

NPC Consultant Professional Profile

I. Personal Information

Name:AVIJITNAYAK

Date of Birth: 14th July 1986

Current Position& Domain: Director Gr II, Energy Management Group

Office Location: Regional Directorate Bhubaneswar

Languages:Fluent in English, Hindi & Odia, Conversational level in Bengali

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Photo*

II. Professional Summary

Certified Energy Auditor with an ability to effectively address multiple market segments in field of Energy Management, and Training. Over 16 years' service in offering effective energy solutions, optimizing energy efficiency, and delivering comprehensive training programs. Possess strong core competencies in energy auditing, project management, and implementing sustainable practices. Professional strengths are built on years of hands-on experience with more than 50 Energy Audit and Conservation study, more than 60 water audit, more than 100 training days and a commitment to driving energy savings and operational improvements.

III. Areas of Expertise

Primary Domains:Energy Management, Performance Evaluation of Industrial Systems, Energy Monitoring & Analysis, Resources Conservation

Specialized Skills:Energy Audit, Performance Evaluation, Management System Implementation, Energy Planning, Water Audit etc.

Industry Focus:Thermal Power Station, Iron & Steel Industries, Commercial Buildings, Mining, Engineering Industries etc.

IV. Professional Experience

Current Position:Director Gr II & Regional Director, **Organisation:**National Productivity Council, Regional Directorate Bhubaneswar**Duration:** [April 2023 - Present]

Key Responsibilities:

- Leading a multi-disciplinary consulting team, strategic role entails guiding, coordinating, and aligning varied expertise to provide comprehensive, client-centered solutions.
- Working in Odisha and Chhattisgarh in areas of Industrial Engineering, Energy Management, Human Resource Management and Environmental Engineering.
- Leading energy management group assignments as consultant or resource person.

Previous Position:Deputy Director **Organisation:**National Productivity Council, Regional Directorate Bhubaneswar**Duration:** [February 2016–March 2023]

Key Responsibilities:

- Led the Energy Management Group and served as Regional Director In-Charge from June 2018 to June 2019 and from April 2022 to April 2023. Apart from heading the office, as a consultant provided consulting and training in resource conservation and management studies.
- Conducting energy and water conservation related studies for organizations such as NALCO, NTPC, NTPC-SAIL, Rashtriya Ispat Nigam Ltd., NMDC Steel Ltd., Odisha Mining Corporation, and Jindal Steel and Power Ltd. etc.
- Executing national and regional projects for organisations including the Bureau of Energy Efficiency, Energy Efficiency Services Ltd., Power Finance Corporation, Central Boiler Board, and State Designated Agencies.
- Delivering Training to engineers of leading Government/Private organisations such as NTPC Ltd., Reliance Industries Ltd., Steel Authority India Ltd, Damodar Valley Corporation (DVC), Bharat Oman Refinery Ltd., Indian Oil Corporation Ltd., GAIL (India) Ltd., New Delhi, Ambuja Cement, Jaiprakash Associates Ltd, Torrent Power Ltd. etc.

Previous Position: Assistant Director **Organisation:** National Productivity Council, Regional Directorate Bhubaneswar & Kolkata **Duration:** [August 2009 – January 2016]

Key Responsibilities:

- Consulting and training activities in energy management.
- Worked as team member and Lead team for energy audit at organisations like NTPC, NTPC-SAIL, Durgapur, DVC, Jindal Power Ltd., Kanti Bijlee Utpadan Nigam Ltd. Dishergarh Power Supply Company Ltd., Caterpillar India Pvt. Ltd., ARS Metals etc.
- Closely working with State Designated Agencies for conducting assignments and training programmes in different states.

Previous Position: Junior Research Fellow **Organisation:** Central Power Research Organisation **Duration:** [August 2007 – July 2008]

Key Responsibilities:

- Testing of protective & control devices and R&D in Substation Automation
- Test Facility Setup in association with KEMA for Compliance Testing of Various Intelligent Electronic Devices used for Substation Automation as per IEC 61850

V. Major Project Experience in NPC [For each significant project, include:]

Project Title: Integrated Management System Implementation

Client Name: NMDC Steel Ltd. **Type:** PSU **Sector:** Iron and Steel

Role: Consultant for Energy Management System ISO 50001: 2018

Duration: November 2023 to September 2024

Problem Definition: Objective was successful implementation and certification of four management systems namely quality management system, environment management system, health and safety management systems and energy management systems in the 3.0 million ton per annum integrated steel plant at Jagdalpur, Chhattisgarh.

Recommendations Made:Prepared standard operating procedures, checklist, initial energy review, objective and target setting, training and guidance for internal audit.

Impact Created:

- Certification Completed for the integrated steel plant

Project Title:50+ Water Audit at Industrial Establishments

Client Name: Industries in Odisha and Chhattisgarh **Type:**PSU & Pvt. Organisations **Sector:**Iron and Steel, Food Processing, Mining & Cement

Role:Team Member/Lead for conducting the audit

Duration:November 2021 to till date

Problem Definition: Objective is to assess and evaluate water usage within a specific system or organization, or area to identify opportunities for water conservation, reduce waste, and improve overall efficiency.

Recommendations Made:Recommendations are prepared for each industry towards reducing water consumption vide improving operational parameters, use of best available technology, water recycling, rainwater harvesting etc.

Impact Created:

- Reduction in Water consumption and enhancing water use efficiency

Project Title:Restructured – Accelerated Power Development and Reform Program

Client Name: Power Finance Corporation **Type:**PSU **Sector:**Electricity Distribution

Role:Team Member/Lead for third party independent evaluating agency

Duration:November 2012 to 2017 for Odisha, West Bengal and Sikkim

Problem Definition: Activity includes Data collection & analysis for energy supply, monitoring of Distribution Loss for identified project areas under R-APDRP Scheme. Under the program NPC worked as a third-party independent energy auditing agency.

Recommendations Made:Distribution Loss evaluation and reporting for identified project areas

Project Title:Baseline Energy Audit Study for Designated consumers under Perform Achieve & Trade (PAT) Scheme

Client Name: Bureau of Energy Efficiency **Type:**Government **Sector:**Iron and Steel

Role:Team Member for Conducting the Study in West Bengal

Duration:2010 to 2012

Problem Definition: PAT Scheme is one of the flagship programs of Government of India under National Mission on Enhanced Energy Efficiency announced in 2008. The scheme is designed to incentivize energy efficient performance beyond certain affixed specific energy consumption targets by participating in industrial units also includes penalties for nonperformance. The assignment aimed at conducting Baseline Energy Audit for target fixation for its first cycle of 2012-15.

Recommendations Made:The study established baseline energy intensity of the industries along with identification of opportunities for efficient energy use.

VI. Educational Background

Highest Degree:

- **Degree:**MBA
- **Institution:**University of Petroleum and Energy Studies**Type:**Part Time
- **Year:**2013
- **Specialization:**Power Management

Graduation:

- **Degree:**Bachelor of Technology in Electrical Engineering
- **Institution:**Biju Patnaik University of Technology **Type:** Full Time
- **Year:**2007
- **Specialization:**Electrical Engineering

Additional Professional Qualifications:

- PG Certificate in Energy Management
- **Certified Energy Auditor (8th Rank in 13th NCE for Energy Managers & Auditors) – EA16645**
- Certificate in Project Management (CIPM)
- Certificate Program on Sustainability Reporting with **GRI Standards**.

VII. Research and Publications**Journal/ Conference Publications:**

- Energy Audit of Auxilliary Power Consumption-A Case Study, Conference paperPublished in Book Series, Advances in Electrical Control and Signal Systems. Lecture Notes in Electrical Engineering, vol 665. Springer, Singapore, July 2020
- Energy Integration Problem in a Cogeneration Plant, Published in Productivity Journal, Vol:52, No.2&3, 2011

Article Publications:

- Energy Efficiency in Iron Ore Mining, Published in Electrical India, December 2018 Issue.
- Boiler Performance Enhancement for Thermal Power Plant Optimization, Published in Electrical India, May 2014 Issue.
- Energy Performance of Air Handling Equipment (FAN) - A Case Study, Published in Electrical India, June 2012 Issue.
- Cost Economics of Solar KWH, Published in Energetica India, January | February 2012 Issue.
- RE Technology for Future Energy Security, Published in Electrical India, October 2011 Issue.
- Energy & Environment Protection towards Sustainable Development, Published in Electrical India, June2011 Issue.
- Optimization of Oil Rig Operation for Energy Conservation, Published in ACT Journal of PCRA June2011 Issue.
- IEC6150 for Substation Automation, Published in Electrical India, September-2009 Issue.

Certification:

I, the undersigned, certify that to the best of my knowledge and belief, this CV correctly describes myself, my qualifications, and my experience. I understand that I shall be responsible for any willful misstatement described herein.

Date: 10-02-2024

[Signature of Employee]

Place:Bhubaneswar

[Name]

Profile Update History

Last Updated: [Date]

Next Review Due: [Date]

***Photo Specifications**

- Professional headshot
- High resolution (minimum 300 DPI)
- Business formal attire
- Neutral background
- Recent (within last 12 months)

