

# Disclaimer

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**EPA Resource Conservation Challenge Web Academy  
Recycling and Solid Waste Management Educational Series  
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**Packaging Sustainable Value Network Co-Manager  
Sam's Club Director of Packaging**

**Robert Parvis**

**Packaging Sustainable Value Network Team Member  
Sam's Club Packaging Manager House Brands**

## We aspire to be sustainable along 3 dimensions

### Supplied 100% by renewable energy



- Existing stores 20% more efficient in 7 years
- New stores 30% more efficient in 4 years
- Fleet 25% more efficient in 3 years, double in 10 years

### Create zero waste



- 25% reduction in solid waste in 3 years
- All private brand packaging improved in 2 years (right sized, reusable materials)

### Sell products that sustain our resources & environment

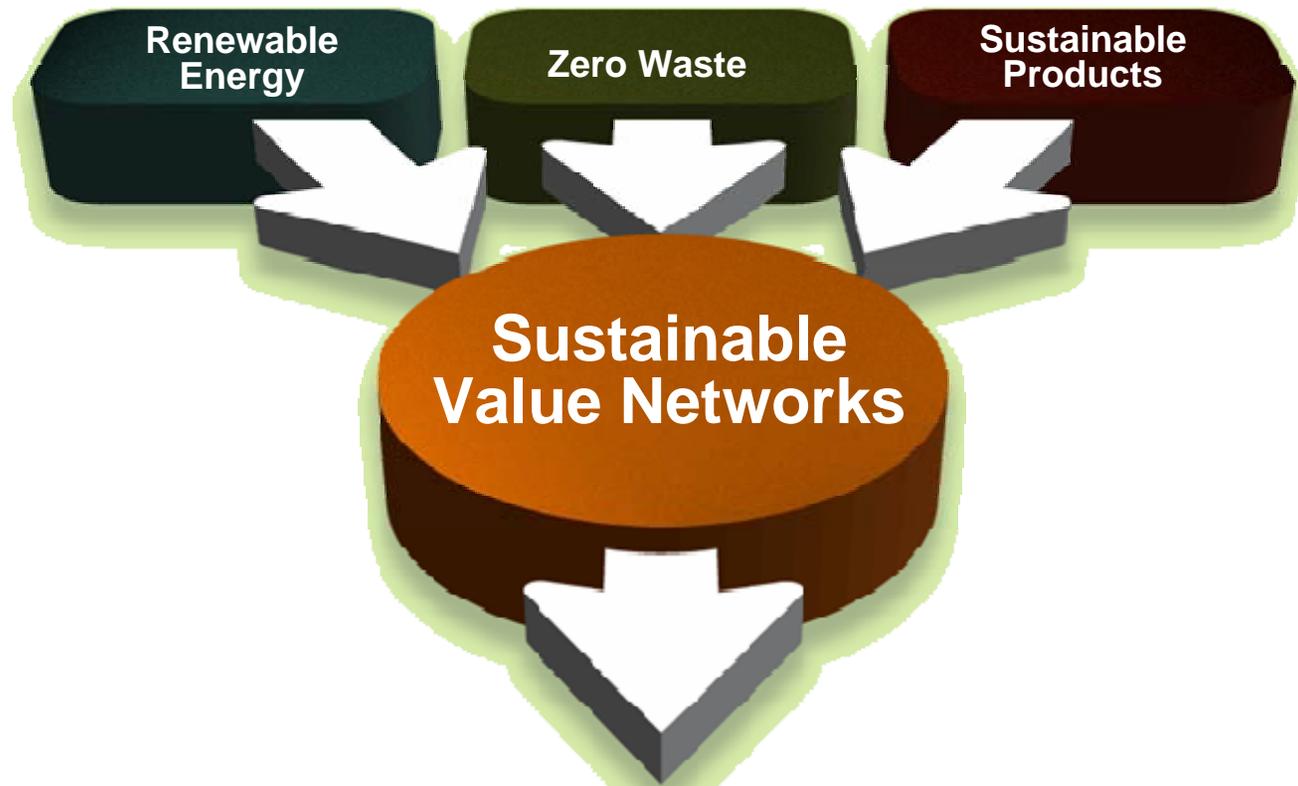


- 20% supply base aligned in 3 years
- Preference given to aligned suppliers in 2 years
- Design and support Green Company program in China

## Why choose packaging?

- In line with our goal of Zero Waste
- Packaging is an integral part of our Retail Supply Chain
- Need to manage our all resources for future success

## How We're Getting it Done – Successful Strategies



**Added Value for  
Customers and Shareholders**

## Sustainable Value Networks

- Preferred Products
  - Textiles
  - Seafood
  - Jewelry
  - Forest Products
  - China
  - Electronics
  - Food & Agriculture
  - Chemical Intensive Products
- Renewable Energy
  - Alternative Fuels
  - Global Logistics
  - Greenhouse Gas
  - Sustainable Buildings
- Waste
  - **Packaging**
  - Ops & Procurement

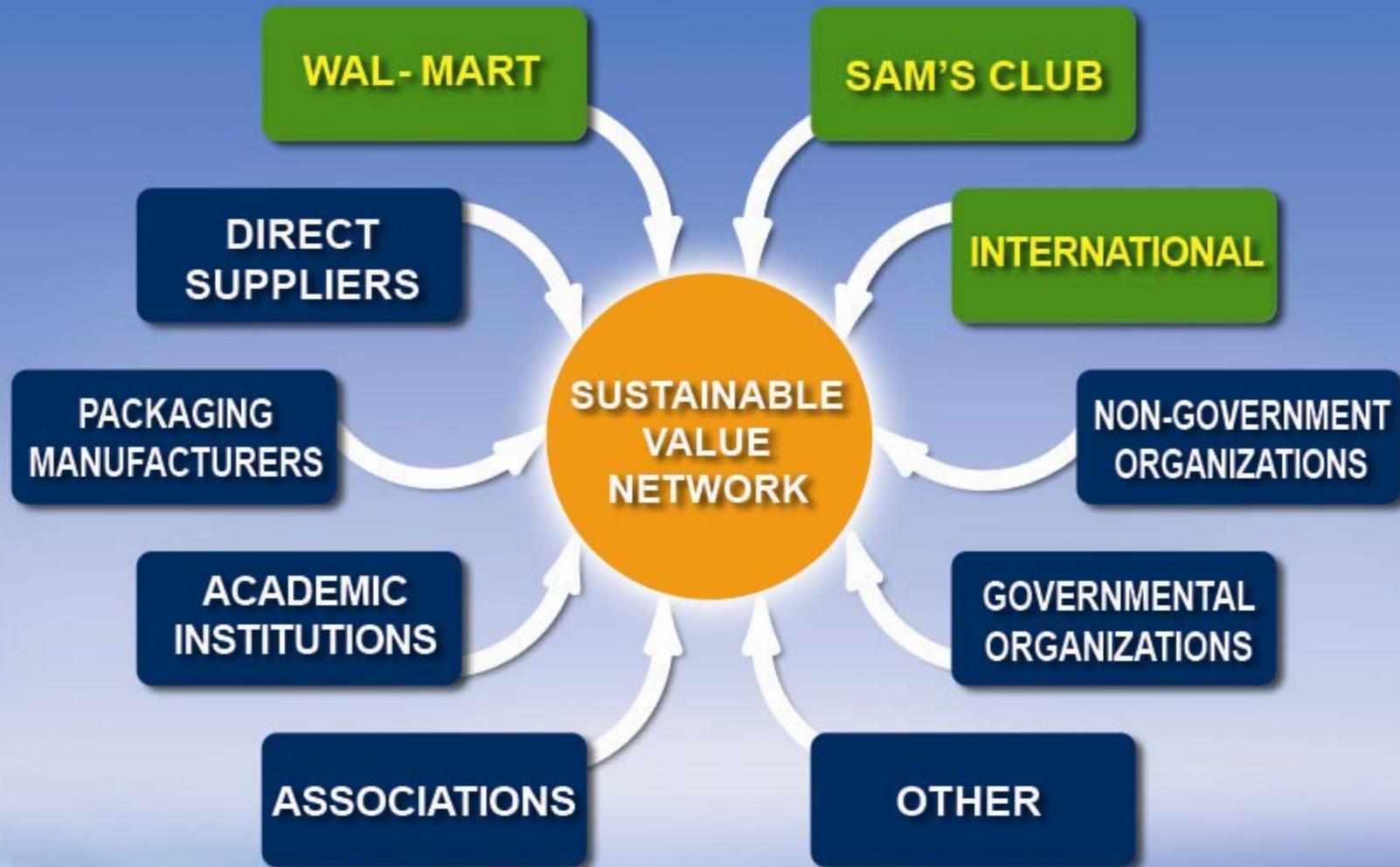
## Wal-Mart Stores Inc. Packaging Sustainable Value Network Scope

The scope of Wal-Mart Stores Inc. Packaging Sustainable Value Network is to provide a link between the packaging industry and our customers to achieve the company's sustainability goals. The Pkg SVN facilitates information flow, develops tools to help make purchasing decisions, tracks progress and communicates activities to our stakeholders.

# Wal-Mart Stores Inc. Packaging Sustainable Value Network Leadership



# Packaging Sustainable Value Network Membership



# Wal-Mart Stores Inc. Packaging Sustainable Value Network Steering Committee

## Academics

|                                   |                  |
|-----------------------------------|------------------|
| University of Berkeley            | Tony Kingsbury   |
| Clemson University                | Chip Tonkin      |
| Michigan State University         | Dr. Paul Singh   |
| Rochester Institute of Technology | Deanna M. Jacobs |
| University of MO-Rolla            | Stephen A. Raper |

## CPG Sub-Committee

|                  |             |
|------------------|-------------|
| Clorox           | Tim Kennedy |
| Procter & Gamble | Tony Burns  |

## Government Organizations

|  |                      |
|--|----------------------|
| CA Integrated Waste Management Board       | Robert Carlson       |
| EPA – Office of Solid Waste                | Sara Willis Hartwell |
| Oregon Department of Environmental Quality | David Allaway        |

## Non-Governmental Organizations

|                               |                      |
|-------------------------------|----------------------|
| Container Recycling Institute | Betty McLaughlin     |
| Environmental Defense         | Maria Harris         |
| Green Blue                    | Anne Johnson         |
| Green Peace                   | Rick Hind            |
| IERE                          | Rita Schenck         |
| Keep America Beautiful        | Christine L. Flowers |
| National Recycling Coalition  | Kate M. Krebs        |
| Rocky Mountain Institute      | Lionel Bony          |

# Wal-Mart Stores Inc. Packaging Sustainable Value Network Steering Committee

## Trade Associations

|  |                        |
|--|------------------------|
| Adhesive & Sealent Council                       | Mark Collatz           |
| Aluminum   | Bob Strieter           |
| American Forest and Paper Association            | Cathy Foley            |
| American Chemistry Council                       | Keith Christman        |
| Association of Postconsumer Plastic Recyclers    | Steve Alexander        |
| Biodegradable Products Institute                 | Steve Mojo             |
| Can Manufacturers Institute                      | Geoff Cullen           |
| Fibre Box Association                            | Brian O'Banion         |
| Flexible Packaging Association                   | Marla Donahue          |
| Glass Products Institute                         | Joe Cattaneo           |
| International Molded Fibre Association           | Joe Grygny             |
| International Safe Transit Association           | Ed Church              |
| National Association for PET Container Resources | Dennis Sabourin        |
| National Wooden Pallet & Container Association   | Edgar C Deomano        |
| Paper Recycling Coalition                        | Fran McPoland          |
| Paperboard Packaging Council                     | Jerome T. Van de Water |
| Recycled Paperboard Alliance                     | Paul J. Schutes        |
| Recycled Paperboard Technical Association        | Joanne Arnold          |
| Reusable Pallet and Container Coalition          | Fred Heptinstall       |
| Rigid Plastic Packaging Group                    | Pete Dinger            |
| Society of Plastics                              | Susan Howe             |
| Society of the Plastics Industry                 | Kevin D Ott            |
| Steel Recycling Institute                        | Bill Heenan            |

## Specific Strategies to Deliver Success

- Align work with Corporate Goals
- Work with all functions in the supply chain
- Over communicate plans and progress
- Track progress and celebrate successes

## Initial Results

- Wal-Mart Kid Connection – “Right-Sized” 300 toy boxes
  - Saved 3,425 tons of corrugated materials, 1,358 barrels of oil, 5,190 trees, 727 shipping containers and \$3.5 million in transportation costs
- Sam’s Club Digital Media – Merchandising Change
  - Worked with Apple to convert I-pod packaging to 100 percent renewable, recyclable and more sustainable materials, the package is also reusable and 50% smaller
- Hamburger Helper – Product Modification
  - Reduced the size of boxes by straightening their noodles and eliminating empty space. Reduced need for 900,000 pounds of paper fiber every year, reduced its overall greenhouse gas emissions by 11 percent and was able to take 500 trucks off the road.
- Car Seat – Remove Materials
  - Buyer pointed out an infant car seat could easily be transported in a thick plastic cover instead of a large, bulky box. Wal-Mart saw our shipping and fuel costs drop, and now our customers can see and touch the seat

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Wal-Mart Inc.  
Sustainable Packaging Scorecard  
for Products

## Project Objective

Create and implement a tool which supports Wal-Mart Stores Inc.'s definition of sustainability, provides suppliers and buyers with direction and measures progress towards:

- 100% renewable energy
- Zero Waste
- Use of Preferred Products/Packaging

## Packaging Scorecard Goals

- 100% Populated with Active Items by 2/1/08
- 5% Reduction of Packaging by CY2013
- \$3.4 Billion in Cost Savings by CY2013
  
- 667,000 metric tons of carbon dioxide from entering the atmosphere and 213,000 trucks off the road annually =
- Saving 323,800 tons of coal and 66.7 million gallons of diesel fuel from being burned



# Wal-Mart Stores, Inc. Sustainability Scorecard



Welcome, [User]

Website Options | Live Support | Logout

Complete Scorecards | Review Scores | Score Modeling

## Review Answers

### Background & Product Info.

|  |                                 |
|--|---------------------------------|
| Supplier Name?   | ECRM                            |
| Supplier Number?   | Scot Case                       |
| Wal-Mart/Sam's Club Item Number? (6 or 8 Digits)                   | 123456                          |
| Product SKU? (14 Digits)   | 12345678912345                  |
| What is the quantity of product Per Selling Unit?                  | 1                               |
| What is the item descriptions? (20 characters)                     | CD case                         |
| Date of Package Launch? (mm/dd/yyyy)                               | 12/12/2006                      |
| What was the purchasing company?                                   | Beta Testing WM STORES INC. USA |
| What is the estimated number of items sold to the above purchaser? | 140646719                       |
| Testing was conducted and the new package performance is:          | N/A first submission            |
| What is the primary product department/category?                   | ELECTRONICS (Dept. 5)           |

### Selling Unit Packaging materials

|   |                       |
|---|-----------------------|
| What is the percentage of cube utilization?                 | .8                    |
| How many selling unit packaging materials are used?         | 1 Material(s)         |
| What is the first packaging material?                       | PLA (polylactic acid) |
| What is the total weight per package for this material?     | .25                   |
| How far did this material travel before packaging occurred? | Between               |

### Transport Packaging Materials

|  |            |
|--|------------|
| Is this item a break pack?   | Yes        |
| What is the percentage of cube utilization?                        |            |
| How many materials are used to transport the selling unit package? | 1 Material |

**Packaging Metrics**  
 ▶ Product to Package  
 ▶ Package Recovery

## Sustainable Product

At Beta Testing, we think you shouldn't need to re-produce a product in a sustainable way. We are dedicated to providing you with a product that you can purchase at our stores and are committed to making it as sustainable as possible.

**Packaging Metrics**  
 ▶ Material Type  
 ▶ Recycled Content  
 ▶ Package Innovation

## Package & Model Scores

| Metric   | Raw Score | Rank          | Weight |
|--|-----------|---------------|--------|
| Greenhouse Gas Emissions from Package Production | 0.1041    | 50%           | 15%    |
| Evaluation of Material Type                      | 2.3159    | 50%           | 15%    |
| Average Distance to Transport Material           | 5.6829    | 50%           | 10%    |
| Product to Package Ratio                         | 1.7094    | 50%           | 15%    |
| Cube Utilization                                 | 0.2850    | 50%           | 15%    |
| Recycled Content                                 | 0.0009    | 50%           | 10%    |
| Recovery   | 1.6857    | 50%           | 10%    |
| Renewable Energy to Power Each Facility          | 0.3300    | 50%           | 5%     |
| Innovation Different from Energy Standard        | 0.3300    | 50%           | 5%     |
| <b>Total Normalized Score (out of 10)</b>        |           | <b>5.5600</b> |        |

### Would You Like To Improve Your Score?

Using our interactive modeling feature allows you to experiment with new or different packaging materials to see how you score could improve with different materials.

[▶ Begin Modeling This Package Now!](#)

▶ Renew  
 ▶ Revenue  
 ▶ Read

company, we know we must play our part to restore the life practices across our entire industry. We created Sustainable Value environmental and business sustainability.

## The Challenge

In order to make a difference we are stressing the importance of using preferable materials. We are asking that you actively participate in this initiative by completing a scorecard that will rate your packaging in terms of

ologies, we are steadily greenhouse gases, reduce plan to share what we've energy

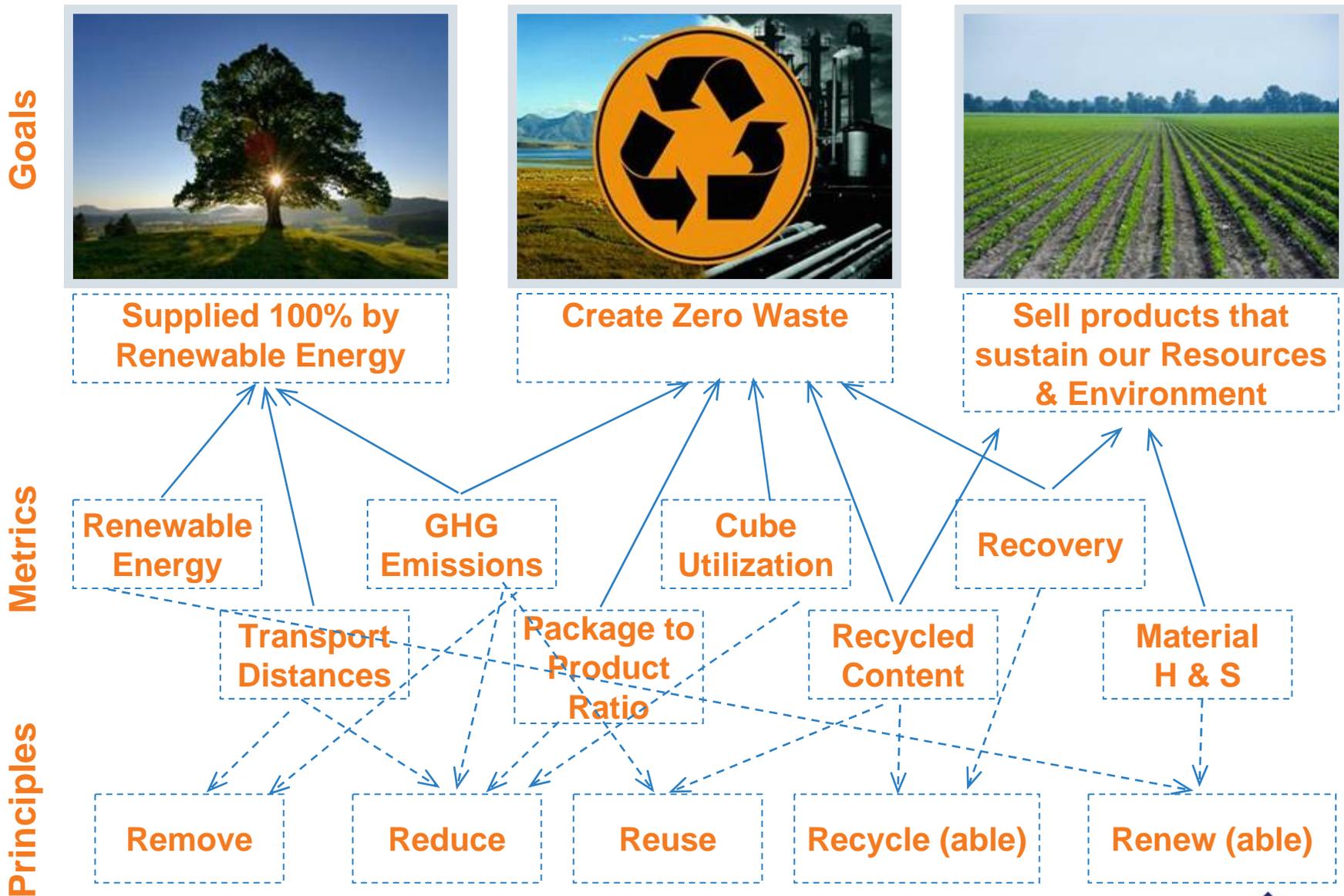
## Scorecard Questions for Suppliers

- Material Type
- Material Weight
- Material Transport Distance
- Cube Utilization

## Metrics – Current Weighting

- 15% GHG / CO2 per ton of Production
- 15% Material Health & Safety
- 15% Product / Package Ratio
- 15% Cube Utilization
- 10% Transportation
- 10% Recycled Content
- 10% Recovery Value
- 5% Renewable Energy
- 5% Innovation / Extra Credit

# Metric Alignment



## Next Steps

- Using Scorecard
  - Track Progress
  - Highlight best practices
  - International Rollout
- Phase II of the scorecard
  - Recycled Content for Individual Packages
  - Recovery tied to package type
  - Expand Material Base
  - Possibly include Converting

## Learn more about Sustainability

**[www.Packaging.Marketgate.com](http://www.Packaging.Marketgate.com)**

- **Modeling Software**
- **Virtual Trade Show**

### **Education**

- **IOPP Fundamentals of Packaging**
  - **[www.iopp.org](http://www.iopp.org)**
- **ISTA CPLP Training**
  - **[www.ista.org](http://www.ista.org)**
- **Sustainable Packaging Coalition Training**
  - **[www.spc.org](http://www.spc.org)**
- **Wal-Mart Scorecard Training – ECRM**
  - **[www.sustainability-education.com](http://www.sustainability-education.com)**

### **Questions?**

- **[PkgSVN@wal-mart.com](mailto:PkgSVN@wal-mart.com)**
- **One topic per e-mail, concise subject line**