



# Energy Transition Strategy: Decarbonisation Pathways, Portfolio Choices and Company Roadmap



## **Energy Transition Strategy: Decarbonisation Pathways, Portfolio Choices and Company Roadmap**

### **Introduction:**

An energy transition strategy is now a board question for oil, gas, power and heavy-industry companies, yet many still hold growth plans built on one demand outlook, scattered low-carbon pilots and capital budgets that ignore stranded-asset exposure. Investors, lenders and customers expect a credible pathway that links scenarios to portfolio and investment choices. This Core Concept course equips senior leaders to test decarbonisation pathways, weigh transition portfolio options, rethink business models and allocate capital under uncertainty. Participants produce a Company Energy Transition Roadmap with a KPI Dashboard.

### **Course Objectives:**

- Interpret the drivers of the energy transition and position the company against IEA STEPS, APS and NZE and IRENA 1.5C Scenario pathways
- Compare low-carbon portfolio options, including renewables, natural gas, hydrogen, CCUS, electrification and efficiency, on maturity, cost trajectory and strategic fit
- Evaluate new business models and partnership structures that turn transition options into revenue
- Assess carbon pricing and policy exposure and stress-test capital plans for stranded-asset risk
- Plan workforce reskilling and just transition measures that sustain licence to operate
- Build a company transition roadmap with milestones, governance and KPIs that a board can monitor

### **Target Audience:**

- Executives who set corporate direction and portfolio mix in oil, gas, power and utilities companies
  - Heads of strategy and corporate planning who own long-range outlooks and scenario work
  - Business development and new-energies leaders who screen and launch low-carbon ventures
  - Investment, finance and capital allocation leaders who approve large project budgets
  - Leaders of energy-intensive industrial groups in cement, steel, chemicals and mining responsible for decarbonisation direction
  - Sustainability and transformation executives who report transition progress to boards and investors
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## Course Outline:

### Day 1: Energy Transition Drivers and Corporate Exposure

- Energy Transition Definition: Structural Shift in Energy Supply and Consumption
- Driver Map: Paris Agreement Goals, Falling Clean Technology Costs and Energy Security
- Investor, Lender and Customer Expectation Scan for Energy and Industrial Companies
- Value Chain Emissions Hotspot and Revenue Exposure Heatmap
- Transition Readiness Diagnostic for the Current Business Portfolio

### Day 2: Decarbonisation Pathways and Scenario Frameworks

- IEA Stated Policies, Announced Pledges and Net Zero Emissions Scenarios Compared
- IRENA 1.5C Scenario: Electrification, Efficiency, Renewables and Hydrogen Levers
- Scenario Signpost Tracking and Early-Warning Indicators
- Demand Outlook Ranges for Oil, Gas, Power and Industrial Heat
- Scenario-to-Strategy Translation Matrix for Corporate Planning

### Day 3: Transition Portfolio Options and Business Models

- Technology Maturity and Cost Curve Screening at Decision Level
- Portfolio Option Scorecard: Renewables, Natural Gas as Transition Fuel, Hydrogen and CCUS
- Electrification and Efficiency Opportunity Ranking Across Assets and Customers
- Business Model Canvas for Energy-as-a-Service, Low-Carbon Products and Offtake Partnerships
- Joint Venture, Acquisition and Corporate Venturing Entry Choices

### Day 4: Capital Allocation, Policy Exposure and Stranded-Asset Risk

- Carbon Pricing and Policy Instrument Overview: Taxes, Trading Schemes and Standards
- Shadow Carbon Price and Hurdle Rate Setting in Investment Appraisal
- Stranded-Asset Stress Test for Upstream, Refining and Thermal Generation Assets
- Capital Rotation Model Between Core Business and Low-Carbon Growth
- Workforce Reskilling and Just Transition Plan for Affected Sites and Communities

### Day 5: Case Work and the Company Energy Transition Roadmap

- Integrated Energy Company Case: Portfolio Rebalancing Decision
  - Heavy-Industry Group Case: Decarbonisation Pathway and Capital Sequencing
  - Transition KPI Dashboard Design: Emissions Intensity, Low-Carbon Capital Share and Revenue Mix
  - Company Energy Transition Roadmap Drafting with Governance Milestones
  - Board Panel Challenge and Roadmap Defence
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## **Skills You Will Gain:**

- Scenario-Based Strategic Planning
- Transition Portfolio Prioritisation
- Clean Technology Maturity Judgement
- Low-Carbon Business Model Design
- Carbon Price Exposure Analysis
- Stranded-Asset Risk Assessment
- Just Transition Planning
- Board-Level Transition Reporting

## **Why Attend This Course:**

- Return with a Company Energy Transition Roadmap and KPI Dashboard ready to table at executive or board level
- Challenge consultant and internal plans that rest on a single demand outlook or unpriced carbon exposure
- Explain to investors and lenders how capital shifts between the core business and low-carbon growth over time
- Test transition choices with senior leaders from oil and gas, power, utilities and heavy-industry organisations

## **Conclusion:**

A credible transition plan links external scenarios to portfolio choices, capital budgets and the people who carry them out. The course moves from transition drivers and corporate exposure, through IEA and IRENA pathways and scenario translation, to portfolio options, technology maturity, business models, carbon pricing, capital rotation, stranded-asset risk and just transition. The final day applies these methods to integrated energy and heavy-industry cases and produces a Company Energy Transition Roadmap with a KPI Dashboard for the participant's organisation.

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