

Balancing Economic Growth and Environmental Impact in Industrial Zones

Part 1: Dialogue

Maya (Urban Planner): We need to finalize our **industrial land-use zoning** strategy for the new development area. Have you reviewed the latest proposals?

Liam (Colleague): Yes, but I'm concerned about the environmental impact. We should focus on **brownfield redevelopment** instead of expanding into untouched land.

Maya: That makes sense. If we rehabilitate existing industrial sites, we can support growth while minimizing ecological damage.

Liam: Exactly. We also need to determine the right balance between **heavy industry vs. light industry** in the zoning plan.

Maya: Agreed. Heavy industries need more space and stricter regulations, while light industries can be integrated into mixed-use areas.

Liam: Right. We should also include an **environmental impact statement (EIS)** to assess how industrial activity will affect the surroundings.

Maya: Good idea. We can use that to set guidelines on emissions, waste management, and noise levels.

Liam: Another key factor is the **hazardous material buffer zone**. We need to ensure safe distances between factories and residential areas.

Maya: Absolutely. Proper buffer zones can protect communities from pollution and accidents while maintaining economic viability.

Liam: Let's compile our recommendations and present them to the planning board for approval.

Part 2: Comprehension Questions

1. What is Maya and Liam's main objective?
(A) Expanding industrial zones into residential areas
(B) Promoting only light industry developments
(C) Eliminating industrial activity from the city
(D) Balancing industrial growth with environmental concerns
2. What is the purpose of **brownfield redevelopment**?
(A) To create more hazardous waste sites
(B) To build new industrial zones on untouched land
(C) To reuse and rehabilitate existing industrial sites
(D) To convert factories into residential buildings
3. Why is it important to define **heavy industry vs. light industry** in zoning plans?
(A) So that industrial zones can be eliminated
(B) To ensure industries are placed in appropriate areas
(C) To ban heavy industry from urban environments
(D) To reduce the number of factories in the city
4. How does a **hazardous material buffer zone** benefit urban planning?
(A) It helps increase industrial density
(B) It improves transportation access for factories
(C) It minimizes pollution risks near residential areas
(D) It encourages more factories to operate without restrictions

Part 3: Vocabulary with Definitions

- **Industrial land-use zoning (産業土地利用区分)** – The process of designating areas for industrial activities while considering environmental and economic factors.

- **Brownfield redevelopment (ブラウンフィールド再開発)** – The process of rehabilitating contaminated or underutilized industrial land for new development.
 - **Heavy industry vs. light industry (重工業 vs. 軽工業)** – Heavy industry involves large-scale manufacturing with high resource consumption, while light industry includes smaller-scale production with fewer environmental impacts.
 - **Environmental impact statement (EIS) (環境影響評価報告書)** – A report that evaluates how a proposed project will affect the environment.
 - **Hazardous material buffer zone (危険物緩衝帯)** – A designated area that separates industrial facilities handling hazardous materials from residential or commercial zones.
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Part 4: Answer Key

1. **What is Maya and Liam's main objective?**
☒ (D) Balancing industrial growth with environmental concerns.
2. **What is the purpose of brownfield redevelopment?**
☒ (C) To reuse and rehabilitate existing industrial sites.
3. **Why is it important to define heavy industry vs. light industry in zoning plans?**
☒ (B) To ensure industries are placed in appropriate areas.
4. **How does a hazardous material buffer zone benefit urban planning?**
☒ (C) It minimizes pollution risks near residential areas.