

## Profile of the User Agency

**Greenko Group** is India's leading clean energy company, with ~4.8 GW operational portfolio across 15 states in India. Greenko Group has an existing asset base of over USD 5.5 Billion with an equity investment of USD 2 Billion. Greenko enjoys strong shareholder support of the world's largest sovereign wealth funds of Singapore (GIC) and Abu Dhabi (ADIA). Greenko Group has an experienced & diverse management team to develop, execute and operate challenging projects with expertise across large-scale Wind, Solar PV and Hydro projects. The team has recently commissioned one of the World's largest single 816 MW<sub>DC</sub> Solar PV Plant in Kurnool, Andhra Pradesh within a record time of 6 months.

Greenko Group has over the past 10 years, developed capabilities not just in RE project execution, but also state of the art digital capabilities for efficiently forecasting renewable generation trends in Solar & Wind domains giving it a unique capability to integrate diverse generation streams of energy to lead the creation of a Decarbonized, Digitized future on the Energy sector in India.

Greenko Group has been in the process of evaluating suitable locations for such integrated projects for over 1 year and has identified Pinnapuram, Kurnool District, Andhra Pradesh for the proposed Pinnapuram Integrated Renewable Energy Project (IREP). Pinnapuram IREP has been conceived as the World's First & Largest Gigawatt Scale integrated project with Solar, Wind and Pumped Storage components that can supply Schedulable Power On Demand (SPOD) which is Dispatchable & Schedulable Renewable Energy for the first time to consumers across India.

After evaluating the site for over 1 year, assessing the Wind & Solar resources, Greenko Group has approached the Government of Andhra Pradesh (GoAP) for necessary permissions and approvals for the proposed Project. Presently, GoAP has approved the project with 1000 MW Solar, 550 MW Wind & 1200 MW of Standalone Pumped Storage capacities.

S.No	Description	Details
01	Name of the Company	Greenko Energies Private Limited
02	Designation and Address	Gopi Krushna N Dy. General Manager Plot No. I 071, Road No.44, Jubilee Hills, Hyderabad - 500033, Telangana.
03	Email address	envifor.irepap@greenkoenergyprojects.com
04	Contact no	040-40301000 Fax No 040-23540287
05	Contact no-mobile	9959666709

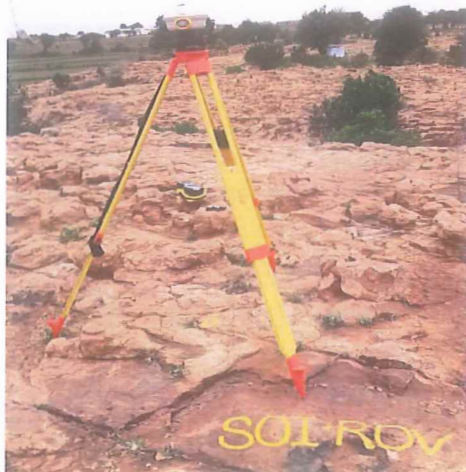
Gopi Krushna Nikku  
Authorised Signatory



STATEMENT OF FOREST LAND REQUIRED FOR ESTABLISHMENT OF STANDALONE PUMPED STORAGE COMPONENT OF PINNAPURAM IREP						
S.L. No	Name of the Division	Name of the Range	Name of the Beat & RF Block	Name of the Component	Compartment No	Forest Land Area Ha
1	Kurnool	Kurnool	Ghani RF	Intake structure	117	8.02
2	Kurnool	Kurnool	Ghani RF	Penstock	117	6.96
3	Kurnool	Kurnool	Ghani RF	Power House &TRC Outlet	117	22.50
4	Kurnool	Kurnool	Ghani RF	Tailrace Channel	115	0.95
					116	0.32
					117	1.15
					113	69.00
5	Kurnool	Kurnool	Ghani RF	Lower Reservoir	114	1.72
					115	213.10
					116	35.20
6	Kurnool	Kurnool	Ghani RF	Proposed road 1. From Lower Reservoir to Power house	116	4.15
				Proposed road 2.From Power house to Upper Reservoir	117	2.58
TOTAL						365.66



## Details of DGPS Survey Instruments Used



S.No	Description	Instrument Used	Persons involved	Period of Survey
1	Surveyed & Prepared by GIS Team of Greenko Group	Trimble	Forest Department officials and GIS team & Environment & Forest Team of Greenko	2018

  
 Gopi Krushna Nikku  
 Dy. General Manager  
 GEPR, Hyderabad

### Major Salient features of the project

1		<b>Pinnapuram Reservoir - Lower</b>	Lower Reservoir
	a	Top of Reservoir	EL +343.00 m
	b	Full Reservoir level (FRL)	EL +340.00 m
	c	Max Height of Embankment	33.0 m
	d	Top Width of Embankment	10.0 m
2		<b>Powerhouse</b>	
	a	Type	Surface Powerhouse
	b	Dimensions	L 240.00m x B 24.00 m x H 58.00 m
3		<b>Tail Race Channel</b>	Trapezoidal Channel - Lined
	a	Length of the channel	1300 m
	b	Bed Width	70 m
	c	Full supply depth	6.00 m
	d	Bed slope	1 in 5000



Gopi Krishna Nikku  
Dy. General Manager  
GEPL, Hyderabad

BREAK UP OF TOTAL LAND REQUIRED FOR INTEGRATED RENEWABLE ENERGY STORAGE PROJECT - PINNAPURAM				
Sl. No.	Components	Total Area (Ha)	Forest Land Area (Ha)	Non-Forest Land Area (Ha)
1	Upper Reservoir	280.17	-	280.17
2	Intake Structure	10.61	8.02	2.59
3	Penstock	6.96	6.96	-
4	Power House & TRC Outlet	22.75	22.50	0.25
5	TailRace Channel	16.83	2.43	14.40
6	Lower Reservoir	319.02	319.02	-
7	Pot Head Yard	0.25	-	0.25
8	Proposed roads: from Power House to Lower Reservoir from Lower Reservoir to Power House	10.41	6.73	3.68
9	Contractor facilities, cement and E & M stores, Temporary colony area. (2 Locations) (5.5ha +5.0ha)	10.50	-	10.50
10	Muck disposal areas	21.00	-	21.00
11	Quarry Area	15.00	-	15.00
12	Magazine	0.05	-	0.05
	<b>TOTAL</b>	<b>713.55</b>	<b>365.66</b>	<b>347.89</b>

N. Govindarajan

