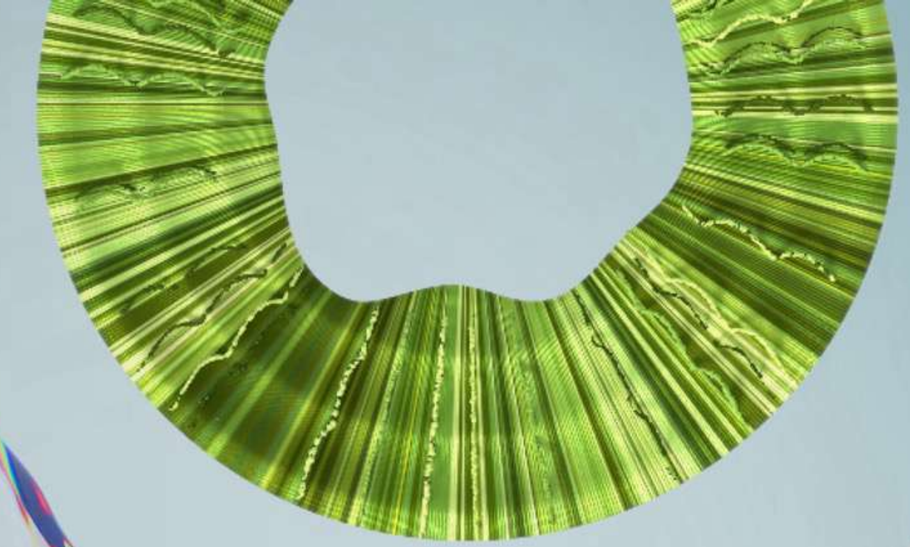
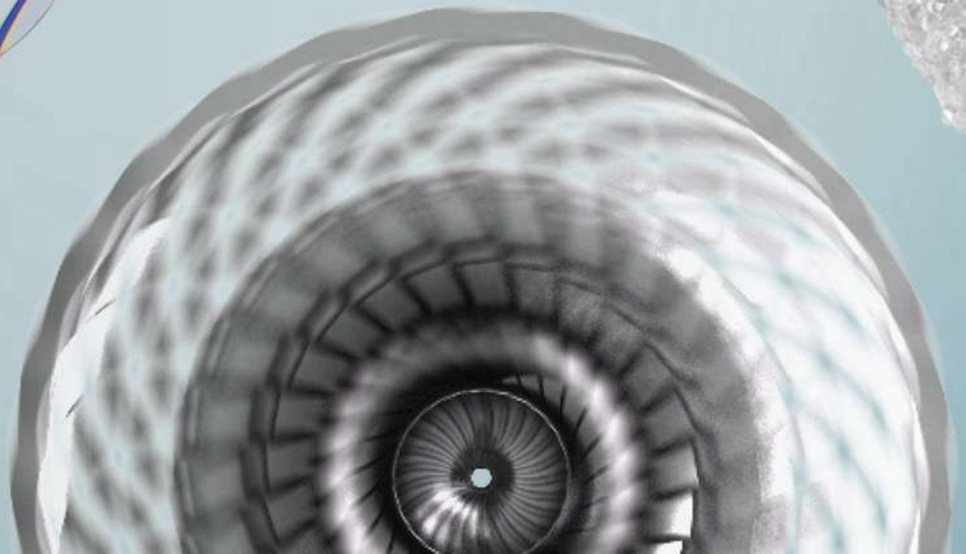
Ara

INDUSTRIAL DECARBONIZATION REPORT 2025

Built to Decarbonize.®





www.arapartners.com

Table of contents

ARA AT A GLANCE

Ara Partners is a global private markets firm that is decarbonizing the industrial economy.

We specialize in buyout, growth equity, and infrastructure investments, targeting sectors that are difficult to decarbonize and often overlooked by scaling proven technologies, backing businesses that help them grow, building decarbonization infrastructure on the ground, and optimizing energy generation assets for the low-carbon transition.

We bring specialist investing, decarbonization, and operational expertise to accelerate the growth and value of businesses that can deliver meaningful, cost-effective decarbonization.

SIZE

$7.7 BN

assets under management[1]

PEOPLE

104

global team members with specialist expertise[2]

PORTFOLIO

27

companies[2]

COMMERCIALIZATION

9

plant startups in 2025

REALIZED EMISSIONS REDUCTION

2.0M

metric tonnes CO_2e reduced in 2025[3]

REALIZED WASTE REDUCTION

912.5K

metric tonnes of waste reduced in 2025[3]

1. AUM in US dollars (USD) as of 12/31/2025 and includes co-invest. 2. As of 12/31/2025. 3. For illustrative purposes only. Reductions include amounts directly resulting from Ara portfolio company operations, in addition to reductions realized by third parties as a result of services provided by portfolio companies. Applicable only to portfolio companies in PE and Infra Funds. There can be no assurance that these targets will be met, and actual reduction of CO_2e emissions will vary substantially depending on a number of factors. Absolute/realized emission reduction amounts calculated irrespective of Ara's ownership share. Reported data is based on best available information from the company and third-party analysis and relies on certain assumptions. For illustrative purposes only. Excludes cross fund investments.

Letter to investors

2025 made clear that low-carbon solutions must compete on economics to scale.

In a time of great uncertainty, decarbonization can deliver crucial cost reductions, supply chain security, and revenue expansion benefiting investors, customers, and portfolio companies.

Charles Cherington
Managing Partner

Troy Thacker
Managing Partner

Irina Markina
Chief Decarbonization Officer

At Ara Partners, our strategy is built around this premise. We back businesses that compete head-to-head with emissions-intensive incumbent solutions on cost, quality, and reliability while delivering step-change reductions in GHG emissions.

Ara sits at the center of the low-carbon transition, scaling the technologies and value chains needed to accelerate progress. With nine plant startups across our Private Equity strategy in 2025, Ara portfolio companies are making a mark, illustrating the power of our approach. By focusing on strong fundamentals, we identify and execute on opportunities where value accretion and decarbonization go hand-in-hand to drive meaningful commercial results: advantaged feedstock positions, efficient supply chains, and robust offtake profiles.

2025 brought notable growth for the Ara platform. With the close of Ara Infrastructure Fund I, we are equipped with capital to pursue our infrastructure thesis—transforming mid-market assets and future-proofing industrial systems while targeting resilient cash flows and attractive returns with meaningful upside potential.

Macro tailwinds reinforce this approach. Rising energy demand, persistent supply bottlenecks, and heightened geopolitical risk are forcing industrial customers to recalibrate, putting emphasis on resource efficiency and onshoring of key supply chains. These effects are converging—sustaining interest in solutions that deliver across both of these dimensions, such as low-carbon materials; waste-to- value; and bioenergy from low-value, abundant feedstocks.

Many Ara companies are well-positioned to capitalize on these trends. Across the portfolio, we increasingly see emissions and waste reduction as strategic levers for unlocking value through lower operating costs, reduced risk, and greater competitiveness. Ara has the resources and expertise to capture this value: we quantify the link between financial returns and decarbonization, identifying sources of revenue, margin expansion, and capital efficiency. Our dedicated Decarbonization Team works with investment and management teams to implement measures that drive financial returns and significant decarbonization results.

2025 also reinforced how difficult it is to achieve commercial-scale buildouts in the industrial economy and bring projects to completion. Ara is not new to this reality. We have spent years strengthening our execution capabilities and honing our skillset to deliver complex projects on time and on budget. That builder DNA is what underpins our ability to deliver low-carbon solutions that are economically compelling, operationally resilient, and integral to critical industrial systems. That has been Ara's focus from the outset, and it continues to be our guiding principle.

Our thesis remains unchanged: industrial decarbonization is a long-term, generational investment opportunity—and Ara is built for it.

Thank you for your continued partnership.

ARA AT A GLANCE

Executive summary

Our performance highlights the success of our Private Equity and Infrastructure strategies, underpinning our approach to value creation.

Emissions Reduction Potential (ERP)

2025 REALIZED

2.0M

$MTCO_2e$ reduction[1]

EQUIVALENT TO AVOIDING

464.1K

passenger vehicles driven for one year[2]

Waste Reduction Potential (WRP)

2025 REALIZED

912.5K

MT of waste reduction[1]

EQUIVALENT TO AVOIDING

130.1K

garbage trucks' worth of waste[2]

Impact thesis

We believe in the alignment between financial performance and decarbonization.

Investment themes

We see several industrial decarbonization themes that we believe can deliver attractive returns for our investors. We partner with businesses that are building the foundations of a lower-carbon economy for generations to come.

Strategies

Our strategies continue to deliver immediate decarbonization results while driving a shift to circular economy:

- **Private Equity:** We are addressing the funding and skills gaps needed to scale technologies and processes, and backing the businesses that are enabling industrial decarbonization.
- **Infrastructure:** We are capitalizing on a growing mid-market opportunity, building new infrastructure and repurposing high-quality existing assets while leveraging a first-mover advantage.
- **Energy:** We are uniquely positioned to drive value through commercially viable decarbonization of the conventional energy assets that the world is relying on to meet medium-term needs.

1. MT = Metric Tonnes. CO_2e = Carbon Dioxide Equivalent. ERP = Emissions Reduction Potential/Avoided Emissions. WRP = Waste Reduction Potential/Avoided Waste. Absolute/realized emission reduction amounts calculated irrespective of Ara's ownership share. Reported data is based on best available information from the company and third-party analysis, and relies on certain assumptions. For illustrative purposes only. Reductions include amounts directly resulting from Ara portfolio company operations, in addition to reductions realized by third parties as a result of services provided by portfolio companies. Excludes cross fund investments. 2. Passenger vehicle and garbage truck equivalency based on 2025 EPA GHG Equivalencies Calculator.

1

Our strategy

OUR STRATEGY

Targeting a generational investment opportunity

Our strategies commercialize, scale, and reshape companies and assets that are critical for creating a competitive lower-carbon economy.

Catalyzing the low-carbon transition

A huge increase in decarbonization investment is required to achieve cost-competitive climate change mitigation.

Trillions of dollars are flowing into decarbonization, but capital is concentrated in mature sectors (i.e., electrified transport, renewable energy, and power grids), leaving high-emissions value chains in industrial and energy sectors under-served.

We see opportunity to allocate capital towards "the world of made things," targeting high-impact industrial sectors, critical supply chains, and conventional energy generation.

Our investment platform focuses on high-polluting areas of the industrial economy, strengthening national security and competitiveness while delivering products and services with lower cost and environmental impact.

$2.3TN

annual global investment in energy transition technologies[2]

92.5%

energy transition capital investment directed towards mature sectors[2]

The Ara Partners platform

Private Equity

We invest in proven, cost-competitive technologies that displace existing, polluting industrial processes, and the businesses that provide products and services to decarbonization platforms.

Infrastructure

We transform mid-market infrastructure assets driving the energy and industrial transition.

Energy

We seek to acquire, optimize, and economically decarbonize existing assets in the conventional energy value chain across power generation, biofuels, and distribution businesses.

We provide:

SPECIALIST DECARBONIZATION EXPERTISE

Our Decarbonization Team helps portfolio companies turn impact into a revenue-generating value proposition and ensures that assets deliver measurable emission reduction.

PROJECT EXECUTION & OPERATIONS (APEX)

Our APEX Team catalyzes the execution of capital projects from groundbreaking to start-up, delivering on time and on budget using a standardized toolkit.

COMMERCIAL SERVICES

Our commercialization support is built to seed durable customer relationships through strategic partnerships.

GOVERNMENT AFFAIRS

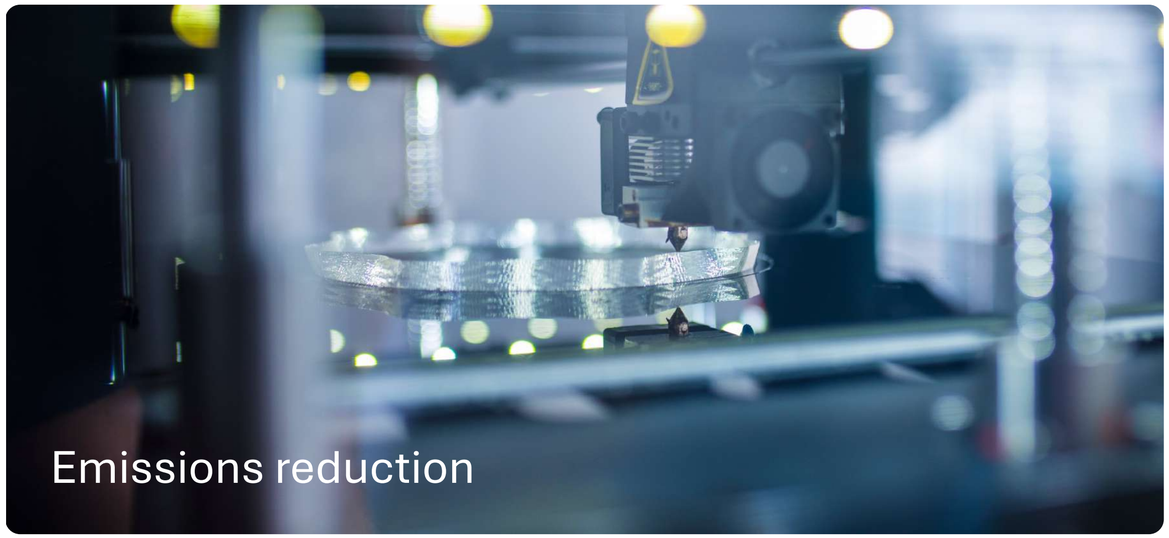
Our Government Affairs Team accelerates scale-up and reduces project costs by identifying and executing opportunities for public-private partnerships.

1. EDGAR, "GHG Emissions of All World Countries 2025," 2025 2. BNEF, "Energy Transition Investment Trends 2026," 2026.

OUR STRATEGY

Decarbonization pillars

We take a dual approach to industrial decarbonization, focusing on two primary pillars that are integrated and evaluated across all our investments.



Ara Partners targets investments that directly contribute to economically viable GHG emissions reduction. Our Private Equity strategy targets opportunities with the potential to achieve at least a 60% reduction in emissions intensity compared to incumbents, while our Infrastructure and Energy strategies focus on total emissions reduction to decarbonize at scale.[1]

We invest in businesses that advance the circular economy by deploying innovative new technologies and infrastructure to reduce and recycle waste. This transition is reshaping supply chains and creating long-term demand for resource-efficient industrial solutions.

1. For illustrative purposes only. Reductions include amounts directly resulting from Ara portfolio company operations, in addition to reductions realized by third parties as a result of services provided by portfolio companies. There can be no assurance that these targets will be met, and actual reduction of CO_2e emissions will vary substantially depending on a number of factors.

OUR STRATEGY

Private Equity

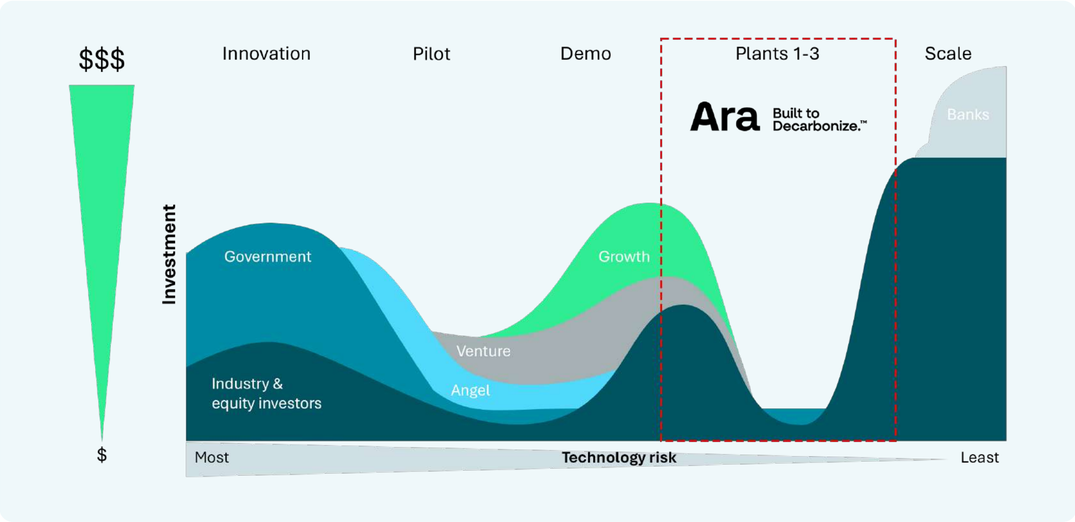
We bridge the gap between IP and real assets with capital and expertise.

Targeting the missing middle

Climate-focused investment is growing, but most of it is deployed at two opposing ends of the energy transition market: venture financing and infrastructure. This leaves the “missing middle”—the gap in funding and skills needed by companies that have matured out of the venture stage but have yet to de-risk or scale enough to access mature-stage capital.

Without this kind of investment, critical early-stage technologies that are needed to meet global GHG emissions reduction will struggle to achieve full-scale deployment and access the trillion-dollar transition opportunity.

Our Private Equity strategy addresses this challenge, commercializing proven technologies and backing the businesses that help them grow, while contributing to the onshoring of critical industry and advancing national competitiveness.



Scaling proven, low-carbon solutions

Ara fills the critical gap between breakthrough innovation and commercial scale-up. We invest in proven, de-risked process technologies that are beyond the demonstration stage but not yet widely deployed and accelerate their path to scale by building the first one to three plants. These initial deployments create the blueprint for efficient replication, enabling strategics or mega-cap investment firms to take over and scale with confidence.

The technologies we back are cost-competitive and at least 60% less carbon intensive than incumbents, giving them true "category killer" potential to fully displace legacy products or processes.

Now in our third PE fund, we have a repeatable playbook for Process Technology Rollouts, refined through cumulative experience. We know the exact markers of a successful rollout—from construction timelines and capital intensity to offtake structure, supply stability, and total addressable and serviceable market—transforming innovation into attractive returns and lasting climate impact.

Taking a diversified approach to industrial decarbonization

Process Technology Rollouts: We support growing companies that have developed proven process technologies to become full industrial enterprises. We help these businesses build new plants, guiding them through planning and execution at all stages of the process while identifying new opportunities to improve their decarbonization potential.

Buyouts: These businesses are the catalysts for delivering industrial decarbonization, providing essential products and services to the wider ecosystem. We partner with companies as their first institutional owner, strengthening the fundamentals of their business and driving growth and emissions reduction.

OUR STRATEGY

Infrastructure

We see a growing mid-market opportunity to build new infrastructure and repurpose high-quality legacy assets to reduce emissions and enhance energy security.

Over the last decade, infrastructure investors have increasingly shifted up-market, leaving behind a deep pipeline of smaller-scale, investable transactions. Combined with the highly fragmented nature of the industrial sector, this leaves a diversified set of lower-competition opportunities in high-quality businesses with multiple levers for value creation.

Our mid-market strategy gives us a front-row seat to assets overlooked by large-cap infrastructure funds, and too mature for private equity capital. We seek to transform these assets, leveraging our builder and operator expertise to execute on value accretive capex projects & commercial optimization.

Underscored by geopolitical volatility, these assets offer compelling value, combining affordability, reliability, and enhanced energy security all while laying the foundation for a resilient, low-carbon industrial economy.

Building assets with attractive risk-adjusted returns

Downside protection
Targeting operational infrastructure platforms with high barriers to entry and protected cash flow profiles to deliver “core“ returns in the downside.

Base case value-add returns
Enabling strong base case returns through execution of near-term growth opportunities de-risked by milestone-based funding.

Upside potential
Providing meaningful upside via additional growth opportunities, follow-on M&A, and realization of pipeline value.

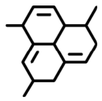
We focus on sectors critical to the industrial and energy transition, acting at the intersection of decarbonization, security, and value.

Low-carbon molecules

The production, storage, and distribution of low-carbon fuels (e.g., biofuels and renewable natural gas).

Waste-to-X

Landfill/incineration avoidance and resource recovery (e.g., waste processing and recycling into industrial products and/or energy).

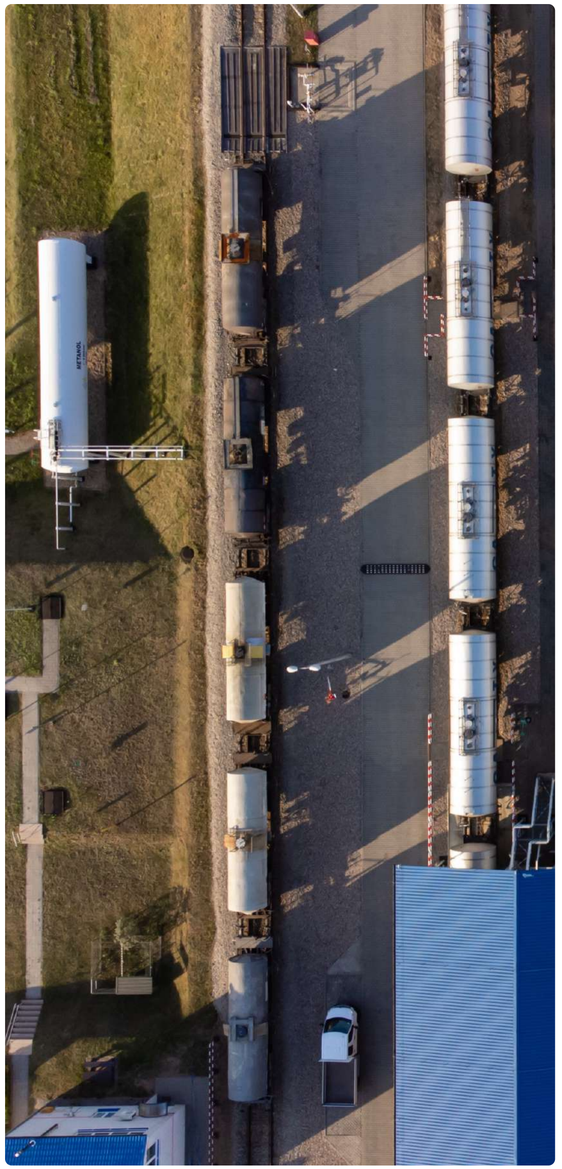


Distributed energy efficiency

Building energy and efficiency solutions across the full infrastructure value chain (e.g., behind-the-meter, grid solutions, energy efficiency).

Transport and logistics

Efficient transport and logistics assets enabling decarbonization and security of supply chains (e.g., rail, marine, distribution, refueling).



OUR STRATEGY

Energy

We target the root cause of industrial pollution, optimizing the energy value chain and tackling emissions at the source.

Conventional energy generation assets will continue to operate for decades. While it remains one of the most challenging sectors to decarbonize, every tonne of carbon removed today delivers exponentially greater climate benefit over time.

With Ara's industrial expertise, this presents an opportunity to deliver outsized decarbonization gains over time in a stable commercial environment.

We prioritize carbon removal at the source—where emissions are highly concentrated, and abatement is measurable—rather than waiting for the perfect technological replacement or policy environment.

We acquire critical energy assets, including generation, fuels, and distribution infrastructure, with the goal of delivering commercial upside and emissions reduction where economically viable.

We project that Ara's financed GHG emissions footprint will initially grow as we deploy capital from this fund, but as we implement decarbonization technology over time, there is potential to achieve outsized decarbonization gains, given the scale of the GHG emissions reduction challenge.

These benefits will likely be realized both directly within the assets' operating footprint and within the larger value chain, creating a conclusive decarbonization outcome.

Ethanol is a ready-now decarbonization lever

Ethanol is one of the most commercially viable low-carbon fuels on the market today, delivering a 46% lower lifecycle carbon footprint than gasoline and offering immediate emissions reductions across the transport and industrial sectors.[1]

Ethanol also serves as a cost-effective decarbonization platform:

- Nearly 99.5% pure CO_2 is produced as a byproduct of ethanol production, making it one of the cheapest and most scalable sources for carbon capture and processing.
- Rising demand driven by E15 mandates, SAF blending, and the global push for fuel security makes decarbonized ethanol an increasingly attractive feedstock for the energy sector.

Investing across the power and fuels value chain—where decarbonization today delivers the biggest return.

Power generation

We acquire conventional generation assets in merchant markets and improve their operations, emissions profile, and reliability.

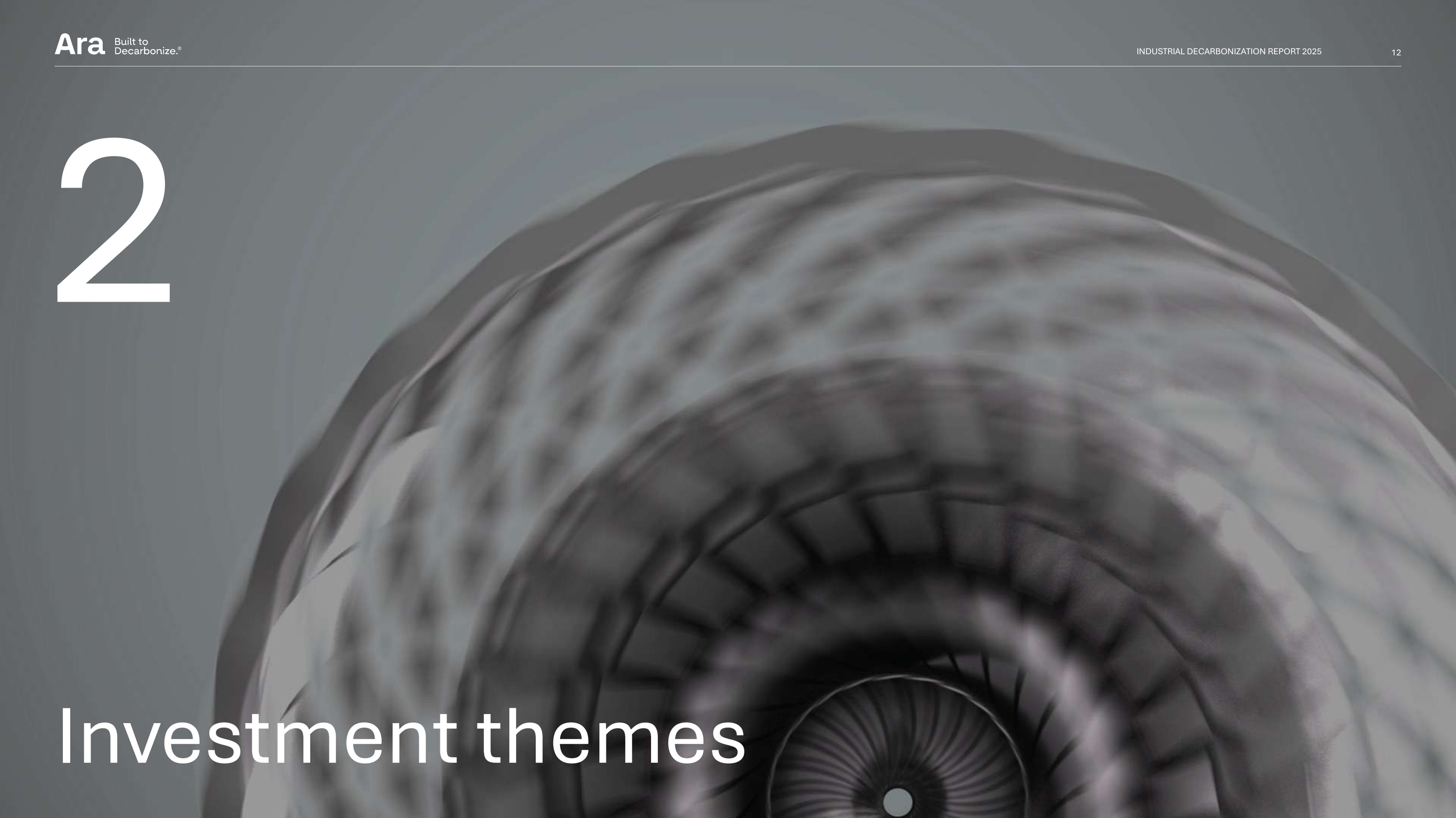
Biofuels production

We invest in low-carbon fuels like ethanol that are already commercial, scalable, and in demand.

Distribution/delivery

We enhance downstream infrastructure to expand access to cleaner fuels—supporting efficient blending, storage, and transport.

1. IOP Publishing, Ltd. "Carbon intensity of corn ethanol in the United States: state of the science," 2021 U.S. Department of Energy sources study done by Argonne National Laboratory which gives a 44%-52% range in "Corn ethanol reduces carbon footprint, greenhouse gases," study, 2021.



2

Investment themes

OUR STRATEGY

Investment expertise

Our experienced leadership combines deep sector expertise with disciplined execution to uncover high-performing opportunities.

MANAGING PARTNERS

Charles Cherington
Managing Partner

25+ years in industrials, energy, and chemicals

Troy Thacker
Managing Partner

25+ years in environmental services, industrials, software, energy, and insurance

PRIVATE EQUITY

Chris Picotte
Partner &
CIO of Private Equity

25+ years in industrials, energy efficiency, and digital transformation

Cory Steffek
Partner

20+ years in advanced materials and energy

INFRASTRUCTURE

Teresa O'Flynn
Partner, Co-Head of Infrastructure

20+ years in sustainable investing

Churchill George Yong
Partner, Co-Head of Infrastructure

15+ years in infrastructure investing

ENERGY

Shameek Konar
Partner, Head of Energy

25+ years in industrials, energy efficiency, and digital transformation

James Chiu
Partner

20+ years in energy

STRATEGY

Tuan Tran
Head of Research & Strategic Partnerships

20+ years in environmental and industrial services and energy tech investing

INVESTMENT THEMES – LOW-CARBON FUELS

Low-carbon fuels

The Middle East crisis sharpens the need to reduce dependence on hydrocarbons. Low-carbon fuels are an immediate and economically viable path forward.

Biogas and renewable natural gas (RNG)

RNG sits at the intersection of waste, energy, and climate. It avoids abundant and harmful methane emissions from landfills, manure, organic waste, and wastewater and upgrades it into pipeline-quality gas, turning a potent greenhouse gas into a useful fuel. Under the U.S. Renewable Fuel Standard (RFS), RNG qualifies as a cellulosic biofuel in the D3 category, which is mainly biogas from landfills and agricultural digesters. The RFS, created under the Energy Policy Act of 2005, requires transportation fuels sold in the U.S. to contain a minimum volume of renewable fuel and tracks compliance through tradable Renewable Identification Numbers (RIN) credits.

The decarbonization impact of RNG is two-fold. First, it avoids methane emissions from existing waste streams, delivering large climate benefits before counting any fuel substitution. Second, when RNG displaces fossil natural gas in transport, industrial heat, or power, it cuts CO_2 emissions as well. Many projects show very low or even net-negative lifecycle carbon intensity once avoided methane emissions are included. Policy now pays for this through federal RINs, state low-carbon fuel programs, and European biomethane incentives. That stack supports long-term contracts and infrastructure-style returns.

CycleØ

Portfolio spotlight

CycleØ develops, owns, and operates biomethane plants across Europe, generating RNG with organic waste.

By capturing raw biogas from agricultural waste sources, CycleØ not only prevents the release of methane with high global warming potential but upgrades it to pipeline-quality RNG with carbon intensities reaching –95 gCO_2e/MJ and below.

Today, with seven operating assets across Spain, CycleØ can generate enough RNG to meet the annual energy demand of ~25,000 European homes.

Solutions:

- RNG plant development and management expertise.
- Biogas upgrading and purification equipment.

Ethanol

Ethanol is the workhorse of global biofuels and a key tool for decarbonizing the existing vehicle fleet. Global liquid biofuel output was about 3.2 million barrels per day in 2024, with 60% from ethanol, 30% from biodiesel and,10% from renewable diesel. Around 65% of this production came from the U.S. and Brazil.[1]

60%

of global liquid biofuels were ethanol in 2024[1]

In the U.S., ethanol sits at the core of the RFS as a conventional D6 biofuel, which is mainly corn-based ethanol. RIN generation from ethanol tracks gasoline demand. In the U.S., ethanol is blended with gasoline at a rate of 10% (E10), and there is industry pressure to roll out a nationwide 15% blend (E15) requirement, given rising pump prices and long-term climate goals. Ethanol's structural role in fuel markets is being reinforced by Brazil's sugarcane ethanol and flex-fuel vehicle fleet, and the EU blending mandates under the Renewable Energy Directive. Ethanol also provides upside as a feedstock for sustainable aviation fuel via the alcohol-to-jet route.

Lifecycle decarbonization performance depends on feedstock and practice. Well-run cane and advanced ethanol pathways can deliver deep emissions cuts compared to gasoline, especially as plants improve efficiency and add value from co-products such as distillers' grains and corn oil. Additionally, the ethanol fermentation process inherently produces a highly concentrated CO_2 stream (>99%), allowing for very cost-efficient carbon capture, sequestration, and utilization (CCUS), further reducing emissions.

Investment angle

RNG offers contracted, policy-backed cash flows tied to methane abatement and gas infrastructure. Ethanol delivers scale, liquidity, and low-cost transport abatement today, plus option value into sustainable aviation fuel (SAF). Both are near-term, measurable decarbonization levers with real assets, real credits, and finite high-quality project pipelines.

Ara

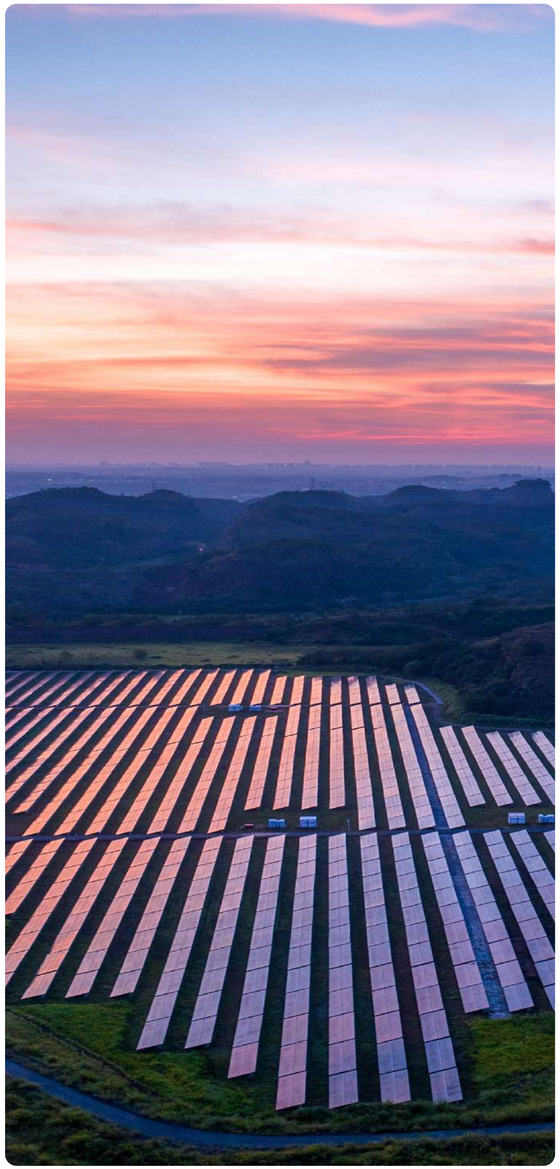
Strategy spotlight: Energy

Ethanol is one of the most cost-effective low-carbon fuels available and among the most economically viable pathways to decarbonize transportation.

Ethanol's lower price compared to gasoline makes it an attractive blend component for reducing carbon intensity and fuel costs, a competitive advantage that strengthens further when global oil prices spike due to geopolitical factors. It is a valuable source of octane and oxygenates for the fuel mix, properties that make it a versatile and cost-efficient solution for decarbonization.

Ara Energy's ethanol assets have approximately 400 million gallons of annual production capacity, supplying lower-carbon alternatives to conventional gasoline and contributing to the reliability and diversity of the domestic fuel supply.

These assets are positioned to further reduce their carbon footprint through carbon capture projects that will result in up to 80% lower emissions versus gasoline.[2]

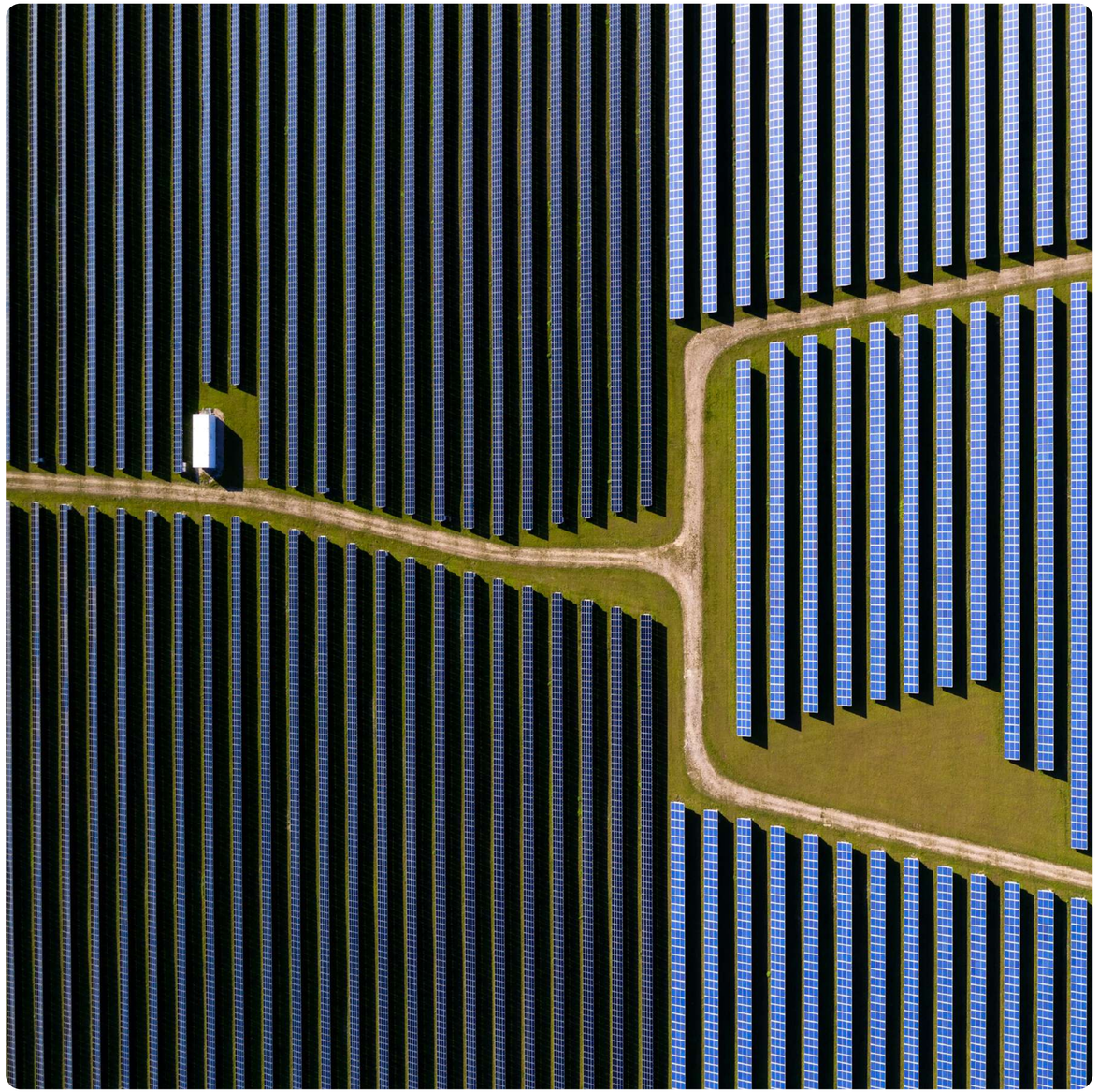


1. BNEF, 2025. 2. RFA, FAQ - Carbon Capture & Sequestration, CO_2 Pipelines, and the Future of Corn Ethanol.

INVESTMENT THEMES – ENERGY AND ENERGY EFFICIENCY

Energy and energy efficiency

Greater renewable energy adoption enabled by improved efficiency, flexibility, and storage is needed to build a cleaner, more resilient power system.



A need for demand flexibility

Demand for electricity is surging in ways the grid was never built to handle. Electric motors are replacing traditional gas or diesel engines, factories are shifting to clean power, and data centers feeding the AI revolution are becoming some of the world's hungriest energy users. Yet much of today's grid still runs on aging, carbon-intensive infrastructure designed for an era of slower growth, fewer renewables, and far less digital load. These constraints are accelerating on-site natural gas buildouts across the U.S. to provide the baseload power needed for data center expansions, creating both a new source of emissions and a major opportunity for clean fuel switching and efficiency projects.

To keep pace, we need rapid buildout of grid infrastructure that can move vast amounts of clean electricity where and when it is needed, reliably and affordably. Without that backbone (modern transmission, flexible distribution networks, and smart, low-carbon balancing resources), the promise of electrification, industrial decarbonization, and AI-driven innovation will collide with the physical limits of an outdated grid.

To fulfill this demand, alternative solutions are being pursued, opening up new infrastructure opportunities across the grid.

Alternative solutions:

> Battery energy storage system (BESS)
> Distributed generation
> Grid-enhancing technologies (GETs)
> Virtual power plants (VPPs)
> Advanced metering infrastructure (AMI)

Data centers:

> On-site power generation

INVESTMENT THEMES – ENERGY AND ENERGY EFFICIENCY

Alternative solutions

Battery energy storage systems

Currently, batteries can store energy for only up to a few hours. If energy could be stored for at least a day, maybe two, this would be significant in providing stable electricity during low points in solar and wind energy production.

Distributed generation

In the past, most data centers were grid-powered, with on-site diesel engines providing backup power. However, with the increase of global power consumption and supply chain tightness, there has been a significant shift toward natural gas e.g., engines and turbines because it produces fewer emissions and requires less maintenance than diesel. While the grid is still preferred, there is a growing demand for on-site generation and backup power.

Grid-enhancing technologies

GETs can help meet the pressures of expanding renewable energy generation and surging demand. Rather than building from scratch, upgrading the grid using GETs (which utilize smart technologies) provides a near-term solution and defers capital-intensive new builds. Some of the highest-impact GETs are reconductoring transmission lines, topology optimization, and advanced power flow control devices. Additional upgrades include, but are not limited to, virtual power plants and advanced metering infrastructure.

Virtual power plants

VPPs use software to aggregate and coordinate a variety of energy sources into a single, flexible power source that adjusts to demand according to system needs. New opportunities are being explored for VPPs in combating extreme weather and the variability of renewable energy output. Monetization, however, has remained the main barrier to scale.

Advanced metering infrastructure

AMI refers to a grid-enhancing technology that supports smart grids, specifically distribution lines, by collecting interval meter data and enabling two-way utility-customer communications. AMI helps smart grids provide damage mitigation during extreme weather by enabling earlier disruption detection and faster recovery from power failures through timely bi-directional communication.

2,062GW

total generation and storage capacity in the U.S. interconnection queue at the end of 2025, compared to 363GW in 2015[1]

116GW

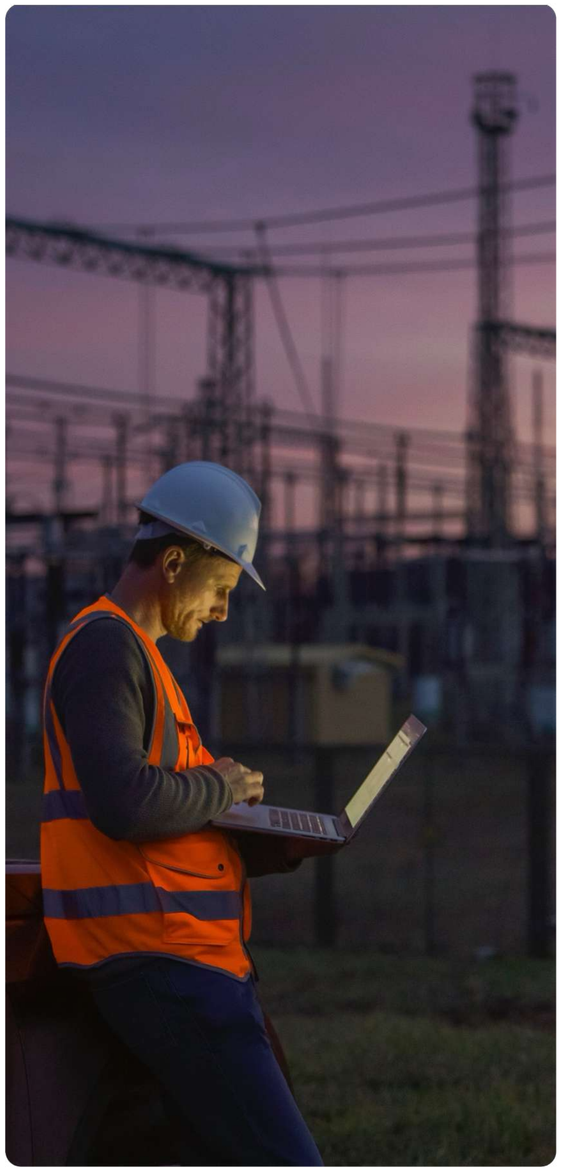
forecasted growth in summer peak demand for regional transmission organizations and independent system operators between 2025–2030[2]

wattstor

Portfolio spotlight

Wattstor is a UK-headquartered provider of turnkey behind-the-meter energy solutions for commercial and industrial customers. Their solutions cut electricity costs and emissions by combining on-site solar PV, battery storage, and proprietary Podium software.

Price Protect is Wattstor's Electricity-as-a-Service offering, which bundles design, financing, installation, and optimization of on-site generation and storage into a single contract, delivering a renewable energy tariff with a price cap. This supplies electricity at below market rates while meeting 100% of a client's demand needs and relieving pressure on increasingly constrained grids.



1. Lawrence Berkeley National Laboratory, 2026. 2. BNEF, "US Grid Unlocks Capacity Quickly With Smart Technologies," 2025.

INVESTMENT THEMES – ENERGY AND ENERGY EFFICIENCY

Data center growth

In the race for power, data centers are resorting to using whatever means necessary to get the most power as fast as possible with little thought toward costs and environmental concerns. Physical and regulatory constraints are driving a push for on-site energy generation ("bring your own power") in order to meet the massive demand of data centers. A need for stable, around-the-clock power presents a barrier for renewables. Natural gas is anticipated to play the biggest role in fueling the electricity generation required, with nearly 75% of the planned onsite power equipment expected to be powered by natural gas.[2]

While natural gas is cleaner than diesel-powered generation, it still is significantly more carbon-intensive than renewable electricity. This creates a sizable opportunity to reduce near-term emissions by blending in a percentage of renewable natural gas or hydrogen, and/or by adding carbon capture infrastructure to natural gas power plants generating 24/7 baseload power.

Reducing energy demand is a complementary solution. Data centers require massive parallel investment in supporting infrastructure and services, including electrical systems, cooling racks, controls, and other internal infrastructure, plus specialized expertise in engineering and construction. Although energy sourcing will largely dictate the carbon footprint of data centers, these other project elements provide another angle to reduce emissions via energy efficiency and resource optimization.

Done right, this transition turns today’s emissions liability into a bridge toward a low-carbon grid, leveraging existing assets while low-carbon transmission, storage, and renewables scale up. It also positions data centers—often seen as a strain on the power system—as anchor customers that underwrite and accelerate investment in decarbonized firm power.

75%

of planned on-site power generation is expected to be powered by natural gas[2]

83%

of all proposed behind-the-meter capacity is in just five U.S. states (TX, NM, PA, UT, and WY)[2]

2. Cleanview, “Bypassing the Grid: How Data Centers Are Building Their Own Power Plants,” 2026.

INVESTMENT THEMES – INDUSTRIALS AND ADVANCED MATERIALS

Industrials and advanced materials

Increased demand, constrained supply, and geopolitical volatility present opportunities for low-carbon materials and onshoring supply chains.

Decarbonizing heavy industry is technically complex because emissions are both energy- and process-related. Unlike power or light transport where most emissions come from burning fossil fuels, many industrial processes also release CO_2 as an inherent part of chemistry, such as calcination in cement or reduction reactions in steel and chemicals. The shift from fossil fuels is further complicated by high-temperature process heat requirements (often above 800–1,000°C), continuous operations, and long asset lifetimes.[1] Retiring or retrofitting large plants is capital-intensive and slow, and in globally traded commodity markets, small changes in cost structures can shift production and emissions across borders, rather than reduce them overall.

Credible decarbonization pathways for industry will likely combine several levers rather than rely on a single technology.

On the demand side, waste-to-value models, resource efficiency, and engineering changes can reduce the need for virgin production.

On the supply side, electrification of heat where feasible, fuel switching to low-carbon hydrogen or bioenergy, process innovation (such as direct reduced iron with low-carbon hydrogen), and widespread deployment of carbon capture, utilization, and storage (CCUS) will all play roles.

Digital technologies and advanced controls can improve energy efficiency and optimize process conditions, incrementally reducing emissions at relatively low cost.

1. BNEF, 2025.

Critical minerals/rare earths

Decarbonization at scale also depends on a reliable, secure supply of critical minerals such as lithium, nickel, cobalt, copper, and rare earth elements, which are essential for batteries, power electronics, electric vehicles, and renewable generation. Without rapidly expanding and diversifying responsible mining, processing, and recycling of these materials, clean energy deployment will slow, and energy systems will remain exposed to price shocks and geopolitical risk.

Of the 34 critical raw materials (CRMs) identified by the European Commission in its most recent list from 2023, 26 (over 75%) are needed for key renewable energy technologies—most notably, aluminum, copper, nickel, silicon, manganese, boron, heavy and light rare earth elements, and cobalt.[2] Constrained supply of these materials leads to high and unstable prices, pushing industrials to search of alternatives.

This deficit can be reversed. In recent years, significant capital has been used to create new mines around the globe. With those continual efforts, seven out of ten energy transition materials (with the exception of copper, palladium, and platinum) will be supplied comfortably until 2030.

BLUE WHALE MATERIALS

Portfolio spotlight

Blue Whale Materials (BWM) illustrates the value of onshoring lithium-ion battery recycling.

Founded in 2015, BWM provides a full suite of domestic collection, testing, and battery processing solutions for end-of-life batteries and production scrap.

BWM's commercially validated technology safely discharges and processes end-of-life consumer cells, modules, production scrap, and full EV packs. The resulting recycled product, Blacksand®, is dry, has low copper and aluminum content, and is free from organics and impurities.

In addition, BWM's Blacksand® is a highly concentrated cobalt, nickel, and lithium mixed metal intermediate product optimized for hydrometallurgical refining and is suitable for reuse in LIBs or other applications.

In 2025, BWM opened its first recycling plant in Bartlesville, Oklahoma where the company can process 14,000 short tons of scrap material into Blacksand® each year. Planned expansion will enable the facility to process up to 50,000 short tons annually.

34

critical materials identified by the European Commission[2]

>75%

of CRMs are needed for key renewable energy technologies[2]

2. ECA, "Critical raw materials for the energy transition," 2026.

● INVESTMENT THEMES – INDUSTRIALS AND ADVANCED MATERIALS

Onshoring of supply chains

The U.S. and EU are explicitly using industrial policy to onshore clean-tech supply chains, create high-value jobs, and reduce dependence on China in strategic sectors like batteries, solar, and critical minerals. The U.S. attracted over $106 billion of investment in onshoring clean-tech manufacturing since the passage of the Inflation Reduction Act (IRA) in 2022. Europe saw $66 billion invested during that same time period.[3] While the U.S. surged in solar and battery investment, the EU focused on wind turbine and electric vehicle (EV) supply chains. In 2025, both countries faced significant challenges that slowed their clean-tech investment: the U.S. faced significant political and regulatory uncertainty, and the EU struggled with the pace of public financing and a large amount of competing clean-tech imports.[3]

However, even after those great strides in the U.S. and EU, in 2024, 76% of global clean-tech factory investments were in mainland China.[4] In addition to putting funds toward onshoring, the U.S. and EU are advancing policies that restrict imports to make domestic production more attractive and competitive versus foreign equivalents. On a national security level, this decision is logical. However, on a decarbonization and financial level, these restrictions could slow decarbonization progress globally and increase production costs.

Metals recycling

Metals recycling offsets spot price dynamics and relieves resource constraints. However, it faces significant supply constraints. Recycled energy transition metals and minerals only amount to 20–30% of total supply. This is due to material availability. For example, while battery recycling plants are exponentially growing in capacity, only 1–2% of this capacity can currently be utilized.[5] Global Lithium-Ion Battery Recycling Availability (LIBRA) is expected to grow by 50% to 0.91 million metric tonnes in supply from 2025 to 2027 (by 2027, the U.S. will grow by 100% to 0.06 million metric tonnes and EU by 60% to 0.08 million metric tonnes).[6] Recycling is a critical first step, but supporting policy is also needed to close the supply and demand gap.

$106BN

has been invested in onshoring clean-tech manufacturing in the U.S. since 2022[3]

$66BN

has been invested in onshoring clean-tech manufacturing in the EU since 2022[3]

20-30%

of energy transition metals and materials supply is from recycled materials[5]

continuum

Portfolio spotlight

Continuum Powders provides a solution for the low supply of critical materials by transforming reclaimed metals into application-ready powder.

Continuum is a U.S.-based advanced materials company delivering production-scale metal powders for critical industries. Founded in 2015, the company serves global customers from Houston, TX (HQ) and Cloverdale, CA. Its Greyhound Melt-to-Powder (M2P) platform—a compact foundry protected by 10 U.S. patents—enables on-demand melting and atomization, internal circularity, and tightly controlled chemistries at or near the point of use, localizing supply and compressing lead times.

Continuum supports aerospace, energy, medical, defense, and industrial applications with rapid qualification, custom particle-size distributions, and data-backed quality across nickel, titanium, steels, cobalt-chrome, and other critical alloys, delivering reliable availability, full traceability, and a lower environmental footprint.

3. BNEF, "Three Years In, US Leads EU in Clean-Tech Onshoring Race," 2025. 4. Taylor et al., "The Race for Clean Energy Leadership," Atlas Public Policy, 2026. 5. BNEF, "Copper Supply Is Tight. What About Other Key Metals?," 2026. 6. BNEF, "Lithium-Ion Battery Recycling Market Outlook 2025," 2025.

INVESTMENT THEMES – FOOD AND AG-TECH

Food and ag-tech

With heightened pollution concerns and resource constraints, bio-waste is moving from a once overlooked sector to a valuable asset.

Biosolids

Biosolids are shifting from a low-cost disposal problem to a strategic fertilizer and resource opportunity embedded in municipal and agricultural wastewater treatment.

Historically, U.S. utilities have diverted most sewage sludge (rebranded as “biosolids”) to farmland as a cheap nutrient source, with the balance landfilled, incinerated, or composted. That model is being disrupted by mounting concerns around PFAS—a group of pervasive, toxic synthetic chemicals also known as “forever chemicals” due to how slowly they break down—leading to state-level bans on land application and tightening federal oversight. This is a global concern: in the EU, PFAS regulations are being discussed for sewerage and chemicals.

As landfills restrict intake and incinerators age under stricter air rules, the traditional outlets for biosolids are narrowing while volumes continue to grow, catalyzing a new class of infrastructure that treats biosolids as a feedstock rather than a disposal liability.

Advanced processing systems can separate incoming sludge into three valuable streams:

- Reusable water that offsets local freshwater demand.
- Nutrient-rich fractions that can supplement or replace conventional fertilizer inputs.
- Energy-dense solids that serve as carbon-negative fuel or industrial feedstock.

Fertilizer market opportunity

For fertilizer markets, the key opportunity lies in controlled nutrient recovery. Instead of spreading untreated biosolids on fields with uncertain contaminant profiles, these systems concentrate and refine phosphorus, nitrogen, and organic matter into more predictable fertilizer components. Similar approaches are being piloted in agricultural waste streams such as dairy manure, creating pathways to integrate municipal and farmland nutrient management, reducing runoff and methane emissions.

6M

short tons of biosolids are produced in the U.S. each year[1, 2]

The business model is infrastructure-like. Project developers build, own, and operate facilities leveraging long-term service contracts with utilities, who pay per tonne or gallon treated. Revenues are anchored by essential wastewater services and enhanced by sales of valuable co-products to agricultural and industrial offtakers.

In this emerging ag-tech market, biosolids management becomes a platform for fertilizer production, carbon-negative fuel source, and circular nutrient flows, aligning decarbonization, regulatory compliance, and resilient food supply chains.

SEDRON®

Portfolio spotlight

Sedron Technologies brings about a new model for how to treat biosolids and wastewater. Sedron upcycles biosolids and manure into valuable carbon-negative commodities and clean water at a fraction of traditional costs and uses 8x less energy than conventional alternatives.[3]

- **Technology:** Sedron’s service model eliminates the financial hurdle to raise capital, and it has a significantly lower operating cost compared to alternative waste treatment solutions.
- **Municipalities:** Sedron’s proprietary Varcor® technology reduces nutrient pollution in local waterways by removing nitrogen and phosphorus efficiently. Compact on-site processing transforms biosolids into a Class A product and clean water while reducing trucking costs.
- **Agriculture:** Varcor® greatly reduces manure management costs, reduces environmental impact, decreases soil phosphorus loading, and recovers water—all without any capital or operating expenses for the farm.

1. Bluefield, "U.S. Municipal Utilities Face US$4.8 Billion Biosolids Management Bill as Disposal Costs and Capacity Pressures Mount," 2025. 2. Measured in dry mass. 3. BlueTech Research, “Sedron Technologies - VARCOR,” 2024.

INVESTMENT THEMES – ADAPTATION AND RESILIENCE

Adaptation and resilience

The global infrastructure landscape and extreme weather patterns are driving greater focus on adaptation and resilience.

Climate adaptation shifts

Demand for technologies that bolster climate resilience and adaptation is accelerating. By 2030, it could represent a $1 trillion private capital opportunity. At the same time, the human and financial toll of climate-related disasters is mounting. In 2024, the U.S. experienced 27 “billion-dollar” climate disasters, roughly three times the long-term annual average.[1] In the first half of 2025 alone, global climate catastrophes generated more than $162 billion in economic losses.[2]

The urgency for action is driven by these increasing climate impacts, the rapid growth of assets and populations in high-risk areas, and a legacy of underinvestment in resilience measures. This is driving significant changes in infrastructure, materials, and insurance.

Adaptation and resilience: large investments, which will pay off in the long run, are needed to build new preventative measures to combat climate change.

> Grid hardening

> Physical barriers

> Vegetation management

Materials: investing in low-carbon, high-strength building materials to fortify new and existing structures is a cost-effective option that will also help to reduce climate impact.

> Supplementary cementitious materials (SCMs)

> Low-carbon steel

Insurance: in areas with greater climate risk, insurance is becoming an important investment consideration to anticipate and mitigate costs associated with repairing and rebuilding damaged assets.

1. BNEF 2025. 2. McKinsey, 2026.

INVESTMENT THEMES – ADAPTATION AND RESILIENCE

Infrastructure adaptation

Grid hardening

In the U.S., states are spending billions of dollars to bury transmission lines underground. While this requires a large initial investment, recurring payments are minimized. Not only does undergrounding protect lines and cut restoration costs due to outages from extreme weather, but it also reduces maintenance costs, such as replacing poles or vegetation management.

Vegetation management

Restoring or enhancing natural barriers can help protect against extreme weather. For example, a web of strong and deep vegetation roots can help prevent landslides and erosion, which can have widespread, catastrophic impacts for the climate, ecosystems, and waterways.

Additionally, managing overgrown or dead vegetation in arid locations can help reduce fire risk. Many wildfires are caused by vegetation acting as dry fuel and interacting with power lines. In fact, trees cause 30–50% of outages during blue-sky days and 80% during storm days in California.[3]

Physical barriers

Physical barriers are an increasingly prevalent method for combating climate change impacts. For example, sea walls can protect major coastal cities from being damaged in the rising tides and storm surges.

Low-carbon materials

Materials drive adaptation and resilience

Growing global population and widespread urbanization necessitate new buildings and critical infrastructure. With a backdrop of rising global GHG emissions and increasing frequency of climate-related catastrophes, low-carbon materials offer a way to reduce emissions while increasing resistance to fire, floods, and other shocks, improving safety for generations to come.

Supplementary cementitious materials

Cement production is responsible for 7–9% of global GHG emissions. Clinker—a critical component of cement—is responsible for over 90% of emissions from cement production. SCMs offer alternatives to clinker, with new blends that are cheaper and cleaner. Replacing clinker with alternative materials reduces emissions from concrete production by over 30% globally.[4] Additionally, SCMs can improve strength and heat resistance of cement—which makes it a preferred building material due to the rising temperatures.

Low-carbon steel

Reducing emissions from steel production is a critical adaptation measure. Globally, iron and steel production is responsible for more than 4 billion tonnes of GHG emissions each year.[5] Planned green steel production capacity expected to be online by 2030 grew to 123 million metric tonnes, more than 20% compared to 2024.[6] However, less than 20% of this capacity has been commissioned.[6] Global annual project announcements have dropped—while Asia and the Middle East forge ahead, Europe and the U.S. reassess. Europe has the most proposed green iron and steel capacity by 2030, but economic delays are holding them back. The U.S. halts are due to lack of clean hydrogen supply and shifting priorities.

Decarbonization has to be done cost competitively. While government support can help get a project up and running, cost-effective economics determine success in the long run.

The role of insurance

Countries exposed to greater climate risks tend to adapt faster than those who have not yet been directly impacted. However, this issue is not isolated to the frontliners—climate risks impact everybody globally. Estimates range into trillions of dollars needed yearly for repairs after climate-induced damages. Insurance can help to offset repair costs and accelerate time to rebuild.

Microtec DEVELOPMENT & HOLDINGS LLC

Portfolio spotlight

Microtec's advanced micronization technology represents a step-change forward in SCMs, delivering a cost-effective, lower carbon alternative.

The company's proprietary Turbo Mill technology produces PozzoDyne™ Activated Ground Glass Pozzolan (AGGP), upcycling post-consumer and industrial waste glass—material that would otherwise be landfilled—into a high-performance SCM.

PozzoDyne™ offers the concrete industry a drop-in solution to overcome inconsistent quality and supply challenges of traditional supplements, while delivering a commercially-viable, cost-competitive, and consistent alternative to ordinary Portland cement mixes.

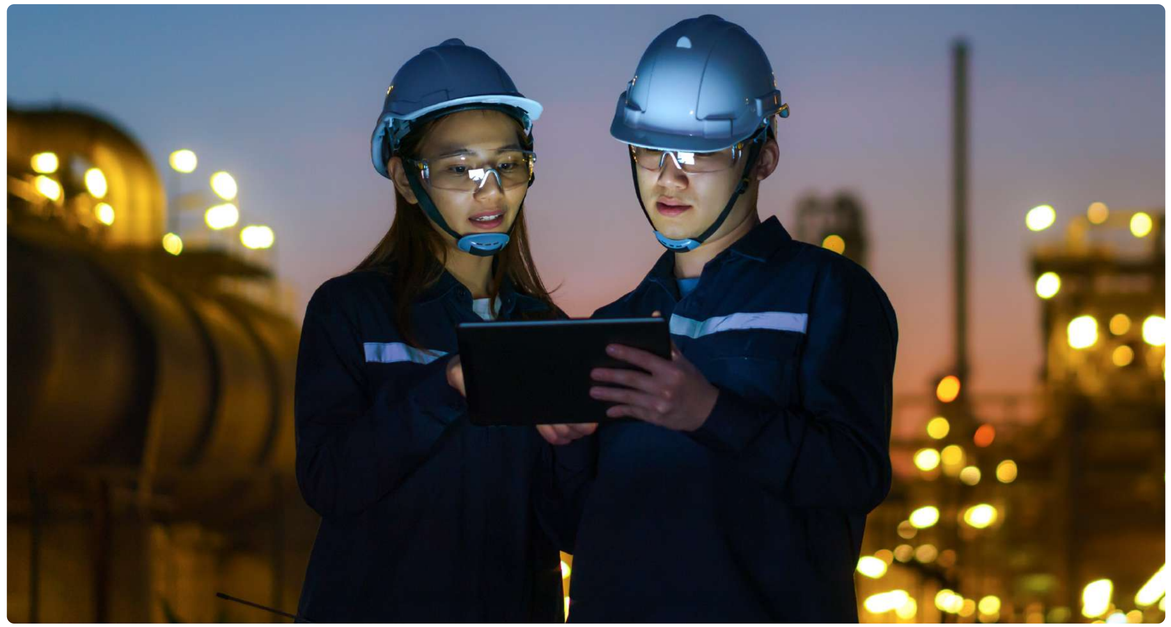
Additionally, PozzoDyne™ meets the most stringent industry standards for performance, durability, strength, and sustainability, including global conventions established under ASTM C1866 and C618.

3. BNEF, "How AI in the Sky Is Staving Off Wildfires on the Ground," 2025. 4. BNEF, "Cement Is Getting Cheaper and Cleaner With New Blends," 2025. 5. World Steel Association, "Climate change and the production of iron and steel," 2024. 6. BNEF, "Global Green Steel Status 2025," 2025.

INVESTMENT THEMES – MARKETS

Markets

While the global political landscape is being shaped by shifting decarbonization and national security policies, one fundamental truth holds: decarbonization must be cost-competitive to scale successfully.



Project economics

Importance of cost competitiveness vs. fossil incumbents

Climate investors will not win meaningful market share through green premiums. To displace entrenched fossil incumbents, low-carbon solutions must be cost-competitive, or clearly cheaper on an all-in basis at scale.

Biofuels make this clear. Corn ethanol only became a durable part of the fuel mix after producers drove down costs through scale and operational improvements, with policy support helping close the gap with gasoline. The same cost-per-Btu logic now applies to advanced ethanol and sustainable aviation fuel: projects that can consistently match or beat refined products on price and reliability will scale while those that rely on subsidies or depend solely on environmental benefits will remain niche.

Battery recyclers must recover lithium, nickel, and cobalt at or below the marginal cost of virgin materials while improving supply security for OEMs.

Metallic 3D-printing powders will gain share when cost per usable part undercuts both machined billet and premium powders.

For climate capital, the investment priority is therefore clear: back technologies and platforms that can beat incumbents—on cost, reliability, and performance.

Ara

Project execution

Delivering on time and on budget

In Process Technology Rollouts, strong project execution is as critical as the underlying technology to achieving return targets. Business plans assume specific start dates, ramp curves, and capex budgets. When projects slip or budgets overrun, those assumptions break, eroding IRRs and delaying or destroying value. Every month of delay pushes out revenue, tax credits, and learning-curve benefits, while interest during construction and overhead continue to accrue. Similarly, capex creep and operating losses raise the capital base investors must cover, making even well-performing assets look subpar.

Ara's APEX platform is designed to keep that from happening—standardizing project development, driving disciplined budgeting and scheduling, and institutionalizing best practices across engineering, procurement, construction, and commissioning. By giving investment teams and operators a common toolkit, APEX helps keep projects within the cost and schedule guardrails that underwrite decisions, turning novel process technologies into repeatable, bankable assets rather than one-off science experiments.

INVESTMENT THEMES – MARKETS

Market mechanisms

EU Emissions Trading System (ETS)

The EU Emissions Trading System is the European Union's core climate policy and a major catalyst for decarbonization.

It is a cap-and-trade system: Brussels sets an overall limit on emissions from power, heavy industry, and intra-EU aviation, then issues a finite number of allowances. Companies must hold one allowance per tonne of CO_2 emitted and can trade allowances with each other. As the cap declines, allowances become scarcer and more expensive, pushing emitters to either cut emissions or pay more. Revenue from the program is reinvested into renewable energy and low-carbon solutions and innovation.

This price signal has reshaped Europe's energy and industrial mix. In power, the EU ETS has helped drive a shift away from coal and toward gas and renewables by making carbon a recurring cash cost. In sectors such as steel, cement, refining, and chemicals, it has turned carbon from a compliance line item into a central capital-allocation constraint, accelerating investments in efficiency, fuel switching, and low-carbon process routes.

Over time, reforms such as tighter caps, reduced free allocation of allowances, stronger market-stability rules, and expansion to maritime and buildings/fuels have increased its ambition and credibility. Globally, EU ETS pricing now serves as a benchmark for other carbon markets and corporate internal carbon prices. Coupled with the Carbon Border Adjustment Mechanism, it also projects EU carbon constraints outward, nudging trading partners toward stronger climate policies.

~40%

share of EU emissions currently covered by the EU ETS[1]

~75%

expected share of EU emissions to be covered by ETS2[2]

Policy spotlight: EU Carbon Border Adjustment Mechanism (CBAM)

The Carbon Border Adjustment Mechanism (CBAM) is one of the EU's most consequential climate policies because it extends Europe's carbon price signal beyond its borders, helping protect the integrity of the EU's decarbonization effort, and incentivizing other jurisdictions to follow suit.

- **CBAM closes the "carbon leakage" loophole.** Under the EU ETS, energy-intensive industries face rising carbon costs. Without a border adjustment, producers could relocate to jurisdictions with weaker climate policies, or be undercut by higher-emitting imports, eroding domestic industry, and shifting emissions offshore rather than reducing them. By requiring importers of carbon-intensive goods (initially cement, steel, aluminum, fertilizers, hydrogen, and electricity) to pay an effective carbon price aligned with the EU ETS, CBAM helps ensure that decarbonization inside Europe does not simply push emissions elsewhere.
- **CBAM strengthens the ETS.** Historically, free ETS allocations were used to shield trade-exposed sectors from foreign competition. As CBAM phases in, those free allowances can be reduced, strengthening the ETS price signal for industry while maintaining competitiveness. That is essential if Europe is to achieve deeper cuts in industrial emissions consistent with its 2030 and 2050 targets.
- **CBAM is a climate diplomacy and industrial strategy tool.** By tying market access to embedded carbon, the EU is effectively exporting its climate standards. Trading partners now face a choice: adopt robust domestic carbon policies or see their producers pay at the EU border. This dynamic encourages broader global carbon pricing, supports investment in lower-carbon production routes, and reinforces Europe's ambition to be a leader in green industrial technologies.

In combination with the ETS and the Green Deal Industrial Plan, CBAM helps align Europe's climate goals with its economic and industrial interest, making ambitious decarbonization more politically and commercially durable.

1. Reuters, "What drove the fall in EU carbon prices and why does it matter?," 2026. 2. European Parliament, "Briefing: Towards climate neutrality," 2025.

● INVESTMENT THEMES – MARKETS

Voluntary carbon markets (VCMs)

Voluntary carbon markets are where companies and individuals purchase carbon credits to mitigate the impact of emissions which cannot be cost-effectively reduced. These credits are then retired to signify they have been "used." The market is still in its early stages, with more pre-purchases than retirements. Purchases are for the strategic benefit of decarbonization or for achieving carbon neutrality rather than required by regulation. Low-cost, high-quality credits are in short supply and in high demand, so having access to such resources has great financial opportunity (both in buying and selling the credits) but comes with risks too.

> Reputational risk from low-quality or controversial credits.

> Limited supply of high-integrity removals as demand surges.

> Regulatory and standard-setting changes can impact credit eligibility and liquidity.

> Price volatility and lack of transparency in some market segments.

VCMs can unlock incremental revenue and profit streams for portfolio companies by monetizing emissions reductions that are already embedded in their business plans, or that can be achieved at relatively low marginal cost. When companies implement process improvements, fuel switching, methane capture, or nature-based projects that verifiably cut emissions beyond regulatory requirements, they can generate high-quality carbon credits that can be sold to corporates with net-zero or Science Based Targets.

This creates a second value stack on top of operational savings or revenue from core products, improving project IRRs and expanding the universe of viable decarbonization investments. For industrial and infrastructure platforms in particular, the ability to convert “non-monetized” environmental attributes into recurring cash flows can support larger project pipelines, de-risk planned capex, and deepen strategic partnerships with offtakers that care about both molecules and attributes. Over time, disciplined participation in VCMs can also strengthen brand equity and position portfolio companies as preferred counterparties in low-carbon value chains.

<1%

size of VCMs as a share of global GHG emissions[3]

U.S. policy development brings challenges and tailwinds

Policy influences where and how climate investors can deploy capital, with real divergences between headwinds and tailwinds across sectors.

On the headwind side, delays in programs like the International Maritime Organization’s maritime decarbonization agenda highlight how fragile policy-driven timelines can be. When adoption of low-carbon fuels, efficiency standards, or carbon pricing for shipping is pushed back or watered down, it undermines demand visibility for alternative fuels, clean propulsion, and port infrastructure. Projects that relied on a clear regulatory pull risk stranded development spend, weaker offtake, and smaller addressable market, forcing investors to reprice risk or pivot to less policy-dependent theses.

Conversely, U.S. policy tailwinds are creating powerful anchors for investment. The U.S. 45Z Clean Fuel Production Credit offers technology- and feedstock-neutral support linked to carbon intensity. This gives biofuels, e-fuels, and renewable gas developers a line of sight to bankable revenue streams.

The Section 45Q tax credit often turns sub-economic, decarbonization concepts into financeable infrastructure by paying for captured and durably stored CO_2, which underpins carbon capture and storage (CCS) projects across industrials, and power generation.

Critical minerals policy—via permitting reforms, strategic stockpiles, and allied-country sourcing incentives—is pushing capital toward domestic and friend-shored mining, refining, and recycling of lithium, nickel, cobalt, and other critical minerals. At the same time, onshoring and “friend-shoring” of clean energy and manufacturing supply chains (e.g., for batteries, solar, and advanced manufacturing) are pulling industrial investment back into North America and Europe, with layered benefits from tax credits, grants, and procurement preferences.

For climate investors, the task is to navigate these cross-currents: avoid over-reliance on uncertain or delayed policy (as in shipping), while aggressively leaning into cost reduction levers such as 45Z, 45Q, and supply chain security/resilience to protect against near-term volatility and optimize project bankability.

3. LSE, “Voluntary carbon markets are helpful but far from perfect,“ October 2024.

3

Decarbonization value creation

DECARBONIZATION VALUE CREATION

A paradigm shift in industrial decarbonization

Decarbonization must be tied to measurable improvements in financial performance.

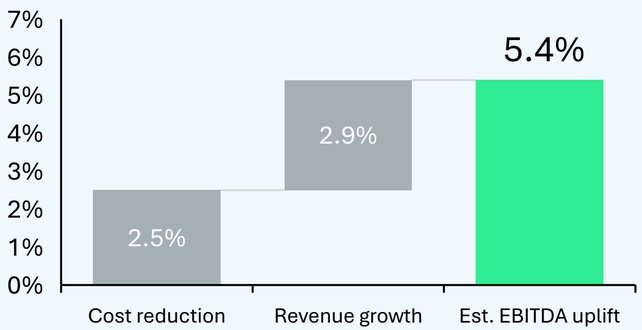
Decarbonization is a commercial catalyst

Attention has shifted toward decarbonization actions that visibly improve financial performance. Companies and their capital providers increasingly view decarbonization and waste reduction as levers for lower unit costs, more resilient supply chains, and stronger competitive positioning.

Our insights and expertise, paired with a hands-on approach to value creation, enable us to support portfolio companies in reducing emissions, waste, and uncertainty while strengthening long-term economic performance.

Decarbonization drives material benefits for companies and investors

Avg. estimated EBITDA uplift[1]



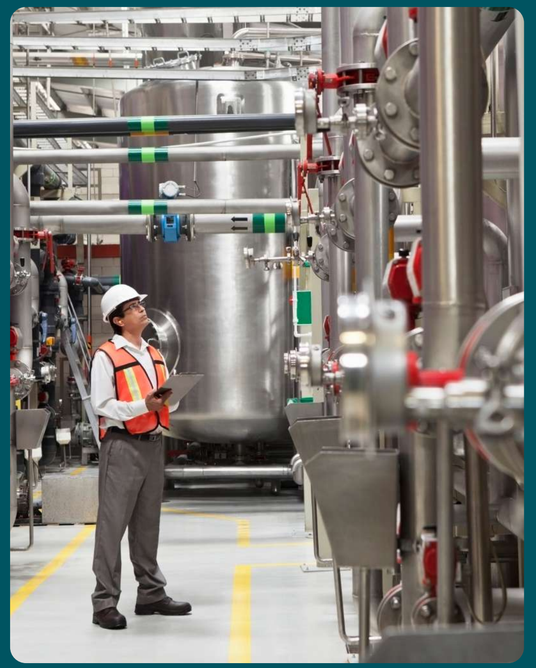
2.3x
rate of sales growth for sustainable goods vs. conventional[2]

6%
sustainability-linked increase in top-line performance[1]

7%
estimated increase in exit multiples for investors[1]

Decarbonization value drivers

Our portfolio companies are leveraging decarbonization to create tangible value through operational improvements and cost reductions. Additionally, co-products and environmental attributes like carbon credits offer opportunities for new market entry and revenue expansion. These value drivers combine momentum from regulation, corporate action, and macro uncertainty to optimize outcomes.



WASTE-TO-VALUE

Turning low-value waste into feedstocks for valuable commodities and/or materials.

ENERGY & RESOURCE EFFICIENCY

Reducing energy, water, land use, and feedstock requirements for industrial processes.

REVENUE EXPANSION

New revenue streams via VCM (carbon removals, etc.), low-carbon upside, or CI thresholds.

OPEX OPTIMIZATION

Improving process efficiency to increase throughput and/or reduce waste.

PERFORMANCE ENHANCEMENT

Innovative technologies and materials that are superior to incumbents.

SUPPLY CHAIN RESILIENCE

Reducing reliance on imports and costs associated with transport, tariffs, etc.

COST OF CARBON

Reducing or avoiding the impact of mandatory or voluntary carbon pricing schemes.

1. Whelan and Linich, "The value of decarbonization: How organizations can use decarbonization to capture financial value and gain competitive advantage," PwC, 2025. 2. BCG, Sustainability in Private Markets, 2025 EDCI Benchmark Annual Report Survey (n=153). Note: EBITDA $ uplift is an inferred estimate based on additive impact of revenue growth and cost reductions. Assumes revenue growth is on average margin-neutral with cost savings fully flowing through to EBITDA (will vary by portfolio company based off margin structure and actions taken). GP average based on equally weighted average of North America and European GPs participant responses to the annual member survey. 3. NYU Stern Center for Sustainable Business, "Sustainability-Linked Value Creation Guide for Private Equity Limited Partners," 2025.

DECARBONIZATION VALUE CREATION

Economically viable solutions

Ara Partners delivers measurable, cost-competitive decarbonization—on time and on budget.

We target opportunities that create real, economically viable emissions and waste reduction by embedding efficiency, process redesign, and technology adoption directly into core operations rather than treating decarbonization as a separate bolt-on initiative.

As customer, regulatory, and cost pressures converge, this focus allows our companies to compete on total cost and reliability while simultaneously lowering their emissions intensity.

In practice, that means prioritizing projects with attractive payback periods and clear GHG reductions, so that decarbonization is inseparable from operating performance and value creation.

Ara has multi-dimensional expertise from preconstruction through operation

$4.3BN
capital projects pipeline

>$20M
avoided tariff impact in 2025

37%
project cost savings vs. industry average

34%
project time savings vs. industry average

Ara Insights

Top 10 decarbonization themes for 2026

2026 is all about execution and cost-competitive decarbonization

Coming out of 2025, the core question from investors and industrial customers alike is no longer **“Is this green?” but “Can you build it on time, on budget, and at a cost that competes with fossil equivalents?”**

In a market where the average plant still arrives materially over budget and behind schedule, being able to deliver industrial projects on time and on budget has become a true differentiator and mission-critical to achieving attractive returns.

Demonstrated track record is now a gating criterion for capital, especially after several high-profile failures in the broader climate space.

At the same time, the bar for economics has risen: investors and offtakers are demanding that low-carbon solutions stand on their own legs, with unit costs and product quality that can compete toe-to-toe with incumbent fossil solutions.

Strategies that rely on perpetual policy subsidies or speculative technology roadmaps are giving way to those built around proven industrial technologies, deep operating know-how, repeatable project delivery and clear cost paths that match or beat legacy emissions-intensive assets.

In this environment, the most attractive decarbonization platforms are the ones that treat project execution as a core capability and bring steel-in-the-ground assets online at competitive cost. Read the full insight here.

DECARBONIZATION VALUE CREATION

The Ara Advantage

We help portfolio companies navigate uncertainty and unlock long-term competitive advantage.

Skillsets for success in evolving markets

Fundamental shifts are occurring in power, fuels, and low-carbon technologies. This volatility is reshaping long-term pricing and creating a unique window to deploy cost-efficient decarbonization solutions at scale. Ara Partners is at the forefront of this transition, helping portfolio companies navigate these disruptions, structure and execute commercial relationships, and systematically capture the resulting value.

Ara has dedicated experts in Decarbonization, Project Management and Execution, and Government Affairs that work directly with management to identify and capitalize on opportunities for cost-effective growth by building strong relationships across the industrial value-chain.

Ara helps design, launch, and scale new low-carbon platforms and product lines, bringing the operational and commercial muscle needed to win in fast-moving markets while ensuring strategies are aligned with evolving policy, incentives, and regulatory frameworks, turning regulatory uncertainty into a source of lasting competitive advantage that can shorten execution timeline.

Bringing the right partners to the table

Ara Partners curates and coordinates a targeted network of engineering firms, technology providers, project developers, offtakers, financiers, and advisors.

We bring together the partners that can validate the technical approach, de-risk project development, unlock strategic customer relationships, and structure bankable offtake and financing.

Through our extensive network, we ensure each portfolio company can tap best-in-class expertise exactly when and where it matters.

DECARBONIZATION VALUE CREATION

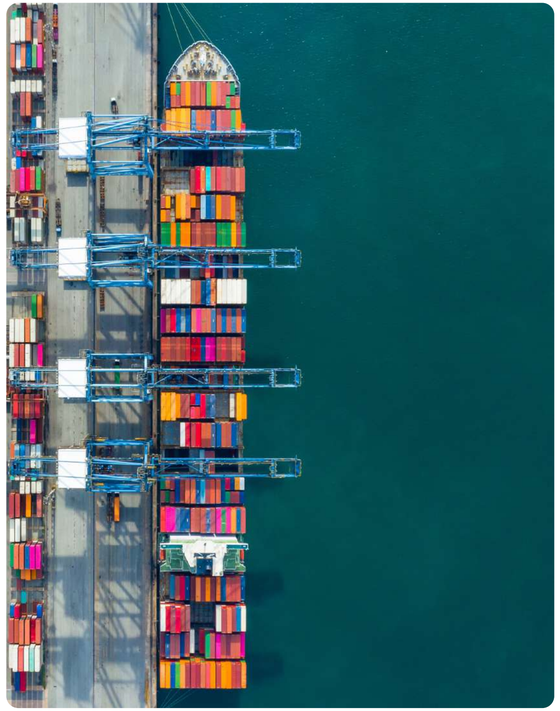
Specialist decarbonization expertise

Actionable guidance on key commercial drivers.

Our in-house Decarbonization Team leverages deep technical, commercial, and operations expertise to identify value creation opportunities for portfolio companies.

Driving meaningful outcomes

Through targeted engagement, we provide portfolio companies the tools, guidance, and network to establish a durable competitive advantage and advance commercial objectives through value-add engagements.



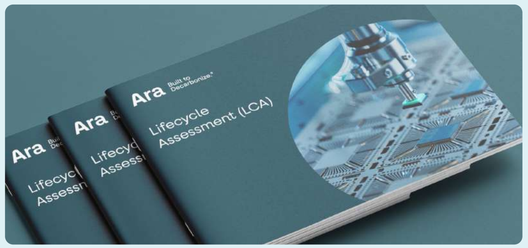
Portfolio playbooks

Our portfolio playbooks capture lessons from prior investments, sector insights, and proven decarbonization pathways, enabling management teams to focus on the most impactful operational and commercial levers. By pairing structured frameworks with hands-on support, we help teams move from concept to execution faster, with clearer accountability for both financial and emissions outcomes.

Other topics include:

- Emissions reduction potential
- Carbon offset strategy
- Sustainable finance
- *(More in development)*

Lifecycle Assessment (LCA)



Value drivers:

> Unlocking new revenue through carbon credits and public incentives.

> Accessing commercial opportunities from decarbonization focused customers and partners.

> Uncovering levers for material opex reduction and decarbonization.

What it covers:

> Assessment types, standards, and value drivers.

> Scoping and setting objectives.

> Data requirements and third-party resources.

> Converting insights into action and cost reduction.

Voluntary Carbon Markets (VCMs)

Value drivers:

> Monetizing verified emissions reductions.

> Lowering cost of capital through bankable forward agreements.

> Accessing capital from major buyers in Big Tech and Finance.

What it covers:

> Types of credits and carbon market structure.

> VCM registries, integrity frameworks, and quality criteria.

> Landscape mapping and customer value drivers.

DECARBONIZATION VALUE CREATION

Value-add engagement

Strategic support from first investment to exit.

Ara Decarbonization provides hands-on support to portfolio companies throughout the full investment lifecycle. These capabilities combine technical expertise and commercial insight to accelerate emissions reduction while strengthening operational performance.

Specialist decarbonization expertise

Decarbonization operating model
> Reducing cost and creating differentiated value by integrating decarbonization and circularity into operations.

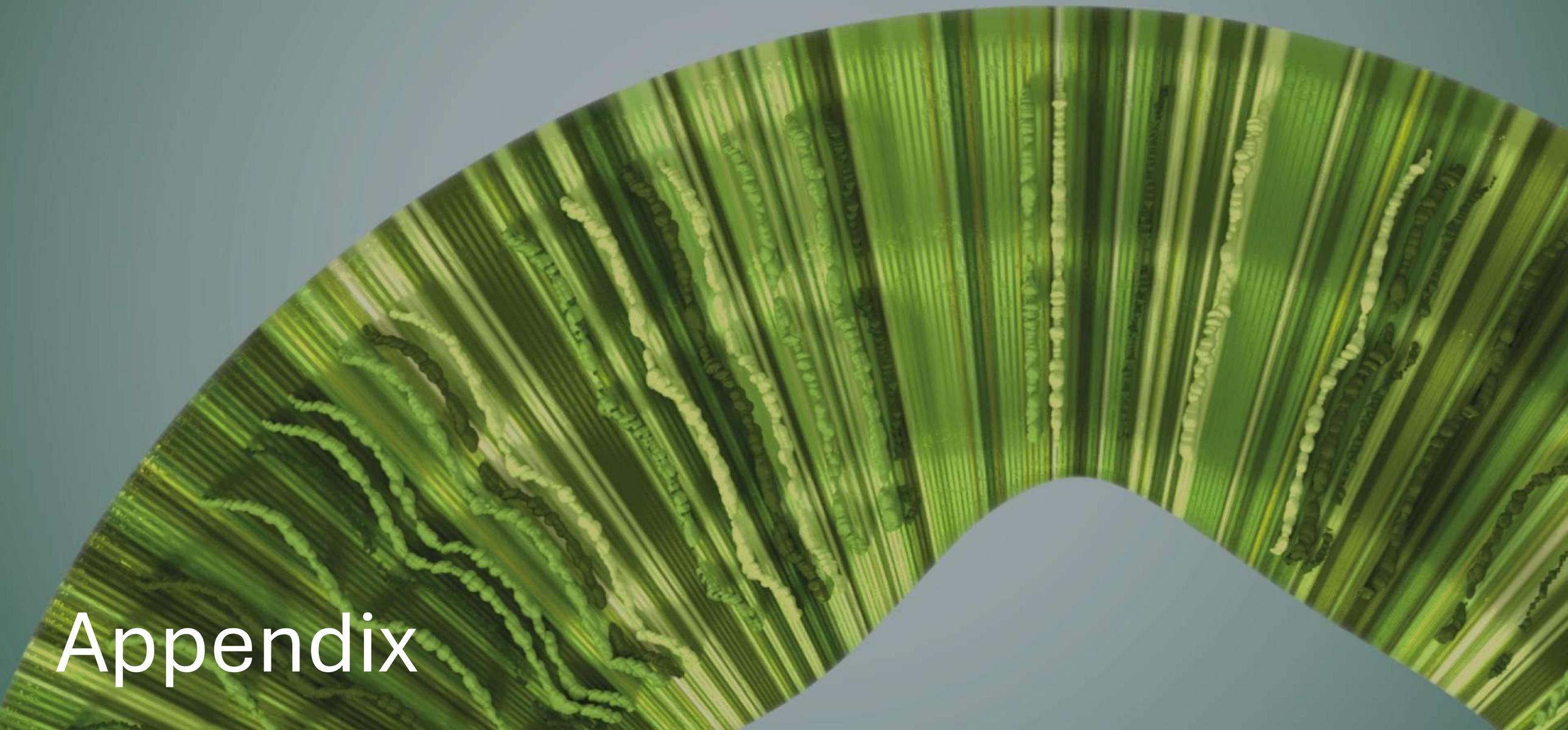
Product and supply chain
> Maximizing revenue and customer access through product design, EAC monetization, and strategic customer engagement.

Strategic customer positioning
> Advancing internal progress and building expertise to serve high-value customer groups.

Decarbonization model oversight
> Emissions and waste avoidance modelling with customer impact allocation, co-benefit, and cost impact.

Carbon markets strategy
> Leveraging opportunities to expand revenue and secure forward project funding.

LCA management
> Guiding partner selection, execution and rollout for high-quality ISO-compliant LCAs and product carbon intensity studies.



Appendix

APPENDIX II

Glossary

Scope 1 – As defined by the GHG Protocol, Scope 1 emissions are direct greenhouse (GHG) emissions that occur from sources that are controlled or owned by an organization (e.g., emissions associated with fuel combustion in boilers, furnaces, vehicles).

Scope 2 – As defined by the GHG Protocol, Scope 2 emissions are indirect GHG emissions associated with the purchase of electricity, steam, heat, or cooling.

Scope 3 – As defined by the GHG Protocol, Scope 3 emissions are the result of activities from assets not owned or controlled by the reporting organization, but that the organization indirectly impacts in its value chain.

GHG emissions reduction – metric tonnes of carbon dioxide equivalent reduced, saved or avoided by business activity below the baseline emissions.

Financed emissions – Absolute emissions that banks and investors finance through their loans and investments as described in the Global GHG Accounting and Reporting Standard Part A: Financed Emissions Second Edition by the Partnership for Carbon Accounting Financials (PCAF).

Operational emissions – Emissions directly associated with a company's operations (Scopes 1 and 2).

Value chain emissions – Emissions from the upstream and downstream activities associated with the operations of the reporting company (Scope 3).

Weighted Average Carbon Intensity (WACI) – Portfolio exposure to carbon-intensive companies, expressed in metric tonnes CO_2e/$M revenue, per TCFD guidance.

Total carbon emissions (TCFD metric) – The absolute greenhouse gas emissions associated with a portfolio, expressed in metric tonnes CO_2e, per TCFD and PCAF guidance.

Total carbon footprint (TCFD metric) – Total carbon emissions for a portfolio normalized by the market value of the portfolio, expressed in metric tonnes CO_2e/$M invested, as per TCFD guidance.

Carbon intensity (TCFD metric) – Volume of carbon emissions per million dollars of revenue (carbon efficiency of a portfolio), expressed in metric tonnes CO_2e/$M revenue, as per TCFD guidance.

Exposure to carbon-related assets (TCFD metric) – The amount or percentage of carbon-related assets in the portfolio, expressed in $M or percentage of the current portfolio value.

Greenhouse Gas Protocol – The Protocol was launched with the dual objective of developing an international standard for accounting and reporting related to greenhouse gas emissions by companies and disseminating this standard as widely as possible.

Taskforce on Climate-related Financial Disclosures (TCFD) – A framework for the financial sector to factor climate change impacts into their business processes and decision-making.

Partnership for Carbon Accounting Financials (PCAF) – A global partnership of financial institutions that work together to develop and implement a harmonized approach to assess and disclose the GHG emissions associated with their loans and investments.

Product carbon footprint (PCF) study – An analysis that sums up the total greenhouse gas emissions generated by a product over the different stages of its lifecycle.

Realized Emissions Reduction – A decrease in greenhouse gas emissions that has been delivered and calculated based on historical data (a.k.a., actual emissions reduction).

Waste Avoided – Reduction of waste sent to landfill and/or incineration as a result of using circular input materials.

Emissions Reduction Potential (ERP) – A solution's ability to reduce greenhouse gas emissions over a specified time horizon compared to the use of its incumbent(s) in the status quo/ baseline scenario.

Waste Reduction Potential (WRP) – A solution's ability to reduce waste sent to standard disposal methods (primarily landfill and incineration) over a specified time horizon compared to the use of its incumbent(s) in the status quo/ baseline scenario.

Cradle-to-Gate – Cradle-to-gate is a partial lifecycle assessment (LCA) process that evaluates the environmental impacts associated with all stages of a product's life from resource extraction (cradle) to the factory gate (before it is transported to the consumer). This process stops at the factory gate and does not including the use and disposal phases of the product.

Cradle-to-Grave – Cradle-to-grave LCA assesses the environmental impacts of a product across its entire lifecycle, from raw material extraction (cradle) through to disposal or recycling (grave), including production, use, and end-of-life stages.

Cradle-to-Cradle – Cradle-to-cradle LCA focuses on designing products with a circular lifecycle that minimizes waste and encourages recycling or reuse, assessing from raw material extraction (cradle) to the product's end of life, where it is repurposed or recycled into a new product (cradle).

APPENDIX II

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The Interests have not been and will not be registered under the Securities Act of 1933, as amended (the "Securities Act"), or any state securities laws or the laws of any foreign jurisdiction. The Interests will be offered and sold under the exemption provided by Section 4(a)(2) of the Securities Act and Regulation D promulgated thereunder and other exemptions of similar import in the laws of the states and other jurisdictions where the offering will be made. The Interests will be illiquid, as there is no secondary market for interests in the Funds and none is expected to develop. The Interests will be subject to restrictions on transferability and resale and may not be transferred or resold except as permitted under the applicable statutes. In addition, such Interests may not be sold, transferred, assigned or hypothecated, in whole or in part, except as provided in the Funds' organizational documents. Accordingly, investors should always be aware that they will be required to bear the financial risks of an investment in the Interests for an indefinite period of time. The fees and expenses charged in connection with an investment in the Funds may be higher than the fees and expenses of other investment alternatives and may offset profits. Investors should have the financial ability and willingness to accept the risk characteristics of the Funds' investments. The Funds will not be registered as an investment company under the Investment Company Act of 1940 (the "Investment Company Act"). Consequently, investors will not be afforded the protections of the Investment Company Act.

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Ara Partners obtained the data used and disclosed in this report, for the purpose of reporting on environmental and social indicators, from portfolio companies and, where possible, validated the data using a third-party service provider. In certain cases (such as in relation to GHG emissions), the data has been estimated. None of this data has been subject to external assurance. Ara Partners has taken all reasonable efforts to verify the accuracy of the data reported, but does not assume any responsibility for the accuracy or completeness of such information.

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In particular, projected performance results are reflective of the results that Ara currently expects to receive given the assumptions provided herein and not the results that investors in the Funds will necessarily receive. The projected results do not include the reinvestment of distributions, interest, or capital gains, and do not reflect the deduction of any fees, expenses, or carried interest. Thus, the actual return that an investor in the Funds can expect to receive would be reduced by the management fees, carried interest, and other expenses which may be incurred by investors in the fund, as described in further detail in the Memorandum.

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There can be no assurance that CO_2e reduction assumptions will be met, and actual reduction of CO_2e emissions will vary substantially depending on a number of factors.

Ara and its affiliates have provided information regarding certain potential investment opportunities it is currently evaluating on behalf of the Funds but there can be no assurances any of these opportunities will be available to, or consummated on behalf of, the Funds. There also can be no assurances that other investment opportunities similar to those presented herein will be available to the Funds or that these investments if consummated or any future investments made by the Funds will achieve results commensurate with those stated herein. You should also bear in mind that past targeted portfolio characteristics are not indicative of future portfolio characteristics and there can be no assurance that a Fund will have comparable portfolio characteristics or that target portfolio characteristics will be achieved. In addition, there can be no assurance that unrealized investments will be realized at the valuations shown as actual realized returns will depend upon, among other factors, future operating results, the value of the assets and market conditions at the time of disposition, any related transaction costs, and the timing and manner of sale, all of which may differ from the assumptions on which the valuations contained herein are based. Unless otherwise stated, all IRRs and investment multiples are presented on a "gross" basis (i.e., they do not reflect the management fees, carried interest, taxes and allocable expenses that are borne by investors in the applicable Ara Fund, all of which will reduce returns and, in the aggregate, may be substantial). Net IRRs are after management fees, carried interest, taxes and allocable expenses. All IRRs presented are annualized and calculated on the basis of monthly investment inflows and outflows. Nothing contained herein should be deemed to be a prediction or projection of future performance of an Ara Fund. Prospective investors are encouraged to contact Ara to discuss the procedures and methodologies used to calculate the investment returns and other information provided herein.

The performance information presented herein includes the impact of fund-level credit facilities that may be drawn upon to fund portions of certain investments in advance of calling committed capital, which has the effect of augmenting net internal rate of return relative to the return that would otherwise have been presented had drawdowns from partners been initially used to acquire the investment. Because IRRs are time-weighted calculations, investments that have been held for a shorter duration of time will be more significantly impacted by near-term cash flows.

Past performance is no guarantee of future results. All investments involve risk including the loss of principal.

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The case studies described in this report are for illustrative purposes only and have been selected to provide, among other things, examples of investment strategy and deal sourcing.

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Ara Built to Decarbonize.®

Connect with one of our industry experts

We’re building companies that are decarbonizing the economy in immediate and tangible ways.

info@arapartners.com