```python
import numpy as np
import matplotlib.pyplot as plt


# Energy consumption function
def energy_function(x):
    return (x - 3)**2 + 5


# Derivative of the function (gradient)
def gradient(x):
    return 2 * (x - 3)


# Initial parameter
x = 0
learning_rate = 0.1
iterations = 30


# To store the values
x_vals = [x]
energy_vals = [energy_function(x)]


# Gradient Descent Loop
for _ in range(iterations):
    grad = gradient(x)
    x = x - learning_rate * grad
    x_vals.append(x)
    energy_vals.append(energy_function(x))


# Final result
print(f"Optimal x: {x_vals[-1]:.4f}")
print(f"Minimum Energy: {energy_vals[-1]:.4f}")


# Plotting
x_range = np.linspace(-1, 7, 100)
```