

CITY ENGINEERING COLLEGE Approved by AICTE New Delhi & Affiliated by VTU, Belagavi Doddakallasandra, Off Kanakapura Main Road, Next to Gokulam Apartment, Bangalore - 560 062.



CRITERION 7: INSTITUTIONAL VALUES AND BEST PRACTICES

KEY INDICATOR: 7.1. Institutional values and Social responsibilities

Metric No.7.1.2 .The Institution has facilities and initiatives for

1)ALTERNATE SOURCES OF ENERGY AND

ENERGY CONSERVATION MEASURES

INDEX

| Sl.No. | Description | | | | | | | |
|--------|---------------------------------------|--|--|--|--|--|--|--|
| 1 | Solar Panel | | | | | | | |
| 2 | Solar Grid connected | | | | | | | |
| 3 | LED Light Photographs | | | | | | | |
| 4 | Wind mill | | | | | | | |
| 5 | Automatic water tank sensors controls | | | | | | | |
| 6 | Solar Street Lights | | | | | | | |



Approved by AICTE New Delhi & Affiliated by VTU, Belagavi Doddakallasandra, Off Kanakapura Main Road, Next to Gokulam Apartment, Bangalore - 560 062.



ALTERNATE SOURCES OF ENERGY:

SOLAR-PHOTOVOLTAIC PANEL



Approved by AICTE New Delhi & Affiliated by VTU, Belagavi Doddakallasandra, Off Kanakapura Main Road, Next to Gokulam Apartment, Bangalore - 560 062.



Alternate sources of energy and energy conservation:

In today's world, the use of electrical energy is indispensable. Currently, approximately 70% of energy is generated through the combustion of fossil fuels, particularly coal. The overuse of these resources has resulted in significant environmental pollution and resource depletion. To ensure sustainable energy utilization, it is crucial to focus on renewable energy sources.

In response, City Engineering College is committed to contributing positively to both the environment and the nation. The college has implemented renewable energy sources and energy-efficient systems and devices on campus. These include solar Photovoltaic Panel and grid-connected solar electrical systems, automated energy conservation mechanisms like solar street light and energy-efficient lighting solutions like LED bulbs to meet night time lighting needs.



Solar Panel - 70KW output



Approved by AICTE New Delhi & Affiliated by VTU, Belagavi Doddakallasandra, Off Kanakapura Main Road, Next to Gokulam Apartment, Bangalore - 560 062.







Approved by AICTE New Delhi & Affiliated by VTU, Belagavi **ISO 9001:2015** Doddakallasandra, Off Kanakapura Main Road, Next to Gokulam Apartment, Bangalore - 560 062.



ALTERNATE SOURCES OF ENERGY:

LED LIGHTS IN CAMPUS



Approved by AICTE New Delhi & Affiliated by VTU, Belagavi Doddakallasandra, Off Kanakapura Main Road, Next to Gokulam Apartment, Bangalore - 560 062.



USE OF LED BULBS AND SOLAR LIGHTS:

LED bulbs are an energy-efficient lighting choice, offering superior cost savings, power efficiency, and a longer lifespan compared to CFL bulbs.

USAGE OF LED LIGHTS IN LABS AND CLASS ROOMS







Approved by AICTE New Delhi & Affiliated by VTU, Belagavi Doddakallasandra, Off Kanakapura Main Road, Next to Gokulam Apartment, Bangalore - 560 062.



ALTERNATE SOURCES OF ENERGY

WIND MILL



Approved by AICTE New Delhi & Affiliated by VTU, Belagavi Doddakallasandra, Off Kanakapura Main Road, Next to Gokulam Apartment, Bangalore - 560 062.



Wind Mill:

City Engineering College harnesses wind energy through a **5kW** SRTPV system installed on the terrace of the Administration Block. This Kirloskar wind energy system contributes to the campus's power supply, supporting our commitment to renewable energy and sustainable practices. By utilizing wind power, the college not only reduces reliance on conventional energy sources but also promotes a cleaner, eco-friendly campus environment.

WIND MILL IN THE CEC CAMPUS-ADMIN BLOCK





Approved by AICTE New Delhi & Affiliated by VTU, Belagavi Doddakallasandra, Off Kanakapura Main Road, Next to Gokulam Apartment, Bangalore - 560 062.





WIND MILL IN THE CEC CAMPUS-ADMIN BLOCK





Approved by AICTE New Delhi & Affiliated by VTU, Belagavi Doddakallasandra, Off Kanakapura Main Road, Next to Gokulam Apartment, Bangalore - 560 062.



| ZIGMA TECHNOLOGIES | | 1 | Invoid | ce No. | | Date | ed | |
|---|-------------|------------|----------------|-------------------------------------|---------------|------------|---------------------|------------------|
| #19 & 20, DLF TOWN ROAD, BRINDAVAN ENCLAV OFF BANNERGHATTA ROAD | E | 2 | Z 1/2 Deliv | ery Note | | A-S Mod | ep-24 le/Terms o | f Payment |
| BANGALORE- 560068 | | _ | | | | 50 % / | Advance & 50% | After Completion |
| PH: 9590137666 | | F | Refer | rence No. & Da 24/25/1372 dt. 4- | te. Sen-24 | Oth | er Referen | ces |
| State Name : Karnataka, Code : 29 | | E | Buye | r's Order No. | 000-24 | Date | ed | |
| E-Mail : E-Mail : accountz@zigma-technologies.com | | - | | | | | | Data |
| Buyer (Bill to) | | L | Dispa | atch Doc No. | | Deli | very Note | Date |
| City Engineering College | | C | Dispa | atched through | | Des | tination | |
| Unit of Jayangar Education Society, Kanakapura Main Road, Doddakalasandra | | - | - | | | | | |
| Bangalore- 560062 | | !' | lerm | is of Delivery | | | | |
| GSTIN/UIN : 29AAATJ1100G1Z7 | | | | | | | | |
| State Name : Kamataka, Code : 29 | | | | | | | | |
| St Description of Goods | | HSN/SA(| c | Quantity | Bate | _ | per | Amount |
| No. | | The second | ~ | Quantity | - Carlo | | p.c. | |
| 1 KIRLOSKAR 5KW SRTPV SYSTEM - SYST | EMS | 85414011 | 1 | | | | | 4,22,500.00 |
| 5kW Horizontal axis wind turbine x 1 nos MPPT based chame controller 48V/804 x 1 nos | | | | | | | | |
| Monopole Tower type 20th x 1 nos-MS with PU coating | | | | | | | | |
| Data logger with Energy Meter x 1 no | | | | | | | | |
| Wind braking system x 1 no | | | | | | | | |
| Cup Anemometer x 1 no publication 2018 leader, term from universe 1 an | | | | | | | | |
| 48U/1654h C10 Rated Tall Tubular Battery bank LivFast x 1 set | | | | | | | | |
| Battery Rack and accessories x 1 set | | | | | | | | |
| Isolation and safety switches x 1 set | | | | | | | | |
| DC Fuse Breakers x 1 set | | | | | | | | |
| Cables and accessories (1/s) | | | | | | | | |
| Warranty: 2 Years for Inverter | | | | | | | | |
| Warranty: 5 Years for Batteries | | | | | | | | |
| Warranty: Wind turbine and controller: 1 year | | | | | | | | |
| Note : Accessories do not carry warranty Note 2: AC Input/ Output Cabling Charges | | | | | | | | |
| Will Be Extra Depending Upon the Site Inspection. | | | | | | | | |
| | | | | | | | | |
| Central Tax (CGST) | | | | | 6 | % | 25,350.00 | |
| State Tax (SGST) |)@ 6% | | | | | 6 | % | 25,350.00 |
| | | | | | | | | |
| | | | | | | | | 4 70 000 00 |
| Amount Charneable (in worde) | Total | | | I | I | | 1 1 1 | 4,73,200.00 |
| INR Four Lakh Seventy Three Thousand Two | Hundred O | nly | | | | | | 2. 0 0.2 |
| HSN/SAC | Taxable | Dest | - FC | GST | SGS | T/UT | GST | Total |
| 85414011 4.22,500.0 Total 4,22,600.0 | | | | Amount 25.250.00 | Rate | | mount | Tax Amount |
| | | | 25,350.00 | | 0% | 2 | 25,350.00 | 50,700.0 |
| Tax Amount (in words) : INR Fifty Thousand Sev Company's VAT TIN : 29560796462 | ven Hundred | d Only | | | | | | |
| Company's PAN : AAAFZ4321M | | | | | | | | |
| Company's PAN : AAAFZ4321M Declaration | | | | | | fo | r ZIGMA TI | ECHNOLOGIES |

This is a Computer Generated Invoice



Approved by AICTE New Delhi & Affiliated by VTU, Belagavi Doddakallasandra, Off Kanakapura Main Road, Next to Gokulam Apartment, Bangalore - 560 062.



ALTERNATE SOURCES OF ENERGY

SOLAR STREET LIGHTS



Approved by AICTE New Delhi & Affiliated by VTU, Belagavi Doddakallasandra, Off Kanakapura Main Road, Next to Gokulam Apartment, Bangalore - 560 062.



SOLAR LIGHTS IN THE CAMPUS





Approved by AICTE New Delhi & Affiliated by VTU, Belagavi Doddakallasandra, Off Kanakapura Main Road, Next to Gokulam Apartment, Bangalore - 560 062.







Approved by AICTE New Delhi & Affiliated by VTU, Belagavi Doddakallasandra, Off Kanakapura Main Road, Next to Gokulam Apartment, Bangalore - 560 062.



| MATHAJI MARKETING NO.99 PADMA COMPLEX LAXMAN RAO ROAD BANGALORE-580033 Ph-080-10960673 / T 6673 M:9161298785 GSTIN/UN: 2980FPM0565G129 State Name : Karnataka. Code : 29 State Name : Karnataka. Code : 29 | | | | | ice No. e-W | d ab.21 | | | | | |
|--|--|------------------|-------|----------------------|-------------------|------------|--------------------|----------------------|------------------------------|--|--|
| | | | | | very Note | | Mode/T | Payment | | | |
| | | | | | rence No. & Da | ite. | Other References | | | | |
| Cor | nsignee (Ship to) | | | - Buye | er's Order No. | | Dated | | | | |
| Paramahamsa Foundation Trust 157,6th Main 30th Cross | | | | | atch Doc No. | | Delivery Note Date | | | | |
| 8th Block Jayanagar Banbgalore-560070 | | | | Disp | atched through | stination | | | | | |
| GSTIN/UIN : 29AAATP15031ZW State Name : Karnataka, Code : 29 | | | | | Terms of Delivery | | | | | | |
| Buy Par 157 Bth Bar 35 Sta | yer (Bill to) ramahamsa Foundation Trust 7,6th Main 30th Cross n Block Jayanagar nbgalore-560070 STIN/UIN : 29AAATP15031 ate Name : Karnataka, Cod | ZW 2 : 29 | | _ | | | | | | | |
| 31 | Description of Goods | HSN/SAC | Quar | ttty | Rate | Rate | pe | | Amount | | |
| - | Solar Led Street Light | 9405 | 4 | 5 Nos | (Incl. of Tax) | 3 171 | 43 No | | 1 42 714 35 | | |
| 2 | 40w Solar Led Street Light | 9405 | | 5 Nos | 4,080.00 | 3,885 | .71 No | 5 | 19,428.55 | | |
| | 000 | | | | | | | | 1,62,142.90 | | |
| | SGST CGST ROUND OFF | | | | | | | | 4,053.57 4,053.57 0.96 | | |
| Am | Total | | 50 |) Nos | | | | 1 | ,70,251.00 | | |
| On | e Lakh Seventy Thousand Two | Hundred Fifty | One I | NR Or | nly | | | | | | |
| | HSN/SAC | Taxable Value | R | Cent | Amount | Rate | Amou Amou | int | Total Tax Amount | | |
| 9405 1,62,142,90 2 Total 1,62,142,90 | | | 50% | 4,053.57 4,053.67 | 2.50% | 4,0 | 53.57 63.67 | 8,107.14 8,107.14 | | | |
| Тах | Amount (In words) : Eight Thous | and One Hund | red S | even li | NR and Fourt | een pais | e Only | | | | |
| - | mpany's PAN : BOFPM05 | 5Q | | | | | | | | | |
| Cor | damile a | | | | | | | | IL MARKETING | | |

This is a Computer Generated Involce