

LVL ENERGY FUND PLC

Investing in energy that powers nations



About Us

LVL Energy Fund Limited was incorporated in June 2006 as a subsidiary of Lanka Ventures PLC with an initial capital of Rs. 300 Mn. The main objective of the Company was to invest in the form of equity and quasi equity in projects in the power and energy sector in Sri Lanka and abroad.

Up to June 2016 the Company had several rounds of fund raising which culminated in a total fund base of Rs. 2,636 Mn by 31st March 2017 prior to launching an IPO to raise further capital of Rs. 1,200 Mn and obtaining a listing for shares at the Colombo Stock Exchange.

The Company remains a well-diversified entity with investments in renewable and thermal power projects in Sri Lanka, Bangladesh and Nepal.

Our Locations

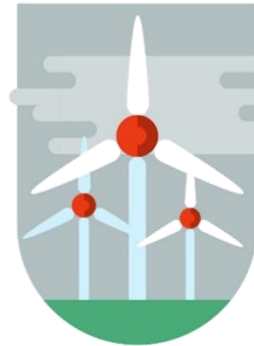


Our Projects



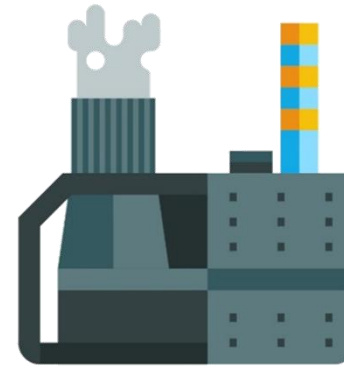
HYDRO POWER

Run-Of-River Hydro Power Plant begins at the weir which divert water via a canal or pipeline to bring the water to the power station. The water is then fed into a high-pressure penstock (or pipeline) which drives the water under high pressure into the powerhouse, where it is connected to an installed turbine driving the generator. The amount of power a hydro station can generate is dependent on the head and flow of the water. At the outlet of the turbines, the water is discharged back to the river via a tailrace.



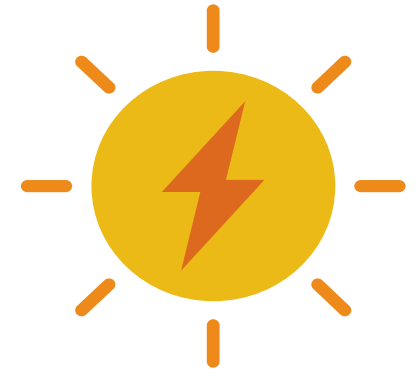
WIND POWER

Wind power is the use of air flow through wind turbines to provide the mechanical power to turn electric generators. Wind farms consist of many individual wind turbines, which are connected to the electric power transmission network. The energy that can be captured by wind turbines is highly dependent on the local average wind speed. The speed of the wind rotates the blades of a rotor, producing kinetic energy. The rotor then drives the generator that converts the mechanical energy into electricity.



THERMAL POWER

A thermal power plant is a power station in which heat energy is converted to electric power. Usually the turbine is steam-driven. The steam is produced in high pressure in the steam boiler from burning of fuel in boiler furnaces. This steam is further super heated in a super heater. This superheated steam then enters into the turbine and rotates the turbine blades which drives an electric generator. After it passes through the turbine, the steam is condensed in a condenser and recycled to where it was heated.



SOLAR POWER

Solar power generation systems collect and concentrate sunlight to produce the useable electricity. The solar panels consist of photovoltaic cells, known as PV or solar cells, to directly convert sunlight into usable electricity. These panels are made from semiconductor materials, usually some form of silicon. When photons from sunlight hit the semiconductor material free electrons are generated which can then flow through the material to produce a direct electrical current. The DC current then needs to be converted to alternating current (AC) using an inverter before it can be directly used or fed into the electrical grid.



HYDRO POWER PROJECTS

Belihul Oya

Nividu (Pvt) Ltd



Location

Belihuloya,
Rathnapura
district



Capacity

2.2 MW



Gross Head

178 m



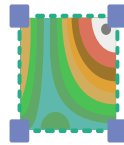
Rainfall

2,638 mm
per year



Design Flow

1.5 m³/s



Catchment Area

21.5 km²



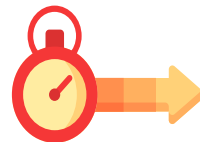
Equipment Supplier

Wasserkraft,
Germany



Year of Commissioning

2002



PPA Expiry

2022

* Extendable till 2037



Ownership

25%



Investment

LKR 120.2
MN

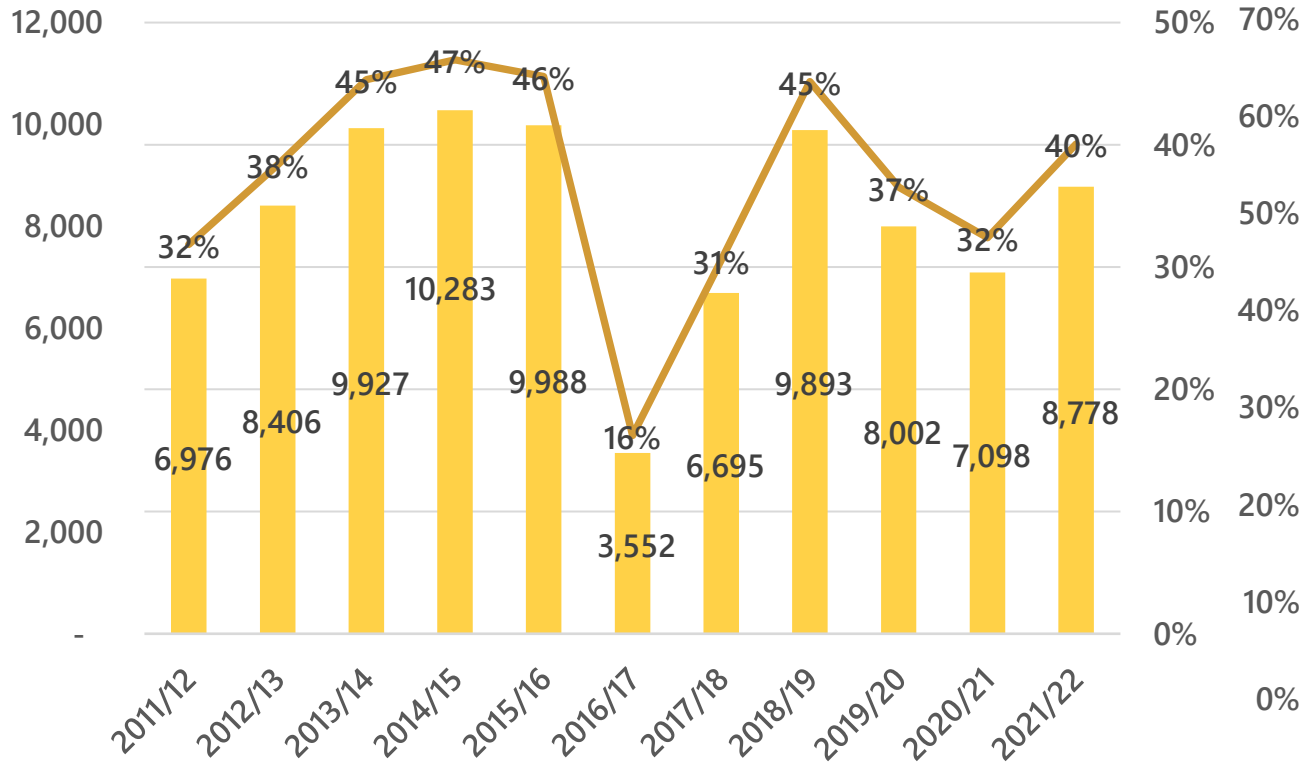


Project Partners

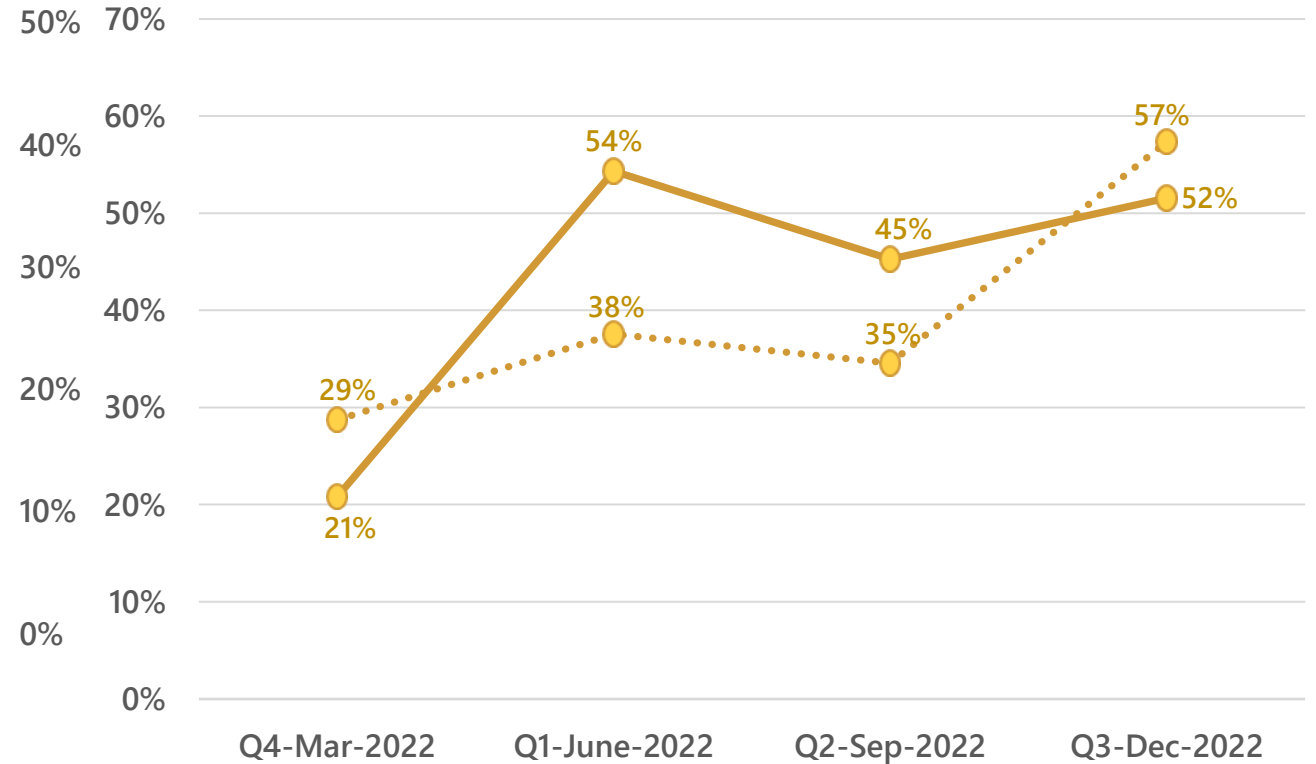
LTL Holdings
(Pvt) Ltd



Plant Factor (Annual)



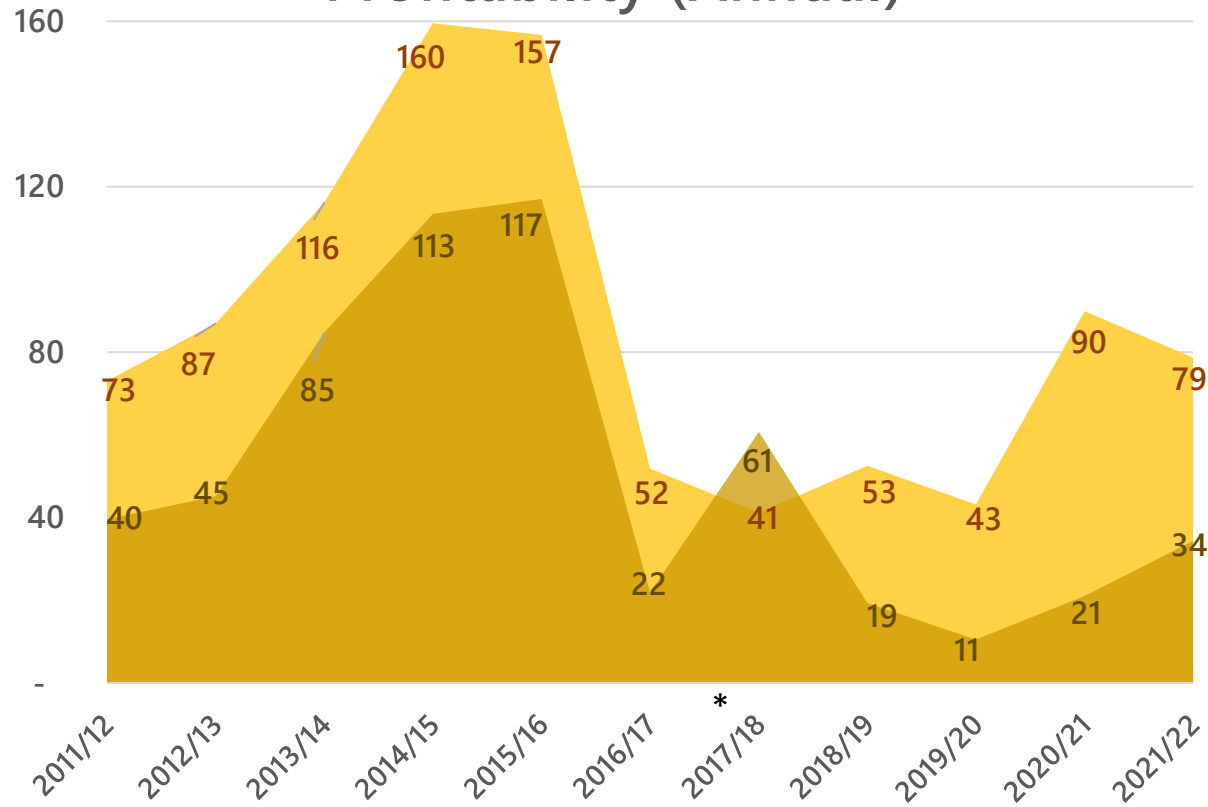
Plant Factor (Quarterly)



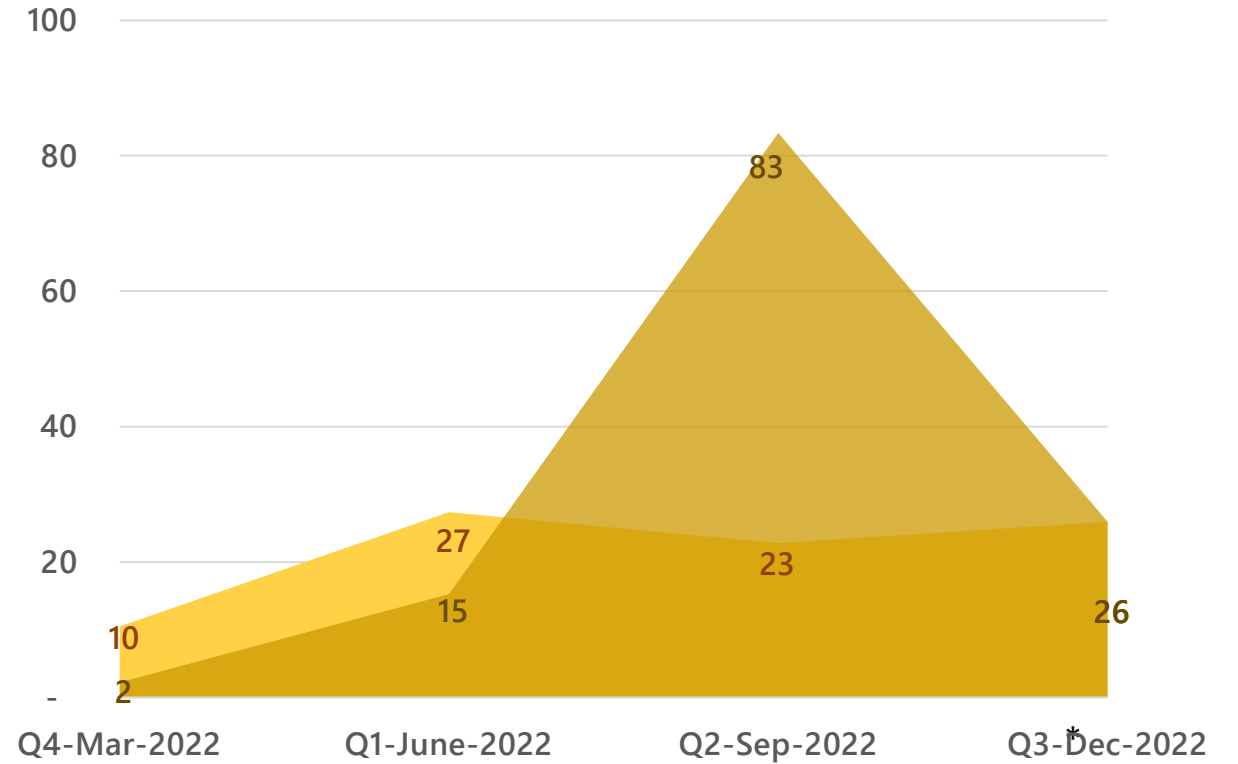
* Plant generation had been affected due to drought condition prevailed in the year 2016 and 2017.

Generation (MWh)
 PF
 4-year Historical Average PF

Profitability (Annual)



Profitability (Quarterly)



* The profit is higher than revenue due to re-valuation of plant assets. The plant was fully depreciated within the initial PPA of 15 year. It was required to re-value the assets and depreciate according to the new life span.

■ Revenue (Mn)

■ Profit (Mn)

Assupini Ella

Nividu Assupini Ella (Pvt) Ltd



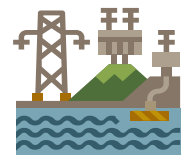
Assupiniella,
Kegalle district

Location



4.0 MW

Capacity



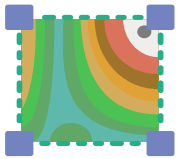
210 m

Gross Head



2,134 mm
per year

Rainfall



27 km²

Catchment Area



2.2 m³/s

Design Flow



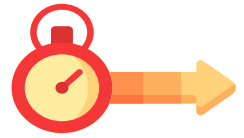
VA Tech,
Germany

Equipment Supplier



2005

Year of Commissioning



2020

PPA Expiry

* Extendable for
another 20 years



25% effective
holding

Ownership

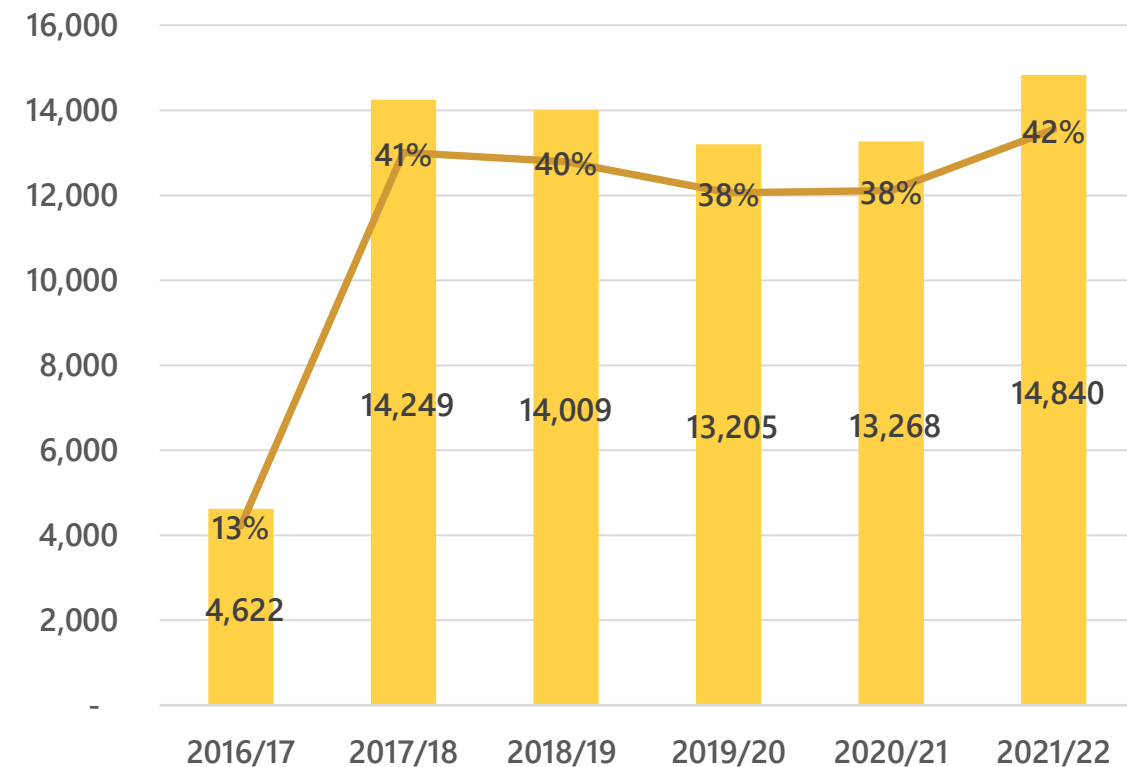


LTL Holdings (Pvt)
Ltd

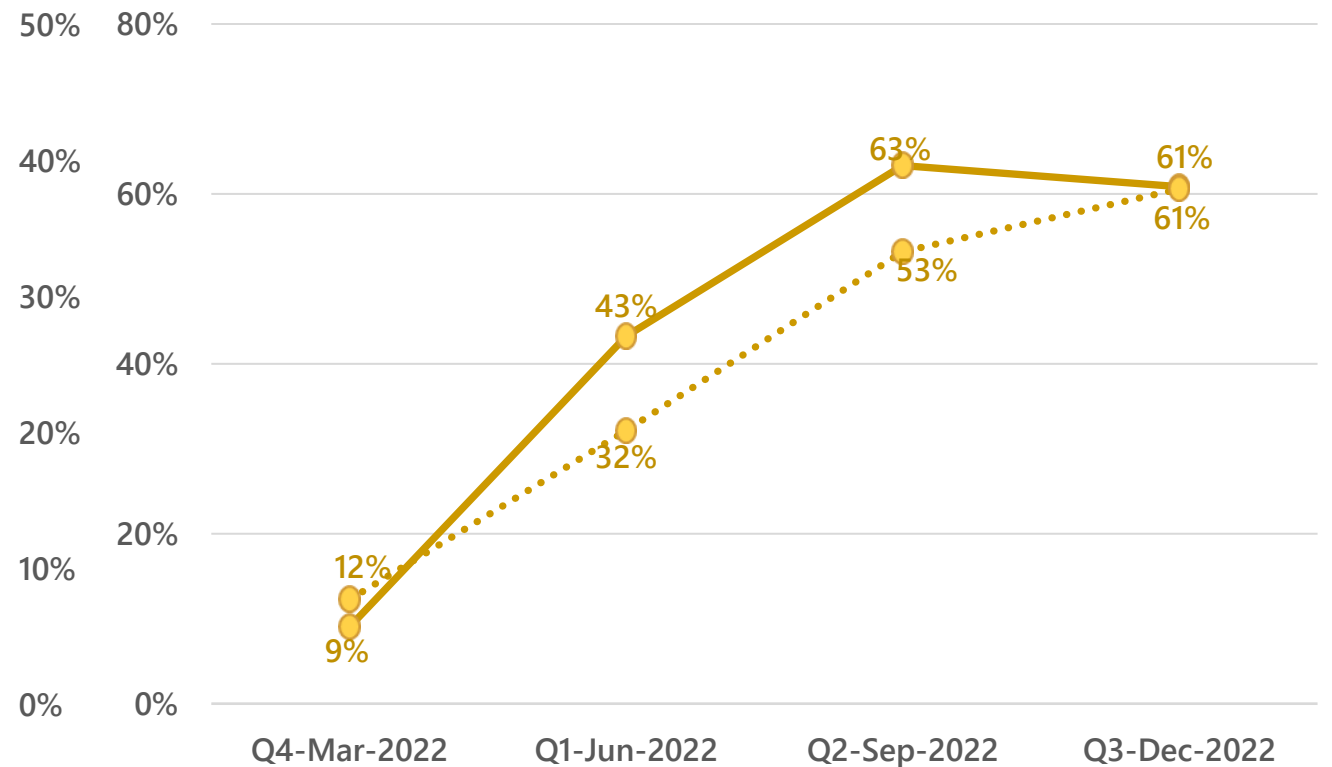
Project Partners



Plant Factor (Annual)



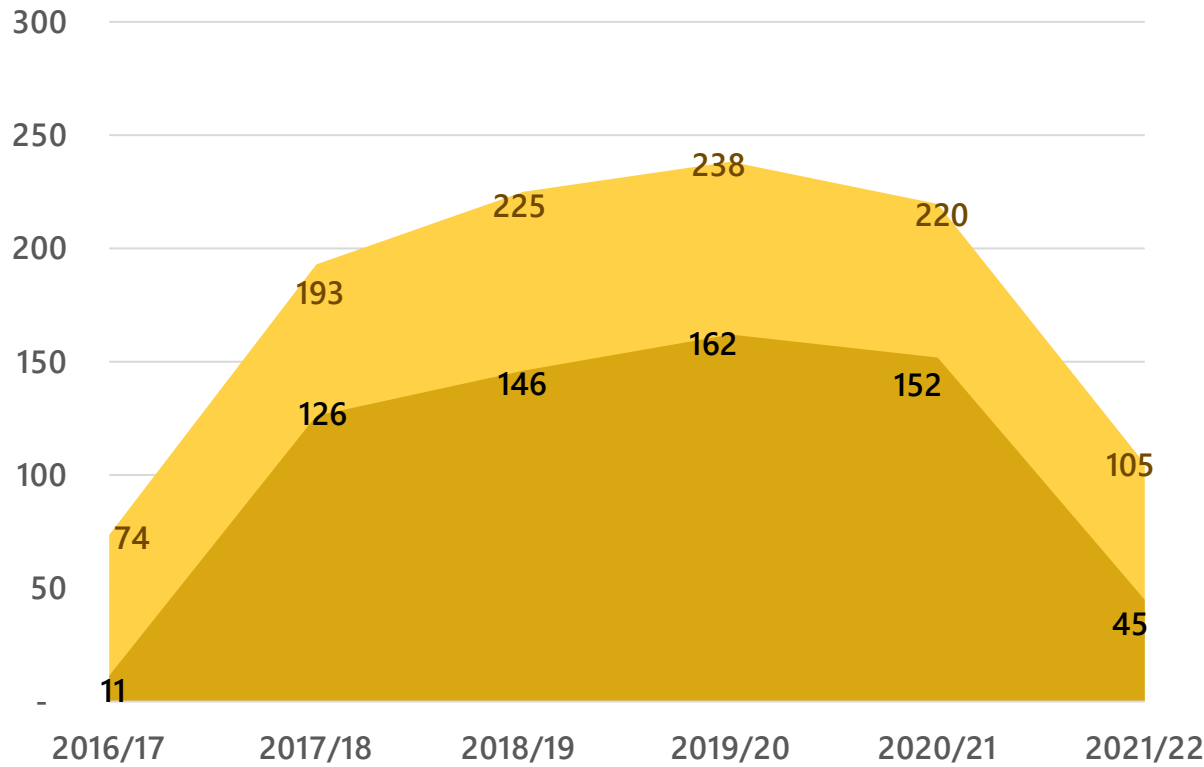
Plant Factor (Quarterly)



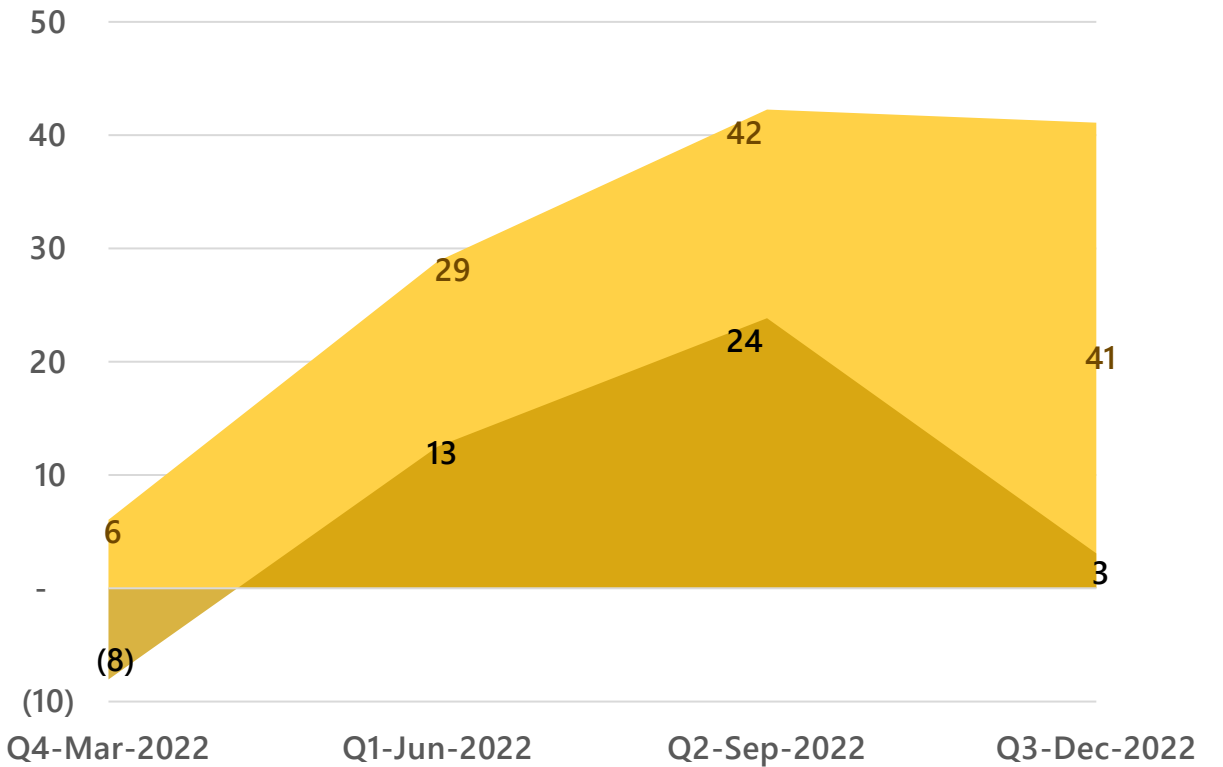
* Plant had to shut down on 15th May 2016 due to part of the channel (approximately 30m) was damaged following a flash flood and earth slip. The plant was re-commissioned in September 2016 after repairs.

■ Generation (MWh)
 —●— PF
 - - -●- - - 4-year Historical Average PF

Profitability (Annual)



Profitability (Quarterly)



Revenue (Mn)

Profit (Mn)

Kadawala

Unit Energy Lanka (Pvt) Ltd



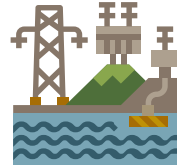
Ginigathhena,
Nuwara Eliya district

Location



Capacity

6 MW



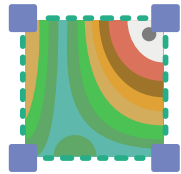
Gross Head

132 m



Rainfall

4,406 mm
per year



Catchment Area

26 km²



Design Flow

5.2 m³/s



Voith Siemens,
Germany

Equipment Supplier



Year of Commissioning

2008



PPA Expiry

2023

* Extendable for
another 20 years



55%

Ownership



Investment

LKR 135.4
MN

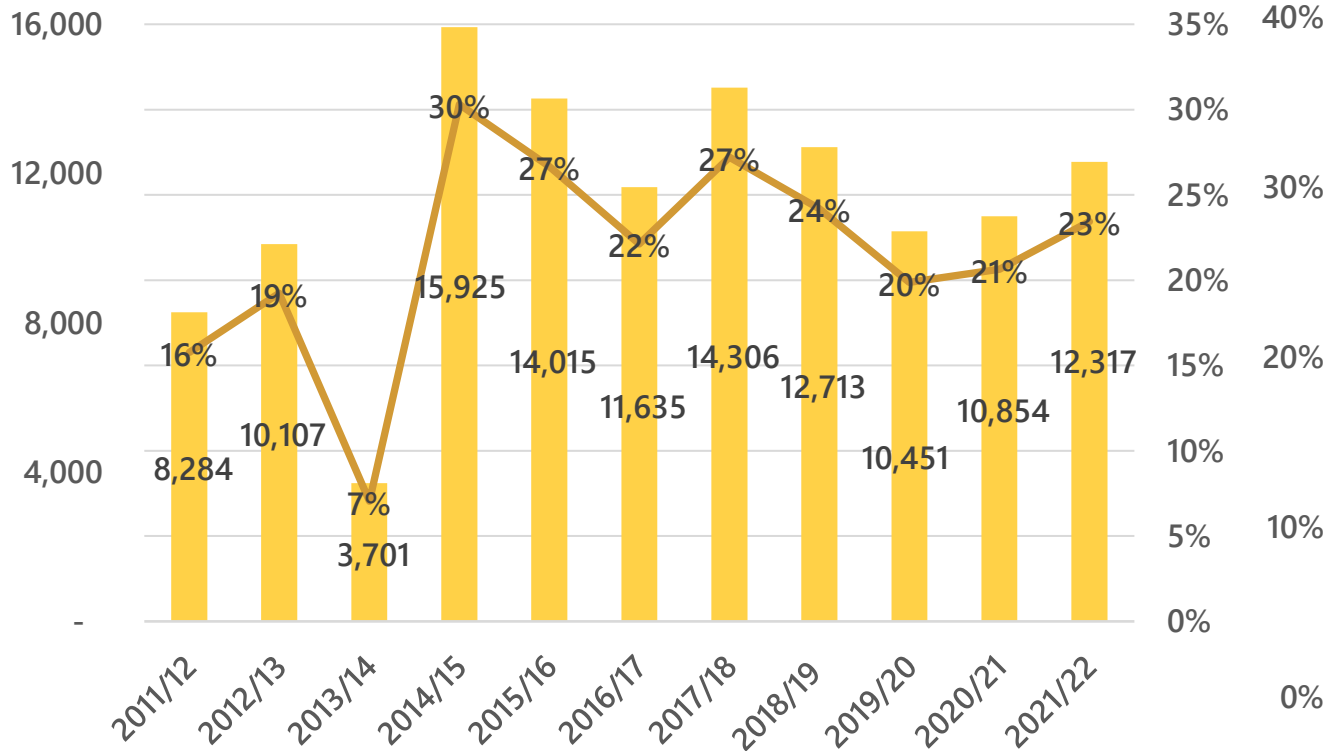


Project Partners

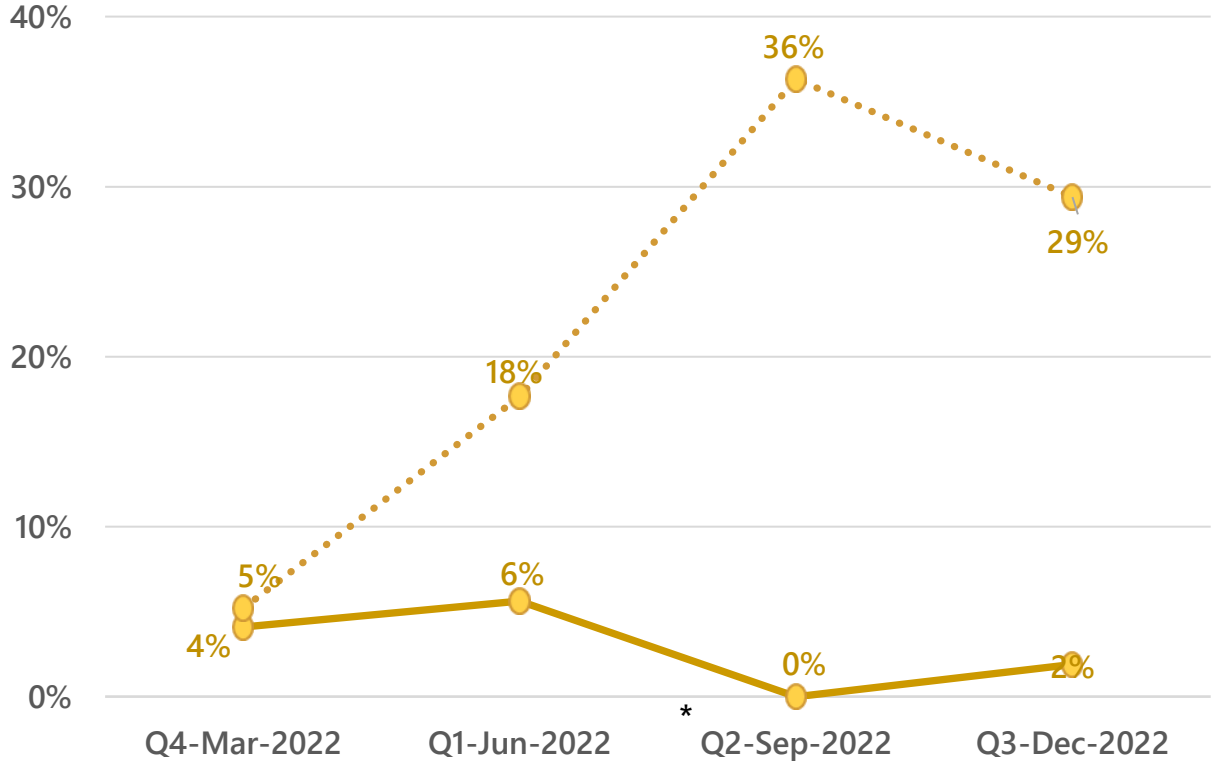
VS Hydro
(Pvt) Ltd



Plant Factor (Annual)



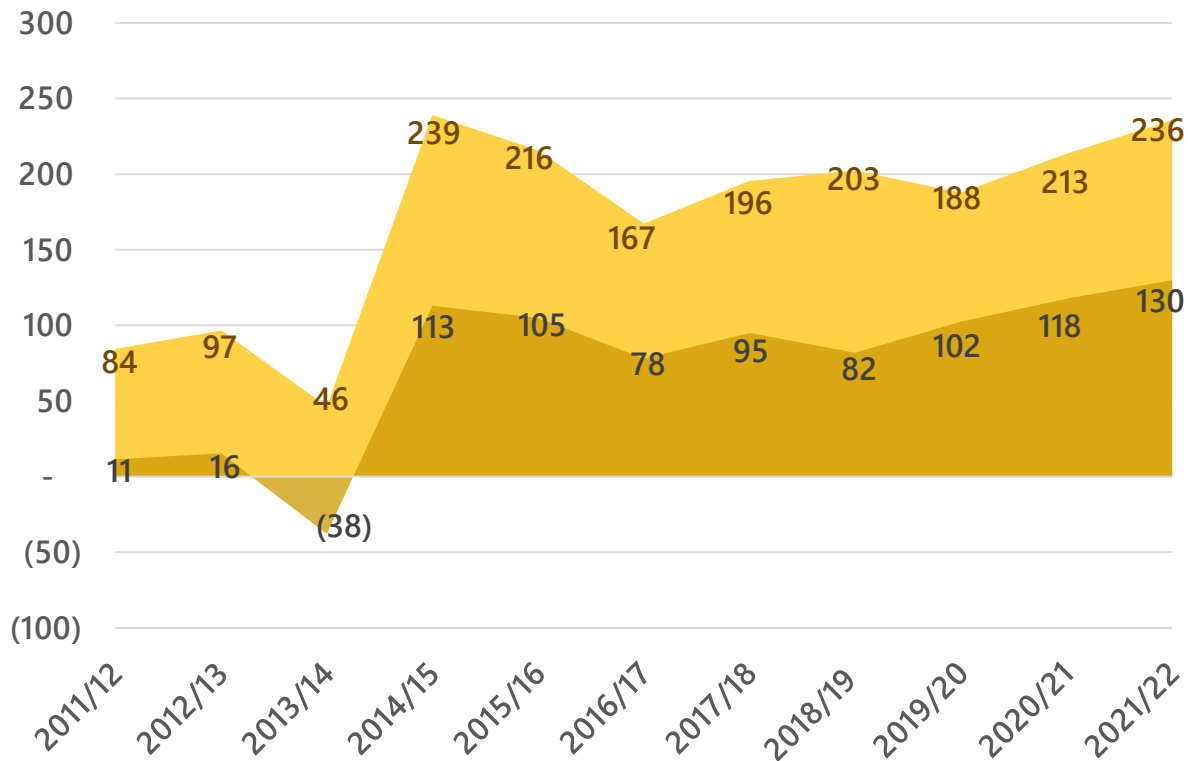
Plant Factor (Quarterly)



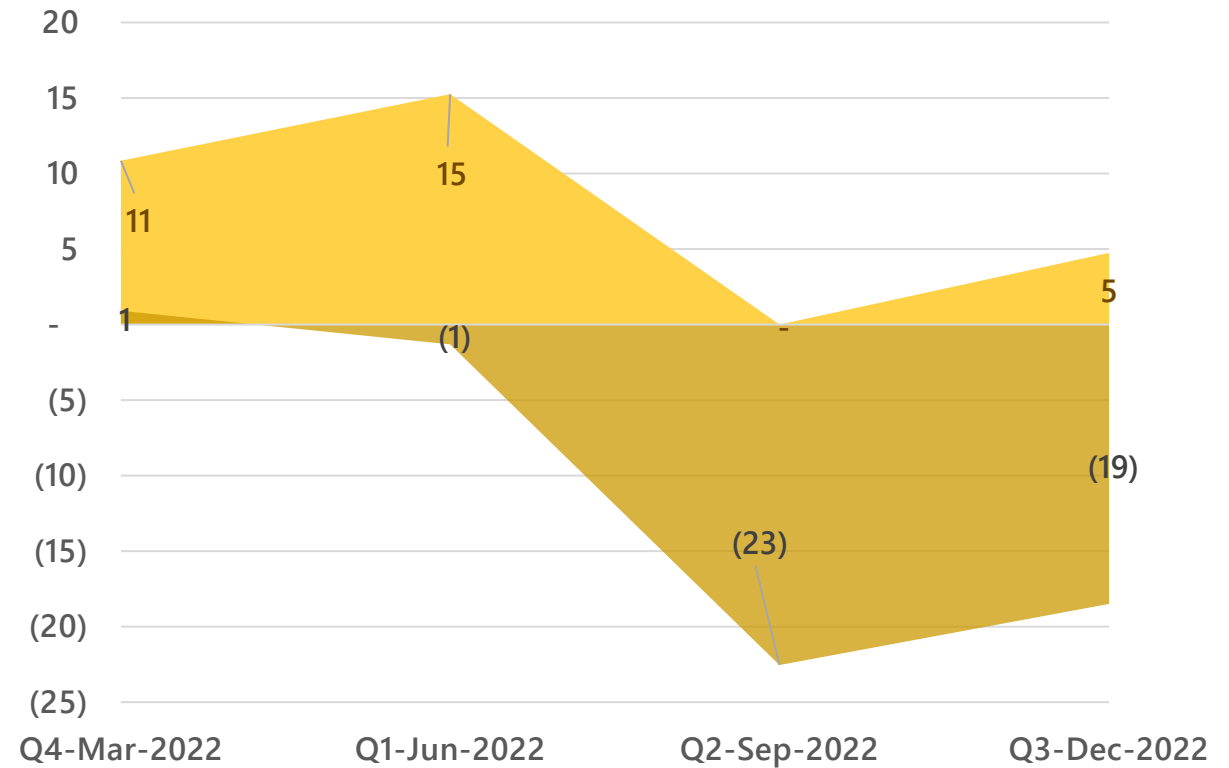
*On 17 May 2022, the plant was shut down due to a water leakage from the turbines. This repair was completed in early August 2022. On 1st August 2022, the plant went under water due to a flash flood following heavy rains in the area affecting other nearby hydro power plants as well. This incident caused damages to few anchor supports, head race channel and 50 meters of the penstock line. The plant was repaired and recommenced operations on 13 December 2022.

■ Generation (MWh)
 —●— PF
 -.-●-.- 4-year Historical Average PF

Profitability (Annual)



Profitability (Quarterly)



*On 13th May 2013, the plant went under water due to a flash flood following heavy rains in the area affecting other nearby hydro power plants as well. This incident caused damage to few anchor supports and electrical equipment including control panels.

■ Revenue (Mn)

■ Profit (Mn)

Neluwa

Neluwa Cascade Hydro Power (Pvt) Ltd



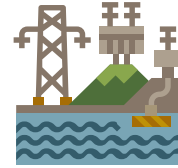
Location

Thawalama,
Galle district



Capacity

2.2 MW



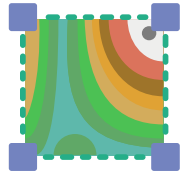
Gross Head

6 m



Rainfall

3,973 mm
per year



Catchment Area

304 km²



Design Flow

40 m³/s



Equipment Supplier

Gugler Hydro
Energy, Austria



Year of Commissioning

2008



PPA Expiry

2023

* Extendable for
another 20 years



Ownership

49%



Investment

LKR 58.8
MN

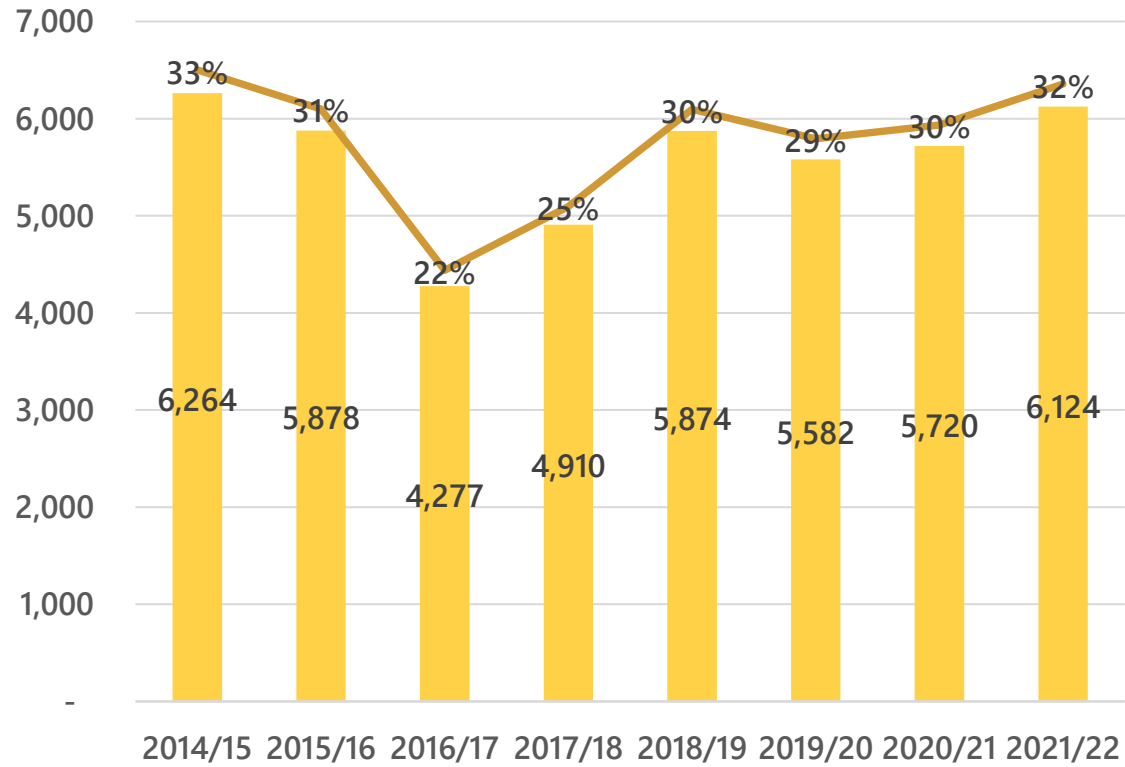


Project Partners

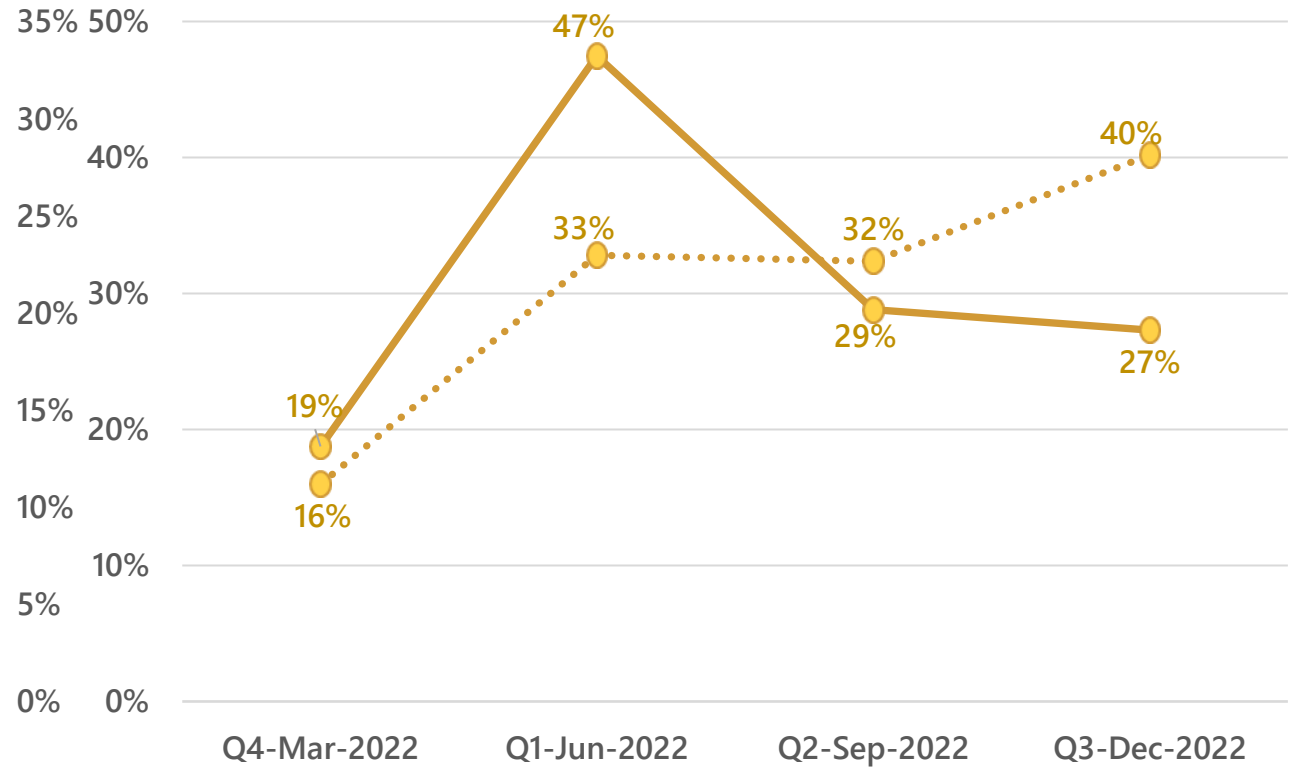
Hayleys Power
(Pvt) Ltd



Plant Factor (Annual)

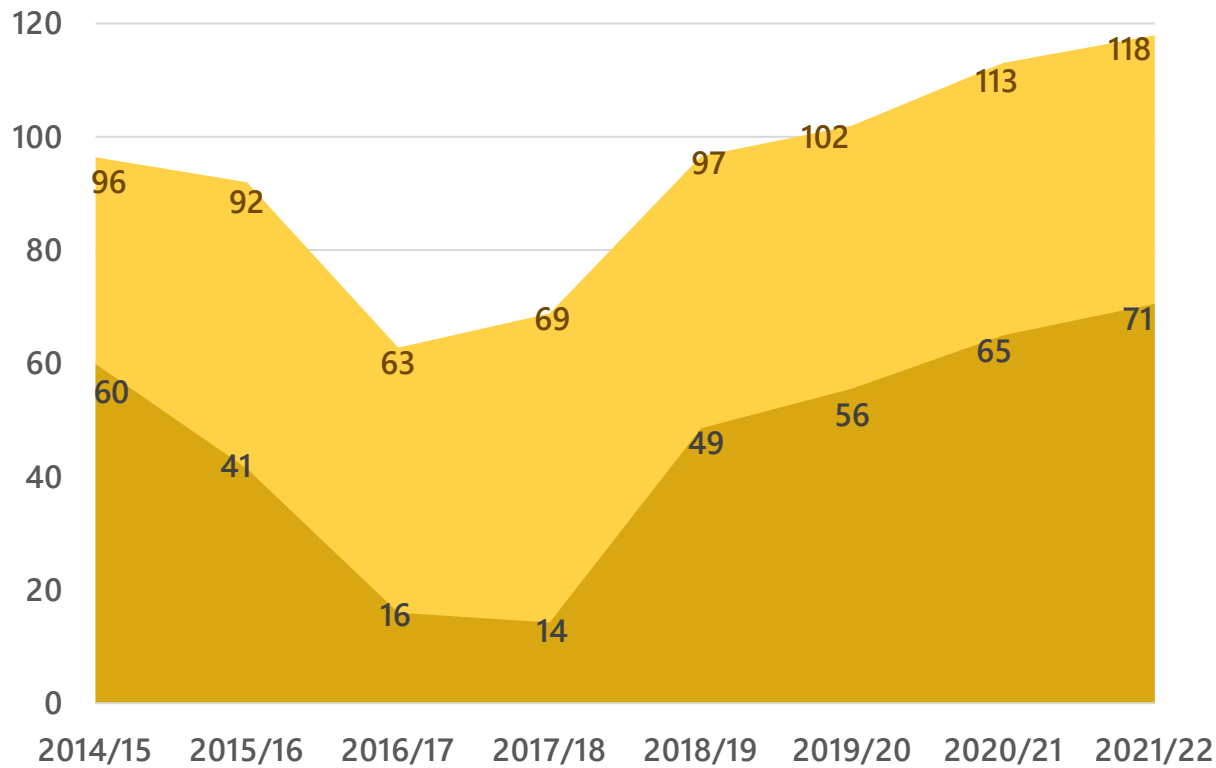


Plant Factor (Quarterly)

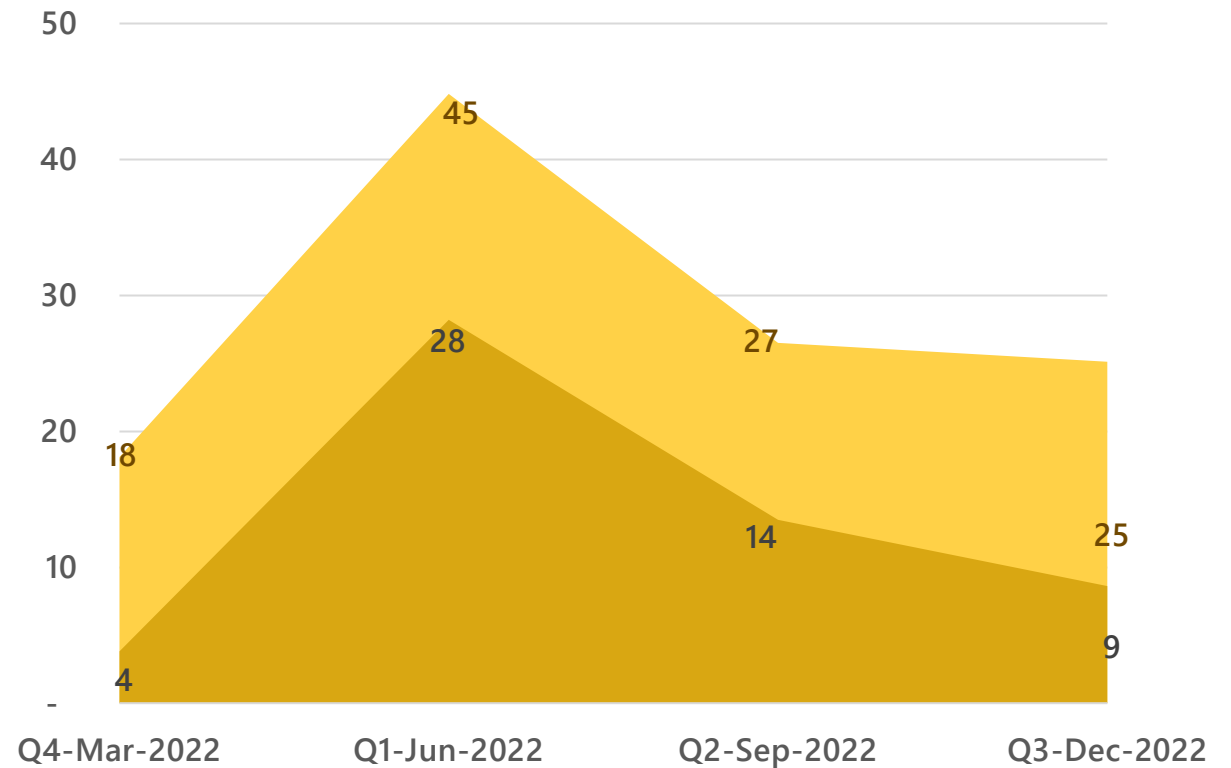


Generation (MWh)
 PF
 4-year Historical Average PF

Profitability (Annual)



Profitability (Quarterly)



■ Revenue (Mn)
 ■ Profit (Mn)

Theberton

Sapthakanya Hydro Electric Company (Pvt) Ltd



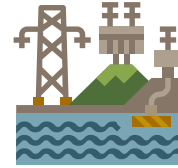
Location

Kiriwaneliya village,
Nuwara Eliya district



Capacity

1.3 MW



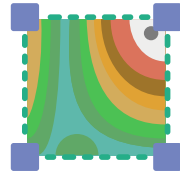
Gross Head

90 m



Rainfall

4,086 mm
per year



Catchment Area

10 km²



Design Flow

1.950 m³/s



Equipment Supplier

- Fuchun Industry Development Co, China
- Hongya Power Generating Equipment, China



Year of Commissioning

2015



PPA Expiry

2035



Ownership

85%



Investment

LKR 142.8
MN

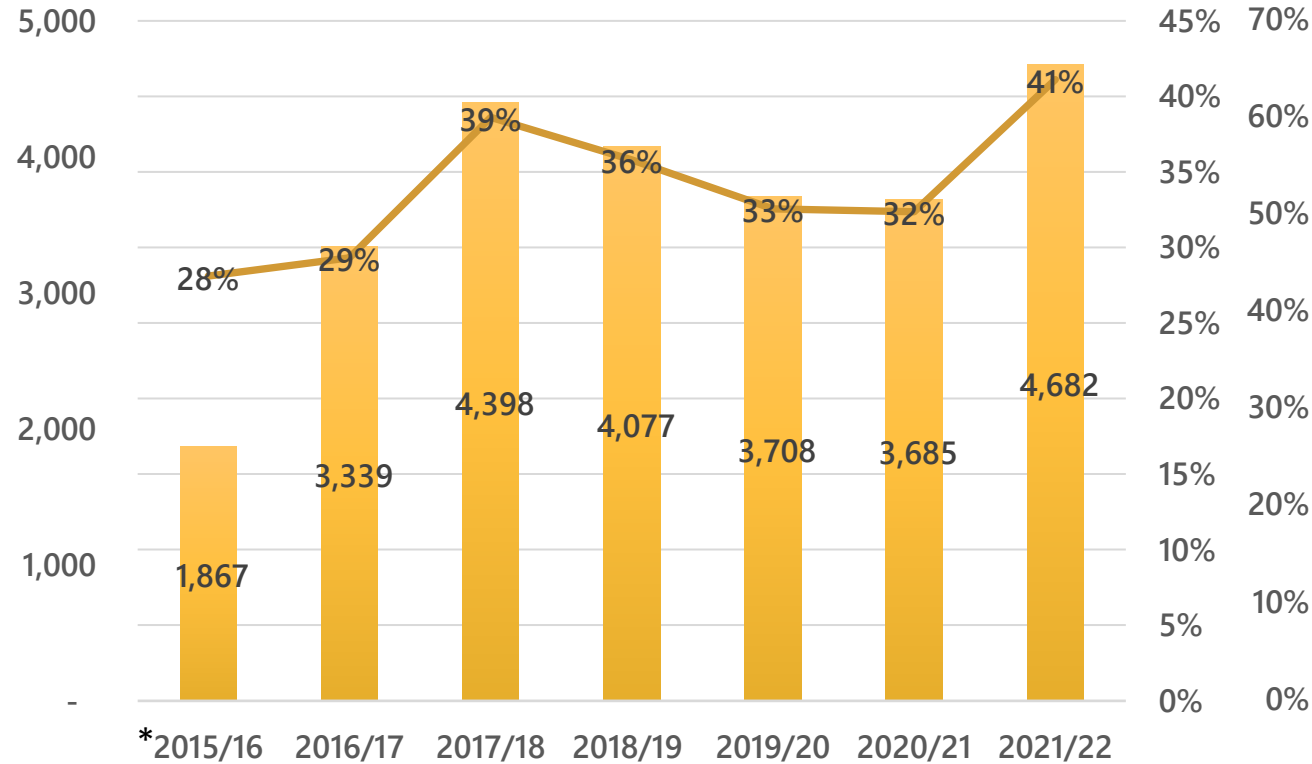


Project Partners

Colombo Energy
Services (Pvt) Ltd



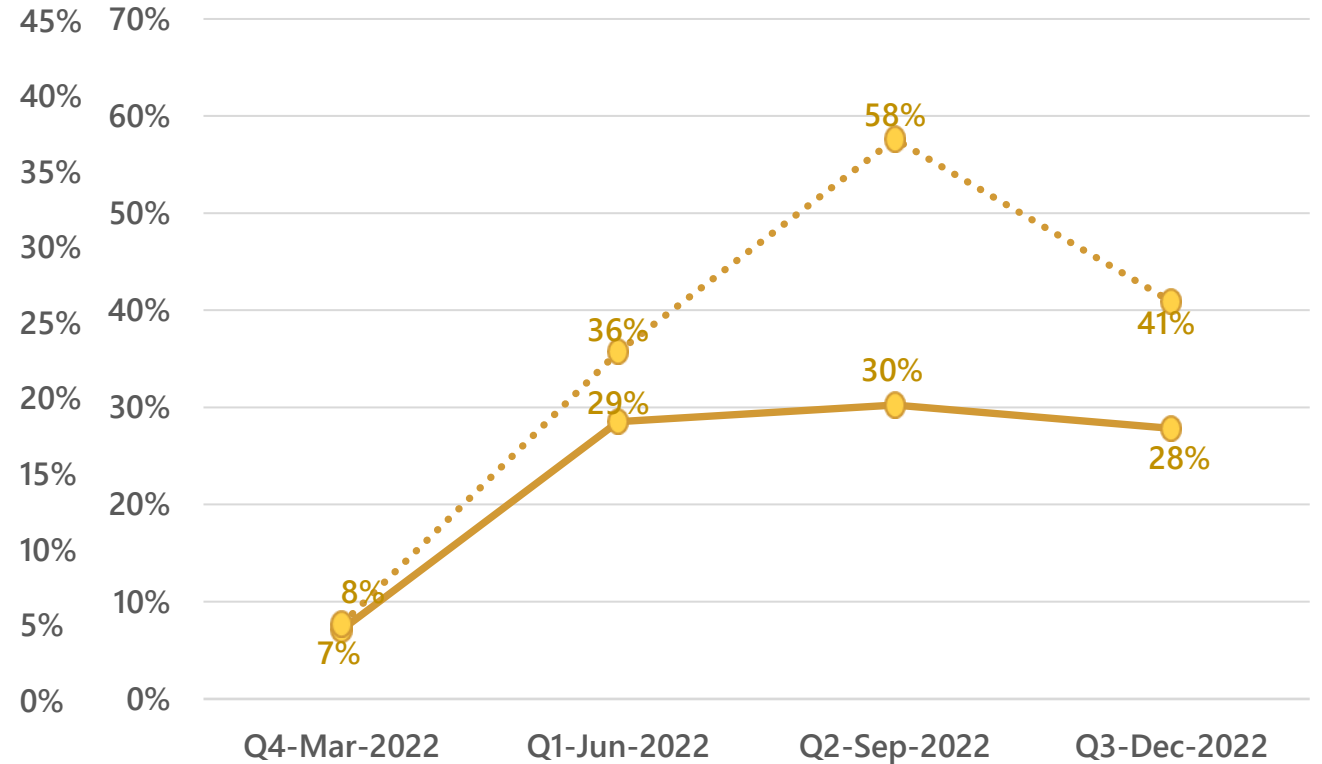
Plant Factor (Annual)



* 2015/16 2016/17 2017/18 2018/19 2019/20 2020/21 2021/22

* First year of commercial operation.

Plant Factor (Quarterly)

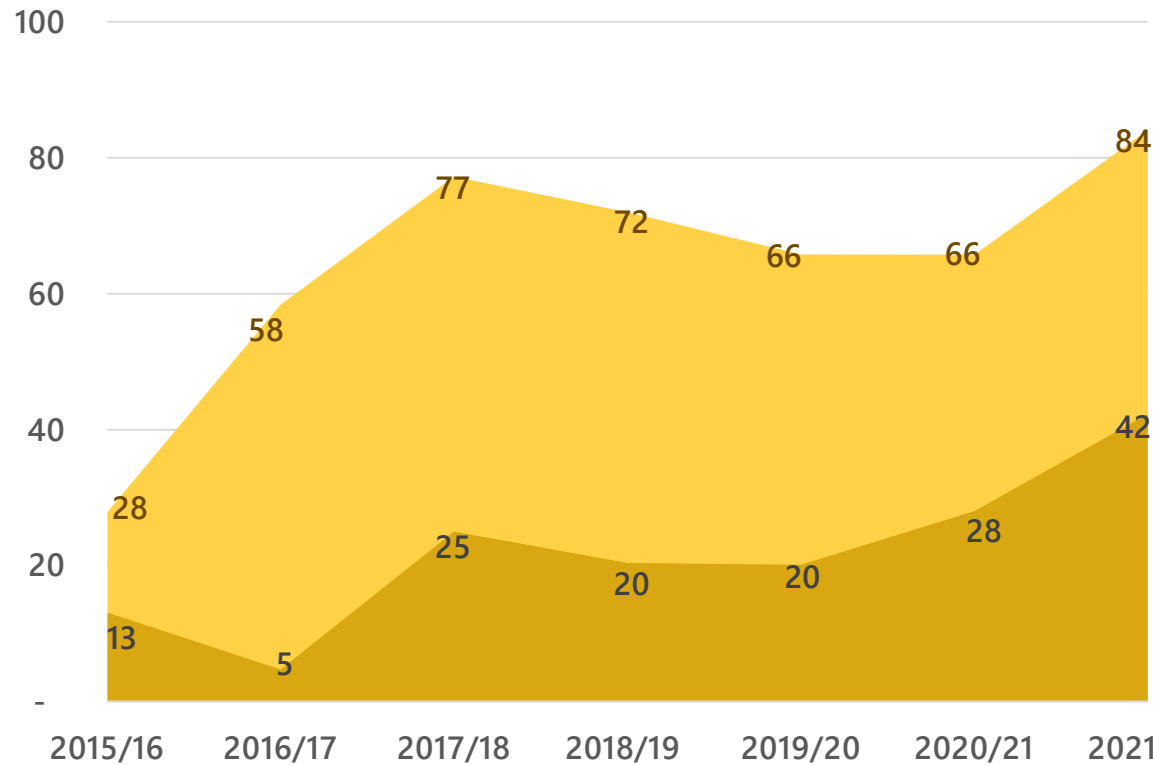


* Plant was shut down for repairs from 23rd February 2022 due to a breakdown in the Turbines. The Plant re-commissioned on 20th March 2022.

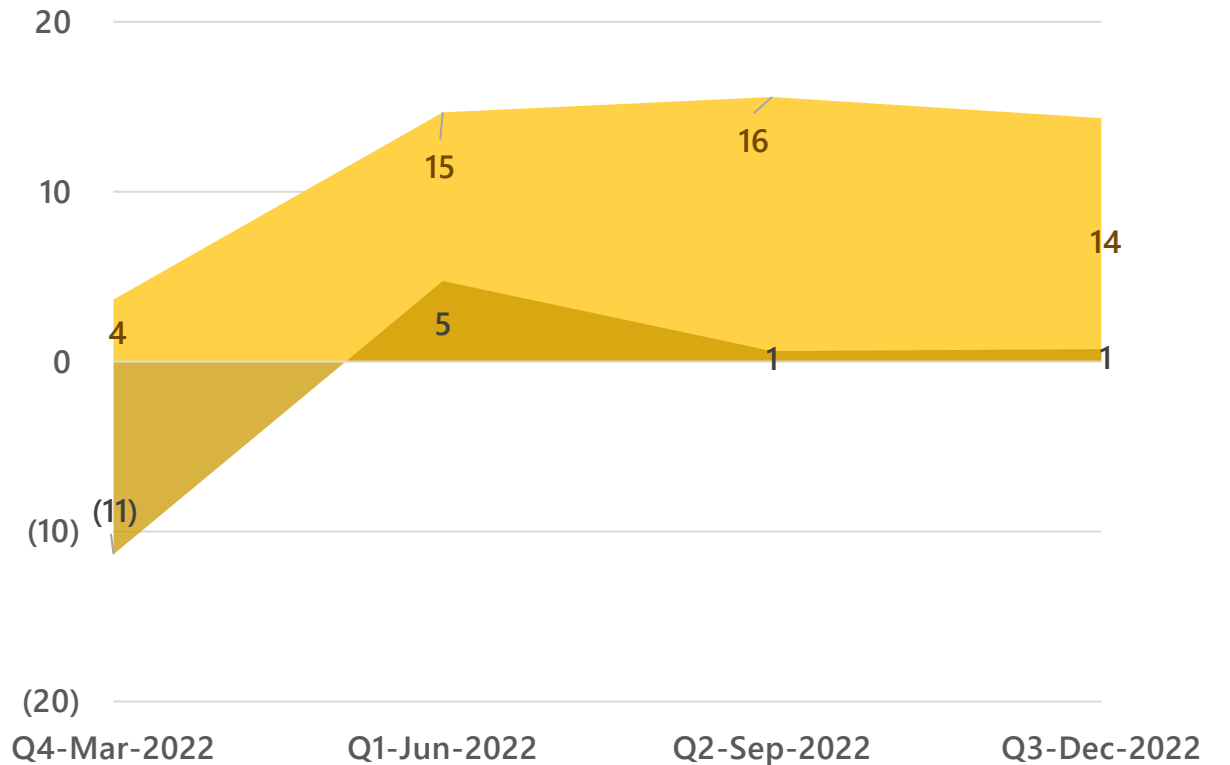
On 24 May 2022 Francis 1000 kW machine had a breakdown due a failure in the exciter panel. This repair was completed in mid November 2022.

Generation (MWh)
 PF
 4-year Historical Average PF

Profitability (Annual)



Profitability (Quarterly)



■ Revenue (Mn) ■ Profit (Mn)

Campion

Campion Hydro Power (Pvt) Ltd



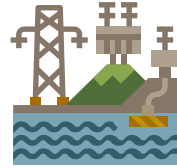
Location

Bogawantalawa,
Nuwara Eliya district



Capacity

1.2 MW



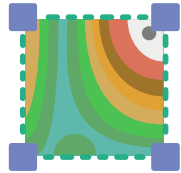
Gross Head

76 m



Rainfall

2,384 mm
per year



Catchment Area

27 km²



Design Flow

2.1 m³/s



Equipment Supplier

Hongya Power
Generating
Equipment,
China



Year of Commissioning

2017



PPA Expiry

2037



Ownership

84%



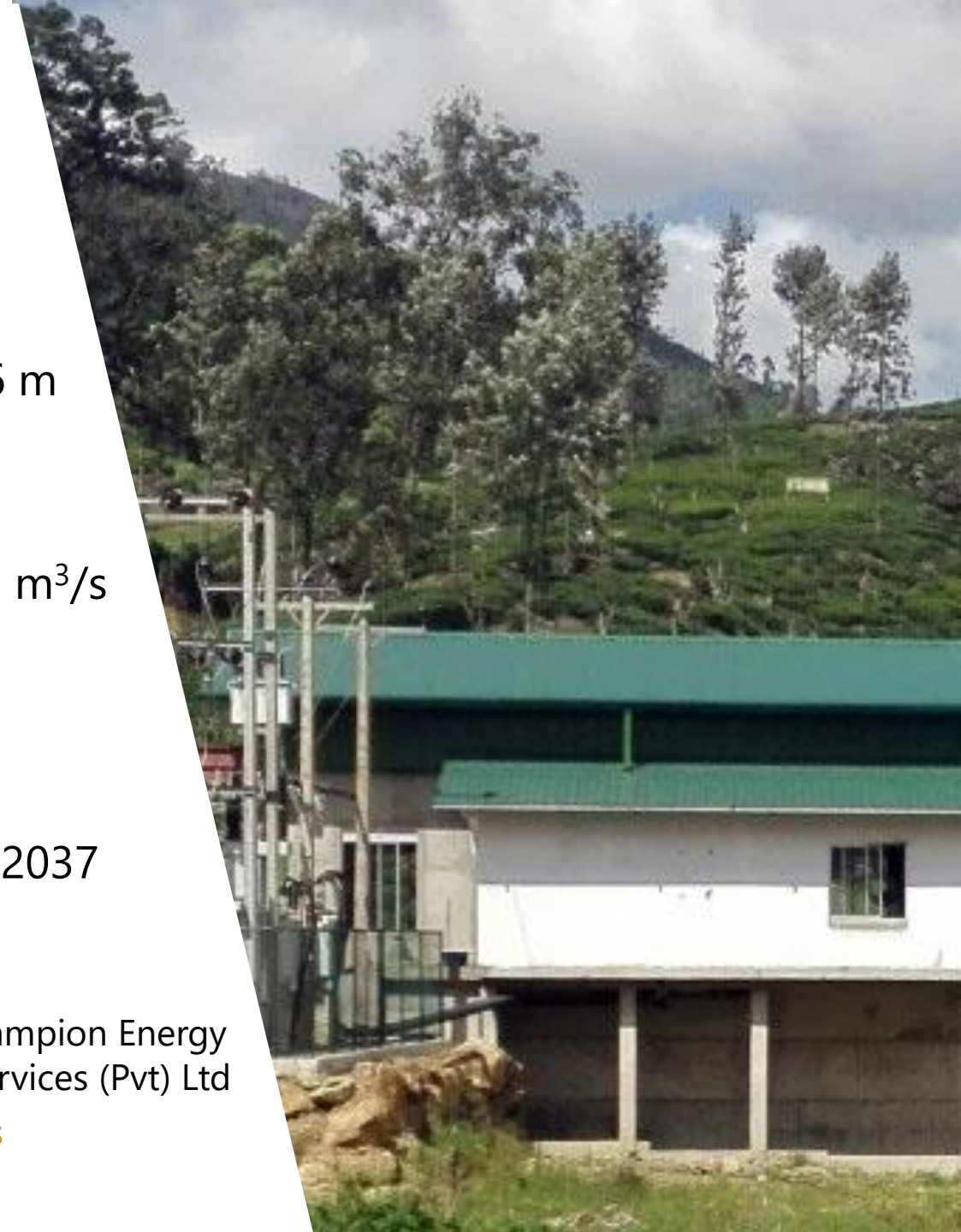
Investment

LKR 118
MN

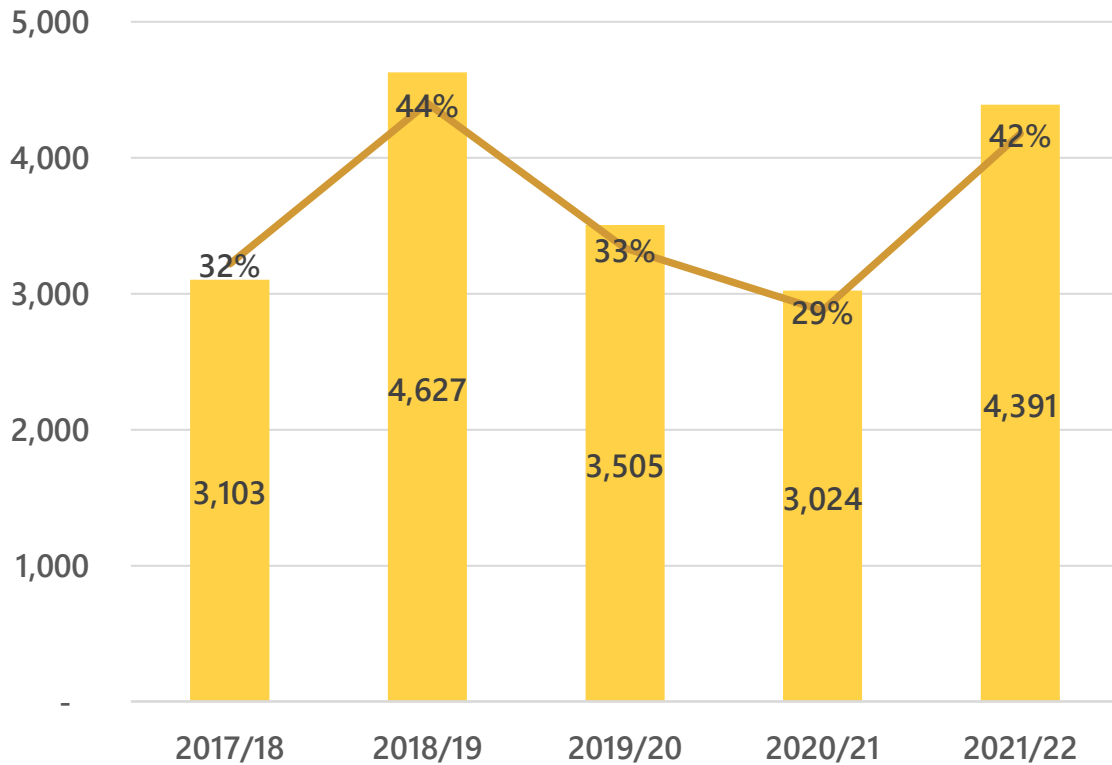


Project Partners

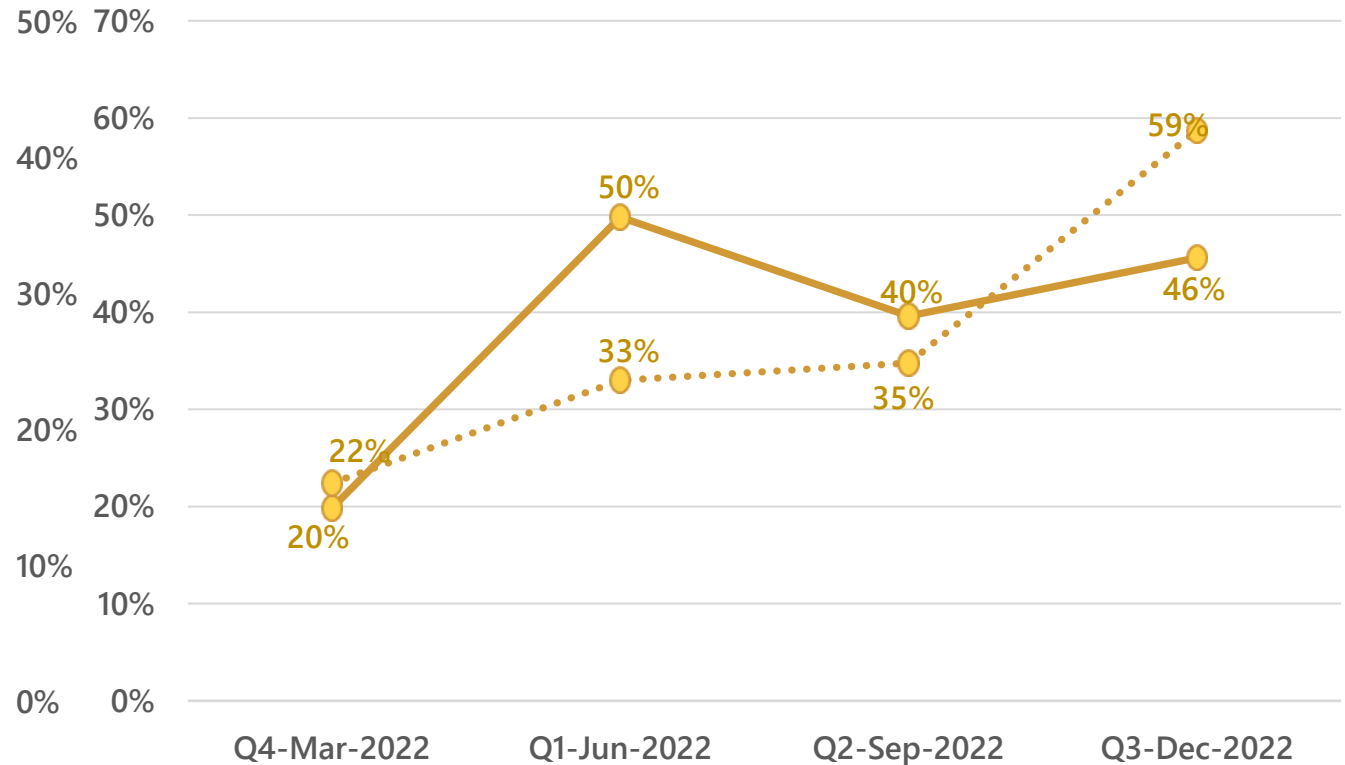
Campion Energy
Services (Pvt) Ltd



Plant Factor (Annual)

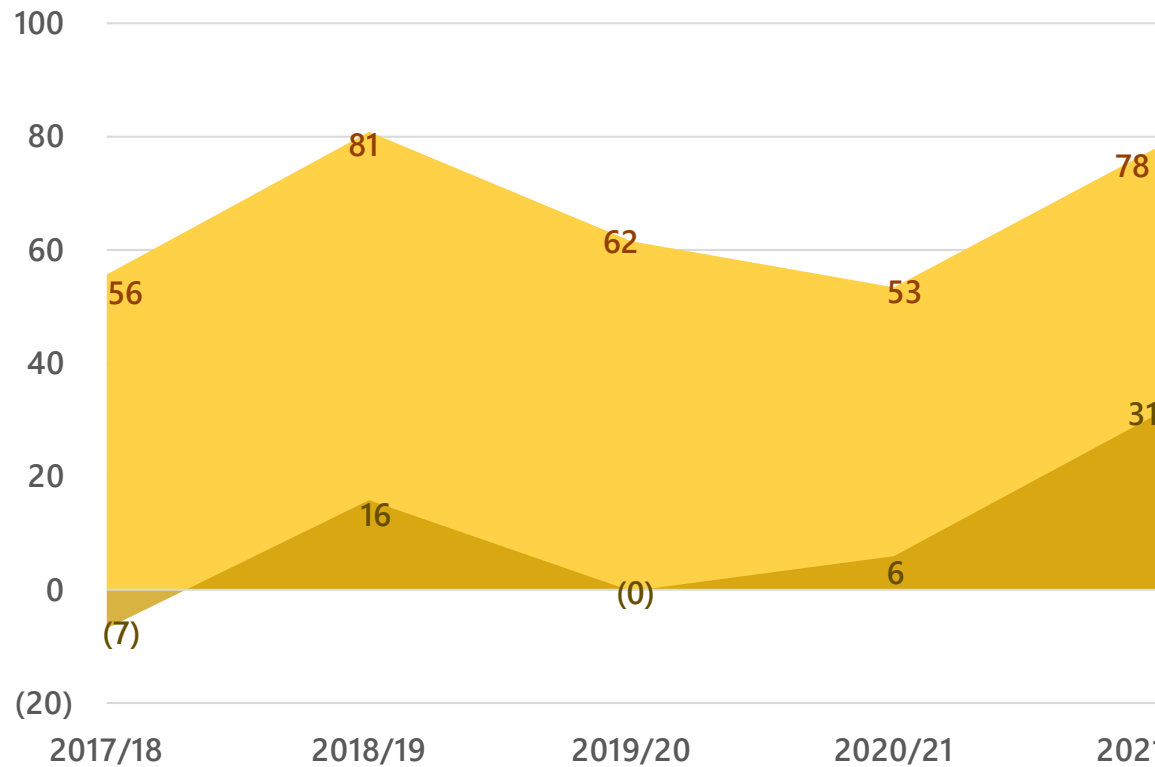


Plant Factor (Quarterly)

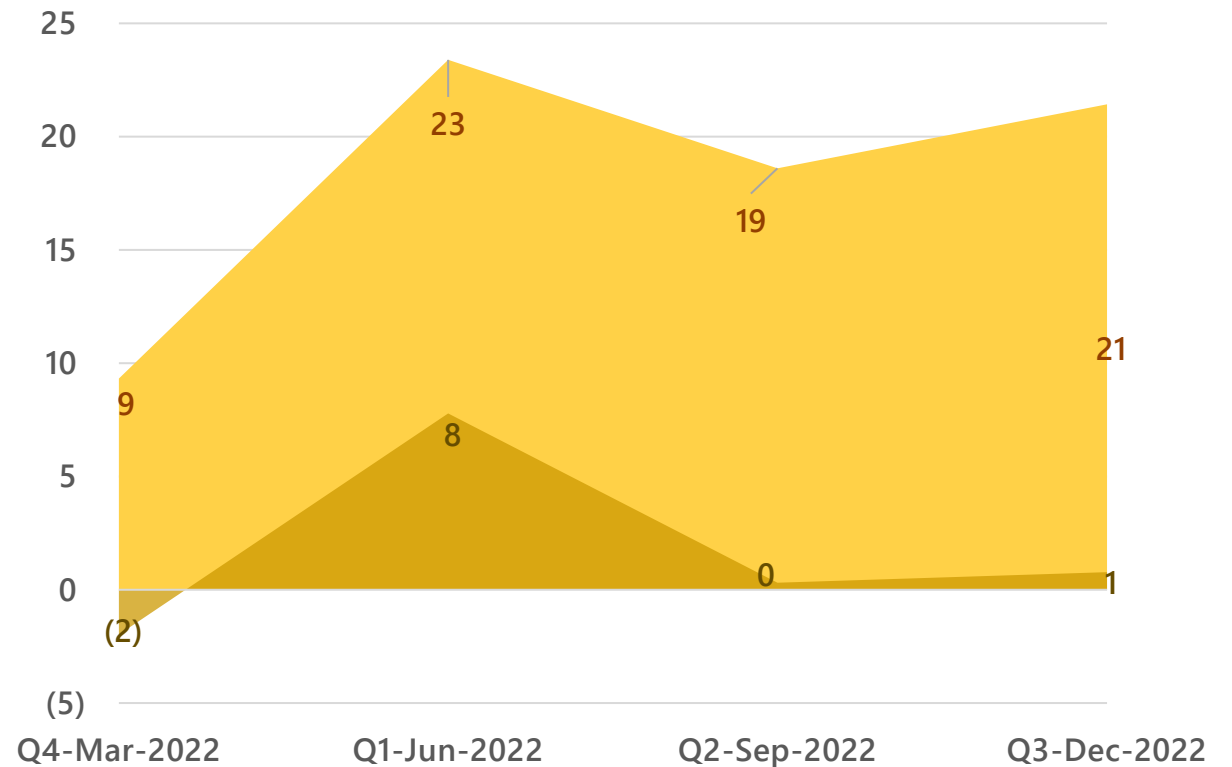


Generation (MWh)
 PF
 4-year Historical Average PF

Profitability (Annual)



Profitability (Quarterly)



■ Revenue (Mn)

■ Profit (Mn)

Bambarapana

Bambarapana Hydro Power (Pvt) Ltd



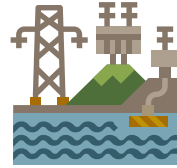
Location

Haliela,
Badulla district



Capacity

2.5 MW



Gross Head

46 m



Rainfall

1,650-1,880 mm
per year



Catchment Area

180.5 km²



Design Flow

6.5 m³/s



Equipment Supplier

Global Hydro
Energy, Austria



Year of Commissioning

2018



PPA Expiry

2038



Ownership

40%



Investment

LKR 155.6
MN

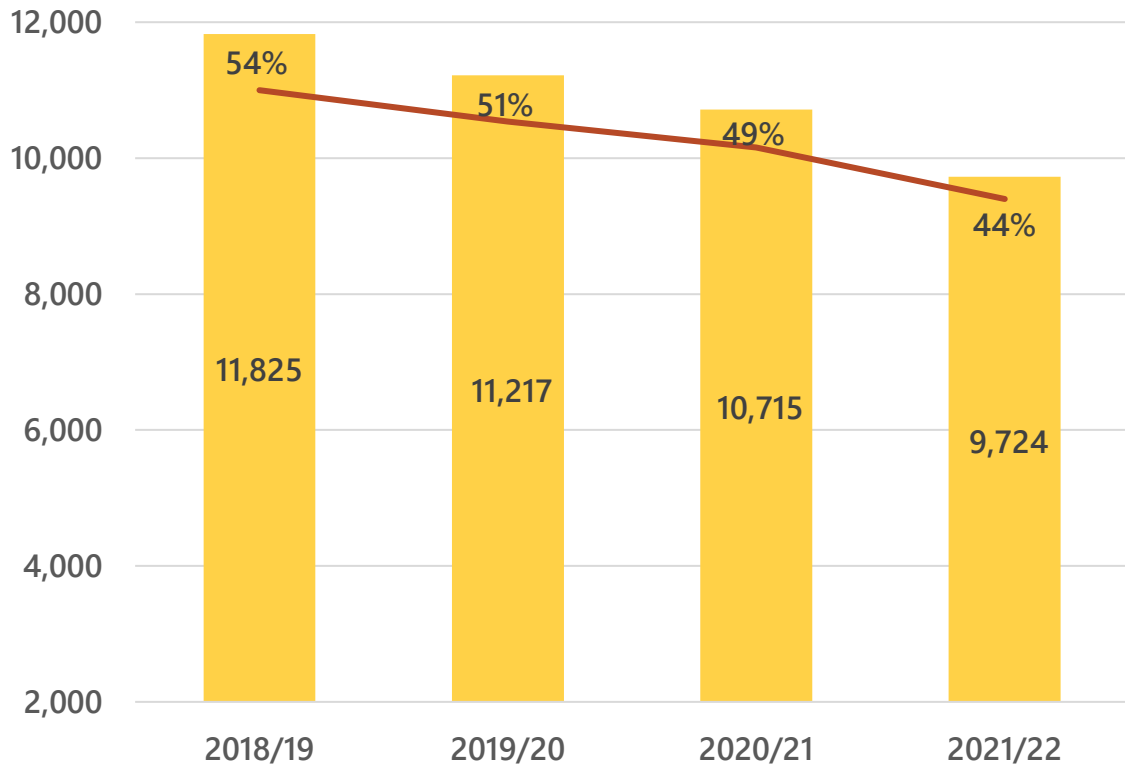


Project Partners

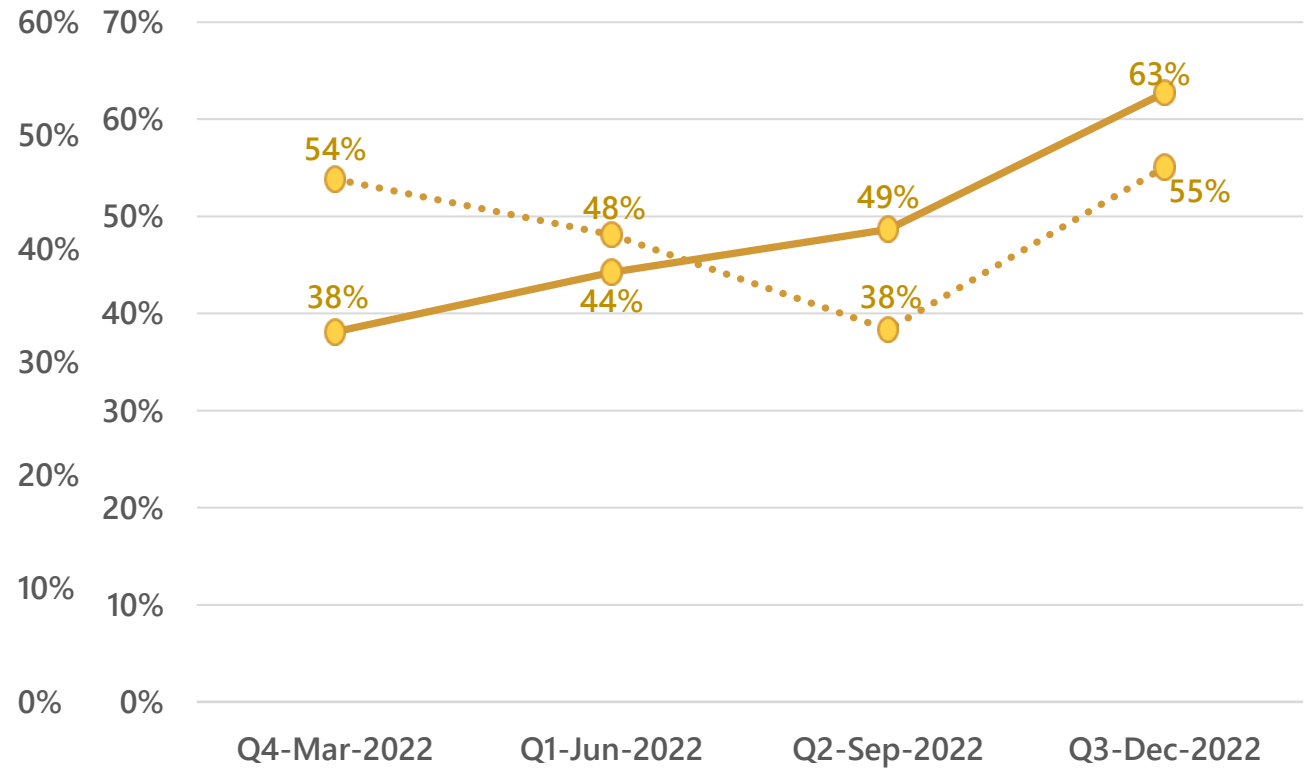
Ceylex Engineering
(Pvt) Ltd



Plant Factor (Annual)

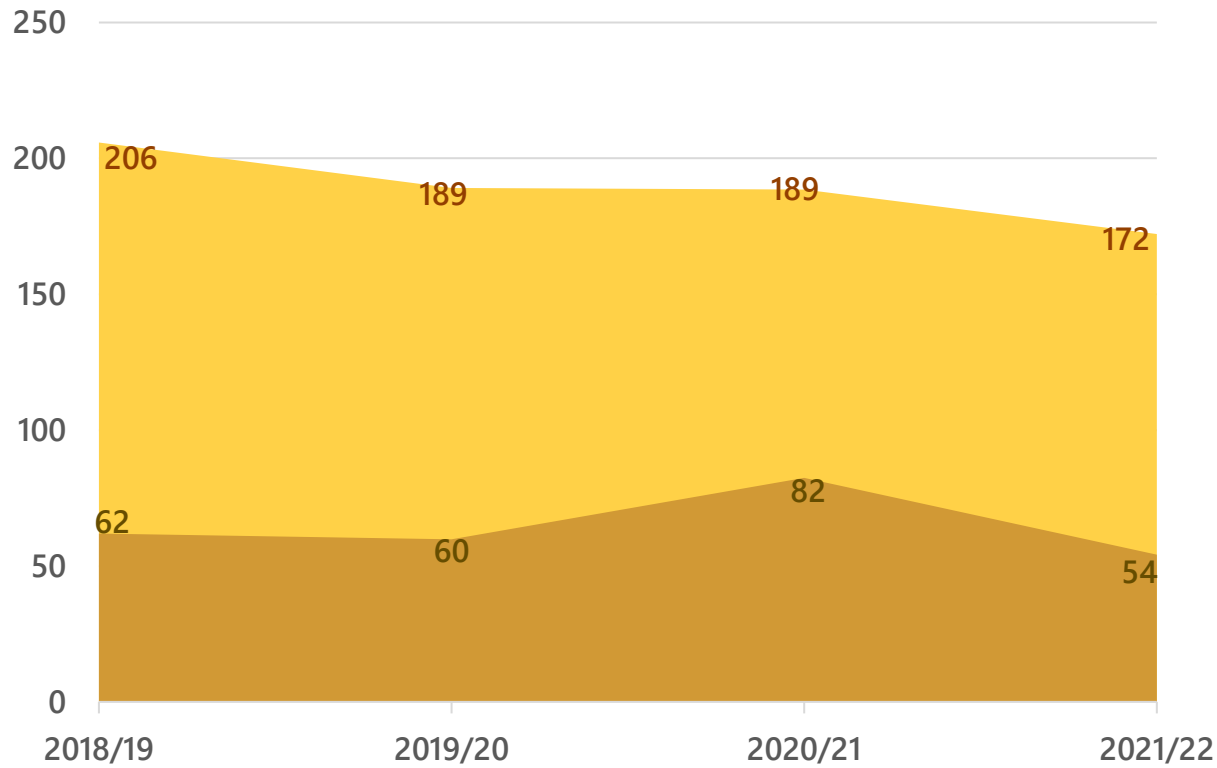


Plant Factor (Quarterly)

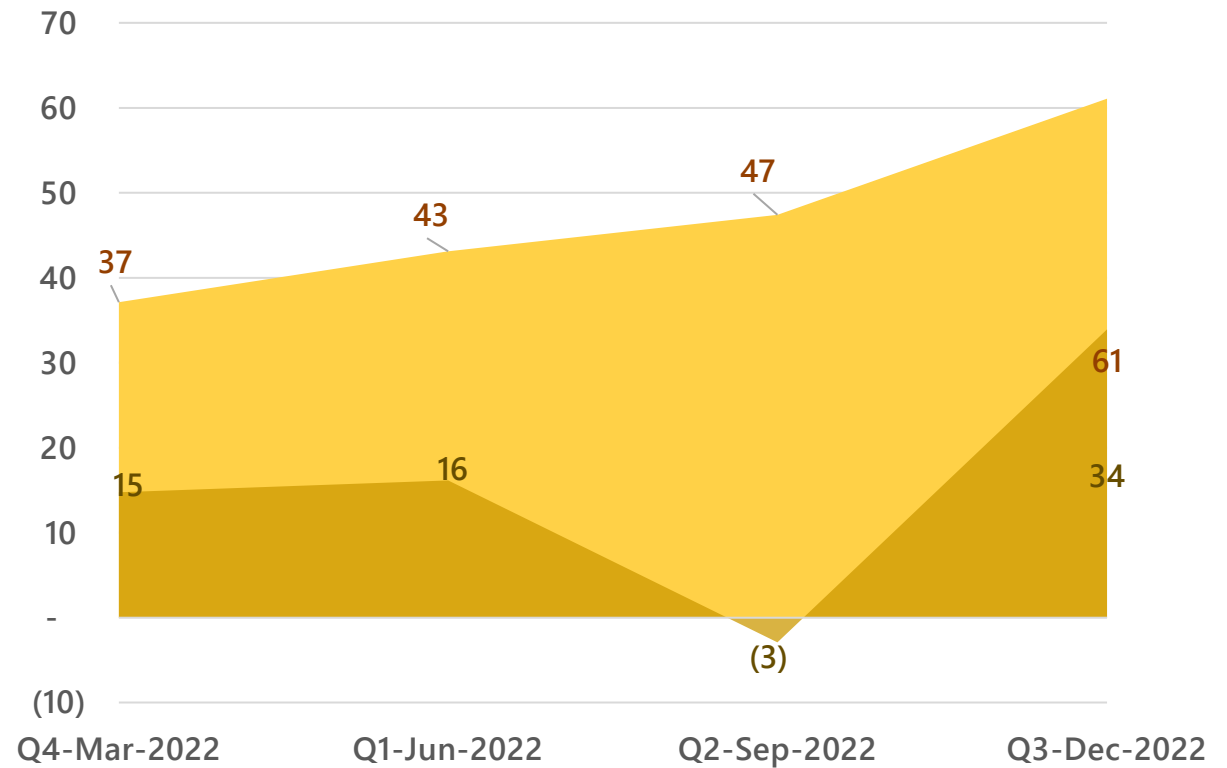


■ Generation (MWh)
 —●— PF
 - - -●- - - 4-year Historical Average PF

Profitability (Annual)



Profitability (Quarterly)



■ Revenue (Mn)

■ Profit (Mn)

Hydro Plants

Generation (MWh)

Project	2015/16	2016/17	2017/18	2018/19	2019/20	2020/21	2021/22	2021/22
Belihul Oya	9,988	3,552	6,695	9,893	8,002	7,098	8,778	9,416
Assupini Ella	16,657	4,622	14,249	14,009	13,206	13,268	14,840	15,461
Kadawala	14,015	11,635	14,306	12,713	10,451	10,854	12,317	1,527
Neluwa	5,878	4,277	4,910	5,874	5,581	5,720	6,124	5,893
Theberton	1,867	3,339	4,398	4,077	3,708	3,685	4,682	2,668
Campion	-	-	3,103	4,627	3,505	3,024	4,391	4,071
Bamabarapana	-	-	-	11,825	10,864	10,715	9,724	10,609



WIND POWER PROJECTS

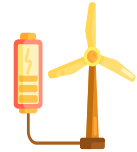
Pawan Danavi

Pawan Danavi (Pvt) Ltd



Location

Kalpitiya,
Puttalam
district



Capacity

10.2 MW



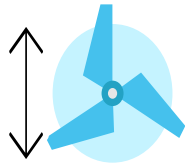
Turbines

12
Turbines



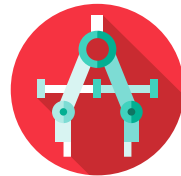
Average wind speed

7-7.5 m/s



Hub Height

65 m



Rotor Diameter

58 m



Equipment Supplier

Gamesa,
Spain



Year of Commissioning

2012



PPA Expiry

2032



Ownership

40%



Investment

LKR 424 MN

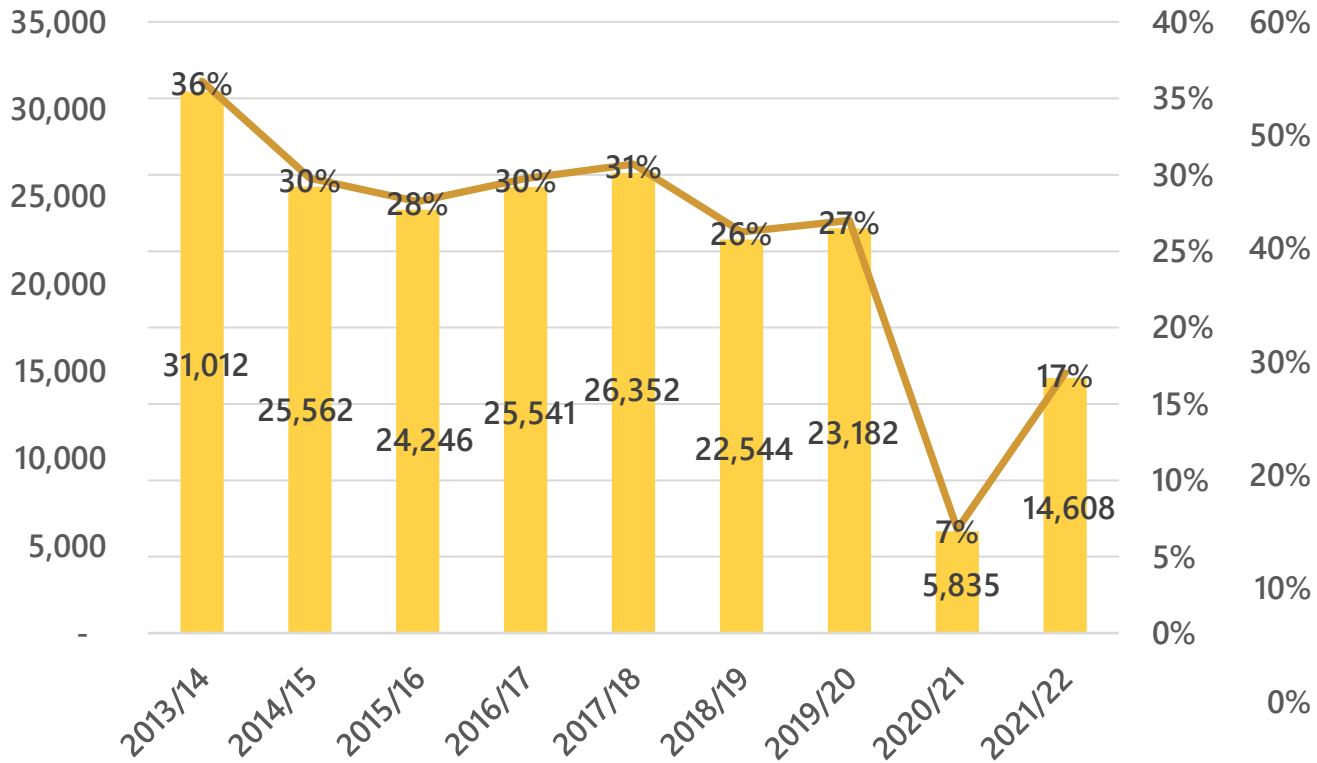


Project Partners

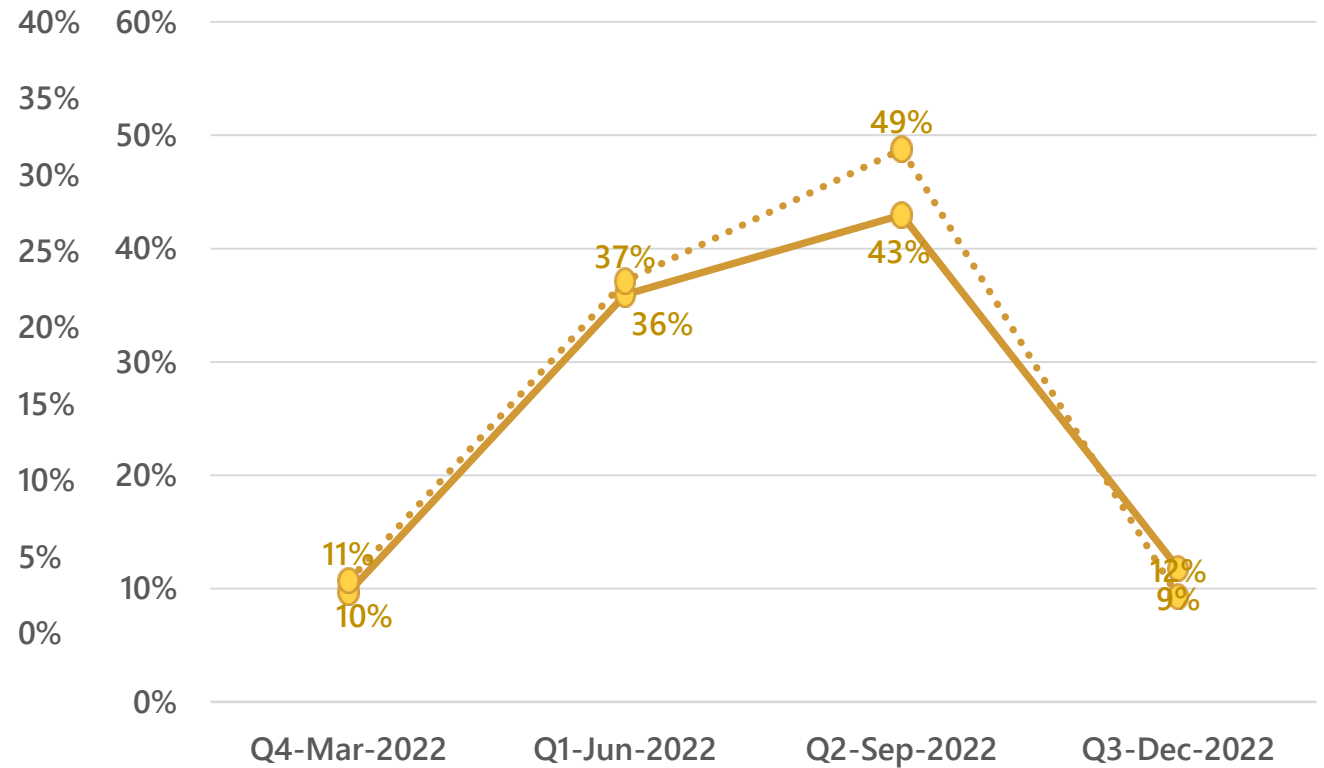
LTL Holdings (Pvt) Ltd



Plant Factor (Annual)



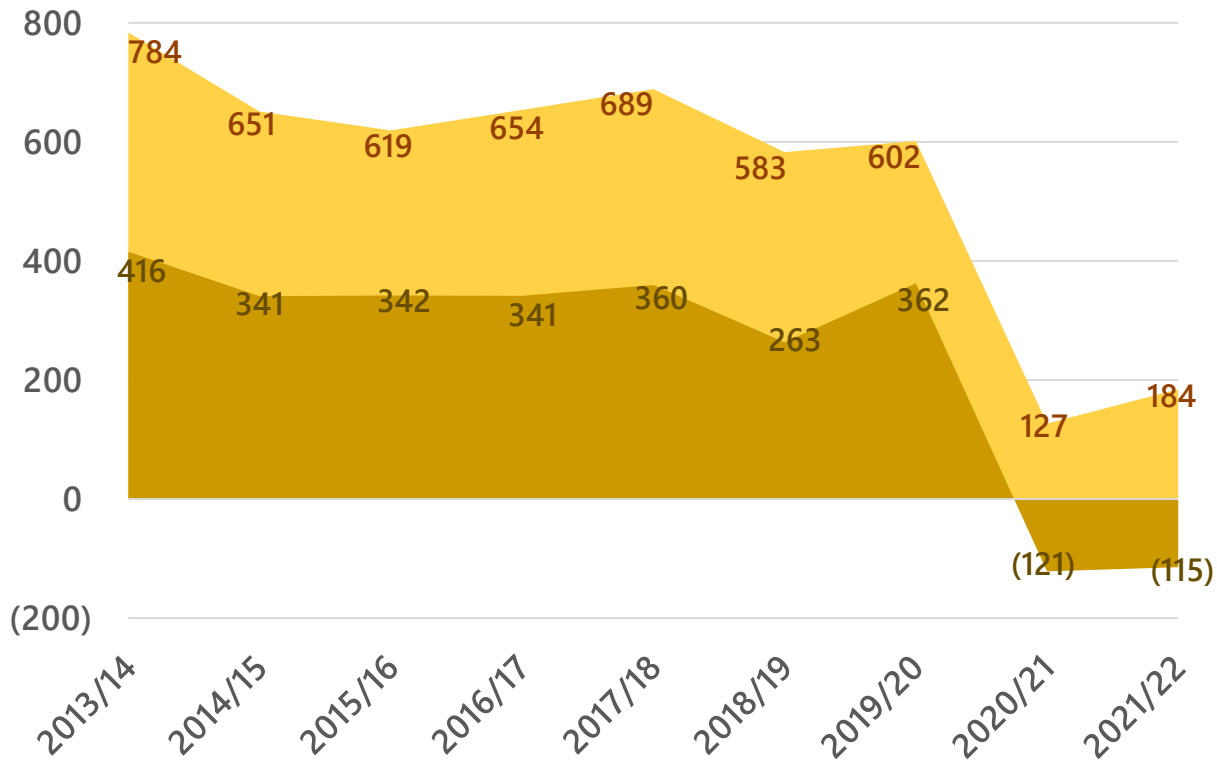
Plant Factor (Quarterly)



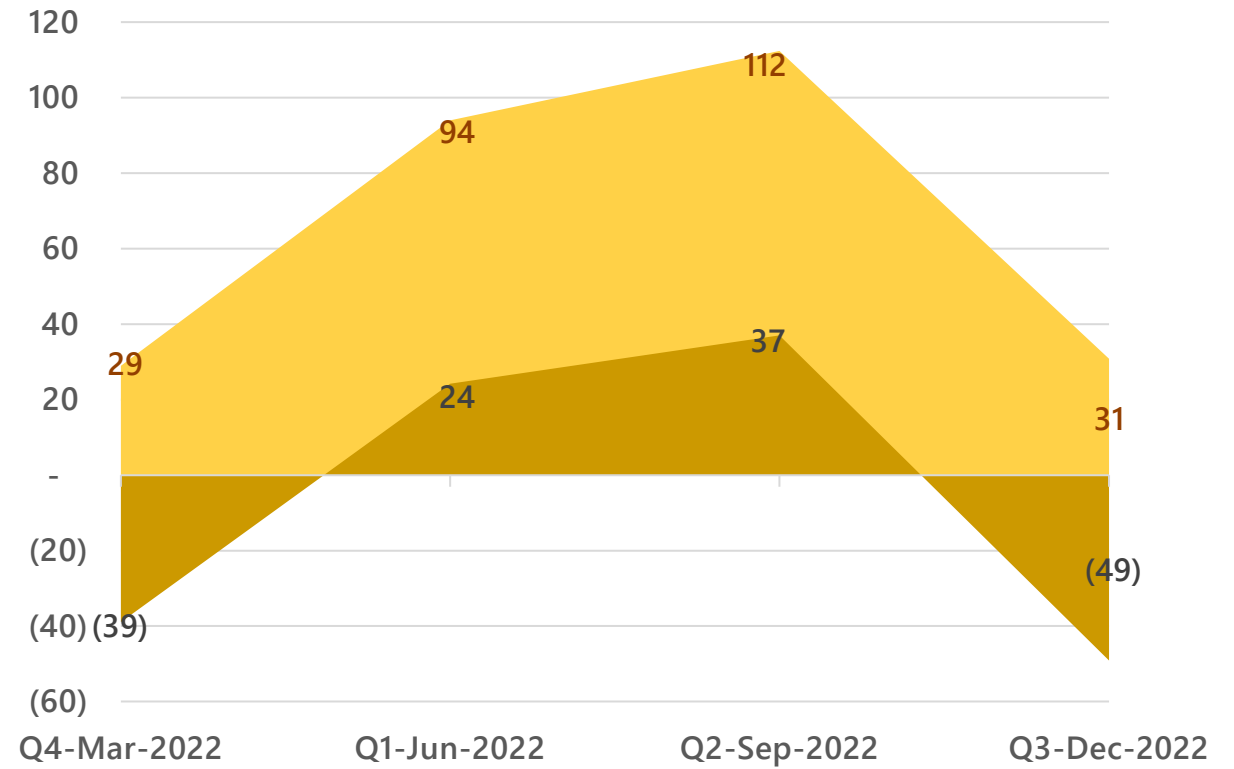
*Due to an equipment failure at the Norochcholai grid substation the plant was unable to dispatch electricity to the grid. This failure was rectified on 23 August 2021 and the plant is fully operational since then.

■ Generation (MWh)
 —●— PF
 - - -●- - - 3-year Historical Average PF

Profitability (Annual)



Profitability (Quarterly)



Revenue (Mn)

Profit (Mn)

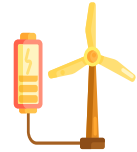
Nala Danavi

Nala Danavi (Pvt) Ltd



Location

Erumbukkudal,
Puttalam
district



Capacity

5.1 MW



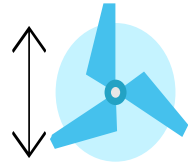
Turbines

6
Turbines



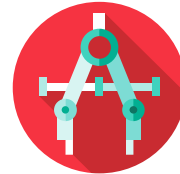
Average wind speed

7-7.5 m/s



Hub Height

65 m



Rotor Diameter

58 m



Equipment Supplier

Gamesa,
Spain



Year of Commissioning

2013



PPA Expiry

2033



Ownership

49%



Investment

LKR 242.6
MN

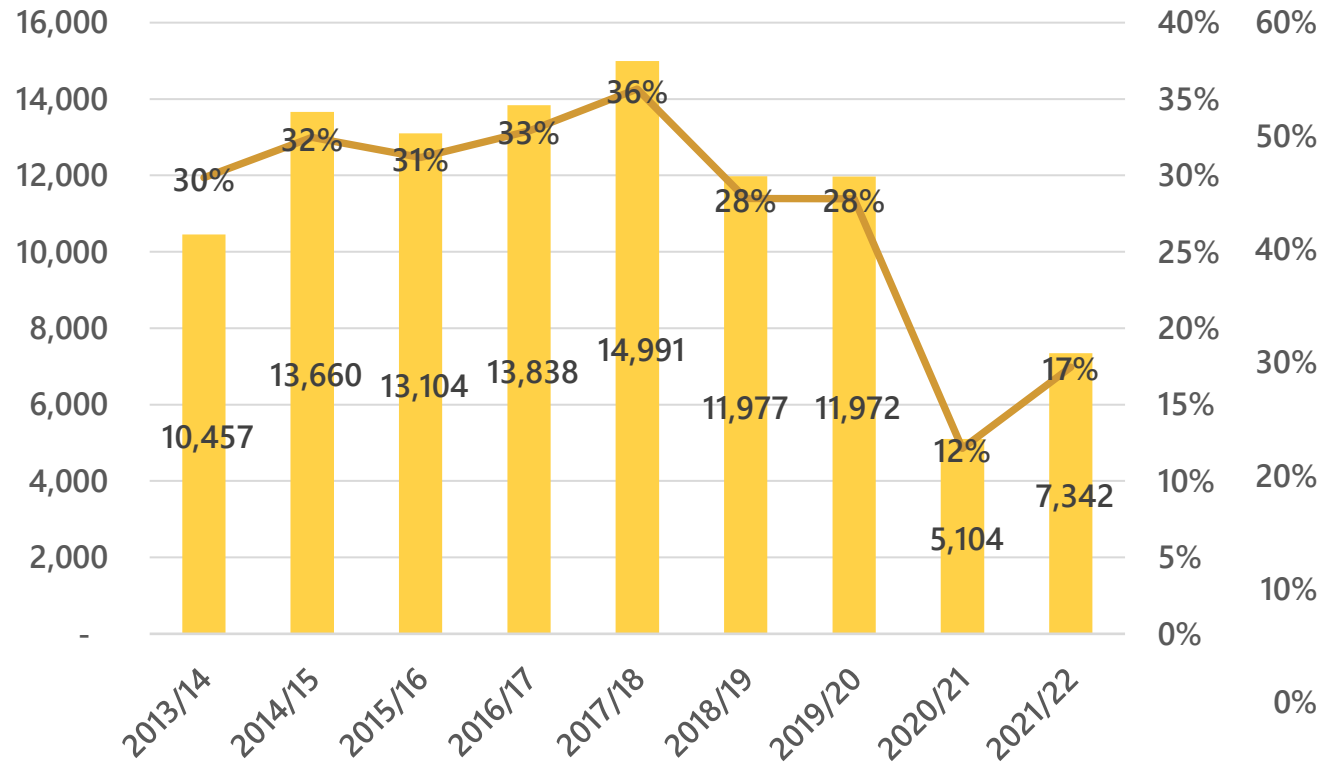


Project Partners

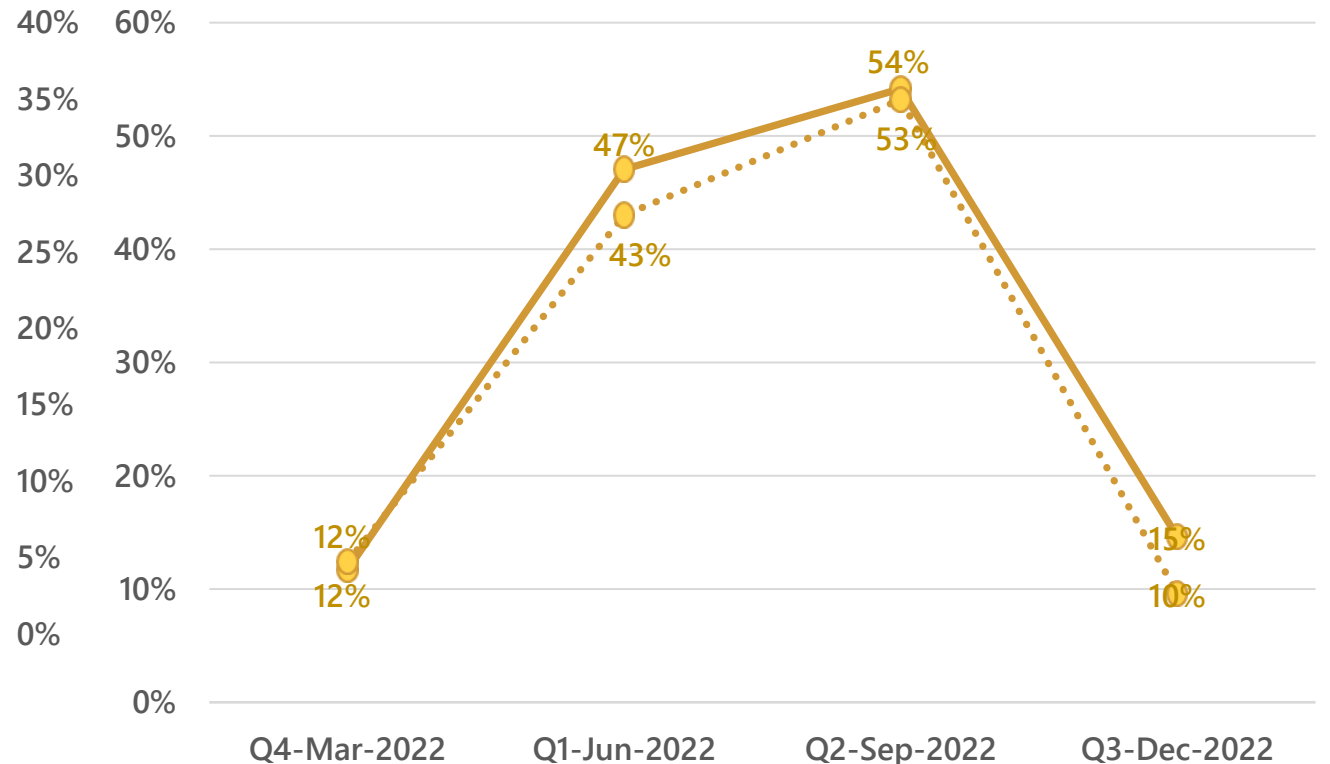
Ceylex Engineering
(Pvt) Ltd



Plant Factor (Annual)



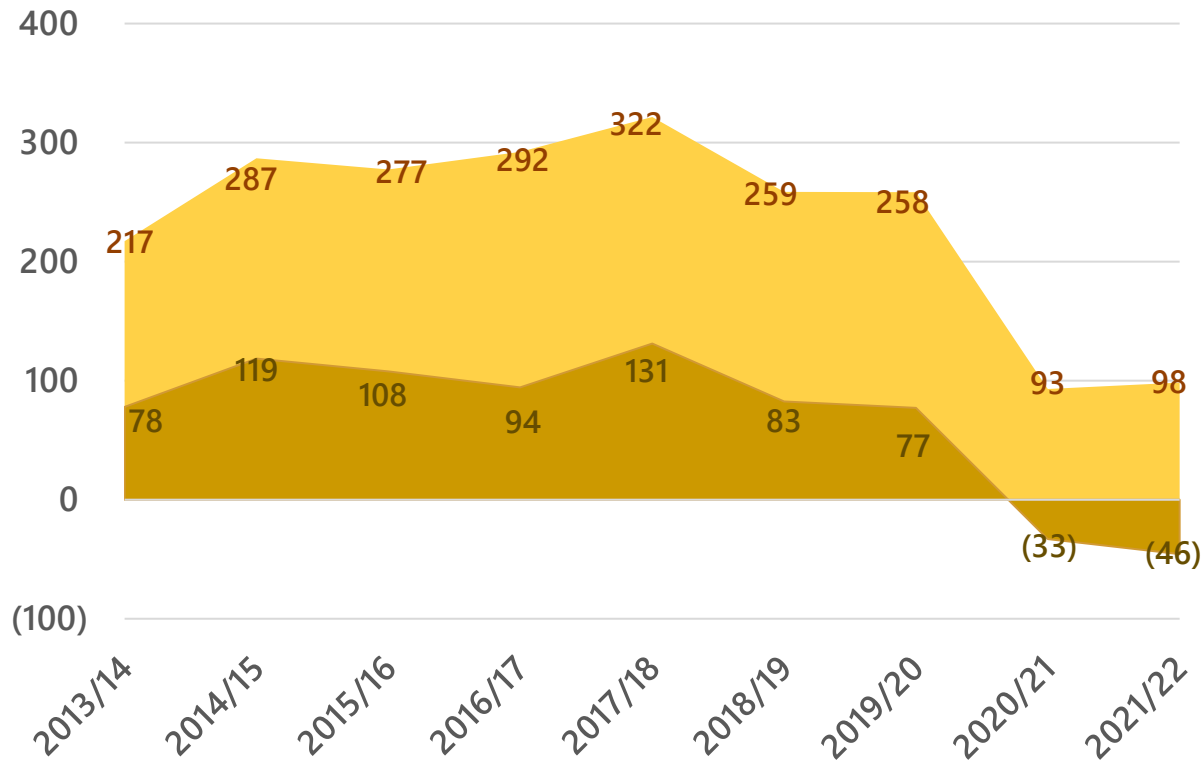
Plant Factor (Quarterly)



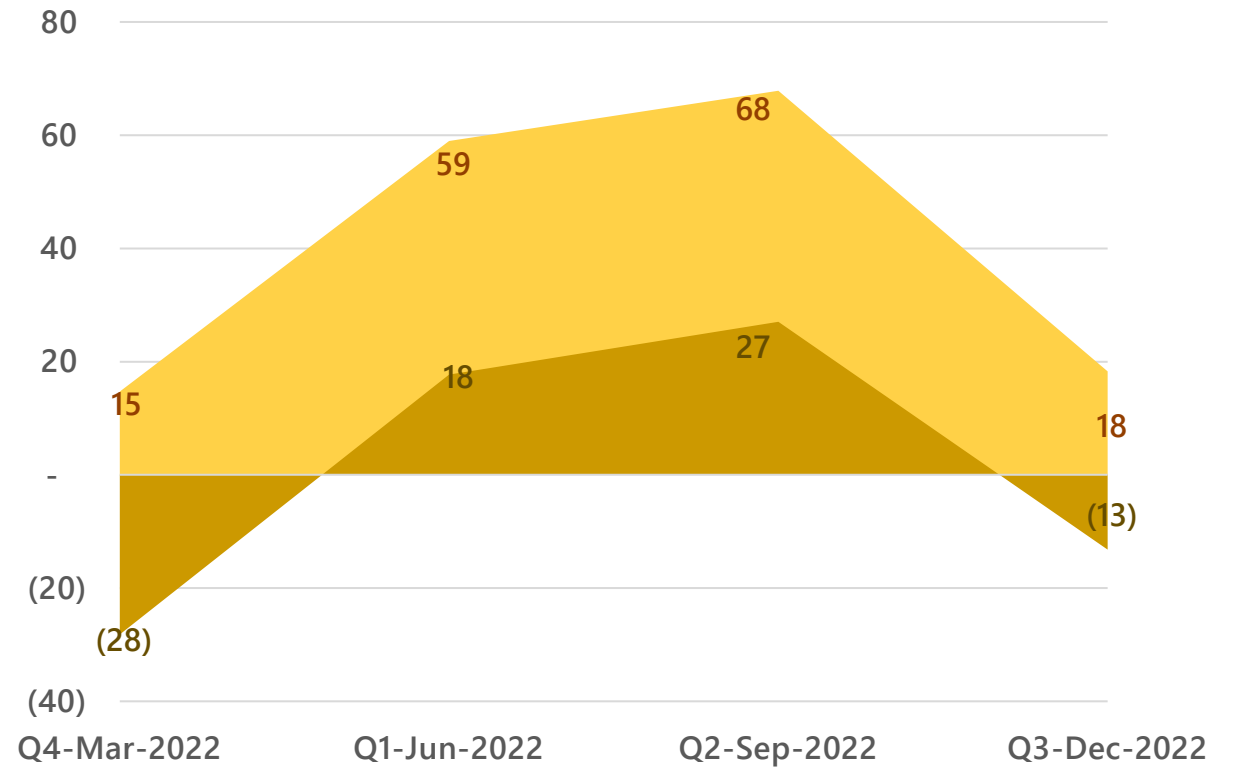
*Nala Danavi also lost its connectivity to the grid due to the aforementioned equipment failure and the plant became fully operational after the repair in August 2021.

■ Generation (MWh)
 —●— PF
 -.-●-.- 3-year Historical Average PF

Profitability (Annual)



Profitability (Quarterly)



■ Revenue (Mn) ■ Profit (Mn)



THERMAL POWER PROJECTS

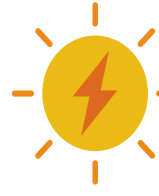
Rajshahi

Raj Lanka Power Company Ltd



Location

Natore,
Rajshahi district
Bangladesh



Capacity

52.2 MW



Engines

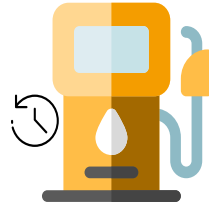
6

HFO / Gas based
Reciprocating
engines



Main Fuel

Heavy
Furnace Oil



Backup Fuel

Diesel



Equipment Supplier

Wartsila,
Finland



Year of Commissioning

2014



Tenure of PPA

15 years



Ownership

20.3%



Investment

LKR 386.5
MN

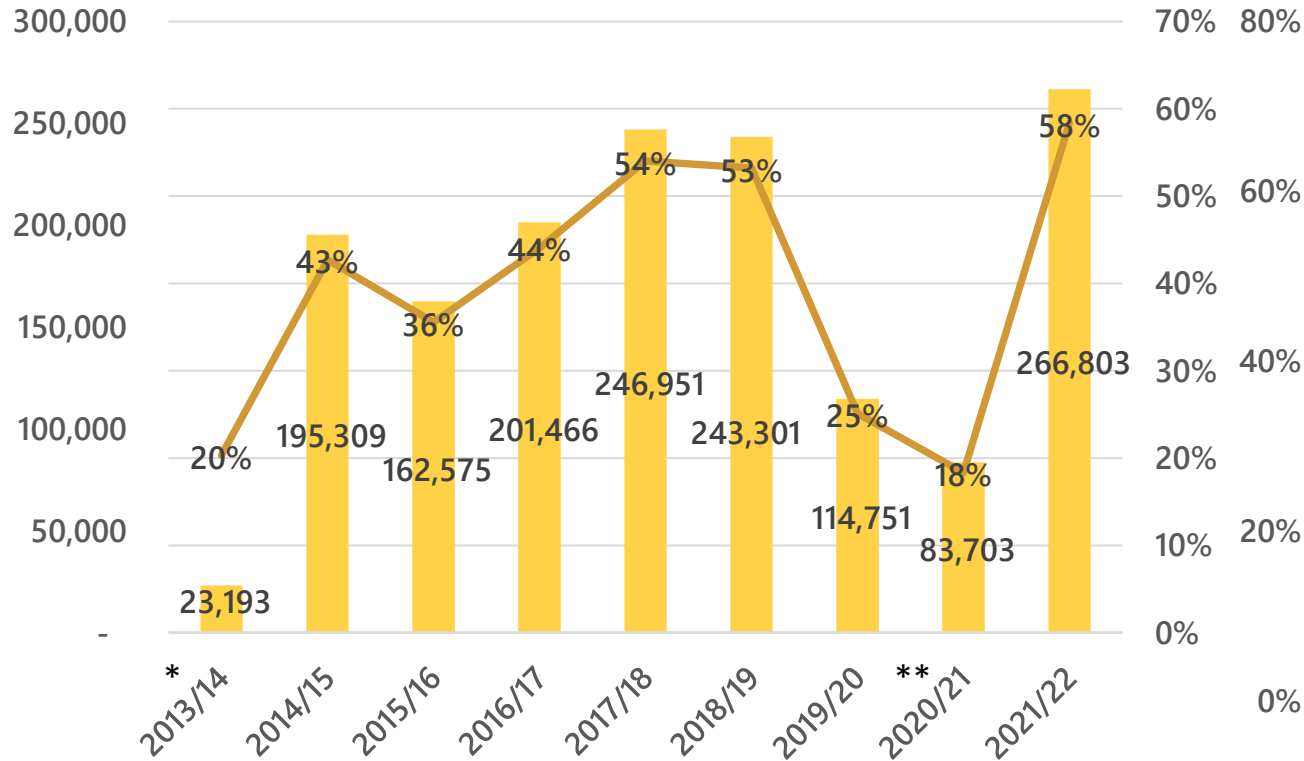


Project Partners

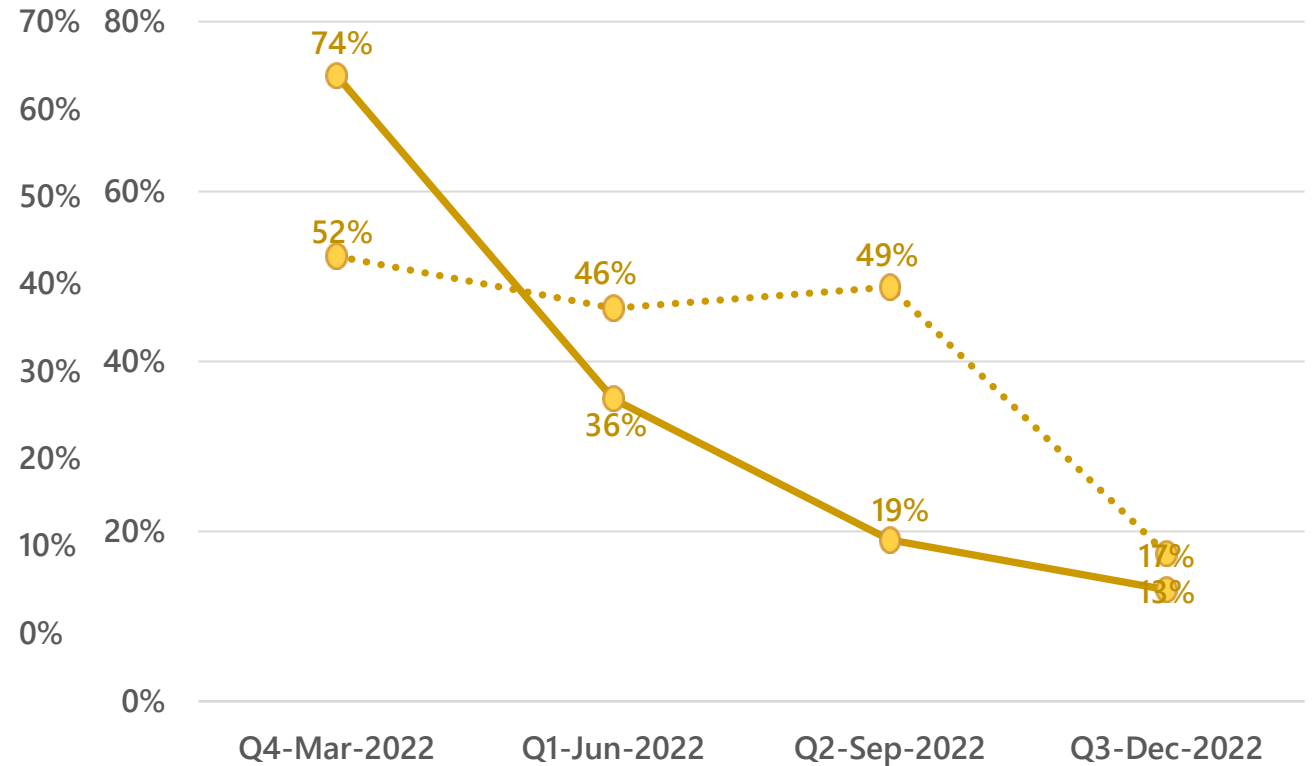
LTL Holdings (Pvt) Ltd



Plant Factor (Annual)



Plant Factor (Quarterly)

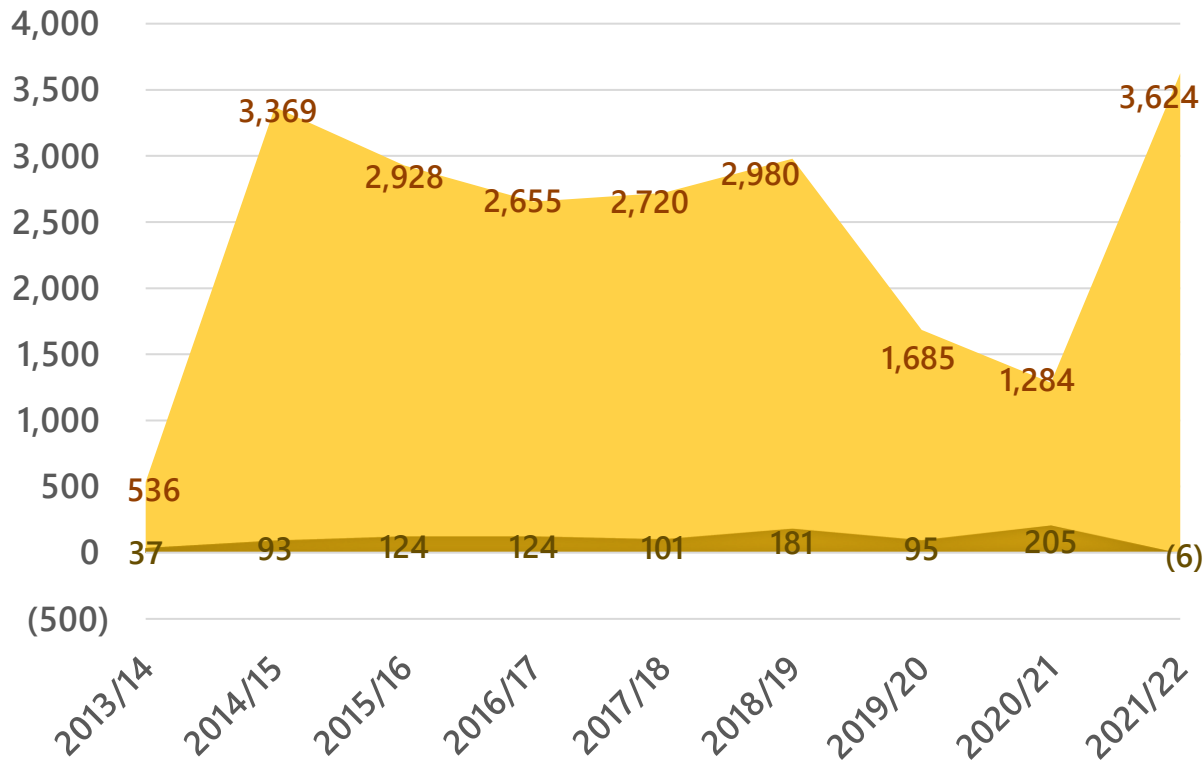


* First year of commercial operation.

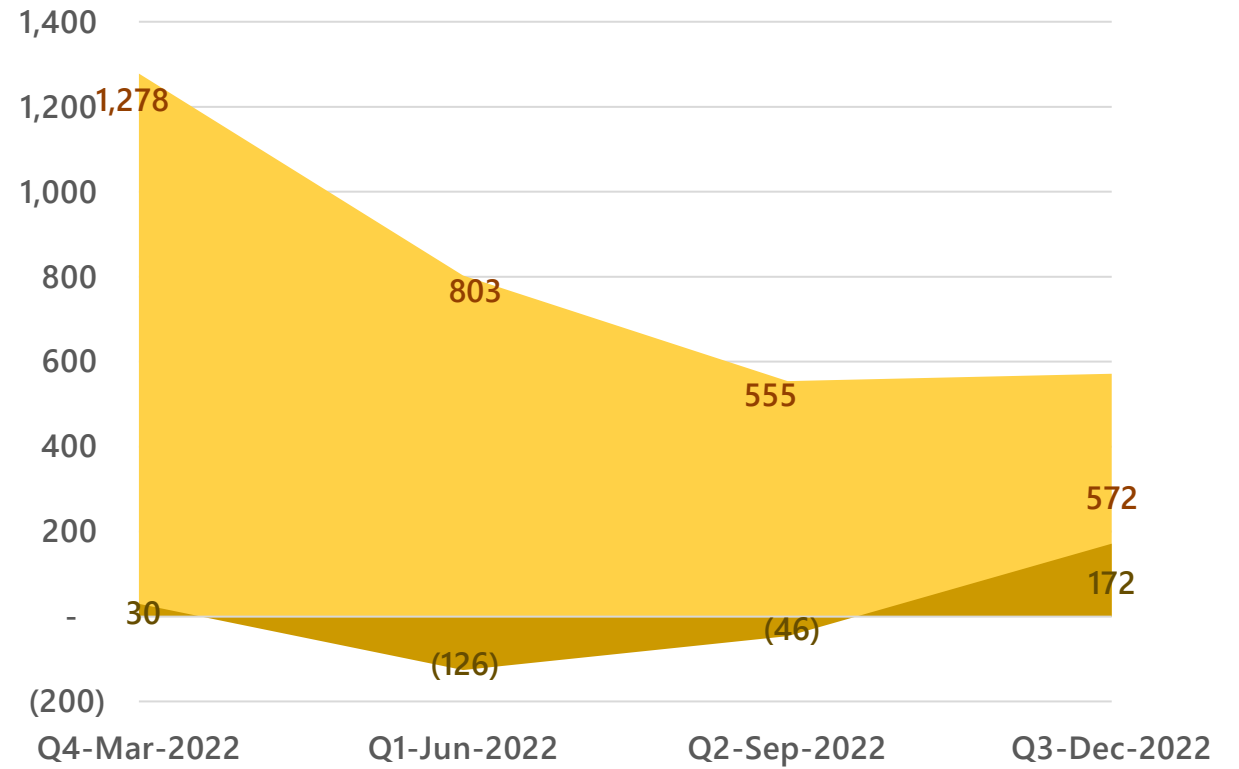
** Generation has been low due to the lower demand from BDPD which is a result of the operations of new gas power plants in close proximity that have begun supplying to the BDPD.

■ Generation (MWh)
 —●— PF
 -.-●-.- 3-year Historical Average PF

Profitability (Annual)



Profitability (Quarterly)



■ Revenue (BDT Mn) ■ Profit (BDT Mn)

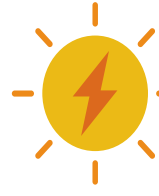
Comilla

Lakdhanavi Bangla Power Ltd



Location

Jangalia,
Comilla district
Bangladesh



Capacity

52.2 MW



Engines

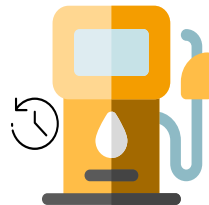
6

HFO / Gas based
Reciprocating
engines



Main Fuel

Heavy
Furnace Oil



Backup Fuel

Diesel



Equipment Supplier

Wartsila,
Finland



Year of Commissioning

2015



Tenure of PPA

15 years



Ownership

33.2%



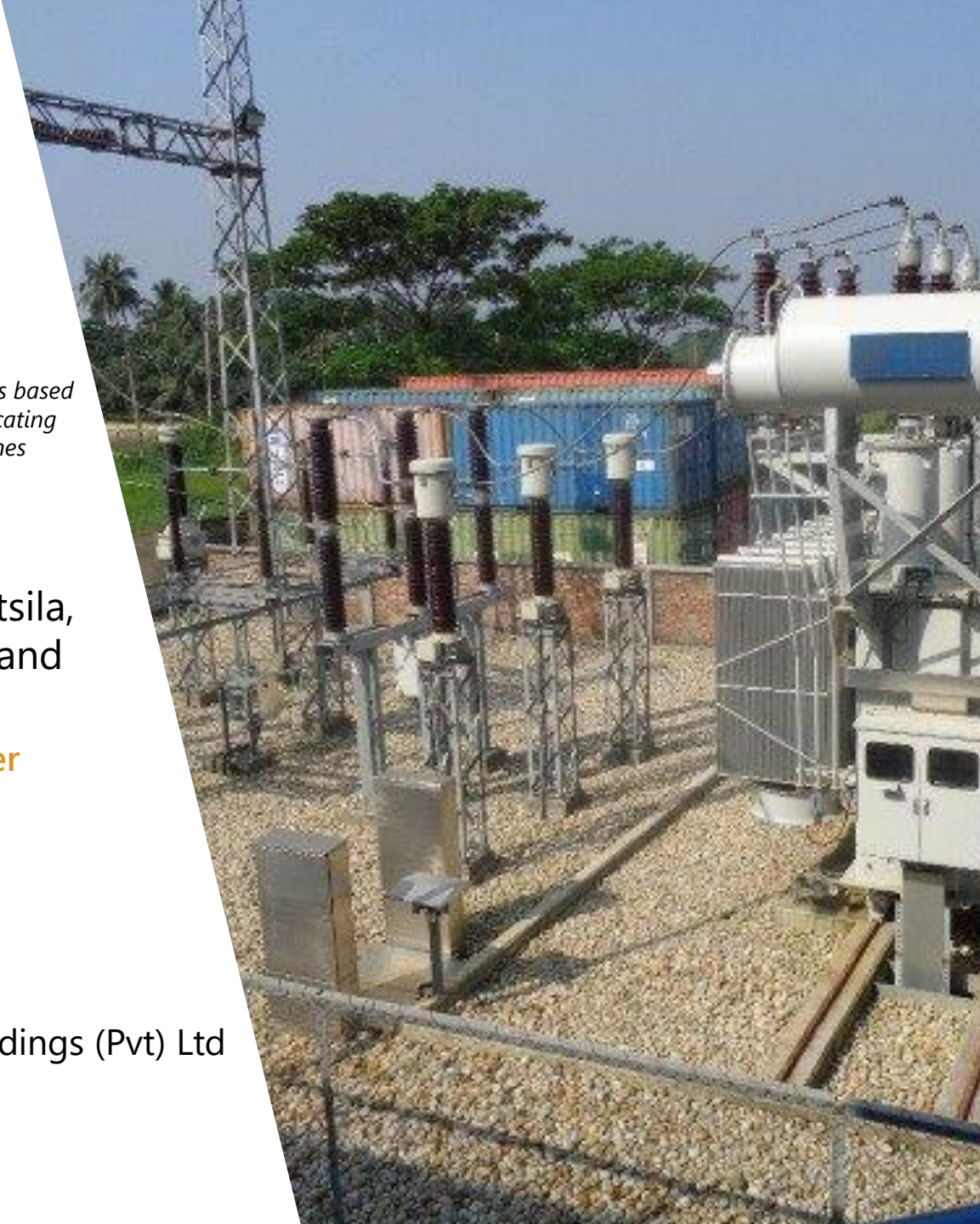
Investment

LKR 653 MN

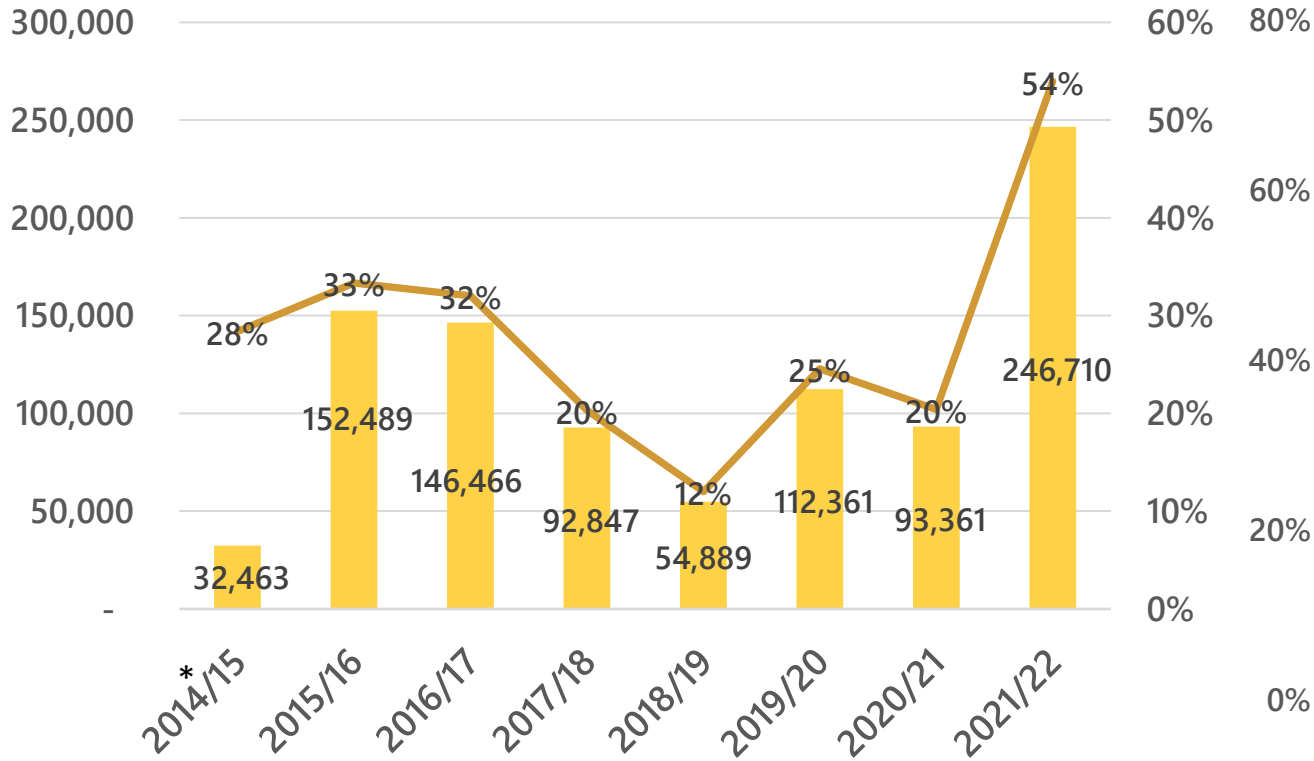


Project Partners

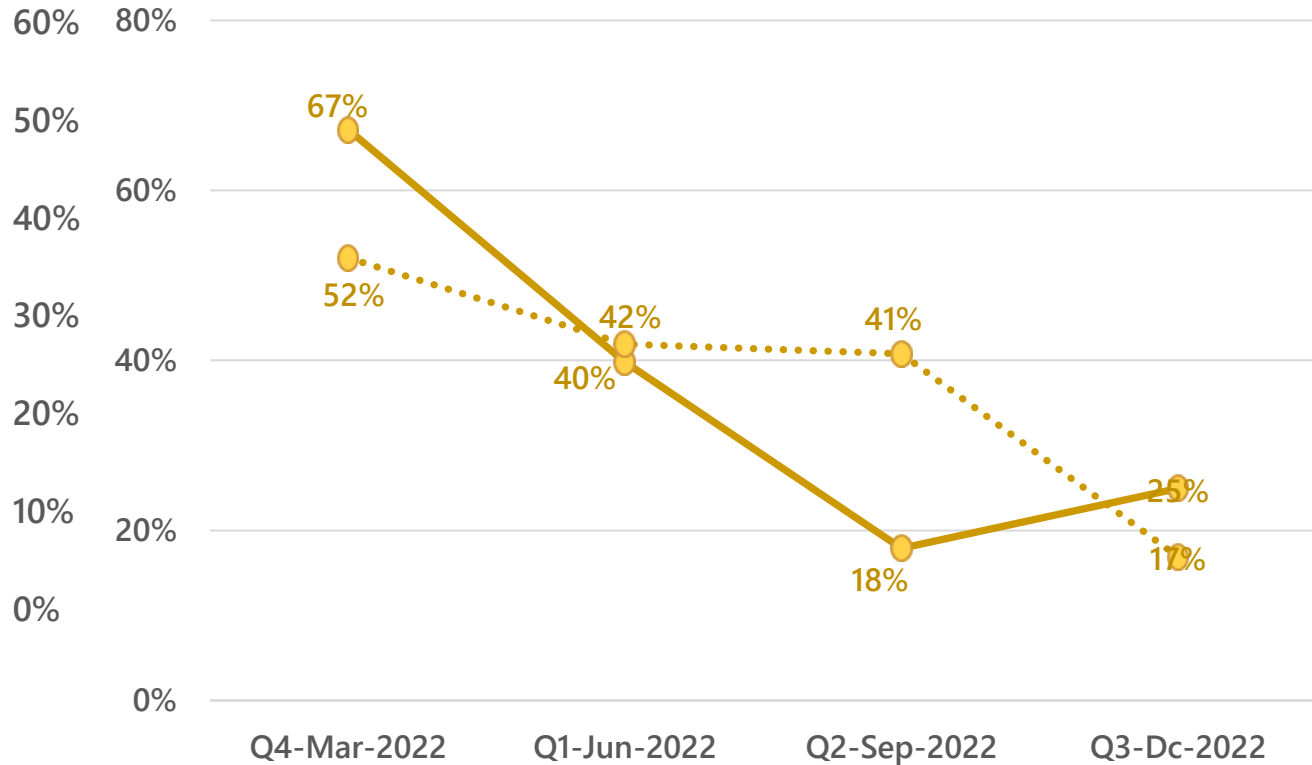
LTL Holdings (Pvt) Ltd



Plant Factor (Annual)



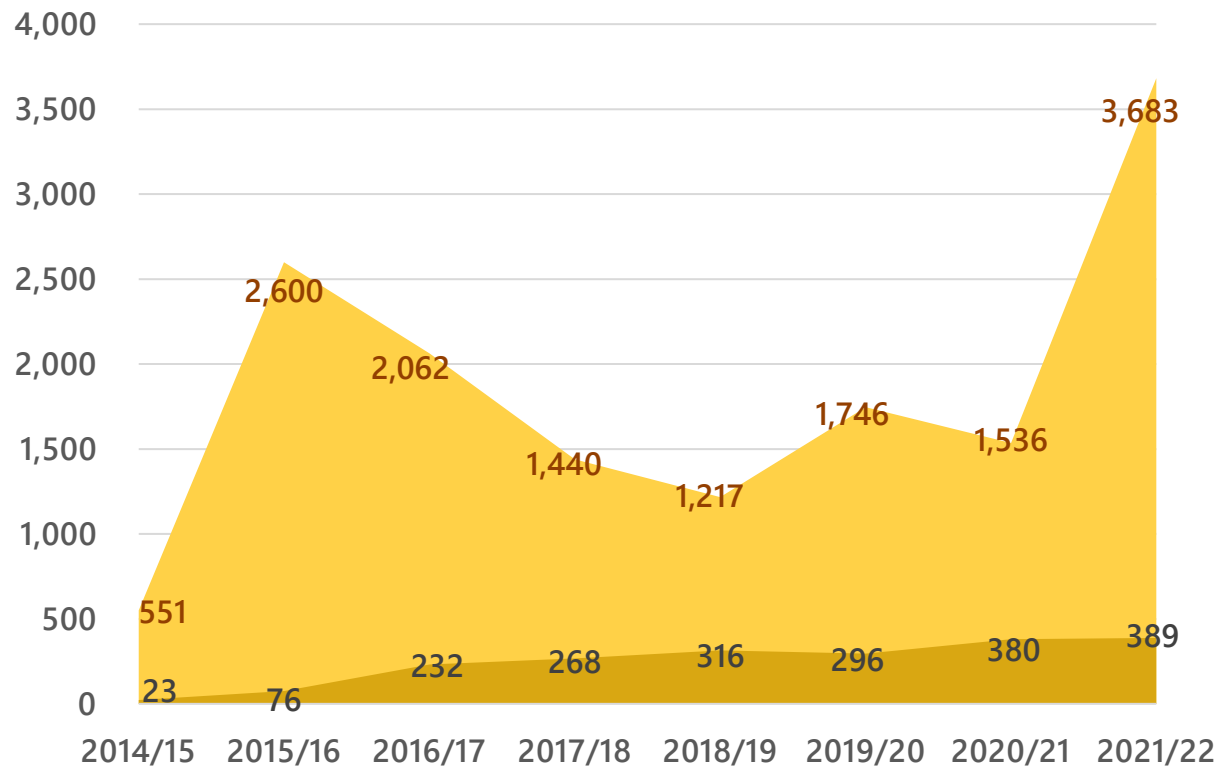
Plant Factor (Quarterly)



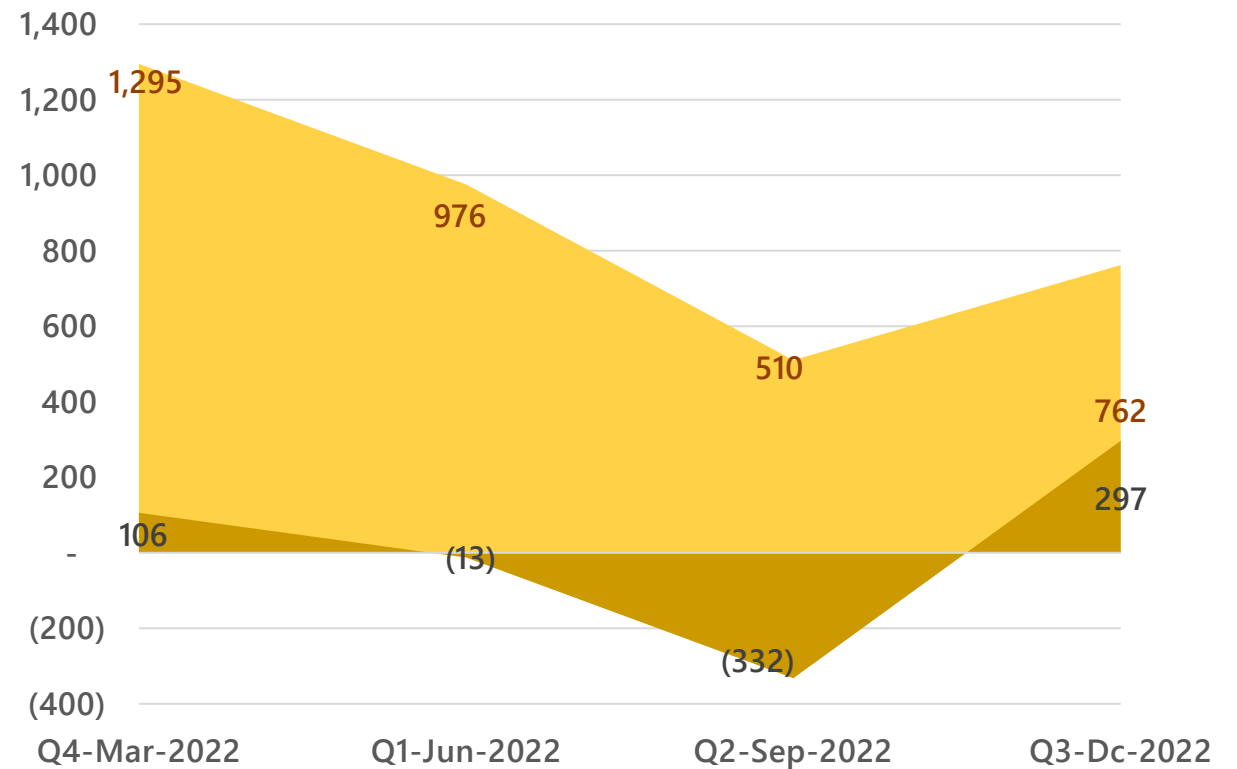
* First year of commercial operation.

Generation (MWh)
 PF
 3-year Historical Average PF

Profitability (Annual)



Profitability (Quarterly)



■ Revenue (BDT Mn)
 ■ Profit (BDT Mn)

Feni Lanka

Feni Lanka Power Limited



Feni,
Chittagong division
Bangladesh

Location



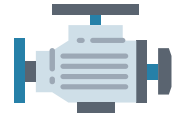
Heavy Fuel Oil based
power plant

Project



114 MW

Capacity



Six 18V50 and one 20V32
Reciprocating engines

Engines



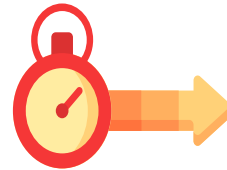
Wartsila,
Finland

Equipment Supplier



2019

Year of Commissioning



15 years

Tenure of PPA



29.2%

Ownership



LKR 1,432.2
MN

Investment

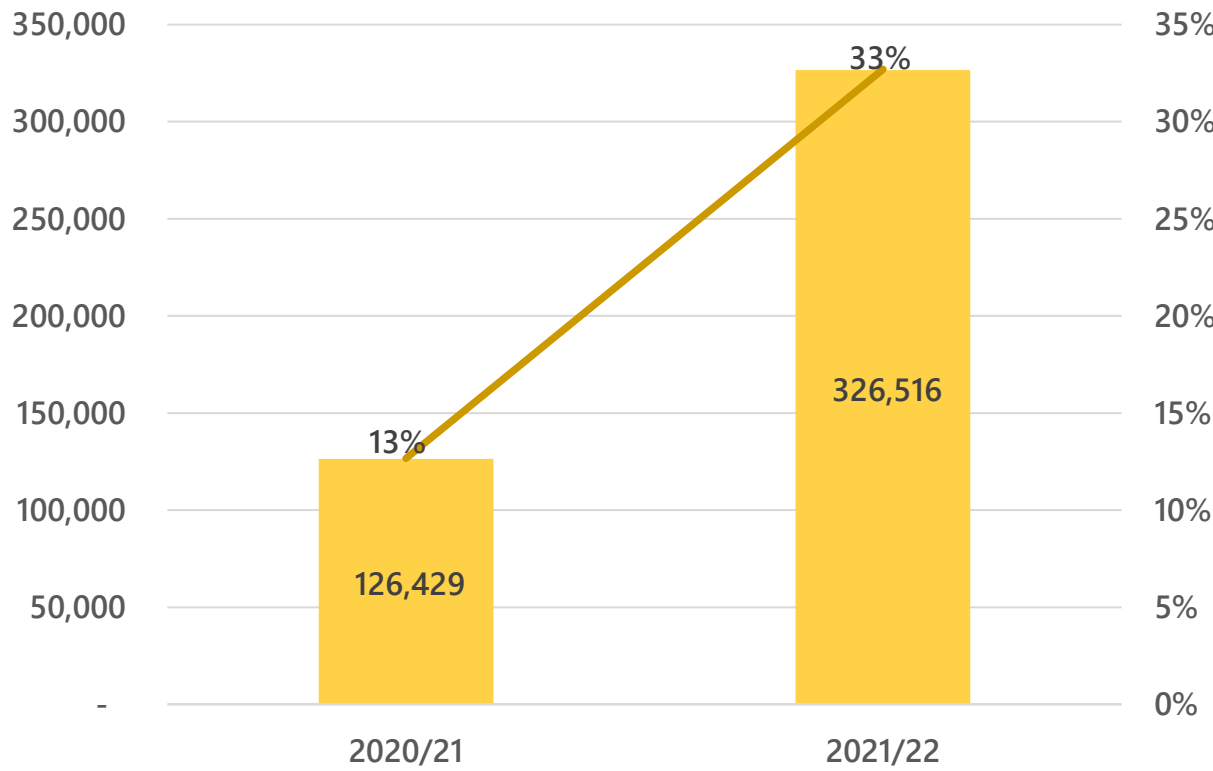


LTL Holdings (Pvt) Ltd

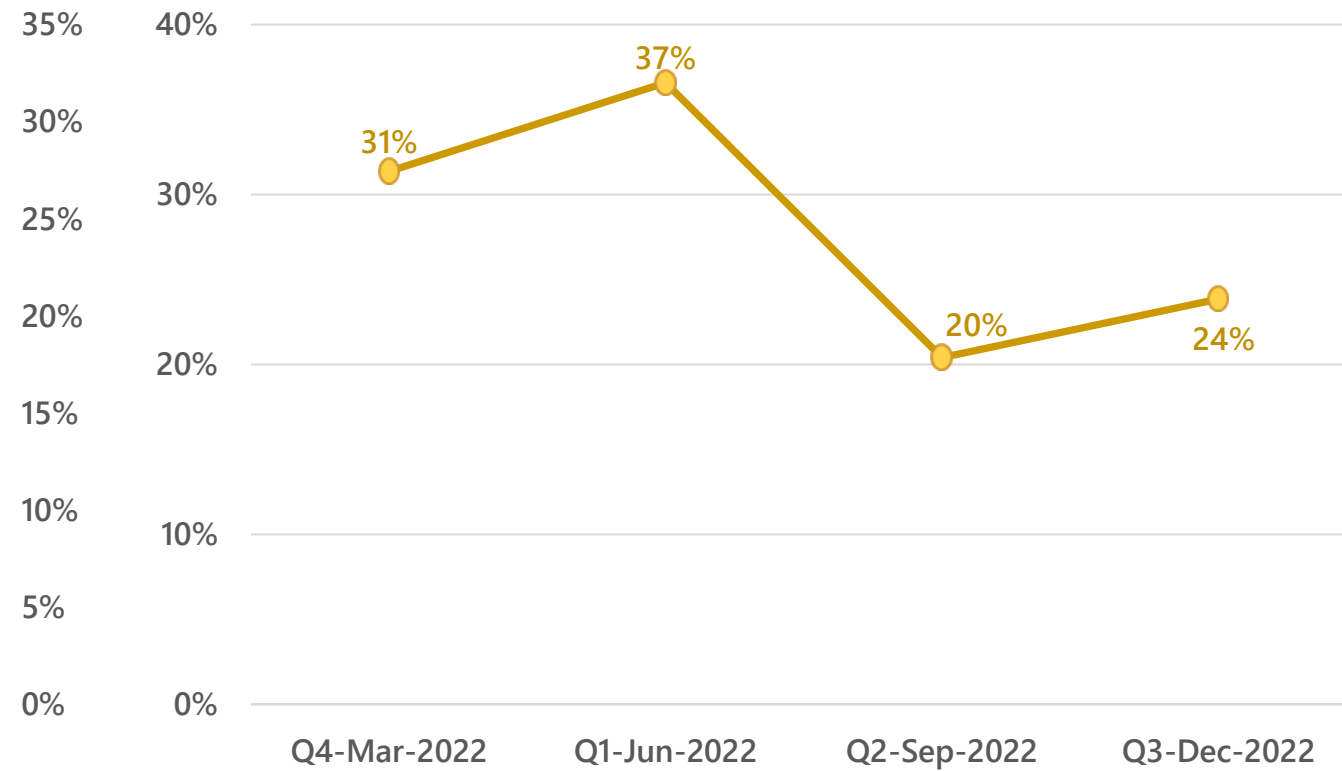
Project Partners



Plant Factor (Annual)

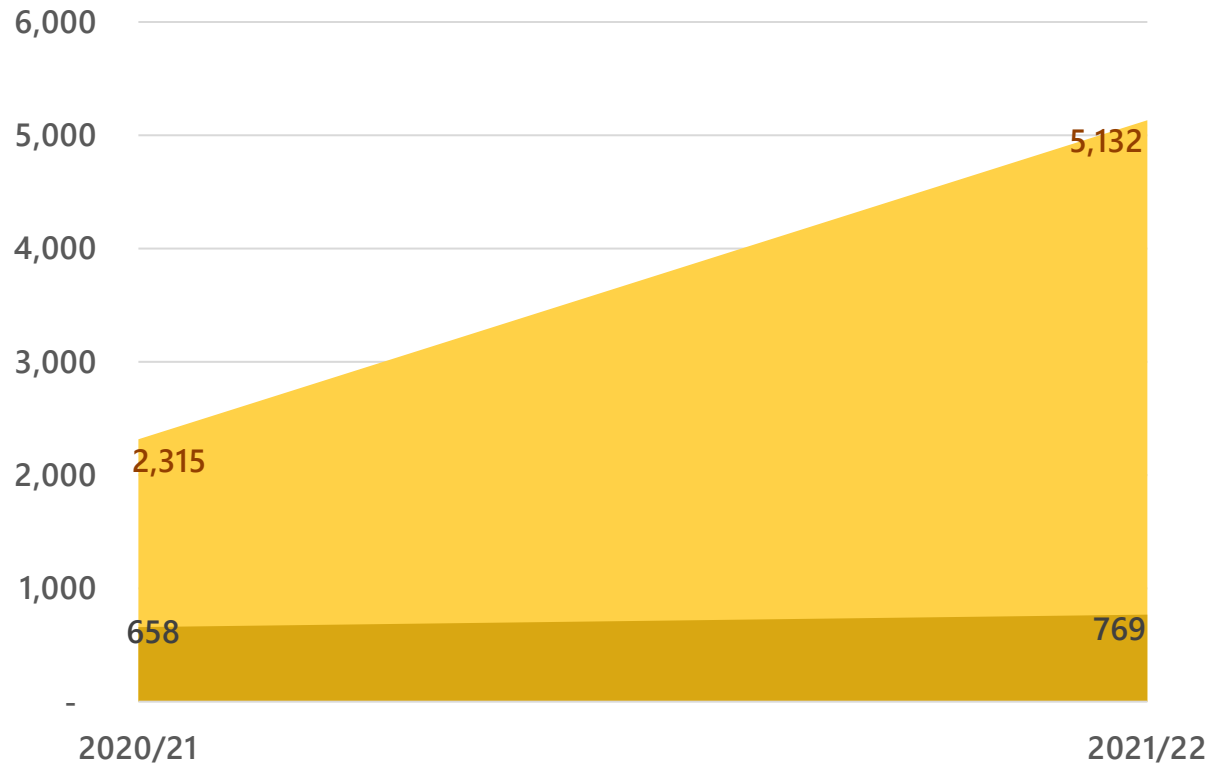


Plant Factor (Quarterly)

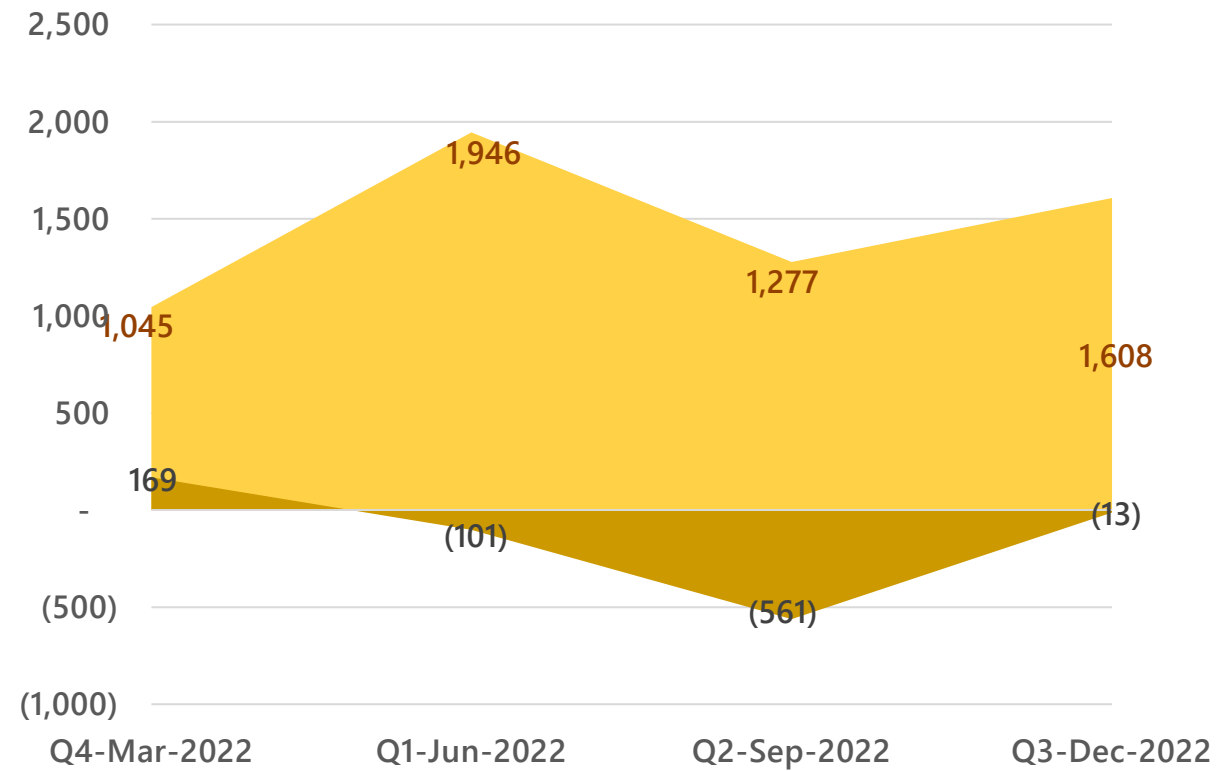


Generation (MWh) PF

Profitability (Annual)

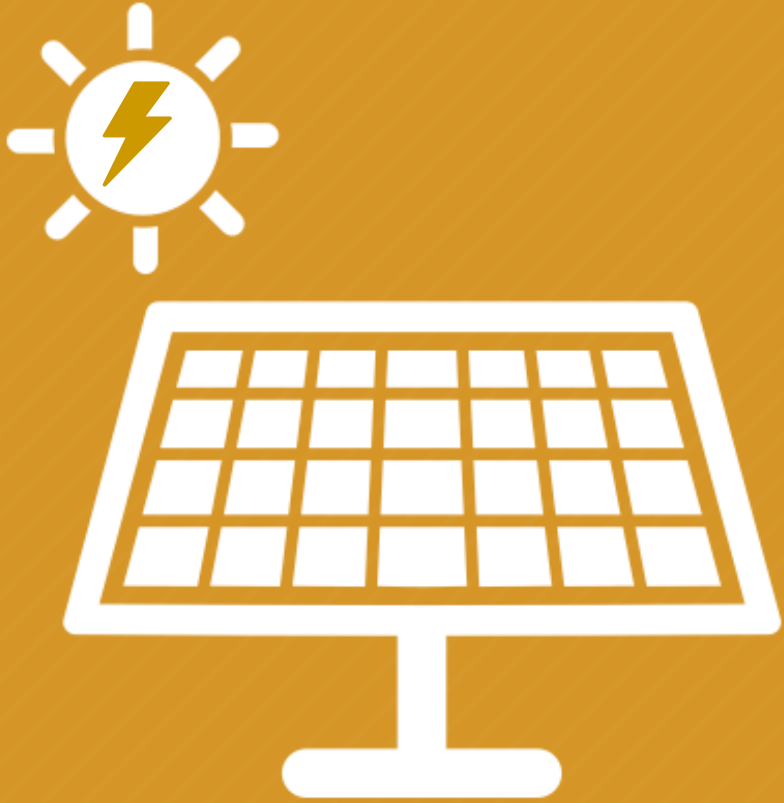


Profitability (Quarterly)



■ Revenue (BDT Mn)

■ Profit (BDT Mn)



SOLAR POWER PROJECTS

Mathugama

SEI Mathuagama (Pvt) Ltd



Mathugama,
Kaluthara district

Location



1 MW

Capacity



345 W

Panel Capacity



Panels - Hanwha Q CELLS
South Korea
Invertor – Sungrow Power
China

Equipment Supplier



2021

Year of Commissioning



20 years

Tenure of PPA



77 %

Ownership



LKR 35.1 MN

Investment

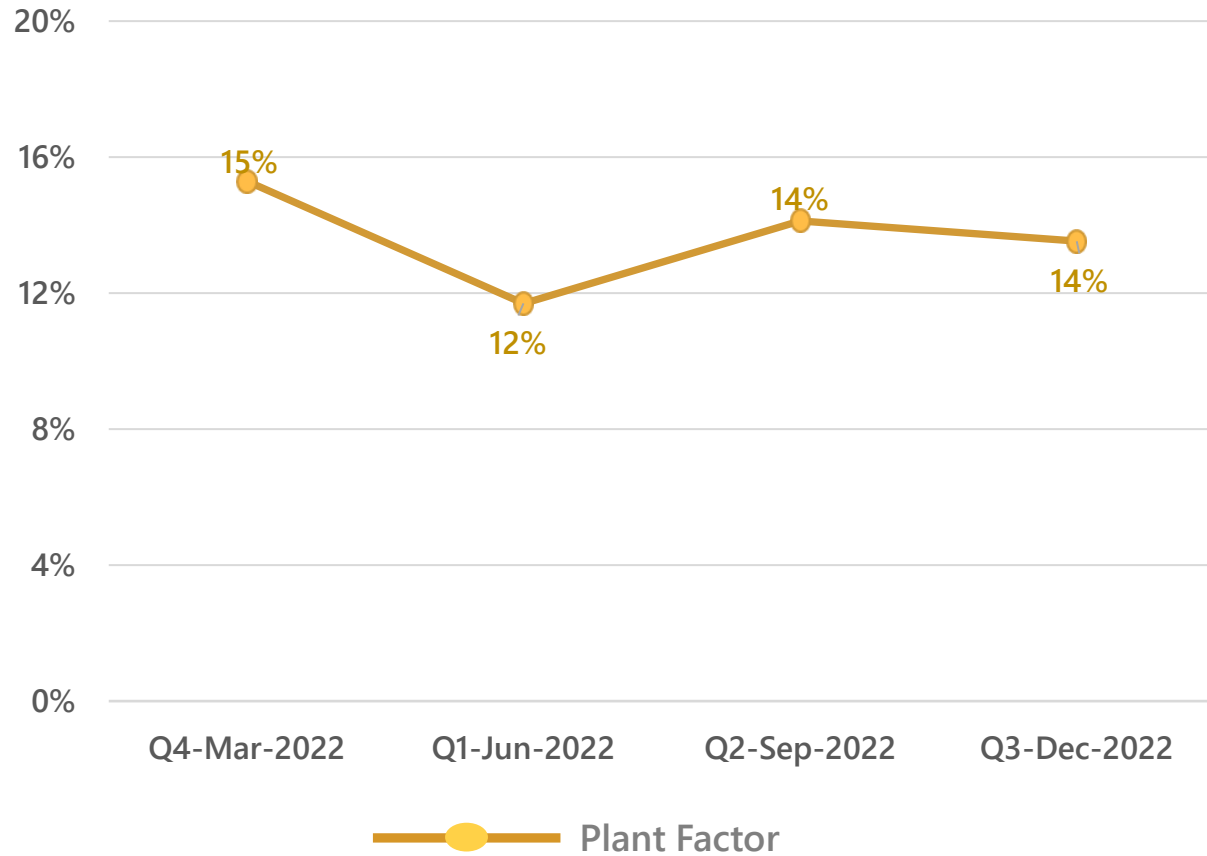


First Energy SL
(Pvt) Ltd

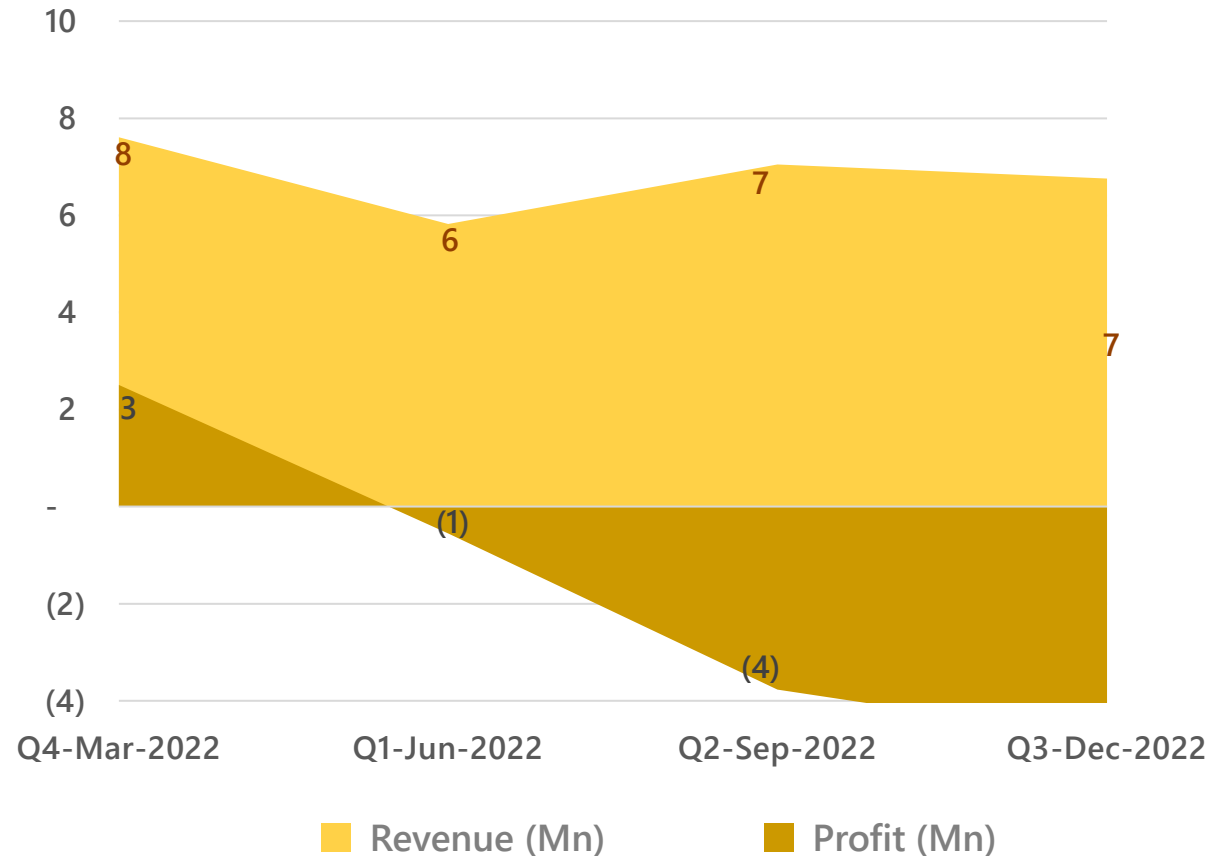
Project Partners



Plant Factor (Quarterly)



Profitability (Quarterly)



Pallekele

Solar Energy Investments Pallekele (Pvt) Ltd



Pallekale
Kandy district

Location



2 MW

Capacity



535 W

Panel Capacity



2022

Year of
Commissioning



20 years

Tenure of
PPA



Equipment
Supplier

Panels -
J A Solar
Invertor -
Ingeteam



81 %

Ownership



LKR 80 MN

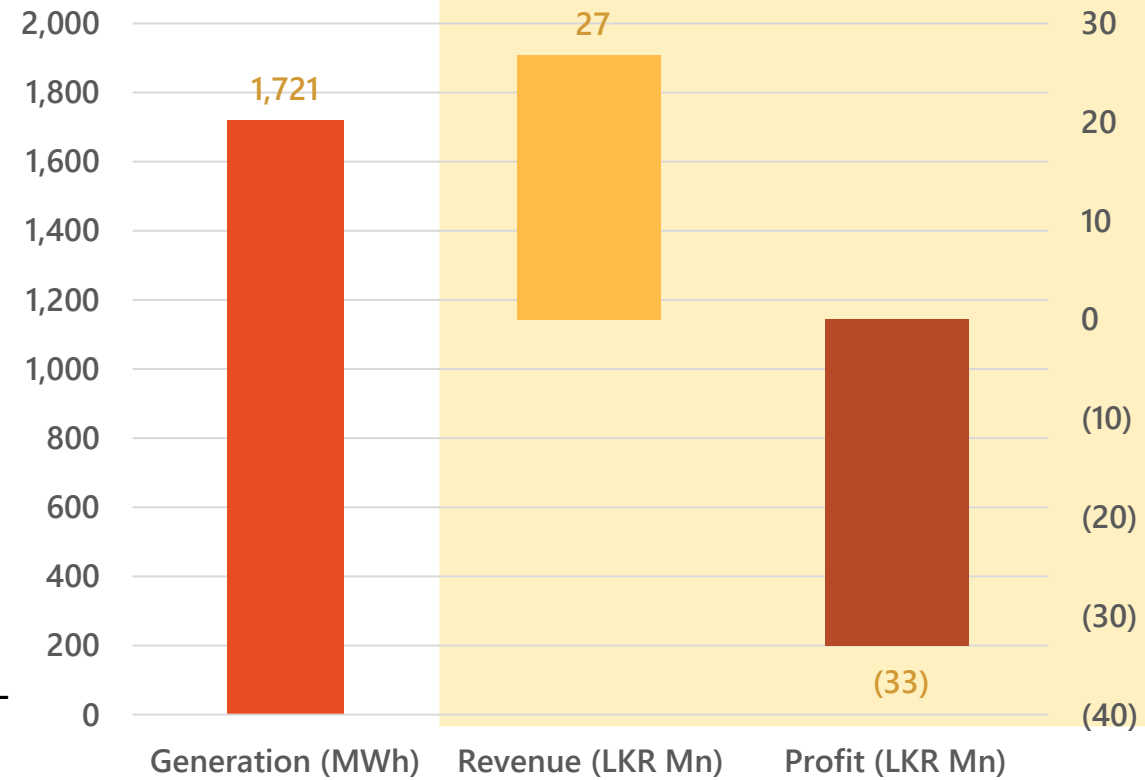
Investment



First Energy SL
(Pvt) Ltd

Project Partners

Generation and Profitability 2022 YTD



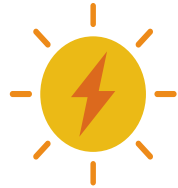
Maho

SEI Maho (Pvt) Ltd



Maho
Kurunegala
district

Location



Capacity

3 MW



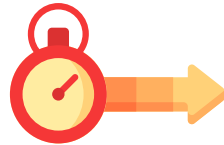
Panel Capacity

535 W



Year of
Commissioning

2022



Tenure of
PPA

20 years



Equipment
Supplier

Panels -
J A Solar
Invertor -
Ingeteam



Ownership

81 %



Investment

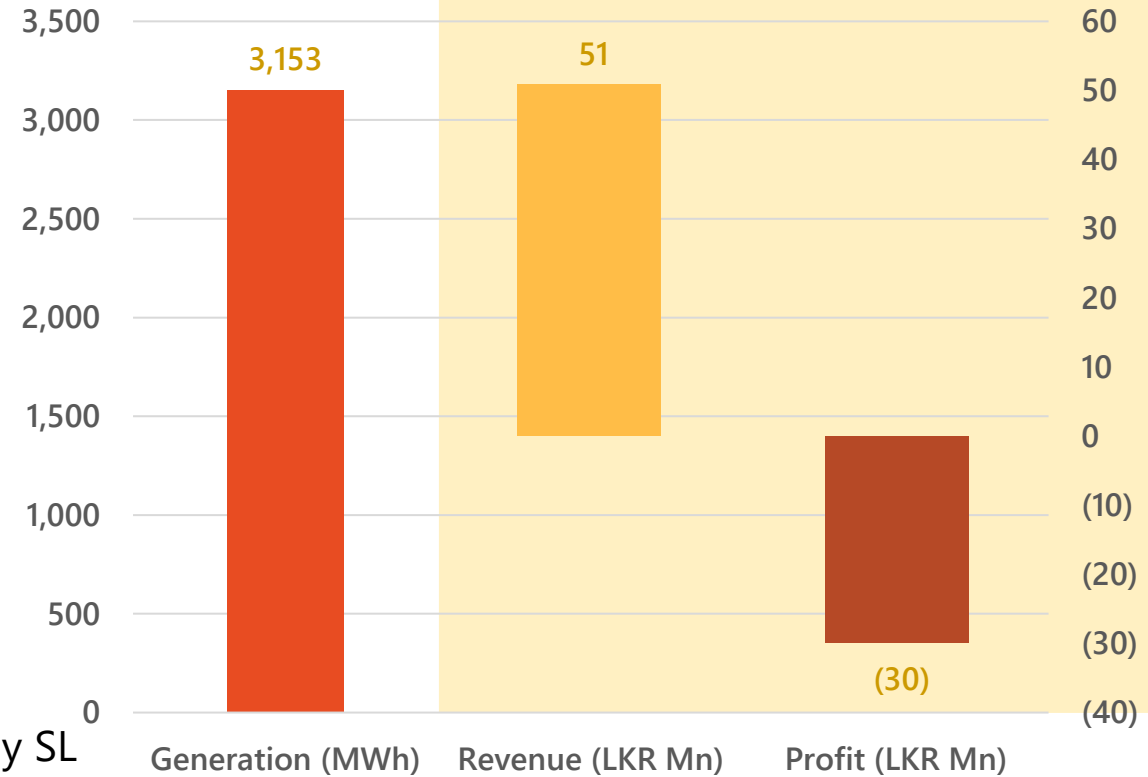
LKR 95.1 MN



Project Partners

First Energy SL
(Pvt) Ltd

Generation and Profitability 2022 YTD





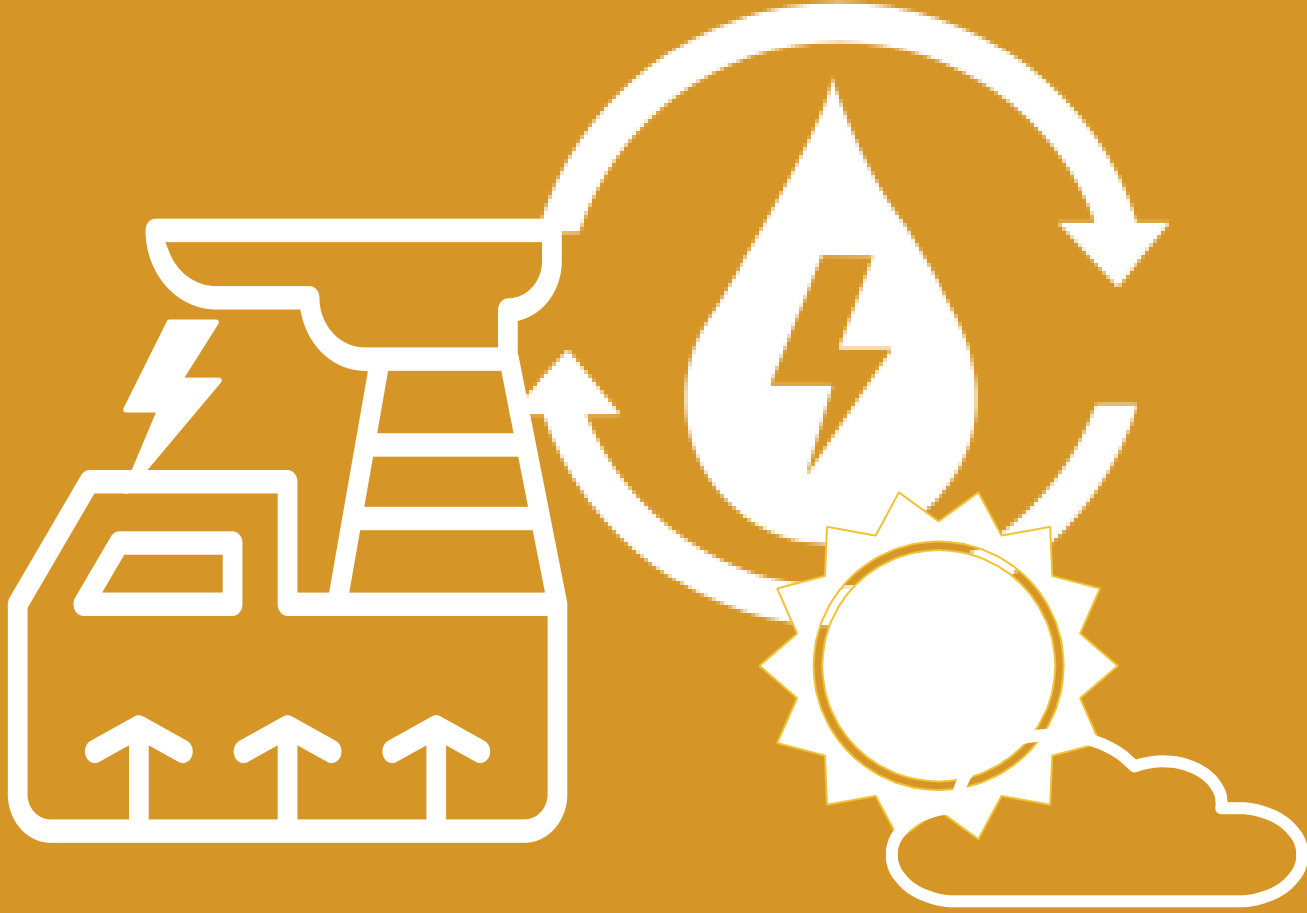
FINANCIAL INDICATORS

Financial Indicators (as at Financial YTD 31st December 2022)

		Ownership %	Investment(Mn)	Net Assets (Mn)	Revenue (Mn)	Profit (Mn)
HYDRO POWER						
Belihul Oya	SL	25%	120	426	76	125
Assupini Ella	SL	100% Owned by Nividhu		268	112	39
Kadawala	SL	55%	135	306	20	(42)
Neluwa	SL	49%	59	340	96	50
Theberton	SL	85%	143	234	45	6
Campion	SL	84%	118	189	63	9
Bambarapana	SL	40%	156	468	152	47
WIND POWER						
Pawan Dhanavi	SL	40%	424	1,200	237	12
Nala Dhanavi	SL	49%	243	720	145	32

Financial Indicators (as at Financial YTD 31st December 2022)

			Ownership %	Investment(Mn)	Net Assets (Mn)	Revenue (Mn)	Profit (Mn)
THERMAL POWER							
Rajshahi	BN	20%	387	1,871 (BDT)	1,929 (BDT)	1,122 (BDT)	
Comilla	BN	33%	653	1,833 (BDT)	2,248 (BDT)	(44) (BDT)	
Feni	BN	29%	1,423	2,274 (BDT)	4,831 (BDT)	650 (BDT)	
SOLAR POWER							
Mathugama	SL	77%	35	48	25	(9)	
Pallekele	SL	81%	80	65	27	(33)	
Maho	SL	100%	102	60	51	(30)	



New projects and developments in the pipeline

Makari Gad Hydropower (Pvt) Ltd



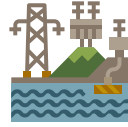
Location

Api Himal Rural
Municipality,
Darchula district
Nepal



Capacity

10 MW



Gross Head

924 m



Design Flow

1.35 m³/s



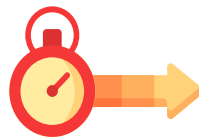
Energy Generation

69.8 GWh



Project Commencement

4Q 2022/23



Tenure of PPA

30 years



Ownership

41.6%



Investment

LKR 664.7
MN



Project Partners

LTL Holdings
(Pvt) Ltd

- In January 2019 LVL Energy Fund made its first equity disbursements of LKR 117.0 Mn in respect of Makari Gad.
- Further disbursements aggregating to LKR 547.7 Mn was carried out up to March 2022. Thereby, as at 31st December 2022 LVL Energy Fund have invested LKR 664.7 Mn in Makari Gad.
- Construction of the 10 MW Makari Gad hydro power plant in Nepal hampered by Covid-19 pandemic, flash floods and landslides is nearing completion and commercial operation is expected to commence by end February 2023.

THANK YOU

The background is a solid orange color. On the right side, there are several diagonal stripes of varying shades of orange and brown, creating a modern, geometric design.