



EUROPEAN COMMISSION
RTD - Energy
ENER - Renewables, R&I, Energy Efficiency
JRC – Institute for Energy and Transport
SET Plan Secretariat

SET-PLAN-SECRETARIAT@ec.europa.eu

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Dear Sir/Madam,

Eleon AS Comments on European Commission Issues Paper No.1: Initiative for Global Leadership in Offshore Wind

Eleon AS is an emerging wind turbine manufacturer focused on direct drive wind turbines with high reliability and low volatility of electricity production output. The company is headquartered in Tallinn, Estonia. Currently Eleon has completed testing of its first 3 MW direct drive, onshore wind turbine type Eleon 3M116 and is launching serial production of line of wind turbines designed for low wind conditions. By now, the company has secured contracts for building wind parks with total volume of 1180 MW. As Eleon wind turbine is characterized by robust design, direct drive concept and hermetic nacelle, Eleon technology could be converted for building offshore wind turbines as well. The company has offshore models 8M167 and 12M200 development at conceptual stage currently (power output 8 - 12 MW, rotor diameter 167 – 200 m, nacelle weight/power ratio less than 50t/MW, capacity factor 52 – 55%).

Eleon AS welcomes European Commission Initiative for Global Leadership in Offshore Wind – it is sector where is opportunity for Europe to be the global pathfinder and we think that Europe should secure this opportunity. European Commission industrial policies play important role here. However, based on our industry experience we see following barriers for meeting the objectives stated in the paper:

- The reliability rates of 99% and capacity factor of 55% can be achieved only using direct drive wind turbine concept. However, lion part of wind offshore turbines developed now are still using traditional, gear-boxed concept. Eleon AS sees a field of possible developments and innovation in converting existing successful onshore direct drive wind turbine innovations for offshore use.
- For meeting the objectives stated in the paper, innovation is a critical success factor. Innovation comes mostly from small and medium size companies. The wind turbine industry very capital intensive and thereof it is currently dominated by big multinational corporations with strong balance sheets. This is a major barrier for innovative start-ups

entering to the industry. To keep the industry innovating it is crucial to promote wind power start-ups and SME-s by stimulating their entries to the industry. Eleon AS sees a need for funding mechanisms dedicated for start-ups to enter to wind turbine industry and grow to compete multinational companies with strong balance sheets.

If you do have any additional questions please contact with my colleague Marek-Andres Kauts by e-mail address marek-andres@kauts.ee or phone number (+372) 50 78 394.

Yours faithfully,

Andres Sõnajalg
Eleon AS, member of management board