

**TOSHIBA**

# **EU-Japan Business Collaboration in Third Markets (Africa)**

**Toshiba Energy Systems  
& Solutions Corporation**

**Dec 2019**

# TOSHIBA's Profile



**Nobuaki Kurumatani**  
Chairman & CEO

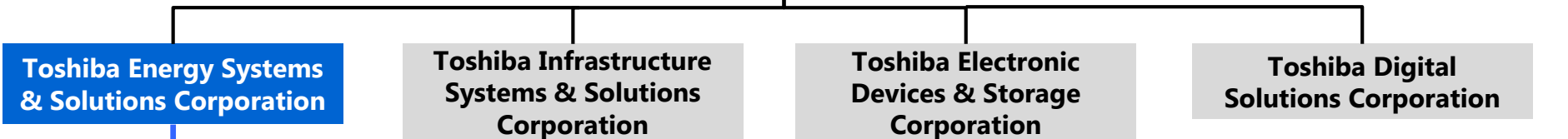


**Satoshi Tsunakawa**  
President & COO

## TOSHIBA Corporation

Established	In 1875 by Hisashige Tanaka
Employees	128,697 Worldwide*
Sales	USD 36,935 million*
Common Stock	USD 2,000 million*
Total Assets	USD 4,2973 million*

\*Consolidated basis. 1USD=¥100



### Toshiba Energy Systems & Solutions Corporation



**Mamoru Hatazawa**  
President & CEO

#### Power Systems Div.

Supercritical CO<sub>2</sub> Turbine Business Promotion Office

ISOGO Nuclear Engineering Center

Keihin Product Operations

#### Grid Aggregation Div.

Fuchu Operations

Hamakawasaki Operations

#### Hydrogen Energy Business Div.

Fuel Cell Power System Center

#### Energy Systems R&D Center

#### DX Business Design Project Team

#### Branch Offices

Established	In 2017
Employees	6,700
Sales	USD 6,527 million*
Common Stock	USD 100 million*

\*Consolidated basis. 1USD=¥100

July 1, 2019



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# Business Domain of TOSHIBA ESS Corporation

## Contributing towards creating a Sustainable Society

### Power Generation Systems



Thermal Power



Nuclear Power

### Heavy-Ion Radiotherapy System For Cancer Treatment



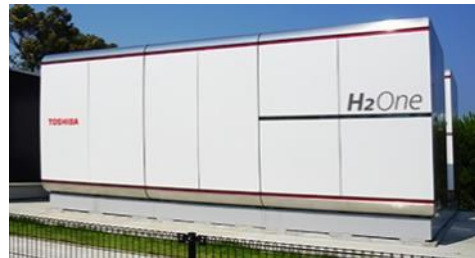
### Transmission and Distribution / Energy Storage



Transformer



Supervisory Control And Data Acquisition Systems (SCADA)



Hydrogen-based Autonomous Energy Supply System



Stationary Battery Energy Storage Systems

### Renewable Energy



Hydro Power



Geothermal Power



Solar Power

# MOU to Support African Countries

Toshiba has been collaborating in power generation projects not only as the equipment supplier, but also as personal skill development and training for the Owner

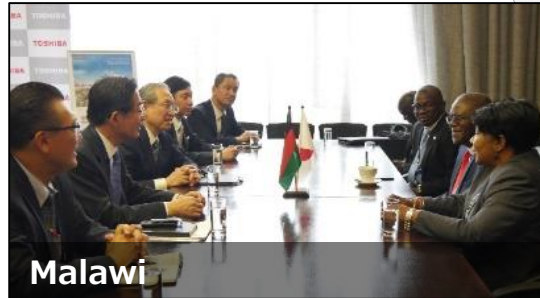
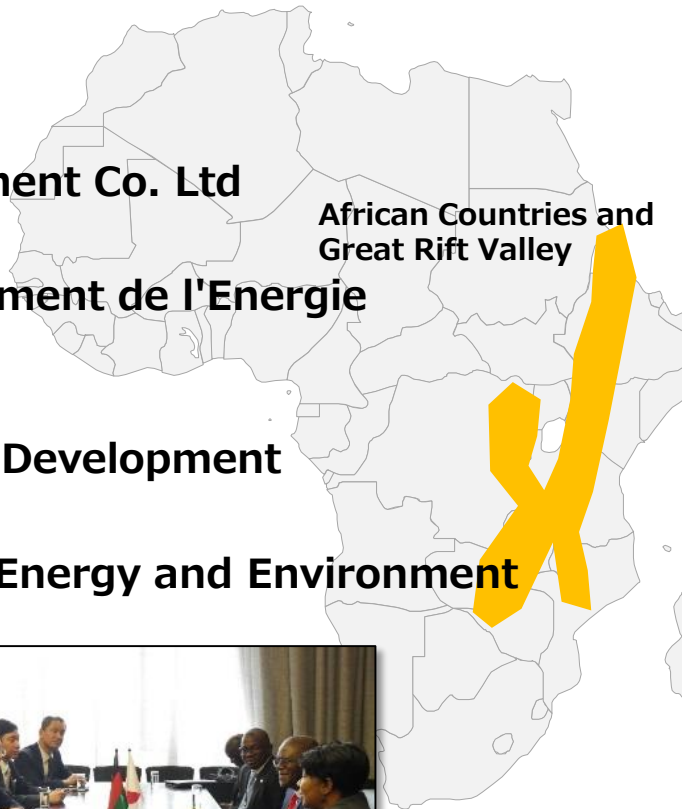
- **Sep 2014 - Ethiopia**  
Ethiopian Electric Power

- **Dec 2015 - Tanzania**  
Tanzania Geothermal Development Co. Ltd

- **Aug 2016 - Djibouti**  
Office Djiboutien de Développement de l'Energie  
Géothermique (ODDEG)

- **Aug 2016 - Uganda**  
Ministry of Energy and Mineral Development

- **May 2018 - Malawi**  
Ministry of Natural Resources, Energy and Environment





# Collaboration with French Companies for Africa

Toshiba is collaborating with French companies for renewable energy projects such as hydro and geothermal for Africa



**TOSHIBA**

Collaboration for Africa

## Eiffage Energy Systems - Clemessy

Toshiba has signed MoU with Clemessy to develop **a specific geothermal project** in Africa.



Eiffage Energy Systems - Clemessy

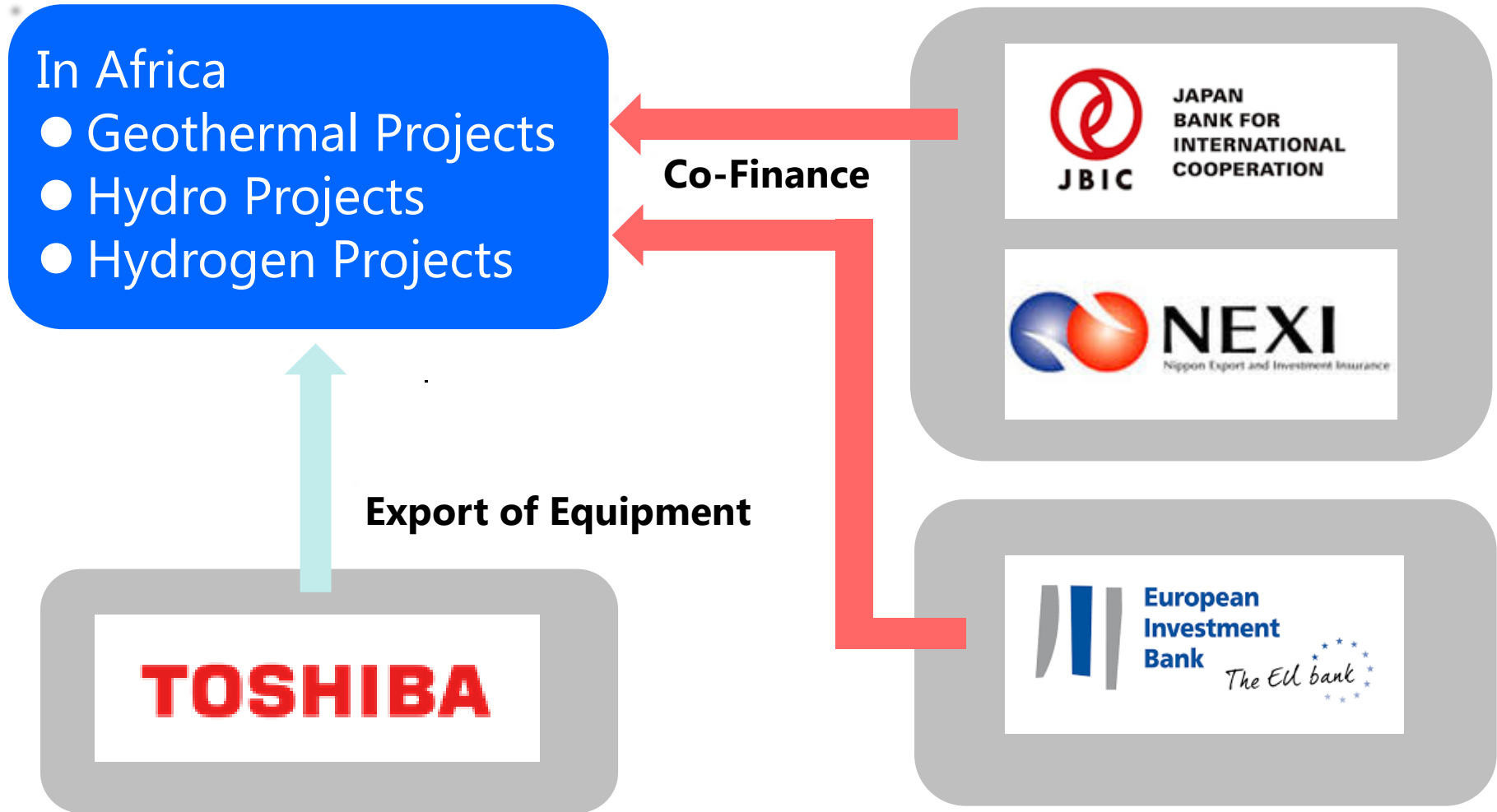
## Vinci Construction

Toshiba has signed MoU with Vinci Construction to develop **hydro and geothermal projects** in Africa.



Vinci Construction

# Concept of Co-Finance of EIB and JBIC/NEXI



**TOSHIBA**

**Thank you**