

The Clarios Sustainability Blueprint

AN INTEGRATED APPROACH TO ESG AND BEYOND

JUNE 2020



“The Clarios Sustainability Blueprint defines how we will operate to the highest level of performance at every location, in every situation, and at all times in a manner that is protective of both people and the environment – enabling inclusive and sustainable growth. It is how we will leave the world better than we found it.”

Mark Wallace, President and Chief Executive Officer

Clarios is powering progress with a clear vision of the road ahead. We are always seeking the best solutions for our customers, the people who benefit from our products, and the planet we share.

- We lead in energy storage solutions, powering one in three of the world’s vehicles.
- We create the most advanced battery technologies for virtually every type of vehicle.
- We partner with our customers to develop smarter solutions that make people’s lives better.

Our mission is to create the world’s smartest energy storage solutions that benefit people, business, and the planet.

Our Business, Our Responsibility

At Clarios, we package power to meet societal needs – in a safe, sustainable and scalable manner.

- We take this responsibility seriously because any battery is a contained and controlled electrochemical reaction that has the potential to cause harm if not responsibly and intentionally managed across the entire life-cycle.
- We believe compliance with applicable laws, regulations, internal standards, and other requirements is not a goal we strive to accomplish – rather it is the foundation from which we build.
- We advance standards that apply the same level of protection for all people and all locations.

Over the last 130 years, we have developed a comprehensive understanding of risks across the battery life-cycle and what is required to effectively and safely manage them. Our experience spans every stage of battery innovation, design, materials sourcing, manufacturing, distribution, collection and recycling. Working with our customers and network partners, we have established the world’s most comprehensive and successful circular or closed-loop supply chains in the world.

Every day – in the energy storage solutions we make and the closed-loop systems we operate – we demonstrate that batteries can be safely and responsibly managed across their life-cycle.

Clarios has been a standalone company for just over a year. The company was acquired by the private equity arm of Brookfield Asset Management from Johnson Controls International, plc, in May 2019. The company is in the process of establishing its comprehensive Environmental, Social, Governance and Sustainability program, guided by our Clarios Sustainability Blueprint (“Sustainability Blueprint”). This document outlines the Sustainability Blueprint and the implementation of our ESG efforts.

The Clarios Sustainability Blueprint – Our Architecture and Plan

We view “*sustainability*” as the ability “*to sustain or grow indefinitely*” which requires a future-focused, intentional, comprehensive, and integrated approach to environmental, social and corporate governance

This mindset is embedded in our Sustainability Blueprint and its five pillars - **Value**, **Operational Excellence**, **Life-Cycle Stewardship**, **Transparency** and **Advocacy**

Built on the foundation of our company values, our Code of Ethics, and our commitment to the UN Global Compact, our Sustainability Blueprint provides an integrated, strategic architecture to:

- Establish enterprise governance and effective cross-functional accountability
- Support business strategy and growth initiatives while reinforcing compliance expectations
- Understand, prioritize and address material risks and opportunities
- Define company commitments, corporate policies, and industry leadership positions
- Foster customer, stakeholder, community and employee engagement and partnerships
- Develop key performance indicators, science-based targets and reporting requirements

Our Sustainability Blueprint reaches across traditionally stand-alone functions associated with Technology & Product Development, Enterprise Risk Management, Environment, Health & Safety, Compliance, Social, Governance, Public Policy, Sustainability and Corporate Responsibility.

Sustainability Blueprint Governance and Accountability

Each of the five pillars of the Sustainability Blueprint are mapped to defined business functions with clear executive accountability established for the enterprise.

An Executive Blueprint Team led by the Chief Executive Officer reports to the Clarios Board of Directors and has the authority to direct and delegate authority to act in its scope of responsibilities throughout the enterprise.

All executives are expected to champion the Sustainability Blueprint, and the members of the Executive Blueprint Team serve as the primary public representatives and/or subject matter experts as required.

Quarterly reviews of charters, plans and progress as well as enterprise-priority deliverables are held. The Executive Blueprint Team also convenes on an ad-hoc basis if unplanned events or needs warrant.

Our Sustainability Blueprint also sets the cornerstone of our multifaceted, global strategy to engage stakeholders to understand the benefits of lead-acid batteries as well as the economic, social, and environmental impact of responsible battery manufacturing and recycling.

Each pillar of the Sustainability Blueprint establishes objectives and expectations to inform our journey as an enterprise. Elements under each pillar align to core business functions to ensure accountability and enable implementation. Further, this architecture enables us to amplify and advance upon our efforts to-date and build upon best practices, as highlighted in the “Examples in Practice” below.

The Sustainability Blueprint - Value



Objective: How we will leave the world better than we found it

Elements: Inclusive & Sustainable Growth; Technology & Innovation; Engagement, Reputation & Responsibility

Expectations:

- A. We leave the world better than we found it by delivering increasingly sustainable energy storage solutions for our shareholders, customers and society.
- B. We design and responsibly manufacture energy storage products and work to encourage safe use, recovery, and responsible recycling of our products.
- C. We actively evaluate and seek to invest in technology and solutions with promising performance, safety and sustainability.

Examples in Practice – Value

Technology & Innovation

Our expertise shapes the future of efficient, safe and secure low-voltage power for tomorrow's vehicle platforms and autonomous vehicles. Today, our advanced battery technology has the ability to cover 95% of OEM vehicle platforms supporting a 5%+ increase in fuel economy.

Inclusive & Sustainable Growth

Across our global recycling network we responsibly recycle over 8,000 batteries every hour of every day. We convert the lead into the grids that go into our new batteries. We take the plastics and convert them into new battery cases, and we have the ability to process the acid for use in by-products such as ingredients for detergents.

Every aspect of the closed loop is designed and continuously optimized to improve performance.

As a result, automotive batteries are the most recycled consumer product in North America and other G7 economies. The recycling rates of lead-acid batteries now exceed 99 percent. That tops aluminum, paper, tires and glass.

According to Dr. Ramon Sanchez, the Chairman of the Responsible Battery Coalition Science Advisory Board and Director of Sustainable Technologies and Health Program at Harvard University's T.H. Chan School of Public Health:

“The recycling of vehicle batteries is one of the great achievements in protecting public and environmental health. With 99% of the vehicle batteries in North America currently being recycled, we are reducing pollution including the greenhouse emissions caused from sourcing new battery materials.”

Engagement, Reputation & Responsibility

Through our *Clarios for All*, *Clarios in Action* and *Clarios Impact* initiatives, we empower our employees to improve our world, engage in the communities in which we operate, and enlist every employee to foster a diverse, inclusive, fair, safe and healthy workplace.

As an extension of our commitment to corporate social responsibility and the Global Compact, we launched the Clarios Foundation to further support our communities and the causes we champion. The initial focus areas for the Clarios Foundation are Children's Health and the Environment, Circular Economy Innovation and Entrepreneurship, and Sustainable Communities.

The Sustainability Blueprint – Operational Excellence



Objective: Set and maintain the highest standard of performance

Elements: Management Systems; Metrics, Targets & Goals; Sustainable Excellence Investment

Expectations:

- A. We set the bar through industry leading performance, operating standards, technology development and life-cycle accountability.
- B. We are committed to preventing occupational injuries and illnesses, protecting the environment, conserving energy, water, and raw materials, responsibly recycling battery components, and preventing pollution.
- C. We strategically identify and develop best available practices, technologies and controls to continuously improve our leading standards and practices.

Examples in Practice – Operational Excellence

Management Systems

Our approach to the management, tracking and reporting, and optimization of all of our facilities -- including energy, greenhouse gas emissions, and water and waste – is embedded in our Clarios Management System or CMS which is based on the ISO14001 Environmental Management, ISO50001 Energy Management and other relevant standards.

CMS covers all aspects of our manufacturing and operations as well as defines progressive levels of environmental and sustainability maturity, practices and outcomes. The CMS provides a framework for continual improvement in operational management including increased efficiencies, environmental and sustainability performance, and community engagement.

Energy and Greenhouse Gas Emissions

We track energy use, greenhouse gas emissions, and report annually via CDP (formerly Carbon Disclosure Project). Our Energy Hunt Program is utilized across our manufacturing facilities globally. This program drives culture change and helps our plants identify tangible and actionable energy savings and greenhouse gas reduction opportunities to further reduce costs and lower our environmental footprint.

Water Management

We pursue water conservation initiatives at our facilities. Our manufacturing plants have recycling systems in place in which acid is reused to achieve the desired acid concentration. We have also implemented closed-loop approaches to minimize releases into wastewater treatment systems. For example, battery formation process cooling water is contained, recovered and continually reused.

Waste - Hazardous Waste Management

We implement a “cradle-to-grave” approach to minimize, recover or safely dispose of hazardous wastes in a manner that is compliant with regulatory requirements and protective of human health and the environment. This approach extends to our expectations for our transportation and logistics partners – all hazardous waste carriers are required to be licensed and insured for moving hazardous waste and dangerous goods.

The Sustainability Blueprint – Life-Cycle Stewardship



Objective: Steward our products & advance circular supply chains

Elements: Value Chain Excellence; Product Stewardship; Responsible Sourcing

Expectations:

- A. We ensure stewardship principles and practices are integrated into our product design, engineering, supply chain, manufacturing, commercial, logistics, recycling and continuous improvement processes.
- B. We advance best practices from around the world to help enable circular and preferably closed-loop supply chains for batteries.
- C. We work to address current disincentives; remove impediments to implementation of closed-loop systems; and help reform policies that have had the unintended consequences of exacerbating harm.

Examples in Practice – Life-Cycle Stewardship

Value Chain Excellence

Our batteries are designed with the ability to recover 99% of the materials used to make them. This enables Clarios to make new batteries from materials collected from used ones. More than 80% of our raw materials come from recycled batteries. This results in 90% less energy and greenhouse gas emissions required than using primary or virgin materials.

Product Stewardship

We were the first battery manufacturer to endorse and help shape the World Economic Forum's Global Battery Alliance "to catalyse, connect and scale-up efforts to ensure that the battery value chain is socially responsible, environmentally and economically sustainable and innovative." The Alliance is a global platform of about 70 public and private sector organizations to expand sustainable practices. (www.weforum.org/projects/global-battery-alliance) At Davos in January 2020, the Global Battery Alliance defined 10 Principles to Sustainably and Responsibly Manage Batteries of All Kinds:



- Maximizing the productivity of batteries
- Enabling a productive and safe second life use
- Circular recovery of battery materials
- Ensuring transparency of greenhouse gas emissions and their progressive reduction
- Prioritizing energy efficiency measures and increasing the use of renewable energy
- Fostering battery-enabled renewable energy integration
- High-quality job creation and skills development
- Eliminating child and forced labor
- Protecting public health & the environment and supporting responsible trade & anti-corruption practices
- Local value creation and economic diversification

Responsible Sourcing

All our suppliers are required to adhere to our Code of Ethics. Using the Ten Principles of the Global Compact, we have fully revised our annual supplier sustainability survey to drive human rights, environmental and anti-corruption expectations across our supply chain. We now embed the Ten Principles into contracts with suppliers and partners. Since our products contain tin, we complete a conflict minerals assessment every year to ensure we work with suppliers that are conflict free.



We champion industry material stewardship and sustainable value chain initiatives such as the Metal Alliance for Responsible Sourcing of the *Wirtschaftsvereinigung Metalle* -- the German non-ferrous metals association. We are working with our customers to identify breakthrough track and trace solutions to improve supply chain visibility & transparency.

The Sustainability Blueprint – Transparency



Objective: Hold ourselves accountable, manage risk, and report publicly

Elements: Ethics, Compliance & Governance; Risk Management; Commitments, Reporting & Disclosures

Expectations:

- A. We understand that the trust of our customers, employees, communities and stakeholders is the very foundation for our success and freedom to maintain our license to operate.
- B. We use our performance metrics as a business tool not just to report, but to manage our business, to hold ourselves accountable, and assess opportunities.
- C. We integrate our performance metrics into management expectations, goals, and compensation and use them to help identify blind spots, mitigate priority risks and de-risk investments.

Examples in Practice – Transparency

Ethics, Compliance & Governance

Our compliance with laws that apply to us in every location where we operate -- more than 20,000 regulations worldwide -- is foundational to everything we do.

Commitments, Reporting and Disclosures

We anticipate our first Communication on Progress to Global Compact will be in January 2021. The Clarios Sustainability Blueprint will guide the development of our public commitments for the enterprise based on stakeholder engagement, global trends, and traditional Environment, Social, Governance and Sustainability expectations.

Enterprise Risk Management

No one should be exposed to levels of lead or other materials used for batteries that could cause harm.

That is why we focus and prioritize our efforts to ensure that lead is used safely at all stages of life, and why we are leading the effort to ensure all batteries are sustainably managed.

We use lead-acid chemistries in the products we make and for the markets we serve because of their unique combination of:

- Electrochemical properties
- Inherent safety
- Demonstrated performance
- Established responsible recycling and stewardship practices.

Unfortunately, our commitment to responsible practices is not universally shared, which in turn created an uneven playing field and, in some cases, causes harm to human health and the environment.

The lack of clear, consistent and comprehensive standards, insufficient regulations and ineffective enforcement has resulted in unacceptable harm caused by substandard, inappropriate and informal practices – especially in low- and middle- income countries.

The Sustainability Blueprint – Advocacy



Objective: Advance standards with the same level of protection for all people & all locations

Elements: Public Policy, Industry Leadership; Strategic Partnerships

Expectations:

- A. We support regulations to ensure energy storage products perform, are safer, and more scalable, and sustainable across their entire lifecycle – not just in the lab but at scale.
- B. We engage in efforts to globally address the unintended negative consequences as well as the underlying causes of harmful substandard, informal and inadequate recycling.
- C. We are a resource to policymakers by sharing our comprehensive understanding of the risks across the battery life-cycle as well as what is required to responsibly and sustainably mitigate those risks.

Examples in Practice – Advocacy

Public Policy

We actively work with governments to advocate for regulations and appropriate incentives to enable closed-loop recycling systems and require implementation of responsible practices across the world.

- Our circular recycling systems in the European Union, US, Canada, Mexico, Brazil and Columbia serve as models.
- We are working to understand the economic and market impediments that hinder responsible recycling.
- We are sharing our learning from around the world to advance practical solutions with policymakers.

Industry Leadership

We have championed efforts across governments, academics, and those who have a stake in the industry to come together to share best practices and advance policies that drive responsible recycling of vehicle batteries to all corners of the globe – regardless of chemistry.

Strategic Partnerships



We founded the Responsible Battery Coalition (www.responsiblebatterycoalition.org) with leading customers, suppliers, academics and industry players that share our belief that batteries should be properly managed across their life-cycle to not cause harm to people or the environment and are reused where possible and ultimately recycled.

U.S. Senator Rob Portman (R-OH), co-chair of the Senate Automotive Caucus, recently commended the Responsible Battery Coalition's members for their environmental stewardship. *"What has been achieved by this industry is remarkable and stands as an example to others around the world. I applaud them for wanting to do better."*

Our Vice President of Government and Public Affairs for Latin America, Ana Margarita Garza, was recently recognized with Pure Earth's Impact Award for efforts to raise public awareness about the dangers of informal battery recycling, the illegal use of lead in pottery and to promote the use and production of lead-free pottery across Mexico.



In 2013, we engaged with the German government, the Oeko-Institut, a leading European environmental institute and a local firm in Ghana to demonstrate the potential for responsible recycling in West Africa as well as to understand the issues, impediments and opportunities to implement best practices in low- and middle- income countries.

The Sustainability Blueprint - Clarios Values

Our values are the starting point for everything we do, everywhere we do it. They remind us — and others — who we are, what we stand for and how we get things done.

Our values show us that how we achieve our goals matters as much as achieving them. They are our inspiration and our guide.

OUR WAY

- 1 **We do the right thing.**
- 2 **We keep each other safe.**
- 3 **We commit to our customers and help them win.**
- 4 **We're empowered, proactive and take ownership.**
- 5 **We step up, speak up and solve things together.**
- 6 **We value and develop each other in a culture of respect.**
- 7 **We never settle — always looking for a better way.**
- 8 **We're nimble and efficient, yet take the long view.**
- 9 **We will leave the earth better than we found it.**



The Sustainability Blueprint - Clarios Code of Ethics

At Clarios, everyone, everywhere must be familiar with the Code of Ethics and follow it every day -- regardless of role or seniority. (<https://www.clarios.com/codeofethics>)

Not only must we follow the Code of Ethics and company policies, we are also each obliged to comply with laws that apply to us in every location where we operate.

We have a duty to speak up if we are unsure about what to do or if we have a concern — especially if we see or suspect misconduct. We consider it our duty to quickly gain clarity and avoid potential problems. If something goes wrong, speaking up gives us an opportunity to investigate and course correct.

The choices we make along the way say a lot about us as individuals and as an organization. We want to be known for making the right choices -- choices that support a culture and a company we can be proud of -- and operating in an ethical, legal and responsible fashion.

The Sustainability Blueprint - Clarios Commitment to the United Nations Global Compact

One of our first priorities was to recommit to the UN Global Compact (“Global Compact”) – a voluntary initiative that encourages companies to develop, implement and disclose responsible business practices. By joining the Global Compact, we pledge to lead on ten universal sustainability principles and uphold responsibilities in four areas: human rights, labor, environment and anti-corruption.

The Global Compact's mission and principles directly align with our values and ground our Sustainability Blueprint to further integrate these principles into our strategy, culture and day-to-day operations – ensuring our business practices continue to be good for people, the planet and business.

As part of this commitment, Clarios will prepare a Communication on Progress to report on practical actions that the company has taken (or plans to undertake) to implement the Global Compact principles in each of the four areas and provide a measurement of outcomes. We anticipate our first Communication on Progress to Global Compact will be in January 2021.



Focusing on Matters that are Material

Our Sustainability Blueprint was developed using a multi-stakeholder approach, identifying key environmental, social, sustainability and governance priorities in order to prioritize our efforts and make the maximum impact.

Clarios completed a Sustainability Materiality Assessment in 2017 engaging business leaders, employees, top customers, key suppliers, highly regarded NGOs and industry groups, labor groups, trade press, and academic experts.

We sought further guidance from the UN Global Compact, UN Sustainable Development Goals, Sustainability Accounting Standards Board (SASB), Global Reporting Initiative, CDP, the Future Fit Business Benchmark, as well as the Social Accountability SA 8000 and other relevant ISO standards.

We also worked with The Sustainability Consortium to identify and understand “Sustainability Hotspots” and establish corresponding Key Performance Indicators (KPI’s) across the Lead-Acid Battery Supply Chain including:

- Climate & Energy
- Land & Ecosystems
- Health, Safety & Rights



In 2017, The Sustainability Consortium’s Impact Report identified lead-acid batteries among its top five performers. <https://www.sustainabilityconsortium.org/2017/09/20626/>