CenTrio

Bold Action. Gentle Impact.

2022 SUSTAINABILITY & IMPACT REPORT

CenTrio

CenTrio's district energy systems play a critical role in the transition of our cities, neighborhoods, and campuses into a more sustainable and equitable future. With enthusiasm and excitement, we present the first Annual CenTrio Sustainability and Impact Report for 2022.

As an organization dedicated to sustainability and maintaining a 99.99% reliability record, we are grateful for the opportunity to highlight and recognize some of our outstanding accomplishments in 2022, including starting up operations for the largest waste-heat recovery system in North America at Denver National Western Center (NWC), implementing an ultra-filtration system that leverages the Chicago River for agua-thermal heat rejection, resulting in over 250M gallons of municipal water saved, and beginning our 30-year partnership with Louisiana State University (LSU) Baton Rouge main campus, where we are pioneering sustainable practices together, in what has become a modernized campus district energy system. We will also explore results of our founding year's vision to spearhead sustainability and resilience, as well as share our next steps in the spirit of continued improvement.

At CenTrio, we have the privilege of contributing to an industry that keeps us closely connected to our customers and the communities we serve, to not only adapt, but collectively thrive in the face of a changing climate.

From river-water cooling to thermal ice storage, the inspiring reality of working so closely with the Earth's natural resources compels us to regularly evaluate and evolve our relationship with the environment, seeking new decarbonization opportunities and resource viability.

The core motivators for our ESG program framework are derived from the sustainability principles that are the bedrock of CenTrio. We are compelled to incorporate an ethic of environmental care, social equity, and financial responsibility into all our programs, practices, and guiding documents. To CenTrio, sustainability is not just a responsibility or an obligation-these principles are our mindset and provide a myriad growth opportunities and creative solutions to very complex community and global problems. The strategies and framework of our operations are directly linked to the risks associated with a changing global climate; therefore, we embed sustainability within our strategic assessments and operational planning. By taking this approach, we are embarking on a meaningful journey towards a lower-carbon future that respectfully prioritizes climate resilience and the growing need for corporate environmental stewardship.

Thank you again for recognizing our efforts in the battle against climate change. Together, we can push the boundaries of sustainable energy and truly innovate to make a difference!

FORWARD **FROM LEADERSHIP**



ERIC MILLER

Chief Executive Officer



MEGHAN RIESTERER

Chief Sustainability Officer and SVP Decarbonization & ESG

Through innovative decarbonization, we not only protect our world, but cultivate a spirit that transforms organizations into pillars of strength – empowering communities and inspiring meaningful progress.

CenTrio

TABLE OF CONTENTS

CenTrio and Our Sustainability & Impact Report Overview

05

07

13

26

31

People and Community

Operational Excellence

System Innovation

Looking Ahead

DELIVERING THE ULTIMATE VALUE



Introduction to CenTrio and the Sustainability and Impact Report

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CenTrio has one of the largest district energy portfolios in the United States, providing centralized cooling, heating, and electricity to over 370 customers, across 140+ million square feet. We empower customers to deliver on their mission by modernizing, operating, and managing their utility systems and transferring operational risks out of these non-core assets, ultimately balancing the social systems, environment, and economies.

CenTrio's notable innovations include North America's largest ice battery system, in Chicago, and largest sewer heat recovery system. in Denver.

CenTrio's promise to our team, partners, shareholders, and planet is to work toward a future where we protect and conserve natural resources, while creating neighborhoods and communities that can not only adapt in a time of great change, but also thrive by respecting the role energy can and should play as a service and need of the human and financial aspects of a healthy ecosystem.

At CenTrio, we are very proud of the establishment and growth of our Sustainability Program in 2022. This Annual Sustainability and Impact Report utilized our Environmental, Social, and Governance (ESG) platform to share the results of this year's approach to lead by example while driving for continued improvement.

CENTRIO FOOTPRINT

SOFT SERVED

CUSTOMERS













O2 PEOPLE & COMMUNITY -OUR MINDSET

Sustainability is embedded throughout our entire organization with innovation, education, and accountability mechanisms strategically driven from within our Environmental, Social and Governance (ESG) program.

Our ESG principles and practices are more than an obligation; they inspire the way we work, inform our culture, provide opportunities for growth, and anchor our strategic assessments and operational planning. Linking our growth strategies, governance frameworks, and operations with sustainability is core to our journey toward climate resilience.

2A. SUSTAINABILITY TEAM

CenTrio's business is very connected to the Earth's natural resources, positioning us at the forefront of the rapid energy transformation happening across the globe.

Recognizing that a strong Sustainability Program is a key to our success, CenTrio hired a Chief Sustainability Officer to develop and execute our Sustainability Program in 2022. The CSO reports directly to the Chief Executive Officer and presents quarterly to CenTrio's Board of Directors.

Additionally, CenTrio created and filled the position of Climate and Energy Senior Engineer to inspire the examination of technical decarbonization strategies. Further supporting the Sustainability Program is the Sustainability Working Group, which was established in 2022 as a cross-disciplinary and diverse group of staff to help guide and execute the Program and its many efforts.

2B. COMMUNITY ENGAGEMENT

Continuing decades of service to our communities providing reliable, cost-effective and sustainable energy services, today we work tirelessly to invest in and upgrade our systems, develop meaningful relationships with our communities, and create innovative ways of pricing and risk transfer that result in positive impact on our climate, in our communities, and to our customers.

- Focused on addressing environmental health, social equity, and viable economics within three spheres of influence: CenTrio, our communities, and the world
- Partnering with community organizations in each district to continue advancing locationspecific reliability, cost-effectiveness, and sustainability initiatives as we participate in the energy transition and work toward decarbonization

- Committed to developing multi-faceted academic enrichment, engagement, and outreach programs on college campuses leveraging unique planning and construction
- Using central plants as a living, learning lab for energy engineering and decarbonization technologies



NATIONAL WESTERN CENTER - 2022 RIBBON CUTTING







2C. DIVERSITY, EQUITY, & INCLUSION

We know that our greatest strengths come from the people who make up our team. CenTrio is committed to the creation and nurturing of a diverse community of individuals through inclusive excellence. In all our practices and daily functions, we strive to create positive impact within the communities we serve, work, and live in. In 2022, an employee satisfaction survey was sent to all employees to gather and collect feedback for the opportunity to improve and create action to enrich the health and well-being of our people. The participation rate was strong at over 60% of all employees. The results showed very favorable employee satisfaction conditions for CenTrio in 2022. Senior leadership presented the results to each system, focusing on how we achieved and will maintain the top 10 ranked categories as well as how we will address and improve the bottom 10 ranked categories. Annual survey results will be featured in future Sustainability and Impact Reports.

At CenTrio, we have included in all our job There have been zero incidents of discrimination descriptions a statement about our belief that documented within this reporting period. diversity involves recognizing the value of differences and the inclusion of all members of In 2022, much of CenTrio's people metrics tracking the community, including those that experience has followed industry efforts to address historical discrimination or under representation. This is a gender imbalances facing the district energy core value of the organization, and we strive for industry; however, in 2023 CenTrio looks forward a culturally diverse work force that reflects the to evolving our program to holistically address multicultural nature of the nation and our world. other important pieces to a strong diversity, Diversity and inclusion bring unique strengths equity, and inclusion program, such as focusing on and abilities to every conversation, and we use diversity within our job recruitment practices and these to advance CenTrio's operational excellence. formalizing a Diversity Policy. Additionally, we continuously monitor important people equity metrics as it relates to our business.

In 2022 these include:

- Board member composition: 33% female
- Female to male gender pay gap: 1.16% annual average
- Gender ratio of all promotions offered in 2022: 28.57% female promotion
- Female to Male full-time employee ratio: 1:9



CENTRIO AND DE&I

A formal program was launched in 2022, as part of a strategic partnership with LSU.



CENTRIO - BATON ROUGE

Creating positive impact within the communities we serve, work, and live.



2D. CASE STUDY: LSU BATON ROUGE SUPPLIER DIVERSITY PROGRAM

Louisiana State University's main campus in Baton Rouge is taking an important step toward building a more reliable, efficient, and sustainable campus to modernize LSU's district energy facilities. With CenTrio's leadership, expertise, and finance capabilities, the over 100 year-old energy and utility system that provides critical support to the campus will be improved and modernized in a way the not only supports a more sustainable future but one that also respects and strives for a more equitable and inclusive future through a strong Diversity Supplier Program established in 2022.

To successfully develop and measure a diverse supplier subcontracting plan for the campus steam and chilled water modernization efforts, CenTrio has partnered with LSU Baton Rouge Diversity Office and the experienced local team, DMM & Associates. The team is committed to aggressive outreach, targeted bid solicitation and equal opportunity measures with a focus on the following diverse supplier certification categories:

- Disadvantaged Business Enterprise (DBE)
- Minority-Owned Business Enterprise (MBE)
- Service-Disabled Veteran-Owned Small Business (SDVOSB)
- State & Local Disadvantaged Business Enterprise: Hudson Initiative (Hudson)
- Women-Owned Business Enterprise (WBE)

The infant year of this program resulted in diversity metrics exceeding federal construction benchmarks while sharing CenTrio's strong business ethics, realizing community and economic development priorities, and aligning the campus utility modernization effort with the United Nations Sustainable Development Goals.



The Audubon Sugar Factory (Constructed in 1925)



The Audubon Sugar Factory (Current Day)







3A. IMPACT THROUGH METRICS

CenTrio operates under a set of standards for operational excellence which extend beyond physical plant operations and which consider the risks and opportunities impacting our ability to sustain long-term values - and we are not alone.

Our customers, our investors, and our partners also have bold, commonly shared sustainability goals. On a global scale, we must consider the impacts of sustainable action and the important ramifications that our decisions today will have on the entire world tomorrow.

The CenTrio ESG Framework and Sustainability Program is aligned with international sustainability methodologies, such as the World Resources Institute GHG Protocol and the United Nation's Sustainable Development Goals (SDG).

We have identified the SDG's that align with our work and highlight CenTrio's positive impact in the holistic transformation to a sustainable future.

BUSTAINABLE G ALS

I. SDG 3: Good Health and Wellbeing – our customers include numerous critical care operations like hospitals, clinics, and university medical campuses.

II. SDG 4: Quality Education – we deliver reliable thermal energy to schools and universities, while leveraging modernization projects to enhance educational opportunities.

VII. SDG 11: Sustainable Cities and Communities
- we seek continuous partnership with our host cities and surrounding community organizations to create sustainable, resilient infrastructure.
Some of our facilities serve as emergency operations centers during catastrophic natural disasters.

IV. SDG 7: Affordable and Clean Energy – we use economies of scale, cutting-edge technologies, and a lean workforce to minimize cost and maximize resilience when delivering thermal energy.

V. SDG 8: Decent Work and Economic Growth - our systems provide safe, stable, and good paying jobs in each community that we operate within.

VI. SDG 9: Industry, Innovation, and Infrastructure – we work closely with federal, state, and local governments to identify opportunities for collaboration in advancing technological innovation.



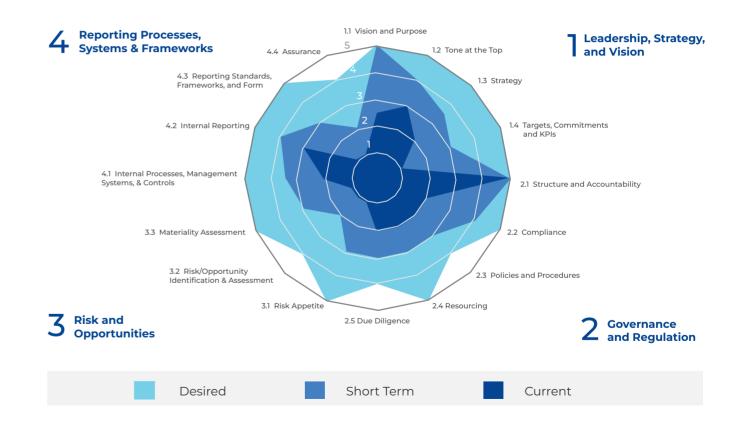
VIII. SDG 12: Responsible Consumption and Production–westrive for continuous improvement in areas of efficiency, waste, and emissions, while simultaneously right-sizing our systems to ensure that we are only producing what our customers need at any given time.

IX. SDG 13: Climate Action – In 2022, we began drafting our Decarbonization Implementation Strategy and target being carbon neutral by 2050.

In 2022, CenTrio conducted and developed its first materiality assessment entitled "CenTrio Sustainability Capability and Government Maturity Model". The Model collected input from ownership, leadership, and employees and will be updated on an annual basis. This Model assesses CenTrio's current state of sustainability management and reporting maturity against a set of tailored criteria. The tool is made up of levers and attributes. The purpose and function of the model is to assess CenTrio's current and desired sustainability maturity to drive action and improvement.

Our year-1 results indicate that CenTrio has initiated this process with a mature framework for sustainability structure and accountability. 2022 was a building year wherein we have identified levers and opportunities for rapid advancement of several criteria, including tone and the top, targets and KPIs, internal reporting, risk assessment, and vision and purpose. We expect to enumerate on each of these metrics in future years as we move toward our desired state of sustainability awareness, action, and communication.

SUSTAINABILITY CAPABILITY & GOVERNANCE MATURITY MODEL



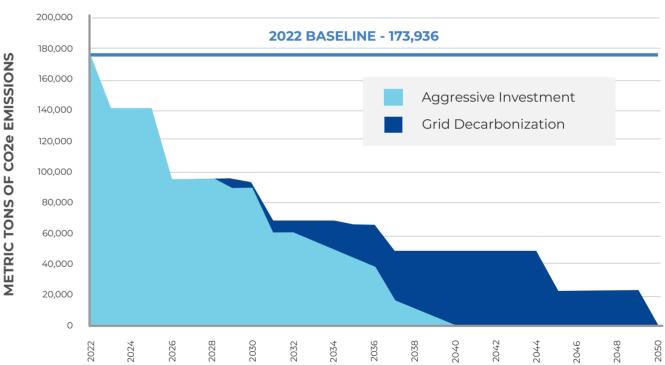
3B. PORTFOLIO GHG SCOPE 1 & 2

One of our major accomplishments within 2022 was gaining a better understanding of our GHG Scope 1 and 2 emissions profile. CenTrio utilizes the Greenhouse Gas Protocol accounting tool for measuring and managing our Greenhouse Gas Inventory. The next phase of this GHG accounting work will begin in 2024 and with an audit that focuses on addressing the Scope 3 contributions to CenTrio's carbon profile.

The Step-Down Chart (on the right) was generated by using 2022 metrics as a baseline. It was constructed by assuming two scenarios: 1) aggressive investment in renewable electrical generation and physical mitigation of carbon emissions by fuel-source optimization, and 2) investment in fuel-source optimization while allowing each supporting electrical grid to move toward carbon-free operation per grid carbon neutrality goals and state-sponsored legislative mandates. Under Scenario 1. we will invest in vertically integrated renewables or physically install renewable generation capacity equivalent to 10% of

our portfolio demand per year between 2029-2040. Fuel-related reductions are achieved by installation of low-carbon processes in the Seattle steam plant to achieve WA Climate Commitment Act compliance (reduction to 25,000 M Tons/yr emissions), complete decarbonization of Seattle (2031), and decarbonization of the New Orleans steam plant (2036). Water reductions are based on 4% process efficiency and loss-reduction improvements per year from 2027-2050. This timeline may be enhanced by installation of carbon-sequestration technology at the building and/or plant level. Carbon neutrality may also be achieved more quickly by installing renewable energy generation that is greater than facility demand, such that CenTrio becomes a net exporter of clean electricity. Under Scenario 2, we approach fuel-based emissions and water identically, but rather than investing in renewable energy generation, we allow time for each grid operator to meet their published interim and long-term carbon neutrality goals.

DECARBONIZATION PROGRESSION FROM A 2022 BASELINE



SYSTEMS DECARBONIZATION 2022 - 2050

CENTRIO CHICAGO

CenTrio operates the largest carbon-free district cooling system in the United States consisting of 6 plants - 5 interconnected and 4 with thermal ice storage and serving 115 buildings in downtown Chicago.



3C. CASE STUDY: CENTRIO CHICAGO DISTRICT COOLING SYSTEM

From innovative river-water cooling to thermal ice storage or "Ice Battery", the district has evolved into a beacon of hope for a climate-resilient future. This unique system was designed to operate at night and melt during the day, reducing costs and carbon emissions and it also leverages the Chicago River for aqua-thermal heat rejection and employs proprietary technologies, saving 250M+ gallons of water annually, benefiting the community and establishing higher industry standards.

CenTrio's Chicago system began operation in 1995 and boasts a 99.99% reliability record. Throughout that time, the system has grown from a single central plant serving a handful of downtown customers to a district of five distribution plants interconnected by 8.5 trench-miles of piping and several satellite chiller plants that serve over 53 million square feet of commercial, residential, hospitality, retail, entertainment, and critical process load customers.

The scale and long-term phased growth of the

system has required strategic planning around operations, plant design, and construction. This has led to CenTrio becoming the standard bearer for operational excellence in district energy systems. With multiple plants being built, maintained, and modernized over a 28-year period, numerous technologies and operational strategies have been deployed to maximize efficiency, reliability, and water savings while minimizing real estate footprints and capital costs.

Recent plant construction and upgrade projects have utilized the newest, most efficient equipment and control systems. CenTrio has also identified ways to leverage existing infrastructure in new ways that were not contemplated at the time of original construction. For example, CenTrio's 310,000 ton-hour ice thermal storage system was developed primarily to leverage low-cost nuclear power at night in the 1990's. While still valuable for reducing electricity costs, lowering carbon emissions, and improving grid stability, CenTrio has further leveraged this asset through participation in demand response programs. CenTrio has invested over \$300 million in the growth and operation of its Chicago system.



The Old Post Office - Exterior





The Old Post Office - Interior

The Old Post Office

Looking out at the Chicago skyline, you will see one of CenTrio's newest customers, The Old Post Office (OPO). This project entailed tunnelling under the Chicago River to bring district service to the site and the development of a new on-site satellite plant. The district connection was made by constructing a pair of shafts approximately 55' deep on the east and west banks of the Chicago River. A 60" diameter bore was made to bring 24" supply and return chilled water pipes and several conduits from CenTrio's existing distribution network. Various regulatory bodies including CDOT, the Illinois EPA, and the Army Corps of Engineers were involved in the review and approval of the project.

Complicating construction of the shafts were their proximity to the structural river wall, requiring advanced engineering and construction methods. Due in part to the timeline required to complete such a complex interconnection project, an onsite plant was constructed to serve The Post Office during construction and initial occupancy. It now provides additional on-site reliability. The developer's plans for a rooftop park and surface level plaza eliminated the possibility of using cooling towers for the on-site plant. A river water system was installed for heat rejection. CenTrio also supplies condenser water as a service to tenants within the building utilizing river water.



CENTRIO CHICAGO - PLANT 6 (INSIDE THE OPO)

River Water Heat Rejection

Two of CenTrio's five distribution plants and one of its satellite plants utilize the Chicago River for heat rejection in lieu of cooling towers, reducing freshwater usage associated with cooling systems by 250,000,000 gallons annually.

The permitting and construction of these systems required strict adherence to environmental standards, as well as, review and approval from the City of Chicago, U.S. Army Corps of Engineers, and the Illinois Department of Natural Resources.

In addition to complex initial construction, extensive maintenance is required for reliable operation, and upgrades to the systems have been required to meet new NPDES permitting requirements. The operational savings that resulted from this effort, instigated some progressive carbon-free power purchase agreements for the entire operation.









CENTRIO CHICAGO - PLANT 2



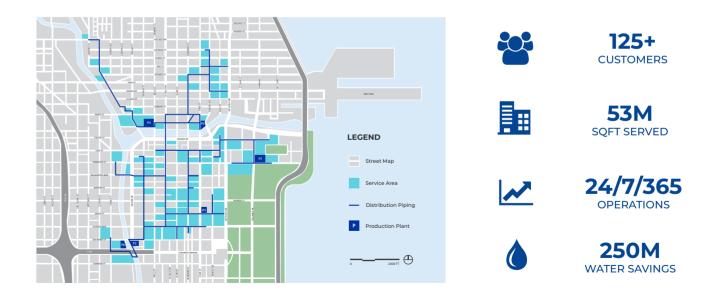
Plant 2 Modernization

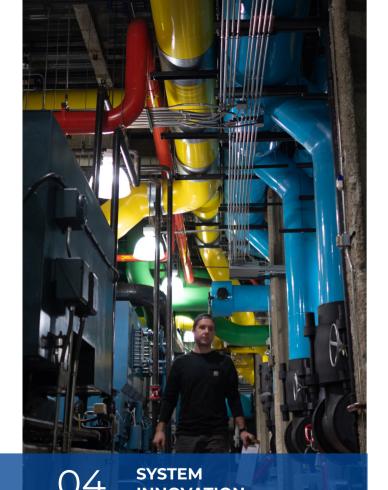
In 2021, CenTrio completed a modernization project at distribution Plant 2. This project consisted of replacing end-of-life equipment with more efficient chillers and cooling towers, reducing reliance on R-22 refrigerant, and increasing chilled water and ice production capacity by approximately 6,000 tons to support new customer growth.

This project required complex coordination due to the fixed footprint of the plant and equipment that was retained. The entire project had to be completed on a firm offseason schedule to ensure plant availability for the entirety of the cooling season.

CHICAGO DISTRICT COOLING MAP

During its operating history, CenTrio has negotiated and received city approval for its initial Use Agreement and more than 30 amendments thereto. The Use Agreement requires **25% MBE contractor participation** and **5% WBE contractor participation**, which CenTrio has met or exceeded. CenTrio also employs Local 399 engineers to operate its plants 24 hours a day, 365 days a year. With over 125 customers in Chicago, CenTrio has unparalleled experience in delivering value to building owners and developers, while navigating complex regulatory challenges, and designing, constructing, owning, operating, and maintaining thermal energy plants and distribution systems.





INNOVATION

4A. ENERGY & WATER EFFICIENCY

As good global citizens and stewards of customer energy and utility needs, CenTrio's first approach is to focus on right-sizing our capacity needs by utilizing all resources as efficiently as possible, whether fossil fuel based or renewable or otherwise.

The effects of climate change and water scarcity are among the most significant threats to community resilience, today and in the future. As a leader in sustainability at the forefront of the energy transition, we believe we can do much more to help our customers and communities meet these challenges. By continuing to invest and modernize our systems while deploying smart, low-carbon operational and resource conservation strategies and practices, our CenTrio district energy system is the technology our communities need to transition to a low-carbon economy.

Our plan is to accelerate what we do well by scaling the proven solutions we have implemented while

working with our partners and customers to infrastructure, district energy allows for a ensure we are investing in future technologies. systematic approach for decreasing carbon in In doing so, we are finding innovative ways to multiple buildings at once, scalable to campus, optimize energy efficiency, such as transitioning multiple neighborhoods, and even an entire city. to cleaner fuels, tapping into renewable energy Economies of scale and efficiency of shared sources, harvesting (capturing and transforming) waste into energy, capturing carbon from our deneration resource are fundamental advantages process gases, and designing our facilities to of the district energy distribution network. The thrive under projected future climate conditions.

We believe that by using a broad sustainability tool set, we will simultaneously contribute to the global imperative of reducing atmospheric GHGs while also providing high-value energy solutions to our customers and reducing our water consumption to an absolute minimum.

4B. SYSTEM MODERNIZATION

District energy is the technology the allows for the lowest-cost, most efficient solution for reducing GHG emissions and primary energy demand in the built environment. Because of its network of underground pipes and other energy delivery

Economies of scale and efficiency of shared generation resource are fundamental advantages of the district energy distribution network. The modernization of this very network of underground pipes also allows a greater integration of energy efficiency, increased resiliency for all those connected to the system, and a wider variety of renewable energy sources.

For these reasons, the United Nations has identified District Energy as the technology cities should deploy to decarbonize. "A transition to such systems, combined with energy efficiency measures, could contribute as much as 58 per cent of the carbon dioxide (CO2) emission reductions required in the energy sector by 2050 to keep global temperature rise to within 2–3 degrees Celsius."



CENTRIO - DENVER

The largest sewer heat recovery system in North America.



4C. CASE STUDY: CENTRIO DENVER NATIONAL WESTERN CENTER

CenTrio has partnered with AECOM Technical Services Inc. and Denver-based Saunders Construction to build and operate the National Western Center's ("NWC") sewer heat recovery system in Denver, the largest sewer-heat recovery system in North America.

Located on a 250-acre master-planned campus, the National Western Center has a partnership with CenTrio through a 40-year agreement to build, operate, finance, and maintain the district energy system. Located less than 3 miles from downtown Denver, NWC is an urban hub with a focus on entertainment, food, animal health and performance, water, energy, agriculture, and sustainability and is home to a Colorado State University System campus. Partners in the district energy system and its future users include the City and County of Denver, CSU Spur, and the National Western Stock Show.







How does sewer-heat recovery work?

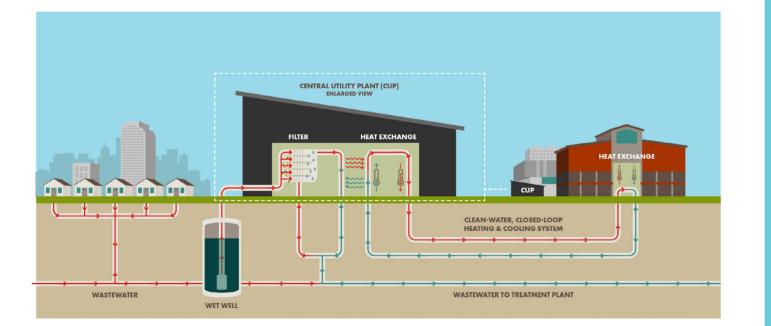
Used water that goes down the drains of showers, sinks, tubs, dishwashers, washing machines and toilets maintains a fairly constant temperature as it travels through the sewer pipe. In a sewer heat recovery system, a heat pump is used to capture the warmth of wastewater and transfer it to a clean

water distribution pipe that enters individual buildings. It is a closed-loop system, meaning the wastewater never touches the clean water. The wastewater flows back into the sewer; the heat is transferred to the clean water that is distributed to heat and cool the buildings.

As part of NWC's commitment to sustainability, CenTrio has begun operation of the NWC sewer waste heat recovery project. The NWC campus will source nearly 90 percent of its heating and cooling from a recycled source of thermal energy — a sewer pipeline that runs through the site — rather than burning fossil fuels. By pulling thermal energy from wastewater instead of burning fossil fuels, the NWC sewer-heat recovery system will avoid an estimated 2,600 metric tons of CO2 each year (emissions equivalent of driving a car 6.6 million miles) and conserve the equivalent of 5 Olympic swimming pools worth of water.

CENTRIO DENVER SYSTEM OVERVIEW

HEATING AND COOLING USING A RECYCLED **SOURCE OF THERMAL ENERGY – WASTEWATER**





of 70%

Equivalent to 6.6 million

vehicle passenger miles

driven in Denver

annually.



Avoids 2,600 metric tons of CO2 emissions each year, a **reduction**

> Equivalent to five Olympic-sized swimming pools each year.

SUSTAINABILITY DELIVERED

Saves 3,168 kgal of water each year, an estimated 80%



Reduces wastewater effluent temperature to by **1 degree F** to protect the Platte River.





CenTrio is proud of our accomplishments in 2022. Our aim this year was to build the Sustainability and ESG Platform while creating and advancing positive impact in collaboration with our employees, leadership, Board of Directors, customers, and local communities.

We will use the successes and lessons learned in 2022 as an opportunity to do more and do better in 2023.

We are inspired to evolve and develop all aspects of our ESG program with a focus on six major areas of priority for 2023.



Prioritize Chicago's access to renewable and carbon- free energy procurement options long- and short-term



Progress our Sustainable Infrastructure Plan & Implementation Strategy, focusing on system-wide decarbonization roadmap



Begin utilization of Global Real Estate and Sustainability Benchmark (GRESB) as program management tool Establish and measure sustainability capability and governance benchmarks for comparison and tracking

CenTrio will continue to push the boundaries for sustainable energy and truly innovate to make a difference for our customers, our communities, and the world.





Formalize and implement diversity supporting our hire, retention, and promotion opportunities efforts



Mitigate risk and establish State and Federal regulatory & incentive programs, starting with Seattle, Los Angeles, and New Orleans

CenTrio

INNOVATIVE ENERGY. SUSTAINABLE SOLUTIONS

CenTrio - Corporate Headquarters

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