

# Reduce Harmful Chemicals and Grow your Business!

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*Strategies that benefit your customers, staff, and environment*



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# Workshop Overview

- Business Perspective
- Company Stories
- Technical Info and Tools
- Resources
- Survey



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# Learning Objectives

## Objectives for Today

1. Understand the business case for toxic chemical reduction
2. Receive basic technical information and resources
3. Learn why and how to incorporate chemical management into your company's sustainability strategy
4. Take steps to measure and reduce your company's chemical footprint
5. Identify what topic you want to explore further



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# New York Sustainable Business Council



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NYSBC Steering Committee

NYSBC is an alliance of over 1600 businesses and business organizations committed to advancing a vibrant, just, and sustainable economy in New York.



# NYSBC Businesses

## Our business leaders often identify with:

- Values-driven
- Socially responsible
- Environmentally conscious
- Independent
- Localist
- Co-ops
- Benefit corporations
- Triple bottom line



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# NYSBC's Work

- Educate
- Mobilize
- Raise the business voice



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# NYSBC's Summit

## Annual Sustainable Business Summit in Albany

In 2017, our business leaders advocated for New York State legislation related to:

- Single payer healthcare
- Worker-owned businesses
- Wage theft
- Fracking waste
- Fossil fuel divestment
- Safer chemicals & disclosure



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# NYSBC's Work on Safer Chemicals



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**Campaign:** Companies for Safer Chemicals New York

**Policy (state and county):**  
Child Safe Products,  
Toxic Show and Tell

**Regulatory:** Implementation  
of disclosure of ingredients  
in cleaning products

**Education:** Business Leadership  
on Safer Materials



# Business Case:

## Sustainable Procurement and Reducing Harmful Chemicals

**Altruism**

**Demand**

**Bottom Line**

**Proactive**

**Opportunities**

**Shift the Market**

**Change the Business Culture**



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# Business Stories

## Retailer and Manufacturer

# Big Blue Marble Ice Cream Retail stores and Wholesale

*"We've made a commitment to our product by becoming certified organic, and we wanted to align all of our business practices with these values."*



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# Business Stories

## Institution



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## Hackensack University Medical Center

*"The internal business practices we've developed help reduce risks to our team members and patients, which helps our bottom line. And we advocate for policy change to ensure that all companies do their part to build a genuinely healthy community."*



**HackensackUMC**



# Business Stories

## Manufacturer



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## Badger

*"We make healthy products to help people and environmental responsibility is one of our key principles."*

- Ingredients
- Facilities materials
- Cleaning supplies
- Paper products
- Packaging





# Clean and Healthy New York

*Promoting safer chemicals,  
a sustainable economy & a  
healthier world*



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- Catalyze sustainable market shifts
- Advance pollution prevention policies
- Train child care providers and nurses
- Produce reports: demonstrating business leaders and laggards; documenting harmful chemicals in products and people
- Healthy Environment & Economy Symposia

[www.cleanhealthyny.org](http://www.cleanhealthyny.org)

# Carcinogens

## Why do we care?

They cause cancer in a variety of organs

- Known - 120 agents
  - Formaldehyde
  - Benzene
  - Vinyl chloride
- Probable - 81
- Possible - 299
- Can't be classified - 502
- Probably not carcinogen - 1



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# The Problem: “Chemicals of Concern”

- 80,000 chemicals in commerce
- Vast majority not well studied
- Strong connection between over 2,000 chemicals and health impacts
- Known harmful chemicals are in everyday consumer products
- Few policies require their disclosure
- We are routinely exposed to chemicals of concern without our knowledge or consent



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# Endocrine Disruptors

## Why do we care?

They “hack” gene expression

Impacts on:

- Puberty
- Reproductive ability
- Obesity
- Immune system function
- Mental health
- Heart and bones
- Brain development & function



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# Endocrine Disruptor examples

- PCBs and dioxins
- Flame retardants
- Pesticides: In food, water, soil
- Perfluorinated chemicals
- Phthalates
- Bishphenols



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# Neurotoxicants

## Why do we care?



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- Disrupts development
- Lasting harm to the brain
- Alzheimer's
- Difficulty concentrating or retaining information
- Speech, language and hearing disorders
- Cognitive impairment
- Poor impulse control
- Lowered IQ

# Neurotoxicant examples

- Organophosphate (OP) pesticides
- Flame retardants (including PBDEs)
- Combustion-related air pollutants: PAHs, nitrogen dioxide and particulates
- Mercury
- PCBs
- Lead



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# Asthmagens

## Why do we care?



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- Breathing problems/pain
- Economic loss
- Missed school and work days
- Lower ability to perform work
- Lower ability to concentrate
- Hard to achieve full potential
- Asthma Life Impact Scale

<https://www.ncbi.nlm.nih.gov/pubmed/20053543>



# Science on Chemicals

## Asthmagens and Asthma Triggers

- Phthalates
- Chlorine
- Diesel exhaust
- Essential oils such as limonene, pinene
- Latex



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# Science on Chemicals

## Aquatic Toxicity



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- Metals
- PAHs
- Petroleum, fuels
- Phthalates
- PCBs
- Triclopyr: In weed killer
- Nonylphenols
- PBDEs, PCBs, DDT, PCDD/F dioxins

# Aquatic Toxicity

## Why do we care?

Certain aquatic toxics:

- Concentrate up food chain
- Mammal fetal death
- Cause cancer
- Disrupt hormones
- Disrupt cellular metabolism
- Tumors, heart defects
- Stop seed germination
- Aquatic gender effects
- Reduced reproduction
- Dampen immune system



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# Hazard Identification vs. Risk Assessment

## “Hazard”

- Inherent ability to cause harm
- Focus is on eliminating it to remove potential for harm across life

## “Risk”

- “Hazard” and “Exposure” used to calculate risk
- Focus becomes control measures reduce exposure
- Assessment may not factor age, diet, genetics, health, gender, stress or other factors affecting disease



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# Solutions

## What your business can do



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- **Make or sell products?** Set Restricted Substances and Beyond Restricted Substances lists, work with vendors
- Primarily **office work?** Set policy for what you buy
- **Provide services?** Think about what goods you use (cleaners, printers, cars) and what you recommend

# Solutions

## How to build a Restricted Substances List



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### Government

- Interstate Chemicals Clearinghouse
- Executive Order 4
- DEC cleanser guidance

### Non-governmental

- GreenScreen
- BizNGO
- Chemical Footprint Project

# Demystifying Certification Programs



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Three types of certifications:

- First-party: self-certifications designed to fit products
- Second party: trade association certifications
- Third party: Separate nonprofit organizations or governments - also not all of the same quality



# Certification Program Examples

- 1st-party come and go as FTC cracks down
- Beware of 3rd party labels w/self-certification
- 2nd party: CertiPur, Sustainable Forestry Initiative
- 3rd party: GreenGuard, Oeko-tex, Forestry Stewardship Council, EPEAT, LEED, Green Seal, USDA organic



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# Avoid bad substitutes: New focus on Chemical Classes

- Highly fluorinated chemicals
- Antimicrobials
- Flame retardants
- Bisphenols/Phthalates
- Some solvents
- Certain metals

<http://www.sixclasses.org/>



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# Help for New York businesses: NYS Pollution Prevention Institute



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- Direct Assistance: staff will work with you on-site
- Green Technology Accelerator Center: help accelerate your prototype to market
- Sustainable Food Program: drives innovation in energy, water, waste reduction, etc.
- Sustainable Supply Chain: help position your company as environmentally-conscious
- <https://www.rit.edu/affiliate/nysp2i/business-assistance/overview>

# Interstate Chemicals Clearinghouse Business opportunities



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- Chemical Hazard Assessment database includes 110 GreenScreens and 20 QCAT assessments
- Updated Alternatives Assessment Guide includes 3 ways to assess
- Monthly e-bulletin, state policy database, and COC list
- Free of charge, with additional tools available to members
- <http://www.theic2.org/>
- <https://www.greenscreenchemicals.org/>

# Learn from and sell to NYS under E04



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- NYS Green Procurement and Agency Sustainability Program
- Oversight: OGS, DEC
- Covers agencies, authorities, public benefit corporations
- Sets environmental specifications



# Procurement for NYS Vendors



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- Is your business now, or do you plan to sell to the State? Review EO4 specifications to:
  - Learn about green criteria NYS seeks in products and services
  - Ensure your products and services are compliant with EO4 specifications
- Get involved in EO4 specification development. Find out how here:

<https://www.ogs.ny.gov/greenny/>

# Procurement for Potential NYS Vendors

- Does your business want to develop green procurement policy?
- Consider using EO4 specifications to guide your procurement. They are:
  - Available for download at <https://www.ogs.ny.gov/greenny/>
  - Developed by NYS experts and undergo rigorous review prior to adoption



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# E04 Example: Furniture Specification



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New furniture shall meet these standards:

- < 1% **PVC**
- No intentionally added **lead**
- No intentionally added **PFCs** as stain, water, or oil resistant treatments
- Must comply with CA Measure to Reduce **Formaldehyde** Emissions from Composite Wood Products
- Free of added **antimicrobials**

Purchasers are encouraged to purchase furniture free of certain **Phthalates**, and to avoid **organohalogen flame retardants**



# E04 Example: Packaging Specification

- Shall comply with ECL 37-0205
- No inks, dyes, pigments, adhesives, stabilizers, etc. to which lead, cadmium, mercury or hexavalent chromium is intentionally added; or
- incidental concentrations of lead, cadmium, mercury or hexavalent chromium which together are greater than 100 ppm (0.01%)
- Tentative single-use food container amendment addresses styrene, chlorine and PFCs



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# Chemical Footprint Project

A new initiative for measuring corporate progress to safer chemicals.

Offers a metric for benchmarking companies as they select safer alternatives and reduce their use of chemicals of high concern.

[www.chemicalfootprint.org](http://www.chemicalfootprint.org)



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# Chemical Footprint Project



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- Measures overall corporate chemicals management performance
- 20 question survey:
  - a. Management Strategy
  - b. Chemical Inventory
  - c. Footprint Measurement
  - d. Public Disclosure/Verification

# NYS Cleaning Product Ingredient Disclosure

- Requires website disclosure of intentionally-added ingredients, and byproducts, contaminants
- Hazard-based lists (carcinogen, asthmagen, etc.)
- May contribute to national cleanser disclosure model
- May be model for other product sectors in NY



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# Workshop Survey

## Sample Survey Questions

When thinking about future changes, what do you think may present the biggest challenges?

Would you be interested in a follow-up webinar about safer options for the following materials/products ?

Which of the following activities do you now plan to do?

**PLEASE FILL OUT SURVEY NOW!**



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# Resources for Businesses

Safer Chemicals/Green Procurement  
Topics

**Identifying Hazards and  
Assessing & Selecting Alternatives**

**Overall Company Impact**

**Certifications of Products**

**Support for your business**

**Purchasing Resources**

**Selling Green**

**Program Guidelines/Guidance**

[www.nyssbc.org/workshops/](http://www.nyssbc.org/workshops/)



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# Thank You!

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