



South African Wind Energy Association

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A registered non-profit organization and approved in terms of Section 18A tax benefit

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To Whom it may Concern

Boulders Wind Farm Job Creation

The growth of the wind energy industry gives South Africa wind energy an opportunity to unlock economic opportunities, especially creation of much needed new jobs.

According to the IPP Office Publication, Focus on Wind (June 2019) the wind energy industry has contributed to creation of 10 892 jobs across the value chain during construction phase from Round 1 to Round 4 (which has a combined capacity of 3.4GW). The 22 wind IPPs (2GW capacity) that have successfully reached commercial operations to date have reported 2169 O&M job years for SA citizens. The impact of a wind farm construction on job creation is very significant. In construction phase a wind energy project makes an impact on jobs in different parts of the value chain.

Often the wind energy's contribution to job creation is questioned because the jobs are concentrated in the construction phase which is 24 months per project. Society tends to dismiss the construction phase jobs on the basis of their short-term nature, however if we look at the IRP 2019, 1.6 GW is going to be commissioned annually from 2022 to 2030. This means that construction phase jobs are going to be constant during that 10-year period. While in traditional centralised utilities, the jobs are concentrated in one location, the wind sector jobs are very distributed nature, both in terms of the geographical location and in terms of the value chain.

It should also be noted that localised construction phase employment tends to be higher for wind farms that use concrete towers instead of steel (as is the case with the proposed Boulders Wind Farm) as concrete towers are assembled locally, they are also taller and foundations bigger which increases the requirement for local labour.



In the transportation and logistics sector, if we consider that an individual tower is transported in 4 sections to site, that is a total of 4 trucks per tower. For a 140MW wind farm, 45 towers will require 180 truck trips to the construction site. Similarly, since blades are transported individually to sites, getting all these blades to site will require 135 truck trips. After landing at various ports, wind energy equipment such as hubs, nacelles, blades, etc, is transported to the intermediate handling sites before transportation to sites, that function creates additional jobs which are accounted for under logistics sector.

With the increase number of transactions, the demand for dedicated employees in the financial institutions, legal firms, consulting firms is going to increase and therefore the sector is well geared to create/support more than 600 jobs per annum in these sectors.

Undeniably, the economic activity stimulated by the construction of wind farms does not only impact the sectors mentioned above that the wind sector directly interacts with. If the wind sector contracts a construction firm, this increases demand for construction supplies such as concrete, cables, steel for foundations etc. This means that suppliers would need to hire new factory workers to meet the increased demand, these would therefore count as indirect jobs. In the case of concrete towers, the demand for construction materials will be even higher. The additional 1 049 full-time equivalent indirect jobs estimated for Boulders Wind Farm is actually quite conservative considering that it also includes local jobs supported in the travel, accommodation and retail sectors.

If we shift focus to operation and maintenance jobs, the main fact to consider is that the O&M staff for wind farms aren't always located on site, but rather at off-site offices because of the nature of the technology and the possibility of remote monitoring. So, when visiting a wind farm and seeing a few employees on site people often get an impression that that is the only O&M jobs that the wind farm has created. The 140MW Boulder Wind Farm plans to create 17 new direct jobs during operation and maintenance, which is quite consistent with the number reported by the IPP Office of 2166 actual O&M jobs created thus far for the 2 GW already operational.

Having reviewed the Property Values, Tourism and Economic Issues Assessment Report for the proposed Boulder wind farm, SAWEA can confirm that the number of jobs estimated to be created during the construction of the proposed Boulder Wind Farm are quite consistent with employment numbers achieved in wind farm developments of similar size and nature. The number of jobs created must be viewed in terms of the total value chain full time equivalent jobs and not total number of people employed on site. This should also be viewed as a total including direct, indirect and induced jobs. The background given above is to assist with the understanding of where these jobs are located in the value chain.

Kind Regards,

Ntombifuthi Ntuli
Chief Executive Officer



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