
Climate Change and Energy Strategy: Emissions, Carbon Pricing and Net Zero Pathways Training Course

22 – 26 August 2027
Zoom





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Programme Summary

Climate change and energy strategy is the subject of this one-week training course for energy executives, strategy leads and sustainability managers at managerial level, ending in a climate and energy strategy brief for one organisation. Energy organisations face rising expectations on emissions, a growing cost of carbon and uncertain demand, yet targets are often set before the emissions baseline is understood. The approach moves from climate science and emissions accounting, through carbon pricing and abatement options, to pathways and governance, and then to a worked brief. Mars Training Centre UK delivers this programme in climate change and energy strategy.

The Business Case

Climate commitments now shape investment, financing and licence to operate in the energy sector. Organisations that cannot say where their emissions arise, what carbon costs them and which reductions are cheapest set targets they cannot meet, or avoid targets they could.

- Emissions Intensity: Falls as abatement options are ranked by cost and impact before capital is committed.
- Carbon Cost Exposure: Becomes visible as price scenarios are applied to the emissions baseline.
- Target Credibility: Improves as commitments are tied to a baseline, a pathway and an owner.

Principles and Evidence Base

- GHG Protocol Corporate Standard: Its accounting and reporting principles structure the emissions baseline built in Session 2.
- ISO 14064-1: Its organisation-level quantification and reporting requirements guide inventory boundaries and quality checks in Session 2.
- Paris Agreement Temperature Goal: It provides the reference for the target setting in Session 4.
- IPCC Assessment Reports: They supply the climate science summarised in Session 1.

Intended Participants

- Energy executives who set strategy and approve low-carbon investment.
- Strategy and planning leads who build long-term energy and emissions scenarios.
- Sustainability managers who report emissions and propose targets.
- Finance and risk managers who price carbon exposure into plans.

The programme serves oil and gas, power generation, utilities and heavy industry organisations.



Learning Outcomes

1. Participants will be able to summarise the climate science behind energy sector emissions in terms a board can use.
2. Participants will be able to construct an emissions baseline across scopes for an energy organisation.
3. Participants will be able to evaluate the effect of carbon price scenarios on project and portfolio value.
4. Participants will be able to prioritise abatement options by cost and impact.
5. Participants will be able to compare net zero pathways and their dependencies.
6. Participants will be able to justify a climate and energy strategy brief to an executive committee.

Programme Structure

Day 1: Climate Change and Energy Strategy Foundations

How does the climate system connect to the decisions an energy organisation takes?

- IPCC Findings Briefing Note
- Energy Sector Emissions Source Map
- Physical and Transition Risk Register
- Stakeholder Expectation Matrix
- Strategy Question Framing Sheet

Day 2: Emissions Accounting and Baselines

How are emissions measured, bounded and checked?

- GHG Protocol Scope Classification
- ISO 14064-1 Inventory Boundary Statement
- Activity Data and Emission Factor Log
- Methane and Flaring Estimate Worksheet
- Baseline Quality Checklist

Day 3: Carbon Pricing and Abatement Economics

What does carbon cost, and which reductions are worth making first?

- Carbon Price Scenario Set
- Internal Carbon Price Rule
- Marginal Abatement Cost Curve
- Carbon Market and Offset Quality Review
- Investment Case Template with Carbon Cost



Day 4: Net Zero Pathways and Targets

How are targets set and pathways compared?

- Paris Agreement Temperature Goal Alignment Test
- Pathway Option Comparison Grid
- Interim Target Ladder
- Technology and Fuel Switching Roadmap
- Governance and Accountability Map

Day 5: Applying Climate Change and Energy Strategy to One Organisation

Is the strategy brief ready for an executive committee to decide?

- Applying the Session 2 Baseline to the Chosen Organisation
- Testing the Session 3 Price Scenarios on Planned Projects
- Ranking Abatement Options on the Session 3 Cost Curve
- Checking Session 4 Pathways Against the Interim Target Ladder
- Completing the Climate and Energy Strategy Brief

Methodology

The programme is built around structured exercises and case analysis. Participants work with an anonymised energy organisation, its activity data and project list, build a baseline, apply price scenarios, rank abatement options and compare pathways in small teams. Each team then defends its brief before a simulated executive committee.

- Suggested activity: Building a scope-by-scope baseline from sample fuel and electricity data.
- Suggested activity: Re-ranking three projects under two carbon price scenarios.
- Suggested activity: Drafting interim targets and testing who owns each one.

Capstone Output

Each participant completes a climate and energy strategy brief for one organisation. It contains an emissions baseline summary, a carbon price scenario view, a ranked abatement list, a pathway comparison and an interim target and ownership table. It is used to brief an executive committee and to frame investment and reporting decisions.



Frequently Asked Questions

Is climate change and energy strategy suitable for managers without a sustainability background?

Yes. Climate change and energy strategy is set at managerial level and assumes responsibility for energy strategy, planning or reporting, not specialist climate science or carbon accounting.

Which standards does climate change and energy strategy rest on in this programme?

Climate change and energy strategy rests on the GHG Protocol Corporate Standard and ISO 14064-1 for emissions accounting, with IPCC reports and the Paris Agreement temperature goal as references.

How is the climate change and energy strategy brief used at work?

You use the climate change and energy strategy brief to inform an executive committee, rank investments and set interim targets with named owners.

How does climate change and energy strategy differ from a programme on energy transition technology?

Climate change and energy strategy centres on emissions, carbon cost and targets, while a technology programme examines specific low-carbon systems and their engineering.