



Nuclear – Requires A Unique Regulatory Framework!



CANADA 150

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Positive Energy Workshop, University of Ottawa

October 4, 2017

The Canadian Nuclear Safety Commission



Regulates the use of nuclear energy and materials to protect **health**,
safety, and **security** and the **environment**



Implements Canada's **international commitments** on the peaceful
use of nuclear energy



Disseminates **objective** scientific, technical and regulatory
information to the public

NSCA – Modern, Clear Legislation

Independent Commission



Quasi-judicial administrative tribunal

Agent of the Crown (Duty to Consult)

Reports to Parliament through Minister of Natural Resources

Commission members are independent and part-time

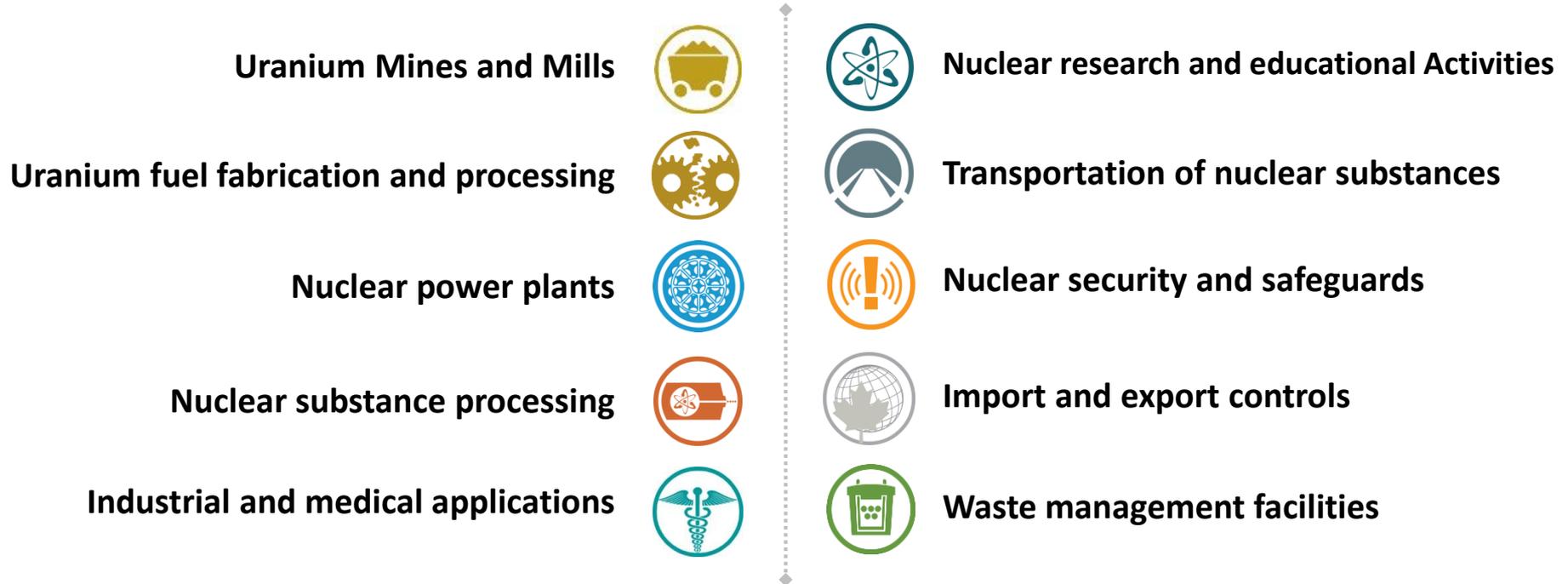
Commission hearings are public and Webcast

Staff presentations in public

Decisions are reviewable by Federal Court

Transparent, science-based decision making

CNSC Regulates All Nuclear Facilities And Activities In Canada



From cradle to grave

Nuclear Regulation Is A Global Affair

Oversight

- UN: International Atomic Energy Agency
- OECD: Nuclear Energy Agency

Sharing

- Senior Regulators (CANDU)
- International Nuclear Regulators Association
- World Nuclear Association
- OPEX

Obligations / Treaties

- Convention on Nuclear Safety (power reactors)
- Joint Convention (nuclear waste management)
- Nuclear Non-proliferation Treaty –
Administrative Arrangement

Peer Reviews

- IRRS, IPPAS, EPREV, OSART
- Also industry peer reviews, e.g. WANO

A Unique Regulatory Framework

Canadian Regulatory Framework - Based On International Guidelines

1. Clear legislation and regulations

- Clear Mandate

2. Safety Focus

- Socio-Economic concerns are not a consideration for licensing

3. Independent

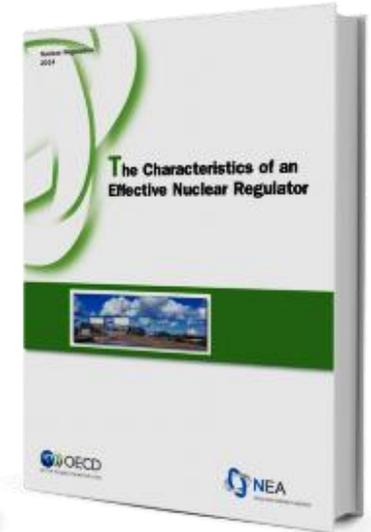
- From industry and government

4. Openness and Transparency

- Clear decision-making process

5. Technical Competence

- Flexible and highly-skilled workforce



Recognized as Best Practice

Canadian Regulatory Framework - Based On International Guidelines

6. Modern, flexible regulatory framework

- Adaptable to an evolving industry and changing regulatory expectations

7. Science-based decision-making

- Risk-informed, technically sound and backed by credible scientific evidence

8. Dissemination of information

- Make the CNSC a key source of credible information

9. Well-managed and well-resourced organization

- With a healthy safety culture

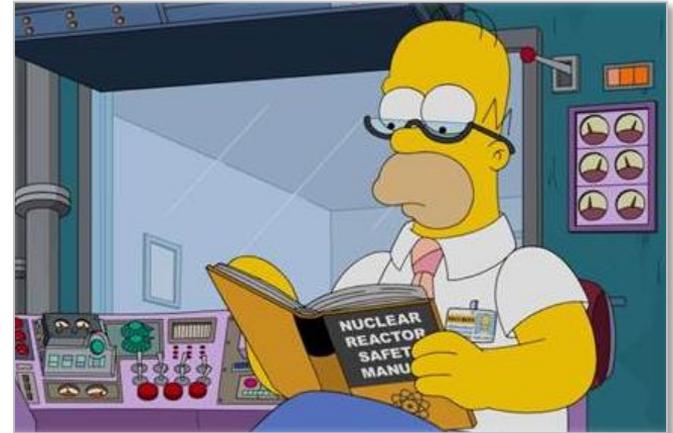
10. Continuous improvement

- Culture of peer review, research and publications, new technology
- Lessons learned – Fukushima, Lac Mégantic, Mount Polley

Recognized as Best Practice

Nuclear Regulation Has Its Unique Challenges

- Fear of radiation; nuclear proliferation
- Complex technology
- Regulator is often accused of pro-industry / pro-nuclear bias
- Alternatives to nuclear power is a policy issue
- Misinformation about health and environmental impacts



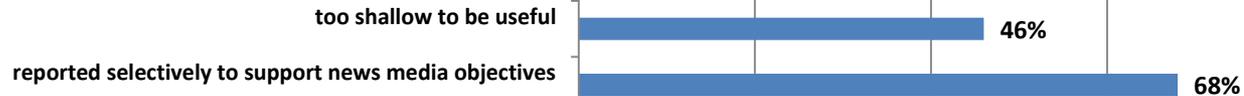
An accident anywhere is an accident everywhere

Canadians Say

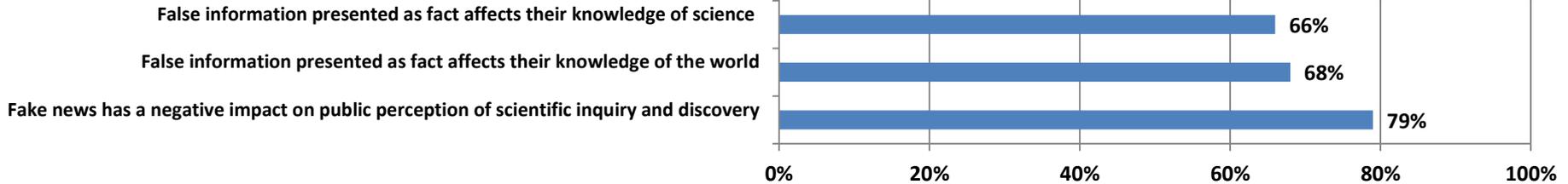
Question: To what extent do you agree or disagree that scientific findings...



Question: Thinking about media coverage you have seen about scientific issues, to what extent do you agree that it is:



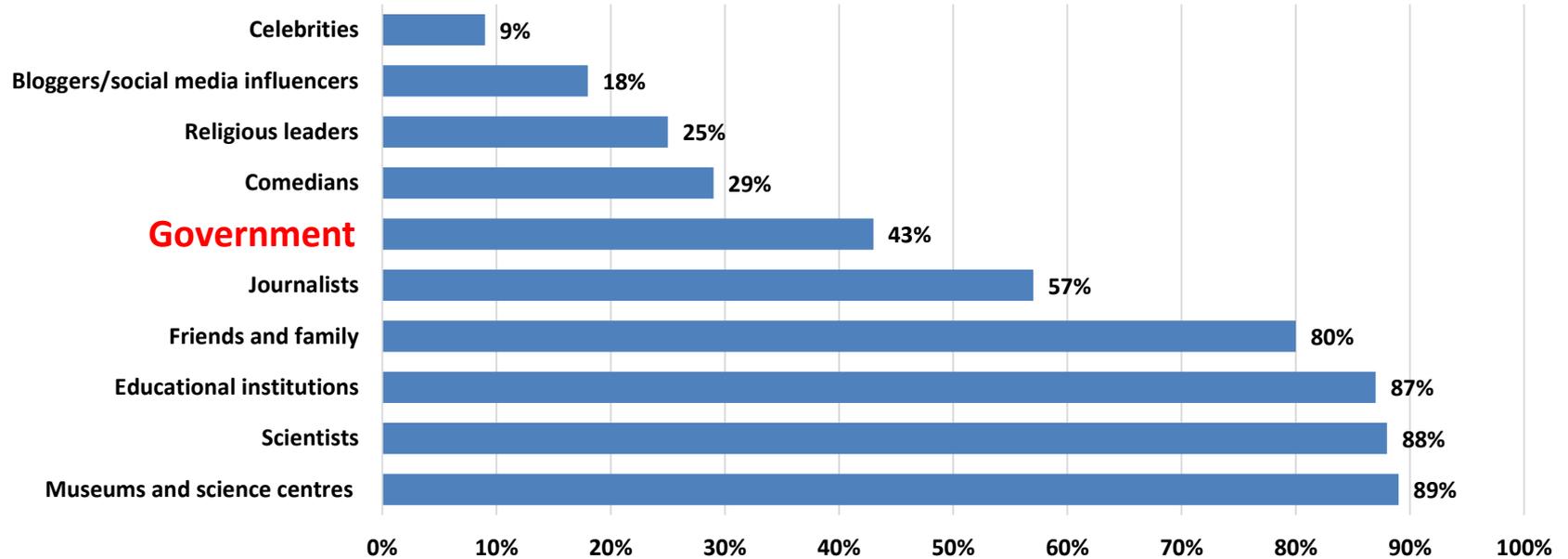
Question: To what extent are you concerned about each of the following:



Source: Leger. LegerWeb online survey of 1,514 Canadians, August 15-16, 2017

Scary View of Science

Who Canadians Trust to Provide Reliable Scientific Information



Source: Leger. LegerWeb online survey of 1,514 Canadians, August 15-16, 2017

How best to engage in this climate?

Need to Engage

Why

- It's in our mandate
- Be objective and trusted source of information
- Describe the CNSC regulatory process – safety first!
- Build trust that nuclear sector is safely regulated

How

- Commission Proceedings
 - Open to the public and webcast
 - Interventions from the public; can ask questions
 - Participant Funding
 - Annual Regulatory Oversight Reports
- Information Products
 - Fact sheets, FAQs, “Mythbusters”
- Outreach Activities
 - Stakeholder working groups
 - Face-to-face: Open houses, CNSC 101; conferences
 - Meetings with Indigenous groups
- Website and social media platforms

We will never compromise safety!

Need to Engage (2)

Where

- In host and potential host communities
 - Commission proceedings in host communities
 - Indigenous communities impacted by or interested in projects
 - NWMO APM process
- Across Canada as requested



Who

- Federal, provincial and territorial governments
- Industry
- Indigenous groups
- Canadian public
- International regulator community



Need Political Support

Question: Given international obligations and responsibilities, and the need for independence, what is the right governance model for nuclear regulation?

Issues that all regulators face

- How to avoid the “Ottawa Syndrome” of system-fixes
 - Too much effort on up-front planning and a lack of attention to execution
 - One-size fits all may not always be best approach – e.g. Phoenix
- Who has legitimacy to participate, and what weight should their voices have?
- Who decides on a project?

Recognize that competent and specialized regulators already exist

- Life-cycle regulators have particular expertise and experience with their projects
 - Technical capabilities; independence; science-based decisions
 - e.g. CNSC has conducted more than 70 EAs since 2000 - decisions upheld by the courts
- Keep politics out of decisions: a quick “yes” or “no” is acceptable; “maybe” is not

Nuclear regulation requires a unique framework.

Connect With Us

Thank You! Questions?

