

ESMAP

***Hydropower Development
Facility Event July 9, 2023***

Mpatamanga
Hydropower

Mpatamanga Hydropower Project

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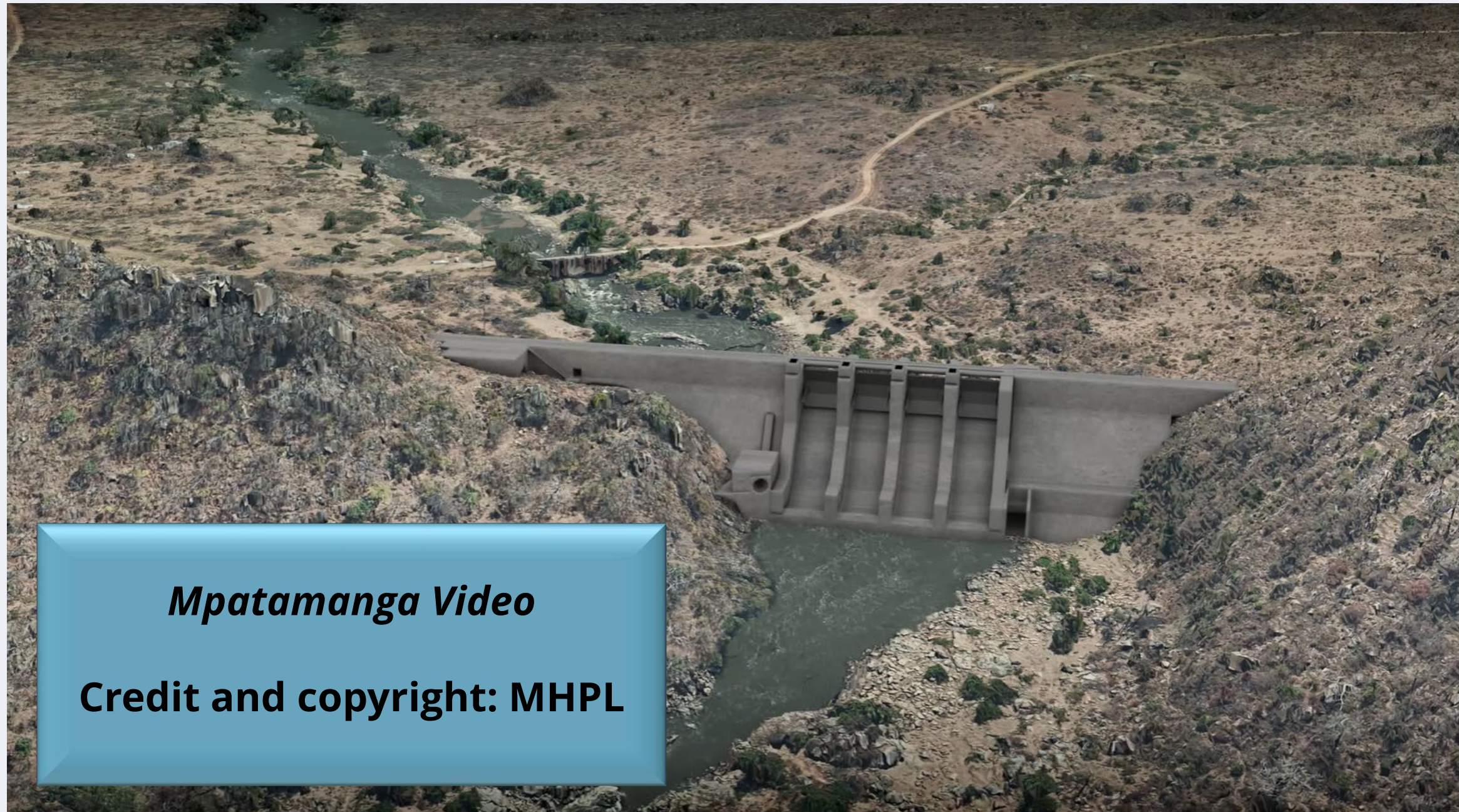
Basic features

- Located in Malawi
- 361 MW
- Hydropower storage project
- Baseload and Peaking Plant
- Public-Private-Partnership (PPP)
- Developed by Mpatamanga Hydro Power Limited (MHPL)*, Government of Malawi, and IFC

**Owned by EDF and SCATEC*

Video presentation

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Mpatamanga Video

Credit and copyright: MHPL

Technical features

- **Main dam**: 275 meter wide Roller Compacted Concrete (RCC) gravity dam, 45 meter high, with a gated spillway. Two headrace tunnels with 9-meter diameter. Surface powerhouse with four units (Francis turbines) with a total capacity of 309 MW. A 400 kV line will evacuate the power to Phombeya Substation.
- **Downstream regulating dam**: 330 meter wide RCC gravity dam, 30 meter high, with gated spillway. Integrated powerhouse with two units (Bulb turbines) with a total capacity of 52 MW. A 132 kV line will evacuate the power to the east to join the existing Tedzani-Kapichira transmission line.

World Bank Group (WBG) cooperation with Govt of Malawi

**Energy sector
support –
beyond GWh
production**

**Regional
perspectives
– energy
trade and
security**

**E&S
safeguarding,
including
Dam Safety**

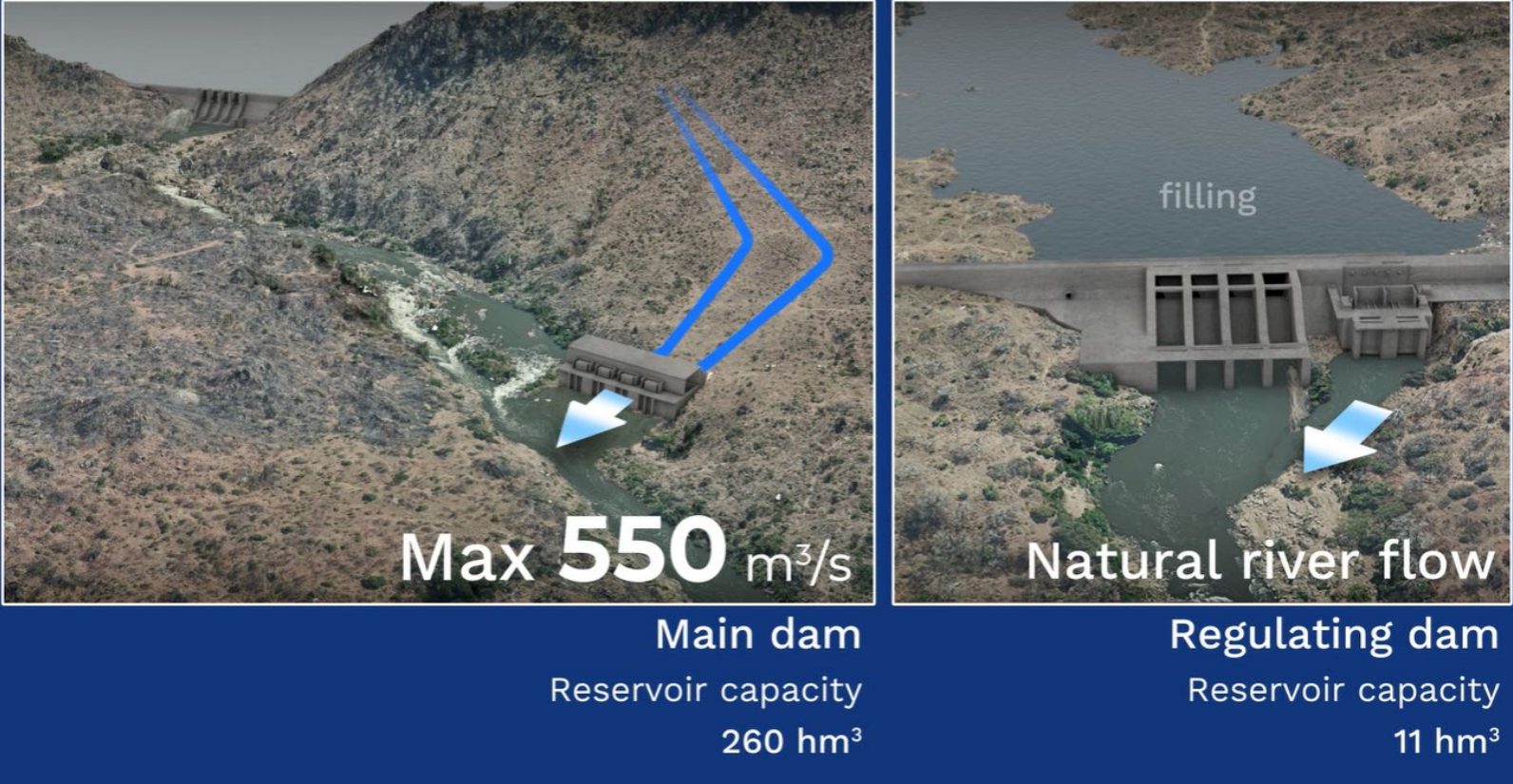
**Concessional
financing and
leveraging of
private
investments**

Key milestones/activities

2014-15	Pre-Feasibility Feasibility Study	Funded by WB Energy Support Project)
2015-18	Feasibility Study	
2018	Integrated Resource Plan (IRP)	Mpatamanga confirmed as a development priority
April 2019	Joint Development Agreement	Between IFC (Infraventure) and Govt of Malawi to develop Mpatamanga as PPP
Jun 2019	IDA Board approval for Malawi Electricity Access Project	Including support for Sector Financial Sustainability
Sep 2019	IDA Board approval for Mozambique - Malawi Interconnector Project	Connection to SAPP
Feb 2020	RFP for Private Strategic Sponsor	
2020	Malawi Market Study: Mpatamanga	Funded by IFC
Sep 2022	Commercial Close	EDF, SCATEC, and IFC signed Relationship Agreement with Govt of Malawi
Oct 2022	The project company MHPL is operational	Jointly owned by EDF and SCATEC
Jan 2023	4 comprehensive safeguards studies initiated	ESIA, RAP, CIA, BAP
<i>End 2024</i>	<i>Expected IDA Board Approval</i>	
<i>End 2025</i>	<i>Expected Financial Close and Start of Construction</i>	

Beyond the GWh

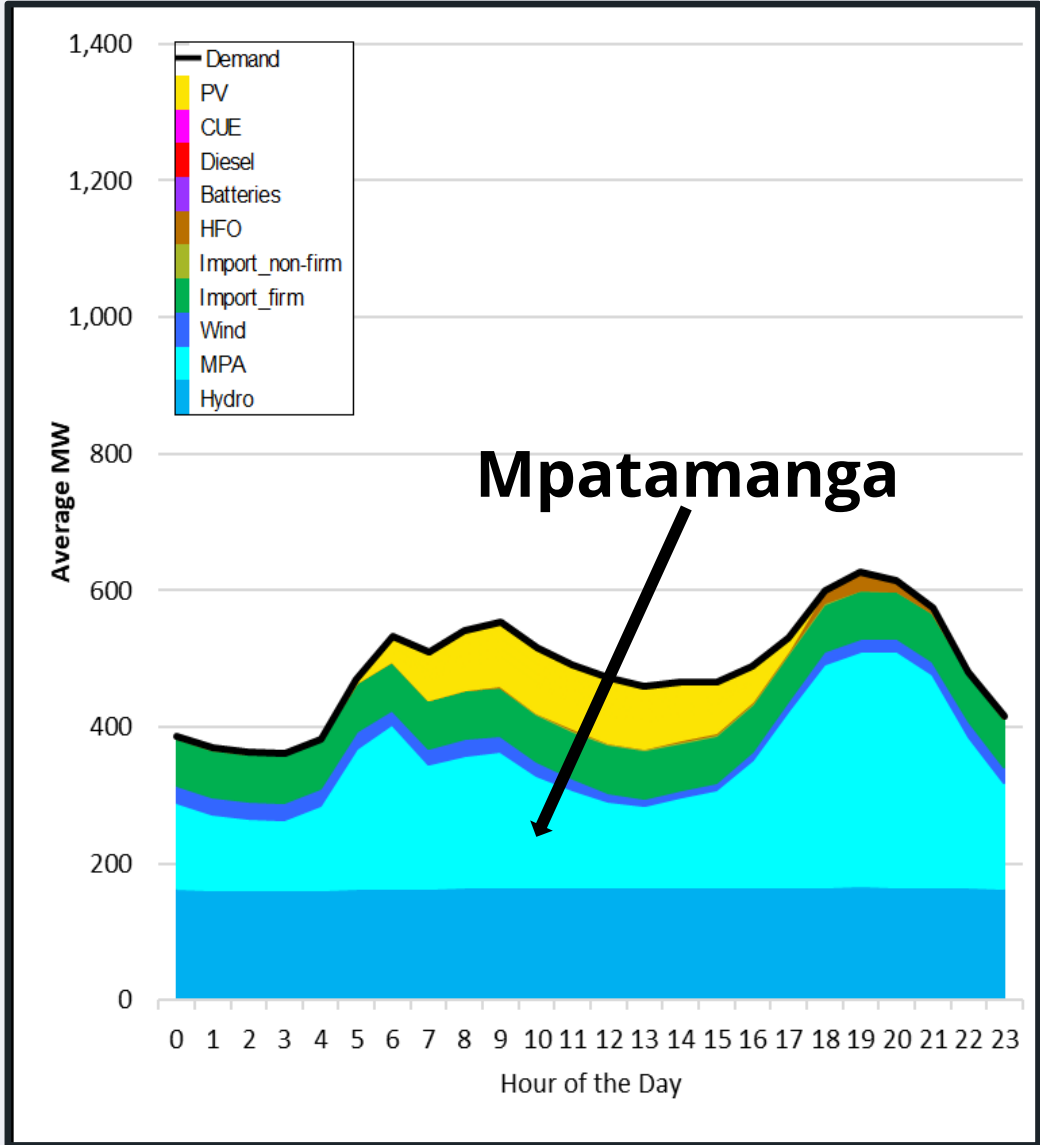
it will generate when the demand is highest
(mornings and evenings)



Source: MHPL (2023)

Mpatamanga reduces output during day-time to allow Solar PV production and to ensure enough energy for peak

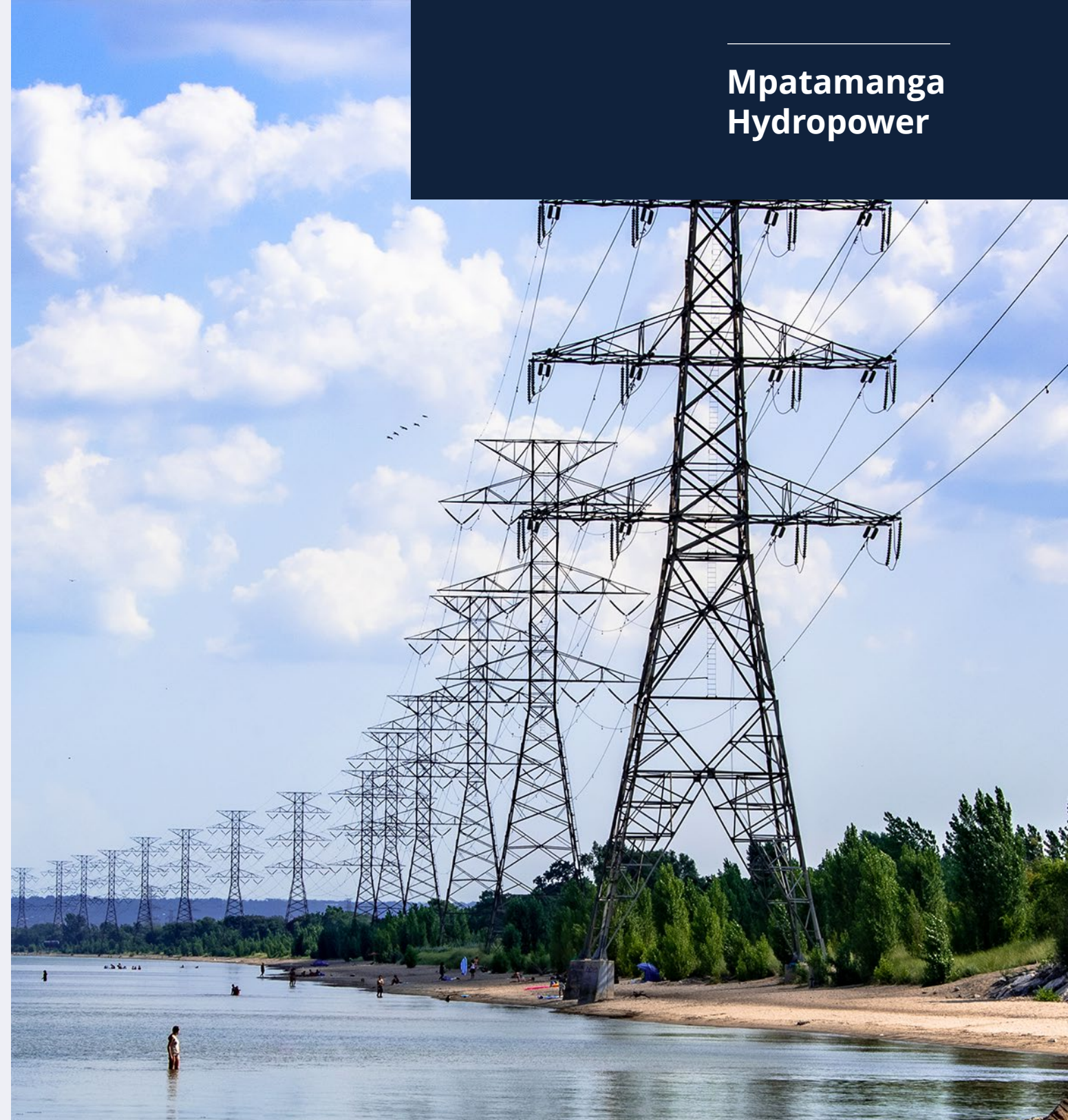
Source: Market Study (2020)



Sector sustainability

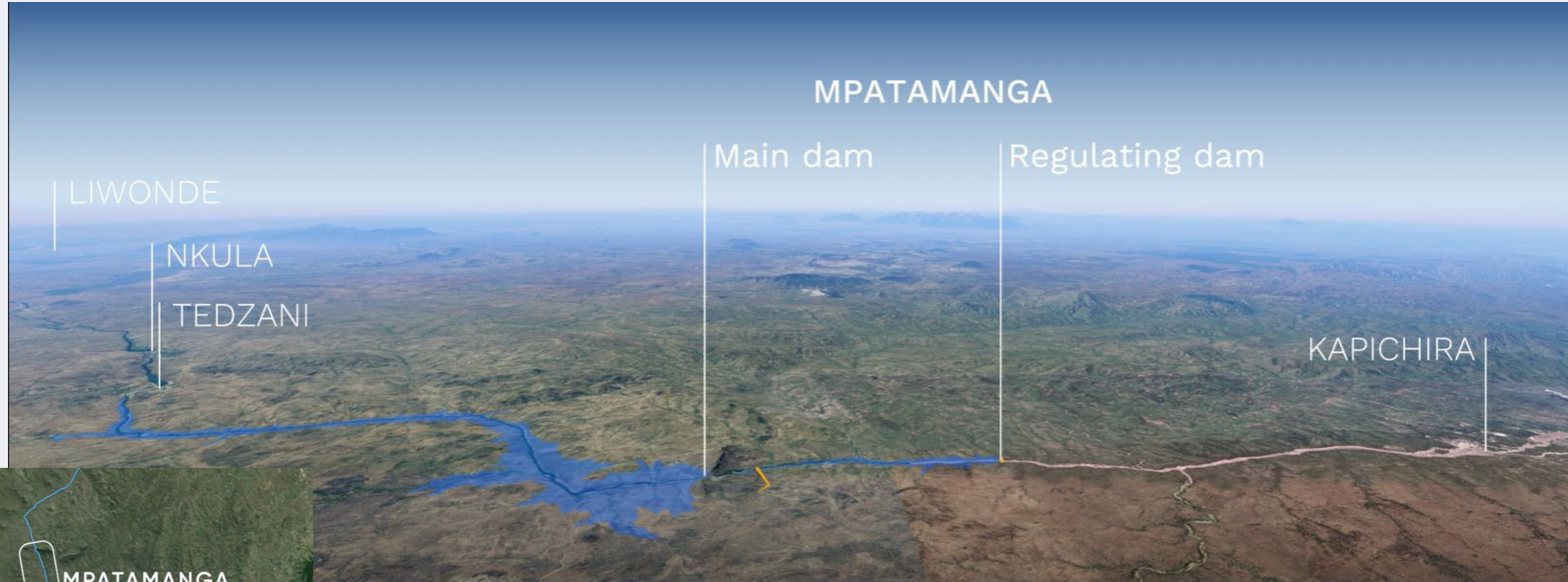
- **Malawi Electricity Access Project is expected to increase the access rate from 18% to 30%**
- **Technical Assistance to review and design options for restoring financial sustainability of the power sector**
- **Energy sector reforms through performance-based lending tied to reform outcomes**

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E&S, Dam safety

**Cascade
management
and dam safety
are essential for
the project**

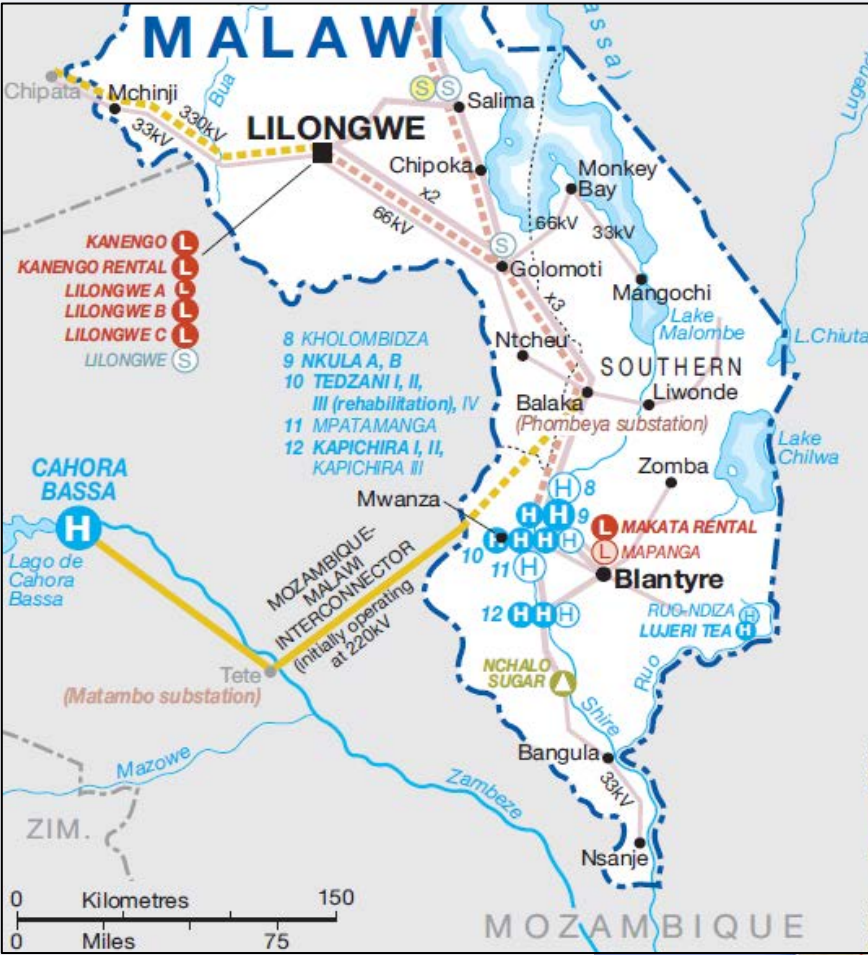


Source: MHPL (2023)

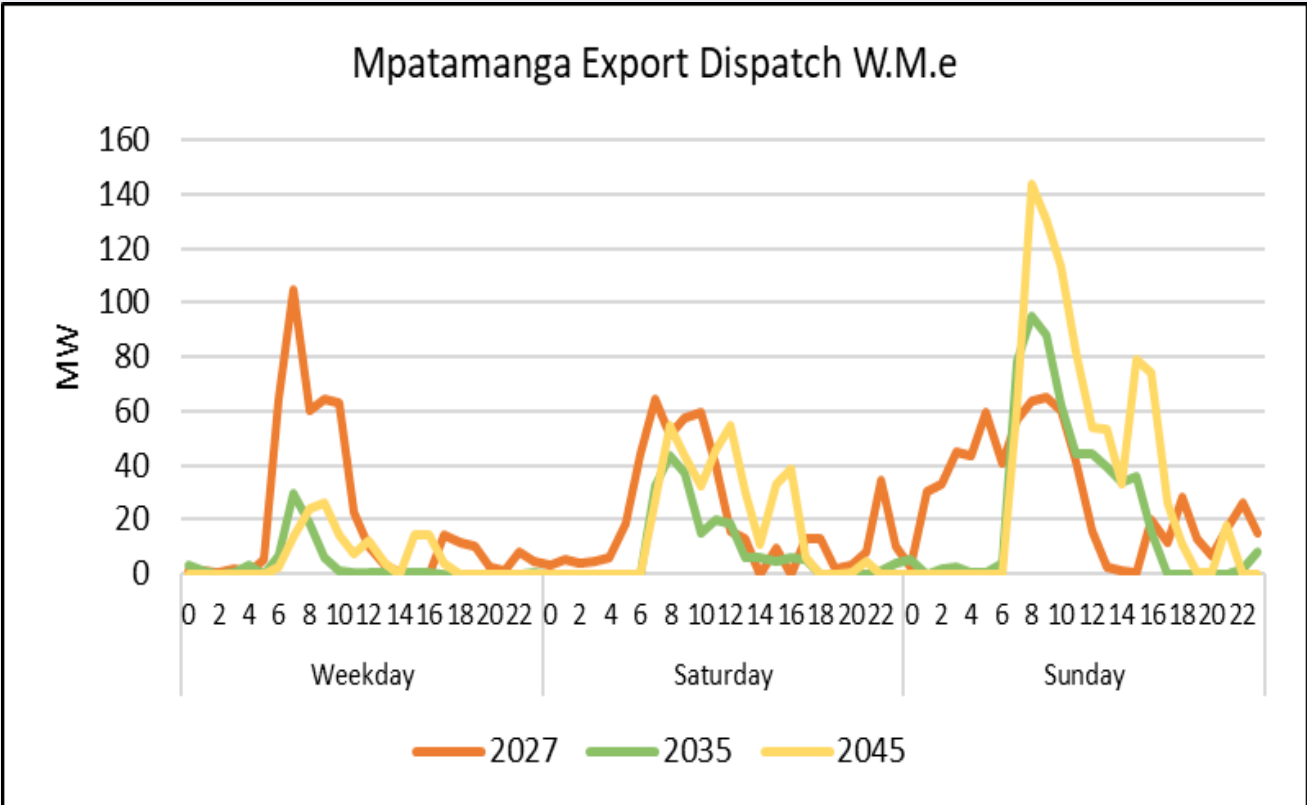
Regulating Dam will remove potential negative impacts on downstream Majete Wildlife Reserve, and avoid spilling at Kapichira when peaking

Regional trade

Mpatamanga Hydropower



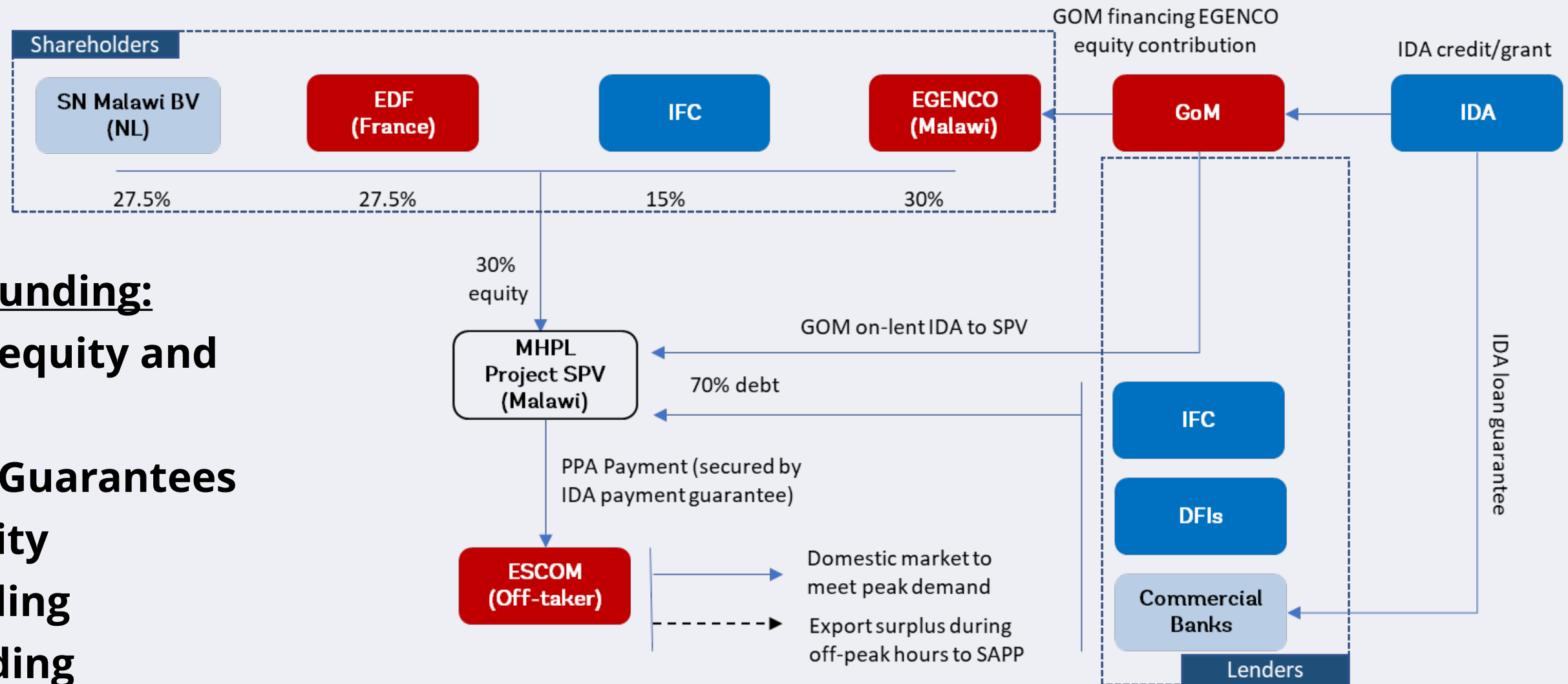
Source: African Energy 2019; www.africa-energy.com



Source: Market Study (2020)

The interconnector to Mozambique enables export of excess energy from Mpatamanga to SAPP

Flexible financing



Potential funding:

- IDA for equity and lending
- IDA for Guarantees
- IFC equity
- IFC lending
- DFI lending
- Commercial lending

THE END

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this presentation**