## Høring om japansk A-kraft

Her følger mine kommentarer til den høring, som Japan gennemfører juli-august 2012 forud for vedtagelsen af en ny energiplan. Energiplan er måske så meget sagt. I efterdønningerne fra Fukushima-katastrofen er fokus naturligt på, hvilken rolle og hvilket omfang, A-kraften skal have fremover i den Japanske energiforsyning.

Frem til 12. august kan man give sit besyv med her: https://www.tfaforms.com/251924.

## Please explain in your own words the reason/s for your answer to Question 3.

I am a Danish architectural researcher. From living in Denmark and participating in the process for making Copenhagen carbon neutral by 2025, I know for sure that the transition to a carbon neutral society run on sustainable energy is not only possible, but is vitalising society. And I feel certain that a similar change of energy policy will as well trigger with a renewed dynamism in Japan arising from the pursuit a sustainable prosperity in Japanese society.

Japan's fleet of nuclear reactors are getting old, and rather than investing in new reactors, for the same amount of money you will get more sustainable energy, faster, cheaper, safer, and more democratic, as well as more localized.

Solar is an obvious first choice, as solar voltaic will peak with peak demand, and a lot of new solar could be in place already for the summer peak consumption of 2012. But looking a bit further, the key will be a mix with thousands of diverse inputs, some constant, some changing with season and weather, while some (like hydro & biomass) can be used as stabilizers to ensure a constant supply. Also, with Japan's volcanic underground, rather than waiting for the next major earthquake to trigger another Fukushima incident, it makes so much more sense to harvest the underground heat and make electricity from it.

In order to cut the carbon footprint of Japan quickly even with a full phase out of nuclear energy, probably the single most important part is to focus on the megawatts, all the savings from insulation, shading, habits, improved building technology, LED lights etc. Most of what we do today could be done with a fraction of the energy spent. Once into the track, I think Japanese inventiveness could develop lot of contributions to the world society.

The more you are able to involve citizens and corporations to take part in the production of sustainable energy, the more stable the system will be, and the more the transition is possible without too big governmental spending.

With 70% of Japanese population hesitant to restart the idled reactors, I think the motivation to put up solar panels and cooperative windmill parks is tremendous. So please give the Japanese people a chance to contribute.

The feed-in tariff is a good beginning. But Japan need to prioritize sustainable energy research (if nuclear is given up, a lot of research money is available even if there may need to be a lot of research in best practise of the decommissioning of +50 reactors).

But what to do with the Japanese energy corporations, TEPCO, KEPCO etc.? Emotionally Japanese people want to get rid of them. But best thing that could happen was that these corporations proactively entered the path towards a sustainable energy future. The Danish energy company DONG made such paradigm shift, giving up making any more coal plants and pursuing a shift within very few years from an 85%/15% fossil/sustainable energy portfolio to an 85% sustainable energy share with a primary focus on offshore wind.

Could TEPCO, KEPCO et al. do similar changes, putting up plans for 20-40-60% sustainable energy in 2020-25-30 (or whatever decided) they could regain the trust of their costumers and the pride of their function. But it will take some strong leadership. It will take a deconstruction of the "Nuclear Village"-habits and business as usual-thinking.

## Please let us know in your own words what you think about the accident at Tokyo Electric Power Co. Dai-ichi Nuclear Power Plant and about Japan's energy policy in general.

My perception of what has happened is very much in line with the investigation released on July 23, that the Fukushima incident was preventable and was manmade. In his English introduction, Kurokawa stresses the cultural factor. This has been criticised, but nonetheless I think Kurokawa is pointing to the core problematic.

Having lived and worked in Japan for altogether four years (I consider Kyoto my second hometown) I know only too well how difficult it will be to establish a truly independent successor for NISA. Feedback mechanisms and "healthy criticism" have very hard conditions in a post-confucian society with little tradition of open discussions.

I know from my time teaching at a Japanese University that it took certain tricks to produce disagreement among students and even more between teachers, and to then demonstrate that it was not dangerous, it was not to avoid, but rather a vital starting point for real understanding and real development.

It is very hard to stand up as an individual and say: we should consider this and this safety issue (like the risk of enormous tsunami and power shortage for the backup systems). And often such "disturbance" is just disregarded, not taken seriously, put under the carpet. If truly interested in making safe energy, TEPCO would have listened carefully to the warnings and taken the consequences. But they did not. And the controlling institutions did not work properly, for a lot of reasons. Everybody was tricked by the inflated safety myth.

In my perspective, this core problematic may take decades to resolve. It takes a new transperency. It takes a break-down of present structures behind the "nuclear village" phenomena and the establising of a participatory democratic Japan. And most of all it takes new generations of Japanese people raised with less respect for the authorities and more respect for truth and knowledge.

So in short, I consider the mix of Japanese corporate-political culture, nuclear plants, and a seismologically hyper-active underground a highly dangerous cocktail, which could very well produce another Fukushima incident.

(For instance, we already saw KEPCO having two reactores restarted at the Oi-plant without clearing the risk of active folds just below.)

Regarding the energy policy, the climate issue is important. Therefore giving up nuclear (an earlier phase out than 2030 would be preferable) makes the swift transition to sustainable energy sources essential. Thus I should like to see stronger targets for the inclusion of sustainable energy sources. It may look difficult, and it will need a new direction of Japan's energy research, but done right way, it could reactivate the local communities facing problems with the phase-out of nuclear.

Also the potential of energy savings is tremendous. Maybe Japan 2030 is run sufficiently on only 70% of the energy input necessary today. In a scenario presented by Tetsunati Iida at a TED conference on May 21th 2011, he envisions a full phase-out of nuclear in 10 years, and a full ransition to 100% sustainable energy by 2050. And ... by 2050 the total energy consumption is only half of today.

So again the negawatts are of outmost importance. In a scanario like that of Mr. Iida, they will contribute as much as all other sutainable energy sources combined.

So I could wish for Japan to listen carefully to Mr. Iida and give his vision full considerations.

With my sincere wishes for a healthy and inclusive debate on the sustainable future of Japan.