

# Sustainable Digital Transformation



### Introducing American Tower Corporation <sup>(1)</sup>

ATC is a globally diversified provider of mission-critical communications real estate



#### **Comprehensive Wirelesss Asset Portfolio**

- Long-term Agreements with Leading **Global Mobile Network Operators**
- U.S. (~43,000 towers)
- International (142,000+ towers)
- Indoor Solutions (1,800 global sites)
- Data Centers (27 globally)
- Power and Energy Site Services
- Real Estate Connectivity Management

Data as of March 31, 2021

In many international markets, we have non-tower, non-DAS communications infrastructure assets which are excluded from site counts

In Australia, the Company does not own or operate communication sites but controls land under carrier or other third-party communications sites, which provides recurring cash flow tenant leasing arrangements

### **Global Carbon Atlas**



## Sustainable Digital Transformation

Uganda's ICT Sector- Journey Assessing GHG Emissions



## Uganda's journey on ICT



## Uganda's journey on ICT



### Sustainable Digital transformation

Around

60%

of Uganda's Tower footprint in Urban areas

31% in Kampala and Wakiso







### **ICT Sector key initiatives**

Tower Co business model help reduce sector carbon footprint

- Reduced number of towers (infrastructure sharing)
- Energy Saving
- □ Reduction in visual pollution









Assuming each NTO licensed operator required 1000 towers over the next 4 years

Concrete **320,000** tons Steel **24,000** tons

> **21%** reduction annually



## ATC\_Key Initiatives

## **Sustainable Digital Transformation**

## Uganda's landscape

□ 13.8M/ 46M have access to electricity

□ 30% of population

- Solutions- solar home systems, mini grids in rural areas, public private partnerships
- □ 1 LTR of diesel= 2.68 kg of carbon

□ 1 hour of DG= 3 LTRs of diesel= 21 kg of CO2





### Energy Source Distribution Journey- 2012 >>2027



37.5% movement in the Energy mix from the diesel generator contribution to renewable energy sources by 2022 from 2012 baseline.
Accelerated deployment of Solar and LIBs to 33% of energy contribution by end of 2022.

### ATC Uganda Power Journey





### Decarbonization Journey: CO<sub>2</sub> Emissions Vs Energy Demand

#### Positioned to reduce carbon footprint through renewable Energy investments and operational best practices



#### Hindsight:

 CO2 emission on a consistent downward trend since 2020 despite increasing number of sites and related power demand. Attributed to grid, solar, LIB deployments coupled with AI assisted network optimization.

#### **Foresight:**

- Power demand is projected to have an exponential growth with ever increasing demand for digital solutions. This will be matched with more innovation to sustain CO<sub>2</sub> reduction trends.
- All new sites installed with high capacity Solar and LIBs as a priority targeting a carbon neutral network.

#### ~1,061

Metric tones of CO2 avoided since 2012 due to fuel saving solutions

#### ~0.319

Tones of CO2 per MWh of energy down from 1.936 in 2012

#### ~18.1

MWp installed since 2012 targeting areas with poor or no grid

#### ~126

MWh of high-capacity Lithium-Ion Batteries installed

#### ~62%

Grid connection rate in 2022, targeting 86% by 2028

~2

New energy solutions targeted in 2024

## **ATC Story**



### ATC Product Portfolio

Mini-macro: Street macro Mini-macro: City macro Pine tree Macro towers Monopole

ATC has continued to transform from the traditional towers of early 2000s into to more innovative tower solutions in support digital services densification



### ICT \_The enabler for other sectors

## ICT\_ Enabler for other sectors

### **Support to Cities**

- Provide technology as backbone for smart cities
- Conducted a study to inform infrastructure requirement for Kampala

### **Health Care**

Tele medicine (mobile health services)

Tele consultations,

### Education

ICT centres to provide digital learning

**D**E Learning

### Oil and Gas

Provide Tower infrastructure and mobile operator services in Oil fields







### Thank You!



#### **AMERICAN TOWER®**

### Chief Executive Officer

ATC Uganda Dorothy.Ssemanda@americantower.com 1. C.S. ......