Natural Capital

While the pandemic is putting to test human systems and resilience, we all have to put together intent and action on another epochal crisis staring at us - Climate Change. The scientific consensus is now very clear that the global temperature rise has to be kept below 1.5 degree Celsius from pre-industrial levels to avoid disastrous impacts of climate change driven events. Action on climate cannot be seen in isolation, but are closely intertwined with water scarcity, biodiversity loss and land use change, chemical and industrial pollution – and its impacts on humanity, especially the most vulnerable among us. Natural capital is a framework that attempts to take into account on how human activities impact the planet's ecosystem.

Wipro's approach to Natural Capital embraces the continuum of

> Initiatives 'within the organization' that focus on reducing the energy, water, waste and biodiversity footprint of our business operations; and

> Engaging on key external programs through a diverse set of partners on the issue of ecology

Governance

Our sustainability governance is informed by our strategic choice to work across both dimensions – business operations and with the larger community. The former is about ensuring that the ecological footprint of our operations is minimized, the organization is compliant with all regulations, and runs its business with integrity. The latter dimension goes beyond the boundaries of the organization and contributes towards development of the larger community.

All key organizational stakeholders, right from the board of directors, executive leadership and different functions have defined responsibilities related to planning, execution, review, evangelization and advocacy of the sustainability charter. Strategic oversight of sustainability programs rest at the corporate level with our Chairman, Board of Directors and Group Executive Council. The goals and objectives are jointly set with inputs from across functions. The quarterly reviews are attended by the Chairman, CEO and Chief HR Officer apart from the Chief Sustainability Officer and Global Head of Operations. We benchmark our performance with our global peers through extensive disclosures as well as a system of rigorous internal and external audits.

Management Approach

At Wipro, we have identified Energy efficiency and Green House Gases (GHG) mitigation, Water efficiency and Responsible Water management, Pollution and Waste management, and Campus Biodiversity as our most material issues and have developed programs around them.

Our Ecological Sustainability Policy, available at https://www.wipro.com/investors/corporate-governance/ forms the structural framework for our environmental programs and management systems. We have been following the guidelines of the ISO 14001 framework for nearly two decades now as one of the cornerstones of our Environmental Management System (EMS). 20 of our campus sites in India and 8 in Australia are certified to ISO 14001 and ISO 45001 (Occupational Health and Safety) standard. Other campuses are benchmarked against the same standard as a part of our internal review/audit process. We were one of the early adopters of Green Building Design with 22 of our current buildings across campuses certified to the international LEED standard (Silver, Gold, and Platinum) during commissioning. We strive to maintain the same standards in the maintenance of our facilities.

We have been responding to Carbon Disclosure Project (CDP) Climate Change Investor and Supply Chain for over 10 years. In addition we apply the Natural Capital Protocol guidelines arrive at the valuation of our natural capital (NCV) which we publish in our annual Environmental Profit and Loss account. In 2020, we also signed up as one of the 9 founding members of the 'Transform to Net Zero' coalition. We are part of the advisory group of CII's Climate Change Council and the India Climate Collaborative. We also chair the Bengaluru chapter of the CII-GBC Greenco chapter.

Strategic Partnerships are key to achieving our goals across the value chain. We work with renewable energy suppliers, energy efficient hardware manufacturers and service providers and other partners who help to reduce our overall GHG footprint including employee commute and business travel footprint.

Environmental Risks

The Enterprise Risk Management and Sustainability functions at Wipro jointly oversee environmental and climate change related risk identification and mitigation. Impacts of extreme weather events, urban water stress, air pollution, waste management and their impacts on employee health and wellbeing are the most material issues we engaged with.

In 2020, we completed a comprehensive climate change risk assessment program, encompassing both physical and transitional risks, for our major operational locations across the globe, covering India (12 cities), China, Philippines, Germany, Romania, the UK and the US. This has been carried out for two scenarios (based on the IPCC defined RCP 4.5 and RCP 8.5) covering medium to long term (2030-2050) time frames. In both scenarios, we see increased probability of higher incidence of water stress, and heat waves across cities. Below are the list of cities and regions where we see an increase in frequency of climate change risks under RCP 4.5 scenario (increase of global temperatures between 1.1 to 2.6 degree Celsius relative to 1986-2005).

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Water Stress	Heat Waves
Water Stress	**Heat Waves**
Delhi	Delhi
Noida	Noida
Bengaluru	Bengaluru
Chennai	Kochi
Kochi	Mysuru
Mysuru	Vishakhapatnam
Vishakhapatnam	Mumbai
Mumbai	
Pune	
Kolkata	

Other than India, impact to Wipro from physical climate risks is more prominent in: Philippines - cyclones, floods, fluctuating rainfall & humidity
China - coastal flooding
Romania - floods, droughts
US - tropical storms and tornadoes
German, US, UK, China and Romania - transitional risk

We are in the process of incorporating the findings of the study into our BCP and Enterprise Risk Management (ERM) framework.

Climate change related impacts

Our risk assessment exercise is undertaken at both the company level and at the asset level. A well-defined Business Continuity Policy prescribes principles to plan for climatic disruptions which could disrupt business objectives. The Corporate Business Continuity Team (CBCMT) governs and guides the standard risk assessment methodology at every location to identify risks which could potentially impact continuity of business and associated financial parameters like revenues and profitability as well as reputational and legal parameters. This group collaborates with various support groups in the organization to assess risks for human resources, facilities and IT infrastructure with identified impacts and their probability/ likelihood as well as the corresponding controls in place. A severity matrix of Low, Medium and High impacts is defined and an identified crisis management group is vested with the responsibility to respond, recover, resume, return and restore from these situations. The detailed climate modelling and impact assessment exercise will help in further calibrating our risk management program.

Energy efficiency & GHG mitigation

Targets

We have SBTI (Science Based Targets Initiative) approved targets for Scope 1, Scope 2 and Scope 3 till 2030 that are based on well below 2 degree temperature goal. We have committed to Net Zero goals by 2040, with absolute emissions reduction of 55% by 2030 with respect to the 2017 base year. These are aligned with the objectives of the Paris agreement to limit temperature rise to 1.5 degree Celsius.

The following are our interim subsidiary goals till 2030

⟩ **Achieve Scope 1 and 2 absolute emissions level of 80,000 tons by 2030 from 2017 baseline**
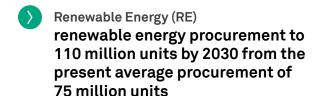
⟩ **Energy Intensity in terms of EPI (Energy Performance Index)**
Achieve EPI of 125 KwH per sq. mt by 2025 from baseline of 181 in 2017 and maintain EPI thereafter

⟩ **GHG Emission Intensity (Scope 1 and Scope 2) on Floor Area (FAR) basis**
Annual reduction of 5 % in GHG intensity from 117 KgCo2 eq./ Sq. Mt. (kgpsm) to 60 kgpsm ofCo2 – eq by 2030

> **Renewable Energy (RE)**
> **renewable energy procurement to 110 million units by 2030 from the present average procurement of 75 million units**

> **Absolute reduction of 55% in Scope 3 emissions for Business Travel, Employee commute and Upstream fuel and energy related emissions by 2030**

Our plan to meet the above goals is through a mitigation hierarchy that is primarily focused on emissions reduction activities in the value chain. As a first principle, we will defer carbon removal projects (offsets) to the net zero target year (2040). This is in line with the science based targets approach of not using offsets for value chain emissions. Over the next few months, we will evolve a detailed plan for the same.

Performance Against Goals

Absolute Emissions
The absolute Scope 1 and 2 emissions (India) for FY 2021 has decreased by 29% from 137,930 tons to 97,348 tons. This is due to low occupancy and resultant lesser conditioned area (50% reduction) at our offices. The dashboard below provides a summary of our Global and India GHG emissions, including data centers. The figures are net emissions for all years, after considering zero emissions for renewable energy procured.

	FY2018-19	FY2019-20	FY2020-21
Offices	113,082	135,537	84,140
Data centers	4,208	2,458	13,207

Emissions Intensity
Our India office space emissions intensity (Scope 1 and Scope 2) is at 108 KgCo2 eq. per Sq. Mt. per annum, up by 24% from FY 2020 – for reasons mentioned in under 'Notes on FY21 emissions'. We are not publishing people based emissions intensity for this year due to the low occupancy of office space.

Energy Consumption
The overall energy consumption from Scope 1 and 2 boundaries (operational and financial control) is 661.5 million Mjoules, compared to 915.3 million Mjoules in the previous year, a decrease of 27.7%. The total energy consumption - electricity and diesel based backup power - for office spaces in India is 151.3 million units; after including the electricity consumption for leased spaces, our global electricity consumption is 174 million units. Data centers in India contribute another 22.9 million units.

For India operations, about 64.85 million units constitute renewable energy procured through independent PPAs (Power Purchase agreements) with private producers. Of this 60.7 million units is with green attributes (zero emissions). Another 13 million units is attributable to renewable resources for our downstream leased spaces. In total, the renewable energy footprint in our portfolio is 73.7 million units.

Office emissions
Though the occupancy is low (average of 5%), the building air conditioning, lighting and allied electrical systems load use would not be proportional. From an assessment of three large campuses representing 35% of total campus area, we see that the conditioned area average was around 50%. Around 70% of the energy consumption for offices is from air conditioning system. Hence, the absolute energy consumption and emissions for buildings is not commensurate with low occupancy. We have also considered 50% of building area for calculating the area intensities.

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Energy Intensity

EPI for company-owned office spaces, measured in terms of energy per unit area has been increased to 194.7 KwH units per sq. meter per annum (from previous years 144 KwH). This is because while the conditioned area has reduced by half on an average, the energy consumption has reduced by 32% compared to the previous year for reasons mentioned earlier.

Scope 3 Emissions

Our total scope 3 emissions for FY 2020-21 is 350,336 tons of Co2 eq, which accounts for 78% of our total footprint. Out of the 15 categories of scope 3 reporting as per the new GHG corporate value chain standard, we are currently reporting on all of the 8 categories applicable to us.

18,055
Employee Commute

13,538
Business Travel

140
Waste

53,937
Upstream Fuel+Energy emissions

215,830
Purchased goods / services
(including capital goods)

12,606
Upstream and Downstream Leased Assets

36,230
Work From Home emissions

350,336
Total

■ Tons (CO$_2$ eq.)

*Purchased goods and services are based on material group and category spend for Tier 1 suppliers. If we include all tiers, the emissions are estimated to be around 500,000 tons. We aim to engage with top suppliers (contributing to 80% of impact) to arrive at the next level of detail in understanding emissions breakdown and planning mitigating actions.

Work From Home Emissions - Calculation Methodology

During the reporting year, most of the employees in India and overseas worked from their places of residence. We have estimated the emissions due to WFH scenario for FY21, and have included in our Scope 3 emissions portfolio.

The methodology* is based on incremental energy consumption (electricity and natural gas) in a household in which members have transitioned to working from home, causing an increase in residential energy use. These are averages of select countries covered by various studies on remote work. The baseline energy consumption per household was derived based on IEA data of residential energy consumption by population of the country. We have considered the number of employees working from home across the following geographies – ANZ and APAC, EMEA; and LATAM & North America to calculate WFH emissions.

The total emissions due to WFH globally is estimated at 36,230 tons of Co2 eq, with the US contributing to 36% and India contributing to 23%. Though 80% of the employees are based in India, its contribution to emissions is less due to significant lower energy intensity per capita compared to other countries.

* Anthesis paper on Estimating Energy Consumption & GHG Emissions for Remote Workers

Total Emissions

The overall GHG emissions across all scopes is 447,683 tonnes, the main contributors to which are: Purchased Goods and Services (48.7%), Electricity – Purchased and Generated (19.1%), Upstream Fuel and Energy emissions (12%) and Work From Home emissions (8%).

GHG Mitigation Measures

Our five year GHG mitigation plan consists of three key elements – Energy Efficiency (Reduce), Renewable Energy (RE) Purchase (Replace) and Business Travel Substitution (Reduce and Replace); of this, RE procurement will contribute the maximum, 80% share to GHG emission mitigation strategy for Scope 1 and 2.

Energy Efficiency

These measures include new retrofit technologies to improve Chiller and Air Handling Units (AHUs), integrated design and monitoring platforms. The Global Energy command center aggregates Building Management System inputs on a common platform to optimize operational control and improve energy efficiency.

Since 2007, we have been working on a server rationalization and virtualization program, through which we have decommissioned old physical servers and replaced the processing capacity with virtualization technology on fewer numbers of servers. As of March 2021, we have 13,133 virtual servers (10,155 in March 2020) running on 758 physical servers which contributes to an energy savings of approximately 57.9 million units in the reporting year. The savings showed an increase of 21% over the previous year.

Virtual Desktop Infrastructure (VDI) provide high-capacity scalable infrastructure with On Demand provisioning, High Availability and High Performance Computing environment. We have enabled 9,333 VDI's to end users across locations. Thin clients being used in one of our location, which consumes less energy (80% less) compared to Desktop, resulting in savings of 1.2 million units.

Procurement

For the reporting period of FY 2021, RE purchase contributed to approximately 73.7 million units or 42.6% of our total India energy consumption of which 12.9 million units are for downstream leased spaces. For details on green procurement in IT hardware and other categories, please see 'supplier section'.

Business Travel and Employee Commute

Due to the pandemic, the business travel footprint was 11% and employee commute was 21% of the previous years footprint. This includes (i) travel by air, bus, train, local conveyance and hotel stays for the category of business travel and (ii) personal cars two wheelers, public transport and Wipro arranged transport for employee commute. As things return back to normalcy, we are looking to transition to low emission travel choices and policies.

Over the past few years, we have taken steps to facilitate a shift towards improved access to public transport for employees (buses, commuter trains) and carpooling. Our carpooling initiative till the previous year had over 1 Lakh registered users across locations. In the reporting year, we had negligible car pooling trips due to majority of employees working from home as well as the requirements of COVID-19 appropriate behavior.

We are the first major Indian business to join EV100, a global initiative by The Climate Group , in our commitment to transition our global fleet to electric vehicles (EVs) by 2030.

Water efficiency and responsible use

At Wipro, we view water through inter-related lens of efficiency of use and conservation coupled with our approach of engaging with urban water as a boundaryless issue. Our articulated goals are therefore derived from this approach.

Water Efficiency

› **Reduce both absolute and area based intensity consumption of externally procured freshwater** for our operations by 50% by the year 2030 with respect to baseline consumption of FY17

› **Contribute to deeper understanding of systemic challenges of urban water in the major cities in India we operate from**

Water Responsibility

To ensure responsible water management in proximate communities, especially in locations that are prone to water scarcity. We are also collaborating on building capacity and advocacy platforms at the city level for integrated urban water management.

Freshwater recycling and efficiency

Freshwater consumption has seen a drop of 47.5% from last year to 850 million litres. The recycled water generation was 407.5 million liters, with a recycling ratio of 32%. Due to the low average occupancy (6.5%) of our offices due to the pandemic, the per capita consumption of water is not comparable. The fresh water consumption has not seen a commensurate reduction for the same reasons as mentioned in energy consumption – use of higher amount of fresh water for HVAC systems of the conditioned spaces as well as lower efficiency and loading of recycling plants. Consequently, the freshwater area intensity at 1.094 KL per square meter has shown a marginal increase of 4.8% compared to the earlier year. We have achieved 12.5% reduction in absolute freshwater consumption from FY16 till the previous year FY20.

Freshwater use-India Offices

Freshwater (KL)

FY2020-21	850,151
FY2019-20	1,621,501
FY 2018-19	1,518,934

Area Intensity

FY2020-21	1.094
FY2019-20	1.044
FY 2018-19	0.957

People Intensity

FY2020-21	6.854
FY2019-20	0.930
FY 2018-19	0.951

Sourcing of Water

Our water is from four sources – private water (mainly ground water delivered by tanker water suppliers), municipal water, water supplied by industry associations, in-situ ground water and harvested rain water – with the first two sources accounting for nearly 94% of the sourced water. Water purchased from private sources is primarily extracted from ground water. Ground water contributes to nearly 46% of our total freshwater consumption across cities in India. Our urban/ peri-urban facilities located in three states – Karnataka, Tamil Nadu and Telangana, are located in water stressed basins. The water supplied by the municipal bodies is sourced primarily from river or lake systems. The table below provides parentage of water sourced from different freshwater sources during the reporting year.

41.7%
A. Private water (mainly Ground water)

54%
B. Municipal and industry bodies

4.3%
C. Ground water

1%
D. Rainwater

Collaborative advocacy on water

Our long term projects on Urban Water in cities are providing key policy insights and levers for citizen engagement and advocacy on ground water management and its relationships to surface water flows and water bodies like lakes/tanks and wetlands. We bring together hydrogeologists, academia, government, citizen groups for a nuanced understanding of issues Catalyzing citizen action on the ground.

We are continuing our work in **Bengaluru** by catalyzing more on-the-ground engagements across city on rain-water harvesting. This is backed up by targeted advocacy work through case studies, engagement with the city utility administrators and development of national guidelines. The program will also monitor and estimate the groundwater (shallow aquifer) potential for city, and recommend suggested practices for better management and integration with utility supply. In **Pune**, we are building a first of its kind city level data, interpretation and decision support platform for ground water management. This will closely work with citizen groups as well as the municipal authority to build appropriate capacities and catalyze on-ground interventions. In **Chennai**, through the small grants program we are supporting three community based interventions on water. In **Hyderabad,** we are putting together a knowledge repository of water in the city – consumption, sources, water bodies, built infrastructure and impacts on water flows. It will also aim to create a network of communities, water practitioners , curate workshops/exhibits and support on ground interventions.

Collaborative advocacy on sustainability

We are actively engaged in several forums that advance advocacy on climate change and other related environmental impacts. Examples include the 'Transform to Net Zero Coalition', the World Economic Forum's Climate Change working group, 'Business for Nature' coalition, 'CII Greenco' and 'India Climate Collaborative'.

A specific city-level initiative we convened is the 'Bengaluru Sustainability Forum'.

Natural Capital

Pollution and waste management

Pollution of air and water poses one of the most serious threats to community health and societal welfare. Managing these 'commons' in an urban context requires business organizations to look beyond its own boundaries and adopt an integrated approach.

Our waste management goals are:
1: 100% of organic waste generated from business operations is recycled for effective reuse.
2: To ensure by 2025 more than 98% of other categories of waste is recycled as per appropriate national standards with less than 2% reaching landfill (excluding construction and demolition waste).

Our waste management strategy includes:

Regular monitoring of air, water and noise pollution to ensure they are well within regulatory and industry norms

Reducing materials impact on the environment through recycling and reuse

Arranging for safe disposal of waste that goes outside our organizational boundaries. To operationalize our strategy, we segregate and monitor waste processing across 13 broad categories and nearly 40 sub categories

The summary of our performance on solid waste management (SWM) is as follows:

→ 90% of organic waste is recycled in house and the balance sent as animal feed outside the campus.

→ Close to 100% of the inorganic waste is recycled through approved partners.

→ 52% of the total mixed solid waste and scrap is currently recycled and the rest sent to landfills. Our target is to improve this to 80% by 2023.

→ Biomedical and hazardous waste is incinerated as per approved methods.

→ All our E-waste is currently recycled by approved vendors.

Other elements: We monitor diesel generator stack emissions (NOX, SOX and SPM), indoor air quality (CO, Co2, VOC's, RSPM), treated water quality and ambient noise levels across 25 key locations every month. All of these meet the specified regulatory norms.

Total waste disposed during FY 2021 was 2,087 tons – a reduction of 58% compared to the previous year. This is primarily due to lower occupancy in our campuses due to the pandemic. For the reporting year our effective safe disposal percentage was 96%.

Urban Biodiversity

The twin primary aims of our campus urban biodiversity program have been to convert our existing campuses to biodiversity zones and to develop them as platforms for wider education and advocacy, both within our organization and outside.

Our biodiversity projects integrate multiple benefits of water conservation, ambient temperature reduction, air pollution mitigation and employee engagement. In this regard, we have drafted a set of biodiversity management guidelines for adoption across our campuses.

Butterfly Park

Flagship program
completed in 2013

Park witnesses hundreds of migratory butterflies every year

Wetland Park

Use of recycled and excess rain water

106 species of plants

9 thematic sections
Educational and information signages

Pune Biodiversity Project

10 thematic gardens

250+ species of native plants

Bengaluru Sustainability Forum (BSF)

This forum was set up in early 2018 and convened by Wipro along with the National Center for Biological Sciences. This year due to the pandemic, all the outreach activities were online. In the year, we hosted a reading and discussion series on the UN sustainable goals, called "Reading for change". It curated conversations with authors of six leading books related to health (pandemic), gender equality, quality education, sustainable cities, clean energy and reduced inequalities.

We also hosted a "Climate Conversations" series in partnership with the Bangalore International Center and a workshop on the food economy of Bengaluru in association with Science Gallery, Bengaluru. We are also working on a series of podcasts on various urban sustainability dimensions.

Wipro's Natural Capital Valuation Program

Natural capital valuation is a rigorous framework that assesses and quantified impacts - positive and negative - on nature or natural capital on account of a company's operations and value chain. Natural Capital Impacts are calculated across six key performance indicators (KPIs) namely, GHG emissions, air pollution, water consumption, water and land pollution, waste generation and land use change. The methodology

uses a value for the social cost of carbon that varies by country and geography – typically, it uses a higher discount rate for developing countries as compared to developed countries.

For calculating impacts due to air pollution only human health Impacts were considered as they contribute to 95% of total impact from air pollution. Land use valuation was based on net change in economic value due to loss of ecosystem service and was calculated only for the electricity procured from the grid mix, since for the direct operations, land use change is not considered to be material. For calculating impact due to water consumption, the following factors were taken into consideration – impact on human health, incidence of infectious disease and impact of energy consumption.

In FY2021, the total environmental costs related to Wipro's operations and supply chain were quantified at $0.20 billion ($0.23 billion in FY20), of which operational and supply chain impacts contribute 8% ($16.3 million) and 92% ($187 million) respectively. Of the operational impacts, the highest contribution is from electricity consumption at 80% ($12.8 million). Within Wipro's upstream supply chain, purchased goods and services across all tiers of suppliers (88%; $161 million) and fuel and energy related activities (12%; $22 million) are the top two impact categories. In terms of the sources of impact, air pollution (57%; $117.6 million), greenhouse gas emissions (30%; $60 million) are the top two contributors.