MEDIA RELEASE

Taiwan Risk Society Forum: How Can We Rebuild Social Trust In Energy Transition After Taiwan's Referendum?

Date: 5th, December, 2018
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Location: Room 108, College of Social Science, National Taiwan University
Organizer: Risk Society and Policy Research Center

Moderators and Speakers:

- Kuei-Tien Chou (Professor and Director of Graduate Institute of National Development, National Taiwan University/ Chief Director of Risk Society and Policy Research Center)
- Kuo-Hui Chang (Associate Professor of Graduate Institute of National Development, National Taiwan University/ Executive Director of Risk Society and Policy Research Center)
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- Chang Yu Ying (Lawyer/ Chairman of Environmental Jurists Association)

On 24 November 2018, Taiwan held three referendums on energy-related issues, which were all passed. The three questions asked if the public agreed that the electricity output of thermal power plants should be lowered by at least 1 percent every year (under question 7), that Taiwan should prohibit the construction of new coal-fired power plants or generators (under question 8), and that the first paragraph of Article 95 of the Electricity Act, which stipulated that, "all nuclear-energy-based power-generating facilities shall completely cease operations by 2025", should be abolished (under question 16). The results of the referendum will have an impact on Taiwan's energy transition. As there are many diverse voices in Taiwan with regard to Taiwan's energy transition, this has resulted in disagreements among the various stakeholders on the locations as to where to set up wind turbines and natural gas power plants, etc., which has affected the level of trust among the citizenry. The Ministry of Economic Affairs has announced that it would introduce a new energy policy within two months of the referendums but this disregards the fact that Taiwan's energy transition is a long-term social project, which requires the sustained innovation in green energy technology and stable government reforms with the view of

encouraging behavior change among the general public.

In order to understand the perceptions of the Taiwanese towards energy transition, the Risk Society and Policy Research Center Taiwan conducted a survey to find out the level of public awareness in energy policies and their level of support for Taiwan's energy transition, in the areas of participatory governance, energy conservation, the internalization of external costs, local energy governance, electricity market reform and green capital. Based on the results, we analyze the key policies that Taiwan should pursue to achieve Taiwan's long-term goals in energy transition.

According to our survey, 82% of the Taiwanese are concerned about the development of energy transition, however only 32% of our respondents are aware that coal-fired power is the main energy source in Taiwan, and 44% of the respondents thought that nuclear energy is the main power generation source (43% among those aged 18-29 and over 50% among those who were aged 30-39 and 40-49). In addition, only 41% of the respondents were aware of the government's renewable energy target for 2025, and 57% who were not clear about this policy goal. As such, the survey showed that a considerable proportion of the public had inaccurate perceptions of Taiwan's energy-related issues and did not understand the government's energy transition pathways and goals.

Our survey was based on a similar survey conducted in Germany, which explored the public's perceptions of Taiwan's current energy policies. In general, the respondents felt that it was urgent for Taiwan to undergo energy transition, however they were also of the opinion that the way policies are currently promoted is chaotic, lacks a coherent strategy and is somewhat unfair.

We also found in our survey that there were only about 20% of the respondents who were resolutely against any price increases in electricity prices. But of the price increase that 48% of the respondents were willing to accept, the magnitude of increase that they were willing to accept was lower than the estimated financial impact that Taiwan's energy transition is expected to bring. [1] The main reasons why respondents were willing to accept price increases for electricity were primarily because of factors such as the reduction of air pollution and for environmental protection, followed by the possibility of financial incentives to conserve energy and for the reduction of nuclear risks. There were also 60% of the respondents who were willing to pay higher prices to support replacing nuclear energy with renewable energy, but this is lower than the 85% in the survey that our center conducted in 2015.

It was also found that when respondents had higher energy knowledge, they would also be more willing to accept higher electricity prices as a result of energy taxes on fuel oil. Our survey thus makes clear that in order to increase the public's acceptance of higher electricity and fuel prices, our focus should be placed on enhancing the public's knowledge on energy-related issues, as well as to emphasize the benefits of price adjustments in air pollution reduction.

During the mid-term election which was held alongside the referendums, there were only a third of the county magistrates who had come out with specific energy policies. From our survey, we found that the public were concerned with whether county magistrates had plans to provide incentives and rewards to encourage power conservation, as well as to supervise the effectiveness of the power saving measures adopted by businesses. 80% of the respondents were also willing to install solar panels in their homes and communities, however inadequate installation space and the lack of subsidies to offset initial investments costs are bottlenecks that need to be resolved.

From our survey, we found that the general public are concerned about Taiwan's energy policies and are willing to proactively share information on energy-related information. However, as the accuracy of their energy knowledge is not high, this affected the extent to which they were accepting of energy conservation and electricity price adjustments. There were also contradictions in the results of the referendums, in that the whereas public voted to lower the electricity output of thermal power plants by at least 1 percent in order to reduce air pollution, and also rejected the goal of a nuclear-free homeland by 2025, yet they also rejected importing agricultural products and food from the Fukushima area where a nuclear accident occurred.

In light of the contradiction in the referendum results, our survey shows that in the process of energy transition in Taiwan, this requires transparent public dialogue and in-depth discussions on the pros and cons of energy-related issues. Energy transition requires massive government and social engineering, to establish a long-term dialogue that helps citizens move up the social learning curve, to prevent our society from descending into an endless series of contradictions and conflicts, which uses political mobilization in replacement of long-term policy planning.

We recommend that when governments at all levels (from central to local governance) pursue energy transition policies, they should follow the principles of social justice

and citizen participation in the 2017 Guidelines on Energy Development, to promote multi-party and multi-level policy-communication, as well as establish diverse communication platforms, including using traditional media such as television, as well as emerging social media networks, to effectively engage the public in discussions on energy-related issues.

At the same time, we call upon the government to provide a clearer energy transition pathway, to engage in dialogue with society, so as to enhance the trust that the public have towards energy reform. Energy transition is closely aligned to societal transition, as such the Risk Society and Policy Research Center calls on all sectors of society to adopt a more forward-looking perspective to appreciate Taiwan's climate change and carbon-reduction challenges. The earlier we are able to make a paradigm shift from a brown economy and brown energy model, and to move away from the shackles of social confrontation, the faster we will be able to catch up to the global trend of a low-carbon and green economy model.

[1] In order to achieve a nuclear-free homeland by 2025, and to reduce air pollution and increase Taiwan's renewables, 47.9% of the respondents were willing to pay high electricity prices in the range of NT$2.7 to NT$3.0. However, according to our center's estimates and that by the Taiwan Power Company, the increase in electricity prices in 2025 will hover around NT$3.0 to NT$3.5, under the energy transition plan.