

HARDIUM COMPANY OVERVIEW

NETWORKED ASSURANCE AND SPECIALIST DELIVERY

Nuclear and high-hazard delivery. Reinforced.

Specialist leadership, governance, assurance and engineering capability for high consequence programmes.

Hardium strengthens client teams at the point success is most exposed; bringing the judgement, control and capability needed to win, mobilise and deliver critical work.

Where Hardium adds value

Leadership	Senior engineering and technical authority when the programme needs decisive, credible leadership.
Governance	Clear accountability, technical authority, SQEP, interfaces and decision control proportionate to the risk.
Assurance	Independent challenge that tests whether engineering, safety and delivery claims are supported by evidence.
Capability	Proven specialists and partner organisations selected around the exact client requirement.
Delivery	Support to win, mobilise, recover and deliver complex projects in nuclear and high-hazard environments.

Built around the client - not a fixed consulting model

Hardium can provide one specialist, an embedded leader, an independent assurance function, a focused specialist team, a defined work package or a partner-enabled delivery team. The form follows the client's need. We reinforce existing teams and authority; we do not create an unnecessary parallel organisation.

A compact core. Exceptional reach. No quality gaps.

Hardium is deliberately compact. Its core owns capability definition, specialist selection, integration, governance and quality. Every engagement has a named accountable Hardium lead. Proven practitioners and approved partners are deployed only where they materially improve the outcome.

The commercial principle

Clients use Hardium where the cost of getting it wrong is greater than the cost of exceptional capability. We are designed to create disproportionate value, not to maximise headcount or time on site.



HARDIUM CAPABILITY SHEET

LEADERSHIP & GOVERNANCE

Put credible authority where delivery needs it.

Senior engineering and technical leadership for complex, regulated programmes.

Bring Hardium in when

- Engineering authority is unclear, stretched or absent.
- Growth, mobilisation or change has outpaced governance and SQEP.
- Technical, safety, commercial and delivery decisions are separating.
- A senior leader is needed to stabilise work without displacing the client team.

Hardium can strengthen

- Engineering Director, Head of Engineering and Technical Authority roles.
- Engineering governance, decision rights and escalation.
- SQEP, competence, capability and succession arrangements.
- Integrated management systems and proportionate assurance.
- Client, regulator, partner and senior stakeholder confidence.

The Hardium standard

- Named accountable Hardium lead.
- Authority and interfaces agreed with the client.
- Leadership selected for the actual technical and organisational problem.
- Visible priorities, decisions, risks and handover.
- Capability transferred rather than dependency manufactured.

The outcome

The client retains control of the programme while gaining the authority, judgement and organisational discipline needed to deliver with confidence.

Flexible by design

Support is shaped around the client: an individual specialist, interim leader, assurance cell, specialist team, defined work package or partner-enabled delivery capability. The client retains ownership and authority.



HARDIUM CAPABILITY SHEET

ASSURANCE & COMPLIANCE

Confidence that can survive challenge.

Independent assurance across engineering, safety, compliance and programme delivery.

Bring Hardium in when

- A critical claim, decision or gate depends on evidence that is fragmented or disputed.
- Engineering, safety, compliance and delivery positions do not align.
- A client, board or regulator needs greater confidence without another layer of bureaucracy.
- Leadership needs independent challenge that supports, not undermines, the delivery team.

Hardium can strengthen

- Engineering assurance and design maturity.
- Programme readiness, governance and recovery assurance.
- Nuclear and process-safety challenge, including HAZOP, LOPA, SIL and ALARP.
- Compliance architecture, evidence and closure.
- Independent reviews, technical audits and decision briefings.

The Hardium standard

- Assurance proportionate to consequence and maturity.
- Claims traced to evidence, plant reality and accountable owners.
- Clear separation of fact, judgement, gap and action.
- No marking our own homework.
- Findings delivered directly, constructively and without theatre.

The outcome

Leadership understands what is justified, what remains exposed and what must change, while the client team remains able to act on the answer.

Flexible by design

Support is shaped around the client: an individual specialist, interim leader, assurance cell, specialist team, defined work package or partner-enabled delivery capability. The client retains ownership and authority.



HARDIUM CAPABILITY SHEET
CAPABILITY & DELIVERY

The right capability. Precisely where it matters.

Proven specialists and delivery partners for nuclear and high-hazard projects.

Bring Hardium in when

- A bid or live project needs rare capability that cannot be carried permanently.
- Mobilisation requires credible people quickly without compromising quality.
- A client team needs reinforcement across specific disciplines or workstreams.
- A Tier 1, SME or asset owner needs help converting an opportunity into executable delivery.

Hardium can strengthen

- Nuclear, fuel-cycle, decommissioning, waste and high-hazard engineering.
- Process, mechanical, EC&I, engineering management and technical assurance.
- Safety case, process safety, human factors, risk and operational specialists.
- Bid strategy, scope definition, mobilisation and delivery integration.
- Wider multi-discipline engineering delivery through Current Projects and approved partners.

The Hardium standard

- Capability defined against the mission, not a CV database.
- Competence, track record and behavioural fit verified.
- No silent substitution or dilution after appointment.
- Specialists integrated under clear governance and interfaces.
- Performance and quality actively overseen throughout delivery.

The outcome

The client gains scarce, high-calibre capability without creating permanent overhead or accepting the quality variability of generic resource supply.

Flexible by design

Support is shaped around the client: an individual specialist, interim leader, assurance cell, specialist team, defined work package or partner-enabled delivery capability. The client retains ownership and authority.



HARDIUM CAPABILITY SHEET

RECOVERY & INTERVENTION

Solve the problem. Strengthen the team. Move on.

Focused support when a critical programme, project or technical decision is exposed.

Bring Hardium in when

- Delivery is slipping and competing narratives obscure the real causes.
- A major commitment is approaching without trusted readiness evidence.
- A technical, safety or governance problem is blocking progress.
- The client needs decisive support without a long consulting mobilisation.

Hardium can strengthen

- Rapid independent reality and readiness reviews.
- Technical baseline, interface and delivery recovery.
- Leadership reinforcement and specialist problem-solving.
- Assurance architecture and priority action control.
- Mobilisation of the exact team needed to close the issue.

The Hardium standard

- The problem and required outcome defined first.
- Smallest effective team and footprint.
- Direct integration with client leadership and delivery.
- Decisions and actions made visible and owned.
- Clean handover once the outcome is secure.

The outcome

The problem is resolved with minimum disruption, the client's delivery system is stronger and Hardium leaves when its specialist contribution is no longer required.

Flexible by design

Support is shaped around the client: an individual specialist, interim leader, assurance cell, specialist team, defined work package or partner-enabled delivery capability. The client retains ownership and authority.



HARDIUM EVIDENCE SELECTED
EXPERIENCE

Capability proven in the work.

Representative evidence behind Hardium's leadership, assurance and delivery model.

Evidence boundary

Case studies 1 and 3 describe David Hardy's experience before Hardium. Case study 2 is a Hardium engagement. Wider capability is provided through verified practitioners and approved partners; claims remain attributable to the people and organisations that delivered the work.

CASE STUDY 01

Scaling nuclear capability without losing technical control

Situation	A nuclear engineering function was growing rapidly while live civil, defence, fuel-cycle, waste and decommissioning work required stronger leadership and governance.
Intervention	David built SQEP, recruitment, governance and assurance arrangements; supported difficult delivery; and connected client need, technical scope and mobilisation.
Result	The function grew from approximately £1.25m to £6m turnover in under 24 months, supporting a 40+ person capability while strengthening technical quality and regulatory alignment.

What this demonstrates

Leadership, governance and capability integration.



HARDIUM EVIDENCE

CASE STUDY 02

Testing whether process-safety claims matched plant reality

Situation	A high-hazard pharmaceutical facility needed independent support around LOPA, safeguards, risk reduction and closure evidence.
Intervention	Through Hardium, the risk logic and evidence were independently challenged, including safeguards, independence assumptions and closure basis.
Result	Leadership received a clearer basis for prioritising action and strengthening the evidence supporting risk reduction and closure decisions.

What this demonstrates

Independent assurance grounded in evidence and plant reality.

CASE STUDY 03

Turning novel technology into an operating high-hazard facility

Situation	An advanced-materials business needed to turn new process technology into a functioning ISO 5 diamond manufacturing operation.
Intervention	David led concept development, detailed engineering, construction, commissioning, operations and commercialisation, integrating engineering, safety, quality and supply chain.
Result	The facility progressed from concept into stable production, creating an operating platform for commercial and technical development.

What this demonstrates

Whole-lifecycle engineering and accountable delivery.

