Giving Green

VASUDHA FOUNDATION
Green ways for a good earth!

Grantee Spotlight: Vasudha Foundation

The Giving Green Fund is awarding two restricted grants to Vasudha Foundation to advance decarbonization efforts through two complementary programs: 1) advancing integration of energy storage systems, and 2) advancing decarbonization of industrial small and medium enterprises. Earlier in 2026, we awarded a grant to Vasudha Foundation to support state utilities with planning and decision-making to navigate the energy transition effectively. Vasudha Foundation is a leading Indian think tank that takes an analytical, data-driven approach to advance the energy transition and climate action.

Vasudha Foundation's energy storage integration workstream falls within our philanthropic strategy of decarbonizing India's power sector and, more specifically, our sub-strategy to provide technical assistance to state utilities with policy design and planning to strengthen, expand, and modernize the power grid. Our previous grant to support state utilities also falls under the same strategy and sub-strategy. Vasudha Foundation's small and medium enterprise decarbonization workstream falls within our philanthropic strategy of supporting cross-cutting enablers for industrial decarbonization and, more specifically, our sub-strategy to provide technical assistance to micro, small, and medium enterprise (MSME) clusters to pilot and adopt decarbonization measures (as discussed in our *Industry* sector report). Please see Giving Green's sector and strategy reports for more information, including potential risks and co-benefits, recommended sub-strategies, theory of change, funding need, and key uncertainties.

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What Is Vasudha Foundation?

Established in 2010, Vasudha Foundation supports evidence-based decision-making for policymakers to accelerate India's clean energy transition, climate action, and sustainable development.

Vasudha's Energy Transition team develops data repositories, conducts data-driven analysis, assesses barriers to scaling clean energy solutions, and provides policy and implementation support to reform India's power sector. Vasudha Foundation works closely with central government bodies, such as the Ministry of New and Renewable Energy and NITI Aayog, and state-level governments, including departments in Kerala, Uttar Pradesh,

Madhya Pradesh, Tamil Nadu, and Odisha. Its flagship projects support the development of renewable energy and electric vehicle policies, and help stakeholders implement them effectively.

The industrial decarbonization program at Vasudha has historically focused on sectors such as fertilizers, cement, and textiles, with emphasis on building stakeholder capacity, bringing in new technology partners, and identifying opportunities to pilot emerging technologies on the ground. Through the Deep Electrification Forum, it has worked with a wide range of stakeholders to decarbonize industrial sectors via direct electrification and indirect electrification approaches.

What Are We Funding, and How Could It Help Address Climate Change?

We are excited to support Vasudha Foundation across two projects that address distinct challenges in the power and industrial sectors. In addition to these two projects, we also provided a grant to Vasudha Foundation in early 2026 to support state utilities.

Energy storage integration: Limited deployment of energy storage systems leaves increasing shares of renewable energy underutilized, increases strain on the grid, and reduces grid resilience. As part of our focus on strengthening grid infrastructure and accelerating subnational energy transitions in India, we are funding Vasudha Foundation to advance storage integration through three key workstreams:

- **Integrating storage into national and state schemes**: conducting techno-economic assessments, impact studies, and geospatial analysis to inform the design of national and state policies for integrating battery energy storage with national policies on intermittent renewable energy sources.
- **Market and technology frameworks for storage**: evaluating market mechanisms that unlock the value of storage and flexibility services—including solutions for managing renewable energy curtailment, congestion, and balancing requirements—alongside assessment of technology-agnostic frameworks for storage adoption.
- **Storage-enabled demand integration**: developing and assessing models that combine renewable energy and storage to serve emerging electricity-intensive loads, and testing how flexible demand can improve renewable energy utilization and reduce grid stress.

These workstreams aim to create an enabling environment to drive storage adoption. Evidence-backed policy design to support integration of storage, flexible demand, and renewable generation can reduce curtailment and improve utilization of existing clean energy and grid infrastructure.

MSME decarbonization: MSMEs account for 20-25% of industrial energy consumption and 45% of the country's manufacturing output, but have historically received limited attention in decarbonization efforts. These firms tend to use older, inefficient, and carbon-intensive technologies and equipment due to limited technical capacity and access to finance to adopt cleaner, more cost-effective alternatives. As part of our focus on supporting MSMEs with the adoption of industrial decarbonization measures, we are also funding Vasudha Foundation over two years through the following activities:

- **Cluster-level electrification and industrial heat assessments:** conducting process-level assessments across two MSME clusters to quantify heat demand and identify opportunities for electrification, waste heat recovery, and efficiency, and assessing the suitable set of decarbonization measures. Subsequently, Vasudha will design sector- and cluster-level industrial decarbonization pathways and decision-support tools.
- **Clean industrial heat platform:** establishing a stakeholder platform connecting government agencies, technology providers, industry associations, and financing institutions to facilitate collaboration and knowledge sharing on technology performance, business cases, and financing models.
- **Policy and market enablers:** developing recommendations on electricity tariffs, grid access, renewable procurement, and technology standards, including a renewable electricity procurement framework that delivers competitively priced power to MSMEs.
- **Circular material markets**: identifying supply-demand matching opportunities that connect emerging manufacturing sectors such as batteries, electronics, and solar photovoltaics with existing MSMEs, and developing a framework for standards, certification, and traceability of secondary materials.

A cluster-based approach can facilitate clean energy and heat adoption across groups of MSMEs. Assessments of a subset of MSMEs within a cluster can inform adoption across the wider cluster and, where relevant, across other clusters with similar profiles. Evidence generated through these assessments can support the design of policies and market mechanisms that address systemic barriers to adoption, including constraints related to procurement, tariffs, and access to renewable energy. Given MSMEs' high reliance on conventional energy for electricity and heat, shifting their energy use toward clean alternatives could deliver substantial emissions reductions.

Technical assistance to state utilities: As part of our focus on strengthening grid infrastructure and accelerating subnational energy transitions in India, we are funding Vasudha Foundation to provide technical assistance to state utilities and support capacity building. Vasudha aims to advance this work through four key activities:

- **Grid planning support**: assessing existing infrastructure and identifying near-, medium-, and long-term upgrade needs while strengthening data-driven decision-making for an increasingly complex power system.
- **BESS pilot facilitation**: supporting the planning and facilitation of battery energy storage system (BESS) pilots to derisk investments, build technical confidence, and demonstrate the operational value of BESS for utilities.
- **Demand assessment and planning**: analyzing the impact of electrification on the distribution infrastructure and supporting supply-demand planning.
- **Product support**: developing digital tools for planning, assessments, and forecasting, and creating knowledge materials with best practices to inform other state utilities navigating similar challenges.

By helping utilities plan proactively for renewable integration, storage, and new electrification loads, this work supports grid strengthening, flexibility, and modernization, enabling faster renewable energy integration while maintaining grid reliability. With an emphasis on replicability, the digital tools and knowledge materials aim to extend to a wider cohort of utilities.

Why Do We Think Vasudha Foundation Will Use This Funding Well?

Vasudha Foundation has a consistent track record of translating technical analysis into durable policy and institutional outcomes.

Energy storage integration: Vasudha Foundation's ongoing engagement with the Ministry of New and Renewable Energy on the national flagship schemes provides a direct pathway to inform the integration of battery storage into these schemes. Its assessment of storage barriers draws on structured interviews and surveys across the sector, which helped identify priority areas for intervention. Its previous floating solar assessments in Uttar Pradesh and Gujarat also provide a foundation for the proposed geospatial analysis of storage deployment. Together, these experiences and groundwork demonstrate relevant technical expertise, established government relationships, and a track record of translating research and pilots into policy and implementation.

MSME decarbonization: Vasudha Foundation also has demonstrated experience in industrial decarbonization. Through the Deep Electrification Forum, it has worked with a wide range of stakeholders to advance direct electrification and indirect electrification through e-fuels across industrial sectors. Its current focus on MSMEs began in the textile sector and is now expanding to take a more sector-agnostic, cluster-focused approach, building on learnings and relationships established through previous engagements. Its engagement across more than eight states in India provides experience working across geographies, sectors, and stakeholder groups. Vasudha Foundation also has an ongoing engagement with the Bureau of Energy Efficiency at the central level, providing a pathway

to align its work with national policy priorities and strengthening its ability to develop technically grounded and policy-relevant interventions.

Technical assistance to state utilities: In the past, Vasudha Foundation has also supported a range of stakeholders in national and state governments on net-zero roadmaps and energy transition planning. Notable initiatives include the India Climate and Energy Dashboard developed for NITI Aayog, the UP Solar Cities Portal for Uttar Pradesh, and MP EV Tarang for Madhya Pradesh. It has also demonstrated strong technical expertise through several innovative initiatives, including battery refurbishment pilots and other clean energy and mobility projects. Through our earlier 2026 grant, Vasudha Foundation deepened its engagement with state utilities on energy transition planning, including facilitation of battery storage pilots. This grant extends that work from individual utility engagements toward the national programs and market frameworks that determine whether storage scales.

Philanthropic funding for storage and grid flexibility, industrial decarbonization, and utility support in India is limited. We believe Vasudha Foundation's technical capabilities, access to key ministries and policymakers, experience working with MSME clusters, credibility with state-level actors, and emphasis on replicable outputs and implementation position it well to address this bottleneck.

We publish grant spotlights to offer transparency to Giving Green Fund donors and resources for those interested in the impact strategies each grant supports. Giving Green believes our Top Climate Nonprofits have the greatest impact potential for large, unrestricted gifts. For several reasons, we also disburse and recommend grants to other organizations surfaced through our research process for work that we believe is at least as impactful as grants to our top recommendations.

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Vasudha Foundation is a registered nonprofit in India.