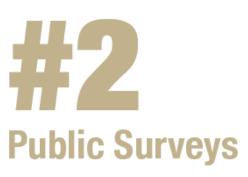
Webinar Series on **Stakeholder Involvement**related to **Nuclear Power**







Listening to the Public through Surveys







Lisa Berthelot Stakeholder Involvement Officer IAEA Division of Nuclear Power





Learning Objectives

By attending this webinar, you'll be able to:

- Recognize the importance of conducting public awareness and opinion surveys and research
- Understand the main elements of conducting surveys and research
- Understand how to use results to adjust stakeholder involvement activities





Today's Speakers



Sandy Wilkes



Duane Bratt



Djarot Wisnubroto

Stakeholder Involvement and Public Opinion Research



To effectively engage with stakeholders:

- Develop a stakeholder involvement strategy and plans
 - Identify stakeholders and conduct stakeholder mapping
- Include public opinion research in plans
- Listen before talking
- Ask questions and genuinely take answers into account

Asking Questions



- What do people...
 - Know
 - Think
 - Feel

...about nuclear power?

- Avoiding assumptions about what people...
 - Know
 - Think
 - Feel

...about nuclear power.

 Using information from public opinion research to better communicate and engage with stakeholders.







Have you ever conducted public opinion research on nuclear power or been asked about your views on nuclear power by an organization?

- Yes, I have conducted public opinion research on nuclear power
- Yes, I have been asked about my views on nuclear power by an organization
- No, I have never been involved in public opinion research about nuclear





Today's Speakers

Sandy Wilkes

- Joined Bisconti Research in 1999 as Senior Research Associate
- Responsible for the qualitative research, aimed at understanding why the
 various members of the public feel the way they do. This includes executive
 interviews to learn the attitudes of influential individuals, focus groups with
 targeted members of the public, and in-depth case studies on various nuclear
 topics.
- Background in psychology and counselling, well-suited for engaging with hardto-reach audiences.
- Master's degree in Guidance and Counselling from Frostburg State University
- Bachelor's degree in Psychology from Johns Hopkins University



How Public Opinion Research Can Guide Communications

IAEA Webinar

August 3, 2019

Alessandra Bisconti Wilkes Bisconti Research, Inc.

www.bisconti.com

First Considerations in Research Decisions

- What do you want to learn?
- From which audiences?
- How will you use the information?
- What is the best method or set of methods to meet your objectives?
- How much can you budget?

Useful Methods

- Surveys (cell phone, landline, online)
- Focus group discussions
- One-on-one interviews with leaders
- Fan teams
- Ask your family, friends, coworkers

10 Types of information surveys can reveal

- 1. Attitudes about your topic
- Knowledge about your topic
- 3. Messages that are most persuasive
- 4. Values, what audience cares about
- 5. Opinions about your organization, community leaders, others
- 6. Sources of information, how to reach your audience
- 7. Credible spokespersons
- 8. Opinions about terms (identify jargon to avoid), slogans, logos, ads, and other materials (online surveys)
- 9. Demographic differences
- 10. Changes over time

Value of focus groups

- Small group discusses topics in a room guided by a moderator with a list of potential questions.
- Good source of insights about how people think and why.
- Helps to hear language people use when they discuss your topics.
- Enables modifications of messages and materials before they are tested.
- Qualitative, not quantitative.
- Expensive

Executive interviews with key leaders can be very helpful in some cases

- Very well-trained interviewer works with you to develop objectives and design questions or question topics.
- Interviewer is free to follow the conversation where it leads while covering all the questions.
- Interview may be conducted in person or by phone.
- Interviewer writes findings and observations for each interview and for the group.
- Expensive

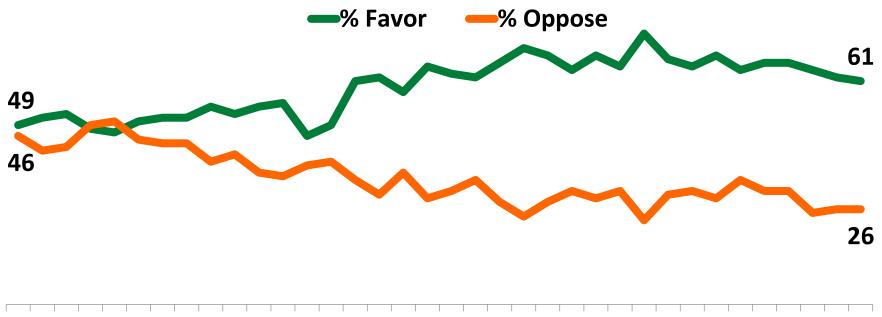
Public Opinion is not always what it seems

Perception that majority opposes nuclear energy can cause "Spiral of Silence"



US Public: Long-Term Trend Favorable

Overall, do you <u>strongly favor</u>, <u>somewhat favor</u>, <u>somewhat oppose</u>, or <u>strongly oppose</u> the use of nuclear energy as one of the ways to provide electricity in the United States? (%)



Perceptions of public opposition can make leaders hesitant to act

• Example: In 1990s, industry leaders believed the public would be opposed to plant license renewal. The talk was about plant shutdown and decommissioning.

Perceptions of public opposition can make leaders hesitant to act

- Example: In 1990s, industry leaders believed the public would be opposed to plant licenses renewal. The talk was about plant shutdown and decommissioning.
- The owners of Calvert Cliff nuclear power station dared to come forward. They initiated their own innovative public opinion research. They created a Fan Team to take information out to opinion leaders in the local community and bring back their opinions, questions and concerns to a central team leader. Can you picture those paths as a fan?

Fan Team is an innovative form of two-way communications to understand the opinions of stakeholders



Outcome

• Armed with the information gathered by the Fan Team, the company organized local participation in the first public hearing on license renewal. The local newspaper reported:

We are sure some of the opponents to relicensing Calvert Cliffs Nuclear Power Plant were left confused following a hearing last week. Critics of the utility and the Nuclear Regulatory Commission denounced the relicensing process as well as nuclear energy. Then what happened next was a little startling. Calvert Cliffs residents stood up and told them to leave their plant alone. That Baltimore Gas & Electric had been a good neighbor."

 Later, national surveys showed vast majority support for first and second license renewal for nuclear power plants that continue to meet federal safety standards.

Make a Fan Team an everyday method of two-way communication

- Identify a point of coordination/coordinator.
- Identify the persons in your organization who interact with key audiences.
- Develop a systematic method of using those persons to transmit information and to report back opinions and any concerns to the coordinator.
- Coordinator should assemble the feedback for the benefit of the organization and serving customers well

Public opinion about nuclear energy is not defined by any single number—read the question!

75%

55%

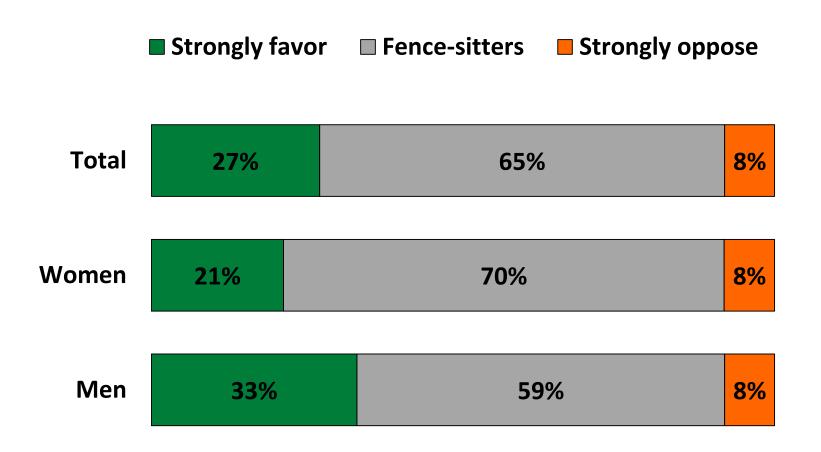
61%

Question context affects answers; these differences are instructive

61%

49%

Public opinion is easily changed so many fence sitters!



Because of feeling besieged, the knee-jerk reaction is to focus on safety

Which benefits do your audiences care about most?

What makes nuclear energy stand out?









Public opinion research. Check all that apply:

- Our organization carries out periodic public opinion research on nuclear power (or other topics)
- Our organization is planning to carry out periodic public opinion research on nuclear power (or other topics)
- Our organization does not carry out periodic public opinion research on nuclear power (or other topics)
- □ I don't know if our organization carries out public opinion research.
- Not applicable to my field of work





Today's Speakers

Duane Bratt

- Political Science Professor and Chair in the Department of Economics, Justice, and Policy Studies at Mount Royal University (Calgary, Alberta)
 - Teaches in area of international relations and Canadian public policy
 - Primary research interest in area of Canadian nuclear policy
- Current projects include the risk assessment of Canada's nuclear waste site selection process
- Recent publications include:
 - co-editor, Orange Chinook: Politics in the New Alberta
 - co-editor, Readings in Canadian Foreign Policy: Classic Debates and New Ideas 3rd edition
 - author of Canada, the Provinces, and the Global Nuclear Revival
- Educated at Universities of Windsor (BA 1991, MA 1992) and Alberta (Ph.D 1996)



Public Engagement in Canada: IAEA Webinar on Public Surveys

Duane Bratt
Mount Royal University
Calgary, Alberta
September 3, 2019



Change in Support for Nuclear [Δ from 2015 to 2016]

Support for nuclear power has decreased slightly across the country, and remains highest in Ontario. There are 3 key measures of "support":

- General support for nuclear power
- Support for refurbishment
- Support for new build

Overall Change in Support:

- General support for nuclear decreased in BC, Alberta and to a lesser extent – Ontario.
- Support for refurbishment decreased in Alberta and Ontario.
- Support for new builds decreased in Alberta and Quebec.
- While year over year gains have fallen within the margin of error in Atlantic Canada, there has been significant improvement on all three measures since 2011.

Support for Refurbishment

Segments	2011	2012	2013	2014	2015	2016	Δ
National	53%	47%	52%	49%	53%	48%	↓ 5%
ВС	50%	48%	53%	52%	50%	45%	↓ 5%
Alberta	58%	45%	59%	51%	60%	47%	↓13%
Prairies	51%	54%	60%	52%	48%	52%	1 4%
Ontario	68%	63%	63%	63%	67%	58%	↓ 9%
Quebec	31%	22%	28%	26%	32%	31%	↓ 1%
Atlantic	43%	48%	54%	43%	48%	54%	1 6%
Men	57%	54%	59%	55%	61%	54%	↓ 7%
Women	49%	41%	46%	44%	45%	43%	↓ 2%

General Support for Nuclear Power

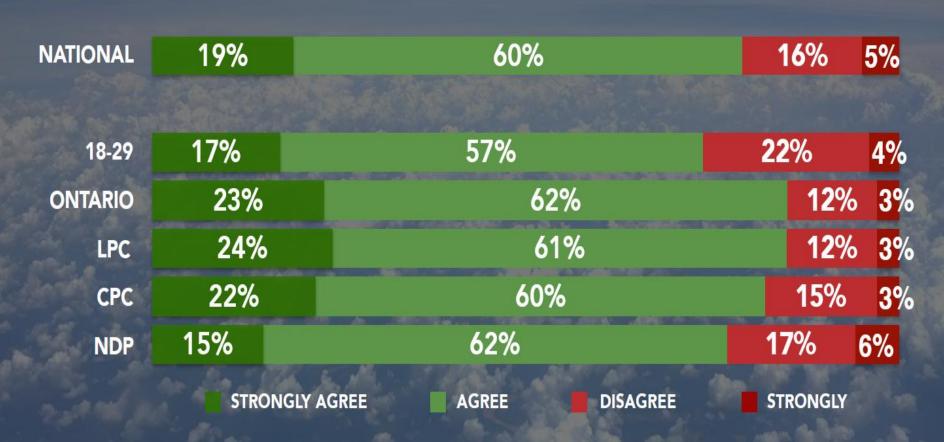
Segments	2011	2012	2013	2014	2015	2016	Δ
National	38%	37%	33%	38%	41%	37%	↓ 4%
ВС	33%	33%	30%	34%	43%	29%	↓14%
Alberta	46%	38%	25%	40%	45%	31%	↓14%
Prairies	37%	44%	40%	32%	33%	38%	↑ 5%
Ontario	53%	54%	49%	55%	53%	49%	↓ 4%
Quebec	17%	12%	11%	13%	22%	23%	↑1%
Atlantic	31%	40%	36%	39%	34%	41%	↑ 7%
Men	45%	47%	42%	49%	50%	46%	↓ 4%
Women	32%	29%	25%	28%	32%	28%	↓ 4%

Support for New Build

Support for New Build								
Segments	2011	2012	2013	2014	2015	2016	Δ	
National	35%	33%	35%	34%	40%	36%	↓ 4%	
ВС	32%	34%	37%	32%	33%	35%	↑ 2%	
Alberta	48%	28%	47%	40%	47%	34%	↓13%	
Prairies	32%	39%	44%	36%	37%	36%	↓ 1%	
Ontario	50%	48%	44%	45%	48%	45%	↓ 3%	
Quebec	13%	11%	13%	15%	29%	18%	↓11%	
Atlantic	28%	30%	32%	30%	35%	41%	↑ 6%	
Men	42%	42%	46%	46%	48%	44%	↓ 4%	
Women	30%	25%	25%	23%	32%	28%	↓ 4%	

Note: ∆ column indicates shifts from 2015 to 2016

"NUCLEAR POWER HAS PROVEN VERY SAFE WHEN MANAGED TO CANADIAN STANDARDS" February 2019





Analyzing the Data

- There is about 40% support for nuclear energy across Canada.
 - Depending upon how the question is worded
 - Support for refurbishment is higher than new builds
- Opponents have a higher degree of intensity than supporters.
- There is a significant gender gap
- Education and age matter much less,

Analyzing the Data

- Support is strongest where nuclear already is located:
 - Durham Region, Ontario
 - Bruce County, Ontario
 - Saint John, New Brunswick
- Opposition is strongest where nuclear either does not exit or is being phased out
 - BC and Quebec
 - BC and Quebec also have the highest opposition to fossil fuels



Analyzing the Data

- Climate Change has created a new perspective on nuclear
- Low energy literacy on carbon saving potential of nuclear
- Broad openness to SMRs and future benefits



Alberta and Saskatchewan

- In 2007-2012, both Alberta and Saskatchewan investigated introducing nuclear energy to their provinces.
- Both created expert panels.
- Both conducted public consultation in 2009.



Public Consultation in Saskatchewan

- Public Hearings across Saskatchewan in Spring 2009.
- Summary of feedback
 - 85% opposed to nuclear power generation
 - 70% opposed to uranium upgrading
 - 86% opposed to nuclear waste storage
 - 42% opposition to nuclear r & d
 - 88% opposition to UDP strategy
 - 98% support for renewable energy
 - 95% support for reducing energy consumption



Public Consultation in Saskatchewan

- Not statistically representative sample of public opinion
- But a wide range of opposition
 - Environment, labour unions, peace, religious
 - Geographic scope across province
 - Range of arguments
 - Economic, health, safety, environmental, peace
- Opponents participated more than supporters
- This illustrates higher intensity



Public Consultation in Saskatchewan

- Wall govt believed Public Consultation was flawed
 - 85% responders were opposed to nuclear energy, not
 85% of Saskatchewanians
 - Perrins "no statistical reliability"
 - Govt "recent independent polling has shown support for nuclear industry"
 - Methodological problems
 - Coding
 - Factual accuracy of responses



Public Consultation in Alberta: Comparing Results by Instrument (April-June 2009)

	Telephone Survey (Randomly Selected)	Focus Group (Randomly Selected)	Workbook Submission (Self-Selected)
Province should encourage proposals	19%	22%	28%
Considered on a case-by-case basis	45%	57%	16%
Province should oppose proposals	27%	13%	55%
Don't Know	8%	8%	1%

@Risk Project

 This research examines the role of risk assessment and management in the decision-making processes of selecting a site for Canada's permanent high-level nuclear waste storage.



Nuclear Case Selection

- There are five communities currently under consideration by the Nuclear Waste Management Organization (NWMO):
 - Hornepayne (NW Ontario)
 - Huron-Kinloss (SW Ontario)
 - Ignace (NW Ontario)
 - Manitouwadge (NW Ontario)
 - South Bruce (SW Ontario



Types of Risk

1. Technological

 Deep Geological Repository (DGR) and storage casks

2. Environmental

- Contamination of soil/water from DGR
- Geological Processes, Tectonic Movement, Climate Change could damage the DGR

3. Human Health

Exposure to radiation



Types of Risk

4. Political

 Site Community, Transportation Routes, larger Public Opinion

5. Security

Transportation accidents, terrorism

6. Financial

 Cost of DGR, maintaining/improving transportation routes, etc



Types of Risk

- Doing nothing is not risk free.
- There are multiple risks to doing nothing and leaving the status quo in place for managing nuclear waste.



Risk Management Tools

- REACT Framework
- Regulatory Interventions
- Economic Interventions
- Advisory Interventions
- Community Interventions
- Technological Interventions



Regulatory Interventions

- CNSC
- NWMO





Economic Interventions

- Nuclear Liability and Compensation Act
- Financial Compensation for a community to host the DGR
 - Interested communities have already received money for participating in preliminary assessment and engagement processes.



Advisory Interventions

- Knowledge transfer from experts on nuclear energy and waste management to interested communities.
- NWMO has commissioned expert briefing documents and sent individuals (including from anti-nuclear groups) to interested communities.





Community Interventions

- NWMO maintains that "project will only be located in an area with an informed and willing host."
 - How do you determine consent? Referendums, town hall meetings, local political support, or absence of local opposition?
 - Can consent be given and then taken away?







Community Interventions

- NWMO recognizes the importance of Indigenous Knowledge.
- Duty to Consult



Technological Interventions









Where do you work?

Government

Regulator

Operator

NEPIO

Technical Support Org

NGO

Academia

Research Institution

Media

Private Sector-non-nuclear

Nuclear Advocate

/Independent Advocate

Other

I prefer not to say





Today's Speakers

Djarot S. Wisnubroto

- Member of the National Research Council
- Senior Researcher at National Nuclear Energy Agency of Indonesia (BATAN)
- Previously Deputy Chairman of BATAN on Development of Nuclear Material Cycle Technology and Engineering; Director of Radioactive Waste Management Center
- Interests: Nuclear Fuel Cycle, Radioactive Waste Management, Socio-Political Study on Nuclear Energy Program
- PhD and Master's degree from Nuclear Engineering School, University of Tokyo
- Bachelor's degree from Gadjah Mada University



PUBLIC OPINION SURVEY ON NUCLEAR ENERGY IN INDONESIA: UNDERSTANDING PUBLIC PERCEPTION ON NUCLEAR POWER PLANT PROGRAM

Djarot S. Wisnubroto

National Nuclear Energy Agency of Indonesia - BATAN

CHALLENGES OF NPP PROGRAM IN INDONESIA

- Only the Java island, which has had a good power grid infrastructure with a large enough capacity.
- The development of the first nuclear power plant has a high financial risk
- NPP is the last option (Gov. Reg. 79/2014)
- Public acceptance is a key factor for NPP Development.
- NIMBY, 5 years political cycle (NIMET, BANANA)

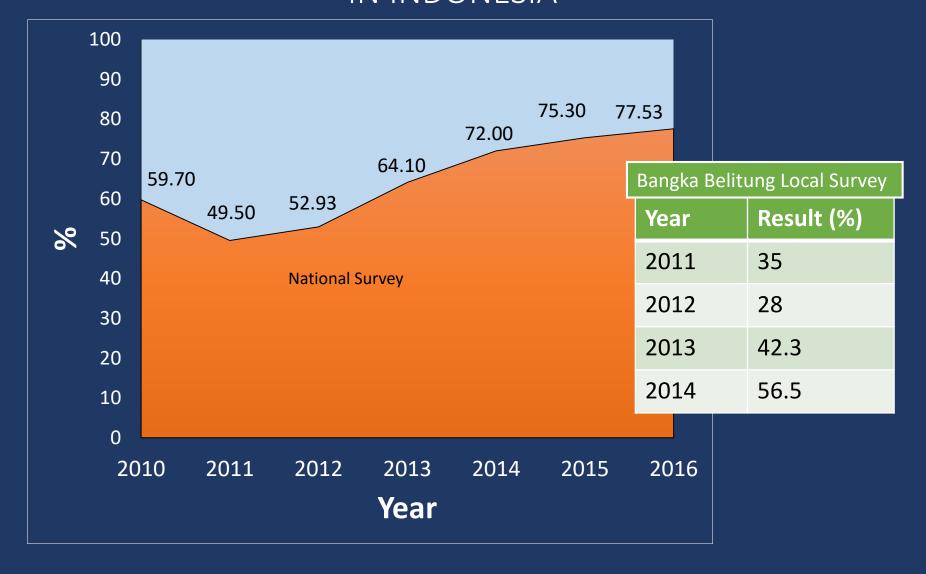
STATUS OF SITE PREPARATION IN INDONESIA



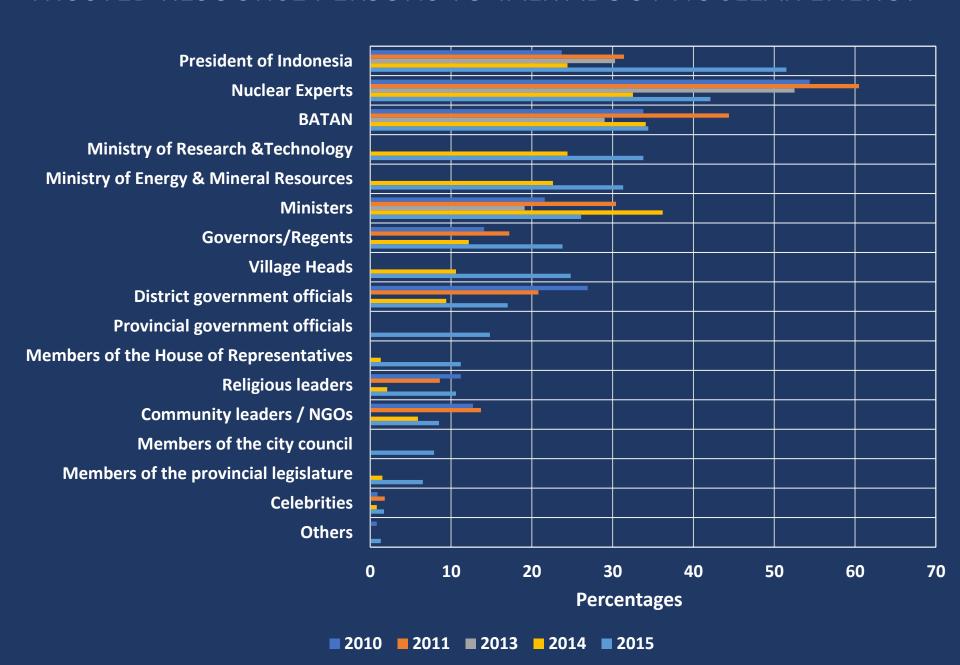
ANTI NUCLEAR DEMO



PUBLIC SURVEY ON NUCLEAR POWER PLANT PROGRAM IN INDONESIA



TRUSTED RESOURCE PERSONS TO TALK ABOUT NUCLEAR ENERGY



Trusted Persons to talk about Nuclear Energy (2015)	%	
President of Indonesia		
Nuclear Experts		
BATAN	34,4	
Ministry of Research &Technology		
Ministry of Energy & Mineral Resources		
Ministers	26,1	
Governors/Regents	23,8	
Village Heads	24,8	
District government officials	17	
Provincial government officials		
Members of the House of Representatives		
Religious leaders		
Community leaders / NGOs		
Members of the city council		
Members of the provincial legislature		
Celebrities		
Others	1.3	

CONCLUSIONS

- From the survey results in the 2014-2016 period, more than 70% of Indonesian people supported the nuclear energy program, despite the NIMBY phenomenon in Bangka-Belitung.
- The NPP promotion will be successful if, carried out in an integrated manner by the Central Government and the Regional Government, coupled with the provision of incentives for infrastructure development in the local area, as well as paying attention to the unique socio-culture around the location.





Q&A











Before you go...













Thank you!