Ecology, Sustainability & Climate Change in Design Policy

Environmental responsibility across gas infrastructure engineering, approvals and appraisals

Document number	Revision	Date	Next planned review
MOG-POL-ENV-ECO-001	0	18 October 2026	18 October 2027

1. Purpose and commitment

Mogas Design Ltd recognises that decisions made during the design, assessment and appraisal of gas pipelines, above-ground installations (AGIs), pressure-reduction stations and associated infrastructure can affect habitats, biodiversity, land, water, resource use and greenhouse-gas emissions over the asset life. We will give proportionate, evidence-based consideration to these impacts from feasibility through detailed design, design change and technical review; seek to avoid preventable harm; support climate resilience; and communicate material risks to clients. Safety, statutory duties, asset integrity and gas containment are never compromised to achieve an environmental preference.

2. Scope and accountabilities

This policy applies to both Mogas directors and independent designers, engineers and specialists engaged on its behalf. Mogas is a design consultancy working predominantly remotely and visiting sites for engineering purposes; it does not ordinarily act as site operator or construction contractor. A director assigns design responsibility and ensures environmental interfaces are considered. Each design contributor flags relevant impacts, assumptions, information gaps and improvements. Where ecology, contaminated land, carbon, drainage or environmental permitting require specialist judgement, Mogas will request competent specialist input from the client or qualified advisers, rather than claim expertise it does not possess.

3. Environmental screening at project outset

- At tender, optioneering and design-basis stages, screen site and route context: existing developed land versus greenfield, protected sites/species and habitats, trees and hedgerows, watercourses/floodplains, ground conditions, contaminated land, land take, neighbours and sensitive receptors.
- Consult client-supplied ecological constraints surveys, environmental impact assessment (EIA) screening/scoping where applicable, planning conditions, consents and project environmental registers. Identify missing surveys or approvals; no assumption that absence of evidence means no constraint.
- Add relevant constraints, ownership, survey/permit dependencies and design hold points to the design risk register or comments schedule; distinguish matters verified by Mogas from those requiring client/ecologist confirmation.

4. Design hierarchy and biodiversity protection

- Follow a proportionate avoid–minimise–restore–compensate hierarchy: first seek options avoiding sensitive habitats, watercourses and mature trees; next reduce footprint, temporary works, vegetation clearance and disturbance; then identify restoration needs and refer any offset/compensation decisions to the client and specialists.
- Consider feasible route and layout alternatives, use of existing corridors/brownfield land, trenchless crossings where technically justified, access and construction compound locations, and avoidance of avoidable habitat fragmentation.
- In drawings and design deliverables, flag known ecological constraints, exclusion zones, timing restrictions and construction-stage measures for development by the relevant ecological adviser/contractor; do not prescribe protected-species mitigation without suitable expert input.
- Check project-specific legal and planning obligations, including biodiversity net gain where applicable to the jurisdiction and consent route. Do not automatically assert that BNG applies to all gas projects or that a design achieves a quantified net gain without a competent assessment.

5. Climate change mitigation and carbon-aware choices

- Compare technically viable options on whole-life grounds where proportionate: material quantities, pipe diameter and wall thickness, equipment life, fabrication, construction complexity, excavated material, travel, operation, maintenance, replacement and end-of-life.
- Avoid unnecessary over-specification while meeting design codes, pressure, safety margins, corrosion allowances, reliability and client requirements; support efficient site layouts and constructable solutions that reduce avoidable rework and waste.
- Where within design influence, identify opportunities to reduce fugitive methane and venting, improve leak-tightness and specify practicable isolation/monitoring arrangements, subject to network operator requirements and safety validation.
- Use client-agreed emission factors, boundaries and data to quantify carbon only where data and scope allow. Record assumptions and limitations. Do not claim carbon neutrality, verified savings or low-carbon status without substantiated calculations.

6. Climate adaptation and asset resilience

- Consider foreseeable climate-related hazards at a level appropriate to asset and design life: flooding, intense rainfall, erosion/scour, ground movement or subsidence, higher ambient temperatures, storms, drought-related ground changes and access disruption.
- Check flood/erosion data, drainage and site-specific studies where supplied, and identify gaps requiring hydrological, geotechnical or civil specialist assessment. Review credible effects on crossings, supports, buried-pipe cover, equipment, drainage, access and maintainability.
- Document significant resilience assumptions and advise the client when further evidence, mitigation or specialist design is needed. Apply current client standards and relevant design codes rather than generic climate allowances without justification.

7. Pollution prevention and resource efficiency

- In design reviews, consider contamination pathways to land, surface water and groundwater; spill-control and drainage interfaces; earthworks and spoil; noise/dust potential; and suitability of material specifications and corrosion protection.
- Promote durable, repairable, standardised components, responsible procurement, accurate material take-offs, reuse where appropriate and efficient design information management to avoid waste and abortive works.
- Communicate construction-related ecological/pollution risks to the party responsible for detailed construction methods, permits and environmental controls; Mogas does not take over the principal contractor's obligations.

8. Project workflow and records

- Before design: review the environmental information made available; screen constraints and assign actions. During options/design: compare relevant alternatives, log environmental decisions and unresolved constraints in the design basis, risk register or design review comments.
- At design check/approval/appraisal: verify that known material environmental interfaces are reflected in drawings/reports or clearly raised as hold points, clarifications and exclusions. Escalate significant gaps to the client before approval where they affect suitability or compliance.
- At site visits: complete site-specific RAMS, follow the Gas Site Visiting Policy and client ecological restrictions; minimise disturbance, use authorised access and report incidents or unexpected sensitive features immediately.
- Retain proportionate evidence: environmental screening/constraints checklist, design options and rationale, client correspondence, specialist advice, approved revisions and action close-out on the controlled company drive.

9. Monitoring, training and continual improvement

Directors review implementation at least annually, including examples of environmental design issues raised and resolved, lessons learned, emerging client requirements, and relevant changes in legislation/guidance. Engineers and contractors must be made aware of applicable project environmental requirements and seek competence support when needed. Mogas will not represent itself as ISO 14001 certified or as having completed ecological assessments, carbon inventories or mitigation works unless supported by records.

10. Governance and related documents

Read alongside the Mogas Environmental Policy, Environmental Aspects Register, Carbon Management Policy and Procedure, Sustainable Procurement Strategy, Risk Management Policy, Quality Management Procedure, Gas Site Visiting Safety & Conduct Policy, and applicable client environmental procedures. The company shall comply with applicable UK legislation and project-specific requirements, including environmental assessment, habitats/species protections, planning and CDM design duties where relevant; the applicable requirements depend on project location, activities and approvals.

Project environmental design review — minimum prompts

Review topic	Evidence / action to record
Ecology / biodiversity	Constraints, surveys, specialist advice, route/footprint alternatives, consent interfaces
Ground / water / pollution	Crossings, drainage, flooding, contamination and pollution pathways
Carbon and materials	Options, material take-offs, waste, methane/leakage interfaces and quantified evidence if available
Climate resilience	Flood, scour, overheating, settlement, accessibility and future exposure
Design assurance	Unresolved queries, owner, action/date, decision and drawing/report references

Document control and director approval

Approving director	Mohammed Fasiuddin
Position	Director — Mogas Design Ltd
Policy date	18 October 2026
Next planned review	18 October 2027 or earlier after material change

Director signature:

Signed copy held on file – available on request.