Optimizing the Circular Economy through Natural Capital Accounting

July 20, 2016

Sponsored by:
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Joe Rozza, Global Manager, Water Sustainability and Natural Capital, The Coca-Cola Company

Michelle Lapinski, President, SustainBiz LLC
Housekeeping

• All Participants are muted; please submit your questions through the question box

• The webinar is being recorded; downloading instructions will be sent shortly after the webinar

• Tweet during the conversation using handles @USCCFBiz4Good and @TetraPak_NA_Eco
CORPORATE CITIZENSHIP CENTER
HELPING BUSINESS MAKE THE WORLD A BETTER PLACE
Natural Capital and the Circular Economy

• Natural capital – stock of renewable and nonrenewable resources that provide ecosystem services which underpin society and the economy

• Circular economy – restorative or regenerative economic model that aims to keep resources and materials at their highest value at all times

• The circular economy preserves and enhances natural capital through resource efficiency and closing the loop
A NEW SYSTEM APPROACH

Source: ELLEN MACARTHUR FOUNDATION
Rethink the future
THE CIRCULAR ECONOMY IN ACTION
October 20-21

- **Learn by Example:** Participate in visits of Phoenix businesses successfully closing the loop
- **Share Knowledge:** Engage with your peers to obtain new insights and identify specific opportunities for adopting circular methods
- **Get Inspired:** Hear from public and private sector leaders on how they made the leap from linear to circular models
- **Connect with Colleagues:** Network with peers to identify new opportunities for bringing the circular economy to scale

Embracing Value From Natural Capital

Elisabeth Comere
Director, Environment and Government Affairs
Tetra Pak, Inc. USA
@TetraPak_NA_Eco
Renewable Materials And The Circular Economy:
A Critical Component

► Natural resource extraction will increase from 85 to 186 billion tons over the next 35 years. However, effective resource efficiency can reduce extraction by 28%.

► This in turn can help to cut global greenhouse gas emissions by 74 percent by 2050 and increase economic output (GDP) by 1 percent in G7 countries and globally.

► Getting there requires all of us to overcome challenges and barriers to new practices.

What Matters To Us: Focusing On The Entire Life Cycle

- Promoting the use of renewable materials.
- Sourcing materials responsibly.
- Continue to lead in recycling.
- Doing more with less.
The Learning Labs Report: Embracing Value From Natural Capital
Advancing Packaging Solutions that Consumers Want and Companies Can Provide

BRIDGING THE KNOWLEDGE GAP

Communication misunderstandings and gaps around definitions and vocabulary.

Complexity around perceived required infrastructure and systems transformation.

Cost issues that hamper C-level endorsement of investments in changes or new practices.

How To Create Consumer Demand via more education and information.
Joe Rozza, P.E., BCEE
Global Manager, Water Sustainability and Natural Capital
The Coca-Cola Company
Jrozza@coca-cola.com
@joerozza
Business Value Model

Strategic Sustainability

**Risks:**
- Supply Availability/Reliability
- Climate Resiliency
- Reputation
- Green Taxes/Compliance
- Social/Political

**Opportunities:**
- Brand Value
- Community Connection
- License to Operate

Support SDGs

Lean & Green Supply Chain

**Opportunities:**
- Cost Avoidance/Reductions
- Company Differentiation
- Brand Value
- Shareholder Value

Optimization

**Risks:**
- Degraded Resource Quality
- Product Quality/Safety
- Treatment/Processing Costs

**Opportunities:**
- Greater Consistency
- Higher Quality

Quality Mgt

Adaptation

**Risks:**
- New Quality risks due to increasing reuse/recycle

**Opportunities:**
- Greater control over quality

Risk Mgt

Innovation

**Risks:**
- Unable to achieve all other goals/objectives
- Ecosystem Service Collapse

**Opportunities:**
- Transformational Resource Efficiency
- Zero Waste | C2C | Upcycle | Restoration
- Green Economy Technology/Infrastructure

Productivity
Incorporate Natural Capital/Valuing Nature into Strategies, Programs and Decision Making

1. Business Value
   - Sustainability Performance
   - Risk Management
   - Productivity
   - Quality

2. Ecosystem Services

3. TCCC Value Chain
   - Ingredient & Packaging Supply
   - TCCC Manufacturing
   - Distribution
   - Cold Drink Equipment
   - Post Consumer

4. Business Value Of Program Upgrades

Coca-Cola Sustainability Programs

Impacts & Dependencies

Business Value Risks/Opportunities And ES

TCCC Program Upgrades and Extensions
Example of a Strategic Program - Replenish

Agriculture
Nature
Health
Women
Cities
Climate
Energy
Society
Recreation
Tomorrow

Mexico
Reforestation
Agriculture
Australia
Project
Catalyst

Nature
Climate
Society
Recreation

94%

The Coca-Cola Company
Natural Capital Business Decision Making Applications & Frameworks

Michelle Lapinski

@M_ellelapinski
Get started: Conceptual model
## Company Pilots & Challenges

<table>
<thead>
<tr>
<th>Company</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nespresso</td>
<td>Comparing watershed impact of coffee processing techniques for long term planning and government engagement. Advice: data used for other purposes may not be sufficient; design for these questions and approaches</td>
</tr>
<tr>
<td>Kering</td>
<td>Using EP&amp;L to drive operational &amp; supply chain changes &amp; organizational engagement; brands participating &amp; finding value. Advice: Value it! Putting dollars on it gives it real business value executives can understand</td>
</tr>
<tr>
<td>Natura</td>
<td>Showed high impact consumer use; found and valued R$32M in GHG impact thru post-consumer recycled content and refills; now informing materials and product development</td>
</tr>
<tr>
<td>General Mills</td>
<td>Assessed full value chain to identify issues that may impact raw material cost &amp; supply, quantify risk and develop adaptable management strategies</td>
</tr>
<tr>
<td>Global beer company/agribusiness company</td>
<td>Evaluating options in face of drought for market-leading commodity – evaluating ROI of options if maintain existing source of supply or source new locale</td>
</tr>
</tbody>
</table>
Adoption Factors

- Accessible
- Flexible
- Aligned

...that conveys...

- Credibility
- Relevance

...and drives meaningful results...

- Comparable
- Decision-useful
- Unlocks value

Primary Uses

- Strategic planning and decision making
- Supply chain risk-assessment
- Capital allocation
- Investment decision making
- Operational decision making
- External reporting

Benefits

- Improved risk management
- Better decision making
- Increased competitive advantage
- Balanced and comparable reporting
### The Natural Capital Protocol Framework

<table>
<thead>
<tr>
<th>Step</th>
<th>FRAME</th>
<th>SCOPE</th>
<th>MEASURE AND VALUE</th>
<th>APPLY</th>
</tr>
</thead>
<tbody>
<tr>
<td>01</td>
<td>Why?</td>
<td>What?</td>
<td>How?</td>
<td>What next?</td>
</tr>
<tr>
<td>02</td>
<td>Get started</td>
<td>Define the objective</td>
<td>Measure impact drivers and/or dependencies</td>
<td>Interpret and test the results</td>
</tr>
<tr>
<td>03</td>
<td>What is the objective of your assessment?</td>
<td>Scope the assessment</td>
<td>Measure changes in the state of natural capital</td>
<td>Take action</td>
</tr>
<tr>
<td>04</td>
<td>Which impacts and/or dependencies are material?</td>
<td>Determine the impacts and/or dependencies</td>
<td>Value impacts and/or dependencies</td>
<td></td>
</tr>
<tr>
<td>05</td>
<td>How can your impact drivers and/or dependencies be measured?</td>
<td>Measure impact drivers and/or dependencies</td>
<td></td>
<td></td>
</tr>
<tr>
<td>06</td>
<td>What are the changes in the state and trends of natural capital related to your business impacts and/or dependencies?</td>
<td>Measure changes in the state of natural capital</td>
<td></td>
<td></td>
</tr>
<tr>
<td>07</td>
<td>What is the value of your natural capital impacts and/or dependencies?</td>
<td>Value impacts and/or dependencies</td>
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<tr>
<td>08</td>
<td>How can you interpret, validate and verify your assessment process and your results?</td>
<td>Interpret and test the results</td>
<td></td>
<td></td>
</tr>
<tr>
<td>09</td>
<td>How will you apply your results and integrate natural capital into existing processes?</td>
<td>Take action</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**PRINCIPLES:** Relevance, Rigor, Replicability, Consistency

[www.naturalcapitalcoalition.org](http://www.naturalcapitalcoalition.org)
Example materiality matrix from the food and beverage sector guide

<table>
<thead>
<tr>
<th>DEPENDENCIES</th>
<th>CONSUMPTIVE</th>
<th>NON-CONSUMPTIVE</th>
<th>BARLEY TO BEER</th>
<th>IMPACT DRIVERS</th>
<th>IMPACTS</th>
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<tbody>
<tr>
<td>ENERGY</td>
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<td></td>
<td></td>
<td>WATER USE</td>
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<tr>
<td>WATER</td>
<td></td>
<td></td>
<td></td>
<td>TERRESTRIAL ECO SYSTEM USE</td>
<td>0</td>
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<tr>
<td>NUTRITION</td>
<td></td>
<td></td>
<td></td>
<td>FRESHWATER ECO SYSTEM USE</td>
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<tr>
<td>MATERIALS</td>
<td></td>
<td></td>
<td></td>
<td>MARINE ECO SYSTEM USE</td>
<td>0</td>
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<tr>
<td>REGULATION OF PHYSICAL ENVIRONMENT</td>
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<td></td>
<td></td>
<td>OTHER RESOURCE USE</td>
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<tr>
<td>REGULATION OF LIVING ENVIRONMENT</td>
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<td></td>
<td>GHG EMISSIONS</td>
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</tr>
<tr>
<td>REGULATION OF WASTE AND EMISSIONS</td>
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<td></td>
<td></td>
<td>NON-GHG AIR POLLUTANTS</td>
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<tr>
<td>EXPERIENCE</td>
<td></td>
<td></td>
<td></td>
<td>WATER POLLUTANTS</td>
<td>0</td>
</tr>
<tr>
<td>KNOWLEDGE</td>
<td></td>
<td></td>
<td></td>
<td>SOIL POLLUTANTS</td>
<td>0</td>
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<tr>
<td>WELL-BEING</td>
<td></td>
<td></td>
<td></td>
<td>SOLID WASTE</td>
<td>0</td>
</tr>
<tr>
<td>SPIRITUAL AND ETHICAL VALUES</td>
<td></td>
<td></td>
<td></td>
<td>DISTURBANCES</td>
<td>0</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>KEY:</th>
<th>IMPACTS AND DEPENDENCIES THAT ARE MATERIAL TO DIRECT BUSINESS OPERATIONS AT THIS VALUE CHAIN LEVEL.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>MATERIALITY ACROSS WHOLE VALUE CHAIN: HIGH MATERIALITY</td>
</tr>
</tbody>
</table>

Example materiality matrix from the food and beverage sector guide
Applying Results for Business Decision Making

- Sourcing, Procurement & Supply Chain Management
- Shadow Pricing
- Disclosure
- Scenario Planning
- Product Design
The Way Forward

► Work toward a common understanding.
► Focus on “here and now“ solutions.
► Enhance alignment and increase knowledge sharing among all actors.
► Educate consumers to stimulate demand and prompt a tipping point toward accelerated adoption of renewable materials.

Link To Our Report: **Embracing Value From Natural Capital: Advancing Packaging Solutions That Consumers Want and Companies Can Provide**
Audience Q&A