

Notice from the Editorial Office

Dear Readers,

While the decommissioning of Germany's last nuclear power plant by 2022 is legally binding, the UK government has recently granted permission for building a new reactor in Somerset which is meant to be connected to the grid at around the same time. Major concerns regarding its appropriateness have been raised not only by British and international societies but they include technological issues as well.

GREEN is dedicated to sustainable energy conversion and storage. Radioactive waste does not fit into a sustainable scenario nor does the potential exhaustiveness of some elements mandatorily necessary for nuclear power plants.

Nevertheless this last argument also holds true for ideally sustainable renewable energy technologies: *The potential scarcity of rare elements for the Energiewende* is one of the matters of concern addressed in an elaborate Review within this second part of the special issue on the energy transition.

Although there is even fierce discussion about where to deposit nuclear waste, pro-nuclear lobbyists themselves refer to the unsolved storage problem of energy derived from renewable techniques. This is indeed an urgent topic that needs to be addressed. As its subtitle implies, GREEN is dedicated to serve as a scientific forum for this realization. A Review on *Thermochemical heat storage for high temperature applications* shows potential solutions out of this dilemma.

Major arguments against renewable energy techniques deal with their societal acceptance including mere esthetic questions like the destruction of a landscape's panorama by modern wind turbines. Embracing this matter, an extensive Expert View filled with descriptive examples, reviews *potentials, barriers and myths of Building Integrated Photovoltaics*.

Other current societal concerns such as augmenting scarcity of fossil fuels along with rising prices for such, forces scientists to look for new transportation solutions or revive very old ones such as the electric car (it was at the end of the 19th century, during the bloom in electric vehicles, when the first car – an electric one – breached the 100 km/h, i.e. 62 mph, speed barrier). *Finland's current concept of how to develop electro-mobility* is summed up in an introductory Expert View.

The economic issue of the global energy transition is evidently one of its major driving forces worldwide.

Green Economy is one of the latest buzz words. The role of small-scale, off-grid renewable solutions is addressed here within another Expert View claiming that “*Off-grid PV in developing countries is more than poverty mitigation – it is sound business sense*”.

Promoters of the planned new Somerset nuclear reactor are claiming economic growth as an important criterion as well. They focus on the creation of new jobs and wealth while also using the arguments of sustainability and emission-free energy (cf. <http://hinkleypoint.edfenergyconsultation.info/>).

Those same justifications are being used for the world's biggest solar thermal power plant in Ouarzazate/Morocco, whose groundbreaking ceremony and implementation of the *Desertec Concept* have just taken place (cf. <http://www.dii-eumena.com/media/latest-news/latest-news-single/article/451.html>).

These examples show the complexity of interests and approaches involved in the worldwide energy-safety debate and the various readings of energy transition that go along with it.

GREEN will continue to serve as a scientific forum for discussion regarding the fascinating move towards renewable and sustainable energy systems. We would like to invite you to contribute to this enormous challenge not only by providing us with your reviews and original articles within the journal's scope but as well with manuscripts for our new column *Energiewende Essays*. The



“The Smiling Sun” (in its Japanese version; text: *nuclear power? – no thanks*, © OOA Fonden – smilingsun.org) was designed in 1975 by Danish activist Anne Lund with the intention to create an anti-nuclear emblem being positive, cheerful and above all polite. The logo was meant to express friendly dissent and to stimulate dialogue. “The Smiling Atom” (in its French version saying: *nuclear power? – yes, please*) is an adaptation of it being used at the online platform for the discussion and promotion of nuclear power: www.nuclearpoweryesplease.org

essays intend to follow up the arguments and achievements of diverse research approaches, present creative solutions and try to illuminate the various settings of energy transition worldwide; thus scientific contributions from *all* related fields are welcome.

Thank you for your support.

A handwritten signature in blue ink, appearing to read "Kristian". The signature is stylized with a large, sweeping loop at the end.