The Crossroads of Change

Where Policy, Politics, and Profits Intersect

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Preview

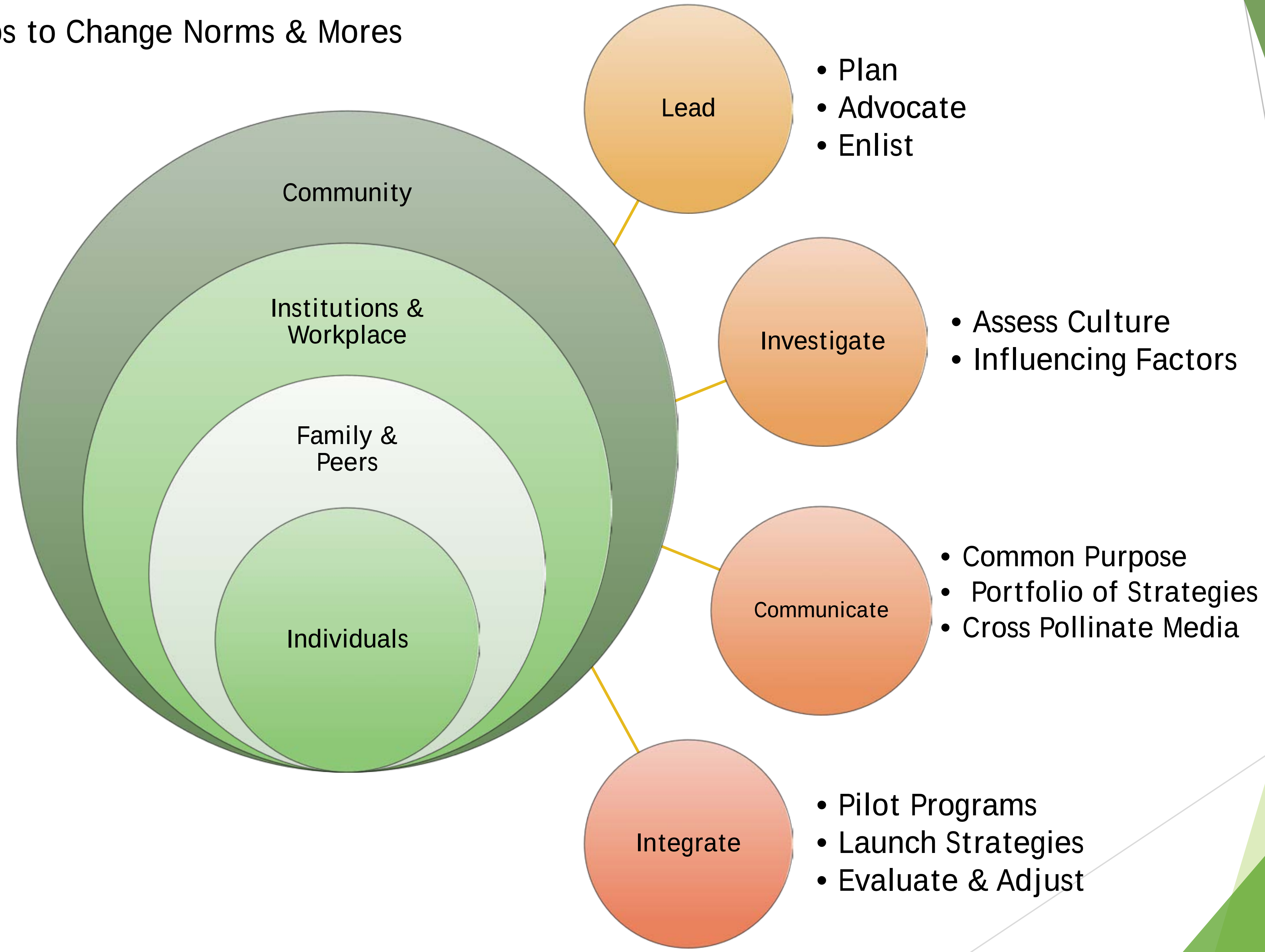
- An Industry In Transition
- Putting Policies in Historic Context
- The Best Defense is a Good Offense
- Changing Effectively
- Issues Worth Watching
- A New York Perspective

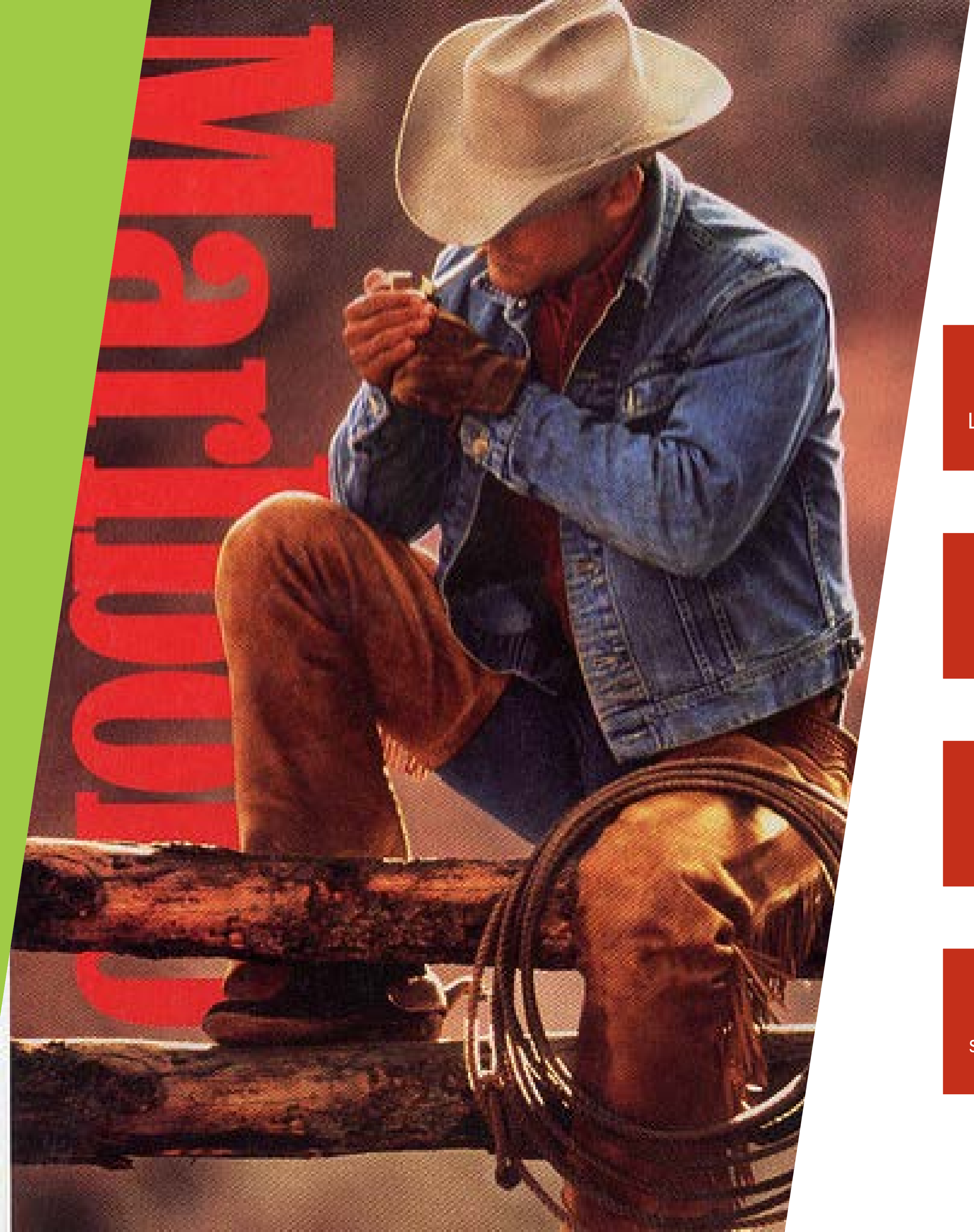
Social Norms

Why Legislation and Regulation Aren’t Enough

- Conformity Feels Safe
- The Action “Feels Natural”
- Ingrained as Youth
- Peer Pressure
- Consequences are not Imminent

Steps to Change Norms & Mores





Legislating Behavior & Changing Social Norms

Understand the Challenge

1946
First Article Linking Smoking To Lung Cancer

1950
FTC Says Cigarette Ads Deceptive

1958
44% Of People Believe Smoking Linked To Cancer

1963
50% Of Men And 30% Of Women Smoke

1964
First Surgeon's General Report

1965
Legislation To Put Warnings On Cigarette Packs

1968
78% Of People Believe Smoking Linked To Cancer

1969
Cigarette Ads Banned on TV & Radio

1974
Smoke free laws introduced

1992
Distribution and sales of cigarettes to youth banned

2015
20% Of Men And 20% Of Women Smoke

2046
US Cigarette Consumption Rare Or Nonexistent

Form Off-shoot Organizations To Implement Member Funded Alternatives

Steer Focus To Individual Responsibility & Job Loss

Introduce & Support Ineffective Legislation As A Smoke Screen

Commission “Third-party” Studies, Reports & “Free-lance” Articles

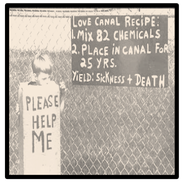
Initiate Litigation For The Sake Of Intimidation

Use Targeted Donations and Grant Programs

Proven Strategy to Thwart Consumer Product Legislation

Environmental Issues Circa 1970-1990

- In the News

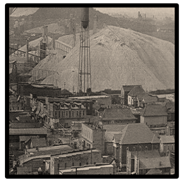


Love Canal, NY
Petro-Chemicals

Valley of the Drums, Bullitt, KY
Paints & Solvents

Times Beach, MO
Dioxin

Coastal
Sewage & Medical Waste



Picher, OK
Lead & Zinc

Michigan Chemical
DDT

Regulatory Reaction

- New Federal Immersion in Solid Waste Management
- Reality of Self Regulated Industries
- Focus on End of Pipeline
- Command & Control Approach

Circa 1950-1990
What about Municipal Waste?

- Reality of Municipal Dumps Prompts Mass Closures
- Economies of Scale Promoted
- Technological Solutions were Favored over “Organic” Approaches
- Cost of Disposal Increases
- Waste Generation Begins to Escalate
- Packaging Alters Waste Composition

“Municipalities or some other "natural payer" may need to help subsidize collection costs if Waste Management can't generate enough revenue from the material.”

David Steiner, CEO
Waste Management
2016

Who is the “natural payer” ?

Circa 1950-1970
Final shift to non-returnable carbonated beverage containers

Cases sold annually

- 1960- 65.7 million
- 2014- 8.4 billion

Average % recovered per year

- 1960= 8%
- 1990 =44.7%.
- 2012 = 42%

Industry Savings (Sample for Coca Cola)

- Reduced Fuel Consumption by 50%
- Saved $4Myr. warehousing/repair per botting operation
- 91% of bottling operations closed by 1980's

Costs & Burden of Recovery shifted to local governments

1970 - 65,000 truckloads of Pepsi & Coca Cola containers each day


“If you don’t like what
they’re saying about you,
change the conversation."

Killed Extended Producer Responsibility For Packaging

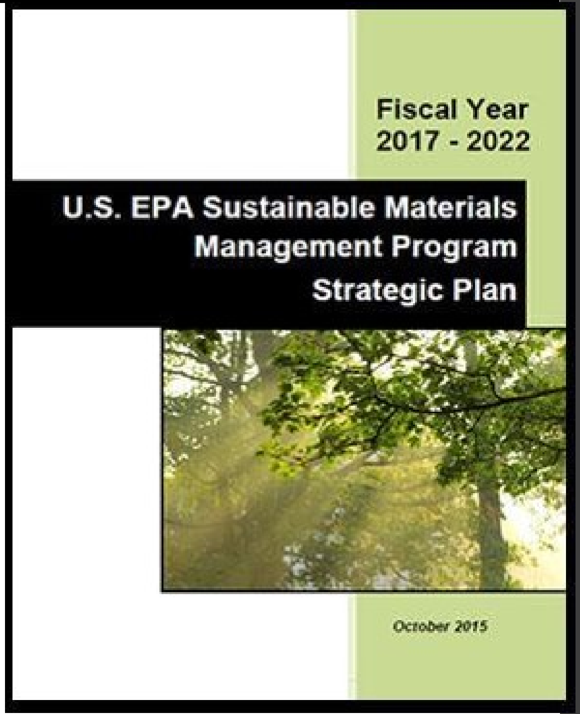
Successfully Lobbied Federal & State Legislators for Curbside Recycling Over Industry Sponsored Collections

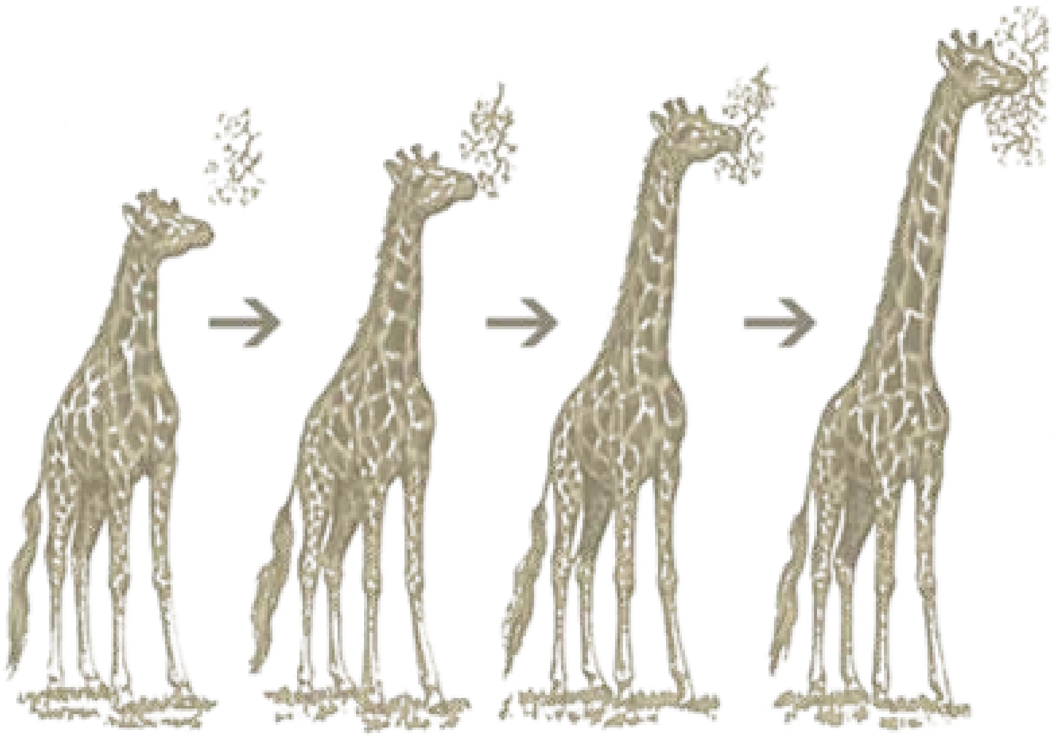
From 1990—2011 Container/Packaging Recycling Cost Local Governments $1.56 Billion Annually

Circa 1971 The Most Powerful Teardrop in American History

Circa 2017 Heading Upstream

Create your future from your future, not your past."
— Werner Erhard





Policies and Technology Evolved to Capture Available Feedstock

Rethinking the Natural Order

Consequences of Recycling Centric Philosophy

Quantity and Quality

Key Policy Drivers

- Packaging
- Food Waste
- Other Organics
- Ewaste
- Digital Media
- On-Line Shopping
- Corporate Initiatives
- Circular Economy

Industry Concerns

- Value of Commodities
- Risk Management
- Shareholder Expectations
- Evolving Ton
- Market Control
- Competing Technology
- Corporate Initiatives
- Return on Capacity

Millennial Influences

- Sustainability in All Aspects
- Repairability
- Corporate Environmental Stewardship
- Sharing Economy
- Cause Based Marketing
- Actions vs. Beliefs
- “On the Go” Expectations
- Preferred Packaging
- Convenience
- Multi Family Dwellings

What's in the Cards?

The Evolving Ton Will Continue To Morph

Safety will be a Top Industry Priority

Discussions Over Extended Producer Responsibility Will Intensify

Recyclability And Waste Diversion Will Lose Status As The Primary Metrics

Energy Production, Water Consumption, and GHG Will Emerge As Important Metrics

Existing Infrastructure Will Clash Over Regulatory Initiatives

Food Waste Disposal Bans Will Expand

Zero Waste to Landfill Initiatives will Drive WTE and Conversion Technologies

New Challenges Will Emerge In Ewaste From Flat Panel Glass

Beyond the Crossroads

Solid Waste and Sustainability Advisory Panel Report

Governor's Recycling Council Report

- Ambitious Itineraries

Tangible vs. Conceptual

Balancing Policy with Practicality

Understanding Borrowed Ideas

Full-Cost Accounting

Sustainable Funding Mechanisms

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