

RISK TABLES

1. Assessing the Likelihood Factor

Choose a description that best fits the likelihood of the project or its stakeholders actually incurring (experiencing) the selected impact, assuming reasonable effectiveness of the existing and tested preventative controls.

Factor	Uncertainty Description	Frequency How often might it / does it happen	Will it happen or not over the risk timescale
1	Very Low	Is very unlikely to occur in normal circumstances	Less than 5% chance
2	Low	Is unlikely to occur in normal circumstances	Around 10% chance
3	Moderate	Likely to occur in some circumstances or at some time	Around 25% chance
4	High	Is likely to occur at some time in normal circumstances	Around 60% chance
5	Very High	Will or almost certainly occur in normal circumstances	Around 90% chance

2. Assessing the Severity Factor

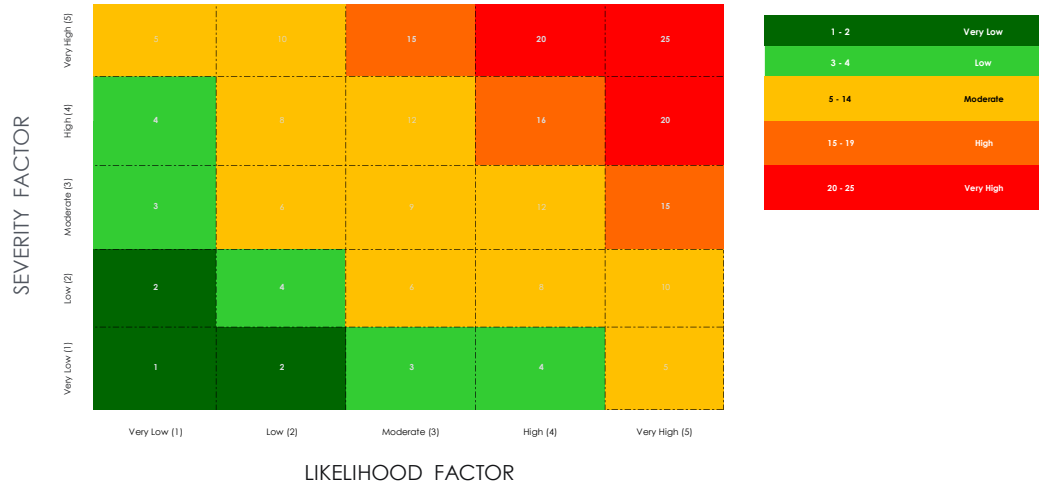
Considering the event being analysed, choose a description that best fits the expected degree of gain, harm, injury or loss from the most severe impact associated with that event, assuming reasonable effectiveness of existing and tested Mitigating Controls. Where there is more than one impact type possible, look across the table and choose the Highest level and corresponding Severity Factor.

Level	IMPACTS TYPES								Level
	General	Health & Safety	Environment	Time / Programme	Legal	Reputation	Quality / Performance	Financial	
1	Very unlikely to threaten overall project outcome in any meaningful way. Inconsequential and non-permanent damages.	Unreportable, negligible harm.	Unreportable, negligible harm.	Immeasurable impact to programme	Infings on legal duties but not to an extent where dutyholder liable	Immeasurable impact to reputation	Immeasurable impact on quality	Immeasurable cost impact	Negligible
2	Unlikely to threaten overall project outcome. Minor and non-permanent damages	Reportable incident, near miss or minor injury with no lost work time.	Requires minor clean up and/or change in working method	1-2 weeks delay to programme completion	Dutyholder liable for minor legal breach, though with minor consequence	Marginal / temporary reputational impact that can be readily overcome.	Requires minor corrective action, though unlikely to have a material impact on overall goals	£1K < £10K	Minor
3	May impact overall project. Can cause permanent damages in some cases and cost of rectification in others	Reportable incident, injury or illness resulting in lost work time (RIDDOR).	Reportable incident, significant clean up / change in working method	2-4 weeks delay to programme completion	Material breach of legal duties, potential financial penalty and enforced correction	Wider reputational impact, requires moderate intervention to overcome	Requires significant corrective action, likely to affect overall goals if not corrected	£10K < £250K	Moderate
4	Can cause significant impact to overall project, or result in complete termination. Will cause permanent and irreparable damages	Life changing / long-term injuries or illness	Long-term damage, requires major clean up and cessation of work.	4-8 weeks delay to programme completion	Negligence, impact to business continuity, prosecution with major financial penalty, contract termination	Long-standing public / multistakeholder reputational impact, requires major intervention to overcome over long-term	Likely to affect overall goals, unlikely to be corrected.	£251K < £1.5M	Major
5	Will cause significant impact to overall project, or result in complete termination. Will cause permanent and irreparable damages	Fatality	Environmental disaster, permanent and unrecoverable impact to multiple receptors	Several months delay to programme completion	Criminal / corporate gross negligence, custodial sentences, severe impact to business continuity, contract termination	Permanent public / multistakeholder reputational impact, severely affecting business continuity	Failure to meet overall goals. Project cessation.	> £1.5M	Catastrophic

RISK MATRIX

When the probability and impact scores have been assigned to each of the risks, they can be plotted on a risk map to have an overview of the overall CCC's risk profile.

$$\text{RISK RATING} = \text{SEVERITY FACTOR} \times \text{LIKELIHOOD FACTOR}$$



PROPOSAL - PROCEED TO INSTALLATION & FINANCE OFFER

No.	Category	Risk Description	Causes / Triggers	Impacts	Pre-Control Risk Level			Post-Control Risk Level			
					Likelihood	Severity	Risk Lev	Control Measure	Likelihood	Severity	Risk Level
1	Installation	Customer property is damaged during installation	1. Improper installation methods 2. Negligent / poor quality workmanship	1. Reputational, customers complaints	2	3	6	1. Appoint contractor with relevant accreditations for energy efficiency and renewable energy installation e.g. MCS, PAS 2030/2035 & Trustmark 2. Contractor to survey all properties, identify and account for risks. 3. Contractor to set out proposed installation and positioning of equipment in their designs shared with customer and ensure customer is in full agreement. 4. Contractor required to have Contractor's All Risks insurance for full reinstatement value. 5. Retrofit Co-ordinator will conduct a post installation inspection of all properties	1	3	3
2	Installation	Disturbance and disruption caused by installation	1. Temporary loss of heating and hot water 2. Need to clear spaces e.g. in lofts, around radiators and pipework 3. Inconsiderate parking of contractor vehicles	1. Reputation and relationship with customers 2. Complaints	5	3	15	1. Contractor to set out proposals in home survey report and explain to customers requirements for clearing spaces and likely duration of heating & hot water outages 2. Schedule installations for outside of heating season 3. Contractor to minimise number of vehicles used and instruct operatives to park considerately	3	2	6
3	HEALTH & SAFETY	Injury during installation	1. Insufficient safe systems of work in place on site / insufficient risk management practices 2. Incompetent workers	1. Reputational damage 2. Injury	3	5	15	1. Contractor required to have and maintain a Health & Safety policy 2. Appoint suitably qualified and accredited contractor 3. Contractor to ensure effective H&S controls, policies and procedures are in place on site. 4. Contractor is required to provide 24/7 emergency support 5. Council has a right to terminate in the event of H&S breaches	1	5	5
4	COMMISSIONING	No heat or hot water	1. Poor coordination and execution of commissioning 2. Failure of equipment	1. Reputation and relationship with customers 2. Loss of heat for customers	3	3	9	1. Appoint contractor with relevant accreditations for heat pump installation & commissioning i.e. MCS 2. Procure heat pumps from reputable supplier (Daikin) 3. Contractor to be Daikin trained 4. Heat pump supplier has local (St Ives) supply depot for spares	1	2	2
5	SECURITY	Theft or vandalism of materials during installation	1. Insufficient security during works	1. Reputational impact 2. Delays to installation	2	2	4	1. Contractor to secure all loose equipment and materials during installation works 2. Contractor required to have Contractor's All Risks insurance	1	2	2
6	LEGAL ISSUES	Installation breaches planning requirements	1. Installation design fails to meet permitted development requirements for solar or heat pumps 2. Resident fails to apply for planning consent if required	1. Reputational impact 2. Installation delay	2	2	4	1. Appoint contractor with relevant knowledge and experience of heat pump and solar installation 2. Contractor to design installations to comply with permitted development requirements 3. If permitted development requirements cannot be met contractor to make resident aware of their obligation to seek planning consent 4. Resident advice on planning and permitted development has been made available on Action on Energy website	1	2	2
7	QUALITY	Installation works fails to achieve expected quality	1. Poor workmanship 2. Substandard materials	1. Reputational impact	2	3	6	1. Appoint contractor with relevant accreditations for energy efficiency and renewable energy installation e.g. MCS, PAS 2030/2035 & Trustmark 2. Contractor to survey all properties to inform design 3. Contractor to set out proposed installation and positioning of equipment in their designs shared with customer and ensure customer is in full agreement. 4. Contractor required to have Contractor's All Risks insurance for full reinstatement value. 5. Heat pumps to come from reputable supplier 6. Contractor to be trained by heat pump supplier 7. Retrofit Co-ordinator will conduct a post installation inspection of all properties	2	3	6
8	TIME/PROGRAMME	Installation work is delayed relative to promised dates	1. Contractor under-resourced 2. Equipment suppliers unable to provide equipment	1. Installation delays 2. Reputational damage	3	3	9	1. Assess contractor resourcing as part of tendering 2. Use of equipment with local supply capacity 3. Contractor to provide weekly updates to consortium on installation dates	2	1	2
9	H&S	Legionella outbreak	1. Inadequate hot water system temperatures 2. Inadequate water quality/hygiene	1. Reputational damage 2. Adverse health impacts	2	3	6	1. Appoint contractor with relevant accreditations for heat pump and hot water installation e.g. MCS, PAS 2030/2035 & Trustmark 2. Contractor to implement legionella control strategy on all installations 3. All installations will involve full pipework replacement and refilling 4. Contractor required to have Contractor's All Risks insurance for full reinstatement value. 5. Retrofit Co-ordinator will conduct a post installation inspection of all properties	1	3	3
10	PERFORMANCE	Energy savings not delivered in operation	1. Heat loss not assessed 2. Heat emitters or heat pumps not correctly specified 3. Controls not optimised		3	2	6	1. Appoint contractor with relevant accreditations for heat pump installation and domestic retrofit e.g. MCS & PAS 2030/2035 2. Full survey, PAS whole house assessment, MCS heat loss assessment, RdSAP and heat pump supplier design calculations to be completed 3. Retrofit Co-ordinator will conduct a post installation inspection of all properties 4. Consortium to monitor post installation performance	2	2	4
11	ENVIRONMENT	Heat pumps cause a noise nuisance in operation	1. Heat pump too close to neighbours or sound reflective barrier 2. Noisy units specified		3	2	6	1. Appoint contractor with relevant accreditations for heat pump installation i.e. MCS 2. Contractor to conduct MCS noise assessment and comply with MCS-020 standard 3. Retrofit Co-ordinator will conduct a post installation inspection of all properties	1	2	2

SUSPEND PROJECT

No.	Category	Risk Description	Causes / Triggers	Impacts	Pre-Control Risk Level			Post-Control Risk Level			
					Likelihood	Severity	Risk Level	Control Measure	Likelihood	Severity	Risk Level
1	REPUTATION	Criticism from residents who wished to proceed with installation	Council withdrawal from scheme	1. Reputational damage	3	3	9	1. Agree lines with Comms, including noting that residents can take forward proposals and have heat pumps installed under the Boiler Upgrade Scheme in the absence of Council involvement	3	2	6
2	REPUTATION	Council withdrawal reinforces negative attitudes to heat pumps	Council withdrawal from scheme	1. Reputational damage 2. Increases challenge of achieving Council's Net Zero ambition	2	3	6	1. Agree lines with Comms with positive messaging about heat pumps and focussing decision to withdraw on limited uptake and limited additionality from Council involvement	1	3	3
3	ENVIRONMENT	Negative impact on heat pump deployment	Council withdrawal from scheme	1. Increases challenge of achieving Council's Net Zero ambition	2	3	6	1. Continue Comms activity to support heat pumps for decarbonising heating e.g. through Action on Energy website and Council's Domestic Energy Efficiency Guidance document	2	3	6
4	GENERAL	Loss of learning from installation phase	Council withdrawal from scheme		5	2	10	1. Request consortium share lessons if they continue without the Council 2. Review literature to continue to develop knowledge of experience in domestic ASHP installation	3	2	6

SIGNPOST RESIDENTS TO COMMERCIAL OFFERINGS

No.	Category	Risk Description	Causes / Triggers	Impacts	Pre-Control Risk Level			Control Measure	Post-Control Risk Level		
					Likelihood	Severity	Risk Level		Likelihood	Severity	Risk Level
1	REPUTATION	Criticism from residents who wished to proceed with installation under A Council backed scheme	Council withdrawal from scheme	1. Reputational damage	3	3	9	1. Agree lines with Comms, including directing residents to a range of commercial offerings	3	2	6
2	REPUTATION	Council withdrawal reinforces negative attitudes to heat pumps	Council withdrawal from scheme	1. Reputational damage 2. Increases challenge of achieving Council's Net Zero ambition	2	3	6	1. Agree lines with Comms with positive messaging about heat pumps and focussing decision to withdraw on limited uptake and limited additionality from Council involvement	1	3	3
3	ENVIRONMENT	Negative impact on heat pump deployment	Council withdrawal from scheme	1. Increases challenge of achieving Council's Net Zero ambition	2	3	6	1. Continue Comms activity to support heat pumps for decarbonising heating e.g. through Action on Energy website and Council's Domestic Energy Efficiency Guidance document	2	3	6
4	GENERAL	Loss of learning from installation phase	Council withdrawal from scheme	1. Council has less knowledges to utilise in supporting further steps to roll out heat pumps	5	2	10	1. Request consortium share lessons if they continue without the Council 2. Review literature to continue to develop knowledge of experience in domestic ASHP installation	3	2	6
5	GENERAL	Increased burden on residents seeking installations	Council withdrawal from scheme	1. Need to engage with separate suppliers for insulation and solar PV 2. Need to check suppliers have appropriate accreditations and financial standing	5	2	10	1. Guidance on Council and Action on Energy website directs residents to seek MCS accredited installers 2. Action on Energy website provides residents access to 5 insulation installers vetted by City Council and Cambridgeshire Energy Retrofit Partnership (of which we are a member)	5	1	5
6	GENERAL	Residents fall victim to rogue installers	Council withdrawal from scheme	1. Reputational damage to Council 2. Financial loss to residents 3. Negative impact on residents well being	3	2	6	1. Guidance on Council and Action on Energy website directs residents to seek MCS accredited installers	2	2	4