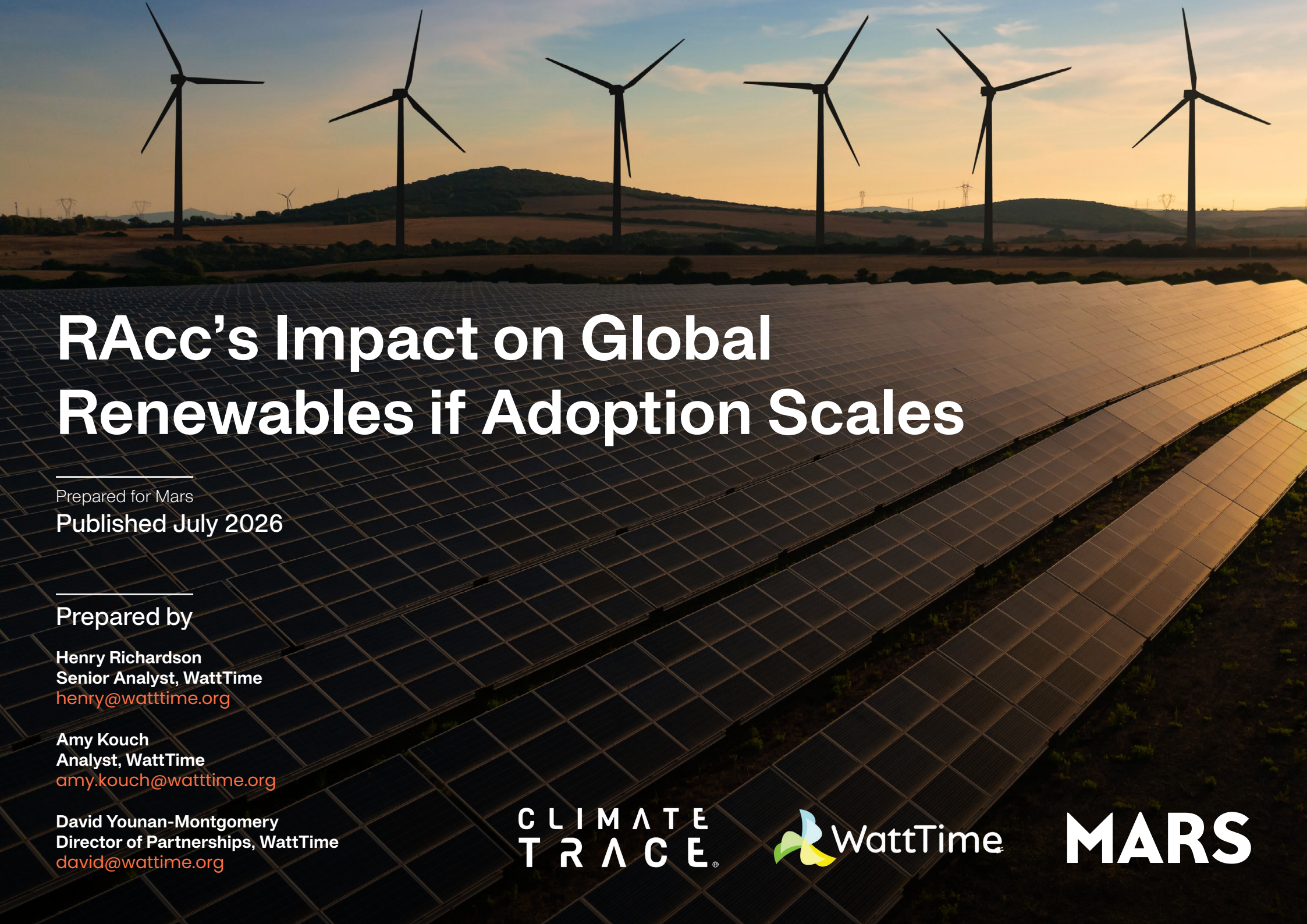




RAcc's Impact on Global Renewables if Adoption Scales

Prepared for Mars

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Executive Summary

This analysis identifies a tipping point for incremental demand for renewable energy from the widespread adoption of Mars's [Renewables Acceleration](#) (RAcc) program. If large companies follow Mars's lead in procuring renewable energy on behalf of the suppliers in their upstream and downstream value chain, this would result in a step change in the demand for renewable energy globally. Adopted at scale, this step change in demand would outstrip existing renewable energy supply and additional procurement would necessarily lead to incremental new renewables. There are nearly 2,500 large companies that consume more than 100 GWh/year

and report to [CDP](#). If these companies procured renewable energy on behalf of their value chain at a scale similar to Mars, the resulting demand could cover approximately 66% of global commercial and industrial (C&I) electricity consumption and avoid approximately 5.5 billion tCO₂e annually. Our findings indicate that if RAcc is adopted by the top 20% of large companies (~539 organizations), the resulting demand would substantially exceed existing global renewable energy supply and drive incremental new renewable electricity supply. Meeting this increase in demand could catalyze an accelerated buildout of new renewable generation capacity.



Background and Methodology

RAcc represents a fundamental shift in how companies approach renewable energy procurement for electricity use embedded in their upstream and downstream value chains, moving from isolated transactions to a coordinated, global strategy. Rather than waiting for small farmers, suppliers, and customers to individually procure renewable energy, it enables large companies to efficiently source renewable energy system-wide across value chains. This represents an innovative strategy option for sophisticated, large-scale, credit-worthy buyers to extend their renewables procurement into their value chains and directly support the development and expansion of renewable generation. This is far faster and more efficient than asking those large buyers to convince all of their suppliers and customers to go source small amounts of renewables. For a business like Mars, the electricity use up and down the value chain (~6–7 TWh) is roughly triple what Mars uses in its own factories, offices, and clinics (~2 TWh). Under RAcc, Mars can bring all of that demand to the market now, and could have those assets online before 2030 — turning Mars from a 2 TWh into an 8–9 TWh renewable electricity customer. If a similar approach was applied by others, that could accelerate the expansion of renewable generation. For more information about RAcc, please see [Mars's blog post](#).

This analysis is intended to illustrate the scale of what is possible if more large companies follow Mars's lead by adopting RAcc. We specifically assess the likely impact of RAcc on the construction of new renewable capacity (i.e., “incrementality”). Findings are based on publicly available CDP disclosure data, filtered to companies with annual electricity consumption exceeding 100 GWh.

We included the following sectors:

- Apparel
- Biotech, Health Care, and Pharmaceutical
- Food, Beverage, and Agriculture
- Hospitality
- Manufacturing
- Materials
- Retail
- Services

This analysis evaluates global renewable energy capacity as defined by the [RE100 Technical Criteria](#). Renewable generation is primarily wind and solar with some small hydroelectric power, as well as existing geothermal and biomass.

We estimated avoided emissions from new renewables using publicly available combined marginal emissions rates from [Climate TRACE](#) and WattTime, following the Greenhouse Gas Protocol's guidance for [Grid-Connected Electricity Projects](#). We then weight the regional averages using regional electricity consumption from the CDP data. The average marginal build emissions rate used was 0.46 tCO₂e per MWh.

To estimate value chain impact, we apply a “RAcc multiplier,” which assumes that a company's value chain electricity demand is three times a company's own Scope 2 load. This assumption is based on Mars' real-world experience. While the “RAcc multiplier” would vary by company, extrapolating from Mars's experience yields valuable directional insight about the scale of potential impact.



Results

Globally, 8,548 CDP-reporting entities across selected sectors account for approximately 3,100 TWh of electricity consumption in their Scope 2 emissions, or roughly 17% of global C&I sector load. On average, these companies report sourcing 29% of their electricity from renewables.

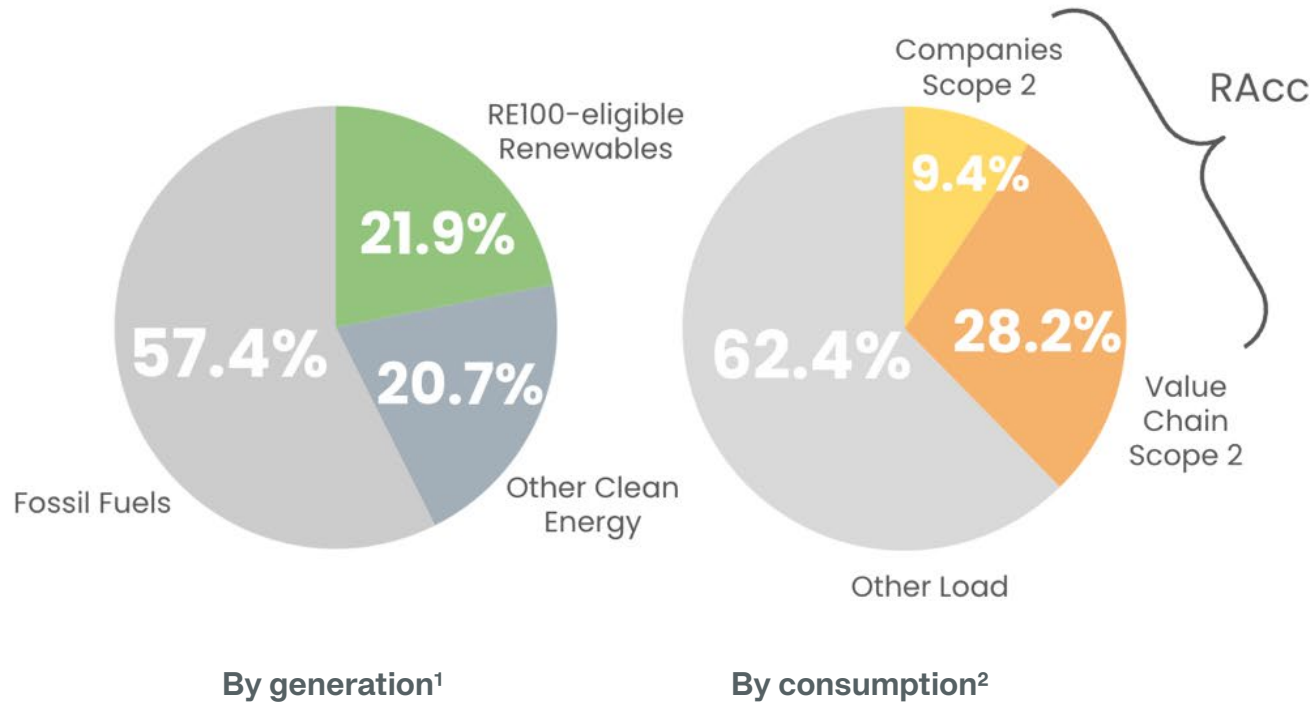
Within this group, 2,430 companies exceed the 100-GWh threshold, representing roughly 3,000 TWh of demand. This threshold serves as a proxy for companies with sufficient scale to engage in power purchase agreements (PPAs) and other large procurement mechanisms. If all of these companies implemented RAcc, the resulting demand would represent approximately two-thirds of total global C&I load.

Metrics	Estimated Values
Value chain demand implied (3x company Scope 2)	9,000 TWh
Total demand (own Scope 2 + value chain Scope 2)	12,000 TWh
Share of total C&I load	~66%
Avoided emissions	5.5 billion tCO ₂ e

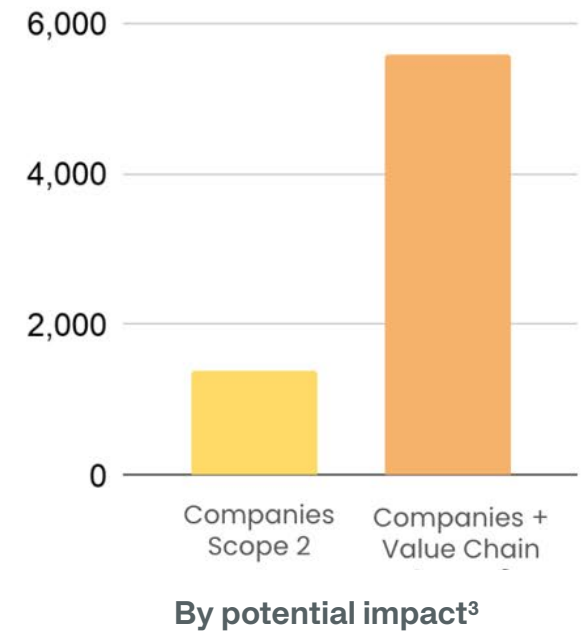
Table 1:
Scaled across large companies, RAcc would avoid around 5.5 billion tCO₂e.

Broadly adopted, we estimate that RAcc would generate around 12,000 TWh of renewable electricity demand, far exceeding renewable energy supply. Meeting this demand would require companies to catalyze a large-scale buildout of new renewable energy generation capacity.

Global Electricity (TWh)



Avoided Emissions (MtCO₂e)



¹ By generation. Source: [EMBER \(2025\)](#)

² By consumption. Source: [Global Electricity \(2024\)](#)

³ By potential impact. Source: CDP (2024), Climate TRACE (2025)

A clear tipping point for incremental renewables would be reached with even partial adoption of RAcc. If just the top 539 companies (each with more than 1 TWh of annual demand) adopted RAcc, their procurement alone would likely exceed the current supply of RE100-eligible renewable

electricity and new renewables would be required to meet the demand. Mars is amongst this group of companies and has shared its experience to enable peer organizations to evaluate the feasibility and potential impact of applying RAcc to their own value chains.

About MARS

Mars, Incorporated is driven by the belief that the world we want tomorrow starts with how we do business today. Based on combined Mars and Kellanova 2025 net sales, we are a \$65bn+ family-owned business with 170,000 Associates, our diverse portfolio of leading pet care products and veterinary services serve pets all around the world and our quality snacking and food products delights millions of people every day. We produce some of the world's best-loved brands including ROYAL CANIN®, PEDIGREE®, WHISKAS®, CESAR®, M&M'S®, SNICKERS®, EXTRA®, Pringles®, Cheez-It®, and BEN'S ORIGINAL™. Our international networks of pet hospitals, including BANFIELD™, BLUEPEARL™, VCA™ and ANICURA™ deliver high quality veterinary care and ANTECH™ offers breakthrough capabilities in pet diagnostics.

For more information about Mars, please visit www.mars.com. Join us on [Facebook](#), [Instagram](#), [LinkedIn](#) and [YouTube](#).

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About Climate TRACE

Climate TRACE is a global nonprofit coalition created to make meaningful climate action faster and easier by independently tracking human-caused greenhouse gas (GHG) emissions with unprecedented detail and speed.

We harness satellite imagery and other forms of remote sensing, artificial intelligence, and collective data science expertise to estimate emissions from more than 352 million assets around the world.

For more information, please visit <https://climatetrace.org/>.

