

Green Clean Schools



Healthy Cleaning for Students, Staff and the Environment

Preparing Your School for a Green Cleaning Program

GreenCleanSchools.org

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In this guide, we walk you through the essential preparations you will need to build a successful green cleaning program, such as creating a green team of school stakeholders and assessing where your school currently stands when it comes to green cleaning. We also address ways to continue ongoing policy and tips on how to evaluate progress.

Create a Green Team

Involving stakeholders in your green cleaning program is critical to establishing an effective change that will stand the test of time. Policies and plans developed in isolation rarely succeed long term. A green team of school stakeholders can provide the needed input and support to successfully move your program forward. Your school may already have an environmentally focused person or group, such as a Health, Life, and Safety Committee, Indoor Air Quality team, Integrated Pest Management team or a recycling coordinator. You may either approach them about spearheading the implementation of the green cleaning plan or tap them to help you create a separate team.

Who Should Be On the Green Team

A green team should include representatives from the following groups:

- **Administrative staff** control the budget and decide which purchases the school or district will make.
- **Facility Operators** have direct technical responsibility for managing the school's heating, cooling and ventilation systems. The facility operator is crucial to addressing problems like indoor air quality.
- **Custodians** are obviously key individuals. In many districts they are in a union.
- **Union Representatives** organize school staff to create priorities for action. They may know members who are interested in environmental risks and willing to participate in action for change. Unions may have environmental health committees that support green cleaning programs.
- **Health Officers/School Nurses** can be helpful in monitoring and recognizing trends in reported illnesses. This monitoring may warn of environmental problems related to cleaning or other factors. Also, the school nurse can be an important advocate and teach people about the relationship between green cleaning and better student health and performance.
- **School Board Representatives** can provide the resources and authority necessary to implement a green cleaning plan.
- **Contract Service Providers** need to be active members of the green team because their activities can impact the school's environmental quality. Examples include pesticide application, renovation work, such as re-roofing and maintenance of ventilation equipment and air filters. In some cases the custodial staff is contracted as well.
- **Teachers** play an important role in promoting and maintaining a clean and healthy classroom. One of the most important steps teachers can take is to encourage and provide opportunities for frequent and effective hand washing. Teachers can also help create a healthy school environment by:
 - minimizing clutter so the classrooms can be cleaned thoroughly and efficiently
 - working with custodians in obtaining green cleaning products
 - encouraging proper cough hygiene
 - overseeing appropriate tissue use and disposal

- assisting with sanitizing between classes on high touch points, such as on keyboards
- avoiding the use of cleaning products not in the program
- **Parents** should be aware of the school's efforts to promote a healthy environment. This not only helps avoid miscommunication but also attracts additional resources and expertise that school personnel cannot.
- **Students** are the primary customers of the school and should understand how they can maintain an environmentally friendly and healthy building. Although students should not clean bathrooms or strip floors, they can keep lockers tidy, practice good hygiene, stack chairs on desks and pick up papers to make it easier for custodians to clean. They can also learn about good indoor air quality.
- **Vendors and Distributors** have a built-in incentive because a school with a new green cleaning program is a potential customer. Vendors are often willing to spend considerable time and effort to help the program succeed.
- **Advocates** such as local healthy school groups, environmental and children's health groups could be excellent allies. These groups are frequently well connected in the community and can generate resources to help your program succeed.
- **Communication and Coordination:** Disseminates environmental information, fields environmental complaints and communicates environmental issues and status to school administration, staff, students, parents and the press.
- **Project Management:** Tracks adherence to the plan; problem solves.

Choosing the Coordinator

The coordinator does not have to be an expert on environmental issues or green cleaning. Ideally, the coordinator should be someone with a genuine interest in improving the school indoor environment and the authority to interact with district-level administrators, school staff, students and parents, and to make budget recommendations.

In larger school districts, the coordinator may be a district-level administrator, such as a business official, health and safety officer or facilities manager. In smaller school systems and individual schools, the coordinator may be the principal, school nurse, a teacher or other school staff. Occasionally, it is necessary to designate co-coordinators or delegate administrative items to a special volunteer subcommittee of community members, such as local environmental or health department staff, parents and skilled business leaders.

Establish Regular Team Meetings

In the beginning, weekly or biweekly meetings may be required to work out your green cleaning plan and policy. Later, monthly or quarterly meetings may be sufficient to update participants on progress, address problems and concerns and revise the plan.

Finding a space that the team can call home will help keep the process organized and focused, avoiding "fell through the cracks" syndrome. Space is scarce in most schools. However, your team will be collecting data that must be organized and available for review. In the tightest quarters, even a dedicated file cabinet and a table in the staff lounge or library can be effective.

The Coordinator's Role

The green team coordinator's role is to promote teamwork and further decision making. The coordinator's main functions will be based on the district or school's needs and may include:

- **Leadership:** Coordinates the green team and encourages cooperative responsibility to implement the green cleaning plan.
- **Cheerleading:** Recognizes those who volunteer.

Understand Your School's Cleaning Program

Understanding how your school's cleaning program is structured is important when forming a green cleaning program and team. In some school districts, janitorial staff might be hired by someone at the district office but supervised by school staff. The person responsible for hiring and training janitorial staff should be included on your green team. Below is a list of questions to help you more effectively navigate your school's decision-making process:

- Does your school have an in-house cleaning program, or are cleaning services provided by an outside service provider?
- If your school has an in-house cleaning program, who has responsibility for hiring and supervising the janitorial staff?
- If your school has an outside contractor, who develops the contract requirements, selects the contractor and monitors performance?
- When does the current contract end? The liaison to the cleaning contractor and a representative of the cleaning company should be on your green team.
- In some cases, purchasing decisions are made through district-wide contracts. Who makes decisions about product selection and equipment purchases?
- Sometimes a district or school employee makes specific purchasing decisions. Other times, the cleaning contractor chooses the products. What are the current product specifications and who establishes the budget, labor, products and equipment?

Assess Your School

Whether beginning a new green cleaning program or improving an existing one, schools should start with an audit. Unfortunately, many audits focus solely on cleaning chemicals and miss other opportunities for improvement. With the appropriate information, schools can identify and prioritize opportunities based on importance, cost, risk factors and other criteria. Having an experienced cleaning person on the

green team will be helpful when gathering this information. Vendor representatives can also provide valuable insights during this portion of the process.

General Cleaning Assessment

A simple walk-through of the building can assess the state of cleanliness and orderliness.

Evaluate the following areas:

- Entryways
- Restrooms
- Offices
- Classrooms
- Media centers
- Cafeterias
- Conference rooms
- Food-preparation areas
- Laboratories
- Athletic and health facilities

Some red flags to note:

- Visible soil, mold and dust
- Odors, especially in restrooms
- Insects and rodent droppings
- General disarray
- Work spaces where desks, credenzas, cabinets and floors are so cluttered that dusting and floor care cannot be conducted
- Mismanagement of recycling and trash, such as wet trash in recycling bins or office paper in wet trash bins
- Anything that seems out of place (i.e. cardboard taped to diffusers, personal air filters or space heaters, collections of cleaning products brought from home, etc.)

You may choose to do an in-depth evaluation of the cleaning practices using the APPA Operational Guidelines for Educational Facilities: Custodial, which was designed to meet the LEED-Existing Buildings Operations and Management standard. This document is available at: http://www.appa.org/bookstore/product_browse.cfm?itemnumber=792

You may use one of the simple inventory forms included in our [Resources & Tools](#) page to document current information on:

- Cleaning chemicals, equipment, supplies and paper products (toilet

- tissue, napkins, paper towels, paper wipes, trash can liners, etc.)
- Cleaning procedures, including maintenance tasks and frequencies
- Training programs and processes

You can access these documents at:
<http://greencleanschools.org/resources>.

Other helpful planning data includes:

- Existing indoor air quality and structural concerns identified by the Health, Life and Safety Committee or Indoor Air Quality (IAQ) Team
- Feedback on general housekeeping quality
- General statistical information on the number of students with asthma and chemical sensitivities, asthma medication use and the number of absences due to asthma may also be informative. Nurses may be already gathering this data and can also track illnesses to determine if students and staff are getting ill in certain areas of the building or during certain times of the day.

Auditing Supplies and Equipment

Cleaning Chemicals

Using safer cleaning products is an important part of a green cleaning program, so taking stock of what you are currently using will help you make future decisions and potentially score some easy wins. Ask your custodial staff or school facility director for a list of products that are currently being used in the cleaning program.

First, you should make sure the products in your school have a qualified third party certification. Most chemicals can and should be certified which makes identifying safer products easy. Labels that can help determine health and safety include Green Seal, Ecologo and the US Environmental Protection Agency's Design for the Environment.

When reviewing products, some red flags include:

- *Ready-to-use products* - Most green programs want to try to use

- concentrated products that are not only easier to transport, but can also be diluted at varying strengths for different uses and save money.
- *Aerosol cleaning products* - While aerosol can have a role in supporting usability and might even be required for some specific applications, their use should be limited. There is a high ratio of packaging to product and unique challenges to recycling most aerosol containers.
- *Chlorine bleach* (especially when found outside a laundry area) - Chlorine bleach is highly corrosive to skin and surfaces. Additionally, when combined with other chemicals, it can release chlorine gas. Because there are so many effective and affordable alternatives, chlorine bleach should not be included in a green cleaning program.
- *Ammonia* - When ammonia is combined with water it produces ammonium hydroxide. This chemical is very corrosive and damages cells in the body on contact. Inhalation of ammonia can cause coughing, and nose and throat irritation.
- *Products labeled as "dangerous," "flammable" or "poisonous."* There are so many safe, effective and affordable alternatives on the market today. Products with these sorts of labels should not be included in a green cleaning program.
- *Products that occupants have brought from home.* All products used in a green cleaning program should be vetted by the green team before they are used in the building. Only products that are listed on your program's product list and purchased from a distributor or manufacturer should be used.
- *Unlabeled or mislabeled containers* - All cleaning products in your green cleaning program should be in clearly marked containers.
- *Damaged or leaking containers* - Any containers that are damaged should be disposed of immediately.
- *Products stored outside of appropriate product storage area* - All cleaning

products should be stored in a clearly designated storage area.

Paper Products

Note the recycled content, size of rolls and if hand towels are roll or multifold. For roll products, note the size to see if it can be replaced with larger rolls. Also make note of dispensers.

Red flags include:

- Multifold towel dispensers
- Damaged dispensers

Trash-Can Liners and Receptacles

Note liners' recycled content, type and thickness. Multiple sizes of liners typically means a lack of standardized trash can size. This frequently results in excessively large bags that waste resources.

Red flags include:

- Trash cans requiring multiple liners
- Trash cans with liners that are too large or too small for the can

Janitorial Equipment

Note the manufacturer's name, model number and size, which can then be matched to equipment spec sheets.

Red flags include:

- Visible damage, including bare or damaged wires and frayed cords
- Trash cans with liners that are too large or too small for the can
- Full vacuum cleaner bags
- Floor burnishers without vacuum attachments
- Floor scrubbers that leave tracks because of damaged or misaligned squeegees
- Floor scrubbers and carpet-extraction equipment with water left in the solution or recovery tank

Entry Mats

Note the mat's size and condition, along with whether the mat is able to prevent dirt from entering that particular location.

Red flags include:

- Short mats (mats should be 10 to 12 feet long)
- Curling corners and edges
- Old, worn or loaded mats that cannot capture soil or moisture
- Mats that move when you walk across them

Other products: mops, mop buckets, recycling containers, carts

Note their state of repair, size and if they are appropriate for the task.

Auditing Training and Procedures

By conducting an audit, schools can highlight opportunity areas and note key improvements for the future.

Auditing cleaning procedures

Observe how efficiently and effectively crews are cleaning. For example:

- Do they need training on the appropriate equipment use?
- Are they emptying filter bags and capturing tanks at the appropriate intervals?
- Are they mixing and using chemicals correctly?
- Are they disposing of waste products correctly?
- Are they using hot water when cold water would work?
- Are they protecting themselves from back and other injuries?
- Are they handling recyclables and waste appropriately?

Red flags include:

- The lack of written plans and standard operating procedures
- The lack of specific daily job cards and work assignments

Assessment of Storage Areas

A simple assessment can identify immediate storage problems, such as incompatible chemicals, electrical issues or other potential problems. Also note how the storage area is organized. Often, simply organizing a storage

area can help manage inventories, reduce waste and reduce time locating cleaning materials.

Red flags include:

- Incompatible products, such as bleach and ammonia, being stored together
- Leaking or damaged products
- Flammable products
- General disarray and clutter

Develop Your Plan and Policy

When your green team has been established and the current cleaning program has been audited, it's time to establish goals and create a written plan of strategies to meet these goals. Then, commit to a green cleaning policy for your school's unique needs and develop a written plan. A sample green cleaning plan is available [here](#).

Timetable and Staffing

The plan should outline a timetable for implementation, identify responsible parties and pinpoint milestones to be measured and celebrated along the way. This ensures that the project moves forward and keeps everyone on the same page. A timetable and staffing plan also keep leadership informed of progress, which boosts confidence in the program.

Establish Goals and Strategies

Use the baseline data to identify critical problems, risks and the best opportunities for improvement. It is important to consider specific contract or other regulations that might constrain your options. For example, some distributor purchasing agreements may not include green equipment. Certain local public health codes require using a stronger chemical to prevent infections. In these cases, always defer to public health safety requirements. Otherwise, talk with your distributor about offering green products and equipment.

Here are a few common goals and strategies to include in your green cleaning implementation plan:

Prevent Pollution

Pollution prevention is reducing or eliminating waste and toxins at the source by:

- Modifying production processes
- Promoting non-toxic or less-toxic substances
- Implementing conservation techniques
- Re-using materials rather than throwing them away

Reduce Chemical Use

Because chemicals can be harmful to both human and environmental health, it's important to reduce how many different chemicals are used and the quantity of each. Schools can consider water-based cleaning options, some of which use steam or vapor in place of chemicals. Concentrated chemicals can be diluted as necessary. Dilution control mechanisms allow staff to determine whether a stronger or less potent dilution is necessary. Diluting concentrated chemicals allows schools to cut down on the quantity and variety of chemicals used.

By reducing the number of different cleaning chemicals and the total quantity used, schools can save money, use fewer supplies and become more efficient buyers.

Improve Indoor Air Quality

Improved Indoor Air Quality (IAQ) is an important overall goal, but it's also expensive to measure. When done correctly, particle sampling is a costly but impressive tracking measure. Alternatively, some schools compare the number of IAQ complaints, which is why baseline data should be collected. Complaints can include odors, dampness, headaches, discomfort and stuffiness.

Reduce Illness and Absenteeism

When green cleaning is part of an overall IAQ plan, your school may reduce student and staff absences, illnesses and school nurse visits. This requires keeping detailed records. Lockport Township High School is one example of a school that collected and learned from this data.

Improve Custodial Staff Worker Safety

Studies have shown that 6 percent of janitors have lost time each year because of chemical injuries, such as burns, eye irritation or inhaling toxic fumes. Janitors experience one of the highest rates of occupational asthma.

Increase Productivity & Ergonomics

Green cleaning may improve school cleanliness by allowing custodians to be more effective. Look for products that help cleaning staff perform the same tasks in less time. Ergonomically designed products and equipment can prevent injuries by allowing staff to conduct repeat movements with better physical posture and a lower risk for falls.

Improve Public Relations

As public awareness of school environmental health increases, schools with a green cleaning program can reap large public relations benefits if they publicize their program's achievements.

Adopt a Green Cleaning Policy

While a plan outlines how the green cleaning program will be implemented, a green cleaning policy broadly expresses the administration's support and formalizes the commitment of time and resources for implementation. It also sets the direction of the green cleaning program and serves as an accountability tool to ensure that school stakeholders carry out their roles.

A green cleaning policy should state the administration's intent to implement the green cleaning plan. The policy should also outline goals and expectations. A policy may include:

- The reason the policy is being implemented
- Definition of key terms, such as "green" and "green cleaning"
- Explanation of the green team's role and responsibilities
- Key expectations such as reporting spills, keeping personal space free of clutter, etc.
- Inappropriate activities such as bringing cleaning supplies from home
- Purchase decision guidelines and approved products and vendors

- Plans for education and communication to key audiences
- Methods to track progress

Building Support

Your green team is the first step toward building support among key school stakeholders who may not have been involved in the planning.

These stakeholders can include:

- Students
- Parent-Teacher Associations
- Custodial and teacher unions
- Contractors and vendors
- Elevator service companies
- Health, Life, and Safety Committee members
- Maintenance and repair personnel

Getting Approval

Find out your district's procedure for adopting a new policy. It may involve providing written rationale. Public hearing or presentation may also be required. For a public hearing, choose a persuasive, influential spokesperson. You can find a sample green cleaning presentation in our **Assessment Resources** page.

Once the policy is adopted, it should be publicized through the district's communication channels. This is an opportunity to celebrate what your team has accomplished and energize those who will implement the policy.

Implement the Green Cleaning Plan

Once the plan and a policy are approved, the green team should oversee its implementation. This will require establishing early and measurable "wins" to motivate the team and gain support for continued progress. Another strategy might involve a pilot project.

Setting Priorities

You don't have to do everything at once.

Prioritize your goals and strategies based on a number of possible criteria, including:

- Eliminating the most immediate risks to people and dangers to the environment
- Choosing products or procedures that yield the greatest health benefits

- Measurable opportunities for improvement that stakeholders or the public can see
- Changes that save money

Pilot Projects

A pilot project can be useful for complex implementation issues or testing a novel approach. It can also build experience and establish a track record to make the large-scale implementation smoother.

Whether changing a significant number of products or using a new vendor, a pilot project can help evaluate service, training and usability. In a large school district, a pilot project may include implementing equipment and a few new products at a small number of buildings.

Overcoming Political and Other Obstacles

Data collected during a pilot may significantly reduce roadblocks for approving larger changes. But resist the natural tendency to relax because a pilot is not the "real thing." A pilot requires all of the ingredients for a successful full-scale implementation. Communication, measurement and feedback are still critical to the pilot's success and by extension, the full-scale implementation's success.

Also, pilots need to have a clear end date (usually the best approach) and defined goals and milestones. Typically, pilot projects close after six months to a year depending on the project. After learning objectives are attained, it is then time to incorporate the findings and move to full-scale implementation.

Evaluate Progress

The green team should review the green cleaning program every three to six months in the first year and annually thereafter. The green team should compare original baseline data as well as plan and implementation priorities with outlined measures of progress. These statistics can motivate students, staff and other stakeholders by demonstrating with hard data why green cleaning is making a difference.

Objective Measures

Objective measures are based on quantifiable facts. The data can be graphed to measure changes over time. Objective measures can include:

- The number of training workshops held and number of participants
- Indoor air quality and other cleaning-related complaints
- Tracking health measures including asthma and attendance records
- Reductions in chemicals purchased
- Products saved by switching to recycled paper (reduction in new production from using recycled goods)
- Materials recycled and other source reduction efforts
- Pollution prevented
- Percentage of dollars on green versus non-green purchases
- Dollars spent per student on cleaning products and equipment
- Dollars spent on cleaning products and staff per square footage
- ATP testing

Subjective Measures

- Pre- and post-implementation surveys or interviews can measure how school stakeholders view the program. Given their high margin of error, surveys should be supplemented with other feedback options, including an e-mail address or phone number for unsolicited, possibly anonymous, comments
- Town hall meetings
- Small focus groups with stakeholders

Individual anecdotes and comments might flag a larger issue, but they should not be used to change the policy or plan until a larger population agrees. It's the difference between a single comment and resounding survey results. Until isolated comments reflect an entire group or population, they are subjective. Still, the importance of stakeholder buy-in cannot be exaggerated. Providing opportunities for feedback and acting on that feedback helps keep stakeholders engaged.

In addition, your school may seek out green cleaning certifications from third parties such as The U.S. Green Building Council or ISSA. These certifications are discussed in detail here. They may be able to help your school create a framework for evaluating progress.