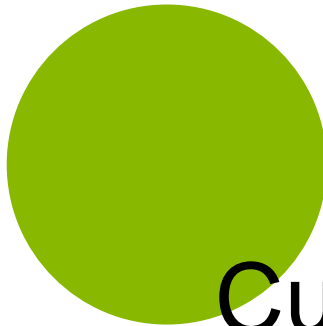


# **CLEAN & GREEN**



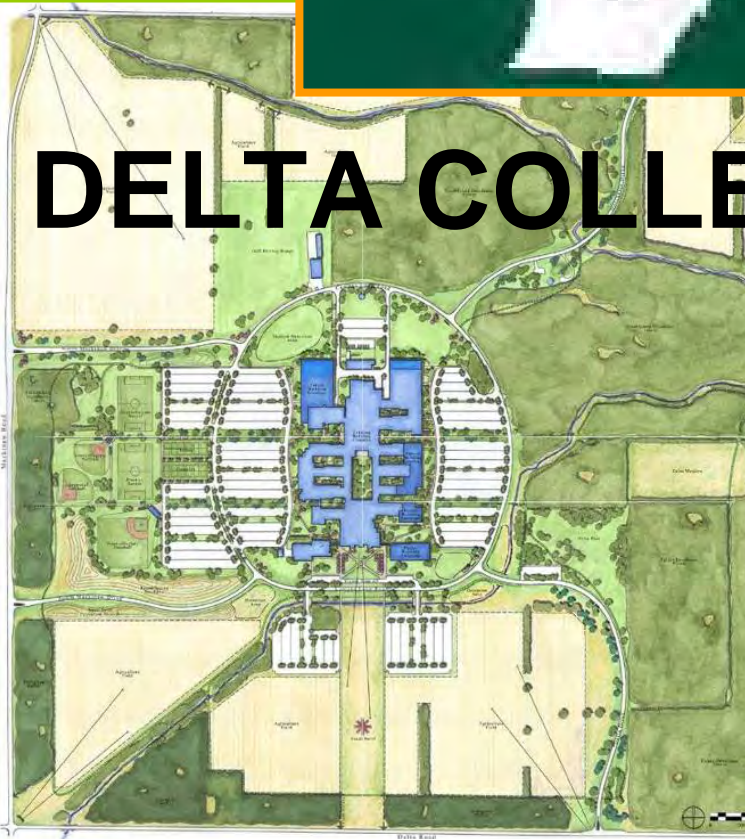
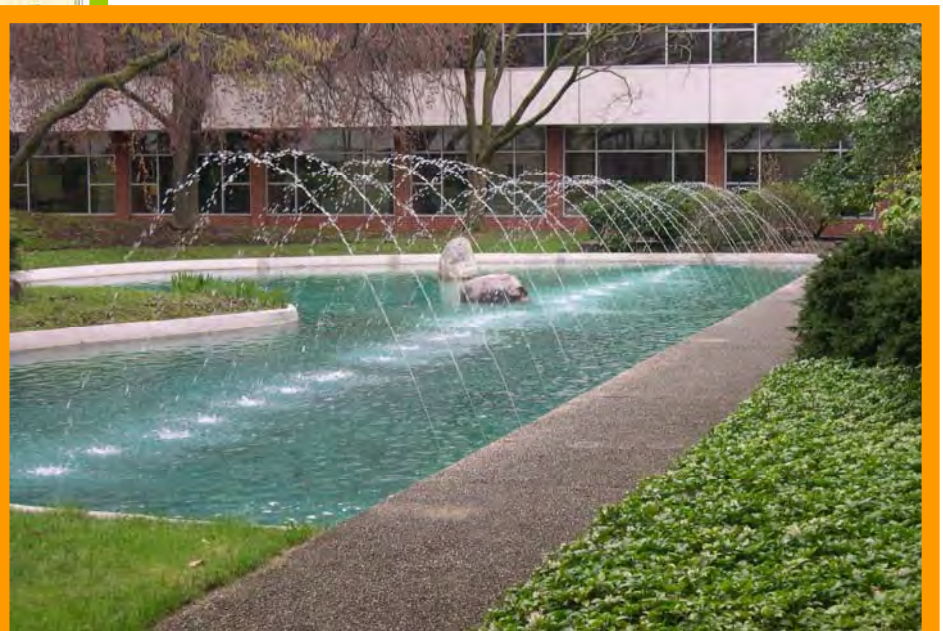
**Delta College**

**Custodial Cleaning Program**





# DELTA COLLEGE





# Institutional Leadership

- Sustainability Task Force
- President's Climate Commitment
- Higher Education Sustainability Act
- STARS (Sustainability Tracking & Assessment Rating System)
- Green Summit



Delta College

A campus where  
will always be our color

Green

What  
Can I  
Do?

Facilities Management, Business Services  
and Finance Department

Books, Custodial, Operations & Maintenance, Fitness & Recreation, Food Services,  
Grounds, Post Office, Printing Services, Purchasing, Shipping & Receiving

There is power in a single action - Yours!

Learn more about **YESTERDAY'S** projects,  
**TODAY'S** exciting initiatives,  
and **TOMMOROW'S** ideas...

Visit [www.delta.edu/evergreen](http://www.delta.edu/evergreen)

Ever



Sustain

to continue  
without  
interruption

### Environmental Sustainability

Delta College has made significant progress toward the development of an environmentally sustainable campus.  
The role of Facilities Management, Business Services and Finance in campus operations imparts responsibility and provides opportunity to consider, develop, and implement processes and practices intended to improve the quality of our environment and to serve as a catalyst of environmental awareness to the College community.

#### Efforts include:

Solar powered pedestrian signs  
Copper, steel, aluminum melted for reuse  
Furniture direct shipment eliminates packaging  
Low energy argon windows boost energy efficiency  
Batteries, lamps, computer media, & electronics recycled  
Award winning paper recycling program • Asset salvage and sales  
Barley straw substituted for chlorine to prevent courtyard pond algaeicide  
Recycled toner cartridges • Surplus food redistribution • Non-motorized greenway trails  
Low flush toilets • Recycled phonebooks mixed with hydroseed mulch to seed campus grounds  
Heat recovery systems reintroduce warm air back into building • Unbleached, chlorine-free paper napkins  
Low mercury fluorescent bulbs & electronic ballast lighting demand 75% less energy • Cell phone recycling  
Copiers use chlorine-free paper • Recycled content paper & soy ink • Tires ground for reuse as paving materials  
White roofs reduce peak cooling demand by 15% • Fair-trade & organic coffee • Solar array electric power generation  
Leaf and grass clippings mulched providing 25% of fertilization needs • Chilled water system produces ice for comfort cooling  
Lawns fed with natural fertilizer produced from wastewater sludge • Printer cartridges refilled at 20% less cost than new • Cooking oil reuse  
Lights, air & temperature regulated by occupancy sensors • Soft starter motors & variable frequency drives reduce voltage • Packing materials reuse  
Renewable fuel source studies • Food service materials recycling • Biomass boiler research • Air travel carbon credits • Storm water treatment investigation

Ability

state of having  
power, skill, or  
resources  
to accomplish  
an objective

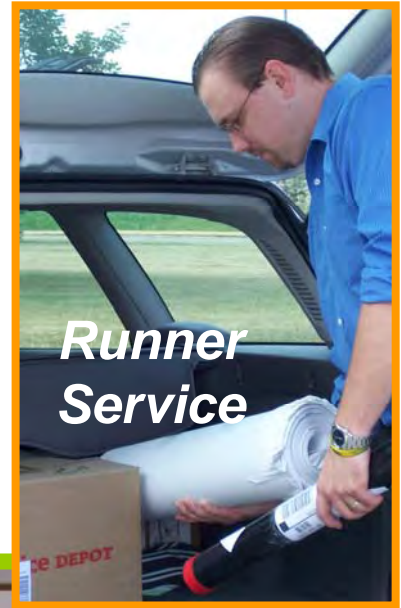
**Cell  
Phones**



**Green  
Inside & Out**



**Runner  
Service**



**Power  
of a  
Single  
Action**

**TransFair USA**  
When you offer  
**Fair Trade Certified™**  
products,  
everyone profits.



**Ped  
Xing**



**Ink  
Cartridges**





**Make  
The  
Switch  
to Off**



**Power  
of a  
Single  
Action**

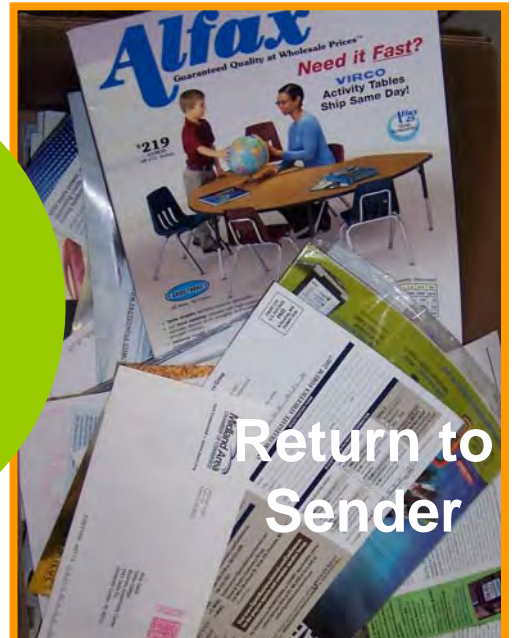
**Recycling  
Riddle**



**Universal  
Waste**



**Return to  
Sender**



**Clean  
& Green**



# Current Projects

- Classroom Paper Recycling
- Hybrid Fleet Vehicles
- Demo Debris Reuse
- Mercury Reduction
- Storm Water Management
- University Center Trail



# **Green Cleaning**







# What is Green Cleaning?

*“...products and services  
that reduce health and environmental impacts  
compared to similar products and services  
used for the same purpose.”*

***Pollution Prevention, Sustainability, Multiple Attributes***

**53 Million Students**

**5 Million Staff**

**20% of Population**

# Green Team



**Supervisors**



**2<sup>nd</sup>  
Shift**



**3<sup>rd</sup>  
Shift**



# Fresh Green Start

- Take our tools away
- Establish a test plot for cleaners & equipment
- Eliminated aerosols
- Replaced bleach containing products
- Substitute top scrub/recoat for floor stripping



# Paler Shade of Green (Program History)

- Walk-off mat installation
- 'Best Practices' paper recycling
- Smoke free campus
- Preventative maintenance
- Public posting & adhesive guidelines





# Cleaning Products

## **Green Seal Certified**

Peroxide Cleaner • Glass Cleaner • Daily Floor Cleaner  
Natural All Purpose Cleaner • Natural Degreaser  
Grout Safe • Carpet Complete

## **Green Earth & CRI Certified**

Carpet Complete • Carpet PreSpray & Spotter  
Best Scrub • Daily Disinfectant Cleaner  
Floor Finish (Test)

## **Reduced Environmental Impact**

Turbo Force Non-Corrosive Stripper  
Foaming Hand Soap • Barley Straw



# Green Product Benefit

**Concentrated  
Recycled  
Packaging**

**No Alkaline  
Builders  
  
Neutral PH**

**No  
Dyes,  
Fumes,  
Synthetic  
Fragrances**

**Low Skin,  
Eye,  
Respiratory  
Irritation**

**Non-Corrosive,  
Butyl, Solvent,  
Combustible,  
or Flammable**

**Biodegradable  
  
Natural  
Source  
Ingredients**





# Equipment

## **Green Seal Certified**

Speed Scrub Rider • Backpack Vacuum  
(Test Phase)

## **CRI Certified**

Advanced CarpeTwin 14

## **Reduced Environmental Impact**

Carpet Spotter Portable  
Windsor Quick 32 Riding Floor Machine



# Green Equipment Benefit

**High Grade  
Exhaust Filter**

**Multi-Stage  
Filtration System**

**Sound  
Insulation**

**Wide  
Cleaning Path**

**Quick  
Spill  
Removal**

**Reduced  
Water Use  
Metering  
System**

**Tested  
Environmentally  
Safe**

# ● ● ● | Cleaning Supplies



## **Microfiber Cleaning Cloths**

All Surface Cleaning • Water Only

No Chemical Application • Microfiber Bonding  
Cleans Close to Surface • Washable / Reusable



# Cleaning Supplies

## **Flat Mops**

Clean Water Process

Reusable

Increased Productivity  
& Surface Contact

## **Durable Mop Buckets**

High Impact Wringers

Longevity of Use

Commercial Grade Content





# Paper & Plastic Products

## **Green Seal Certified**

Toilet Paper  
Multifold Towels

100% Recycled  
Content

Reduced Cost  
Favorable User  
Response

Recycled  
Content

Source & Waste  
Reduction

## **Reduced Environmental Impact**

Waste Baskets & Liners  
Recycle Collection Bins  
Corrugated Recycling Totes



# Cleaning Procedures

## TRADITIONAL

Product apply & remove  
Daily waste collection  
Liner bags changed each time  
Complete floor stripping  
Daily office vacuum  
Product surface application  
Aerosol products  
Pest control aerosols  
Bleach containing products

## GREEN CLEAN

Dwell time  
Weekly waste collection  
Liner bags changed if soiled  
Top scrub & recoat  
Weekly office vacuum  
Product cloth application  
Non-aerosol products  
Integrated pest management  
Non-bleach content



# Policy & Process

- **Meetings**

- Custodial supervisors meet weekly with Director
- Staff meet w/supervisor prior to shift
- Supervisor / Supplier updates

- **Training**

- Orientation
- Custodial handbook
- Hands-on demonstration
- PPE, Bodily Fluid Waste, BBP, RTK
- HR 24/7 online programs

- **College Wide Communication**

- Power of a Single Action
- Website referral





# Innovation

## **RetroPlate Flooring**

- Highly abrasive, dust resistant
- Cleans w/water, eliminates moisture vapor
- No topical sealers, stripping, or waxing

## ● **Recyclable Carpet Tile**

- Easily replaced
- High soil, stain, & anti-microbial treatment ratings
- Manufacturer committed to zero eco-impact

## ● **Posting Policy**

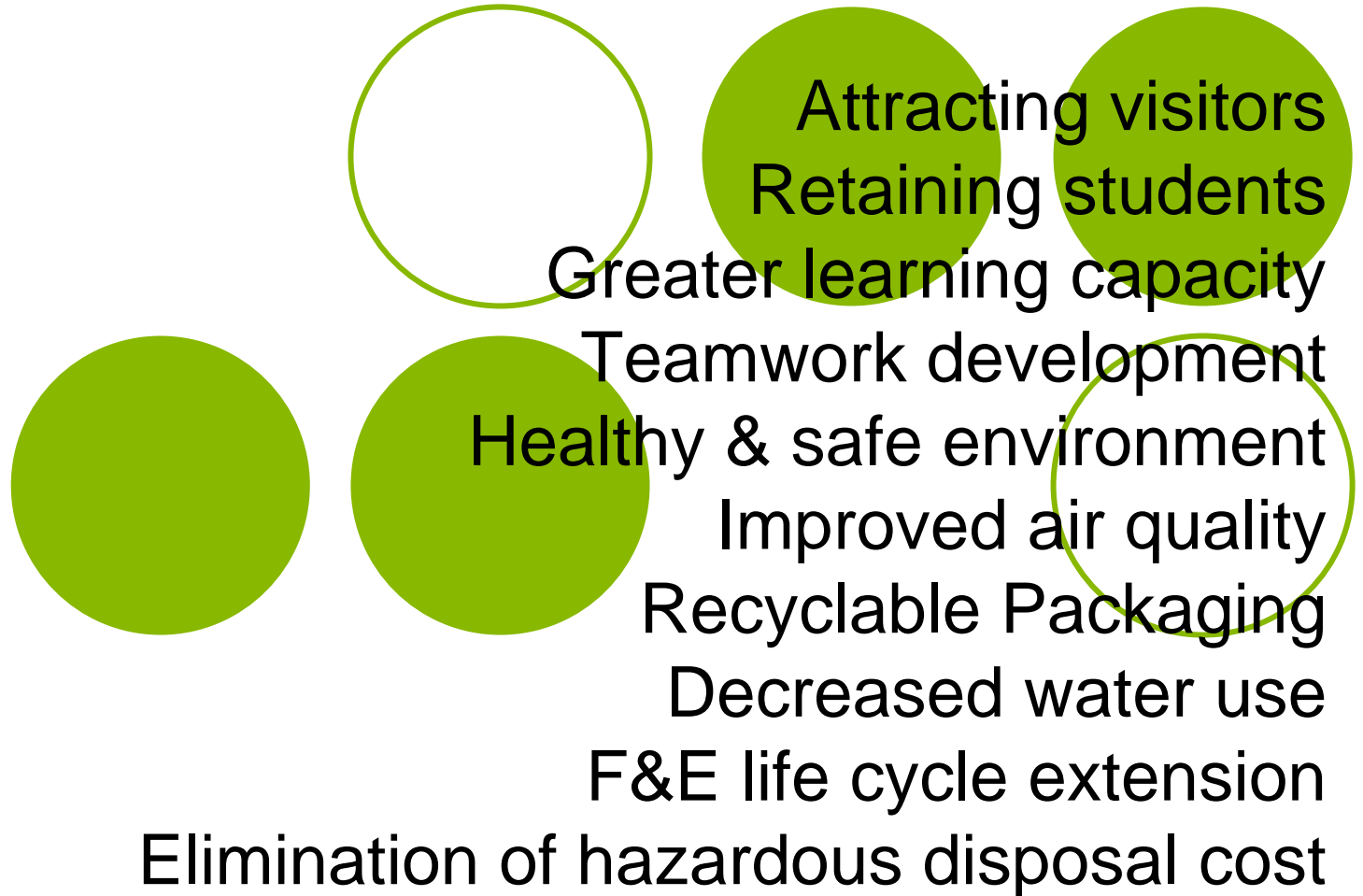
- Reduced maintenance & labor costs



# Program Evaluation

- **Facilities Email**
  - Decreased complaints / requests
  - Increase positive comment
- **Positive Media Coverage**
  - Campus newspaper
  - Local news
- **Custodial Injury / Claim Tracking**
  - Zero worker comp cleaning product claims
  - Zero injury reports since 2005
- **MSDS Product Inventory**
  - Decrease paper inventory
  - Decrease labor inventory

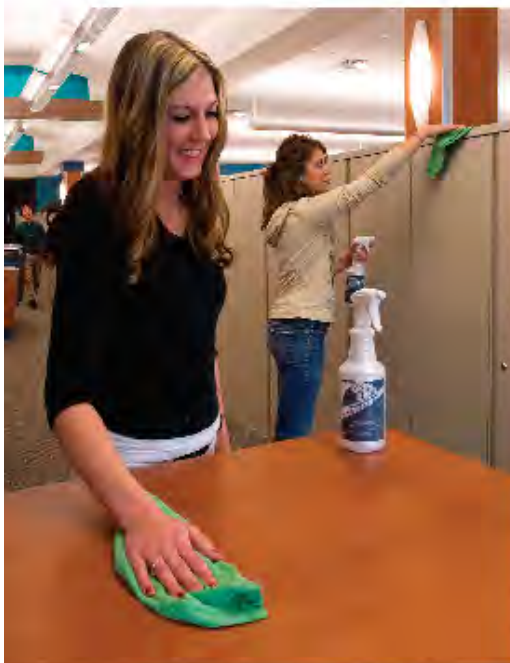
# Benefits of Green Cleaning



## GRAND AWARD

## COLLEGES

## &gt;&gt; DELTA COLLEGE, UNIVERSITY CENTER, MICH.



## PROGRAM INFORMATION

Number of students: 6,648

Square footage maintained: 1,042,243 sq. ft.

Number of full-time custodians: 29.5 FTE

Annual cleaning budget: \$1,130,232 (total);  
\$1,071,276 (salary and fringes), \$58,956 (custodial supplies)

Green-cleaning team members: Jeff Jump, Assistant Director of Facilities Management; Michelle Brondstetter, Robert Dzurka, Head Custodians; Arnold Sales, Central Michigan Paper, Eco-Lab, Gordon Food Service, Lansing Sanitary Supply, Supply Pro, Janitorial Product Distributors

**D**elta College began its recycling program in 1991. In 2001, walk-off mats were installed at every entrance, reducing labor by retaining debris within 15 feet of the entrance. Campus buildings have been smoke-free since 1996. In 2003, the university restricted the use of surface adhesives. "Green" magnets and paper grips were made available for posting signage, which reduced the cost of cleaning walls, doors and windows.

The college recently launched EverGreen, an environmental sustainability program. It also established an Environmental Sustainability Task Force to advise the college president on sustainability matters. The task force works to integrate sustainability into campus programs in education, operations and community service, and hopes to instill a culture of sustainability in long-range planning and forward-thinking design.

Each custodial staff member is provided an on-the-job custodial handbook that includes information about green-cleaning products and procedures. Hands-on training is required.

The college's green-cleaning procedures include reducing office waste collection from daily to weekly, changing liner bags only when soiled, and vacuuming private offices weekly instead of daily. Floor stripping has changed to top scrub, and recoating requires removal of the top layer only.

Used cleaning equipment is replaced with eco-friendly equipment. As inventory is depleted, traditional cleaning products are replaced with green products. Aerosol products have been reduced significantly.

Microfiber cleaning cloths and flat mops can be laundered and reused, reducing waste. Barley straw is used instead of chemical chlorines to prevent algae in the courtyard pond.

The college has amassed 1,000 tons of collected recyclable materials and \$200,000 in savings. ■



Photographer: Monte Lenar

# American School & University



# Good For Us!

AS&U  
Grand Award

President's  
Award  
Presentation

Board  
of Trustee  
Dinner



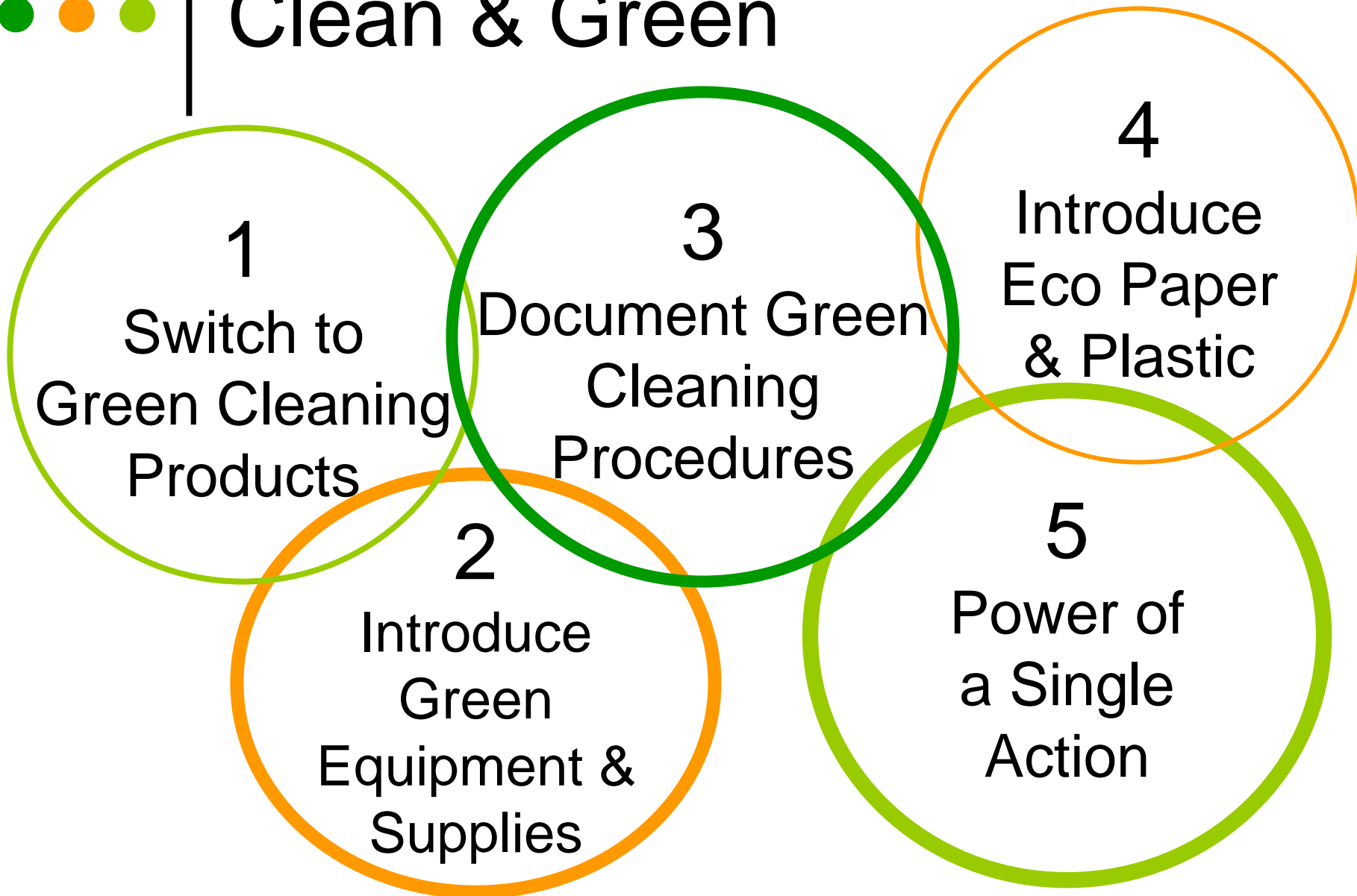


# What's Next...

- **Grow Program**
  - Low eco-impact to Green Seal Certified
  - Replace current equipment w/eco-brand
- **Green Seal (GS-42)**
  - In-House Green Cleaning Certification
- **LEED's Building**
  - Allied Health Major Renovation



# Clean & Green



# DELTA COLLEGE



Where Our Color  
Will Always Be Green