

Household Energy Consumption Analysis – Summary Report

Key Statistics

- Average Electricity Usage: 301.34 kWh
- Average Gas Usage: 123.26 units
- Average Monthly Income: ₹59,793
- Average Family Size: 4.1 members
- Average Appliances Count: 7.9
- 90th Percentile Electricity: ≥ 470 kWh
- 90th Percentile Gas: ≥ 183 units

Insights

1. **Family Size:** Larger families (6–7) use slightly more gas, but electricity usage does not rise linearly.
2. **Appliances:** Households with 7+ appliances show higher electricity usage (~340 kWh).
3. **Income:** Medium-income households consume most electricity (~308 kWh), while high-income use more gas (~128 units).
4. **High Consumers (Top 10%):**
 - Electricity ≥ 470 kWh
 - Gas ≥ 183 units
 - Typically large families with 10+ appliances.

Recommendations

- Encourage large families to adopt bulk cooking and shared appliances.
- Promote replacement of old appliances with 5-star rated energy-efficient models.
- Offer solar panel subsidies and smart meters to medium/high-income households.
- Run awareness campaigns for efficient gas usage and turning off unused appliances.

Important Notes

- Appliance count is a stronger driver of electricity usage than family size.
- Gas usage correlates more closely with family size.
- Targeting top 10% high consumers makes subsidy/awareness programs more effective.