

## Ordered Checklist of Actions and Their Return on Investment

Some actions to make your sanctuary more sustainable are more effective than others. Every dollar invested in your sanctuary will save a certain number of pennies each year, a percentage known as your return on investment (ROI). The higher the ROI, the less time it will take to recover your investment. Starting with projects with high ROIs makes sense because these will give maximum money and energy savings for the money (and effort) you spend.

| ACTION  | Approximate payback period   |
|---|------------------------------|
| <b>LEVEL 1: HIGHEST RETURN ON INVESTMENT</b>  | Immediate                    |
| <b>GOVERNANCE:</b> Institutional commitment   | Immediate                    |
| <b>SIGNS:</b> Place on lights, thermostats, doors, windows  | Immediate                    |
| <b>THERMOSTATS:</b> Adjust for lower energy use   | Immediate                    |
| <b>HEATING:</b> Hold small meetings in small heated rooms   | Immediate                    |
| <b>WATER TEMPERATURES:</b> Reduce to 95F  | Immediate                    |
| <b>GAS PILOT LIGHTS:</b> Turn off in summer   | Immediate                    |
| <b>ELECTRONICS:</b> Turn off sleep-mode   | Immediate                    |
| <b>LEVEL 2: HIGHEST RETURN ON INVESTMENT (33% - 200%)</b>   | 1 – 3 years                  |
| <b>AIR LEAKS:</b> Use weather stripping, caulking   | 1 year <sup>1</sup>          |
| <b>LIGHTING:</b> Install motion sensors   | 1 year <sup>2</sup>          |
| <b>BULBS:</b> Replace incandescents with compact fluorescents (CFLs)                              | 9 months                     |
| <b>BULBS:</b> Replace tubular fluorescent T-12 lights with T-8 lights                             | 3 years or less <sup>3</sup> |
| <b>THERMOSTATS:</b> Install and properly site programmable ones                                   | 6 months                     |
| <b>MAINTENANCE:</b> Regular for boiler and furnace  | 1 year                       |
| <b>WATER:</b> Install faucet flow restrictors   | 1 year                       |
| <b>LIGHTING:</b> Replace bulbs in exit signs with LED's   | 1 year                       |
| <b>LEVEL III: MEDIUM RETURN ON INVESTMENT ( 10% to 33%)</b>                                       | 3 - 10 years                 |
| <b>INSULATION:</b> Increase ceiling insulation from R-11 to R-19                                  | 5 years <sup>4</sup>         |
| <b>INSULATION:</b> Increase wall insulation from R-0 to R-11                                      | 9 years <sup>4</sup>         |
| <b>INSULATION:</b> Insulate ducts in unheated areas   | 9 years <sup>4</sup>         |
| <b>WATER:</b> Install solar water heating   | 3 - 4 years                  |
| <b>HVAC:</b> Replace gas furnace with an air-to-air heat pump system                              |                              |
| <b>WATER:</b> Install low-flush toilets   |                              |
| <b>DISHWASHERS &amp; FRIDGES:</b> Replace pre-1993 models with high efficiency Energy Star models | 5 years                      |
| <b>LEVEL IV: Low Return on Investment (less than 10%)</b>   | > 10 years                   |
| <b>WATER:</b> Install on-demand water heating on sinks  |                              |
| <b>HVAC:</b> Replace air-to-air heat pump by a geothermal heat pump                               |                              |

<sup>1</sup> Assuming 125 watt leakage and \$1.20/therm of natural gas = \$45/yr

<sup>2</sup> Assuming sensor saves 100 watts, 5 hours/day

<sup>3</sup> If lights are used 15 hours/week or more

<sup>4</sup> In California

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| <b>ELECTRICITY:</b> install photovoltaic array on the roof |  |
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