INTERNATIONAL DISTRICT ENERGY ASSOCIATION

System of the Year 2023

2022 System of the Year
Toronto District Energy System, Enwave Energy Corporation

Created in 1992, the International District Energy Association System of the Year Award recognizes the most outstanding district energy system, one that demonstrates a high level of performance, efficiency and reliability and best exemplifies the many features and benefits of the district energy industry. The award serves to:

- **Provide a global industry benchmark for industry excellence, recognizing systems that illustrate the operational advantages of district energy in providing sustainable, efficient, reliable, and resilient energy services in their communities.**
- **Provide a platform for sharing ideas, best practices and innovations that have helped to make district energy systems successful.**
- **Identify and promote the importance and value of district energy systems in the marketplace relative to other forms of energy generation and distribution.**
- **Further publicize district energy as a progressive industry that seeks continuous improvement in the services it provides.**

Eligibility

To be considered for the System of the Year Award, the district energy system will be comprised of a central plant or plants providing thermal energy and/or electricity to three or more buildings through a distribution network. The system may incorporate technologies such as highly efficient heating and cooling, combined heat and power (CHP), waste energy recovery, waste- to-energy, thermal storage, renewables, microgrids, and other related technologies.

In addition, eligible systems must meet the following criteria to be considered for this award:

1. Subject district energy system and/or system representative must be a member in good standing of IDEA or be managed by an entity that is an active member of IDEA.
2. The system may be publicly or privately owned.
3. A university, military, corporate or healthcare campus, downtown utility, municipal, airport, community or government-owned entity serving three or more separate building facilities is eligible.
4. The system must have been in operation for at least two (2) years. Start of operation determined by date of continuous service to first customer or facility.

2021 System of the Year
Ever-Green Energy, Milwaukee, WI

Submission Process

All submissions must include the following information about your system, submitted as a PDF or Word document in the following order.

Descriptions of each category to follow.

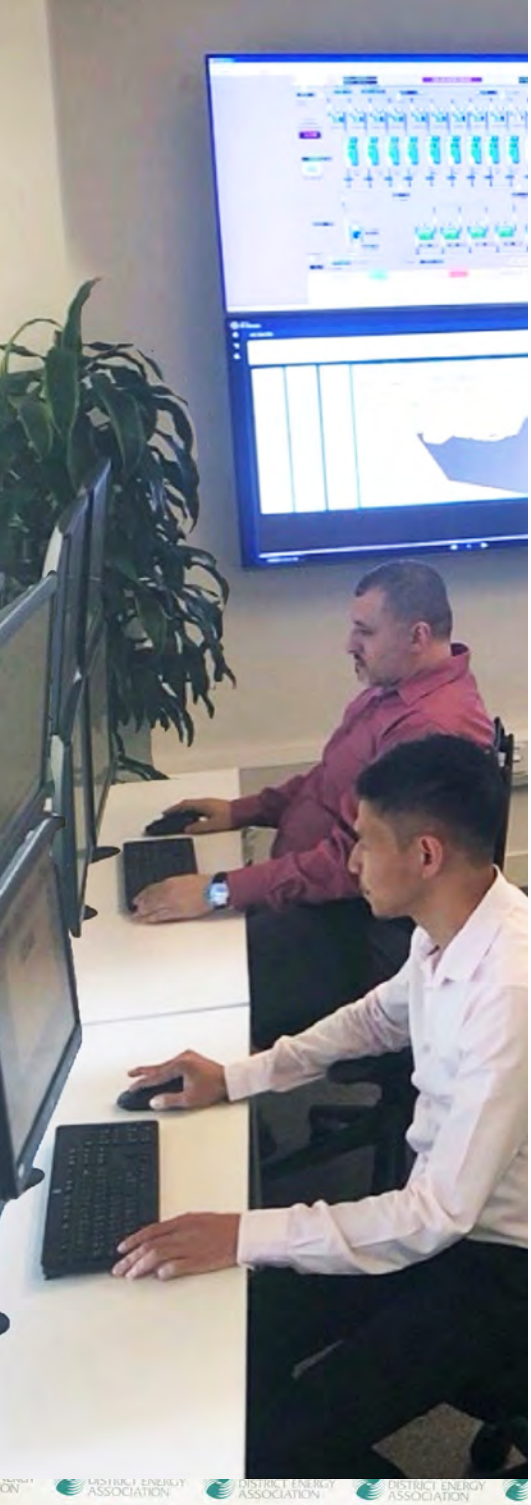
1. **Cover Page**
2. **System Description**
3. **Demonstrated Efficiency (include calculations)**
4. **Demonstrated Availability/Reliability (include calculations)**
5. **Demonstrated Resiliency**
6. **Environmental Benefits**
7. **Sustainability Efforts**
8. **Workplace Safety/Employee Training**
9. **Customer Relations Strategy**
10. **Community Involvement**
11. **Availability/Reliability Worksheet (separate excel spreadsheet)**

Submissions must be received by Friday, April 7, 2023.

To view past submissions, visit https://www.districtenergy.org/membership-services/awards-scholarships/system-year-award

1. **Cover page** – state the name of the system, location of the system, name of the owner, type of ownership, and the name, phone number, email and physical address of the person submitting the portfolio. You may also include photos of the system and logo.
2. **System Description** – A 1-2 page description of the system with key information covering history/background, unique characteristics, recent improvements, or notable features that distinguishes the system from the peer group, e.g., system history, configuration of production units, distribution network, number or square footage of buildings/customer facilities served, average age of production and distribution system facilities.
3. **Demonstrated Efficiency** – Data representing the system's overall efficiency for the past two years of operation. The data shall include detailed energy inputs/outputs and calculations of efficiency based on industry standard methods. Inputs shall include all energies added to the process, such as: fuels, waste thermal, electricity, other mechanical energies, etc. Outputs shall include all energies delivered to customer, such as: thermal (steam, hot water, chilled water), electricity, other mechanical energies, etc.

   Calculated efficiency shall be represented in recognized industry standards, such as: thermal efficiency (%), Tons/kW, coefficient of performance (COP), Btu/kWh (Heat Rate), etc. Submissions shall include calculations to show how efficiencies are determined. Systems delivering multiple utilities to customers may also provide utility specific efficiencies, in addition to their overall system efficiency, to best represent their system.



2020 System of the Year
Tabreed, UAE

4. **Demonstrated Availability/Reliability** – Data demonstrating the system's district heating, district cooling, power and overall service reliability for a minimum of two most recent years. Data should reflect both plant production availability, fuel flexibility capabilities and reliability of customer service. Data should also include normal operation criteria. Use the following formulas in your submission. Download the Availability-Reliability worksheet by clicking the "Download Availability/Reliability Worksheet" button and return the completed worksheet with your submission.

   Availability (%) *= 1 – [Total hours of unplanned outage / (total hours in period x no. of production units)] x 100*

   Reliability (%) *= 1 – [customer hours of unplanned and interrupted service / total annual customer hours] x 100. (Temporary shutoffs for planned construction or maintenance should not be included as interruption hours.) Interruptions are defined as incidents where the service provider deviates from acceptable operation criteria, e.g., low pressure steam header drops below 20 psig for three hours.*

5. **Demonstrated Resiliency** – Description of recent demonstrated resiliency and business continuity in the face of extreme weather or other factor that threatened operations. Description of features that are installed to provide system resiliency; recent investments to upgrade resilience and operational reliability is recommended.

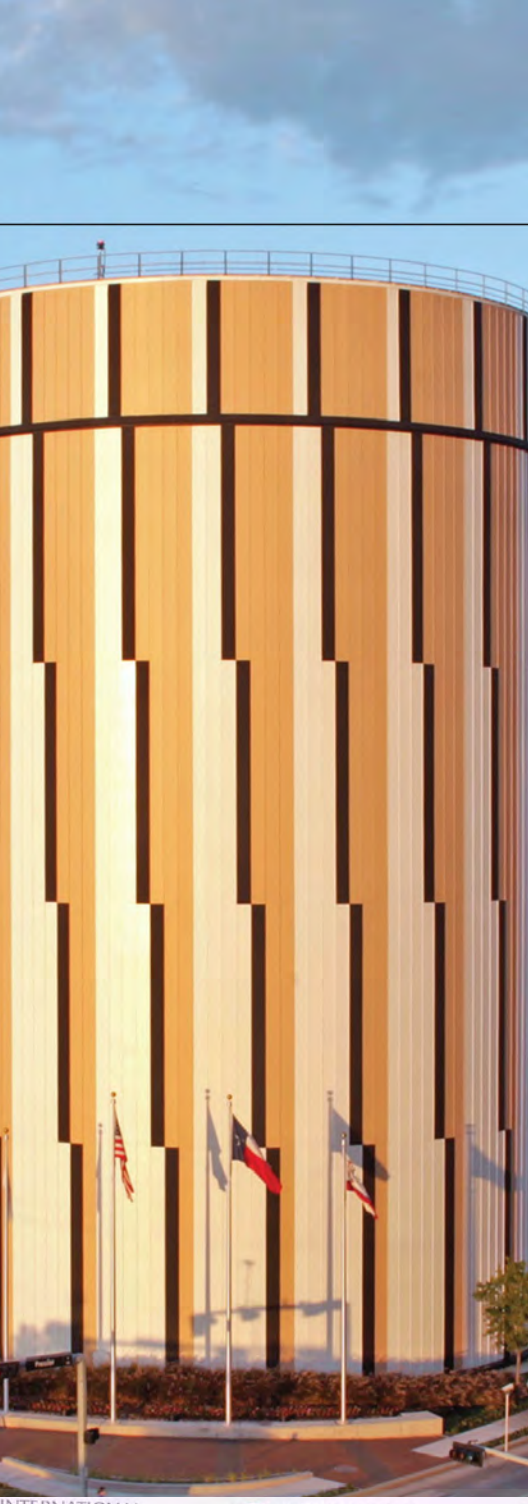
6. **Environmental Benefits** – Description of (1) environmental benefits system provides above other available energy options and (2) environmental compliance strategies successfully implemented, e.g., emissions reduction credits, etc. How has the system reduced greenhouse gas emissions? How has the system reduced other emissions in your community (NO_x, SO_2, particle emissions) or achieved other environmental benefits?

7. **Sustainability Efforts** – Evidence of sustainability in addition to system efficiency and environmental benefits described above. Description of sustainable practices, e.g., water conservation; recycling/waste reduction; building efficiency adaptation and/or incentives or assistance to customers for building efficiency improvements; reduction of other impacts on environment such as streams, rivers, etc.; use of renewable sources of energy; etc.

8. **Workplace Safety/Employee Training** – provide evidence of safe work environment. Minimum two years record of reportable accidents. Provide description of employee safety and training programs as well as effective safety incentive programs.

9. **Customer Relations Strategy** – Describe your efforts to provide exemplary customer relations and improve customer satisfaction, including brief review of communication and marketing efforts (customer newsletters/communications, customer service seminars, customer retention efforts, customer service improvements.)

10. **Community Involvement** – Documentation of the positive impact the system and its employees have on the community or area served. This would include community relations including for example education, plant tours, outreach to local governments, participation in professional organizations, awards and recognitions, involvement in community activities, letters from customers and other activities that demonstrate good citizenship.



2019 System of the Year
Thermal Energy Corporation (TECO)

Judging

1. Judging will take place in April 2023. The award will be presented at IDEA2023 in Chicago, IL June 5-8, 2023.
2. Judging will be based solely on the information submitted, as highlighted in the Submission Process section. The quality of the submission, clarity, simplicity, layout, and attractiveness will facilitate review.
3. Judging will be conducted by a seven-member Awards Committee appointed by the IDEA President and comprising a cross-sectional representation of IDEA membership. Judges will possess a high level of knowledge and experience in the district energy industry.
4. Judging is based on the preceding Criteria. If the competition is close or if more than one system deserves recognition on merit, the judging panel has the option to recognize entrants with an Honorable Mention Award or with a Certificate of Special Merit.
5. The decision of the Awards Committee shall be final.

Announcement of Winner

- IDEA will notify the winner in April 2023 and award will be presented at IDEA2023. IDEA does not pay for travel to the event or registration fees for the winner.
- Submitters who are not selected for the Award will be notified at the same time.

Benefits to the Award Winner

- Two (2) commemorative award plaques presented at Annual Conference. One large (11” x 14”) for public display. One small (5” x 7”) for personal display.
- IDEA will produce and disseminate a blog post on the IDEA website featuring the award recipient along with photos.
- IDEA System-of-the-Year digital file from IDEA for use on the winner’s stationery, website or marketing materials.
- Award notice will be posted on IDEA website along with a list of previous recipients. The Summary page of the winning submission will be posted on the IDEA website. Submitters must agree that all material submitted in this summary page is approved for public distribution. The remainder of the material submitted will be considered confidential and not distributed publicly.
- Opportunity to present an overview of System of the Year award submittal content at a special session at a future IDEA Annual Conference and/or a webinar.

Submission Rules and Deadlines

Submittals for IDEA System of the Year 2023 must be in pdf, .doc, or .docx format using the Calibri font, size 12 point, along with the availability and reliability worksheet. Both must be received by end-of-business Friday, April 7, 2023.

Email submittals to Jason Beal, Director, Member Services, at jason.idea@districtenergy.org. For files larger than 10 MB, please connect with Jason directly for instructions on submitting via file share.

If you have questions about the process, please contact us at **idea@districtenergy.org**; **+1 508-366-9339**.

For a list of past winners, visit:

https://www.districtenergy.org/membership-services/awards-scholarships/system-year-award

2018 System of the Year
University of Texas at Austin

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1.11.23