

## **Sustainability Summit Agenda-at-a-Glance**

(As of July 13, 2017)

### **Wednesday, August 9**

10:00 AM – 7:30 PM

#### **Registration**

12:00 PM – 3:00 PM

#### **Ed-U-Ventures**

***Buses will begin loading at 11:30am. Buses will depart at 12:00 noon SHARP!***

#### **Brewing Better: Little Harpeth Brewery Tour**

Nashville's Little Harpeth Brewery is among the most sustainable businesses in Music City. The company's commitment touches all aspects of the business- from its built-environment where 80 percent of the materials used to build the brewery were reused from demolition debris to energy efficiency and water conservation to providing habitat for bees. This field trip will give participants an inside look into the Little Harpeth operation, including an in-depth explanation of the brewing process including the ingredients used and why and a tour of the brewing vessels and equipment and how they work. Of course, product tastings will also be included!

#### **What's Growing in Nashville? Nashville Farmers' Market Tour and Cooking Demonstration**

Originally started in the 1800's and now covering over 16 urban acres, the [Nashville Farmers' Market](#) has long been an important part of the city's food infrastructure. Over time, the market has grown to meet local demand and now includes a demonstration kitchen, 16 restaurants, and countless vendors selling everything from produce to value added product like cheeses and crafts.

On this Ed-U-Venture, participants will tour the market with the Executive Director, talk with a former 15 year food critic who now works for the market and with families who have sold their crops at the market for generations.

*This great trip will finish with a cooking demonstration from one of two very well-known local chefs...and of course, samples! This will be a great way to learn about the culture of food and agriculture in the Nashville area and learn from some of the best.*

12:00 PM – 3:00 PM

#### **Pre-Summit Sessions**

#### **Food Waste Measurement and Donation Best Practices Workshop**

Food waste has been a major topic in the CPG and retail industry for the past several years. The cross-industry Food Waste Reduction Alliance (FWR) has identified accurate measurement as the single best practice to reducing waste. This workshop will feature experts on three critical areas of food waste management and reduction: measurement, data reporting, and food donation. Join peer companies and NGO experts to learn how to implement or improve both measurement systems and food donation programs in your operations. This workshop is open to attendees with a wide variety of experience and you will walk away with concrete tools and solutions that will help your company reduce waste and costs.

***Kai Roberson***, Lead Advisor, Food Loss & Waste Protocol, World Resource Institute (WRI)

***Karen Hanner***, Director, Manufacturing Partnerships, Feeding America

***George Parmenter***, Manager of Sustainability, Delhaize America

***Justin Block***, Senior Manager, Retail Information Services, Feeding America

***Melissa Donnelly***, Manager, Sustainability Integration and Metrics, Campbell Soup Company

***Ricky Ashenfelter***, Chief Executive Officer, Spoiler Alert

### **Making the Business Case for Sustainability**

Sustainability – doing more with less - is at the heart of all that we do in the food, CPG, and retail industry. Sometimes, translating that success into a compelling business case can be a challenge. In this session, you will hear from experts on how to talk about the value of sustainability to two key audiences: internally, to those in your company and externally, to the investment community. Learn practical ways to make the case for sustainability programs from the C-suite to your front-line employees. Next, learn what leading investment advisors want to know about a company's sustainability program and what is valued from the shareholder side of the equation. This session will feature experts from the consulting, NGO, and investment community and is open to participants with a range of experience levels.

**Tim Greiner**, *Co-founder and Managing Director, Pure Strategies*

**Cheryl Baldwin**, *Vice President, Pure Strategies*

**Eliza Roberts**, *Manager, Water Program, Ceres*

**Brooke Barton**, *Senior Director, Food & Water Program, Ceres*

**Michael Younis**, *Principal Asset Stewardship, State Street Global Advisors*

**Peter van der Werf**, *Senior Engagement Specialist, Active Ownership Robeco*

**Yumi Narita**, *Vice President, BlackRock*

3:30 PM – 3:45 PM

### **Welcome and Conference Overview**

3:45 PM – 4:45 PM

### **Harnessing Your Power to Create Change**

As Founder of the Global Soap Project, Kayongo has built a multi-million dollar venture which takes recycled soap and distributes it through global health programs to people who lack access to it around the world. He breaks down the key factors that have led to his personal success; (S.E.L.F.) Service, Education, Leadership and Faith and shares his account of life as a Ugandan refugee and the turning point which lead him to a brilliant transformation as a social entrepreneur. He calls upon audiences to stop complaining and to start taking responsibility, to consistently seek opportunities to improve, and most importantly, to maintain faith in yourself and your team to create an environment where everyone is empowered to thrive. He brings you on an emotional journey –there will be tears of joy; most of the time, laughter. But every time, the story is real.

**Derreck Kayongo**, *Business Visionary, Global Soap Project Founder & CEO of the Center for Civil and Human Rights*

4:45 PM – 5:30 PM

### **The Paris Vision and Climate Action – What's Next for U.S. Businesses?**

The US Administration has announced its intention to withdraw from the Paris Agreement on climate change. Governors, mayors, businesses and investors are stepping forward to fulfill the Paris vision of a resilient world with warming well below 2 degrees Celsius. But what does this mean for retail and consumer products companies? Whether your company has public commitments to reduce greenhouse gas emissions, is working to build supply chain resilience to climate impacts or just want to know more about what's next for the global agreement, this session is for you!

**David Wei**, *Director, Climate Change, BSR*

**Berkley Rothmeier**, *Manager, BSR*

5:45 PM – 7:30 PM

### **Opening Reception in The Green Room**

**Thursday, August 10**

7:00 AM – 5:00 PM

**Registration**

7:00 AM – 8:00 AM

**Continental Breakfast in the Green Room**

8:00 AM – 8:15 AM

**Morning Welcome Remarks**

8:15 AM – 8:45 AM

**Beyond Sustainability – The Agricultural Path to Climate Regeneration**

Regenerative Agriculture may be one of the most powerful ideas in food! With benefits relevant to consumers, producers and manufacturers the practice has the opportunity to engage all aspects of the food system while offering a powerful tool to addressing climate challenges. Join us as we explore how our businesses can move beyond sustainability to climate reparation. During this presentation we will define and discuss the systems behind Regenerative Agriculture and explore the path forward in engaging consumers, producers and finished goods manufacturers in the benefits of Regenerative Agriculture. Join us as we present insights from recently completed market research which reveals what barriers exist to increasing market openness, awareness, readiness, and acceptance of this exciting and powerful idea and climate tool.

***Eric Pierce**, Director of Business Insights, New Hope Network and NEXT Data & Insights*

8:45 AM - 9:30 AM

**Sustainability in the Protein Supply Chain: Meeting Global Demand**

Protein is an essential ingredient of a healthy diet, and animal care and the sustainability of animal agriculture is top of mind for consumers, NGOs, industry and others. This panel will feature representatives from Cargill, Elanco and United Egg Producers who will give their perspective on how to sustainably meet the protein needs of a growing population, engage consumers and advance science-based approaches.

***Jill Kolling**, Sustainability Leader, Cargill Protein, Cargill*

***Chad Gregory**, President, United Egg Producers*

***Dr. Roger Cady**, Senior Technical Consultant - Global Sustainability Lead, Elanco*

9:30 AM – 10:00 AM

**Networking Break in The Green Room**

10:00 AM – 11:00 AM

**Concurrent Interactive Workshops**

- **Clean Tech Across The Portfolio: How Companies are Creatively Deploying Renewables to Reach Carbon Reduction Goals, Achieve Economic Prosperity, and Manage Risk**

***John Martin**, Client Development Manager, Sustainability & Clean Tech, Schneider Electric*

***John Hoekstra**, Vice President of Sustainability & Clean Tech, Schneider Electric*

- **Quizshow: Test Your Walmart Sustainability Index Knowledge**  
Think you're an expert or want to learn more about the tools, tips, and trades on reporting your sustainability progress? Curious about the year to year trends in sustainability data collected by Walmart? Come test your knowledge and skills as TSC and Walmart host a trivia session on terms and knowledge used to answer the Walmart Sustainability Index. This session will test and teach you about the state of measurement in sustainability assessment and help you with resources to improve communication and data collection throughout your supply chains.  
*Euan Murray, CEO, The Sustainability Consortium*  
*Fred Bedore, Senior Director, Sustainability, Walmart*
- **Creating Sustainable Supply Chains: Assessing and Improving Human Rights in Fisheries**  
As a global leader in sustainable seafood recommendation programs, the Monterey Bay Aquarium Seafood Watch program recognizes the importance of addressing human rights in the world's fisheries. We have become part of the solution by partnering with Seafish and Sustainable Fisheries Partnership to create a tool that identifies and assesses risks to human rights in fisheries worldwide. The Human Rights Risk Tool for Seafood (HRRTS) produces risk ratings of human rights abuses by country and fishery. During this breakout session attendees will be introduced to The Seafood Human Rights Risk Tool, walked through the process of how risk ratings will be created and shown how these ratings can be utilized to identify risk within their own supply chain.  
*Shawn Cronin, Business Program Manager, Monterey Bay Aquarium*
- **ReFED 2.0: Simple Solutions for Retailer Leadership on Food Waste**  
In 2016, ReFED published the Roadmap to Reduce U.S. Food Waste by 20 Percent, the most comprehensive analysis to date of the food waste problem and solutions to address it. In this session, we'll explore a new set of data and insights from ReFED and its partners dedicated to the issues that affect CPGs and retailers most. This includes the launch of a new date labeling framework and preliminary implementation plans in partnership with the TPA members, and an action guide for retailers. The retailer guide is complete with a self-assessment tool to help retailers take more aggressive steps to reduce food waste, combined with economic data to bolster the business case for solution implementation.  
This session is designed for anyone looking to expand and accelerate their food waste reduction strategies and to engage their customers and employees. Dimensions to be addressed include:

  1. What are the key messages and delivery channels most effective for engaging customers and employees on waste reduction solutions?
  2. What governance and coordination structures need to be in place for retailers and manufacturers to accelerate their waste strategies?
  3. Which solutions provide the highest cost savings and ease of implementation for food businesses?

*Eva Goulbourne, Associate Director of Programs & Communications, ReFED*  
*Michael Hewett, Director of Environmental and Sustainability Programs, Publix Super Markets, Inc.*  
*Kevin Smith, Senior Advisor for Food Safety, Center for Food Safety & Applied Nutrition, U.S. Food and Drug Administration*

**Jeffrey Canavan**, MPA, RD, Deputy Director, Labeling and Program Delivery Staff, USDA, FSIS, OPPD, LPDS  
**Anna Vinogradova**, Senior Manager Sustainability, Walmart

11:15 AM - 11:45 AM

**Creating Resilient Cities: Coordinating Government, Businesses, and Communities**

With support from The Rockefeller Foundation and 100 Resilient Cities, cities around the world are developing resilience strategies to better prepare for physical, social and economic challenges, including natural disasters. Recent research suggests that resilient cities require resilient food systems. This session will discuss the importance of considering food systems in urban resilience strategies and highlight the food industry's role in strengthening the resilience of urban food systems to natural disasters. The discussion will be framed around food system vulnerabilities to natural disasters and urban food resilience strategies in U.S. cities that are currently underway. The Initiative for a Competitive Inner City (ICIC) will present recent research supported by The Rockefeller Foundation that uses a newly developed framework to analyze the resilience of food systems in four U.S. cities to natural disasters: New York City, New Orleans, Los Angeles, and Madison (Wisconsin). Representatives from city resilience agencies, hunger relief organizations, and the food industry, will provide an overview of food resilience initiatives currently underway and their perspectives on strengthening the resilience of urban food systems.

**Monica Munn**, Senior Program Associate, The Rockefeller Foundation

**Kim Zeuli**, Senior Vice President, Director of the Research and Advisory Practice and Director of Communications, ICIC

**Karen Hanner**, Managing Director of Manufacturing Partnerships, Feeding America

**Brandon Scholz**, President & CEO, Wisconsin Grocers Association

11:45 AM – 12:30 PM

**Cultivating a Sustainable Future for the Guitar Industry**

Charlie Redden of Taylor Guitars will discuss the complexity of a global supply chain, the diminishing supplies of tropical tonewoods that have long been relied upon by instrument makers, and the innovative steps Taylor Guitars has taken to safeguard these precious resources for the entire industry by partnering with forestry experts to develop new paradigms of sustainable forestry. While exploring the guitar industry's supply chain, Redden will also share the valuable lessons he learned living in Cameroon as Taylor worked to transform an ebony mill and the ebony trade, the big-picture vision of cultivating tonewood forests for future generations, and his experience in managing a multi-layered international supply chain.

**Charlie Redden**, Director of Supply Chain, Taylor Guitars

12:45 PM – 1:30 PM

**Lunch & Learn Workshops and Volunteer Opportunity**

Spend your lunch hour in a lunch & learn workshop or participating in the volunteer service project with fellow attendees. Carry out lunches will be provided.

**Digital Ag Tools—Growing Sustainability and the Future of Farming**

In this Lunch and Learn, attendees will get a first person, hands-on perspective of digital ag tools on the farm, and how they enable increased production in a sustainable way, as well as impacts downstream in the food value chain. A farmer, ag retailer, and representative from a digital software platform will discuss innovations in the field of digital technology, and what is currently used on farm and what is on the horizon. In addition, panelists will discuss how these tools enable increased profitability for growers, sustainable and climate smart ag practice implementation, and how data collection can impact and benefit the food value chain. Finally, attendees will have opportunities to ask questions of the panelists to better understand how modern data collection can benefit their organization's supply chain.

**Lunch & Learn Workshop #2**

1:45 PM – 2:30 PM

**Political Landscape 2017: Impacts on the Retail and CPG Industry at the State and National Level**

This session will feature three experts in politics, two from the federal perspective and one who focuses on state and local affairs and will be moderated by FMI/GMA policy staff. The experts will provide an overview of what impacts the new Administration and state and local government proposals are having on the retail and CPG industry, as well as insights into future policies.

**Andrew Hackman**, Member, Serlin Haley LLP

2:45 PM – 3:15 PM

**Networking Break in The Green Room**

3:30 PM – 4:30 PM

**Concurrent Interactive Workshops**

- **U.S. Department of Energy Demonstrations of Zero-Emission Fuel Cell Technologies for Distribution of Food and Grocery Products**

The panel presentation will highlight the successful commercial launch of several zero-emission (at the tailpipe) fuel cell-powered motive products of interest to the food manufacturers and distributors, including primarily light-duty fuel cell electric vehicles and material handling equipment. The panel will also discuss the research, development, and demonstration effort underway to build on this commercial success by integrating fuel cell technologies into other products, including on-road trucks and vans, off-road specialty vehicles, and auxiliary power units for truck refrigeration. Panelists will speak to the ability of fuel cell technologies to enable food manufacturers and distributors to meet sustainability and regulatory compliance objectives, to address the technical and non-technical challenges with transitioning fuel cells into fleets, and to understand the key drivers of substantive economic and operational benefits.

**Greg Moreland**, Energy Expert, CSRA Inc

**Jim Petrecky**, VP Business Development, Plug Power

**Gus Block**, Director of Marketing and Corporate Development, Nuvera Fuel Cells

**Pete Devlin**, Program Manager, U.S. Department of Energy

- **Landscape-level Strategies for Enhancing Pollinator Health Viewed From Different Vantage Points in the Value Chain**

In this Challenge Session, a panel comprised of representatives from DanoneWave, the Almond Board of California (ABC), and SureHarvest will present session participants two different landscape-level approaches in support of enhancing pollinator health in the California almond industry. The panelists will also explore how pollinator health, in the context of the almond industry, serves as an example of the complex dynamics both growers and CPG companies are facing when responding to retailer and consumer expectations related to sustainable production and responsible sourcing practices. The context setting portion of the session will focus on summarizing the key issues pertaining to pollinator health. A brief discussion on the voluntary nature of compliance with best management practices related to pollinator health follows, with emerging industry and NGO initiatives referred to as examples. Two landscape-level approaches to enhance pollinator health and increase awareness of the value of pollination services will be subsequently discussed in a breakout group setting with the panelists based on their current experience in the almond value chain. One will focus on ABC's approach to grower adoption of best management practices through self-assessments, workshops and other outreach efforts working at a landscape-level. The second will focus on emerging efforts on the part of NGO initiatives seeking to validate pollinator-friendly production practices at a

landscape-level, which are also dependent on collaboration with growers, handlers and CPG companies.

**Dr. Jeff Dlott**, *President and CEO, SureHarvest*

**Gabriele Ludwig**, *Director, Sustainability & Environmental Affairs, Almond Board of California*

**Hansel New**, *MBA, Manager of Corporate Sustainability, DanoneWave*

- **Taking Responsibility for Global Responsibility: How Nielsen Looks Through the Sustainability Microscope**

In our increasingly data-driven society, the challenge for companies to use data to advance their global sustainability strategies is broadening. As a leading global data provider, Nielsen is excited to share where we are with this directive and where we plan to go. We see the future as an open, collaborative landscape where companies can sustainably advance strategies together. We'll explore this vision of the future in which we are all accountable and working together to create sustainable, transparent and responsible business models.

**Crystal Barnes**, *Vice President Global Responsibility and Sustainability, Nielsen*

- **Gaining Ground in Soil Health**

In 2016, The Nature Conservancy, with support from General Mills, launched a 10-point roadmap for soil health, making the business case for investing in sustainable soil health practices to achieve unprecedented economic benefits for U.S. farmers and businesses as well as significant conservation outcomes for generations to come. In fact, soil health improvements made possible through transformation in the agriculture supply chains could create a value of \$7.4 billion annually for society and \$37 million net annually for farmers. This session on soil health will include a discussion by panelists from the environmental, farming and food industry sectors who can offer unique insights on strategies taking place to improve soil health across the United States as well as success stories.

**(Moderator) Cheryl Baldwin**, *Vice President, Pure Strategies*

**Shauna Sadowski**, *Vice President of Sustainability & Industry Relations, Annie's, Inc. (a division of General Mills)*

**Bruce Roskens**, *Director of Crop Sciences, Grain Millers, Inc.*

**Larry Clemens**, *Director of North America's Agriculture, The Nature Conservancy*

- **Sustainability as Your Main Ingredient: Driving Operational & Supply Chain Savings**

Join our candid conversation on ways to transform your sustainability portfolio into an asset, including:

- Using sustainability analytics and reporting to drive 20% cost reduction
- Leveraging procurement and demand initiatives to drive price reductions
- Incorporating utility rebates and incentives to drive sustainability usage reduction programs

We'll cover these and other best practices to engage internal and external stakeholders, and we'll discuss the convergence of supply, efficiency, and sustainability goals.

Sponsored and brought to you by: Schneider Electric

**Erin Augustine**, *Senior Sustainability Manager, Natural Resource Conservation, Kellogg Company*

**Walter Kraus**, *P. Eng., CSR-P, Vice President, Environment & Corporate Sustainability, Weston Foods*

4:45 PM – 5:30 PM

**Win-Wins in the Water Space: Building Brand Value while Mitigating Your Water Risk**

More and more food sector companies are recognizing the very real risks that global water stress pose to their entire value chain. Many are responding by taking a range of different actions from conducting a risk assessment of their value chain to engaging with suppliers at the field level. But, what are the right actions to take when it comes to water? How does my company compare to others in the sector? What is best practice when it comes to addressing water risk? And what are some win-win opportunities that will help to build my company's brand while mitigating our exposure to water risk? In this session, we will grapple with some of these tough questions using fresh new research on the food sector's response to water challenges to frame the conversation. Examples of best practice will be shared throughout the conversation from various food sector panelists.

**Brooke Barton**, Senior Director, Food & Water Program, Ceres

**Roberta Barbieri**, Vice President, Global Water and Environmental Solutions, PepsiCo, Inc.

6:00 PM – 9:00 PM

**An Evening at the Wildhorse Saloon (Off-Site Reception)**

Join your colleagues for an evening of fun, food, music, and dancing at the world-famous Wildhorse Saloon. With balcony views overlooking the stage and dance floor this venue in the heart of Music City's downtown district offers live music and line dance lessons on the largest dance floor in Tennessee.

\*Please meet in the lobby. We will be walking from the Renaissance Nashville at 5:45 PM

**Friday, August 11**

7:00 AM – 11:00 AM

**Registration**

7:00 AM – 8:00 AM

**Continental Breakfast in The Green Room**

8:20 AM – 8:30 AM

**Morning Welcome Remarks**

8:30 AM – 9:00 AM

**Paving the Way Towards Progress on Food Waste: An Update on the FWRA and TPA Date Labeling Initiative**

Food manufacturers and retailers view our efforts to lead the way on food waste as both a responsibility and an opportunity. During this session, get up to date and "up to speed" on two of industry's proactive efforts to cut consumer confusion and decrease food waste. Representatives of the Food Waste Reduction Alliance (FWRA) will outline the organization's efforts since last year's summit and give an exciting preview of future plans. FMI and GMA will also provide background and answer questions on our joint Trading Partner Alliance (TPA) date labeling initiative. This session is a great opportunity to learn what industry is doing to address food waste within our own supply chains, as well as our efforts to reach out to consumers with clearer, more concise date labels.

**Jason Wadsworth**, Manager of Sustainability, Wegmans Food Markets, Inc.

**Andy Harig**, Senior Director, Sustainability, Tax & Trade, Food Marketing Institute

**Meghan Stasz**, Senior Director of Sustainability, Grocery Manufacturers Association

9:15 AM – 10:15 AM **Concurrent Interactive Workshops**

- **WBCSD Principles and Climate Smart Ag: Incorporating Them into Your Supply Chain**

Embracing the WBCSD (World Business Council on Sustainable Development) sustainable supply chain strategies, FMI and GMA members can manage and minimize the negative economic, social and environmental impacts associated with sourcing of goods and services. In this session, attendees will understand and identify climate smart ag principles that are reducing the environmental footprint of food production which can be currently incorporated into their supply chain strategies. Discover how innovative and sustainable tools such as cover crops, no-till farming, modern crop protection and digital agriculture are improving water and soil health. This session will also look at ways to further advance sustainable practices mitigating the challenges of climate change across the supply chain while maximizing efficiency, performance and protection of the environment. In addition to the panel, growers will join a roundtable discussion for the second half of the session to discuss how they grow food sustainably and how to partner with the food value chain to execute sustainability initiatives.

*(Moderator) Pamela Strifler, Vice President, Global Sustainability, Stakeholder Engagement and Corporate Insights, Monsanto Company*

*Chris Walker, Director, World Business Council for Sustainable Development, North America*

*Ed Anderson, PhD, Senior Director of Research ISA and Executive Director NCSRP, Iowa Soybean Association and North Central Soybean Research Program*

- **Forest Certification: What Is It And What Does It Mean To Me?**

The next time you're in the grocery store, take a closer look at your paper grocery bag, magazine, packaged goods box, envelope, juice carton, and toilet paper. There's a good chance that you'll find a forestry certification logo. That might not have been the situation a few years ago. Similar to programs that facilitate responsible sourcing of palm oil, fish, and meats, many companies that use fiber-based products are turning to forestry certification programs to provide assurance of responsibly sourced wood fiber and meet customer demands for sustainable products. If you check out the websites of these companies, you'll probably find a corporate fiber procurement policy that discusses forestry certification. But, do you know what it all means to you? This session will provide attendees with a basic understanding of how Forestry Certification works and the processes involved in utilizing certified fiber-based products. We will demonstrate how fiber certification can be used to meet supply chain assurance and sustainability goals for responsibly sourced products. Finally, you will learn about the Appalachian Woodlands Alliance, and other programs, where several stakeholders are working together to improve sustainable forest management.

*Chad Leatherwood, Project Manager, Sustainability, Evergreen Packaging*

*Andrew Goldberg, Program Manager, Appalachian Woodlands Alliance, Rainforest Alliance*

- The Future of Food Sustainability: Local Indoor and Vertical Farming**  
Not only will local indoor and vertical farms have an impact on the future of food sustainability, but it is going to improve the retail industry's fresh supply chain. Companies who understand and leverage Vertical/Indoor growing technology will have the competitive advantage with consumers who expect food transparency. Attendees will learn how to see past the technology to maximize their company's goals. Zale Tabakman will explain the technology and challenges of scaling Indoor Vertical Growing and how to judge food safety and ways to leverage the technology for product development. Attendees will leave the session understanding how vertical farming can do the following:

  - Give them a competitive edge in the marketplace
  - Reduce their food safety risk
  - Help the environment
  - Reduce their product waste
  - Increase product shelf life

**Zale Tabakman**, President, Local Grown Salads Inc.

10:15 AM – 10:30 AM **Networking Break in The Green Room**

10:30 AM – 11:15 AM

**Sustainability Leadership Panel**

Sustainability professionals are an important role in any company, requiring a unique set of skills and expertise. CPG and retail companies of all sizes and types are working to meet growing global demand while reducing their environmental footprint and enhancing the communities in which they operate. Sustainability leaders are at the forefront of this challenge. From engaging front line employees to identifying and mitigating supply chain risks around the world, leadership is critical to success. Hear from three leading Chief Sustainability Officers at companies with global footprints about what works, what lessons they've learned along the way, and what the future of sustainability looks like from their perspective.

11:15 AM – 12:00 PM

**A 4D Future: Self-Assembly, Programmable Materials and 4D Printing**

3D printing has grown in sophistication since the late 1970s. TED Fellow Skylar Tibbits is shaping the next development, which he calls 4D printing: where the fourth dimension is time. This emerging technology will allow us to print objects that then reshape themselves or self-assemble over time. Think: a printed cube that folds before your eyes, or a printed pipe able to sense the need to expand or contract.

In this keynote, Tibbits explains how we are now able to program nearly everything—from bits of DNA, proteins, cells, and proto-cells; to products, architecture, and infrastructure. Programmability and computing are becoming ubiquitous across scales and disciplines. Tibbits shows us how soon these small-scale technologies will translate into solutions for large-scale applications—and what it means for your industry.

**Skylar Tibbits**, TED fellow and Co-Director of the MIT Self-Assembly Lab

12:00 PM – 12:10 PM

**Closing Remarks**