

Corporate
Sustainability
Report | 2018
2019



Contents

About TCS	3
About the report	4
CEO's Message	5
Organizational Profile	8
TCS by numbers	9
Stakeholder Engagement and Materiality Definition	10
▪ Material Topics	13
PROFIT	15
▪ Corporate Governance	15
▪ Relative Outperformance	20
▪ Strategy for Business Sustainability	20
▪ Structured for Agility	20
▪ Investments in Research & Innovation	21
▪ Information Security	21
▪ Data Privacy	22
PEOPLE	23
▪ Talent Management	23
▪ Talent Acquisition	24
▪ Talent Diversity	25
▪ Talent Development	25
▪ Competitive Compensation	26
▪ Talent Retention	26
▪ Occupational Health and Safety	26
▪ Community Initiatives	28
STEM EDUCATION	29
▪ Ignite My Future in School	29
▪ TCS Digital Explorers	30
▪ Artificial Intelligence (AI) and Robotics	30
▪ Australia GoIT Girls - Women in STEM	31
▪ STEM Education through Drones	31
▪ STEM in China	31
▪ Lab on Bike	32
▪ LaunchPad and InsignT	32
BRIDGING THE DIGITAL DIVIDE	33
▪ Adult Literacy Program	33
▪ BridgelT	35
▪ IT Employability	36
▪ Digital skills for the visually impaired	37

▪ Cancer Care	38
▪ DiNC enabled Care Continuum	39
▪ Other Initiatives	40
▪ VHAB	40
▪ Digital Impact Square (DISQ)	40
▪ Microbiome-Based Diagnostic Solutions	40
▪ Integrated Solutions for Elderly Care (Singapore)	40
▪ Accessibility Platform for Digital Publishing (India)	40
▪ TCS Research Scholarship Program (India)	40
▪ Digital Farming and Fishing (India)	41
▪ CSpashshala (India)	41
▪ Pan IIT Alumni Leadership Series (PALS)	41
<hr/>	
Planet	42
▪ Reducing the Carbon Footprint	42
▪ The Path to Energy Efficiency	44
▪ Other Emissions	45
▪ Value Chain Emissions	45
▪ Water Conservation	46
▪ Waste Reduction and Reuse	46
▪ Responsible Sourcing	47
▪ Employee Engagement	47
<hr/>	
Awards and Recognition	49
<hr/>	
GRI Context Index	51

About Tata Consultancy Services (TCS)¹

TCS, an IT services, consulting, and business solutions provider, has been partnering with the world's largest businesses in their transformation journeys for the last fifty years. TCS offers a consulting-led, cognitive-powered, integrated portfolio of business, technology, and engineering services and solutions. This is delivered through its unique, Location-Independent Agile delivery model a benchmark of excellence in software development.

A part of the Tata group, India's largest multinational business group, TCS has over 420,000 of the world's best-trained consultants in 50 countries. The company generated consolidated revenues of US \$20 billion for the year ended March 31, 2019 and is listed on the BSE (formerly Bombay Stock Exchange) and the NSE (National Stock Exchange) in India. TCS' proactive stance on climate change and award-winning work with communities across the world have earned it a place in leading sustainability indices such as the Dow Jones Sustainability Index (DJSI), MSCI Global Sustainability Index and the FTSE4Good Emerging Index.



We are a member of the GRI Community and support the mission of GRI to empower decision makers everywhere, through GRI Sustainability Reporting Standards and its multi-stakeholder network, to take action towards a more sustainable economy and world.

¹102-1, 102-2, 102-5

About the Report²

TCS publishes the Sustainability Report on an annual basis. The last report was published for FY 2018. The current report, for FY 2019 (year ending March 31, 2019), is the 13th such report published by TCS till date. This report has been prepared in accordance with the GRI Standards: Core option. The report's boundaries and exclusions have been listed below:

Data	Basis	Exclusions
Financial	TCS' consolidated global operations ³	None
Human Resources	TCS' global operations, including wholly owned subsidiaries	Subsidiaries not wholly owned by TCS, accounting for 2.5% of the consolidated headcount
Environmental	Delivery centers in India, the UK, Hungary, Singapore, China, Peru, Argentina, Philippines, Brazil, Chile, Uruguay, Colombia, and Mexico	Remaining delivery centers, accounting for ~4% of the headcount

We have highlighted the employed data measurement techniques and the basis of calculations and estimates in the relevant areas of this report. TCS does not believe there is any substantial divergence from the GRI Disclosures Protocols.

The scope, boundaries, and methodology for data analysis in this document remain the same as in the last reporting period. There has been no restatement of information or changes in the material topics or boundaries provided in the prior year's report. The data has been sourced from Ultimatix, our core enterprise platform which runs internal processes related to HR, finance, and project management. This portal is also used by employees to submit their opinions and feedback. All the data is reviewed by relevant third-party auditors as part of ISO and financial audits.

This report has been externally assured by Ernst and Young. The scope and basis of assurance have been described in the assurance letter issued by Ernst and Young. The Board was not involved in seeking this assurance.

²102-10, 102-45, 102-48, 102-49, 102-50, 102-51, 102-52, 102-54, 102-56

³Complete list of TCS subsidiaries available in the Annual Report FY 2019, page 238. (GRI 102-45)

CEO's Message⁴

Our core competence is our ability to attract, train, retain, and engage the best talent across the world. By hiring local talent wherever possible, we are creating thousands of well-paying jobs in the communities that we touch, directly and indirectly, rejuvenating local economies and providing visibility to young people across the world around long term careers in technology. This strategy has de-risked our business model, opened up new talent pools, and built greater diversity and dynamism in the organization. Our workforce today has representation from 147 nationalities, with women making up 35.9% of the base.



Dear Stakeholder,

It gives me immense pride to present to you the thirteenth edition of our Sustainability Report.

We had a standout year in FY 2019⁵, crossing two important milestones. Our annual revenue crossed the \$20 billion figure, a 20-fold growth over the last 16 years. Our market capitalization crossed the \$100 billion mark, making us the first Indian company to achieve this in the last decade, and one of the Top 100 most valuable companies in the world.

The strong performance was driven by the rapid mainstreaming of digital technologies, and our expanding participation in our customers' growth and transformation initiatives. This is just the latest instance of TCS reinventing itself, as it has with every new technology cycle over the last five decades. Our values and the Tata Code of Conduct have served as our moral compass through each of these transformations.

At the core of the resilience and longer-term sustainability of our business model is our customer-centric worldview that helps us spot trends early and embrace business opportunities by continually investing in research and innovation, developing newer capabilities, reskilling our workforce, and launching new services, solutions, products and platforms, while discharging our social and environmental responsibilities. This strategy has resulted in deep and enduring customer relationships, a vibrant and engaged workforce, a steady expansion of our addressable markets, and a proven track record in delivering longer term stakeholder value.

Our verticalized, modular organization structure, consisting of over 150 business units, has helped engender high levels of accountability, entrepreneurial agility and responsiveness, making us an industry benchmark in customer satisfaction and helping us achieve strong growth despite our scale. The structure has also helped us build deep domain knowledge, and foster customer-specific contextual knowledge that has been critical in our ability to differentiate ourselves.

Our sustained investments in research and innovation, have resulted in innovative solutions to business critical problems, and a large portfolio of intellectual property which differentiate us and position us as an innovation partner to our customers. In addition, we have developed an extended innovation ecosystem wherein we partner with major technology providers, as well as start-ups and academic researchers, to design, launch and jointly market industry-specific solutions that leverage our domain knowledge and their technology.

Our core competence is our ability to attract, train, retain, and engage the best talent across the world. By hiring local talent wherever possible, we are creating thousands of well-paying jobs in the communities that we touch, directly and indirectly, rejuvenating local economies and providing visibility to young people across the world around long term careers in technology. This strategy has de-risked our business model, opened up new talent pools, and built greater diversity and dynamism in the organization. Our workforce today has representation from 147 nationalities, with women making up 35.9% of the base.

⁴102-14

⁵See Letter from the CEO, TCS Annual Report 2018-19

We reimagined our entry level hiring in India, illustrating how our business initiatives are closely aligned with the needs of the community. Instead of limiting our fresher hiring to only the on-campus offers made at institutions we traditionally visited every year, in FY 2019, we opened up the opportunity to all engineering graduates across the country, with the TCS National Qualifier Test held on the iON™ Assessment platform. The test attracted over 280,000 students from over 1,800 colleges, across 100 cities.

This not only expanded our catchment area across the country, and gave access to a much larger pool of the most talented youngsters in India, it also made our recruitment far more inclusive, democratizing the opportunity to pursue fast track careers in TCS to talented youth across the nation, regardless of where they studied.

Our distinctive, people-centric culture differentiates us in the job market. At a time of immense technology change, eschewing the conventional approaches to talent refresh, we doubled down on investing in organic talent development initiatives. Over the last few years, our digital learning platform – which enables learning anytime, anywhere, and on any device – has empowered thousands of individuals to acquire the skills they need to pursue their career aspirations, at their own pace. At the end of FY 2019, over 320,000 employees were trained in digital technologies.

TCS' progressive workplace policies, and a philosophy of valuing individuals for their domain expertise and customer-specific contextual knowledge, while continually investing in upgrading their technology skills have resulted in outstanding business outcomes. Our attrition rate in IT services was at 11.3%, the lowest in the industry. We were recognized as a Global Top Employer for the fourth consecutive year by the Top Employers Institute, the only one among the Top 10 IT services brands to get this recognition.

Our concern for people's wellbeing extends beyond the boundaries of our organization, to the community

at large. Our purpose-driven worldview comes from deep within, from our values, and from our unique ownership structure. 71.9% of TCS' equity is held by Tata Sons Ltd, and two thirds of the holding company is owned by the philanthropic Tata trusts which fund community initiatives in education, healthcare, nutrition and rural livelihoods. Consequently, much of the profit we generate goes back to the community, giving us immense pride in belonging to an organization where business success results in good for the society at large.

In addition, we work with local communities across the world in the areas of education, skill development, health and wellness, and the environment, mapped to UN Development Goals. We are big supporters of global initiatives like the UN Global Compact, the

Carbon Disclosure Project and GRI⁶. A significant part of our community outreach happens through the volunteering efforts of our employees. In FY 2019, TCSers volunteered over 600,000 hours for social and environmental causes dear to them, in their respective communities.

One of our big focus areas is on reducing the digital divide that is at the heart of many societal inequities across the world. In North America, UK, Europe and Australia, we are taking on the

cultural inhibitions that are causing skill deficits and gender imbalances in STEM. Programs like goIT, IT Futures and Ignite My Future encourage and inspire middle school students – especially girl students – to pursue educations and careers in technology.

In India, we are partnering non-profits and governmental agencies to impart functional literacy to adult learners, running employability programs for disadvantaged students from rural areas, and empowering individuals from under-privileged backgrounds to become digital entrepreneurs. We have used the power of technology to transform outpatient services at premier hospitals to eliminate over-crowding and reduce waiting time for patients. We have set up a digital nerve center for leading cancer research centers in India to collaborate and

TCS' progressive workplace policies, and a philosophy of valuing individuals for their domain expertise and customer-specific contextual knowledge, while continually investing in upgrading their technology skills have resulted in outstanding business outcomes.

⁶102-12

extend tertiary care to remote locations. We have built the enabling platforms to realize policy initiatives to extend banking to millions of unbanked Indians.

On the environmental front, our concerted efforts to reduce our carbon and resource footprint – including the use of green IT, green buildings and intelligent energy management using our own IoT-based solution – have helped us reduce our specific carbon footprint by 56% compared to baseline year 2008. Our specific water consumption has reduced by 19.4% over the baseline year.

Beyond our own footprint, we are helping our customers reduce their carbon footprints through the creative use of digital technologies, whether it is a Middle Eastern retailer who is using our remote energy management solution to cut energy consumption, or Japanese power plants which are using our digital solution that leverages IoT, AI and machine learning to continually recalibrate their boilers and bring down NOx emissions.

By helping our customers accomplish their growth and transformation objectives, we are getting embedded deeper in their business ecosystems, and becoming an industry staple. This is resulting in greater visibility, predictability and sustainability for us.

When we look ahead, we see a vast, expanding market opportunity for TCS, led by greater leverage of technology by enterprises for competitive differentiation, structurally driving up technology intensity across industries. We are already benefiting from these trends, and that will only increase with time.

By helping our customers accomplish their growth and transformation objectives, we are getting embedded deeper in their business ecosystems, and becoming an industry staple. This is resulting in greater visibility, predictability and sustainability for us. By staying true to our values and remaining rooted in the community, we are well poised to continue on our journey to create ever more value for our stakeholders.

Thank you,

Rajesh Gopinathan
Chief Executive Officer and
Managing Director

Organizational Profile⁷

TCS has a global presence, deep domain expertise in multiple industry verticals, and a complete portfolio of offerings – grouped under consulting and service integration, digital transformation services, cognitive business operations, and products and platforms. The five key vertical clusters are: Banking, Financial Services & Insurance (BFSI), Retail and Consumer Business, Communication Media and Technology (CMT), Manufacturing, etc. The last category includes Life Sciences and Healthcare, Energy, Resources and Utilities, Public Services among others.

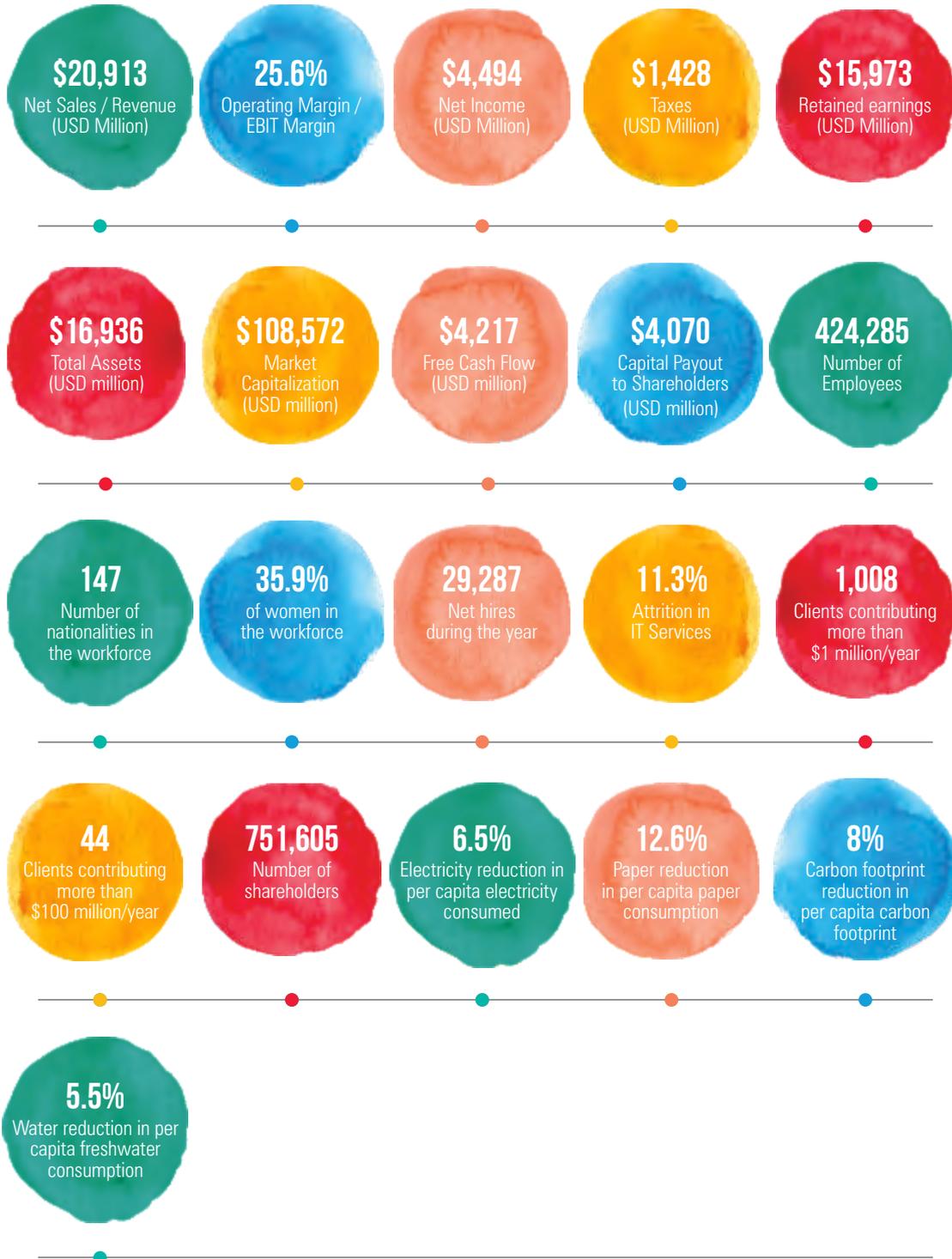
Our geographic footprint covers North America, Latin America, the United Kingdom, Continental Europe, Asia Pacific, India, and Middle East and Africa.

Geography	Offices	Revenue Breakup %
North America	21	51.0
Latin America	20	2.0
UK	28	15.6
Continental Europe	36	14.1
India	144	5.7
Asia Pacific	29	9.5
MEA	15	2.1

Figure 1: Office distribution and revenue break-up by geography

⁷102-2, 102-4, 102-6

TCS by numbers⁸



⁸102-7, 201-1: Information on direct economic value generated and distributed on an accrual basis is reported on page 115 and details of spend on community initiatives are reported on page 100 of TCS' Annual Report 2018-19

Stakeholder Engagement and Materiality Definition⁹

TCS engages with a broad spectrum of stakeholders – internal and external – to understand their concerns and priorities and uses these to guide policy formulation and decision making. Business considerations govern decisions about which stakeholders to engage with, in what manner, and with what periodicity.

Key stakeholders are identified through a prioritization exercise undertaken in consultation with our company's management. Figure 3 describes TCS' stakeholder interaction framework, including the topics of most significance to each group. Some other stakeholders that we closely engage with – such as industry analysts, equity analysts, and the media – have not been mentioned here because they are proxies for other named stakeholders – such as customers, shareholders, and society at large, respectively.

Stakeholder	Interfacing Group	Engagement Types by Frequency	Material Topics
Customers	Sales/Presales Marketing Client Partner Delivery teams Senior management	As needed: Project-related calls and meetings; project management reviews; relationship meetings and reviews; executive meetings and briefings; customer visits; responses to RFIs/RFPs; sponsored events; mailers; newsletters; brochures	Investments and capabilities in digital technologies; quality of work; data privacy and security; ethical behaviour; customer growth and transformation opportunities, fair business practices, community development
		Continuous: TCS website; social media (LinkedIn, Twitter, Facebook, Instagram, YouTube)	
		Half-yearly: Customer satisfaction surveys	
		Annual: Customer summits, Innovation days; Executive customer surveys, Sponsored Community events	
Employees	HR Senior management	As needed: Town halls; roadshows; project or operations reviews; video conferences; audio conference calls; PEEP; PROPEL (employee forum); one-on-one counselling	Safe and comfortable workplace; diversity; engaging assignments; learning opportunities; career development; compensation structure

⁹102-40, 102-42

Stakeholder	Interfacing Group	Engagement Types by Frequency	Material Topics
		<p>Monthly: @TCS (in-house magazine)</p> <p>Continuous: TCS website; Ultimatix Notice Board; CEO Connect; CTO Blog; Corporate Corner; JustAsk; IdeaMAX; Knome; dipstick surveys; grievance redressal system</p> <p>Annual: PULSE (employee feedback survey); long-service awards; sales meets; Blitz (business planning meet)</p>	
Shareholders	Investor relations Company secretary Senior management	<p>As needed: Press releases and press conferences; email advisories; facility visits; in-person meetings; investor conferences; non-deal roadshows; conference calls</p> <p>Quarterly: Financial statements in Ind AS and IFRS; earnings call; exchange notifications; press conferences</p> <p>Continuous: Investors page on the TCS website</p> <p>Annual: Annual General Meeting; Annual Report</p>	Demand sustainability; financial sustainability; corporate governance; transparency and disclosure; social and environmental sustainability
Academic institutions	HR Senior management CTO	<p>As needed: Academic Interface Program; Co-Innovation Network (COIN™) meetings</p> <p>Continuous: TCS website; academic portal</p> <p>Annual: Sangam (high-level academic conference); campus recruitment</p>	Job creation; curriculum enhancement; internship opportunities; faculty development

Stakeholder	Interfacing Group	Engagement Types by Frequency	Material Topics
Head-hunters; staffing firms; other suppliers	HR	One-time: RFIs/RFPs; empanelment process	Demand sustainability; talent acquisition; ethical behavior; fair business practices; governance; creditworthiness
	Business units Procurement	As needed: Transactional meetings; periodic reviews; surveys	
Partners and collaborators	Alliance management	As needed: Meetings/calls; COIN™ meetings; visits; partner events	Ethical behavior; fair business practices; governance; sustainability of demand; creditworthiness
	CTO	Monthly: Conference calls	
		Quarterly: Business reviews	
		Annual: Partner events	
Industry bodies	Corporate affairs Finance Senior management	As needed: Conferences and seminars; working committee meetings; surveys; other meetings	Demand sustainability; financial stability; governance; ethics and compliance; fair business practices
		Annual: Conferences; summits	
Governments; NGOs; local communities; society at large	Government business unit	As needed: Governance RFIs/RFPs; presentations; project meetings; reviews; calls and meetings; surveys; consultative sessions; field visits; due diligence; conferences and seminars; surveys; press releases; press conferences; media interviews and quotes; sponsored events	Financial stability; quality of work; data privacy and security; ethical behavior; fair business practices; good governance; ethics and compliance; support for developmental programs; job opportunities; responsible citizenry; environmental impact
	Corporate affairs HSE/Finance teams CSR team		
	Corporate Communications team Senior management	Continuous: TCS website	

Figure 3: TCS' framework for stakeholder interactions and identification of material topics¹⁰

TCS is a member of a number of industry bodies such as NASSCOM and CII in India, and works closely with these for shaping public policy¹¹.

¹⁰102-43, 102-44

¹¹102-13

Material Topics¹²

Stakeholder interactions of the various interfacing groups within TCS result in the identification of a broad funnel of issues important to each of the constituencies. Customer satisfaction surveys, employee surveys, first-hand feedback from investors, and discussions with internal and external stakeholders serve as formal inputs in prioritizing the identified issues to each of the stakeholder groups. For this report, internal stakeholders included senior management members and employees, whereas external stakeholders include shareholders, suppliers, contractors, NGOs, and academic institutions.

During the Sustainability Council's deliberations, senior executives assess the impact of each of the most significant issues in order to arrive at a prioritized list of material topics with significant economic, environmental, and social impacts on TCS' business, reputation, and operations, forming the basis for this report. These topics are listed in Figure 4.

Material Topics	Why this is Material	Key Aspects	Boundary of Impact	GRI Disclosures
Corporate Governance	Strong corporate governance that takes into account stakeholder concerns, engenders trust, oversees business strategies, and ensures fiscal accountability, ethical corporate behaviour, and fairness to all stakeholders is core to achieving the organization's longer term mission.	<ul style="list-style-type: none"> - Governance structure and composition; anti-corruption - Additional aspects: independence of the Board; avoidance of conflict of interest; Board oversight; fiscal oversight; disclosure and transparency; ethics and compliance 	Internal	102-18, 102-16
Business Sustainability	A financially strong, viable business that is able to adapt to changing technology landscapes to remain relevant to customers and profitably grow its revenues year-on-year is essential to meet longer term expectations of stakeholders.	<ul style="list-style-type: none"> - Economic performance - Additional aspects: demand sustainability; business agility; investments in innovation; financial sustainability 	Internal	201-1
Talent management	The company's ability to attract, develop, motivate, and retain talent is critical to business success.	<ul style="list-style-type: none"> - Employment; labour management; relations; diversity and equal opportunity; training and education - Additional aspects: talent retention; employee engagement; health and safety 	Internal	401-1, 3 402-1 403-1 404-1 405-2

¹²102-47

Material Topics	Why this is material	Key aspects	Boundary of Impact	GRI Disclosures
Social responsibility	Business has to be rooted in community and be aligned with its larger interests. Any adversarial relationship can hurt the company's ability to create longer term value.	- Local communities Additional aspects: job creation; taxes generated; education and skill development; health and wellness; environmental stewardship	External	201-1, 413-1
Environmental footprint	Business sustainability is linked to the planet's sustainability. Moreover, good environmental practices result in greater operational efficiency, adding to financial sustainability.	- GHG emissions; energy; water management; effluents and waste	External	302-3, 303-3 305-4 306-1

Figure 4: Material topics, aspects, and boundary of impact¹³

¹³102-46, 102-47: Boundary of Impact: Internal includes all TCS offices and campuses, 103-1

Profit

Effective corporate governance practices constitute a strong foundation on which successful commercial enterprises are built to last. Corporate governance at TCS entails strong oversight of business strategies, and ensuring fiscal accountability, ethical corporate behavior, and fairness to all stakeholders.

The customer-centric strategy pursued by TCS has resulted in best-in-class revenue growth over the last many years, industry-leading profitability, near 100% cash conversion, near zero-debt and strong return on equity¹⁴.

The business model is an asset light one, requiring very little capital, entirely met through internal accruals. Additionally, company believes that there is a very large organic growth opportunity, and acquires businesses sparingly, to augment existing capabilities and not for growth. The company has a very shareholder-friendly capital allocation policy that entails returning most of the free cash flow in the form of dividends and buybacks. In the last two years, TCS has returned 106% and 92% of free cash flow respectively to shareholders.

Our pricing and our operating margins have been stable, evidencing the resilience of our business model and the value attributed by our customers to our services. TCS continues to invest in workforce and workplace transformation, and building newer capabilities, translating into newer service offerings, intellectual property, and new business models that will support future growth.

The structural attributes of our business model are sustainable, and we continually scan the environment for potential threats using our robust risk management framework.

Corporate Governance

Details of TCS' philosophy on corporate governance, the board structure and the various committees that constitute the governance structure of the organization are covered in detail in Pages 76-92 of the FY 2019 Annual Report. The various material aspects of corporate governance and TCS' approach to them are discussed in the table below:

Aspect	Approach
Avoidance of Conflict of Interest	<p>Chairmanship of the Board is a non-executive position, and separate from that of the CEO and MD.</p> <p>The Code of Conduct (https://www.tcs.com/tata-code-of-conduct) for non-executive directors, and for Independent Directors, carries explicit clauses covering avoidance of conflict of interest.</p> <p>Likewise, there are explicit clauses in the Tata Code of Conduct (TCoC) prohibiting any employee – including the MD and executive directors – from accepting any position of responsibility, with or without remuneration, with any other organization without TCS' prior written approval. For executive directors and the MD, such approval must be obtained from the Board.</p>

¹⁴103-2, 103-3; Please refer to our FY 2019 Annual Report for the detailed financial performance

¹⁵102-18

Aspect	Approach
Board independence and minority shareholders' interests	<p>Independent Directors constitute more than 50% of the Board strength, ensuring protection of minority shareholders' interests.</p> <p>The TCoC, which defines the governance philosophy at TCS, emphasizes fairness and transparency to all stakeholders.</p> <p>The Company also has a variety of channels including a structured global investor outreach program, through which minority shareholders can interact with the management or Board and express their concerns.</p> <p>Shareholders can communicate any grievance to the Company secretary's office through a well-publicized channel, where complaints are tracked to closure. The Stakeholders' Relationship Committee, consisting of two independent and two non-independent directors, oversees the redressal of these complaints.</p> <p>The Annual General Meeting is another forum where they can interact with the Board.</p>
Related Party Transactions	<p>All dealings with Tata Sons Private Limited or with any Tata Group company are done on an arm's-length basis and are subject to approval of Audit Committee and Board, where required. Employees and resources (including cash) are not shared between group companies.</p> <p>Transactions with related parties are disclosed in TCS' Annual Report for FY 2019 (page 234- 236).</p>
Board oversight of the sustainability agenda	<p>The Board of Directors meets 6-7 times a year versus the 4 times as required by law. This has allowed the Board to go beyond financial performance and execute a more thorough oversight of business, strategy, operations and sustainability matters.</p> <p>The Board consists of individual committees – such as the CSR Committee, the Risk Management Committee, Ethics and Compliance Committee and Health, Safety and Sustainability Committee – which frame the policies governing the different aspects of TCS' sustainability agenda and oversee the company's performance across these areas. These committees have met 2-3 times in FY 2019.</p> <p>Details of the terms of reference of each of the committees are provided on our website. For details of the Board Evaluation (refer Page 39 of the TCS Annual Report 2018-19)¹⁶.</p>

¹⁶103-3

Aspect	Approach
Fiscal oversight	<p>An Audit Committee consisting of non-executive directors oversees TCS' disclosure process to ensure that sufficient and credible information is disclosed, and that the published financial statements reflect a true and fair position of the Company's finances.</p> <p>Typically, the committee meets at least four times a year to approve the quarterly accounts, and another one or two times as needed for an in-depth consideration of internal audit reports and other matters. The Audit Committee also actively ensures that the internal audit processes provide adequate support in making the Company more efficient and cost-effective.</p> <p>As an additional governance control on access to the Company's cash, TCS has a Bank Account Committee of directors, which approves the opening and closing of bank accounts of the Company, and authorizes persons who can operate these accounts.</p>
Independent and effective validation	<p>An independent third-party firm of chartered accountants, Ernst and Young LLP, oversees and carries out internal audits of TCS' operations as per an internal audit plan, which is reviewed by the Audit Committee in consultation with the statutory auditors.</p> <p>In line with international practices, the planning and execution of internal audits is oriented towards the review of controls in the management of risks and opportunities in the Company's activities. Our external auditors are BSR & Co. LLP, who do not have any undue dependence on TCS.</p>
Disclosure and transparency	<p>Benchmarked against global peers, TCS discloses significantly more operational and financial metrics on a quarterly basis. The quarterly, half-yearly, and annual results are intimated to the stock exchanges, published in leading Indian newspapers, emailed to analysts and investors who subscribe to the service, and posted on our website. Half-yearly results are sent to shareholders, along with a message from the MD on the Company's performance.</p> <p>The quarterly earnings release is accompanied by a press conference, which is streamed live on our website. We also organize an earnings call that is webcast on our website, where the management briefs investors and analysts on the quarter gone by, and addresses their questions. Any material developments in the course of the quarter that might impact revenue or earnings are intimated to the stock exchanges and through our website.</p> <p>Through our robust investor outreach program, TCS' management meets investors at our premises or at investor conferences, and addresses their queries and concerns.</p>

Aspect	Approach
<p>Values, Ethics and compliance¹⁷</p>	<p>Over the last five decades, TCS has consistently adhered to the highest principled conduct and has earned its reputation for trust and integrity in the course of building a highly successful global business. The company's core values are: Leading change, Integrity, Respect for the individual, Excellence, and Learning and sharing.</p> <p>The Tata Code of Conduct (TCoC), which every employee signs at the time of joining the company, serves as a moral guide and a governing framework for responsible corporate citizenship. Periodic refresher courses are conducted to ensure continued awareness of the code, and employee communications from the leadership reiterate the importance of our values and the TCoC.</p> <p>Customers and suppliers are made aware of the TCoC principles in contract discussions, and through inclusion of specific clauses in proposals and contracts. The TCS Supplier Code of Conduct is shared with suppliers as part of the procurement process and is published on the TCS website.</p> <p>Compliance to laws of the countries in which we operate, as well as global legislation such as FCPA, UKBA is monitored through formal compliance procedures led by the corporate compliance office. Changes to legislation are closely monitored, risks are evaluated and effectively managed across our operations. Avenues have been provided for all employees and stakeholders to report concerns or non-compliance which are investigated and addressed by following due process. At the apex level, the Ethics and Compliance committee oversees compliance to internal policies and external regulations.</p>
<p>Board composition and selection of Board members</p>	<p>The Nomination and Remuneration Committee, comprised of three independent directors and one non-independent director, including the chairman, makes recommendations regarding the composition of the Board, identifies suitable individuals who can be inducted as independent directors, and takes steps to refresh the composition of the Board from time to time.</p> <p>The supervisory capability of the current Board has been significantly boosted by the inclusion of highly capable individuals with global management perspectives, broad corporate experience, specific expertise in corporate governance, and compliance as independent, non-executive directors.</p>
<p>Employee access to the Board</p>	<p>The TCS culture empowers employees and encourages open communication of concerns and grievances through various channels. In addition, individual senior-level employees are also invited to present to the Board on specific topics under discussion from time to time.</p> <p>The Company has a Whistle Blower Policy for employees to directly report concerns about unethical behavior to the chairperson of the Audit Committee without fear of reprisal or victimization.</p>

¹⁷102-16

Aspect	Approach
Sustainability and risk management	<p>TCS has adopted the COSO framework (Committee of Sponsoring Organizations of the Treadway Commission) for implementation of Enterprise Risk Management (ERM) in the organization. TCS uses an in-house developed digitised platform to create, update, assess, monitor and report risks at various levels in the organization. At an executive level, ERM is a corporate function headed by a Chief Risk Officer (CRO). The CRO is supported by Enterprise Risk Officers (EROs) who are responsible for deploying ERM across the entire organization with the support of risk officers in the business units and functions. Adequate reviews are in place at every level in this hierarchy to ensure that robust risk management practices are implemented and in alignment with the company's overall risk philosophy. Mitigation actions and controls are implemented where required and effectiveness monitored to ensure sustainability. The risk governance and oversight model also promotes a risk-aware culture across the organisation. At the board level, the Audit Committee and Risk Management committees are in place to oversee Enterprise risks and the ERM implementation.</p> <p>We ensure compliance to all applicable laws globally, including those relating to employment and immigration, taxation, forex and export controls, health, safety, and environment, company laws, establishment, SEZ regulations, data privacy, anti-bribery and anti-corruption regulations, and IT/ITES laws. An executive management committee reviews compliance risks and monitors the deployment of the enterprise compliance framework across all jurisdictions.</p>
Succession planning	<p>Succession planning happens at every level at TCS – corporate, business unit, account, and even at the project level.</p> <p>Succession planning of senior management is directly reviewed by the executive committee of the Board. Business or unit heads are invited to present on specific topics at Board meetings from time to time, offering an opportunity for the directors to assess their values, competencies, and capabilities.</p>
Remuneration policy	<p>The company follows a compensation mix of fixed pay, benefits, and performance-linked variable pay. The variable component determined by the individual's performance (measured through the appraisal process), the business unit performance and the company's performance. This is tailored to suit the needs of different businesses / countries, as necessary.</p> <p>The performance evaluation criteria for independent directors, remuneration policy, and details of the remuneration paid out to members of the Board in FY 2019 are disclosed on page 76-83 of the Annual Report.</p>

Figure 5: Details of our aspect and approach to various corporate governance requirements

Relative Outperformance

In FY 2019, the global market for IT Services¹⁸ is estimated to have grown by 3.2% YoY, driven by strong growth in digital engagements, particularly cloud adoption. Business Process Management grew by 4.5% over the prior year on account of greater focus on automation.

TCS has historically grown significantly faster than the market. In the latest five-year period, while the market for IT-BPM services expanded by a CAGR of 2% (IT Services CAGR: 1.5%), TCS had a CAGR of 9.2% in USD terms.

One reason for this outperformance is market share gains on account of superior capabilities and higher customer satisfaction. The second reason is the greater participation in our customers' growth and transformation initiatives, which represents the expanding part of their technology spending.

Strategy for Business Sustainability¹⁹

TCS has successfully navigated through multiple technology cycles over the last five decades, pivoting and adapting each time to build relevant new capabilities through organic talent development and helping our clients realize the benefits of emerging technologies. Our responsiveness, agility, and adaptability to change have been core to our longevity.

Customer-centricity is at the core of TCS' strategy, organization structure, and investment decisions. Our philosophy has been expanding and deepening customer engagements by continually looking for new areas in the customer's business where we can add value, proactively investing in building newer capabilities, and launching new offerings to participate in those opportunities. Over time, this has meant expanding beyond IT and participating in the departmental spends of other stakeholders – such as business heads, CMOs, CROs, COOs, CFOs, and even CEOs.

This strategy has resulted in a continual expansion of customer relationships in terms of the services consumed, revenue, and share of wallet as evidenced by the client metrics we report every quarter and every year. The willingness to invest in the relationship, the commitment to deliver impactful outcomes, and the track record of execution excellence have resulted in high satisfaction levels and long enduring customer relationships.

This steady expansion of the engagement over the years, covering ever more aspects of the enterprise's operations, has resulted in the build-up of deep and holistic contextual knowledge of the customer's business. This has been the cornerstone of our ability to participate in our customers' growth and transformation initiatives in recent years.

We have been leveraging this contextual knowledge, our long-standing investments in research and innovation, our extensive Intellectual Property (IP) portfolio of accelerators, products and platforms, and partnerships and alliances with leading technology providers, to craft unique solutions that transform our customers' businesses, and give them a competitive edge in the market.

Structured for Agility

Despite being one of the largest IT services companies in the world, TCS has maintained a nimble organization structure, geared for agility. The corporate organization is very lean, and executive decision-making powers have been devolved to lower and lower levels. Today, TCS has over 150 operating business units, each with its own P&L. These are small, agile, empowered and intensely entrepreneurial, customer focused organizations which pursue the best growth that their domain affords, constantly investing in building newer capabilities to be able to create value for their customers.

¹⁸Nasscom Strategic Review Report 2019

¹⁹103-2

Investments in Research & Innovation

Our Research and Innovation (R&I) efforts strengthen the company's sustainability by scanning emerging technologies, identifying trends, and building capabilities in relevant areas. Our researchers take up promising themes in each industry, and collaborate with domain experts to build innovative solutions that we proactively showcase to customers at our innovation centers.

On occasion, the outcome is IP – accelerators, frameworks or products such as Optumera™, Quartz™ or ignio™ – which help customers digitally reimagine key elements of their business, reduce risk and gain speed to market.

TCS partners with all the major technology providers to launch and jointly market industry-specific solutions that leverage our domain knowledge and their technology. We continue to invest in our Co-Innovation Network (COIN™), where we work with start-ups with promising new technologies.

Information Security

TCS has implemented a comprehensive Information Security Management System (ISMS) based on the globally recognized ISO 27001:2013 ISMS standard. This framework covers cyber security, privacy, and physical/environmental and personnel related controls, thereby covering people, process, and technology.

The information security professionals at TCS have industry-recognized credentials such as CISA, CISM, CISSP, CEH, and CBCP. They possess experience in subjects such as application security, infrastructure services, networking, forensics, law, and compliance. TCS considers all client information confidential, and has implemented rigorous processes to protect the same.

TCS' security policy has been framed to comply with all international privacy and information security laws. Collection, processing, and dissemination of any personal data is done under highly controlled conditions.

The company has been continually investing in automated prevention and detection solutions – third party products as well as in-house tools - to address evolving threats.

TCS has implemented advanced perimeter security controls, enhanced internal vulnerability detection, and data leak prevention tools. There are strict access controls, and special handling of privileged administrator accounts.

There is a well-defined and tested incident management and recovery process, backed by an ability to isolate the TCS enterprise network from client networks, and escalation mechanisms to handle security incidents in client environments. Data is encrypted, and backed-up with well-defined recovery mechanisms to ensure business continuity.

There is periodic testing to validate effectiveness of controls through Vulnerability Assessment and Penetration Testing. This is backed up by internal and external audits and forensics.

The Information Security team collaborates with the Computer Emergency Response Team (CERT) and other private cyber intelligence agencies, for awareness on emerging cyber threats.

Data security is treated as everybody's responsibility at TCS, and is underpinned by enterprise-wide mandatory training and awareness programs.

Data Privacy

TCS has a global privacy policy covering all applicable geographies and areas of operations, with designated data privacy managers in all units. A Global Privacy Office has been set up for deploying data privacy initiatives across the enterprise, with designated Data Protection Officers in Europe and the UK, as per GDPR.

The company has implemented data protection controls and robust risk response mechanisms to protect sensitive data within the TCS network as well as in client-managed networks in Offshore/ Global Delivery Centers.

Mandatory training and workshops on data privacy and GDPR have been organized to foster a culture of awareness and responsibility among employees. This has been supplemented with awareness campaigns through blog posts, email broadcasts, gamified awareness building, and roadshows.

Project delivery teams are factoring in data privacy in the design of new systems and embedding controls to secure Personally Identifiable Information (PII) and Sensitive Personal data and Information (SPI). Industry-standard data masking technologies are being used to protect PII and SPI in sensitive customer engagements.

Vendor assessment as well as contracts have been enhanced to cover data privacy controls. Formal Data Transfer Agreements have been entered into with vendors / partners for data sharing.

Talent Management

TCS' HR strategy provides our global, diverse workforce with a stimulating and flexible environment to personally and professionally develop through this rapid change in technology by nurturing social contract, fostering innovation, building a result-oriented and high-performance culture and motivating the current multi-generational and mobile workforce.

TCS has a highly educated workforce of 424,285 employees as on March 31, 2019. Our workforce is predominantly young, with an average age of 30.7 years. A break-up of the workforce by region and gender is provided in Figure 6.



Figure 6: TCS Employees by Region, Age and Gender

At TCS, three months' notice is required from either side for termination²⁰. In India, less than 0.03% of the workforce is unionized²¹, which is our largest region of operation. Although most of the organization's activities are performed by full-time employees, TCS uses contractors, especially for short-term assignments or those requiring skills not internally available.

²⁰103-2,103-3

²¹102-8

²²402-1

²³102-41

Talent Acquisition²⁴

Along with being the largest IT recruiter in India for many years, we believe we were also the largest net recruiter in the IT-enabled services industry in the US in FY 2018-19. TCS has been recognized for industry-leading job creation in the American IT Services sector over the past 5 years.

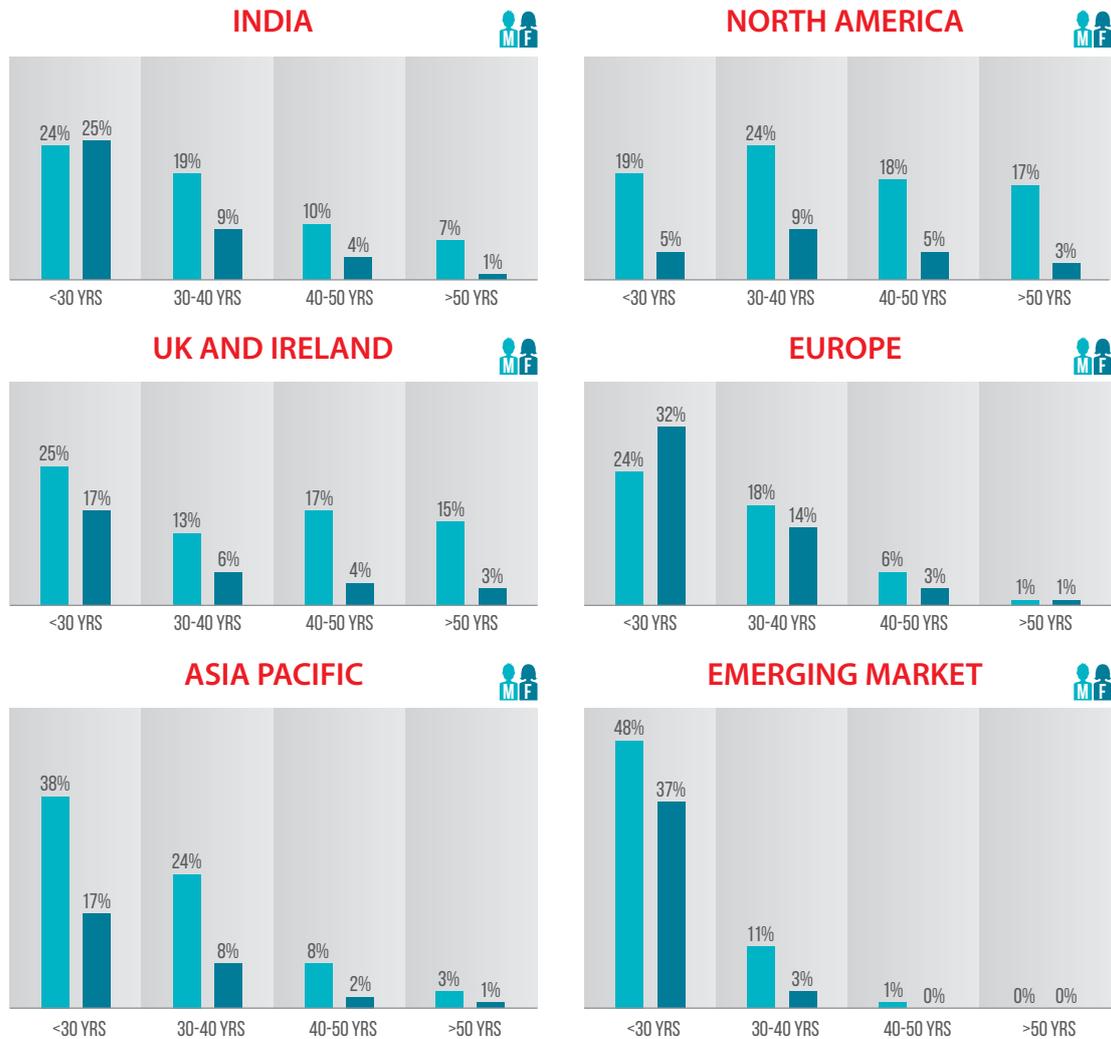


Exhibit 7: Break-up of new hires by region, employee age, and gender

TCS continues to remain the preferred employer at leading engineering campuses across India. Our college recruitment efforts in USA, Canada, Latin America, China, and Hungary have been progressing well, with very encouraging outcomes. TCS has also been recruiting graduates from the Top 10 B-Schools in the US for key business roles.

Academic institutes are key partners in TCS' talent acquisition strategy. Our Academic Interface Program (AIP) is a structured approach towards building strong, enduring relationships with top universities globally, which covered 1,060 institutes globally in FY 2018-19 through both student- and faculty-focused activities such as workshops, internships, sponsorship of contests, faculty development programs, research scholarships, curriculum review, establishing technical institutes, etc.

²⁴102-9,401-1

Campus Commune, our unique student engagement portal, helps students collaborate and network with their peer groups globally and currently has over 2.1 million registered users across 49 countries. They participate in multiple contests and engage in digital learning through webinars, educational videos, and blog posts by experts in various field through dedicated channels, grooming them for professional life.

We use variety of contests such as EnQuode, EngiNx, Inframind, HackQuest and CodeVita to spot and hire top talent. In FY 2018-2019, we recruited over 2000 expert programrs through this gamified approach. CodeVita, the global programming competition organized through Campus Commune, was enlisted in the Limca Book of Records in 2015. After seven successful seasons, it witnessed more than 210,000 registrations from across 2500 colleges in 68 countries in FY 2019 alone.

Talent Diversity²⁵

TCS is an equal opportunity employer and subscribes to the Tata Code of Conduct in embracing diversity in race, nationality, religion, ancestry, marital status, gender, age, ethnic origin, physical ability, and sexual orientation. We have a global policy on Diversity and Inclusion (D&I) and the policies that promote diversity and equality are fair and equal.

TCS has been promoting gender diversity at the workplace through a structured program that promotes sensitization and awareness, life cycle management, grooming and development; and networking and affiliations. These customized initiatives cater to women employees at different stages of their lives at a personal as well as professional level. TCS is one of the world's largest employers of women, with more than 150,000 women employees, making up 35.9% of the workforce.

Gen Y comprises 85% of the TCS workforce. This age diversity encourages a collaborative work culture while promoting learning and reverse learning to build stronger teams. For our hyper-connected diverse workforce, the internal TCS social media platforms allow employees to always stay connected and bridge distances, thus further promoting collaboration and diversity of thought. We also have an internal digital platform Fresco Play for learning the latest technologies on the go which is available in concert with iEvolve, the learning system that provides a host of learning options and internal certification.

Our Center of Excellence for Accessibility works on IT solutions for persons with disabilities, aiding their seamless integration into the workforce. TCS also actively encourages greater diversity in the communities we work in. D&I will soon become the top agenda at TCS by inculcating it in the ethos of the organization.

Talent Development

TCS' success in navigating the digital technology opportunity stems from its early investments in large scale reskilling of the workforce using the Digital Learning Platform. The Inclusive Learning Pyramid offers learning opportunities across the organization through Anytime, Anywhere learning, thus enabling employees across all levels to move ahead in their careers. A total of 380,000 individuals were trained during the year.

In addition to reimagining the recruitment of fresh engineering graduates through the National Qualifier Test(NQT)²⁶, TCS has transformed the Initial Learning Program, enabling significant amounts of competency building for the fresh recruits even before they are on-boarded. This way they are already at par with their colleagues in terms of knowledge.

Further, Digital Talent Development continues to be a prime focus area. More than 2.1 million Digital competencies were acquired by 311,000+ unique associates as on March 31, 2019, and 348,000+ unique associates were trained on Agile to move closer to our target of 100% Agile by 2020. Talent Development also focuses on Leadership Development, Domain Expertise, and Language Training.

²⁵103-2, 103-3

²⁶102-9

AVERAGE TRAINING HOURS PER ASSOCIATE

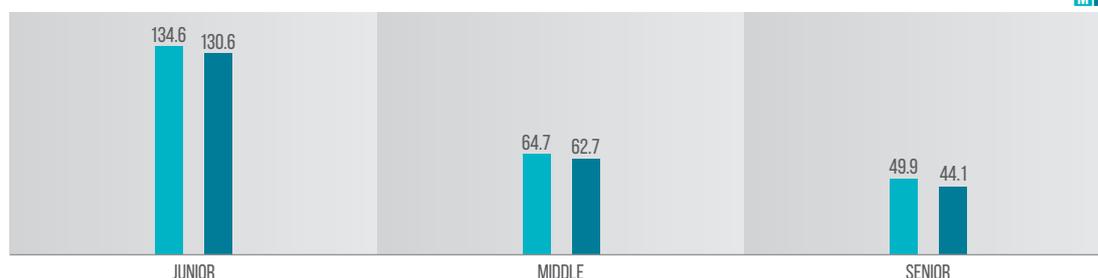


Exhibit 8: Average Learning Hours Per Employee ²⁷

Competitive Compensation

To attract and retain talent in a highly competitive market, TCS regularly benchmarks its compensation plans and benefits with peers to ensure competitiveness. There is also a skill-based allowance for employees possessing niche skills, designed to motivate employees to acquire marketable skills, thereby benefiting themselves as well as TCS. Compensation structures are driven by prevailing practices in each country we operate in. But across the enterprise, remuneration is the same for men and women working full-time, in the same grade, in the same role, and at the same location ²⁸.

In India, along with a fixed component of the salary, there is a variable component linked to the performance of the company, the business unit, and the individual. This alignment of our company's and employees' interests strengthens team spirit and improves collaboration among teams.

Talent Retention

Our employee-friendly workplace and HR policies have resulted in consistently high retention levels and developed a strong employer brand. TCS' employee retention record is a benchmark, with our attrition rates being the lowest in the industry. In FY 2018-19; TCS' attrition in IT Services was 11.3% (11% in FY 2017-18). We are one of the 10 companies to be rated as a Global Top Employer with certifications in 29 countries across our key markets in North America, Europe, Asia Pacific, the Middle East, and Latin America.

Occupational Health and Safety ²⁹

Under the aegis of the Tata Group Safety Policy and its Occupational Health and Safety (OHS) Policy, TCS has well-defined processes to ensure the safety and well-being of its employees. The board-level Health, Safety, and Sustainability Committee and the Corporate Sustainability Council review the health and safety performance on a regular basis. Safety lead and lag indicators from across the organization are measured and reported to the management for review.

²⁷404-1

²⁸405-2

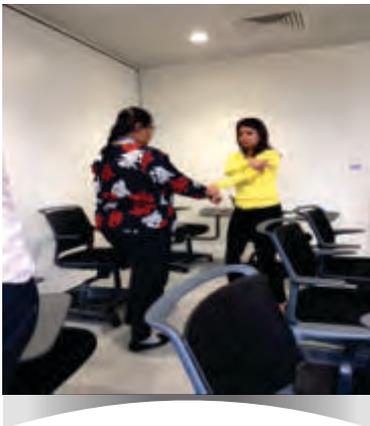
²⁹103-2, 103-3

Our OHS management system has been implemented at nearly 120 locations worldwide. At TCS locations which have ISO 18001:2007 Occupational Health and Safety Management Standard certification, or where there is a local legal requirement, there are formal joint management-worker health and safety committees that monitor, advise and drive occupational health and safety initiatives. Each committee has cross-functional representation, is chaired by senior management and meets on a quarterly basis. About 96% of our workforce is represented by such committees³⁰.

The company's objective is to build a culture of safety and provide a safe workplace to associates, complying with the health and safety management system beyond regulatory requirements. This has been achieved by inculcating safe work practices among associates and contractors through engagement and training, reporting workplace accidents through an online safety incident reporting app, and implementing remedial measures to ensure 100% resolution of all incidents reported.

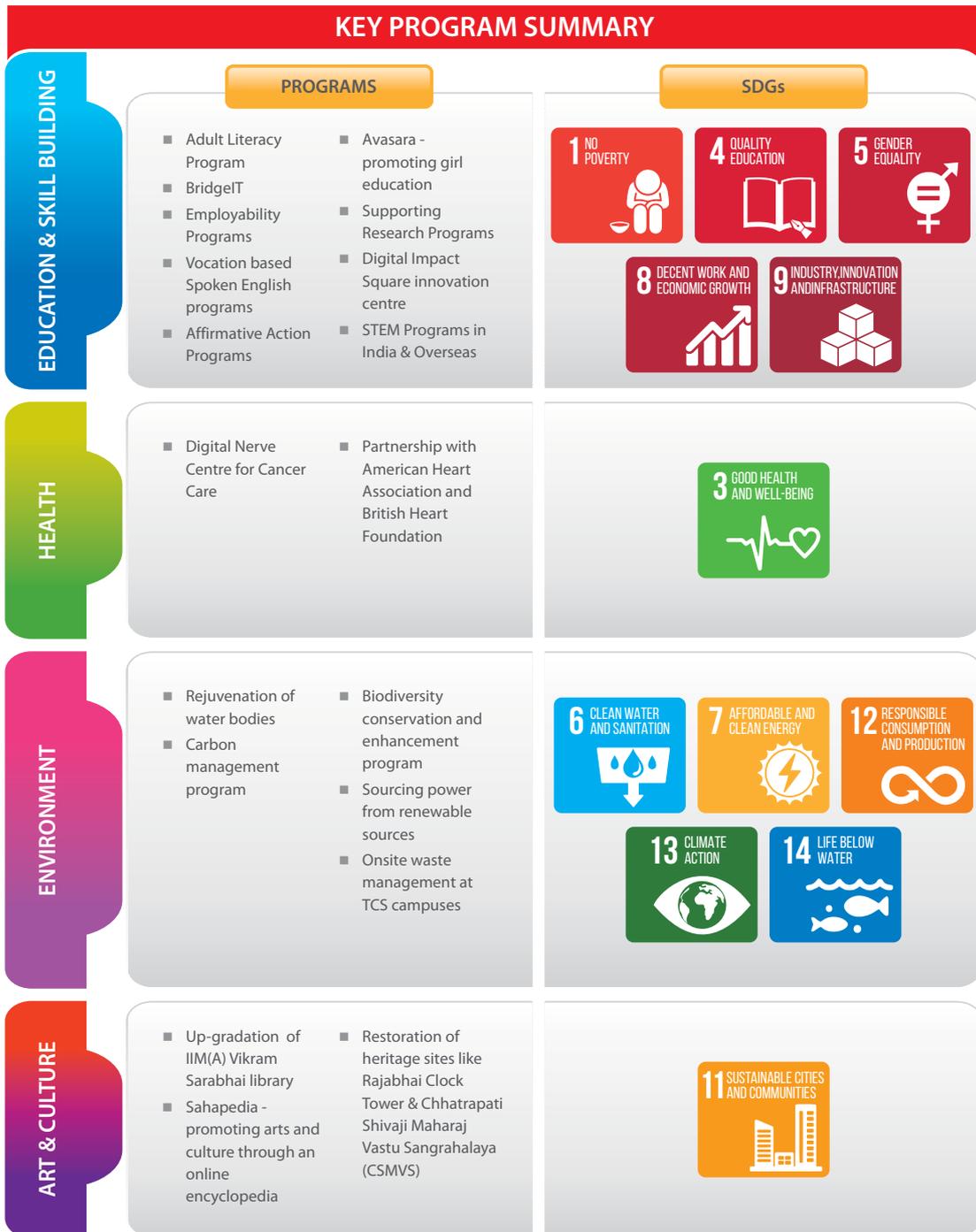
Our safety engagement framework on safety is based on three pillars – Educate, Engage, and Listen. Education starts with the induction training at the time of joining and continues in the form of site safety inductions and mandatory yearly web-based training. Engagement is ensured through the various awareness campaigns observed through the year on themes like road safety, office ergonomics, office safety, and fire safety. The associate satisfaction index on health and safety has consistently increased since the last 3 years, which reflects the outreach of these programs.

The Safety First initiative has been the primary platform for employee engagement on safety within and beyond the workplace. Through campaigns to promote road safety and online safety in FY 2019, the program attempted to reduce incidence of road accidents, crimes -- especially those against women, and incidents of self-harm. Additionally, workshops were conducted at all locations to raise awareness on personal safety by offering advice and tips on identifying and managing risk and defusing techniques and proactive practical strategies for reducing risk.



³⁰403-1

COMMUNITY INITIATIVES³¹



³¹103-2, 103-3, 413-1

STEM Education

Ignite My Future in School

Ignite My Future in School (IMFIS) is a trailblazing STEM (Science, Technology, Engineering and Mathematics) initiative by TCS and Discovery Education (DE) that provides educators with new teaching resources that are built on innovative computational thinking and problem-solving strategies. It transforms K-12 students' method of learning in America by offering educators curriculum support available on a digital platform that engages teachers nationwide in an exclusive, cost-free, virtual professional development experience, including curriculum resources, eLearning courses, webinars, etc.

Its approach is interdisciplinary; it embeds computational thinking strategies into subjects such as math, science, language arts, and social studies, allowing students to obtain critical thinking and technology skills that will be required for 21st century careers in every field.

This initiative aims to engage 20,000 teachers and one million U.S. students by 2021. Since its debut in 2017, IMFIS has engaged over 460,000 students and nearly 8,000 teachers from all the 50 states in America.



Jenna Roseinski is a Learning Leader (LL) (the program's teacher network) who became empowered by the IMFIS program. As a second-year teacher and first-year IMFIS LL, she and her students participated in the Resilient Cities lesson plan where the students were asked to reimagine something in their community that could be repurposed. Jenna's students are from Janesville, WI and are in a part of the country where manufacturing as an industry and job provider no longer exists. Her students chose to tackle the abandoned General Motors plant using Augmented Reality to reimagine this building for their community. Using computational thinking, students are collecting data, analyzing it and using decomposition and abstraction

for both project management and implementation. Upon completion of this project, the students intend to present their proposal to their local city council.

- The U.S. Chamber of Commerce Foundation recognized TCS as a finalist for its prestigious 2018 Citizens Award for 'Best Commitment to Education' for Ignite My Future in School
- Profiles in Diversity Journal's 15th Annual International Innovation in Diversity Awards recognized the Ignite My Future in School program as the Winner of the Award of Excellence
- American Business Awards (Stevie) - CSR Company of the Year for Ignite My Future in School.

"I want to thank TCS and DE for partnering on the 'IMFIS'. Providing opportunities for our teachers to learn and incorporate computational thinking into core subjects, benefits not only educators but also ensures North Carolina's students are learning skills for the 21st century economy and allows our great state to maintain a competitive workforce."

- Sen. Thom Tillis, North Carolina



Teachers & program experts after a Day of Discovery at North East Middle School in Charlotte, NC

TCS Digital Explorers

TCS United Kingdom & Ireland is leading change with a simple aim - to enthuse a generation of young people into technology. The UK's multi-award winning IT Futures program in the community works with schools, colleges and universities across UK. In 2018-19 TCS reached approximately 250,000 with its various initiatives.



TCS Digital Explorers, a part of the "IT Futures" targets talented diverse young people largely from disadvantaged backgrounds. This program runs an intensive week-long "Experience Work" event for students to learn core IT skills through real-world projects, rub shoulders with industry professionals, explore future tech trends, and network with entrepreneurs and graduates. The young participants left the week equipped with the confidence

and the abilities needed to succeed in the world of digital work.

In 2018-19, Digital Explorers expanded its reach and took the event to six locations: London, Birmingham, Peterborough, Edinburgh, Liverpool, and Bristol.

Since inception in 2017, the TCS Digital Explorers program has provided 8500+ day places to young people and been supported by nearly 550 employees who have shared their career experiences, helped run workshops, and provided mentoring.

"I just wanted to say how much I appreciated and enjoyed today's work experience with TCS. I have learnt valuable skills which I believe will empower me in both the work field and life. Thank you again for an amazing experience and opportunity"

- Student, The Priory Church of England School

Artificial Intelligence (AI) and Robotics

TCS has brought a unique, hands-on learning experience to students and teachers at Diepsloot Combined School, Johannesburg. Over the 15 weeks of the program which started in August 2018, more than 157 Grade 9 students have participated in hours of learning using complex

Artificial Intelligence concepts to create solutions to existing challenges in their community.



A team presenting their solution, in Johannesburg

Students were introduced to STEM and AI concepts such as machine learning, parallel processing, introductory coding and robotics and discovered how to use these technologies for creative problem-solving in the future.

Australia GoIT Girls - Women in STEM

The GoIT Girls program is TCS Australia's flagship CSR program launched in 2014 and aims to alleviate the shortage of skills and increase gender diversity in the Australian and New Zealand IT industry by inspiring young women to pursue careers in technology.

500th GoIT Girls:

In Nov 2018, TCS Australia celebrated 500 girls successfully completing their flagship GoIT Girls program reaching 582 girls.

GoIT Girls Work experience program is a week-long program for Year 10 and 11 students that introduces them to leaders across STEM industries. It gives them insight into the technology industry, different roles available, builds technical skills through coding, tech apps and other methodologies. Most importantly, it breaks down gender stereotypes in STEM.

TCS collaborates with clients by inviting female role models to inspire students, developing projects for students to work on and creating hands-on workshops. In addition, the program also includes visits to client innovation labs and workplace experiences.

"My daughter had zero interest in IT when I signed her up for this program. She absolutely loved the program and got so much value out of it. She now sees a potential path and looks forward to working in the corporate arena one day."

- Mother of GoIT Girl student

STEM Education through Drones



Drone programming classes with Japanese school students

TCS Japan has been working with Nara Women's University secondary school to promote STEM education for the future. TCS has also assisted in a Drone Programming Competition held at the school.

STEM in China

In October 2018, TCS China successfully completed its first big-scale STEM-CSR Program – goIT China in Shanghai. This program aimed at increasing interest in STEM and computer science and developing innovation and problem-solving skills.

In 2018 TCS China partnered with a local non-profit organization "Project Volunteer Online" to launch a STEAM (science, technology, engineering, art, and mathematics) learning program for students in rural schools. Through this initiative TCS China volunteers conducted real-time learning programs over video conference on various STEAM related topics for primary schools in rural areas of Guizhou, Shanxi, Henan and Guangdong provinces.



goIT - at Xiwai International School - Shanghai

Lab on Bike

Lab on Bike, implemented in association with Agastya International Foundation, provides government school children and teachers quality hands-on basic education that awakens their curiosity and fosters creative thinking, problem-solving and communication skills.

The program involves an instructor travelling to the government schools, with a science experiment kit which fits on to the side of his/her bike to conduct hands-on science classes. Experiments cover different concepts from Physics, Chemistry and Biology.

“This way of teaching is very helpful and very interesting as it simplifies all topics in science, and kids also get involved and learn. Thanks for this opportunity.”

- Paresh Thakor, Science Teacher,
Sargasan Primary School,
Ahmedabad

FY'19 Highlights

- 1,540 students were added in 29 government schools across Bangalore and Ahmedabad.
- 110 teachers were empowered with science concepts to provide continued support to children.
- 54% increase in students reached per school as compared to FY 18.
- 37% increase in beneficiaries reached as compared to FY 18.
- 32 students cleared the district-level science fair and competed at the state-level.

LaunchPad and InsignT

LaunchPad, developed by TCS in 2016 was introduced to school students of classes 8, 9 and 10. It is a free online course that lays a strong foundation for understanding programming logic by teaching the fundamentals of C++ and Python through gamification. It dovetails into InsignT, which prepares students for the Class 12 Exams.

“I am very proud to say that I have joined TCS LaunchPad-Python Course. It is very easy to learn programming through videos. I think it would definitely be a good opportunity for me. Thanks to all staff of TCS and teachers of our school for introducing me to this course.”

- Soundhariya TV, Chettinad
Vidyashram, beneficiary

Designed as a self-learning course, it nurtures the concept of independent learning. LaunchPad has reached out to more than 18,000 students across India (Gujarat, Tamil Nadu, West Bengal, Kerala, Delhi, Uttar Pradesh, and Maharashtra), Dubai, and Singapore, since inception.

InsignT was started in 2006 with the commitment to provide students of classes 11 and 12 an insight into the IT world and to improve the quality of professionals entering the IT Industry. The course is delivered online and is within the syllabus prescribed, for Computer Science. The program has impacted more than 24,000 students across India and Muscat since inception.

“It was awesome. I already knew the basics of python, but now I've learnt the advanced stuff too. Thank you TCS for conducting this course.”

- Aryan Gupta from Navrachana University



InsignT Orientation Session in Sathyabama
Engineering College, Chennai

BRIDGING THE DIGITAL DIVIDE

ADULT LITERACY PROGRAM

Married into an educated, affluent family, Anita had already completed her graduation in Sanskrit, when she moved into her husband's house in Rali Chauhan, Meerut, Uttar Pradesh. Repeated coaxing by her husband to enrol into a Bachelor of Education course did not yield much result, as Anita nestled into her new role of being a wife. It was only about a decade later, when her husband died unexpectedly of a massive heart attack, that the value of education became clear to her. "The shock was overwhelming, and I went in to my shell for nearly a year. The support of my in-laws quickly waned, and it soon became clear that I had to rebuild my life anew to be able to sustain my two growing sons," recalls Anita.

Her resolve coincided with the launch of TCS' Adult Literacy Program (ALP) with Nai Disha in Uttar Pradesh and as she had some prior experience with the Government's adult literacy initiative, she grabbed the opportunity to join the project as a Prerak (teacher). "Initially, I had to collect the details of the women from the village Anganwadi center. It was for the first time that I personally conducted a door-to-door survey at my own village to ascertain the number of illiterate women," says Anita.

In the 20 years that she had lived in Rali Chauhan, it was for the first time that Anita really got to know her neighbours and felt their love and admiration towards her, for the noble initiative that she was part of.

However, during the initial days of the project, Anita struggled to convince older women to step out of their houses to gain literacy skills. The biggest deterrent came from a group of men. "They would constantly harass the women coming to attend the class by mocking their age and asking them the benefits of studying. One day, I accompanied the women to the village square and told the men that this is the second shift for these women after their household chores and that the men will do well by gaining some literacy themselves," said Anita. "That was the last time they passed a comment," she declared with a hearty laugh.



"All the illiterate women I met were eager to learn to read and write. It was heartening to learn that they particularly wanted to attend classes conducted by me as they felt safe coming to my house and had confidence in my ability to teach, owing to my educated background."

- Anita Chauhan, Prerak

Program Highlights

- In FY 2019, ALP directly reached 365,411 beneficiaries, of which approximately 85% were women and around 50% were beneficiaries from marginalized/Affirmative Action communities (SC/ST).
- In FY 2019, ALP witnessed a 110% growth in the number of beneficiaries, as compared to FY 2018.
- Since inception, up to March, 2019, the program reach has been 927,295 beneficiaries.
- In FY 2019, ALP won the following awards: -
 - Project Management Institute (PMI) India Award for Contribution to Community
 - SABERA Award under the Responsible Business category
 - India Digital Award (Internet & Mobile Association of India) – Best use of technology to drive CSR.
- Through ALP, more than 70,000 prison inmates have been made literate, across various correctional centres, within a span of 4 years.

Through its flagship Adult Literacy Program, TCS has been instrumental in augmenting the efforts of the Indian Government to achieve functional literacy, using an in-house Computer Based Functional Literacy (CBFL) software, available in nine Indian and three foreign languages. Its aim is to promote and strengthen education of adults, particularly that of women.

It was launched in 2000 with the intent of making the semi-literate and illiterate masses of India functionally literate in their native language. The CBFL solution supports non-literate adult learners to easily achieve literacy in their native language in approximately 50 learning hours.

ALP focuses on 3 R's Reading, wRiting, and aRithmetic. TCS partners with local governments, jail authorities, NGOs, TATA companies, etc. to implement this solution. In FY 2019, the program was implemented across 18 states in India and Burkina Faso in West Africa.



“One of the elements that makes the program so effective is the use of the digital medium such as the laptop to conduct the training. The innovative program and methodology helps women grasp elementary reading and writing skills at a very quick pace compared to the conventional methods of teaching through blackboards where a lot of stress is laid on the sequence of alphabets.”

- Narayan Singh, Sarpanch, Kutubgarh Gram Panchayat, Village Mailawas, Nuh district, Haryana

BridgelT

Non-availability of rich educational resources, limited access to information, and traditional teaching methods impede the learning outcomes of children in rural areas. Moreover, with the digital world far from the reach, computer-aided education remains a remote possibility. Currently, youth from rural areas have limited or no access to appropriate support to help them develop their entrepreneurial skills and capabilities. BridgelT was designed to address these issues and level the playing field between rural and urban areas. It also aims to facilitate digital literacy for middle school children involving computer basics, MS Office, Paint, Word Pad etc.

It aims to bridge access and competency gap between marginalized communities and mainstream society, using digital tools. It is aligned with TCS' focus on utilizing technology in its social interventions, especially to provide rural communities a platform to develop skills, to help improve their standard of living.

Rural youth from marginalized communities with the potential for entrepreneurship are identified by implementing partners through an interview process and are provided with two laptops and other peripherals like mouse, speaker, etc. TCS volunteers train the digital entrepreneurs on CBFL Tool and other basic software.

The duration of the program is 5 years with the entrepreneurs being provided with a monthly stipend during first 2 years, after which they can sustain on their income generated through entrepreneurial activities. Entrepreneurship, technology and soft skills trainings are planned during the program to hone their skills with the industry and subject matter experts' support.

Program Highlights

- In FY 2019, BridgelT won the following awards
 - Selected under category - Private Sector Companies for 'Best Practices Award 2018 on Sustainable Development Goals at United Nations Global Compact Network India - National Convention 2018.
 - Emerged the winner at DIAN Decade Awards 2018 for Promotion of Social Inclusion in Asia
 - Honored with Good Practices Award at the TATA Business Excellence Group Awards
- In FY 2019, BridgelT reached 14,028 beneficiaries, of which approximately 12,250 were children, 1,678 adults and 100 entrepreneurs



"BridgelT gave me a purpose to not only be financially independent but to also work for the upliftment of those who are socially and economically backward"

- Ravi Kumar Gautam

Ravi Kumar Gautam, an unemployed graduate in Mechanical Engineering wanted to start his own business but could not do that due to lack of finance. Ravi faced lots of challenges in the village as he was from a backward caste. Moreover he had to shoulder the responsibility of financial needs of the family, as he lost his father at a young age. Financial struggles used to be the norm for him.

It was in this background that Ravi attended the BridgelT interview process and got selected. His fortunes have taken an upward trajectory on joining the BridgelT program.

He conducts Computer Aided Literacy (CAL) sessions for school children and basic literacy training for his village people. At present, Ravi is not only running his computer center business quite efficiently but is also able to employ people. Ravi has plans of launching an online e-commerce portal which will be used to promote products made by village women at home. He also wants to own an automobile shop in the future. His goal is to generate employment in his village.

IT EMPLOYABILITY

TCS uses its IT-core competence and the active involvement of its employees and leadership team for IT Employability. Since 2014, TCS has been assisting undergraduate rural engineering and science students from disadvantaged sections through this program by training them on employability skills during their graduation course. This program provides access to quality education and enhances the competencies, and thereby the employability of rural disadvantaged students.

TCS believes that there will be a noticeable transition in their lives and they would step confidently into the corporate world with the help of such employability training along with their curriculum.

FY 2019 Highlights

- 1,735 students trained through this program.
- 200+ students placed in TCS and 525 secured jobs in other companies post training
- 35% increase in beneficiaries compared to FY 18.
- IT Employability is published in the annual compendium of Confederation of Indian Industry (CII) on CSR & Social Development Initiatives in Western Region 2018.

IT Employability is completely driven by volunteering efforts by TCS associates, who visit colleges in the remote parts of India to conduct the sessions. Post training, all students are provided with an opportunity to attend TCS placement drives.

The program comprises of 3 modules covering business skills, general aptitude, and reasoning. It additionally covers technical skills involving programming languages like C/C++/Java

Zahir Hussain, from Thiruvannamalai one of the least developed districts in Tamil Nadu, is the eldest of three children in his family, supported only by the income of his father, who works as a truck driver. Zahir Hussain was a school topper in higher secondary exams and secured a degree in Bachelor of Engineering in Electronics and Communication at the Anna University College of Engineering in Villupuram, Tamil Nadu. He joined the IT Employability program in 2016 during his pre-final year and got selected by TCS through the post-course placement drive. Currently, Zahir Hussain is working in TCS Bangalore and is proud of himself for being able to support his siblings' education

"IT Employability gives confidence and provides opportunities to many students from rural areas to explore and realize their potential. This program shows the way to succeed in life. I would like to give back to the society by sharing my knowledge and empowering other students by becoming a part of this program."

- Zahir Hussain, IT Employability beneficiary, TN



Digital skills for the visually impaired

Tejaswani Pawar, a visually impaired MA graduate from Sangli district in the state of Maharashtra, could not find a job in the corporate world due to her lack of confidence and computer skills

She started using computers at the age of 16 and would use JAWS software (Job Access with Speech) but was unaware all the benefits that the software had to offer and the advanced usage of computers available for the visually impaired.

She had always been interested in learning more about accessibility and HTML, and she showed keen interest in joining the Advanced Computer Training Centre (ACTC) program of TCS.

This program helped her gain additional knowledge on computers and develop her overall personality. Due to her enhanced computer skills, she was selected as an Accessibility Tester in a multinational organization.

TCS is empowering visually impaired individuals, by providing an Advanced Computer Training program enhance their employment opportunities.

This program conducts 2 batches in a year, one at National Association for the Blind, Mumbai and the other at Mitra Jyothi, Bengaluru.



ACTC graduates and the entire group of Maitree volunteers, who contributed their time and efforts to make TCS Maitree ACTC, 2019 a successful event.

ACTC offers courses that are in sync with industry requirements, providing trainees with life-affirming employment opportunities and a prospect to overcome their disability with the help of technology, guidance, recognition and the right operating environment.

This training is a 45-day residential course where the participants get trained on various subjects like accessibility testing, website designing, software testing, networking, CCM tools, route cause analysis, structured problem solving, big data, etc. These trainings help them become more efficient and competitive in technical as well as behavioral (soft skills) aspects.

This initiative, while improving the prospects of India's visually impaired workforce, aims to redefine the perspectives of employers regarding their potential and versatility.

Cancer Care

India reports over 1.5 million new cancer cases every year. This takes an ominous turn when the country has a dismal doctor-patient ratio of 0.7 doctors per 1000 patients, cost is exorbitant and specialist care is far. No wonder, the dreaded 'C' is the second most common cause of mortality in the country

Taking cognizance of the need for 'Technological & Transformational' intervention, in 2017, TCS launched the Digital Nerve Centre or DiNC; the first of its kind digital healthcare platform aimed at overcoming health-system challenges to deliver patient centric healthcare service.

DiNC facilitates Accessible, Available and Affordable healthcare through a unique synergy of Digital technology, Reimagined processes and Redefined resource network.

DiNC has opened new avenues of communication and connectivity between Specialists, Patients and Healthcare Workers. The impact has been phenomenal, especially in the doorstep reach of care management and control.

Oncological ecosystem is one of the greatest beneficiary of DiNC's preventive care, early detection and meticulous treatment management system - from awareness and screening to post treatment follow-up.

TCS - DiNC, has partnered with some of the top most Cancer hospitals of the country to enable the delivery of Right treatment at the right time through the right providers. For about 2 years now, DiNC has been aiding the effort of Tata Medical Center - Kolkata, Adayar Cancer Institute - Chennai, Tata Memorial Hospital - Mumbai to State Cancer Institute - Guwahati and Assam Cancer Care Foundation.

Transcending the constraint of distance and reach, DiNC services such as Care Coordination, Active Patient Management, Counselling and Virtual Care, have been helping Cancer patients in their treatment journey both within and outside the hospital.

Deep diving into the need of both patients and healthcare professionals, DiNC has widened its oncological service support to include Virtual Tumour Board and Palliative Care (specialized medical care for very sick patients).

In the short span of just 2 years, DiNC has brought oncological care closer to home for over 1 million Cancer patients. TCS' 'experience certainty' is certainly in full swing, ensuring increased capacity for Cancer care providers and care continuation for cancer patients.



DiNC Patient Care Coordinator helping a patient use the kiosk at Tata Medical Center, Kolkatta

DiNC enabled Care Continuum

In 2018, Mr. Bose (name changed) was diagnosed with colon cancer. Under treatment at Tata Medical Center (TMC), Kolkata, Mr. Bose regularly used DiNC service to fast track his consultation & chemo visits to TMC. He also received regular follow-up calls from DiNC to enable him to maintain due care protocol.

One day, on 11th Feb'19, the DiNC-Doctor stationed at the Nerve Centre in Trivandrum, received a frantic call from Mr. Bose's son Vijay stating that Mr. Bose was having severe diarrhea. About 7-8 loose motions in 1 day with blood in the stools, Mr. Bose had become too weak to travel to TMC.

The DiNC-Doctor (fluent in local Bengali language) attending Vijay's call noted the details and looked up Mr. Bose's medical record. There-after he cross checked with Vijay on the medications being taken by Mr. Bose. On confirmation, the DiNC-Doctor realized that the diarrhea episode was infact a side-effect of Mr. Bose's oral chemo medication.

The DiNC-Doctor consulted the treating doctor's prescription captured in DiNC Clinicograph, which clearly stated that the particular medication was to be stopped if the patient had > 4 loose motions. Hence, the DiNC-Doctor in conjunction with the clinicograph-maintained prescription, asked Vijay to stop Mr. Boses's oral chemo and advised him on the medicine for diarrhea relief.

The DiNC doctor took care to remind Vijay of the necessity of oral rehydration. Furthermore, going by the consultant's advice, the DiNC doctor advised Vijay to get lab tests done incase Mr. Bose developed fever > 100F and report immediately.

After putting to rest Vijay's concerns regarding Mr. Bose, the DiNC-Doctor reached out to the DiNC-Patient Care Coordinator(PCC) stationed at TMC. He, asked the PCC to coordinate with the

TMC-Oncologist treating Mr. Bose and get an understanding on when to restart the oral chemo medication. Once the DiNC-Doctor received all the necessary information, he called up Vijay to inform him of the same. He also emphasised on the importance of care continuity - restarting the oral medication as soon as the diarrhea stopped.

The TMC oncologist had mentioned that the oral cancer drug, which had been stopped, needed to continue for 1-14 days. The DiNC-Doctor had made note of the same. He followed up with Mr. Bose as well as Vijay to ensure that there was no lapse in the continuation of medication and care continuum.

Later, due to persistent weakness when Mr. Bose was advised blood transfusion by his treating doctor, they again took DiNC support. The DiNC-Doctor helped them by answering their questions with regards to the process for procuring the blood packets, arranging for a donor etc.

Today, Mr. Bose and Vijay continue to engage with DiNC for care advisory, visiting TMC only when advised, doing away with unnecessary travel & cost.

Other Initiatives

VHAB

Virtual Habilitation (VHab) is a digital assistive solution conceptualized, designed, and developed by TCS to significantly improve the physiotherapy regimen for differently-abled children. VHAB is already being successfully used by over 500 students across three schools for children with special needs. The results have been positive with the children exhibiting a visible increase in their attention, concentration, and other learning skills.

Multiple Projects at Digital Impact Square

Digital Impact Square (DISQ) is an open social innovation center in Nashik, Maharashtra. It encourages innovation using digital technologies to address social challenges prevalent in Health and Hygiene, Housing and Transportation, Food and Agriculture, Energy, Water and Environment, Financial and Personal Security, Citizen Empowerment and Transparency, and Education and Skills Development across India. These challenges are drawn from the voice of citizens, domain experts, local administration, and government. DISQ is a living lab where research and technology from academia and industry influences everyday life, fosters a culture of innovation through a series of sustained innovation cycles, and accelerates the journey of many from ideators to entrepreneurs and researchers to corporate leaders.

This has created community IP owned by innovators, instead of TCS or any TCS foundation, that go through DISQ.

Microbiome-Based Diagnostic Solutions

Asymptomatic diseases are 'silent-killers' which show no apparent sign(s) of a medical condition until it's too late. Millions of people worldwide are affected by these diseases, and exploring ways of early diagnosis and treatment is the need of the hour. TCS' Life Sciences R&D team has developed non-invasive 'microbiome-based' diagnostic solutions for two 'asymptomatic' clinical conditions, viz., preterm birth (PTB) and colo-rectal cancer (CRC). These inventions, first-of-their-kind, utilize variations in microbial communities residing inside our bodies as highly accurate 'diagnostic-biomarkers'. These low-cost solutions are anticipated to redefine the diagnostics landscape in maternal/neonatal healthcare (PTB diagnostics) as well as elderly care (CRC screening). It may be noted that the developed solutions have a clear advantage over other state-of-the-art screening/diagnostic methods in terms of cost, accuracy, and complexity. Overall, the developed solutions promise immense societal and economic impact.

Integrated Solutions for Elderly Care (Singapore)

TCS and Singapore Management University (SMU) extended their research partnership until 2020 to focus on intelligent, inclusive, and integrated solutions for urban challenges. The TCS-SMU iCity lab was established in 2011 and launched a very successful pilot project called SHINE Seniors in Singapore which uses non-intrusive sensor technologies to remotely monitor senior citizens living independently at 100 housing development board homes, providing them personalized, sustainable, and tech-enabled care.

Accessibility Platform for Digital Publishing (India)

Access Infinity is a technology platform from TCS R&I that powers the Sugama Pustakalaya (<https://library.daisyindia.org/>) - a pan-Indian ecosystem for real-time publishing of accessible media. It provides real-time availability of accessible content in many languages, meeting all the regulatory and security compliances. This platform brings together an entire accessible literacy ecosystem for the country, thus creating a national catalogue of hundreds of thousands of books.

TCS Research Scholarship Program (India)

The TCS Research Scholarship Program (RSP) focuses on increasing research in areas related to computing as well as innovation in order to enrich India's technology landscape. TCS has identified and shortlisted 66 top-ranking institutes and universities across India with active PhD programs in Computer Sciences. PhD candidates are invited for a scholarship, and the selected research scholars receive a competitive stipend. The scholars and their guides are also awarded significant funds for national and international travel to attend and present their research work. This program is currently in its fourteenth cycle, covering 261 PhD scholars across India.

Digital Farming and Fishing (India)

TCS' Digital Farming initiative mKRISHI® has progressed both technically and along impact dimensions. It has developed an agricultural analytics engine called agEYE™, along with a web-based application that provides historic, current, and future data on crops. It offers crop health, soil moisture, weather forecast, disease-severity forecast, and disease identification at a village level to farmers and other stakeholders in the agri-value chain. These parameters are derived from near real-time remote sensing data and weather data from third-party services. In addition, there is also the mKRISHI® fisheries service, which has a built-in advance warning and message alert service to help fishermen remain safe during weather events.

CSPathshala (India)

The Association for Computing Machinery (ACM) India started an education initiative, CSPathshala (www.cspathshala.org) in 2016 to teach computing as a science in all schools. The key objectives are to popularize Computational Thinking (CT) and influence education policy to enable its introduction into the curricula.

TCS Gandhinagar, in partnership with Ahmedabad University and Google, trained 93 teachers from 53 government schools in Sabarkantha, Gujarat in CT and use of CSPathshala teaching aids over two days.

Pan IIT Alumni Leadership Series (PALS)

PALS (<http://www.iitalumni-center.org/pals/>) is a major initiative by the IIT Alumni Center, Chennai, aimed at benefiting students and faculty of engineering colleges in Tamil Nadu. TCS has a number of IIT Alumni who are a part of PALS, who participate actively in various programs. TCS researchers gave talks at PALS's partner-engineering colleges on industry perspectives on emerging technologies. TCS researchers were adjudicators at INNOWAH 2017 - an innovation competition for undergraduate engineering students - and gave feedback on how to take their products/ideas to the market.

PLANET

TCS takes its responsibility for environmental stewardship very seriously and has been continuously striving to reduce its ecological footprint and pursue a strategy of environmentally sustainable growth. Top management has taken a 'beyond compliance' approach, setting a bold vision for environmental sustainability, articulated in the TCS Environmental Policy, that translates into a strong focus on operational efficiency and concern for the environment across the organization and in the value chain.

TCS' overall approach aims to mitigate climate change-related risks through resource optimization and impact minimization. Our environmental sustainability strategy is implemented through standardized processes, environmental impact performance monitoring and strong partnerships with stakeholders, including customers, employees and suppliers. The four key focus areas of our strategy are:

- **Carbon footprint reduction:** Energy efficiency and use of renewable energy
- **Water management:** Efficient use, recycling and rainwater harvesting
- **Waste management:** Reduction, Reuse and Recycling
- **Supply chain sustainability**

Our customers, employees, and contractors are a part of our environmental sustainability journey. We help our customers transform their IT landscapes into lean, energy-efficient and agile cloud-based digital cores, and embrace technology-enabled green solutions, we motivate our contractors to adhere to safe and environmentally responsible practices. We engage our employees through awareness and communication campaigns to sensitize them to the risks for our environment, the need to conserve resources and be environmentally responsible.

TCS is certified enterprise-wide compliant with the ISO 14001:2015 Environmental Management System (EMS) standard globally across 120 locations. The EMS follows a risk-based approach founded on the principle of Plan-Do-Check-Act, and helps to integrate environmental risks and opportunities with TCS' business strategy. Environmental initiatives are part of our overall operational and infrastructure improvements. Expenditure on these initiatives are funded through related budgets, and not separately tracked.

Reducing the Carbon Footprint³²

Long before it became an established science, TCS was an early believer in the impact of anthropogenic emissions on climate change. Embracing the precautionary principle, our management recognized this as a high priority area³³ in our efforts towards responsible environmental stewardship.

Further, it has been a core belief that collective course correction is only possible when every individual takes steps and makes responsible, environmentally sustainable choices to safeguard the future of the planet. Towards this, TCS launched organization wide employee engagement programs and started measuring the specific carbon footprint of its operations. In 2011, our then-CEO (and current Chairman) set an ambitious target of halving our specific carbon footprint by 2020, taking 2008 as the base year.

²⁶102-11,103-2,103-3

With an operational footprint that consists of campuses of office blocks to house our delivery organization, and sales offices across the world, direct emissions from our operations – also referred to as Scope 1 emissions – are a very small part of our carbon footprint, amounting to just 6% of the overall carbon footprint. The rest is made up of indirect emissions, referred to as Scope 2 emissions, associated with purchased electricity³⁴.

Consequently, in working towards our stated goal, we made concerted efforts to bring down our per capita energy consumption by investing in green infrastructure, more efficient operations, and greater adoption of green IT and renewable energy. The results have been very gratifying. We achieved our stated target in 2018, well ahead of schedule.

We have been able to reduce our specific energy consumption by 54.5% over baseline year FY 2008 (Exhibit Figure 8), and bring down our greenhouse gas emissions (Scope 1 + Scope 2)³⁵ from 3 tCO₂e/FTE/Annum in FY 2008 to 1.31 tCO₂e/FTE/Annum in the current reporting year, a reduction of 56%. Compared to the prior year, our specific energy consumption is down 6.5% YoY and specific carbon footprint is down 8.1% YoY.

Having achieved our 2020 target to reduce the specific carbon footprint by 50%, we are now working on the next stage of our environmental sustainability target.

Electricity Consumption (kWh/FTE/month)



Exhibit 9: Longer term trend in specific electricity consumption³⁶

Scope 1 + Scope 2 Emissions (tCO₂e/FTE/annum)

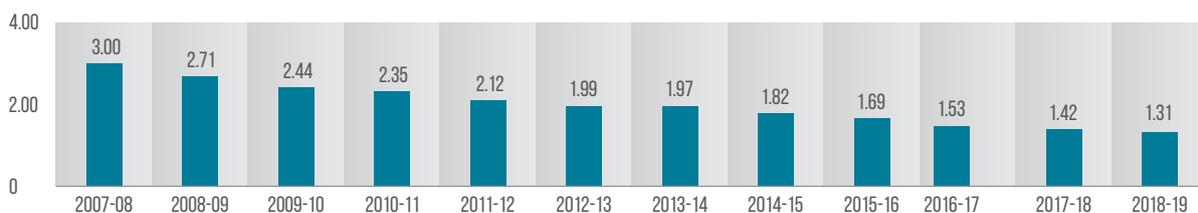


Exhibit 10: Longer term trend in Specific Carbon Footprint (Scope 1 + Scope 2)³⁷

Our absolute Scope 1 + Scope 2 emissions³⁸ have reduced by 4% over the last financial year in FY 2019 (from 455,329 in FY18 to 437,366 in the current reporting year), for the third consecutive year.

³⁴302-1, In FY 2019, TCS consumed 584 GWh of electricity of which 10.1% was from renewable sources, 3% from onsite utilities and the remaining was purchased electricity. Total direct energy used was 2.2 Million GJ. The total electricity consumed, as well as direct energy usage, have gone down, indicating better controls.

³⁵302-3, Scope 1 emissions have been calculated using the emissions factors published by the GHG (greenhouse) Protocol All Sector Tools version released in 2017. For Scope 2 emissions – that is, purchased electricity-related carbon emissions – for India, the source is the emissions factor in the CO₂ Baseline Database for the Indian Power Sector, User Guide, Version 13.0, June 2018, published by the Central Electricity Authority of India. For Scope 2 emissions of locations other than India, emission factors published by DEFRA 2015 have been used.

³⁶302-3

³⁷302-3

³⁸305-1

The Path to Energy Efficiency³⁹

Our halving of our specific energy consumption was achieved by adding more green buildings to our real estate portfolio, placing rooftop solar panels across our offices, optimizing IT system power usage, and improving operational efficiency through machine learning-based cognitive algorithms on our IoT platform.

Energy Lever	Description
Green Buildings	<p>We have 21.8 million sq ft of office area designed as per green building standards, which is over 60% of the total office space we currently occupy. Out of this, 17.24 million sq ft comprises of campuses across India, making up approximately 86% of the total owned workspaces. Energy efficiency is a key criterion even when we lease new spaces. New campuses in Indore and Mumbai and leased office spaces in Gandhinagar and Bangalore are green buildings.</p> <p>Other milestones achieved in FY 2019:</p> <ul style="list-style-type: none"> ■ TCS House in Mumbai was awarded the highest Platinum rating by the Indian Green Building Council under the Existing Building category. ■ TCS became the first IT services company in India to achieve the ISO 50001:2011 Energy Management System certification for its campus at Pune, Sahyadri Park.
Energy Management	<p>Overall energy efficiency was brought about by changing over to energy-efficient luminaires, retrofits, and enhancement to legacy infrastructure.</p> <p>The TCS Remote Energy Management Program continues to scale up by extending the program to some of our international sites in the US, Ecuador, and China in addition to the 135 sites in India in the program.</p> <p>Our IoT platform has been further enhanced to acquire Indoor Air Quality (IAQ) data – indoor CO2 levels, temperature, and relative humidity – to ensure that the IAQ parameters inside our facilities are maintained within acceptable limits for a healthy and conducive work environment.</p> <p>The Resource Optimization Centre (ROC) in Kochi continues to orchestrate business operations and generate value, thus consistently delivering year-on-year energy reduction, offsetting the growth in employees and new facilities, and ramping up existing facilities. Initiatives that are further fine-tuning asset operations (HVAC, lighting) with occupancy and weather conditions are generating savings. Asset efficiency analytics are helping to improve the efficiency and maintainability of assets. Furthermore, machine learning-based cognitive algorithms have been developed to help with automated anomaly detection and accurate forecasting for various uses like budgeting, provisioning, and procurement on energy exchanges.</p>

³⁹103-2,103-3

Energy Lever	Description
Renewable Energy	The use of renewable energy in our offices increased to 10.1% from 8.45% in the last reporting year, driving us closer to achieving the 2020 target of 20% RE in the energy mix. This year, we added 1.7 MW of Solar Rooftop systems across four locations and plan on adding another 3MW in FY 2020. The solar rooftop installations across our campuses contribute towards 5849 MWh of energy.
Green IT	We continuously innovated and improved our data center energy efficiency through initiatives like data center/server room consolidation, rack cooling solutions, air-flow management, UPS load optimization through modular UPS solutions and centralized monitoring; thereby reducing the Power Utilization Efficiency (PUE) across 23 data centers to 1.67, reducing it from 1.71 in the FY18.

Other Emissions

Emissions of Ozone depleting substances are primarily in the form of system losses or fugitive emissions during maintenance and repair of air conditioning systems, estimated to be 0.20 ton of CFC-11 equivalent in FY 2019. TCS is committed to using zero-ozone depleting potential (ODP) refrigerants in its operations. New facilities coming up at TCS have HVAC systems based on zero-ODP refrigerants. All ODP refrigerant gases will be phased out and replaced with zero-ODP refrigerants, in line with country-specific timelines agreed to as per the Montreal Protocol and local regulations. SOx and NOx emissions from diesel generator sets used as a backup source of power during power outages, were estimated at 1.44 ton and 176 ton respectively for the reporting period.

Value Chain Emissions

All other indirect emissions are accounted by TCS as Scope 3 emissions. These are also known as value chain emissions because they are caused by sources not owned or controlled by TCS, but are relevant to our operations within our value chain. By applying an expansive boundary and using standard Scope 3 emission factors, we estimate that the value chain emissions amounted to 1.67 tCO₂e per FTE, in FY 2019. The largest contributors, amounting to ~60%, were the business travel intrinsic to the consultancy business model, and the daily workplace commute of employees. TCS has been investing in superior communications and video conferencing infrastructure to promote greater collaboration across remote teams, and with lesser in-person attendance for meetings and business discussions. This has helped us reduce the specific carbon footprint from business air travel by more than 59% over the baseline year.

Water Conservation⁴⁰

TCS optimizes water consumption through conservation, sewage treatment and reuse, and rainwater harvesting. Moreover, all our new campuses have been designed for 50% higher water efficiency, 100% treatment and recycling of sewage, and rainwater harvesting. Employee engagement also plays a big role in our water sustainability strategy.

In FY 2019, water management measures have helped us reduce our specific fresh water consumption by 5.5% over the last financial year and by 19.4% over the baseline year. Implementation of rooftop collection systems, storage tanks, and recharge trenches and pits has led to a 28% increase in the rainwater harvesting potential at TCS sites over the previous year.

We continue innovating our water management practices, primarily towards maximizing the reuse of waste streams. We successfully piloted a project to reuse cooling tower blow-down, which was earlier being discharged to maintain the cycle of concentration at optimum levels. It involved setting up a treatment plant to make the water quality suitable for reuse and helped reduce the freshwater consumption by over 90 kilo liters per day.

Of the 4 million kL⁴¹ of fresh water consumed by TCS in FY 2019, 58% came from municipal sources, 30% from tankers, 11% from borewells, and 1% was bottled water. Consistent water efficiency measures have helped us reduce fresh water consumption by over 19% over baseline year FY 2008. Total treated sewage recycled as a percentage of the total sewage generated was 75% in FY 2019⁴².

We continue our efforts towards community water shed management and surface water body rejuvenation projects by scaling up our work at Siruseri in Chennai, Kasalganga in Solapur, and Malguzari ponds in Vidarbha.

Waste Reduction and Reuse⁴³

As an IT services and consulting organization, our facilities only generate electronic, electrical, and office consumables waste and municipal solid waste. Additionally, the generation of potentially hazardous wastes such as lead-acid batteries and waste lube oil are in relatively smaller proportions. In FY 2019, we generated 206 tons of paper waste, 1,030 tons of dry waste, and 4,299 tons of canteen waste: all adding up to 21.41 kg/FTE/annum of waste⁴⁴.

TCS' waste management practices seek to maximize segregation at source, as well as reuse and recycle as possible. All the hazardous and regulated waste is disposed through government-authorized vendor as per the regulatory requirements. Engaging employees and raising their awareness to encourage responsible consumption is a key lever in our strategy.

TCS' waste management practices⁴⁵

Biodegradable waste is treated onsite for biogas recovery or manure generation through bio-digesters or composting. In locations where there is limited space for putting up these system, the waste is disposed of as fodder for livestock or sent to the municipal waste collection system. The choice is based on the space available and the quantum of food waste generated. In FY 2019, 42% of the total food waste generated across all TCS facilities was treated using onsite composting methods or bio-digester treatment. All TCS campuses, owned offices and leased offices that have the required space have been provided with onsite food waste management facilities. Dry waste is categorized, segregated, and sent for recycling. Garden waste is composted onsite. Over 275 tons of compost was generated in FY 2019, thus avoiding the use of chemical fertilizers and preventing the resultant soil and groundwater pollution.

⁴⁰103-2, 103-3

⁴¹303-1

⁴²306-1

⁴³103-2, 103-3

⁴⁴Data given is only for India, since most overseas locations are multi-occupancy facilities, where waste handling and disposal is handled by the building authority, and hence is not under TCS' control.

⁴⁵In all geographies, we follow local regulations. Since most of the facilities outside India are typically leased and operated by landlords, the generation of such waste is marginal and is appropriately handled through the landlords.

In FY 2019, 52,862 items of e-waste obsolete or defunct electronic and electrical equipment⁴⁶ were disposed through government-authorized handlers or recyclers in accordance with the regulations of each country. For operations in India, hazardous wastes (as defined by regulations) are handled and disposed of as per the Hazardous Waste Management and Handling Rules, 2008, only through government-authorized vendors. In FY 2019, 36,928 liters of lube oil from diesel generator sets and 441 tons of batteries from UPS systems were disposed of through government-authorized recyclers. All used printer cartridges and photocopier toner bottles are sent back to the manufacturers for proper disposal.

As a part of our 'duty of care', our recycling service providers undergo a stringent due-diligence audit process to ensure compliance with health, safety, and environment (HSE)-related regulations in letter and spirit and that electronic and hazardous waste are handled and recycled appropriately. A desktop review is followed by a detailed site audit to verify adherence to HSE practices.

TCS' focus on resource use and waste reduction has led to the reduction of the consumption of the per capita paper consumption by 12.6% over the previous year and 87% over the baseline FY 2008. The success of this drive can be attributed to the awareness created among employees and the enforcement of printing discipline through automated and manual means. Paper waste is carefully segregated, shredded, and sent for recycling. In some cases, waste paper is sent to NGOs, which supply a range of stationery such as notepads and files, made from recycled paper back to TCS. TCS continues to achieve 100% recycling of its paper waste⁴⁷.

Responsible Sourcing⁴⁸

Our responsible sourcing program motivates our suppliers to adhere to 100% regulatory compliances and strive for better sustainability performance. Our Sustainable Supply Chain policy and Green Procurement policy outline our commitment to make our supply chain more responsible and sustainable. TCS' Supplier Code of Conduct is included as a part of the contract with all vendors. Pre-qualification compliance assessments and site audits are done for high-risk vendors through periodic reviews during the contract period.

Employee Engagement

Every year, the month of June is celebrated as the TCS Sustainability Month, and in June 2018, TCS globally observed this campaign with the theme 'Beat Plastic Pollution'. We pledged to make all our offices plastic free by eliminating the use of single-use plastic items and minimizing and recycling plastic packaging in our cafeterias. Additionally, the campaign comprised several employee engagement activities that encouraged TCSers to join this movement and implement their learning not only in their personal lives but also for the benefit of the community around them.

⁴⁶ Data for all geographies.

⁴⁷ Data is limited to Indian facilities; overseas operations are mostly at multi-occupancy facilities where waste handling and disposal is handled by the building authority.

⁴⁸ 308-1

Another campaign was to make TCS campuses free from single-use plastics. Using the theme of #BeatPlasticPollution eliminated the use of plastic straws, cutlery, and glasses. Further, all other forms of plastic waste are also segregated and recycled wherever feasible.

Other such initiatives included the following:

- Green Day was observed on 5th June across various regions in TCS India.
- Tree Plantation drive was conducted across various locations to sensitize TCS associates while simultaneously adding to the floral diversity at our campuses.
- A walkathon was conducted by TCS-Noida associates to spread awareness about the impacts of plastic pollution.
- TCS Ecuador hosted the Recycling Marathon, which saw enthusiastic participation by employees, who collected 500 kg of recyclable waste during the campaign.
- TCS Brazil planted vegetable seeds and plants with elementary school children to sensitize them about not only caring for the environment but also the benefits of healthy and sustainable living.
- TCS Chile set up an attractive green selfie booth for fun photographs and over 800 participating employees went home with fruit and vegetable seed packets.
- Taking the initiative beyond TCS, awareness sessions were conducted for kids at local schools in some cities across India to groom the citizens of tomorrow.
- TCS offices observed Earth Hour on 30th March 2019 by switching off all non-critical lights from 8:30 pm to 9:30 pm and sharing the information through company-wide mailers, encouraging employees to participate in this global movement under the TCS4ThePlanet campaign.

Awards and Recognition

Business

- Voted the Overall Most Outstanding Company in India, in Asiamoney's 2018 Asia's Outstanding Companies poll
- Named the Fastest Growing Brand of the Decade in IT Services globally by Brand Finance. TCS' brand value crossed \$12.8 billion this year, up 447% over the decade
- Ranked #1 for Customer Satisfaction for the sixth consecutive year in Europe's largest independent survey of IT service providers, carried out by Whitelane Research. In the individual market rankings, TCS was placed first in United Kingdom (81%), Germany (77%), Netherlands (80%), Nordics (82%), BeLux (80%) and Switzerland (74%)
- Won the Best Risk Management Framework & Systems - IT-ITES sector award presented by ICICI Lombard and CNBC-TV18 at the prestigious India Risk Management Awards
- Won the Best Patents Portfolio Award (2013-2018) in the Large (Engineering) Industries category at the CII Industrial Intellectual Property Awards 2018
- Ranked #1 in the DQ Top 20 2018
- Ranked #35 on the Forbes 2000 list of World's Best Regarded Companies in 2018
- Ranked #1 in Investor Relations, #1 in ESG, and #2 in Best Managed Company in India in FinanceAsia's 2019 Asia's Best Managed Companies survey of portfolio managers and analysts across Asia
- Topped the sector in Institutional Investor's 2018 All Asia Executive Team rankings, clinching first place in Best Corporate Governance and second place each in Best Investor Relations Program and Best ESG / SRI Metrics. Individual rankings were:
 - Rajesh Gopinathan, CEO and Managing Director, ranked Best CEO (First Place)
 - V Ramakrishnan, CFO, ranked Best CFO (Second Place)
 - Kedar Shirali, Global Head – Investor Relations ranked Best IR Professional (First Place)
- TCS' #DigitalDirections campaign won three accolades at the Communicate magazine's Corporate Engagement Awards -Two Golds, for 'Best Stakeholder Communications' and 'Best Sponsorship Activity To Support or Develop A Corporate Reputation', and One Silver for 'Best PR and external communications'
- TCS BaNCS, along with its customer DBS, won the 'Financial Markets Technology Implementation of the Year – Best Custodian System Implementation' at The Asian Banker Financial Markets Awards 2018
- Recognized as one of India's top innovative organizations at the 2018 India Innovation Conference and Awards
- ignio™ won an award for First Use of Machine Learning within the Workload Automation Analytics Industry from Enterprise Management Association

Employer

- Recognized as a Global Top Employer for the fourth consecutive year by the Top Employers Institute, and the Number One Top Employer in four regions – North America, Europe, Asia Pacific, and the Middle East
- Ranked #3 in the 17th edition of the Business Today Best Companies to Work For survey

- Won the 2018 Canadian National HR award for 'Best Recruitment Campaign', for the fourth straight year
- Won 11 Stevies® – 5 Gold Stevies, 2 Silver Stevies and 4 Bronze Stevies – at the 2018 Great Employers Awards for achievements in Talent Acquisition and Development, Leadership Training, and Creative Use of Technology
- Awarded the 2018 BEST Award by the Association for Talent Development
- Won 6 Stevies® at the 2018 American Business Awards®: a Gold Stevie® for Mobile Marketing Campaign of the Year, a Silver Stevie® for Corporate Social Responsibility Program of the Year, and 4 Bronze Stevies® for Company of the Year, New Product or Service of the Year for Human Capital Management, Human Resources Department of the Year, and Human Resources Team of the Year for Talent Engagement
- Won the Businessworld HR Excellence award for Excellence in Diversity and Inclusion

Sustainability Awards

- Won Company of the Year Award from the Canada-India Business Council for achievements in business growth and impressive corporate social responsibility initiatives
- Won the Hr NETWORK Scotland National Award 2018 for the IT Futures program in UK
- Won Gold in the EcoVadis CSR Assessment for the fifth year in a row
- Recognized among Sustainability Leaders in the Dow Jones Sustainability World Index
- Won the Social Responsibility Award at the North American Employee Engagement Awards for the third year in a row
- Named America's Most Community-Minded Information Technology Company in the 2018 Civic 50 by Points of Light
- Won three awards at the 19th National Award for Excellence in Energy Management 2018, organized by CII, India – TCS Shayadri Park, Pune and Peepul Park, Trivandrum (Energy efficient unit award).
- TCS-New campus Kochi won the ICC Environment Excellence Award 2018

Partner

- Won the 2018 Pega Partner Excellence Award
- Won the Business Excellence - Market Development award at the 2018 Cloudera Partner Impact Awards; additionally, named the North EMEA Partner of the Year
- Named HPE Global Hybrid IT Solutions Partner of the Year
- Won the Salesforce Partner Innovation Award during Dreamforce 2018
- Recognized as Adobe System Integrator Partner of the Year 2018 for India region
- Won the 'Valued Partner' award from ASML
- Named an Azure Expert Managed Service Provider by Microsoft

Contact⁴⁹

Corporate Headquarters:

TCS House, Raveline Street,
Fort, Mumbai - 400 001
Maharashtra, India

Phone : 022-6778 9999

Fax : 022-6778 9000

Website: www.tcs.com

Please email any feedback/queries to: corporate.sustainability@tcs.com

⁴⁹102-3, 102-53

For the GRI Content Index Service, GRI Services reviewed that the GRI content index is clearly presented and the references for all disclosures included align with the appropriate sections in the body of the report.



GRI Standards – Content Index ¹

GRI Standard	Disclosure	Page No.	Omission
GRI 101: Foundation 2016 (GRI 101 doesn't include any disclosures)			
General disclosures			
Organisational Profile			
GRI 102: General Disclosures 2016	102-1 Name of the organisation	3	
	102-2 Activities, brands, products and services	3	
	102-3 Location of headquarters	50	
	102-4 Location of operations	8	
	102-5 Ownership and legal form	3	
	102-6 Markets served	8	
	102-7 Scale of the organisation	9	
	102-8 Information on employees and other workers	23	
	102-9 Supply Chain	24	
	102-10 Significant changes to the organisation and its supply chain	4	
	102-11 Precautionary principle or approach	42	
	102-12 External initiatives	6	
	102-13 Membership of associations	12	
Strategy			
GRI 102: General Disclosures 2016	102-14 Statement from senior decision maker	5	
Ethics and Integrity			
GRI 102: General Disclosures 2016	102-16 Values, principles, standards, and norms of behavior	18	
Governance			
GRI 102: General Disclosures 2016	102-18 Governance structure	15	
Stakeholder Engagement			
GRI 102: General Disclosures 2016	102-40 List of stakeholder groups	10	
	102-41 Collective bargaining agreements	23	
	102-42 Identifying and selecting stakeholders	10	
	102-43 Approach to stakeholder engagement	12	
	102-44 Key topics and concerns raised	12	
Reporting Practice			
GRI 102: General Disclosures 2016	102-45 Entities included in the consolidated financial statements	4	
	102-46 Defining report content and topic boundaries	14	
	102-47 List of material topics	13	
	102-48 Restatements of information	4	
	102-49 Changes in reporting	4	
	102-50 Reporting period	4	
	102-51 Date of most recent report	4	

¹102-55

GRI Standard	Disclosure	Page No.	Omission
GRI 102: General Disclosures 2016	102-52 Reporting cycle	4	
	102-53 Contact point for questions regarding the report	50	
	102-54 Claims of reporting in accordance with the GRI Standards	4	
	102-55 GRI content index	51-54	
	102-56 External assurance	4	
Material Topics - Economic			
GRI 201 – Economic Performance			
GRI 103: Management Approach 2016	103-1 Explanation of the material topics and its boundaries	14	
	103-2 The management approach and its components	15	
	103-3 Evaluation of the management approach	15	
GRI 201: Economic Performance 2016	201-1 Direct economic Value generated and distributed	9	
Material Topics - Environment			
GRI 302: Energy			
GRI 103: Management Approach 2016	103-1 Explanation of the material topics and its boundaries	14	
	103-2 The management approach and its components	42	
	103-3 Evaluation of the management approach	42	
GRI 302: Energy 2016	302-1 Energy consumption within the organization	43	
GRI 303: Water			
GRI 103: Management Approach 2016	103-1 Explanation of the material topics and its boundaries	14	
	103-2 The management approach and its components	46	
	103-3 Evaluation of the management approach	46	
GRI 303: Water 2016	303-1 Water withdrawal by source	46	
GRI 305: Emissions			
GRI 103: Management Approach 2016	103-1 Explanation of the material topics and its boundaries	14	
	103-2 The management approach and its components	42	
	103-3 Evaluation of the management approach	42	
GRI 305: Emissions 2016	305-1 Direct (Scope 1) GHG Emissions	43	

GRI Standard	Disclosure	Page No.	Omission
GRI 306: Effluents and Waste			
GRI 103: Management Approach 2016	103-1 Explanation of the material topics and its boundaries	14	
	103-2 The management approach and its components	46	
	103-3 Evaluation of the management approach	46	
GRI 306: Effluents and waste 2016	306-1 Water discharge by quality and destination	46	
Material Topics - Social			
GRI 401: Employment			
GRI 103: Management Approach 2016	103-1 Explanation of the material topics and its boundaries	14	
	103-2 The management approach and its components	23	
	103-3 Evaluation of the management approach	23	
GRI 401: Employment 2016	401-1 New employee hires and employee turnover	24	
GRI 402: Labor/Management Relations			
GRI 103: Management Approach 2016	103-1 Explanation of the material topics and its boundaries	14	
	103-2 The management approach and its components	23	
	103-3 Evaluation of the management approach	23	
GRI 402: Labor/ Management Relations 2016	402-1 Minimum notice periods regarding operational changes	23	
Material Topics - Social			
GRI 403: Occupational Health and Safety			
GRI 103: Management Approach 2016	103-1 Explanation of the material topics and its boundaries	14	
	103-2 The management approach and its components	26	
	103-3 Evaluation of the management approach	26	
GRI 403: Occupational Health and Safety 2016	403-1 Workers representation in formal joint management-worker health and safety committees	27	
GRI 404: Training and Education			
GRI 103: Management Approach 2016	103-1 Explanation of the material topics and its boundaries	14	
	103-2 The management approach and its components	26	
	103-3 Evaluation of the management approach	26	
GRI 404: Training and Education 2016	404-1 Average hours of training per year per employee	26	

GRI Standard	Disclosure	Page No.	Omission
GRI 405: Diversity and Equal Opportunity			
GRI 103: Management Approach 2016	103-1 Explanation of the material topics and its boundaries	14	
	103-2 The management approach and its components	25	
	103-3 Evaluation of the management approach	25	
GRI 405: Diversity and Equal Opportunity 2016	405-2 Ratio of basic salary and remuneration of women to men	26	
GRI 413: Local Communities			
GRI 103: Management Approach 2016	103-1 Explanation of the material topics and its boundaries	14	
	103-2 The management approach and its components	28	
	103-3 Evaluation of the management approach	28	
GRI 413: Local Communities 2016	413-1 Operations with local community engagement, impact assessments, and development programs	28	



Ernst & Young Associates LLP Tel: +91 22 6102 0000
5th Floor, Block B 2 ey.com
Nitar Knowledge Park
DR Western Express Highway
Goregaon (E), Mumbai-400063, India

INDEPENDENT ASSURANCE STATEMENT

The Board of Directors and Management
Tata Consultancy Services Limited
Mumbai, India

Ernst & Young Associates LLP (EY) was engaged by Tata Consultancy Services Limited (the 'Company' or 'TCS') to provide independent assurance on its annual Sustainability Report (the 'Report') for the Financial Year 2018-19.

The development of the Report is based on the Global Reporting Initiative (GRI) Sustainability Reporting Standards ('GRI Standards'); its content and presentation is the sole responsibility of the management of the Company. EY's responsibility, as agreed with the management of the Company, is to provide independent assurance on the report content as described in the scope of assurance. Our responsibility in performing our assurance activities is to the management of the Company only and in accordance with the terms of reference agreed with the Company. We do not therefore accept or assume any responsibility for any other purpose or to any other person or organization. Any dependence that any such third party may place on the Report is entirely at its own risk. The assurance report should not be taken as a basis for interpreting the Company's overall performance, except for the aspects mentioned in the scope below.

Scope of assurance

The scope of assurance covers the following aspects of the Report:

- Data and information related to the Company's sustainability performance for the period 1st April 2018 to 31st March 2019;
- The Company's internal protocols, processes, and controls related to the collection and collation of sustainability performance data;
- Verification of data and related information through consultations at the Company's Head Office in Mumbai as well as site visits and desk reviews at the following locations:
 - o Wellspring, Mumbai
 - o Adibatla, Hyderabad
 - o Deccan Park, Hyderabad
 - o Velachery, Chennai
 - o Siruseri, Chennai
 - o Sahyadri Park, Pune
 - o Kalinga Park, Bhubaneshwar
 - o Barabati, Bhubaneshwar
 - o Peepul Park, Trivandrum
 - o CLC, Trivandrum
 - o Hangzhou, China
 - o CUNSAC Building-EI Agustino, Peru (desk review)
 - o San Sebastián building, Av. Aviación, Peru (desk review)
- Review of data on a sample basis, at the above-mentioned locations, pertaining to the following General Disclosures and Specific Disclosures of the GRI Standards.
 - General Disclosures
 - o Organizational Profile (102-1 to 102-13), Strategy (102-14, 102-15), Ethics and Integrity (102-16, 102-17), Governance (102-18 to 102-39), Stakeholder Engagement (102-40 to 102-44), Reporting Practice (102-45 to 102-56)
 - Specific Disclosures
 - o Environmental Topics: Energy (302-1, 302-3, 302-4), Water (303-1, 303-2, 303-3), Emissions (305-1 to 305-7), Effluents and Waste (306-1), Waste (306-1, 306-2, 306-3, 306-5)
 - o Social Topics: Employment (401-1), Occupational Health & Safety (403-1), Training and Education (404-1), Diversity and Equal Opportunity (405-1), Local Communities (413-1)



Limitations of our review

The assurance scope excludes:

- Operations of the Company other than those mentioned in the 'Scope of Assurance';
- Aspects of the Report and data/information other than those mentioned above;
- Data and information outside the defined reporting period i.e. 1st April 2018 to 31st March 2019;
- The Company's statements that describe expression of opinion, belief, aspiration, expectation, aim or future intention provided by the Company;
- Review of the Company's compliance with regulations, acts, guidelines with respect to various regulatory agencies and other legal matters;
- Data and information on economic and financial performance of the Company.

Assurance criteria

The assurance engagement was planned and performed in accordance with the International Federation of Accountants' International Standard for Assurance Engagements Other than Audits or Reviews of Historical Financial Information (ISAE 3000) and the second edition of AccountAbility's AA1000 Assurance Standard 2008 (AA1000 AS). Our evidence-gathering procedures were designed to obtain a 'Limited' level of assurance (as set out in ISAE 3000) on reporting principles and a 'Type 1, Moderate' level of assurance (as per AA1000 AS), as well as conformance of sustainability performance disclosures as per GRI Standards.

What we did to form our conclusions

In order to form our conclusion, we undertook the following key steps:

- ▶ Interviews with select key personnel and the core team responsible for the preparation of the Report to understand the Company's sustainability vision, mechanism for management of sustainability issues and engagement with key stakeholders;
- ▶ Interactions with the key personnel at the Company's Management to understand and review the current processes in place for capturing sustainability performance data;
- ▶ Data assurance at the Company's corporate office and other operational locations as mentioned in the 'Scope of Assurance' above;
- ▶ Review of relevant documents and systems for gathering, analyzing and aggregating sustainability performance data in the reporting period.

Our Observations

The Company has demonstrated its commitment to sustainable development by reporting its performance on economic, environmental and social aspects for FY 2018-19. The Report has been developed as per the GRI Standards 'Core', and includes a description of the stakeholder engagement process, materiality analysis and the key material topics.

Our Conclusion

On the basis of our review scope and methodology, our conclusions are as follows:

- **Inclusiveness:**
The Company has described its stakeholder engagement approach and activities in the Sustainability Report. We are not aware of any matter that would lead us to conclude that the Company has not applied the principle of inclusivity in engaging with the key stakeholder groups identified in the Report.
- **Materiality:**
The Company has identified key issues material to its sustainability performance and described the process for materiality analysis in the Sustainability Report. Nothing has come to our attention that causes us to believe that material issues so identified have been excluded from the Report by the Company.
- **Responsiveness:**
We are not aware of any matter that would lead us to believe that the Company has not applied the responsiveness principle in its engagement with stakeholders identified in the Report on material aspects covering its sustainability performance.



- **Reliability of performance information:**

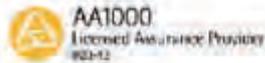
We reviewed the accuracy and completeness of sustainability information in the Report. Nothing has come to our attention that causes us not to believe that the data has been presented fairly, in material respects, in keeping with the GRI Standards and the Company's reporting principles and criteria. Some data pertaining to key performance disclosures underwent change as part of our assurance process, which has been communicated to the Company as part of our Management Letter.

Our assurance team and independence

Our assurance team, comprising of multidisciplinary professionals, has been drawn from our climate change and sustainability network and undertakes similar engagements with a number of significant Indian and international businesses. As an assurance provider, EY is required to comply with the independence requirements set out in International Federation of Accountants (IFAC) Code of Ethics¹ for Professional Accountants. EY's independence policies and procedures ensure compliance with the Code.

for Ernst & Young Associates LLP

Chaitanya Kalia
Partner
15 January 2020
Mumbai



¹ International Federation of Accountants (IFAC) Code of Ethics for Professional Accountants. This Code establishes ethical requirements for professional accountants. The guidance related to network firms was updated in July 2006.

Awards & Recognition



CONTACT

Corporate Headquarters

TCS House
Raveline Street Fort Mumbai 400 001
Maharashtra India
Phone 6778 9999 Fax 6778 9000 www.tcs.com

Please email any feedback/queries to corporate.sustainability@tcs.com

About Tata Consultancy Services Ltd (TCS)

Tata Consultancy Services is an IT services, consulting and business solutions organization that delivers real results to global business, ensuring a level of certainty no other firm can match. TCS offers a consulting-led, integrated portfolio of IT and IT-enabled infrastructure, engineering and assurance services. This is delivered through its unique Global Network Delivery Model™, recognized as the benchmark of excellence in software development. A part of the Tata Group, India's largest industrial conglomerate, TCS has a global footprint and is listed on the National Stock Exchange and Bombay Stock Exchange in India.

For more information, visit us at www.tcs.com

IT Services
Business Solutions
Consulting

All content / information present here is the exclusive property of Tata Consultancy Services Limited (TCS). The content / information contained here is correct at the time of publishing. No material from here may be copied, modified, reproduced, republished, uploaded, transmitted, posted or distributed in any form without prior written permission from TCS. Unauthorized use of the content / information appearing here may violate copyright, trademark and other applicable laws, and could result in criminal or civil penalties.

Copyright © 2020 Tata Consultancy Services Limited