



SARANATHAN COLLEGE OF ENGINEERING

(Approved by AICTE, New Delhi, Affiliated to Anna University, Chennai-25)

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CRITERION: 7.1.2

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NAAC Criteria 7.1.2

The Institution has facilities for alternate sources of energy and energy conservation measures

Ladies Hostel - Alandhur campus

1. Bio gas plant Details

Type : 30 cubic meter cow dung/ Food waste based Bio -gas plant

* Installed at Ladies Hostel , Alandhur campus For cooking purpose.

* Month and year of Installation : May 2016

* Total Cost : Rs. 6,00,000/- (Rupees six lakhs only)

(A) Quotation

**-RESOURCE MANAGEMENT SOLUTIONS.
203/62, PAARAI VATTAM, ALAGAPURAM,
SALEM- 636 016.**

TIN no- 33202845913
CST no-1116941

Mail- greenconnectindia@gmail.com ;

web- greenconnect.in

AN ISO 9001:2008 CERTIFIED ORGANIZATION

Ref no- GC-QU-20150818-08-25 cum FRP

Date- 30th October, 2015

To

The director,
Saranathan college of engineering,
Trichy - 12.

Dear Sir,

Sub- Revised quotation for installing 30 cubic meter biogas plant- reg.



Further to our previous quotation dated 18th august, 2015, I am offering you the revised quote as per our discussions on 30th October, 2015. Kindly accept this as our final offer and release the favorable purchase order along with advance.

Thanking you.

(B) Purchase Order



SARANATHAN COLLEGE OF ENGINEERING
TIRUCHIRAPALLI

S. RAVINDRAN
SECRETARY

03-11-2015

SCE/ALANDUR/BIOGAS/GC-1

TO

THE CEO,
GREEN CONNECT,
203/62, PAARAI VATTAM,
ALAGAPURAM,
SALEM -636016.

Sir,

Sub: Purchase order for supply and installation of 30 cubic metre cow dung /Food waste based Bio Gas plant at Alandur Campus

Ref: Your revised quotation GC-QU-20150818-08-25 cum FRP dt 30-10-2015

We are glad to place the purchase order on you for the supply and installation of 30 cubic metre cow dung/ food waste based Bio Gas plant, conforming to the following specifications, at Saranathan Academy of Higher Education, Alandur Campus:

30 cum/day Biomethanation plant-(FRP portable water jacket Model)

PART 1- GREEN CONNECT BIO-METHANATION PLANT

ITEMS INCLUDED	DESCRIPTION	COSTS (INR)
Green Connect Bio-methanation plant	Supply and install	4,73,000
Slurry pump	Supply and install	18,000
Total		4,91,000

Contd page 2...

COLLEGE OFFICE : VENKATESWARA NAGAR, PANJAPPUR, TIRUCHIRAPALLI - 620 012.

© Off : 0431 - 2473686

Fax : 0431 - 2473684

E-mail: secretary@saranathan.ac.in

PART 2- GAS PIPING

ITEMS INCLUDED	DESCRIPTION	COSTS (INR)
Gas piping and Connections(50m)	Supply and install	5,500
Biogas Stove- 2 No.'s	Supply and install	8,000
Biogas booster	Supply and install	13,500
Biogas meter	Supply and install	18,000
Total		45,000

PART 3- FOOD/DUNG PULPER:

ITEMS INCLUDED	DESCRIPTION	COSTS (INR)
Waste pulper	Supply and install	64,000
Total		64,000

GRAND TOTAL	6,00,000 INR Nett
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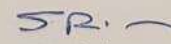
Total Value of this Purchase Order Rupees Six Lakhs Nett

Terms and Conditions:

- The above price is inclusive of all taxes and duties
- Transportation cost will be paid separately by us
- Power supply cabling for crusher, Booster and slurry pump will be under our scope. However the required panels, controls for these will be supplied by you
- Piping- 15 Kgf PVC, Nylon Braided Hose, Flexible hose.
- Fabrication/Construction of the biogas plant- 30-35 working days.
- Piping connections- 3 working days.
- Total time duration for completion - 40-45 days from the receipt of purchase order
- **Payment terms:-**
- Stage 1- 25% advance along with work order(Rs. 1.5 Lakhs)
- Stage 2- 50% on receipt of all the materials at our campus (Rs.3 Lakhs)
- Stage 3- 10% after installation ,commissioning and put in to operation (Rs. 0.6 Lakhs)
- Stage 4- 15% after successful operation of 2.5 months from the date of installation (Rs.0.9 Lakhs)
- Food, accommodation will be borne by us for five of your staff members for 5 days approx during the last part of field work at our campus
- **Bio gas sample from the outlet has to be analyzed for CH₄,H₂S,CO₂,etc percentage composition**

Kindly execute this order within the stipulated duration without compromise on quality of materials and workmanship. Expecting your good services and best performance of your plant for continued association with us.

Encl: DD No.dated.....for Rs.1.5 Lakhs


S.Ravindran
(Secretary)

(C) Bill

Green Connect-AN ISO 9001:2008 CERTIFIED ORG. COMMERCIAL INVOICE

203762, paarai vattam,
alagapuram, Salem 636 016.

Consignee :
saranathan college of engineering,
Trichy.

INVOICE NUMBER | GC-CI-20160530-04
INVOICE DATE | May 30, 2016
OUR TIN NO. | 33202845913
OUR CST NO. | 1116941

SALES PERSON | CHYTHENYEN, N.K
SHIPPED VIA | ROAD
PAN NO | AUNPC1900C

ITEM	MATERIAL/DESCRIPTION	ORDER QNTY	UOM	PRICE PER UNIT	NET VALUE INR
1	30 CUBIC METER/DAY FRP PORTABLE BIO-METHNATION PLANT VAT 5%	1550	1	1.00	4,00,000 20,000.00
2	INSTALLATION CHARGES				1,40,000
3	COMMISSIONING CHARGES				40,000
	TRANSPORTATION CHARGES				6,400.00
Rupees "THOUSAND NINE HUNDRED ONLY"				Total net Value	6,06,400

SIGNATURE AND DATE-

For GREEN CONNECT

Chythenyen 20/5/16
CHYTHENYEN

- Less Transport
Cost Rs 6,400
Rs 6,00,000

Nett Bill
amount

So far Rs 5,10,000/- payment has been made. Balance
and final payment of Rs 90,000/- (Rupees Ninety thousand
may please be cleared.

Dharmaraj 03/06/16

(D) Geotagged Photographs





R. Simeetha

HoD

Principal

**Saranathan College of Engineering
Department of EEE**

Cost saving achieved through solar energy NACC 7.1.2

S.No	Academic year	Utility electricity units consumption	Gross utility bill amount/annum in Rupees	Electricity units produced through solar PV plant	Cost of solar units produced in Rupees	Annual saving achieved through renewable energy in Rupees	Reduction of emission of CO ₂ in tons
1	2015 june)-2016(May)	368461.8	3991256	9091.5	60640.31	60640.305	9.0915
2	2016(June)-2017(May)	604720.8	6358504.2	15463	103138.2	103138.21	15.463
3	2017(June)-2018(May)	573730.4	6122661	26444.8	197594.7	197594.686	26.444
4	2018(June)-2019(May)	628490.4	6369951	33491	262182.8	262182.8	33.491
5	2019 (June)-2020 (May)	548362.6	5850462	26818	214132.8	214132.84	26.818
Total	2015(june) To 2020(May)	2723766	28692834.2	111308.3	837688.8	837688.841	111.3075

Solar PV plant commissioned date: September 2017(20.16kW)& November 2013(10kW)
 Capital cost of the plant: (20.16kW)Rs. 14,40,000/- + (10kW) Rs.10,50,000 =Rs. 24,90,000/-
 Installed capacity of the plant: 20.16kW + 10 kW

D. Kumar

Cost saving achieved through BIO GAS energy

S.No	Year	Total Bio-gas produced in cubic meter	Total Number of LPG cylinder equally conserved	Cost of LPG saved in Rupees
1	from 2016 (May)- to 2020(June)	4889.43	129 Numbers(commercial cylinder -19 kg)	1,78,020

Bio- gas plant commissioned date: May 2016
 Capital cost of the plant: Rs. 6,00,000/-
 capacity of the plant: 30 Cubic Meter