Climate change: In the forefront of ecological transformation

Leverage technology to support the transition to a low-carbon world

We are focused on creating shared value within the business, for clients, local communities as well as the planet. Our approach is focused on environmental protection and enabling our clients on their sustainability journey.

Climate change and its ramifications like rising global temperatures, deteriorating air quality and contamination of our water bodies, are among the largest crises looming over the planet in recent times. At Infosys, we recognized the gravity of this issue early on and began focusing on climate action since 2008, through energy efficiency, renewable energy and carbon offset programs.

We achieved Carbon Neutrality in fiscal 2020, 30 years ahead of the 2050 timeline set by the Paris Agreement, as a culmination of our decade-long efforts in environment stewardship. We were carbon neutral for emissions within and outside(1) our boundaries. Our ESG Vision 2030 reinforces our commitment to climate action. We resolved to remain carbon neutral every year going forward.

We have aligned our climate change management process and reporting with leading global standards like GRI, TCFD and SASB. We continue to be on the CDP leadership quadrant for the fifth year in a row for our efforts in environmentalism.

Understanding the need for global and national action, Infosys participated as an Anchor company, in the Carbon Market Simulation exercise, initiated by the World Resources Institute (WRI). The exercise was aimed at understanding and evaluating corporate India’s readiness to enter carbon markets and align India’s efforts to the Paris Agreement. The simulation will provide evidence-based sustainable policy recommendations to help India achieve its climate goals.

Our continuing advocacy in climate action comprises creating awareness through participation in various forums related to low-carbon transition, water and waste management. We partner with thought leaders to enable policy reform, collaborate with academia to research and promote sustainable technologies and publish our work for awareness and wider adoption. During fiscal 2021, we became an industry partner for Solar Decathlon India, an innovation-based competition among post-graduate and graduate students from Indian institutions on next-generation solutions to address climate change in the buildings sector.

Ambition

- Maintain carbon neutrality across Scope 1, 2 and 3 emissions every year
- Reducing absolute Scope 1 and 2 greenhouse gas (GHG) emissions by 75%
- Reducing absolute Scope 3 GHG emissions by 30%

Climate change risks and opportunity assessment in line with TCFD recommendations

This year, we conducted our climate change risks and opportunity assessment based on the recommendations of G20 Financial Stability Board’s Task Force on Climate-related Financial Disclosures (TCFD).

Read more on ESG Data Book 2020-21

Educating our employees on sustainability

#GreenisthenewSwag is a continuous learning series aimed at strengthening awareness on making our ecosystems and lifestyles sustainable. Infoscions learn from best practices in environmental sustainability and are inspired to bring change in their lives and communities.
Environment

Leading the low-carbon transition among communities and businesses

Carbon neutrality
Preserving the planet for our future generations and operating sustainably remains pivotal to how we conduct business. Through our energy efficiency and renewable alternative measures, we were able to reduce and/or avoid emissions within our boundaries significantly. For emissions that remained beyond our control, we used the high-quality carbon offsets generated from our own projects to create lasting social impact.

We are Carbon Neutral for fiscal 2021 for the second year in a row
The above was verified and assured against the PAS2060:2014 standard.
Read more on Carbon Neutrality Assurance +

Approach to ensuring a carbon neutral world
Enabling work from home effectively has helped bring down our overall Scope 1, 2 and 3 emissions by about 46%, while paving the way for a hybrid workplace of the future.

- With most employees working from home, we moved towards a revenue-based intensity tracking for our environmental KPIs as opposed to the conventional employee based intensity.
Read more on ESG data book +

- Pioneered solutions and services to help clients in their low-carbon transition
Read more on ESG microsite +

(1) for emission categories of our carbon neutrality

Where our emissions come from (290,865tCO₂e)

- **Scope 1**
  - Fuel consumption - 3,374
  - Fugitive emissions - 5,304

- **Scope 2**
  - Global energy consumption - 68,673

- **Scope 3**
  - Business travel - 8,068
  - Employee commute - 4,717
  - T&D losses - 12,061
  - Upstream leased asset - 3,156
  - Waste - 127
  - Work from home - 64,634
  - Capital goods - 120,751
Pillars of our carbon neutrality commitment

Energy efficiency Renewable energy Carbon offsets

Setting benchmarks in operational efficiency

Over the past decade, we have been leveraging technology and knowledge to build and run some of the most efficient buildings and campuses globally. These campuses are designed to not only conserve energy and water, but also focus on treating waste responsibly. It is no wonder then that our campuses are synonymous with ‘living labs’ for clean technology.

Energy efficiency

Our energy efficiency efforts involve optimizing operations, leveraging higher-efficiency equipment and eliminating wastage. Most of our energy consumption happens in our buildings. Efficient design of new buildings, deep green retrofits in existing buildings and operational excellence through smart automation were crucial in achieving energy efficiency. They also resulted in a reduction in energy demand, thereby significantly bringing down our operational costs. During fiscal 2021, we implemented over 15 energy efficiency projects across HVAC and lighting spaces. An important aspect of our energy efficiency program is smart automation, deployed across 30 mn Sq.ft of office space. Automation has enabled remote operations, optimization, valuable insight into equipment health and timely corrective action.

Our energy intensity (electricity consumption per capita) has seen substantial reduction. In fiscal 2021, with most employees working from home, the metric for energy intensity was revised from per capita to per mn $ revenue.

Better lighting with lower energy

Concern
Lighting is the third-largest consumer of electricity in buildings after computers and air conditioning. Technological improvements owing to LEDs, improved electronics and better future design enable a significant reduction in lighting energy usage.

Approach
A major lighting retrofit in our Pune campus involved replacing 9,000 CFL-based light fixtures spanning 1 mn Sq.ft space, across 4 buildings, with high efficiency LED lighting and motion sensors. We also responsibly disposed of the replaced CFLs through an authorized e-waste recycler.

Outcome
A reduction of 68% (~417 kW) was achieved on the connected electrical load, ~0.8 mn kWh is expected to be saved annually through this retrofit, with a payback of less than 3.5 years. The retrofit improved the lighting levels in the buildings, thereby enhancing employee comfort and experience.

Phasing out pollutants

Concern
Some refrigerants in air-conditioners are harmful to the atmosphere due to their ozone-depleting and global warming effects. They are being globally phased out in accordance with the Montreal protocol. In India, the target is to phase out R-22, one of the most common refrigerants, by 2030.

Approach
We undertook an accelerated phase-out plan, where R-22 air-conditioning units were replaced with new efficient systems and refrigerants that have zero ozone-depleting potential (ODP). These new refrigerants include R-410a or R-134a. Retrofit projects were taken up across locations and a capacity of 705 TR (cooling capacity) of R-22 based systems were replaced.

Outcome
This has enabled connected load reduction of ~268 kW, and an estimated 1.18 mn kWh of annual energy savings.
We prioritise the shift in our processes to using energy sources that are virtually inexhaustible. This will enhance clean air across communities and result in zero greenhouse gas emissions. We commissioned the first solar photovoltaic (PV) plant at our Jaipur campus in fiscal 2011. Today, our installed capacity across locations is at ~60 MW, comprising on-site and off-site solar PV plants. The on-site solar PV plants include building rooftop and ground-mounted systems.

In fiscal 2021, ~50% of our electricity for our India operations were sourced from renewable sources, including electricity generated from our own solar PV plants and green power procurement.

We are continuously working with governments in various states in India to facilitate the creation of favorable policies so as to increase the share of renewables in our energy mix.

Prioritising rural development

Given the nature of our operations, despite our best efforts in reducing/avoiding emissions within our boundaries, a sizeable emissions basket remains. These include emissions from business travel, employee commute, among others. While we can choose to offset these emissions through the purchase of carbon credits in the market, we opted to invest in projects that would provide larger social and economic benefits to communities. We invest and implement these projects on ground.

We actively identify and work on projects in rural India that also have an emission reduction potential. Our primary intervention is the clean cooking space. This year, we added one new household biogas project in the Vidarbha region of Maharashtra. Today our project portfolio includes 9 carbon offset projects.

Transforming lives across the indigenous Vidarbha settlement in Maharashtra

Our pursuit to identify community-based projects where we can make a difference through carbon offset initiatives took us to Vidarbha, the North-eastern part of Maharashtra, India. The agrarian distress in Vidarbha has long been among the most discussed concerns in India.

The Vidarbha region contributes to the highest share of Maharashtra’s forest cover and has a significant indigenous population. Our studies showed that over 80% of these families still depend on firewood for cooking. The landholding pattern tells us that most of them were small and marginal farmers and owned cattle. This made it a perfect area for implementing a biogas-based carbon offset project.

The project aims to provide clean cooking gas and smoke-free kitchens to 12,000 families. Also, organic farming practices were enabled. The project will create over 180 direct jobs and reduce the drudgery faced by women and children of the family.
Climate change is increasingly becoming an immediate and substantial threat to humanity’s development and prosperity. To avoid the worst impacts of climate change, we must transform – at speed and scale – the way our economies, businesses and communities work. Sustainability has become important for enterprises across industries. Indian Meteorological Department (IMD) reports that 62% of CXOs consider a sustainability strategy necessary to be competitive today, and another 22% thinks it will be in the future – a $1 tn+ market segment. As the expectations on corporate responsibility increase, and there is scrutiny on business operations, enterprises are recognizing the need to act on sustainability in a way that produces tangible outcomes. The good news is that when an enterprise takes sustainability as their purpose, they can increase growth and profitability, while also caring for the people and improving the planet on which they depend.

Over the past decade, we have leveraged technology to build and run some of the most efficient buildings and campuses globally. Campuses that conserve energy, save water and treat waste responsibly. Our campuses are ‘living labs’ for clean technology. Leveraging our expertise, we set up the Sustainability Practice Unit in 2020 with a mission to serve the preservation of our planet by shaping and sharing technology solutions. The practice works collaboratively with business units to scale technology-led solutions to tackle climate change.

Our sustainability philosophy is about ensuring that our business, our clients’ businesses, and our ecosystems are all sustainable. Now, we are bringing our net carbon neutral success to sustainable offerings for our clients’ businesses, throughout the market. We have proven that we understand the metrics of sustainability and global reporting criteria.

In the first year of this journey, we completed 20+ projects facilitating clients in their transition to combat climate change through business-driven IT solutions around CCUS, energy storage, next-generation innovative and sustainable products and services, renewables, energy efficiency, brownfield modernization and transformation, clean energy generation and trading, as well as electric mobility. The coming year is an exciting one for us. We have many opportunities in the pipeline with a focus on energy, chemical, smart utilities, mining, transition to cloud services, predictive PLM, smart spaces, and circularity solutions for sustainable manufacturing, financial services, and consumer product retail.

We signed an MoU with BP to develop an integrated energy as-a-service platform to leverage our and BP’s diverse areas of expertise. While our digital capabilities will be used to manage energy assets, provide low-carbon power, heating/cooling, and mobility to campuses, driven by an AI-based digital platform, British Petroleum’s expertise and resources in renewable solar and wind together with gas for power, fuels, electric vehicle charging, battery swapping and advanced mobility solutions will be crucial. The integrated energy as-a-service offering will be piloted at our Pune campus, and later scaled to our other campuses, smart cities, and industrial and business parks.

Entering an MoU agreement with British Petroleum

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