an attraction strategy, creating renewable energy development pathways and make public; identifying the province’s competitive advantages, barriers and explore solutions.
- Issue expressions of interest for: crown land; available excess energy; capacity on Maritime Link; Gull Island; Churchill Falls; and any near-term electricity generation.
- Leverage federal funding to assist with renewables in isolated diesel systems.
- Support businesses diversifying from oil and gas to marine renewable energy.
- Establish an independent working group to oversee implementation of the renewable energy plan (e.g. government, industry, Indigenous governments/ organizations, and academia).
- Work with the Government of Canada, Atlantic Provinces, and stakeholders to pursue the electrification of marine transport.

**“Newfoundland and Labrador must now invest in strategic partnerships with the private sector and build upon its experience in major project development to unlock the enormous economic potential inherent in the province’s wind and other renewable resources.”**

## **6. Research and development**

Various suggestions were provided to enhance the province’s focus on renewable energy research and development (R&D).

### **Suggestions included providing support for:**

- Create a space/sandbox for innovation, incubation, development and demonstration.
- R&D funding framework (e.g. funding program or innovation challenge) in collaboration with research entities (e.g. Energy Research and Innovation Newfoundland and Labrador).

- Research collaboration: joint research projects, graduate projects, student internships, short research assistant reports.
- NL “Future Domestic Growth Analysis” and a “Comparative Export Analysis” reports.
- Initiatives and private sector projects that reduce GHGs.
- Encourage utilities to support tech sector.
- Create a high-voltage direct current (HVDC) Centre of Excellence.
- Research/projects to understand:
  - Offshore wind (feasibility and potential)
  - Onshore wind and battery potential to assist grid demands
  - Marine renewable energy potential to decarbonize ocean industries (i.e. use offshore wind/wave/tidal/river current to decarbonize marine transport, aquaculture, oil and gas)
  - Hydrogen storage options
  - Renewable mining opportunities
  - Alignment of ports with export opportunities
  - Ramea’s wind-hydrogen-diesel project lessons learned
  - Technologies maximizing renewable energy
  - Enabling transmission upgrades
  - Electrical grid modernization

### **7. Training and jobs**

Respondents outlined the need to ensure Newfoundlanders and Labradorians have the skills needed to participate in, and grow, the province’s renewable energy industry.

#### **Suggestions included:**

- Conduct a long-term labour market assessment to anticipate skilled labour requirements.
- Develop relevant renewable energy training programs in conjunction with academia and stakeholders.
- Provide job training to help oil and gas workers transition to renewable energy.
- Ensure appropriate training for renewables, as well as complementary industries (e.g. mining for metals needed for renewable energy technologies).
- Build competency in: green hydrogen, HVDC transmission links, and renewables in arctic environments.
- Use project labour agreements, community benefit agreements, and local hiring agreements, to ensure local workers participate in new renewable energy projects.



- Ensure there are targeted hiring mandates in place, for renewable energy projects, that will promote participation of women, people of colour, and economically disadvantaged communities, or communities heavily affected by climate change.
- Engage unions in planning for labour force needs, training, apprenticeships, and community benefits.
- Establish domestic expertise and capacity for renewables development via a renewable energy team within government or an arm of government.

**“Emission reductions need to be at the heart of our planning and objectives as a society”**

## **8. Link to environment / net zero**

A number of respondents highlighted support for Industry, Energy and Technology developing a renewable energy plan, highlighting the global need to transition away from fossil fuels and for the province and its residents to play a role in reaching net zero commitments.

### **One respondent also recommended:**

- Legislating a new bill that lays out net-zero emissions targets to 2050, commits to reporting progress, and establishes clear mechanisms to ensure social equity and just transition for all of Newfoundland and Labrador’s communities.
- Committing to increasing the proportion of renewable energy in total energy use to 85 per cent by 2050, establish clear targets, and commits to annual reporting on progress.
- Institute a Provincial Climate Transition council consisting of representatives from unions, environmental non-governmental organizations (NGOs), expert researchers, and business to assess emission reduction and clean energy measures, forecast job and skill requirements, and ensure job quality standards.
- Examine linkages/opportunities with an enhanced carbon pricing system.

### **Specific recommendations included:**

- Analyze potential uses of the province’s renewable energy resources to determine the opportunities with the greatest greenhouse gas reduction per kilowatt hour of electricity and cost benefit to residents (including an analysis of other benefits).
- Ensure the protection of wildlife and ecosystems in any renewable energy planning, as well as ensuring land restoration after project development.
- Explore pairing carbon offset development opportunities with renewable energy development.

