

CASE FOR SUPPORT

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EREF

**Environmental Research
& Education Foundation™**



THE CASE FOR A CIRCULAR ECONOMY

Reimagining Sustainability

Our world faces a growing challenge to address how people create, use, and discard the materials that make our lives. Finite resources and growing populations drive the urgent need for sustainability—and for decades, global leaders have framed this need through the lens of “waste.”

But to us, it's not about waste. At the Environmental Research & Education Foundation (EREF), we're challenging the world to reimagine what “sustainability” really means. To realize that **waste isn't something to get rid of; it's a resource.**

**EREF POWERS THE
SCIENCE OF
SUSTAINABLE ~~WASTE~~
RESOURCE
MANAGEMENT.**



Our current linear economy moves raw materials through manufacturing, distribution, and consumption to ultimately create waste. At EREF, we imagine a circular economy that instead **keeps materials moving through reuse, repair, redistribution, and recycling**. This is the most powerful way to preserve natural resources and minimize emissions that cause climate change.

Keeping materials in motion for as long as possible reduces the number of finite resources extracted. But to get there, we need a better understanding of how materials flow through society.



How Does An Economy Get Circular?

And how does EREF help? We drive the reimagination of sustainable resource management with **the most powerful tools on the market: data and research**.

Sitting squarely at the intersection of business, environment, science, and education, EREF provides scientific, evidence-based research, data aggregation, and policy analysis that is unbiased and nonpartisan.

The truth is, we can't tackle the charge of creating a more circular economy without data to tell us what works and what doesn't. **EREF knows that there's too much at stake to get the science wrong, which is why we help leaders of industries, states, and nations make scientifically based decisions.**

For more than 30 years and over \$31 million invested, EREF has expanded scientific understanding, increased educational pathways, and inspired sustainable solutions that advance a more circular economy. And to keep it up—to keep offering data to drive critical sustainability efforts—**we need to double our investments in scientific research** and expand education surrounding research initiatives.

“**THERE ARE HUNDREDS OF ENVIRONMENTAL ORGANIZATIONS, BUT EREF IS A REAL SCIENTIFIC ORGANIZATION PRESENTING REAL DATA. THEY ARE FINDING ACTIONABLE SOLUTIONS TO PROBLEMS VERSUS ADVOCATING FOR POLITICAL CHANGE.**”

| Ven Poole, GFL Environmental

EREF IS THE LARGEST PRIVATE FUNDER OF SUSTAINABLE SOLID WASTE MANAGEMENT RESEARCH.



WHAT WE NEED



And Why We Need It Now

If there's one thing we know, it's that there's no time to waste. We need accurate information to drive our pursuit of a more circular economy, and we need it now.

Fast-tracking time-sensitive research to fuel the conversion from a linear to a circular economy will require a **\$50 million investment over the next 5 years.**

The decisions that people, brands, businesses, and regulators make today—as you read this document—are impacting our environment and our future resources. To create real change and turn our pursuit of a circular economy from aspirational to actionable, we need science, empirical data, and true collaboration.

Why EREF?

There are a lot of organizations working in the name of sustainability. But at EREF, we're talking data—and **data based on sound science is the most powerful tool in our fight to preserve natural resources** and avoid climate-altering emissions.

Sustainability goals are often set without a clear understanding of how to achieve them—but guesswork won't get us where we need to go. We can only solve problems that we understand, and we can only understand these problems through data.

Centralizing Industry, Federal, and NGO Silos

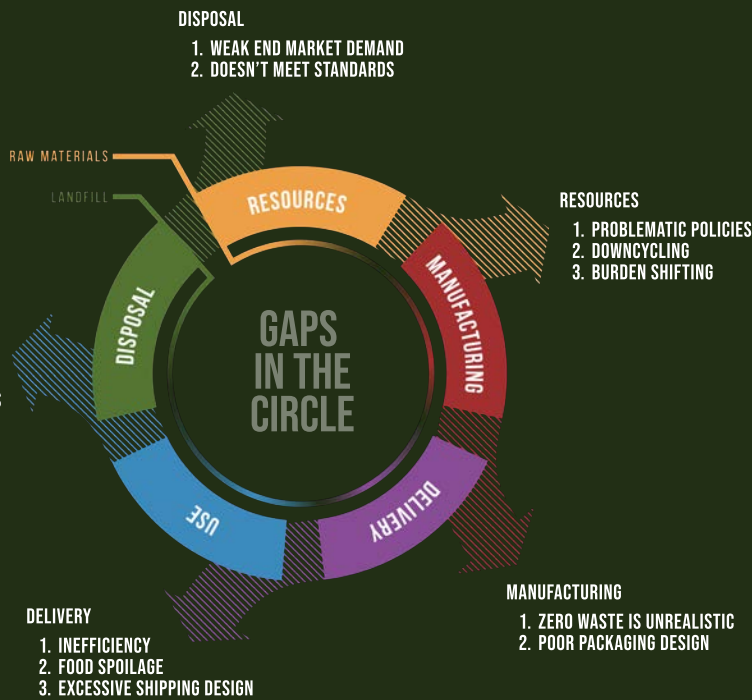
Credible science helps leaders see waste as a resource and empowers sustainable solutions that help industries, corporations, and governments meet Environmental, Social and Governance (ESG) goals.

EREF's network of product manufacturers and distributors, consumers, equipment manufacturers, recyclers, academic institutions, and waste processors brings together key players to close the loop on sustainable materials management.

“ AS MORE CORPORATIONS, MANUFACTURERS, RETAILERS, AND POLICYMAKERS SEEK TO SET MEANINGFUL SUSTAINABILITY GOALS, EREF PROVIDES THE EMPIRICAL DATA TO MOVE US FROM ASPIRATIONS INTO A TRULY CIRCULAR ECONOMY.”

|Kristin Kinder, VP of Research and Waste Stream Sustainability, Wastequip

RESOURCE LIFE CYCLE



Research

EREF's international scope has already driven change in recycling, collection, and waste management, and our unbiased, peer-reviewed research makes critical information readily available to all. **With more funding, we'll be able to dig even deeper and bring forward data** that advances our understanding of key sustainability challenges—and what we can do to meet them.

Your Support Helps Us Answer The Critical Questions

We're continuously working to close gaps in research. As it stands, the largest scientific gaps impeding our pursuit of a more circular economy are:



HOW CAN WE BETTER REDUCE ENVIRONMENTAL AND SOCIETAL IMPACTS?

HOW CAN WE BETTER MITIGATE CLIMATE CHANGE?

HOW CAN WE BETTER EVALUATE TRADEOFFS OF DECISIONS MADE TO INCREASE SUSTAINABLE MATERIALS MANAGEMENT?

HOW CAN WE BETTER MEASURE THE CIRCULARITY OF MATERIALS?



HOW CAN WE MAXIMIZE THE IMPACT OF EXISTING AND PROPOSED POLICIES?

END USES OF RECYCLABLE MATERIALS:

How much is truly recycled? How are recycled products being used?

DOES EXTENDED PRODUCER RESPONSIBILITY INCREASE RECYCLING RATES?

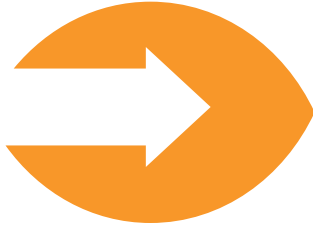
What are the nuances of its success?

RECYCLING BOTTLE-TO-BOTTLE:

How often are products recycled back into their original use?



With an additional \$50 million investment in researching these questions now, we'll exponentially impact the decisions of tomorrow.



EREF'S EYES ARE ON THE FUTURE

How Today's Contributions Shape Tomorrow

EREF is paving the way for a more circular economy. With 125 funded research projects, 15 published reports, and educational programs that guide decision-makers within regulatory agencies, private companies, and communities nationwide, there's no debate that we're powering science.

But it's not enough.

Our research needs continue to expand at a rapid pace, and it's critical that we ramp up education and communication in tandem—so that we can serve our critical role in helping stakeholders at every point reimagine sustainability. This includes policymakers, waste and recycling organizations, equipment manufacturers, upstream product manufacturers, retailers, consumers, and more.

The list of those who need our research is long and growing. But we can only provide data at the volume we need to with the help of our donors.

Immediate Data Needs

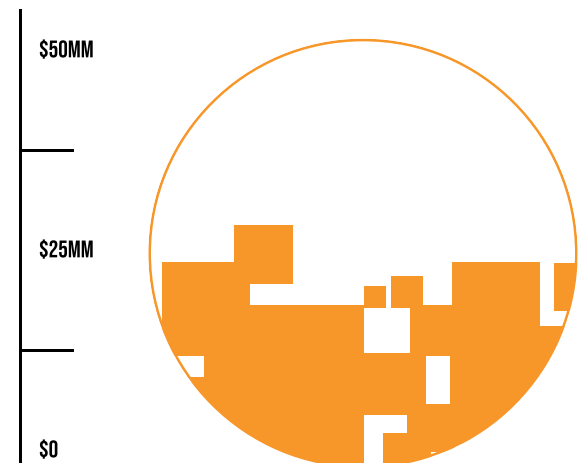
EREF is expanding to become a data repository for everyone working toward more circular solutions. Our well-researched, unbiased data will pinpoint opportunities and present viable, implementable solutions.

We're already working to evolve more than 30 data sets to enable sustainable decision-making in the future. This critical data includes the aggregation of specific topics around:

- Mass Flow of Materials
- Equipment Efficiency, Sustainability & Innovation
- Infrastructure Capabilities, Capacity & Demand
- Consumer Behavior Analysis
- Government Policies & Programs
- Circular Economy Analysis



WITHOUT HITTING FUNDING GOALS, THE FULL PICTURE OF OUR DATASETS WILL REMAIN INCOMPLETE.



Our Education Pipeline

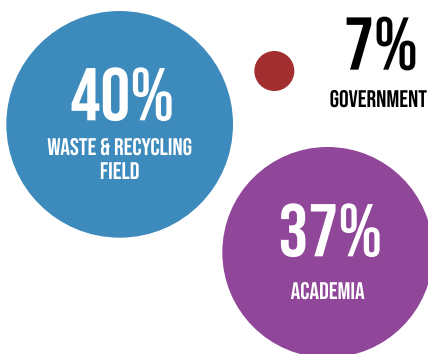
EREF grows future leaders by providing scholarships for some of the brightest minds in sustainability. **Our Scholarship Program fosters the next generation of researchers**, who will continue to provide critical research and data well into the future.

Through its 30-year history, our Scholarship Program has supported 108 graduate-level scholars who now create real impact in their fields: 40% in the waste and recycling industry, 37% in academia, and 7% in government.



SCHOLARSHIP PROGRAM

108 GRADUATE LEVEL SCHOLARS



To reimagine sustainable solutions, we need to **double our investment in young professionals to keep the sustainable resources management field well-staffed into the future.**

“**THE ENVIRONMENTAL RESEARCH & EDUCATION FOUNDATION IS A CRITICAL PARTNER TO OUR UNIVERSITY, BRIDGING THE GAP BETWEEN THEORY AND IMPLEMENTABLE SOLUTIONS THAT CREATE LASTING IMPACT IN OUR ENVIRONMENTAL SUSTAINABILITY EFFORTS.**”

|Craig Benson, Ph.D., PE, DGE, BCEE, NAE, Dean Emeritus, University of Virginia

“**BEING AN EREF SCHOLAR HELPED TAKE MY RECYCLING AND SOLID WASTE MANAGEMENT EXPERTISE TO THE NEXT LEVEL. EREF SUPPORTED MY GRADUATE STUDIES FOCUSING ON SOLID WASTE MANAGEMENT AT THE MUNICIPAL LEVEL. I WENT ON TO MANAGE A MATERIALS RECOVERY FACILITY PROCESSING 15,000 TONS OF RECYCLING A MONTH AND NOW I'M BUILDING AND OPERATING TESLA GIGA TEXAS' RECYCLING AND RESOURCE RECOVERY PROGRAMS.**”

|Brent Perdue, Non-Regulated Waste Manager, Tesla EREF Scholar

“**WE HAVE BUILT A STRONG FOUNDATION, BUT EREF IS INVESTING IN THE FUTURE THROUGH RESEARCH AND SCHOLARSHIPS. THIS IS WHAT WILL TAKE US FROM GOOD TO GREAT!**”

|Tara Hemmer, Chief Sustainability Officer, WM

WITH YOUR HELP, WE CAN ADVANCE A MORE CIRCULAR ECONOMY



No one's talking data like EREF, and EREF needs your support to keep bringing unbiased, expertly researched science to a field that desperately needs it.

Our economy's "waste" can be a resource. We can change the conversation around sustainability and create a healthier tomorrow. But we need funding to get there.

EREF is seeking a \$50 million investment over the next 5 years to power this audacious, but implementable change.

We need to move quickly if we're going to provide data that truly informs decision-making and positively impacts our environment. With your support, EREF will power the way to a more circular economy.

JOIN US.