

Ann Arbor's Proposed Sustainable Energy Utility

100% Clean, Reliable, Resilient, Locally Built and Owned, Optional, and Supplemental Utility



TABLE OF CONTENTS

Context Vision Examples of Services Next Steps

Ann Arbor's Sustainable Energy Utility

Emissions by Source



- 40% of community-wide emissions come from building electricity usage
 - Nearly 70% come from buildings as an entire sector
- Vehicle (and building) electrification is increasing this figure
- Goal of a just transition to community-wide carbon neutrality by 2030 (A²ZERO)



Ann Arbor Energy Profile



Renewable share of Ann Arbor's power supply will increase due to State mandate, DTE plans, and current Ann Arbor initiatives, but will not reach 100%, without further interventions.



Michigan Energy Context





- Ann Arbor has a pre-Foote Act franchise, meaning our current utility's franchise is considered perpetual.
- Foote Act franchises are not exclusive; MI law gives cities and villages the right to compete, as well as the Constitutional right to take over an existing franchise. That means we could:
 - Buy out DTE's infrastructure (traditional municipalization)
 - Create a parallel utility to supplement DTE's service (SEU).
 - Continue the relationship we have.
 - Push for new utility laws and policies.
 - Other...

What if?

We created:

- A community owned energy utility that provides reliable and resilient electricity from local solar and battery storage systems installed on homes and businesses throughout the City.
- A supplemental utility that offers sustainable ways to heat and cool your home or business, like from networked geothermal.
- A utility that gives residents a choice for where they procure their energy.
- A parallel utility that immediately reduces emissions and invests in the utility of the future.



A Sustainable Energy Unit







What is an SEU

- The Ann Arbor SEU would be a community owned energy utility that provides electricity from local solar and battery storage systems installed on homes and businesses throughout the City, authorized to also provide geothermal (ground source) and air source heat pumps.
- A utility authorized to invest in energy efficiency and electrification of our homes and businesses.
- A utility that provides services to at-risk and underserved communities.
- A utility focused on generating clean, reliable, and resilience energy.





What services could an SEU provide?

- Solar and energy storage to improve reliability.
- Air source and ground source heat pumps, including networked geothermal.
- Robust energy waste reduction efforts that improve indoor comfort, health, and safety, all while saving money.
- Microgrids(ish) between neighboring households, to share solar and storage.
- Support for beneficial electrification to support cleaner and safer homes and businesses.
- On-bill financing to help lower the costs of beneficial electrification and efficiency improvements while increasing payment flexibility.
- Over time, community solar programs and new community desired clean energy offerings.



Why an SEU?



An SEU focuses on locally generated, clean, community-owned power. It would:

- Invest immediately in clean energy in our community.
- Help more Ann Arborites access the benefits of clean energy and receive energy waste reduction services.
- Focus on increasing the reliability and resilience of our energy system.
- Advance our community's commitment to climate and equity.
- Deploy renewable energy fast, immediately reducing emissions.







What would be needed to make an SEU work?



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SEU Projections and Rates





- To succeed, the SEU must be costcompetitive with private solar leases.
 - It is.
- Storage cannot be paid for by avoided energy costs but provides the customer resilience value (think generator).
 - Cheaper than generator.
- Financing requirements for the SEU can be debt, grants, or provided by an equity partner.
 - We've got interest from all of the above.

Key Variables to SEU Success



- Adoption rates matter. The more renewable energy the SEU deploys, the more affordable the system.
 - Interested in joining the waitlist?
 - https://osi.a2gov.org/SEUwaitlist
- Financing matters. Which is why the City is:
 - Exploring grants
 - Investigating PPA arrangements
 - Looking at Green Bonds
 - Exploring private capital investment
 - Looking at Greenhouse Gas Reduction Fund opportunities







On November 5, 2024, Ann Arbor voters will be presented with the following question:

The City of Ann Arbor proposes to create within its boundaries an opt-in, publicly owned Sustainable Energy Utility ("SEU") to (i) supply, generate, transmit, distribute, and store electricity, heat, cooling, light, and power (solely from renewable sources); and (ii) provide energy-related services. The SEU could, for example, provide individual or networked rooftop solar panels, heat pumps, geothermal systems, or batteries to customers to supplement existing utility services. The SEU will be fee-based. This proposal does not authorize new taxes.

Shall the Charter be amended to authorize the City to establish, construct, own, and operate an opt-in Sustainable Energy Utility?





How a Sustainable Energy Utility could work



Ann Arbor's Sustainable Energy Utility

15

Examples: SEU-Owned Solar

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- Enroll in the SEU as a supplemental utility to DTE.
- SEU places solar on roof, maximizing the generation potential, and sending the excess to SEU-owned storage (and eventually to neighbors).
- SEU assists in electrification and efficiency improvements. Homeowner has option to finance upgrades with on-bill financing.
- Can eventually connect to networked geothermal system.
- Resident receives two bills, one for usage from DTE and one for usage from the SEU.



Scenario 1: SEU Owned Solar

Example: SEU W/O On-site Solar



- SEU assists in electrification and efficiency improvements. Resident has option to finance upgrades with on-bill financing.
- Once micro grids become available, resident receives power from excess energy generated by neighbors or the SEU's battery system.
- Once available, resident can sign up for networked geothermal to heat and cool their home/business.
- Resident receives two bills for SEU financed improvements and/or SEU drawn solar and one from DTE.



Scenario 2: Homeowner/Business with poor solar potential

Example: Customer-owned solar

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- Resident enrolls in the SEU.
- SEU assists in electrification and efficiency improvements. Resident has option to finance upgrades with on-bill financing.
- Resident uses power from their solar system - any excess is sold to the SEU and distributed through the micro and/or nano grid to neighbors (*once available*) OR put onto the SEU battery system OR sold to DTE.
- Can eventually connect to networked geothermal system.
- Owner receives two bills, one from DTE and one from the SEU.



Scenario 3: Homeowner/Business who owns their own solar

Example: Renters



- Enrollment and programs are done in coordination with landlord.
- Renters are eligible for all applicable SEU programs.
- Green rental leases and onbill financing enable the improvements to stay with the building, the financing to be spread over a longer period, and the benefits to be realized by current and future tenants.



Scenario 4: Renters and Multi-Family Units





- More details available at www.a2gov.org/a2seu
- Conduct outreach and engagement with the public.
- Fundraising for SEU microgrid(like) creation.
- Have questions or interested in a presentation for your organization, reach out to sustainability@a2gov.org







www.a2gov.org/a2seu

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