Green Associate Certification Training

Participant Guide – Introduction

Purpose
The purpose of this course is to educate and provide you with the tools you will need to move towards a greener work environment for both Canon and our clients.

Objectives
This course will:

Provide you with the:

- Fundamental knowledge to increase your awareness of sustainability issues for reducing environmental impacts in the workplace
- Tools to take strategic actions for reducing carbon footprints that result in operational savings for CBPS as a corporation and our clients as needed

Prepare you for your certification as a “Green Associate”

Contents
This course is organized into the following lessons:

- Introduction to Sustainability
  - The Business Case for Sustainability
  - Characteristics of Sustainable Companies
  - Current Canon Initiatives & Resources
- Tactical Solutions
  (for paper, water & recycling, energy, water, indoor air quality/chemicals/pollution, transportation, and miscellaneous items, including carbon footprints & LEED buildings)
- Summary & Conclusion
Introduction to Sustainability

What is Sustainability?

Here is the generally-accepted definition: meeting the needs of the present without compromising the ability of future generations to do the same.

What is Sustainable Business?

When we apply the concept of sustainability to business, it looks a little different.

Sustainable business is an approach that creates long-term shareholder value through embracing opportunities and managing risks.

On the risk side, if a company does a lot of travel for business or if they are a manufacturer that uses a lot of petroleum or oil in their manufacturing, then as the energy costs go up, whether it’s for travel or manufacturing, that’s a risk to their business. A company can work to manage that risk by embracing more sustainable business practices.

The Triple Bottom Line

Companies that are working toward sustainability are focused on what is called The Triple Bottom Line.

We’re all used to hearing about a singular bottom line. Whenever we have a new program or initiative, everyone wants to know what the impact is to THE bottom line, which always means economic. But a Triple Bottom Line adds two more components.

The Triple Bottom Line includes an economic aspect, but also an environmental and social aspect as well, which creates the TRIPLE bottom line. This is also known as people, planet, and profit, which is kind of an easy way to remember it.

A sustainable business is one that intersects the environmental, social and economic aspects. It is balancing and integrating a company’s goals in these three areas that gives us a sustainable business, again, that Triple Bottom Line.
Introduction to Sustainability, continued

**Economic Goals**

These take into consideration things like income, expenses, and return on investment.

Of course, we’re still talking about balancing the social and environmental areas, but a company has to make money to survive. These economic goals account for the opportunities that can result from green business practices.

It’s important to note that investments that are made in the environmental and social areas can often provide positive economic results as well. However, it’s often difficult to separate the economic benefits from the environmental and social ones, because they are usually tied together.

**Social Goals**

This includes the impact on employee health, safety, morale and job satisfaction, as well as the impact on the people in both the local and global communities. Sustainable companies work to minimize the harm done to the community’s health or environment.

The social goals are often the hardest to measure in exact terms. Still, their impact can be seen and felt, and it’s essential for companies pursuing sustainability to incorporate goals related to people – both employees and the whole community.

**Environmental Goals**

From an environmental perspective, sustainable companies work to protect and restore the environment.

We can look at opportunities around things like reducing waste, improving reuse & recycling rates, and cutting down on the use of energy, water, and other resources.

We can find opportunities in improving air quality by cutting down on pollution and greenhouse gases.
The Business Case for Sustainability

Why are Companies so Interested in Sustainability?

Companies are really making what's called “the business case” for sustainability.

Until recently, many companies that pursued environmental initiatives did so because their leaders felt compelled to do so, more for altruistic reasons than for business ones. They felt it was just the right thing to do.

Now, companies are focused on doing well by doing good. This means that they are finding ways to make money, which is doing well, by considering the people and planet in the course of business. That's the doing good part. Companies are finding ways to achieve both, making that business case for sustainability.

There are several factors that are driving companies in this direction. These can also be broken down into those same three key areas: Economic, Social and Environmental.

Economic Factors
- Globalization
- Demand for transparency
- Increasing value & market share
- Finding cost savings
- Improving a company’s brand

Social Factors
- Demand for good corporate governance
- Regulations around health & safety of the general public

Environmental Factors
- Climate change
- Concerns about water, air quality, forests, waste
The Business Case for Sustainability, continued

Economic Benefits
- Improved brand image
- Greater competitive edge to attract new clients
- Cut costs through improved efficiencies
- Greater profitability

Social Benefits
- Make a company’s corporate culture more flexible and innovative
- Help with recruiting and retention
- Improved employee morale and satisfaction
- Improved relationships with customers and other stakeholders

Environmental Benefits
- Less need for regulatory intervention
- Reduction in the use of our planet’s natural resources
- Reduction in waste produced
- Less waste going into landfills because products have longer life cycle

Characteristics of Sustainable Companies
Sustainable companies share several characteristics. Two of the most important ones are:

1. Sustainable companies develop green policies that are material to the company’s core business. Green policies relate directly to the company’s business strategies.

2. Sustainable companies take a holistic view of sustainability. They look across the company’s entire operations for opportunities.

Canon & Sustainability
Many CBPS service offerings already help to green our clients. For example, scanning and digital mail services can save up to 3% on paper use.

Canon also works with clients to improve their environmental impacts as well as our own. Canon partners with Energy Star and the United Nations Global Compact and has had some recent recognition for our environmental performance.
Structured Framework for Success

It’s helpful to have a framework to use to provide accountability and structure. Sometimes companies think that they don’t know how to “do” greening, but that’s not the case. Here is a simple framework that fits right in with what companies already know how to do.

The **ASSESS** phase is an important first step, to make sure you get started on the right foot. We’ve provided you with a set of checklists and a set of action plan documents to help. Both the Green Checklists and the Action Plans are in your training materials.

Use the checklists in this **ASSESS** phase to audit your facility. Then you can use the appropriate Action Plan document to address questions or concerns and to determine where actions might be taken.

During this **ASSESS** phase, you may need to set some baseline measurements. You should already be familiar with some of the ways we measure results using:

- Service Level Agreements
- Key Performance Indicators
- Performance Metrics
- Process Tracking, and
- Performance Reports

This type of measurement is also important with green initiatives. Here’s why: If you don’t measure and set a baseline up front, it will be impossible to show your improvements. The Action Plans included in your training materials will help you with this sort of measurement.

**FOR EXAMPLE:** Imagine there is a goal in your department or site to reduce paper use by 30%. Your initial baseline shows your site is ordering 1000 reams per month, at a cost of $3,500 per month, and there is no recycled content in the paper. Keep in mind that it’s important to measure both the environmental aspect, such as the usage and amount of recycled content, and the economic aspect, which is the cost of the paper.

After taking steps to reduce paper usage by 30%, you find that the costs have come down. Some of that savings can now be invested in buying paper with recycled content.

So, you can save money by cutting use, and then invest a little bit into recycled content paper. You’re achieving environmental and economic goals. The key here is to measure BOTH environmental impact and economic costs from the beginning, so that both may be tracked over time.
The next step is to **SET GOALS** to ensure progress and accountability. Make sure that you’re moving forward and that you have some metrics to keep you accountable. That’s what setting goals does for you.

You’re probably familiar with Six Sigma and continuous improvement. Canon is focused on quality and process improvements, and it’s no different here.

So, set those goals for where you’d like to be. Figure out the steps needed to achieve those Triple Bottom Line goals, those goals that benefit the company economically, socially and environmentally.

After goals are set, you can **TAKE ACTION** to accomplish them.

Once you implement your action plans, you’ll need to make sure to communicate regularly to ensure everyone understands the changes and what they need to do.

Make sure to report successes as well as challenges to everyone as you execute your plans. This keeps everyone in the loop and connected to the green initiative.

After you **TAKE ACTION**, it’s time to **REVIEW RESULTS**.

Always refer to your business case to make sure that you’re tracking the right things.

You’ll need to use the tracking method that you set up in the **ASSESS** phase, recording both the environmental and economic results.

Then compare your results against your goals. If you didn’t meet them, try to figure out why and how you can do better going forward.

If you **did** reach your goals, think about what went well and how you can replicate that success.

From there, it’s time to communicate those wins and challenges. Doing so helps keep the energy and momentum going for the changes.

Don’t forget to reward those people who helped you, as well as your other colleagues who made successful changes to their behavior.

Celebrate whenever you can – we often don’t take enough time to reflect on what we’ve achieved – and of course, keep moving forward.
Tactical Solutions

Introduction

In this module, you'll learn about some tactical solutions – the "How-To's" – in key areas of sustainability including paper, waste, recycling, energy, water, air quality, and transportation.

Reduce, Reuse, Recycle

This hierarchy is an easy way to think about and prioritize green initiatives; this will help you figure out the best way to go about making changes.

As far as Mother Earth is concerned, it’s best to reduce first, then reuse materials, and then finally recycle them at the end of their useful life.

Cutting paper use, for example, should be a top priority, as you’re not just reducing the trees that are used for the paper, but you’re also reducing the energy, water, and chemicals that go into making it. Also, all the packaging and emissions from shipping the paper are gone.
Tactical Solutions, continued

Paper

Paper represents a key area of opportunity for Canon, since it’s really core to our business. It’s also low-hanging fruit in a lot of offices. In other words, it’s an easy win for your sustainability efforts. There are some really easy ways to achieve some big changes. The average office worker throws away 175 lbs. of high-grade paper per year! Not only does that represent 25% of the trees that are harvested there’s also a lot of water, energy and toxic chemicals used to create paper.

THINGS TO LOOK FOR/LOOK OUT FOR:

- When you order paper, aim for 30% post-consumer recycled content. Post-consumer means it’s been used before. In other words, it has been printed on or written on, rather than being scrap left over from manufacturing. You can get up to 100% recycled content, but it takes a lot of processing, chemicals, and bleaching to get mixed recycled content back to the nice white copy paper that we’re used to using. So, it’s ok to go for just 30% recycled content, and it’s a lot less expensive than the higher percentages, too.

- Look for 3rd party certification on the paper you order as well. This is a great way to make sure that the paper you’re buying is sourced responsibly. There’s a chain of handling that’s been certified by the Forest Stewardship Council or the Sustainable Forestry Initiative, so look for one of those certifications.

- Try to avoid pressure-sensitive adhesives, or PSAs – better known as the sticky stuff on the back of Post-It® notes, self-sealing envelopes, and postage stamps. Recycling companies will take paper with this adhesive on it for recycling. The adhesive itself is not recyclable. It causes problems in the recycling process and reduces the value of that recycled paper. So, avoid those PSAs whenever possible.

- Keep an eye out for non-recyclable elements, such as dark or heavy inks and UV or metallic coatings, which are often seen on business cards or marketing materials.
Tactical Solutions, continued

Paper, cont.  OPPORTUNITIES:

- Use duplex capabilities. Setting printers and copiers on duplex and then making that the default setting can save at least 40% on paper use. Many times there’s really no reason to print single-sided – especially for internal documents, agendas, and so on.

  Think about how much your team or your client spends on paper. Then imagine cutting that amount by 70%. This can be realized simply by using the duplex feature.

- Print multiple pages per side.

- Use a smaller font.

- Delete the headers. According to Canon research, turning off headers alone saves 18 – 28% of paper consumption.

- Instead of making copies for everyone, scan and e-mail documents. It’s estimated that scanning documents saves up to 3% of paper use.

- Use smart technologies, such as personal mailbox or fax-from-desktop, which can also save up to 3% on paper use.

- Send print jobs to workgroup printers, which saves money and paper because people print less when they don’t have a desktop printer.

So, think about which of these items you or your client could benefit from. If you look at all the opportunities to save paper, they add up very quickly.
Waste Reduction & Recycling

The key here is to reduce waste and preserve materials for future use. The problem is that Americans throw away about 4 ½ pounds of trash per person per day, so we’re filling up our landfills, and all that waste contaminates groundwater and uses up our natural resources. Fortunately, the Reduce Reuse Recycle hierarchy also gives you a good way to think about waste and recycling initiatives. It’s best to reduce, then to reuse, and finally recycle at the end of a material’s useful life.

THINGS TO LOOK FOR/LOOK OUT FOR:

• Reduce your purchases. Buying less stuff is one of the best ways to reduce your eco-impact. Also look for products with less packaging.

• Next, think about recycling vs. down-cycling. Only some things can be recycled into the exact same material. For example, if you recycle an aluminum can, it becomes another aluminum can. But paper and plastic are actually down-cycled; they become a lower quality material. Paper, for example, may start out as writing or copy paper, but then over time, it becomes down-cycled to newsprint, cardboard, that sort of thing. Also, plastic can only be recycled once or twice into new products.

• Consider the type of plastic that you buy and use. The most commonly accepted plastic for recycling are types 1 and 2. If you’ve never noticed before, there’s a little symbol on the bottom of each plastic item that indicates the type of plastic, so you can see what type it is. In most areas that have recycling programs, types 1 and 2 are accepted. In other areas, such as in Los Angeles, all 7 types are accepted. So, knowing what you can recycle in your area can help you to choose items that you can recycle.
Waste Reduction & Recycling, cont.

THINGS TO LOOK FOR/LOOK OUT FOR: (continued)

- Consider how to properly dispose of hazardous materials. It will help you to remember the acronym **BOATY**. It represents the things that should NOT go in the trash.
  - **Batteries** are very toxic, so don’t throw those in the trash. They must go to hazardous waste. Or you can purchase batteries that are less toxic and are easily disposable.
  - **Oil and other hazardous liquids** such as paints and antifreeze cannot go in the trash.
  - **Appliances and e-waste**, which is electronic waste. This is anything with an on/off switch or power that goes to it, or anything related to your computer, printers, monitors, etc. All of these things have toxic components. They need to be recycled properly.
  - **Tires** do NOT go in the trash.
  - **Yard waste or landscaping waste** doesn’t go in the trash either. Not because it’s hazardous, but because it’s bulky and takes up a lot of room in landfills. It should be composted instead.

- When thinking about a recycling program first, consider a recycling program that fits the waste disposal procedures at your site. Keep in mind that there may be some Canon services that could help. Think about the disposal of paper, cardboard, glass, metal, e-waste, all these things.

  Then close the loop on your recycling program. This means buying paper and other office supplies that are made from recycled content. This creates more of a market for these products. If we all recycle, but no one buys stuff made from recycled materials, no one will want our recycling, as there will be no value in it. So, make sure to close the loop.

- **Water bottles**: A lot of companies either use individual water bottles or they have the big jugs for coolers trucked in. Switching to a filtered water system is much better for the environment. It taps directly into the water line in the wall, so you can put one anywhere – conference rooms, break rooms. It doesn’t just have to be in the kitchen.
Tactical Solutions, continued

Energy Use & Office Carbon Emissions

While most people think of transportation as the big environmental offender, buildings account for nearly 40% of emissions because of all the energy they use.

THINGS TO LOOK FOR/LOOK OUT FOR:

• Have your energy provider come and conduct an energy audit. They will come to your office or home and point out where you can save energy.

• Look for Energy Star-rated products. These take less energy to operate than regular ones. By buying products and properties with the Energy Star rating, Americans offset greenhouse gas emissions equal to 25 million cars.

• Avoid old energy hogging appliances and equipment. Newer models use less energy.

• Think about outdated habits. For example, we used to think that turning off your computer every night would wear it out, but the lifespan of a computer is only about 5 years. This is not because it wears out, but because they become outdated or too slow due to lack of storage space, and infections from viruses.

• It does take a little extra energy to start up a computer, so the Environmental Protection Agency recommends that if you’re going to be away from your computer for 2 hours or more, then shut it down. However, if you’ll be away for 20 minutes or more, then just turn off your monitor.

• Install power strips at all workstations, then after you power down at night, flip that switch on the strip as well. Many electronic devices still draw power, even when they’re not on, that’s called “vampire power”, and this accounts for 10-22% of the power used. So, power down, and then flip that switch on the strip.

• Thermostats: Set them a little higher in summer and a little lower in winter. You can save about 5% in energy costs per degree, so it’s worthwhile.
Tactical Solutions, continued

Water

You may believe that you have no control over water use in your building, but you may have more power than you think. As you begin to make some changes toward sustainability, you’ll probably become known around the office as the “green person”, and people will ask you about all sorts of things, so it’s important to understand how to conserve water.

The problem is that water is finite, and we’re experiencing droughts in many parts of the country and around the world. As our population grows, our agricultural needs grow, and that threatens our water supply.

Leaky faucet or the toilet that runs continuously can waste hundreds of gallons of water in a single day. Note that we use about 30% of our drinkable water outdoors, mostly for landscaping. So, we can definitely do better here.

If you have access to the water bill, keep an eye on your usage and costs. If they rise suddenly, that could indicate a leak. If you have a leak, make sure to report it right away so it can be fixed.

Also, check out the WaterSense database or buy Energy Star-rated products, as these save water in addition to using less energy, such as dishwashers and washing machines.

THINGS TO LOOK FOR/LOOK OUT FOR:

- Just like with energy companies, water providers also offer free audits, as well as additional resources, supplies, and rebates, so see if they will audit your facility.

- Post signs in the restrooms. Make sure and include the phone number to report leaks and running faucets. Since many people have their cell phones on them all the time, they can just call it in right then, instead of forgetting when they get back to their desk.

- Also, install low-flow aerators on faucets. They mix air in with the water, so you have the same water pressure, but you’re using a lot less water. These cut water use by about half.

- Install shut off devices or smart controllers for irrigation. These smart controllers check the internet for local conditions to see when it will rain next. Then they decide when to water. These can generate savings of up to 50% annually.
Indoor Air Quality, Chemicals & Pollution Prevention

We have more chemicals around us than ever before and many of us don’t think about the hazards that these can present. For example, the storm drain system is completely separate from the sewer system. So, most of the water that goes down the storm drain goes untreated, directly into our waterways, and to our drinking water. Any trash or chemicals that hit the street, or the sidewalk ultimately end up in our lakes and oceans.

THINGS TO LOOK FOR/LOOK OUT FOR:

- Look for green versions of cleaning products. The Green Seal certification is a good one but it’s mostly for industrial cleaning products.

- Look for low- or no-VOCs, that stands for Volatile Organic Compounds. These are found in lots of things, like paints, wood products like furniture, plastics, carpets, etc. and they are toxic. You can find more and more products that don’t have VOCs, so look for those.

- Avoid antibacterial ingredients, like in soaps. The ingredients in these products are increasingly being linked to health problems, such as neurological disorders. Take the time to wash your hands properly, and you don’t need the antibacterial agent.

- Be careful with chemical odors such as with new paint or furniture. That is a sign of off-gassing, which is the releasing of those chemicals into the air. Unfortunately, that includes that thing that everyone loves – new car smell.

- Clean out your work area, spare offices, and cluttered closets, and then dispose of unwanted items properly.

- Fluorescent lights have a small amount of mercury, so those are hazardous waste and don’t go in the trash.

- Toner cartridges should be recycled.

- Most cleaning companies have added green services, or have revised their current services to be green, and it doesn’t cost any more. So, that’s an easy way to make a big change.
Tactical Solutions, continued

Transportation

For a lot of companies, particularly service companies that don’t manufacture an actual product, transportation can be a big piece of their carbon emissions. In fact, transportation is second only to buildings in environmental impact, accounting for about a quarter of greenhouse gas emissions.

Airplanes are also really hard on the environment, especially short flights, since there’s so much fuel used in take-off. Plus, the emissions are distributed at higher altitudes, so the environmental impacts are even worse.

THINGS TO LOOK FOR/LOOK OUT FOR:

- Commuting: Try to find ways to lower the amount of carbon emissions in your own commute by using public transportation, and alternate forms of transportation such as walking or riding a bike or carpooling.

- With business travel, first understand why people travel. Then, you might be able to find some other methods to accomplish the same goals such as using virtual meetings rather than meeting in-person.

- Remember to consider other transportation, such as the errands you run or deliveries you make or have made to you, and the shipment of goods and documents. All of these add up so try to find ways of reducing them.

- Avoid using overnight delivery when it absolutely, positively does NOT have to be there overnight, because overnight shipping is generally done by air. Ship it ground instead.
Tactical Solutions, continued

**Miscellaneous Items**

Miscellaneous items can have a big impact. For example, Americans drink 400 million cups of coffee per day. If we used disposable cups for all of that, it would add up to 146 billion cups per year, most of those going into landfills.

Also, think about your purchases. Think about where the things you buy come from, what they are made of, and how far they have to travel to get to you. Try to buy products that are locally sourced.

Consider the events you plan and attend, which can have a large impact because of the travel and hotels, so how can you do better there?

Look in your kitchen or break room. There are often disposable items and single-serving items, such as sugar. It’s better to have a larger container instead and cut down on waste.

*Use your new understanding of sustainability to find better alternatives and to do things differently.*

**Carbon Footprints**

Carbon Footprints are an entity’s total emissions of the 6 main greenhouse gases that contribute to climate change. We’re used to hearing about carbon dioxide, but there are 5 other gases that also contribute to climate change. A carbon footprint measures all of them, and then converts those other gases into their carbon equivalents.

Though carbon is the most plentiful of these gases contributing to climate change, some of them are much stronger. Methane, for example, has 20x the climate change capacity compared to carbon, so it’s important to measure them all.

**LEED-Certified (or Green) Buildings**

LEED certified or green buildings provide a lot of benefits. LEED stands for *Leadership in Energy and Environmental Design* and is run by the US Green Building Council.

The benefits of green buildings include things like reduced operating costs. Though it does cost a little bit more initially to build a green building, about 2% more, there are cost savings over the life of the building that make up for that. Plus, green buildings improve occupant health and productivity, and reduced pollution and waste.

You don’t have to move into a new building to get a LEED certified building. There are certifications for build-outs of commercial interiors, and for how you operate and maintain existing buildings.
What’s Next?

It’s important to think about each area that is involved with sustainability such as paper, energy, transportation, and water. Brainstorm ideas with your team or take a field trip around the office to look at what’s going on and where you can implement what you’ve learned.

THINGS TO LOOK FOR:

- Look for opportunities to save money and time or improve efficiencies that are green.
- Look for burning issues. These are specific things that need to be changed, and that are obvious to everyone, but that no one has done anything about. Paper use is an example. Everyone knows that it’s not good for the environment to use so much paper, but they haven’t been able to do anything about it. This is a great opportunity for you.
- Look for highly visible issues, which can be seen by all areas of the company. Addressing these issues will help build interest in your sustainability programs. Again, look for the low-hanging fruit — those simple, basic opportunities—that will give you some early wins that help build momentum.
- Look for waste, because in the business world, waste equals inefficiency. Anything that’s paid for and not used is waste.
- And of course, always consider what is most important to your client!
Summary & Conclusion

Green Association Certification Quiz

Congratulations! You have finished the primary content for this course. To receive your Green Associate Certification, you must complete a course assessment and score an 80% or better.

You will have four attempts to achieve that score.

If you cannot pass it in four tries, you will be required to take the course again.

Quiz Instructions

- Log on to the Learning Academy/Percipio: https://cbps.percipio.com
- Click LIBRARY at top of home page > click CBPS CONTENT > click on CERTIFICATIONS in dropdown menu > click on Green Associate Certification Quiz.
- This is a 20-question, multiple choice, open book quiz. Please use your Participant Guide and notes for the answers.
- If you have any questions or issues re: accessing the CBPS Learning Academy/Percipio for the quiz, contact your Regional Training Specialist.
- Recommended: Take the certification quiz ASAP!
- Once you have passed the quiz, the Learning Academy/Percipio will generate a certificate for your files. Click on the CANON logo in the upper left corner to go back to your Percipio HOME page. Then click on the downward arrow next to your name in the upper right-hand corner. In the dropdown menu, click on ACTIVITY.
- Look for GREEN ASSOCIATE CERTIFICATION QUIZ in the activity list and click on the three dots at the far right of the row. Then click on VIEW CERTIFICATE in the dropdown menu. Your certificate will open up, and you can save it as a PDF to your desktop.

Congratulations!

You have successfully completed the Green Associate Certification Training!

Remember: Sustainability is a journey, not a destination!

Thank you for your participation!