

What Predicts Government Trustworthiness in Cross-border HK-Guangdong Nuclear Safety Emergency Governance?

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China has drawn up huge plans in nuclear power development. After the Fukushima crisis, the HK public has expressed serious concerns about the nuclear power plants in the cross-border Guangdong area. We conducted a survey consisting of a randomized sample of 1032 respondents in HK. The aim of our study is to identify the key factors that predict HK Government's trustworthiness (GT), with regard to nuclear safety emergency governance in the cross-border context of HK-Guangdong. Our result shows that the perceived benefit of nuclear power is positively associated with GT, while risk perception about nuclear power technologies, expected engagement in emergency planning, and average monthly income are negatively associated with GT. We also find that knowledge about nuclear technology and safety has no effect on GT. This contradicts the common view that educating the public about nuclear safety and technology will increase public trust. Further, we find that HK respondents prefer engaging with local experts than international/Guangdong authorities. To build trust in NSEG, HK Government should direct attentions towards improving public understanding on the significance and contribution of nuclear power in overall electricity generation in HK, reducing public fears of nuclear power technologies, and ensuring appropriate level of engagement with

HK stakeholders. Our proposed methodology can be transferrable to other cross-border domains and jurisdictions where the demand for nuclear power is huge, or where nuclear safety emergency making presents challenges or requiring joint decision-makings.

To build public trust in NSEG in HK, we recommend the following measures to be considered by the decision-makers in HK.

1. Integrity is the most influencing factor predicting the overall government trustworthiness in NSEG, followed by reliability, fairness, and credibility. Priorities should be given to these four dimensions to substantially improve the public trust in NSEG in HK.

2. Strategies for reducing risk perception, in both threat dimension and uncertainty dimension, should be implemented to increase overall government trustworthiness in NSEG.

3. The benefits and contributions of nuclear power in HK's electricity generation can be highlighted. Such message should be broadly shared across the general public to increase the public trust in NSEG in HK.

4. Traditional approaches that educate the public on nuclear technology and safety may not bring about an improved understanding of nuclear safety and technology, more dynamic and participatory methods of education, e.g. inviting the HK students of all levels or the general public to fairs/competitions of nuclear technology and safety may offer new opportunities to help public understand more about nuclear and remove any fears on nuclear due to misconceptions or pre-conceived negative perceptions toward nuclear power plants.

5. Local experts should be substantially involved in nuclear emergency-related public engagement activities when collaborating with other international/Guangdong authorities.

6. HK Government's trustworthiness can be improved more significantly if we target at the higher income groups for trust-building of NSEG in HK.

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