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def factory_energy_evaluation():
    print("FACTORY-LEVEL ENERGY TRANSITION TOOL (Region-specific)")
    print("-----")

    regions = ["India", "China", "Vietnam", "EU/USA"]
    for idx, reg in enumerate(regions, 1):
        print(f"{idx}. {reg}")

    try:
        reg_choice = int(input("Select region number (1-4): ").strip())
        if reg_choice not in range(1, 5):
            print("Invalid region number. Please enter a number between 1 and 4.")
            return
    except ValueError:
        print("Invalid input. Please enter a numeric value.")
        return

    region = regions[reg_choice - 1]

    try:
        load = float(input("Enter annual factory energy demand in MWh (e.g. 1200): ").strip())
        if load <= 0:
            print("Energy load must be a positive number.")
            return
    except ValueError:
        print("Invalid input. Please enter a numeric value.")
        return

    print("\nSelect current primary energy source:")
    print("  1. Natural Gas")
    print("  2. Coal")
    print("  3. Grid Electricity")
    print("  4. Renewable (e.g. solar/wind)")

    try:
        source_choice = int(input("Enter number (1-4): ").strip())
        if source_choice not in range(1, 5):
            print("Invalid choice.")
            return
    except ValueError:
        print("Invalid input.")
        return

    sources = {
        1: ("Natural Gas", 0.202, 55),      # tCO2, e/MWh, $ per MWh
        2: ("Coal", 0.341, 50),
        3: ("Grid Electricity", 0.45, 85),  # Approximate global avg
        4: ("Renewable", 0.03, 70)
    }

    current_source, current_ef, current_cost = sources[source_choice]
    current_emissions = round(load * current_ef, 2)
    current_total_cost = round(load * current_cost, 2)

    print(f"\nYou selected: {current_source}")
    print(f"Est' Emissions: {current_emissions} tCO2, e/year")
    print(f"Est' Energy Cost: ${current_total_cost:,} USD/year")

    print("\nCleaner Alternatives Evaluation:")
    for key, (alt_name, alt_ef, alt_cost) in sources.items():
        if alt_name != current_source:
            alt_emissions = round(load * alt_ef, 2)
            alt_total_cost = round(load * alt_cost, 2)
            reduction = round(current_emissions - alt_emissions, 2)
            cost_diff = round(alt_total_cost - current_total_cost, 2)
            print(f"\n{alt_name}:")
            print(f"  Emissions: {alt_emissions} tCO2, e/year (Est' {reduction})")
            print(f"  Cost: ${alt_total_cost:,} USD/year ({'Est' if cost_diff > 0 else 'Sav' } {abs(cost_diff):,})")

    print("\nRecommendation: Consider transitioning to renewable sources where feasible to reduce emissions drastically.")

```