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TEACHER'S IMPLEMENTATION GUIDE
FOR ERASMUSLAND SIMULATION



MANKIND ACT KEEPS EARTH - MAKE

1. OVERVIEW

The Erasmusland Simulation is an interactive role-play activity designed to help students understand how decisions about energy, food, water, and forests affect both the economy and the climate. By taking the role of national ministers in the fictional country Erasmusland, students negotiate, calculate, and observe how policy choices influence carbon emissions, sustainability, and citizens' well-being. This simulation links directly to the European Green Deal, the European Climate Pact, and SDG 13 – Climate Action by turning abstract climate data into hands-on learning experiences.

2. LEARNING OBJECTIVES

By the end of the simulation, students will be able to:

- Explain how government policies influence climate and resource use.
- Calculate the effects of different actions using simplified data models.
- Work collaboratively and negotiate trade-offs between environmental and economic goals.
- Understand the complexity of sustainable development decisions.
- Connect classroom learning to EU-wide goals for a carbon-neutral future.

3. STRUCTURE AND TIMING

Phase	Activity	Duration
Preparation	Teacher setup, assigning ministries and briefing materials	15 min
Round 1	First policy decision and data input	25 min
Round 2	New negotiation and updated calculations	25 min
Debrief	Reflection, presentation of results, discussion	20 min
Total Duration	Approx. 1.5 hours (can be extended to 2 lessons)	

4. MATERIALS CHECKLIST

Item	Description	File Reference
Erasmusland Simulation Guide	Main facilitator document with agenda, steps, and outcomes	<i>Erasmusland.pdf</i>

Item	Description	File Reference
Briefing Sheets (x5)	Confidential background info for each Ministry (Climate, Agriculture, Food, Forest, Water)	<i>Climate_Briefing.docx, Agriculture_Briefing.docx, Food_Briefing.docx, Forest_Briefing.docx, Water_Briefing.docx</i>
Calculation Sheet	Formula-based data table for teachers or students	<i>Calculations in Erasmusland.docx</i>
Nametags & Table Tents	Visual identity for role-play teams	<i>Nametags.pdf, Table_Tents.pdf</i>
Optional Digital Tool	Vensim / Excel dynamic model “ALPS”	link: Vensim Reader Download

5. CLASSROOM SETUP

- Arrange five tables — each representing one Ministry (Agriculture, Forest, Water, Food, Climate).
- Distribute nametags and briefing documents to each group.
- Display the main Erasmusland map or logo on the projector (from the PDF).
- Explain that the goal is to make decisions that balance prosperity, environment, and equity.

6. HOW TO RUN THE SIMULATION

Round 1 – Initial Policy Decisions

- Each ministry reviews its confidential briefing and chooses two main policies.
(e.g. increase food exports, expand forest area, build hydropower).
- Teacher collects all choices and enters them into the Calculation Sheet.
- Use the spreadsheet to compute the national results: emissions, GDP, food balance, and water use.
- Display the outcome to the class.

Example: “Erasmusland produced 45 Mt CO₂ and achieved 2.5% GDP growth.”

Round 2 – Negotiation And Adjustments

- Groups discuss how their first choices affected others.
(e.g. “Forestry expansion reduced farmland”, “Water demand increased”).
- Each ministry modifies its policy for a second round.

-Re-run the calculations and compare results:

“Did Erasmusland achieve sustainability this time?”

-Debriefing and Reflection

-Ask pupils to analyse:

-Which policies led to higher emissions?

-Which ministry faced the hardest choices?

-How can countries cooperate to reach the EU 2050 climate goal?

-Record answers on the board or in a Reflection Sheet.

7. TEACHER TIPS

-Use coloured markers or sticky notes for each ministry to visualise policy choices.

-Encourage real diplomatic language — “The Ministry of Agriculture proposes...”

-If possible, use the ALPS digital model (Vensim) to display graphs showing how CO₂ and GDP change in real time.

-Keep rounds short and dynamic; energy comes from interaction, not data entry.

-The calculation sheet can be simplified for younger students by showing only 3 variables: Emissions, Food, Forest.

8. ASSESSMENT AND LEARNING EVIDENCE

Criterion	Evidence	Assessment Method
Understanding of climate–economy link	Student explanations in debrief	Oral discussion
Use of data and reasoning	Completed calculation sheet	Group work
Collaboration and negotiation	Observation of group interactions	Teacher rubric
Reflection on sustainability	Written reflections or class summary	Self-assessment

9. EU POLICY AND CURRICULUM LINKS

Theme	EU Policy Reference	Related SDG
Climate & Energy	European Green Deal / European Climate Pact	SDG 13 – Climate Action
Agriculture & Food	Farm to Fork Strategy	SDG 2 – Zero Hunger
Forest & Biodiversity	EU Biodiversity Strategy 2030	SDG 15 – Life on Land
Water & Environment	Water Framework Directive	SDG 6 – Clean Water
Economy & Innovation	Circular Economy Action Plan	SDG 12 – Responsible Consumption

10. REFLECTION & FOLLOW-UP ACTIVITIES

After completing the simulation, students can:

- Design a “Green Policy Poster” summarising their final decisions.
- Compare Erasmusland’s results with real EU data (Eurostat or EU Learning Corner).
- Write a short article titled “If I Were a Climate Minister...”
- Integrate their experiences into STE(A)M club presentations or the MAKE project website.

11. ACKNOWLEDGEMENT

This simulation was developed collaboratively by the MAKE Project partners (Spain, Türkiye, Poland, Lithuania, and NGO K.A.N.E., Greece). All data and resources are inspired by open-access materials from the European Commission, DG Environment, and the European Climate Pact.

12. SUGGESTED REFERENCE

- European Commission (2019). The European Green Deal. Brussels.
- DG CLIMA (2021). European Climate Pact – Resources for Schools.
- EU Learning Corner. Climate Change and Sustainability Education Materials.
- UNESCO (2023). Education for Sustainable Development Guidelines.