

# Accelerating the

**QUARTERLY** 

IMPACT REPORT SPRING 2025

**Robotic dogs** 

equipped with

patrol OCWR

landfill sites.

methane sensors

# pace of change.

RMI's vision of a clean energy future commits us to THINK bigger, DO boldly, and SCALE globally.

#### **Turning Trash to Treasure** Orange County, California, is proving that

Orange County, California, is proving that landfills can be part of the climate solution. By using advanced tools like methanesniffing drones and robotic dogs, the county is cutting harmful emissions, improving

air quality, reducing odors, and supporting local jobs. RMI featured this innovative model in an article and short film to show how smart landfill practices can cut methane emissions and help other communities modernize waste management for environmental and social impact.

#### **Global South Outpaces the North**

Emerging economies are transitioning to clean energy twice as fast as the Global North. As shown in RMI's *Powering Up the Global South* report, 87 percent of 2024 electricity investments in these regions went to clean sources. Rich in renewable resources and low in fossil fuel dependency, the Global South is becoming a driving force in global decarbonization.

#### Can US Hydrogen Catch Up to the EU?

Low-emissions hydrogen is essential for decarbonizing industry and heavy transport sectors. While China leads low-cost manufacturing and the EU rapidly advances bold investments and substantial public support, the United States is scaling more slowly, hindered by limited demand and fragmented policy. RMI's recent report, *Hydrogen – Made in America, For America,* assesses the strategies needed to build a strong US market, deliver economic benefits, and position the country for global hydrogen leadership.



This 808 kilowatt solar array at a Baltimore school will reduce greenhouse gas emissions by nearly 27,000 metric tons of  $CO_2e$  over 35 years, the equivalent of nearly 6,000 cars driven for a year and about 3 million gallons of gas consumed.

#### A Baltimore School Lights the Way

Baltimore's Henderson-Hopkins School now doubles as a community power plant. Through the Solar4Us initiative, its rooftop solar array provides discounted electricity to 150 low- to moderateincome households – cutting emissions and saving families an estimated \$1.1 million. With support from RMI's Renewables Investment for Social Equity (RISE) initiative, the project leveraged federal incentives\* and created a replicable model for clean energy access. It's not just about power – it's also about equity, education, and building resilient, community-led solutions.

#### A Roadmap for Greenhouse Gas Removal

The Bezos Earth Fund and RMI have released the first global roadmap to scale greenhouse gas removal by 2050. Featuring 83 initiatives, the plan outlines how to rapidly deploy technologies that remove carbon dioxide and other gases from the atmosphere. This guide provides clear milestones and actionable goals to help governments, investors, and innovators coordinate action to accelerate carbon dioxide removal (CDR).

#### **Ditching Generators for Clean Energy**

In Nigeria, unreliable electricity forces millions to rely on costly, polluting fossil-fuel generators. A new 500 kW solar PV interconnected minigrid in Robinyan, Ogun State – developed by Sahara Power Group, Ikeja Electric, and Darway Coast with support from RMI and GEAPP – now provides clean, reliable energy to over 5,000 residents. Combining grid supply with solar and battery storage, this model lowers costs, strengthens resilience, expands energy access and offers a scalable solution for increasing renewable energy and win-win partnerships across Nigeria.

Programs like these may be at risk if the US administration pulls back funding. RMI remains committed to advancing clean energy and driving emissions reductions in the United States and globally.

**DO PILOTING SOLUTIONS** 

#### Virtual Power Plants Go Mainstream

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Virtual power plants (VPPs) — networks of distributed energy resources like batteries, solar, and smart appliances — are rapidly scaling across the United States, expanding grid services and offering customers the chance to support greater grid resilience while being compensated in the process. In just one year, we saw a wave of momentum continue to accelerate VPP adoption: in 2024 alone, utilities in 34 states and Puerto Rico launched or expanded VPP programs, and 10 state legislatures introduced VPP-related bills, with four becoming law.



Better together. Virtual power plants deploying all over the nation can keep costs low and help the lights stay on.

RMI's Virtual Power Plant Partnership (VP3) is at the center of this momentum. Launched in 2023, VP3 catalyzes market transformation by connecting key players, among others, producing research and driving policy change to unlock the full potential of VPPs. In 2024, VP3 worked with regulators, utilities, and lawmakers in 10 states and Washington, DC, providing critical input to ensure policies support scalable, equitable deployment.

VP3 also published influential reports, such as the *Power Shift* analysis, which showed that VPPs could reduce grid costs by 20 percent. These findings have informed state-level policy and utility planning across the country.

With 2030 goals to enable 160 GW of VPP capacity and expand their grid role, VP3 is positioning VPPs as a foundational climate and resilience solution for communities nationwide.

# Fueling the Future: How RMI Is Powering Low-Carbon Flight

Air travel generates nearly 2.5 percent of global carbon emissions, largely due to fossil jet fuel. Sustainable aviation fuel (SAF) — often made from waste oils, agricultural residues, or captured carbon — can cut emissions by more than 80 percent and work in today's aircraft with no modifications. So why isn't SAF taking off?

The answer lies in a classic chicken-and-egg problem. SAF suppliers face high up-front costs, long permitting timelines, and fragmented demand, while buyers are deterred by limited availability, higher prices, and uncertainty around emissions accounting. That's where RMI steps in.

With support from strategic philanthropy, RMI co-founded the Sustainable Aviation Buyers Alliance (SABA) with Environmental Defense Fund and ENGIE Impact, with expert support from the Center for Green Market Activation. SABA aggregates demand from climate-leading companies, proving to suppliers that real,



SAF cuts emissions and works in today's aircraft – no engine changes needed.

### What is a buyers' alliance?

A buyers' alliance unites companies to collectively purchase clean technologies — like sustainable aviation fuel — creating strong, reliable demand signals for suppliers. By aggregating demand, members reduce market risk, unlock economies of scale, and accelerate deployment. SABA shows how this model helps overcome cost and supply barriers, making climate solutions more accessible and scalable across industries.

## What are SAF certificates?

SAF certificates (SAFc) allow companies to claim verified emissions reductions from sustainable aviation fuel, even if they don't use the fuel directly. These certificates represent a specific volume of SAF used instead of conventional jet fuel and can be issued and retired in a company's name. They help reduce indirect emissions from activities like business travel and shipping, which often make up the largest portion of a company's carbon footprint. Purchasing SAFc supports credible climate disclosures and sends a strong demand signal to fuel producers, encouraging greater investment and scaling of SAF production.

reliable markets exist. By uniting buyers — including tech firms, logistics providers, and consumer brands — SABA reduces market risk and unlocks investment needed to scale SAF production and infrastructure.

RMI also built the enabling tools: a trusted registry to track emissions reductions, standardized procurement guidance, and a certificate system that allows buyers to credibly claim climate benefits. This infrastructure supported the largest-ever aggregated SAF certificate purchase and laid the foundation for a global market.

Importantly, SAF certificates allow buyers to support emissions reductions even when physical SAF isn't available at their location. This flexibility creates new entry points for corporate climate leaders while sending strong demand signals to producers.

Our leadership in demand aggregation isn't new. In 2015, RMI launched the Business Renewables Center, which evolved into the Clean Energy Buyers Association – now a global force in clean power procurement. We're applying that proven model to aviation and beyond.

SABA's success offers a blueprint for other hard-to-abate sectors. RMI co-developed the registry used by the Zero-Emissions Maritime Buyers Alliance, and we are building new coalitions that include the Sustainable Steel Buyers Platform and ZEROGrid, a coalition focusing on clean energy to support grid reliability. We're also exploring new models in cement, concrete, and other industries where emissions reductions are most challenging.

The lesson is clear. when corporate climate leaders act together, they shift markets. With RMI's guidance and your support, a low-carbon aviation future is not only possible — it's already in motion.

#### **SUPPORTER** SPOTLIGHT

Over the years I have collaborated with some of your team members who are decarbonizing the electric grid and have been impressed with their approach, professionalism, and impact. So, when [we] decided we wanted to invest additional philanthropic dollars in climate action, we chose RMI.

#### - CHERYL L. ROBERTO and DAVID J. MAGEE NEW SOLUTIONS COUNCIL\* DONORS

RMI's progress is powered by *people like you*. Whether it's through steady monthly giving or a one-time gift, your belief in our mission makes transformation possible. Your commitment to a clean energy future keeps our team focused, our work innovative, and our momentum strong – especially when challenges arise. Because of your support, we're able to drive bold action, collaborate globally, and stay resilient in the face of uncertainty.

#### Thank you for being an essential part of this journey.

\* The Solutions Council is a growing community of RMI donors who contribute \$1,500+ annually to accelerate solutions for a prosperous, resilient, clean energy future.







Learn more about any of this work and how you can take part in the clean energy transition by scanning this QR code with the camera on your smartphone or visiting: rmi.org/impact-spring-2025