

Press Release – Do not Release before February 9, 2021!

Declaration of the 100%RE Global Strategy Group:

A world based on 100% Renewable Energy is possible, and we are able to transform the energy system fast enough to avoid the climate catastrophe!

There is a wide public discussion about the need for a rapid transformation of the world's energy system towards a system without polluting emissions, based on utilization of 100% Renewable Energy (RE). How can a world work with close-to 100% RE, will it not be too costly, result in job losses, will it provide a reliable power system, which technology barriers will we have to overcome?

The world's leading researchers on the energy transformation, some whom have been researching for almost two decades the realization of a complex and secure energy supply with 100% RE, have summarized the key findings of their research in this 10 point declaration. The declaration and accompanying material will be published today on www.Global100REStrategyGroup.org, as well as presented at a conference of the 2021 Partner Meeting of the Desert Energy Initiative Dii in Dubai.

The Earth's climate emergency requires the completion of a zero-emissions economy much sooner than the generally discussed target year of 2050. A target year needed for ending our CO₂ and other climate-warming and air pollutant emissions is proposed to be 2030 for the electric power sector and soon thereafter, but ideally no later than 2035, for other sectors.

The central question of these studies was whether and how it is possible to achieve the goal of 100% supply of the world's energy demand with renewable energies already by 2030 for the electricity demand, and 2035 for the total energy demand. The core solution to meeting this timeline is to electrify or provide direct heat for all energy and provide the electricity and heat globally with 100% clean renewable energy.

Eicke R. Weber commented: "Bringing together this unique group of globally leading scientists allowed us to determine the key common elements resulting from all our studies on a world that is reliably supplied by 100% renewable energy in the near future, soon enough to avoid the most catastrophic effects of the looming climate catastrophe."

"This group of researchers has developed dozens of science-based studies over several decades, using different methodologies, and covering hundreds of regions around the world. The conclusion is clear: a global energy system powered by 100% clean renewable energy is not just possible over the next 10-15 years, it can also save money, create jobs and wealth, save lives, and get humanity ahead of the curve to prevent runaway climate change," said Tony Seba. "It is economically, socially, geopolitically and environmentally irrational for us to kick the can down the road to 2050."

Mark Jacobson added: "We have lost too much time in our efforts to address global warming and the 7 million air pollution deaths that occur each year, by not focusing enough on useful solutions. Fortunately, low-cost 100% clean, renewable energy solutions do exist to solve these problems, as found by over a dozen independent research groups. The solutions will not only save consumers money, but also create jobs and provide energy and more international security, while substantially

reducing air pollution and climate damage from energy. Policymakers around the world are strongly urged to ensure we implement these solutions over the next 10-15 years."

Brian Vad Mathiesen commented: "With low-cost renewable energy based electricity in place in 2030 a parallel rapid transition and re-design of the national energy systems will be feasible, using a smart energy system approach combining electricity with energy efficient buildings, district heating, electrified transport and industry, as well as energy storage. We provide a deep understanding of the technical solution; decision makers now need to re-design the energy markets for the re-designed energy systems."

This statement will be specifically published in support of the new United States President's climate change agenda. In addition to the 7 initial signatories, dozens of invited academics and other researchers in this field have by now already signed this statement.

The initial signatories are:

Prof. Andrew Blakers, Australian National University, Australia

Prof. Christian Breyer, LUT University, Finland

Hans-Josef Fell, Energy Watch Group, Germany

Prof. Mark Z. Jacobson, Stanford University, USA

Prof. Brian Vad Mathiesen, Aalborg University, Denmark

Tony Seba, RethinkX, USA

Prof. Eicke R. Weber, ESMC, CBC, UC Berkeley, Univ. Freiburg em., Germany