

#### **GREENKO MP 01 IREP PRIVATE LIMITED**

Registered Office: 1366, ROAD NO. 45, JUBLIEE HILLS, HYDERABAD-500033

# TENDER SPECIFICATION No. MP01-PSP/GANDHI SAGAR/CIVIL AND HYDRO-MECHANICAL PACKAGE/002 Dated 13<sup>TH</sup> DECEMBER 2021

#### **INTERNATIONAL COMPETITIVE BIDDING**

(TWO PART BID)

# BID DOCUMENTS FOR "CIVIL AND HYDRO-MECHANICAL WORKS" for PUMPED STORAGE PROJECT (PSP)

M/s. Greenko MP 01 IREP Private Limited (GMP01) invites <u>sealed bids</u> from eligible Bidders / EPC Contractors.

Implementation of the project has been envisaged through a design-build approach in which the project will be executed through an EPC Contract on **FIRM & FIXED** Price basis with Completion Time Guarantee. Brief Scope of Work under this package is detailed hereunder.

Execution of Civil and Hydro-Mechanical Works on EPC Basis, along with complete detailed engineering (including review of Electro-Mechanical design & drawings), Scope of work will include all components of project i.e. Upper embankment dam, bottom outlet at upper reservoir, Intake Structure, Buried Penstocks, vertical and horizontal Pressure Shaft along with Steel Liner, Surface Powerhouse, Tail Race Tunnel, Outlet structure, Tail Pool, Coffer Dam & Temporary Dike, Tail race channel (Off-shore Construction), Adits, Hydro-Mechanical Works (including Gates, Stoplogs, hoisting arrangements, Trash Racks & valves etc), all other Appurtenant Works required for completion of project, Infrastructure works along with review & interface Electro-Mechanical Works, Fabrication, Erection, of Commissioning and conducting Performance Guarantee Testing complete and handing over in all respects of "Civil and Hydro-Mechanical Works" on "EPC BASIS", remedying of the defects if any, and other activities incidental to the completion of Works

Project: 1440 MW Pumped Storage Project (PSP) at Khemla Block Village, Neemuch Dist., Madhya Pradesh, India.

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#### **GREENKO MP01 IREP PRIVATE LIMITED**

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# VOLUME - I: PART - I NOTICE INVITING TENDER (NIT) (TWO PART BID)

	(TWO PART BID)			
1.	Name of the Project	1440 MW MP30 Gandhi Sagar Pumped Storage Project (PSP)		
2.	Company Name	GREENKO MP01 IREP PRIVATE LIMITED (GMP01)		
3.	Tender Inviting Authority	C&P Department- IREP Projects		
4.	Tender Notice No.	MP01-PSP/GANDHI SAGAR/CIVIL AND HYDRO-MECHANICAL PACKAGE/002		
	Internat	ional Competitive Bidding (ICB)		
5.	Scope of Work	C&P Department- IREP Projects  MP01-PSP/GANDHI SAGAR/CIVIL AND HYDRO-MECHANICAL PACKAGE/002  national Competitive Bidding (ICB)  Brief scope includes (but not limited to):  General Scope of Work for this Bid Invitation  Implementation of the project has been envisaged through a design-buil approach in which the project will be executed through an EPC (Firm Fixed Price basis) Contract. Brief Scope of Work under this package detailed hereunder.  Execution of Civil and Hydro-Mechanical Works on EPC Basis, along wit complete detailed engineering for the project (including review of Electromechanical design & drawings), Scope of work will include all component of project i.e. Upper embankment dam, bottom outlet at upper reservoi Intake Structure, Buried Penstocks, vertical and horizontal Pressure Shalalong with Steel Liner, Surface Powerhouse, Tail Race Tunnel, Outleted		

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#### a) Design Engineering:

Design Engineering for all Civil Works and Hydro Mechanical Works of the Project covering detailed designs, Construction drawings, Specification for all components of works inclusive modifications/revisions of drawings to suit site conditions or specific requirements. All information of the Electro-Mechanical Equipment received from the various suppliers such as dimensions, loads, arrangements, cables, ducts, pipes, etc, will be made available for interface engineering and establishing reference co-ordinates and alignment of each individual structure for the preparation of construction drawings and AS-BUILT Drawings.

#### b) Civil and Hydro-Mechanical Works

To carry out the main Civil and Hydro-Mechanical Works which includes but not limited to the design and construction of the following structures and testing and commissioning of such structures.

- Upper Dam consists of Asphalt Face Rockfill embankment Dam of varying from 10m to 35m height for creation of upper reservoir and the existing Gandhi Sagar Reservoir is the lower reservoir,
- > Intake Structure,
- > 6 Nos. of each 430 m long and 7.50 Mtr dia. buried penstocks,
- > 5 nos. each of 181m long (including top vertical bend, Vertical Pressure Shaft of length 32 m, bottom vertical bend & bottom horizontal pressure shaft 88 m long) and 7.50 m dia. circular steel lined each for unit of 240 MW,
- I nos of 153m long (including top vertical bend, Vertical Pressure Shaft of length 45 m, bottom vertical bend & bottom horizontal pressure shaft) and 7.50 m dia circular steel lined bifurcated into 2 penstocks of 5.30 m dia & 79 m length to feed 2 units each of 120 MW,
- A surface Power house having an installation of five nos. Fixed Speed reversible Francis turbine each of 240 MW capacity operating under a rated head of 121.25 m in generation mode & 127.15 m in pumping mode and two nos. Fixed Speed Francis turbine each of 120 MW capacity,

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			122 m long, 8.50 m dia. and n dia. Tail Race Tunnels lead structure	
		> Outlet Structure	e with transition	
		> A coffer dam 8 Outlet Structure	k temporary dike for construc	tion of Tail Pool &
			apezoidal, un-lined tail race ch 0 m long inside the lower Gar cture),	
		> Intake & Outle Hoists etc.	et Structure consisting of Ti	rash Rack, Gates,
		> Bottom Outlet gates, Valves &	structure at upper reservoir accessories	with trash rack,
		For Gandhi Sagar Pum	ped Storage Project-1440 M	ıw
		Basic Engineering and Load data for "Powerhouse and GIS" will be provided by Employer. Detailed Engineering shall be in the scope of Bidder		
		shall be <b>FIRM &amp; FIXE</b>	pasis of "EPC Contract" basis of throughout the Performance of the reaso this Tender	ce of the Contract
	Capacity and		ct -1440 MW Pumped Storage	
6.	Location of the	· ·	omplete Civil and Hydro-Mecha	
	work		emuch Dist., Madhya Pradesh,	
7.	Tender Type	renders through "Inte	rnational Competitive Biddi	ng ((1CB)"
		Two Part type: Part-I: D	re-Qualification & Technical Bid	
		· ·	Price Bid and Commercial Term	
8.	Tender Category		IXED Price basis throughou	
	,	Completion Period		
9.	Cost of Document	Nil		
10.	Period of Completion	18 months from Effect	ive Date	
11.	Defects Liability Period	24 Months from the dat	e of <b>Commercial Operation c</b>	of Plant (COD)

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HYDRO-MECHANICAL PACKAGE/002	

1440 M Project		gar Pumped Storage	VOLUME I, PART - I (ICB)	Greenk <sub>®</sub>
12.	Bid Security (EMD)	nationalized/Internati	es One Crore only] the form of a Bank Guar ional bank of reputed and omitted along with Tender	
13.	Bid Security Payable to	a) The Bank Guarantee IREP Private Limited format (refer to the A 180 Days with claim p	shall be obtained in favor of I from any nationalized bank annexures). The B.G. shall have beriod of 90 days thereafter.  e Vice President, C&P (IREP Pro	in the prescribed e the validity up to
14.	Contract Performance Bank Guarantee	Performance Security for submitted upon award of The successful Bidder Guarantee (CPBG) for the date of Letter of whichever is earlier, too prescribed proforma (enshall remain valid till the (24 months) of all the period of 90 days over an The Contract Performance completion of Defects Lie	shall furnish a Contract F  10% of Contract value within Award/same day on Signing wards the "Performance of the closed in the Tender Document of the COD + Deficivil and Hydro-Mechanical Wind above the period.  The Guarantee shall be releated ability Period (DLP) including exceptance Certificate, after contracts.	Performance Bank in one month from g of the Contract in the t). This Guarantee fect Liability Period orks, with a claim sed on successful extensions thereof,
15.	Schedule Issuance of ICB Documents	13 <sup>th</sup> December 2021 o	nwards	
16.	Pre-Bid meeting Date & Time		1:00 Hrs (prospective Bidders a <b>21<sup>st</sup> December 2021</b> to kogroup.com	are advised to ail
17.	Bid Submission closing Date	21st January 2022		
18.	Bid Submission	Scanned copies by e-mai	nall be submitted thru Electroni il) and Hard Copies by Courier/ ers shall be submitted in Sealed	In person
19.	Bid Validity	180 days from the date of	of bid submission due date	

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HYDRO-MECHANICAL PACKAGE/002

1440	MW	<b>MP30</b>	Gandhi	Sagar	<b>Pumped</b>	Storage
<b>Proje</b>	ct (F	PSP)			_	

## VOLUME I, PART - I (ICB)



20. | Eligibility Criteria

Minimum Eligibility Criteria: The Bidder should satisfy **ALL** the following.

#### A) TECHNICAL CRITERIA:

- The Bidder should have satisfactorily completed/ Substantially completed (i.e. more than 75% work) similar works of value not less than Rs. 1,400 crores as a prime Bidder or Lead Partner in joint venture in the same name and style during any one year in last Five Financial Years (2016-17 to 2020-21) and upto bid due date. The similar works means, Civil and Hydro-Mechanical Works for RCC/Concrete Dams / Barrages, Earth dams, Rock fill dams, Water Conductor Systems, Gates, Hoists, Penstocks, Powerhouse for Hydro Projects / Barrages/Lift Irrigation Projects.
- 2. The Bidder should have satisfactorily completed / substantially completed (i.e. more than 75% work) one similar Project of value not less than Rs. 700 crores as a prime Bidder or Lead Partner in joint venture in the same name and style during any one year in last Five Financial Years (2016-17 to 2020-21) and upto bid due date. The similar works means, Civil and Hydro-Mechanical works for RCC/Concrete Dams / Barrages, Earth dams, Rock fill dams, Water Conductor Systems, Gates, Hoists, Penstocks, Powerhouse for Hydro Projects / Barrages/Lift Irrigation Projects
- 3. The Bidder should have executed the following Minimum quantities in **one year** during last Five Financial Years

a) Excavation Works (Soil/Rock)b) Concrete Works24 Lakh Cum1.2 Lakh Cum

c) Steel Liner Works - 6,000 MT (including MS Pipe Works or Structural works)

d) Gates, Hoist and other structures - 1,000 MT

Note: This is to clarify that the Lead Bidder shall propose HM Agencies as JV Partner / Sub-Contractor

- 4. As individual / firm / Lead Member in case of J.V, shall have completed/ Substantially completed (i.e. more than 90% work) at least one work of concrete dam / rock fill dam/ earth dam / Earth cum rock fill dam having a minimum height not less than 30 m during last Seven Financial Years and upto bid due date as a prime Bidder or as a Lead Member in the JV in the same name and style.
- 5. Bidder should engage reputed Engineering Consultancy firm of International repute having design experience of "Pumped"

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1440	MW	<b>MP30</b>	Gandhi	Sagar	<b>Pumped</b>	Storage
<b>Proje</b>	ct (F	PSP)			_	

## VOLUME I, PART - I (ICB)



**Storage Projects**" of capacity not less than **300 MW** completed in last 10 years. Letter of consent along with their experience details to be submitted by Design consultant in this regard.

### **B) FINANCIAL CRITERIA:**

- 1. The Bidder should have annual financial turnover in all Civil and Hydro-Mechanical works of not less than **Rs. 2,500 Crores** in consecutive two financial years during last 3(Three) Financial Years (2018-19 to 2020-21).
- 2. In case of Joint Venture (JV), Lead Member should have minimum annual financial turnover in all Civil and Hydro-Mechanical works not less than **Rs. 1,250 Crores** in consecutive two years during last 3(Three) Financial Years (2018-19 to 2020-21)
- In case of Joint Venture (JV) each member of joint venture (other than Lead Member) should have minimum annual financial turnover in all Civil and Hydro-Mechanical works not less than Rs. 625 Crores in consecutive two years during last Five Financial Years (2018-19 to 2020-21)

Note: If the balance sheets for the Financial Year 2020-21 are not audited, the audited balance sheets for the previous Five Financial Years shall be submitted by the bidder. This note is applicable for above 3 criteria's

- 4. The Bidder or Lead member of the JV should be **Net Profit** making in at least 3 (Three) financial years during last 5 (Five) financial years.
- 5. The Bidders/or any of the JV members who have applied for CDR (Corporate Debt Restructuring) or NCLT during the past five financial years and as on the date of submission of the Bid are not eligible to participate in this bid.
- 6. The Bidder should have adequate financial capacity to meet the financial obligations (as mentioned elsewhere) pursuant to the scope of the works. The Bidders should submit their Audited Financial Statements for the last five years.
- Bidder should have Liquid assets and /or Line of Credit facilities in their name for present work of an amount not less than Rs 150 Crores to be obtained from nationalized / scheduled Banks.

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	MW MP30 Gandhi S t (PSP)	agar Pumped Storage	VOLUME I, PART - I (ICB)	Greenk®
		Tools & Tackles expeditiously with	d have adequate Equipment, Ma available to perform the wo nin the time period specified in apporting documents for eviden	orks properly and the Bid document
		organization des	d have established quality assusigned to achieve high level execution and Construction o	els of equipment
		with their Bid	o furnish details of their technic as set out in Bid documer nents for evidence.	
		(Greenko MP01 I any additional inf reject the propos	d requirements are minimum, REP Private Limited) reserves to commation and data besides result of any Bidder if in the opinic cation data is incomplete, or corm the works.	the right to call for serving the right to on of the Employer
		Department/Agen	embers who are Blacklisted acy in India as on the date of participate in this bid.	, , , , , , , , , , , , , , , , , , ,
			per should submit a certificate to declaring all the above.	from their principal
		and all JV me requirements. Th	enture, JV members should be embers should combinedly ne joint venture partners show among themselves and shall nsible".	meet the above ald have a legally
		Mechanical Engin	e group members must be a C eering company and having ex igation Projects/ Barrages Bidde	xperience in Hydro
21.	Officer Inviting Bids	AVP-C&P (IREP Projects)	Greenko MP01 IREP Private Lir	nited

	1W MP30 Gandhi Sa t (PSP)	ngar Pumped Storage	VOLUME I, PART - I (ICB)	Greenko
22.	Address		r <b>ivate Limited</b> o. 64 (part) Old Deloitte Bu 500 081, Telangana, India	uilding, Hitec City,
23.	Contact Details	All Queries to be address	ed to: <u>prakash.c@greenkogrou</u>	ıp.com
24.	Procedure for bid submission	· 1	read and understand clems & conditions of the tendender.	,
		stamped to the Aut Technical & PQ docu mail), duly signed &	PQ documents shall be submithority as mentioned in the Imments shall be submitted in some stamped (on all pages in pdf mass as mentioned in the ICB.	CB. Further, these oft copies (through
		3) The Commercial / Priced documents shall be submitted duly signed & stamped to the Authority as mentioned in the ICB to reach the tender inviting authority (in sealed envelope). The <b>List of the documents</b> to be submitted is given in the Annexure.		
		4) The Bids shall be quo	ted in Indian Rupees ( <b>INR) or</b>	nly
		5) The Bidder shall sul English language onl	bmit the bid and all related	correspondence in
25.	Statutory Requirements	a) Income tax Clear Permanent According latest IT assessm b) The Bidder shour with Corporate Id c) The Bidder should d) Explosive License Explosives from	Id furnish the following statutor rance Certificate: Bidder shalunt Number (PAN) card, late ent orders.  Id furnish the valid registration entity Number (CIN).  Id furnish valid GST Registration for Blasting- Certificate from Nagpur / Zonal Offices to before commencement of worless.	I furnish copies of est IT returns and on certificate along a Certificate Chief controller of be submitted by
26.	Documents to be submitted (Hard copies) to the Tender inviting authority	submitted by him to be the stipulated date as co finalizing the tender and uploaded or submitted in	ould furnish all the hard copies received by the tender invition mmunicated by the tender invition before issue of LOA/Contract the hard copies are found to date, the bid will be cancelled der will be blacklisted.	ng authority within ting authority after . If the documents be fake / defective
27.	Other relevant information		PRIVATE LIMITED reserves the nout assigning any reasons the	
	1	1		

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1440 M Project		gar Pumped Storage	VOLUME I, PART - I (ICB)	Greenk®	
		PRIVATE LIMITED reserves the and its conditions before la	-		
	3) The Bidders are requested to submit the original Bank Guarant along with other hard copies required as soon as requested by tender inviting authority.				
		4) The Bidders should up signing each and ever	pload the technical documents ry page of the bid.	duly stamping and	
		For all clarifications and g	guidance, the Bidders may cont	act the	
		AVP (C&P) - IREP Projects GREENKO MP01 IREP PRIVATE LIMITED, Plot no. 13, Survey No. 64 (part) Old Deloitte Building, Hitec City, Madhapur, Hyderabad - 500 081, Telangana, India			
28.	Superscription on	The Bidders shall ment	ion the following superscription	ons on the tender	
	Tender Cover	cover:	on No		
	(Hard Copies to be furnished on	<ul><li>i) Tender Specificati</li><li>ii) Name of the Work</li></ul>			
	request from the	iii) Due Date and Tim			
	tender inviting	iv) EMD/BG PARTICU	, ,		
	authority)	v) Validity of the Ter	nder		
29.	Downloading the Bid Documents		ent, the Bidder shall provide th downloading the Tender Docum		
	Our Website:	https://www.greenkogro	up.com/tenders.php		

For Greenko MP01 IREP Private Limited

Sd/-**Authorized Signatory** 

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