



NET ZERO FOR UTILITIES

Emission Accounting

Emission Tracking

Emission Reporting

Introduction

Many countries and corporations have embraced the race to zero. However, even if achieved completely, the pledges will still fall short of reaching net-zero targets by 2050. The current climate policies will result in an average global temperature rise of 2.7°C to 3.1°C by the end of the century, which is well below the targeted rise of 1.5°C above preindustrial levels.

Currently, energy generation is the largest contributor to anthropogenic greenhouse gas (GHG) emissions and is responsible for almost three-quarters of the total CO₂ equivalent GHGs we annually put into the atmosphere.

Many Utilities are setting up net-zero goals and committing to achieving net-zero emissions by 2050. The path to achieving net-zero emissions must be a balance between reducing existing emissions and offsetting emissions that can't be removed in the mid-to-long term.

Emission Reduction

Utilities need to shift towards low-carbon sources of generating and distributing energy and resources to reduce overall carbon emissions. Additional investments will be necessary to accelerate innovation in low-cost low-carbon energy storage solutions with higher energy densities to store the energy generated from renewable sources.

Emission Offset

The remaining emissions that can't be reduced must be removed permanently. The industry needs to look at either natural or artificial carbon sequestration techniques to offset its overall carbon footprint.

The first milestone on the road to net-zero is to start accounting for the existing emissions accurately. This will help businesses understand the overall emissions profile based on which strategic decisions can be taken. One of the ways to achieve the goal is to invest in a robust reporting platform capable of aggregating and reporting on the emissions data.

The next exercise for the business is to formulate the emissions mitigation strategy. A roadmap needs to be developed to phase out the existing energy sources and replace them with renewable or non-emitting sources, thus ensuring a seamless energy transition. Figuring out the appropriate pathway and process will need accurate demand forecasting and robust scenario planning capabilities.

For emission scopes that can't be mitigated, businesses can partner with other organizations to develop carbon sequestration programs. Finally, the business needs to track its emissions profile throughout the journey, and report its performance to internal and external stakeholders.

LTIMindtree works with many Electric, Gas, and Water Utilities globally to help develop their GHG inventories and assess the total GHG footprint their business is responsible for. Integrated reporting platforms with intelligent analytical capabilities are developed to help organizations assess and account for their overall carbon footprint. We also conduct strategy workshops with partners to assist in developing energy transition roadmaps and design sustainable supply chains for the future.

The reimagined enterprise strategy coupled with the rich insights from the reporting platform has allowed business leaders to track decarbonization targets accurately and set policy accordingly, thus enabling the organization to fulfill its net-zero target.

LTIMindtree is a global technology consulting and digital solutions company that enables enterprises across industries to reimagine business models, accelerate innovation, and maximize growth by harnessing digital technologies. As a digital transformation partner to more than 700 clients, LTIMindtree brings extensive domain and technology expertise to help drive superior competitive differentiation, customer experiences, and business outcomes in a converging world. Powered by 84,000+ talented and entrepreneurial professionals across more than 30 countries, LTIMindtree — a Larsen & Toubro Group company — combines the industry-acclaimed strengths of erstwhile Larsen and Toubro Infotech and Mindtree in solving the most complex business challenges and delivering transformation at scale. For more information, please visit <https://www.ltimindtree.com/>