

## Abdullah Ahmed Ahmed Mwanees

Electrical & Solar Energy Engineer +967 775154755 |  
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Sana'a, Yemen

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### Professional Summary

Highly accomplished and results-driven **Electrical & Solar Energy Engineer** with over **10 years of experience** in the design, execution, and supervision of large-scale, multi-million dollar projects (**\$15M+ portfolio**) across healthcare, education, and commercial sectors. Specialized expertise in **solar PV systems** (On-grid, Off-grid, Hybrid) and comprehensive **MEP solutions**, consistently achieving significant energy cost savings (up to **40%**). Proven ability to manage full project lifecycles, from technical studies and tender documentation to execution and commissioning, ensuring strict compliance with **NEC, IEC, and NFPA standards**. Adept at optimizing procurement and technical workflows, resulting in substantial material cost reductions (up to **20%**). Proficient in industry-leading software including **AutoCAD, Revit MEP, PVsyst, ETAP, HOMER, HAP, Dialux evo, Ecodial, and advanced Excel modeling**.

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### Professional Experience

**Alwakdy Corporation For Contractors (WCTC Company)** | Sana'a, Yemen **Electrical & MEP Site Engineer** | Jan 2022 – Dec 2025

- Led the design and spearheaded oversight of **electrical, HVAC, and medical gas installations** for critical healthcare projects, including the Medical City for the Treatment of Barren Cancer Tumors (\$4M, Cancer Fund) and the Al-Thawra Heart Center (\$500K, UNOPS-funded).
- Achieved project completion **2 months ahead of schedule** and reduced costs by **12%** through strategic procurement initiatives.
- Minimized installation errors by **20%** by leveraging Revit MEP and HAP-based design documentation, ensuring high precision and efficiency.
- Conducted rigorous pre-commissioning and final inspections, leading to a **17% reduction**

in post-installation maintenance requirements.

**Social Fund for Development (SFD)** | Yemen

**Lead Solar Energy Trainer (Part-time)** | Nov 2024 – Mar 2025

- Trained **110+ engineers, technicians, and quality officers** on advanced PV system concepts and software applications (PVsyst, HOMER).
- Developed comprehensive QA tools and technical checklists, enhancing reporting accuracy by **35%**.
- Reduced unexpected project costs by **22%** through practical, hands-on technical coaching.

**Certified Solar Content Developer (Contract)** | Aug 2024 – Nov 2024

- Authored an **80-page technical manual** and created **12 IEC 62446 compliant commissioning templates**, adopted in over 50 projects.
- Accelerated onboarding time for new engineers by **40%** by providing structured documentation and essential tools.

**Solar System Design Engineer (Contract)** | Mar 2025 – May 2025

- Engineered **9 standardized solar power systems** tailored for schools across diverse geographical zones.
- Developed modular templates that streamlined procurement and maintenance processes, resulting in a **17% reduction** in lifecycle costs.

**Public Works Project** | Sana'a, Yemen **Solar System Design Engineer – UNICEF Project (Contract)** | Aug 2023 – Oct 2023

- Formulated comprehensive solar PV systems for **149 schools** in Al-Hodeida Governorate (\$1.8M total value), segmenting designs into 9 climate/load profiles.
- Optimized component selection and vendor specifications, achieving a **20% cost reduction** for the project.

**Quality Consultant – Solar Street Lighting (Contract) |**  
Oct 2022 – Nov 2022

- Identified and resolved critical battery quality issues, saving **\$20K** in potential maintenance liabilities.
- Composed detailed quality assessment reports that influenced and shaped future standards for donor-funded projects.

**Alwakdy Corporation For Contractors (WCTC Company) |** Sana'a, Yemen **Senior Electrical/Solar Engineer – Mixed Projects |** 2015 – 2022

- Directed the full lifecycle execution of **hybrid (solar-diesel) power systems (up to 400 kW)** for hotels, malls, villas, and major hospital rehabilitation projects (Al-Jumhuri Al-Mahwit, Al-Jamhori, Shibam Kawkaban Hospitals - UNOPS-funded), totaling over **\$10M**.
- Accelerated project completion by **20%** through efficient planning and execution.
- Achieved a **35% reduction in material costs** by directly overseeing the procurement and import of materials from manufacturers.
- Successfully applied HAP and VRF technologies, leading to a **30% energy consumption reduction**.
- Expedited project timelines by **60 days** by integrating BIM workflows using Revit MEP.

Commissioning, QA documentation (IEC 62446), Solar energy systems (on-grid, off-grid, hybrid).

- **Software:** AutoCAD, PVsyst, ETAP, Revit MEP, HOMER, HAP, Helioscope, MS Excel (advanced), Dialux evo, Ecodial.

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**Soft Skills**

Analytical thinking, Technical reporting, Team coordination, Supplier communication, Problem-solving, Adaptability, Emotional intelligence.

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**Certifications & Training**

- Advanced Solar PV Training – Sana'a University – 2017
- Occupational Safety in Construction Projects – UNOPS – 2021
- Experience Certificate MEP Engineer – Alwakdy Corporation For Contractors (WCTC Company) – 2025
- Additional relevant contracts with various organizations

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**Education**

**Sana'a University, Faculty of Engineering |** Sana'a, Yemen **B.Sc. in Electrical Engineering** – Department: Power and Machines Graduated: [Insert Your Graduation Year Here, e.g., 2014]

- **GPA:** 85.64% (Equivalent to Excellent / Very Good)
- **Rank:** 3rd in Batch

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**Technical Skills**

- **Electrical Engineering:** NEC / IEC-compliant designs, Load studies, Panel board layouts, Electrical protections, Circuit sizing, Power distribution, Tender documentation, BOQs, Cost estimation, Site supervision, Testing,