# Step 1 Prepare Your School

**5 Steps to Green Cleaning in Schools** 

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# Preparing for a Green Cleaning Program

Implementing green cleaning in schools has <u>many</u> <u>benefits</u>, and chief among them is helping students stay healthy and ready to learn.

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 develop a policy and evaluate progress.

If you are a school facility administrator or other member of the school community is interested in the how-to of building your green program, keep reading for specifics. If you are a parent or community member interested in learning more about green cleaning and raising awareness in your school, see our companion guide, Making Change at Your School, as a starting point. No matter what your role, you have the power to make a significant impact on student health, well-being and achievement by helping shape a greener, healthier approach to cleaning at your school.

# 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 stakeholders can provide the needed input and support to successfully move your program forward. Your district 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. These groups may also exist at the school level. 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:

- Administrators control the budget and decide what purchases are made.
- Facility operators have direct technical responsibility for managing heating, cooling and ventilation systems. The facility operator is crucial to addressing problems such as indoor air quality.
- Custodians are key to this process. As their health is directly affected by exposure to cleaning chemicals, they can benefit personally and directly from an effective green cleaning program. Custodians can share an on-the-ground perspective to ensure the policy is practical for those who put it in action. In many districts, custodians are part of a union.
- · Union representatives organize school staff, including custodians and teachers, to create priorities for action. They may know members who are interested in environmental risks and are willing to participate in action for change. Unions may have environmental health committees that support green cleaning programs. Note that different school employees may be represented by different unions.
- · Health officers and school nurses can be helpful in monitoring and recognizing trends in reported illnesses. This monitoring may identify or warn of environmental problems related to cleaning or other factors. School nurses can also be important advocates 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 schools' environmental quality.
   Examples include pesticide application, renovation work such as re-roofing, and maintenance of ventilation equipment and air filters. In some cases, the school custodial staff is contracted as well and their employer should be represented on the team.
- Teachers play an important role in promoting and maintaining a clean and healthy classroom. In some cases, teachers bring and use their own cleaning products in addition to the regular school cleaning program. Teachers also play an important role in promoting hand-washing, minimizing clutter, assisting with sanitizing touch points between classes, and much more.
- Parents should be aware of efforts to promote a healthy environment. This not only helps avoid miscommunication but also attracts additional resources and expertise.
- Students are the primary customers of the school and benefit greatly from a healthy indoor environment that supports their health and learning. Students can play a role in maintaining an environmentally friendly and healthy building. Although students should not take on major cleaning tasks such as cleaning bathrooms or stripping 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 district 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 organizations 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.

### **Choose a Coordinator**

As you bring together your team, you will need to designate a coordinator to promote teamwork and further decision making. The coordinator's main functions will be based on the team's needs and may include:

- Leadership: Coordinate the green team and encourage cooperative responsibility to implement the green cleaning plan
- · Cheerleading: Recognize those who volunteer
- · Communication and Coordination: Share information, field environmental complaints and communicate environmental issues and status to school administration, staff, students, parents and the press
- Project Management: Track adherence to the plan; problem-solve

The coordinator does not need 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 cocoordinators or delegate administrative items to a 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, frequent 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.

# Understand the Cleaning Environment

As you begin, it is important to take time to thoroughly understand the context of your cleaning program and how state or district requirements shape it. Below is a list of questions to help you understand the broad context for your program and think through your approach.

- State policy: Does your state have a law that requires or recommends green cleaning? Visit greencleanschools.org/policies to view a list of states with green cleaning policies. If your state has a green cleaning law, begin by reviewing the state requirements or guidance. This will bring immediate credibility to your efforts and of course will help ensure your program is compliant with state rules and regulations.
- District policy: Does your school district have a policy that requires or recommends green cleaning? If your district has a green cleaning policy, begin by reviewing the requirements or guidance. If your district does not have a policy, consider that your team can play a role in creating a strong policy for your district. For more on this, see the Develop Your Plan and Policy section further in this document.

- Determine who is in charge: Look at your district website site or contact your district leaders (for example, a facility and operations director) to understand who has the primary responsibility for the cleaning program. Also, learn who this person reports to. It is important to understand who has the authority to make the change you want.
- Learn about the structure of the program: School districts can either manage their cleaning program themselves or they can hire an outside contractor. It is important to understand the basic structure of your program. If the school district has hired an outside contractor, it is important to understand (and ultimately influence) the requirements of the contract with that yendor.
- Understanding key program elements: Regardless of how the program is structured, it is important to understand how decisions are made about some key areas:
- Staffing: Who is responsible for supervising the janitorial staff? Who provides professional development and training?
- Products and equipment: Who makes decisions about purchasing products and equipment for your cleaning program? What are the current product and equipment specifications? What factors are prioritized in this decision-making? In some cases, purchasing decisions are made through district-wide contracts. In other cases, they are made at the school level or may be influenced by recommendations from a contractor.
- **Budget:** Who establishes the budget for labor, products and equipment?

# **Assess Your Cleaning Program**

Whether beginning a new green cleaning program or improving an existing one, your team should start with an audit. If you are working at the district level, you can choose a representative sample of schools to audit or can visit all of the schools, depending on what is practical for your team. A cleaning audit

involves on-the-ground observations, so visiting the schools is essential for conducting the audit. Unfortunately, many cleaning audits focus solely on cleaning chemicals and miss other opportunities for improvement; your team's audit will need to take many other factors into account. With the appropriate information, you can identify and prioritize opportunities based on importance, cost, risk factors, potential impact and other criteria. A member of your green team who has school cleaning experience will be helpful in gathering this information. Vendor representatives can also provide valuable insights during this portion of the process.

Plus: See our Audit Tool for getting started.

# **General Cleaning Assessment**

A simple walk-through of the building can provide an assessment of the state of cleanliness and orderliness. On your walk-through, be sure to 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
- · Insect and rodent droppings
- · General disarray

- Work spaces where desks, credenzas, cabinets and floors are so cluttered that dusting and floor care cannot be properly 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 or indicates that building occupants have developed their own modifications to building conditions (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.

You may also use one of the simple inventory forms included in our Resources & Tools to document current information on:

- · Cleaning chemicals, equipment, supplies and paper products
- · Cleaning procedures, including maintenance tasks and frequencies
- Training programs and processes

Other helpful points to consider include:

- 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. School 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. Taking stock of the products currently in use will help you make future product decisions and potentially score some easy wins. Ask your facility manager for a list of products that are currently being used in the cleaning program.

First, your team should determine whether the products meet 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 U.S. Environmental Protection Agency's Safer Choice. For more on this issue, see our overview of Third Party Certifications.

Plus: See the <u>Chemical Supply Audit</u> tool for getting started.

When reviewing products, some red flags include:

- Ready-to-use products: Green programs generally use concentrated products that are easier to transport and can be diluted at varying strengths for different uses, reducing overall costs.
- Aerosol cleaning products: While aerosol can have a role in supporting usability and might even be required for some specific applications, its use should be limited. Aerosol containers have a high ratio of packaging to product and are difficult to recycle.
- · Chlorine bleach (especially when found outside a laundry area): Chlorine bleach is highly corrosive to skin and surfaces. When combined with other chemicals, it can release chlorine gas. Because so many effective and affordable alternatives are available, 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 nose and throat irritation and coughing. Because so many effective and affordable alternatives are available, ammonia should not be included in a green cleaning program.
- · Products labeled as "dangerous," "flammable" or "poisonous": Many safe, effective and affordable alternatives are available on the market today. Products with these 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 appropriate product storage areas: All cleaning products should be stored in a clearly designated storage area.

Plus: For more on selecting less hazardous cleaning chemicals, see <a href="Step 2">Step 2: Identify Green Cleaning</a>
Products.

# **Paper Products**

Note the environmental attributes of paper products, including recycled content, renewable sourcing, size of rolls and whether hand towels are roll or multifold. For roll products, note the size to see if larger rolls can be used. Also make note of dispensers.

Red flags include:

- · Multifold towels and/or dispensers
- · Damaged dispensers

# **Trash Can Liners and Receptacles**

Note liners' recycled content, type and thickness. Multiple sizes of liners typically indicates a lack of standardized trash can size. This frequently results in the use of 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 specification sheets.

Plus: See our Janitorial Equipment Inventory Form.

# Red flags include:

- Visible damage, including bare or damaged wires and frayed cords
- · 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:

- · Mats less than 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 size, state of repair, and whether they are appropriate for the task.

Plus: For guidance on selecting green products in the categories outlined above, see <a href="Step 3: Introduce">Step 3: Introduce</a> <a href="Green Equipment + Supplies">Green Equipment + Supplies</a>.

# **Auditing Training and Procedures**

# Staff training

Take time to review your training plan, making sure that the training:

- · Is delivered in manner that employees understand; this includes delivering training in an employee's primary language
- Includes a combination of classroom and hands-on learning to support different styles of learning
- · Is accompanied by pre- and post- assessments so you can validate the effectiveness of the training

Review documentation that supports your training program to ensure that it includes:

- · A clear written plan for training and orienting new employees
- · A clear written plan for regular professional development
- Training documents and assessments provided in employee's' primary language

# Cleaning procedures

As you assess cleaning procedures, consider how they help reduce general health risks to students, staff, and custodians, and help minimize environmental impact. One key component to reducing general health risks is to ensure you are using cleaning products and equipment properly. Observe how efficiently and effectively crews are

cleaning. For example, are cleaning staff:

- · Using equipment correctly and efficiently?
- Emptying filter bags and capturing tanks at the appropriate intervals?
- · Mixing and using chemicals correctly?
- · Disposing of waste products correctly?
- · Using hot water when cold water would work?
- Protecting themselves from back injuries and other injuries?
- · Handling recyclables and waste appropriately?

Review documented procedures and consider:

- Do staff have written plans and standard operating procedures?
- Do staff have specific daily job cards and work assignments?
- · Are these documents used in practice and available in employees' primary language?

# **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

Plus: For more on greening your cleaning procedures, see <u>Step 4: Adopt Green Cleaning Procedures</u>.

# **Understanding Occupant Needs**

Your assessment is about more than just looking at the custodial services. You will want to understand how your building occupants experience their daily activities. Input from teachers, administrators and students can help you identify potential hot spots of concern in your buildings, and at the same time, give a voice to the concerns of your students and staff. You can adapt this <u>sample survey</u> for your needs.

# Develop Your Plan & 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. Committing to a written plan can help you address your school's unique needs. You can access a sample green cleaning plan from Howard County Public Schools.

# **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 information you've gathered in your audit to identify critical problems 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:

# **Improve Indoor Air Quality**

Improved Indoor Air Quality (IAQ) is one of the most important reasons for implementing a green cleaning program. Improved IAQ has been linked with better student attendance, health and attentiveness. A green cleaning program should be one of the first strategies a school employs to create a healthier indoor environment. In essence, green cleaning empowers schools to use fewer yet safer products and processes that promote good hygiene and sustainability. This all contributes to healthier indoor air.

# **Prevent Pollution**

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

- Using non-toxic or less-toxic substances
- · Implementing conservation techniques
- · Re-using materials rather than throwing them away
- Choosing products that are produced in a sustainable way when possible

### 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 while promoting health and protecting the environment.

# **Reduce Illness and Absenteeism**

When green cleaning is part of an overall IAQ plan, you may reduce student and staff absences, illnesses and school nurse visits. Making this connection requires keeping detailed records. Some green cleaning teams have partnered with their school nurse to review absenteeism data and connect facility issues to student health.

# **Improve Custodial Staff 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. A green cleaning program with fewer hazardous chemicals and a training component focused on protecting human health and the environment can be transformational for custodial workers' safety and long-term health.

# **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, districts that implement green cleaning can reap public relations benefits by sharing information about their program's achievements. This could include outreach to media (with the support of your district's communications or public relations department) or something as simple as highlighting green cleaning achievements in a school newsletter or letter to parents. You can also apply for the <u>Green Cleaning Award for Schools & Universities</u> to achieve national recognition for your efforts! For more on engaging your school community and earning recognition for your

green cleaning program, see <u>Step 5: Share the</u> Responsibility.

# **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
- Purchasing decision guidelines and approved products and vendors
- · Plans for education and communication to key audiences
- · Methods to track progress

Your green team's work has created a foundation for engaging and building support among key school stakeholders who may not have been involved in the work so far. The support of these stakeholders will be helpful in ensuring the success of the policy. Stakeholders can include students; parent-teacher associations; unions representing custodians and teachers; contractors and vendors; members of the

Health, Life, and Safety Committee; maintenance and repair personnel; and others.

# **Getting Approval**

Find out your district's procedure for adopting a new policy. It may involve providing written rationale or delivering a presentation at a public hearing. For a public hearing, choose a persuasive, influential spokesperson. You can find a sample green cleaning presentation on our <u>Resources</u> page.

Once the policy is adopted, it should be publicized through all the district's communication channels. This is an opportunity to celebrate what your team has accomplished and energize those who will implement the policy. For more on engaging your school community and raising awareness of your green cleaning program, see <a href="Step 5">Step 5</a>: Share the Responsibility.

# 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 the criteria you determine. Possible criteria include:

- · 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 success.

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 staff, students and other stakeholders by demonstrating with hard data how 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
- · 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
- · Surface sampling, such as ATP testing
- · Occupant surveys

# **Subjective Measures**

Pre- and post-implementation surveys or interviews can measure how various stakeholders view the program. Given their high margin of error, surveys should be supplemented with other feedback methods, 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 green cleaning policy or plan unless a larger population agrees. It's the difference between hearing a single comment and getting 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 will help keep stakeholders engaged.

In addition, you may seek out green cleaning certifications from third parties such as The U.S. Green Building Council or ISSA. They may be able to help you create a framework for evaluating progress.

**Next:** Keep reading steps 2-5 for more how-to on building your green cleaning program!

# Reading this Document Offline? Get the Resources!

Visit <u>greencleanschools.org/resources</u> to access the supporting documents linked throughout this document.

# Get Started!

Now that you have the steps laid out before you, it's all about moving forward with your plan. Contact us at Healthy Schools Campaign to share your story, ask follow-up questions or find out how to connect with green cleaning leaders across the country. Our newsletter is a great way to stay on top of green cleaning trends and learn about what other schools are doing that really works. And now that you're preparing your green cleaning program, you'll want to prepare your school to apply for the Green Cleaning Award for Schools & Universities.