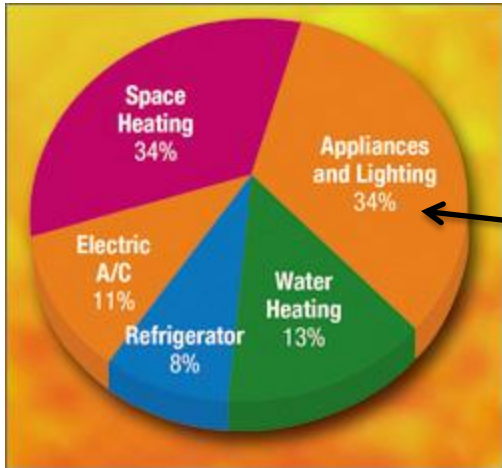


What we can do to make our homes
more energy efficient &
environmentally friendly



Assessment of Utility Usage



What is the breakdown of utility consumption?

- Lights – 11%
- Computers – 8%
- Appliances – 8%
- Other – 7%

55% of all utilities all base load

Water Usage

- 51% irrigation
- 20% toilets
- 10% showers
- 8% laundry
- 8% faucets
- 2% leaks
- 1% dishwasher

What to do?

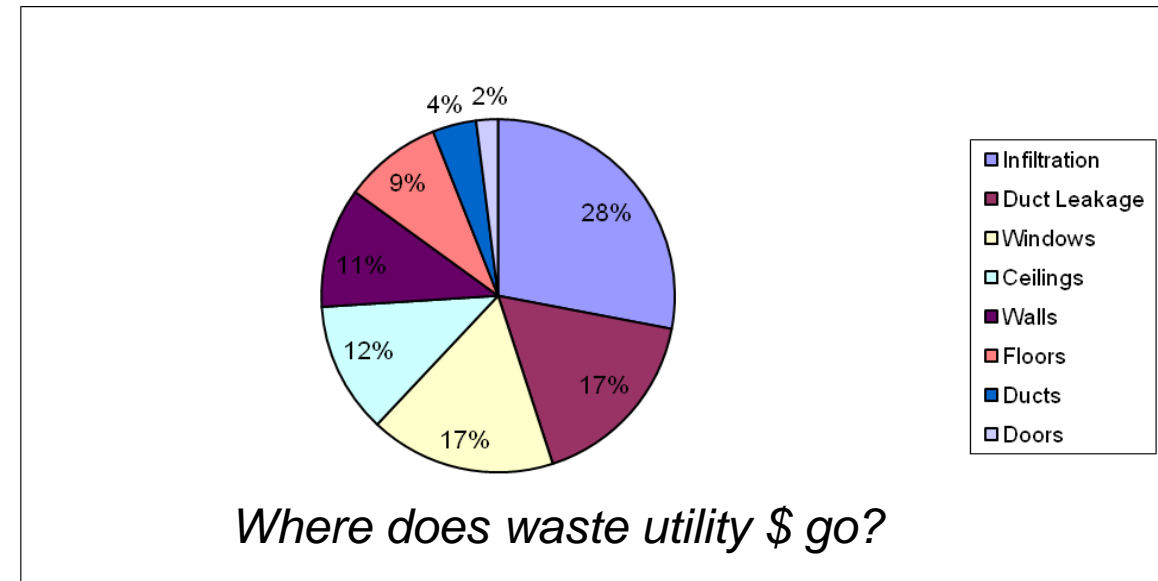
Assessment – audit to understand where \$'s go and identify opportunities

Establish Conservation goal – start small, change behavior, define upgrades, establish a master plan

Provide maintenance – change filters, flush hw heater, recharge AC, fix leaks, clean refrigerator coils, replace door seals on refrigerator, look for gas flames that are blue not yellow.

Perform upgrades – weekend homeowner projects vs. contractor activities

Monitor – keep record of utility bills each month, track progress by measuring consumption.



Areas for Improvement

- Property
- Exterior
- Interior
- Heating & Cooling Systems
- Plumbing - Water & Sanitary
- Electrical
- Other Ideas



Why Do it!

- Improve indoor air quality
- Improve comfort
- Reduce energy usage
- Improve value of your home
- Reduce the impact on the environment
- Reduce dependency on natural resources



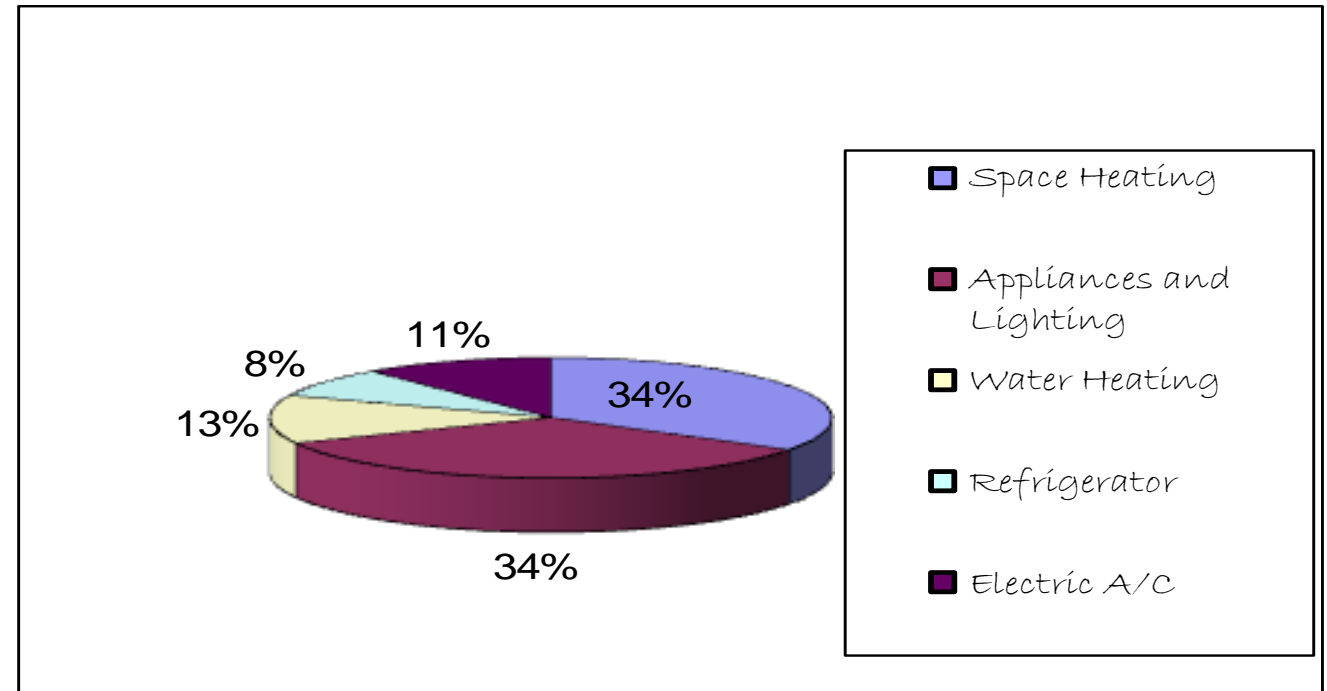
Typical Household Water Usage

- By the year 2050, the worldwide availability of freshwater will have decreased by a third as a result of global warming, population growth, and wasteful habits.



Typical Sources of Energy Use

- Space heating accounts for 34% of all primary energy input.
- Space heating includes all sources: electricity, natural gas, fuel oil and propane.
- 34% is a wide array of electric appliances.



What can we do!

Property



- Improve grading away from foundation
- Rain barrels
- If irrigating - drip /controller
- Shade trees
- Composting



What can we do!

Property



- Recycle leaves/branches/clippings
- Less impervious surfaces
- Drought tolerant plants
- Organic fertilizers
- Solar walkway lighting



What we can do!

Exterior



- Seal openings and cracks
- Caulk around all joints
- Weatherstrip Doors
- Install storm doors
- Keep gutters and downspouts clean



What we can do!

Exterior

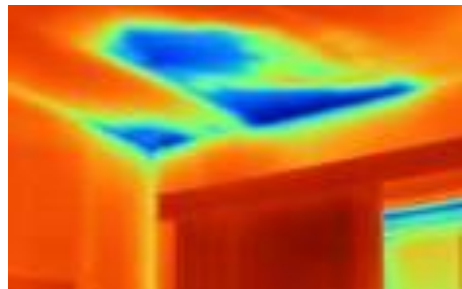


- If re-roofing use light colored roofing.
- Entrance lighting use cfl's/motion sensors.
- Replace doors and windows.



What we can do!

Attic



- Additional attic insulation
- Radiant Barrier
- Seal holes and penetrations
- Provide ventilation
- Insulate attic stair
- Insulate attic ductwork

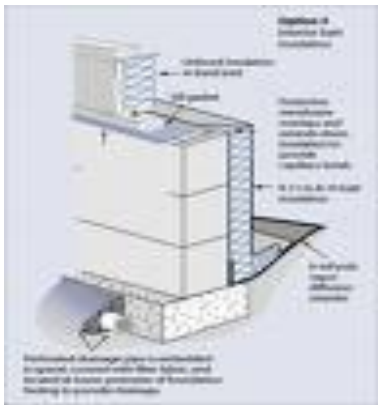


What we can do!

Living Spaces



- Task lighting in kitchen
- Replace lamps with cfl's
- Seal around recessed lights
- Turn off lights

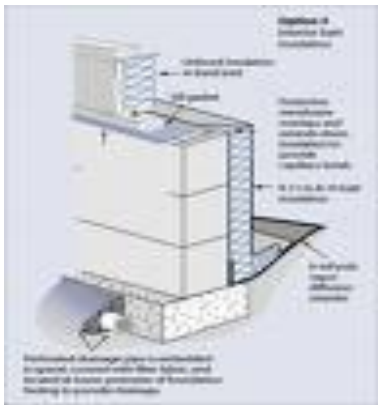


What we can do!

Living Spaces



- Weather stripping on doors
- Gasket electrical outlets
- Storm windows
- Insulate floor over crawl space



What we can do!

Living Spaces



- Seal around ceiling grilles
- Bath exhaust to exterior
- Seal attic access panels
- Clean dryer vent
- Set thermostat @ 76° F in summer and 68° F in winter



What we can do!

Living Spaces

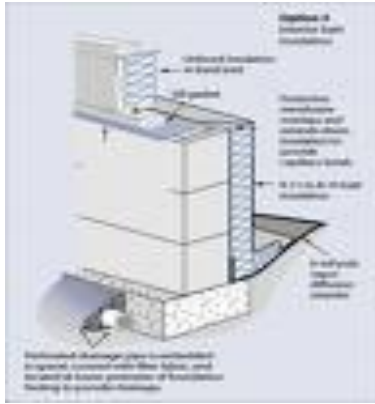


- Power strip electronic devices
- Window shades in summer
- Insulating drapes in winter
- Leave bedroom doors open
- Ceiling fans in each bedroom



What we can do!

Crawl Space/Basement

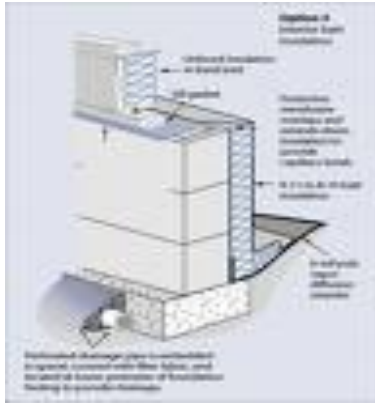


- Close vents in winter
- Install 20mil poly on floor
- Insulate walls or floor above
- Insulate rim joist



What we can do!

Crawl Space/Basement



- Seal basement windows
- Insulate basement door
- Seal bilco door
- Fill all cracks and around penetrations in foundation



What we can do!

Hot & cold water



- Low flow shower heads
- Sink aerators
- Set HWHT at 120° F
- Jacket the HWHT
- Add hot water pipe insulation



What we can do!

Hot & cold water



- Use dishwasher
- Full load use of washing machine
- Dual flush toilets
- Instantaneous HWHT
- Drain corrosion from HWHT



What we can do!

Heating & A/C



- Replace filters
- Check ducts for leakage
- Seal grilles and diffusers
- Keep doors to bedrooms open



What we can do!

Heating & A/C



- Programmable thermostat
- Participate in utility company energy program
- Install kitchen/bath fans to remove odors and moisture



What we can do!

Electrical

- “Your electronic appliances and high-tech gizmos can drain electricity even when turned off. Some experts call this “vampire power” or wasted standby power, which can account for up to 10% of your monthly electric bill.”
- Change recessed down lights to sealed down lights
- Replace incandescent lamps w/ cfl's
- EnergyStar appliances



What we can do!

Electrical

- “Your electronic appliances and high-tech gizmos can drain electricity even when turned off. Some experts call this “vampire power” or wasted standby power, which can account for up to 10% of your monthly electric bill.”
- Subscribe to green energy provider
- Turn off lights when not in the room
- Timers and motion sensors



What we can do!

Recycle



- Recycle plastic bags
- Dispose of batteries properly
- Non-toxic cleaning products



What we can do!

Recycle

- Non VOC's - paint/carpet
- Plastic/glass containers
- Reduce junk mail go to www.catalogchoice.org.



What we can do!

Other Ideas



- Buy local produce
- Recycled/post consumer paper products
- Engineered wood products
- Clean & reuse paint brushes



What we can do!

Other Ideas



- Carpool
- Combine errands using gas efficiently
- Keep auto serviced
- Bicycle/walk if possible
- Consider hybrids



Web Sites You Can Visit

- Calculate your carbon footprint:
www.earthlab.com/carbonprofile.
- Rebates are available through: www.bpu.state.nj.us
- Ideas are available through EPA, DOE and Energy Star.
- Calculate your low impact living index @
www.lowimpactliving.com



Web Sites You Can Visit

- Visit USGBC The Green home Guide.
- New Jersey Green Homes @ www.nj.gov/dca/dhcr/hsg-prog/njgreenhomes.
- Lists of Green products @ www.buildinggreen.com



Additional Sources of Information

- Home Energy Magazine- www.homeenergy.org
- Consumer Guide to Home Energy Savings- Alex Wilson, Jennifer Thorne, John Morrill
- Go Green Live Rich- David Bach
- The Home Energy Diet- Paul Scheckel





**Residential Energy
Professionals, LLC**