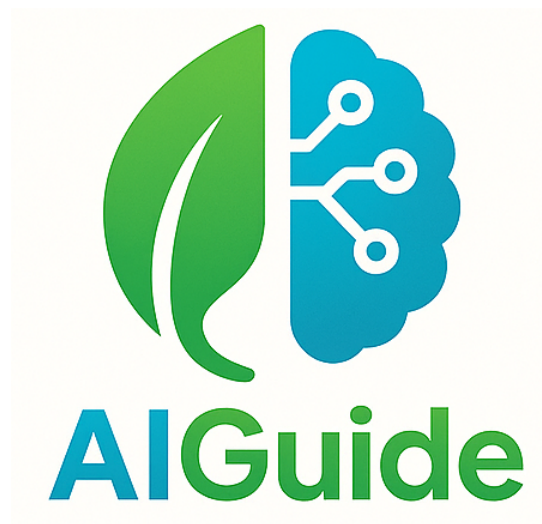




ONLINE COURSE CONTENT

MODULE 3: CLIMATE POLICY AND INSTITUTIONAL DECISIONS

2025-1-LT01-KA220-HED-000354784

Artificial Intelligence for Green Understanding, Insights & Decision Empowerment



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Co-funded by
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A. General Information

Module No	☐ Module1 ☐ Module2 ☒ Module3 ☐ Module4 ☐ Module5
Subtopic	Climate policy and institutional decisions
AI Literacy Component	Policy-relevant evidence; institutional data interpretation
Decision Making Skills	Risk analysis; policy based decision making
Teacher Learning Outcome	Interpret climate or institutional AI-supported green decision-making scenarios
Student Transfer Outcome	Evaluate climate-related uncertainties and implications.
Possible AI Tools	Climate data tools; Power BI Copilot; chatbots
AI Literacy Level	Advanced
Estimated Duration	60 minutes

B. Content:

Highlights

1. Climate policy and institutional decisions are deeply intertwined: the effectiveness of a climate policy depends on the institutional framework that shapes, implements and sustains it (Averchenkova & Nachmany, 2017; Dubash et al., 2021).
2. Historical institutionalism explains why climate policy oscillates over time: critical junctures produce change, while path dependence produces continuity shaped by past decisions (Cui, 2025; Mealy et al., 2024).
3. Political and cultural context matters: fragmented governance and polarization impede coherent policy, while robust multi-level governance and public consensus support policy continuity (Guo, 2025; Finnegan, 2022).
4. Turning institutional data into policy-relevant evidence is not a purely technical task; it is embedded in political and institutional dynamics that shape how evidence is framed, prioritized and used (Liverani et al., 2013; Strassheim & Kettunen, 2014).
5. Risk analysis provides a structured way to assess the probability and consequences of hazardous events, supporting accountable, policy-based decision making under uncertainty.
6. AI tools — climate data platforms, Power BI Copilot and chatbots — can help teaching staff and students interpret institutional climate scenarios, but their outputs must be critically evaluated for uncertainty and political feasibility.

Introduction

Universities, ministries, municipalities and companies increasingly make green decisions inside institutional structures: emission-reduction targets, sustainability strategies, procurement rules and climate action plans. For STEM teaching staff, this subtopic addresses an advanced layer of AI literacy: how to interpret climate or institutional AI-supported green decision-making scenarios, and how to help students evaluate climate-related uncertainties and their implications. Whereas earlier subtopics focused on evidence-based reasoning (3.2) and resource-efficiency trade-offs (3.3), Subtopic 3.4 moves to the policy level: how institutions transform evidence into decisions, why apparently rational policies fail or succeed in different institutional contexts, and how risk analysis structures policy-based decision making.

This session combines three strands drawn from the module matrix: (1) policy-relevant evidence and institutional data interpretation as the AI literacy component, (2) risk analysis and policy-based decision making as the decision-making skill, and (3) hands-on work with climate data tools, Power BI Copilot and chatbots as the supporting AI toolset. The material below can be used directly with teaching staff in a 60-minute professional development session, and the same content and activities can then be transferred to students in STEM lectures.

B.1 Why Climate Policy Depends on Institutions

Climate policy and institutional decisions are deeply intertwined. Institutions play a crucial role in shaping, implementing and sustaining climate policies, and the effectiveness of climate policies often hinges on the institutional frameworks that support them — frameworks that vary significantly across political and cultural contexts.

Historical institutionalism: critical junctures and path dependence

Historical institutionalism offers a lens for understanding shifts in climate policy over time. In the United States, climate policy has oscillated between active and passive stances due to *critical junctures* and *path dependence*, driven by partisan contestation between Democratic and Republican leaderships (Cui, 2025). Critical junctures represent moments of significant change; path dependence reflects continuity shaped by past decisions. Their interplay has produced a persistent lack of policy continuity in U.S. climate governance (Cui, 2025). Path dependence also has a constructive side: countries are more likely to adopt policies that align with their existing institutional capacity, and this regularity can be leveraged to identify climate policies that are both feasible and strategic for a given country (Mealy et al., 2024).

Institutional frameworks for implementation

Effective climate policy implementation requires robust institutional frameworks that make policies durable, legitimate and effective — including a clear delineation of responsibilities, stakeholder engagement and an efficient state bureaucracy (Averchenkova & Nachmany, 2017). Institutions mediate political interests and guide policy development and implementation; they are essential for translating long-term emission-reduction targets into near-term actions (Dubash et al., 2021). The Brazilian experience highlights institutional diversity, cooperation and political competition as key factors in climate governance, underscoring the importance of inclusiveness and accountability in decision-making processes (Rodrigues & Galvão, 2018).

Political and cultural influences

Political and cultural factors significantly shape climate policy outcomes. Australia's fragmented governance structure and political polarization impede coherent policy development, whereas Norway's robust multi-level governance and public consensus ensure policy continuity; the absence of binding enforcement mechanisms in Australia contrasts with Norway's legally binding commitments, underscoring the importance of aligning institutional design with societal values (Guo, 2025). Electoral rules and interest-group intermediation also matter: proportional electoral rules and concertation between industry and the state can lead to higher policy stringency and a more effective distribution of costs (Finnegan, 2022). Finally, institutional design itself — accountability arrangements and effective monitoring of decision making — is a strategic question for climate policy, as debates about emissions trading schemes and governance arrangements demonstrate (Ergas, 2010).

Key message for teaching staff: when interpreting an AI-generated climate policy scenario, the question is never only “Is the evidence sound?” but also “Which institutions will carry this decision, and does the design fit the political and cultural context?”

Video — Christian Downie, "How We Win on Climate Change" (TEDxANU, ~12 min).

<https://www.youtube.com/watch?v=yztpMAnK3hY>

Interactive comparison — Climate Action Tracker country pages (Australia vs Norway).

The document already contrasts Australia's fragmented governance with Norway's multi-level consensus (Guo, 2025). Readers can open both country cards side by side and see how each translates institutional design into actual policy ratings. Link: <https://climateactiontracker.org/countries/>

B.2 From Institutional Data to Policy-Relevant Evidence

Interpreting institutional data for policy-relevant evidence is a multifaceted process involving the interplay between evidence generation, institutional structures and political contexts. The

synthesis of evidence into policy is not merely a technical task; it is deeply embedded in the political and institutional frameworks that govern decision making.

7. Institutional structures shape evidence supply. In Cambodia, evidence-based approaches are emphasized, yet fragmented research activities and the absence of a national policy guiding evidence use persist; structural arrangements are needed to facilitate data supply and its integration into policy making (Liverani et al., 2018). In Nigeria, institutional structures for policy making exist, but the use of research evidence is suboptimal — funding is inadequate and often donor-driven, pointing to the need for better institutional prioritization and engagement between policy makers and researchers (Uneke et al., 2023). Ethiopia's experience shows that failures of evidence-based policy can stem from weaknesses in both the research process and the indigenous policy-making process (Mitchell & Font, 2017).

8. Politics conditions evidence use. Political systems and institutional mechanisms — state centralization, external donor influence, bureaucratic organization — strongly influence how evidence is framed and utilized in policy (Liverani et al., 2013). Evidence use is not uniform: it varies with issue characteristics and stakeholder influence, as comparative analysis of health policy processes demonstrates (Walls et al., 2017). When the struggle for political and epistemic authority dominates, evidence-based policy can turn into policy-based evidence, with evidence socially embedded in cultural and authority relations (Strassheim & Kettunen, 2014).

9. Capacity and communication are decisive. Low- and middle-income countries face challenges in both generating and using policy-relevant evidence; institutional capacity building, improved communication between researchers and decision makers, and the availability of relevant evidence are essential for enhancing evidence uptake (Shroff et al., 2017).

10. Methodologies and governance frameworks can help. Data-driven decision support systems can facilitate the assessment of multiple policy alternatives and promote institutional efficiency (Vargas & Gautama, 2021), while building a data-driven organization requires a governance framework that transforms data into actionable knowledge, as illustrated by the Spanish central administration (Varela Merino, 2023).

For STEM educators, the transferable insight is that institutional dashboards, sustainability reports and emissions inventories are not neutral inputs. Before AI tools are asked to summarize or visualize such data, staff and students should ask: Who produced this data,

under which institutional incentives? What is missing? Which framings does the data structure make easy, and which does it hide?

Interactive dashboard — OECD Climate Action Dashboard. The single best embodiment of "institutional data → policy evidence" available online: emissions status, policies, risks, and just-transition indicators for OECD countries and partners, updated regularly under the IPAC/CAPMF framework. Readers can pick a country and see exactly the kind of institutional dashboard the section discusses. Link: <https://www.oecd.org/en/data/dashboards/climate-action-dashboard.html>

Interactive chart set — Our World in Data, CO₂ and GHG Emissions. Free, licence-friendly for reuse in an ebook (CC-BY). Suggested embeds: "Annual CO₂ emissions by world region," "Change in CO₂ emissions and GDP," "CO₂ emissions by sector." These make the point that the *same data* can be framed to support very different policy narratives depending on the visualization choice. Link: <https://ourworldindata.org/co2-and-greenhouse-gas-emissions>

B.3 Risk Analysis for Policy-Based Decision Making

Risk analysis plays a crucial role in policy-based decision making by providing a structured approach to understanding and managing the risks associated with policy interventions. It involves assessing the probability and the consequences of hazardous events, which helps policy makers take informed decisions. Integrating risk analysis into policy processes addresses technical, social and value issues together, enhancing both the effectiveness and the accountability of policies — particularly where risks are complex, uncertain or ambiguous, as in environmental, technological and safety-related domains.

Frameworks

11. Quantitative barrier-based methodologies, such as fault trees and event trees, are used to manage safety and security incidents by quantifying the probability of undesirable events; they are particularly useful in critical decision-making processes.
12. Bayesian networks allow risk scenarios to be mapped so that conditional probabilities can be manipulated to explore alternative assumptions and outcomes, supporting comprehensive decision making under uncertainty.

Applications in policy making

13. Regulatory contexts. Risk analysis is integral to EU decision making, where it is used to regulate product, service, environmental and climate risks that cannot be managed at the individual level and therefore require a structured approach to assessment and management.

14. Siting hazardous facilities. Risk analysis clarifies potential losses and facilitates negotiations among stakeholders, for instance by redistributing gains and losses through compensation.

Challenges and limitations

15. Perception and communication. The effectiveness of risk analysis depends on how risks are perceived and communicated; misunderstandings can lead to disputes and litigation, so risk assessments must be clear and comprehensible.

16. Political and organizational dynamics. Risk-based policy making can be filtered through organizational routines that reinforce existing practice rather than challenge it, and using risk analysis primarily for audit purposes may undermine the reflexivity of policy making.

17. Analytical versus political rationality. Critics argue that risk-based approaches often assume a linear-instrumental rationality that does not fit all contexts; a more comprehensive analysis should also consider political acceptability and context-specific needs, and risk analysis should not become an epistemic trap that forecloses other viable decision-making models.

In short, risk analysis is a valuable tool for policy-based decision making, but its application must be context-sensitive, balancing analytical rigour with political feasibility to ensure effective and accountable policy.

B.4 AI Tools for Interpreting Climate Policy Scenarios

The module matrix identifies three AI tool families for this subtopic. Each maps onto one strand of the content above:

18. Climate data tools (open climate and emissions data platforms and dashboards) provide the raw institutional and environmental evidence base. Staff and students use them to ground policy scenarios in real observations rather than in AI-generated approximations.

19. Power BI Copilot (and comparable AI-assisted analytics features in spreadsheet and BI tools) supports *institutional data interpretation*: querying an emissions inventory or policy-indicator dataset in natural language, generating visualizations, and flagging trends and anomalies that feed a policy argument.

20. Chatbots (general-purpose AI assistants) support *scenario interrogation*: articulating a proposed policy, stress-testing it against institutional constraints (path dependence, capacity, accountability), generating structured risk registers, and

drafting policy briefs — always subject to critical human evaluation of accuracy, bias, uncertainty and political feasibility.

A critical AI literacy point at the *Advanced* level: AI systems can produce fluent, confident policy narratives that ignore institutional feasibility. The pedagogical task is to make participants interrogate AI outputs with the concepts from B.1–B.3 — asking about critical junctures, institutional capacity, evidence provenance and risk framing — rather than accepting a well-written scenario at face value.

Video — Microsoft's official "Copilot in Power BI" demo (~3 min). The canonical short demo, showing natural-language querying of a dataset and auto-generated visuals. Perfect one-click illustration of the "institutional data interpretation" claim. Link: https://www.youtube.com/watch?v=wr__6tM5U6I

Video — "How did Copilot do that?" transparency feature (~2 min). This one directly matches the *Advanced* AI-literacy point in your text — Copilot exposing the data and filters behind its answer so users can verify it. It's a much better teaching artefact than a generic demo because it shows critical evaluation of an AI output. Link: <https://www.youtube.com/watch?v=2uQ2MTy9a1k>

B.5 Anatomy of an effective policy-analysis prompt

Chatbots and Copilots are only as good as the prompt they receive. When you use one to stress-test a policy plan or interrogate an institutional assumption, a well-structured prompt names four things: who the AI should act as (*role*), what it should do (*task*), the material it is working from (*context*), and how the answer should be organised (*expected output*). Making these components explicit gives you a first draft you can critique on the terms you set — and lets students learn the pattern by seeing it applied, not only by being told about it.

Colour key: Role Task Context Expected output

Example 1 — Sceptical policy-audit prompt

Act as a sceptical policy auditor reviewing our city's climate action plan (pasted below). List the five strongest reasons this plan might fail for institutional — not technical — reasons, as a numbered list where each item names the institution(s) responsible and the type of failure (capacity, accountability, path dependence, or political context).

Example 2 — Follow-up prompt to surface hidden assumptions

Identify the assumptions about future emissions, funding and enforcement that this plan makes implicitly, and for each, state one type of evidence a reader would need to judge whether the assumption is reasonable.

Notice that Example 2 does not repeat the *role* or the reference to the plan: in a running chat both are still in force, and the sceptical-auditor voice carries into the follow-up. Staff can use this four-part checklist when demonstrating prompt design with students — if any component is missing or vague, the AI's answer will inherit that vagueness. The same shape applies whether the tool is a general chatbot, Power BI Copilot working over a dataset, or Copilot Chat working over a policy document.

B.6 60-Minute Professional Development Session Plan (Workshop for Teaching Staff)

Note on the session structure. The 60-minute plan below describes a professional development (PD) session delivered to STEM higher-education teaching staff — the "participants" in the table are the teachers themselves, not the students in their courses. The session is designed as a synchronous, workshop-style experience (face-to-face or online), in which participants work through AI-supported forecasting, resource-use analysis and a weighted decision matrix as learners, using the same tools and dataset they will later adapt for their own STEM courses. It is not a self-paced e-learning module, nor a lesson plan to be delivered directly to STEM students.

The plan therefore operates at two levels. At the PD level, it is what teaching staff experience during the workshop; at the classroom level, it becomes the blueprint that teachers adapt for their own students. The transfer step is supported in the sections that follow: Section C provides a guideline for constructing an equivalent real-life case in the teacher's own discipline, and Section D provides a design guideline and student activity card for use with STEM higher-education students. Where the table refers to "participants", "teams" and "the case dataset", these refer to the teaching-staff learners in the PD session; the parallel student-facing materials are those developed via Sections C and D.

Time	Phase	Participants' activity	Materials / Tools
0–5 min	Opening & framing	Welcome; present the teacher learning outcome (interpret climate or institutional AI-supported green decision-making scenarios) and the student transfer outcome (evaluate climate-related uncertainties and implications).	Slides; Section A table
5–20 min	Mini-input	Interactive mini-lecture on B.1–B.3: institutions and climate policy, institutional data as evidence, and risk analysis for policy decisions. Prompt: "Think of a policy at your own institution that succeeded or failed for institutional, not technical, reasons."	Slides; Sections B.1–B.3
20–40 min	Scenario work (pairs/small groups)	Groups receive an AI-generated climate policy scenario (e.g., a campus carbon-neutrality plan drafted with a chatbot). Using a structured worksheet, they interpret the	Chatbot; climate data tool; scenario worksheet

Time	Phase	Participants' activity	Materials / Tools
		scenario: evidence base, institutional assumptions, risk register (probability × consequence), and key uncertainties.	
40–50 min	Risk & feasibility check	Groups query the underlying dataset with Power BI Copilot (or an equivalent AI-assisted analytics tool) to verify one claim from the scenario, then rate the policy's institutional feasibility and identify one critical juncture that could change its trajectory.	Power BI Copilot; sample emissions dataset
50–55 min	Plenary discussion & transfer	Groups report the biggest uncertainty they identified and how they would ask students to evaluate it. Discussion: how to adapt the scenario exercise to each participant's discipline.	Flipchart / shared board
55–60 min	Wrap-up & next steps	Summarize key messages; introduce the Section C real-life example task and the Section D activity card as follow-up work for participants' own courses.	Sections C and D

C. Real Life Example

C.1 Real-Life Example: Drafting a Green Infrastructure Policy Brief with Microsoft Copilot

The following real-life example, adapted from the AIGUIDE WP2-A3 Best Practices Report (Section 3.1, Generative AI Assistants & Chatbots), illustrates how the workflow of this subtopic — institutional data interpretation feeding a policy-based decision — plays out in practice.

In a STEM higher education course on sustainable engineering, students use Microsoft Copilot Chat embedded in Word to draft a green infrastructure policy brief. The workflow mirrors this subtopic exactly: institutional data interpretation feeding a policy-based decision.

21. Institutional data interpretation. Students first use Copilot in Excel to analyse real regional carbon-emission datasets: Copilot identifies trends, suggests visualizations and flags anomalies without requiring complex formula knowledge — the same AI-assisted analytics workflow available in Power BI Copilot.

22. Guided evidence-based reasoning. The Study and Learn Agent poses guided questions about the data (“What does this trend suggest about the relationship between industrial output and emissions?”), pushing students to reason from evidence rather than assert conclusions.

23. Institutional grounding. With Copilot Studio, educators build custom AI agents grounded in institutional sustainability data, which students query as part of a scenario simulation exercise — a direct application of interpreting institutional AI-supported scenarios.

24. Deliberation and trade-offs. In Teams, Copilot summarizes interdisciplinary group discussions on sustainability trade-offs, capturing action items and linking them to relevant readings, while all interactions remain inside the institution's secure Microsoft 365 environment.

The outcome is a policy brief in which every recommendation is traceable to institutional data, key risks and uncertainties are stated explicitly, and the limits of the AI's contribution are documented — modelling exactly the interpretation and evaluation skills targeted by Subtopic 3.4.

Best Practices Report, Section 3.1 "Generative AI Assistants & Chatbots", specifically the *Microsoft Copilot Chat* use-case block on p. 8.

C.2 Staff Guideline: Prepare a Real-Life Example from Your Own Subject Area

After discussing the example above, each participant prepares one real-life example connecting climate policy, institutional decisions and AI-supported analysis in their own discipline. Use the following guideline:

25. Step 1 – Choose an institutional decision. Select a real climate-related decision made by an institution relevant to your field (a ministry regulation, a municipal climate action plan, a university sustainability target, a company's net-zero commitment).

26. Step 2 – Identify the institutional data. Locate the datasets or reports the institution used or should have used (emissions inventories, energy statistics, climate projections, monitoring reports).

27. Step 3 – Map the institutional context. Note the responsible bodies, accountability mechanisms and any path dependence or critical juncture that shaped the decision (concepts from B.1).

28. Step 4 – Add the AI layer. Specify how an AI tool (climate data tool, Power BI Copilot, chatbot) could support interpreting the data or stress-testing the policy — and where its output would need critical evaluation.

29. Step 5 – Frame the risk question. Formulate one risk-analysis question students could answer (probability, consequence, uncertainty, feasibility).

30. Step 6 – Share and refine. Present the example in 3 minutes to a peer; refine it based on feedback and note how you would use it in your next lecture.

D. Interactive Learning Activity

D.1 Example Student Activity Card

The following activity card is prepared in the WP3-A2 Student Learning Activity Card Template format. Teaching staff can use it directly with their students.

1. Activity Identification

Module / Unit	Module 3 – Subtopic 3.4 Climate policy and institutional decisions
Activity Code	M3-A4
Activity Title	Advise the City: Evaluating a Climate Action Plan with AI
Developing Partner	EGE
Recommended Duration	60 min (in-class) + optional homework extension
Delivery Mode	In-class Online synchronous Online asynchronous Blended
Student Grouping	Individual Pair Small group Whole class
STEM Context / Discipline	Adaptable: environmental/civil engineering, energy systems, data science, urban planning, biology

2. Pedagogical Design

Learning Objective(s)	By the end of this activity, students will be able to: 1. Interpret an institutional climate policy scenario using AI-supported analysis of institutional data. 2. Evaluate climate-related uncertainties and their implications through a structured risk analysis, and justify a policy recommendation.
Target AI Literacy Competence	Understanding AI concepts Using AI tools critically Evaluating AI outputs Human-AI decision-making Ethical/responsible AI use
Green Decision-Making Focus	Climate change Energy Materials/resources Biodiversity Waste/circularity Water Other: ____
Prerequisite Knowledge	Basic data interpretation (charts, trends); familiarity with a chatbot; introductory awareness of climate policy concepts (targets, emissions inventories). No prior policy or risk-analysis training required.
Key Concepts / Keywords	Policy-relevant evidence; institutional data interpretation; path dependence; critical juncture; risk analysis (probability × consequence); uncertainty; policy feasibility; AI-assisted analytics; prompt design; critical evaluation of AI output.

3. Student Task Design

Student Scenario / Challenge	Your city has published a draft Climate Action Plan pledging a 40% cut in municipal emissions by 2035. The city council has hired your team as advisory analysts. Using the plan, the city's emissions dataset and AI tools, you must evaluate whether the plan is evidence-based and institutionally feasible, identify its main climate-related uncertainties, and deliver a one-page recommendation memo: adopt, revise, or reject — with justification.
Student Instructions	Step 1 – Engage: Read the draft plan summary; as a group, list the plan's three central claims and the institutions responsible for delivering them. Step 2 – Explore: Query the emissions dataset with an AI-assisted analytics tool (e.g., Power BI Copilot or spreadsheet AI features) to check one central claim against the data; use a climate data tool for context. Step 3 – Explain: Use a chatbot to stress-test the plan (sample prompts below); build a risk register with at least three risks, each rated for probability, consequence and uncertainty. Step 4 – Extend: Identify one institutional factor (capacity, accountability, path dependence, political context) that could change the plan's trajectory, and propose one design improvement. Step 5 – Evaluate: See part 5. Assessment and Evidence.
Input Materials	Dataset Case text Article Image/video Policy document Other: _____
Expected Student Output	Short report Decision matrix Presentation Poster/infographic Reflection Discussion post Other: risk register
Student Deliverable Format	One-page recommendation memo (max 500 words) + risk register table (3–5 rows: risk, probability, consequence, uncertainty, mitigation) + 5-sentence AI-use reflection. Submitted as a single PDF.

4. AI Use and Green Decision-Making

Suggested AI Tool(s)	Chatbot (e.g., institutionally approved AI assistant); Power BI Copilot or AI-assisted spreadsheet analytics; an open climate/emissions data platform for contextual data.
AI Prompt / Interaction Guidance	Sample prompts: “Act as a sceptical policy auditor. Here is the summary of our city's climate action plan: [paste]. List the five strongest reasons it might fail for institutional (not technical) reasons.” “For each risk below, suggest how a city government could reduce its probability or consequence, and state what additional data would reduce the uncertainty: [paste risk register].” “What assumptions about future emissions, funding and enforcement does this plan make implicitly?”
Critical Evaluation Requirement	Students must check AI output for: accuracy bias source quality uncertainty environmental relevance ethical implications
Human Decision Component	The final adopt/revise/reject recommendation, the probability and consequence ratings in the risk register, and the choice of the single most critical uncertainty must be made and justified by the students themselves — the AI may inform, but not decide.

Responsible AI / Ethics Note	AI chatbots can generate fluent but unfounded policy claims (hallucination risk); every factual claim used in the memo must be traced to the dataset or the plan text. Do not upload personal data or confidential institutional documents. Note that AI tools reflect the framings of their training data, which may not match the local institutional context.
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5. Assessment and Evidence

Assessment Method	Checklist Rubric Peer feedback Teacher feedback Self-reflection Quiz
Assessment Criteria	1. Relevance to green decision-making (the memo addresses the climate policy decision directly). 2. Critical use/evaluation of AI (AI outputs are verified, questioned or rejected with reasons). 3. Evidence-based reasoning (claims traced to the dataset or the plan; uncertainties stated explicitly). 4. Clarity of final decision/output (a justified adopt/revise/reject recommendation).
Evidence to Be Collected	Student output Screenshots/log of AI interaction Reflection form Attendance/participation record Teacher observation notes
Success Indicator	At least 70% of student groups deliver a memo containing a complete risk register and a recommendation explicitly justified by evidence and stated uncertainties. [Threshold to be confirmed by the developing partner.]
Feedback Questions	1. What did AI help you understand about the policy or the data? 2. What AI output did you question or reject, and why? 3. How did your final recommendation change after evaluating the uncertainties?

6. Implementation Notes

Teacher Preparation	Prepare (or adapt) a one-page draft climate action plan summary and a small emissions dataset (real municipal open data or the provided sample); verify student access to the chatbot and analytics tool; print the risk-register template.
Timing Plan	Introduction: 10 min Task: 35 min Discussion: 10 min Reflection: 5 min [indicative — adjust to group]
Accessibility / Inclusion Notes	Provide the plan summary in plain language; allow written or oral contributions in group work; assign rotating roles (data analyst, AI operator, sceptic, rapporteur) so every student engages; permit native-language drafting with English final output where appropriate.
Possible Risks	AI access problems; dataset too complex for the time available; superficial AI use (accepting the chatbot's first answer); groups anchoring on AI recommendations instead of their own analysis.
Mitigation / Backup Plan	Keep printed AI outputs and pre-computed charts as offline fallback; provide a simplified 20-row version of the dataset; require the "rejected AI output" field in the reflection to force critical engagement.

Extension / Follow-up	Homework: compare the city's plan with a national or EU-level climate policy and analyse how multi-level institutional arrangements affect feasibility (links forward to Subtopic 3.5 stakeholder perspectives).
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D.2 Staff Guideline: Design Your Own Interactive Learning Activity

After experiencing the example card, each participant designs one interactive learning activity for their own subject area using the WP3-A2 Activity Card Template. Guideline for the design session:

31. Step 1 – Pick the decision scenario. Choose a climate policy or institutional decision authentic to your discipline (e.g., grid-expansion permitting for energy engineers, land-use regulation for biologists, data-governance policy for computer scientists).
32. Step 2 – Anchor the outcomes. Write one learning objective on interpreting AI-supported scenarios and one on evaluating climate-related uncertainties, aligned with the Section A table.
33. Step 3 – Design the five steps. Fill the Engage–Explore–Explain–Extend–Evaluate sequence, ensuring at least one step uses institutional data with an AI analytics tool and one step uses a chatbot with critical evaluation.
34. Step 4 – Build in risk analysis. Require a risk register or an equivalent structured uncertainty assessment as part of the student output.
35. Step 5 – Define evidence and assessment. Complete sections 5 and 6 of the template, including a measurable success indicator and a realistic backup plan.
36. Step 6 – Peer review. Exchange cards with a colleague from a different discipline and check them against the Partner Completion Checklist of the template; revise before classroom use.

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