This Month's Theme: Capturing Waste for Energy


Waste energy presents a massive opportunity for building owners trying to improve energy performance and reduce carbon emissions. Lawrence Livermore National Laboratory estimates that about two-thirds of the energy produced in the U.S. is wasted yearly.

Reduce, recover, and then replace.

*Efficiency and heat recovery should be pursued before building electrification.*

Heat capture and recovery strategies can reduce peak loads, enable downsized electric heating and cooling equipment, and minimize electric grid impacts at scale, as our building stock becomes increasingly electrified.

Thermal networking can be applied on a floor-to-floor, building-to-building, or district basis. Supermarkets, data centers, and medical facilities, which constantly reject heat energy, could become primary heating sources for other buildings, using heat capture and reuse technology.

The 2022 energy flow chart released by Lawrence Livermore National Laboratory details the sources of energy production, how Americans are using energy and how much waste exists.
Capturing Wastewater energy:
Join our Lunch and Learn with SHARC Energy 3/12 to learn more about this topic.

SHARC Energy Projects
District wastewater recovery system: Alexandria Center for Lifescience

Highlights:
- 99% carbon reduction (as compared to traditional lab)
- 70% of campus building heat provided from city sewer wastewater
- leverages King County’s groundbreaking public-private legislation

Multi-family wastewater recovery system: Building Seven35 recovery system installation

Quick Facts:
- Energy savings of 75%
- GHG production reduced by 90%
- Installed heat capacity of 120,000 Btu/h
- LEED Platinum
- Built Green Gold
- CHBA BC award for most energy efficient and sustainable community
- The average water usage per town home is 250 gallons per day at an average exiting temperature of 20°C (68°F).

Capturing food waste:
Last month we talked about Sustainable Food Systems and Composting. Here are a few more resources and the EPA’s Wasted Food Scale.

Ann Arbor’s Commercial Composting Program
Tuthill Farms Composting operation
MSU Aerobic Digester “Rethinking Waste as Power for Campus” MSU is one of only three universities in the United States to have its own self-sustaining anaerobic digester, and it is the largest.

Want to do more around your home, but don't know where to start? The A2ZERO Home Energy Advisor may be just what you're looking for! The Office of Sustainability and Innovations will soon be offering this service to assist those looking to enhance energy efficiency, electrify their homes/apartments, add renewable energy, and/or explore battery storage. To learn more or ask your questions, please send a note to sustainability@a2gov.org.

Events
Genesis of Ann Arbor

Second Annual Climate Teach-In: Build Your Climate Action Toolkit
Keynote Speaker: United States Congresswoman Debbie Dingell, "Our Hopes for the Future" representatives of AAPS Freeman Environmental Youth Council, breakout sessions, "Community Solar and Other Initiatives" Missy Stults PhD, Director, Office of Sustainability and Innovations City of Ann Arbor, followed by networking.

Lunch and Learn: Implementing the A²ZERO Carbon Neutrality Plan
Session 3: Wastewater Energy Recovery - Sustainable Heating & Cooling using the power of wastewater systems. Speaker: Brock Trimble, SHARC Energy

HoW and Nonprofits Green Team Meeting #12: On Site Solar for Houses of Worship & Non-Profits
Speaker: Srinergy
~ Benefits of On-Site Solar
~ IRA Direct Pay Provisions: how do they work?
~ Options for procuring On-Site Solar Systems with Srinergy:
  - PPA: Solar PV, Charging Stations + new roofing (if needed)
  - Bulk Buy Opportunity: Solar PV + Charging Stations

SUSTAINABILITY SERIES: OSI is bringing the Sustainability Series back for another season at the downtown branch of AADL! Join in person, or online, the last Wednesday of every month. You can register here for the virtual meetings, registration is not required to attend in person.
  - March 27 – Circular Economy and e-Waste
  - April 24 – A²ZERO Equity in Action
  - May 29 – Rebates & Home Energy Advisor Services

AADL in person/virtual options

News Corner

DOWNTOWN PLANNING PUBLIC WORKSHOPS
WE WANT TO HEAR FROM YOU!
PUBLIC ENGAGEMENT MARCH 12, 13, 14

Ann Arbor DDA would like your
RMI - States Can Quantify the Benefits of Climate-Friendly Transportation Options With RMI’s Smarter MODES Calculator

Engagement from these public workshops will inform the Downtown Area Circulation Study and the City of Ann Arbor's new Comprehensive Plan. Learn more

Hyper Local Super Ecogroovy Lumber Now Available!
Urban Ashes will have a lot of great lumber with a sweet story - and full documentation on its carbon impacts - as part of the first big salvage project (Oak Wilt remediation in Bird Hills) in their brand new and very first Urban Ashes Circular UrbanWood Triconomy here in Ann Arbor. Contact Paul Hickman of Urban Ashes for more information.

New Member Shoutouts

Join the 2030 District and start your Zero Net Energy journey!

Property Owner/Manager

The Standard at Ann Arbor

The Boyd Group

Whittemore County Parks & Recreation Commission
EGLE announces 2024 energy grants open for applications:

- $250,000 available to small manufacturers to implement process energy efficiency measures. Applications close March 3, 2024.
- $150,000 available to local governments, tribal governments, and other public-service entities for energy-related projects. Applications close March 30, 2024.
- $100,000 available to small manufacturing related businesses for implementing energy efficiency upgrade recommendations following an environmental assessment. Applications close March 3, 2024.

Energy Management Grants
Ann Arbor / Washtenaw 2030 District 2024 Energy Management Grant Program. Member buildings are eligible for grant funding for Energy Audits, Retro Commissioning and Electrification Plans. We support you wherever you are on your carbon neutrality journey. Contact: jculbertson@2030Districts.org if you are interested in learning more.

City of Ann Arbor Benchmarking Ordinance 2024
All commercial and multifamily parcels with buildings totaling 20,000 SF or more are required to benchmark by June 1, 2024. More information can be found here, such as how to file for an extension and the covered buildings list. The A2 2030 District is here to help you through the process. Contact: a2benchmarking@2030districts.org

Eliminate your Scope 2 emissions today by enrolling in DTE’s MiGreen Power Plan. It is now priced less than your regular power! Available for residential and business accounts. Contact jculbertson@2030Districts.org if you are a building owner/manager with multiple properties and the 2030 district can connect you with a MiGreen Power representative.

You can now follow us on Instagram and Facebook!
Have feedback on website or newsletter? Please contact karethurman@2030districts.org