



Laundry Research

CLASP – SEDI Dryer Industry Summit
Chris Granda for Charlie Stephens, NEEA
September 30, 2011

NORTHWEST ENERGY EFFICIENCY ALLIANCE

NEEA Study Objectives

- Extension of NEEA Residential Building Stock Assessment
- Establish usage patterns of recent vintage clothes washers and clothes dryers based on participant logs
- Develop estimates of recent vintage laundry equipment energy consumption normalized by number of occupants and other variables

Study Scope

- Recruit 85 homes, assume 70 final sets of good data
- Monitor dryer energy use (data logger)
- Laundry weight (bathroom scale, occupant records in log book)
- Cycle choice (occupant records in log book)
- Measure air flow at outside vent (flow hood)

Study Schedule

- RBSA recruitment began 2nd Qtr 2011
- Planning and equipment acquisition for dryer study begins now
- Recruitment, installer training, and equipment installation began 2nd Qtr 2011
- Data acquisition begins 1st Qtr 2012, lasting for two cycles of four weeks
- Data available during 2nd Qtr of 2012

Study Questions

- What is the energy use of different wash and dry cycles?
- What cycles actually get used and how often?
- What is the size and composition of common laundry loads?
- How much laundry do people do?
- What is the water content of clothes leaving washer?
- What is the RH of dryer exhaust at beginning and end of cycle (and is it consistent)?
- What is the energy use of dryers past 5% RH?
- What is the actual air flow at vent exterior termination?

For Further Information Please Contact

Charlie Stephens

SENIOR ENERGY CODES AND STANDARDS ENGINEER

Direct 503.688.5457

cstephens@neea.org

NORTHWEST ENERGY EFFICIENCY ALLIANCE

421 SW Sixth Avenue, Suite 600, Portland, Oregon 97204