5 PRACTICAL STEPS FOR DECARBONIZING THE INDUSTRIAL SECTOR RIGHT AWAY

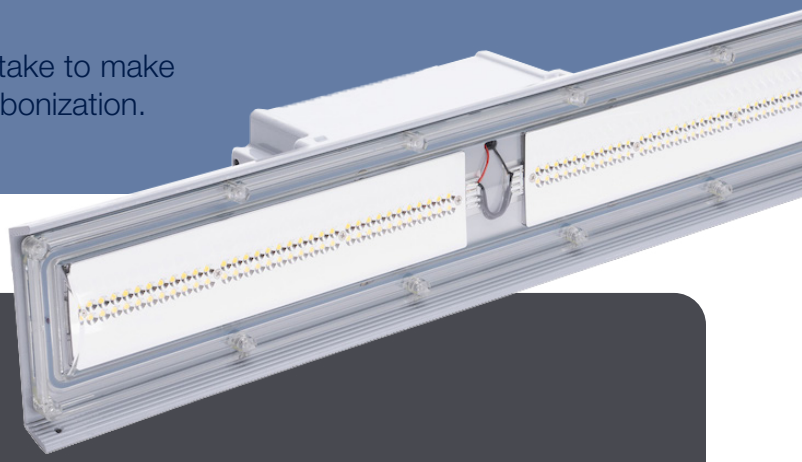
The industrial sector accounts for more than 1/3 of global greenhouse gas emissions. Not only are governments, global consortia, and regulatory agencies pushing for the industrial sector to achieve net zero operations to slow climate change, but consumers are also demanding greater sustainability from the companies from which they purchase. In response, companies are making environmental initiatives a top priority, including setting science-based targets and developing plans to achieve Net Zero by 2050 or sooner.

Three out of four Fortune 100 companies have made commitments to reduce emissions. However, simply outlining plans and talking about solutions aren't enough—consumers and regulatory groups are demanding real, measurable results.

In fact, the SEC recently issued a draft rule regarding standards for how publicly traded companies should disclose how climate change affects their financial stability and their roles related to greenhouse gas emissions. Part of the required disclosure relates to a company's Scope 1 and Scope 2 emissions - the greenhouse gas emissions produced directly through business operations and the emissions related to the energy they purchase to run their business.

Because the challenge feels overwhelming, some companies have struggled to know where to start in lowering their carbon footprint to meet regulatory and consumer expectations in the near term. But there are simple, impactful solutions that can be implemented right away to get companies started on their journey.

Here are five practical steps industrial companies can take to make real, measurable and sustained progress toward decarbonization.



1

CHANGE THE LIGHTS

To immediately address decarbonization, all you have to do is look up. While LED lighting has become widely utilized in commercial and residential applications, the vast majority of the industrial sector still relies on antiquated, inefficient, and environmentally damaging lighting such as High Pressure Sodium, Metal Halide, and Fluorescents.

LED lighting is the most efficient light on the market and does not contain mercury, which can be toxic in the event of bulb breakage. LED lighting has proven to lower energy consumption by up to 90%, offers advanced controls capabilities, and often qualifies for utility rebates.

Industrial grade LED lighting can also dramatically improve sitewide safety by properly illuminating potential hazards and reducing the need for maintenance at high elevation. LED lighting designed for industrial use also offers superior protection against common causes of fixture failure, such as dust, debris, vibration, and extreme temperatures.

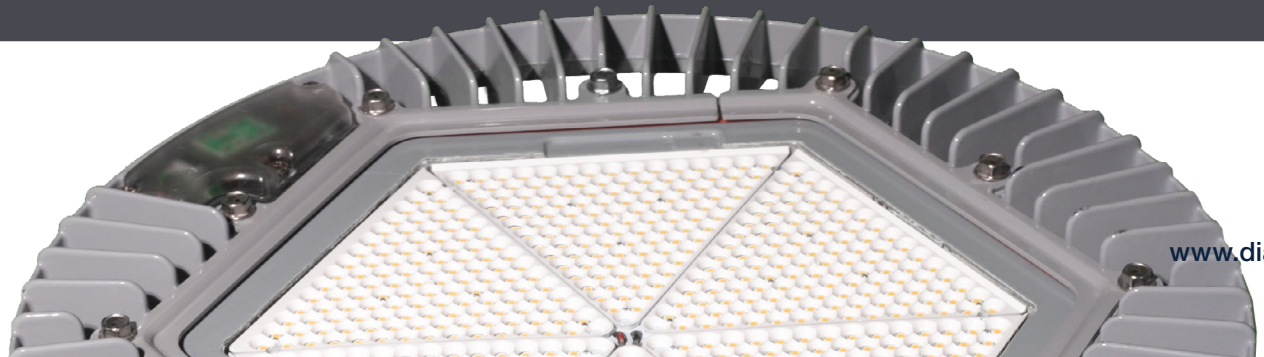
Dialight is the world leader in industrial LED lighting with millions of fixtures installed worldwide, and has a proud heritage of designing best-in-class LED lighting tailored to the unique needs of industrial applications. For over 50 years, Dialight has focused exclusively on environmentally friendly LED lighting technology and is proud to help industrial customers improve safety, reduce carbon impact, and save money on the total cost of ownership of their lighting investment.

Dialight's long-life products also reduce landfill waste with lifespans up to 5X that of traditional lighting technologies and double that of many LED lighting competitors.

When it comes to carbon impact, the difference is significant. Carbon calculations of the usage of Dialight's installed base of LED fixtures vs. incumbent legacy lighting over the course of 2020 show a nearly 2/3 carbon reduction, abating 1,500k tonnes of CO_2.

Dialight recently launched the Ultra-Efficient Vigilant® High Bay, which at up to 200 lumens per watt, is the most efficient heavy industrial high bay on the market. What's more, it has a verified Environmental Product Declaration (EPD), providing transparent information on the environmental impact of the production of the product.

Upgrading to Dialight industrial LED lighting is an easy, cost-effective, low-risk solution for lowering carbon emissions and making fast progress on meeting decarbonization goals.



2

RETHINK SUPPLY CHAIN & LOGISTICS

According to the EPA, over 75% of industry-related greenhouse gas emissions come from their supply chain and shipping is the biggest source of transportation pollution in the world. Heavy-duty trucks account for nearly one-fourth of all transportation greenhouse gas emissions, while 15 of the world's largest cargo ships emit as much pollution a year as 760 million cars.

Industrial companies could dramatically lower their carbon impact by optimizing their supply to shorten shipping routes and reduce dependence on long-haul transportation. By purchasing from suppliers that are located nearer to facilities, leveraging existing technologies, for example, supply chain control tower, to map shorter routes and using different modes of transportation, companies can reduce supply chain emissions and lower their total carbon footprint.

3

AUDIT & OPTIMIZE AIR COMPRESSORS

Compressed air can be up to 40 percent of a manufacturing facility's total energy bill. Air compressors that are not energy efficient can have a significant carbon as well as financial impact.

The first step is to conduct periodic air audits to be sure that energy isn't being wasted. Maintaining your capital equipment is essential in ensuring energy efficiency. Many companies offer air system audits and advanced monitoring programs to protect your investment.Then, there are several options to adapt or replace your air compressors to perform optimally and decrease energy usage including variable speed air compressors.

4

UPGRADE HVAC SYSTEMS

Heating and cooling systems are responsible for roughly 15% of global greenhouse gas emissions, and residential room air conditioners alone will account for over 130 gigatons of CO2 emissions by 2050—nearly 40% of the world's remaining "carbon budget." Many antiquated systems are extremely inefficient and are prone to hydrofluorocarbon leaks that further damage the environment.

Upgrading HVAC systems to newer, more efficient products—especially those from manufacturers that make sustainability a high priority—can drastically lower the industrial carbon footprint. Choose products that have been built with future environmental regulations and demands in mind, and that enable responsible reclamation of refrigerants and end of life services.

5

INSTALL SOLAR PANELS

Fossil-fuel electricity production is the second largest source of U.S. greenhouse gas emissions, which means lowering consumption of electricity from coal- and natural gas-fired power plants will substantially reduce carbon emissions.

Over the last few years, solar power has become not only the cleanest but also the cheapest energy source in the world. Because the majority of manufacturing takes place during the day, most industrial facilities can leverage solar power without the need for energy storage systems. Additionally, the large roof space covering many operations makes them an ideal location for a solar power system.

Tesla's Gigafactory is one prominent example of manufacturing powered entirely by renewable energy, but many more industrial companies are leveraging the benefits of rooftop solar panels. Even better, high-efficiency LED lighting is the ideal companion for solar power, as its low energy demand means lighting will consume a much smaller proportion of overall energy, freeing up more solar power for production needs.

Meeting decarbonization goals will be a top priority in the coming years as companies work overtime to achieve net zero. While some in the industrial sector may feel stuck in their tracks, unsure where to begin, starting with these five practical solutions can put any company on a fast track to for a better future for both their business and the planet. If you would like more information on how LED lighting can help your facility reduce carbon emissions, please click HERE.

Dialight