

## **Simple (and Other) Things You Can Do / Lifestyle Changes You Can Make to Combat Climate Change**

Note: while the focus here is on reducing greenhouse gas emissions / saving energy, doing that also saves water →  
For every 1 KWH of electrical energy consumed, typical amounts of water in gallons needed for that production by fuel:  
natural gas 0 to 0.5; coal 0.5 ; nuclear varies widely—in AZ it is 0.0625; hydroelectric ~60 to 100; solar & wind ZERO

### **Home Energy**

- \*turn off lights, televisions, computers, appliances, etc. when not in use
- \*daytime: in winter, open drapes to let sunlight in  
→ reduce temperatures; in summer close them to block / keep out sun → reduce temperatures;
- \* on cold nights, close drapes to help keep heat in;  
better → use moveable insulation panels or shutters over windows
- \*use solar heat to dry clothes → use a clothesline; use cold water for wash & rinse cycles in machine washing clothes
- \*run clothes washers and dishwashers only when full
- \*replace incandescent lights with compact fluorescent or better yet, LED based lights
- \*adjust HVAC thermostat settings: lower on winter nights (use sweaters, blankets!); higher in summer (wear fewer clothes!)
- \*maintain your heating furnace or air conditioner to increase fuel efficiency by changing filters regularly, etc
- \*encourage natural ventilation to keep cool in summer: open lower windows/vents to let cool air in,  
open highest windows/vents to exhaust warm air – hot air rises → so give it a path to rise and escape!
- \*minimize or avoid air conditioner use  
→ where possible use well-placed fans to move air to stay cool in summer
- \*weatherize house to plug cracks (especially around doors and windows) to reduce unwanted air movement
- \*in winter, employ modular heating  
→ heating only selected rooms, closing off others as appropriate to minimally disrupt lifestyle
- \*use flow restrictors in shower heads to save water
- \*wrap hot water heater tank with insulating blanket to minimize heat loss (taking care to avoid fire hazard from gas pilot lights!)
- \*set hot water heater temperature to minimum necessary for comfort / safety; turn down or off when on vacation
- \*in hot sunny climates, paint roofs (or select) light / reflective colors (roofing materials) to help cool them
- \*replace water guzzling toilets (up to 7 gal / flush!) with water efficient (~1.28 gal / flush) ones
- \*add more insulation to under-insulated (first) ceilings, (next) walls, (last) floors; install storm windows and storm doors
- \*use do-it-yourself solar warm air window heaters (some stand alone w/ducts & blowers) for winter-time, daytime temperature boost
- \*use do-it-yourself batch solar water pre-heaters (generally these will need to be drained in winter to avoid freezing)
- \*use photovoltaic panels in do-it-yourself ways (to heat water, cook food, bring heat to difficult to heat areas, etc)
- \*lease photovoltaic panels (from company like Solar One) in electric utility grid interactive fashion
- \*employ professionally installed flat plate collector / heat exchange tank solar hot water systems
- \*employ professionally installed photovoltaic panels systems (either off grid w/battery bank or utility tie-in)
- \*choose to live in a smaller house (generally unwanted heat transfer surface is proportional to exposed surface area)

## **Transportation and Travel**

- \*walk instead of driving for shortest trips;      \*bike instead of driving for short trips      \*car share
- \*use public transportation (buses, subways, trains) instead of driving for longer trips;    \*car pool → maximize miles / person!
- \*maintain your car to increase fuel efficiency (regular tune-ups; keep proper pressure in tires, stay streamlined, etc.)
- \*drive at a reduced speed (<70mph on highways!), employ “hyper-mileing techniques” where practical
- \*if you must travel by air, select fuel efficient planes (787 Dreamliner) or better buy carbon offset credits
- \* use and buy electric cars over gas powered ones—especially where electricity used is renewable (or from your solar panels!)
- \* live near to where you work, go to school, shop, recreate, etc to avoid energy-wasting commutes; \*telecommute when possible

## **Food / Living Things**

- \*eat more plant based food, less meat (beef can be especially energy/water inefficient);
- \*eat more natural / unprocessed foods
- \*avoid wasting food and teach children not to waste food!
- \*minimize / avoid garbage disposal use → compost food waste (and build soil at the same time!)
- \*minimize / avoid dishwasher use → wash dishes by hand taking care to also conserve water
- \*support local / organic farmers, or better,      \*grow your own organic food
- \*reduce food consumption by 2%;
- \*reduce consumption of water    intensive plant foods: almonds, etc.
- \*cover pots when heating / boiling water when cooking (and turn down heat to minimum needed to maintain boiling!)
- \*use energy-saving techniques to cook foods (solar ovens, slow cooking with well-insulated “fireless cookers”, etc)
- \*collect and use rainwater where appropriate: for gardening, landscaping, etc.
- \*plant trees or support organizations doing this / support sustainably managed forests

## **Consumption, Waste, Other Choices**

- \*recycle household waste: glass, metal, plastic, cardboard, paper; etc.
- \*buy clothes, etc. at thrift or second hand stores
- \*buy food or other items that use less packaging or recycled materials in packaging / prefer paper over plastic
- \*buy used rather than new cars, tools, appliances, etc (this is recycling!);
- \*avoid (or at least reuse) consumables where possible
- \*select more fuel efficient cars, appliances – valuing miles / gal ratings or Energy Star designations
- \*generally natural gas powered appliances are preferred over fossil fuel derived electricity powered appliances
- \*do not invest in companies or vote for politicians that push fossil fuels;    \* do support “green” businesses / leaders
- \*choose to have zero or fewer children, or, as grandparents, encourage your own children to make this choice