Room Air Conditioner Turn-In and Recycling Programs

Recycling inefficient room air conditioners saves energy and resources, helps curtail growing peak load demand, and prevents the release of greenhouse gases. More than one third of states and territories have included room air conditioners in their State Energy Efficient Appliance Rebate Programs. Many of these programs require recycling of replaced units or offer a higher rebate to consumers who choose to properly recycle their used room air conditioners. Room air conditioner turn-in events can also be a fun, quick, and easy way to educate consumers about the importance of appliance recycling while collecting large amounts of used room air conditioners for recycling.

Replacing and properly decommissioning old units yield the greatest savings. Consider:
- A new ENERGY STAR® qualified room air conditioner uses 20 to 284 kWh less per year than a new, non-qualified unit, with an average savings of 75 kWh per year.
- When a 10 year-old or older room air conditioner is replaced with a new ENERGY STAR qualified unit, savings are nearly double—ranging from 35 to 492 kWh a year and averaging 132 kWh per year.
- Room air conditioners that are at least 10 years old use 20 percent more energy than a new ENERGY STAR qualified unit.

Collecting and recycling old units permanently removes them from the electric grid. Otherwise, these older, inefficient units could be moved to other locations for continued use or be reconditioned and re-sold; either practice leads to the inefficient use of peak load power.

States can team up with energy efficiency program sponsors, retailers, and recyclers by sponsoring room air conditioner turn-in events to help drive consumers to stores and encourage the recycling of old units and the purchase of new ENERGY STAR qualified models. Turn-in events are often coupled with a multi-media marketing campaign and held at retail stores to make transactions easy for consumers and haul-away easy for program sponsors.

Consider these additional room air conditioner tips to reduce energy bills all year long:
- ENERGY STAR qualified room air conditioners use less energy than standard new models. Look for a high Energy Efficiency Ratio (EER). Units with high EERs cost less to operate than units with low EERs.
- A properly-sized air conditioner will operate more efficiently and dehumidify more effectively. An oversized unit will cycle on and off more frequently; short cycling reduces an air conditioning system’s life, and will not reduce humidity effectively. Undersized equipment can reduce the efficiency of air distribution and accelerate wear on system components, leading to premature failure.
- Some ENERGY STAR window and through-the-wall room air conditioners include programmable thermostats or timers. A programmable thermostat allows homeowners to automatically adjust to a more comfortable temperature when they are scheduled to be home. Homeowners can set the temperature to use less cooling when they are normally away. In addition, residents can save three percent on cooling costs for each degree they turn thermostats up above 72 degrees.

Resource / Program Example:
- “Keep Cool” Air Conditioner Bounty Program, New York State Energy Research and Development Authority (NYSERDA)
- Responsible Appliance Disposal (RAD) Program, U.S. Environmental Protection Agency, Ozone Layer Depletion Partnerships