

# Appliance Electricity Cost Worksheet

Use model-specific annual kWh or safely measured kWh when available.

Do not infer normal consumption from breaker size or maximum connected load.

## 1. Appliance and rate

Appliance: \_\_\_\_\_

Manufacturer/model: \_\_\_\_\_

Electricity rate (\$/kWh): \_\_\_\_\_

Rate period/date: \_\_\_\_\_

Fixed monthly charge (do not count as avoidable appliance cost): \_\_\_\_\_

## 2. Select the strongest available method

- ☐ A. Model-specific annual kWh from EnergyGuide or certified data
- ☐ B. Safely measured cumulative kWh for a compatible appliance
- ☐ C. Annual kWh divided by a documented annual cycle count
- ☐ D. Watts multiplied by hours as an explicitly rough estimate
- ☐ E. Volts multiplied by amps only as rough apparent power

### Measurement warning

Use ordinary plug-in meters only for compatible appliances within the meter's voltage, current, and wattage ratings. Do not use them on standard 240-volt dryers, electric ranges, wall ovens, or hardwired appliances. Do not add unapproved extension cords, adapters, power strips, or smart plugs.

## 3. Record source

Energy source URL or document: \_\_\_\_\_

Annual kWh or measured kWh: \_\_\_\_\_

Watts, if used: \_\_\_\_\_

Hours or minutes, if used: \_\_\_\_\_

Annual test cycles, if used: \_\_\_\_\_

Classification: label / certified / measured / standardized / hypothetical: \_\_\_\_\_

## Method A: Annual kWh

Annual cost = annual kWh x electricity rate

Annual kWh: \_\_\_\_\_

Electricity rate (\$/kWh): \_\_\_\_\_

Annual cost: \_\_\_\_\_

Monthly average = annual cost / 12: \_\_\_\_\_

Daily average = annual cost / 365: \_\_\_\_\_

## Method D: Watts and Time

kWh = (watts / 1,000) x hours

Cost = kWh x electricity rate

Watts: \_\_\_\_\_

Minutes: \_\_\_\_\_

Hours = minutes / 60: \_\_\_\_\_

Kilowatts = watts / 1,000: \_\_\_\_\_

kWh: \_\_\_\_\_

Cost: \_\_\_\_\_

Number of uses per month: \_\_\_\_\_

Monthly projection: \_\_\_\_\_

Annual projection: \_\_\_\_\_

### Cycling caveat

If a thermostat, compressor, heater, or sensor cycles off, multiplying rated watts by the entire clock time may overstate actual energy use. Label the result as a full-power estimate.

## Method C: Cost Per Cycle

kWh per cycle = annual kWh / annual test cycles

Cost per cycle = kWh per cycle x electricity rate

Annual kWh: \_\_\_\_\_

Annual test cycles: \_\_\_\_\_

kWh per standardized cycle: \_\_\_\_\_

Electricity rate: \_\_\_\_\_

Cost per standardized cycle: \_\_\_\_\_

Your actual cycles per year: \_\_\_\_\_

Projected household annual cost: \_\_\_\_\_

## Time-of-Use Cost

Total cost = off-peak kWh x off-peak rate + peak kWh x peak rate

Off-peak kWh: \_\_\_\_\_

Off-peak rate: \_\_\_\_\_

Off-peak cost: \_\_\_\_\_

Peak kWh: \_\_\_\_\_

Peak rate: \_\_\_\_\_

Peak cost: \_\_\_\_\_

Total: \_\_\_\_\_

Use time-of-use scheduling only when the appliance can operate safely under its instructions and household or building rules.

# Compare Two Appliances or Methods

| Input                     | Option A | Option B |
|---------------------------|----------|----------|
| Purchase price            | <hr/>    | <hr/>    |
| Annual kWh                | <hr/>    | <hr/>    |
| Uses or cycles per year   | <hr/>    | <hr/>    |
| Electricity rate          | <hr/>    | <hr/>    |
| Annual electricity cost   | <hr/>    | <hr/>    |
| Cost per use              | <hr/>    | <hr/>    |
| Servings or items per use | <hr/>    | <hr/>    |
| Cost per serving/item     | <hr/>    | <hr/>    |
| Expected life             | <hr/>    | <hr/>    |
| Maintenance cost          | <hr/>    | <hr/>    |

## Simple purchase payback

Payback uses = purchase-price difference / savings per use

Purchase-price difference: 

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Savings per use: 

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Uses to recover price difference: 

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## Remember

- ☐ Energy savings are not guaranteed.
- ☐ Purchase price, repairs, maintenance, capacity, convenience, and product life also matter.
- ☐ Compare the same task, quantity, and result.
- ☐ Use your local variable rate rather than the national example.