



BizNGO Guide to Safer Chemicals

November 30, 2011

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Our mission

To promote the creation and adoption of safer chemicals and sustainable materials in a way that supports market transitions to a healthy economy, healthy environment, and healthy people.

Our objectives include ...

- Model new type and degree of collaboration
- Develop tools and continuous improvement criteria
- Advance policy initiatives





- Dell, Inc.
- Electronics Take Back Coalition
- Google
- Hewlett-Packard
- Seagate



- Catholic Healthcare West
- Kaiser Permanente
- Health Care Without Harm
- Hospira, Inc.
- Practice Greenhealth
- Premier, Inc.



- Method
- Nike
- Seventh Generation
- Staples
- Whole Foods



- Construction Specialties
- InterfaceFLOR
- Healthy Building Network
- Perkins+Will
- Shaw

- Breast Cancer Fund
- Clean Water Action
- Ecology Center
- EDF
- Env'l Health Strategy Center
- Investor Env'l Health Network
- NRDC



BizNGO Projects

Chemicals

- Principles for Safer Chemicals
- Guide to Safer Chemicals

Materials

- Principles for Sustainable Plastics
- Plastics Scorecard - tool for integrating green chemistry into material assessments

Policy

- Gov't Initiatives – TSCA, CA Green Chemistry
- Industry Standards – GRI, Sustainability Consortium, ULE



BizNGO Principles for Safer Chemicals

(formerly the “Guiding Principles for Chemicals Policy”)

Endorsers include ...

- Brooks Sports
- Catholic Healthcare West
- Construction Specialties, Inc.
- Health Care Without Harm
- Hewlett-Packard Company
- Hospira, Inc.
- Kaiser Permanente
- Method
- Novation
- Perkins+Will
- Practice Greenhealth
- Premier, Inc.
- Seventh Generation
- Staples, Inc.
- Whole Foods Market, Inc.

1. Know and disclose
product chemistry

2. Assess and avoid hazards

3. Commit to continuous
improvement

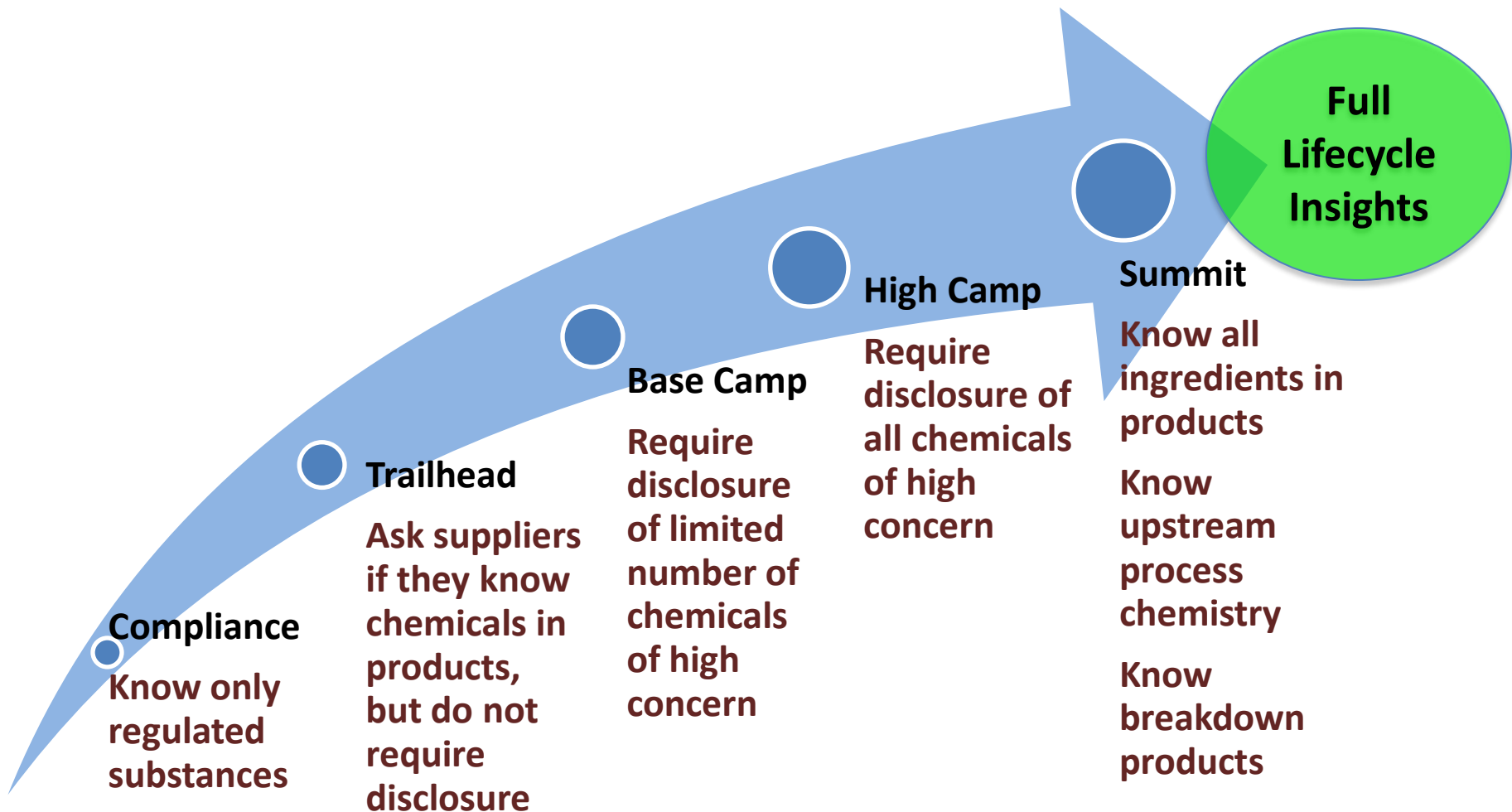
4. Support public policies and
industry standards

BizNGO Guide to Safer Chemicals



BizNGO Guide to Safer Chemicals – Benchmarks

Principle #1a - Knowing Ingredients



Highlights of Seagate's Product Stewardship System

Alignment to standards

- Seagate uses IPC 1752 as our materials reporting format
 - IPC 1752 is an open, industry data standard, not a Seagate-specific format

Full disclosure

- “FMD” (Full Materials Disclosure) is used to manage compliance to changing regulations and customer specifications
- Software automation is used to gather and manage data, grade compliance

Stability

- Supplier reporting requirements and formats seldom change

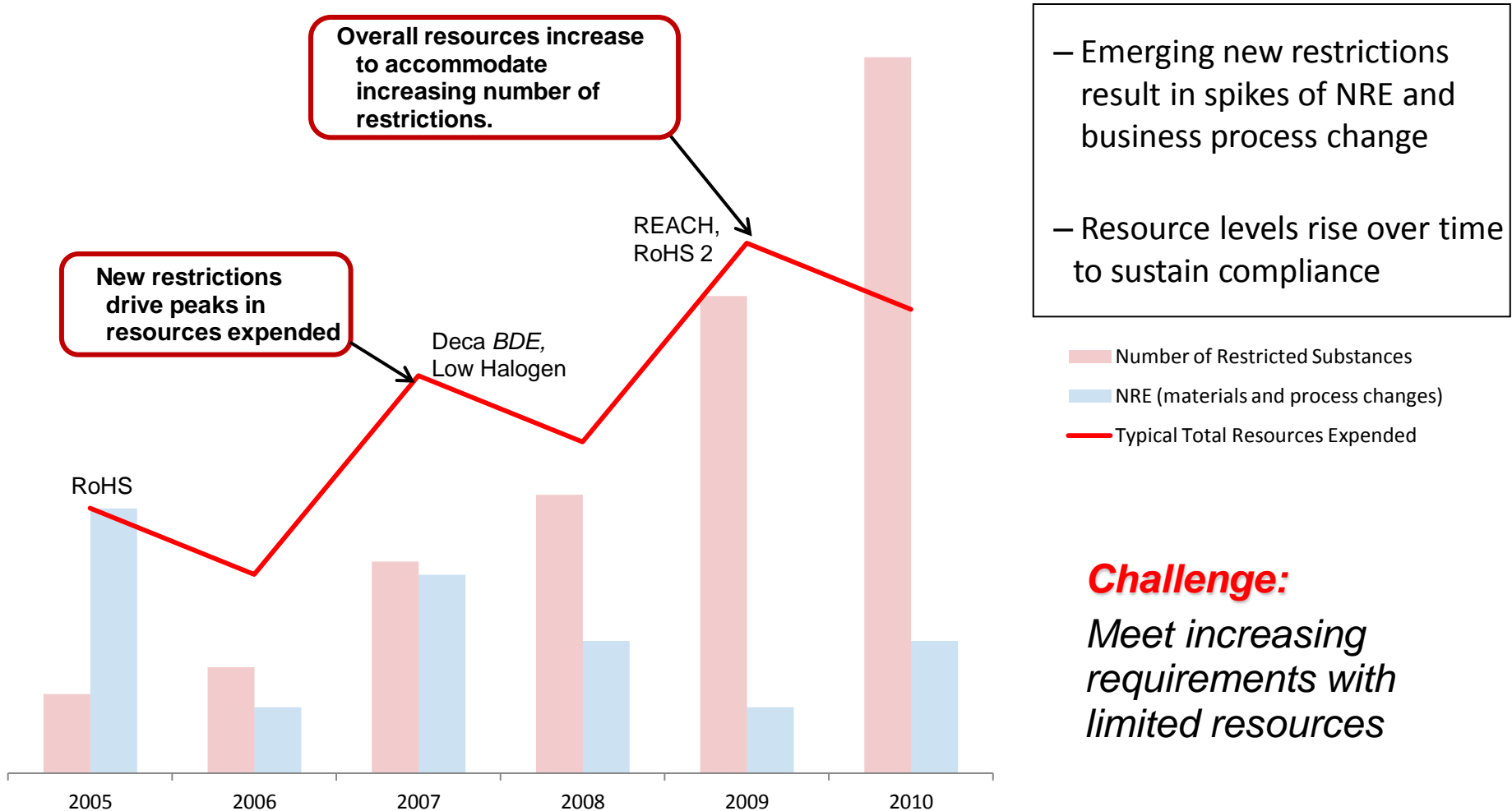
Security

- Seagate does use third party content collection services, but all data are maintained only in Seagate systems – and supplier data are kept confidential

Supplier responsibility

- Suppliers must provide full-disclosure data
- Suppliers are responsible for engaging third party (WSP) services

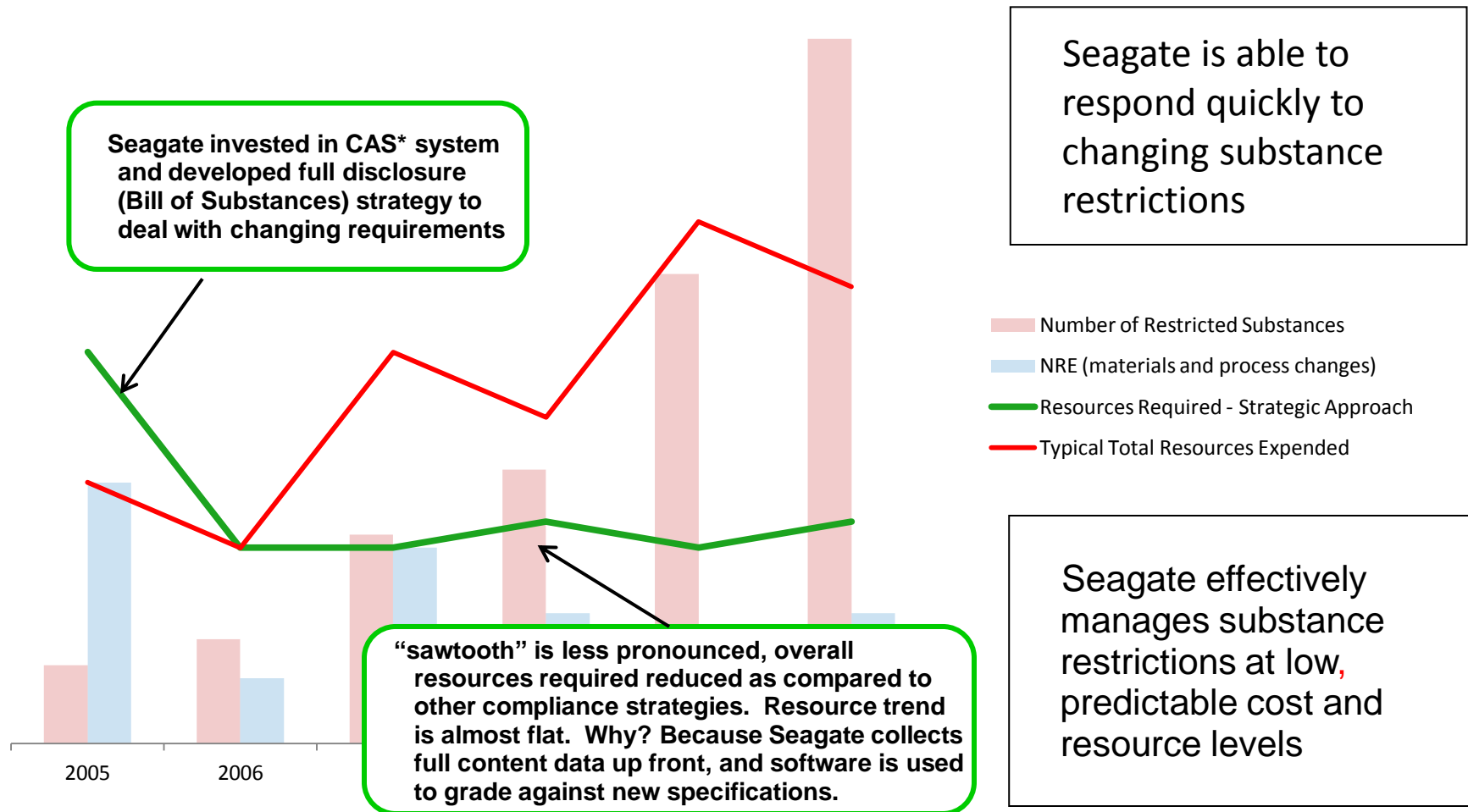
Resources required to **react to** new substance restrictions typically follow a 'sawtooth' line, and increase over time



Challenge:

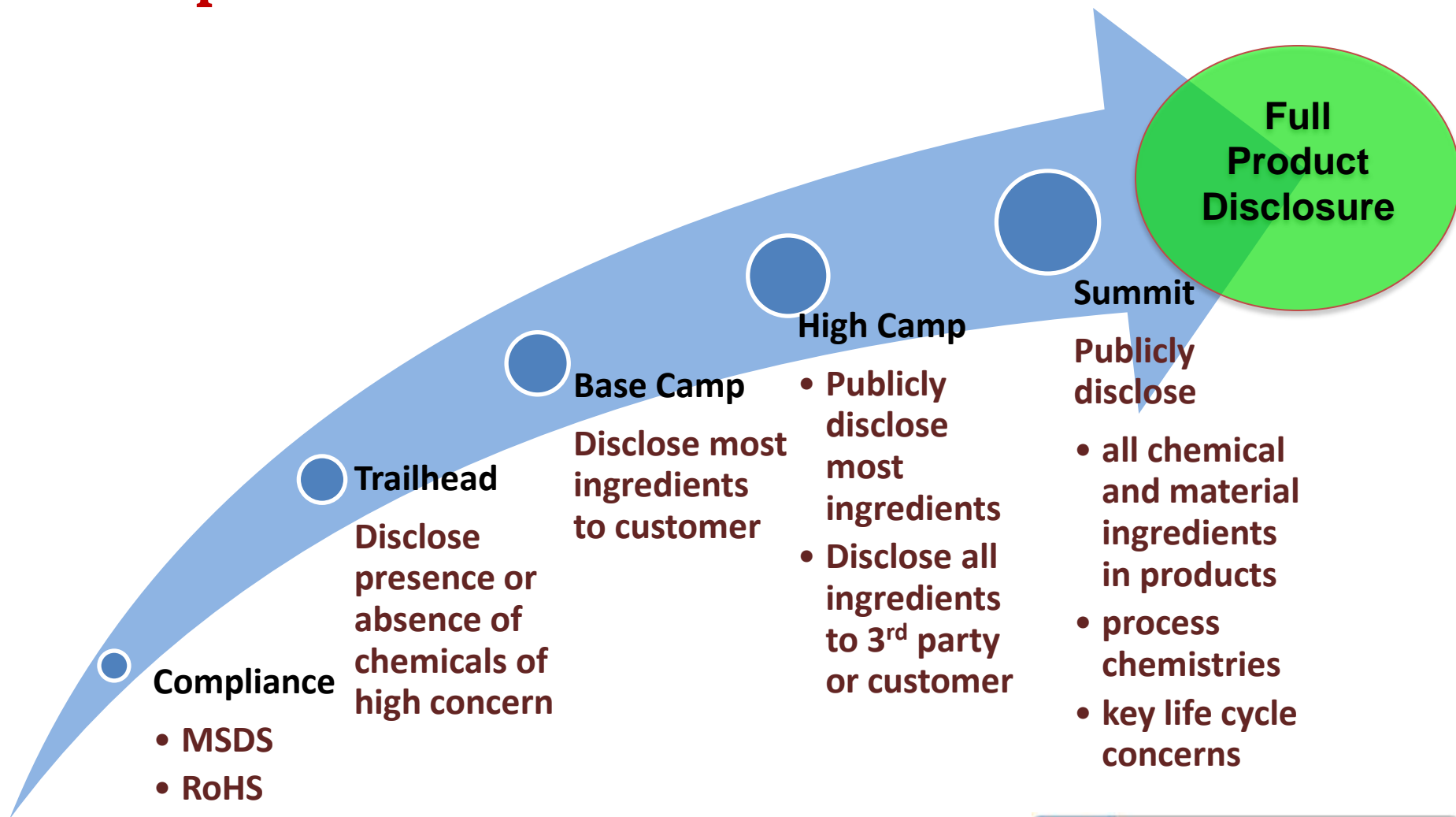
Meet increasing requirements with limited resources

By investing early in full disclosure data, Seagate has been able to flatten the 'sawtooth' in resource requirements



*CAS – Compliance Assurance System, Seagate's materials content compliance system

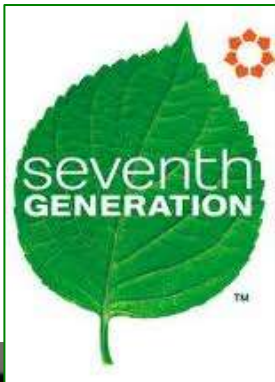
Principle #1b - Benchmarks for Disclosure



Disclosing Ingredients in Products

BOMcheck.net

IMDS Advanced Solutions



GreenWERCS™ 

maintains pH balance based dish liquids.

PEEL BACK THIS LABEL TO VIEW OUR FULL INGREDIENTS LIST

Safety Information: Please keep all cleaning products out of the reach of





GIVE NEW MEANING TO CLEANING

Our new standards for household cleaning products let you make the best choice for you.



wholefoodsmarket.com/eco-scale
store info goes here

- Full transparency, disclosure of ingredients on packaging by April 2012
- Independent 3rd party verified compliance to standards
- No ingredients with significant environmental or safety concerns
- No formaldehyde-donors, preservatives which have the potential to release formaldehyde
- No phosphates, chlorine, or synthetic colors
- 100% natural fragrances
- No ingredients with moderate environmental or safety concerns
- No DEA, MEA or TEA—surfactants that have the potential to contain nitrosamines and other impurities
- No synthetic, petroleum-derived thickeners made from nonrenewable sources
- Only 100% natural ingredients
- No petroleum-derived ingredients

Health Product Declaration Form

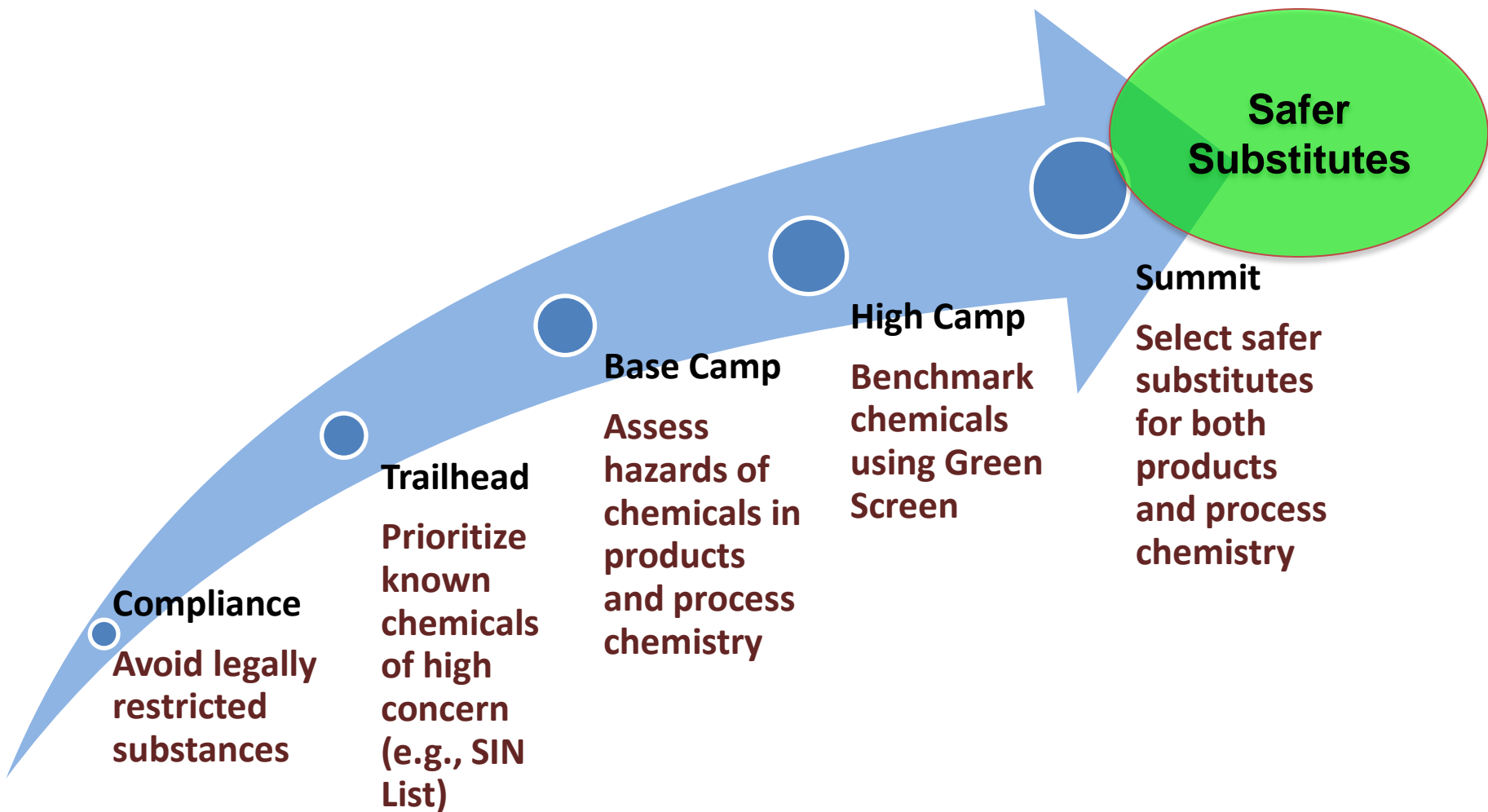
Name & IDs	Tuff Stuff X42, product SKU SB4353	Mas
Manufacturer	Ajax Manufacturing	Declar
Description	High performance coating designed for painting bath stall walls and other wet surfaces.	

2) Product Contents Disclosure

Disclosure level	94	percent of intentionally added content s fully disclosed (100 percent is ideal).				
Name	CAS RN	%	Health Hazard Warnings			
1	Phenyl Glycidyl Ether	122-60-1	55%	Cancer and Male reproductive toxicity (CA Prop 65) R37 Irritating to respiratory system and R53 May cause long-term adverse eff environment (EC Risk)		
2	Alkyl (C12, C14) Glycidyl Ether	68609-97-2	21%	Irritating to skin and May cause sensitization by skin contact. (EC Risk) Full Green Screen assessed at Benchmark 2 by ChemService on 6/6/2011. F www.ChemService.com/GS54345		
3	Bis(2-(dimethylamino)ethyl) ether	3033-62-3	8%	No warnings found		
4	Polyethylene	9002-88-4	7%	No warnings found		
5	Trade secret	Not disclosed	3%	Category 1 Evidence of endocrine disruption activity (EC Endocrine) Very toxic to aquatic organisms and possible risk of impaired fertility (EC Risk)		
6	Acme Zap-It Antimicrobial	Content not disclosed	3%	Not available		
7	Silver	7440-22-4	2%	No warnings found		
8	Distillate Fuel Oils, Light	13463-41-7	1%	No warnings found		
All known residuals disclosed to		Lowest requirements (ideal)	X	100 ppm	1000 ppm	As required on MSDS
9	Formaldehyde	50-00-0	<1000 ppm	Group 1: Agent is carcinogenic to humans (IARC) and other cancer warnings Generally accepted asthmagen (AOEC) R23: Toxic by inhalation and R24: Toxic in contact with skin and R25: Toxic if R34: Causes burns and R43: May cause sensitization by skin contact.(EC Ris		
The manufacturer affirms that all known material contents were screened for chemicals of concern and health warning listings using:				Pharos Chemical and Material Library from the Healthy Building Network		Scr

BizNGO Guide to Safer Chemicals – Benchmarks

Principle #2 - Assess & Avoid Hazards



The SIN List

a tool for identifying high concern chemicals



Greening Consumer Electronics

– moving away from bromine and chlorine

SONY ERICSSON

Bromine- and Chlorine-Free Mobile Phones

APPLE

Restriction of Elemental Bromine and Chlorine
to Achieve Elimination of BFRs and PVC
in Consumer Electronics Products

DSM ENGINEERING PLASTICS

Bromine- and Chlorine-Free Plastic Components

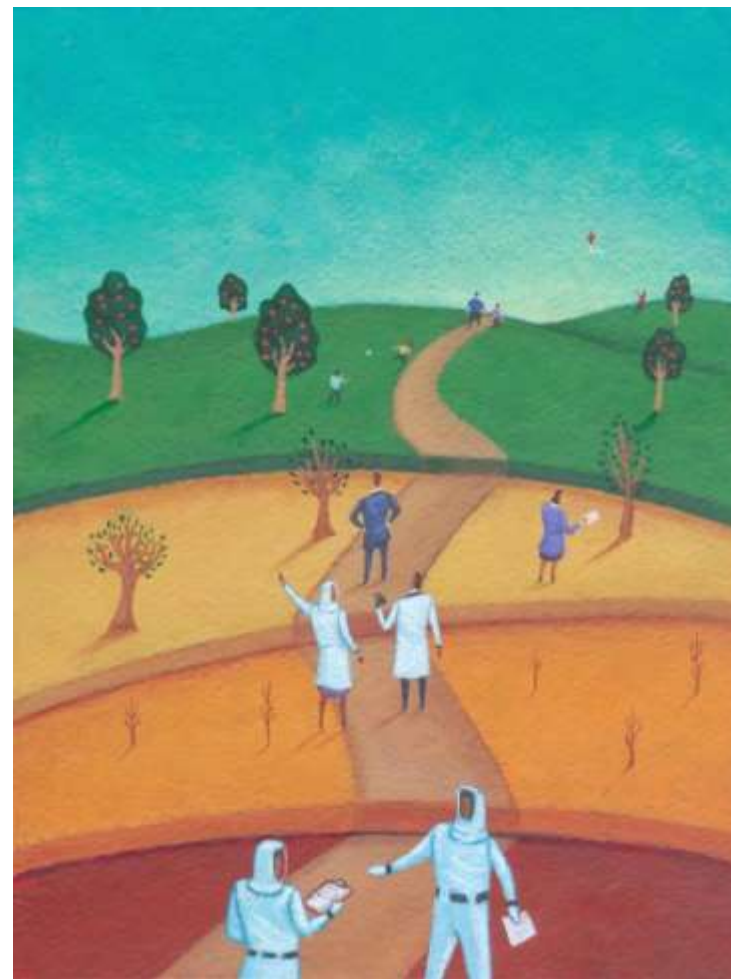


BizNGO

FOR SAFER CHEMICALS AND SUSTAINABLE MATERIALS



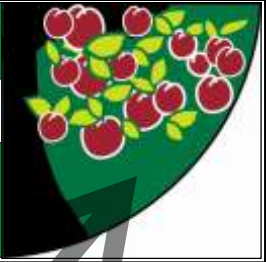
- Comparative Chemical Hazard Assessment Method
- Publicly accessible and transparent
- Data driven, systematic and scientifically robust
- Builds from:
 - Life cycle thinking
 - 12 Principles of Green Chemistry
 - US EPA DfE Chemical Alternatives Assessment method





Benchmark 4

Prefer – Safer Chemical

A stylized green tree with red berries and green leaves, positioned on the right side of the Benchmark 4 box.

Benchmark 3

Use but Still Opportunity for Improvement

A stylized yellow tree with green leaves and black branches, positioned on the right side of the Benchmark 3 box.

Benchmark 2

Use but Search for Safer Substitutes

A stylized yellow tree with black branches, positioned on the right side of the Benchmark 2 box.

Benchmark 1

Avoid – Chemical of High Concern

A stylized red silhouette of a tree, positioned on the right side of the Benchmark 1 box.

GREEN SCREEN

HP is the world's leading practitioner of the **Green Screen** tool.

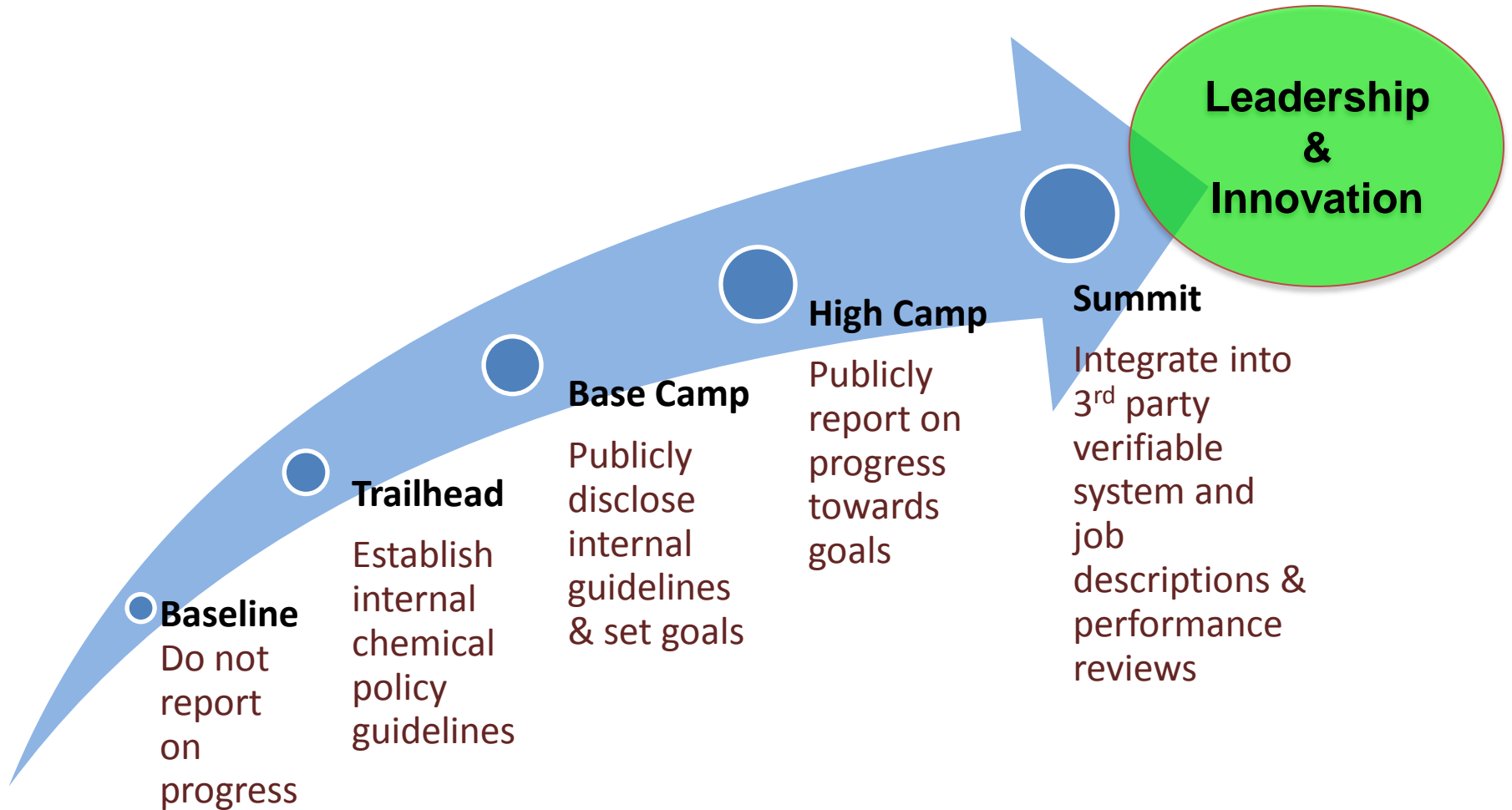
“HP has committed to replace restricted substances only with materials that are better for the environment and human health, and when there is sufficient assurance of required volumes and we have enough time to design and qualify the new material into the product. To assess alternative replacement materials we now use the Green Screen, a hazard-based assessment framework developed by the nongovernmental organization Clean Production Action.”

HP's Global Citizens Report



BizNGO Guide to Safer Chemicals – Benchmarks

Principle #3 – Commit to Continuous Improvement



Using Safer Chemicals in Products Supports Preventive Health Care



Healthy Chemicals, Healthy Patients—Why Health Care Needs Federal Chemicals Reform



Construction Specialties™

Green Buildings Need Safer Chemicals Policy Reform

PERKINS
+ WILL

Taking a Precautionary Approach to Chemicals in Products

By Robin Guenther, FAIA, Principal
+ Perkins + Will on design structures

A
foundir
integrit



Water
We rec
use in
build, c
both to
Poor in
by the l
(EPA) a
tal risk
and

Safer Chemicals Policy Reform—Bringing Transparency to Chemicals Management





Catholic Healthcare West

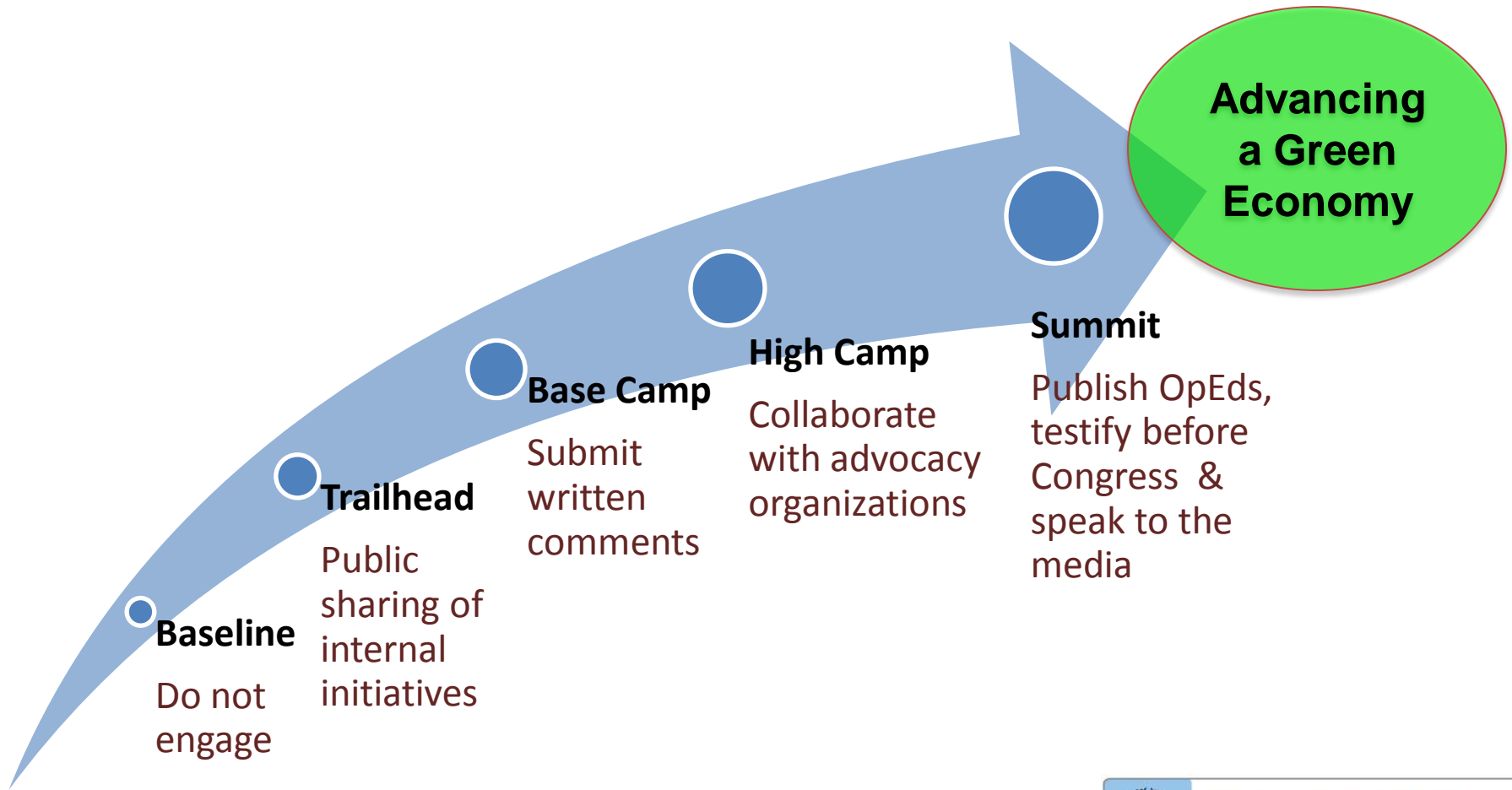
Comprehensive Chemicals Policy – Policy Statement

CHW Supply Chain Management
will:

1. Request product chemistry data from suppliers
2. Prioritize chemicals of high concern for elimination
3. Create contractual obligations w/suppliers to:
 - a. Avoid chemicals of concern
 - b. Substitute safer alternatives
4. Develop goals and metrics to measure progress and evaluate results



Principle #4 – Support Policies & Standards that Advance Principles #1 and #2



Support Public Policies & Industry Standards

CONSTRUCTION SPECIALTIES PROMOTES TSCA REFORM AT HOUSE HEARING



BUSINESS LEADERS DISCUSS SAFER CHEMICALS POLICIES

November 30, 2010

In this 7 min. video three business leaders discuss how their companies are implementing the BizNGO Principles



Engaging and Informing Policy

- Business and NGO collaboration
- Academia collaboration
- Public forums
- Media
- Inform and engage government agencies
- Engage and inform public policymakers
- Inform and engage at the organizational level
- Supply chain collaboration

Trends in Chemicals Management

- ↑ Transparency – disclose chemicals in products
- ↑ Responsibility -- Supply Chain and Life Cycle, including feedstocks
- ↑ Demand for comprehensive hazard data on chemicals
- ↑ Demand for safer alternatives based on hazard assessment
- Leadership across many sectors, including: Health Care, Electronics, Buildings, Retail, Cleaning Products, Personal Care Products, Apparel & Footwear, Outdoor Industry



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Thank You!

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