

ES401

Environmental Management

Sustainability Development

Report on ITC

Submitted By:

Sharang Mantri (18B080022)

Sustainable development is the organizing principle for meeting human development goals while simultaneously sustaining the ability of natural systems to provide the natural resources and ecosystem services on which the economy and society depend. The desired result is a state of society where living conditions and resources are used to continue to meet human needs without undermining the integrity and stability of the natural system. Sustainable development can be defined as development that meets the needs of the present without compromising the ability of future generations to meet their own needs. Sustainability goals address the global challenges, including poverty, inequality, climate change, environmental degradation, peace and justice.

As the concept of sustainable development developed, it has shifted its focus more towards economic development, social development and environmental protection for future generations. It has been suggested that the term 'sustainability' should be viewed as humanity's target goal of human-ecosystem equilibrium, while 'sustainable development' refers to the holistic approach and temporal processes that lead us to the endpoint of sustainability". Modern economies are endeavouring to reconcile ambitious economic development and obligations of preserving natural resources and ecosystems, as the two are usually seen as of conflicting nature. Instead of holding climate change commitments and other sustainability measures as a remedy to economic development, turning and leveraging them into market opportunities will do greater good. The economic development brought by such organized principles and practices in an economy is called Managed Sustainable Development (MSD).

In the following report, we will see the sustainable development report of ITC

In order to address sustainable development challenges, best practices have been embedded into ITC's operations on the basis of which, the Company strives to maximise the efficiency of use of natural resources across its Businesses while also contribute to enhancing India's natural

capital stock. The goal is to continue being a net contributor to the enrichment of the environment through a cohesive approach.

PHILOSOPHY

ITC nurtures a culture of conservation that emphasises meticulous monitoring of resource use and encourages innovations that aid in reducing the dependency on natural resources. It believes in bringing together likeminded stakeholders and working collaboratively in tackling such complex issues. Accordingly, ITC is collaborating with key stakeholders to spearhead largescale interventions such as Social and Farm Forestry, Integrated Watershed Development and Sustainable Agriculture Practices among others.

PRACTICE

ITC's Businesses have targets for key performance indicators like specific energy consumption, specific greenhouse gas emissions, specific water intake, specific waste generation, etc.

POLICIES

The overall responsibility for ensuring implementation of Policies and Standards on environmental performance resides with the Divisional/ Strategic Business Unit's (SBU) Chief Executives who work with their respective management teams. Various committees designated with specific responsibilities have also been constituted for operationalising the Sustainability Policies.

At the corporate level, Corporate EHS Department is responsible for reviewing and updating Corporate Standards, verifying compliance, providing guidance and support as required. The progress and compliance of different Businesses against the agreed roadmap is reviewed regularly by the Sustainability Compliance Review Committee (SCRC) constituted by the Corporate Management Committee (CMC).

MANAGEMENT APPROACH

While fossil energy is a necessary resource for fuelling development and economic growth, it has a direct impact on the environment including long term impacts through climate change. The direct and cascading impacts of climate change are now well-documented and universally acknowledged with effects being felt across the globe, including in India. As a signatory to the Paris climate treaty, India has committed to deliver on its nationally determined targets of reducing emission intensity by 33-35%, increasing the share of non-fossil based electricity to 40%, and creating additional carbon sinks of 2.5-3 billion tonnes of CO₂ by 2030.

GREEN ENERGY

40.9% OF ITC'S ENERGY IS FROM RENEWABLE ENERGY SOURCES
57,068 acres of plantation added under Social and Farm Forestry Initiatives
7 ITC units met more than 90% of their electric energy requirements from renewable sources in 2018-19

ENERGY & CLIMATE CHANGE

Adopting a low-carbon growth path with the aim of achieving a 50% renewable energy share
Energy conservation through audits and benchmarking against industry standards
Continuous monitoring and review of performance through an organisation-wide data management system

Life-cycle assessment based approach by ITC

Evaluation of energy footprint along the value chain and identification of opportunities for improvement
Engagement with supply chain members for monitoring and improving energy performance
Progressive inclusion of supply chain partners within the sustainability reporting boundary

Reduction of energy consumed in transportation of raw materials finished goods and waste

ITC'S SUSTAINABILITY POLICIES

ENVIRONMENT, HEALTH & SAFETY

LIFE-CYCLE SUSTAINABILITY

RESPONSIBLE SOURCING

ACTION PLAN ON CLIMATE CHANGE

❖ RISKS FROM CLIMATE CHANGE

Targets under RECs, and PAT mechanisms likely to get more stringent in line with India's NDC

Increase in fuel prices due to higher taxes

❖ POTENTIAL IMPACTS

Additional investments become necessary to improve specific energy consumption and enhance renewable energy share

Increase in fuel costs could lead to the higher product cost

❖ RISKS FROM CLIMATE CHANGE

Disruption in agriculture yield due to change in precipitation patterns

Extreme weather events posing a threat to ITC properties that are in coastal areas and possibly leading to disruption in manufacturing and logistics

❖ POTENTIAL IMPACTS

ITC's Businesses depend significantly on Agri inputs. Any disruption in crop yields will result in greater competition for agriculture commodities

Disruptions in raw materials supply, production as well as delivery of the product

❖ RISKS FROM CLIMATE CHANGE

Increased difficulty in achieving equitable growth and inclusive development in a large and diverse country like India

Growing income disparity leading to socio-economic turbulence

❖ POTENTIAL IMPACTS

Since the poor would be worst affected by climate change, this will further aggravate the socioeconomic stability. Businesses having dependence on the agriculture sector, which is a source of livelihood for nearly half of the population, may face challenges in their supply chain

MANAGEMENT METHOD

Effective measurement and benchmarking the performance with international best practices

Identification of energy conservation opportunities through rigorous third-party audits and subsequent implementation of viable recommendations

Social investments made in various programmes, such as soil and moisture conservation, climate-smart agriculture practices and technologies, etc., to reduce the risks

Undertaking comprehensive climate change risk and vulnerability assessments, and developing site-specific risk mitigation and adaptation plans

Business continuity plans are in place to compensate for any interruption of production by a manufacturing facility due to extreme weather events

ITC's inclusive development models are based on deep-rooted stakeholder concerns and focus on the generation of sustainable livelihoods. With initiatives like Sustainable Agriculture, Soil & Moisture Conservation, etc., ITC has been working to promote climate-smart agriculture in its supply chain

ITC periodically commissions comprehensive studies through credible agencies in assessing water use at units and subsequently implementing specific interventions to help improve water usage efficiency and augment the supply of water for all stakeholders within the catchment areas.

PERFORMANCE

In 2018-19, ITC units consumed 23,326 Terra Joules (TJ) of energy out of which 40.9% was from renewable sources.

This year, ITC's total energy consumption witnessed an increase of 5% over the last year. Increase in total energy consumption is due to increased output, higher capacity utilisation of the Bleached Chemical Thermo Mechanical Pulp (BCTMP) mill at Bhadrachalam and an increase in the number of reporting units

ITC has computed its greenhouse gas (GHG) inventory, including GHG emissions, biogenic Carbon Dioxide (CO₂) emissions and GHG removals, in accordance with ISO 14064:2006. The GHG inventory of 2018-19 has been verified by Messrs. Ernst & Young Associates LLP, an independent third-party assurance provider, at the 'Reasonable Assurance' level. ITC accounts for the following gases in its GHG inventory: Carbon Dioxide (CO₂), Methane (CH₄), 2,4 Nitrous Oxide (N₂O), Hydrofluorocarbons (HFCs), Perfluorocarbons (PFCs) and Sulphur Hexafluoride (SF₆).

9,747 tonnes of GHG emissions (scope 1 & 2) were avoided by the implementation of energy conservation measures

Some of the energy conservation adopted across the ITC units are outlined below:

Installation of energy-efficient pulp refiners.

Installation of automatic condensate drain valves to improve the efficiency of air compressors.

Installation of high energy efficiency baking ovens.

Installation of Vapour Absorption Machine (VAM) and thermo-compressors to utilise waste heat.

Installation of thermodynamic steam traps with condensate recovery to improve energy efficiency.

Installation of heat pump for improving the efficiency of Heating, Ventilation and Air Conditioning (HVAC) system at ITC Hotels.

Automation of the tube cleaning system in HVAC chillers resulting in improved efficiency.

Installation of Variable Frequency Drives for ventilation units, blowers, pumps, fans, etc.

Replacement of heat exchangers, UPS, motors, compressors, chillers, air conditioners, pumps, blowers and agitators with higher efficiency ones.

Process improvements to enhance productivity and reduce specific energy consumption.

TARGET AND PERFORMANCE

In order to pursue continuous improvement in energy and emissions related performance, ITC Businesses have taken up specific energy as well as specific GHG emission reduction targets. In line with the same, unit-level targets have been allocated for driving performance improvement.

Since the three units (Bhadrachalam, Kovai and Tribeni) of Paperboards and Specialty Papers Division (PSPD) together account for about 87% of ITC's total energy consumption and 79% of total scope 1 and 2 GHG emissions, greater focus is accorded towards improving the energy performance of these units. A detailed account of their performance during the reporting period is provided below.

Over the next decade, ITC will deploy superior solutions so that 100% of product packaging will be reusable, recyclable or compostable. To this end, ITC's approach focuses on:

Optimise packaging in a way that it reduces the environmental impact arising out of post-consumer packaging waste without affecting the integrity of the product

Conduct the Life Cycle Assessment (LCA) studies to evaluate the impacts of packaging and identify opportunities for improvement.

Identify alternative packaging material with a lower environmental impact.

ITC's in-house Life Sciences and Technology Centre's efforts towards developing sustainable packaging solutions

Identify suitable end-of-life solutions for packaging waste.

BEYOND BOUNDARY

ITC remains focussed on measuring and managing its environmental footprint across the value chain. During the year 2018-19, 3,342 TJ of energy was consumed outside the organisation. Further, scope 3 GHG emissions stood at 281,569 tCO₂e which includes emissions from the energy sources listed below as well as emissions arising from fertiliser 2 application in farm forestry programmes.