



Minutes – Friday, May 30, 2025
Video Conference
9 am to 11 am

Attending: Marie McRae, Mike Hoffman, Dan Lamb, Brian Eden, Susan Riley, Ingrid Zabel, Hailly Delisle, Gerri Wiley, Dan Antonioli, Tom Hirasuna, Margaret Johnson, Rebecca Evans, Dave Bradley, Paul Moore, Nico Leonard, Nick Goldsmith, Tom Hoebbel, Carol Chock, Margaret McCasland, Peter Bardaglio

Tapping the Unique Power of Food to Confront Climate Change – Mike Hoffmann
Michael Hoffmann is professor emeritus at Cornell in the Department of Entomology in the College of Agriculture and Life Sciences. Mike discussed the importance of food as a vehicle for sharing stories about climate change: “Food is essential for life, it is emotive, it is personal, and it’s deeply imbedded in our cultures and family histories but it’s all changing because of climate change. Food is the ideal messenger for the climate change story, and this story even crosses the political divide — we all eat. We can all tap the power of food to confront climate change and coincidentally, help keep the planet livable.”

- Mike started his talk with a vivid series of photographs that captured the wide variety of ways in which food is produced and processed
- He then turned to a more personal account of his background and how he came to the subject of food and climate change
- He emphasized the importance of understanding the need for each of us to take responsibility for doing what we can to prevent climate catastrophe:
- *Our planet is a lonely speck in the great enveloping cosmic dark. In our obscurity, in all this vastness, there is no hint that help will come from elsewhere to save us from ourselves. - Carl Sagan, Pale Blue Dot*
- Global warming, climate change, and extreme weather events are not “natural” – they are the result of human choices and actions:
 - CO2 grew at fastest rate ever in 2024
 - 27% higher than previous record
 - Highest in 3 million years
 - Why? Possible decline in natural sinks
 - Now 70% chance 2025-2029 five-year mean will >1.5°C
- Photosynthesis reduced by:
 - 12% terrestrial plants
 - 7% in marine algae
- Reduction in CO2 uptake
- Reduction in crop yields
- Survey of 400 Authors of UN IPCC Reports
 - Expect global heating to pass:
 - 90% – 1.5C “Blast past”

- 80% - 2.5C
 - ~50% - 3C
- “Semi-dystopian” future: famines, conflicts and mass migration, but not giving up. Nor should we!
- Over 76% of 16–25-year-olds, describe their future as “frightening”
- Survey of ~16,000 in US
 - 85% worried about CC
 - 53% hesitant to have children
 - 40% reported climate change impacting mental health
 - Climate-anxiety is on the rise
- Dealing with eco/climate-anxiety
 - Your feelings are justified
 - Connect with nature, meditate
 - Don’t doom scroll
 - Join others, work together
 - Act
 - Careful of burnout, choose your battles
 - You are not alone, get help if needed
- Why Tap the Power of Food to Tell this Story?
 - It’s relevant - we all eat!
 - It speaks to culture, family traditions, and emotions
 - Enjoyable, a social lubricant
 - Easy to talk about - Unlimited stories
 - A rich world audience
- *There is no love sincerer than the love of food.* - George Bernard Shaw
- What does food mean to you?
- Mark Hertsgaard argues that we need to do three things in telling climate change story: Humanize, Localize, Solutionize
- Climate change effects on the plants we depend on for life
 - Air (CO₂)
 - Water
 - Temperature
 - Soil
 - Sunlight
- All of these are changing, except for sunlight
- The impacts of increasing CO₂ on plants
 - Higher CO₂ is beneficial to 95% of crops - but the benefits are offset by higher temperatures and increasing water stress.
 - Weeds are more difficult to control.
 - Up to 30% less protein in pollen for bees.
 - Less protein, vitamins, and minerals in many crops, affecting human nutrition.
 - Now add smoke.
- Changes in water
 - Global shifts in patterns
 - More extremes:
 - Downpours, droughts – “whiplash”
 - California, Italy
 - Ice melts:

- Peru and Chile
- Changes in Temperature
 - US winters warming 2X faster than summers:
 - Loss of “winter chill”
 - Nights warming faster than days:
 - Reduce yields – wheat, rice
 - More heat waves:
 - Wheat devastated every six years
 - 2024 hottest year since 1850
- Getting Food to the Table
 - Raw materials→Supplier→Manufacturer→Distribution→Customer
→Consumer
 - Chokepoints: storms, power outages, transport halted, employees unable to get to work
- Everything on our menu is changing
 - Unlimited stories to tell
 - And you don’t need to be a scientist
- Messaging Experiment
 - Generic climate change message
 - Food-focused climate change message
 - *No difference*
- 19 questions
- Demographics
 - Political affiliation
 - Age
 - Gender
 - Race
 - Education
- Very or fairly concerned about food choices
 - 86% (D) vs. 61% (R)
- Willing to pay more for climate friendly practices
 - 87% (D) vs. 63% (R)
- Interested in learning more
 - 90% (D) vs. 62% (R)
- Is climate change a crisis?
 - 59% (D) vs. 20% (R)
- First word that comes to mind when thinking about the effects of climate change on food.
 - 20% — famine, hunger, scarcity, starvation, and shortages
- Talk about food often or occasionally: 76%
- Talk about climate change often or occasionally: 35%
- Confronting Climate Change
 - Challenge
 - Tackle
 - Threaten

- Meet head-on
 - Face up to
 - Defy
- What's being done? A lot!
 - Stewards of the Land/Climate Smart Agriculture
 - Promote soil health, effective water management, diversification planning and adaptation
 - Food and Beverage Businesses
 - Assess supply chain risks, invest in suppliers, alternative ingredients, reducing impact
 - Scientists
 - Developing resilient varieties including GE, climate modeling, water management, and more
- What We Can All Do - Find Your Greater Purpose
 - Talk about it — use food
 - Become climate change literate
 - Focus on what matters
 - Get involved — what you're best at
 - Be the first — peer pressure works!
- *No one is too small to make a difference. - Greta Thunberg*
- Food: A Common Ground
 - Consumers
 - Chefs
 - Restaurateurs
 - Food industry
 - Food media
 - Producers
- No villains
 - Joining forces
 - All telling this story
- Using the power of food: A great awakening
 - Creating a much deeper state of awareness and need for action on climate change, using food.
 - Quickly and at scale – we all eat
 - A social movement
- Using the power of food: Spreading the word
 - Change policy priorities – climate change ranked 19th
 - Get more people involved in climate change political actions
 - Food's very popular genre on TV
 - Food Network – 845,000 viewers during prime time
 - 88% of consumers use online recipes
 - Food influencers (chefs) have millions of followers

- Food is the ultimate climate change messenger – speak up!
 - We all eat – Let's use the power of food to confront climate change
- Using the power of food to keep the planet livable
 - Incentivize massive shift away from fossil fuels
 - Help people realize growing risks
 - Grassroot movement to a global network
 - Change lifestyles such as diets
 - Educate others in new and improved ways
- Using the Power of Food to Confront Climate Change/Climate Change and Your Future — Undergrad Courses
 - *Using food as a medium would be much more direct and effective in initiating conversation because it is much closer to people than hardcore scientific facts, melting ice, and homeless polar bears.* Jonathan '23
 - *In essence, the might of food lies in its subtlety—a silent force with profound cultural and personal nuances.* Eve '26
 - *The future isn't written yet, and that gives me hope. The most powerful thing we can do is recognize that hope isn't just a feeling—it's an action.* Nairobi '25
- In one word - How do you feel about your future given climate change?
- Start of semester
 - Cynical/Ambivalent
 - Uncertain
 - Limited
 - Frustration
 - Uncertainty
 - Small
 - Hot
 - Daunting
 - Devastating
 - Stuck
 - Terrified
 - Anxious
 - Frustrated
- End of semester
 - Hopeful
 - Uncertain/Hopeful
 - Hopeful
 - Irritated
 - Frightened
 - Bigger
 - Motivated
 - Actionable

- Mitigable
- Motivated
- Prepared
- Motivated
- Empowered

Ithaca 2030 District & 2024 Annual Progress Report – Peter Bardaglio

Peter is the executive director of the Ithaca 2030 District, the flagship program of TCCPI. He reported on the progress that the 2030 District made in 2024 regarding its effort to reduce the carbon footprint of commercial buildings in downtown Ithaca, including energy usage, water usage, and commuter emissions.

- TCCPI & Ithaca 2030 District
- Ithaca 2030 District is flagship project of the Tompkins County Climate Protection Initiative (TCCPI)
- TCCPI launched in 2008 and 2030 District established in 2016 – first in NYS
- Members: building owners, community organizations, government agencies, and professionals
- TCCPI's primary vehicle for engaging business community in effort to reduce GHG emissions
- What are 2030 Districts?
 - Goal: Improve energy and water performance of commercial and mixed-use buildings & reduce transportation emissions
 - Private-sector led – voluntary collaboration
 - Based in market realities, building business case for sustainability
 - Collect, benchmark, and analyze data to track progress
- Now 26 districts in U.S. and Canada – Ithaca is no longer smallest city in network – New Kensington, PA, outside of Pittsburgh just joined the network and is now smallest
- Why focus on buildings?
 - Built environment responsible for about 42% of annual global CO2 emissions
 - Of total emissions, building operations responsible for about 27% annually
 - Embodied carbon of just four building and infrastructure materials – cement, iron, steel, and aluminum – responsible for another 15%
- Existing Building Targets
 - 50% reductions in energy use, water consumption, and transportation emissions by 2030
- New Building and Major Renovation Targets
 - Immediate 50% reductions in water consumption and transportation emissions, with energy use in the design year reaching carbon neutrality by 2030
- Current Ongoing Activities
 - Provide owners with individual performance dashboards to track progress of their buildings
 - Hold quarterly meetings with District Partners
 - Publish e-newsletter four times a year
 - Compile annual progress report on performance of District as a whole

- Use Portfolio Manager to collect energy and water data and then upload to dashboard – each owner/manager has link to online, interactive dashboard
- Current advisory board members:
 - Terry Carroll, County Chief Sustainability Officer
 - Rebecca Evans, City of Ithaca Sustainability Director
 - Nicholas Leonard, HOLT Architects
 - John Guttridge, Urban Core, LLC
 - Susan Holland, Historic Ithaca Executive Director
 - Conrad Metcalfe, NYS-BPCA (ret.)
 - Guillermo Metz, CCETC Energy Team Leader
 - Jan Rhodes Norman, Local First Ithaca Co-Founder
 - Ethan Skutt, Project Engineer, Taitem Engineering
- As of 12/31/24 there were 56 member buildings, 31 members, and 931,974 square feet of committed space
- Property type breakdown by square footage:
 - Office – 30.2%
 - Educational/Cultural – 25.5%
 - Retail – 15.1%
 - Mixed Use – 14.3%
 - Public Safety – 9.1%
 - Restaurant – 3.9%
 - Hotel/Inn – 2.0%
- District reduced its energy consumption by 36% from district baseline and used 55% less water than baseline last year
- 2023: 37% in energy savings and 46% in gallons avoided
- Second year in a row that we met 2025 performance targets for both energy and water
- Energy update: 2024 District Baseline EUI, calculated as weighted mean of individual buildings' energy baselines: 89.35 kBtu/sq ft
- At district level, aggregated EUI in 2024 was 57.59 kBtu/sq ft
- Consumption of natural gas dropped from 56.6% in 2023 to 51.4% in 2024
- Energy results
 - Energy cost avoided: \$489,000
 - CO₂e emissions avoided: 5.3 million lbs.
 - Equivalent number of young trees planted: 240,000
- 35 of 53 buildings in 2024 met 2020 target of 20% reduction from their building baselines compared to 27 the year before – number achieving the 2030 target of 50% rose from 17 to 22
- Water update: 2024 District Baseline WUI, calculated as weighted mean of individual buildings' water baselines: 20.95 gal/sq ft
- At district level, the aggregated WUI in 2024: 9.48 gal/sq ft – not only exceeded 2025 target but also 2030 target
- Water results
 - Water cost avoided: \$240,000
 - Gallons saved: 9.6 million
 - Equivalent number of showers saved: 570,000

- 32 properties met 2020 target of 20% reduction from their building baselines v. 25 in 2023 – 15 of those properties met 2030 target v. 16 in 2023
- Transportation emissions benchmarked as annual emissions of carbon dioxide equivalent (CO₂e) per commuter
- Baseline for District in 2024: 1501 kg CO₂e/commuter/yr
- Actual in 2024: 1480 kg CO₂e/commuter/yr, well above 2020 target but significant reduction from 1706 in 2021
- Before COVID, only 10% of respondents worked at home – with 2020 spring lockdown, proportion of remote workers jumped to 45%
- Even with reopening in second half of year, 32% of respondents continued to work remotely
- Taken as whole, in 2020 the District achieved 1172 kg CO₂e/commuter/yr, below 2020 target of 1200 kg CO₂e/commuter/yr
- Proportion of remote workers declined in 2021 to 28% -- percentage of commuters who drove alone jumped from 39% during 2020 lockdown to 51%
- Percentage of remote workers dropped to 15.7% in 2022 and remained at that level in 2023 and 2024
- Rate of commuters driving solo increased to 58.8% in 2022, with rate stabilizing around 56% in 2023 & 2024
- Noteworthy drop in emissions per commuter during next 2 years from peak of 1706 in 2021, but they rose from 1403 in 2023 to 1480 in 2024
- As a result, even though District remained below baseline of 1501, it was well above 2020 goal of 1200, with 51.6% reduction needed to reach 2025 target
- Only good news for District members in 2024 was County and City's data revealed much worse results, with former hitting 1890 kg of CO₂e emissions per commuter and latter coming in at 1750
- Of course, from perspective of climate mitigation, it was even worse news
- Ithaca Green New Deal
 - City committed to achieving community-wide carbon neutrality by 2030
 - Latest GHG inventory: buildings make up estimated 58% of emissions in Ithaca – commercial sector contributes 38%
 - Energy efficiency and electrification in built environment key to achieving carbon neutrality
 - 2030 District's focus on improving performance of commercial buildings can clearly help accelerate reduction of community's carbon footprint