

A HYPOTHETICAL UK INFRASTRUCTURE PORTFOLIO

12 locations. 4 priorities. A clearer next step.

Exploring how a connected climate-intelligence workflow can focus the questions a team asks next.



Illustrative case study — not a customer result.

All sites, indices, and outputs in this document are fictional demonstration data. This is a workflow example, not a real-world climate-risk assessment or a forecast.

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01 / START WITH THE DECISION

Which sites deserve a closer look?

Imagine an infrastructure team responsible for twelve locations. It needs a focused starting point for a review meeting, not an unexplained league table.

The hypothetical decision

Agree which locations to investigate first, which assumptions need checking, and what evidence to request from local teams.

The challenge

The organisation has an asset inventory, but environmental context is scattered. Different teams use different terminology. A risk score without an explanation could accelerate a meeting while weakening the decision behind it.

The proposed workflow

1. **Connect:** organise a consistent portfolio and clarify the review question.
2. **Explore:** compare an illustrative exposure layer across locations.
3. **Understand:** identify review priorities and the assumptions behind them.
4. **Act:** prepare a brief that turns screening into a local evidence-gathering plan.

What this example can demonstrate

A shared interface can make a conversation easier to organise. This example demonstrates that interaction pattern. It does not establish predictive accuracy, avoided losses, return on investment, or the effectiveness of any adaptation measure.

02 / MAKE THE ASSUMPTIONS VISIBLE

The inputs. The method. The limits.

The dataset is deliberately small and fully inspectable. Every number is synthetic.

12

fictional locations

0–100

demonstration index

 ≥ 70

illustrative review threshold

ID	Location label	2030	2050	2030 priority
SY-001	Canterbury Hub	72	84	Elevated
SY-002	Ashford Site	62	70	Standard
SY-003	Maidstone Works	56	65	Standard
SY-004	Sevenoaks Park	34	46	Standard
SY-005	Dover Link	78	88	Elevated
SY-006	Tunbridge Campus	45	56	Standard
SY-007	Folkestone Point	39	50	Standard
SY-008	Medway Centre	74	86	Elevated
SY-009	Brighton Works	51	63	Standard
SY-010	Lewes Site	44	55	Standard
SY-011	Guildford Hub	71	80	Elevated
SY-012	Reigate Campus	36	49	Standard

How the example is calculated

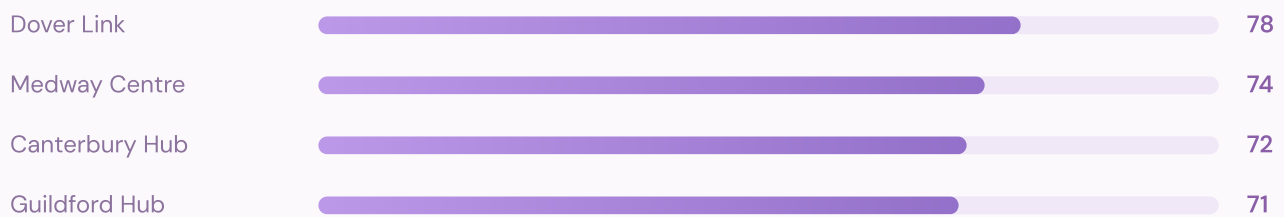
The portfolio index is the unweighted arithmetic mean of the twelve site indices, rounded to the nearest integer. “Elevated” means an index of 70 or above. The 2040 view interpolates between the two supplied endpoint values. Neither endpoint is derived from a climate model.

Important distinction: a score of 78 is not a 78% flood probability. These indices have no units, return periods, or empirical calibration. The location labels do not describe actual assets.

03 / TURN A PATTERN INTO BETTER QUESTIONS

Four priorities. Not four conclusions.

At the 2030 baseline, four fictional locations meet the example review threshold. The portfolio average is 55/100.



Interpret the pattern with care

The ranking gives the hypothetical team a place to start. It does not explain flood depth, warning time, access-route disruption, existing protection, or the vulnerability of a particular building. Those details would change the operational meaning of exposure.

A useful AI-assisted question

"Which evidence would help us understand whether these exposure signals translate into disruption for this site?"

What happens at the threshold?

Guildford Hub's index of 71 sits close to the example cut-off. A small change would alter its category without necessarily changing the underlying decision. A real workflow should examine sensitivity rather than treat the threshold as a scientific boundary.

What changes in the 2050 scenario?

The synthetic portfolio average rises to 66/100 and five locations meet the threshold. Ashford Site joins the list with an index of 70. This is a demonstration of scenario comparison, not evidence of a projected physical outcome.

04 / MAKE THE NEXT STEP PRACTICAL

From a shared screen to a focused review.

The output should be a question-led action plan. It should not imply that the screening exercise has finished the assessment.

01 Validate the inventory

Confirm locations, site boundaries, operational functions, critical access routes, and the people responsible for each record.

Evidence: an agreed asset register and clear ownership.

02 Bring in appropriate hazard evidence

Use licensed, relevant datasets with documented scale, resolution, dates, scenario assumptions, and limitations. Check whether they fit the question.

Evidence: a source register and suitability review.

03 Test the operational interpretation

Discuss local vulnerabilities, protections, dependencies, and service consequences with site teams and qualified specialists.

Evidence: reviewed assumptions and a record of uncertainties.

04 Evaluate possible responses

Compare options, costs, practical constraints, and monitoring needs. Decide which measures warrant more detailed appraisal.

Evidence: an accountable next-step plan, not an automatic recommendation.

Success criterion for a real pilot

Can participants explain why a site is prioritised, what remains uncertain, and which evidence is needed next? Define and measure that usefulness against the existing process.

05 / KEEP THE EXAMPLE IN PERSPECTIVE

A workflow to explore. A judgement to validate.

What this case study does not claim

It does not describe a Syrili customer engagement, a validated scientific model, real asset exposure, an achieved emissions reduction, or avoided financial loss. There are no measured commercial outcomes. Synthetic indices cannot establish the performance of the future platform.

What can transfer to a real engagement

The sequence is useful: start with a decision, organise the inventory, make evidence and assumptions visible, explore scenarios, and agree a practical review plan. A real engagement would require appropriate data, expert input, evaluation, and an agreed service scope.

Further reading

[IPCC — AR6 Synthesis Report](#)

Climate impacts, risk, adaptation, and uncertainty.

[NASA Earthdata](#)

Earth observation data, access, and documentation.

[UK Government — Check long-term flood risk](#)

Official public information for a real UK flood-risk question.

YOUR QUESTION COULD SHAPE WHAT'S NEXT

Let's explore your use case.

Tell us about your locations, the decision you need to make, and what a useful outcome would look like.

syrili.com/contact.html ↗

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