



Prevention and Mitigation Benchmarks

Objectives:

Youth will learn a variety of ways in which they can prevent and mitigate global climate change.

These benchmarks were developed as a tool you can use in your garden program that will both guide you towards developing an ecologically sustainable garden and program, as well as contextualize that sustainability work in terms of its role in preventing and mitigating further climate change. Feel free to modify as needed for your specific program and site!

Each benchmark is listed as an overall goal and then provides several concrete, tangible steps you can take to reach that goal! Feel free to reorder the benchmarks in an order that feels most feasible to you and your program. The activity of re-ordering them might serve as a good beginning group activity in your program to assess where you are at (in terms of ecological sustainability) at the garden/program/organizational level, and where would you ideally like to be in the future, and then list and order the specific steps you can take to achieve that. The benchmarks may serve as a useful starting point for that discussion, but please don't feel limited to these! Through a creative process, your group may come up with dozens of additional ways to improve energy efficiency and sustainability in your garden program!

Benchmark #1: Improve energy efficiency

Reduce your building's electricity and gasoline consumption by using more energy-efficient products.

- Replace regular outdoor and indoor light bulbs with compact fluorescent bulbs
- Install outdoor automatic light timers instead of keeping lights on at night
- Use solar- powered garden products (such as pond filters, patio lights, etc)
- Get a building energy audit done

Benchmark #2: Reduce use of gasoline-powered yard tools

Avoid using gasoline-powered tools such as lawn mowers, weed eaters, and leaf blowers.

- Start using electric-powered or push mowers, hand clippers, and rakes
- Replace part of your lawn with low-maintenance groundcover, a native wildflower patch, or a vegetable garden
- Recycle lawn clippings and leaves in your compost pile

Benchmark #3: Reduce the threat of invasive species expansion

- Remove invasive species from the garden and plant native ones instead

Benchmark #4: Incorporate a diversity of native plants into your landscape

- Plant a diverse range of native blooming and fruiting plants in your garden

Benchmark #5: Reduce water consumption

During heat waves and droughts, water resources become scarce. Reduce water consumption through:

- more mulching in the garden
- installing rain barrels
- adjusting your watering schedule to times in the day that are less hot
- using drip irrigation
- incorporate xeriscaping principles into your garden design.

Benchmark #6: Develop a rain garden

- Create a rain garden, which captures storm water runoff and helps prevent it from polluting local lakes, streams, and coastal waters.

Benchmark #7: Reduce kitchen and garden waste

Home compost operations help lighten pressure on landfills and result in more water-retentive soil for the gardener.

- Install a compost bin in your yard for all your kitchen and garden waste.

Benchmark #8: Establish a “greenroof” and plant trees to protect your house from the elements and to absorb carbon dioxide

- Commit to planting a certain number of trees each year to your property.

Benchmark #9: Minimize tillage in the garden

□ Learn how much is too much in terms of tillage and working the soil. A good principle to go by, is starting from the soil and building up, instead of digging down. Add organic material to build up the soil. Use a lot of compost and mulches, and you won't need to do any back-breaking digging and will be assisting with carbon sequestration in the soil!

Benchmark #10: Encourage local home and garden retailers to carry energy-efficient products.

□ You can help increase the availability of energy-efficient garden products, as well as native plants, by encouraging your local home and garden retailers to carry them.

Benchmark #11: Actions for Your Elected Officials

□ Contact your elected officials at the local, state, and federal levels and urge them to implement a strong plan of action to combat global warming, such as placing mandatory limits on the nation's global warming pollution and raising fuel economy standards for cars and sport-utility vehicles.

Benchmark #12: Go organic

- Stop using products like synthetic fertilizers that use fossil fuels in their production.
- Replace synthetic fertilizers with compost and organic mulches, supplemented with organic, slow-release fertilizers when an extra boost is needed.

Benchmark #13: Grow some of your own food

□ Commit to buying your program food from local farmers and markets. Grow some of your own.. Food transportation causes tremendous amounts of greenhouse gas emissions.

Benchmark #14: Buy your electricity from sustainable energy sources

Benchmark #15: Stop and think when you shop.

Choose products that generate the least waste and make sure that you compost all organic waste. Recycling paper, cardboard, cans, and bottles also helps reduce the greenhouse gas emissions associated with landfills.

- Learning to take a soil test to ensure you're not adding inputs you don't need.
- Planting the three sisters to experience a system that is environmentally sustainable, as well as nutritionally sound.