

# Masaiti Energy Center

A Load Following Wind, Solar  
and Battery Storage Project

Upepo Energy Zambia, Ltd

# About Upepo Energy Zambia Ltd (Upepo)

- **Upepo Energy Zambia** is a subsidiary of U.S. based Upepo Holdings, LLC
- Founded by Americans who built, constructed and operated over **1,000MW** of renewable energy in the USA as Wind Capital Group
- Committed to bringing **high quality, reliable** and **cost-effective** utility-scale renewable energy to East and Southern Africa

# Masaiti Energy Center Project Summary

- Load following hybrid renewable energy project including wind, solar and battery storage
- **Phase I** Feasibility Study of **150 MW** optimizing wind and solar resources with battery storage
  - Wind Farm Location – Masaiti District, Copperbelt Province
  - Solar Farm and Battery Storage are co-located north of the CEC Turf Substation – Kitwe District, Copperbelt Province

# Upepo Wind Farm Development in Zambia

- **2017** \* Field visits to potential Wind Farm Sites across Zambia
- **2018** \* Masaiti Wind Farm Site in the Copperbelt selected
- **2019** \* Upepo Energy Zambia Limited registration
  - \* MoU with Copperbelt Energy Corporation
  - \* Land Lease with Chieftainess Malembeka
  - \* USTDA Feasibility Study Grant Award
  - \* Two 80 meteorological masts installed
- **2020** \* Solar site secured
  - \* Geotech and aerial mapping completed
  - \* ESIA nearing completion
  - \* Logistics and Interconnection studies in progress

# Masaiti Project Area



# Feasibility Study Status

- Site Survey – **Completed**
- Hydrologic Report - **Completed**
- Preliminary Turbine Layout – **Completed**
- Preliminary Logistics Study – **Completed**
- Wind Resource Assessment – **10 months of high-quality wind data collected**
- Interconnection Study – **in process**
- ESIA – **Scoping Report, TOR and Field work complete, Draft ESIA filing expected Dec 2020**
- Excellent relationships with Chieftainess Malembeka, District Officials, Traditional Leaders and Local Residents

# Next Steps

- Complete Feasibility Study **Q2 2021** including
  - Bankable Wind Study
  - Approved ESIA and other regulatory requirements
  - Optimized Wind, Solar and Battery Storage to provide a plant to follow CEC's load
  - Commercial Documents