



# THE SINGARENI COLLIERIES COMPANY LIMITED

(A Govt. Company)

## Sustainable Development Activities (2020-21 & 2021-22)



**Reclamation**



**Agriculture by  
Mine Water Utilisation**



**Eco-Park**



**Summer Storage Tank**



**In pit crusher**



**Surface Miner**



**Processed Overburden Plant**



**Solar Power Plant**

# Creation of Eco-park

To [change the negative perception](#) of people about Coal Mining as a polluting industry and provide awareness about the hardships that goes in to produce coal to meet the energy demand of the Nation.

To develop [Eco-park/Tourism site in the reclaimed mining areas of SCCL](#) for re-creational activities and tourism purpose.

In this context, SCCL is developing an Eco-Park in the reclaimed mining areas of [Gautham Khani Opencast Project \(GK OC\)](#) with its own funds as advised by the Ministry of Coal.

Further, it is also proposed to integrate with the [Telangana State Tourism Development Corporation](#) for successful implementation and develop tourism in the State of Telangana.

# Creation of Eco-park

Foundation stone was laid for the proposed Eco-Park at Gautham Khani OC on 23.07.2020 by Shri Vanama Venkateswara rao, Hon'ble MLA, Kothagudem Constituency and Shri S.Chandra Shekar, Director (OP)&(PA&W) in connection with VRIKSHAROPAN ABHIYAN – 2020 programme of MoC.

The tentative budgetary requirement for the proposed Eco-Park at GK OC project is Rs.4.76 Crores.

Eco-park works are under progress



# Creation of Eco-park

- The Eco-Park is situated near [Gauthampur village](#) in Chunchupalli Mandal of [Bhadradi Kothagudem](#) district, Telangana State adjacent to NH 30 (NH-30 runs through the states of Uttarakhand, Uttar Pradesh, Madhya Pradesh, Chhattisgarh, Telangana and Andhra Pradesh in India).
- The nearest railhead to the project is [Bhadrachalam Road](#), which is at a distance of [12 Km](#).
- This Railway Station is connected to the [South Central Railway, Dornakal junction](#) on Chennai-New Delhi grand trunk line by a 55 Km long track which is also meant for [coal transport](#).
- The park is well connected with [State Capital, Hyderabad \(280 Km\)](#) and the district head quarters, [Bhadradi Kothagudem \(10 Km\)](#) by road.



# Salient features of the Eco-park

## Facilities provided at the Eco-Park:

- Development of Lawns and gardens along with theme plantation.
- Butter fly garden.
- Water fountains.
- Boating arrangement in the water reservoir.
- Bird watching arrangement on OB dumps.
- Cycling track and park for children.
- Vinayaka Vanam
- View of Opencast mining
- Canteen and Rest Rooms



# Creation of Eco-park

Reclaimed dumps





# Creation of Eco-park



Water Reservoirs



# Mine Water Utilization

The mine discharge water is being utilized for industrial & domestic purposes such as dust suppression, stowing, washing of machinery, fire fighting, plantation, and drinking.

After meeting the industrial requirement, part of the excess mine discharge water is being supplied to SCCL colonies and surrounding villagers for drinking purpose after treatment in filter beds.

The remaining excess mine discharge water is channeled through settling tanks before discharging in to nearby agriculture tanks for community use such as irrigation and for ground water recharge.

Summer water storage tanks have been created near most of the opencast mines to store excess mine discharge water.

About 100 surrounding villages are being benefitted by excess mine water discharge.



# Mine Water Utilization

Year		Water pumped out from mines	Own Use (Industrial)	Community Use				
				Domestic water		Irrigation water		Total
				Volume	Beneficiaries (@15 LPCD) (per day)	Volume	Irrigation	Volume
	LKL			LKL	Nos.	LKL	Acres	LKL
2020-21	Target	992.17	525.95	13.16	2,40,000	453.06	4,500	466.21
	Actual	992.30	524.57	13.17	2,42,000	454.56	4,500	467.73
2021-22	Target	995.33	495.33	15.00	2,73,973	485.00	4,900	500.00
	Actual	1036.28	484.76	16.70	3,05,023	534.82	4,900	551.52

Agricultural Fields near by OB dumps of JVR Open Cast Mine



Agricultural Fields near by OB dumps of RG Open Cast Mine-III



# Mine Water Utilization

Summer Storage Tank near RG OC-III project



Summer Storage Tank near RG OC-II project



# Mine water Utilization

Supply of drinking water to surrounding villagers





# Mine water Utilization

## List of benefitted villages

1	Strut-pit Basthi	27	Peddampaet & Mangalpalli	53	Dhanbad	79	Beddalonipalli
2	Stalin Nagar	28	Medapalli Village	54	Kistaram	80	Kashimpalli
3	Thilak Nagar	29	Dubbagudem	55	Rejerla	81	Reddy colony
4	Kummar Basthi	30	Bhagatsingh Nagar	56	Barlipet	82	Gandhinagar
5	Seshagiri Basthi	31	Muthyalampalli Village	57	Main Hospital Area	83	Shanthinagar
6	Bolli Nagar	32	Orregadda	58	Budidagadda	84	Madina Nagar
7	Cheuvu Katta	33	Kasipeta	59	Old Rama Talkies area	85	LB nagar
8	Bupesh Nagar	34	Amarwadi, Sarangapalli	60	Babu Camp	86	Krishna colony Plots area
9	Vijayalaxmi Nagar	35	BPA Muncipal Area	61	Writer Basthi	87	Subhash colony plots area
10	JK-5 Hutment	36	Rachapalli Village	62	CMPF Office area	88	Bhaskara gadda village
11	Vengalrao Nagar	37	Akkapalli Village	63	Coolie line	89	Veshyalapalli
12	Indira Nagar	38	Kannala Village	64	Ganesh Basthi	90	Basavarajupalli
13	No.15 Basthi	39	Vempadu Village	65	Superbazar area	91	Parashurampalli
14	Kakatiya Nagar	40	Huts area-KK Nagar	66	Sanyasi Bhasthi	92	Peddapur
15	Subash Nagar	41	Huts area-Lamadi Thanda	67	Nehru Basthi	93	Ravinagar
16	Sanjay Nagar	42	SingireddyPalli&Chandanapur	68	Durgam Basthi	94	Arunakka nagar
17	Balaji Nagari	43	Alluru village	69	Ram nagar	95	Sundarayya Colony
18	Lalithapuram	44	Penchikalpet	70	N.K.Nagar	96	Singapur
19	Usirikayalapalli	45	Penagadapa	71	Bhajanamandir	97	Thallapalli
20	Seetaramapuram	46	Sitampeta	72	Gajularam Basthi	98	Guttedar Palli
21	Bhagyanagar Thanda	47	Rudrampur	73	Gouthamnagar	99	Ramarao Peta
22	Lachagudem	48	Garibpeta	74	Patha Kothagudem	100	Jangeti Village
23	Venkateshwarlapalli	49	Ramavaram	75	Ganga Hussain Basthi	101	Bhupalapalli village
24	Huts area(Sector 1&2)	50	3 Incline colony	76	A-Power House Basthi	102	Vippala Singaram
25	Janagama Village	51	Seetampeta	77	Main Bazar	103	Annaram village
26	Private Area	52	Gouthampur	78	Mathura Basthi	104	Kommugudem village

# Reclamation

## Details of Bio-Reclamation/Plantation

Year		Within leasehold area		Outside lease hold area		Total		Revisiting	Replace ment	Free Distributio n	Total	
		Area (Ha)	Plants (Nos.)	Area (Ha)	Plants (Nos.)	Area (Ha)	Plants (Nos.)	Plants (Nos.)			Area (Ha)	Plants (Nos.)
2020-21	Target	793.50	19,83,750	11	27,500	804.50	20,11,250	6,00,000	5,45,750	4,00,000	804.50	35,57,000
	Achievement	799.00	19,98,000	10	25,000	809.00	20,23,000	11,7,6,090	9,53,905	4,78,679	809.00	46,31,674
2021-22	Target	911.00	22,77,500	-	-	911.00	22,77,500	9,00,000	8,77,500	10,00,000	911.00	50,55,000
	Achievement	580.12	24,36,215	-	-	580.12	24,36,215	9,98,768	9,79,301	10,29,830	580.12	54,44,114

# Reclamation

RG OC-I- External Dump Plantation



JVR OC-I- External Dump Plantation



Plantation over stabilized Internal dumps



Avenue Plantation  
Sathupalli-Kothagudem Highway





# Processed Overburden

**Processed Overburden (POB)** and **Bottom Ash from TPPs** are being used as stowing material in underground mines of SCCL in place of river sand which is a scarce commodity and its use is environmentally un-friendly.

[Processed Overburden Plant at Sri Rampur](#)



[Processed Overburden Plant at Ramagundam](#)



[Processed Overburden Plant at Bhupalpalli](#)



# Bottom Ash Utilisation

Bottom ash is being utilized successfully for stowing in UG mines. The particle size of the bottom ash shall be not less than 53 microns or otherwise there is problem of water drainage. As per statute, DGMS has permitted to use bottom ash of particle size not less than 53 microns. The size of the bottom ash is tested at frequent intervals. Bottom ash is transported to mines in wet condition in tarpaulin covered trucks.

## Sources:

1. NTPC located at Ramagundam
2. STPP located at Jaipur, Mancherial
3. Navabharat & KTPS located at Palvoncha, Kothagudem.

# POB, Bottom Ash and Sand Utilisation

**POB, Bottom Ash and Sand Utilisation (All fig. in Cu.m)**

S.No	Item	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21	2021-22	TOTAL
1	<b>POB</b>	97,081	89,286	1,09,761	1,04,609	2,34,658	6,69,747	5,64,498	4,25,484	3,56,498	4,72,577	5,10,696	3,63,4895
2	<b>Bottom Ash</b>	0	92,947	50,8687	9,08,730	8,12,119	11,61,651	17,26,695	12,30,329	12,55,845	7,16,086	9,01,503	9,31,4592
3	<b>Sand</b>	28,89,581	25,51,618	22,82,115	20,07,458	20,51,376	12,43,558	10,43,443	13,40,011	11,0,3985	5,55,094	4,46,844	17,51,5083
Total		29,86,662	27,33,851	29,00,563	30,20,797	30,98,153	30,74,956	33,34,636	29,95,824	27,16,328	17,43,757	18,59,043	30,46,4570

**Percentage of Utilisation**

S.No.	Item	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21	2021-22	TOTAL
1	<b>POB</b>	<b>3.3</b>	3.3	3.8	3.5	7.6	21.8	16.9	14.2	13.1	27.1	<b>27.5</b>	11.9
2	<b>Bottom Ash</b>	<b>0.0</b>	3.4	17.5	30.1	26.2	37.8	51.8	41.1	46.2	41.1	<b>48.5</b>	30.6
3	<b>Sand</b>	<b>96.7</b>	93.3	78.7	66.5	66.2	40.4	31.3	44.7	40.6	31.8	<b>24.0</b>	57.5
Total		100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

\* It is observed that, utilisation of sand has been reduced and utilisation of bottom ash & processed overburden increased accordingly.



# Promoting Renewable Energy

SCCL proposed to set up **299.5 MW** capacity **Solar Plants** (3 phases) with capital outlay **Rs.1361.5 Crores**. Of the 299.5 MW capacity units, **219** MW capacity plants were commissioned as on **31.12.2021**.

## Phase-I (2020-21)

S. No	Area	Capacity (MW)	Date of Synchronisation
1	STPP	10	Synchronized on 10.02.2020.
2	Manuguru	30	Synchronized on 30.07.2020.
3	Ramagundam -3	50	1) 15 MW Synchronized on 27.11.2020 2) 15 MW synchronized on 20.01.2021. 3) 10 MW synchronized on 10.11.2021. 4) 10 MW synchronized on 31.12.2021.
4	Yellandu	39	15 MW synchronized on 09.01.2021 24 MW synchronized on 05.03.2021
	<b>TOTAL</b>	<b>129</b>	

## Phase-II (2021-22)

S.No	Area	Capacity (MW)	Date of Synchronisation
1	Mandamarri stage - 2	15	Synchronized on 08.04.2021
2	Mandamarri stage - 1	28	Synchronized on 17.04.2021
3	Bhupalapalli	10	Synchronized on 05.06.2021
4	Kothagudem stage -1	37	Synchronized on 22.09.2021
	<b>TOTAL</b>	<b>90</b>	

# Promoting Renewable Energy

## Phase-III (2022-23)

S. No.	Location	Type	Capacity (MW)	Remarks
1	Kothagudem	Ground mounted	22.5	To be commissioned
2	Chennur		11.0	
3	RG OC1 Dump	OB Dump	22.0	
4	Dorli OC1 Dump		10.0	
5	STPP Raw water reservoir	Floating solar	10.0	
6	Dorli OC2 Void area		5.0	
		<b>TOTAL</b>	<b>80.5</b>	

## Office Buildings/Guest Houses-Present Installed Capacity

S.No.	Location of the solar plant	Capacity of the plant	Type
1	Guest House, MMR	4 kWp	Roof Top
2	GMO, RG3	10 kWp	Roof Top
3	Singareni Bhavan, Hyderabad	60 kWp	Roof Top
4	SC Polytechnic, SRP	100 kWp	Ground Mounted

## Proposed Units

S.No	Location of the solar plant	Capacity of the plant	Type	Remarks
1	New Head office building, Corp.	80 kWp	Roof Top	To be commissioned
2	EPI centre building, Corp.	80 kWp	Roof Top	

# Promoting Renewable Energy



Synchronization of 15 MW Solar Power Plant at Yellandu on 09.01.2021



# Promoting Renewable Energy

Solar Power Plant at STPP (10 MW)



Solar Power Plant at Manuguru (30 MW)





# Promoting Renewable Energy



Synchronization of 15 MW Solar Power Plant at RG 3 on 27.11.2020



# Vriksharopan Abhiyan

- **Massive plantation** and **free distribution of saplings** to the surrounding people was taken up in all the areas of SCCL during the **Vriksharopan Abhiyan 2020 & 2021**, a nationwide plantation programme organised by **Ministry of Coal** held in all coal/lignite PSUs.
- In SCCL, the programme was launched by Sri. **N.Sridhar, I.A.S., C&MD** of SCCL by planting saplings in the **C&MD office premises at Hyderabad** during the years 2020 & 2021.
- Prominent people from society such as **MPs, MLAs, MLCs, MPTCs, ZPTCs, District Collectors, RDOs, DFOs, MROs and other Officials from Police, Revenue, Municipal departments** etc., were invited as chief guests for the programme in all the areas.
- All **Directors, Area General Managers, General Manager (Environment), AGM (Forestry), and other officials of SCCL** were participated in the programme. The programme was arranged in a grand way by taking **COVID-19** precautions such as **social distancing, wearing of masks** etc.,
- Similarly, plantation & free distribution of saplings will be taken up during **Vriksharopan Abhiyan 2022**.

## Details of Vriksharopan Abhiyan

Year	No.of species planted	No.of saplings distributed
2020	2,00,000	56,000
2021	2,051,00	53,500

# Vriksharopan Abhiyan



Plantation at Hyderabad Office by Sri N.Sridhar, C&MD on 23.07.2020 in connection with Vriksharopan Abhiyan-2020



Plantation at Hyderabad Office by Sri N.Sridhar, C&MD on 19.08.2021 in connection with Vriksharopan Abhiyan-2021



Plantation at Manuguru by Sri N.Balram, Director (Finance) on 23.07.2020 in connection with Vriksharopan Abhiyan-2020



Plantation at Kothagudem by Sri S.Chandrasekhar, Director (Operations) on 23.07.2020 in connection with Vriksharopan Abhiyan-2020



Plantation at STPP by Sri D.Sathyanaryana Rao, Director (E&M) on 19.08.2021 in connection with Vriksharopan Abhiyan-2021



# Vriksharopan Abhiyan

