ISTC Technical Assistance Program News: March 2022

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Emerging leaders weigh in on what's missing from corporate climate action

GreenBiz, 3/4/22

Among the more than 1,300 people who attended GreenBiz 22 in February, there were 10 students and young professionals who were part of the Emerging Leaders program, which aims to elevate, cultivate and support the next generation of Black, Indigenous and people of color (BIPOC) professionals and upcoming leaders in sustainable business.

GreenBiz asked the cohort, "What do you think is missing from conversations about sustainability and corporate action on addressing the climate crisis?"
Are top corporations really failing on their net zero goals?
GreenBiz, 2/11/22

Are major corporates failing on climate? A recently released report appears to suggest so, accusing some of the world’s highest profile businesses of pursuing deeply flawed and partial net zero strategies that amount to little more than greenwash.

Do rankings create clarity or confusion about corporate sustainability?
edie, 2/16/22

The start of the year has seen numerous efforts to rank corporate efforts to improve across a range of sustainability metrics. While many of these have been questioned by the corporates involved, it makes it abundantly clear that disclosure and action are what businesses will be judged on this year.
How smaller companies can catch up on sustainability reporting

GreenBiz, 2/22/22

How can companies — especially smaller firms, which may be new to sustainability disclosure — focus their sustainability reporting on needle-moving issues while also satisfying stakeholder requests for broader disclosures as well?

Becoming sustainable can be good for business too

NIST, 3/2/22

Sustainability is becoming a selling point for many customers, and small and medium manufacturers (SMMs) up and down supply chains are being pushed to address their emissions and resource use. However, many SMMs are hesitant to take on sustainability goals.

A new paper from NIST and Georgetown University addresses their hesitations by reviewing data
from corporate sustainability reports and projects supported by the Departments of Commerce and Energy. The paper identifies several standards used to improve sustainability that also yielded increased sales and retained customers and jobs in SMMs.

**Fostering employee engagement (without dead polar bears)**

GreenBiz, 2/21/22

Companies who try to engage their employees with quantitative information will fail because most people don’t get terribly motivated by data, especially when it is abstract and unrelatable.

John Scott, a senior chemist with the Illinois Sustainable Technology Center, says per- and polyfluoroalkyl substances are widespread, long-lasting and extremely difficult to remove from the environment. (photo by L. Brian Stauffer)

**How can Illinois address the problem of PFAS pollution?**

by Diana Yates, University of Illinois News Bureau
Following action by the federal Environmental Protection Agency, the state of Illinois is investigating the occurrence of per- and polyfluoroalkyl substances in community water supplies across the state, with an eye toward developing policies to reduce their use. Exposure to PFAS has been linked to increased risk of certain cancers and potential developmental problems in children. News Bureau life sciences editor Diana Yates spoke about the issue with John Scott, a senior chemist with the Illinois Sustainable Technology Center.

Divert and convert: Campus project turns plastic waste into fuel

by Lisa Sheppard, Prairie Research Institute

A new Illinois Sustainable Technology Center (ISTC) pilot project, funded by the University of Illinois Student Sustainability Committee, is gearing up to remove 200 pounds of non-recyclable plastics from University of Illinois campus trash daily and convert it to 140 pounds of crude oil to power university vehicles. The project will demonstrate its benefits to the environment and campus and present unique learning opportunities for students.
The missing link in plastics circularity
Packaging Europe, 2/8/22

In order to make the plastics value chain truly circular, it's crucial that the industry is able to measure the level of recycled content in packs accurately and efficiently. Researchers from Manchester University in the UK are currently developing a technology that uses tracking molecules for identifying, quantifying and validating recycled content in plastics and plastic packaging. Packaging Europe spoke with Prof. Mike Shaver, who is leading the project, to find out more.

U.N. adopts historic resolution aimed at ending plastic pollution
Washington Post, 3/2/22

For the first time, the international community has agreed on a framework to curb the world's growing plastic problem. A resolution adopted last Wednesday by the United Nations lays out an ambitious plan for developing a legally binding treaty to “end plastic pollution.”
Aerial view of full installed submerged rubble ridges

**Underwater innovation at Illinois Beach State Park helps mitigate erosion**

by the IDNR Coastal Management Program

This past summer, with funding from the EPA Great Lakes Restoration Initiative, a US Army Corps of Engineers crane carefully placed over 10,000 tons of stone five hundred feet offshore of Illinois Beach State Park (ISBP) and Hosah Park, a Zion Park District property wedged between the north and south units of IBSP. Hidden from view underneath the shallow coastal waters of Lake Michigan, these stones form three “rubble ridges” approximately seven hundred and fifty feet long. They are intended to work in concert to lessen storm waves and protect the eroding beach and unique terrestrial ecosystem in the dunes while preserving views and enhancing fish habitat.
Aerospace

- Atlanta airport tackles emissions by increasing energy efficiency in buildings, operations. 
  Environmental Leader, 2/17/22
- Consortium finds safer alternatives for aerospace and defense. 
  Environmental News Bits, 3/7/22

Chemical manufacturing

- Announcing 16 projects to accelerate bioindustrial manufacturing in the U.S. 
  BioMADE, 2/15/22
- Bacteria upcycle carbon waste into valuable chemicals. 
  Northwestern University, 2/21/22
- Is climate change impacting the safety of chemical facilities? 
  U.S. Government Accountability Office, 3/2/22
- New method enables recycling of CO2 and drug development simultaneously. 
  AZOCleanTech, 2/23/22
- Will legacy issues capture the chemical industry's future? 
  GreenBiz, 2/15/22

Food & beverage

- Carbon dioxide chiller provides ample cold for dairy and replaces propane heat for hot water. 
  Food Engineering, 2/23/22
- Food manufacturer finds £20,000 energy saving from pumps. 
  Food Manufacture, 3/4/22
- How are the biggest bread players tackling sustainability? 
  Bakery Info UK, 2/28/22
- How to finance Scope 3 emissions reductions on farms. 
  GreenBiz, 2/10/22
- How to reduce food waste when supply chains are unpredictable. 
  Food Engineering, 2/21/22
- New environmental labelling system unveiled. 
  Food Navigator, 2/8/22
- Packaging with promise: Food businesses look at sustainable packaging with the help of a grant from Boulder County. 
  Yellowsence Magazine, 2/24/22
- Precision fermentation food colours prepare to challenge synthetics. 
  Food Navigator, 3/2/22
- Sustainability gets baked into food design. 
  GreenBiz, 2/28/22
- Sustainability in the food industry: How companies can get ahead of stakeholder demands. 
  Brink News, 2/21/22
- Technology opens doors to sustainability transformations in F&B industry. 
  FnBNews.com, 2/7/22
- Upcycled Food Association CEO: 'We want an upcycled product in every aisle of every grocery store' 
  Food Navigator USA, 2/24/22
- Upcycling vegetable by-products into fibre-rich ingredients for ‘juicier’ burgers: ‘We can make...
processed food healthier and more sustainable' Food Navigator, 3/3/22

**Metal fabrication & finishing**

- World’s largest solar-powered steel mill breaks ground in Colorado Construction Dive, 3/2/22

**Circular economy**

- 5 expectations for the circular economy in the year ahead GreenBiz, 1/7/22
- Chemical recycling is getting more attention than ever, but its benefits are unproven GreenBiz, 2/11/22
- Co-branding collaboration: CRUST reveals new model to help big food firms benefit from upcycling Food Navigator Asia, 3/3/22
- Comcast partners with Echo Environmental for coax recycling program Multichannel News, 2/12/22
- Government supports efforts to reduce food waste and enhance sustainability Agriculture and Agri-Food Canada, 2/17/22
- Major brand owners commit to increasing investment in circular economy for flexibles Packaging Europe, 3/1/22
- PepsiCo LatAm transitions to GHG-busting plastic alternative made from household waste Bake and Snacks, 2/16/22
- Recycling tech startup Novoloop raises $11 million to upcycle low value plastic into high performance materials ESG Today, 2/16/22
- Can we fix recycling? National Renewable Energy Laboratory, 2/18/22
- University of Birmingham licenses rights to 'supercritical water' recycling technology Resource, 2/15/22
- What needs to change to build a true circular economy GreenBiz, 2/18/22

**Climate**

- Bacardi to cut emissions from rum in half in 2023 ESG Today, 2/10/22
- Biden administration launches industrial decarbonization initiative, targets $9.5B for clean hydrogen Utility Dive, 2/16/22
- Biden administration promises to buy ‘clean’ industrial materials New York Times, 2/15/22
- DOE announces pledges from 90+ organizations to slash emissions by 50% within decade U.S. DOE, 2/28/22
- Here’s how Congress can help industry become cleaner and more competitive ACEEE, 2/23/22
- How are food manufacturers working towards net zero? Food Manufacture, 2/11/22

• How can businesses trigger cleantech tipping points in the 2020s? GreenBiz, 2/21/22
• Microsoft and ClimateWorks Foundation launch The Carbon Call GreenBiz, 2/11/22
• Plastic pollution is bad, but how exactly is it linked to climate change? GreenBiz, 2/18/22

Construction & buildings

• How a high-tech twist on a 19th-century process could clean up steel and cement making The Verge, 2/22/22
• White House launches low-carbon construction initiative Construction Dive, 2/16/22

Consumer behavior

• Conscious consumerism has bounced back after a pandemic low Fast Company, 2/11/22
• FMCG environmental sustainability: mounting pressure to improve sourcing and packaging Odgers Interim, 2/23/22
• Gen Z and sustainability: The disruption has only just begun Forbes, 2/18/22
• Sustainability is redefining customer loyalty and retailers must step up efforts, says Retail Insight Food Navigator USA, 2/14/22

Corporate sustainability

• Biodiversity meets the bottom line GreenBiz, 2/11/22
• Guest post: What business leaders need to know about the growing pains in Europe’s ESG governance ESG Today, 3/2/22
• Inclusive companies and communities advance environmental justice GreenBiz, 2/21/22
• PepsiCo more than doubles revenue growth with framework prioritizing sustainability Food Navigator USA, 3/2/22
• POLITICO Q&A: Bank of America CEO Brian Moynihan POLITICO, 3/2/22
• Science Based Targets Initiative removes fossil fuel companies’ commitments and validated targets ESG Today, 3/8/22
• The sustainability talent you’re looking for, it’s in your operations department GreenBiz, 2/21/22

Energy

• After renewable energy installations dipped in 2021, industry renews call for clean energy package Utility Dive, 2/22/22
• Coal giant Peabody announces joint venture focused on solar power and energy storage St. Louis Post-Dispatch, 3/1/22
• DOE to offer $3B to boost battery production, recycling Utility Dive, 2/15/22
• Meijer advances sustainability efforts with solar power project Grocery Dive, 3/7/22
• Quorn to explore decarbonised production at Billingham plant Food Manufacture, 2/10/22
• The cost of algae-based biofuel is still too high Popular Science, 2/21/22
• Three myths about renewable energy and the grid, debunked e360, 12/9/21

Packaging

• A sustainable view of packaging in 2022 and beyond Label & Narrow Web, 2/25/22
• AB InBev pilots ‘climate-positive thermoplastic’ in Brazil Beverage Daily, 3/1/22
• Biopolymer film: An alternative to single-use plastic food packaging Monash University, 2/22/22
• Coors Light eliminates 6-pack plastic rings Food Processing, 3/1/22
• Divorcing the plastic from our packaging not so easy without a new suitor Food Engineering, 2/8/22
• Eco be-leaf: Researchers develop bioplastic based on lotus leaf that’s suitable for food packaging Food Navigator Asia, 2/15/22
• Harvard team unveils biodegradable, anti-microbial food packaging material Packaging Europe, 2/3/22
• HP backs ‘disruptive’ paper bottle technology with acquisition of Choose Packaging Europe, 2/3/22
• Oregon State researchers make key advance in turning apple waste into packaging material Oregon State University, 2/14/22
• Plastic labelling needs ‘sustainability scale’ University of Exeter, 2/28/22
• Plastic packaging increases fresh food waste, study finds The Guardian, 2/23/22
• The 6 sustainable packaging trends we’ll be watching in 2022 GreenBiz, 1/6/22

Product design

• Cole Haan’s new shoes are made from dandelions Fast Company, 2/11/22
• How technology can help us become more sustainable New Food Magazine, 3/1/22
• This startup is transforming used chopsticks into beautiful furniture Atlas Obscura, 2/25/22

Regulation

• Conservative justices express some support for limiting Biden’s ability to curtail greenhouse gas emissions Inside Climate News, 3/1/22
• Court temporarily blocks key Biden climate accounting measure The Hill, 2/11/22
• EPA announces new Science Advisory Board process to strengthen science supporting EPA decisions U.S. EPA, 2/28/22
• EPA issues enforcement alert regarding ski wax products containing perfluorinated chemicals The National Law Review, 2/11/22
• Los Angeles City Council moves toward phasing out single-use plastics, including bags and EPS foam Waste Dive, 2/28/22
• Update on FDA’s continuing efforts to understand and reduce exposure to PFAS from foods Quality Assurance Magazine, 2/28/22

Retail

• 6 ways to be an ethical retailer Speciality Food, 3/1/22
• Allbirds launches shoe resale platform as part of circular economy efforts edie, 2/18/22

Supply chain

• Blockchain based circular system being developed to assess rare earth sustainability Circular, 2/16/22
• Building resilient and sustainable supply chains Supply Chain Dive, 3/1/22
• Cosmetics giant Shiseido unveils sustainability requirements for suppliers ESG Today, 2/15/22
• New Kellogg program to reward farmers Food Business News, 2/15/22

Waste prevention & toxics reduction

• FMI: 5 ways grocers can do more to reduce food waste Grocery Dive, 2/14/22
• Food waste reduction app Flashfood raises $12.3M Grocery Dive, 3/1/22
• Leveraging technology to tackle record food waste highs Business Chief, 2/15/22
• Milliken & Company to eliminate PFAS from textile finishes, fibers Furniture Today, 2/15/22

Water

• Citing drought, US won’t give water to California farmers Associated Press, 2/23/22

Tools & publications

• 2022 Illinois Sustainable Technology Center Strategic Research Areas (ISTC)
• Capturing CO2 from Industrial and Power Generation Sources: Engineered Biphasic Solvent Based System (ISTC)
• Chemical Accident Prevention: EPA Should Ensure Regulated Facilities Consider Risks from Climate Change (U.S. Government Accountability Office)
• Farewell to Fluorescent Lighting: How a Phaseout Can Cut Mercury Pollution, Protect the
Climate, and Save Money (American Council for an Energy Efficient Economy)
- Rising Leaders on Social and Environmental Sustainability: A Global Survey of Business Students (Yale Center for Business and the Environment)
- Road to Zero Emissions: 55 Companies Ranked on Net Zero Progress (As You Sow)
- Supply Chain Greenhouse Gas Emission Factors for US Industries and Commodities (U.S. EPA)

Events

ECEC22: Emerging Contaminants in the Environment Virtual Conference
ISTC and Illinois-Indiana Sea Grant are hosting ECEC22, a virtual conference featuring the latest in emerging contaminants research, policies, and outreach, on April 27-28, 2022. Registration for the conference is $50. Undergraduate student scholarships are available. Register today!

Upcoming

- Mar 10, 2022, noon CST Breaking the Plastic Wave: Solving the Plastic Pollution Problem (ISTC)
- Mar 10, 2022, 1 pm CST Credible Corporate Climate Action: How to Set and Meet Net-Zero Targets (GreenBiz)
- Mar 23, 2022, 2 pm CDT GreenScreen Certified for Furniture & Fabrics v1.1 Webinar (GreenScreen)
- Mar 24, 2022, noon CDT The Current Status and Pillars of Direct Air Capture Technologies (ISTC)
- Apr 14, 2022, noon CDT Trichloroethylene (TCE) Alternatives Project (ISTC)

On demand

- Direct Air Capture Facility Development in the United States (Institute for Carbon Removal Law and Policy)
- Southern Illinois Sustainable Business Webinar Series (Illinois Green Business Association)
  - What is "Sustainable Business" and Why Does It Matter?
ISTC employment opportunities

Visit the PRI website to see current job opportunities at ISTC.