

## **Acceptance Speech Prof. Hennicke - JACA Prize 2019**

Dear Professor Hayashi

Dear Professor Menkhaus

Thank you very much for awarding me the JSPS Alumni Club Award 2019 (JACA Award)  
The award is a great honor and an enormous encouragement for me and for the entire team of the German Japanese Energy Transition Council (the GJETC).

For us in the GJETC, the energy transition („the Energiewende“) is one of the outstanding visions of the 21st century: for Germany, for Japan and worldwide.

An ambitious energy transition creates jobs, increases security of supply and avoids premature deaths from air pollution. Resource conflicts are reduced. New green lead markets for renewable energies and resource efficiency emerge.

The energy transition is comparable to a intergenerational contract: the current generation (pre-)finances and organizes a gradual phase out of the entire fossil and nuclear energy system through energy efficiency, energy conservation and renewable energy, to protect children, grandchildren, future generations and the global South should from the risks of a non-renewable energy system.

Responsible science and research must help to minimize all energy-related risks and to develop opportunities through ecological modernization.

The scientific cooperation with Japanese colleagues on this fundamental issue has led me to many fascinating experiences.

Through lectures at Japanese universities and presentations at various conferences my interest in the social, economic and energy-related development of Japan has deepened since my retirement in 2008. Two book publications in Japanese language and the supervision of master theses on Japanese energy policy by German students are an expression of this intensive interest.

But finally, my visit to the disaster area of Fukushima in 2013 was decisive for intensifying the German-Japanese cooperation within the framework of the GJETC. The perception of the ghostly atmosphere in this deserted, contaminated and tsunami-destroyed region around Fukushima Dai-Ichi has shaped me to this day: I want to contribute as much as

possible with all my scientific efforts that such a disaster does not happen again, neither in Japan nor anywhere else in the world.

In my opinion, Chernobyl and Fukushima have demonstrated that a longrun decarbonization energy strategy must be really risk-minimized, i.e. must be combined also with a simultaneous phase-out of nuclear energy.

Recent scenarios demonstrate that in principle this is technically and economically feasible in Germany, in Japan and also worldwide. But the implementation poses an enormous social and political challenge, which is often underestimated: The „Energiewende“ is a tremendous economic structural change and a radical socio-ecological transformation for which there is no example in history.

Because of its island status, for Japan a strategy of decarbonization and risk minimization is even more challenging than for Germany, which is embedded in the European internal market. Thus, unfortunately there is no guarantee that the Energiewende will be successful neither in Germany nor in Japan.

Therefore our credo for the GJETC and for the German-Japanese cooperation is not to preach each other, but to solve common problems and to support the energy transition in our countries.

Our concept for intercultural trust building in the GJETC is intensive dialogue and mutual critical analysis. For the GJETC Report 2018, we asked the Japanese experts to comment critically not only on the German „Energiewende“ but also on their own development in Japan. And the same task was given to the German experts. This experiment has enormously strengthened the basis of trust and knowledge on both sides.

A key point of our different perspectives is, for example, the question of whether Japan is an "energy poor" or "energy rich" country. If we take the resources of conventional energy - coal, oil, natural gas, uranium - as a benchmark, then Japan is "energy poor". If, on the other hand, we combine the potential for energy efficiency with renewable energies such as wind, solar, geothermal and biomass, then Japan is "energy rich," perhaps even richer than Germany. And in the future, the vision of a "hydrogen economy" will confront both countries with the same challenge of importing hydrogen as environmentally friendly and cost-effective as possible.

The aim of our cooperation with Japan is to demonstrate that the energy transition can succeed better, despite considerably different starting positions in Germany and Japan, if both countries learn from their strengths, but also try to make their weaknesses transparent in order to avoid them.

Germany can learn a great deal from Japan, for example in the areas of fuel cells, batteries, ICT, robotics, car mobility and rail transport. On the other hand German experience is helpful for Japan in restructuring the electricity system and in fostering decentralization. If we demonstrate the energy system transformation in these two high-technology countries in a socially and economically sustainable way, this will not only lead to a simple doubling of success, but can - precisely because of the differences outlined above - be used as a blueprint for other industrialized and emerging countries.

In this respect, we are in complete agreement with our Japanese partners: We both would like to present the GJETC cooperation as a role model for other countries. We want to insert this concept in the context of the upcoming G20 Summit in Osaka and we would like to further expand our scientific cooperation.

Let me close my thanks by referring to one of our key recommendations which has been mentioned: The GJETC strongly advocates a bilateral agreement, an adequate budget and a strong marketing concept for a German-Japanese support program for the exchange of students, joint master's and doctoral theses, and in general for vocational training and school education. This Japanese-German „Erasmus Programme“ could contribute a lot to our mutual understanding, to our friendship and to intensified cooperation between our countries

The JACA Award supports us strongly in all this ambitious efforts!

On behalf of the GJETC team, I would like to thank you very much for your wonderful encouragement!