

Portfolio energy strategy: risk matrix

An example feasibility-stage risk assessment for a coordinated portfolio energy strategy

This matrix is a high-level example of how strategic, commercial, regulatory and technical risks can be assessed during the **feasibility stage** of a coordinated portfolio energy strategy. Risks are scored on a 5×5 likelihood-and-impact framework, with preliminary mitigations and indicative owners. It is **not** a detailed design or delivery risk register.

WHAT A MATRIX LIKE THIS IS FOR

- Highlight material risks that may influence investment or delivery viability
- Support informed decision-making prior to detailed design
- Identify areas requiring further technical or commercial validation
- Provide early visibility of escalation risks

RISK MATRIX LEGEND

Score	Rating	Action required	Likelihood scale	Impact scale
16–25	Critical	Immediate escalation	5 Almost Certain (>90%)	5 Catastrophic (>\$2M / project failure)
12–15	High	Senior management attention	4 Likely (60–90%)	4 Major (\$500k–\$2M / significant delay)
6–11	Medium	Active monitoring	3 Possible (30–60%)	3 Moderate (\$100k–\$500k / schedule impact)
1–5	Low	Routine management	2 Unlikely (10–30%)	2 Minor (\$50k–\$100k / minor delay)
			1 Rare (<10%)	1 Insignificant (<\$50k / negligible)

Example risk matrix — detailed assessment

ID	Risk Category	Risk Description	Likelihood (1-5)	Impact (1-5)	Risk Score	Risk Rating	Mitigation Strategy	Residual Risk	Owner
R01	Network Infrastructure	Network connection capacity insufficient or delayed for the site	4	5	20	Critical	Early engagement with the network operator; alternative connection options assessment; contingency budget allocation	Medium	Project Manager
R02	Network Infrastructure	Network augmentation costs exceed budget allowance	3	4	12	High	Detailed network study in design phase; competitive tendering; staged implementation approach	Medium	Commercial Lead
R03	Network Infrastructure	Grid export limitations restrict solar system sizing	3	3	9	Medium	Battery storage to maximise self-consumption; dynamic export limiting technology	Low	Technical Lead
R04	Regulatory	Embedded network regulatory framework changes adversely	3	4	12	High	Monitor AEMC rule changes; flexible commercial structures; RaaS partner with regulatory expertise	Medium	Legal / Compliance
R05	Regulatory	Changes to feed-in tariffs or network tariff structures	4	3	12	High	Financial model sensitivity analysis; diversified revenue streams; battery arbitrage capability	Medium	Commercial Lead
R06	Regulatory	Planning approval delays for solar installation at the site	3	3	9	Medium	Early planning consultation; DA preparation in parallel with design; alternative site options	Low	Project Manager
R07	Commercial	RaaS partner counterparty risk (insolvency / exit)	2	4	8	Medium	Due diligence on partner selection; contractual protections; backup retailer arrangements	Low	Commercial Lead
R08	Commercial	Wholesale electricity price volatility exceeds CPI escalation assumptions	3	4	12	High	Develop energy management capability; battery arbitrage hedging support; long-term partnership consideration; sensitivity modelling in business case	Medium	Finance
R09	Commercial	Tenant uptake in commercial precinct lower than forecast	2	3	6	Medium	Competitive embedded-network pricing; green energy marketing to tenants; flexible tariff structures; contracts linked to tenant leases	Low	Leasing Manager
R10	Commercial	Capital cost overrun on solar / BESS installation	3	3	9	Medium	Fixed-price EPC contracts; contingency allowance; competitive tender process	Low	Project Manager
R11	Technical	Battery degradation faster than modelled assumptions	2	3	6	Medium	Tier 1 battery supplier with warranty; conservative degradation assumptions; performance guarantees	Low	Technical Lead
R12	Technical	Solar yield underperformance vs. modelled output	2	3	6	Medium	Conservative yield assumptions (P75); performance ratio guarantees from EPC; ongoing monitoring	Low	Technical Lead
R13	Technical	System integration complexity with embedded-network metering	3	3	9	Medium	Experienced embedded-network operator; proven technology platforms; pilot testing before full rollout	Low	Technical Lead
R14	Technical	Cybersecurity breach affecting energy management systems	2	4	8	Medium	ISO 27001 compliant systems; regular penetration testing; incident response plan	Low	IT / Security
R15	Land / Site	Suitable land for ground-mount solar unavailable or uneconomic	4	4	16	Critical	Alternative rooftop options; reduced system size with battery focus; third-party land lease	High	Development Manager
R16	Land / Site	Aesthetic / planning objections to visible solar infrastructure	2	3	6	Medium	Minimise visually exposed assets; design integration with landscape; community engagement; screening solutions	Low	Planning Manager
R17	Stakeholder	Council handover terms unfavourable for energy assets	3	4	12	High	Early council engagement; clear asset transfer framework; retained supply agreement options	Medium	Executive Sponsor
R18	Stakeholder	Internal capability gaps for embedded-network ownership model	3	3	9	Medium	RaaS model minimises capability requirements; phased capability building; outsourced management and operation	Low	Operations Director
R19	Stakeholder	Excluded anchor tenant future integration complexity	2	2	4	Low	Maintain separate NMI approach; document future integration pathway if required	Low	Leasing Manager
R20	Market	Technology obsolescence (battery chemistry advances)	2	2	4	Low	Modular system design; technology refresh provisions; avoid long-term lock-in	Low	Technical Lead
R21	Market	EV charging revenue lower than opportunity suggests	2	2	4	Low	EV charging treated as upside only; conservative base case excludes this revenue	Low	Commercial Lead
R22	External	Extreme weather events affecting infrastructure	2	4	8	Medium	Insurance coverage; resilient design standards; business continuity planning	Low	Risk Manager