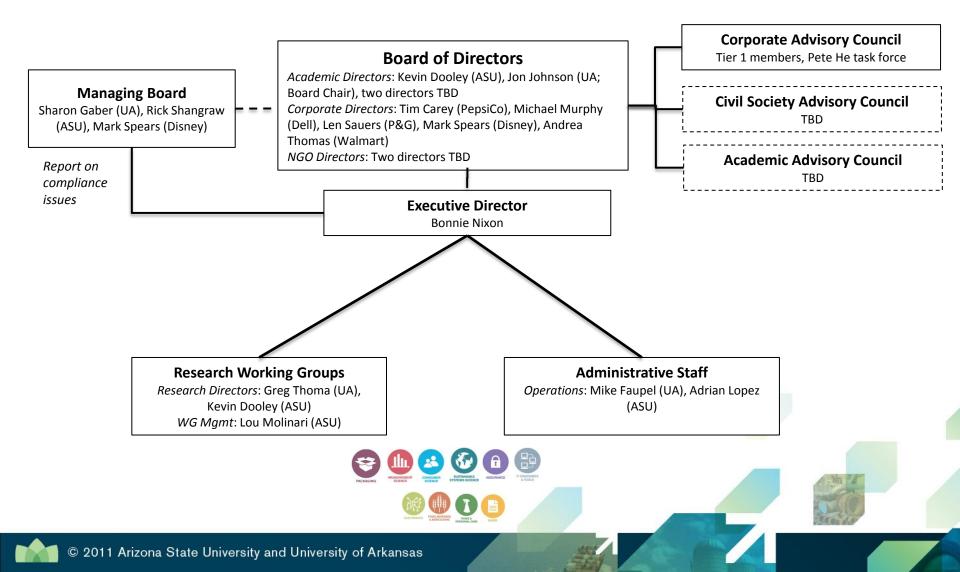
THE SUSTAINABILITY CONSORTIUM

C-AGG Presentation Wednesday December 7, 2011 Dr. Sarah E. Lewis Food, Beverage, and Agriculture Sector Manager

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www.sustainabilityconsortium.org

The Sustainability Consortium Current organizational structure



Who We Are: Actively Engaged Working Groups

Sector Working Groups — TSC is about SCALE as it represents more than ~75 of the largest companies in the world including their supply chains

Consortium Working Groups — Made up of Corporate members, NGOs/ONGs, government agencies & academics



Why are we doing this?

- By 2050, 9 billion people
- How do we create a world in which people are <u>living well</u> and <u>businesses can prosper</u> within the limits of the planet?



- Living Well: A standard of living where people have access and ability to afford education, healthcare, mobility, the basics of food, water, energy, shelter and consumer goods.
- Living Within the Limits of the Planet: Means living in such a way that it can be sustained with the available natural resources and without further harm to biodiversity, climate and other ecosystem services.



What are we doing?

Sustainability Measurement and Reporting System[™](SMRS)



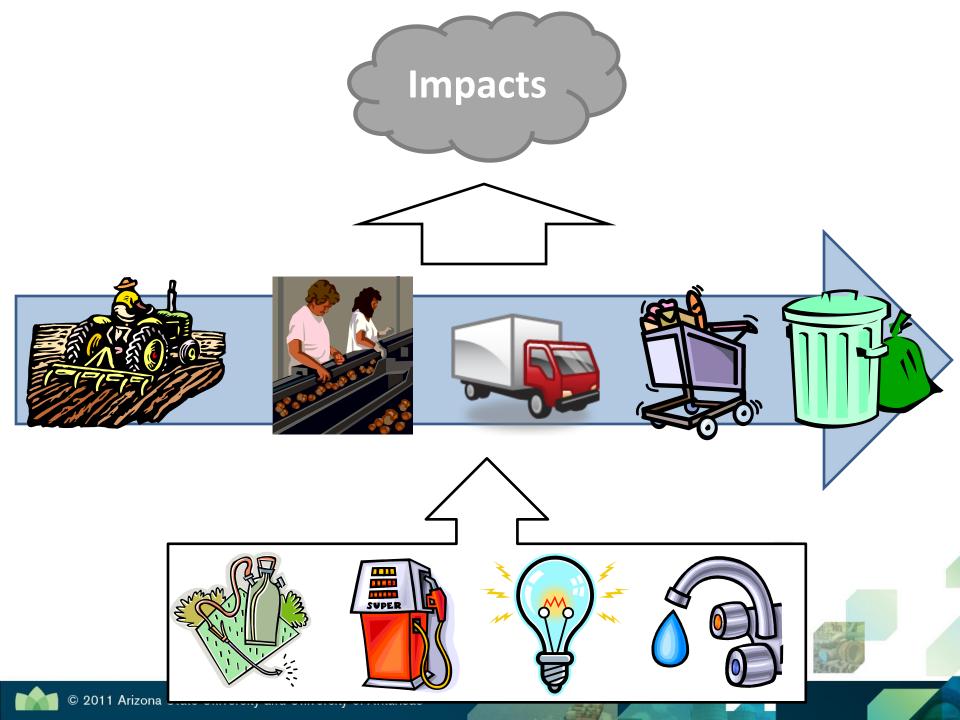
- Develop scientifically sound measurement methods of a product's environmental and social attributes
- Make carbon, water, materials, biodiversity, toxicity and social impact results accessible and available
- Design and provide transparent and easy to use IT tools for sharing common data and reporting
- Build on existing lifecycle, supply chain & product data
- Commit to scientific rigor, practicality & transparency

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Primary Deliverable = The Sustainability Measurement and Reporting System (SMRS)

•Harmonized communication and tools for product sustainability

- Same language and methods used for a product category
- •Points of reference (baselines) against which to report product sustainability
 - Category Sustainability Profiles for consistent product category communication
 - Baseline models for quantitative product level comparison
 - It is a reference used to consistently measure and make claims
 - eg. meter stick few things are exactly 1 meter stick long, but a meter stick is a consistent tool against which to compare.
- •Reduced cost of conducting LCAs process and indicator focus
- •Transparency of data and methodology
- Consistency in data and methodology
- Global system
- •Life Cycle Approach
 - -Cradle to grave accounting of environmental and social impacts



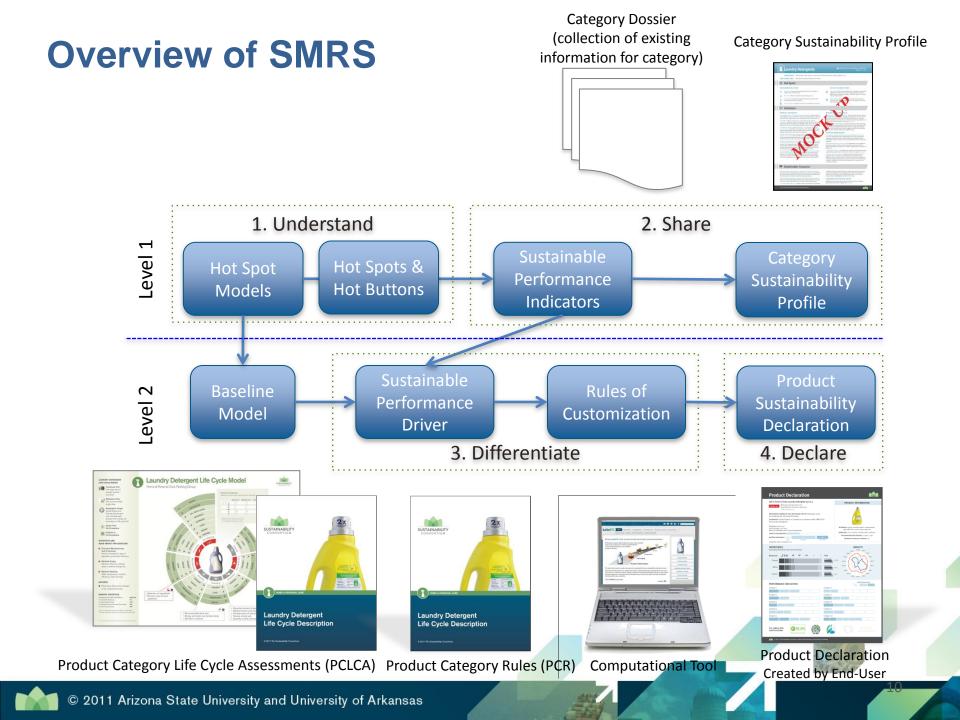
How does SMRS benefit Ag?

The SMRS helps to ...

- Create a stakeholder approach
- Create consistent communication with suppliers and buyers
 - Education of supply chain about agricultural production methods
 - Harmonization of calculation tools
 - Alignment of surveys and similar questions
 - Further understand opportunities for innovation
 - Reduce misperceptions of on-farm hotspots
 - Fertilizer production vs. fertilizer use
- Level the playing field
 - Ensure that competitors are using the same assumptions, system boundaries, data sources, and procedures to make product claims.
 - Everyone is addressing the same scientifically based issues (hotspots)
 - Shared knowledge for innovative sustainable practices that reduce impacts
- Encourage innovation
 - Compare products by communicating innovations
- Ultimately sustain natural resources for the next generation of producers

History of TSC and the Sustainability Measurement and Reporting System (SMRS)[™]

Date	State
Fall 2009 – Spring 2010	Established Sector Working Groups, Measurement Science Working Group
Spring 2010 – Fall 2011	Level 2 SMRS Prototypes – Product Category Rules and LCAs for seven product categories
Summer 2011 – Fall 2011	Level 1 SMRS Prototypes – Product Category Dossiers for 100 product categories
Fall 2011 – Winter 2012	SMRS Reengineering Project
2012	Level 1 SMRS production; Level 2 SMRS new component development and prototyping



Knowledge Creation and Management

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Level 1 SMRS

Category Sustainability Profiles

- Applies to the product category level (yogurt, beef, coffee)
- Life cycle approach, includes biodiversity, social
- Promotes sharing of information

Level 2 SMRS

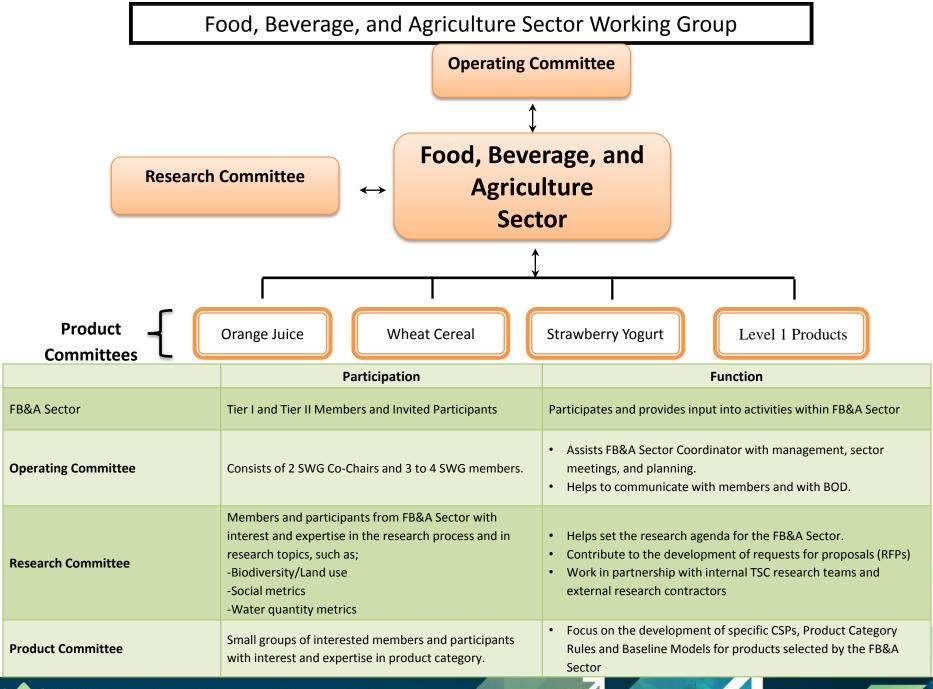
Product Sustainability Declaration

- Applies to the product level (e.g. Frozen Beef Patties)
- Allows for direct comparison of products against the product category LCA baseline: includes uncertainty
- Based on Baseline (LCA) Model + PCR
 - Parameterization of variables, such as geography, variety, method or process

Food, Beverage, and Agriculture Sector







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Food, Beverage, and Agriculture Sector

- Product sustainability tools and science ٠
 - Level 1 SMRS: Hotspots, Improvement Opportunities, Additional issues
 - » Top 10: beef, coffee, cotton towels, wheat cereal, yogurt
 - » 100 products by January 2012
 - Level 2 SMRS: Expand baseline modeling and identify an IT interface
 - » Prototypes: Orange juice, strawberry yogurt, wheat cereal
 - » IT Tool by mid 2012
- Research to capture geographic variables •
 - Dr. Christy Slay and MSWG
 - Biodiversity/Land Use Change indices ٠
 - Social Hotspot Index
 - Water Scarcity Indices
- Research to identify LCA drivers out of improvement opportunities
 - University of Minnesota, Dr. Tim Smith
- Collaboration with key stakeholders to increase harmonization of ag-tools
 - Sustainable Food Lab
 - Daniella Malin
 - First step = who are the key players and what are the tools?
- Research to capture social variables in LCA ٠
 - CARE, New Earth, United Nations, Heifer International



How can we drive harmonization together?

- TSC can help drive these initiatives, but we can't do it alone!
 - Partnerships are essential
- Key issues that need to be addressed
 - How to have interoperability of calculation tools
 - Minimize the time spent on various supply chain surveys
 - Life cycle assessment data gaps
 - Social and biodiversity metrics
 - Global markets and harmonization
 - Local markets

Specific ways to engage

- Provide ideas for how to further align tools and metrics
- Volunteer to be interviewed or recommend a colleague, Level 1
- Participate in reviewing documents developed by TSC
- Provide ideas for scientific resources
- Help network with key local and global stakeholders to ensure interoperability
 - Agricultural producers
 - Companies
 - NGOs
 - Governmental organizations
 - Academic organizations
- Encourage your supply chain to join
 - Harmonize tools, communication, increase science, stakeholder approach



Contact: <u>slewis@walton.uark.edu</u> or 479-263-2087

Thank you very much!

THE SUSTAINABILITY CONSORTIUM

The Sustainability Consortium is administered by Arizona State University, the University of Arkansas, and Wageningen University







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