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Excellences, Ladies and Gentlemen

It is my great pleasure and honour to give a keynote speech here at the Green Economy Forum within the XI Astana Economic Forum.

Six years ago, as a member of the German Parliament, I had the first intensive contact with the government of Kazakhstan. The former Ambassador of Kazakhstan in Germany and now Advisor to Honourable President Nazarbayev, Dr. Nurlan Onzahanov asked me to give advice on how Kazakhstan could shift to a green economy.

With my successful experience as a legislator for Renewable energy in the German Parliament, I advised Kazakhstan to set the target of 100% Renewables, without fossil and nuclear energy, mainly solar, wind and biochar, combined with small hydropower, biofuels, biogas and geothermal energy. Biochar is produced from all organic materials, mostly agricultural and municipal waste, which often pollutes water resources. This way Kazakhstan could solve several serious problems: secure clean water resources, fight against air pollution and get a CO2 neutral clean fuel for the existing coal power stations, which produce electricity and heat, when solar and wind power are low. When solar and wind power are in surplus, they can provide energy for electricity, heating and cooling, as well as for electric mobility.

To protect the world of more disastrous climate heating, the world would require a zero emission economy and carbos sinks by 2030.

A global transition, as well as a transition in Kazakhstan to 100% renewable electricity is not a long-term vision, but already a tangible reality. More than 50 countries worldwide adopted the goal of 100% renewable energy.

A recent groundbreaking study by the Lappeenranta University of Technology and the Energy Watch Group shows the way. The results of the study are revealing: A global electricity system fully based on renewable energy is feasible at every hour throughout the year – baseload of nuclear and coal plants are not necessary - and is more cost effective than the existing system, largely based on fossil fuels and nuclear energy.

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Existing renewable energy potential and technologies, including storage and e-mobility can generate sufficient and secure power to cover the entire global electricity demand even before 2050.

Moreover, today renewable clean energy is the cheapest option for energy investment. Nuclear and fossil energy generation is much more expensive than solar and wind power.

The transition to 100% renewables would stimulate economic growth, prosperity and create millions of new jobs, as IRENA in wonderful studies shows.

Renewables are also the energy for peace. As wars over oil are increasing in the world, a switch to renewables will cancel these war reasons.

Renewables can also replace nuclear power, so that the source of new nuclear weapon materials is closed. I thank the Kazakh Government for a commitment to make the country free of nuclear weapons.

On April 27, 2018, the world community has witnessed a historic moment in the Korean peace process. The President of the Republic of Korea Moon Jae-in and the President of North Korea Kim Yong-un have pledged to rid the Korean peninsula of nuclear weapons, to start a "new era of peace" and to foster economic cooperation. Real denuclearization in the Korean peninsula can succeed only if the use of nuclear energy for electricity generation is brought to an end too. Otherwise we must fear a discussion over hidden nuclear weapon material like in Iran.

A 100% clean renewable energy based system is the most important pillar for North Korea to achieve energy security and to boost economic growth by creating new jobs. Just in the moment I offered such a proposal to his Excellency Mr. Ban Ki-moon. I congratulate Kazakhstan on the International Centre for Green Technology and Investment Projects. Mr. Rapil Zoshybaer, the Energy Watch Group would be glad to collaborate for a plan for Kazakhstan's path to 100% Renewables. Thank you all for your attention.