

The cover features a complex geometric design with overlapping triangles in shades of green, blue, and yellow. The background is a collage of images: a blue sky with clouds, a modern glass skyscraper, a close-up of a green fern leaf, and a roof with solar panels. Three circular cutouts are placed within the geometric shapes, revealing parts of the background images. The text is overlaid on a teal-colored triangular area on the left side.

2021

ESG and
Impact
Performance
Report

ENERGY IMPACT PARTNERS

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A Message from our Chief Executive Officer



To all our partners and stakeholders:

By any measure, 2020 was a year of tremendous challenge. As we observed the extraordinary events of the year unfolding, we recognized our relative good fortune. We continued to build our platform, increase our impacts, and improve our environmental, social and governance (ESG) processes and reporting. We also acted to expand our efforts to promote diversity, equity, and inclusion (DE&I) in clean energy and redoubled our commitment to accelerating the transition to clean energy through collaborative investing.

The performance of our portfolio continues to reinforce our conviction that investing in the clean energy transition both maximizes profits for our investors and generates long-term, positive environmental impact for our planet.

We believe that collaboration is the foundation for accelerating change that leads to a better future. We are deeply engaged with an industry that is at the core of the energy transition, and partner with forward-looking incumbents who are working aggressively to reduce greenhouse gas emissions and who are committed to enabling the adoption of clean energy across the global economy. Bringing together inspiring entrepreneurs and motivated industry operators

to accelerate the innovation that is necessary to tackle the significant global challenge is a critical driver of our success.

We also recognize that our responsibility as investors goes beyond the environment. In alignment with our commitment to the United Nations Principles for Responsible Investment (UNPRI), we continue to implement our policy and practices for integrating ESG risks and opportunities into our investment decisions. We believe that following sound ESG practices makes us better investors, as well as better contributors to advancing environmental and social progress.

We believe the investment opportunity in sustainability will continue to grow and shape markets for the decades to come. We look forward to working with you toward these monumental goals.

Sincerely,

A handwritten signature in black ink, appearing to read 'Hans Kobler', written in a cursive style.

Hans Kobler
Founder & Managing Partner

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Introduction

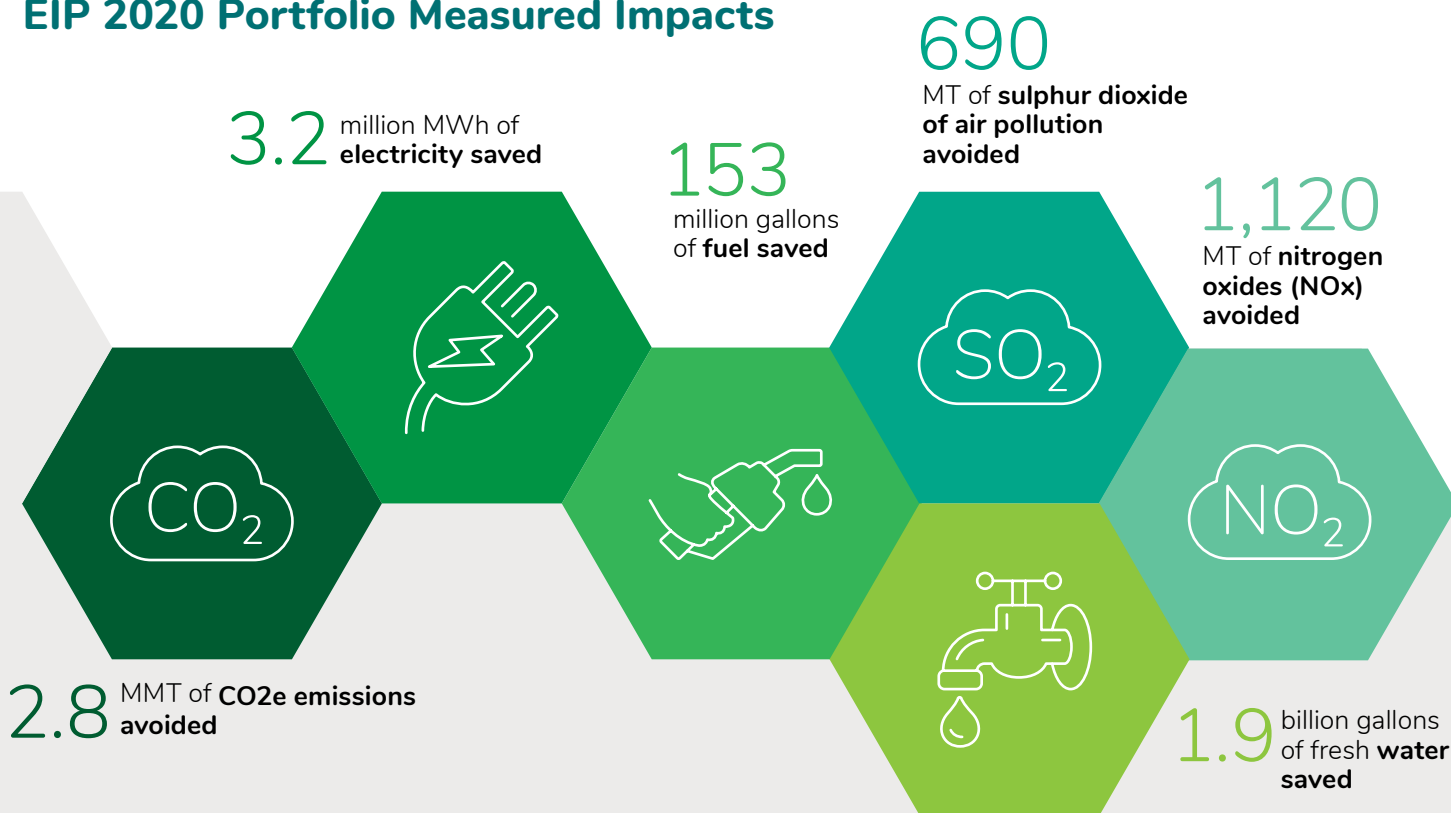
Energy Impact Partners (EIP) is one of the world's largest coalitions of strategic investors focused on the clean energy transition. Our mission is to invest in companies that accelerate the transformation of the global economy to a 100% clean, resilient, and inclusive ecosystem, while providing strategic benefits and superior returns to our investors.

At EIP, measuring our impact is an integral part of fulfilling our mission and we are proud of the direct

environmental impacts we have achieved. As our platform has grown, we have expanded and improved our ESG and impact measurement across all our funds, starting with formal impact reporting three years ago. This report documents the measurable impacts of our investing activities in 2020 on the environment and on DE&I efforts in our sector as well as our portfolio companies' ESG performance. In addition, **lifetime CO₂e savings for our full portfolio rose 42% to 38 million metric tons (MMT).**

Our foundational companies create the essential infrastructure that underpins the global low-carbon economy. These companies also made progress in 2020 despite very challenging conditions. To cite one key performance indicator (KPI), year-over-year (YoY) customer growth remained positive for every reporting company except one, ranging from a low of approximately -10% to a high of 500%.

EIP 2020 Portfolio Measured Impacts



Our foundational impacts included:

Piloting the use of AI-enabled analysis of transmission line maintenance needs from drone-based photography, a collaboration between portfolio company **eSmart** and investment partner **Xcel Energy**

Helping utilities and other energy companies improve their customer engagement and pricing through our companies **Autogrid, GridX, Innowatts, and Marketing Evolution**

Helping portfolio company **Dragos** create a cybersecurity platform for threat alert intelligence-sharing that has been adopted by all three of the industry's cybersecurity protection centers

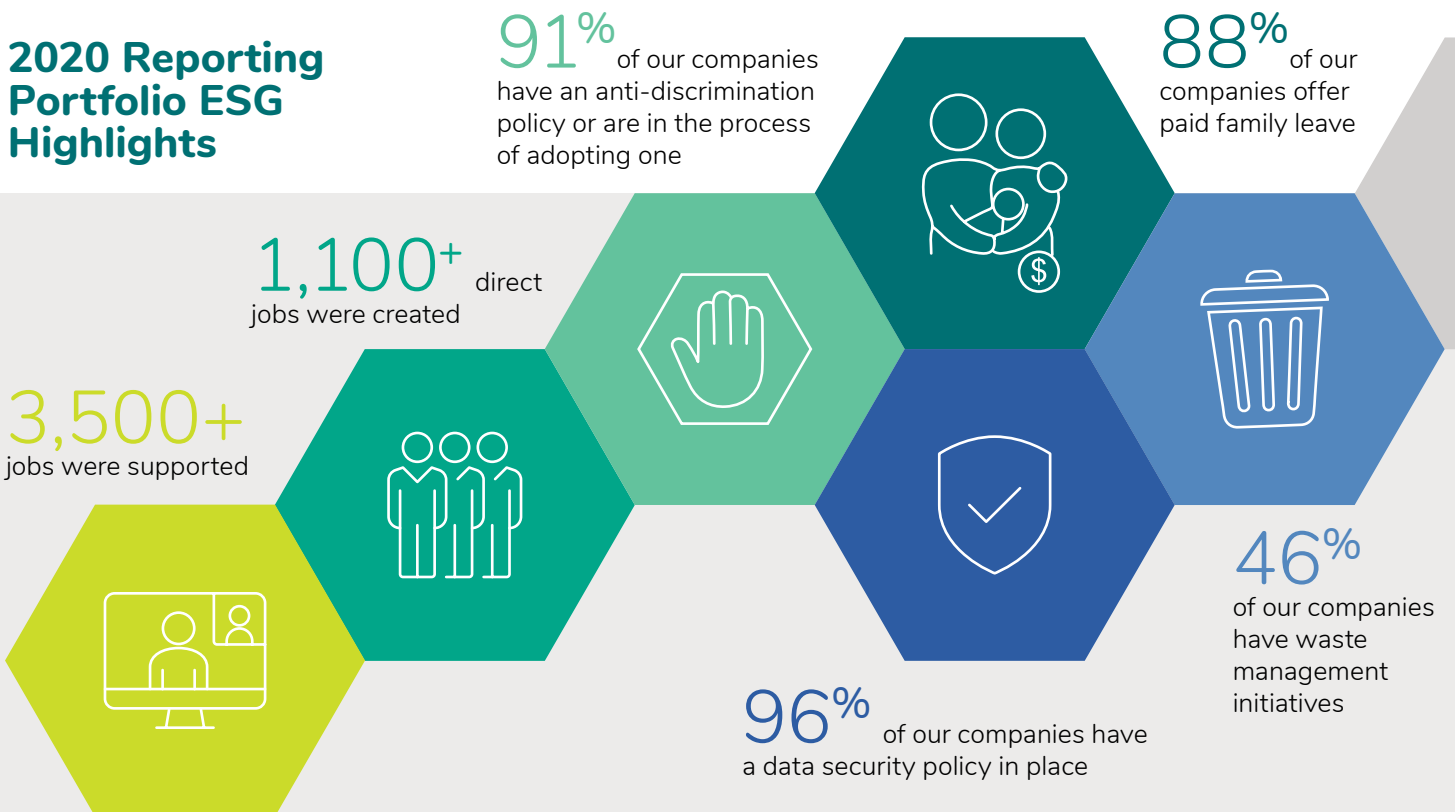
In addition, **we expanded our internal and portfolio-wide DE&I efforts.** In 2020 this work included additional DE&I training, a summer internship program focused entirely on expanding DE&I in our sector, and approval to create a new fund that will invest in companies led by underrepresented founders and leaders and/or who create economic opportunity for distressed or disadvantaged communities.

At EIP, our strategic partners are at the core of our success. Despite the pandemic, in 2020 these partners continued to make progress toward reducing greenhouse gas (GHG) emissions and satisfying other ESG goals. Our coalition of strategic

partners has **already achieved CO2e emission reductions of 40%. Carbon emissions have been reduced by over 300 MMT** since their respective base years. In addition, our coalition has committed to an **aggregate CO2e reduction of 99% (780 MMT total) by 2050.**

This report documents our approach to impact measurement and calculations, our efforts to promote DE&I, and the ESG metrics we collect on our portfolio companies. We also summarize the ESG activities of our investing partners and report on our own carbon footprint.

2020 Reporting Portfolio ESG Highlights





About Energy Impact Partners

EIP was founded in 2015 by a team of corporate venture capital pioneers, successful technology investors, and industry experts, with the goal of advancing the transition to a global low-carbon economy.

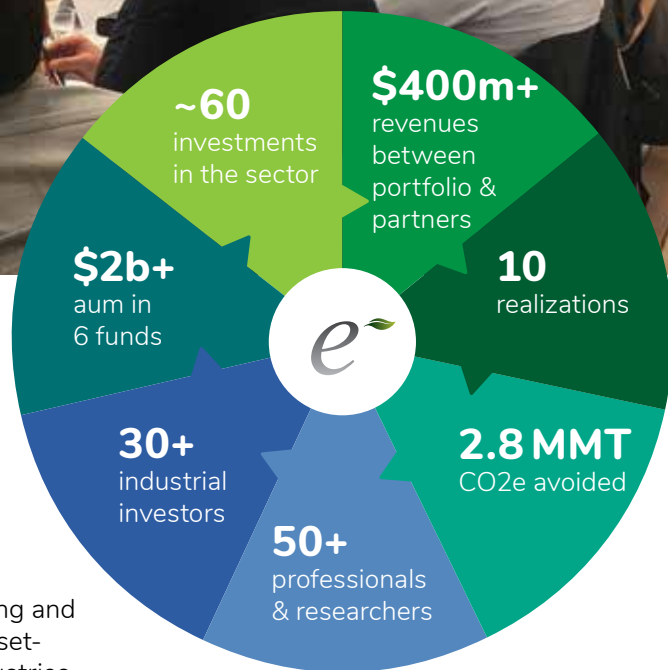
EIP's core objectives are to achieve superior, risk-adjusted returns for investors, deliver strategic insights to our corporate partners, drive value creation in our portfolio, and, consistent with our investment mandate, advance positive environmental and social outcomes through our investments. With the move toward a decarbonized, digitized, and electrified future,

innovators are transforming and disrupting traditionally asset- and carbon-intensive industries. To help advance these objectives, we follow a specialist platform approach to investing by partnering with more than 30 of the world's largest, most innovative energy, utility, and industrial firms as strategic investors.

We offer these strategic partners unique insights that facilitate their active cooperation and engagement in our model and then work closely with them to find value-creation opportunities along the entire investment lifecycle. From identifying the top companies in segments most critical to the energy transition, to conducting thorough due diligence and facilitating commercial relationships between our limited partners and portfolio companies, EIP's platform supports scaling the

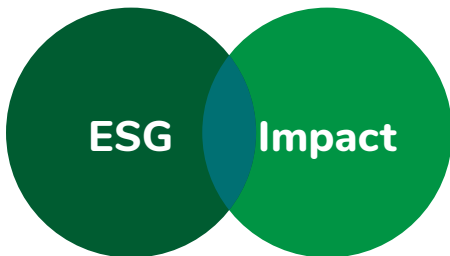
adoption of clean technologies while maximizing profitability for investors. The better we position our partners for the clean energy future, the more we can positively impact the environment by saving electricity, increasing penetration of renewable energy on the grid, and reducing GHG emissions.

Across EIP's global family of funds, we have a team of over 50 professionals, with offices in New York (headquarters), San Francisco, London, Cologne, and Palm Beach. With over \$2 billion in assets under management, we invest globally across venture, growth, credit, and infrastructure.



As of 6/30/21

How We View Impact and ESG Performance



While both are integral to our work, ESG and impact measurements are not identical concepts. We measure our impact in terms of quantitative and qualitative metrics that are fundamentally related to our mission to accelerate the clean energy transformation. We report on these impacts using a variety of metrics such as reductions in carbon emissions and other pollutants, water savings, and other metrics tied to the expansion of clean technologies and markets.

Our ESG reporting incorporates all of our impact metrics, but it also includes a broader set of data on the environmental, social, and

governance aspects of our portfolio companies. For example, our ESG reporting includes extensive data on the composition of the workforce in our portfolio companies, a review of policies affecting DE&I, and a number of governance metrics. We believe that reporting on this broad set of ESG indicators enhances our role as responsible investors and will ultimately lead to improvements in portfolio financial performance as well as more sustainable outcomes.

EIP's Commitments



In 2020, EIP made several public commitments to encourage accountability and transparency of our ESG and impact principles. We became a signatory to the UNPRI, a UN-supported organization dedicated to advancing responsible investment and supporting an international network of investor signatories in incorporating ESG considerations into investment and ownership decisions. We also became a member of Initiative Climat International (iCI), a subgroup of UNPRI specifically formed to work on reducing carbon emissions of

private equity-backed companies and securing sustainable investment performance by recognizing and incorporating the materiality of climate risk. Lastly, EIP is a supporter of the Task Force on Climate-related Financial Disclosures (TCFD) as we believe the TCFD recommendations provide a useful framework for increasing transparency on climate-related risks and opportunities within financial markets.



Clean Energy Impacts

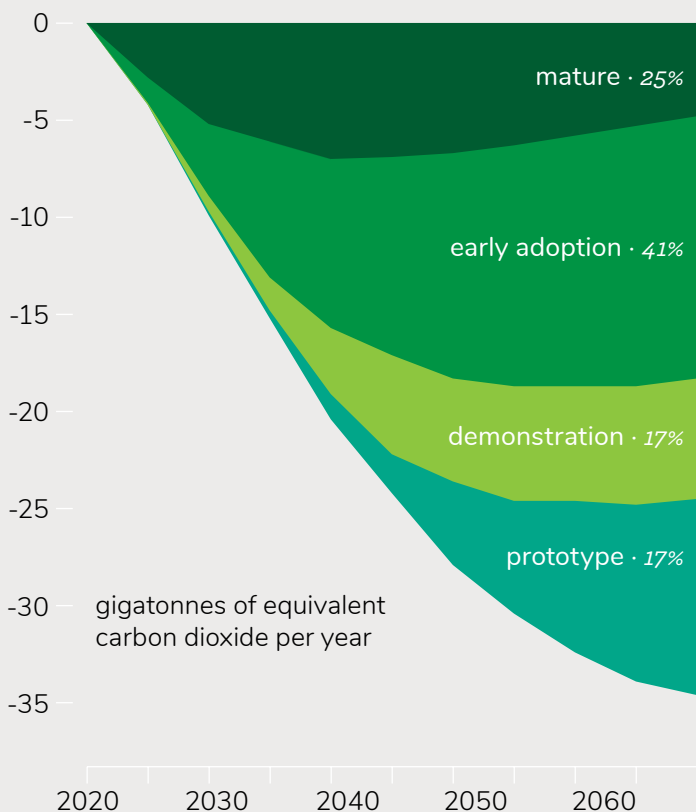
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Our Impact Thesis

Climate change poses an existential threat to our planet and requires an urgent effort to transform the world's energy systems. Changing weather patterns are already contributing to record numbers of increasingly severe climate disasters and are exacerbating global environmental, social and economic inequalities.

The clean energy transition will require massive investment to expand and transform every part of the electricity sector, from new generation technologies to grid protection and customer electrification. A strong, clean electricity sector will form the backbone of the global electrified and low-carbon economy as large emitters of carbon, such as the transportation sector, convert to electricity. To successfully transition to a low-carbon economy, the required investment in emerging clean energy technologies will extend into the trillions, providing a tremendous investment opportunity for those willing to lead.

Global Energy Sector CO₂ Emissions By Current Technology Readiness



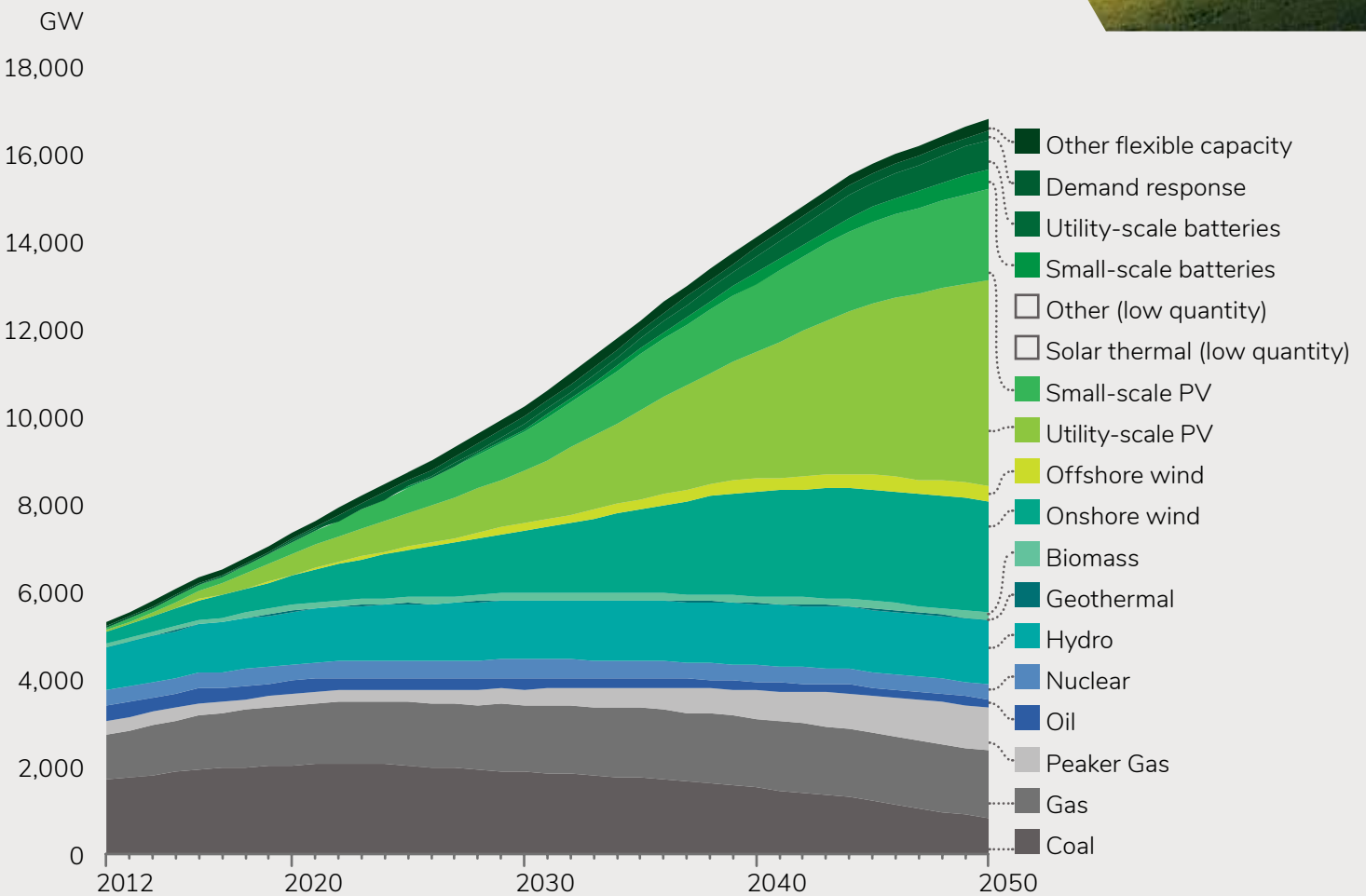
The IEA estimates that **roughly half the reductions that the world needs** to swiftly achieve net zero emissions will come from technologies that are **not commercially available**.¹

¹ IEA, Global energy sector CO₂ emissions reductions by current technology readiness category in the Sustainable Development Scenario relative to the Stated Policies Scenario, 2019-2070, IEA, Paris

By 2050, renewable energy resources are expected to account for more than 60% of generation used in final worldwide energy consumption. This evolution provides an unparalleled investment opportunity.



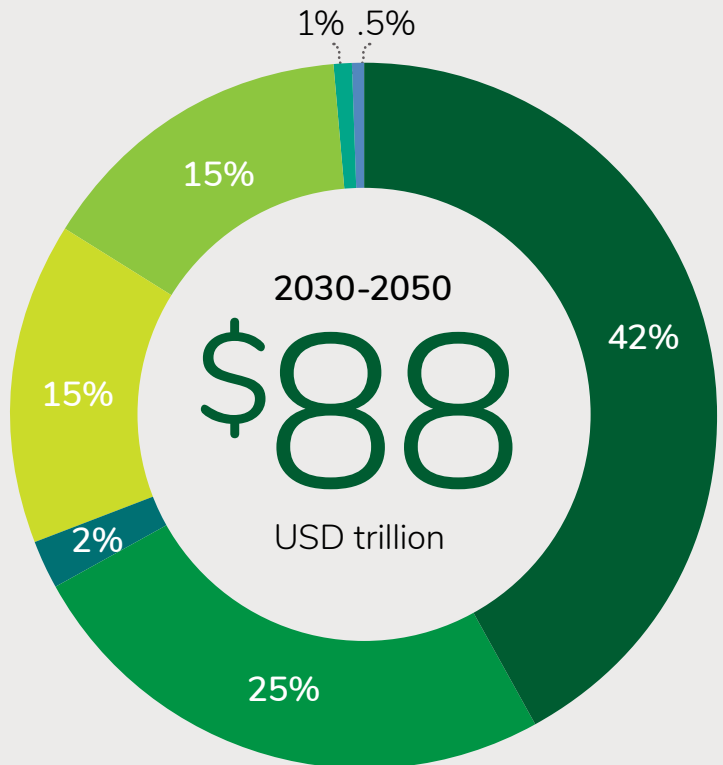
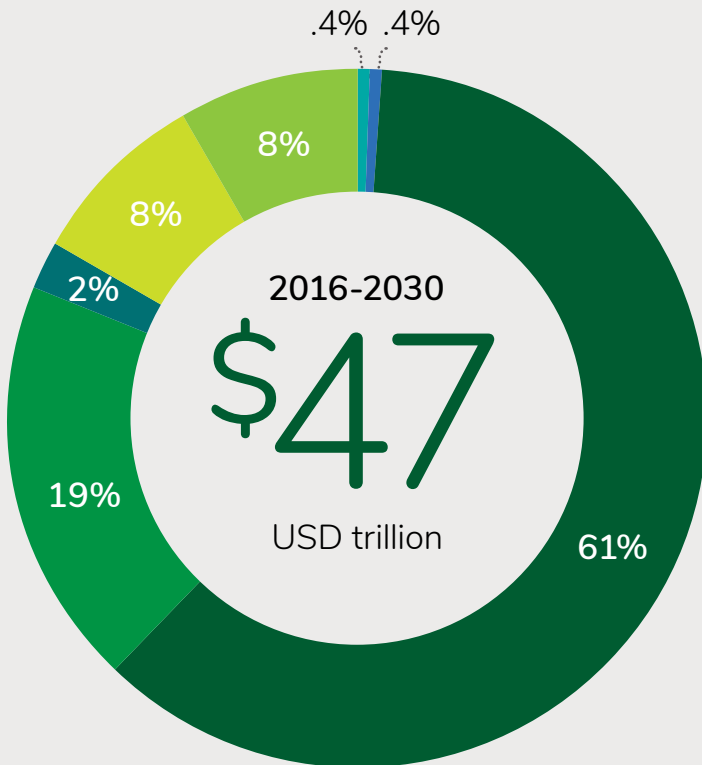
Electricity Generation Share By Fuel Type² 2015-2050



² BNEF New Energy Outlook 2018



Required Infrastructure Investment³



- Energy efficiency
- Renewables - power
- Renewables - end uses
- Electrification
- Power grid and energy flexibility
- Hydrogen
- CCS & Other

IRENA's Transforming Energy Scenario shows that to achieve a more climate-friendly global energy system, **investment of \$47 trillion and \$88 trillion** are required by 2030 and 2050, respectively

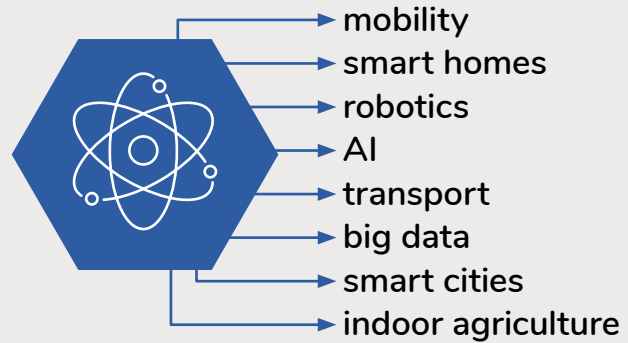
³ IRENA Global Renewables Outlook, 2020 Edition

Using our industry-leading investment coalition and approach, EIP is uniquely positioned to accelerate an inclusive clean transition. Our partners own and manage massive energy and industrial systems across four continents; they serve more than 200 million residential electric customers, and collectively spend more than \$65 billion in capital expenditures (CapEx) each year. The

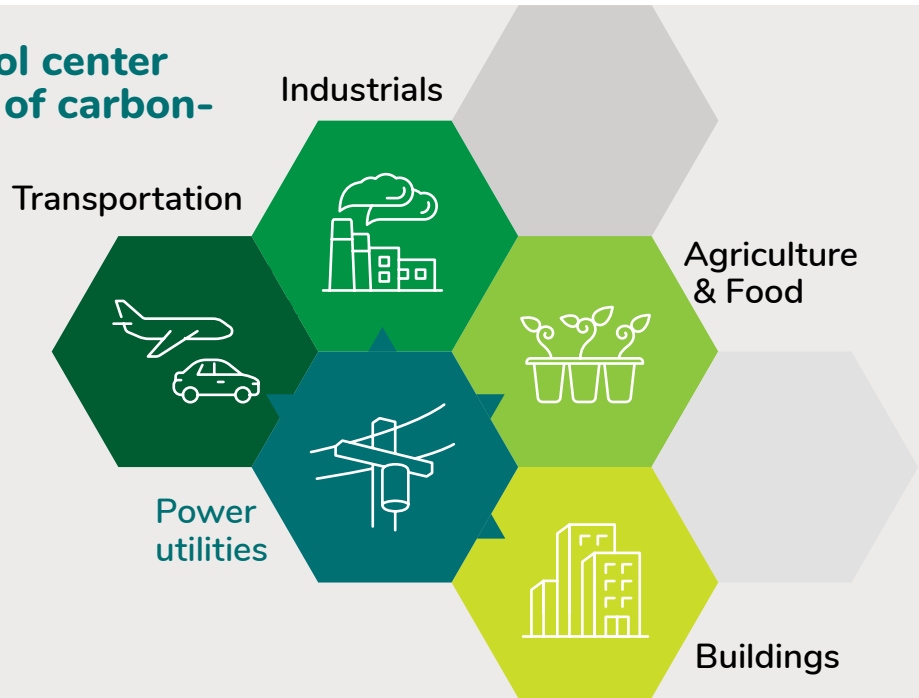
energy and industrial sectors have long been characterized by the asset- and carbon-intensive nature of their operations. However, as digitization and electrification continue to advance as top priorities, industry incumbents are well positioned to unlock significant carbon, water, fuel, and electricity savings by advancing innovation and adopting clean technologies.



The electron is the fuel of a sustainable future



Utilities are the control center for the electrification of carbon-intensive industries



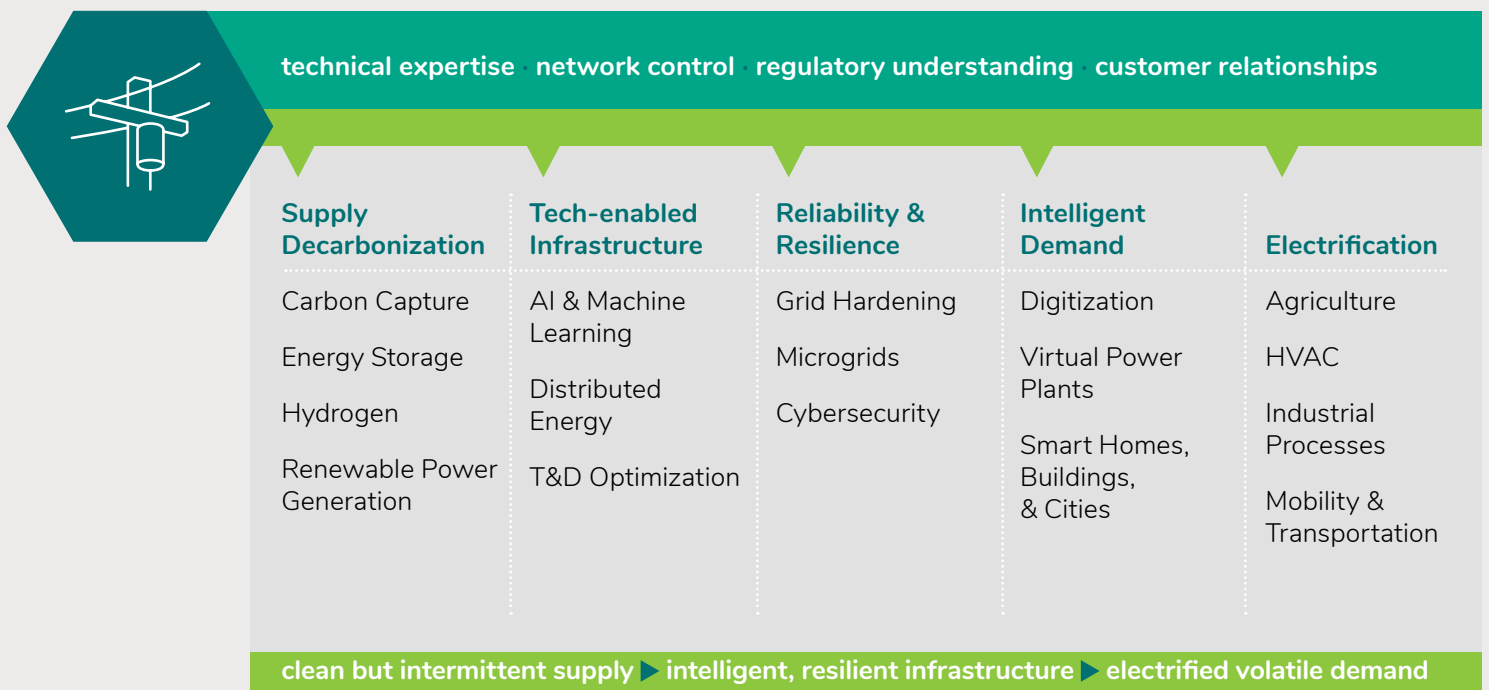
Target Investment Sectors

Our impact mission is to transform the energy industry into a 100% clean, resilient, and inclusive ecosystem.

By aligning our investment priorities with disruptive trends underpinning the energy transition, EIP gives our partners exposure to critical climate solutions and supports their commercial strategies for technology adoption. These segments offer highly attractive market opportunities because of their potential for significant disruption, profitable growth, and the ability to deliver meaningful

social and environmental outcomes. Our investment priorities extend across the entire value chain, seeking technologies that contribute to change and can rapidly scale their impacts as they become market leaders. We invest in both early- and growth-stage companies, where we can have highly leveraged and scalable impacts.

Utilities' Core Strengths Complement Target Investment Sectors



Our Four Impact Pathways

There are four distinct ways in which our activities influence the pace of the clean energy transition. We call these our impact pathways.

Directly
Measurable
Impacts



Helping
Our Partners
Succeed



Foundational
Company
Impacts



Thought
Leadership



Directly Measurable Impacts



The first impact pathway is direct participation in a business value chain for which environmental differences from the status quo can be quantified with reasonable accuracy. For example, several of our portfolio companies finance or install energy efficiency (EE) technologies that reduce grid energy use by readily measured amounts. Because the environmental impacts of grid power can be estimated for each location and time period, we are able to estimate

the savings enabled by our portfolio companies' participation in the installation of these EE technologies.

We call the portfolio companies with impacts that are measured on this first pathway our directly measurable (DM) companies.

Fourteen of the 34 companies in our 2020 portfolio were directly measurable.

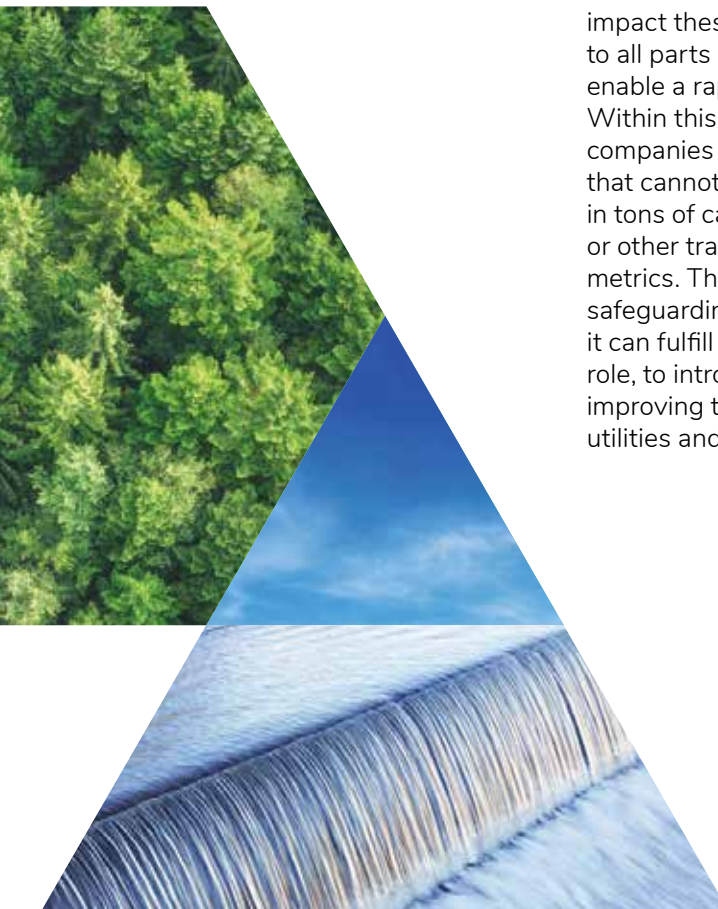
Foundational Company Impacts



The clean energy transition requires a monumental shift in supply, delivery, operations, management, and customer experience across the entire energy value chain. EIP's impact thesis targets such changes to all parts of the system to better enable a rapid and complete transition. Within this broad space, our portfolio companies perform many functions that cannot properly be measured in tons of carbon emissions saved or other traditional environmental metrics. These functions range from safeguarding the electric network so it can fulfill its critical decarbonization role, to introducing new processes for improving the engagement between utilities and their customers.

We call this second pathway our foundational impacts and measure them using metrics described later in this section. Seventeen, or 50%, of the 34 companies we owned in 2020 were foundational.

The full effects of our foundational companies on energy systems can be both subtle and complex, but a number of metrics correlate with foundational impact and can be measured over time to assess the direction and rate of progress. Of course, the financial performance of a firm with a transformational mission is one of the best correlates of success, and it is always our goal to strengthen our portfolio companies' value and growth. However, financial metrics do not tell the whole impact story.



Helping Our Partners Succeed



Our third impact pathway involves activities that influence our investment partners. EIP does extensive research on a wide range of new technologies, decarbonization strategies, business models, and energy policy changes. Unlike traditional private equity and venture capital funds, we collaborate on such research and share the results of our work through intensive engagement with our investors, many of whom are transforming their own businesses

to clean, sustainable operations. We also work hard to identify the critical emerging technologies that will help our partners transform their business, and then facilitate the adoption of these innovations. If we are meeting our performance expectations, we are having a significant impact on our partners' own transformations.

Thought Leadership



Finally, and consistent with our investment mission, we believe that we have an obligation to engage with the larger financial community and the public on issues related to investment in the clean energy transformation. As a result, we devote significant

resources to public efforts to improve clean energy investment performance and other forms of industry thought leadership. The remainder of this section documents each of these impact pathways.



Directly Measurable Impacts



In 2020 we were invested in 14 portfolio companies with DM impacts. Our directly measurable portfolio companies enable carbon savings in a variety of ways, including by:

Increasing energy efficiency and reducing energy use

Generating clean electricity

Financing clean energy solutions

Increasing clean energy deployment

Electrifying transportation

Reducing GHG emissions

Our measurements for DM companies follow several conventions that are common in the impact measurement sector. First, we recognize that our DM companies typically are not the only actors in the value chain that enable a positive impact to occur. A residential solar power system that is financed by one of our portfolio companies also has manufacturers, installers, and a distinct owner, each of whom plays a critical role in providing that system's environmental benefits. In reporting our impacts, we do not claim that we are the sole enabler of savings, only that we play one critical role in the benefit delivery chain.⁴

Consistent with industry practice, we do not prorate company impacts within the value chain or by ownership share. Our impact estimates represent projected gross savings created by our portfolio companies, which we believe far exceed their own GHG footprints. However, in cases where the inputs needed to achieve these savings have material negative effects, we include Scope 1 and 2 emissions from these inputs in our estimates in order to fairly assess each company's net contribution to energy and carbon benefits. For example, for electric transport companies such as Volta, we include the negative impacts from grid charging of batteries, along with the positive impacts of avoided gasoline combustion in our savings estimates.



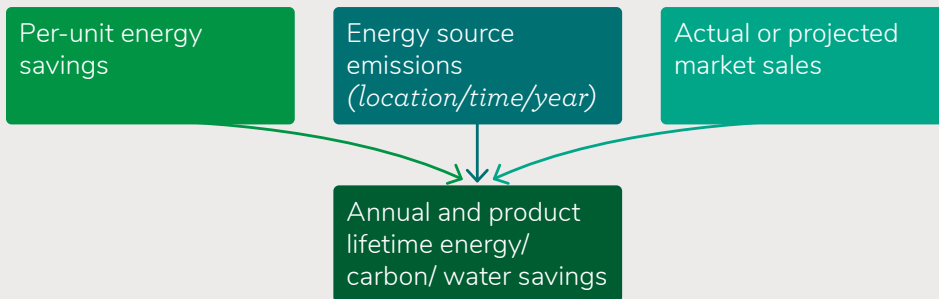
⁴ Relatedly, we follow industry conventions by measuring the full impacts of companies we invest in regardless of the nature and extent of our investment. In other words, we do not distinguish between companies in our credit and equity funds from the standpoint of impact measurement, nor do we scale our impacts by the percentage of capital provided.

Measuring impacts also requires the establishment of an environmental baseline that would exist in the absence of our investment. We employ assumptions, parameters, and inputs that we consider to be reasonable, based on information currently available to us to determine projected grid environmental attributes over our investment horizon in the absence of our investment. We then apply this benchmark scenario as the baseline for estimating the impacts of our DM companies. While unforeseen changes to the local or regional energy system could render our baseline inaccurate, we believe this is the most accurate possible

approach to attributing estimated changes from the status quo to new technologies and business models.

As an example, Urbint’s solutions for utilities include damage prevention tools that reduce accidental leaks of natural gas, which primarily consist of methane, a potent GHG with a global warming potential (GWP) of more than 28 times that of carbon dioxide. Through targeted data collection, together with industry research, we are able to estimate impacts that in many cases have been previously unmeasured. Our approach is summarized visually in the figure below.

Portfolio Company Impact Measurement · Overview



Our companies help enable environmental savings as part of a value chain. All parts of the chain together create and share in the impact; we are not the only impact creator

Consistent with industry practice we do not pro-rate company impacts within value chain or by ownership share

Our approach follows many best practices for energy and emissions accounting, with credible, reliable data sources and well-vetted methodologies. We measure both the depth and breadth of impact for each of our DM companies. The depth of impact reflects the relative intensity of energy and emissions savings compared to the benchmark scenario. For example, each solar panel (measured in watts of capacity) in a certain location will generate clean energy according to the solar resource available over the year in that location, as measured either by actual project output data or by estimates from sources such as the National Renewable Energy Laboratory (NREL). Since solar panels produce power during peak, sunny periods, the avoided grid emissions for a period are estimated using the Environmental Protection Agency's (EPA) eGRID measurement of marginal emissions during the period. The depth of impact is therefore calculated on a per-unit

basis, and the breadth of impact can be assessed by looking at not just one solar panel or one project location, but by extending the analysis broadly across a company's entire portfolio of projects.

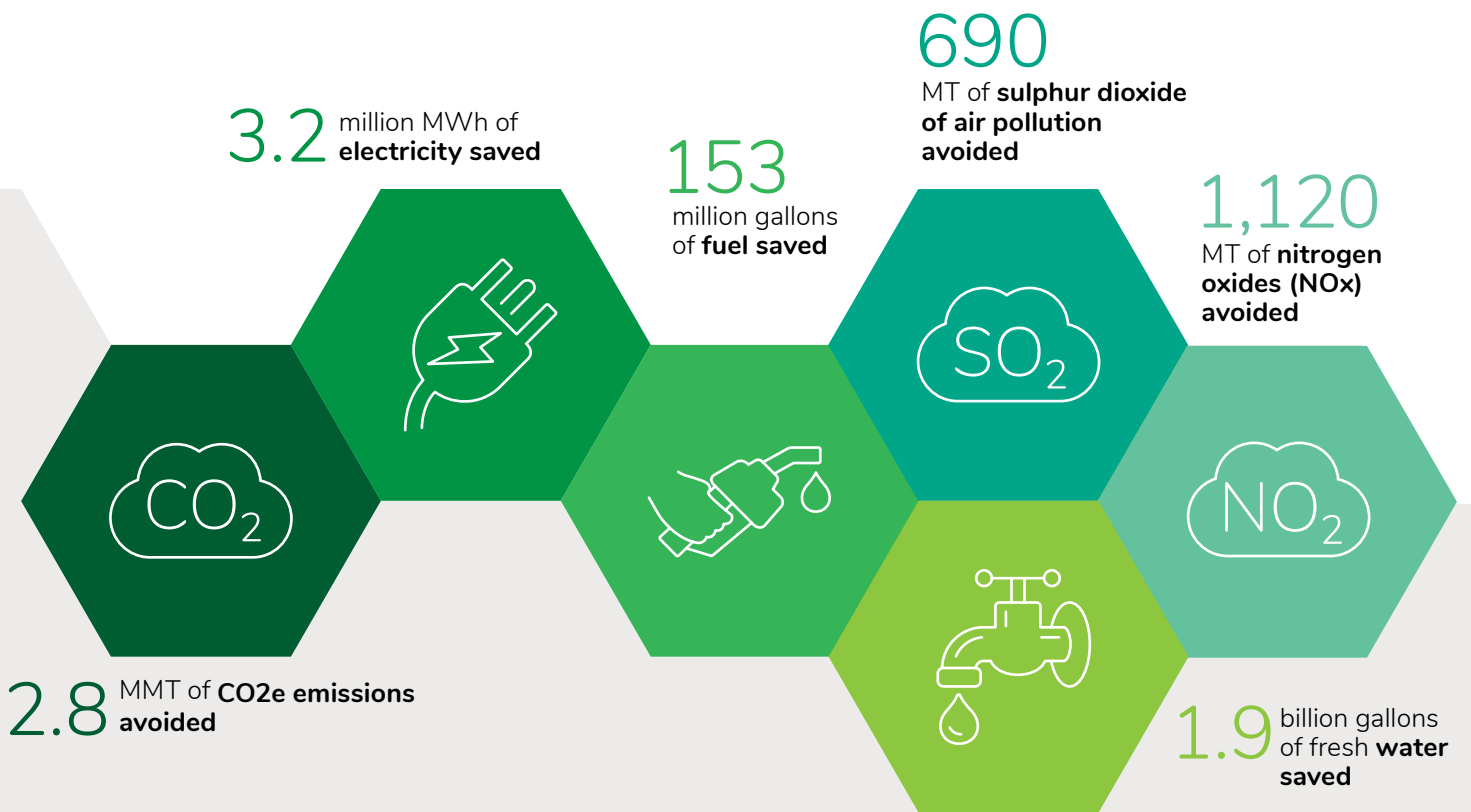
Our sources for data and analysis include peer-reviewed research, such as life-cycle assessments (LCAs), government standards, industry reports, and company data on system performance, installed volume, and operational performance. Our energy analysis relies on technical engineering analysis of the inputs and outputs of each project. Emissions calculations align with guidance from Greenhouse Gas Protocol, the Intergovernmental Panel on Climate Change, the EPA, and other industry experts. While we recognize the uncertainty that exists in accounting for nonfinancial impacts, we set high standards for the quality and credibility of our data and analysis.

Our toolkit includes a diverse library of standards and datasets from government agencies, nongovernmental organizations (NGOs), and industry collaborations. Our analytical framework uses the scientific and engineering principles that apply to each specific use case in order to set parameters and assumptions for material inputs and calculate projected material outputs. No single, comprehensive impact assessment framework is currently available to adequately address all industries and technologies that we invest in. Instead, we aim to use best practices in the evolving field of impact assessment while drawing from the most widely used and credible sources available,⁵ and believe our methodology generally aligns with other industry leaders in this space, including Project FRAME, the CRANE tool, GRI and SASB.



⁵ More information on our DM impacts for 2020 are provided in Appendix One.

Our analysis for the 14 DM companies during calendar year 2020 produced the following results:



The CO2e savings enabled in 2020 are equivalent to planting 46 million trees or taking 590,000 cars off the road. These projected savings are also about 28,000 times as large as the 2020 carbon footprint of EIP itself, which is a little over 100 tons of CO2e.

Carbon (metric tons CO2e)



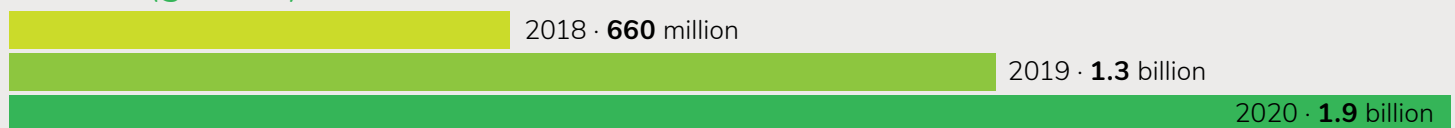
Electricity (MWh)



Fuel (gallons)



Water (gallons)



Lifetime Carbon Savings and Potential

All of the DM companies in our portfolio sell products or offer services that, once installed, reduce negative environmental impacts throughout their installed and operating lifespan. Accordingly, for carbon only, we have computed the emissions savings we help enable over the life of the installed measures.

These savings total about 38 MMT of CO₂e, the equivalent of planting about 620 million trees or taking 8

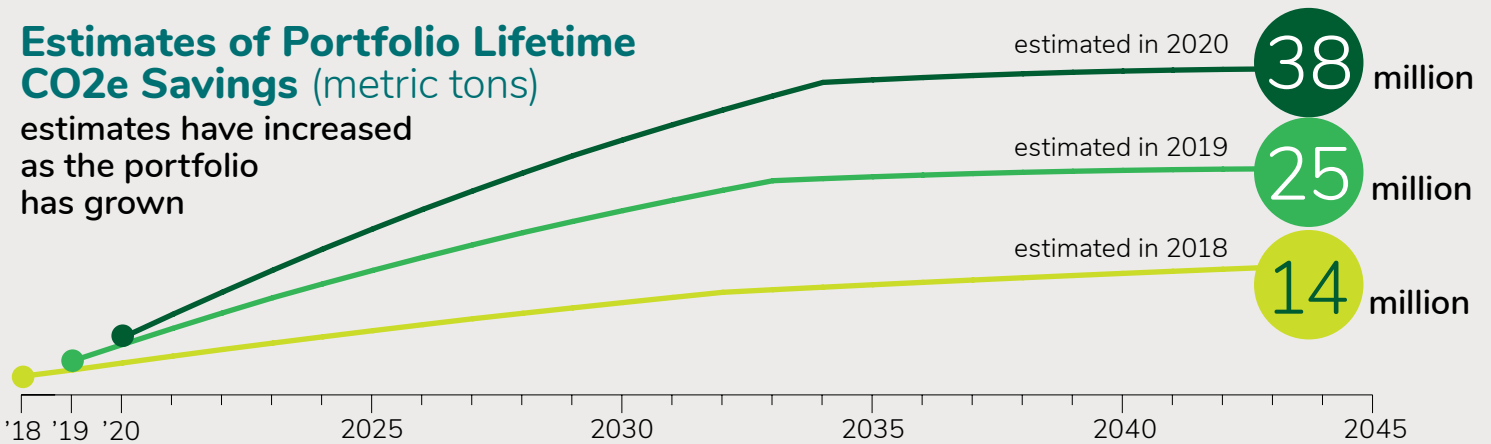
million cars off the road. The product lifetimes we have assumed are shown in Appendix One. In calculating lifetime savings, we have assumed that grid carbon intensity declines to zero by 2045.

Our portfolio lifetime savings, like our annual savings, are actual estimated figures that are already “locked in” by our portfolio companies’ actual installations of their technologies. This should not be confused with estimated

potential or possibly achievable savings our companies may attain over the full life of their technologies. The potential savings, which we plan to report in the future, are projected to reach into the level of gigatons for the total technology lifetimes.

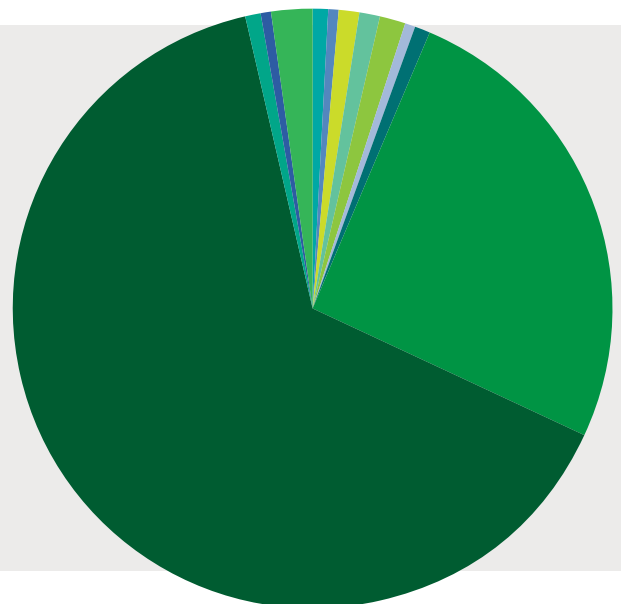
Estimates of Portfolio Lifetime CO₂e Savings (metric tons)

estimates have increased as the portfolio has grown



Lifetime CO₂e Savings by Company (metric tons)

Ecobee · 24,370,000	Cimcon · 280,000
Mosaic · 9,600,000	Volta · 280,000
Arcadia · 870,000	Derive · 250,000
SmartRent · 536,000	ViriCiti · 167,000
Urbint · 450,000	Sense · 122,000
Sparkfund · 440,000	Opus One · 16,000
Palmetto · 380,000	Enchanted Rock · 0





Case Study

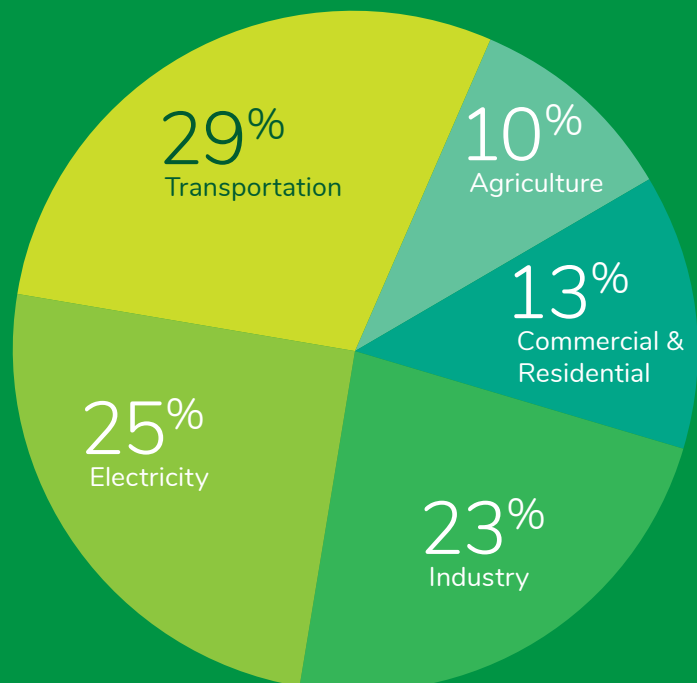
Volta: Accelerating Electric Transport Through Innovative Charger Business Models

The single largest source of carbon emissions in the United States is light-duty internal-combustion vehicles.

In the U.S. transportation is responsible for 1,875 MMT of CO₂ equivalent, over 29% of total U.S. emissions in 2019.

U.S. Greenhouse Gas Emission Sources 2019

Source: EPA US Greenhouse Gas Inventory 2021



As electric vehicle (EV) batteries continue to improve and the number of EV options explodes, the availability of charging infrastructure is increasingly seen as one of the most difficult barriers to decarbonizing transportation. The National Renewable Energy Network estimates that about 600,000 U.S. chargepoints will be needed within only the next nine years, roughly a 600% increase over current installations.

Rapid creation of a widespread, fully accessible charging network is a difficult challenge from several standpoints. Siting, permitting, and supply engineering can each represent a substantial barrier, especially to rapid network scaling. More importantly, low charger utilization rates in almost all locations yield insufficient revenues to offset high upfront capital costs.

Positive Impact on EV Use and Purchase

10 hours per day use
(7x California Average)

75% increase in EV adoption likelihood

168% increase in EV awareness

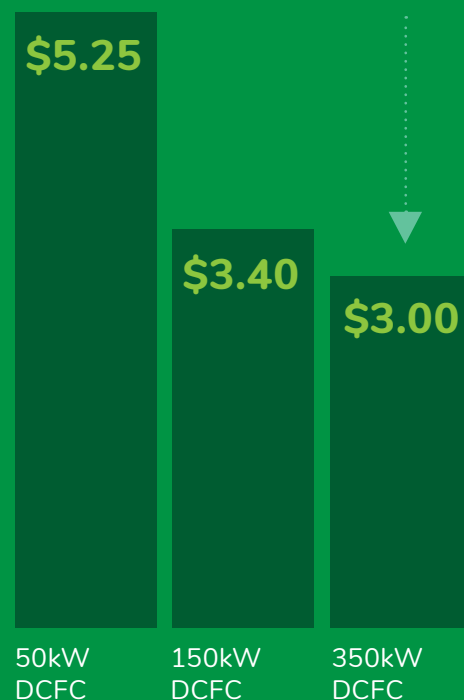
EIP portfolio company Volta is pioneering a highly innovative approach to leapfrogging these challenges. Volta installs unique Level 2 chargers with built-in advertising screens at retail and office locations in existing high-traffic parking areas. Working in partnership with the site owner, Volta efficiently manages the installation of the charger at no cost to the owner, instead earning revenues from the advertising on its charger kiosks. Free EV charging is then offered as an amenity to drivers visiting the nearby stores or offices.

Volta's approach has proven to be extremely impactful. Volta's chargers are in use an average of ten hours per day, 7 times the average California EV charger. EV drivers drove over 86 million miles on the charges received from Volta during 2020, saving almost 24,900 tons of CO₂e. Retail customers stay longer at locations where Volta has installations and are more engaged, particularly when nearby retailers leverage Volta's screens to drive marketing synergies. Market trials even find that car buyers are positively influenced towards new EV purchases by the availability of Volta chargers; one study by the company found a 75% increase in the likelihood of EV adoption by consumers who saw their kiosks.



Cost per charge, 50% utilization, 7-year simple payback

With sufficient demand, cost-per-charge declines as charging use increases because more vehicles charge per day.



Foundational Company Impacts



The clean energy transition requires a monumental shift of supply, delivery, operations, maintenance, management, and customer experience across the entire energy value chain. To better enable the full transition, EIP's impact thesis targets changes to all parts of the system. Within this space, our portfolio companies perform many functions that cannot properly be measured in tons of carbon emissions saved or any other traditional energy and environmental metric. These functions range from safeguarding the electricity network so it can safely double in size, to introducing new processes for improving engagement between utilities and their customers. These foundational companies include:

Cybersecurity companies that play specific roles safeguarding the entire power system

Companies that improve utilities' **operating efficiency**, lowering the cost of electricity service and thus facilitating the shift of current fossil-fueled end uses to clean electricity

Customer engagement companies that improve utilities' communication and interaction with customers, also facilitating greater clean electrification of the economy

Grid integration firms, which assist with integrating and managing distributed energy resources, and the creation of a digital, multidirectional, fully intelligent grid.

EIP's 2020 Foundational Companies

Cybersecurity

Critical to the reliability and safety of electric power systems



Efficient Operations

Help utilities operate more efficiently to lower costs



Customer Engagement

Help energy providers better engage with their customers



Grid Integration

Integrate clean energy into the grid & transportation networks





Case Study:

Dragos and Neighborhood Keeper

In our heavily electrified future, maintaining a secure and reliable grid will be an essential prerequisite to continued decarbonization and digitization.

Founded in 2015, Dragos is a cybersecurity company with a particular focus on safeguarding industrial control systems (ICS) and operating technologies (OT) against cyberthreats. The founders of the firm, which is headquartered near Washington, D.C., are famous for having diagnosed Russia's two hacks of the Ukraine's power system in 2015. EIP funded Dragos in 2017, when it had only six customers but was well-positioned to help utilities in the U.S. and Europe fend off the growing number of threats.

At that point, EIP and its coalition of investment partners immediately began exploring ways to make the power system more secure. In 2018, Dragos and three EIP partner utilities — Southern Company, Ameren, and FirstEnergy — went to the U.S. Department of Energy (DOE) with a proposal to create an industry-wide platform that could protect utilities by sharing threat intelligence without transferring proprietary data. DOE responded by awarding a grant to Dragos to develop the platform now called Neighborhood Keeper (NK).

By October 2020, 20 utilities were participating in NK, and in January 2021, the Idaho National Laboratory gave NK a highly positive technical review. In June 2021, NK was adopted by the Electricity Information Sharing and Analysis Center (E-ISAC), the official U.S. group in charge of utility industry grid monitoring. The NK platform was then available to all E-ISAC analysts, who together

communicate with over 1,200 electric utilities across the country. In addition, 84 utilities are in the process of opting in for higher levels of protection using NK. In August 2021, NK was also adopted by the Downstream Natural Gas Information Sharing and Analysis Center (DNG-ISAC), the official information sharing and analysis center for all U.S. gas distribution utilities.

The story of Dragos and NK is emblematic of EIP's foundational impacts. In less than five years, EIP and its partner coalition were able to take an industry-leading solution to a fundamental system-enabling need for safe, reliable grids and scale it from our own partner coalition to multiple industry-wide platforms.

How Neighborhood Keeper Works

- 1.** Dragos Platform customers deploy passive sensor in ICS/OT environment, and opt-in to Neighborhood Keeper. When detections occur in the environment, all data stays on premises with the customer and only anonymized metadata is shared.
- 2.** Neighborhood Keeper receives the anonymous alert and shares the detections and insights across the community to inform them of what's occurring elsewhere, the prevalence of certain adversary methods, vulnerabilities, and risks to amplify and inform their own security efforts.
- 3.** Participants may also anonymously make an encrypted request for assistance from other members. Members who respond can identify themselves temporarily to the requestor. The requestor can then identify themselves to the team of their choice to help them and coordinate response efforts.

Neighborhood Keeper's Scale-Up to Industry-wide Use



Foundational Impact KPIs

Our team’s experience in the energy sector leads us to believe firmly that our foundational or “system-enabling” technologies contribute to the utility industry’s full transition.

Nonetheless, we want to move beyond binary conviction to actual measurement of the impact of our foundational firms.

While we know they are each playing a role in facilitating the transition, we would like to know how much of a role they are playing in their respective markets and whether such impacts are increasing or declining.

While the full effects of our foundational companies on energy systems are complex and often impossible to quantify directly, a number of metrics are available that correlate with impact and can be measured over time to assess the direction and rate of progress. Of course, the financial performance of a firm with a transformational mission is one of the best correlates of success, and it is always our goal to strengthen our firms’ value and growth. However, financial metrics alone do not tell the whole impact story.

To complete the picture, we have collected data on several key metrics that correlate with impact success across various parts of our portfolio:

Customer Expansion Within Our Coalition of Strategic Investors. This metric fits with our role as an active coalition of investors interested in advancing the transition by sharing market intelligence and innovation experience, thereby de-risking new technologies and other innovations.

Customer Expansion Within the Energy Industry. Our mission is to introduce innovations that can scale rapidly throughout the energy industry, accelerating the pace of positive change. The penetration of our foundational technologies across energy industry customers is one way to measure our industry-wide impacts.

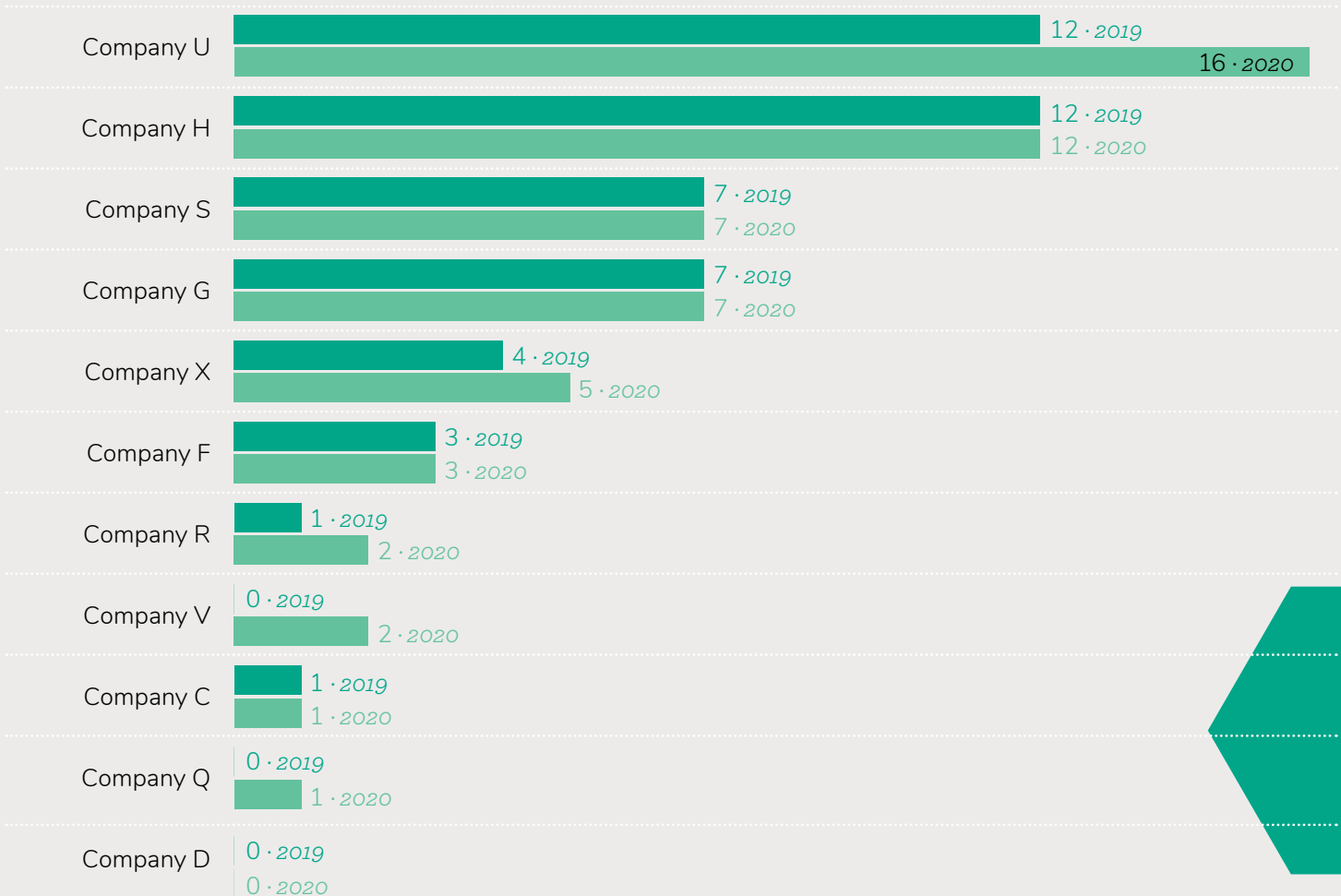
Total Customer Expansion. Some of our companies sell directly to retail customers. For these firms, total customer growth is also a measure of their foundational impacts.

These metrics, called our *common KPIs*, are useful because they are available for all our companies and can be benchmarked against each firm’s own past trajectory, as well as against other firms inside and outside our portfolio. In addition, we believe that foundational firms also have more specific, differentiated KPIs; we plan to expand to include them in future impact reports.



Utility uptake from a sample of portfolio companies that sell directly to utilities.

The figures in this section display data on the common KPIs from a sample of portfolio companies that sell directly to utilities. Tracking customer expansion within the EIP coalition, the figure below shows that all companies but one in our sample are selling successfully into our coalition, with a high of 16 coalition partners for Company U. While we are pleased with this level of penetration, the number of new coalition partners added in 2020 was modest, reflecting the difficulties of expanding operations during the pandemic. We expect the pace of coalition additions to increase in 2021.

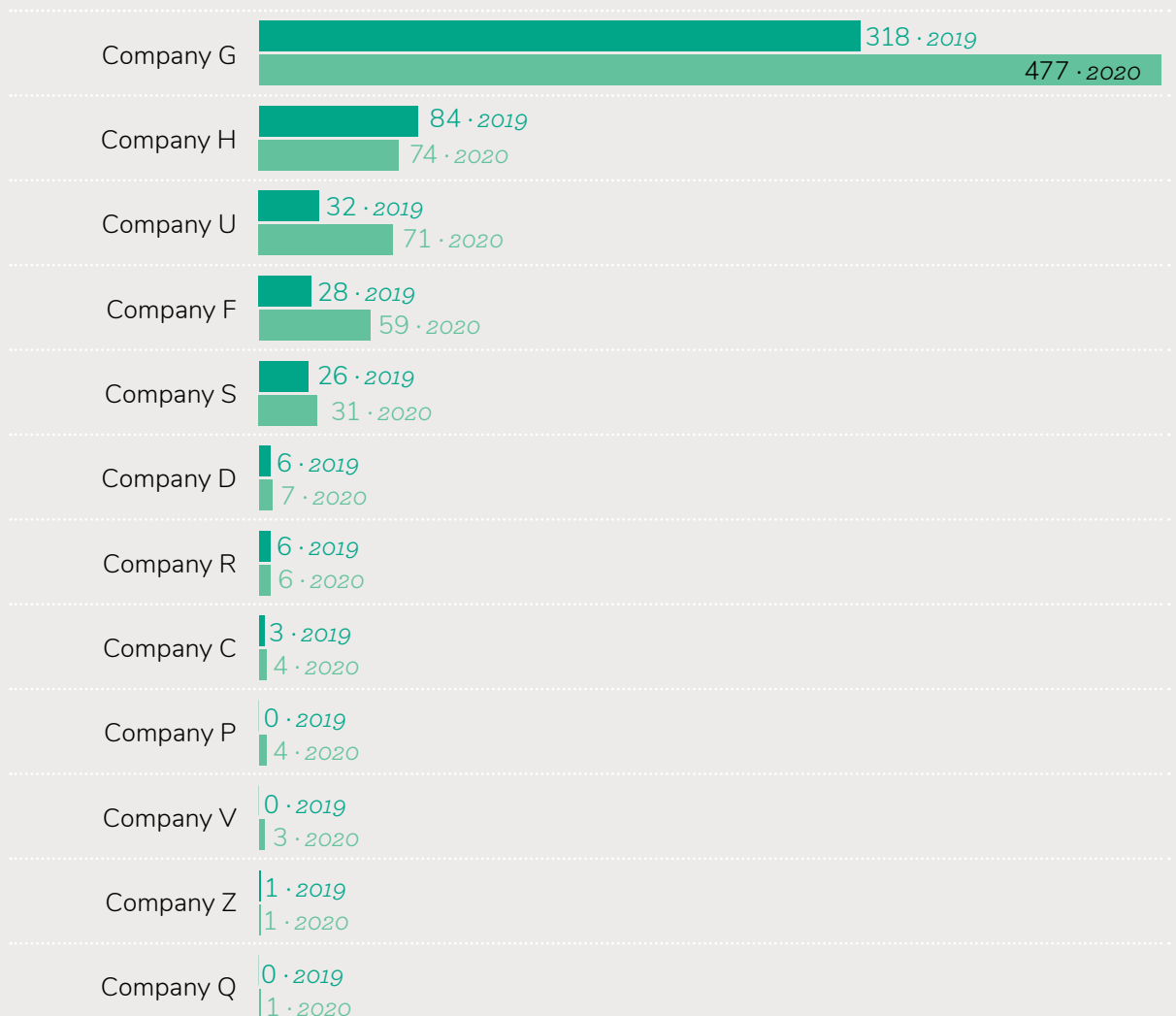


Customer Expansion Within Energy Industry

Increased use of our technologies by energy industry customers outside our investor coalition is another important indicator of impact. Most of the companies in our portfolio are business-to-business (B2B) enterprises, and although customers within our coalition are key partners in market acceptance, the ultimate markets for many of our companies include a variety of customers beyond

utilities. The figure below shows that, with two exceptions, customer growth across the energy industry has been consistent within our reporting sample. Companies G, U, and F showed especially large growth, while the two companies without energy industry customer growth have special circumstances. Company H, which sells large capital goods, is already a market leader in its niche

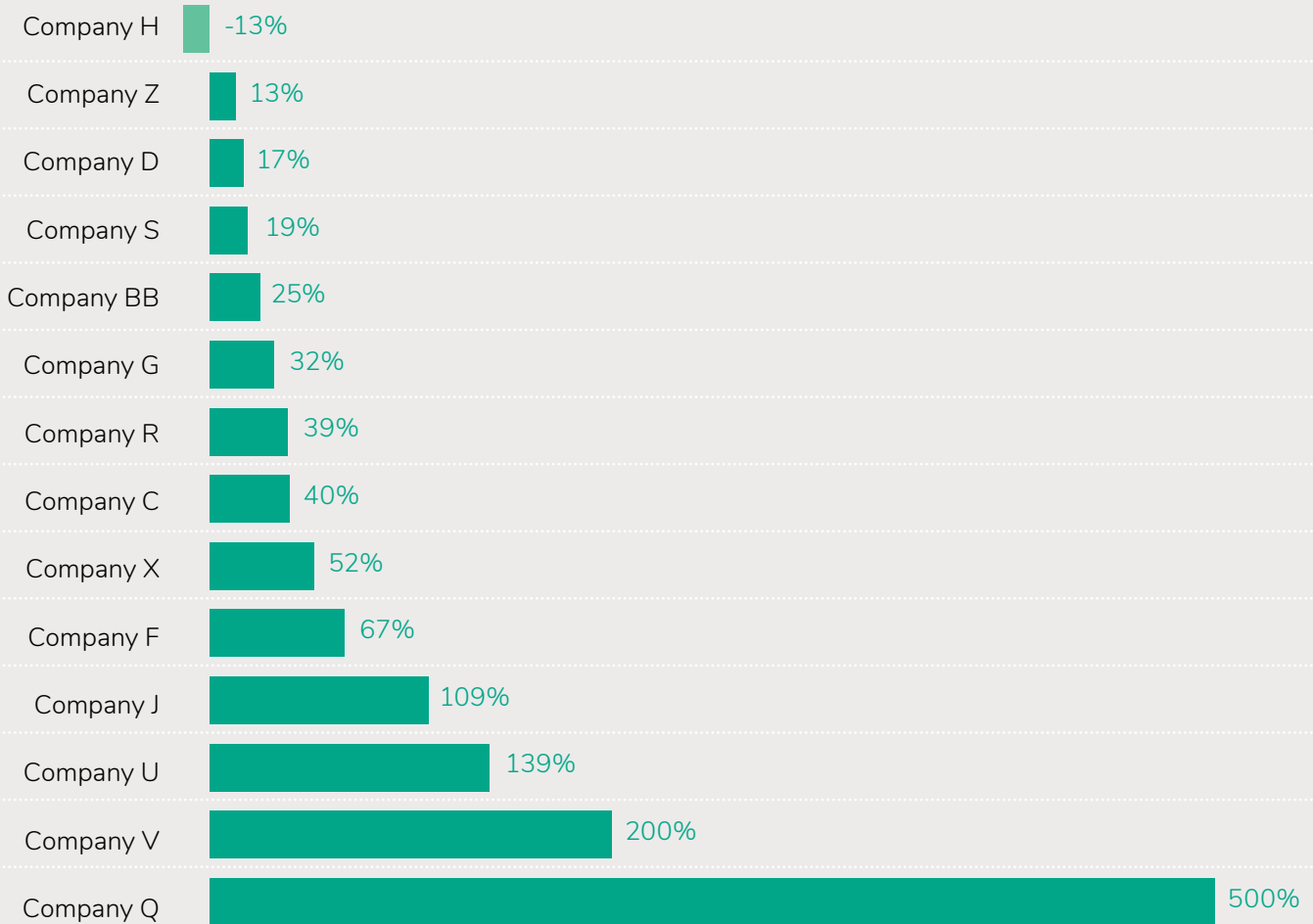
and lost ground simply due to its utility customers' inability to focus on capital purchases during the emergency conditions created by the pandemic. Recognizing the constrained utility sales climate, Company R focused its 2020 efforts outside the energy sector, which proved to be a winning strategy.



Total Customer Growth

The final foundational KPI collected samples the total number of customers of all types, retail and wholesale combined. Due to the wide range of customer counts among our companies, we express this metric in annual percentage growth from year-end 2019 to year-end 2020. As shown in the figure below, relative customer

growth follows a strongly positive pattern, interrupted only by Company H discussed previously, Company Q led the field with its 6x increase in customers. The remaining companies had annual customer growth rates of 13 to 200%.





Helping Our Partners Succeed

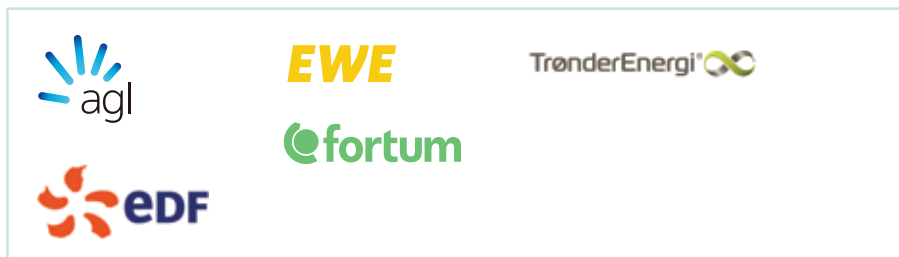
EIP's third pathway for impacting the clean energy transition is rooted in our work with our strategic utility and industrial partners. As network owners and operators, utilities hold long-established relationships with nearly every household in their service territories and possess a thorough understanding of the regulatory system. These advantages can help these companies identify and create successful investment opportunities in EIP's target sectors. We believe EIP's coalition of utility and industrial partners is one of the largest and most successful in the world for advancing innovation and investment.

Together, our strategic partners represent a market capitalization of nearly \$450 billion, serve more than 55 million customers, and collectively spend more than \$65 billion in CapEx annually. Our partners assist EIP by jointly defining attractive investment segments, leveraging proprietary deal flows, conducting rigorous due diligence grounded in the reality of their industries, and creating commercial opportunities for our portfolio companies.

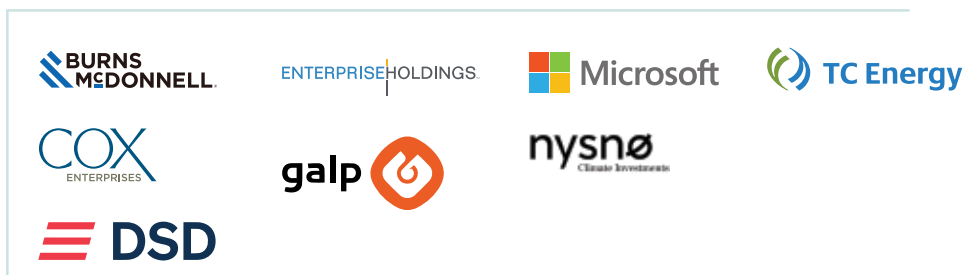
North America Utility Partners



Europe Utility Partners



Industrial Partners

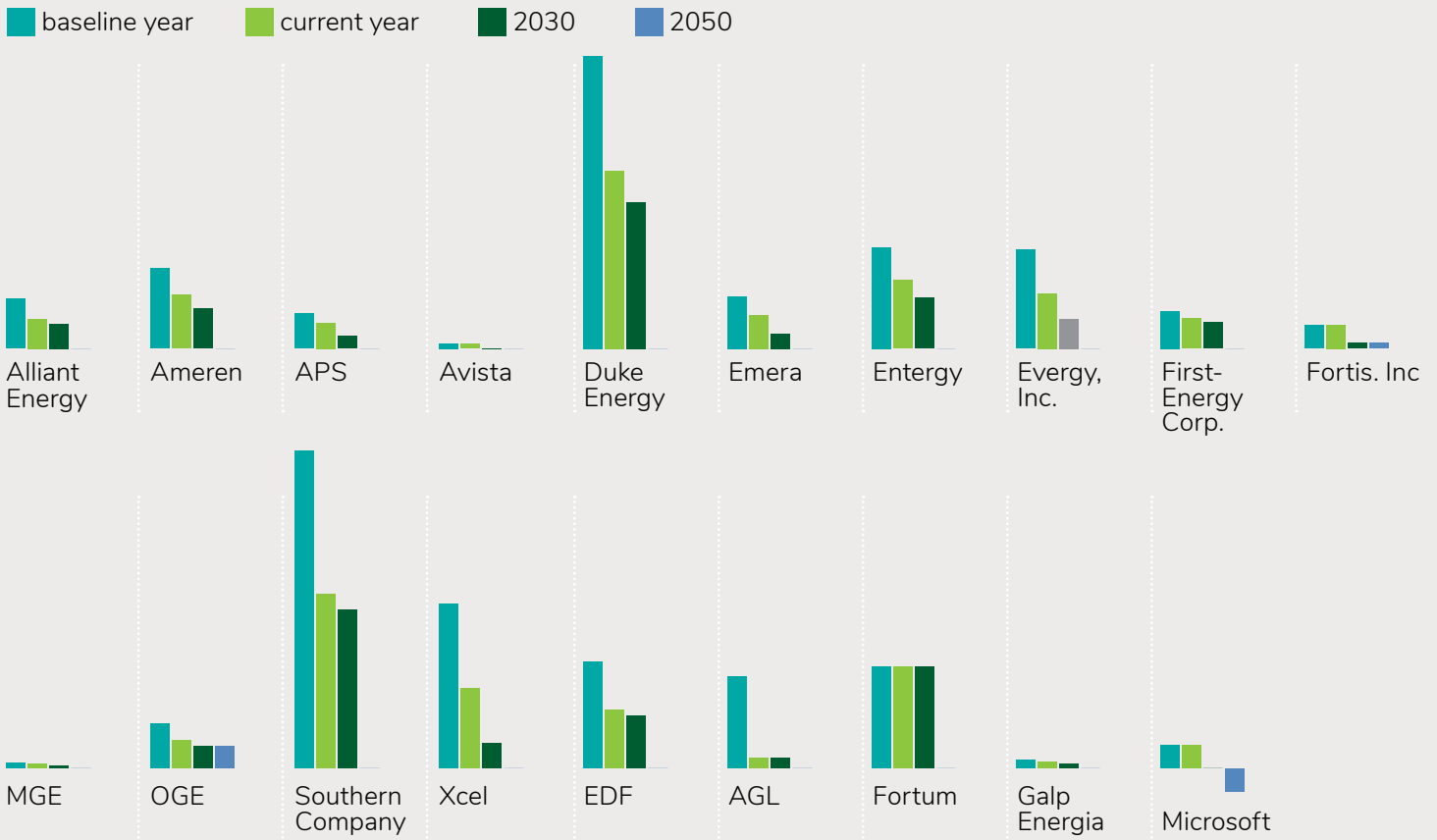


Our Partners' Carbon Commitments

Our investment partners have made ambitious climate commitments; nearly all have set targets of net-zero carbon by 2050 – in some cases, much earlier. As shown in the figure below, 17 of our partners have adopted 2030 goals, and 7 more have committed to 75% or greater reductions prior to 2050. We support and encourage our partners' commitments to reduce their environmental footprints.

While these commitments cannot be guaranteed in advance, our partners have established planning and reporting processes that document their progress. Our coalition has already reduced its actual, measured carbon emissions by 40% from each utility's base year.⁶ This substantially exceeds the 33.1% decline in the total electricity industry's GHG emissions from the peak year of 2007 through 2019, which is itself the largest decline in any major emitting sector's emissions in the United States to date.⁷

EIP Partner Coalition Greenhouse Gas Reduction Goals



⁶ See Appendix 2 for the full list of partner commitments.

⁷ <https://cfpub.epa.gov/ghgdata/inventoryexplorer/#electricitygeneration/entiresector/allgas/category/all>



Ambassadors from each of our partners meet together with EIP on one of our frequent Council Days.

Helping Our Partners Reach Their Goals

“As we continue to make progress on our goal to deliver 100% carbon-free electricity to customers by 2050, we need new dispatchable, carbon-free technologies to develop. Energy Impact Partners is doing the critical work of connecting private sector innovators with energy producers to bring those resources to the market as quickly as possible”

Ben Fowke, Chairman and former CEO of Xcel Energy

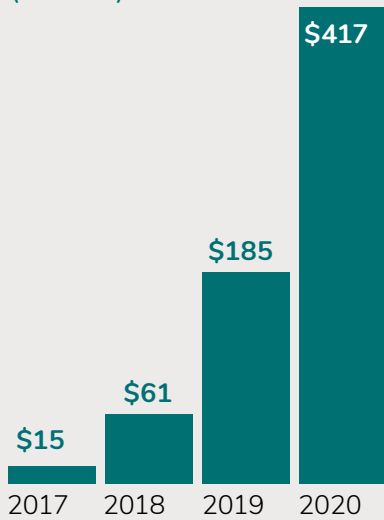
We aim to help our partners achieve strategic goals, including meeting their carbon reduction commitments, increasing workforce diversity, and encouraging and leveraging innovation efforts. We have long recognized the challenges of bringing innovators and utilities together and have worked to create a dedicated team of industry veterans, innovators, and business development resources designed to make finding the right connections easier for all parties. EIP provides hands-on commercialization support for our portfolio companies by driving collaboration with our utility and industrial partners, as well as with other customers across the energy ecosystem.

To foster collaboration and accelerate progress, EIP leads intensive, targeted working groups with its coalition members. In 2020, EIP hosted seven

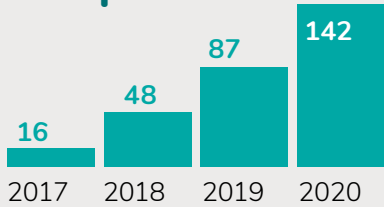
working groups with our partners and external participants around commercial and multifamily buildings, smart homes and distributed energy resources, T&D operations and maintenance, human resources technology, cybersecurity, digital infrastructure, and electric transport. Over 300 individuals participated in these working groups, and we expect to continue expanding our research coverage and strategic insights in 2021.

Since EIP's inception, we have supported over \$400 million in cumulative revenue from collaboration with our partners across our portfolio companies, with \$60 million in 2020 alone.

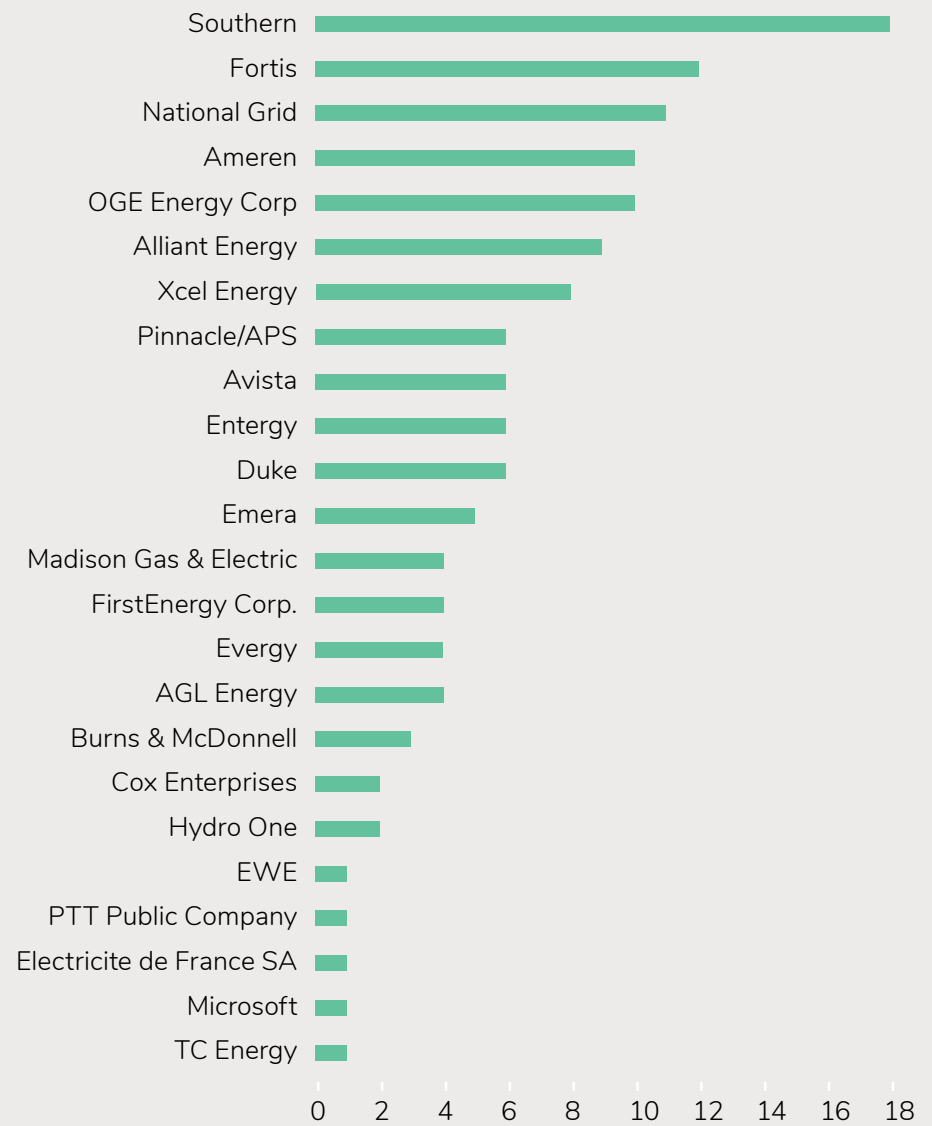
Cumulative Revenue Generated From Portfolio Collaborations (\$mm)



Cumulative Number Of Contracts Between Partners And Portfolio Companies



Cumulative Number Of Partner/Portfolio Contracts





Impacting Our Partners' Clean Energy Journeys—Three 2020 Examples

Since investing in Dragos in 2017, EIP has helped drive collaborations across our partners by making introductions to key cybersecurity leaders and supporting executive engagement. Early pilots helped Dragos refine their industrial controls systems security offerings, which are now the gold standard in the industry and have grown into several multimillion-dollar contracts.



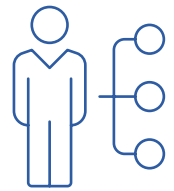
eSmart entered the North America market through an AI-enabled infrastructure defect detection pilot with EIP partner Xcel Energy. Xcel Energy is now scaling the solution across the vast majority of its transmission network, setting a new standard for the industry.



Volta has developed sophisticated internal tools to optimize EV charger siting and use in support of their core EV charger development business. Volta worked with EIP LP Southern Company to develop a utility-facing solution based on these tools, now being piloted in Alabama. EIP has helped Volta highlight this work to LPs and provided introductions to a breadth of leaders across the utilities ecosystem, helping drive demand across the globe.



Thought Leadership



EIP's fourth impact pathway is thought leadership – our public-facing contributions to conversations around the energy transition that continue to accelerate industry trends and push the sector forward. Many EIP employees author articles or books, or participate in podcasts, conferences, and panels to explain and promote our work on the energy transition. Some highlights of our 2020 thought leadership efforts are:

Chief Strategy and Impact Officer **Peter Fox-Penner** discussed power decarbonization and his book **Power After Carbon** in over 20 formal presentations, reaching a total audience of over 1,500 participants,

including the National Association of Utility Regulatory Commissioners, the Edison Electric Institute, the Gridwise Policy Council, and the Clean Energy States Alliance.

Partner **Shayle Kann** continued to lead **The Interchange**, a top-tier clean energy podcast that has been downloaded more than one million times.

Senior Vice President **Andy Lubershane's** five-part series of articles on medium.com, **Our Decarbonized and Electrified Future**, was downloaded more than 7,000 times.



EIP is also part of several organizations where we work with our peers and industry coalitions to advance some of our impact and ESG measurement principles. We are a charter member of the **Project FRAME** impact peer group, which seeks to build shared guidelines and tools for investors to better assess the GHG reduction potential of their portfolio companies. We are also members of Invest Europe's Sustainable Investment Roundtable, a subgroup dedicated to working on sustainable finance topics.

EIP's team is also frequently covered and quoted in press articles about clean energy, sustainable investing, and ESG. For a full account of EIP news coverage and articles, please visit EIP's [LinkedIn](#) page or our company [website](#).

PROJECT
FRAME

EIP 2020 Press Coverage

Bloomberg
TELEVISION

The Washington Post

The Atlantic

 MARKETPLACE®

Vox

FT FINANCIAL
TIMES

IMPACT  ALPHA

 HARVARD
Kennedy School


NBC

Our Carbon Footprint

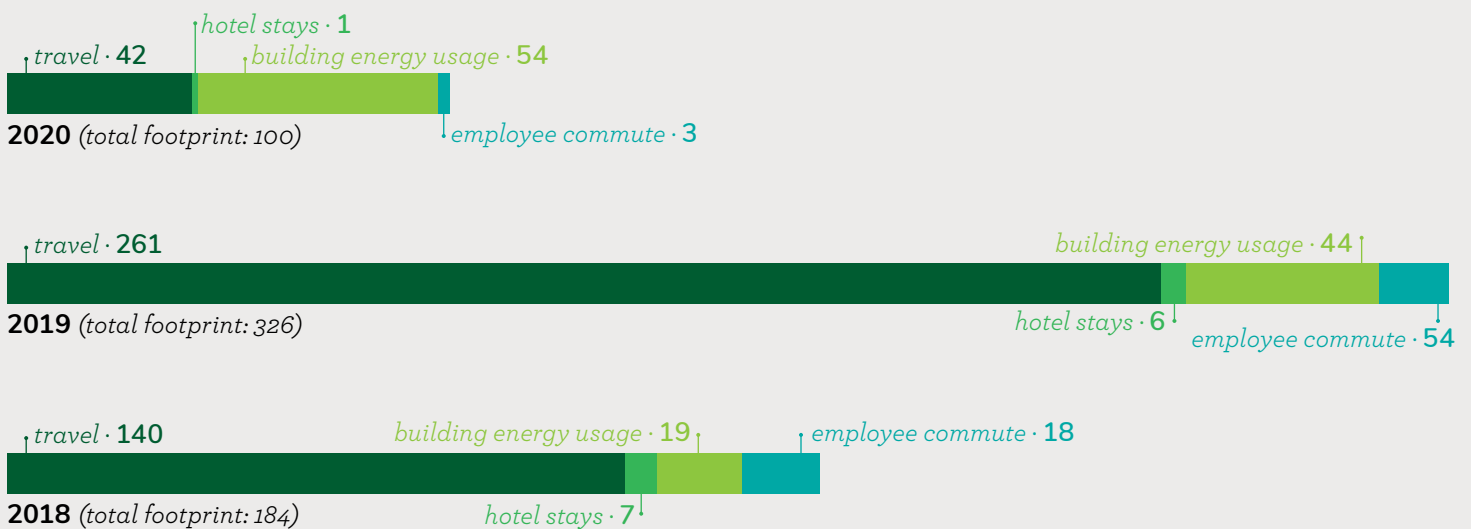
EIP has continued its commitment to evaluate our own environmental footprint, and measure and then offset GHG emissions generated from our internal operations and employee travel. In 2020, the pandemic forced us to reduce our operational footprint dramatically as shown in the chart below.

EIP closed all of our offices beginning in March 2020 due to the global pandemic and switched to 100% remote operations. As a result of the closure, as well as near-total travel restrictions, we decreased our Scope 1, 2, and 3 (business travel) emissions from 326 metric tons of CO₂e in 2019 to 100 metric tons in 2020. As noted earlier, this is 28,000 times smaller than our annual enabled carbon savings, though we share these savings with our value chain co-actors. Our per-employee footprint also decreased from 7.7 metric tons of CO₂e in 2019 to 2.6 metric tons in 2020. Business travel accounted for approximately 42% of the total reported emissions, about half of last year's level of 80%. Due to employees working from home, energy consumption grew to be 54%

of total emissions in 2020, while employee commuting and lodging both decreased.

EIP has offset its total 2020 measured emissions through carbon offsets purchased from Clear. Clear is a UK-based organization founded in 2005 that finances certified projects to reduce GHG emissions using high standards for permanence, additionality, leakage and carbon accounting - such as Certified Emissions Reduction (CER) and Gold Standard VERs. All of Clear's profits are retained in the company whose sole purpose is to fight climate change. Projects supported include biomass projects in Thailand, Ecuador, and India, as well as projects that prevent further deforestation in Zambia and the Amazon.

EIP Carbon Footprint Scope 1/2/3 travel (CO₂e Metric Tons)





Social Impact:
Our commitment
to Diversity, Equity
& Inclusion (DE&I)

e

Greater Diversity Yields Greater Benefits

Across nearly all sectors and geographies, businesses and investors are examining internal diversity and racial equity strategies and placing a new priority on action.⁸ In the energy sector, the epochal shift to a cleaner, more resilient energy future will require massive investment in workforce development, grid modernization, and other emerging technology innovations.⁹ Furthermore, the environmental costs of energy production and use

have disproportionately fallen on communities of color. However, recent evidence suggests that by reducing the environmental costs associated with these activities, electrification with clean energy dramatically reduces these exposure disparities (see below). Our industry is thus particularly well-positioned to tackle DE&I issues and drive progress by opening up access to capital for those innovators typically underserved by the venture community.

⁸ Harvard Business Review: Moving Beyond Diversity Toward Racial Equity.

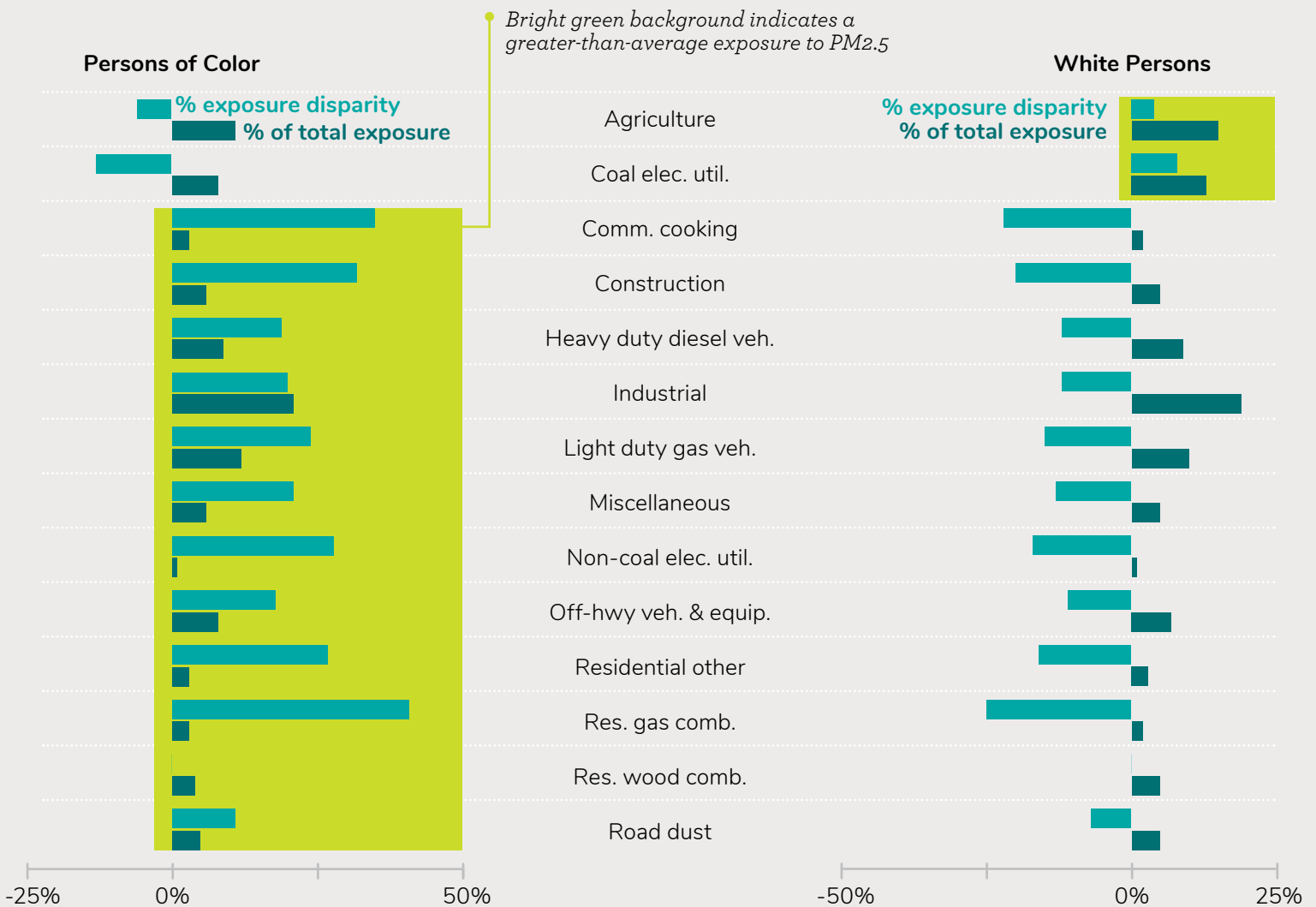
⁹ McKinsey



Persons of color have between 15% to 50% greater exposure to PM2.5 from every source except agriculture and coal-fired power plants. The sources providing the greatest exposure—especially industry, vehicles, and

construction—are the uses that could reduce PM2.5 emissions to zero with widespread electrification. **Clean electrification could eliminate the exposure disparities from almost all sources.**

Differences in Exposure to PM2.5 Pollution from all Sources by Population Groups



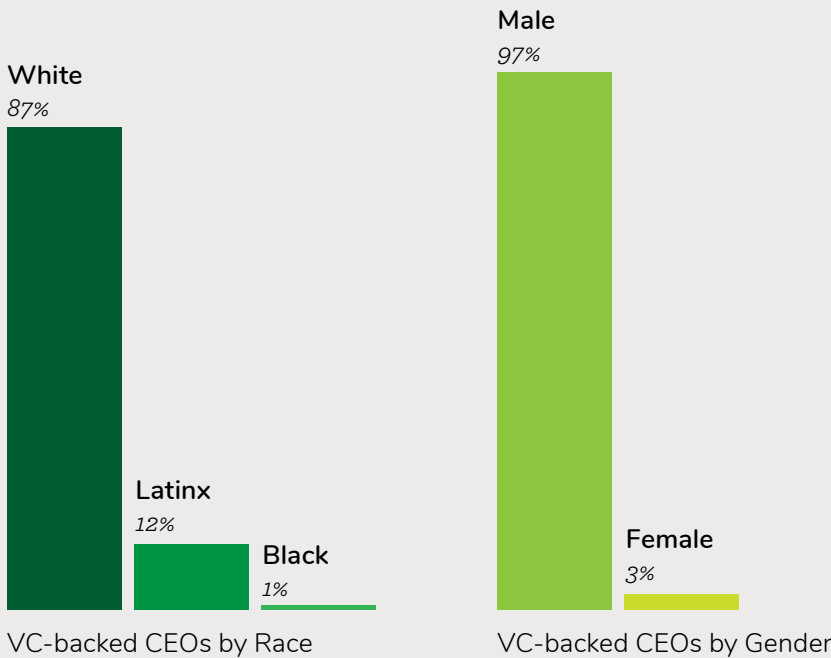
Source: Tessum et al., Sci. Adv. 2021; 7 : eabf4491 28 April 2021

Research has also shown that diversity drives innovation.¹⁰ Startups and investing teams that are racially and gender-diverse have proven to be more innovative and often more financially successful than homogenous teams.¹¹ Despite women-founded startups receiving on average less than half the investment capital of men-led startups, they generate twice as much revenue per dollar of

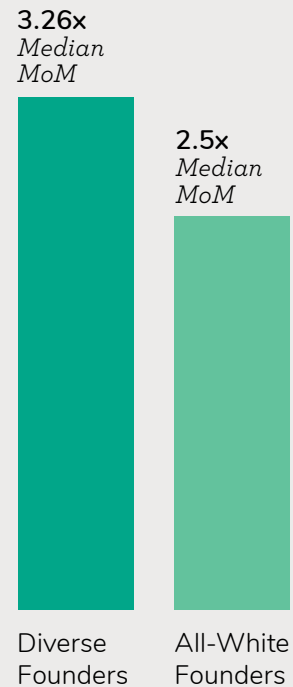
funding.¹² Racial diversity in senior management teams is also correlated with higher returns and a faster pace of innovation than nonracially diverse teams.¹³ Homogenous teams, by contrast, return smaller profits. By elevating and fostering diversity in our industry, we aim to amplify innovation and maximize the profitability of our investments.

Yet significant institutional barriers have historically limited the participation of diverse talent in our industry and in venture-funded businesses. For example, in 2019, just 3% of overall venture-backed financing went to women founders, only 1% to Black founders, and 12% to Latinx founders (see below).¹⁴

Nonwhite And Female Founders Have Less Access To Capital¹⁶



Racially Diverse Teams Outperform¹⁵



¹⁰ Harvard Business Review

¹¹ Forbes

¹² McKinsey

¹³ Kauffman Fellows- Deconstructing the Pipeline Myth and the Case for More Diverse Fund Managers.

¹⁴ Diversity VC & Crunchbase - Diversity in U.S. Startups.

¹⁵ See footnote 12

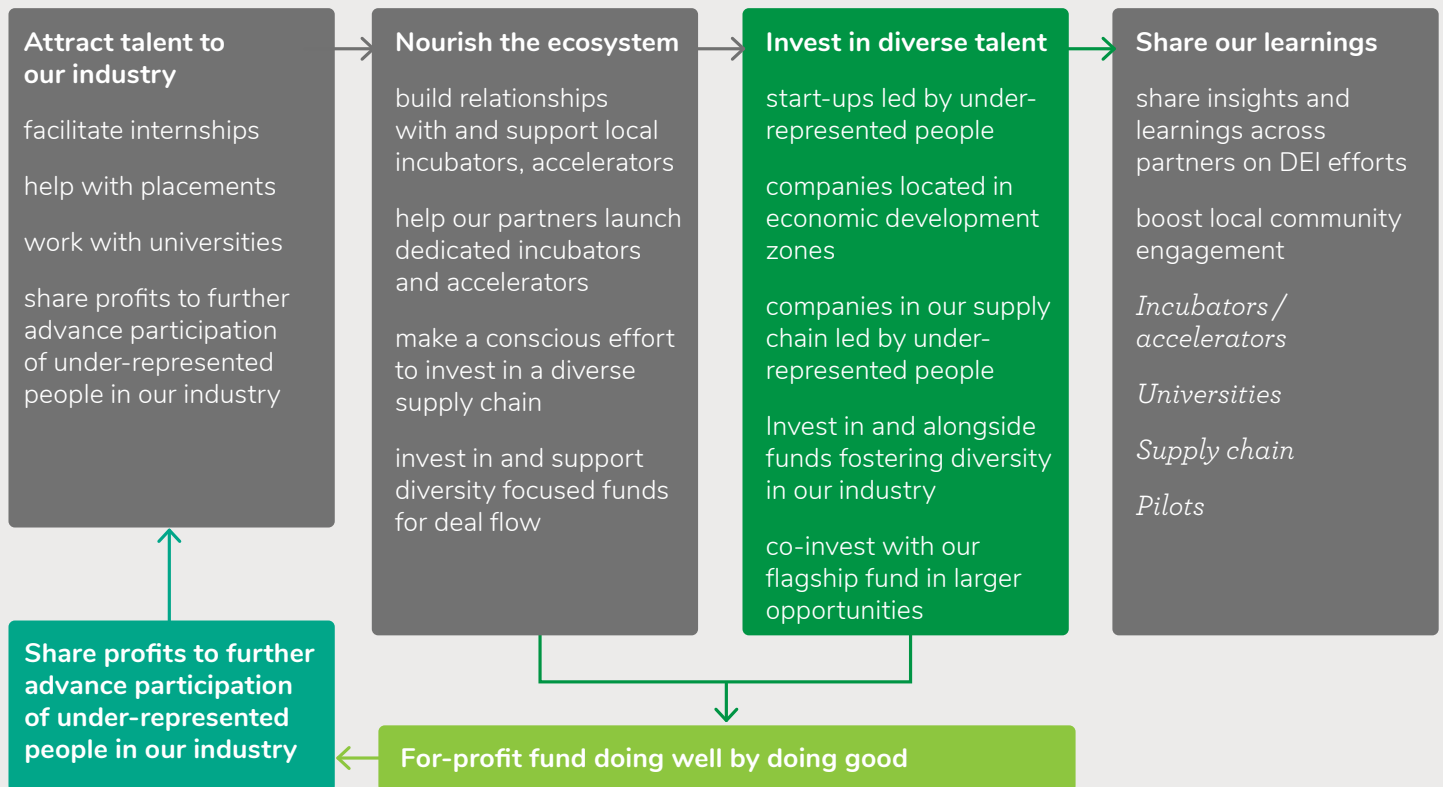
¹⁶ See footnote 13

Speaking Out— and Taking Action

EIP is committed to the fight against racism and discrimination in all its forms and is determined to be part of the solution through our actions as well as our words. The connective and transformative nature of our platform is one of our strongest attributes. We are striving to leverage our resources for a more equitable and just world through several efforts. Our ambitious

vision to expand DE&I in the startup financing segment of the clean energy sector is summarized in the figure below. We see our role as helping to attract new talent to the industry, nourish the ecosystem that increases DE&I, invest in the talent we have attracted and share our experience with a diverse set of partners.

Our Approach to Advancing DE&I in the Clean Energy Industry



The increased focus on issues of race and racial inequality in 2020 were sparked by high-profile incidents of police brutality and racially motivated violence, as well as the ongoing public-health and economic crises that disproportionately impacted Black Americans and other POC. These events prompted us to increase our engagement on the issues of combatting racism and actively promoting diversity, equity, and inclusion. EIP is committed to providing a work environment in which all individuals are treated with respect and dignity. EIP defines DE&I as a continued effort to reduce inequity gaps in venture capital by creating a meaningful experience for all professionals that interface with EIP.

By striving to create a representative workforce and promoting transparency, collaboration, and inclusivity, we can be more innovative and engage different perspectives in our organization. We provide equal opportunities for all employees and partners of EIP and encourage the development and acceptance of all individuals. In the chart below, EIP reports its own diversity and inclusion metrics for year-end 2020, recognizing the importance of transparency as we strive to improve these results each year.

During 2020, EIP partnered with INROADS, Inc., an international nonprofit organization committed to building career pathways for Black and other underrepresented talent. EIP

seeks to bolster industry innovation by increasing summer internship opportunities for individuals from underrepresented backgrounds. In 2020, EIP hired seven interns through INROADS to work on our investment, research, finance, operations, and ESG teams and sponsored 15 additional INROADS interns working with our partners and portfolio companies.

This year EIP also conducted a charitable giving program to match over \$20,000 in donations to the Sentencing Project and the National Urban League. Additionally, EIP hosted a two-part Diversity and Inclusion training for all employees, which we expect to continue on an annual basis.

EIP Internal Diversity and Inclusion Metrics

Percentage of total employees who are female

37%

Percentage of management employees who are female

25%

Percentage of total employees who are minority

22%

Percentage of management employees who are minority

20%



The Elevate Future Fund

“As we reshape the low carbon economy of the future, it is important that this future is equitable, diverse and inclusive. We have a lot to improve upon and formed Elevate to help advance this important cause.”

Hans Kobler, Founder & Managing Partner

Most importantly, we were proud to have received approval during 2020 to launch the Elevate Future Fund, an investment vehicle dedicated exclusively to founders and entrepreneur leaders from underrepresented groups.

This new addition to EIP’s platform will invest in companies founded or run by leaders from traditionally underrepresented groups or companies that create economic opportunity for distressed or disadvantaged communities. As with all funds on our platform, the Elevate Future Fund’s investment focus is on technology segments that are well positioned to capitalize on the shift toward a digitized, decarbonized, and electrified energy future. The EIP team conducted extensive research and interviews with our partners, peer funds, and portfolio companies to develop the fund’s strategy.

In addition to its direct investments, the Elevate team will form partnerships with technology accelerators and universities, including historically Black colleges, to nurture talent and promote infrastructure and support systems to retain talent from underrepresented groups. The fund will work closely with its strategic corporate investors to leverage their considerable resources to jointly advance this important mission.



EIP Portfolio DE&I Reporting

For the first time in 2020, EIP collected metrics from portfolio companies across our platform on DE&I within their organizations. We collected these metrics to establish DE&I baselines for all reporting companies and to provide transparency into our portfolio. We aim to enhance our reporting in future years and provide support to portfolio companies that wish to engage further on best practices and improvements in DE&I.

In addition to the diversity data provided in the figures below, 83% of reporting companies stated that they

have policies that support DE&I or guarantee fair treatment of employees and protection from discrimination on the basis of race, gender, disability, or sexual orientation. Further, 41% of our reporting companies have adopted efforts or set goals to improve employee diversity, with another 18% indicating that they expect to adopt these practices in 2021. We encourage our portfolio companies, regardless of investment platform, to consider these important metrics and initiatives.

Major Gender and Racial Metrics EIP Reporting Portfolio

Women — All Employees

32%

Women — Management Employees

27%

Women — Board of Directors

7%

Minority — All Employees

32%

Minority — Management Employees

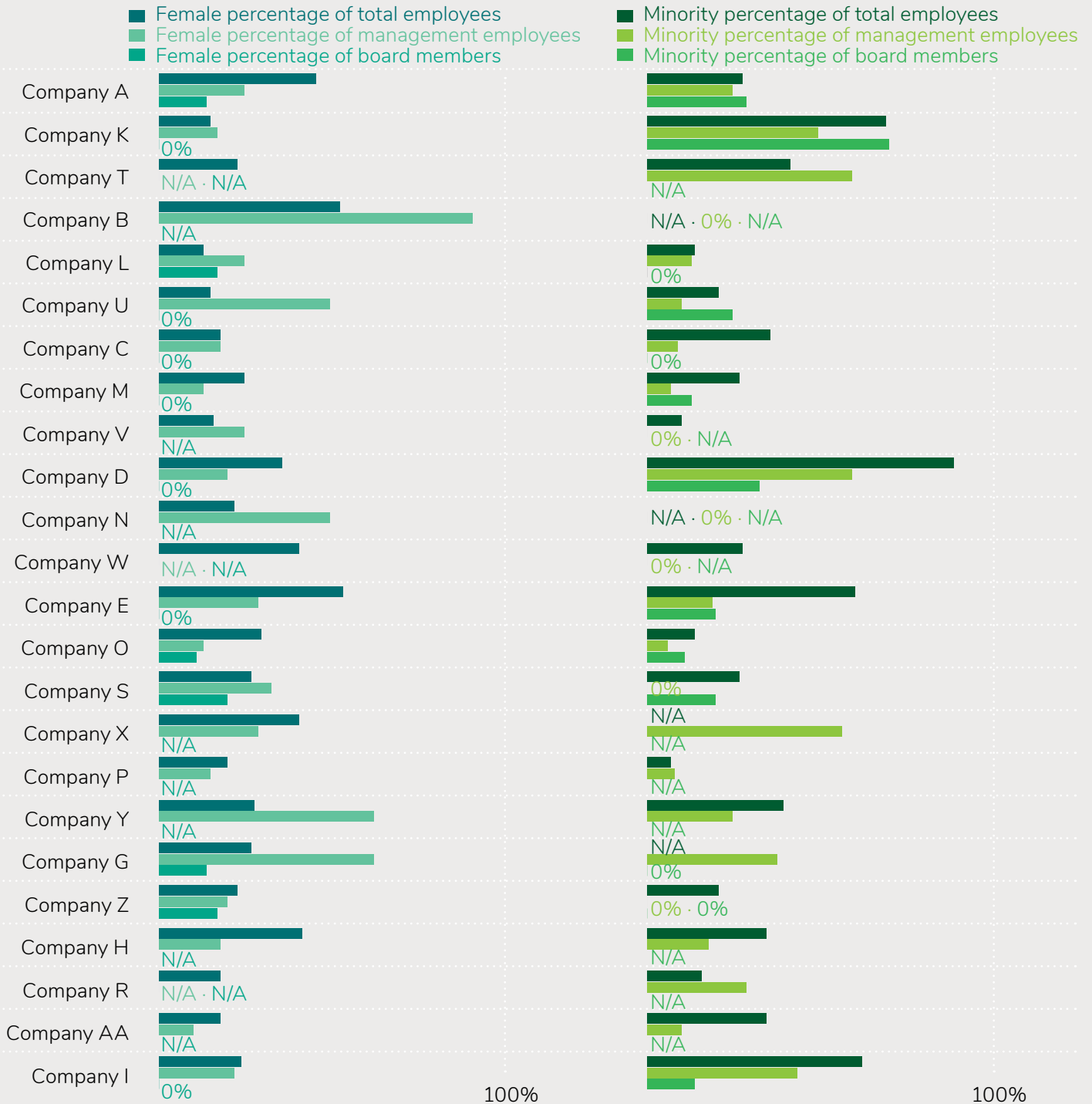
20%

Minority — Board of Directors

19%

Women & Minority Representation in Workforce, Management, Boards

EIP Reporting Portfolio



Social Impact

In addition to EIP portfolio companies' contributions to the energy transition and reduction of GHG emissions, many of our portfolio companies also provide positive social impact by working with public health and safety officials, healthcare professionals, nonprofits, research institutions, municipalities, and underserved communities. Here are a selection of 2020 examples.

Environmental Justice and Climate Equity

Several of EIP's portfolio companies expand energy and transportation access to underserved communities and individuals.

Arcadia

Arcadia offers customers solar power without requiring credit checks or setting specific income requirements, which traditionally prohibit low- to moderate- income households from being able to access renewable energy.

AutoGrid

In 2020, **AutoGrid** began a partnership with the National Rural Telecommunications Cooperative, an organization that represents more than 800 rural electric utilities in 28 states.

remix

Remix's solution provides city transportation and mobility planning and logistics software to municipalities, which helps to expand access for typically underserved localities to these services.

MOSAIC

Mosaic's solutions break down barriers preventing low- to moderate-income households from accessing clean energy by offering affordable financing for residential solar installation.

GridX

GridX's platform also enables lower-income participants traditionally excluded from clean energy and energy efficiency projects to access these programs through their utility.

Nonprofits and University Partnerships

Many of EIP's portfolio companies partner with nonprofit organizations and communities to drive impact.



Construction Resources has partnered with Sunshine on a Rainy Day (SOARD) for more than five years. SOARD is a nonprofit organization that coordinates home renovation projects for children with special needs and their families.



Spire Power Solutions is active in the communities they operate in, by participating in local philanthropic activity, hosting internship programs with local universities, and lending property to schools, police, and fire departments for training and other uses.



Palmetto partners with Solar Sisters, a venture run by women for women, to expand the delivery of clean energy to homes across Africa.



Rangeforce has partnered with BlackGirlsHack to provide training resources to Black girls and women and increase representation and diversity in the cybersecurity field. The company has also partnered with 7 Eagle Group to upskill veterans with cybersecurity training.

NS1.

NS1 hosts an internal culture club focused on community service and giving back to several partner organizations.



Trifacta allows over 100 universities around the world to offer students access to generally cost-prohibitive data-wrangling tools.

volta

Volta has partnered with nonprofits Surfrider and Save the Bay by promoting their social causes on Volta's charging stations at no cost.



Public Health and Safety

Some portfolio companies beneficially impact public health and safety, and many work with federal, state, and local governments.



Cimcon's solution is used by public safety officials for night-time lighting outside bars and restaurants, reducing the need for police presence at these locations.



Trifacta's data-wrangling software has been used by the CDC to trace and contain disease and viral outbreaks, as well as by medical systems and pharmaceutical companies to help reduce and mitigate delays in clinical trials.



In 2020, with California wildfires, a hurricane in Texas, and the ongoing COVID-19 pandemic, **Enchanted Rock's** microgrids proved to be a vital necessity for ensuring customers, hospitals, and other critical businesses have access to reliable, long-duration backup power.



SmartRent's solution includes providing smart locks and carbon monoxide detectors, helping people to secure their property and providing residents with these amenities, which they would not typically be able to access.



RapidSOS' software provides location and other critical data and information to help emergency responders; its technology has the potential to save over 10,000 lives annually.



ecobee repurposed its smart home technology during the pandemic by providing its cameras to hospitals to be placed in the rooms of patients with COVID-19, allowing doctors and nurses to remotely monitor symptoms and thus reducing unnecessary viral exposure.



Selected 2020 ESG Highlights From EIP's Partner Coalition

In addition to carbon reduction commitments, our partners engage in extensive ESG reporting and make many environmental and social contributions to their communities and beyond. This section highlights just a small portion of the 2020 ESG activities of our coalition members.



Alliant Energy commenced a new initiative committing to donate and help plant more than 1 million trees.



AmerenCares Creating Opportunities, Salvaging Treasures (COST) initiative was created in 2020 and has donated to 56 organizations during the COVID-19 pandemic.



APS committed over \$15 million in pandemic relief aid.



Avista has been named a top-rated "W" Company by 50/50 Women on Boards for achieving at least 20% women on its corporate board before 2020.



Burns & McDonnell Wildlife & Energy Interaction Symposium brings together clients and regulatory agents from the renewable and electric utility industries to engage on topics that include mitigation banks and habitat conservation plans.



Cox Enterprises has reached nearly \$1 billion in cleantech investments, with companies such as Rivian, BrightFarms, and Sierra Energy, which focus on addressing sustainability challenges through innovative business solutions.



Duke Energy Foundation committed more than \$2 million to social justice and racial equity organizations.



33% of **Emera's** Board of Directors are women (a 30% mandatory minimum was established in 2018) and was in Canada's Top 100 Employers (2020).



Entergy engages with historically Black colleges and universities and also works with diverse organizations to develop emerging skill needs.



Enterprise Holding Foundation pledged an additional \$65 million to Fill Your Tank, a 6-year program that has contributed more than \$50 million to address local food insecurity.



Energys has recruitment partnerships with organizations such as the Urban League, NAACP, Guadalupe Center, Full Employment Council, Women's Employment Network, and Troops to Energy to provide employment opportunities to urban youth, women and veterans.



To support their goals to increase diversity, **FirstEnergy** launched a network to build relationships with colleges & universities.



Fortis and its utilities continue to make meaningful inclusion and diversity progress. During 2020, Fortis established a company-wide council to guide its inclusion and diversity strategy implementation, signed the BlackNorth Initiative focused on ending anti-black systemic racism and at its 2021 AGM, achieved gender parity on its Board of Directors.



Galp is the only company in Portugal and in the oil and gas sector worldwide selected for the Bloomberg Gender Equality Index.



Hydro One achieved a gender-balanced board and announced indigenous and other diversity procurement goals.



Last year, **MGE** received over \$100,000 in donations to its Energy Fund, created in 1995 to help ensure needy area families and individuals have money to pay for their heat.



OGE was named a top-rated “W” Company by 50/50 Women on Boards for achieving and maintaining 20% women on Board of Directors.



Southern Company Southern Company committed \$200 million over five years to advance racial equity and social justice in its communities with a focus on criminal justice reform, economic empowerment and the advancement of educational equality.



TC Energy spent over \$680 million with indigenous and Native American businesses in 2020, donated over \$36.5 million to over 4,200 charitable organizations, and set diversity targets of 40% women and 17% minorities employed at its corporate offices by 2025.



To attract applicants for open positions, **Xcel Energy** works with diverse student groups, including the National Society of Black Engineers, Society of Women Engineers, Society of Hispanic Professional Engineers, and Society of Asian Scientists and Engineers.



Social Impact Spotlight: Arcadia's GOOD Energy Program

“We’re all in this together, and it will take all of us to rebuild in a way that’s more sustainable for us and for the planet. Until then, we could all use some good energy.”

Kiran Bhatraju, CEO and Founder of Arcadia

Arcadia connects customers with renewable energy sources. With Arcadia, customers can purchase renewables for 50-100% of their energy use and save approximately 20% on their utility bills. In 2020 alone, Arcadia customers purchased more than 386,000 MWh of clean energy attributes. Arcadia also supports low-FICO customers, who are traditionally unable to access community solar, significantly lowering barriers to renewable energy access and ensuring that more families can access the cost-saving benefits of community solar.

During the COVID-19 pandemic, Arcadia implemented the **GOOD Energy initiative**, which has allowed customers to donate directly to cover fellow members' electricity bills. Arcadia members were able to utilize the company's free platform to offer or request help in the form of contributions to the member's next power bill. Arcadia matched every contribution dollar for dollar and distributed the money as bill credits for members who needed help paying their utility bills.

An aerial photograph of a vast, snow-covered evergreen forest. The trees are densely packed and their branches are heavily laden with white snow. In the background, rolling hills and mountains are visible under a soft, hazy sky, suggesting a winter or early morning setting. The image is overlaid with several large, semi-transparent geometric shapes: a large blue hexagon on the left side, and several smaller triangles in shades of blue and green scattered across the top and bottom. The text 'Environmental, Social and Governance (ESG) at EIP' is positioned within the blue hexagon.

Environmental,
Social **and**
Governance
(ESG) **at EIP**

The logo for EIP, consisting of a stylized lowercase letter 'e' in white. The letter has a small, curved leaf-like shape extending from its top right, giving it a natural or environmental feel. It is set against a dark blue background.

e

Our ESG Process

In alignment with our commitment to UNPRI, EIP continues to implement and refine its ESG processes in pre- and post-investment decision making. We believe that integrating ESG into our investment process and reporting on a broad set of ESG indicators are key parts of our role as responsible investors and will ultimately lead to improvements in portfolio financial performance, as well as better social outcomes.

Pre-Investment Process

Focus on Analyzing ESG and Impact Risks and Opportunities

EIP's ESG and investment teams work together closely to determine the ESG and impact risks and opportunities of each investment made on EIP's platform. Prior to Preliminary Approval, the ESG team performs a qualitative screen to ensure the investment does not violate EIP's ESG policy. The preliminary screen also identifies unusual ESG elements that require specialized research. Then, prior to Final Approval, the ESG team performs a deeper analysis to

determine the ESG and impact risks and opportunities for each company, utilizing industry standard metrics including SASB and S&P. The ESG team's findings are shared with the appropriate Investment team (and the company, if necessary), and any additional data is obtained. The resulting ESG scores are presented to the Investment Committee and are reviewed and considered as part of the ultimate investment decision.

Post-Investment Process

Emphasize Collecting and Reporting Material Impact and ESG Data

Once EIP has made an investment in a portfolio company, the ESG team meets with the company leadership to understand the company's ESG and impact status and goals, and to introduce our process. We collect data annually from active portfolio companies, including ESG metrics, impact KPIs for foundational companies, and carbon-savings data for directly measurable companies. The results of this data collection inform our annual ESG and Impact

Performance Report and serve as a basis for discussions with our companies. Looking forward, we plan to increase these discussions as a part of our role as responsible investors. EIP also reports annually to UNPRI and consults quarterly with our ESG Advisory Board.



EIP's Award-Winning ESG Advisory Board

Consistent with our mission and culture of innovation, our ESG Advisory Board was recognized earlier this year by Private Equity International (PEI) as one of the “30 Big Ideas Shaping ESG.” EIP received its award in the governance category.

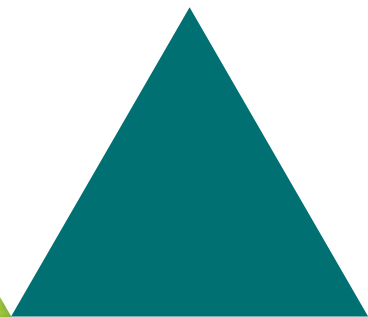
In 2020, EIP established a dedicated ESG Advisory Board to provide input and guidance on EIP's ESG activities and, as needed, inform our policy changes and procedural improvements. The board consists of EIP partners Nysno Climate Investments, the Norwegian Sovereign Wealth Fund's climate impact arm, as committee chair, and Microsoft's Climate Innovation Fund and Xcel Energy as members. Few if any similar funds have established external partner ESG advisory boards.



ESG Reporting

EIP is pleased to present our first annual ESG reporting results for the calendar year 2020. While our investment platform is primarily focused on positively impacting the clean energy transition, we also believe that following sound ESG practices leads to capturing greater opportunities and mitigating risks that together drive long-term value

in our portfolio. Twenty-four portfolio companies, representing 75% of our 2020 active companies, participated in our 2020 ESG data collection exercise, reporting on over 40 key metrics. The results, presented in this section, are anonymized by portfolio company and are reported as of year-end 2020.



Environmental Metrics

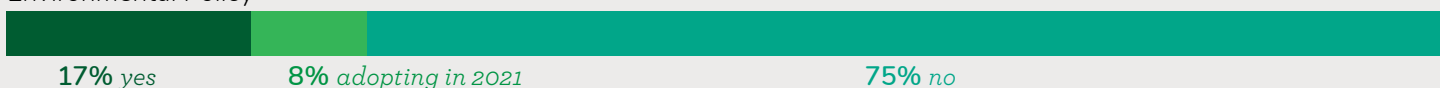
While our investment thesis is focused on expanding and increasing the impact of our portfolio companies across the clean energy transition, we also collected data on other environmental aspects of our portfolio companies.

Reported in the figure below, the results show that about half our portfolio companies have waste reduction initiatives, and almost one-third have in-house energy conservation programs. Although only 21% of the reporting companies

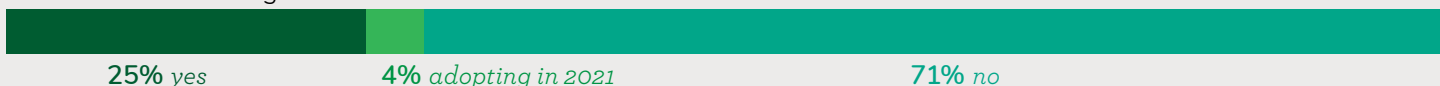
are, or expect to be, calculating their internal GHG emissions, we recognize that early-stage companies often face difficulties performing this calculation due to lack of available data and resources. While we expect that the carbon footprint of our portfolio companies is immaterial when compared with the portfolio's carbon savings (see [page 18](#)), we expect to work with our portfolio companies to determine their footprint in the next reporting cycle.

Portfolio Companies Adopting Environmental Measures in 2020

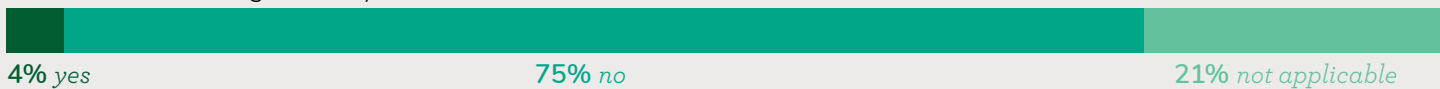
Environmental Policy



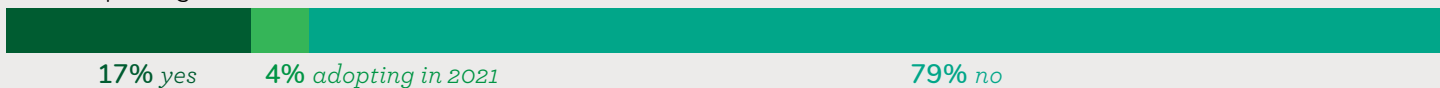
Environmental Training



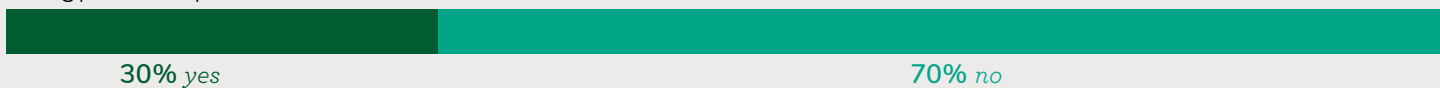
Environmental Management System



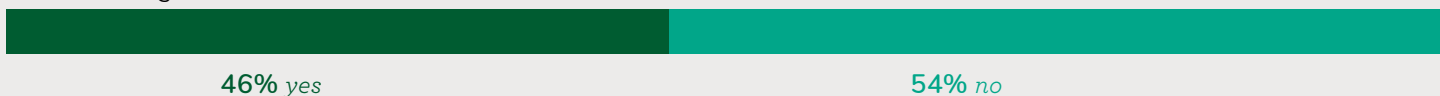
GHG Reporting



Energy Consumption Initiatives



Waste Management Initiatives



Social Metrics



We collected a wide range of ‘S’-related metrics for our portfolio companies in 2020, ranging from human resource data, including employment and turnover metrics, to socially relevant policies, including paid family leave and data security. As presented below, our reporting companies generally have adopted or are planning to adopt most socially

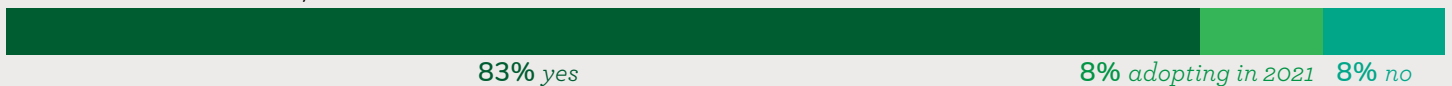
relevant policies and best practices – for example, 91% of reporting companies already have an anti-discrimination policy in place or will be adopting one by year’s end, and most reporting companies have or are planning to adopt a data security policy.

Portfolio Companies Adopting Social Measures in 2020

Health & Safety Policy



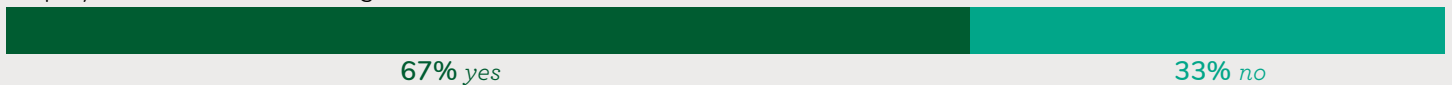
Anti-Discrimination Policy



Data Security Policy



Employee Satisfaction Tracking



Paid Family Leave Policy





Job Creation

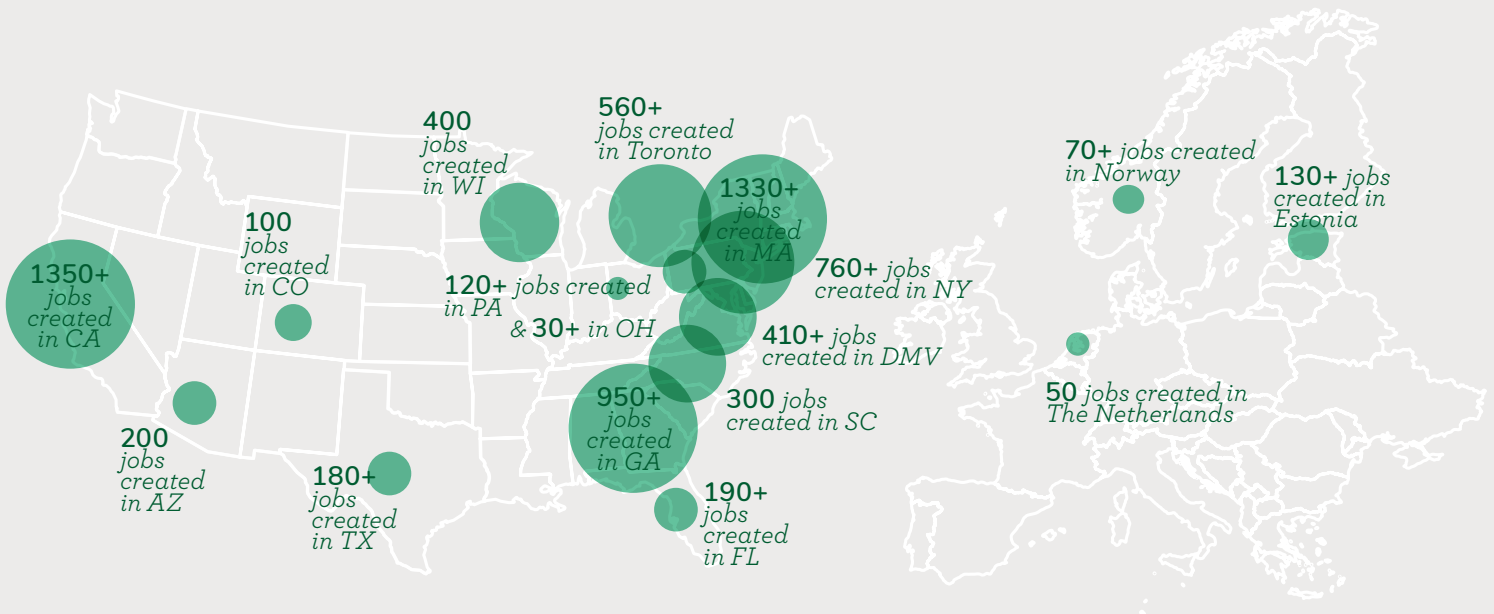
As of year-end 2020, our reporting portfolio companies employed over 3,500 full-time workers, with over 1,100 direct jobs created in 2020. EIP generally invests across venture-stage companies, which can range in size from a handful of employees to several hundred, with our credit platform investing in even later-stage and larger companies. The data presented below shows the employment data on a company-by-company basis

for full-time, part-time, and contract employees.

EIP's portfolio is focused on early and venture-stage companies across North America and Europe. The map below shows the headquarter locations of our portfolio companies and their relative head count. While many of our companies are located in venture capital hotspots, such as Silicon Valley, several of our companies are located in

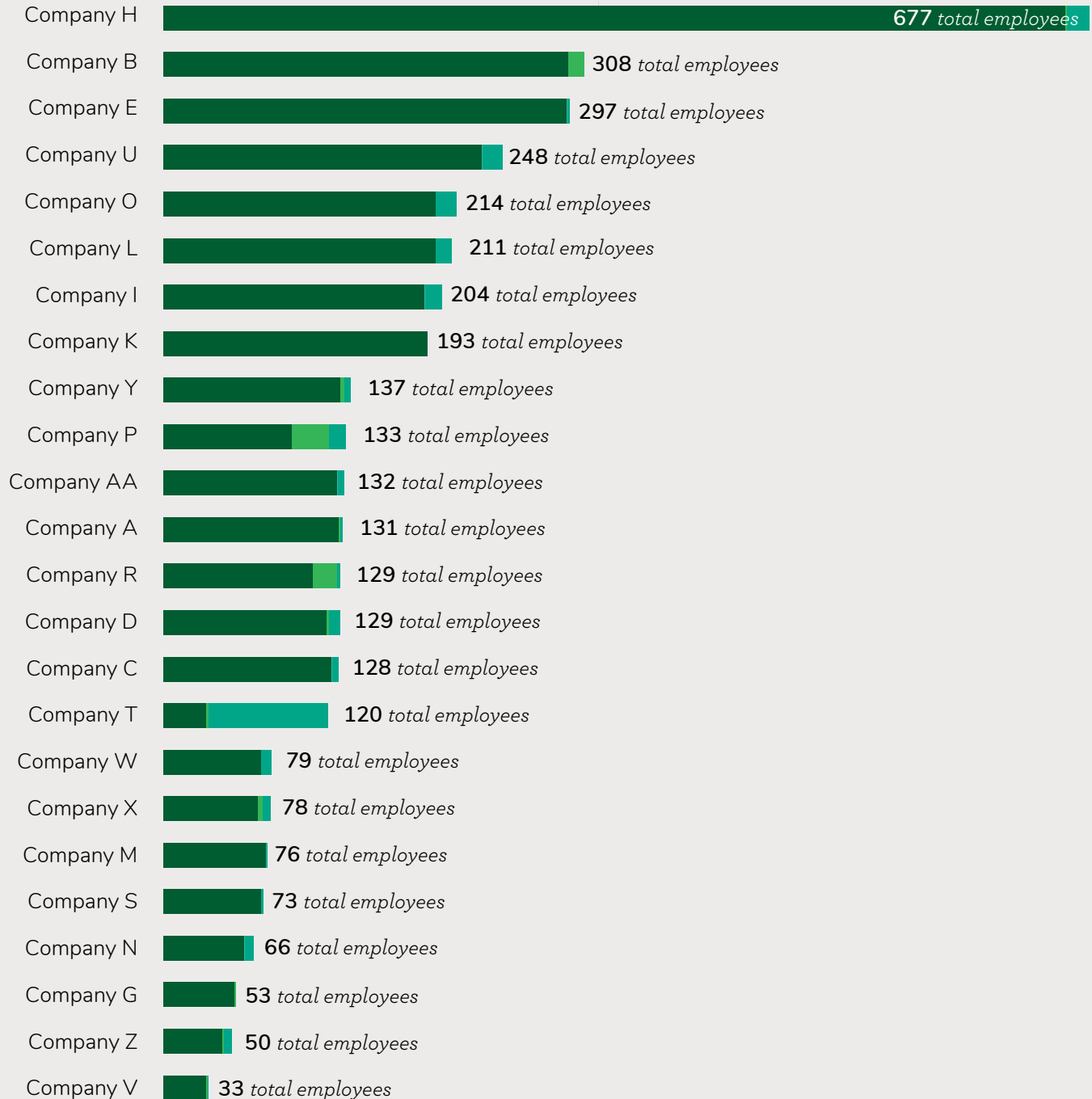
opportunity zones, providing jobs and investment in economically distressed communities. We expect our footprint across the U.S. to grow to include more of these communities, especially as we deploy our Elevate Future Fund. We also expect our European presence to grow as our expanding European team invests in the region's dynamic global markets.

EIP 2020 Portfolio Company Locations & Jobs Created



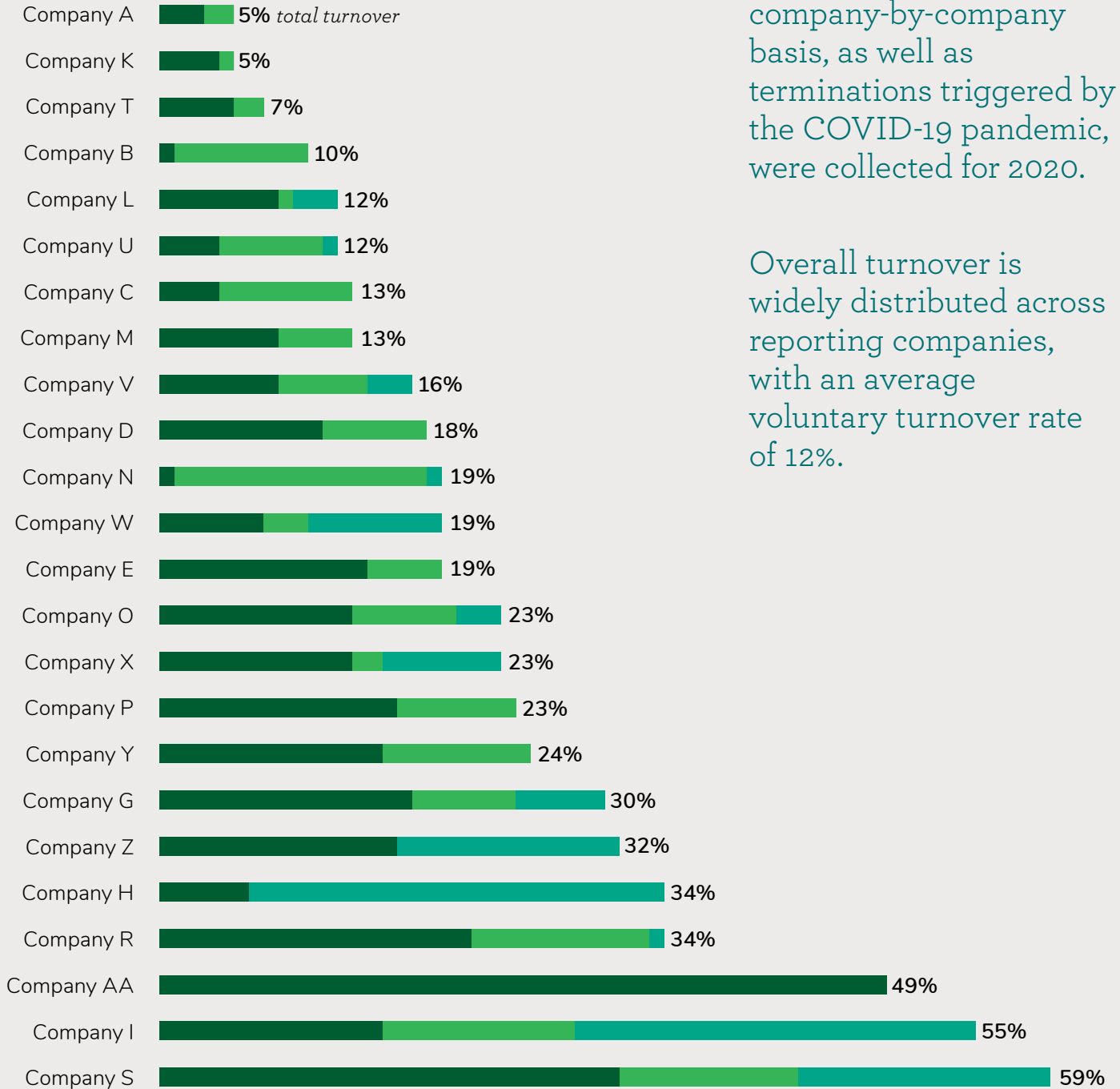
2020 Employment Data

■ Full Time Employees
 ■ Part Time Headcount
 ■ Contractors



Staff Turnover by Company

■ Voluntary Turnover
 ■ Involuntary Turnover
 ■ COVID-19 Terminations



Staff turnover data—voluntary and involuntary—on a company-by-company basis, as well as terminations triggered by the COVID-19 pandemic, were collected for 2020.

Overall turnover is widely distributed across reporting companies, with an average voluntary turnover rate of 12%.

Mapping Investment Themes to the Sustainable Development Goals

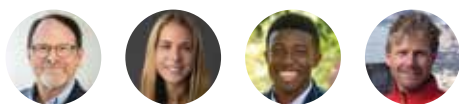
The United Nations Sustainable Development Goals (SDGs) offer investors an aspirational view of what the world could look like by 2030, highlighting the role that private stakeholders must play in driving progress. The UN estimates that over \$90 trillion of investments will be needed over the next 15 years to fulfill these goals, with the majority of that amount coming from private investors.

EIP follows a careful framework to map our investments not only to the SDG's 17 "parent" goals, but more granularly to the 169 subtargets. EIP's 2020 portfolio companies mapped most frequently to the SDGs shown in the figure below:



Authors and Acknowledgements

This report was written by Peter Fox-Penner, Gabriella Rocco and Alvin Themistocle of Energy Impact Partners, and Cliff Brown of ESG Capital Group. Questions/comments are welcome at press@energyimpactpartners.com.



The authors would like to extend their gratitude to EIP's investment partners, portfolio companies, and their employees, many of whom have devoted significant time and resources to make this report possible.

In our portfolio companies, we would like to thank Richard Caperton, Joel Gamoran, Maggie Mullooly, and Aseem Singh, **Arcadia**; Katrina Porter, **Attivo Networks**; Rahul Kar and Arup Barat, **AutoGrid**; Jill Harght and Charles Harvey, **BHI**; Jim Borri and Bob Flaherty, **Cimcon Lighting**; Thomas Ligocki and Sharon Parker, **Clevest**; Rozina Kassam, **Construction Resources**; Amy Bagwell, John Oechsle and Mike Kronenberg, **Derive Systems**; Matt Bodman, Bruce McConnel, Darren Sankbeil and Peter Vescuso, **Dragos**; Sina Shahandeh and Kevin Trinh, **ecobee**; Shannon Sauerhage and Allan Schurr, **Enchanted Rock**; Tina Skagen and Henrik Bache, **eSmart Systems**; Chris Ritchie, **Finite State**; Jian Zhang and Scott Engstrom, **GridX**; Jason Davis and Krishnan Kasiviswanathan, **Innowatts**; Joseph Zoccali, **Marketing**

Evolution; Oliver Doughtie, **Mimeo**; Lakshmanan Venkatesan, **Mosaic**; Alex Vayl and Patrick Chung, **NS1**; Hari Suthan and Joshua Wong, **Opus One Solutions**; Clint Cutchins, **Palmetto**; Isabella Andrade and Raniz Bordoloi, **Particle**; Taavi Must and Jaanus Kink, **RangeForce**; Michelle Cahn, **RapidSOS**; Tiffany Chu, **Remix**; Carol McGarry and Mike Phillips, **Sense**; Isaiah DeRose-Wilson, Demetrios Barnes and Mitch Karren, **SmartRent**; Ben Hill and Pier LaFarge, **Sparkfund**; Justin Smith, **Spire Power Solutions**; Sydney Williams-Shaw and Julie Rockett, **Swimlane**; Mike Fuller, **Tenere**; Tom Lawton, **TESCO**; Will Davis and Adam Wilson, **Trifacta**; Michael Dolmatch and Mishal Thadani, **Urbint**; Freek Dielissen and Andi Piftor, **ViriCiti**; Praveen Mandal, Nadya Kohl, and Eric Kung, **Volta**.

We would also like to thank our **ESG Advisory Board members: Siri Kalvig** of Nysno, **Brandon Middaugh** of Microsoft, and **Frank Prager** of Xcel Energy for their ongoing counsel, and the many members of our strategic partners who contributed to this report.

About ESG Capital Group

ESG Capital Group (ECG) advises investors and companies on strategy and sustainability issues, with deep expertise in the rigorous measurement, analysis, reporting, and performance improvement of ESG (environmental, social, and governance) and impact in private equity. Starting in 2007, ECG (formerly Environmental Capital Group) served as an environmental

advisor to CalPERS' Clean Energy and Technology Program, developing one of the largest programs of sustainability impact accounting and reporting in the world. ECG has since advised 30+ funds on \$15+ billion of investments in over 300 portfolio companies. Cliff Brown, Managing Director, has led ECG's private equity advisory services since 2008.

Appendices

Appendix 1—Additional Information on Directly Measurable Impact Estimates

Directly measurable carbon savings are estimated using best practices for carbon accounting and energy analysis. These estimates are gross savings from the material changes enabled by our portfolio companies, compared to business-as-usual. Impact estimates do not include emissions from operations or facilities where there is not a known material difference compared to industry norms. In cases where the inputs needed to achieve these savings have material effects, we include emissions from these inputs in order to fairly assess each company's net contribution to energy and carbon benefits.

Many of our portfolio companies have developed technologies that reduce consumption of electricity, in which case we estimate the electricity savings factored by grid-emission factors provided by EPA's current eGRID database (eGRID 2021). Other companies enable savings of gasoline and other fossil fuels, which reduce combustion emissions applied from the EPA's emission factor database (EPA 2021).

This appendix includes general references that are useful for multiple companies, with specific methodologies described for each company.

General References

- 1 **EIA** [U.S. Department of Energy, Energy Information Administration. 2020. "Electric Sales, Revenue, and Average Price"]
- 2 **EPA eGRID** [U.S. Environmental Protection Agency (EPA). 2021. "Emissions & Generation Resource Integrated Database (eGRID), 2019"]
- 3 **EPA GHG Emission Factors** EPA GHG Emission Factors [United States Environmental Protection Agency (EPA). 2021. "GHG Emission Factors Hub, 2021" Washington, D.C.]
- 4 **GHG Protocol** [Greenhouse Gas Protocol, World Resources Institute (WRI), ghgprotocol.org]
- 5 **GRI** [Global Reporting Initiative, www.globalreporting.org]
- 6 **IPCC AR5** [Intergovernmental Panel on Climate Change. Fifth Assessment Report.]
- 7 **NREL Solar Output by State** [National Renewable Energy Laboratory. 2016. "Solar Photovoltaic Technical Potential in the United States: A Detailed Assessment"]
- 8 **SASB** [Sustainable Accounting Standards Board, www.sasb.org]
- 9 **WattTime** [WattTime. "Marginal Emission Factors for the U.S. Electricity System"]



Assumptions for Company-specific Carbon Savings

Carbon savings are measured using company activity data that includes sensitive and proprietary information. We have access to this data for our carbon calculations but have agreed to not disclose confidential information. Our descriptions below refer to this data in general terms, as do the methodology, references, and results of our calculations.

Arcadia

Arcadia provides renewable energy attributes directly to retail utility customers in 50 states by purchasing renewable energy certificates (RECs) matched to the electricity use of each customer. The company also offers shares in physical community solar projects. Under carbon accounting rules the purchase of RECs on a short-term basis does not meet the test of additionality. To adhere to these rules, we measure carbon savings from renewable energy displacing grid power only from the community solar projects, which are clearly additional.

Carbon savings for the community solar projects subscribed by Arcadia were determined by evaluating all projects subscribed by Arcadia in each state. Output of projects installed throughout 2020 was measured on a partial-year basis, with full-year operation for 2021 and onwards. For each project, Arcadia estimated the actual clean energy output of each kW of installed capacity, with a result of 68,000 MWh of clean energy generated in 2020 (enough to power 6,200 households). This clean energy is assumed to displace non-baseload grid energy, including assumed net transmission and distribution grid losses of 5%. Using eGRID emission factors for each project location, the resulting avoided emissions are 37,000 metric tons of CO₂e, equivalent to planting 610,000 tree saplings that grow for 10 years.

Cimcon

Cimcon provides smart city solutions including street lighting management that provides intelligent controls such as adaptive dimming. Carbon savings result through energy efficiency from dimming, as well as from fuel savings due to reduced maintenance “truck rolls.”

Carbon savings for Cimcon were calculated by analyzing the energy consumption of the baseline of fully on LED streetlights compared to Cimcon’s adaptive dimming, with 50-60% dim rates for 5 hours nightly, according to

company sources. Cimcon saves 20% of the energy of already-efficient 45-55W LED fixtures, which equates to 34,000 MWh of energy savings. In addition, maintenance alerts cut truck rolls by 2/3 compared to traditional streetlights, which saves 60,000 gallons of fuel annually. Electricity and fuel savings yield a grand total of 22,000 metric tons of avoided CO₂e emissions in 2020.

Derive

Derive creates solutions to optimize vehicle performance, fuel efficiency, and safety.

Carbon savings for Derive were estimated across Derive’s active fleet customers, using case study results that indicate an average of 6% improved fuel efficiency. Baseline mileage assumptions include 15 miles per gallon (mpg) for fleet vehicles, which include vans, light trucks, and passenger cars, traveling an average of 18,000 miles per year. Total savings for 2020 are estimated to be 4.1 million gallons of fuel and 36,000 metric tons of CO₂e.

Ecobee

Ecobee sells Wi-Fi enabled smart thermostats that save energy for heating and cooling. By automatically adjusting thermostat set points, heating and cooling systems run for less time, directly saving on consumption of electricity, natural gas, and other fuels.

Carbon savings for ecobee were determined using actual company data on reduced runtime of heating and cooling systems for each location, based on company studies. The runtime savings were applied to the energy consumption rate of typical heating and cooling systems, including efficiency losses. For emissions calculations purposes, heating systems are assumed to use natural gas, although in some regions, fuel oil, electricity, and other energy sources are used. Cooling systems use electricity for typical air conditioners. To convert energy savings to carbon emissions avoided, EPA and eGRID emission factors for each state are applied based on the location of ecobee customers. The energy savings for 2020 are 1.7 million MWh of electricity (enough to power 160,000 U.S. households for a year), and for fuels such as natural gas, equivalent to the energy in 140 million gallons of gasoline.

Assumptions for Company-specific Carbon Savings

Enchanted Rock

Enchanted Rock provides onsite backup power and distributed energy generation for commercial customers, primarily through natural gas-powered generators. These generators save carbon by displacing dirtier diesel gensets, as well as by selling cleaner energy back to the grid during peak periods, which generally produce higher emissions. EIP's Peter Fox-Penner, in his role as an academic advisor to The Brattle Group, co-authored a study for Enchanted Rock, "Assessing Alternatives to Diesel Backup Power," including the need for energy resilience and GHG emissions under alternatives scenarios.

Carbon savings for Enchanted Rock were calculated by evaluating periods of both backup power and distributed energy generation. During 2020, Enchanted Rock units generated 350 MWh of natural gas-powered backup power in place of diesel generators. Using heat rate (Btu/kWh) data from the U.S. EIA as well as emission factors from the EPA, avoided emissions of nitrogen oxide (NOx) and CO₂e were calculated. Distributed energy generation provided greater savings since Enchanted Rock's systems run more often in this mode: 28,400 MWh (vs 350 MWh in backup mode). This energy generation was compared to eGRID non-baseload emission factors for Texas, the location of Enchanted Rock's customers, again using factors from the EIA and EPA. Total carbon emissions were reduced by 950 metric tons, as well as 11 metric tons of avoided NOx emissions.

Mosaic

Mosaic offers financing for solar energy systems, enabling home improvement and solar companies to install more solar projects for homeowners. These solar power systems reduce carbon emissions by providing clean energy in place of grid power that is still dominated by fossil fuel-based generation. While Mosaic is one of many players in the supply chain, financing is a critical requirement of solar project development.

Carbon savings for the solar projects financed by Mosaic were determined by evaluating all projects financed by Mosaic by state and region. Output of projects installed prior to 2020 were fully counted for 2020, whereas projects installed during 2020 were prorated by month of installation. For each state and region, solar output factors were applied to estimate the actual clean energy output of each kW of installed capacity, with a result of 1.2 million MWh of clean energy generated (enough to power 184,000 households).

This clean energy is assumed to displace non-baseload grid energy, while also avoiding transmission loss of approximately 5%. Using eGRID emission factors for each project location, the resulting avoided emissions total 650,000 metric tons of CO₂e, the equivalent of planting 10.7 million tree saplings that grow for 10 years.

Opus One

Opus One's GridOS Platform offers electric distribution utilities tools to optimize energy planning, operations, and market management. Opus One's technology enables many benefits for utilities, including reduced power grid losses.

Carbon savings were estimated on the basis of a study by the Bloom Centre for Sustainability ("Environmental Benefits Initial Report for Opus One Solutions' GridOS," 2017), which quantified potential environmental benefits. For 2020, Opus One served feeders in multiple locations with an average 10-MW peak load per feeder, with an assumed 50% load factor over the year. Based on the Bloom study, we assumed that energy savings averaged 1.5% from improved voltage management and power factor correction. This resulted in 12,500 MWh in energy savings for 2020, with carbon savings of 1,800 metric tons of CO₂e, using location-specific emission factors.

Palmetto

Palmetto provides services to support the deployment of residential solar power systems. These solar power systems reduce carbon emissions by providing clean energy in place of grid power.

Carbon savings for Palmetto's solar projects were evaluated on a state-by-state basis for all projects completed. Output of projects installed prior to 2020 were fully counted for 2020, whereas projects installed during 2020 were prorated by month of installation. For each state, solar capacity factors were applied to estimate the actual clean energy output of each kW of installed capacity, with a result of 29,000 MWh of clean energy generated (enough to power 2,700 households). This clean energy is assumed to displace non-baseload grid energy, while also avoiding transmission losses of approximately 5%. Using eGRID emission factors for each project location, the resulting avoided emissions are 18,000 metric tons of CO₂e, equivalent to planting 290,000 tree saplings that grow for 10 years.

Assumptions for Company-specific Carbon Savings

Sense

Sense provides tools for customers to track energy use and identify opportunities for energy savings. Based on a study done for Alliant Energy, this technology is assumed to reduce carbon emissions by saving an estimated 6% of energy usage, therefore reducing marginal grid power and emissions.

Carbon savings for Sense were estimated by analyzing all Sense devices by state or province of installation. For each location, average household energy consumption was collected (EIA, 2020) and factored by the number of sense devices in each location. Savings were then calculated for each location using an average savings rate of 6%, determined from the pilot study described above. Energy savings for 2020 are estimated at 34,000 MWh, enough to power 3,100 households for a year. For each location, carbon emission factors from eGRID were applied to calculate a carbon savings of 13,000 metric tons of CO₂e.

SmartRent

SmartRent is an enterprise smart home automation company developing software and hardware that empower property owners, managers, and homebuilders to effectively manage, protect, and automate daily operational processes.

Carbon savings were measured for the deployment of smart thermostats across SmartRent's portfolio. Baseline energy consumption for an average 900-square-foot apartment was estimated for each thermostat location (EIA Electric), with associated carbon emissions using EPA emission factors. Smart thermostat energy savings were assumed to be 10%, based on DOE estimates (www.energy.gov/energysaver/thermostats). Total energy savings for 2020 are estimated to be 55,000 MWh, 5.5 million gallons of gasoline equivalent (primarily in the form of natural gas for heating), with a net carbon savings of 68,000 metric tons of CO₂e.

Sparkfund

Sparkfund provides energy services to commercial customers. These services include energy efficiency projects — such as lighting, heating and cooling, and other projects — that reduce carbon emissions through avoided energy consumption.

Every Sparkfund project develops its own bespoke annual and lifetime energy savings estimate. Total energy savings, in kWh, were applied, along with non-baseload emission factors from the EPA eGRID database for each project location to determine estimated carbon savings.

Urbint

Urbint offers AI solutions for utilities, including gas distribution system safety and risk management. One of these solutions includes damage prevention technologies that reduce GHG emissions by decreasing damages to distribution lines and the resulting associated leaks. Since natural gas is primarily methane, which has 28 times the global warming potential per ton compared to CO₂, avoided leaks have a more significant benefit to GHG reduction.

Carbon savings from the application of Urbint's technologies were estimated through damage prevention rates reported from users of Urbint's solutions, compared to historical rates, with an average reduction of 15% of damages from a 1% intervention rate (Urbint). For each avoided damage incident, the average avoided emissions were 22 metric tons of CO₂e, based on an analysis of leaks published by the EPA ("Inventory of U.S. Greenhouse Gas Emissions and Sinks," Chapter 3, Annex 36, 2021) and California Air Resources Board ("Analysis of the Utilities' June 16, 2017, Natural Gas Leak and Emission Reports"). Based on the implied average per-customer, damage-based leakage amount, the avoided emissions enabled are estimated at 60,700 metric tons of CO₂e.



Assumptions for Company-specific Carbon Savings

ViriCiti

ViriCiti provides monitoring solutions for commercial electric bus and truck fleets. These services include smart charging, vehicle monitoring, smart driving, and maintenance status monitoring. The company enables carbon reductions by extending electric vehicle range and improving driving efficiency.

Carbon savings for ViriCiti were calculated using company-provided data for 2020, including distance travelled in each city for both electric and diesel vehicles. Electric vehicle travel was assumed to displace diesel vehicle travel, and ViriCiti was credited for a 40% increase in range (based on company studies). The diesel baseline was assessed at an average fuel efficiency of 5.3 mpg (NREL, 2018) with a diesel emission factor of 10.21 kg CO₂e per gallon (EPA, 2021). By comparison, electric vehicles have zero tailpipe emissions but do require grid energy for charging. Electric vehicle energy consumption was calculated using an average efficiency rate of 1.5 kWh per km (NREL 2018). For each fleet location, local grid emission factors (EU JRC , US eGRID) were applied to determine the carbon footprint of the charging energy for electric vehicles. The overall net benefits include fuel savings of 2.8 million gallons, with carbon savings of 14,000 metric tons of CO₂e (which represents the net savings including the grid emissions for battery charging).

Volta

Volta delivers free electric charging stations to property owners and free power to electric vehicle drivers, using advertising-supported services. The company enables carbon reductions by providing charging services across a network of stations.

Carbon savings for Volta were calculated using company-provided data for 2020 distance traveled for electric cars in the U.S. Electric vehicle travel was assumed to displace gasoline vehicle travel. The gasoline baseline was assessed at an average fuel efficiency of 24.4 mpg (US FHA) with a gasoline emission factor of 8.8 kg CO₂e per gallon (US EPA) . By comparison, electric vehicles have zero tail pipe emissions but do require grid energy for charging. Electric vehicle energy consumption was calculated using an average efficiency rate of 0.3 kWh per mile (per Volta).
























Average U.S. grid emission factors (EPA eGRID) were applied to determine the carbon footprint of the charging energy for electric vehicles. The overall net benefits include fuel savings of 3.5 million gallons, with carbon savings of 25,000 metric tons of CO₂e, which represents the net savings including the grid emissions for battery charging.

Lifetime Savings

All of the companies in our portfolio sell products that, once installed, reduce environmental impacts throughout their installed and operating lifespan. Accordingly, for carbon savings only, we have computed the emissions savings we help enable over the life of the installed measures. In calculating lifetime savings, we have assumed that grid carbon intensity declines linearly from current levels to zero by 2045. The assumed life span of each company’s primary technology is shown in the table below:

Companies	Life span
Arcadia	30
Cimcon	20
Derive	7
ecobee	15
Enchanted Rock	20
Mosaic	30
Opus One	10
Palmetto	30
Sense	10
SmartRent	10
Sparkfund	10
Urbint	5
Viriciti	10
Volta	10

Appendix 2—Our Partners' Carbon Reduction Targets

Partner	Emission Reduction Goal
AGL	Net zero emissions by 2050 
Alliant Energy	50% reduction in fossil generation CO2 emissions from 2005 levels by 2030. Net-zero CO2 electricity by 2050 
Ameren	50% reduction in CO2 emissions from 2005 by 2030; 85% by 2040; net-zero by 2050 
APS	65% clean energy by 2030; 100% carbon-free power by 2050 
Avista	Carbon neutral by end of 2027 and 100% clean electricity by 2045 
Burns & McDonnell	50% reduction in GHG emissions from 2019 levels by 2030 
Cox	Carbon-neutral by 2034 
Duke Energy	At least a 50% reduction in CO2 emissions from 2005 levels by 2030; net-zero by 2050 
EDF	Carbon neutrality by 2050 and i) reduce its Scope 1 and 2 CO2 by 50% (2017 basis), including emissions from non-consolidated generation assets and emissions associated with electricity purchased for sale to end customers, and ii) reduce its CO2 emissions associated with the burning of gas sold to end customers (Scope 3) by 28% (2019 basis). 
Emera	55% reduction by 2025; 80% by 2040; net-zero emissions by 2050
Entergy	50% reduction in CO2 intensity from 2000 levels by 2030; net-zero by 2050 
Enterprise	Not available
EWE	Climate-neutral by 2035 
Energy, Inc.	70% reduction in CO2 emissions from 2005 levels by 2030; net-zero by 2045 
FirstEnergy	30% reduction in GHG emissions from 2019 levels by 2030; carbon-neutral by 2050 
Fortis. Inc	75% reduction in CO2 emissions by 2035 
Fortum	Carbon neutrality by 2050 
Hydro One	30% reduction by 2030; net zero by 2050 
Galp Energia	Reduction of 40% absolute emissions from operations in 2030; net-zero by 2050 
MGE	40% reduction by 2030; net-zero carbon electricity by 2050 
Microsoft	Carbon-negative by 2030; and remove all historical emissions by 2050 
OGE	50% reduction in CO2 emissions from 2005 levels by 2030 
Southern Co.	50% reduction in CO2 emissions from 2007 levels by 2030; net-zero emissions by 2050 
TC Energy	Not available 
TronderEnergi	Aligned with Norway's climate targets of minimum 50% reduction from 1990 levels by 2030
Xcel	85% reduction in CO2 emissions from 2005 by 2030; 100% carbon-free electricity by 2050 

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