



# **PUBLIC UNDERSTANDING OF ATLANTIC ELECTRICITY ISSUES**

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**CONSERVATION COUNCIL OF NEW BRUNSWICK**

**JULY 2021**

# OVERVIEW

- Survey method
- Analysis note
- Results in total and/or by province, variables driving results
- Topline results summary

# SAMPLE METHOD: ATLANTIC CANADA

- **Field dates June 18 – 29, 2021**
- **Online panel Narrative Research**
- **Total sample: 952**
  - **NB: 303**
  - **NL: 243**
  - **NS: 292**
  - **PEI: 108**
- **Male, 48%; Female, 52%; Other, 1%**
- **18-34: 24%; 35-54: 33%; 55+: 43%**
- **High school: 23%; College, Apprenticeship: 39%; University/Post: 37%**
- **City, 32%; Suburb, 25%; Small town, rural, 42%**
- **Political Ideology: Left 14%; Centre, 60%, Right, 13%**

# ANALYSIS NOTE

- **People don't often think about energy or electricity other than their bills**
- **For many questions about 1/4 to 1/3 of respondents are neutral, not sure; Opinions are highest for renewable energy and reasons for supporting or opposing energy sources: People know more about what they want than government gives them credit for**
- **We analyze the factors that influence having an opinion (positive or negative) and not having an opinion**
  - **People identifying as female, and people who are less motivated toward environmental goals, for example, are most often neutral or not sure**
- **This presentation focuses on provincial results and factors associated with having an opinion**

## DEFINITIONS

RATE EACH OF THE FOLLOWING ENERGY SOURCES  
IN TERMS OF WHETHER YOU AGREE OR DISAGREE  
THAT THEY REPRESENT 'CLEAN ELECTRICITY'

ELECTRICITY IS "EMISSIONS-FREE " WHEN...

# SOURCES THAT REPRESENT 'CLEAN ELECTRICITY': ATLANTIC (TOTAL AGREE %)



Solar

• 82%



Wind

• 80%



Hydro

• 59%

# SOURCES OF ELECTRICITY THAT REPRESENT “CLEAN ELECTRICITY”: (TOTAL AGREE %)

NB, NS, PEI FAVOUR NUCLEAR MORE THAN NL; CONFLICTED ON GAS



Coal

• 9%



Gas

• 31%



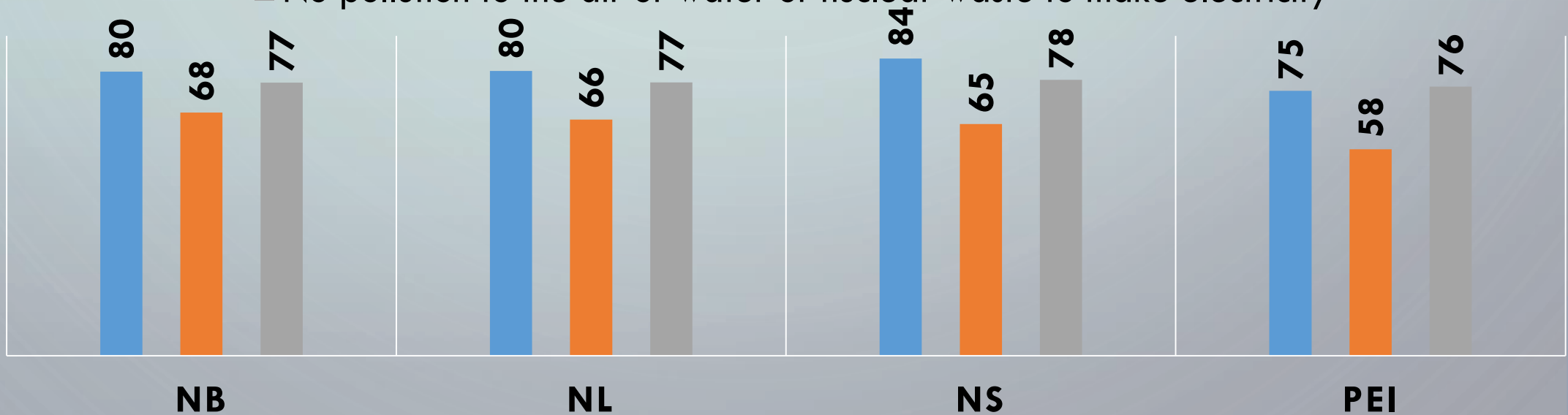
Nuclear

• 25%

# NO AIR, WATER OR NUCLEAR POLLUTION DEFINE “CLEAN ELECTRICITY” FOR THREE-QUARTERS OF RESPONDENTS

## ELECTRICITY IS CLEAN WHEN THAT ELECTRICITY GENERATES (TOTAL AGREE, %)

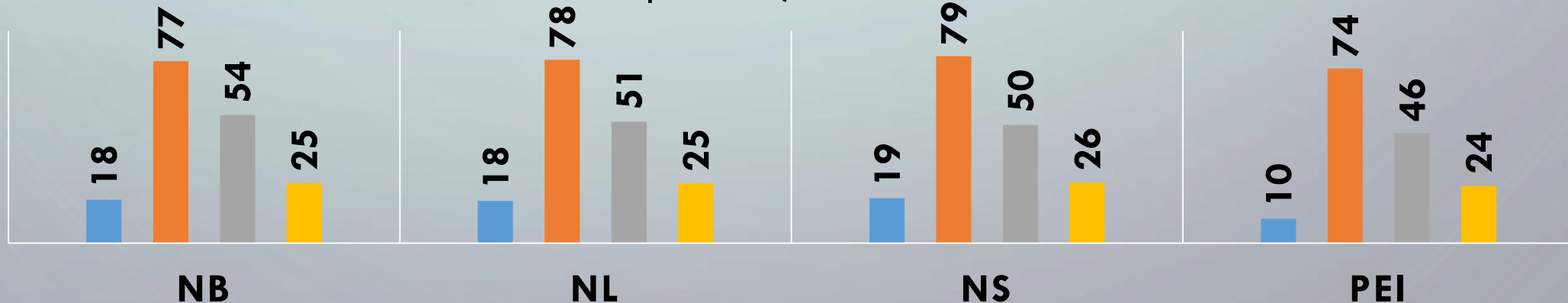
- No pollution to the air or water to make electricity
- No nuclear waste to make electricity
- No pollution to the air or water or nuclear waste to make electricity



# CARBON CAPTURE, NUCLEAR DO NOT DEFINE EMISSIONS-FREE; SOLAR, WIND, HYDRO DO

## ELECTRICITY IS EMISSIONS-FREE WHEN... (TOTAL AGREE, %)

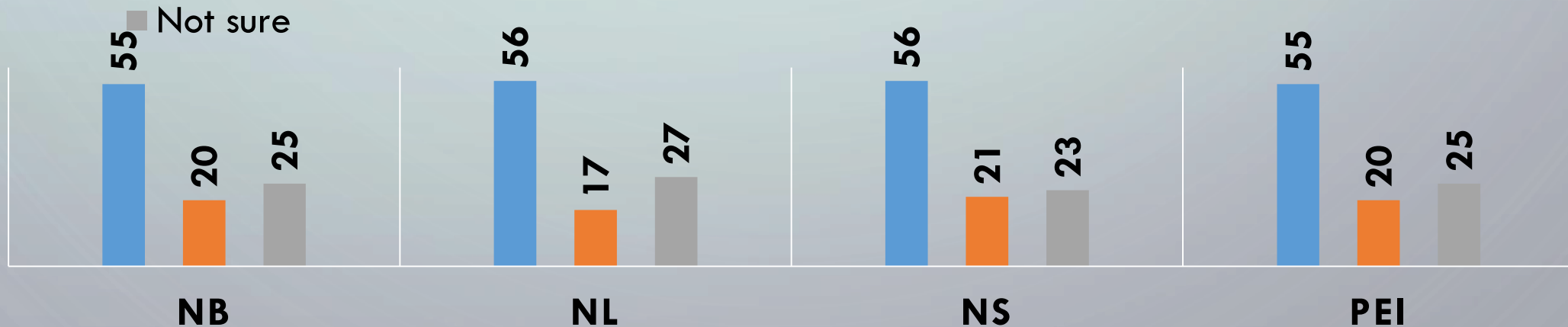
- Tailpipe or chimney stack pollution is captured and stored underground
- Electricity is generated with solar, wind or hydro
- There is no nuclear waste
- There is no air or carbon pollution, but there is nuclear waste



# OVER 50% AGREE OTHER ENVIRONMENTAL AND SOCIAL RISKS MEAN CLEAN SHOULD NOT APPLY TO NUCLEAR

## TERMS SUCH AS “CLEAN” AND “EMISSIONS FREE” SHOULD...(%)

- Not apply to nuclear power because there are other environmental or social risks associated with it
- Apply to nuclear power because it does not produce greenhouse gases





PLEASE INDICATE HOW MUCH YOU AGREE OR  
DISAGREE WITH THE FOLLOWING  
STATEMENTS.

# I WANT (SOURCE) POWERING MY ELECTRICITY (TOTAL AGREE, %)

Solar,  
Wind,  
Hydro

**71%**

From  
within  
Atlantic

**53%**

# I WANT (SOURCE) POWERING MY ELECTRICITY OR OPEN TO (TOTAL AGREE, %)

Large  
hydro  
dams

**40%**

Open  
to QC  
Hydro

**38%**

NL negative  
toward QC  
hydro

# I WANT (SOURCE) POWERING MY ELECTRICITY (TOTAL DISAGREE, %)


**SMRs**

**36%**

Less than  
 $\frac{1}{4}$  agree

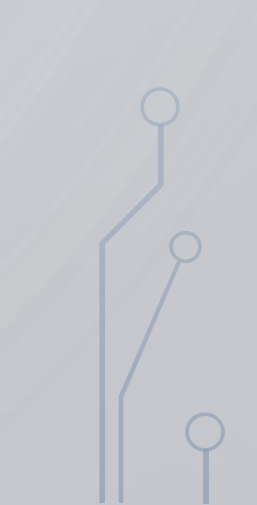

**Coal,  
oil,  
gas**

**57%**



THE FEDERAL GOVERNMENT IS REQUIRING UTILITIES IN NEW BRUNSWICK AND NOVA SCOTIA THAT BURN COAL TO CUT THEIR GREENHOUSE GAS POLLUTION BY AT LEAST HALF BY 2030. TO MEET THE NEW REGULATED STANDARD, UTILITIES MUST USE CARBON CAPTURE TECHNOLOGY\*, CLOSE THE PLANTS, OR SWITCH TO OTHER FORMS OF ELECTRICITY GENERATION.

UNDERSTANDING THAT THERE ARE COST IMPLICATIONS TO EACH OF THE OPTIONS BELOW, WHICH MAY IMPACT ELECTRICITY RATES, TO WHAT EXTENT DO YOU SUPPORT OR OPPOSE EACH OF THE FOLLOWING OPTIONS.



FOR COAL PHASE-OUT BY 2030, RESPONDENTS PREFER TO CLOSE PLANTS AND REPLACE WITH IN-PROVINCE RENEWABLES, THEN HYDRO FROM QC/NL (TOTAL SUPPORT %)

Solar,  
wind my  
province

**67%**

SMRs: 25%

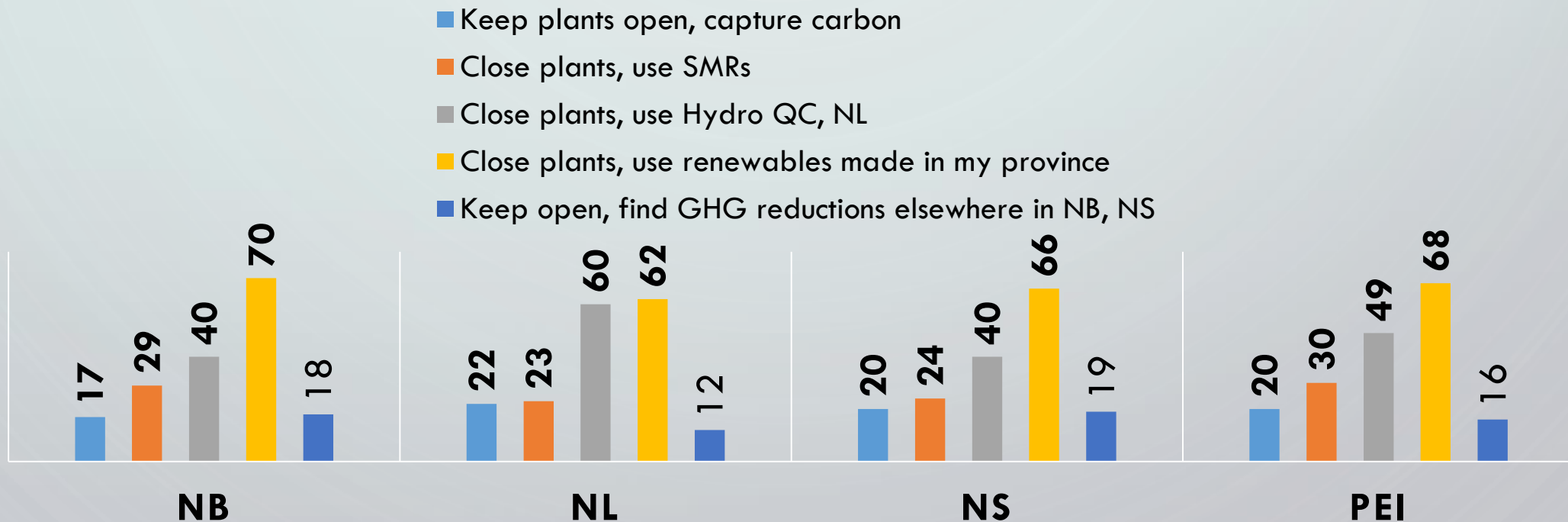
Hydro  
QC/NL

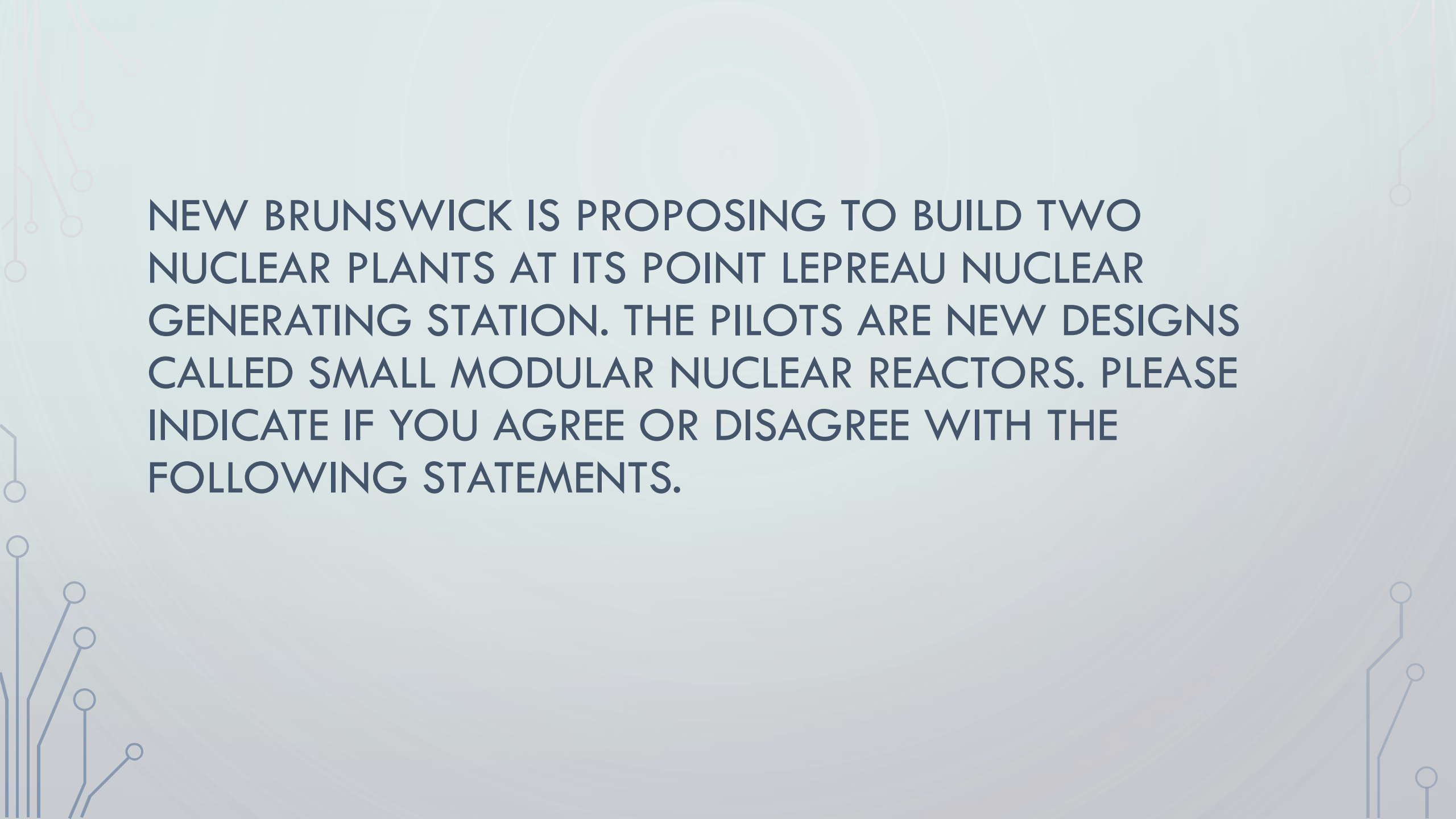
**47%**

NL most  
supports  
hydro

FOR COAL PHASE-OUT BY 2030, RESPONDENTS PREFER TO  
CLOSE PLANTS AND REPLACE WITH IN-PROVINCE RENEWABLES,  
THEN HYDRO FROM QC/NL: NL MOST STRONGLY SUPPORTS HYDRO

### NB/NS COAL PHASE-OUT OPTIONS, (TOTAL SUPPORT, %)



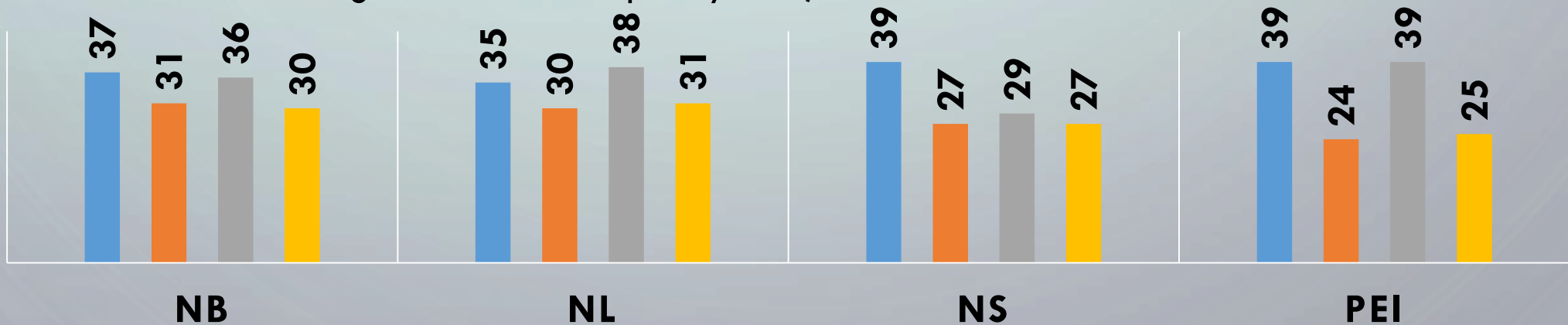
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NEW BRUNSWICK IS PROPOSING TO BUILD TWO  
NUCLEAR PLANTS AT ITS POINT LEPREAU NUCLEAR  
GENERATING STATION. THE PILOTS ARE NEW DESIGNS  
CALLED SMALL MODULAR NUCLEAR REACTORS. PLEASE  
INDICATE IF YOU AGREE OR DISAGREE WITH THE  
FOLLOWING STATEMENTS.

# ALMOST EVENLY SPLIT AMONG SMALL MODULAR NUCLEAR PILOT OPTIONS: HALF OR MORE NOT SURE OR NEUTRAL

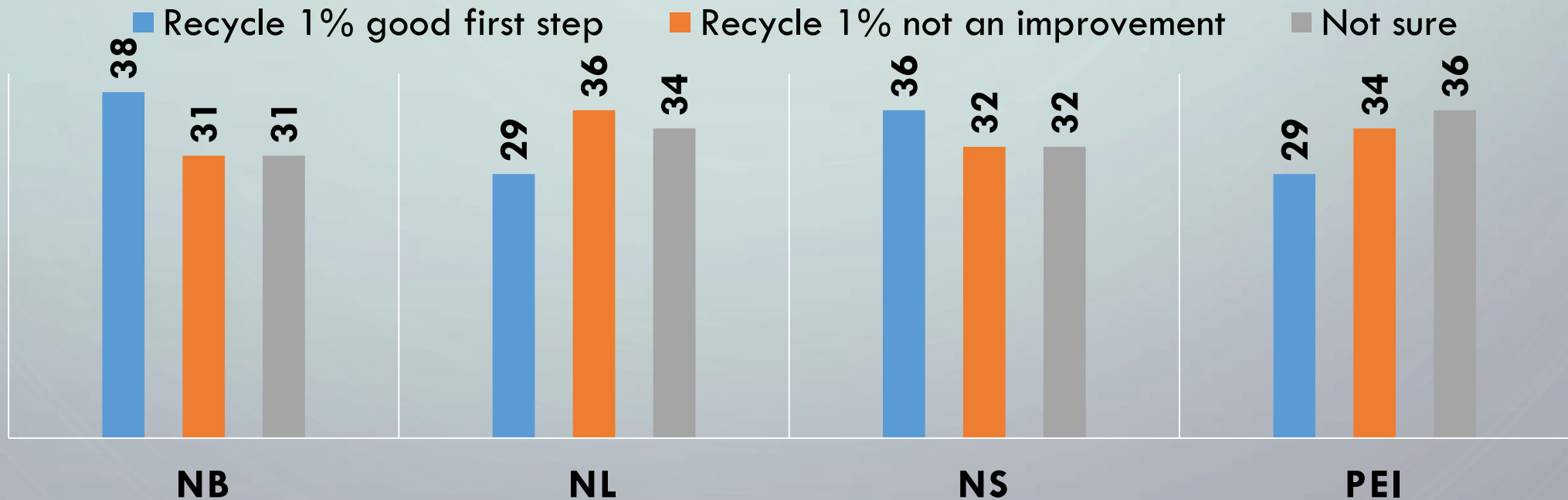
## SMALL MODULAR NUCLEAR REACTORS (TOTAL AGREE, %)

- SMR 10-15 years to build, can't wait, climate change means close fossil plants now
- Close fossil plants when SMRs ready
- Not enough renewable capacity now so need fossil, nuclear
- There is enough renewable capacity now, don't need fossil



# LESS THAN 4 IN 10 AGREE REPROCESSING NUCLEAR WASTE IS A GOOD IDEA; 1/3 NOT SURE

## PROPOSAL TO RECYCLE 1% OF SOLID NUCLEAR WASTE (%)





FACTORS THAT INFLUENCE YOUR OPINION OF AN  
ELECTRICITY SOURCE

ELECTRICITY SOURCES EFFECT ON RATES, RELIABILITY

VIEWS ON THE ATLANTIC LOOP

MOST IMPORTANT ASPECT WHEN IT COMES TO YOUR  
ELECTRICITY



# HEALTH, ENVIRONMENT, ECONOMY, NOT COST DRIVING EVALUATION OF ELECTRICITY SOURCES (TOTAL IMPORTANT, %)

**Natural  
environment**

• **91%**

**Health and safety**

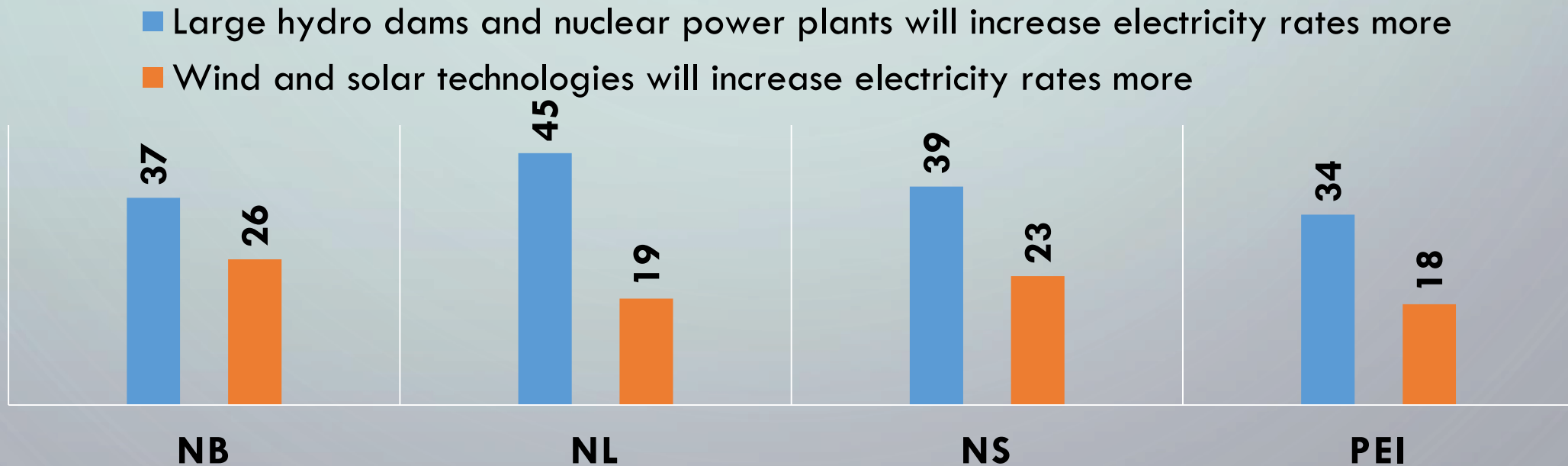
• **91%**

**Regional economy,  
consumers**

• **89%**

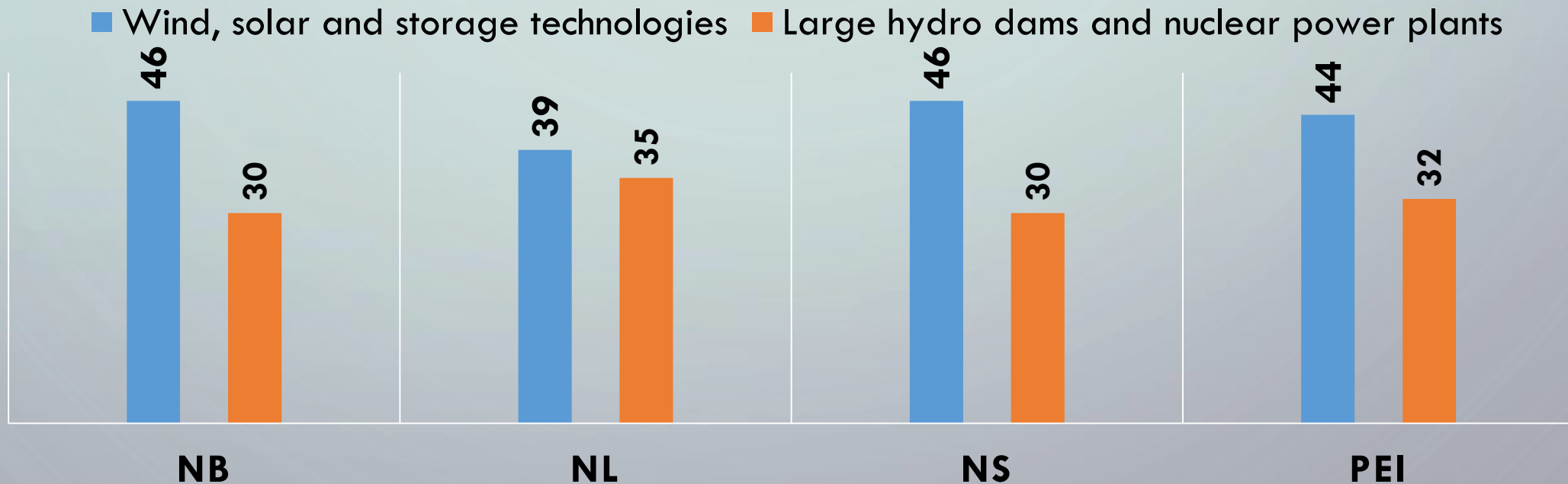
THOSE WITH AN OPINION SAY LARGE HYDRO, SMRS  
WOULD RAISE RATES MORE THAN RENEWABLES  
A THIRD TO HALF NOT SURE

### WHICH APPROACH COULD INCREASE ELECTRICITY RATES MORE (%)



**44 TO 46% SAY RENEWABLES ARE MORE RELIABLE  
THAN LARGE HYDRO, SMRS**  
NL LOWEST AND MORE EVENLY SPLIT; ABOUT 1/4 NOT SURE

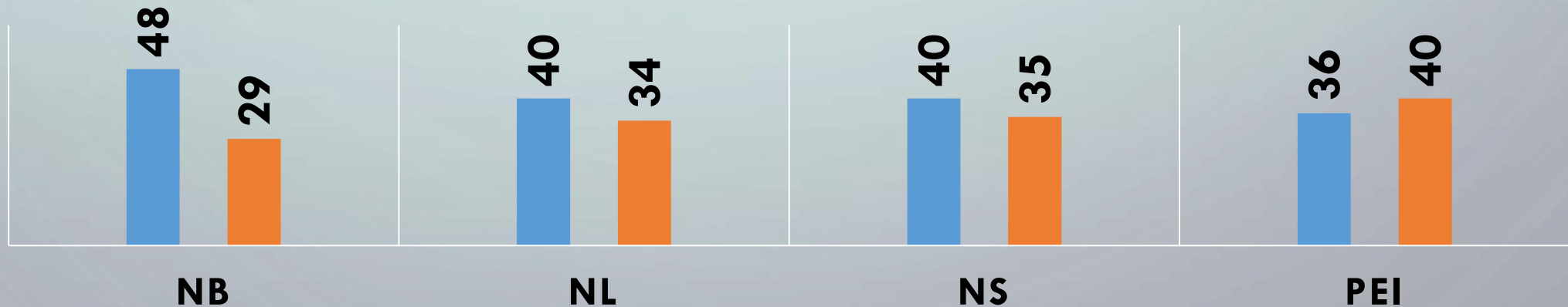
**WHICH APPROACH COULD INCREASE RELIABILITY  
MORE (%)**



**48% (NB) TO 36% (PEI) BELIEVE WE CAN SPEND THE SAME OR LESS ON ELECTRICITY WITH EFFICIENCY**  
NB MOST OPTIMISTIC; PEI LEAST OPTIMISTIC; ¼ NOT SURE

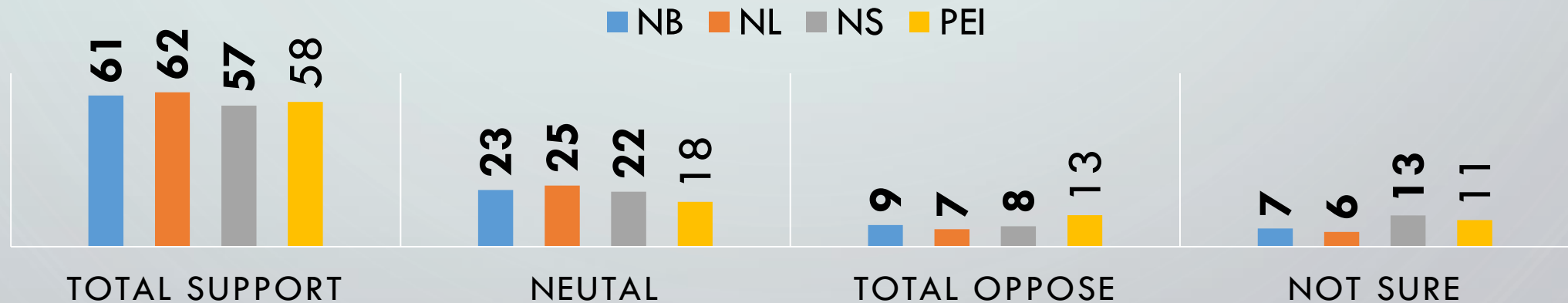
### **EFFECTS OF MORE ELECTRICITY POWERING OUR LIVES (%)**

- We will spend the same or less on electricity because we will be more energy efficient
- Electricity will cost more as we power more of our day-to-day activities



# ATLANTIC RESIDENTS ARE GENERALLY SUPPORTIVE OF THE IDEA OF AN ATLANTIC LOOP

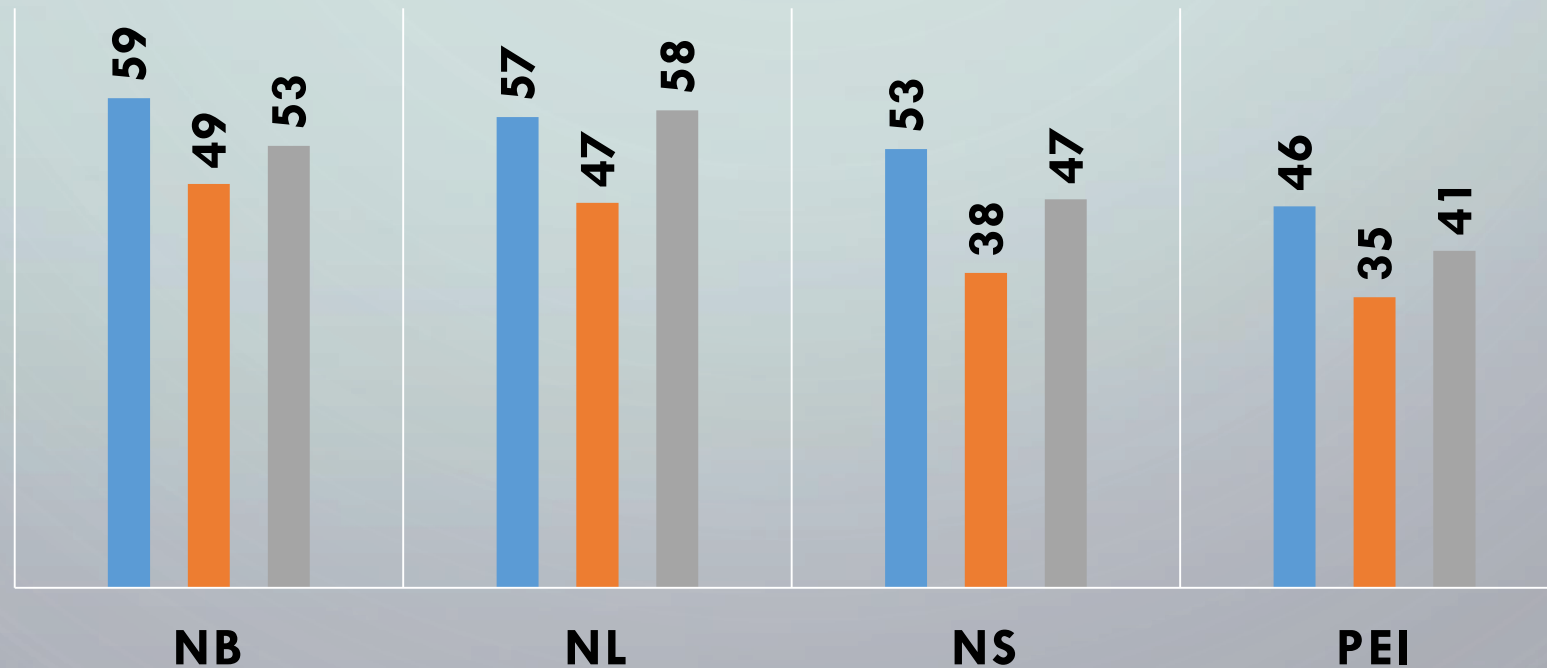
**THE ATLANTIC LOOP WOULD LINK THE ATLANTIC PROVINCES, AND QUEBEC TO CREATE A TRANSMISSION NETWORK TO TRADE ELECTRICITY AMONG ALL FIVE PROVINCES**



ATLANTIC LOOP MOST BENEFITS RELIABILITY, THEN SUSTAINABILITY;  
NS/PEI LEAST CONVINCED IT HELPS AFFORDABILITY; 1/3 NEUTRAL

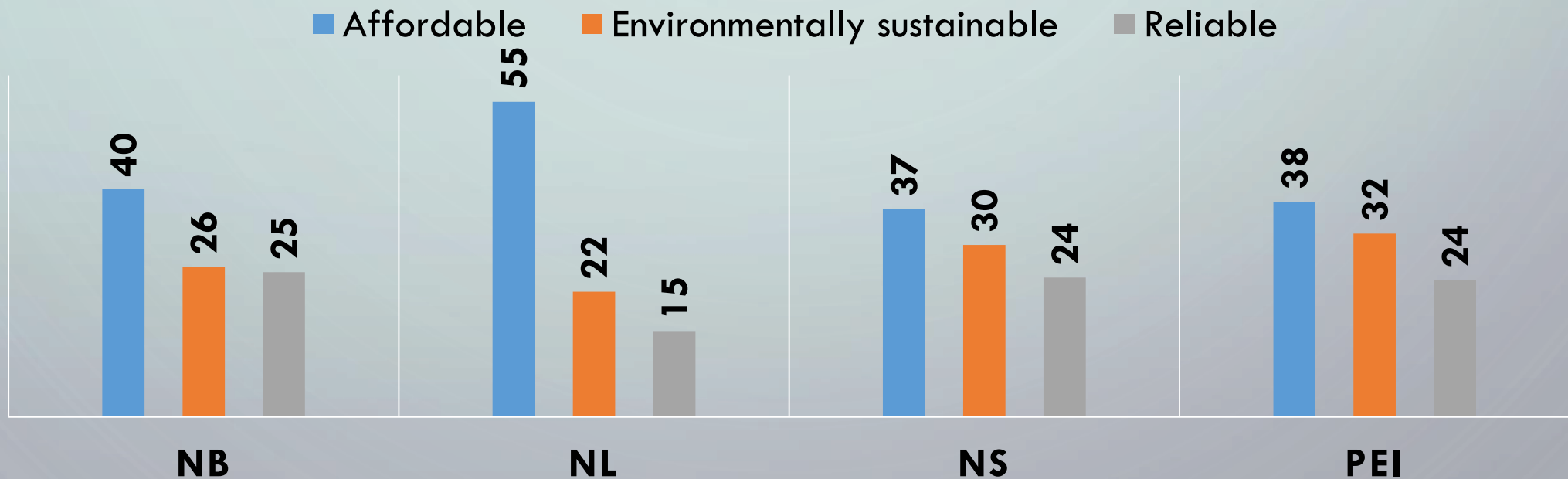
**THE ATLANTIC LOOP WILL MAKE OUR  
ELECTRICITY MORE...(TOTAL AGREE, %)**

■ Reliable ■ Affordable ■ Environmentally sustainable



# AFFORDABILITY IS MOST IMPORTANT ATTRIBUTE OF A PERSON'S ELECTRICITY, FOLLOWED BY ENVIRONMENTAL SUSTAINABILITY

## MOST IMPORTANT CONSIDERATION WHEN IT COMES TO "YOUR" ELECTRICITY (%)





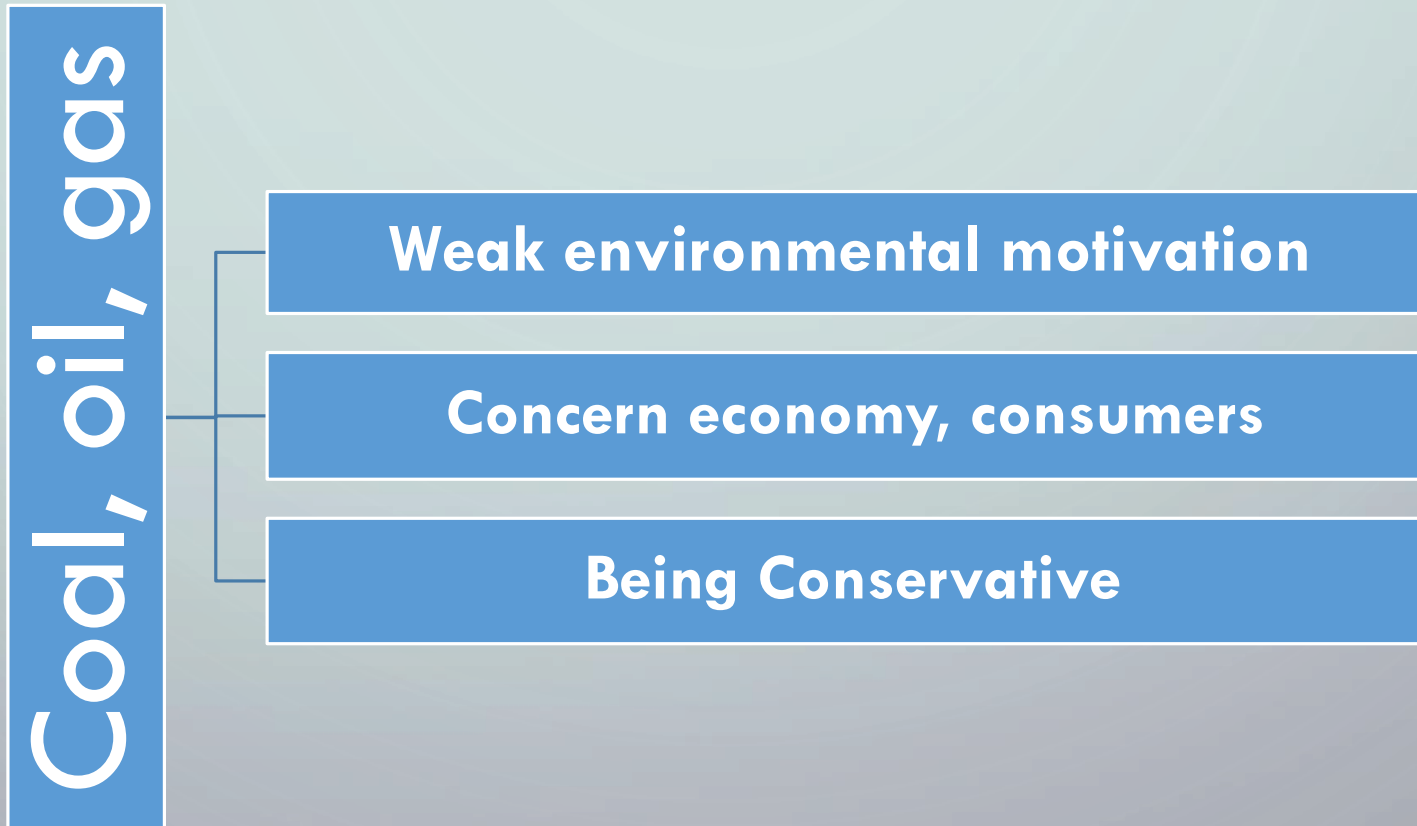
# **STATISTICAL ANALYSIS**

WHAT DRIVES OPINION AND SUPPORT?

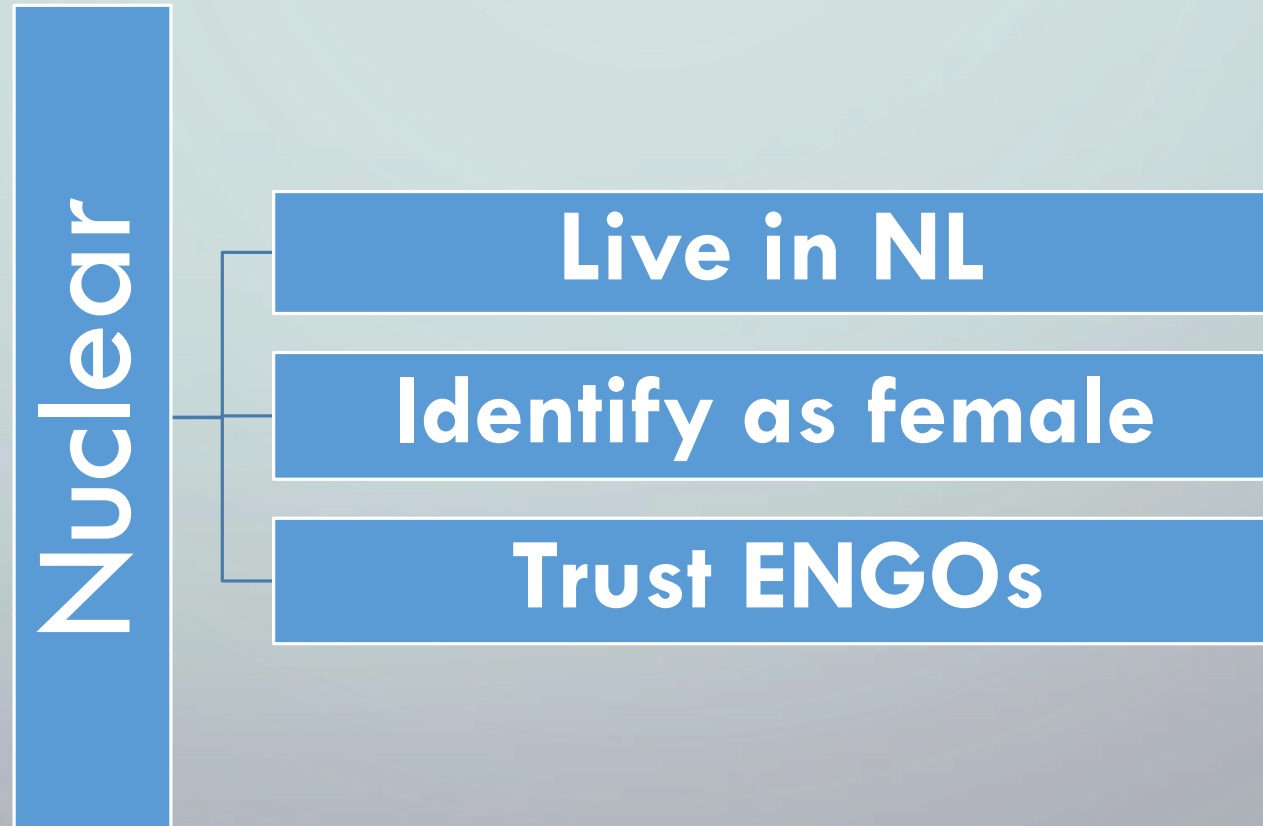
# FACTORS THAT INCREASE THE PROBABILITY OF SUPPORT



# FACTORS THAT INCREASE THE PROBABILITY OF SUPPORT



# FACTORS THAT DECREASE THE PROBABILITY OF SUPPORT



# THE LIKELIHOOD OF CONSIDERING ELECTRICITY CLEAN WHEN THE SOURCE OF THAT ELECTRICITY

**Generates no  
pollution to the air or  
water or no nuclear  
waste to make  
electricity**

**Trust  
academics**

**Trust ENGOS**

# FACTORS THAT INCREASE THE PROBABILITY OF SUPPORT FOR COAL PHASE-OUT OPTIONS

## SMRs

- Concern economy, consumers
- \$80k-\$119.9k/year

## QC/NL Hydro

- Live in NL
- Concern impact environment

## Renewables my province

- Health and safety
- University

# SUMMARY: NUCLEAR STORY

## Increases support

- Trust utilities
- Earn \$80k-\$119.9k/year
- Anglophone
- Concern about economy/consumers

## Decreases support

- Strong environmental identity (Intrinsic)
- Trust environmental groups
- Identify as female
- Over 35 years of age

# SUMMARY OBSERVATIONS

## Topline #1

- Governments and utilities are out of step with the public on electricity

## Topline #2

- People want in-province renewables before inter-provincial connections to hydro

# SUMMARY OBSERVATIONS

## Topline #3

- Atlantic Loop advantage is reliability, then affordability, women least supportive of large hydro

## Topline #4

- Little social license for SMRs, especially among rural, female, 55+ respondents

# SUMMARY OBSERVATIONS

**Topline  
#5**

- We need to consult the public to define electricity vision, set renewable energy targets

**Topline  
#6**

- Health, environment and economy are primary evaluation criteria

# SUMMARY OBSERVATIONS

## Topline #7

- Environmental identity, self-determination toward environmental goals, concerns about health and safety important to forming opinions

## Topline #8

- This is not the work of competing technology options; it is the work of values, trust, and then information

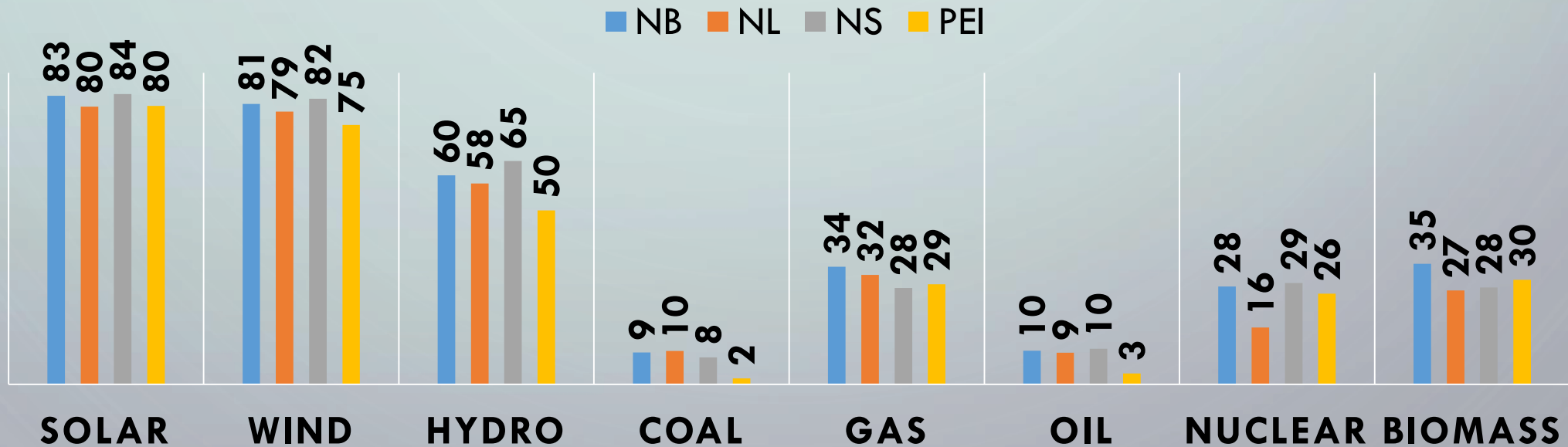


# **APPENDIX**

**MORE PROVINCIAL DETAIL**

# STRONG MAJORITY SAY CLEAN ELECTRICITY SOURCES ARE SOLAR, WIND, THEN HYDRO ; CONFLICTED ON GAS NB, NS, PEI FAVOUR NUCLEAR MORE THAN NL

## SOURCE REPRESENTS 'CLEAN ELECTRICITY' (TOTAL AGREE, %)



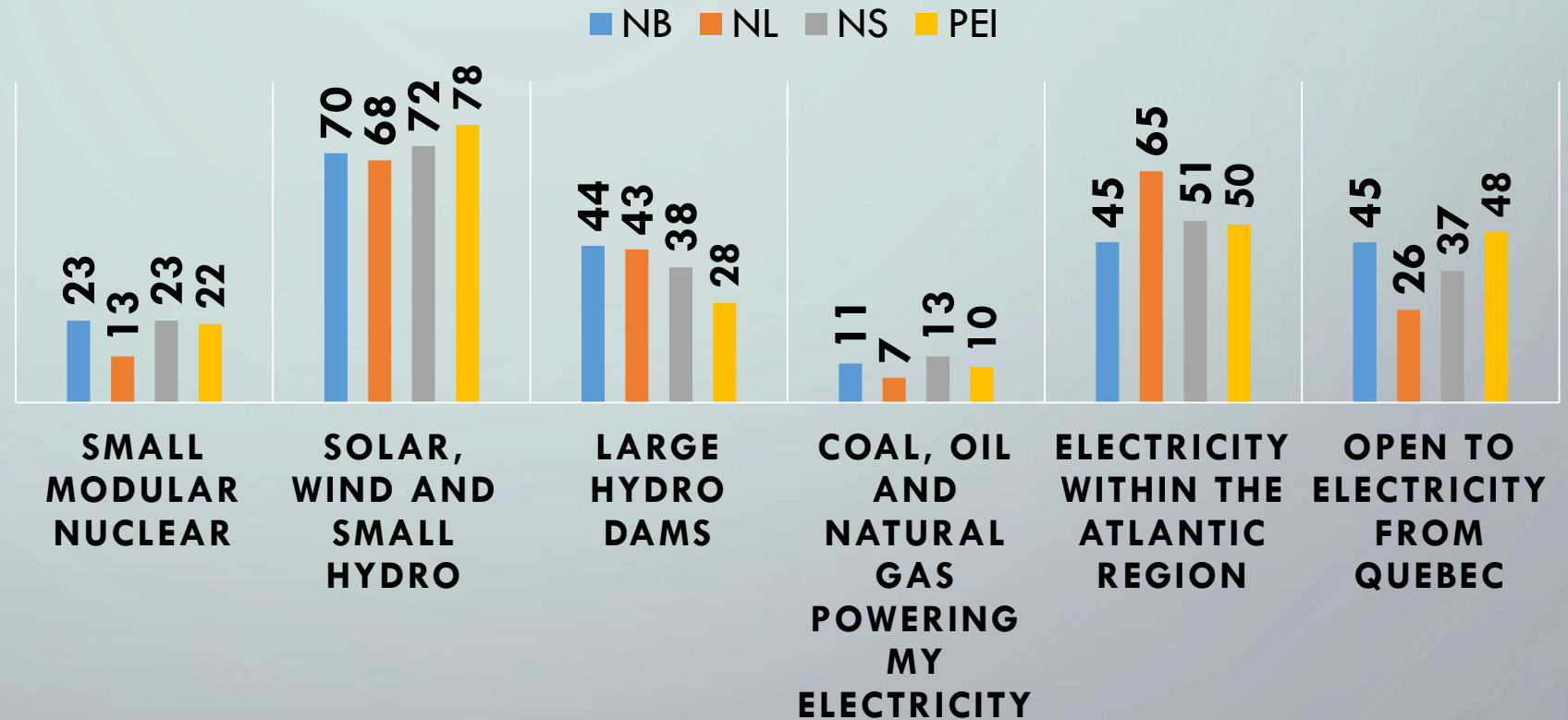
**HOME GROWN  
RENEWABLES,  
THEN REGIONAL  
CONNECTION TO  
HYDRO; NL  
NEGATIVE  
TOWARD QC  
HYDRO**

1/3 NEUTRAL

SMRS: LESS THAN  
1/4 AGREE;

SMRS: DISAGREE:  
NB, 32%, NL, 40%,  
NS, 34%, PEI,  
38%)

## I WANT (SOURCE) POWERING MY ELECTRICITY OR OPEN TO (TOTAL AGREE, %)



# HEALTH, ENVIRONMENT, ECONOMY, NOT COST DRIVING OPINION OF SOURCES

## FACTORS INFLUENCING OPINION OF SOURCES (TOTAL IMPORTANT, %)

