Accelerating the Energy Transition

amp

2022 Sustainability Report amp.energy



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Dave Rogers Founder and CEO

Letter from Founder & CEO

For Amp, 2022 was another year of exciting opportunities, remarkable achievements, and impressive resolve in the face of oncoming headwinds. We enhanced our technology expansion by leveraging scale and announcing several landmark wind, energy storage, and green hydrogen projects. We also cemented our leadership position in AI-enabled digital energy through our Amp X platform, making power grids smarter, greener, and more dynamic.

Like all purpose-driven companies, Amp is continually evolving. We announced the sale of our Amp US platform, featuring a portfolio of community solar and energy storage projects developed over the last six years. This measured re-investment strategy allows us to focus on further global expansion and sustainable business growth in our core strategies for the future.

The decarbonization opportunity requires \$150 trillion of investment to achieve net zero by 2050, presenting an unprecedented growth opportunity for those bold enough to attack it. Amp's development pipeline now exceeds 30 GW, and we are proud to be spearheading this critical global shift with global leadership in solar and wind generation, battery storage, green hydrogen, and the digitalizing of grid infrastructure. At the heart of our mission is the continuous enablement of a new energy ecosystem with an expanding share of renewables, EVs, and green assets at the edge of the grid. Our growth strategy is anchored in sustainable and climate-conscious decision making, and our team is focused on continuing our journey to becoming a global powerhouse in the energy transition.

And with such an incredible journey still ahead of us, we are more energized than ever.

Dave Rogers, Amp Founder & CEO

100% Renewable Energy Portfolio

> **Zего** High-risk accidents in 2022

> > **Carbon Neutral** for scope 1 and scope 2 emissions

> > > 40 GW Pipeline and rapidly growing globally

> > > > 20 GW of Hydrogen Capacity Largest platform in Australia

Key Highlights

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Amp's Founder & CEO, **Dave Rogers**, wins Canada's Clean50 and Clean16 Award

CEO of Amp X, Irene Di Martino, Recognized with **Net Zero** Energy Pioneer

at Regen Green Energy Awards

Amp X's Smart Transformer Trialed by UK Power Network to Address Key Challenges of the Energy Transition

Building a Sustainable Organization Resilient to Climate Change.



Carlyle is proud of Amp Energy's demonstrated ability to identify attractive renewable energy opportunities that have the potential to create value for shareholders.

- Ferris Hussein, Managing Director, Carlyle

Amp Materiality Matrix

Environmental Materiality Mix:

- Climate Change
- Greening the Grid
- Sustainable Development



Social Materiality Mix:

- Stakeholder Inclusion



Governance Materiality Matrix:

- opportunities

Sustainable Development Goals:



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• Environment Preservation and Biodiversity

Sustainable Development Goals (SDG's):

• Focus on Employee Health and Safety • Prioritize employee wellbeing and development Fostering Diversity and Inclusion

Sustainable Development Goals (SDG's):

• Conduct business to the highest ethical levels • Integrate and disclose climate change related risks and

• ESG in the investment and procurement processes

Environmental

Carbon Footprint

Net Zero Scope 1 and 2 Emissions:

In 2022, we made significant progress in addressing and minimizing our Scope 1 and 2 carbon emissions. We reduced our Scope 1 emissions by transitioning segments of our vehicle fleets from internal combustion engine (ICE) cars to electric vehicles (EVs). We also lowered our Scope 2 emissions by increasing the year-over-year percentage of renewable energy purchased for our global operations.

We also intensified our efforts to account for and work toward reducing our Scope 3 emissions by forming closer relationships with our suppliers and service partners. We began this process by mapping all of Amp's major equipment providers across the value chain. We are now in the influencing phase and supporting our suppliers' efforts to provide validated greenhouse gas (GHG) reporting.

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• Scope 1: 32 Metric Tonne CO2e • Scope 2: 63 Metric Tonne CO2e Carbon Offsets Purchased: 95 Metric Tonne CO2e

Greening the Grid

313,297 metric ton CO2e abatements

409,493 MWh

renewable energy injected to the grid

Around the world, Amp is helping power grids accelerate their energy transitions by deploying renewables and battery storage at scale. In 2022, we expedited our entry into green hydrogen production, a clean liquid fuel critical to global decarbonization.

Our Amp X platform's software and hardware solutions are unlocking the grid stability and flexibility needed to embrace greater levels of clean energy. The Amp X digital assistant "ALICE" allows residential customers to optimise their energy consumption and utility bills while creating a more consumer-centric and interactive energy ecosystem.

In the commercial space, we continue supporting our clients' net-zero journeys through renewable deployments and PPA contracting. In Japan, Amp secured the country's first-ever Feed-in-Premium (FiP) tariff auction, a crucial step in transitioning from a Feed-in-Tariff (FIT) to a market-based system.



CASE STUDY Amp X -A Disruptive Grid Edge Digital Energy Platform



February: Completed the first live trial of Amp X's digital energy management system, Alice, in 50 homes in the UK.

June: Alice was shortlisted in the UK's Decentralised Energy Awards in the "Power & Flexibility" category.

June: STX, the Amp X Smart Transformer formed a key element of Project STRATA, a three-year multi-party research project across three countries, which has been awarded funding from the EU and Scottish Enterprise.

August: Amp X successfully retained its ISO 9001 and ISO 27001 certifications.

November: Commenced the first live deployments of STX, the Amp X Smart Transformer, in Sussex, south-east England.

Amp X continues driving rapid progress in its mission to make power grids smarter, greener, and more interactive. In 2022, in partnership with Energy Systems Catapult, Amp X deployed its user-centric digital energy assistant, Alice (Agent for Lifestyle-Based Intelligent Control of Energy), into the "Living Lab" in homes in the UK. During the seven-month trial, Alice automatically managed the energy use of connected devices, including electric vehicles (EVs) and white goods such as washing machines and dishwashers.

Alice used its artificial intelligence and advanced analytics to understand user behavior and create dynamic, autonomous schedules prioritizing the cheapest and greenest electricity. Participants could view and manage the consumption of their devices at any time via Alice's smartphone app.

The trial also allowed users to participate in demand response (DR) events, branded as the "Dynamic Savings Program." Via the app,

Alice notified consumers about operational signals and changes in market prices. Alice learned and stored user preferences concerning appliance schedules, home temperature, EV usage, and more, while forecasting device load-shifting potential. As a result, Alice enabled consumers to lower their monthly electricity bills while reducing their carbon footprint. The Living Lab trial was a clear success, as 76% of users said they would continue using Alice, even without any financial savings.

In November, Amp X also commenced the first live deployments of the STX Smart Transformer in a strategic innovation trial in partnership with UK Power networks (UKPN). The digitalised transformers can provide live network operational data on an unprecedented scale. They also flexibly adapted to intermittent power generation and consumption to smooth energy flows and maintain network stability. Following the successful trial, Amp X is working on a second generation of the STX and hopes to provide further updates in 2023.

Alice's Living Lab by the numbers:

- Households: 50

User acceptance of Alice's energy schedule:

Financial savings

Demand response events:

- participation

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• Trial length: 7 months • User confidence score: 8.5/10

• 85% compliance for EV scheduled charges, overridden only 15% of the time on average • 76% compliance for dishwashers • 51% compliance for washing machines

• Overall average savings: 29% • EV-specific savings: 33% • 30% reduction in users' monthly energy bills

• Long-notice events (12-18 hours): 75% user participation • Short-notice events (20-60 minutes): 33% user

Environmental Preservation and Biodiversity

At Amp, we firmly believe that our renewable energy assets have the power to drive ecological and social transformation, thereby advancing our commitment to reducing our own carbon emissions. That is why, while accelerating the shift to clean energy, we seek to make each project a tangible demonstration of sustainability in action.

We realize this vision by working closely with our partners and local stakeholders to incorporate best-in-class environmental standards and initiatives into each new development. Our activities include planting vegetation such as trees, hedges, and wildflowers, hosting beehives, grazing sheep and chickens, and installing bird and bat houses. Through these measures, we create healthier wildlife habitats, more diverse and resilient ecosystems, and new educational opportunities for local schools and universities. Amp's commitments have been formally recognized in the United States, where we have retained our gold certification in the UMass Pollinator-Friendly Solar PV Certification Program.

CASE STUDY Hillston Agrovoltaic Project in Australia

- Amp and BV Innovations are pioneering an agrivoltaic project combining solar energy with chicken and lamb grazing.
- The project improves soil quality and biodiversity while reducing maintenance costs by up to 10%.
- Amp aims to extend the 18-month pilot up to 25 years and replicate it globally.

Amp's 119 MWDC Hillston Solar Farm in regional New South Wales powers the equivalent of 48,000 homes each year. The area is warm and dry but can receive short periods of intense rainfall, making it difficult to sustain grass and plant growth. To enhance biodiversity, Amp partnered with BV Innovations (BVI) to combine solar energy with agriculture. A 15-hectare area now houses 160 chickens, which will scale to around 14,000 by the end of the trial period. They naturally aerate the soil and provide organic fertilizer. The project will also introduce 100 lambs in Q4, 2023, which will graze the land to manage grass growth and eliminate mechanical lawn maintenance.

Amp aims to extend BVI's partnership to the full 225 hectares of the solar farm for up to 25 years and incorporate agrivoltaics into new solar developments worldwide. The project will rotate up to 80,000 chickens and 2,000 lambs annually, sold as high-quality organic meat.

Embracing these regenerative agriculture principles enhances the land's water retention and carbon sequestration. The greener areas under the solar arrays also help to reduce solar cell temperatures and improve their efficiency, particularly during summer. Overall, the project will reduce the site's O&M costs by up to 10% through lawn maintenance savings and rental income while supporting biodiversity in the region.

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This landmark project demonstrates that renewables and nature can do more than just coexist; they can thrive together.

- **José Fortes**, Operations & Asset Management, Amp Australia



Health, Safety and Employee Development

Amp's 2021 Health and Safety **Record at a Glance:**

- Zero major incidents recorded
- Zero worker compensation claims
- Zero Total Recordable Incident Rate (TRIR) during construction, operations, and maintenance
- Zero Days Away, Restricted, or Transferred (DART) recorded

Focused on Employee Well-being and Development while Fostering a Culture of Inclusion and Diversity.

The safety and well-being of our employees remain our highest priority, including an expanded focus on mental health. Through recent years that have seen a global pandemic, geopolitical conflicts, and many other challenges, we continue prioritizing emotional and physical well-being with flexible working conditions and employee support programs. These can include a USD \$100 monthly health and wellness payment, upgrades to benefits packages, extra personal leave days, and additional contributions to employee healthcare plans.

Through our Global Health and Safety Policy and our Accident Prevention Program, we ensure every Amp employee, contractor, and partner has a safe and healthy working environment. Our Joint Health and Safety Committee (JHSC) also tracks and documents all health and safety matters, meets quarterly to discuss recent developments, and reports directly to Amp's Executive Team.

Across the organization, we foster safe, diverse, and inclusive working environments that respect each person's unique talents, abilities, and experiences. To maximize our staff's personal and professional development, our global leadership teams conduct formal goal-setting and annual performance reviews. Through the alignment of goals, Amp is accelerating the energy transition worldwide.

Community Engagement

Stakeholder Inclusion and Supporting Local Communities.

As the developer, owner, and operator of each clean energy project, we are active in our host communities long before the first shovel hits the ground. We understand that while renewables such as solar farms and wind turbines are becoming commonplace, residents and stakeholders may still have questions or concerns about new developments in their area. To maximize each project's potential, we adopt a structured engagement strategy to recognize each community's unique history, ecological landscape, and long-term goals.

This approach helps us earn strong community trust, streamline our development work, and deliver ongoing environmental, social, and financial benefits. Over the life of each project, we strive to become a valued community member and contribute to a greener, more prosperous future for everyone in the region. Spain's regional communities are struggling as more and more people move to big cities. At Amp, we are proud to be making country life more attractive to new generations by developing clean technologies and renewable energy projects.

- Carlota Garrigues, Member of the Executive Committee, Amp Iberia





Amp has spearheaded a number of terrific initiatives in Japan, including providing energy-efficient street lights for 20 years, improving community water supplies, sponsoring the Fukushima United soccer team, and supporting a range of educational and agricultural activities.

- Martin Stein, EVP, Head of Japan

Investing in the Communities Where We Operate

Since Amp's inception, we have supported a range of social and educational initiatives that enrich lives and create stronger, more equitable communities. In 2022, we donated over \$200,000, including end-of-year contributions from all Amp offices to local food programs supporting residents and families in need. In 2022, we bolstered our commitments by establishing a matching donations committee that assesses and matches all employee donations that align with Amp's policies and supported causes.

We also engage with communities by donating time and money to local sporting teams in Japan, India, and Australia. In Japan, we sponsor Fukushima United FC in the country's third national soccer division and participate in club events supporting local youth and agricultural activities.

In the US, as part of our commitment to education, we have provided a \$100,000 Endowed Scholarship at the University of Rochester in New York. We continue exploring social investment opportunities and advancing renewables as a catalyst for positive change around the world.







ESG in the Procurement Process

Expanding into Scope 3 Emissions

As sustainability reporting standards continue evolving, there is an intensifying focus on Scope 3 emissions across the value chain. In response, Amp has made significant progress in collating data from our partners and suppliers to assess the indirect emissions associated with our activities. These categories include purchased goods and services, transportation, and waste generated by our operations.

We actively consult with reporting bodies and industry peers to ensure our data collection aligns with best practices and emerging frameworks. Aggregating our Scope 3 emissions data provides a comprehensive overview of our carbon footprint, enabling us to set data-driven goals and make impactful long-term improvements.

Sustainable Procurement

Through close relationships with our suppliers, we drive environmental progress by prioritizing sustainability in our purchasing decisions. In 2022, we completed mapping all our major service and equipment providers. Our ESG focus included factors such as human rights and carbon intensity data. In addition, we aligned with the emerging industry trend of requiring carbon-reduction commitments in every request for proposal (RFP).

These efforts to measure and reduce our Scope 3 emissions are essential to Amp's net-zero journey. As we advance, we will leverage our scale and influence to prioritize sustainable practices and help our suppliers reduce their carbon footprint. In doing so, we will improve Amp's environmental performance while helping decarbonize the value chain across the renewable energy industry.

Driving sustainability creates positive outcomes for our employees, business, and the environment, and 60% of what we can achieve happens in our supply chain. In 2023, we worked with third-party rating agencies to identify solar manufacturers that use low-carbon production methods and which align with our sustainability goals. In the future, we will extend this approach to all our major equipment manufacturers and broaden our focus to include their component suppliers.

- **Taras Bezchlibnyk**, VP of Project Delivery & Engineering

Climate Change Governance

To combat the growing impacts of climate change, we must ensure our clean energy assets maintain reliable and efficient lifetime performance. To enhance these efforts, in 2022, we partnered with CBRE IM to perform climate scenario analyses across our portfolio, assessing both physical and transition climate-related risks and opportunities. We used two climate scenarios as the basis of the screening-level scenario analysis, representing a range of future trajectories focusing on physical (high emission scenario - RCP 8.5) and transition (net zero by 2050 scenario) risks and opportunities.

Mapping out these critical factors enabled us to integrate them into risk frameworks and create more effective mitigation strategies. Following the analyses, we refined our processes and methods to assess, integrate, and alleviate the identified climate-related risks and opportunities. In Amp's context, we stand to benefit from the global transition to a low-carbon economy, specifically the rising demand for renewable energy.

Our proactive approach to climate change governance enhances the health and performance of our asset portfolio and supports our mission of realizing a net-zero future. At CBRE Investment Management, we are conscious of the role our portfolios play in unlocking net-zero outcomes. We are proud to partner with Amp in its climate mitigation efforts, contributing to the long-term resilience of its renewable energy assets and supporting our shared mission to deliver a net-zero future.

- Gioia Torresi, Director, Asset Management, CBRE Investment Management





Olta Cibuku Head of ESG

SUSTAINABILITY AT AMP Making a Long Lasting Impact

Amp is energized by an unwavering commitment to driving ESG progress. In 2022, we worked to reduce our carbon footprint, enhance nature and biodiversity, and foster a diverse and inclusive culture - all while embodying good governance.

In 2022 we intensified our focus on climate change and reducing our Scope 3 emissions. Working with a key investor, we performed an extensive climate scenario analysis to quantify physical and transition risks on an asset-specific basis.

practices.

vears to come.

I am inspired to be part of an exceptional team dedicated to expediting the energy transition and helping power grids, corporations, and countries achieve their net-zero targets. Working toward such a noble goal inspires us to do better every day, knowing we are actively driving positive change.

Olta Cibuku. Head of ESG

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In parallel, our procurement teams established a supplier mapping framework and direct communication channels with Amp's service and equipment providers. We requested greenhouse gas (GHG) emission data and reinforced our commitment to sustainable and ethical sourcing

Overall, our efforts in 2022 helped to expand the benefits of clean energy and drive social and environmental change that will benefit our world for











For more information contact: info@amp.energy

