RMI
ENERGY. TRANSFORMED.

QUARTERLY IMPACT REPORT SPRING 2024

Accelerating the pace of change.

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

Cleaner skies? We're banking on it.

The aviation industry — the fastest-growing transportation sector — contributes 2.5 percent of global CO_2 emissions. The sector's ability to reduce heat-trapping pollution depends on advancing key technologies. In April, RMI and five global banks launched the Pegasus Guidelines, a first-of-its-kind framework developed by RMI to enable banks to consistently measure and disclose the emissions associated with their aviation lending portfolios. Another four banks are already either adopting or testing the guidelines. Financial institutions — working together with airlines, investors, policymakers, customers, airports, fuel producers, and NGOs — can use the guidelines to advance decarbonization strategies like accelerating the roll-out of sustainable aviation fuel, the most significant opportunity to reduce the climate impact of aviation.

Leaping Forward with Clean Hydrogen Hubs

In October 2023, the Department of Energy's H2Hubs program awarded seven clean hydrogen hubs roughly $7 billion to accelerate the domestic market for low-cost, clean hydrogen. Hydrogen can be used in the stationery and transportation energy sectors, generating electrical power in a fuel cell while emitting only water vapor. RMI served as a strategic advisor to three hubs that were among the final awardees. Following the awards, RMI released *Delivering Equitable and Meaningful Community Benefits Via Clean Hydrogen Hubs*, an insight brief with our learnings from advising program applicants, plus lessons for future clean energy projects. The interactive report also showcases best practices for engaging communities in the clean energy transition.

THINK | TESTING OUR ANALYSIS

A NEW 3-MEGAWATT SOLAR FARM IN ST. LUCIA IS SAVING CONSUMERS $16 MILLION

Unlocking Clean Energy Funds: AFFORD Tool Reaches Cities and Beyond

Federal funding for clean energy and decarbonization projects is abundant, but not automatic. RMI and World Resources Institute have been working together on the Bloomberg Philanthropies American Cities Climate Challenge Renewables Accelerator, providing tools, resources, and technical assistance to accelerate opportunities for US cities to implement high-impact, near-term renewable energy projects. And it's now easier than ever to find and navigate funding opportunities with AFFORD (America's Federal Funding Opportunities and Resources for Decarbonization). The tool, upgraded in November 2023, allows a broad audience — higher education, faith, health care, and cultural institutions, as well as tribes and state and local governments — to find, compare, and prioritize federal funding opportunities for clean energy and decarbonization projects. AFFORD's latest upgrade is packed with more Inflation Reduction Act (IRA) incentives and redesigned for a better user experience.

Sealing the Gaps: Increasing Understanding of Landfill Methane

RMI worked with partner Carbon Mapper on the launch of a groundbreaking study revealing that landfill methane emissions significantly exceed official estimates. The findings underscore the urgent need to address landfill methane emissions, including through stronger EPA standards. In January, RMI's Tom Frankiewicz gave expert testimony at the Senate Environment and Public Works hearing on "Avoiding, Detecting and Capturing Methane Emissions from Landfills." His testimony lays the groundwork for implementing stronger standards for monitoring and mitigating landfill methane leaks. RMI also collaborated with Gina McCarthy, former Environmental Protection Agency (EPA) Administrator and former White House Climate Czar, on a recent webinar geared toward local governments on opportunities to reduce waste sector methane. And as part of our Waste Methane Assessment Platform (WasteMAP), RMI released a strategic playbook on Deploying Advanced Monitoring Technologies at US landfills.

DO | PILOTING SOLUTIONS

> "We see this as the first major practical step in Saint Lucia's energy transition process towards a more secure and sustainable energy supply.
>
> —TREVOR LOUISY, MANAGING DIRECTOR, LUCELEC

RMI and LUCALEC staff tour the new solar farm in Vieux Fort, St. Lucia.

St. Lucia's Solar Lights the Way for Caribbean Clean Energy

The Caribbean is on the front lines of climate change, yet relies heavily on expensive, imported fossil fuels — the main driver of climate change — that contribute heavily to heat-trapping pollution. In 2017, RMI worked with the government of St. Lucia on its first steel-in-the-ground project in the Caribbean: a 3-megawatt St. Lucia Electricity Services Limited (LUCELEC) solar farm. The 14,900 photovoltaic panels on the now-complete energy production facility generate enough electricity for nearly 3,500 homes while offsetting over 3,800 metric tons of carbon dioxide annually, already saving $16 million for consumers. The solar farm is historic for St. Lucia as the first utility-scale renewable energy project on the island, where diesel-powered generators typically account for over 99 percent of electricity generation. As one of the region's early projects, it provided a template for a successful competitive process that RMI has replicated elsewhere in the Caribbean, including Anguilla and the Bahamas.

SCALE | CATALYZING MARKETS

Revolutionizing Clean Energy Choices: Three RMI Sustainability Tools

RMI's interactive calculators and tools bring our in-depth research and analysis to life, raising awareness about issues and providing specific, actionable data to decision makers. Integrating user inputs and real-time data analysis, these calculators allow consumers, professionals, and policymakers to evaluate different scenarios quickly and accurately, leading to more informed decisions, improved efficiency, and increased transparency. Here are three recently released tools that are supporting clean energy decision-making across the United States:

1 The Inflation Reduction Act has significantly boosted interest and investment in home and vehicle electrification and energy efficiency upgrades. Despite this, energy professionals have struggled to provide specific advice on the cost-effectiveness and environmental impact of these upgrades. To help close this gap, RMI has launched the **Green Upgrade Calculator**, a free tool designed to enable contractors, home energy advisors, and their clients to analyze the lifetime cost and environmental benefits of various residential decarbonization solutions such as rooftop solar, weatherization, and electric vehicles.

Developed in collaboration with seven partner organizations, the calculator offers detailed cost-benefit analyses and helps in designing effective system upgrade combinations for homes. For example, contractors can mix-and-match technologies (e.g., an air-source heat pump plus insulation or solar) and design parameters to see and communicate what will be most cost-effective or reduce the most climate pollution for their clients. Additionally, the tool incorporates real-time electric utility rates and emission impacts to provide tailored advice and support policy design on a regional or national level. In short, this tool aims to empower professionals to provide precise, data-driven recommendations and maximize the impact of green upgrades for consumers and the planet.

2 Electric vehicle adoption is rising in the United States, but many are worried the EV battery supply can't meet the demand. In response, RMI is advancing a circular battery economy — in which EV batteries are reused, repurposed, or recycled. Battery circularity reduces our reliance on raw materials, strengthens the supply chain, creates jobs, and lowers emissions. **RMI's new Battery Circular Economy Initiative Dashboard** helps policymakers, governments, and the private sector understand the expected demand for electric vehicle batteries. It also reveals the quantities of recoverable end-of-life battery materials, how they can meet anticipated supply gaps, and the environmental and economic benefits of recycling. Users can input their regional variables to create different scenarios, helping them make informed decisions to ensure the EV supply can meet demand.

3 **The Smarter Mobility Options for Decarbonization, Equity, and Safety (Smarter MODES)** calculator is a tool developed by RMI to help states quantify the money, lives, and pollution saved from reducing car traffic and expanding transportation options, including access to walking, biking, and public transit. Released in February 2024, it provides state-specific data and projections and assesses impacts such as reduced tailpipe emissions, decreased automobile operating costs, and the societal benefits of increased physical activity and cleaner air. By inputting various scenarios, state decision makers can use results to guide investments in more sustainable and equitable transportation solutions. For example, if people could replace 1 in 5 car trips with a bike, walk, or Zoom call, the United States would avoid 6,000 annual fatalities and save $259 billion in annual fuel and maintenance costs by 2050.

SUPPORTER SPOTLIGHT

DENALI HUSSIN is the strategic communications manager for RMI's Climate Finance Access Network and co-leads communication and marketing strategy across RMI's Global South Program. She and her partner, Andy Sayler, donate to RMI.

"Making the decision to donate to RMI was easy. When I first came to work for RMI back in 2016 I knew two things: First, that climate change was the most important work to be done and second, that solutions were critical to motivating action. Where better to go for solutions than RMI? In the face of the climate challenge, it's easy to feel dispirited and hopeless, but RMI's work has meant I have a continuous sense of purpose and inspiration. My partner and I donate as a household because RMI provides **practical, actionable solutions — and a strong, reality-grounded sense of hope.**

—**DENALI HUSSIN,** RMI donor

HOW YOU CAN HELP

Learn more about 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 by visiting rmi.org/impact-spring-2024