



*Zero Waste Alliance*

---

# *Case for for Zero Waste Overview*



Larry Chalfan  
Zero Waste Alliance

**September 27, 2004**



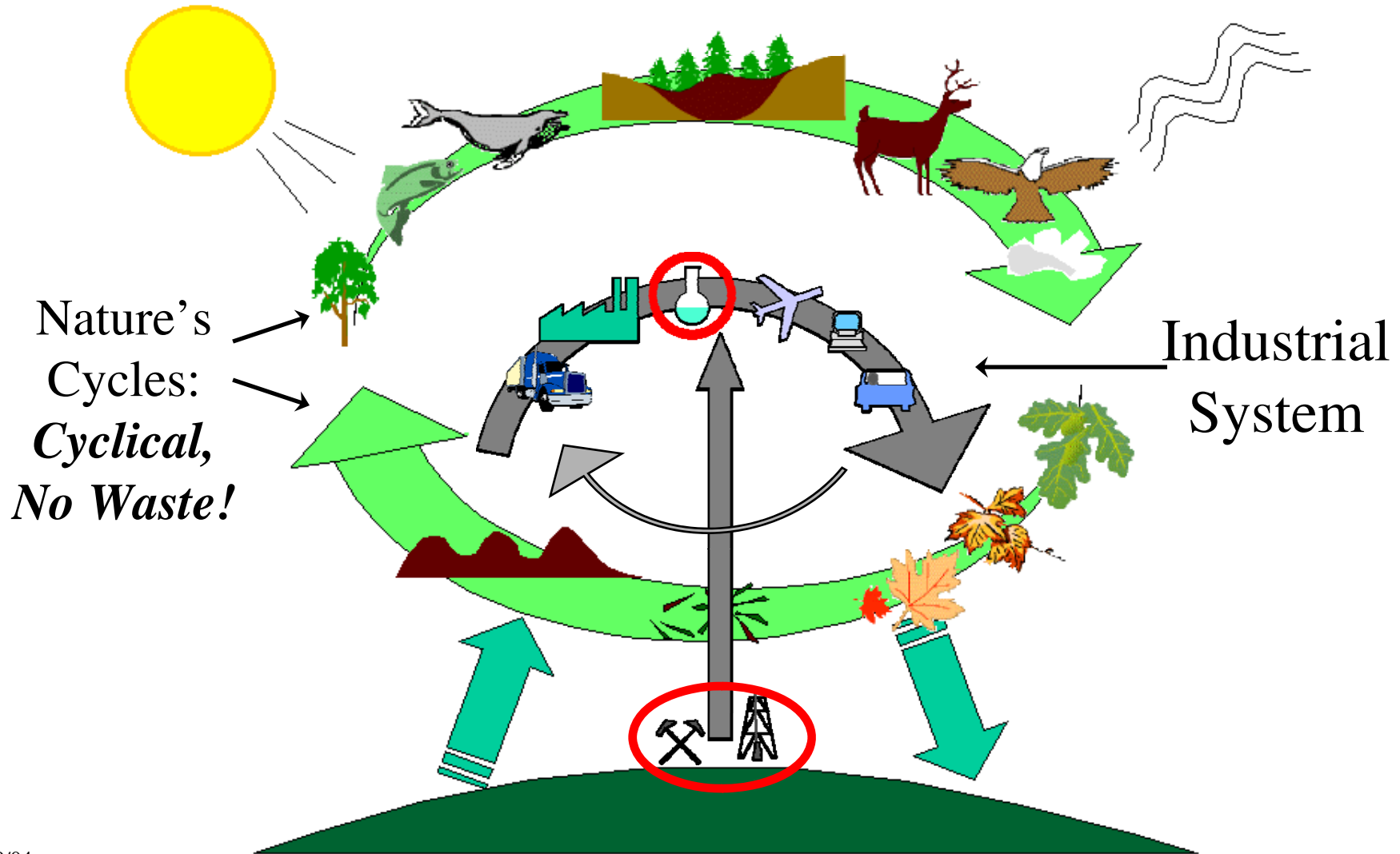
# Case for Zero Waste Outline

- Follows Nature's Model
- Saves Money
- Supports Sustainability
- Clear Goal that Engages People



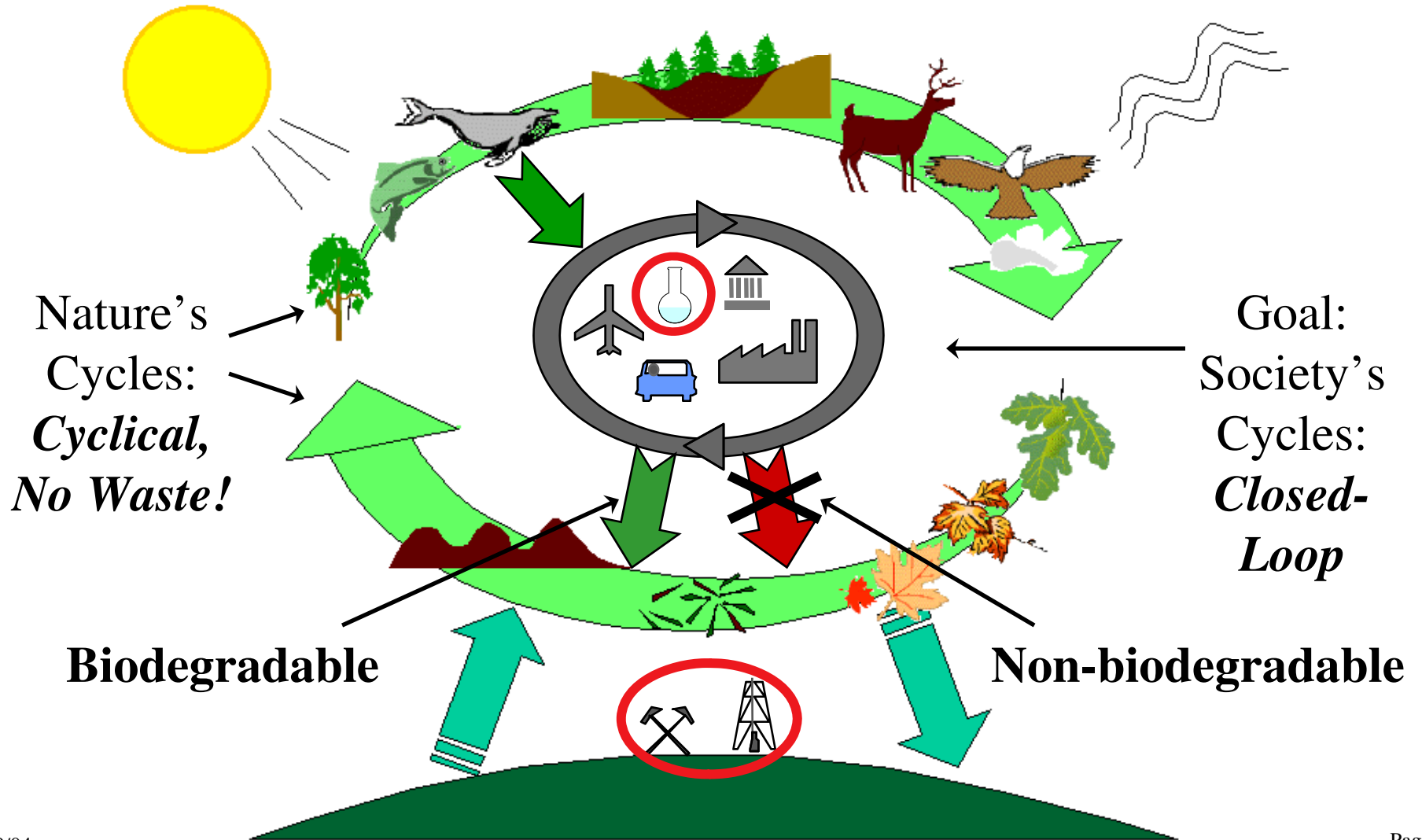


# Today's Industrial System View





# Zero Waste's System View



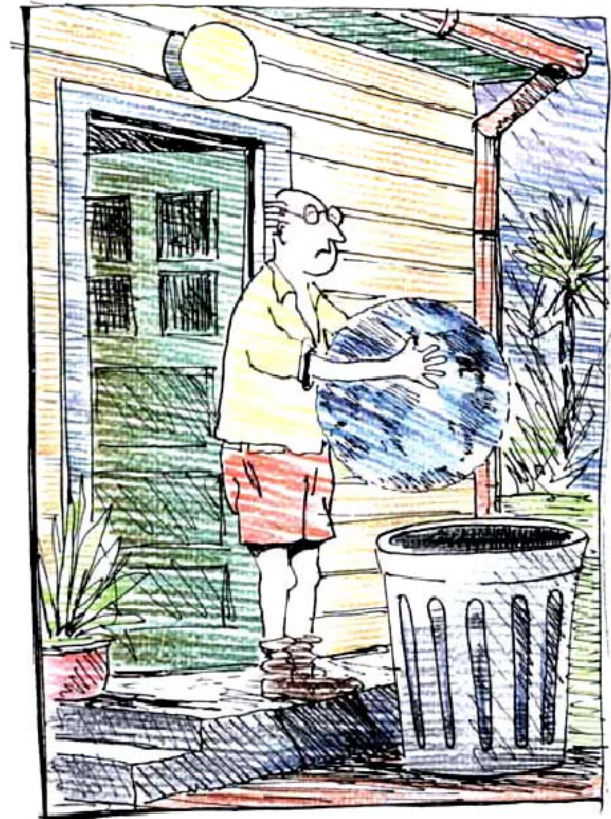


# What is it?

- **Zero Waste is a whole-system approach to redesigning the flow of resources through society.**

*-Warren Snow, Zero Waste New Zealand*

- **Zero Waste is preventive in nature, drives design**
  - **Design for the Environment**
  - **Design for End-of-Life Management**





# Zero Waste's Ultimate Goal

*To eliminate the very concept of Waste.*

- The word “*Waste*” validates misuse of resources.
- Waste Managers become Resource Managers.





# What is Waste?

- Something we have purchased and reduced to a value of zero or less
- Actions taken that don't create or add value
- Costly - permits, fees, disposal costs, safety risks
- **A sign of inefficiency and lost money**

*Waste* = *Resource  
in Disguise* =





# What are Examples of Waste?

## General Wastes:

Solid Waste - Garbage  
Hazardous Waste  
Emissions  
Waste of Resources  
- Energy, Water, Materials  
Waste of Human Resources  
Misprinted Invoices

## Manufacturing Wastes (Toyota)

1. Waste from Overproduction
2. Waste of Waiting Time
3. Waste of Transportation
4. Waste in Processing
5. Waste of Inventory
6. Waste of Motion
7. Waste from Product Defects





# Programs Focused on Zero

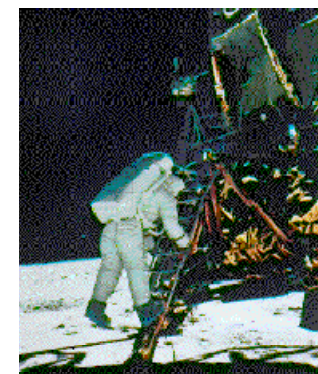
- Zero defects
- Zero inventory
- Zero injuries, illnesses
- Zero environmental incidents
- Zero equipment downtime
- Zero emissions
- Zero Waste

***They are all about Waste!***



# Zero Waste: Bold Visionary Goal

- Easily understood by all
- Engages people
- Optimizes the entire system
- Promotes more rapid innovation
- Contains a clear **endpoint goal**

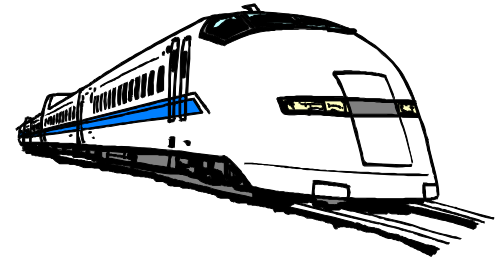




# Why is an Endpoint Goal Important?

➤ Incremental strategies are very valuable

- Pollution Prevention
- Cleaner Production
- Environmental Management Systems
- Eco-Efficiency



- *better than yesterday is good, but will not necessarily achieve a sustainable future*

➤ Zero Waste Strategy provides a clear endpoint goal.

- Promotes greater innovation
- Promotes prevention
- Creates jobs
- Eliminates Pollution





# Zero Waste & Sustainability

## **Sustainability is a vision**

- Considers future generations
- Doesn't tell us what to do Monday



## **The Natural Step provides a definition and motivation**

- Provides a shared mental model, a definition
- Presents system conditions for a sustainable society
- Creates motivation

## **A Zero Waste Strategy**

- Visionary, stretch endpoint (not a short-term goal)
- Looks at all processes, products, activities and services
- Utilizes tools of industrial ecology, LCA, DfE, EMS, etc.



# Zero Waste Supports Sustainability

## **Economic Sustainability**

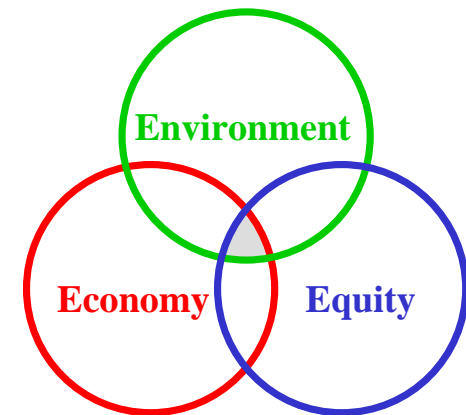
- Waste reduction improves efficiency and lowers costs
- Costs of compliance with regulations is reduced

## **Environmental Sustainability**

- Reduces demand for resources and energy from nature
- Reduces wastes to nature

## **Social Sustainability**

- More resources and energy become available for others
- Closing the loop (cradle-to-cradle) generates new jobs





# *Zero Waste Alliance*

## *Following Nature's model...*

A non-profit partnership of associates, universities, businesses and government entities providing:

- **Management support**
  - Strategy development - environmental/sustainability
  - Environmental management systems, ISO 14001
- **Technical services**
  - Chemical assessments
  - Resource Management
  - Direct technical services, waste stream reduction/elimination
  - Resource clearinghouse for problem solving assistance
- **Training and education**
  - Conferences and workshops - Custom training

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



*Zero Waste Alliance*

---

# Contact:



*Zero Waste  
Alliance*

**Larry Chalfan**  
Executive Director

One World Trade Center  
121 S.W. Salmon St., Ste 210  
Portland, OR 97204  
Tel: 503-279-9383  
Fax: 503-279-9381

[lchalfan@zerowaste.org](mailto:lchalfan@zerowaste.org)  
[www.zerowaste.org](http://www.zerowaste.org)