

VISION

Enhancing public health and the environment by creating value from waste through partnerships

VALUES

COMMITMENT

Committed to public health, safety and the environment

TEAMWORK

Making the biggest impact by working beyond ourselves

RESPECT

Treating the earth and all people with esteem, dignity and compassion

TRUST

Maintaining diligent stewardship of public trust and funding, with science

INNOVATION

Focusing on excellence, continual improvement and adaptation in pursuit of the mission

Message from the Chair:

A YEAR OF INNOVATION THROUGH COLLABORATION

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By working together, the two counties can move more quickly and efficiently toward our vision of vibrant, healthy communities

without waste."

Ramsey/Washington Recycling & Energy (R&E) completed its fourth year in 2019, continuing the strong relationship of the two counties, and moving rapidly to redefine waste management. Early in the year, staff from all levels of the organization prepared a statement of R&E's vision, mission and values, which the R&E Board heartily endorsed. These statements will guide and inspire R&E's planning, policy development and operations, now and in the future. It is with pleasure that, along with R&E Board members and staff, we present this report on 2019.

FRAN MIRON **R&F Board Chair**

ABOUT RAMSEY/WASHINGTON RECYCLING& ENERGY

Ramsey/Washington Recycling & Energy operates under a joint powers board, the R&E Board, and is the organization through which Ramsey and Washington counties collaborate to improve how waste is managed in the two counties, looking well into the future. R&E strives to enhance public health and the environment by recovering value from waste.

A board of nine elected county commissioners, five from Ramsey County and four from Washington County, and two ex officio members from the City of Newport and the Minnesota Pollution Control Agency

22 non-union and 50 union employees that

- Operate the Recycling & Energy Center
- Provide the administrative, financial, human resources and procurement services for the organization
- Lead, strategize, plan and develop policy
- Coordinate joint county activities in waste reduction and recycling

30 staff from the two counties that work collaboratively through R&E to accomplish common goals

THE R&E BOARD

Fran Miron, Chair | WASHINGTON COUNTY COMMISSIONER

Victoria Reinhardt, Vice Chair | RAMSEY COUNTY COMMISSIONER

Toni Carter | RAMSEY COUNTY COMMISSIONER

Wayne A. Johnson | WASHINGTON COUNTY COMMISSIONER

Gary Kriesel | WASHINGTON COUNTY COMMISSIONER

Trista Matas Castillo | RAMSEY COUNTY COMMISSIONER

Mary Jo McGuire | RAMSEY COUNTY COMMISSIONER

Rafael Ortega | RAMSEY COUNTY COMMISSIONER

Lisa Weik | WASHINGTON COUNTY COMMISSIONER

Dan Lund, (ex officio member) | MAYOR OF NEWPORT

Dave Benke (ex officio member) | MINNESOTA POLLUTION CONTROL AGENCY

Stan Karwoski (alternate) | WASHINGTON COUNTY COMMISSIONER

Jim McDonough (alternate) | RAMSEY COUNTY COMMISSIONER



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A YEAR OF INNOVATION]

Working since 2014 to recover value from waste and move to a more circular economy, the R&E Board solidified ambitious plans to make significant upgrades to the way waste is handled in the two counties.

After considerable research and discussion, approval was given to implement innovative solutions for waste reduction and recycling by:

- Increasing collaborative efforts with businesses, multi-unit housing and schools
- Aggressively pursuing work on food waste by partnering with others to reduce wasted foods, recover food for people, and implement a two-county system to collect food scraps from residents for recycling
- Expanding joint work between the two counties

The R&E Board approved plans to make significant improvements to the R&E Center, using cutting-edge technology to recover more materials for recycling and extract greater value from waste while decreasing reliance on waste-to-energy. It also approved a financing plan that includes seeking \$21 million in state support and local funds in the same amount, and a schedule to complete architectural and engineering plans so that the project is "shovel ready" in 2020.

A YEAR OF INNOVATION (continued)

R&E engaged with several anaerobic digestion, waste conversion and recyclables recovery technology providers, including visiting facilities in San Jose, U. S. Army Fort Hunter Ligget, and San Luis Obispo. These tours provided the opportunity to view projects that are operational and learn from their experience.

R&E toured Hitachi Zozen in San Luis Obispo, California to learn from their valuable experience.



A YEAR OF COLLARBORATION

R&E worked with residents, municipalities, state agencies, other counties, non-profit institutions, businesses, service organizations, business associations, schools (public, private and non-profit), waste haulers, recyclers, transfer stations, vendors, service providers and more.

Communication from R&E and the two counties was coordinated, ensuring clarity and transparency in messages to the public and other organizations.

R&E also partnered with other organizations on communication efforts, including an op-ed published in the Star Tribune on the state of recycling in Minnesota, which was signed by 14 public, private and non-profit partners.

Partnerships emerged, such as working on food waste reduction with other organizations, including the two counties' Statewide Health Improvement Partnership (SHIP) and food inspection programs, as well as Second Harvest Heartland.

Staff initiated work to engage the community regarding plans for residential organics collection. This work included an online survey and many in-person interviews.



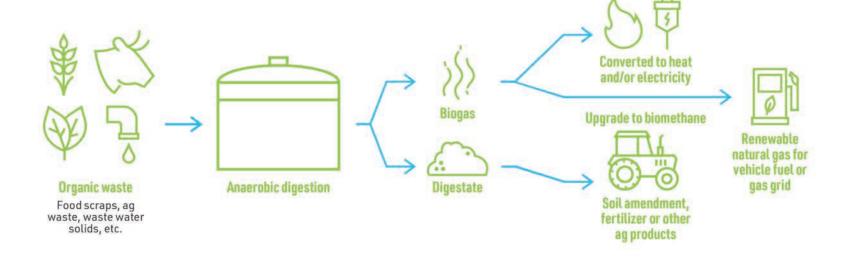
PARTNERSHIP ON WASTE AND ENERGY



The Partnership on Waste and Energy (PWE) is the entity through which Ramsey, Washington and Hennepin counties collaborate on waste and energy management, including legislation, policy development, planning and evaluation related to waste processing technologies.

PWE is an effective partnership on policy issues, establishing the waste and energy-related legislative platforms for the three counties and retaining lobbyists to work with the legislature, governor's office and state agencies on policy change.

PWE has been working with Great Plains Institute (GPI) to evaluate and facilitate anaerobic digestion efforts in the state. After the completion of the Anaerobic Digestion Evaluation Study in 2018, PWE continued its work with GPI in 2019 to engage key stakeholders and identify the next steps needed to facilitate development of anaerobic digestion projects in Minnesota.



ANAEROBIC DIGESTION

Anaerobic digestion is a process that can be used to extract value from organic waste. It is a series of biological processes in which microorganisms break down organic material, producing biogas, which can be combusted to generate electricity and heat, or processed into renewable natural gas and transportation fuels.

RECYCLING & ENERGY CENTER

Residential and business waste generated in Ramsey and Washington counties is delivered to the Recycling & Energy Center (R&E Center) in Newport. At the R&E Center, trash is processed to extract recyclable metals, and the remaining materials are processed into an energy source called refusederived fuel. This fuel is sent to Xcel power plants, where it is incinerated to generate electricity. Processing waste keeps it out of landfills and recovers its resource value.



HAULER REBATES

In 2019, the R&E Board decided to eliminate hauler rebates starting in 2020. When the R&E Center was privately owned, the counties provided a hauler rebate (subsidy) to waste haulers to encourage them to bring waste to the R&E Center instead of to landfills. Now that the facility is under public ownership, the counties require trash be delivered there, and the hauler subsidy is no longer necessary. R&E is assisting haulers and municipalities in communicating with their residents, businesses and customers about this change.



RESPONSIBLE PROCUREMENT SAVES MILLIONS

R&E had budgeted for the purchase of new trailers to replace aging trailers in its fleet, which were 17 to 27 years old. After hearing a local company was auctioning 28 gently used trailers, only 1-6 years old, staff moved quickly to make a winning bid. This action saved R&E approximately 1.8 million dollars (and supported the concept of reuse, consistent with R&E's mission).

FACILITY UPGRADES

- Renovated bulky waste load out area In this area, bulky waste is loaded onto semi-trailers to be shipped to the landfill for disposal. Bulky waste includes materials difficult to process at the R&E Center such as rope, wire, carpet or large items like furniture. The new loading area enables trailers to be loaded more efficiently, which equates to an annual savings of \$80,000.
- Progress toward fully enclosing the refuse-derived fuel load out area Enclosing this area will help control odor and litter.
- New tour room and office space The new tour room, which includes windows overlooking the tipping floor, improves the tour experience at the R&E Center.
- Repaved parking lot The visitor and staff parking lot requires repaving periodically to repair wear and tear.
- Progress toward administration building renovation Funding was secured from the counties, and plans were developed for renovation of the administration building at the R&E Center. Renovations to the administration building are needed to address an inefficient HVAC system. Changes will result in improved energy efficiency, staff morale, accessibility, productivity and safety.



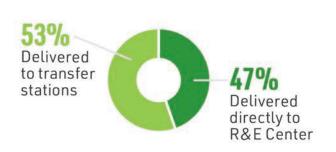
RECYCLING & ENERGY CENTER

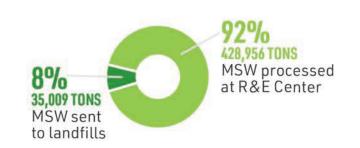
OPERATIONS

The R&E Center handled waste from over 800,000 residents and 70,000 businesses in the two counties, which is equal to about 13% of all waste generated in the state. The R&E Center holds contracts with six transfer stations and over 80 haulers.

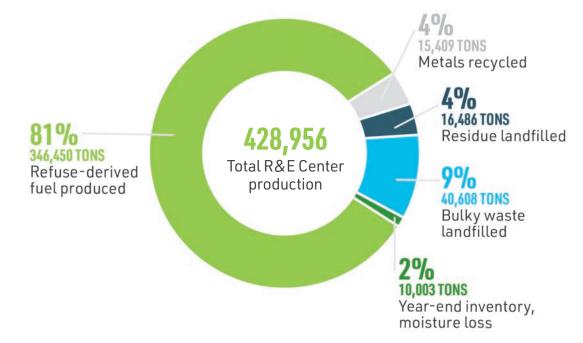
Because the Great River Energy resource recovery facility in Elk River closed in early 2019, more waste was landfilled than prior years.

463.965 TONS Total municipal solid waste (MSW) generated in Ramsey and Washington counties





R&E CENTER PRODUCTION



40,000 HOMES powered by electricity generated from refuse-derived fuel produced at the R&E Center each year.

BIZRECYCLING

BizRecycling celebrated its fifth birthday in 2019. The program helps businesses, non-profits, schools and institutions in Ramsey and Washington counties recycle better. Through BizRecycling, businesses receive free on-site consultations, technical assistance and grants of up to \$10,000 to implement best practices in waste management.

MULTI-UNIT PROPERTIES

In 2019, R&E piloted a BizRecycling expansion that extended technical assistance and grants to multi-unit properties like apartment buildings, townhomes and condos. With 2,328 multi-unit properties in Ramsey County and 415 in Washington County, this is an area of potential for significant waste reduction. During this pilot year, BizRecycling awarded grants to 12 properties worth a total of \$146,403. The program will fully launch in 2020.





IINNESOTA UNITED PARTNERSHIP

Minnesota United FC opened Allianz Field in 2019 as home for the Minnesota United professional soccer team. Built on a brownfield site in the Midway area of Saint Paul, the stadium was sited to bring economic development opportunities and designed with modern green building practices. Minnesota United partnered with BizRecycling to ensure that best practices in waste management, including recycling and organics, were included in everything from the building design to fan engagement.

BizRecycling assisted with the following:

- Encouraged construction of loading dock and enclosure for three waste streams: trash, organics, recycling
- Funded waste and recycling stations and customized signage throughout the stadium
- Developed a purchasing plan to ensure usage of only recyclable and compostable materials throughout the stadium
- Sponsored the Green Team, a hired group of passionate individuals who travel throughout the stadium on game days to engage fans with the recycling program

THANKS TO BIZRECYCLING

Minnesota United engaged **100,000 fans** in its waste reduction efforts and recycled **174 tons** of materials during its first year of operation.

Success Story

BRIDGEPORT RIVER MARINAS

In its first summer since starting recycling,
Bridgeport recycled an estimated 9,828 pounds of material.

Bridgeport River Marinas owns and operates three marinas on the Minnesota side of the St. Croix River. With assistance from BizRecycling, Bridgeport's manager added recycling dumpsters and custom signage to each marina site in order to capture cans, bottles and other recyclables coming off the boats. In its first summer since starting recycling, Bridgeport recycled an estimated **9,828 pounds** of material.

In addition, Bridgeport River Marinas was motivated to find a recycling outlet for the heavy plastic boat wrap generated every spring as owners take their boats out of winter storage. BizRecycling was able to connect them with a hauler that would pick up the material for recycling, and, in one season alone, Bridgeport recycled an estimated **7,896 pounds of wrap**.



BIZRECYCLING BY THE NUMBERS



238 BUSINESSES

received on-site consultations



148 BUSINESSES

received BizRecycling grants



93 BUSINESSES

started collecting food and organics



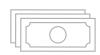
46 BUSINESSES

started single-sort recycling



155 BUSINESSES

made improvements to existing recycling and organics collections



\$1,000,310 IN GRANTS AWARDED

FINANCIALS

R&E operates out of three budgets: the Joint Activities Budget, the Facility Budget and the Equipment Maintenance Budget.

JOINT ACTIVITIES BUDGET

The Joint Activities Budget supports a variety of projects to meet goals and strategies in county waste management plans and is funded by Ramsey and Washington counties. Both counties charge a fee associated with collecting trash, referred to as the County Environmental Charge or CEC. A portion of CEC fees collected funds the Joint Activities Budget.

Business recycling Constal outrooch	\$2,182,671
General outreach Policy evaluation	\$315,032 \$904,958
Hauler rebates	\$4,616,580
Total	\$9,429,554

FACILITY BUDGET

The Facilities Budget supports the operation of the R&E Center. This enterprise budget is funded by tipping fees.

Personnel	\$6,539,485
Fuel	\$6,563,804
Landfill	\$4,685,662
Waste processing	\$52,080
Transportation	\$6,784,160
Transloading	\$2,235,940
Operations	\$6,888,216
Debt service	\$1,698,129
Total	\$35,447,476

EQUIPMENT BUDGET

The Equipment Maintenance Budget supports equipment maintenance and replacement. This budget is funded by sale of recyclables recovered from the waste stream.

Total	\$2,065,302
Maintenance	\$850,000
Equipment	\$1,215,302



LOOKING FORWARD

In 2020, Ramsey/Washington Recycling & Energy will be launching initiatives to help businesses prevent pollution, improve markets for compost, and connect communities with resources to support waste reduction. We are eager for the

