

ENERGY COURSES



INTRODUCTION

At **Makeway Global**, we are committed to empowering professionals with the knowledge and skills needed to excel in the ever-evolving energy sector. As a leading provider of specialised training, we offer comprehensive courses covering **Oil & Gas, Manufacturing and Industry, Power & Utilities, Natural Gas, and Renewable Energy**.

With years of experience in energy training, **Makeway Global** has built a reputation for **excellence, innovation, and practical learning**. We collaborate with industry leaders and regulatory bodies to ensure our training remains relevant and impactful. Whether you are a seasoned professional or new to the field, our courses will help you gain the expertise needed to succeed in the global energy sector.

Our training programmes and hands-on coaching engagement help us tailor our services to the personal or organisation's needs for our respective clients – we listen to the voice of the customer. We provide tips and tools that can be applied immediately to everyday tasks and assignments to bring meaningful change to the respective teams and/or organisation. Our courses are always delivered to an exceptional standard, by expert instructors, at a price that offers excellent value for money



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What We Offer

- ✓ **Comprehensive Training Programmes** – Covering key energy sectors with up-to-date content and practical applications.
- ✓ **Industry-Experienced Instructors** – Learn from experts with real-world experience in energy production, distribution, and sustainability.
- ✓ **Flexible Learning Options** – We provide in-person, online, and blended learning opportunities to suit diverse needs.
- ✓ **Accredited and Recognised Courses** – Our certifications enhance professional credibility and career progression.
- ✓ **Customised Corporate Training** – Tailored programmes designed to meet specific business and operational objectives.



🕒 Our Vision Statement

Enhanced stakeholder confidence in the continued productivity of their enterprise

🕒 Our Mission Statement

Providing inspiration and enabling 'tools' that generate and promote the productivity of the client's business

SECTOR SPECIALISATION

We understand that each training participant is as distinct as the unique needs and learning objectives of every organisation. Therefore, we ensure that our training curriculum and delivery methodology are tailored to support professionals and organisations in the energy industry to achieve their human capital development goals.

POWER AND UTILITIES

Our Power and Utilities training programmes have been crafted by esteemed industry experts to cover the entire power value chain – Generation, Transmission, Distribution, and support services. These courses are designed to offer world-class learning opportunities for everyone, from technical professionals aiming to enhance their skills, to non-technical individuals seeking to understand the sector.

MANUFACTURING AND INDUSTRY

Our training programmes are tailored to meet the specific needs of various industries, including manufacturing, production, and processing. Each course is expertly designed and delivered by seasoned subject matter experts.

GAS

Our gas training programmes are continuously reinforced with practical and industry-led issues and challenges, including the best and most innovative practices to solve on-the-job problems. Participants can constructively apply what they have learnt and practised in our training courses to their day-to-day operations, successfully implementing precise improvements.

RENEWABLE ENERGY

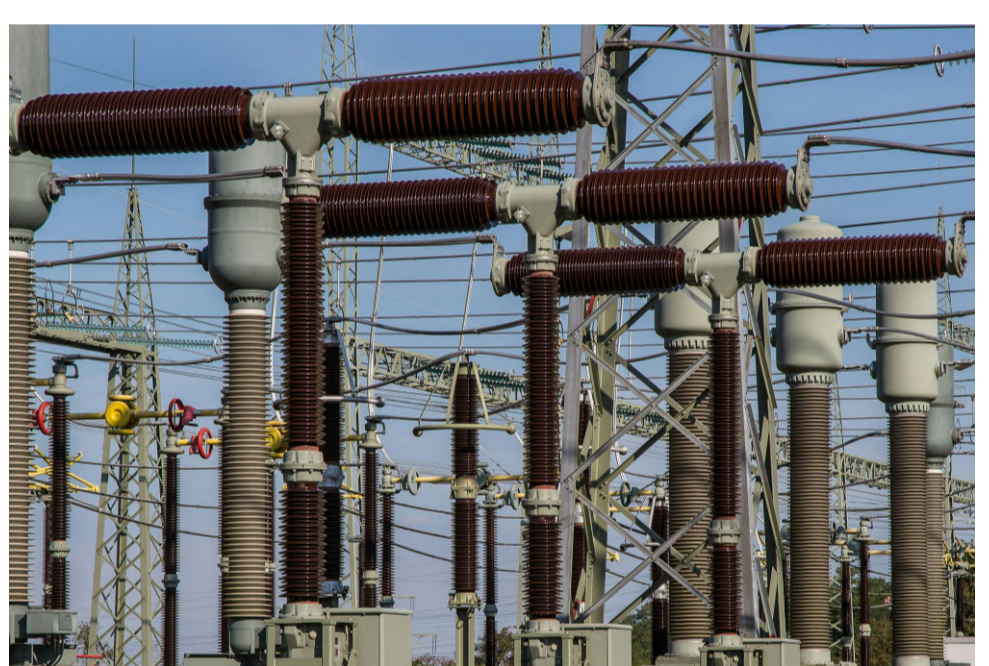
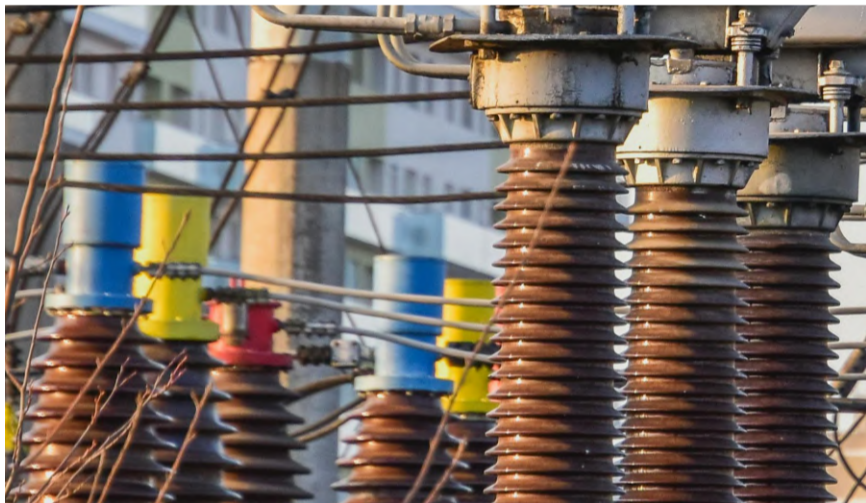
Our training programmes include technical, commercial, and management courses designed to accelerate the adoption of renewable energy in Nigeria. Developed and delivered by subject matter experts, these courses equip local entrepreneurs, technicians, and businesses with the skills to effectively manage and implement renewable energy solutions while also enhancing their general management capabilities.

OIL AND GAS

Our courses offer a comprehensive understanding of the oil industry considering both technical and business perspectives. We facilitate skill enhancement for professionals in the industry, focusing on the Upstream, Midstream, and Downstream sectors. These are delivered through our subject matter experts and strategic alliances.



POWER AND UTILITIES



Power and Utilities Training Programme

This comprehensive training programme provides in-depth knowledge of power generation, transmission, distribution, and utility management. It covers conventional and renewable energy sources, smart grid technologies, regulatory frameworks, and best practices for operational efficiency. The course is ideal for engineers, utility managers, policymakers, and professionals seeking to enhance their expertise in the power and utilities sector.

Module 1: Introduction to Power and Utilities

- Overview of the Power and Utilities Sector
- Key Players and Market Dynamics
- Energy Demand and Supply Trends
- Regulatory Frameworks and Compliance Standards

Module 2: Power Generation Technologies

- Conventional Power Generation (Coal, Gas, Nuclear)
- Renewable Energy Sources (Solar, Wind, Hydro, Biomass)
- Combined Heat and Power (CHP) Systems
- Emerging Technologies in Power Generation

Module 3: Transmission and Distribution Systems

- Power Transmission Networks and Grid Infrastructure
- Distribution Systems and Network Management
- Smart Grid Technologies and Digitalisation
- Grid Resilience and Energy Security

Module 4: Energy Storage and Efficiency

- Battery Storage and Other Energy Storage Solutions
- Demand-Side Management and Energy Efficiency Strategies
- Load Forecasting and Grid Balancing
- Power Quality and Reliability

Module 5: Utility Management and Operations

- Utility Business Models and Revenue Management
- Tariff Structures and Energy Pricing Mechanisms
- Customer Engagement and Smart Metering
- Risk Management in Power Utilities

Module 6: Sustainability and the Future of Power and Utilities

- Decarbonisation and Energy Transition Strategies
- Policies and Incentives for Clean Energy
- Innovations in Distributed Energy Resources (DERs)
- Future Trends in Power Generation and Distribution

Assessment and Certification

- Case Studies and Real-World Applications
- Practical Exercises and Group Discussions
- Final Assessment and Certification of Completion



MANUFACTURING AND INDUSTRY IN THE ENERGY SECTOR

This comprehensive course outline is designed to provide participants with a thorough understanding of the manufacturing processes and industry standards within the energy sector, ensuring they are well-equipped to handle the challenges and opportunities in this dynamic field.

Module 1: Introduction to the Energy Sector

- Overview of the Energy Sector
- Key Players and Stakeholders
- Energy Policies and Regulations
- Sustainability and Environmental Impact

Module 2: Manufacturing Processes in Energy Production

- Fundamentals of Manufacturing Processes
- Material Science and Engineering in Energy
- Innovations in Manufacturing for Energy Efficiency
- Case Studies in Manufacturing Excellence

Module 3: Industry Standards and Best Practices

- International Standards and Compliance
- Health, Safety, and Environmental Standards
- Quality Assurance and Control
- Best Practices in Energy Manufacturing

Module 4: Technology and Innovation in Energy Manufacturing

- Advanced Manufacturing Technologies
- Automation and Robotics in Manufacturing
- Digital Transformation and Industry 4.0
- Renewable Energy Manufacturing Technologies

Module 5: Supply Chain Management in the Energy Industry

- Supply Chain Dynamics and Logistics
- Procurement and Sourcing Strategies
- Risk Management in the Supply Chain
- Case Studies in Supply Chain Management

Module 6: Human Capital Development in Manufacturing

- Workforce Training and Development
- Leadership and Management Skills
- Building a Culture of Continuous Improvement
- Talent Acquisition and Retention

Module 7: Project Management in Energy Manufacturing

- Principles of Project Management
- Planning, Execution, and Monitoring
- Cost Control and Budgeting
- Project Risk Management

Module 8: Future Trends in Energy Manufacturing and Industry

- Emerging Technologies and Innovations
- Global Market Trends and Analysis
- Future Challenges and Opportunities
- Strategic Planning for the Future

Assessment and Certification

- Quizzes and Assignments
- Group Projects and Presentations
- Final Examination
- Certification of Completion

ENERGY GAS TRAINING PROGRAMME

Course Overview

This specialised training programme provides a comprehensive understanding of the natural gas industry, covering exploration, production, processing, transportation, distribution, and utilisation. It also explores emerging trends, environmental considerations, and regulatory frameworks. Designed for professionals in the energy sector, the course is ideal for engineers, project managers, policymakers, and business leaders seeking expertise in the gas industry.



Module 1: Introduction to the Natural Gas Industry

- Overview of the Global and UK Gas Markets
- Role of Natural Gas in the Energy Transition
- Key Stakeholders and Market Dynamics
- Environmental and Economic Impacts

Module 2: Gas Exploration and Production

- Fundamentals of Natural Gas Formation
- Upstream Operations: Drilling and Extraction
- Offshore vs. Onshore Gas Production
- Health, Safety, and Environmental (HSE) Considerations

Module 3: Gas Processing and Liquefaction

- Gas Treatment and Purification Processes
- Liquefied Natural Gas (LNG) – Technology and Infrastructure
- Compressed Natural Gas (CNG) – Applications and Benefits
- Gas-to-Liquids (GTL) Technology

Module 4: Gas Transportation and Distribution

- Pipeline Infrastructure and Maintenance
- LNG Shipping and Storage Solutions
- Gas Compression and Pressure Regulation
- Smart Gas Metering and Network Management

Module 5: Gas Markets, Trading, and Regulations

- Gas Pricing Mechanisms and Market Structures
- UK and International Regulatory Frameworks
- Contracts and Risk Management in Gas Trading
- Future Trends in the Gas Industry

Module 6: Sustainable Gas and Emerging Technologies

- Role of Hydrogen and Renewable Natural Gas (RNG)
- Carbon Capture, Utilisation, and Storage (CCUS)
- Methane Emission Reduction Strategies
- Future Innovations in the Gas Sector

Assessment & Certification

- Case Studies and Practical Scenarios
- Group Discussions and Industry Insights
- Final Assessment and Certification of Completion

This course equips participants with technical, regulatory, and commercial insights into the gas sector, preparing them for leadership roles in the evolving energy landscape. Would you like any modifications or additional focus areas?

A photograph of an industrial facility, likely a refinery or chemical plant, at night. The scene is illuminated by numerous lights, creating a complex network of pipes, scaffolding, and structures. The sky is dark, and the overall atmosphere is industrial and brightly lit.

RENEWABLE ENERGY SYSTEMS TRAINING PROGRAM

Course Overview

This comprehensive course aims to equip participants with an in-depth understanding of renewable energy systems. It covers various renewable energy sources, including solar, wind, hydropower, biomass, and geothermal energy. Participants will learn about the latest technologies, innovations, and best practices in the renewable energy sector. The course also addresses economic and financial aspects, grid integration, and real-world applications through case studies. It is designed to enhance the knowledge and skills of professionals and individuals interested in contributing to the growth and sustainability of the renewable energy industry.

Module 1: Introduction to Renewable Energy

- Overview of Renewable Energy Sources
- Global Energy Scenario and Trends
- Environmental and Economic Benefits
- Policy and Regulatory Frameworks

Module 2: Solar Energy

- Principles of Solar Radiation
- Solar Photovoltaic Systems
- Solar Thermal Energy
- Design and Installation of Solar Systems

Module 3: Wind Energy

- Fundamentals of Wind Energy
- Wind Turbine Technology
- Wind Farm Planning and Development
- Case Studies in Wind Energy

Module 4: Hydropower

- Basics of Hydropower
- Small and Large Hydropower Plants
- Environmental Impact and Mitigation
- Hydropower Project Management

Module 5: Biomass Energy

- Introduction to Biomass Energy
- Biomass Conversion Technologies
- Biogas Production and Utilisation
- Sustainability and Environmental Considerations

Module 6: Geothermal Energy

- Understanding Geothermal Resources
- Geothermal Power Plants
- Direct Use Applications
- Environmental Impact of Geothermal Energy

Module 7: Emerging Renewable Technologies

- Ocean Energy (Wave and Tidal)
- Hydrogen as a Renewable Energy Carrier
- Advanced Energy Storage Solutions
- Innovations in Renewable Energy

Module 8: Integration of Renewable Energy Systems

- Grid Integration of Renewable Energy
- Smart Grids and Microgrids
- Energy Management Systems
- Challenges and Solutions in Integration

Module 9: Economic and Financial Aspects

- Cost Analysis of Renewable Energy Projects
- Financing Renewable Energy Projects
- Economic Incentives and Subsidies
- Market Dynamics and Trends

Module 10: Case Studies and Real-World Applications

- Successful Renewable Energy Projects
- Lessons Learned and Best Practices
- Future Prospects of Renewable Energy
- Strategic Planning for Renewable Energy Deployment

Assessment and Certification

- Quizzes and Assignments
- Group Projects and Presentations
- Final Examination
- Certification of Completion

This updated course outline ensures participants receive a thorough and well-rounded education in renewable energy systems, preparing them to effectively address the challenges and opportunities in this evolving sector.



Course Outline:

OIL AND GAS TRAINING PROGRAMME

Course Overview

This comprehensive training programme provides in-depth knowledge of the oil and gas industry, covering upstream, midstream, and downstream operations. It explores exploration, production, refining, transportation, distribution, and environmental considerations. Designed for professionals in the energy sector, this course is ideal for engineers, project managers, policymakers, and business leaders looking to enhance their expertise in the oil and gas industry.

Module 1: Introduction to the Oil and Gas Industry

- Overview of the Global and UK Oil and Gas Markets
- The Role of Oil and Gas in the Energy Mix
- Key Industry Stakeholders and Market Trends
- Environmental and Economic Impacts

Module 2: Upstream – Exploration and Production

- Fundamentals of Oil and Gas Formation
- Exploration Techniques and Technologies
- Drilling, Well Completion, and Production Processes
- Offshore vs. Onshore Production Operations
- Health, Safety, and Environmental (HSE) Considerations

Module 3: Midstream – Transportation and Storage

- Crude Oil and Natural Gas Pipelines
- LNG and CNG Transportation Methods
- Oil and Gas Storage Facilities and Terminals
- Risk Management in Midstream Operations

Module 4: Downstream – Refining and Distribution

- Crude Oil Refining Processes and Petrochemicals
- Gas Processing and Liquefaction
- Distribution and Retail of Oil and Gas Products
- Quality Control, Safety, and Regulatory Compliance

Module 5: Oil and Gas Markets, Trading, and Regulations

- Oil and Gas Pricing Mechanisms and Market Structures
- UK and International Regulatory Frameworks
- Contracts, Risk Management, and Hedging Strategies
- Future Trends in the Oil and Gas Industry

Module 6: Sustainability and the Future of Oil and Gas

- Energy Transition and Decarbonisation Strategies
- Carbon Capture, Utilisation, and Storage (CCUS)
- Digital Transformation and Emerging Technologies
- The Future of Oil and Gas in a Low-Carbon Economy

Assessment and Certification

- Case Studies and Practical Applications
- Group Discussions and Industry Insights
- Final Assessment and Certification of Completion

This course equips participants with technical, regulatory, and commercial insights into the oil and gas industry, preparing them for leadership roles in the evolving energy sector. Would you like any modifications or additional focus areas?