

LTWP'S CONSTRUCTION LABOUR SUMMARY REPORT

AUGUST 2017

INTRODUCTION

This document focuses on the Lake Turkana Wind Power Project (hereinafter 'the Project') that has been constructed in Marsabit County by Lake Turkana Wind Power Ltd. (LTWP). The Project is located in Loiyangalani District, Marsabit County, Kenya. It comprises of 365 wind turbines and a high voltage substation that will be connected to the Kenyan national grid through an associated Transmission Line, which is being constructed by the Kenyan Government.

Construction of the Project commenced in October 2014 and was completed in June 2017. At the time of writing, the Project is not yet operational as the associated Transmission Line is still under construction.

Once operational, the Project will provide 310MW of reliable, low cost energy to Kenya's national grid (i.e. approx. 15% of the country's installed capacity), which will be bought at a fixed price by Kenya Power & Lighting Company Ltd (KPLC) over a 20-year period in accordance with the Power Purchase Agreement.

The Project proponent is the LTWP consortium, comprising of KP&P Africa B.V., Aldwych International, Investment Fund for Developing Countries, Vestas, Finnfund, Norfund and Sandpiper. Project Lenders are from Europe and Africa.

This document is LTWP's Construction Labour Summary Report, a voluntarily produced document which (i) provides an overview of how workers and the working environment were managed during the construction phase, (ii) presents labour statistics, (iii) discusses health and safety trends during the construction phase, (iv) discusses how workers' accommodation was managed and, (v) presents an overview of lessons learnt during construction regarding labour aspects, with the intention to share this knowledge widely.

LABOUR AND RECRUITMENT APPROACHES AND STATISTICS

LTWP's recruitment policy during the construction phase, which was communicated to all contractors, was to employ as many local people as possible, i.e. people from Laisamis Constituency and/or wider Marsabit County. Where a local suitable candidate was unavailable, the Project would seek to employ a Kenyan national. If a suitable candidate was unavailable in Kenya, then LTWP and its contractors would seek to find a candidate internationally.

The purpose of this recruitment approach was to ensure that as many locals as possible would be employed by the Project, given that the Project is located in their area of residency and given that unemployment rates are extremely high in the region. Moreover, employment opportunities had been discussed with communities during the nine years of consultations that LTWP undertook prior to construction commencing in October 2014. Consequently, there were high expectations from the community towards obtaining employment, which LTWP needed to manage carefully and in a sensitive and culturally appropriate manner.

To ensure that employment aspects were well managed, LTWP established an employment office in Kurungu in September 2014 (officially opened in November 2014) and in Loiyangalani in July 2015 whose sole purpose was to ensure that employment opportunities were equitably distributed amongst local communities, to ensure that local labour sensitivities were understood and managed in accordance with project contractors, and that the labour and community grievances were carefully managed¹. To support this approach, LTWP instructed all contractors to use the employment offices whenever they sought to

LTWP Employment Offices		
Aspect	Kurungu	Loiyangalani
Opening date	Nov. 2014	July 2015
Closing date	May 2016 when LTWP offices opened on wind farm	
No. of staff	1x HR Manager 2x HR Assistants	1x Employment Office Assistant
	<i>5x CLOs regularly based themselves at these offices</i>	
Responsibilities	<ul style="list-style-type: none"> ▪ Equitable recruitment of local labour to minimize risk of social conflict or antipathy towards the Project ▪ Advertising employment opportunities locally ▪ Collecting CVs and job applications ▪ Management of labour/community grievances ▪ Explaining local labour sensitivities to contractors and advising on how to manage these, particularly at the start and towards the end of construction 	

recruit workers or needed to manage local workers' and/or community grievances. Where suitably qualified candidates could not be recruited from Marsabit County, the contractors were expected to identify suitable national and/or international candidates themselves. This approach was successful in that it ensured that all unskilled jobs were occupied by locals, while both labour and community grievances could be addressed and discussed in local languages and in a culturally appropriate manner through LTWP's Human Resource team (HR) and Community Liaison Officers (CLOs), all of whom are local themselves. While not officially based at the employment offices, the five LTWP CLOs² spent most of their 'office time' at these offices, which ensured that they worked closely with their HR colleagues on all community and local labour matters.

Given the context of where the Project is located, i.e. high levels of monetary poverty, low levels of formal education attendance and an extremely limited number of people with university level degrees, the Project needed to recruit the majority of its semi-skilled and skilled labour force nationally and internationally. This aspect was regularly discussed during community meetings and in many cases, e.g. in relation to masonry and carpentry work, unskilled locals were employed to work alongside, and be trained by semi- and skilled national/international colleagues to develop their own capabilities.

Figure 1: Proportion of Kenyan vs. expatriate project workers Jan. '16 - June '17



Despite the challenges faced in finding local semi- and skilled workers, the Project employed 1,700 people during the peak of its construction phase in Q4 2015 and an overall total of over 2,500 people during the entire construction phase. In both cases, approximately 70% - 75% of jobs were occupied by locals from Laisamis Constituency or Marsabit County. In fact, as shown in Figure 1 on the left, more than 90% of the labour force employed by the Project between January 2016 and June 2017 was Kenyan.

¹ LTWP's grievance mechanism is explained on the Project website, via the following link: <https://ltwp.co.ke/feedback-mechanism/>

² The Project had five CLOs at the start of construction. This number had increased to 15 at the time of writing this document.

Given the location of the Project and the cultural perception in the area that construction is a male activity, the Project had few female construction workers. Women who did work in construction were engaged as surveyors and timekeepers, with one woman also working as a backhoe operator. However, as culturally acceptable in Marsabit County, women were primarily employed as cooks, cleaners, housekeepers and administrators. Moreover, some women were also employed as HSE Officers and others held more senior/managerial role, to the extent that 8% of the labour force was female.

As the Project is the largest private investment in Kenya's history to date and given that it will transform Kenya's energy sector, LTWP is extremely proud that this project has predominantly been built by Kenyans.

KEY LABOUR STATS

- Project employees consisted of Kenyans (*namely: Samburu, Rendille, El Molo, Turkana, Luo, Kikuyu, Kisii, Luya and Kalenjin*), Somalis, South Africans, Ugandans, Tanzanians, Ivorians, Dutch, Germans, Danish, Greeks, Cypriotes, British, Chinese, and French.
- Employed more than 2,500 people during construction (~ 75% of whom were local)
- 1,700 people employed during peak construction phase in Q4 2015
- Women made up 8% of the labour force

To ensure that labour and HSE were managed in line with Kenyan law and international practice, LTWP developed various HR and labour management plans and policies, which together stipulated general working terms and conditions. For example, all project workers needed to have signed contracts, which clearly set out their working hours, contract duration and job description as well as their salary, overtime pay and annual leave entitlements. Moreover, salary payments had to be accompanied with pay slips explaining how wages were calculated.

The Project's Labour Management Plan and environmental and social (E&S) policies allow for workers' organizations, yet there were no unions on site, primarily because most unions in Kenya base themselves in larger cities where there is a larger population of workers; Nanyuki, the closest such city to the wind farm, is located five – six hours' drive from the Project. Moreover, LTWP's Labour Management Plan and E&S policies also (i) commit LTWP to strive for equal opportunities for all current and potential employees and to not discriminate against them; and, (ii) state that the Project has zero tolerance for any form of child (below the age of 18), forced or trafficked labour.

A short video discussing employment benefits of the Project titled 'What's in it for Kenya & Local Employment' can be accessed via the following link: <https://ltwp.co.ke/videos/>

HEALTH, SAFETY AND ENVIRONMENTAL (HSE) APPROACH, STATISTICS AND TRENDS

LTWP was and continues to be fully committed to meeting the good international industry practice standards on environmental, health and safety practices set out in the IFC Performance Standards to minimize the risk of harm, injury and environmental disturbance.

Throughout construction, the Project's dedicated HSE Teams monitored HSE aspects, procedures and related documentation (e.g. permits, licenses and audit reports) to ensure a high standard of performance and to identify areas of improvement. All disturbed areas, e.g. borrow pits³ and roads access routes, were monitored and regulated through an internal permitting process., Site inspections were done before extraction and construction works occurred, in order to minimize environmental disturbance and damage.

³ A borrow pit is an area where material (e.g. soil, gravel and/or sand) has been dug out for use at another location.

As well as the occupational health and safety plans, LTWP developed and implemented 23 Environmental and Social Management System (ESMS) Plans, covering aspects including, but not limited to, labour, accommodation, water resources, biodiversity and conservation, waste, cultural heritage, fuel and hazardous chemical substances. The management plans were developed and reviewed to ensure practicality in compliance with both international best practice standards and Kenyan legislation. To enable implementation of the plans, checklists, registers, tracking documents, reporting templates and forms were developed and shared with the contractors for implementation.

Figure 2: Working at height at substation site

In addition to the internal monitoring processes, an external third party performed quarterly audits on all environmental and social aspects, including labour and HSE, at the LTWP Head Office in Nairobi and with all project contractors on site. These external audits focused on the implementation of HSE systems, site performance and documentation. Each audit concluded with a monitoring report that contained recommendations and corrective actions for the Project, which in turn were followed-up on by the third party at their subsequent audits.



LTWP is proud that no construction-related fatalities occurred during the construction phase of the Project, particularly seeing that the majority of the workforce was made up of people who were employed for the first time in their lives. The various HSE Teams that worked on the Project are also extremely proud of this achievement and consider it to be testimony to the ongoing HSE training and monitoring that they conducted at the various construction sites on the wind farm.

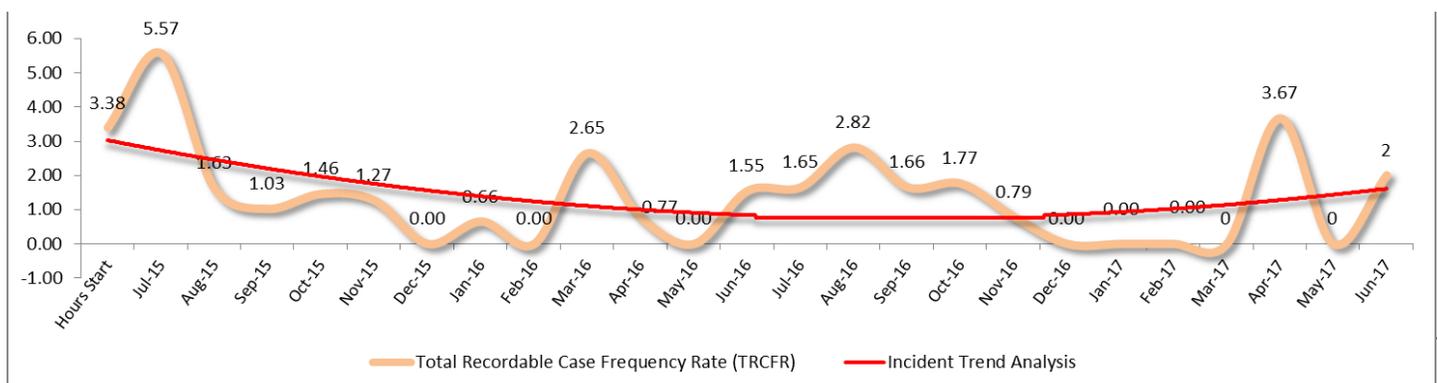
In terms of HSE statistics over the 32-months' construction phase, the Project had a total of 7.1 million-man hours, during which the following was recorded:

- 10 Lost Time Cases (*i.e. number of incidents/accidents that led to workers not being able to work*)⁴;
- 48 Medical Treatment Cases;
- 293 First Aid Cases; and,
- 672 Near Misses (*i.e. an identified situation that could have led to a collision or accident*).

Overall, the frequency of HSE incidents was significantly higher at the start of the construction phase due to the novelty of the construction works and the need to teach and then train local employees about best practices linked to construction works (see

overleaf). Given the locality of the Project and the relative inexperience of the workforce regarding construction activities, a lot of time was spent early on to train workers on how to work with site safety boots and the use of hard hats, as well as how to work with safety gloves and protective glasses.

Figure 3: Total Recordable Case Frequency Rate



Relatedly, reporting of near misses was minimal towards the start of the Project, primarily because it was not a cultural norm in the wider project area to report potential hazards or unsafe working behaviour. Moreover, reporting near misses was also perceived to bring negative repercussions to those who reported them. To address these cultural perceptions, the various site HSE Teams regularly explained and held workshops with their colleagues in order to discuss and show that reporting of near misses is in actual fact a positive contribution, as it can save colleagues from potential accidents in future. To further encourage project workers to report on near misses, competitions were held across the entire project, whereby workers who reported the ‘best’ near misses would receive recognition in front of colleagues as well as an award to take home. Combined, these two approaches led to an increase in near miss reporting about half way through the construction phase, which in turn helped to mitigate against potential serious accidents.

WORKER ACCOMMODATION

Given the size of the wind farm and the length of the 210km access road that LTWP had to rehabilitate, the number of national and international contractors, as well as the differences in the contractors’ responsibilities, the Project had a total of 21 camps throughout its construction phase. These camps were operational at different stages of construction, they were distributed in an area of approximately 2,500km² and ranged from being able to accommodate as few as four people to as many as 156 (see Figure 4 below for largest accommodation site, i.e. LTWP Village). Of these camps, only five will continue to operate during the operations phase of the Project in order to provide accommodation facilities to the Project’s workforce.

Figure 4: LTWP Village, i.e. main permanent accommodation camp for operations phase



To manage accommodation standards, LTWP developed a ‘Temporary Accommodation Management Plan’ at the onset of the Project, which set out the standards that all contractors had to meet while constructing their temporary accommodation facilities. Moreover, LTWP obliged all contractors to build and manage their accommodation camps in line with the IFC/EBRD Accommodation Guidelines, which are a guide on best practice. On one hand, this approach led to most accommodation camps being built to an acceptable/high standard, particularly those that were of a larger size, that were needed for a longer time period or belonged to larger contractors. On the other hand, having to meet the IFC/EBRD standards posed a significant challenge to the smaller (size wise) and more temporary camps, as contractors were more reluctant to spend money on these facilities. A further challenge expressed by most contractors was the need to comply with international best practice on accommodation⁵ in a location where local houses are made of sticks and mud, where they have no basic amenities (e.g. no direct access to water and/or sanitation), where several people share a room and where the cultural understanding of privacy and individual space is entirely different to that in western culture. These challenges were addressed through ongoing dialogue, whereby LTWP representatives needed to explain that adhering to

⁵ E.g.: In relation to dimensions of rooms, dimensions of personal space, need for lockable cabinets and/or ratio of sanitary facilities to number of workers.

these standards was a contractual commitment and obligatory for receiving project financing from lenders. These challenges were also addressed through regular monitoring visits during which corrective actions and recommendations were identified.

LESSONS LEARNT

Several lessons were learnt, corrective actions identified and procedures modified during the construction of the Project, all the with purpose to continuously improve working conditions and HSE aspects. The following are the key lessons learnt on this project:

- Establishing dedicated employment offices in Kurungu and Loiyangalani, which primarily focused on the equitable distribution of employment opportunities amongst the local communities, not by tribes, as well as managed local workers' and community members' grievances, was critical to sharing employment benefits equitably and to addressing grievances in a culturally sensitive and appropriate manner. This approach was a significant contributor to positive community-project relations, as the offices were managed and operated in a transparent manner;
- While establishing dedicated employment offices was key, it was also important to oblige contractors to employ workers through these offices. In most instances where contractors chose to employ workers directly, rather than through the employment offices, negative repercussions e.g. a strike by local workers were experienced by these contractors, as the communities no longer felt that employment opportunities were being equally distributed.
- Weekly HSE interface meetings between all contractors, hosted by the Project Management Contractor, i.e. WorleyParsons, were important in aligning on standards and processes, thereby improving performance and compliance; and,
- The importance of ensuring that standards are clearly understood, and then making adherence to them a contractual obligation, is crucial to ensuring that these can be met by contractors. For example, regarding accommodation: Had the standards not been set out clearly from the onset, then the contractors would have struggled (even) more to adhere to them. Moreover, setting clear expectations meant that monitoring could focus on corrective actions instead of discussions about what the standards are. It was equally important that LTWP engaged in dialogue with contractors and took the local context into consideration when identifying corrective actions and/or recommendations. This approach was welcomed by contractors and accommodation residents as it illustrated LTWP awareness of the context in which the Project is located and people's cultural preferences.

The lessons learnt during the construction phase of the Project led to the revision of existing - and the development of new - HR and labour management plans and policies. These plans and policies will be used during the operational phase of the Project in order to further improve the good employment practices that the Project has implemented to date.