

From Insight to Implementation: Business Perspectives on Energy Efficiency Investments

Energy Efficiency Investment Survey 2024



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Survey methodology

Energy Efficiency Movement survey commissioned by Sapio Research in February 2024.

Company sectors

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A total of 1282 respondents participated in the survey

Accuracy At an overall level, results are accurate to ±2.7% at 95% confidence limits.

Company size (employees)

Less than 100	5%
100 – 499	16%
500 - 999	24%
1000 – 4999	33%
More than 5000	21%

Turnover

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Less than \$99m	10%
\$100m – \$999m	43%
\$1bn – \$5bn	32%
More than \$5bn	15%

Role





12% Specialist

Responsibility



31% One of several decision makers 12% Decision influencer

Countries

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Argentina Brazil China Germany India Indonesia Italy Malaysia Mexico Spain Sweden United Kingdom United States

Executive summary



By Mike Umiker Managing Director Energy Efficiency Movement

"Great to see that moving data to the cloud is the most common energy efficiency measure, followed very close by performing energy efficiency audits (69%)."

> The economic benefits of energy efficiency are evident, and the business case for making improvements towards becoming more energy efficient has been laid bare.

> An overwhelming 93 percent of businesses have set their sights on executing energy efficiency upgrades within the coming three years. Nearly three-quarters of companies (69 percent) are now performing Energy Efficiency audits, aligning with the exact recommendations furnished in our 2023 report, "The Case for Industrial Energy Efficiency".

> Yet, the journey towards energy prudence encompasses more than just initial evaluations. What other steps are businesses implementing to become more energy efficient? And how are contemporary business attitudes towards energy efficiency evolving as they face the dual pressures of escalating energy costs and intensifying regulations?

Our global industry survey acts not only as a continuation and expansion upon our 2022 report but seeks to answer these questions – to shed light on the existing and prospective commitments of industry to bolster their investments in energy efficiency.

The 2023 United Nations Climate Change Conference (COP28) reiterated the pledge for a doubling of energy efficiency improvements by 2030, with Dr Al Jaber stating that, so far, progress in this area "has been too slow".

In this area, the International Energy Agency (IEA) reported a mixed year in its Energy Efficiency 2023 Report. While the rate of progress in energy intensity – the main metric used for the energy efficiency of the global economy – fell from 2 to 1.3 percent, this largely reflected an increase in energy demand.

The IEA's report also masked genuine improvements in energy efficiency from nations such as the US, the UK, Korea and Turkey, as well as across the EU, with these improvements ranging from 4 to 14 percent. This indicated that the momentum to double the rate of progress in efficiency to 4 percent globally is quickly gathering pace - a rate which could deliver 50 percent of CO2 reductions by 2030. Various factors may explain this forward momentum. It might stem from substantial hikes in energy prices, as our survey found to be a moderate threat by 64 percent of businesses in North America, and 60 percent of European businesses. Additionally, concerns about the scarcity of resources, as evidenced by a previous industry report, could play a role, as could the pursuit of enhanced energy resilience due to unreliable or unavailable grid power - identified as the key motivator for 41 percent of the survey participants.

Our survey, and the report developed by the IEA, house fascinating findings ahead of the IEA's ninth Energy Efficiency Conference, which will be held in Nairobi, Kenya in May this year. Why should we focus on energy efficiency? The potential for Energy Efficiency is enormous, as it avoids the need to develop new sources of energy. The IEA refer to this as "the first fuel" due to its ability to allow for more work to be achieved with less energy. Instead, by improving existing industrial systems – through, for instance, the use of high-efficiency electric motors controlled by variable speed drives (VSDs) – the path to net zero can be made smoother.

Take heat exchangers, for example, which are used widely across the commercial and industrial sectors, in areas such as building heating and air conditioning, refrigeration, process industries, and data center and fuel cell cooling. However, they are rarely maintained adequately. Research¹ found that remarkably, this lack of maintenance alone could account for up to 2.5 percent of global carbon emissions – roughly the equivalent of the entire airline industry.

Furthermore, the world possesses significant potential for excess heat recovery from production, industry and commercial premises, for example. Recovering excess heat will contribute to overall energy efficiency goals, doubling global progress. However, this sector coupling will demand investments by private industries. In Europe alone the potential for excess heat recovery, according to the Heat Roadmap Europe project, amounts to 245 Mtoe/year, corresponding almost to the EU's total energy demand for heat and hot water in residential and service sector buildings². To achieve Energy Efficiency through system-level measures such as reusing heat from industry by sector coupling, demands not only policies, financial instruments, and facilitation, but also incentives and investments from both the public sector and industry.

¹ H. Müller-Steinhagen , M. R. Malayeri & A. P. Watkinson (2009) Heat Exchanger Fouling: Environmental Impacts, Heat Transfer Engineering, 30:10-11, 773-776, DOI: 10.1080/01457630902744119

² Connolly, D., et al. (2013). Heat Roadmap Europe 2: Second Pre-Study for the EU27. Department of Development and Planning, Aalborg University, p. 54 Encouragingly, trends are pointing in that direction. From this latest Energy Efficiency Movement survey, we're already seeing changes in industry attitudes towards energy efficiency: investments in energy efficiency are on the rise with a 7 percent increase from 2022, there's less ambiguity around energy efficiency solutions and less resistance to new technologies among the workforce, and businesses are placing more focus (a 5 percent increase in the last two years) on improving the energy efficiency of their facilities rather than transportation.

Many of these movements have been the result, at least partly, of the global energy crisis, which began in 2021/2022 and has caused energy costs to spiral in many regions. This has had an impact across every industry – a fact which was highlighted in our survey. Of the 1,282 respondents, 51 percent were from the manufacturing sector, while others were spread across transportation, energy generation, heavy industry, and light industry. Unsurprisingly those actively involved in the Energy Efficiency Movement, our "Movers", are leading the charge when it comes to attitudes to energy efficiency. The Movers that replied to the survey are more likely to be investing in energy efficiency due to cost savings (67 percent vs 52 percent of non-Movers) and corporate sustainability commitments (71 percent vs 47 percent of non-Movers).

With the call for energy efficiency more urgent than ever, and the reasons for investing in it more beneficial than ever, we believe the trend will continue in the right direction. But there's a huge way to go in achieving greater energy efficiency. So, if you're facing the same challenges, and you're looking for guidance, now is the time to join us.

Quotes

"At COP28, the world committed to working together to doubling energy efficiency progress this decade this decade. Achieving the goal will need strong and early action from all sectors, including industry, so seeing an increase in businesses investing in energy efficiency is heartening. We commend this collective commitment to supporting global efforts toward energy efficiency - an essential step to a resilient and sustainable energy future."

Dr. Brian Motherway, Head of Energy Efficiency and Inclusive Transitions Office, International Energy Agency (IEA)

Movers quotes

"At Iveco Group, sustainability is at the heart of our strategy and embedded in our daily operations to ensure that our business practices are economically viable, environmentally responsible and social advantageous. This approach fosters a cycle of continuous improvement that is driving the tangible technical evolution of the transport sector and is instrumental in reducing emissions and setting new standards for sustainability. Simultaneously, it is critical that all stakeholders prioritize a broader understanding of our shared pathways to energy efficiency, taking action together to accelerate the decarbonization of our planet."

Giorgina Negro, Director of Energy Department, Iveco Group N.V.

Movers quotes

"An energy efficiency audit is a crucial foundation step towards achieving sustainable energy management. It is gratifying to see that 69% of businesses have committed to investing in or are already conducting such audits. They are instrumental in uncovering energy-saving opportunities, reducing costs and guiding strategic investments that not only improve the bottom line but also contribute to a more sustainable future."

Tarak Mehta, President of Motion Business Area, ABB.

"Energy efficiency is paramount in achieving the goals set forth by the Paris Agreement and the COP28 targets to double the global rate of energy efficiency improvements until 2030 to reach net zero. The industry holds a pivotal position in this endeavor. According to the IEA, up to 50% of today's potential for energy efficiency saving lies within the industrial sector, and by prioritizing increased energy efficiency, we can potentially drive over 40% of emissions reductions over the next two decades. This report underscores the urgent need for immediate action from the industry to commit and invest in energy-efficient solutions. This is crucial in order to accelerate the energy transition and for reaching net zero on time."

Thomas Møller, President of Energy Division, Alfa Laval.

Movers quotes

"The focus on energy efficiency in China's chemical and manufacturing sectors is just one part of the country's growing commitment to climate-friendly technology, relative to global trends. Setting bold targets for energy consumption reduction should be the natural response to the challenge of Net Zero."

Wei Li, General Manager of Chengguang (Beijing), Energy Technology Co., Ltd.

"We have seen significant growth in investments and an increase in energy efficiency measures in all sectors of Brazilian industry, especially in topics related to electrical energy. There is a growing understanding that improving energy efficiency is not just a cost-saving initiative, but also translates into greater longevity and sustainability, more profit and more efficient and stable operations. Furthermore, companies have been begun to demand from their suppliers that there is an awareness and purposeful attitude towards improving energy efficiency through the production chain."

Luis Dearo, Director, APS Soluções.

"Thanks to our global footprint, at Soler y Palau we see that the Market is becoming intelligent, it's evolving and moving at a breakneck speed looking forward to the challenges in terms of energy efficiency. Based on our principles of sustainability, we guide our five Development Centers around the world to focus on more efficient systems overall, in terms of energy, acoustics, water, resource recovery, and recycling."

David Ortiz Technical Area Manager, Soler & Palau Mexico.

Join the Movement today

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Key findings

The Challenge Rising energy costs

24% of businesses' annual operating costs are attributable to energy usage, consistent with 23% in 2022.

In Mexico, 49% of businesses said up to 30% of their annual operating costs is attributable to energy usage, while in Brazil, 38% of businesses said up to 40% of their annual operating costs were attributable to energy usage.



58% say that rising energy costs are at least a moderate threat to the profitability of their business, increasing from 53% in 2022.

This was seen as a major threat to 15% of our surveyed businesses – with 22% of respondents in Indonesia citing rising energy costs as a major threat, along with 20% of respondents in the UK, and 19% of respondents in Spain.

will be making energy efficiency improvements in the next 3 years,

with 61% already investing in making energy usage more efficient, a 7% increase from 54% in 2022. This shows a significant increase in the last 2 years.



The Opportunity Energy Efficiency Investment

Compared to 2022, more businesses are focusing on improving their facilities energy efficiency (+5%), along with the efficiency of their productions/operations (+3%), and less focused on transportation (-6%).



Only 38% of respondents in Argentina said that they are already investing in energy efficiency, while this number jumped to 78% in China.

India, Italy and Sweden were all relatively similar at 51%, 50% and 51% respectively.

To achieve this,

plan to or have invested in moving data to the cloud and

have performed energy efficiency audits.

The Barriers Cost and energy efficiency

say that cost is the top barrier to improving energy efficiency, slightly increasing from 50% in 2022

However, when it comes to the main reasons businesses are investing in energy efficiency, over half say cost savings are the most important reason to invest (52%), followed by corporate sustainability commitment (48%).

Lack of digital skills in the workforce was seen as a barrier to 30% of the businesses we surveyed, however this number jumped to 45% for Chinese businesses.

Interestingly, the workforce being resistant to new technology was seen as a barrier to 25% of businesses, a number that increased to 37% for Brazilian respondents, and then increased again to 40% of respondents in India.

Achieving Net Zero

4 0 of businesses are aiming to achieve
1 0 of businesses are aiming to achieve
1 0 of businesses are aiming to achieve Net Zero within 10 years instead.

Only 47% of businesses are aiming to achieve Net Zero within the next 5 years, a slight decrease from 52% in 2022. 32% are setting their target to the next 10 years, a significant increase from 23% in 2022, suggesting that businesses are trying to set more realistic targets.

The percentage of businesses that don't have a specific target date to reach Net Zero has fallen from 15% in 2022 to 10% in 2024.

The Challenge

High energy costs are still a major challenge



Region - average % OPEX spend

	Europe	North America	Latin America	Asia	Year	Mean
2024	22%	23%	25%	23%	2024	24%
2022	22%	20%	26%	22%	2022	23%
Change	+2%	+3%	-1%	+1%		

On average, 24 percent of businesses' annual operating costs go towards energy usage – a figure that has barely shifted from the 23 percent in 2022. This indicates that high energy costs are still a major challenge to businesses today.

There could be regional differences in how the data reads. For instance, Summer 2022 saw a big hike in industrial electricity prices in the US, prices have risen steadily since, and continue to do so in 2024 at the time of the survey. And it's clear that smaller companies seem to be less affected (19 percent down from 22 percent) than companies with a turnover of at least \$5bn (26 percent up from 23 percent).

Rising energy costs are a threat to profitability

10% % At least a 1 – No threat moderate 9% Year threat 2024 58% 38% 2022 53% 2 – Minor threat 33% 40% 3 - Moderate threat 43% 13% 4 - Major threat 2022 2024 15%

Q2. What level of threat to the profitability of your business is attributable to rising energy costs?

Region - % at least moderate threat

	Europe	North America	Latin America	Asia
2024	60%	64%	61%	55%
2022	58%	45%	49%	53%
Change	+2%	+9%	+12%	+2%

Sector – % at least moderate threat

	Manufac- turing	Heavy industry	Light industry	Transporta- tion
2024	60%	60%	56%	59%
2022	54%	54%	56%	50%
Change	+6%	+6%	0%	+9%

There has been a 5 percent increase in the last two years in businesses saying rising energy costs are at least a moderate threat to profits, from 53 percent in 2022 up to 58 percent now.

The reasons for this seem to be at least partially region-specific. So, in North America for example, there's been limited progress in transitioning away from fossil fuels, making companies there more reliant on potentially volatile international markets.

Meanwhile, light industry has been less affected by rising energy costs because it is naturally less energy demanding.

The Opportunity – Energy efficiency

More businesses are investing in energy efficiency

Q3. Are you planning to invest, or have you invested, in making your energy usage more efficient?



Region - % already investing in energy efficiency

	Europe	North America	Latin America	Asia
2024	58%	65%	53%	65%
2022	56%	53%	45%	53%
Change	+2%	+12%	+8%	+12%

To overcome these challenges, it's been encouraging to see an increase in businesses investing in energy efficiency. Over the last two years, 7 percent more businesses are investing in making energy usage more efficient, up from 54 percent to 61 percent. This appears to be the start of a positive trend and can be partially explained by a group of companies that were planning to invest two years ago – and are now investing.

But despite this positive shift, more could be done. The International Energy Agency (IEA) says: "To meet Net Zero by 2050, we predict that a third of emissions reductions will need to come from energy efficiency improvements."

Encouragingly, we can see sizeable increases in companies already investing in energy efficiency in North America, Asia, and Latin America. But conversely, there have been no major changes in the EU.

Of those businesses investing, it tends to be the smallest companies by turnover that have increased their investment most, with 57 percent investing now vs 46 percent two years ago.

Increasing focus on making facilities and production more energy efficient



In terms of the areas in which companies are implementing energy efficiency initiatives, most are increasingly prioritizing facilities (78 percent up from 73 percent), as well as productions/operations (73 percent up from 70 percent), rather than transportation (37 percent down from 43 percent). This has been the case across both heavy and light industry.

Some of this can be explained by country differences, with Spain, for example, having high solar potential, meaning facility upgrades could include integrating renewable energy sources like rooftop solar panels, further optimizing energy consumption.

India's rapid urbanization, meanwhile, has led to increases in energy demand, making energy efficiency crucial for managing future energy needs. Government initiatives like the "Energy Conservation Building Code" and PAT (Perform, Achieve, Trade) scheme have encouraged and incentivized improvements in building energy efficiency.

It's a similar case in Mexico, with rapid urbanization and rising energy demand. Recent policy changes like the "NOM-001-ENER-2022" standard have promoted energy efficiency improvements in buildings.

And in China, the world's largest energy consumer, improving facility efficiency is key to reducing its carbon footprint and dependence on imported energy. Several government policies and initiatives are supporting this, including China's building codes and comprehensive appliance standards. These have been crucial in limiting the increase in energy use resulting from higher rates of construction and appliance ownership.

Businesses are taking measures to boost their energy efficiency

Nearly three-quarters of companies (71 percent) are now investing in moving data to the cloud and performing energy efficiency audits (69 percent). At the other end of the scale, less than 50 percent of companies are investing in heat reuse. And since 2022, 53 percent of businesses are now using Building Energy Management Systems (BEMS) compared to 47 percent two years ago.

Growth in the use of energy audits has been seen all over the globe, showing an increasing willingness to start the first step of the energy efficiency journey. BEMS growth, meanwhile, especially in North America and the EU, could be the result of mandates and regulations in building energy efficiency. This includes the International Energy Conservation Code (IECC) in the US – providing minimum energy efficiency requirements for new construction and major renovations – and the Energy Performance of Buildings Directive (EPBD) in the EU, which requires member states to establish minimum energy performance standards for buildings, promote energy efficiency improvements, and implement national long-term renovation strategies.

Q5. Which of the following energy efficiency measures have you invested in, or do you plan to invest in?

only asked to those who said **yes** to Question 3

% Invested in



Region – % invested in BMS

	Europe	North America	Latin America	Asia
2024	47%	62%	46%	59%
2022	41%	46%	45%	56%
Change	6%	16%	1%	3%

Region - % invested in energy efficiency audit

		North	Latin	
	Europe	America	America	Asia
2024	69%	67%	67%	69%
2022	46%	53%	47%	59%
Change	23%	14%	20%	10%

93% will be making energy efficiency improvements in the next 3 years



Countries more likely to be looking at energy efficiency improvements this year:

- China (53% up from 45%)
- Mexico (68% up from 59%)
- Spain (64% up from 54%)

The number of businesses saying they will be making energy efficiency improvements in the next three years has remained steady at 93 percent. We would have expected movement on this, so these results suggest a delay – but it's still encouraging to see almost all businesses are looking at energy efficiency improvements in at least the next three years.

Country by country, China (53 vs 45 percent), Mexico (68 vs 59 percent), and Spain (64 vs 54 percent) have the most businesses on average making changes in this period. For China this is due to the level of legislation – as reflected in cases where there's a major drive for businesses to only buy highly efficient IE5 motors, for example.

89% expect their investment in energy efficiency to increase in the next 5 years

Q7. Do you expect your investment in energy efficiency to grow during the next 5 years?



Sector - % expected increase in investment

	Manufacturing	Heavy industry	Light industry	Transportation	Energy generation
2024	90%	87%	79%	89%	89%
2022	92%	91%	87%	84%	89%
Change	-2%	-4%	-8%	+5%	-

In 2024, 89 percent of companies expect their investment in energy efficiency to increase in the next five years. And 46 percent of businesses expect it to increase significantly, up 4 percent from 42 percent in 2022.

While Swedish businesses are still not expecting it to increase much (71 percent vs 76 percent), as the country is already a globally recognized leader in energy efficiency, there's less perceived room for significant growth.

In the US, the debate has been firmly two sided, with one side saying efficiency is for electrification and the other saying it should be for energy production too.

Regional differences - No major changes

	Europe	North America	Latin America	Asia
2024	85%	85%	91%	93%
2022	85%	85%	92%	94%

Industry differences - Light industry expecting it to increase less (79% vs 87%)

	Manufacturing	Heavy industry	Light industry	Transportation	Energy generation
2024	90%	87%	79%	89%	89%
2022	92%	91%	87%	84%	89%

Cost savings are still the most important reason businesses invest in energy efficiency



Over half of all businesses – 52 percent – cite cost savings as the most important reason to invest in energy efficiency, followed by corporate sustainability commitments (48 percent).

When it came to the latter, China ranked third highest for corporate sustainability commitments, after Mexico (65 percent) and Argentina (60 percent). This highlights the importance of regulation in countries where fuel prices are lower to motivate a green economy.

Argentina also ranked highly for cost savings at 70 percent, as did Brazil at 64 percent. But this was less a factor in Italy (41 percent) and China (37 percent).

It's not immediately clear why this is, but it could be due to the high volatility of energy prices in Argentina and Brazil making cost savings from improved energy efficiency a more pressing concern. There's also more limited access to clean energy sources in these countries.

China and Italy, meanwhile, have broader sustainability goals, reflected in the fact that their answers are close to each other percentage-wise.

Regional differences

	2024	2022
Europe	 Cost savings Corporate sustainability commitment Increased competitiveness 	 Cost savings Corporate sustainability commitment Increased competitiveness
North America	 Cost savings Improving energy resilience NEW Increased competitiveness NEW 	 Cost savings Corporate sustainability commitment Improving brand reputation
Latin America	 Cost savings NEW Corporate sustainability commitment Increased competitiveness 	 Corporate sustainability commitment Cost savings Increased competitiveness
Asia	 Improving energy resilience NEW Cost savings Corporate sustainability commitment 	 Corporate sustainability commitment Cost savings Increased competitiveness



The Barriers

Cost and downtime still the biggest barriers to improving energy efficiency



In 2024, cost is still the top barrier to improving energy efficiency compared to 2022, with 53 percent of companies citing this as the main reason vs 50 percent two years ago. Downtime (34 percent) is also a major factor but with a downwards trend compared to 2022 (3 percent down).

There is an easier business case to demonstrate reduced cost. There is also less uncertainty around how to improve energy efficiency – and, importantly, less workforce resistance – as businesses are becoming more familiar with the energy efficiency process. This is especially true in China (17 percent, down from 43 percent), Germany (19 percent, down from 25 percent) and Sweden (14 percent, down from 23 percent), highlighting the growth in awareness in these countries, plus the ease of use of digital energy efficiency tools.

Cost is a larger barrier now in energy generation, with 53 percent citing it compared to 39 percent two years ago, as are digital skills (36 percent vs 25 percent). But it is less of a barrier for smaller companies than larger businesses.

Time based ROI from energy efficiency investments





Return on investment (ROI) is a still a key concern for businesses when it comes to energy efficiency investments, with 82 percent saying a payback time within the next five years would be enough to persuade them to invest more.

In fact, most companies expect a payback in the first three to five years of investment as opposed to the next one to two, which is a more realistic view, even as investments need to be made in the next few years.

This attitude changes depending on the industry, with 47 percent of businesses in heavy industry, and organizations with a turnover of more than 5bn (46 percent), demanding ROI in at least the next two years. This is likely due to larger scales of investment and bigger budgets overall.

The survey also revealed that there were differing ROI expectations depending on seniority level, or job title. Over half of business owners (51 percent) are inclined to increase their investments in energy efficiency if there was the potential for an ROI in the next two years, followed closely by 46 percent of executives. Managers and specialists are less expectant of a short ROI timeline, with 38 and 37 percent respectively that would be motivated to invest more if ROI was to be achieved within just two years.

Looking further ahead, within the next five years, the number of those who would be persuaded to invest in energy efficiency increases significantly across all roles. A vast majority (84 percent) of owners would invest more if the ROI was to be achieved within just five years, with executives showing an even higher level of persuasion at 90 percent. Managers and specialists show similar trends, with 81 percent and 78 respectively, being more inclined to invest under the possibility of achieving an ROI in five years.

The Trends

Businesses are looking for more information from government and 3rd parties





Perhaps unsurprisingly, there are still many companies that feel there isn't sufficient information on energy efficiency available from government. Although, when it comes to access to support and information around energy efficiency, 43 percent say they have everything they need, in line with the 41 percent who said this in 2022.

As a possible reaction to industry uncertainty, governments around the world have put into place policies specifically related to energy efficiency and climate-neutrality. The European Green Deal, alongside the subsequent "Fit for 55" package, serve as an example. The Green Deal provides a broad blueprint to combat climate change, the Fit for 55 lays out a detailed roadmap towards achieving objectives. It is more granular in its approach, concentrating on critical areas such as emission trading for transport and buildings, effort sharing regulations, and energy efficiency directives – all with the aim to reduce Greenhouse Gas emissions by 55 percent, by 2030.

A lack of clear guidance and information could be impacting those businesses planning to invest in energy efficiency compared to those already investing, with those planning to invest far less likely to have sufficient information (28 percent) than those currently investing (53 percent).

Worldwide, those that don't have enough information are specifically looking for:

- Clear information on available energy efficiency incentives or rebate programs.
- Information on financing and investment for energy efficiency upgrades.
- Information on emerging energy technologies and innovations.

Net Zero target dates are quickly approaching



Almost half of businesses, 47 percent, are aiming to achieve Net Zero within the next five years. Slightly concerning though, only half of those companies are already investing in energy efficiency. Only 3 percent of all the companies that we surveyed are currently at Net Zero.

More encouraging is that the number of businesses that don't have a specific date in mind about when they will achieve Net Zero has fallen 5 percent compared to 2022. So, while fewer companies are aiming for Net Zero within the next five years (47 percent now vs 52 percent in 2022), more are aiming for it in the next ten years – perhaps signaling a more feasible focus generally.

There was a steep fall from 24 to 16 percent in companies that don't have a Net Zero date in Latin America, reflecting that there are now more Net Zero national targets. Argentina, for example, has publicly committed to achieving Net Zero emissions by 2050, although it hasn't yet been formally incorporated into its Nationally Determined Contributions (NDC) to the United Nations. And Brazil has also made public pronouncements about aiming for Net Zero by 2050.

Perhaps unsurprisingly, those already investing in energy efficiency are more likely to have a target date in the next five years.

Growing concerns over lack of electrical grid power

Q14. Are you concerned that there might be a limited supply or lack of electrical grid power for your production/business in the coming years?



34

There are clear concerns around energy supply, with 41 percent of businesses at least moderately concerned that there might be a lack of electrical grid power in the coming years. This relates to the findings of ABB Motion's 2023 circularity survey³, where 91 percent suffer resource scarcity, the highest being energy.

The highest percentage of companies at least moderately concerned by this occurs in India (57 percent), Argentina (55 percent), and the US (50 percent).

China has made significant investments in grid infrastructure in recent years, with policies to diversify the energy mix, while it is also a global leader in renewables deployment. That puts it at odds with nations like Argentina and India, where ageing infrastructure, limited investment, and reliance on imported fuels has increased concerns among businesses.

And in the US, electrification of transport and increasing reliance on data centers taking grid power – as well as a reliance on fossil fuels – is also causing concerns to grow.

These concerns are more likely to be affecting heavy industry (46 percent at least moderately concerned) than energy generation (35 percent) – but this can be explained by the fact that heavy industry relies on reliable electricity, and outages can cause massive financial losses.

They are also more reflected in the concerns of high-turnover companies (50 percent) than lower turnover companies (39 percent).

Businesses are adopting energy efficiency to combat the lack of grid power

Q15. What actions, if any, has your company taken to address a potential limited supply or lack of electrical grid power?



Most companies are looking at energy efficiency measures, renewables, backup generators, and alternative energy to combat a lack of electrical grid supply. In this regard, 44 percent of businesses have adopted energy efficiency measures, and 42 percent have adopted on-site renewable energy sources. This reflects the IEA's energy efficiency as the "first fuel" view that prioritizes energy efficiency measures before considering other energy sources or solutions. By focusing on efficiency as the "first fuel," the goal is to achieve significant energy savings, reduce costs, and minimize environmental impact before investing in new energy infrastructure.

Mexico is the country most likely to be looking at energy efficiency measures to combat lack of electric grid supply (62 percent), while adopting renewables is most popular in Indonesia (56 percent). Backup generators are the most popular method of combating energy shortages in India (58 percent) but shifting away from this should be a priority to decarbonize.

In the US, businesses are more likely to be looking at investing in alternative energy sources (41 percent). This is likely due to large decreases in wind and solar costs over the past decade, as well as supportive policies and financial incentives, such as the Inflation Reduction Act of 2022 – which looks to spur investment in green technology in the US through grants, loads and tax credits.

Moves to introduce more energy efficiency are highest in manufacturing (46 percent) but lowest in light industry (38 percent), while on-site renewables are highest in manufacturing (47 percent) but lowest in light industry (33 percent).

How Movers differ

It's perhaps not a surprise, but our Movers are more likely to be investing in Energy Efficiency due to cost savings (67 percent vs 52 percent) and corporate sustainability commitments (71 percent vs 47 percent).

So, if energy efficiency is important to you, join the Movement and get access to a unique global network of stakeholders working for a more energy-efficient world.





