

The Business Case for Knowing Chemicals in Products & Supply Chains Webinar

13 January 2015, 3pm GMT

Today's webinar

- This webinar looks at the use of CiP information systems and the value of knowing about chemicals contained in products.
- These systems continue to enable and stimulate companies and entire product sectors to realize benefits, from achieving product safety to leading product innovation.

Speakers



- **Mark Rossi** PhD, BizNGO; Co-Director, Clean Production Action



- **Kevin Munn**, United Nations Environment Programme



- Chair: **Leigh Stringer**, Chemical Watch

Questions

- Please submit questions during the webinar using your chat box
- Any unanswered questions can be raised on our Forum following the webinar:
<http://forum.chemicalwatch.com/>

The Business Case for Knowing Chemicals in Products & Supply Chains

January 13, 2015

Mark Rossi, PhD





SAICM/OEWG.2/INF/12

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English only



Strategic Approach
to International
Chemicals Management

Open-ended Working Group of the International Conference
on Chemicals Management
Second meeting
Geneva, 15–17 December 2014

Item 5 (a) (ii) of the provisional agenda*
Emerging policy issues and other issues of concern:
report on progress on emerging policy issues:
chemicals in products

Making the business case for knowing chemicals in products and supply chains

Note by the secretariat

The secretariat has the honour to circulate, for the information of participants, a report received from the Inter-Organization Programme for the Sound Management of Chemicals on making the business case for knowing chemicals in products and supply chains (see annex). The report is reproduced as received by the secretariat, without formal editing.

<http://www.bizngo.org/news/article/the-business-case-for-knowing-chemicals-in-products-and-supply-chains>



**CORE
BUSINESS**

Take Ownership – directly traceable to your organization
[supply chain]

Take Action – impacts you contribute to + have problem solving competence
[sector initiatives]

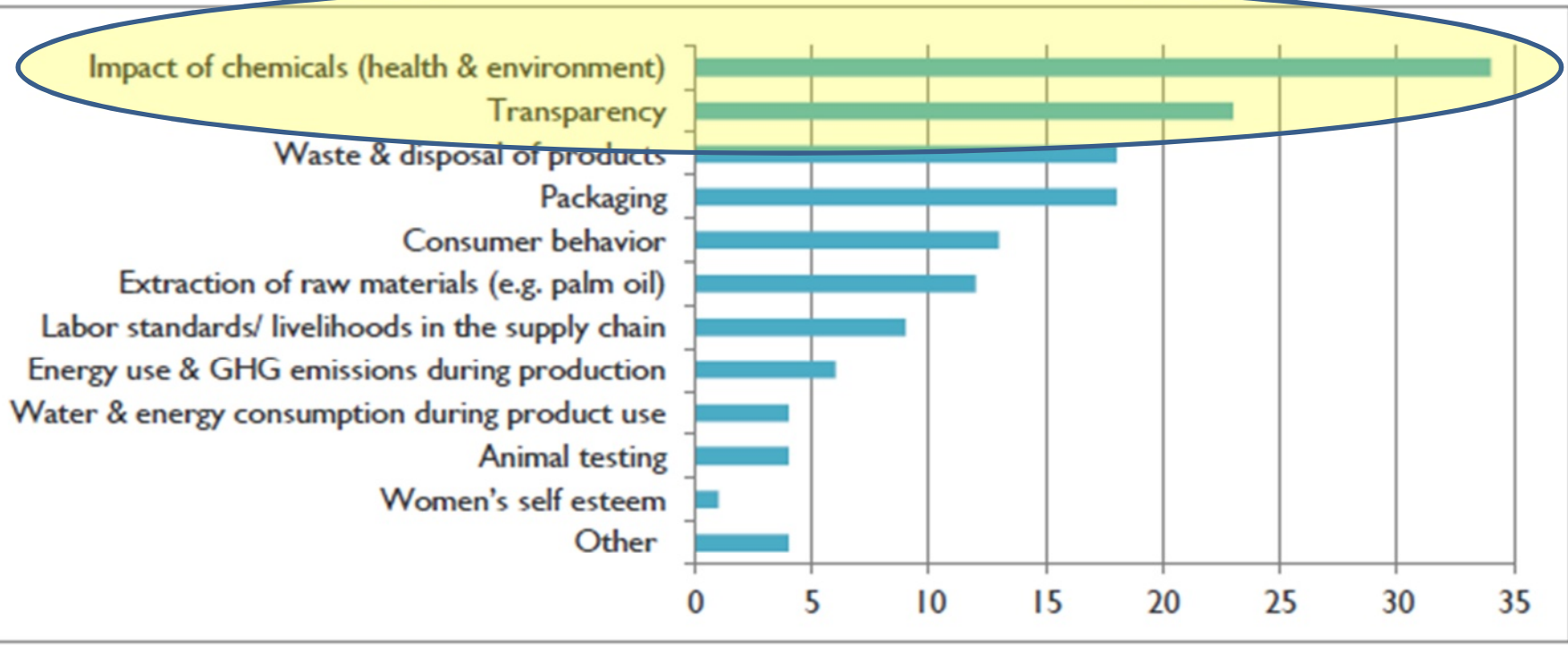
Take Interest – ripple effects - no special competence, but capacity to inform
[chemicals policy]



Beauty and Personal Care Products Sustainability Summit



Source of photo: <http://www.greenbiz.com/blog/2014/09/06/can-retailers-align-information-and-incentives-drive-innovation-personal-care-indust>



Source: Forum for the Future, http://www.forumforthefuture.org/sites/default/files/%23BPC_Summit_Summary_Report.PDF



*Option 1. Material ingredient reporting:
The manufacturer has published complete
content inventory for the product*

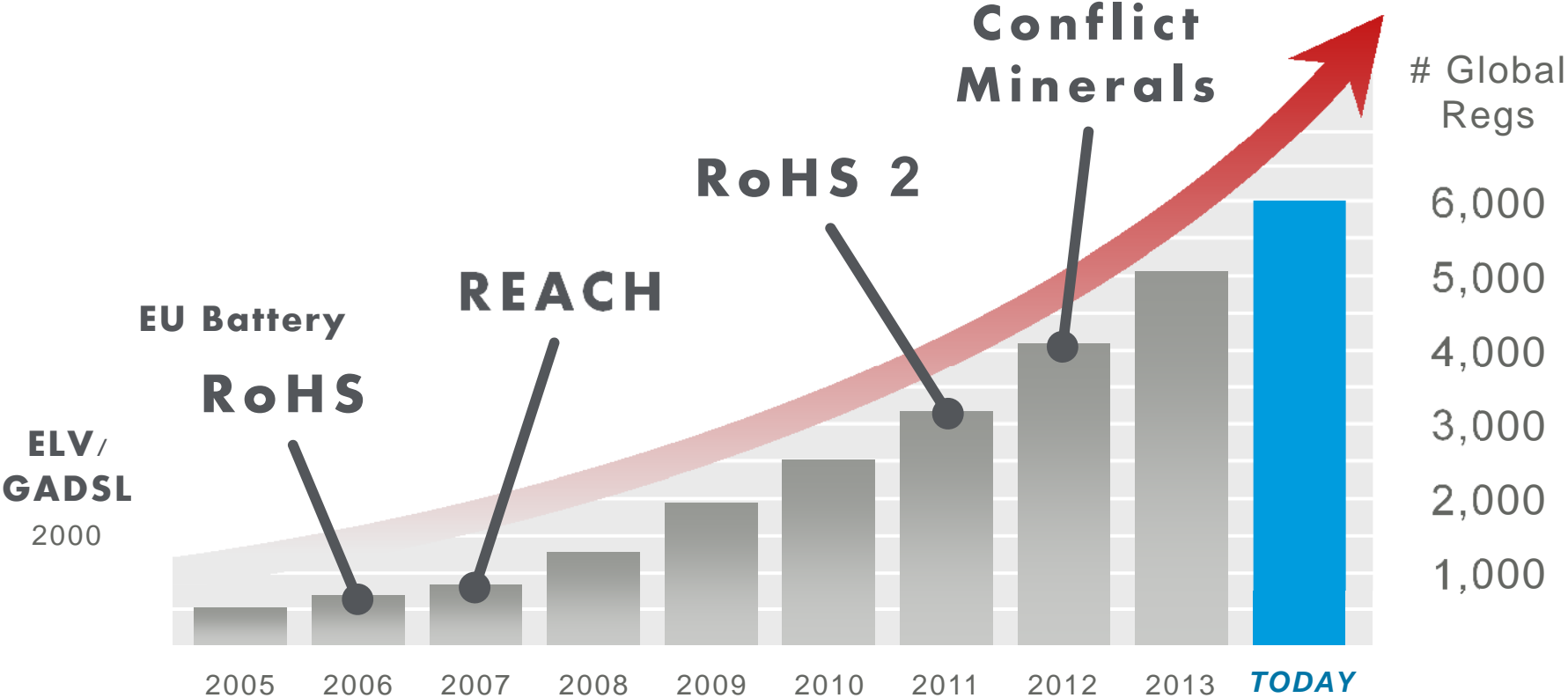
Global Product Regulations on the Rise!

Companies facing increasing ...

Regulatory Complexity

Effort to Fulfill Obligations

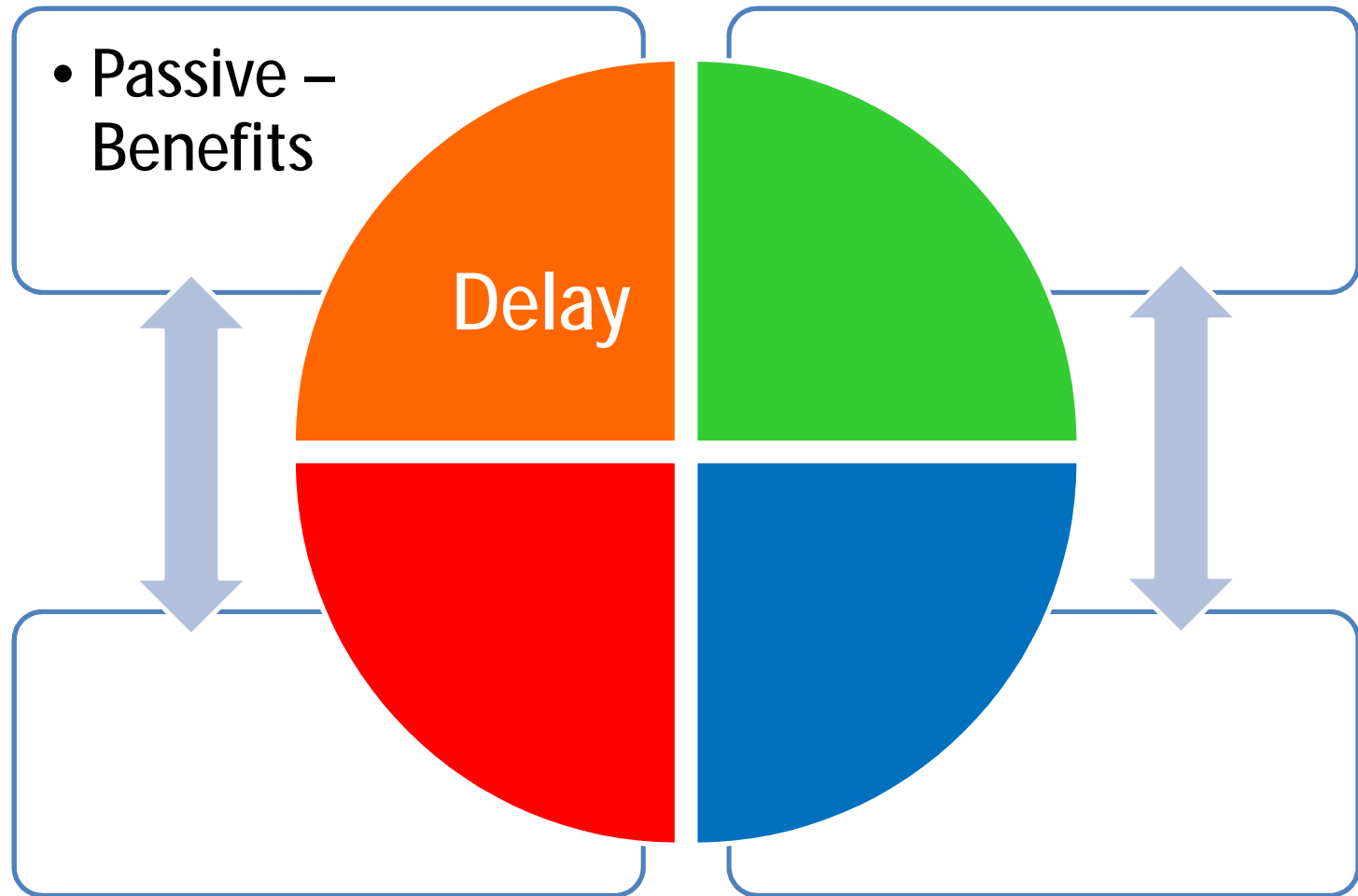
Customer Demands



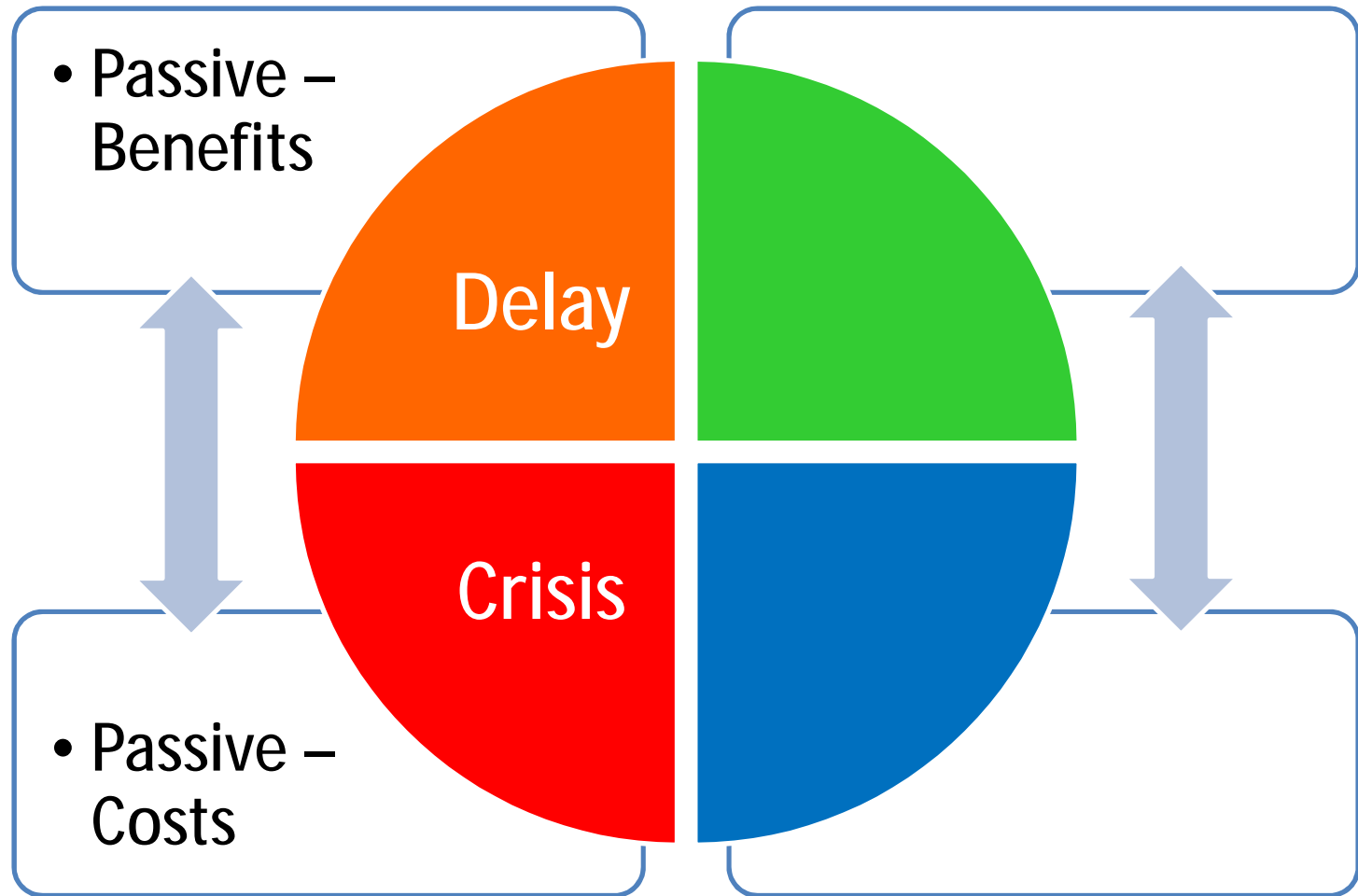
Source: Compliance and Risks 2014

PASSIVE TO ACTIVE

PASSIVE TO ACTIVE



PASSIVE TO ACTIVE



Costs of Not Knowing – Fines for Non-Compliance

- Walmart: \$81.6 million
- Target Corp.: \$22.5 million
- Walgreen Co.: \$16.6 million
- CVS Pharmacy: \$13.75 million



Product Recalls – Sony



- Europe - 2001
- 1.3 million PlayStations
- Illegally high cadmium levels in cables
- \$150 million in lost sales and product reformulation

Product Recalls – Mattel

- U.S. – 2007
- more than 9 million toys, including Barbie dolls
- recalled due to lead in paint
- \$110 million in costs
- Stock price down 18% (August-December 2007)



Non-Disclosure: SIGG USA Bankruptcy

- SIGG sales soar: consumers switch from PC to aluminum to avoid BPA (2007)
- BPA in SIGG linings public (2008)
- Consumers stop buying
- Retailers -- REI, Patagonia, Whole Foods Market -- pull bottles
- SIGG USA (subsidiary of SIGG Switzerland) files for bankruptcy with \$13 million in liabilities due to failure to disclose BPA (2011)

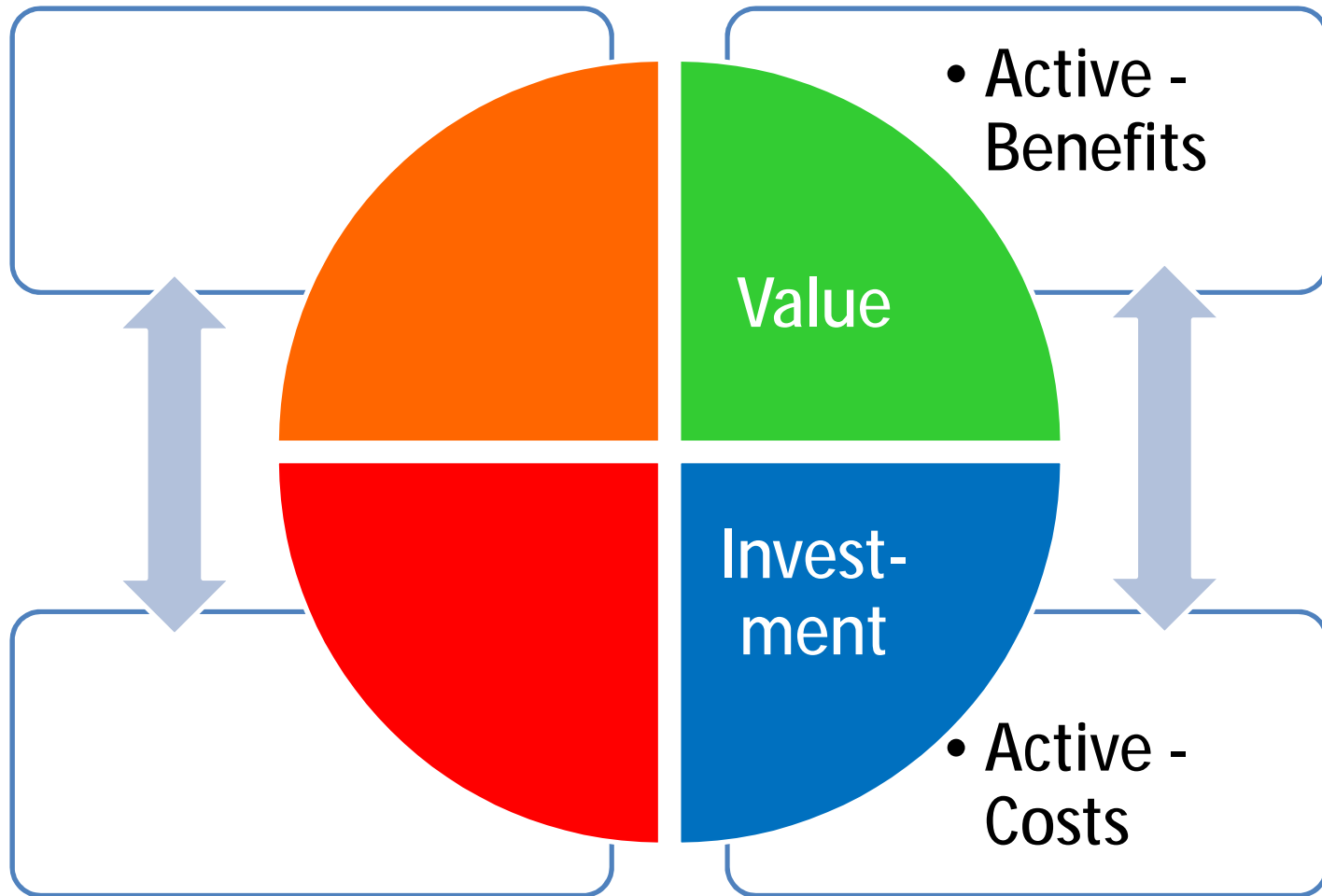


Lost Sales & Market Share – Johnson & Johnson

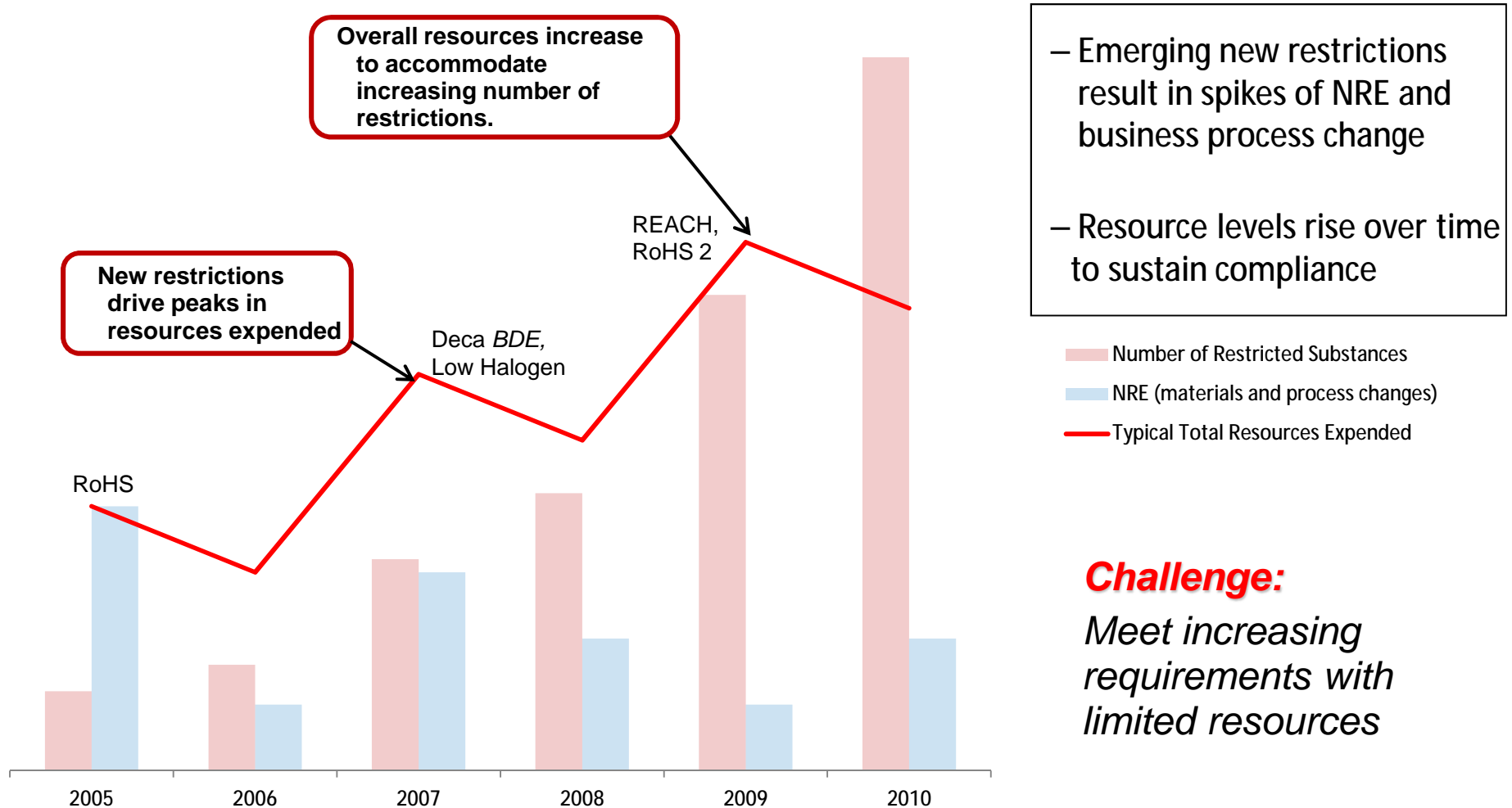
- NGOs found formaldehyde, 1,4-dioxane in baby care products (2009)
- Impacts in China
 - survey of consumers: 75% of ~120,000 stopped buying J&J products
 - retailers remove J&J bath products: e.g., NGS Supermarket Group - 3,500 stores
- Market share for baby products – down from 64.3% to 55.9% by 2010



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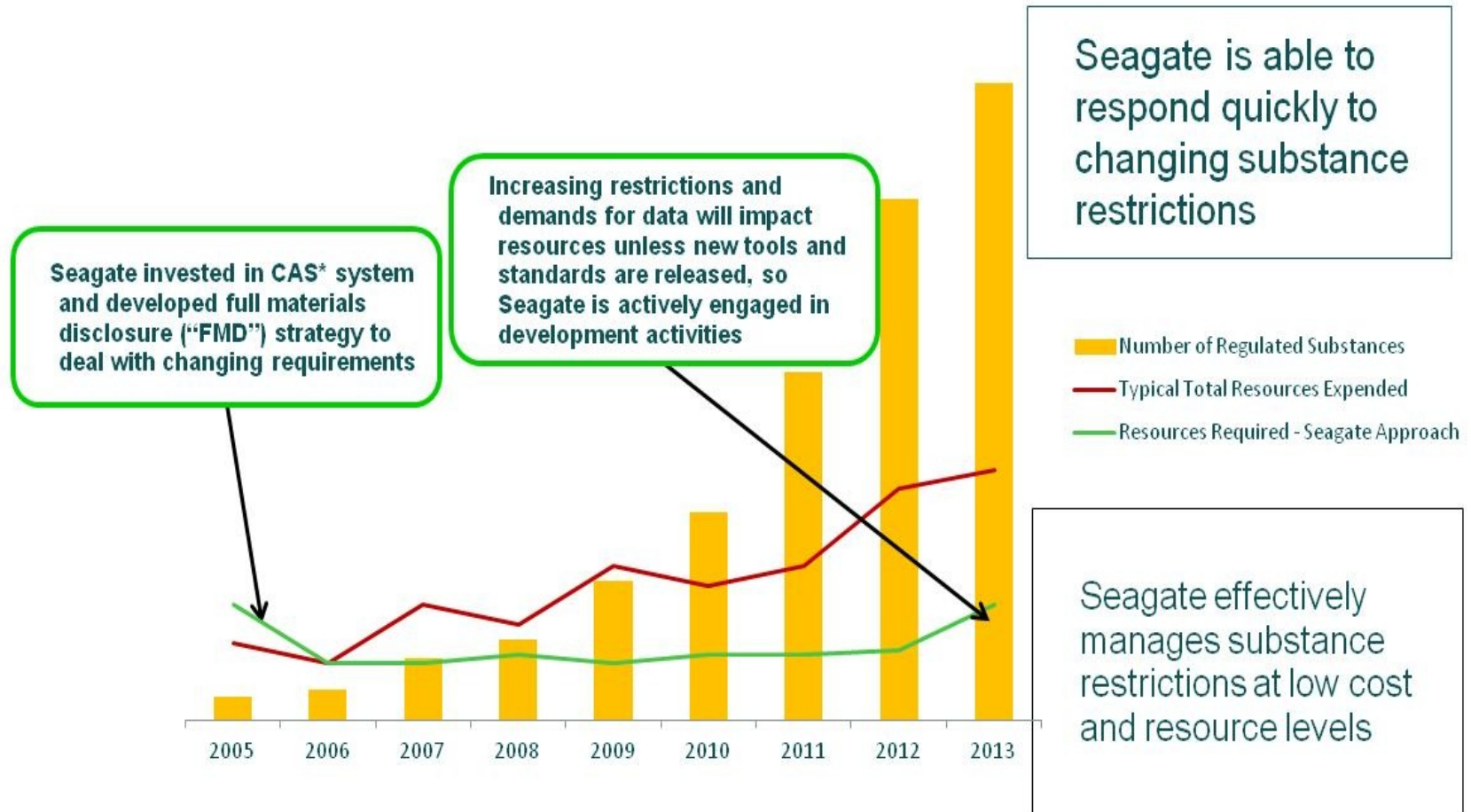
Resources required to **react to** new substance restrictions typically follow a 'sawtooth' line, and increase over time



Challenge:

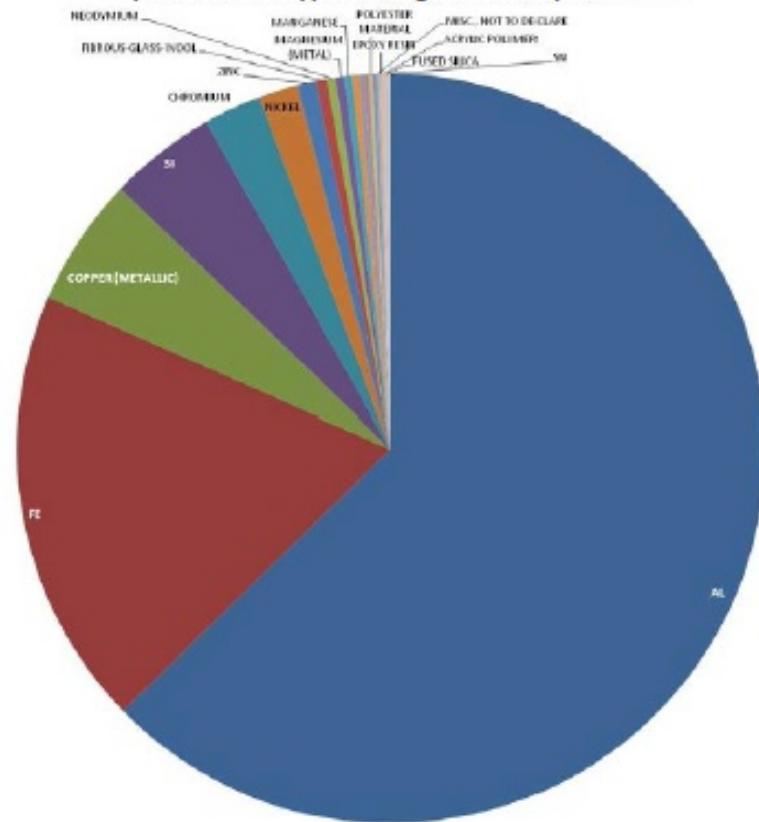
Meet increasing requirements with limited resources

Seagate Costs of Managing Full Material Disclosure and Conflict Mineral Data



Using data compiled from supplier FMD, Seagate can assemble a bill of substances for our products

Composition of a typical Seagate desktop disk drive



- Listed phthalates* ("phthalate free") (Homogeneous Material level)
- JIG/IEC 62474 restricted chemicals (over limits)
- REACH SVHCs over 1000 ppm (Article)
- ODCs

Substance	CAS Number	Cumulative Concentration
AL	7429-90-5	61.9451
FE	7439-89-6	80.5984
COPPER (METALLIC)	7440-50-8	86.12
SI	7440-21-3	90.705
CHROMIUM	7440-47-3	93.1778
NICKEL	7440-02-0	94.862
ZINC	7440-66-6	95.6614
FIBROUS-GLASS-WOOL	65997-17-3	96.141
NEODYMIUM	7440-00-8	96.5053
MAGNESIUM	7439-95-4	96.8692
MANGANESE	7439-96-5	97.1983
LCP polymer	147310-94-9	97.5019
POM, Polyoxymethylene copolymer	24969-26-4	97.7305
"DOPO" halogen free flame retardant	35948-25-5	97.9132
POLYESTER MATERIAL	79-14-1	98.086
ACRYLATE URETHANE OLIGOMER	73324-00-2	98.2507
PROPRIETARY SYSTEM		98.3749
EPOXY RESIN	129915-35-1	98.4961
ACRYLIC POLYMER	37325-11-4	98.6128
FUSED SILICA	60676-86-0	98.7214
SN	7440-31-5	98.8116

The Seagate supplier specification restricts almost 2000 CAS numbers

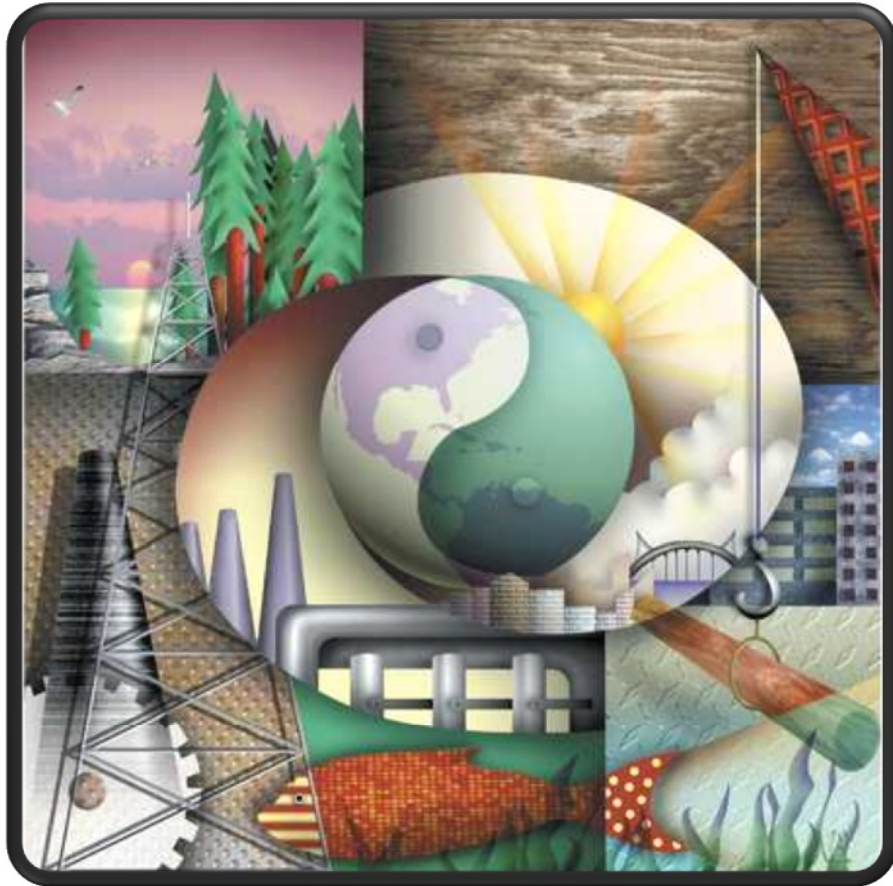
Coastwide Labs (Staples) – Sustainable Earth Product Line

Largely due to Sustainable Earth product line

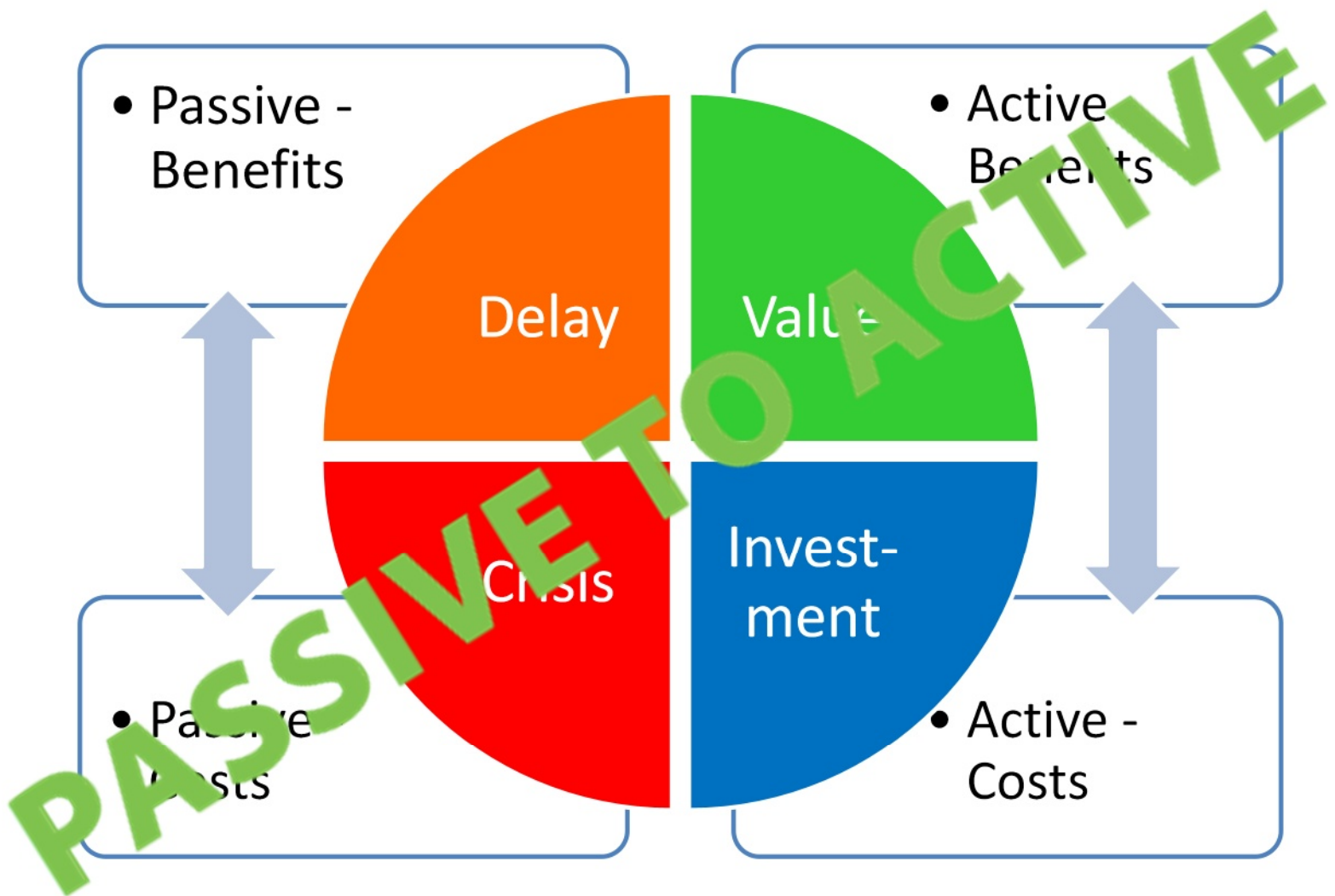
- Net operating income averaged double to triple the industry norm
- Sales rose 8% largely due Sustainable Earth products
- Market share grew to about 16% of the regional market
- New customers rose 35% in 2005 largely attributable to the Sustainable Earth product lines



Shaw Industries – EcoWorx Carpet Backing



- Eliminated
 - PVC
 - Phthalate plasticizers
 - Antimony trioxide flame retardant
- Comparable cost
- 40% recycled content
- Equal to improved performance
- Customers preferred EcoWorx, within 5 years, 1999-2004, ended all PVC use



PASSIVE TO ACTIVE

Passive Strategy – strive for compliance

Benefits - Delay

- low initial investments

Costs – Crisis

*Chemical Risks -- hidden liabilities of chemicals in products
& supply chains*

- non-compliance
- product recalls
- lost sales, market share, valuation
- product reformulation under crisis conditions
- supply chain disruption
- brand reputation tarnished



PASSIVE TO ACTIVE

Benefits - Value

- ↑ sales, market valuation, brand reputation, & supply chain reliability
- Innovative products
- ↓ costs of compliance

Costs – Investment

- Invest in:
 - knowing chemicals in products & supply chains
 - systems to collect data (either directly or 3rd party)
 - product reformulation ahead of regulations & market demand
- Train suppliers
- Test products





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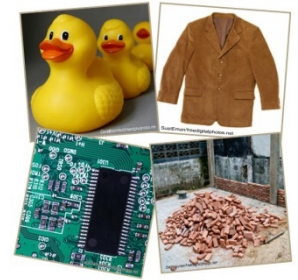
Chemicals in Products programme: background / status

Kevin Munn
Programme Officer
UNEP/DTIE Chemicals Branch

13 January, 2015



UNEP



United Nations Environment Program



- 1972 – UN General Assembly directed UNEP to serve as the coordinator of environmental issues and catalyst for environmental action and awareness within the United Nations System.

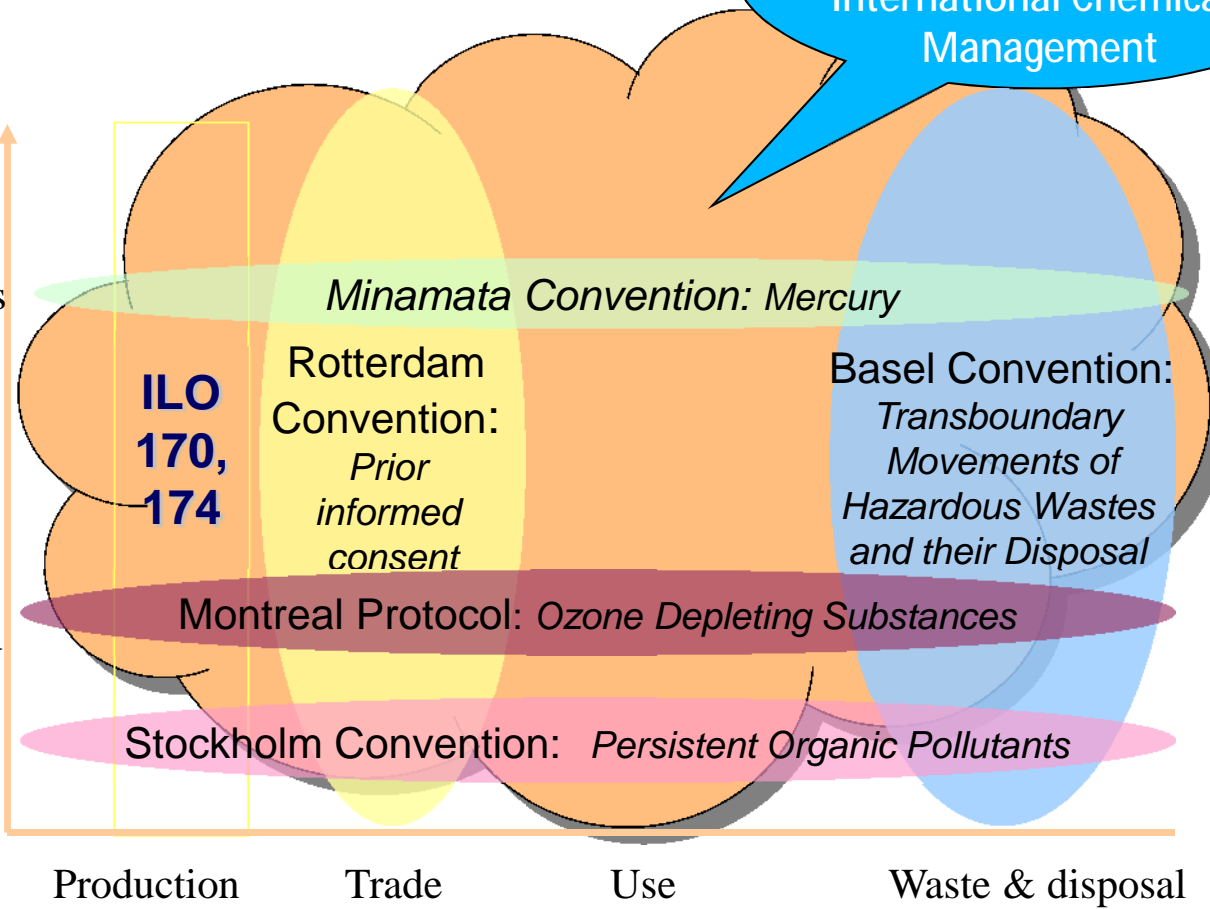
International chemicals governance: chemical characteristics and life cycle



SAICM:
Strategic Approach to
International Chemicals
Management

Chemical
'coverage'

Heavy metals
Other
chemicals
of concern
Specific
Halogenated
Compounds



Production

Trade

Use

Waste & disposal

Chemical 'life cycle'

SAICM



Strategic Approach to International Chemicals Management (SAICM)

- Overall objective: “by 2020 chemicals are produced and used in ways that minimize significant adverse impacts on the environment and human health” (2002 World Summit goal)
- Established in 2006 at the first International Conference on Chemicals Management (ICCM)
 - ICCM is SAICM’s Governing body - ICCM4 in 2015
- Voluntary, multi-sectoral and multi-stakeholder approach (governments, business and industry, civil society, labour)
- SAICM text: political declaration, policy strategy with specific objectives, plan of action

(<http://www.saicm.org>)

Chemicals in Products project – analysis phase



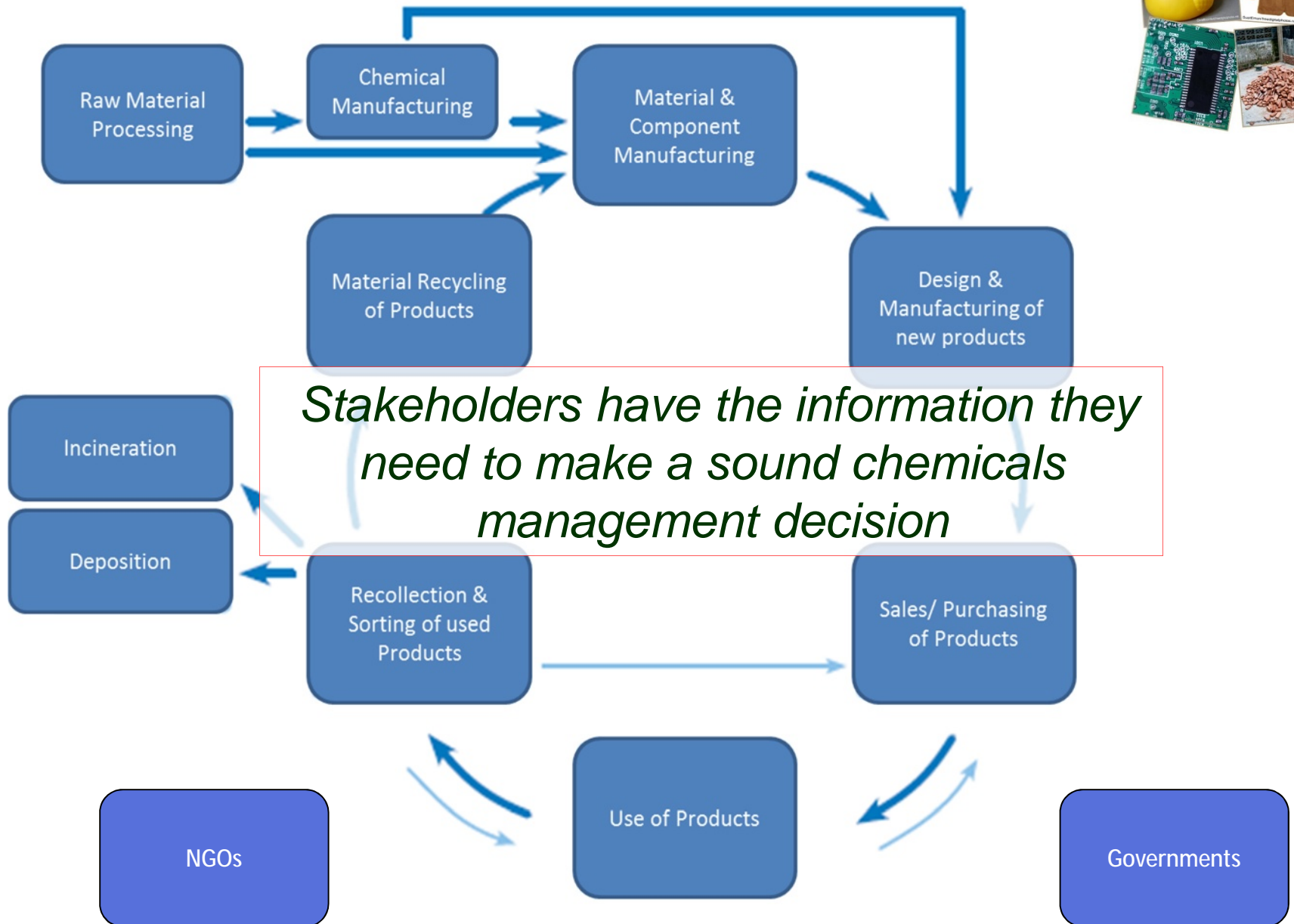
- ICCM2 (2009) identified chemicals in products (CiP) as an emerging policy issues for global cooperative action (others: nanotechnology, electronics, lead in paint, and perfluorinated chemicals)
 - CiP project basis in SAICM objective on Knowledge and Information (Para 15b) - to ensure that “information on chemicals throughout their life cycle, including, where appropriate, chemicals in products, is available, accessible, user friendly and appropriate to the needs of all stakeholders”
- Invited UNEP to lead the CiP project to:
 - Investigate existing systems of CiP information exchange
 - Identify stakeholder needs for CiP information and gaps
 - Recommend to ICCM3 (Sept. 2012) actions to address the issue

Chemicals in Products project – the CiP programme



- ICCM3 (2012) – Agreed to develop a *CiP programme* to “facilitate and guide the provision and availability of, and access to, relevant information on chemicals in products among all stakeholder groups”
 - Identify roles and suggest responsibilities of the major stakeholder groups
 - Develop guidance on what chemicals information could be transferred and how
 - Life-cycle; consider best practices; implement pilot(s)

The elevator pitch / take-home point



The CiP programme – enabling sound chemicals management



By 2020 chemicals are produced and used in ways that minimize significant adverse impacts on the environment and human health

Policy basis - SAICM 2020 goal

High level objectives
- OPS Objective 15(b)

“information on chemicals throughout their life cycle, including, where appropriate, chemicals in products, is available, accessible, user friendly and appropriate to the needs of all stakeholders”

Resolution
ICCM3

Objectives of Chemicals in Products
information exchange

CiP programme Guidance (general)

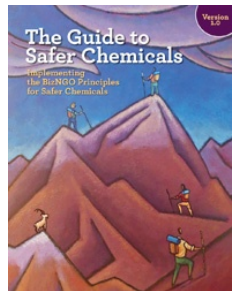
Sector specific Guidance
(if needed)

Chemicals in products information exchanged

Sound chemicals management actions

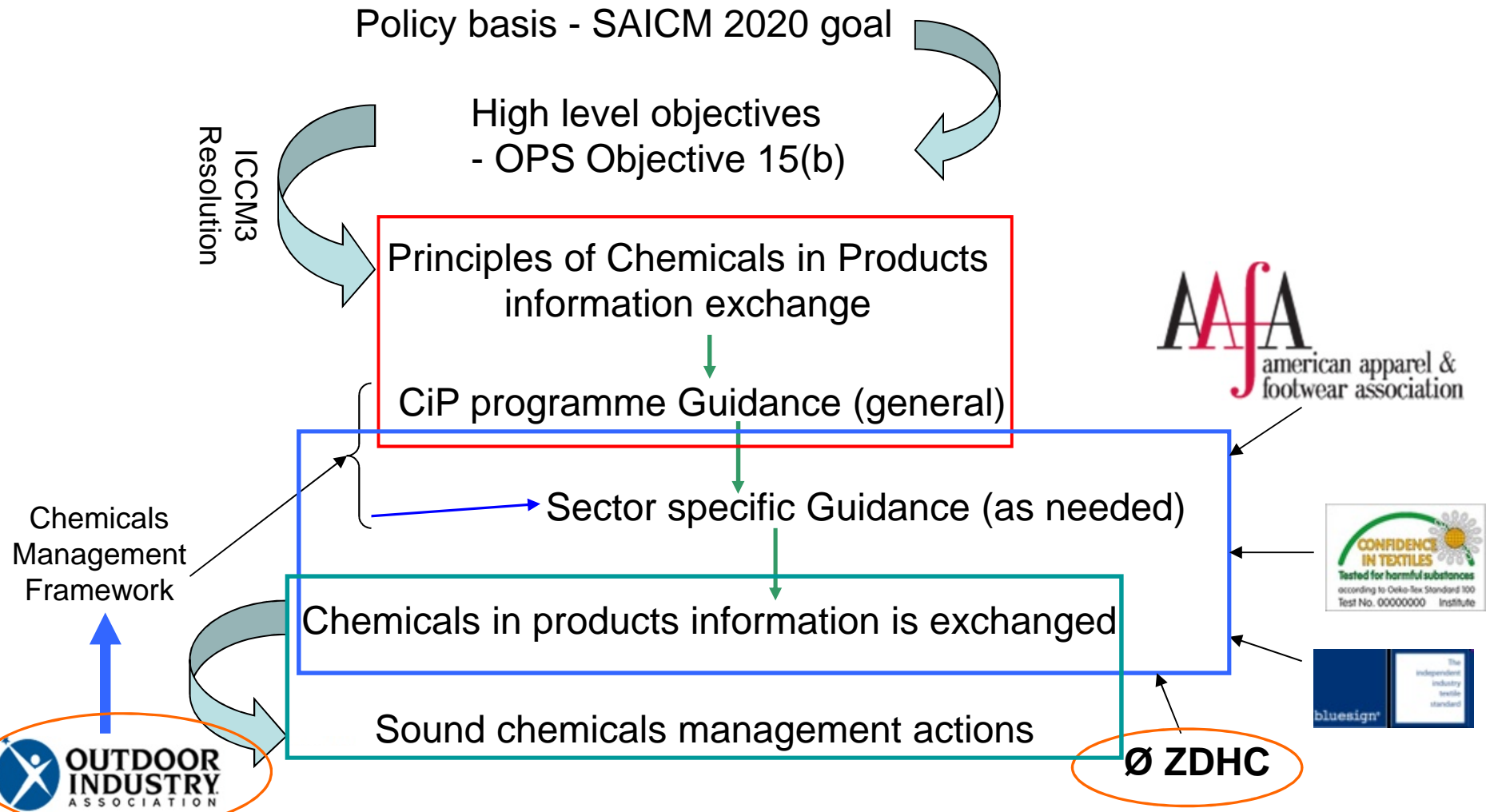
**KNOW AND EXCHANGE
IN SUPPLY CHAINS**

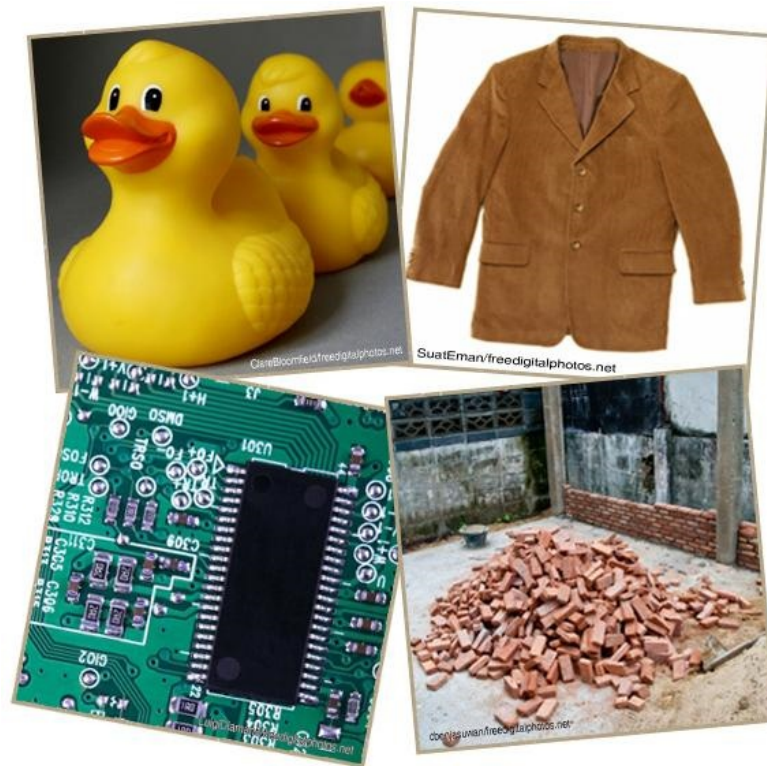
information on what chemicals are in your products, associated hazards and sound management practices. **DISCLOSE** information to stakeholders **outside** the supply chain to assist in informed decision making. **ENSURE** that information is accurate, current, verifiable and accessible.



Chemicals
Management
Framework

A textile sector pilot of the CiP programme





THANK YOU

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CiP project URL:
<http://www.unep.org/chemicalsandwaste/UNEPsWork/ChemicalsinProductsproject/tabid/56141/Default.aspx>

Thank you for attending



What did you think about the webinar? Please take part in our email survey (in your inbox now)

A downloadable recording of this presentation (with slides) will be available shortly.

If you have any questions, please contact Lorna (lorna@chemicalwatch.com)

Don't forget: Mark Rossi will be giving a keynote address at our Global Supply Chain Summit, 25-26 February, Brussels.

www.chemicalwatch.com/supply-chain-summit