



***What are your
chemical risks?
The business case
for knowing
chemicals in
products &
supply chains***



AMERICAN
SUSTAINABLE
BUSINESS
COUNCIL



February 10, 2015



Kevin Munn

*Programme Officer
UNEP / DTIE
Chemicals Branch*



Mark S. Rossi, PhD

*Co-Director, Clean
Production Action;
Chair, BizNGO*

Questions for the presenters?



- Please type questions into the “Questions” Pane during the webinar
- The moderator will ask your questions after presenters finish
- Ask unanswered questions at bizngo@cleanproduction.org

Chemicals in Products programme: background / status

Kevin Munn
Programme Officer
UNEP/DTIE Chemicals Branch

10 February 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



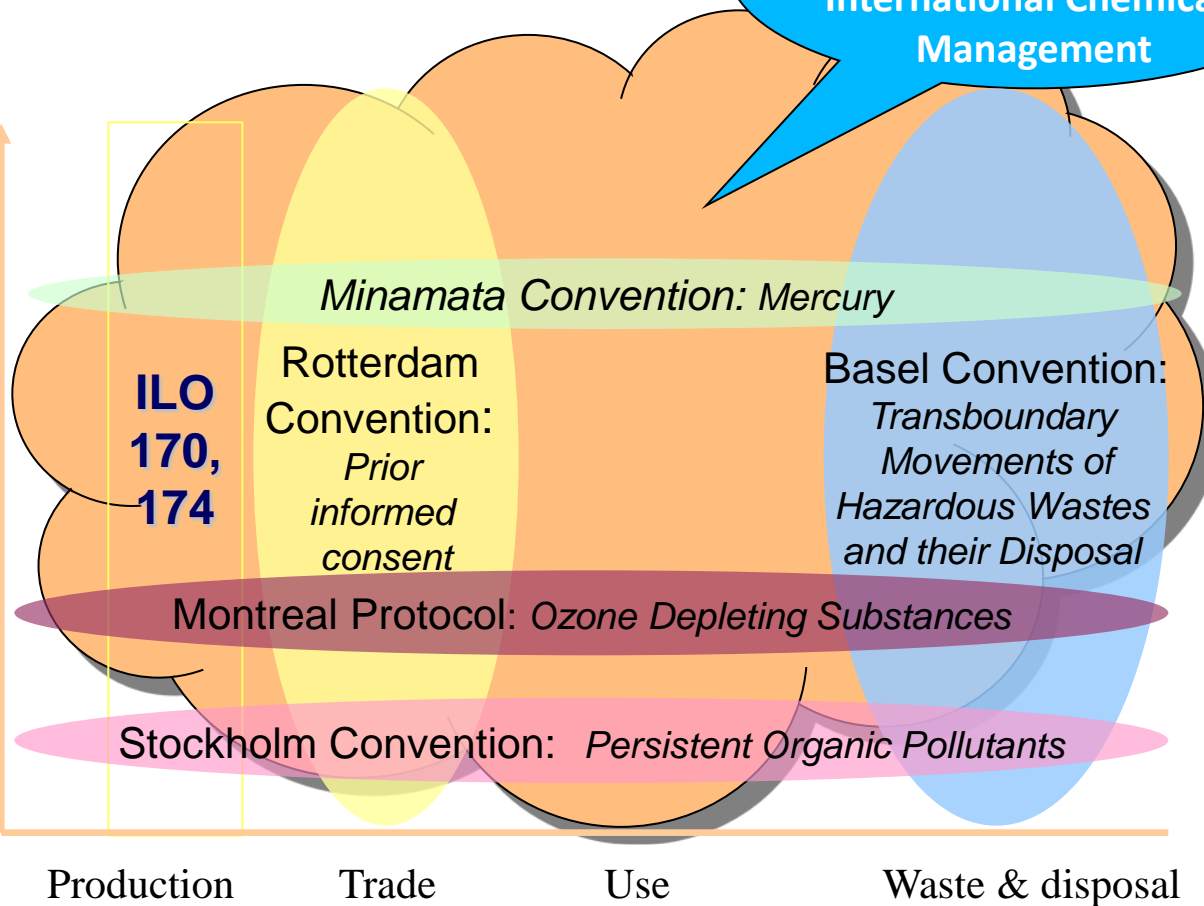
SAICM:
Strategic Approach to
International Chemicals
Management

Chemical
'coverage'

Heavy metals

Other
chemicals
of concern

Specific
Halogenated
Compounds



Chemical 'life cycle'

SAICM

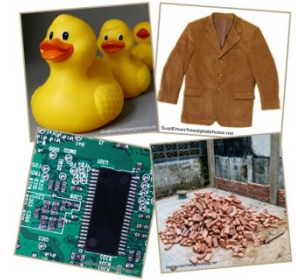


Strategic Approach to International Chemicals Management (SAICM)

- 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



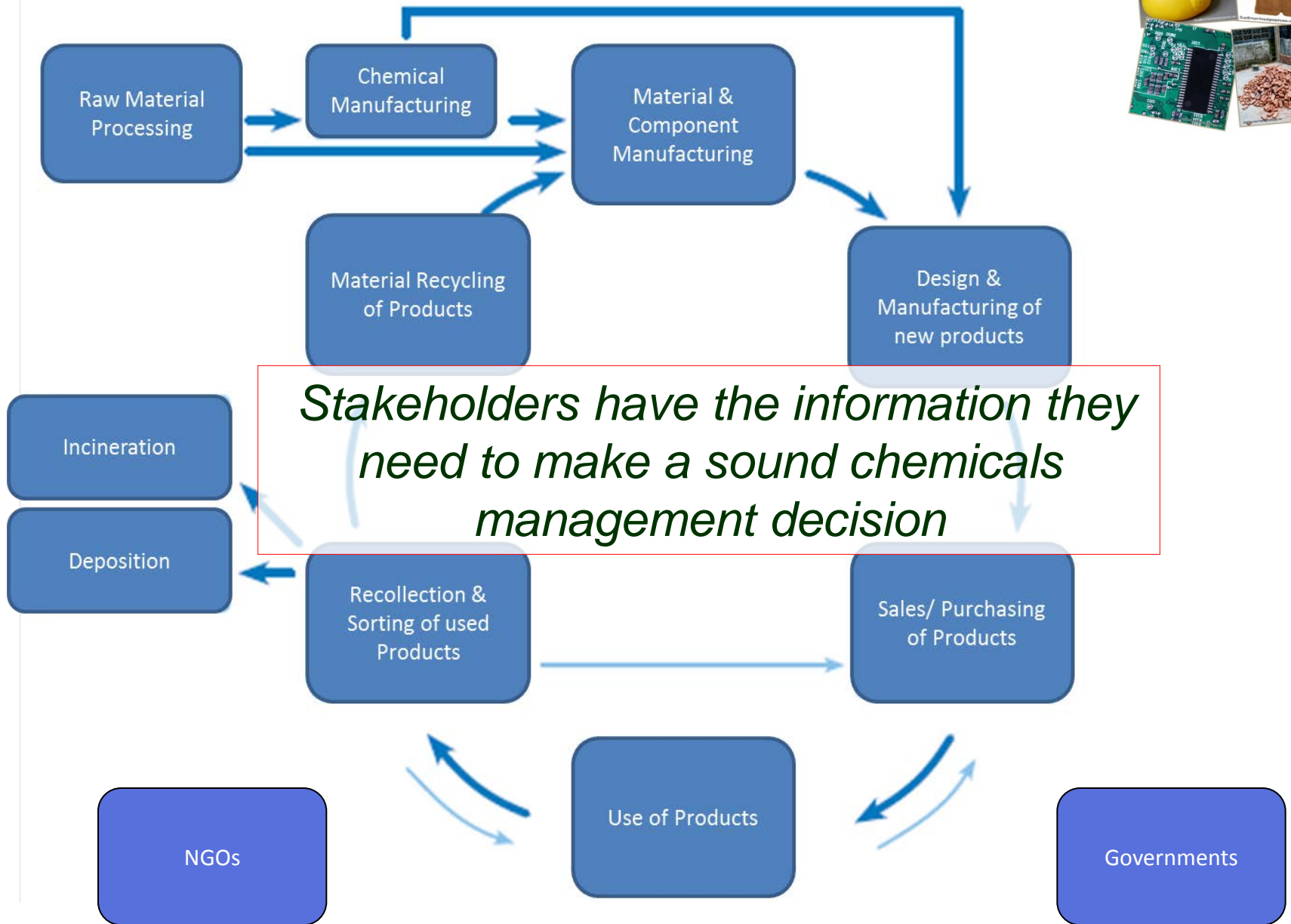
- ICCM2 (2009) identified chemicals in products (CiP) as an emerging policy issues for global cooperative action (others: nanotechnology, electronics, lead in paint, and perfluorinated chemicals)
 - CiP project basis in SAICM objective on Knowledge and Information (Para 15b) - to ensure that “information 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

“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”

High level objectives - OPS Objective 15(b)

Resolution ICCM3

Objectives of Chemicals in Products information exchange

CiP programme Guidance (general)

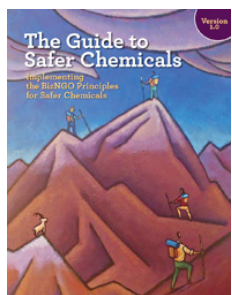
KNOW AND EXCHANGE IN SUPPLY CHAINS

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.

Sector specific Guidance (if needed)

Chemicals in products information exchanged

Sound chemicals management actions



Chemicals Management Framework

A textile sector pilot of the CiP programme



Policy basis - SAICM 2020 goal

High level objectives
- OPS Objective 15(b)

ICCM3
Resolution

Principles of Chemicals in Products
information exchange

CiP programme Guidance (general)

Sector specific Guidance (as needed)

Chemicals in products information is exchanged

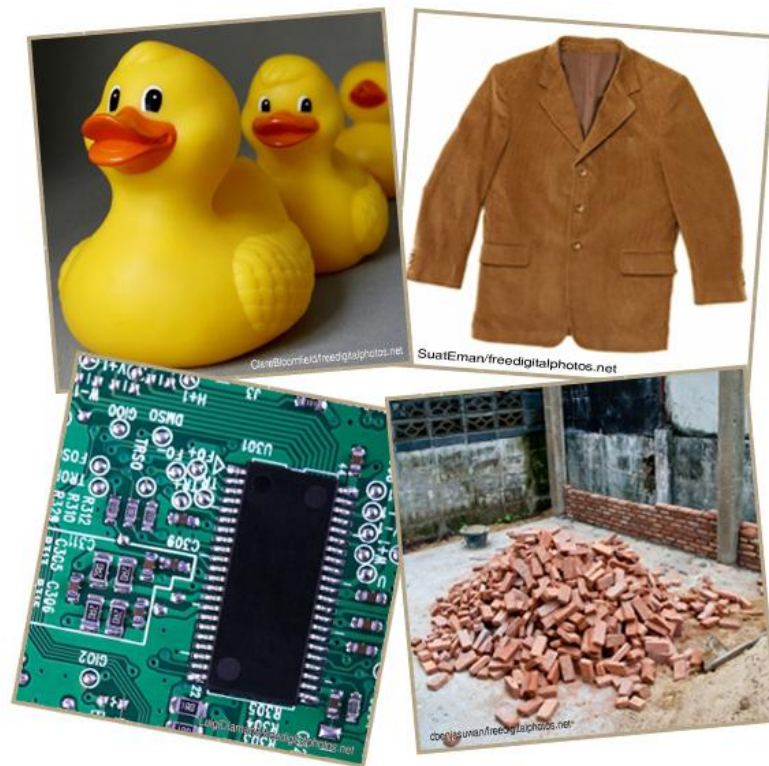
Sound chemicals management actions



Ø ZDHC

Chemicals
Management
Framework





THANK YOU

Kevin Munn, Project Officer
UNEP Chemicals Branch, DTIE
Geneva, Switzerland
kevin.munn@unep.org

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



SAICM/OEWG.2/INF/12

Distr.: General
10 November 2014
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]

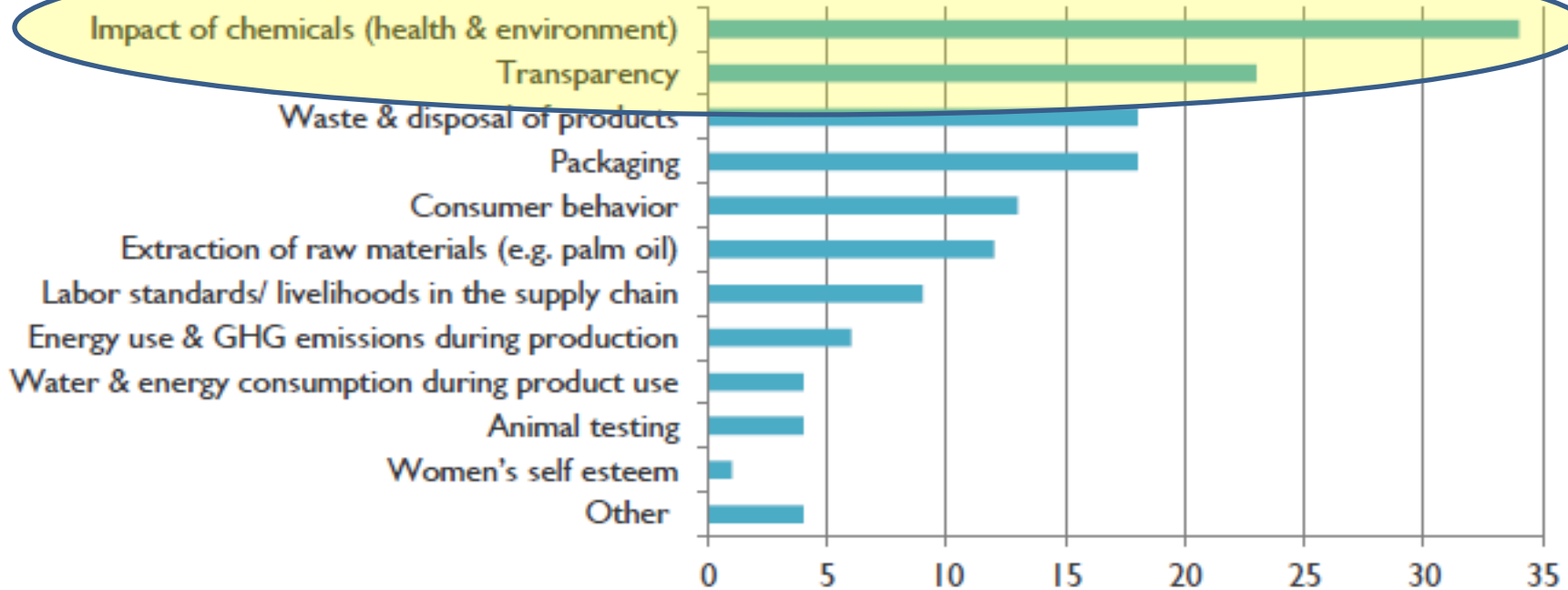
Take Interest – ripple effects - no special competence, but capacity to inform
[public policy]



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



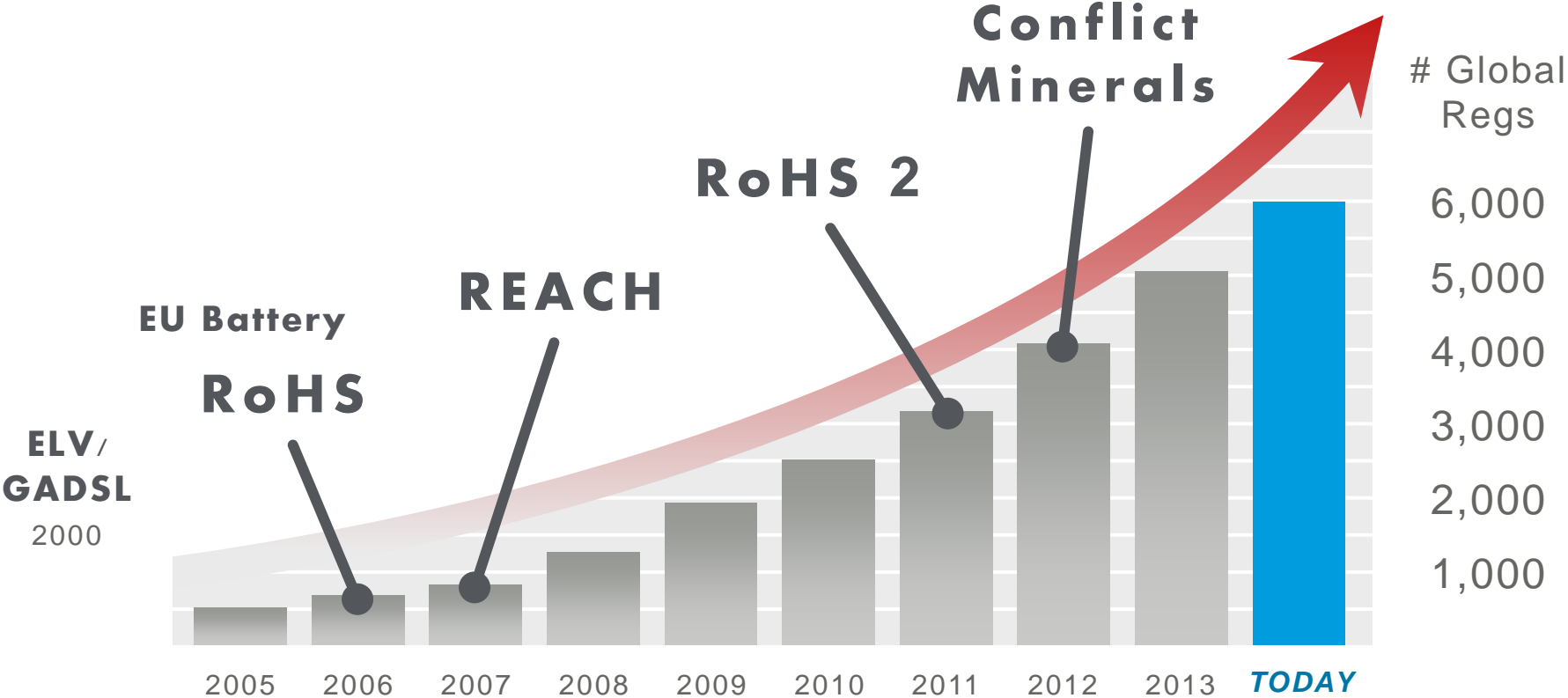
Option 1.
Material ingredient reporting:
The manufacturer has published complete content inventory for the product

Companies facing increasing ...

Regulatory Complexity

Effort to Fulfill Obligations

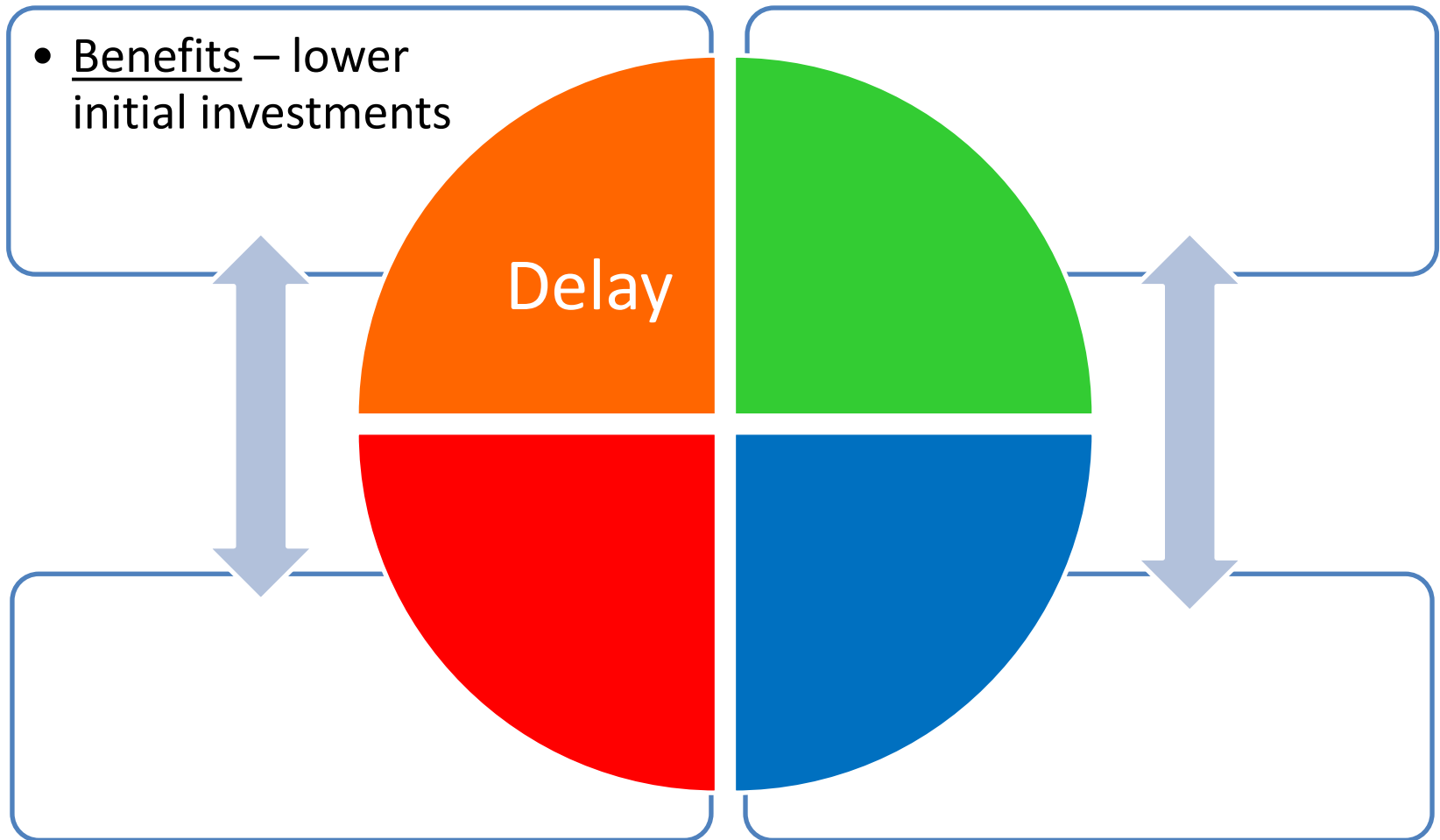
Customer Demands



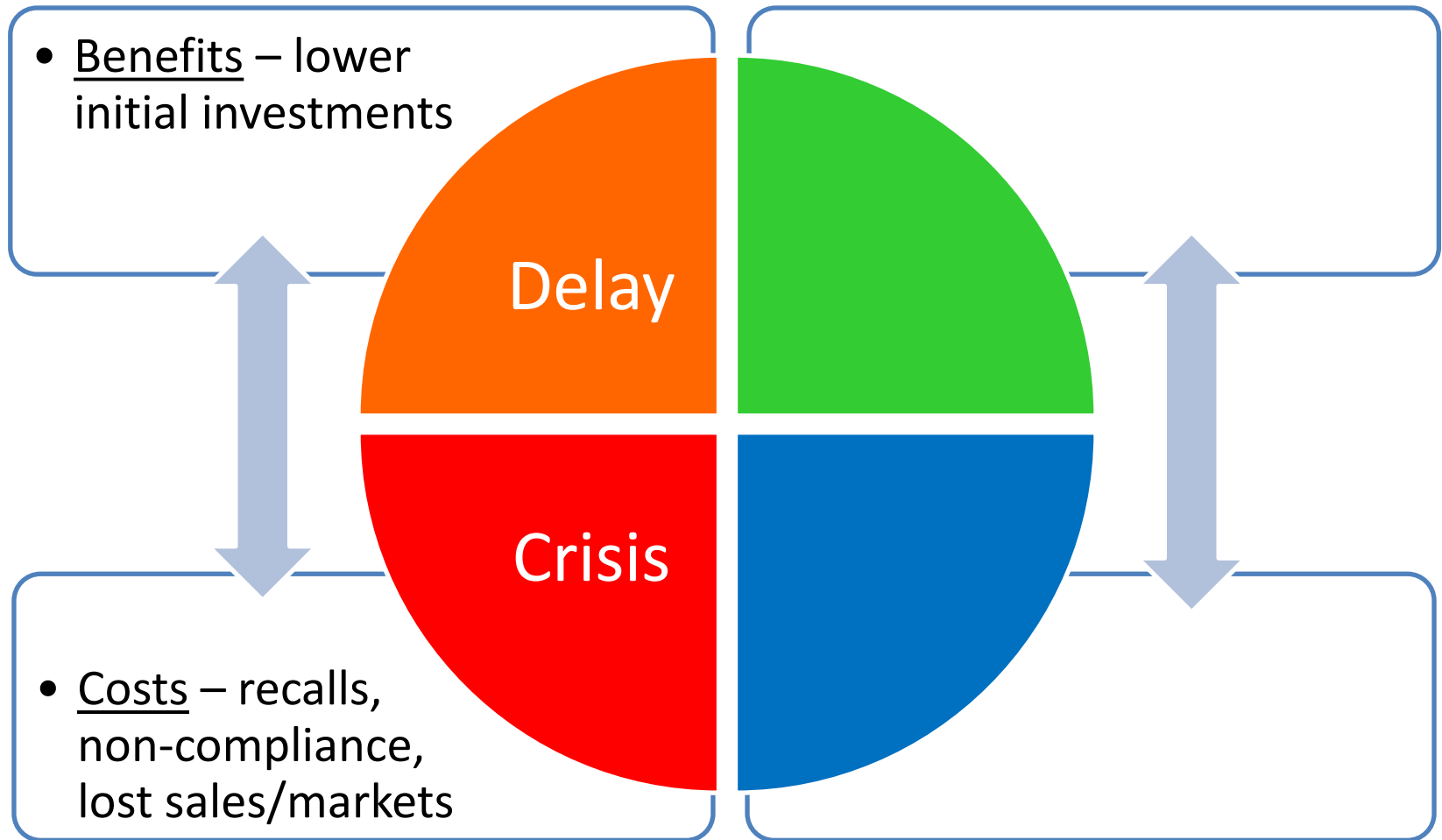
Source: Compliance and Risks 2014

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 Recall – 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 polycarbonate 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)

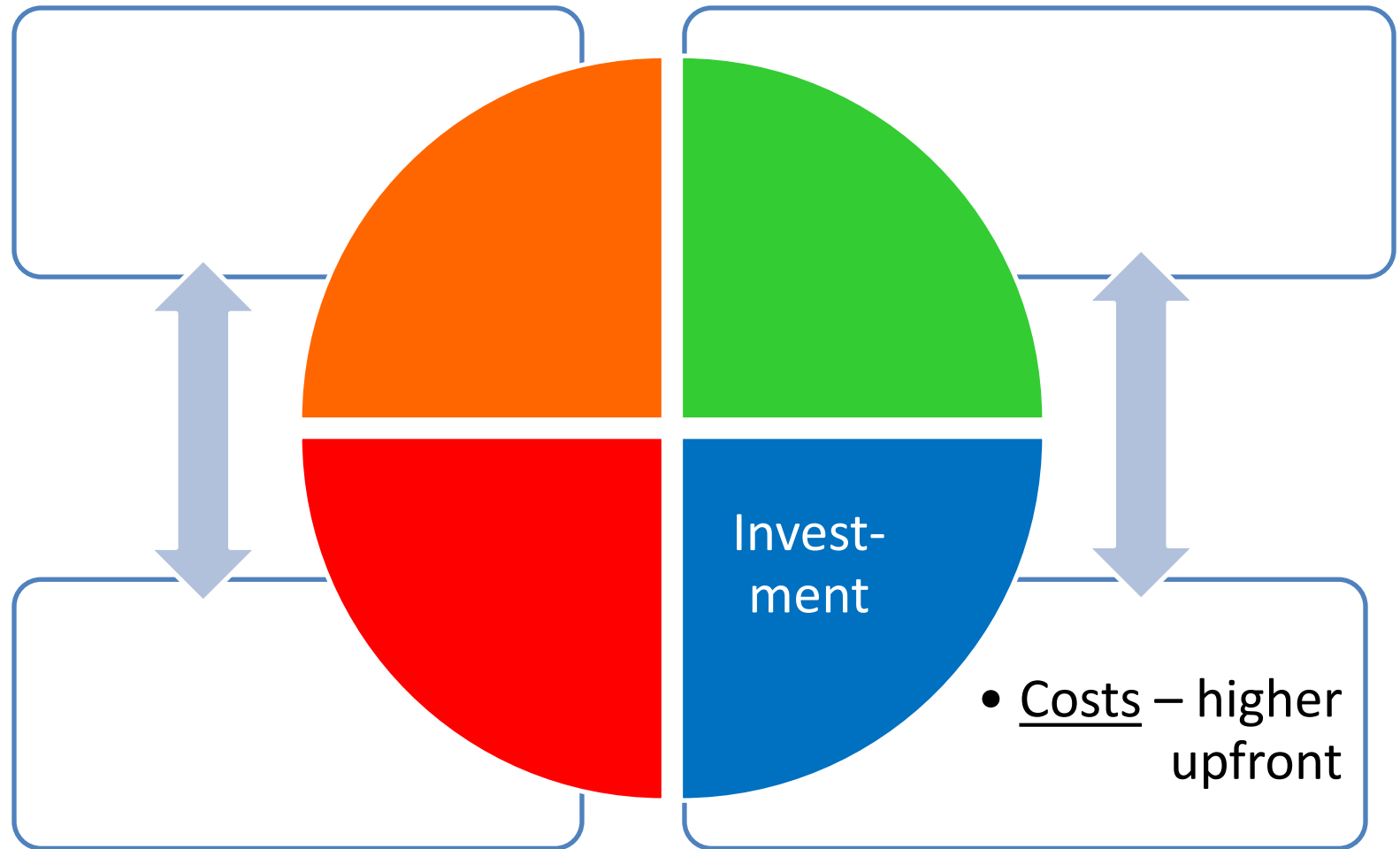


Lost Sales & Market Share – Johnson & Johnson

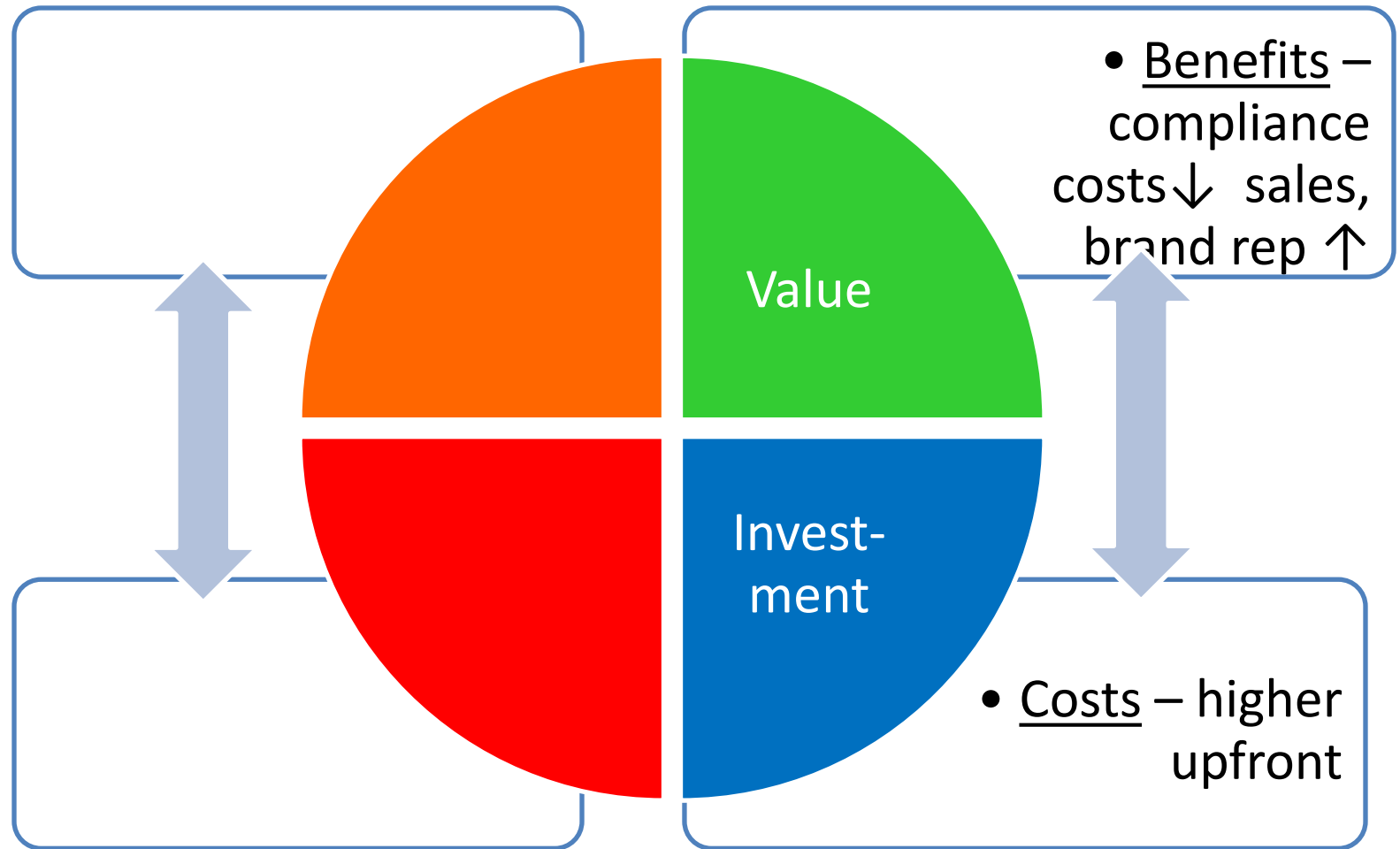
- NGOs report formaldehyde, 1,4-dioxane in baby care products (2009)
- Impacts in China
 - survey of consumers: 75% of ~120,000 stopped buying J&J products
 - retailers remove J&J bath products: e.g., NGS Supermarket Group - 3,500 stores
- Market share for baby products – down from 64.3% to 55.9% by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



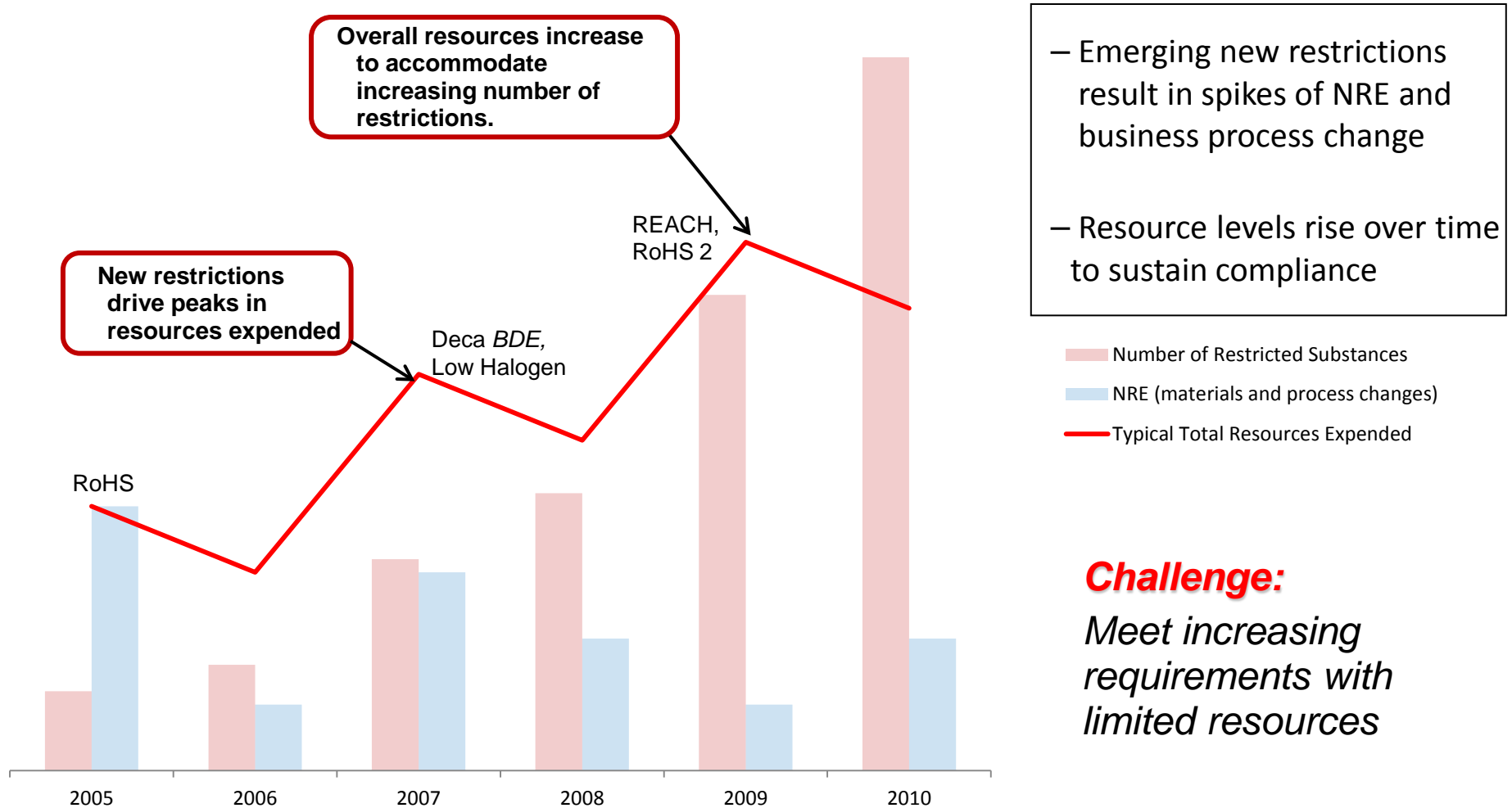
PASSIVE TO ACTIVE



PASSIVE TO ACTIVE



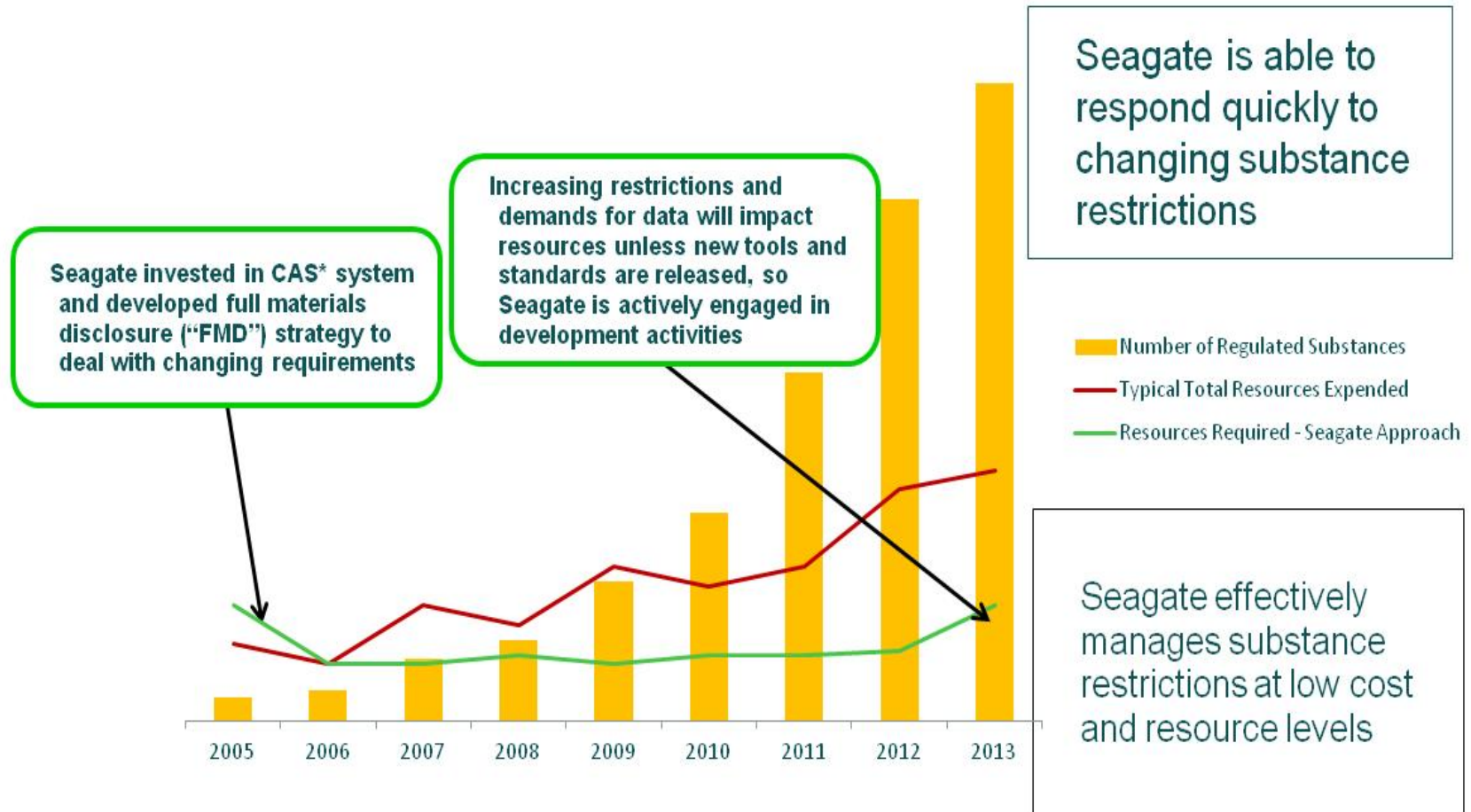
Resources required to **react to** new substance restrictions typically follow a 'sawtooth' line, and increase over time



Challenge:

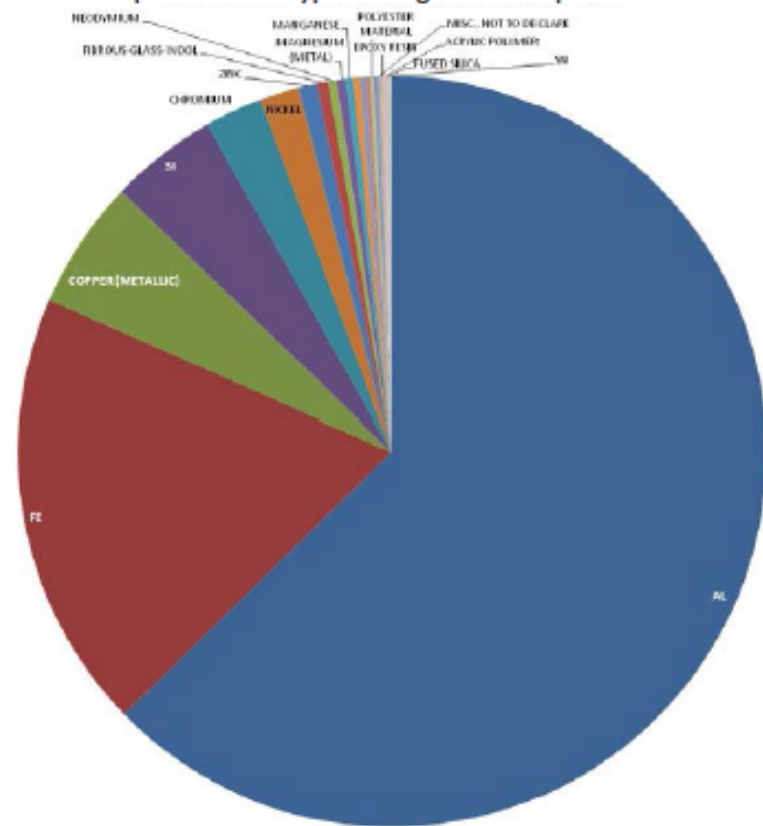
Meet increasing requirements with limited resources

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



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

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

The Seagate supplier specification restricts almost 2000 CAS numbers

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



New Report Makes Strong Business Case for Using Safer Chemicals in Products and Supply Chains

ma, dec 15, 2014

Product Recalls Cost Companies Millions; While Companies Responding to Recalls
Products Are Seeing Growth in Sales

Email 0 Tweet 1



The report concludes that companies with Active chemicals management systems have seen increased sales and well-managed supply chains.

Geneva, 15 December 2014 - Chemicals are all around us, present in the products we use every day. Increased transparency on chemicals up and down the supply chain is growing. Consumers, retailers and brands all want to know more, driving companies to disclose information about the hazardous chemicals in their products and to make safer choices.

FURTHER RESOURCES

Click to download 'The Business Case for Safer Chemicals'

<http://www.unep.org/NewsCentre/default.aspx?DocumentID=2814&ArticleID=11109>

The United Nations Environment Programme (UNEP) report, prepared in collaboration with the environmental NGO Clean Production Action, was released today at the Strategic Approach to International Chemicals Management (SAICM) Open-Ended Working Group's meeting in Geneva, Switzerland.

Thank You!

Mark Rossi, PhD
mark@cleanproduction.org

&
Kevin Munn
kmunn@chemicals.unep.ch