



2020-21 Sustainability Report

TCI SANMAR CHEMICALS S.A.E.

Conserving Resources for Sustainable Growth



Report Parameters

The 2021 Sustainability Report is prepared in accordance to the Global Reporting Initiative (GRI) Standards: Core option Reporting. The report has been subjected to third party assurance by D carbon-Egypt.

Timeline

1/4/2020 to 31/03/2021

Reporting Cycle Annual

Forward-Looking Statements

This Sustainability Report contains forward-looking statements on various future estimations and paramount considerations that are expected to emerge in Global Petrochemicals Sector and in TCI Sanmar's operating markets. Sanmars's financial and environmental, social and governance (ESG) performance and its business model have proven agility to allow swift adaptation to change, however, due to the rapid dynamics of technologies and new Clients' needs and considering the potential unperceived disruption of the COVID-19 pandemic, there is no assurance of the magnitude nor the pace of such changes.

Mistakes and Typographical Errors

Any errors discovered following the publication of the report will be corrected and displayed on our website.

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Table of Contents



01 Message from the Chairman

6



02 Sustainability Highlights 2020-2021

- Operational Highlights
- Safety Highlights
- Environmental Highlights
- Market Share
- Financial Highlights
- HR Highlights

9



03 Operational Management

- Operational Performance
- Energy Resources Saving
- Quality Over Quantity
- Production Performance: Exceeding Limits
- Project Nile for Sustainable and Improved Operations
- Sustainable Operations
- Sustaining Our IT Capabilities



04 Health and Safety is a Business Priority

23

- OHSAS for Sustainable Growth
- Our Approach to Safety and Health
- Occupational Health and Safety System
- Towards Zero Accidents Initiatives



05 Our People

- Managing our Talents
- Healthy & Safe Workplace
- Talent Retention
- Human Rights and Equal Opportunities
- Our Workforce
- Sustaining Operations Via Training
- Training and Personal Development

29



06 Our Environmental Commitment

- Growth via Environmental Responsibility
- Water Stewardship
- Our Emissions
- Conserve Energy and Save Resources
- Risk-Free Waste Management
- Environmental Protection Success Stories
- Environmental Disclosures Summary

37



07 Our Financial Performance

- Economic Presence
- Improvement in Financial Risk Profile
- Our Production Mix

49



08 TCI Sanmar Sales and Marketing

- Market Leadership
- Market Share
- Sustaining our Procurement
- Procurement Highlights
- Procurement Crisis Management
- Suppliers Policies

49

50

50

50

50

50

50



09 Corporate Governance

- Governing Our Future
- Vision, Mission, and Values
- Governance Structure
- Responsibility of the Board of Directors
- Management's Role in Sustainability
- Policy
- Business Code of Conduct
- Monitoring Sustainability Efforts
- Evaluation Of Corporate Performance
- Risks and Opportunities
- Stakeholder Engagement
- Material Topics

53

54

55

56

57

59

59

59

59

59

59

59

59

59



10 Our Corporate Shared Value: Local Community, Egypt, and the Globe

- UNGC Principles Through our Operations
- TCI Sanmar Mapping with Sustainable Development Goals (SDGs)

73

74

75



11 COVID-19 Crisis Management

- COVID-19 Story
- Living with the New Normal
- Marketing During COVID-19
- COVID-19 and its Effect on Our Supply Chain
- COVID Health & Safety Procedures

81

82

83

83

83

84

GRI Standards Content Index

86

External Assurance Letter

91

Acronyms

Acronym	Word
AEP	Alco Ethylene Plant
AKC	Asahi Kasei Chemicals Corporation
BOP	Balance of Payments
CCPP	Combined Cycle Power Plant
COVID	Corona Virus Disease
CSR	Corporate Social Responsibility
CSV	Corporate Social Value
CIGS	Cross-Inspection Groups System
HR	Human Resources
HCl	Hydrochloric Acid
HAZOP	Hazard and Operability
IB	Inclusive Business
IDA	Industrial Development Authority
GDP	Gross Domestic Product
GHG	Green House Gas
GRI	Global Reporting Initiative
EDC	Ethylene Dichloride
EEAA	Egyptian Environmental Affairs Agency
EPD	Environmental Product Declaration
EBTIDA	Earnings Before Interest, Taxes, Depreciation, and Amortization
ETA	Egyptian Tax Authority
ESIA	Environmental and Social Impact Assessment
FY	Financial Year
CO ₂	Carbon Dioxide
ISO	International Standards for Organization
KG	Kilograms

MT	Metric Ton
MTI	Ministry of Trade and Industry
NGO	Non-Governmental Organisation
NTRA	National Telecom Regulatory Authority
NO _x	Nitrogen Oxide
VCM	Vinyl Chloride Monomer
VFD	Variable Fan Speed Frequency Drive
ZLD	Zero Liquid Discharge
SDG	Sustainable Development Goal
SO _x	Sulfur Oxide
SRS	Sulfate Removal System
TPA	Tones Per Annum
TPD	Tons Per Day
VCI	Value Chain Impact
OHSAS	Occupational Health and Safety Assessment Standard
OXY	Oxy Chlorination Unit
PHA	Process Hazard Analysis
PCR	Product Category Rules
PVC	Polyvinyl Chloride
PSSR	Pre-Start-up Safety Review
KPIs	Key Performance Indicators
LCIA	Life Cycle Impact Assessment
LCA	Life Cycle Assessment
LCI	Life Cycle Inventory
CaCl ₂	Liquid Calcium Chloride
ZLD	Zero Liquid Discharge

01 Message from the Chairman



Our dedication to sustainability drives us to consider innovative methods to be future-ready, focusing not just on current development but also, on proactively tackling tomorrow's concerns. Although, COVID-19 has become part of our lives and threatened our market supply and demand, we have succeeded in producing our third sustainability report that has focused on reporting our progress in addressing our material concerns and threats for improving and embedding sustainability in all our operations. We report on our social, economic, and environmental impacts demonstrating that we have progressed on all levels throughout this tough year. Environmental manners and operational highlights along with a protective health and safety plan are just a few of the major concerns that may have an influence on our stakeholders today and in the future. We think that by future-proofing our business and reacting to the demands of stakeholders related to our business – local communities, suppliers, and industry peers – we can build a more resilient tomorrow. As a result, the topic of this year's report is **"Conserving Resources for Sustainable Growth"**. Here are some of the ways we are preparing for tomorrow's difficulties today.

Efficient Use of Resources

TCI Sanmar strives to improve its machines to keep up with the latest technologies while being energy efficient. We improved our equipment in 2020/2021 to reduce energy usage. We used an external expert to carry out energy audits with the goal of optimizing the energy use. This resulted in an overall decrease in energy consumption of at least 5%, when compared to current levels of power use. In addition, to further improve our environmental footprint, we have carried out an extensive maintenance program for our machines, we continuously research new techniques to develop our current operational methods and we launched new projects that are more sustainable to improve our ESG footprint.



Among our numerous initiatives to be a more sustainable business is "Project Nile". The project was launched two years ago to ensure that we run our facilities with the most advanced technology available for both existing production units and future expansion projects. Among the successful outcomes of the project was the development of Cross-Functional Teams from all our manufacturing divisions in collaboration with McKinsey India, through which several new projects were conceived and implemented. Furthermore, part of our sustainable development strategy is to launch new projects that ensure our operations do not harm the environment. Our research and development team continuously works to update us with the latest technology available worldwide with a focus on creating a global sustainable supply chain. Among the steps of embedding more sustainable projects into our strategy, TCI Sanmar proposes to put up a natural gas-based Combined Cycle Power Plant (CCPP) to fulfill the chemical complex's power and steam needs, cutting operating costs and utilizing the region's natural gas supply. The proposed power plant will also provide steam recovered from gas turbine exhaust which ensures more circularity. All our future projects ensure that we not only focus on being a successful profitable business but also on preserving the environment where we operate for future generations to enjoy.

Sustainable Safety Manners

Another pillar of our sustainable development strategy is having a reliable health and safety plan. Creating a new method for the Pre-Start-up Safety Review (PSSR) is one of our initiatives and new directions for a more sustainable H&S Strategy. PSSR is a sequence of operations carried out to ensure that all steps to eliminate process-related events are implemented. These operations are carried out after the installation of any new equipment or facility, immediately before the initial start.

PSSR is also carried out before any restart following a major modification, upgrade, or shutdown. Within this strategy, we have also implemented a fire alarm system to avoid any potential disasters.

Sustainable Environment

In terms of emissions, we regularly monitor all our gaseous waste to guarantee that they do not harm our employees, the nearby communities, or the entire planet. We are committed to ensuring that the quality of the air, water, and land is safe, with no pollutants and no negative effects from our operations. Our basic principles include environmental protection, and every person in the plant work with this philosophy in mind. We recycle the water used in production through our two zero liquid discharge facilities to ensure that we have a positive water footprint. We have also dug up a well for rainwater harvesting, which can be used in production, to ensure that water withdrawal is less from the municipality, thus reducing our environmental impact. In terms of the effect on biodiversity, we operate in an area of low biodiversity, with no species in danger of extinction, yet we ensure that we do not carry out any activities that might harm any species.

Sustainable Workplace

The social pillar in our Sustainable Development Strategy ensures that our working environment is free from any form of Human Rights abuses, forced or compulsory labor, harassment, and threats that might affect our employees' physical or mental health. We equip our employees with diverse training such as Health and Safety, like how to handle hazardous materials, how to react during emergencies, among others. Our human resource policies also ensure a career path development for our employees, with adequate pay well above the minimum required wage rate, in addition to a generous benefits package. We continuously work to ensure that TCI Sanmar is a place where people would love to work.

Heading Towards the Future

With an aim to preserve the Earth's resources for our future generations, at TCI Sanmar we guarantee that our sustainability strategy is embedded within all our operations. We only launch new products that have a positive ESG impact. We ensure that all our operations do not harm any of our external or internal stakeholders. We know that we have a moral and legal responsibility towards our stakeholders, and we will continuously work to ensure that we fulfill this responsibility.



02

Sustainability Highlights 2020-2021

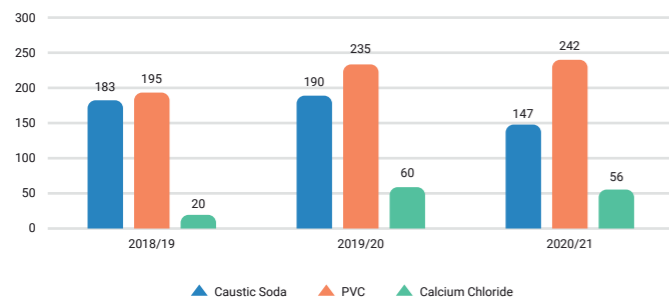
- ▶ Operational Highlights
- ▶ Safety Highlights
- ▶ Market Share
- ▶ Financial Highlights
- ▶ HR Highlights
- ▶ Environmental Highlights



Sustainability Highlights 2020-2021

Operational Highlights

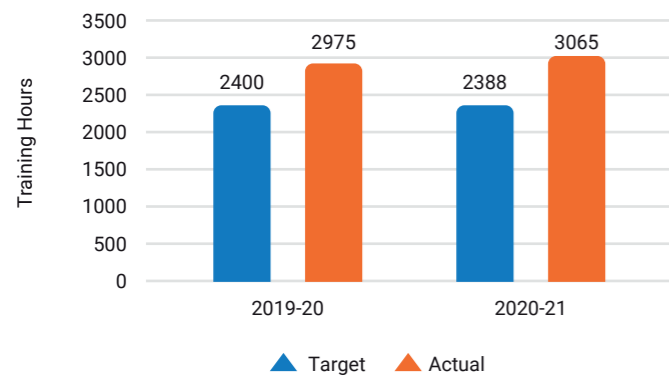
Product Mix by Production Size (MT)



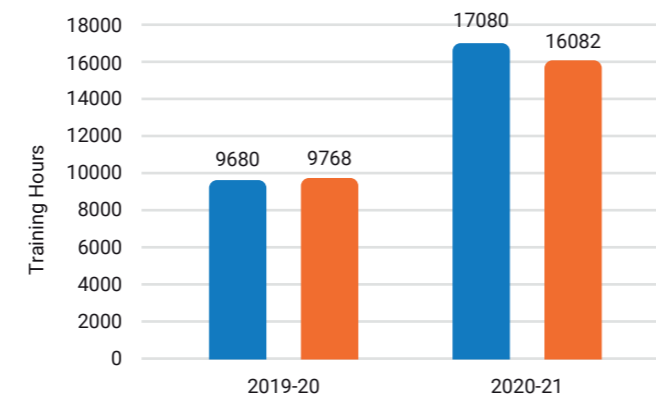
- 62%** Reduction in Accidents
- 100%** Safety Training for Staff & Contractors
- \$1M** Spent for Advanced Fire-fighting System

Safety Highlights

TCI Total Safety Training Hours Actual Versus Target

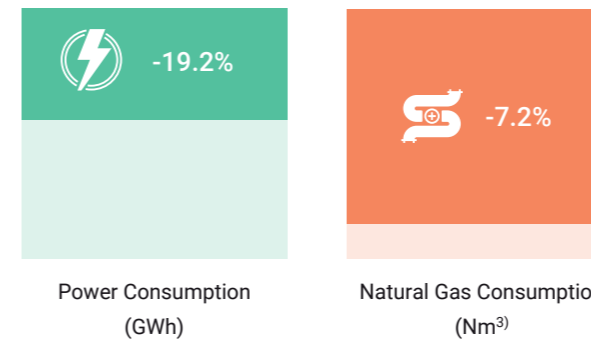


Contractor Total Safety Training Hours Actual Versus Target

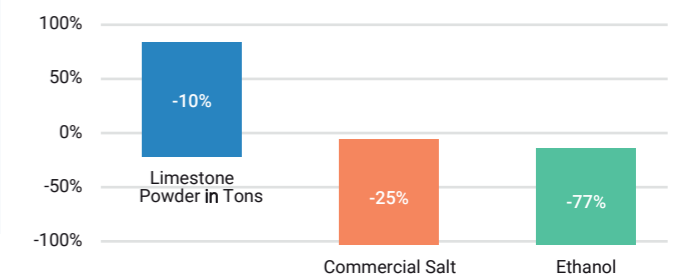


Environmental Highlights

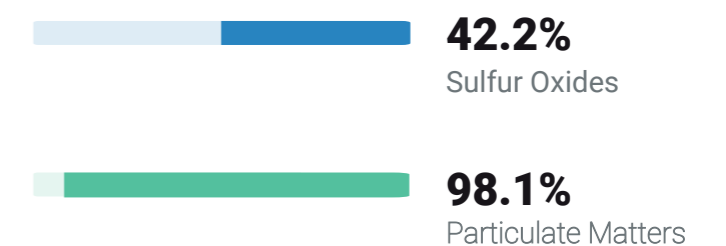
Reduction in Energy Consumption



Material used as Percentage



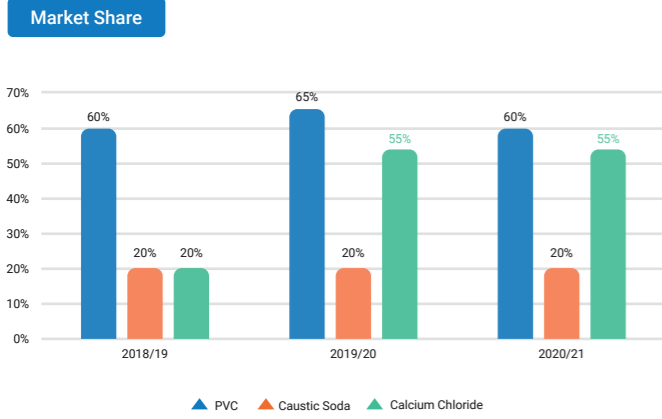
Air Pollutants Reduction during 2020-21



Our Plans for Water Stewardship

- Water Bore Well**
TCI Sanmar spent USD 1,300,000 to dig a borewell inside the plant to save an amount of 456,250 m³/year of water withdrawn from the water network grid.
- ZLD Revamping**
Our overall expenditures over Zero Liquid Discharge Revamping exceeded USD 260,000 to ensure the finest technology being adapted to our recovery system.
- Effluent treatment plant (ETP) & Sewage treatment plant (STP)**
The total investment for both ETP and STP exceeded USD 1,200,000 to assure better control on the final effluent quality and to enhance the recycling opportunities.

Market Share



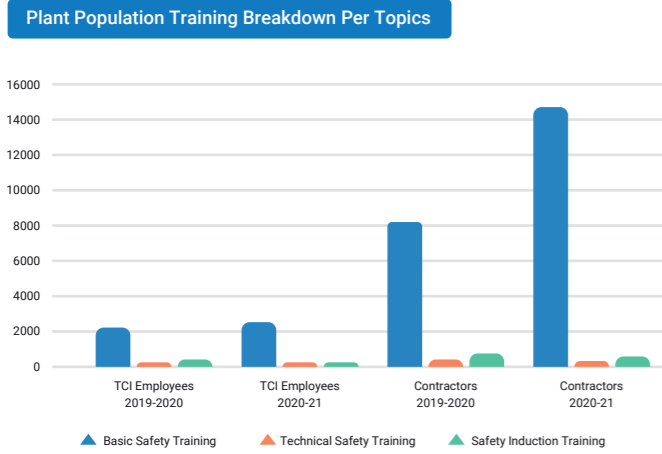
Financial Highlights



19%
Total Revenue

21.8%
PVC Revenue

HR Highlights





03

Operational Management

- ▶ Operational Performance
- ▶ Energy Resources Saving
- ▶ Quality Over Quantity
- ▶ Production Performance: Exceeding Limits
- ▶ Project Nile for Sustainable and Improved Operations

Operational Management

Operational Performance

The sustainable growth of TCI Sanmar relies on the continuous improvement of our operational performance. The Board of Directors and top management of the company have established policies and plans to achieve the best performance possible. They secured all necessary resources and finances to achieve sustainable production and operations. Circularity, State-of-the-Art Technologies, and Maintenance Management Approaches are our core drivers to reach excellence. Our Code of Conduct outlines the principles which, we operate to guarantee long-term success. As a result, our manufacturing is handled with the utmost care for the environment, occupational health and safety of employees, contractors, subcontractors, and for the local community development.

Energy Resources Saving

Petrochemicals production is a water and electricity-intensive industry. Upgrading machinery with recognized efficiency ratings significantly reduces energy and financial resources depletion. Raising energy efficiency leads to improved safety of the work environment, reduces the cost of both raw materials as well as environmental compliance. At TCI Sanmar, we strive to upgrade our machinery to match the best technology while being energy efficient. In this reporting year we advanced our equipment to cut down on the energy consumption. We applied energy audits by an external consultant to optimize energy consumption. This resulted in an overall reduction of energy consumption by a minimum of 5% as compared to present levels of utilization of electricity. Yet to enhance the operation process, we have established a new project.



Saving our Resources and Generating our Own Power

The electricity demand for the chemical complex changes based on the plant operation is met from the Egyptian grid. The chemical complex was allotted a maximum energy demand of 126 MW from the Egyptian grid. The current maximum power demand for the plant is around 118 MW. Considering future expansions (where the expected additional power demand is 9 MW) and considering the margin towards aging of plant (which is expected to be around 5 MW), the total estimated power demand is 132 MW (net) at the site conditions.

The steam demand for the plant is met from natural gas-fired boilers in the complex. The total steam demand including future requirements is 237 TPH and the maximum steam demand including future requirements is 271 TPH.

Proposed Plan

Currently, the chemical complex draws power from the Egyptian grid and the steam demand is met through natural gas-fired boilers. The electricity price is increasing around 10% every year. To reduce operation costs and to utilize the availability of natural gas in the region, TCI Sanmar intends to set up a natural gas-based Combined Cycle Power Plant (CCPP) to meet the power and steam demand of the chemical complex.

<p>The commercial operation of the plant is estimated to be 30 months</p>	<p>Plant capacity 1 x 132 MW (Net) & 135 MW (Gross)</p>	<p>Steam to Process 237 TPH @ HP Steam</p>	<p>Fuel Natural Gas</p>
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The proposed power plant will also supply steam recovered from the gas turbine exhaust. In addition, the natural gas supply is available at reduced prices for power plants when compared to chemical & petrochemical industries.

Considering reliable power supply to the chemical complex and requirement of independent operation of gas turbine multi-shaft configuration is considered for the proposed power plant.

The power plant location has been identified within the chemical complex. The identified land will be adequate for the plant set-up. The chemical complex has adequate spare capacity in the Demineralization plant, compressed air system, Zero Liquid discharge plant and sewage treatment plant.

TCI Sanmar Energy Reduction/ Saving Initiatives

Currently, the chemical complex draws power from the Egyptian grid and the steam demand is met through natural gas-fired boilers. The electricity price is increasing around 10% every year. To reduce operation costs and to utilize the availability of natural gas in the region, TCI Sanmar intends to set up a natural gas-based Combined Cycle Power Plant (CCPP) to meet the power and steam demand of the chemical complex.

- 01.** Implementation of Zero Gap Technology in the Caustic Plant Electrolysis: The Zero Gap Technology from Asahi Kasei Chemicals Corporation (AKCC) was implemented in 3 out of the 11 electrolyzers this year and will be applied in the near future to the remaining 8 electrolyzers to further reduce the electricity consumption per ton of Caustic Soda. The expected reduction is 150 kWh per ton of Caustic Soda.
- 02.** Hydrogen emitted in the Chlor-Alkali facility is gainfully captured and used for conversion of Chlorine into Hydrochloric Acid (HCl). In addition, the excess Hydrogen is used in steam production, thus reducing the consumption of natural gas.
- 03.** Variable Fan Speed Frequency Drive (VFD) was provided to control the Cl₂ compressors. The VFD can reduce the energy usage of electric motors up to 90% while extending the motor lifetime. The expected energy savings from using the VFD would be 1.45 million Units (MU) per annum which amounts to USD 0.102 Million.
- 04.** Replacing the current motors with more efficient (IE3) motors for reduced energy consumption. The efficiency of IE3 motors is higher than 90% while the efficiency of the present motors is about 82%.
- 05.** The fan assembly hub has been replaced with a more efficient set that is expected to reduce about 10% of the energy consumed. Accordingly, the expected savings would be 0.47 MU per annum which amounts to USD 0.66 Million. The investment of USD 0.3 million for 3 fans would be paid back in less than one year.



More energy efficiency project to come

A study has been undertaken for internal usage of clean Hydrogen energy captured from Chlor-Alkali plant to be used in VCM furnaces, thus reducing the natural gas in the furnace operations. This project sets a perfect example of energy recycling within the plant.

Quality over Quantity

At TCI Sanmar, we prioritize the quality of products when selecting our technologies. Our operation team works closely with the R&D team to select the finest chemicals and technologies to be used at our plant ensuring the best form of PVC every year. Our quality enhances our competitiveness, improves our profitability, and increases our productivity. In this reporting year, we worked on adapting new technologies to improve our product quality.



Quality Case

Our PVC manufacturing plant is an innovative technology obtained from INEOS Vinyls UK Ltd, a world major producer of PVC. In TCI Sanmar, PVC is produced by the suspension polymerization reaction of Vinyl Chloride Monomer (VCM) in reactors equipped with an agitator and jacket cooling system. VCM is charged to the reactor together in a batch process with water and catalyst plus chemical additives to control the PVC quality. All these technological advances are backed by importing the finest, purest form of chemicals from globally acclaimed industries to ensure high and optimum quality of our PVC production.

Quality Payback



01
At least three white pipe manufacturers have switched from Imported PVC resin to that of TCI Sanmar after acknowledging its superior performance and cost benefits.

02
PVC Window profile trial is done and accepted by profile manufacturers.

03
PVC new grade production pilot trials have already started to produce K-70 grade for cables application and K-57 grade for fitting application and as per plan next year will be the full capacity production from all 3 grades K-67/K-70/K-57.

Production Performance: Exceeding Limits

Operational efficiency is essential to ensure on-time delivery of products to customers with the highest quality and lowest possible costs to maintain customer satisfaction. PVC2 plant with large capacity reactors has proven consistent performance in production. Productivity per reactor is one of the highest in the licensor's plants globally. The installed plant capacity of 600 T/day was enhanced to 750 T/day in 2019 and it has been increased to 820 T/day in 2020, thus reaching 136% capacity increase. A monthly record was achieved for PVC Production from 29,851 MT to 31,008 MT. And for VCM production from 30,000 MT to 30,774 MT. Moreover, the PVC2 plant has achieved yearly highest production of 200,917 MT. The PVC product quality enhancement has received better acceptance both from Egyptian and international customers.

Project Nile for Sustainable and Improved Operations

The Project Nile is one of our sustainable Growth Strategy initiatives. McKinsey India was invited in 2019 to analyze our production process. In cooperation with McKinsey India, we formed Cross-Functional Teams from all production units through which several of initiatives were conceived and implemented towards productivity improvement, quality enhancement, customer satisfaction, procurement prioritization, cost reduction, reliability improvement etc. The following represents the results of such visionary initiative at each production process:

Caustic Soda Plant

1. Completion of CA plant s/d in Feb'20 to address the reliability issues, resolve rectifier issues and ramp up capacity to 825 tons per day (TPD).
2. Improved Caustic Concentration Unit (CCU) - Unit B capacity from 210 TPD to 250 TPD.
3. Improved Chlorine evacuation capacity from 130 TPD to 200 TPD.
4. Increased captive salt consumption from 10% to 50%.
5. Reduction in specific salt consumption in Caustic soda from 1.69 to 1.62.

VCM Plant

01. Ramp up of VCM production to 990 TPD (VCM1 450 + VCM2 240 + VCM3 300).
02. Engaged consultant for the technical bottlenecks in VCM 2&3, which was immediately improved. Productivity increase steps with VCM2 plant was identified by the Korean consultant; while the bottleneck issue with VCM3 was solved by an Indian consultant technique. The related procurement activities were initiated as planned to execute the following reporting year.
03. Reduction in specific EDC consumption from 1.67 to 1.65 MT/T of VCM.
04. Reduction in steam consumption in VCM and PVC plants from 2.9 to 2.7 MT / T.

PVC Production

01. Improvement of PVC quality (Whiteness index, strength) that improved realization in the market.
02. Completing trials with profile manufacturers in Turkey and cable manufacturers in Egypt that led to the introduction of two grades of PVC (K57 for fitting ,and grade K70 for cables) which are considered to be premium products, although grade K70 requires special care and production process that makes many firms refrain from producing but, our known quality makes it easier to fulfill our customer needs.
03. Completing trials improved PVC1 product with local white pipe manufacturer.
04. Testing of end products with the new trial lot material, on ASTM standard.
05. Test feasibility of film grade resin and build capability to manufacture to get \$150 to \$200 premium on current market prices by Trial manufacturing film grade in PVC1 , this exercise is co-ordinate with licensor Ineos to get the success formula for PVC2.
06. Reduction of packing cost per ton of PVC-Target reduction in pallet cost through the removal of pallets/ plastic pallets/ lower cost of pallets.

Calcium Chloride Production







1. Improve cleaning efficiencies by reducing cleaning time to 2 days from current 3 days as per design.
2. Address critical reliability concerns by Funds - \$90k HCl tank rubber lining repair + \$ 20K for critical spares - HCl pump, skip hoist correction, Nuberg & scrubber pump. Urgent fund requirements were identified and allocated for timely maintenance and to improve plant reliability.
3. 25 kg bagging machine was commissioned by demonstrating sustainable operation for the machine. The small bags packing machine was supplied and installed by JTN, an Austrian company, with the assistance of Zirax. These 25 kgs bags thus produced were helpful to identify retail customers in US market.
4. Reduction in specific power consumption by ensuring that there was consumption of 185kW-hr/ ton across all 3 lines.
5. Reduction in packing costs by reducing the cost of packing bags for calcium chloride through indigenization.

Utilities & Power Maintenance

01. Identify the need to reduce energy consumption and take the initiative to invite a third-party energy auditor to assess the energy consumption across all plants.
02. Setting up a new maintenance organization (In order to close the recruitment process for new positions and planning function).
3. Set-up IT systems to include a maintenance module in SAP for maintenance workflow management, planning & budgeting.
4. Establish tools for reliability/ planning functions in March 2020 maintenance by developing templates and execution mechanism/plan for FMEA, RCA, health monitoring with newly added functions (Reliability & Planning).

Sustainable Operations

Our operational priority is to run our plants using the finest technology available for both existing production units and for future growth projects. TCI Sanmar's Code of Conduct outlines the principles upon which we operate to guarantee long-term success. **Our operations are in-line with the SDGs and sustainable growth through the following actions:**

 <p>Drive efficiency and cost improvements.</p>	 <p>Drive additional initiatives (e.g., scrap sales, insurance claim, customs duty refund, reduction in fixed costs).</p>
 <p>Commercial excellence to improve PVC sales realization (accelerate trial and approvals for profile/cable applications, increase domestic/direct customer share, improve customer service).</p>	 <p>Improvement in PVC quality (Whiteness index, mechanical strength) to improve realization.</p>
 <p>Ramp up Chlorine/HCL sales to ensure proper material supply with the required quality on time to avoid any production interruption and losses.</p>	 <p>Continuously monitoring supply needs through the supplier's development plan in coordination with the Cross-Functional Team.</p>

Impacts of Project Nile on Sustaining Our Operations

The Project Nile visionary plan started two years ago, through a robust management development program. During this period, we succeeded in achieving several fruitful operational achievements such as:

- ▲ Adding new suppliers in all categories with the help of operational functions, that have a positive impact on the efficiency and reliability of the complex.
- ▲ Significant improvement in power supply has been realized thereby minimizing the interruptions in plant operation.
- ▲ Electrical system reliability has been increased substantially after the extensive maintenance activities carried out on the breakers / switchgear, by Schneider, Egypt.
- ▲ The defective electrical components were identified after careful inspection for the corona effect on the contactors.
- ▲ Long overdue upgrade of the DCS system for the PVC1 plant was completed successfully with the help of Honeywell Egypt, despite the experts from Honeywell Dubai inability to attend due to the travel restrictions arising out of the Coronavirus pandemic crisis. Eliminated multiple contractors and retained only 2 contractors covering the entire site in 2 sections.
- ▲ New organizational structure was introduced for dedicated functions, for planning and reliability.
- ▲ RCA System was strengthened to analyze the failure causes on a day-to-day basis.
- ▲ Process Safety Management was administered for key elements such as, Risk Assessment, Management of Change and Pre-Startup Safety Review.
- ▲ Profit optimizer model is utilized to compare the cost of production of EDC and PVC through the captive EDC route and the Imported EDC route. The captive EDC plant was not operated for a portion of the year.
- ▲ Similar exercise was carried out and optimized Caustic Soda production during the period of the market downtrend for this product.

Liquid Calcium Chloride (CaCl₂) project






There is a market for CaCl₂ as a solution containing 34-36% of Calcium Chloride. TCI Sanmar recognized that with the PVC operating capacity that we have, there will be an excess HCl generated at the site which will require neutralization. The concept is to install a second CaCl₂ facility in the area adjacent to the AEP and close to the limestone preparation unit.

This plant will have the flexibility to pump out any neutralized solution before purifying it as a saleable product, in addition to producing more "virgin" CaCl₂ that can be either sold in liquid form or transferred to the existing unit for solidification (or potentially to a second "solids end" CaCl₂ unit). The plant would have the capacity to produce 225 kta of saleable CaCl₂ liquid (or equivalent of around 80 kta of dry CaCl₂).



Sustaining Our IT Capabilities

The Information Technology Department is the heart of sustainable operations allowing us to communicate with our departments and outside our organization. IT department services in TCI Sanmar are interlinked with many government authorities such as the National Telecom Regulatory Authority (NTRA). When we use Wi-Max and Microwave signal devices, the Egyptian Environmental Affairs Agency (EEAA) to provide proper communication method to send immersion readings to them, and direct linking with Egyptian Tax Authority (ETA) when responding to the implementation of the new e-invoicing system law. We also connect with many public and private sectors to get internet and telephone connections, VPN and MPLS links, and hardware support for all our devices. To maintain communication between our operational and administrative units we have the following initiatives:

 <p>The ERP SAP system connects all units and controls the workflow between all departments production, maintenance, stores, sales, purchase, and finance.</p>	 <p>Implemented high tech and performance network infrastructure to connect all plant units and connect remote branches to the Headquarters.</p>	 <p>Provide high quality services by applying new technologies and deploying the latest software and security updates.</p>
 <p>Ensuring high service level quality by extending the user support on weekdays and providing ways of communication to the IT support team by phone to email or user self-logging ticketing system.</p>	 <p>Ensure the users high productivity by reducing the systems downtime to the maximum and by solving the user problems in the minimal time.</p>	



04

Health & Safety is a Business Priority

- ▷ OHSAS for Sustainable Growth
- ▷ Our Approach to Safety and Health
- ▷ Occupational Health and Safety System
- ▷ Towards Zero Accidents Initiatives

Health & Safety is a Business Priority

OHSAS for Sustainable Growth

Our Approach to Safety and Health

At TCI Sanmar we believe that excellence in safety is core in our business, and that safe performance is a symbol of professionalism. We endeavor to provide a safe working environment for our employees, the contractors and service providers who work with us. Our safety management is represented in the Cross-Inspection Groups System and Occupational Health and Safety system. We are securing private medical insurance facilities within our plant and are currently arranging awareness programs in preparation for emergencies.

Our Safety Standards

At TCI Sanmar, we maintain a strict policy regarding our safety standards compliance. We signed several contracts for firefighting, equipment maintenance and nucleonic radiation source supervision. We apply firefighting precautions according to the Egyptian fire protection standards & NFPA standards. We have a safety committee that includes a representative from each department to discuss all safety KPIs, monthly targets, initiatives, challenges and actions related to the plant, responsibilities, and recommendations. We have acquired numerous international certifications for our safety standards including OHSAS 18001 and ISO 45001. These standards evidence our commitment to excellence as we meet the international standard requirements and align with global principles.

Cross-Inspection Groups System

The Cross-Inspection Groups System (CIGS) is an internal plant-wide inspection system that aims to get workers involved in achieving safety as an intrinsic business value. In the CIGS, each plant nominates a team of four, with the plant head as the leader and three engineers or supervisors as team members. Each team conducts an audit per month on another plant, following a predefined schedule and safety inspection criteria. The audit team provides a report with photos (if available) to the area owner and to the safety department. It is the responsibility of the area owner to respond to any actions or non-conformity and provide feedback to the safety department. The safety department monitors and follows up on the reports from all teams and discusses and analyzes them in the safety management steering committee meeting. This process performance assessment and analysis is considered a vital proactive measure which was taken by our company.



TCI Sanmar Occupational Health and Safety System

According to OHSAS 18000, TCI Sanmar has created its occupational health and safety system to meet our plant-wide sustainable growth strategy, as part of our commitment to make our business activities healthier and safer for our employees and community. Even though our operations contain a few dangerous compounds (Chlorine and VCM gases), no adverse health effects have been recorded. Our HSE practices are designed to address occupational health, environmental, and safety concerns associated with the handling and processing of these compounds. To ensure the safety of these materials' activities and the highest levels of health and safety, we have adopted several critical risk-mitigation steps:

01. Processes and handling of these two materials are kept contained within a closed system.
02. Installing a gas detection system.
03. Keeping emergency management tools available and accessible to be used in the event of an emergency.
04. Conducted mock drill training for employees and contractors for different scenarios to increase their capabilities for dealing with emergency cases.

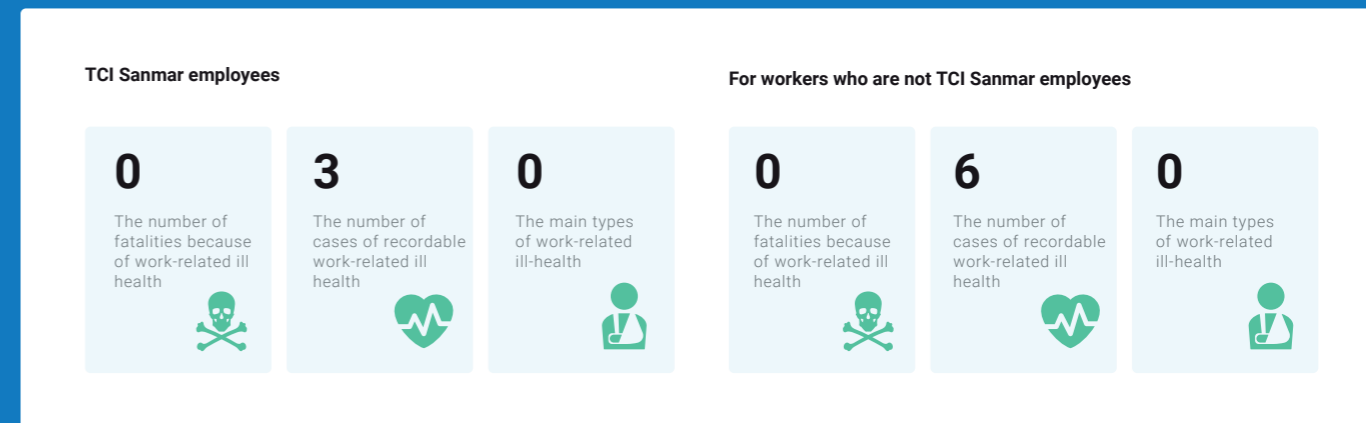
Highlighting the importance of safety, we invested about USD 200,000 on improving our firefighting system for the entire plant to mitigate any potential accidents. Furthermore, we are in the process of applying two new safety plans. The first plan is to carry out a Hazard and Operability study, HAZOP, for our Chloro Alkali plant aimed at identifying and evaluating problems that may represent risks to personnel or equipment. The second plan is to perform a quantitative risk assessment, QRA, for the whole complex to estimate the likelihood and consequences of any potential hazardous events formally and systematically over the whole plant, and accordingly put forward safety management plans.



Toward Zero Accidents Initiatives

In collaboration with the Ministry of Manpower, we took the initiative to publish work accident statistics every six months. Among the figures are number of workplace accidents, occupational diseases, and other major accidents. We established the Permit to Work (P.T.W) system to authorize involved departments to carry out specified work at a given time and place to work as a primary safeguard required to accomplish the operation safely. We have also formed occupational safety and health committees in each plant. Each committee has several numbers of employees from the senior management that meet every month with employees and plant heads.

Work Ill Health Indicators during the reporting year










Note: Recordable work-related ill health an injury causing absence of work for two days or more beyond the day, on which accident occurred.

Management Best Practices and Initiatives for Sustainable and Safe Growth

Safety Cross Audit Best Practice

- ▲ TCI Sanmar established Safety Cross Audit program as a to have an effective basis. tool , internal auditing program for all the production units on a monthly
- ▲ Cross Audit (inspection) groups system is to get everybody involved in the safety inspection.

Objective of the program

 Lead by example	 Show management commitment	 Listen to the concerns of workers and supervisors
 Learn more about jobs and tasks	 Identify existing and potential hazards	 Determine the underlying causes of those hazards
 Monitor hazard controls that are already in place	<ul style="list-style-type: none"> ▲ The first 3 winners are decided at the end of every year, based on the credit points accumulated. ▲ TCI Sanmar had organized a safety award distribution event. The winners for the safety audit, safety man of the year and the best plant in safety performance (2019-20) were awarded in this event. 	

Re-validate HAZOP Study Initiative

Hazard and operability (HAZOP) study methodology is a Process Hazard Analysis (PHA) technique used worldwide for studying not only the hazards of a system, but also, its operability problems, by exploring the effects of any deviations from design conditions of a plant. TCI Sanmar already conducts HAZOP study for its facility, in order to maintain continuous improvement.

Our aim is to Re-validate the HAZOP study for our plant to be in line with the international standards. Therefore, TCI Sanmar plans to start this year with Chloro/Alkali plant HAZOP study, which will be followed by a capacity-building program for our employees to enable them to conduct the HAZOP study in the future for the rest of the plants by themselves.

To involve our employees, TCI Sanmar hired an international consultant, sigma-HSE CO to conduct training programs. There training programs will be a part of our online training on HAZOP study. Another part would be on-site workshops, at TCI Sanmar facility, with our consultant.

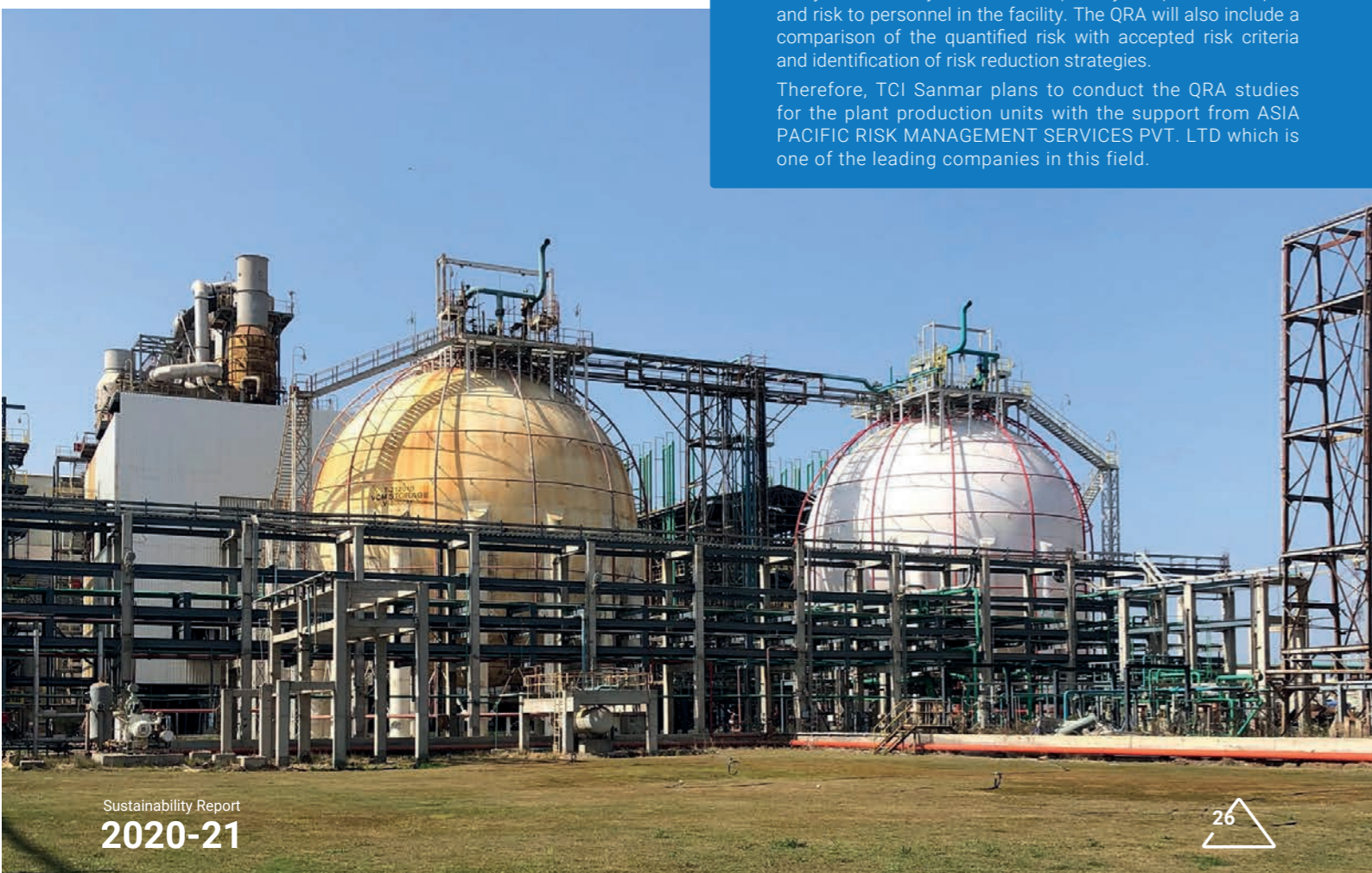
Pre-Start-up Safety Review Procedures Initiative

In the frame of the health and safety management system development, we developed a new procedure for Pre-Start-up Safety Review (PSSR). This is a series of review activities conducted to ensure that all measures to eliminate process-related incidents are applied and in place. These activities should be conducted on the completion of the installation of any new equipment or facility, prior to the initial startup. This also applies to any re-start after significant modification, upgrade, and/or shutdown.

Quantitative Risk Assessment (QRA Study Initiative)

The objective of the Quantitative Risk Assessment (QRA) study is to identify hazards and quantify the potential impact and risk to personnel in the facility. The QRA will also include a comparison of the quantified risk with accepted risk criteria and identification of risk reduction strategies.

Therefore, TCI Sanmar plans to conduct the QRA studies for the plant production units with the support from ASIA PACIFIC RISK MANAGEMENT SERVICES PVT. LTD which is one of the leading companies in this field.





05

Our People

Managing our Talents

- ▷ Healthy & Safe Workplace
- ▷ Talent Retention
- ▷ Human Rights and Equal Opportunities
- ▷ Sustaining Operations Via Training
- ▷ Training and Personal Development



Our People

Managing our Talents

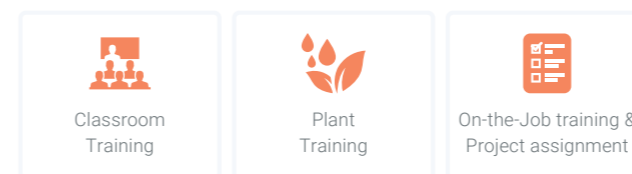
The Human Resource department is considered to be one of the central functions of every firm, as it is responsible for handling matters such as recruitment, payroll, employment policies, and benefits. Often acting as a bridge between employees and managers, it clarifies basic company policies such as parental leave and sick pay. Bearing integrated responsibilities, our HR department has a strategic role in business management and the implementation of workplace culture. Our effective policies contribute significantly to our overall success. They provide guidelines allowing us to set up and supervise various actions to develop the human capital and talent of our company.

Based on the above-mentioned vision and in line with the UN Sustainable Development Goal number four (Quality Education), TCI developed (GET) program to provide educational support throughout the community activities in Port Said region, where we operate. As per the strategic direction of The Sanmar Group, TCI Sanmar management decided to replicate the GET program in Egypt like the successful program in India. TCI agreed to a proposal of recruiting 8 GET in the initial stage. The First phase of candidate selection included screening, tests, and interviews which were completed in Dec 2020. The candidates thus selected to represent the diversity of engineering sections, who are going to enhance their skills as well as develop innovative ideas in the workplace. The selected candidates were offered a one-year paid internship contract.

The candidates were given both classroom and on-the-job training, with specific mentors and subject-wise trainers. They have the access to all plant sections for more knowledge and practice.

The candidates were given both classroom and on-the-job training, with specific mentors and subject-wise trainers. They have the access to all plant sections for more knowledge and practices.

The GET training program consists of three major components:



We offered the program graduates full-time employment in the plant so they can start to build their careers in TCI Sanmar. They contributed efficiently to developing solutions for some operational issues and discovered innovative methods for continuous improvement of sustainable operations.

In the second run of the program (our GET 2022 program), we received more than 150 graduate engineer applicants, they passed through written General Aptitude, and specialized technical exams from the Port Said University – Faculty of Engineering premises. So, it will be a continuous people development process, as part of our Corporate Social Responsibility (CSR) principles.

Our Human Resource policies are guidelines for hiring, work processes, compensation, leave, training, promotion, work environments, termination, and other principal functions. Our HR policies outline how we treat people and property. To develop and strengthen our employee's interpersonal, personal, and technical skills, we continuously provide opportunities that promote individual and organizational growth to contribute towards accomplishing our objectives. Although, during the hard time of Covid -19, TCI Sanmar did not terminate any employees' contract and worked hard to provide an inclusive and safe working productive environment for all employees and contractors.

Healthy & Safe Workplace

TCI Sanmar aims to create a safe working environment by conducting health and safety and personal development training. We manage an excellent working environment by increasing communication between our departments. We provide

our employees medical insurance services, offering them a source of tranquility. Our organization is profoundly based on awareness of our obligations and adhering to all rules and regulations in Egypt, which influence our behavior towards our employees and has a direct impact on our success.

We double our efforts in protecting and enhancing the health of our employees by establishing new health plans along with the standardized occupational health and industrial hygiene programs available to all departments. We promote employee health and well-being with core programs that ensure worker protection in areas of mental, biological/chemical, and physical health such as ergonomics, fitness to work, travel health, and hearing-conservation programs. In addition, we increased the number of training and development courses such as technical training and health and safety training to guarantee that our staff members are conscious of occupational risks. The training included directives on how to best operate machinery and tools, in the case of emergencies to ensure safety is never jeopardized.

At TCI Sanmar, we believe that a healthy working environment allows employees to put their skills and experience to use while providing a sustainable income that satisfies their expectations and allows them to live a comfortable life. We have an ethical and fair employment process that allows anyone to apply for a job. All salaries are above the minimum wage set by the government and aligned with the market average salaries.



Talent Retention

Specifically, talent retention and training and development aspects were few of the major topics concerning the HR department in the recent years. After introducing successful solutions this year, twenty-eight outsourced engineers and chemists were transferred to operate under the umbrella of TCI Sanmar, further advancing our expertise and innovation capabilities. Other material topics include, high turnover rate, inability to attract new calibers, and shortage of skilled staff. However, the situation has improved as is evident by the decrease in attrition rate from 2019/2020 to the current reporting year.

At TCI Sanmar we recognize the dangers of having a high turnover rate, as it has the potential to cause operational disruptions, negatively affect our financial performance and put business continuity at risk. In response, the HR department has implemented the employee satisfaction principle which aims to increase employee satisfaction and reduce the turnover rate.

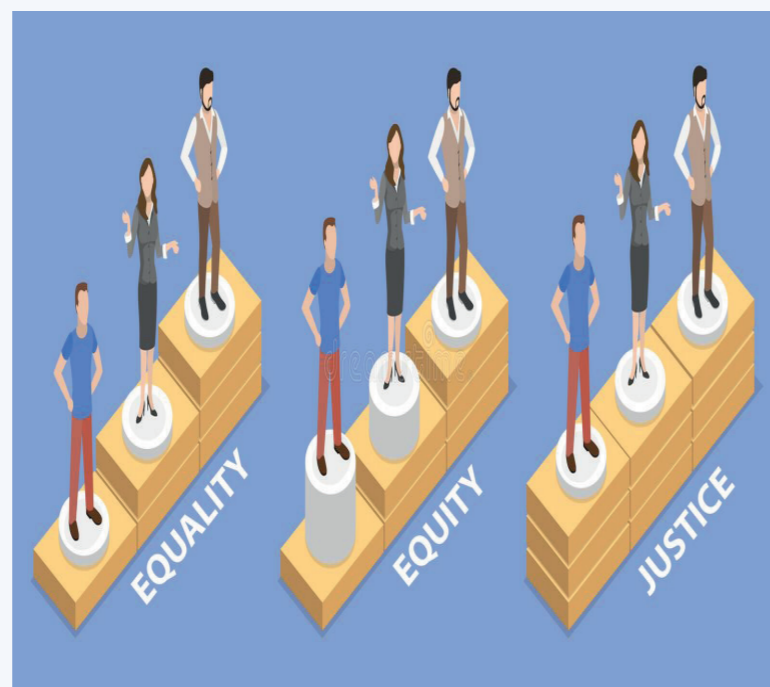
Exit interviews are held with employees before leaving the organization, to discuss the employee's reasons for leaving and their experience working for us. Exit interviews provide us with the insight needed to improve the effectiveness of the recruitment process and enhance organizational performance. In comparison to the previous year, fewer workers quit because of the new rules and processes implemented, which enhanced employees' satisfaction and maintained them as part of the TCI Sanmar community.



Moreover, new incentive systems have been added to increase employee productivity. Rewards offered by TCI Sanmar incentivize members to exceed their goals and targets thereby contributing to our advancement.

Human Rights & Equal Opportunities

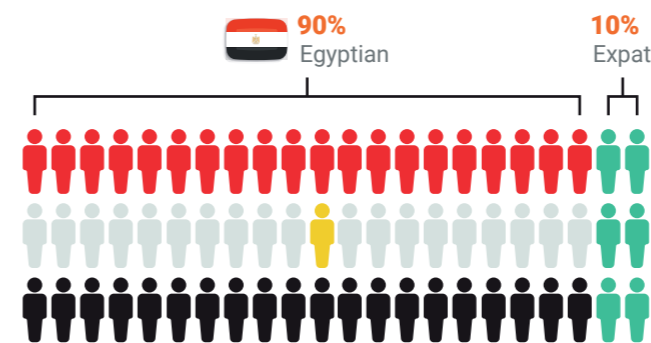
Each of our employees is valued as a member of our business, and we value their diversity. Our HR department has a responsibility to guarantee that our hiring, selection, development, and advancement decisions are made based on merit, qualifications, demonstrated abilities, and achievements. We believe in providing equal opportunities and do not allow race, color, religion, gender, age, national origin, sexual orientation, marital status, disability, or political affiliation to impact our judgment or treatment of others. Our commitment to Human Rights is included in our Code of Conduct; specifically, TCI Sanmar stands by the principle that everyone has the right to be treated with dignity and respect. We demonstrate our belief and respect for Human Rights, as we protect and support the communities where we work by maintaining safe working conditions. All employees are given an appropriate number of working hours and fair compensation. There is no discrimination made between male and female workers as they are fairly and equally compensated. We have no forced labor, as all workers are free to work without external pressure. At TCI Sanmar, we believe that the use of child and forced labor of any kind is illegal and inhumane. We are against child labor as it violates our policies and beliefs, so we ensure that our suppliers are free from child labor. Finally, we ensure that the company maintains a safe working environment free from sexual harassment.



Our Workforce

About 90% of our employees are Egyptians, which has a massive impact on the local community by raising the local standard of living. In addition, 10% of our employees are foreigners, lending significant impact to the local community and the factory by sharing new experiences and enhancing the knowledge of local workers.

Total Employees by Nationality



Due to the nature of the industry, job requirements and working conditions, we have a total of 376 male and 10 female workers in our workforce. In our efforts to become more inclusive, we have implemented a policy aimed at achieving a more balanced environment by hiring more women in different layers of management to improve gender diversity in our sector and improve our labor supply. We recognize that by establishing a more diverse workforce we achieve better collaboration in our work environment, further fueling our competitive advantage.

Sustaining Operations Via Training

At TCI Sanmar, we consider training crucial to our development, as we believe that training will enhance our operations and increase productivity. By providing effective training opportunities to our employees, we increase production efficiency, resulting in financial gain.

Establishing a training center is an asset to TCI Sanmar. It updates employees with the latest operational procedures to ensure high performance and compliance with the highest safety measures. In 2020, we proudly exceeded our training hours target, providing our employees with the ability to overcome any challenges. The training center includes the general safety training program which, consists of firefighting, emergency plan and chemical hazard training conducted to all levels of employees. Technical training is conducted by all employees including working at heights, work permit systems, radiation hazards, and working in high places. We ensure that our workers are up to date on the most recent operational strategies. We conduct health and safety training programs to all our employees. Furthermore, we provide anti-corruption training to all our employees to ensure that we maintain an ethical workplace. We regularly assess our training to make sure that our employees have the required knowledge they need and are up to date on current industry trends.



Training and Personal Development

TCI Sanmar training plan ensures:



Continuous update on employees with the latest operational procedures to ensure the highest performance.



Compliance with the required implementation of the highest safety measures.

Our training agenda includes the following programs:

Training Program	Category	Target Group	Target	2020-21 Achieved
Basic Safety Training: <ul style="list-style-type: none"> ▲ Firefighting ▲ Emergency Plan ▲ Chemical Hazard ▲ On job Training 	Basic Safety Training	TCI Employees	8hrs./employee Annually	2884
		Contractor Employees	16hrs./employee Annually	15215
		TCI Employees	8hrs./employee Annually	89
		Contractor Employees	16hrs./employee Annually	335
Technical Safety Training: <ul style="list-style-type: none"> ▲ Confined Spaces ▲ Radiation Hazards ▲ Work Permit System ▲ Work at Height 	Technical Safety Training	TCI Employees	8hrs./employee Annually	92
		Contractor new Employees	16hrs./employee Annually	531
Safety Induction Training	Safety Induction Training	TCI Employees	8hrs./employee Annually	92
		Contractor new Employees	16hrs./employee Annually	531

Safety Training and Monitoring

Our workers receive induction safety training on the first day of work, followed by basic and technical training such as chemical and electrical hazard training, first aid, and hazardous materials training, thereby making safety an integral part of our business. In total, our employees have completed 19,530 hours to learn all the aspects of risk management techniques. We have a monthly people training program in all our plants, and each employee receives an appropriate training. Each plant has a safety committee that includes a representative from each department to discuss all safety actions related to the plant, responsibilities, and recommendations. Furthermore, employees are given private medical insurance facilities, which they use on a case-by-case basis, to further promote worker health.





06

Our Environmental Commitment

- ▷ Growth via Environmental Responsibility
- ▷ Water Stewardship
- ▷ Managing Our Emissions
- ▷ Conserve Energy and Save Resources
- ▷ Risk-Free Waste Management
- ▷ Environmental Protection Success Stories
- ▷ Environmental Disclosures Summary

Our Environmental Commitment



Total environment expenditure for the fiscal year 2020/2021 is

USD 809,675

in the areas of waste management, environmental management, and self-monitoring programs.



Growth via Environmental Responsibility

TCI Sanmar's commitment is to grow while protecting the environment and saving resources. This is achieved via a spectrum of mitigation actions such as, judicious energy use and taking strict actions towards GHG emission reductions, efficient water consumption, and waste management. We place emphasis on recycling as an integrated part of a larger circular economic initiative and biodiversity protection.

To fit under TCI Sustainable Growth and Resources Saving Strategy, the environment and sustainability department, in collaboration with laboratories and utilities management divisions, is constantly striving to ensure that all processes and associated discharges and emissions comply with national and international rules and regulations. Samples are examined on a regular basis to ensure that emissions are within the limits set by local environmental laws. In addition to international auditing from international auditors, TCI Sanmar operations are audited on a monthly basis from several local government organizations. Local auditors include the Egyptian Environment Affairs Agency (EEAA), Ministry of Health, and Environment Department of Port Said Governorate, and the Industrial Development Authority (IDA). It is important to highlight that all auditors have reported that TCI Sanmar operations are compliant with legislation and laws. Our efforts to adapt innovative systems ensure long-term sustainable growth and preserve natural resources. This resulted in our sustainable growth and effective outcomes.

Below are some of the initiatives developed by the TCI Sanmar team as effective sustainability initiatives in the areas of natural resources conservation and energy saving.



Managing Utilities to Save Resources

Utilities are the heart of operations and are used in TCI Sanmar to continuously improve manufacturing processes and increase production processes efficiency. We decided to implement a state-of-the-art utility to carry out our water stewardship, waste management, and responsible energy use mandates to achieve our sustainable growth plans.

Water Stewardship

Operating in a water-stressed country in an industry that has high water consumption rates, makes it essential for us to carefully manage water. We are part of national efforts to secure access to quality water. Water is a precious natural resource that needs to be conserved. Hence, all our production sites have implemented water-saving strategies, such as using closed-loop systems in extrusion operations that tremendously decrease water withdrawal. Moreover, we have implemented a strategic wastewater management approach that assures that no industrial effluent is discharged into the environment. Our system recycles wastewater, recovers, and reuses it for industrial purposes.



Our water consumption plan ensures that we do not create any water-stress in the surrounding areas.

Water Bore Well

As a sustainable organization and to cope with the country's water shortage issue, we continuously seek water sources that do not affect the national drinking water capacity. Accordingly, we source our water from bore wells and have implemented a project (with a total cost of USD 1,300,000) to dig a borewell inside our plant. We also undertake full operation and treatment/desalination process for the extracted water. This borewell is sustainable as it recharges continuously from rainwater. The water from borewells saved an amount of 456,250 m³/year of water withdrawn from the water network grid.

Water Recovery System

At TCI Sanmar, we aim to maximize the treated wastewater to be reintroduced to the plant process units instead of discharging it through the effluent streams towards the wastewater drainage network. To maximize the usage of treated water we established Reverse Osmosis (RO) System and two Zero Liquid Discharge (ZLD) systems. ZLD1 which assures the reduction of wastewater via construction, commissioning, and operation of ZLD 2 plant with a capacity of 6,000 m³ in addition to the existing ZLD 1 with a capacity of 8,500 m³.

We continue to develop and improve of these processes. Keeping our water management plan in mind to ameliorate our water treatment system, we installed a new dosing system for our ZLD Clarifier, adapted a high-end ultra-filtration system for the RO process, upgraded the ZLD treatment system capacity to increase the annual water recovery from 825,000 m³/year to 1,485,000 m³/year. Overall, our expenditure over these installments exceeds USD 256,410 to ensure that the finest technology is being adapted to our recovery system.



Cooling Tower Cycle

Our water management goes beyond wastewater recycling. TCI Sanmar has multiple cooling towers in action that are used extensively. Cooling tower operation and water treatment systems are continuously upgraded to improve efficiency, eliminate evaporation losses, and minimize drift losses by installing drift eliminators. As a direct impact of using higher technology and better additive chemicals, we look forward to increase the concentration cycle of cooling towers from 3 cycles to 4 – 5 cycles which will save 396,000 m³/year of water, subsequently reducing effluent discharge and decreasing the overall water consumption. In addition, improving the water quality that will decrease the corrosion rate and prolong the equipment lifetime, which assures our sustainable growth strategy.

Managing Our Emissions

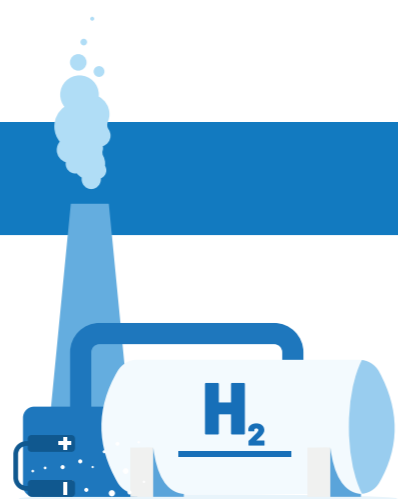
The total electricity consumption at our facility is 552.55 GWh and the natural gas consumption amounts to 109,425,826 Nm³. To translate this into CO₂ equivalent, we have two sources of emissions: Scope 1 (direct emissions) and Scope 2 (indirect emissions). The direct emissions from burning GHG in TCI Sanmar is estimated to 221,259 MTCO₂eq. The indirect GHG is estimated to 294,508 MT CO₂eq for the reporting period.

The aim is to reduce emissions and use energy more efficiently. The PM load was decreased sharply from last year's levels due to the stoppage of one line and reduction of the work load of the other lines. The SO_x was reduced due to several measures taken including the purchase of more efficient technologies and equipment to minimize emissions and increase energy efficiency. The CO₂ emissions decreased due to efficient production technologies and the utilization of the heat recovery systems from steam.

Effluent Treatment Plant (ETP) and Sewage Treatment Plant (STP)

Our Effluent Treatment Plants (ETP) and Sewage Treatment Plants (STP) will be rehabilitated to improve the effluent quality and will help to decrease the quantity of effluents discharged. The total investment for both ETP and STP exceeds USD 1,200,000. It will assure better control on final effluent quality before discharge as well as increase the recovered wastewater to the plant. It will assure compliance with the legal national standards of final effluent quality as well as enhance the recycling opportunities. In another word this will increase the reintroduction of the treated/recovered water to the ZLD process, leading to saving around 330,000 m³/year of water.

Air Pollutant	Year 2020-2021
Carbon Monoxide (Kg/Y)	80,818.05
Nitrogen Oxides (Kg/Y)	277,716.25
Sulfur Oxides (Kg/Y)	5,027.08
Particulate Matters (Kg/Y)	8689.16



Our prospects are to use 100% Hydrogen as a source of energy in boilers.

This will save equivalent natural gas consumption of 708 m³/hr. This innovative usage of energy is expected to have positive impact and cost savings.

Conserve Energy & Save Resources

Energy conservation through steam recovery systems is another way by which, we save resources. Steam produced from boilers that expend high calorific value of natural gas. Although natural gas deemed to have lower GHG emissions than other non-renewable sources, it negatively impacts the environment. To cut down the consumption of natural gas used in steam production, we adapted a steam heat recovery system at our plant. The steam exiting from VCM-3 production operations is transferred to the boiler deaerator to be used as a heating source. This technology utilizes up to 23,760 m³/year of steam that could have been wasted hence, cutting down significantly on the usage of natural gas.



Risk-Free Waste Management

It is crucial for TCI Sanmar to ensure that all our wastes are properly managed. We have a strict waste management system for both hazardous and non-hazardous solid waste. Each form of garbage has its own set of waste management techniques, that are extensively documented. There is a work instruction document for internal hazardous waste handling (in the case of hazardous wastes generated by the manufacturing unit). Waste is segregated and moved to an intermediate storage facility in the plant before being safely and permanently disposed of through an authorized third party.



Our Major Waste Streams

TCI-Sanmar generates different types of waste:

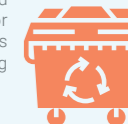
Non-hazardous waste scrap, which is generated during maintenance and operations work e.g., wood, metals, cables, plastic, etc.



Municipal waste generated from food and packages, but this waste is lesser compared with other waste.



Hazardous waste: TCI-Sanmar generates hazardous waste from operation units in the form of solid and liquid wastes. These hazardous wastes handling, storage, and disposal is stressed according to the environmental law standards and guidelines. It is worth mentioning that some waste, like liquid wastes are recovered through waste heat recovery boiler to produce steam which enters the steam network to be used in the process. Other types are being disposed into Landfill by an authorized third-party contractor (approved by EEAA). TCI-Sanmar as part of its Sustainability is looking for hazardous waste recycling and reuse opportunities rather than land filling.



Environmental Protection Success Stories



Environmental and Social Impact Assessment of the Combined Cycle Power Plant

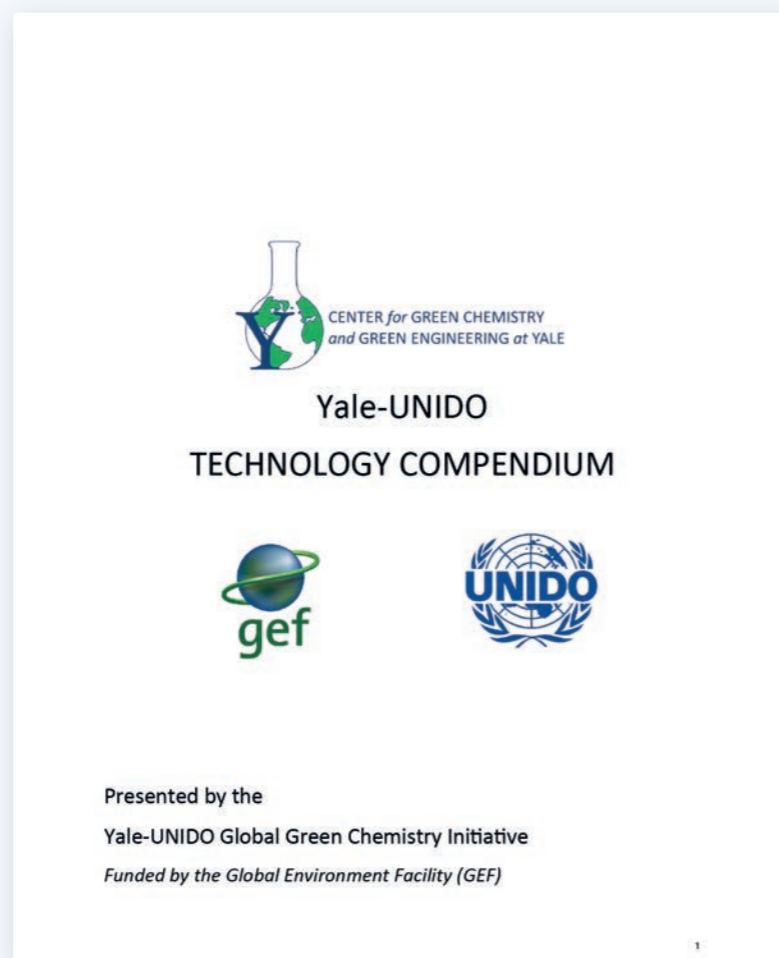
TCI Sanmar declined Environmental and Social Impact Assessment (ESIA) permit for the Combined Cycle and Heat Power Plant (CHPP) project by the Egyptian Environment Affairs Agency (EEAA) on 25.10.2020, after evaluation of the ESIA study and conducting a successful public hearing session. The ESIA's objective is to assess and predict any negative social and environmental impacts, and to establish appropriate mitigation strategies, which are recorded in an Environmental and Social Management Plan (ESMP).



Publishing TCI Sanmar Case study Our Initiative was Published in the Yale University-UNIDO Technology Compendium

Check Page 346

https://www.global-green-chemistry-initiative.com/_files/ugd/c7d2f6_e7faa18a7c8b4837ac1b55e8ff68565f.pdf



Environmental Disclosures Summary

Disclosure ID	Disclosure	
301-1	Materials used by weight or volume	<p>Non-renewable material:</p> <p>Limestone: 218053 MT soda ash: 1214 MT sodium meta Bisulphate: 193625 kg sodium Bicarbonate: 29737.079 kg sodium Polyphosphate calcium Hydroxide (lime hydrate): 809 MT</p> <p>ii. Renewable material:</p> <p>Ethanol: 13509 MT Raw Salt: 245817 MT</p>
301-2	Recycled input materials used	HCl which produced as byproduct in the complex is recycled to produce $CaCl_2$ granules as a final product
301-3	Reclaimed products and their packaging materials	We don't use reclaimed products in our production.
302-1	Energy consumption within the organization	<p>- Total electricity consumption in TCI-Sanmar complex is 552.55 GWh</p> <p>- Total Natural gas consumption for the complex is 109,425,849 Nm³</p>
302-2	Energy consumption outside the organization	<p>We have two sites outside TCI-Sanmar operated using diesel engines. Their energy consumption is as follows:</p> <ol style="list-style-type: none"> 1. Salt farm in Sinai: the energy used was 4600 GJ 2. Port site: 828 GJ <p>- The energy conversion factor is: 46 GJ/MT of diesel. (Amin et al. 2016)</p>
302-4	Reduction of energy consumption	<p>- Establishing Steam Heat Recovery systems to recycle up to 23760 M³ of Steam per year</p> <p>- Implementing Zero Gap Technology saves and reduces energy consumption per ton to 150KWH</p>

303-1	Interactions with water as a shared resource	<p>a. Withdrawn from municipal water and bore wells, consumed within the boundaries of the complex, and then discharged to the public sewage network.</p> <p>b. Discharge water quality monitored/ analyzed to be within the legal standard of the environmental regulations, frequency of sampling by complex self-laboratory on daily basis and by the third party on monthly basis.</p> <p>c. Addressed in the plant with the plant team, contractors and suppliers through the water management plan and environmental policy and addressed internally and externally through environmental awareness campaigns.</p> <p>d. The Process for setting water-related targets to reduce water consumption was achieved by the establishment of a ZLD facility in the complex which was a proactive step even before Egypt became a water stress country.</p>
303-2	Management of water discharge-related impacts	Effluent discharge is according to the Decree of Housing ministry no. 44/2000, and according to the parameters defined at that decree.
303-3	Water withdrawal	We have two source that is municipal water and bore-well
303-4	Water discharge	We have no violations regarding wastewater effluent and air emissions
303-5	Water consumption	Consumption/ quantities in separate raw material consumption file - 5,201,944 M ³
304-1	Operational sites owned, leased, managed in, or adjacent to, protected areas and areas of high biodiversity value outside protected areas	TCI-Sanmar is not located in a protected area, so it doesn't affect any species.

304-2	Significant impacts of activities, products, and services on biodiversity	TCI-Sanmar doesn't locate in a sensitive area, so it doesn't affect any species
304-3	Habitats protected or restored	TCI-Sanmar is not located in a protected area. As a result, we don't have any partnerships related to habitats.
304-4	IUCN Red List species and national conservation list species with habitats in areas affected by operations	We don't have any habitat species affected by the operation area.
305-1	Direct (Scope 1) GHG emissions	Direct GHG is 221,259.067 (ton CO ₂) Emission factor of natural gas calculated = 2.022 kg CO ₂ /Nm ³ gas Based on WBCSD CO ₂ emission and energy protocol V3
305-2	Energy indirect (Scope 2) GHG emissions	Indirect GHG is 294,508 (ton CO ₂) Emission factor (Combined Margin) = 0.533-ton CO ₂ /MWH based on the IGES Grid emission factor for Egypt
305-3	Other indirect (Scope 3) GHG emissions	NA
305-5	Reduction of GHG emissions	Alco Ethylene Plant is considered initiative for CO ₂ reduction, because usually the production of Ethylene starts by cracking of natural gas which produces GHG and also emits CO ₂ through the conversion process, but in the case of AEP, we use Ethanol as raw material which is produced from sugar cane , which emits zero CO ₂ through its conversion process to produce ethylene. TCI Sanmar AEP is the only plant in Egypt and the middle east producing Ethylene from ethanol (zero carbon footprint)
305-7	Nitrogen oxides (NOx), sulfur oxides (SOx), and other significant air emissions	CO Load in kg/year (80,818.05) NO _x Load in kg/year (277,716.25) SO _x Load in kg/year (5,027.08) PM Load in kg/year (8,689.16)

306-1	Water discharge by quality and destination	<ul style="list-style-type: none"> i. Effluent is discharged to public sewage system ii. Wastewater is treated by 2 ZLD units and recycled 90 % to be used in process again. iii. Wastewater is not reused by another organization but, reused again in our process. iv. Housing Minister, decree no. 44/2000.
306-5	Water bodies affected by water discharges and/or runoff	<p>TCI-Sanmar discharges its effluents to the public sewage system and doesn't discharge any wastewater to water bodies. There is a canal next to the TCI Sanmar, but due to our strict environmental protection policy, we have constructed a fence that controls any runoff water to this canal.</p>
307-1	Non-compliance with environmental laws and regulations	<p>TCI Sanmar didn't make any violations to the environmental laws during the reporting period.</p>



Continuous Monitoring for Environmental Indicators

07

Our Financial Performance

Economic Presence

- ▶ Improvement in Financial Risk Profile
- ▶ Our Production Mix



Our Financial Performance

Economic Presence

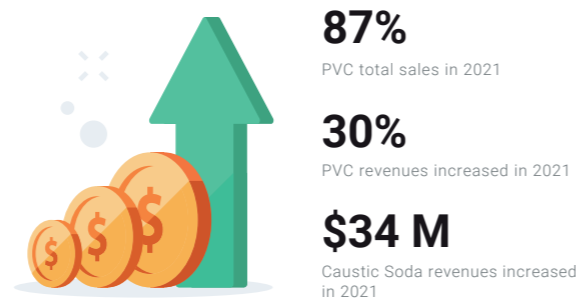
The impact of COVID-19 continued affecting the financial performance of the firm in the first period FY21, which led to a longer effect than estimated. But we have succeeded in managing our debt ratio during the last 2 years. The financial results for the fiscal Year 2021, showed a total operating revenue increase at 19 percent, the highest between the FY 2019 and 2020. However, with circumstances starting to improve we look to achieve more prosperous outcomes in the coming years.

Improvement in Financial Risk Profile

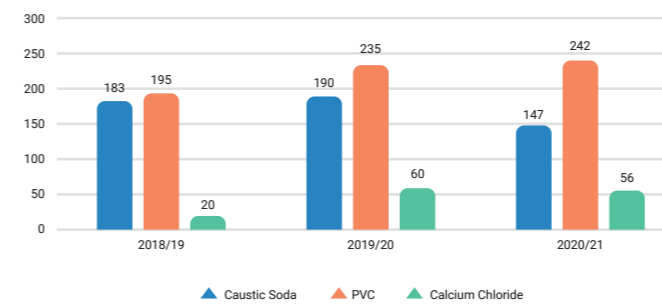
The budget year of 2021 has recorded an improvement in our performance potentially due to the increase price of PVC and Caustic Soda and decrease of Ethylene Dichloride (EDC) which is a raw material that is considered as one of the main components of the production of our goods. Our financial performance has improved, demonstrated by higher revenue as our operating income increased to USD 308 Million in FY2021 from USD 259 Million in FY2020 accounting for a 19 percent increase.

Our Production Mix

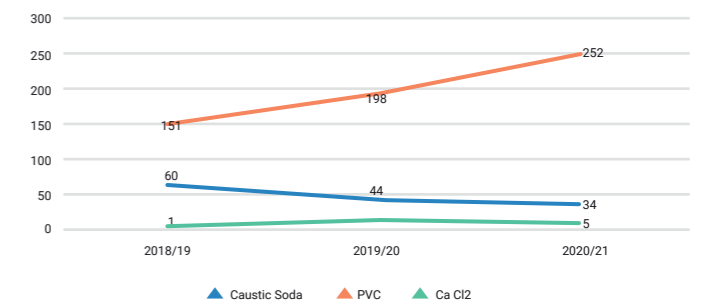
PVC accounts for the highest portion of our business, accounting for 87% of total sales in 2021. PVC revenues increased by a 100% between 2017 and 2021, reaching a 30% rise in 2021 compared to 2020. Possibly due to a huge rise in PVC production and considerable demand drivers from ongoing building expenditure, since PVC is known as infrastructure plastic. Calcium Chloride is considered having the least production size reaching 5 million as a revenue in 2021. However, Caustic Soda revenues increased in 2018 before declining steadily to reach USD 34 Million in 2021, a 21% fall from 2020.



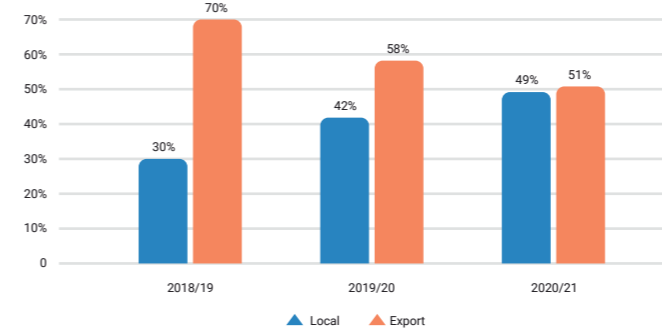
Product Mix by Production Size (MT)



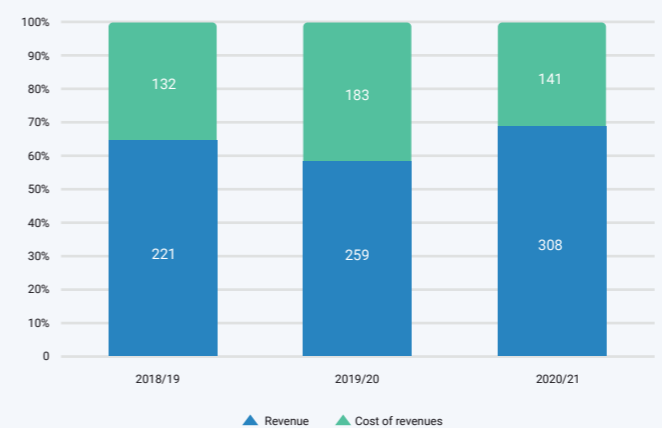
Revenue by product (USD mn)



Total Revenues by shares



Financial Highlights and Ratios



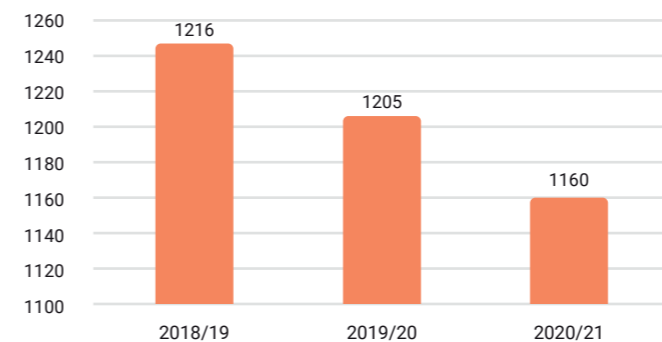
During the FY2021

local revenue and export revenue was close, as local revenue accounted for 49%, an increase compared to the last 3 years, while export revenues recorded 51% which is a minor drop in revenues. In 2021 revenues from local revenues experienced 7% increase than 2020 while export revenues experienced 7% decrease compared to 2020.

Our total revenues increased further in 2021, reaching USD 308 Million, a 19% increase over the previous year.

Yet, when it comes to the cost of revenue, we were able to utilize and decrease costs gradually during the last 3 years, reaching 141 in 2021, a decrease by 23% from 2020. In 2020, the increase in sales costs was caused by an unanticipated increase in the price of its primary raw material (EDC Ethylene Di-Chloride). This scenario persisted for about a year, keeping EDC prices high. Profitability was harmed because of low SPVC (finished product) pricing and high EDC (raw material/feedstock) costs. Yet, in 2021 the raw materials costs began to decrease and settle down gradually giving us a chance to decrease its costs and achieve a higher revenue compared to the previous year.

Total Assets



The growth in total assets from 2018 to 2020 is due to fresh investments, subsequently in 2021 there were no new investments resulting in a steady total asset portfolio.





08

TCI Sanmar Sales and Marketing

- ▷ Market Leadership
- ▷ Market Share
- ▷ Sustaining our Procurement
- ▷ Procurement Highlights
- ▷ Procurement Crisis Management
- ▷ Suppliers Policies



TCI Sanmar Sales & Marketing

Market Leadership

At TCI Sanmar, we maintain our prosperous position on the national level as one of the largest market leaders. Despite the economic downturns stemming from COVID-19, we maintained our strength by implementing a strategy that allowed our plant to sustain a continuous minimum downtime, leading in steady, if reduced, production rates. Due to our stringent crisis management measures, we maintained sales quantities. We focused on enhancing operational efficiency and maintaining an elevated level of client satisfaction while minimizing loss. As a result, our revenues remained unaffected by COVID-19 crisis.



Clients Satisfaction

To serve our customers better and exceed their expectations, we are harmonizing the way we define and measure product quality and customer satisfaction across markets. We also intend to implement additional customer research tracking to gather insights on product innovation to improve service and customer interaction for all TCI Sanmar offerings. Furthermore, we assure that customers are provided reasonable market rates, that their purchases are fulfilled promptly, and, most importantly, that all items are fulfilled. Concentrating on client satisfaction not only ensures our favorable industry reputation, but also enables us to retain our national competitive standing and ensures organizational continuity. TCI Sanmar's marketing team is proud of its relationship with its clients, developed through an extensive follow-up strategy. Consequently, all consumer's input is taken into consideration and utilized for future growth. All complaints are logged, followed-up and investigated to identify the root cause and find a solution, thereby, decreasing the probability of occurrence.



Market Share

At TCI Sanmar, we maintain our remarkably prosperous position on the national level as one of the largest market leaders. Despite the economic downturns stemming from COVID-19, we maintained our strength by implementing a strategy that allowed our plant to sustain a continuous minimum downtime, leading in steady, if reduced, production rates. Due to our stringent crisis management measures, we maintained sales quantities. We focused on enhancing operational efficiency and maintaining an elevated level of client satisfaction while minimizing loss. As a result, our revenues remained unaffected by COVID-19 crisis.

Our products are exported to

49 Countries

PVC is exported to over 32 countries in 2020-21, Caustic Soda is exported to Turkey and Europe, CaCl₂ Export to USA, Canada, UAE, Kuwait, Oman & Europe. The below map lists the countries, we exports our products to;

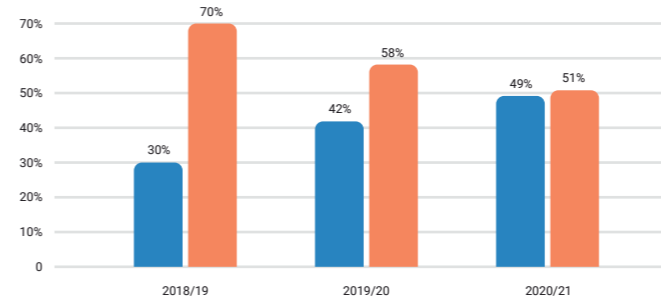


Value Generated

TCI Sanmar had a total revenue increase of about 19% relative to last year's total revenue. In comparison to past years, we showed increased flexibility and responsiveness. The volume of sales demonstrates our revenue levels earned from both domestic and international markets.



Total Revenues by shares



We experienced improvements in revenue on both national and international levels over the last 3 years. Notably, revenue from the domestic market has increased by almost 8%, showing a positive shift in market behavior and a significant increase in TCI Sanmar's value in the domestic sector. Similarly, compared to 2021, the export revenues decreased by about 7%. Our achievements benefit the local community by increasing transactions in the domestic market, further advancing economic growth, and enhancing the wheel of development in Egypt.

Sustainable Supply Chain Management



Decreasing Purchase Order Cycle Time by modifying PA (Purchase Approvals) System.



Increasing the share of A.R.C. with reputed suppliers & contractors.



Improving the coordination purchase - logistics departments for smooth handling of importing shipments.



Initiating Raw Materials & Packing Daily stock reporting system for closely follow-up and in-line troubleshooting.

Sustaining our Procurement

Our supply chain is being maintained through external and internal stakeholders with the same method of communication which is by Mobile phone, Email or a physical meeting, or being contacted daily, weekly, or when needed to have an efficient procurement process. The external stakeholder is the sugar company, who guarantee that the Ethanol Specs and quantity are provided as expected. On the other hand, our internal suppliers are the HS department that monitors operation activities safety-wise and decides the required controls and procedures. The HR department that provides the required staff, that fit in the position. Moreover, the Finance department is responsible for handling supplier and contractor invoices, preparing the budget and required cash for running operation. Our Plant Heads are the source of the plant requirements of different supplies on time and the maintenance department who source the plant requirements of different spares and services.



Opportunity for Future Growth

TCI Sanmar is committed to promoting sustainable procurement, from supplier access to routine assessment of in-trade suppliers. The procurement department is responsible for the supply chain management, training suppliers and to ensure that the procurement process meets the requirements of social responsibility. This process prevents production disruptions, while maintaining process consistency, quality assurance, and satisfaction amongst our customers.

During the reporting period, we succeeded in adding new suppliers to all categories with the help of operational functions that have a positive impact on the efficiency and reliability of the complex. One of our strategies to ensure stable supply is to rely on the local market. As a result, the spending on local suppliers exceeds the spending on imported raw materials, excluding Ethylene Dichloride. Also, we continuously monitor our supply needs through the supplier's development plan in coordination with the Cross-Functional Team. We have a stringent Vendors' Code of Conduct that all our providers are required to follow. We monitor their performance and ensure that they meet our requirements and have a positive influence on the areas in which they serve. TCI Sanmar also guarantees that suppliers follow labor laws, social liberties laws, environmental standards, and safety regulations. We adhere to the Sanmar Group Code of Conduct and regularly analyze the effectiveness of our suppliers to determine compliance.

Initiative for Sustaining our Procurement



Initiative for Sustaining our Procurement

Captive salt is an essential raw material that secure for sustainable operations. Hence, rather than relying on buying it from suppliers, we focus on our own farm. To reduce the cost of salt production, we renegotiated the Salt Farmland rental fees with the Suez Canal Economic Zone and succeeded in **reducing the rent cost by 9.3%**.



Reducing EDC Transportation Cost

We hired two more EDC Transporters, the existing one, allows us to improve the process and **reduce transportation cost by 15%**.



Reducing Maintenance Cost

We have signed up 2 Global Maintenance Contracts with Menco & EMC, which will allow us to **reduce the maintenance cost by 34%**.

Also, we developed a new local service provider to renovate the blocked Quench Column condenser, instead of procuring a new one from abroad.



Reducing EDC Storage Cost

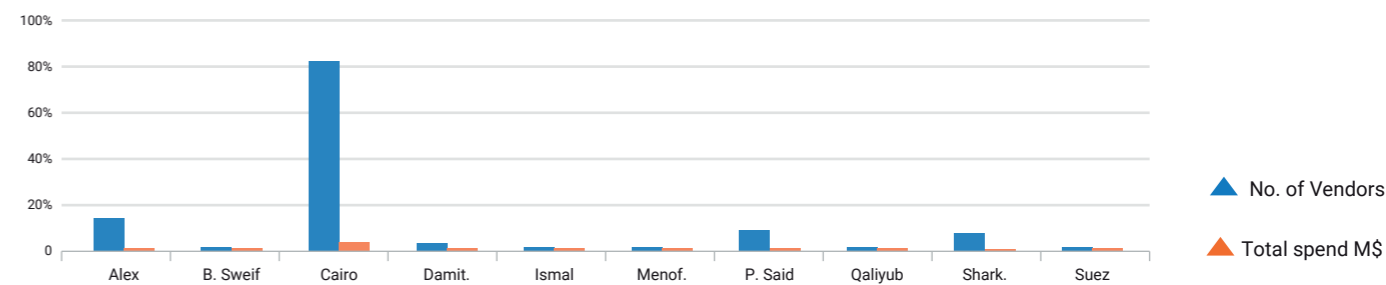
We introduced a new service provider at Adabiyah Port which allows us to fix the storage fees at **25% less than the previous year**.



Supporting Environment and Local Economy

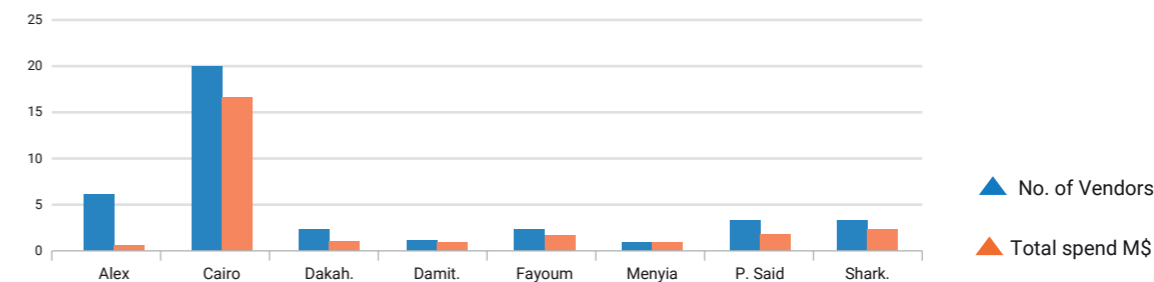
While choosing a supplier, we ensure that our selection is sustainable, and has a positive impact on the environment and society. We ensure that our suppliers have a positive impact on the organization and the local community. By working with local suppliers, we guarantee efficient transportation resulting in less operating costs and a reduction of GHG emissions. In addition, we contribute positively to the economic growth, providing decent work opportunities for the local population and ensuring a long-term source of revenue. Other benefits include lower or eliminated costs for shipping, customs, charges, tariffs, and quotas, which is shown favorably in our financial results.

Procurement Highlights

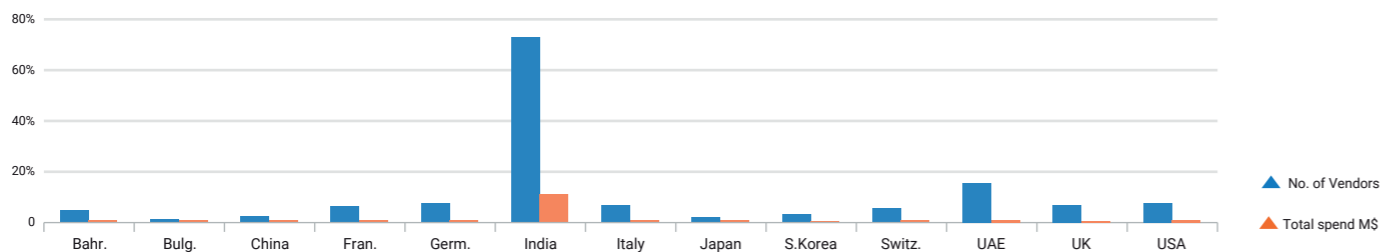


Local Material Supplies				
	2018	2019	2020	2021
Number of vendors	51	6	3	115
Total spend M\$	1.1	0.04	0.01	3.843

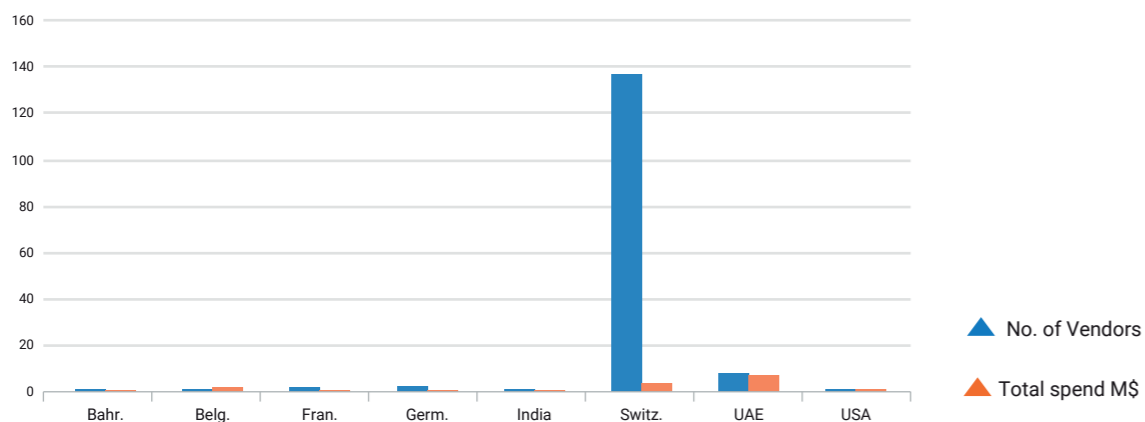
Local Raw Material / Packing								
	Alex.	Cairo	Dakah.	Damit.	Fayoum	Menyia	P. Said	Shark.
Number of vendors	6	20	2	1	2	1	3	3
Total spend M\$	0.368	16.523	0.820	0.691	1.605	1.046	0.547	1.688



Imported Material Supplies (Spares, Tools & Lub.)													
	Bahr.	Bulg.	China	Fran.	Germ.	India	Italy	Japan	S.Korea	Switz.	UAE	UK	USA
Number of vendors	2	1	1	2	2	74	2	1	1	2	13	2	3
Total spend M\$	0.327	0.007	0.011	0.051	0.132	3.102	0.06	0.019	0.001	0.048	0.487	0.045	0.122



Imported Raw Materials / Packing								
	Bahr.	Belg.	Fran.	Germ.	India	Switz.	UAE	USA
Number of vendors	1	1	2	3	1	1	5	1
Total spend M\$	0.28	2.044	0.112	0.366	0.002	136.585	4.545	0.809



Procurement Crisis Management

COVID-19 pandemic had severe impacts on the financial and economic performance of many businesses globally. We faced disruptions in the supply chain due to the lockdown of countries that supply us with needed raw materials and spare parts. This year we realized that depending on local suppliers is much safer and more efficient than foreign suppliers. After the lockdown, we implemented a system using suppliers' data and existing internal data to build the supplier risk pre-warning platform, which identifies and displays the visualization, real-time monitoring, and pre-warning automation of our supplier risks. We have on hand all the necessary raw materials and spare components that, if not available, would result in a complete shutdown of production. Every department in the plant was requested to supply us with a list of its most vital supplies so, we could ensure sufficient stock in the event of another lock-down or global crisis. We always work to ensure that manufacturing flows efficiently and with minimal interruptions to secure the long-term viability and excellent standard of our goods.

Suppliers Policies

At TCI Sanmar, we provide healthy and safe work environment for our employees, which includes providing equal opportunities. We are fully aware that across the world there is a lack of diversity in the legal and cultural environment in which several number of supply factories operate. Therefore, we ensure that our suppliers operate in full cooperation with the laws of respective countries and abide by appropriate policies and regulations. TCI Sanmar's suppliers are expected to use the highest standards when there are variations or disputes in requirements. TCI Sanmar's suppliers must adhere to regulations that encourage respect for employees and protect their rights under regional and global labor, and social welfare standards and policies. We do not work with vendors that expose their employees to Human Rights violations. We prohibit discrimination in our employment process, which includes hiring, compensation, gender, color, and religion. These should not be used to determine advancement, discipline, termination, or retirement. We ensure that suppliers adhere to our policy of not using child labor. Suppliers shall treat their staff with decency and dignity. TCI Sanmar recommends that suppliers must offer a safe and healthy work environment following with relevant laws governing working conditions, such as worker health and safety, sanitation, fire safety, risk management, electrical, mechanical, and structural safety.

09

Corporate Governance

- ▷ Governing Our Future
- ▷ Vision, Mission, and Values
- ▷ Governance Structure
- ▷ Responsibility of the Board of Directors
- ▷ Management's Role in Sustainability Policy
- ▷ Business Code of Conduct
- ▷ Monitoring Sustainability Efforts
- ▷ Evaluation Of Corporate Performance
- ▷ Risks and Opportunities
- ▷ Stakeholder Engagement
- ▷ Material Topics

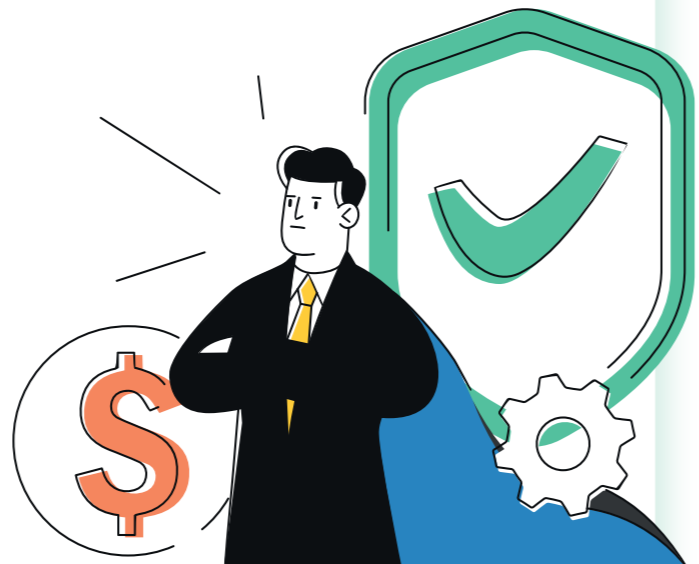
Corporate Governance

Governing Our Future

TCl Sanmar Chemicals S.A.E. was formed in 2001 as a limited liability corporation following the acquisition of Trust Chemical Industries by "The Sanmar Group." On February 28, 2010, the company's legal status changed from Limited Liability to Joint Stock. The corporation amended its Articles of Association in March 2011, March 2017, and June 2018. Changes in manufacturing capacity, project expansions, and the board members.

TCl Sanmar's governance system is designed to ensure, that all managerial actions are carried out smoothly in the best interests of the stakeholders, and it changes throughout time as needed. The structure enables the Board of Directors to exercise sufficient control and monitor duties to fulfill the management's aims and objectives while remaining aligned with those of the stakeholders. TCl Sanmar's reputation derives from our customers, workers, investors, suppliers, and all other stakeholders in a way that enhances excellent management. Following Decree 134/2003, the firm has established an occupational health and safety council to ensure labor and environmental safety.

Accountability, honesty, and openness are critical drivers in improving our decision-making process; these criteria produce credibility, which boosts our stakeholder's confidence. TCl Sanmar utilizes acceptable governance standards that are appropriate for our size and present level of operations. Our governance system is simple and effective, and it is backed up by a set of policies, ambitious standards, and best practices.



Vision, Mission, and Values



Our Vision

We aspire to maintain our leading market position in manufacturing and marketing Caustic Soda, PVC, and Calcium Chloride and ensure our presence in the local and international markets, while operating following with international standards.



Our Mission

We strive to work efficiently and actively in a safe and responsible approach, towards bettering the environment and producing our diverse products with the highest quality required and expected by our customers. We aim to continue to utilize our resources optimally, maintain environmental sustainability, and reduce the operational risks. Simultaneously, we focus on implementing our investments in a way that satisfies our stakeholders and increases our revenues, while safeguarding the rights and interests of our employees, and other stakeholders.



Our values



Honesty

in communicating within the company and with our business partners, suppliers, and customers, while simultaneously protecting the company's confidential information and trade secrets.



Compassion

in our relationships with our employees and the communities affected by our business.



Fairness

to our employees, stakeholders, business partners, customers, and suppliers through adherence to all applicable laws, regulations, and policies and a high standard of moral behavior.



Excellence

in high-quality products and services to our customers.



Consistency

in our word and deed.

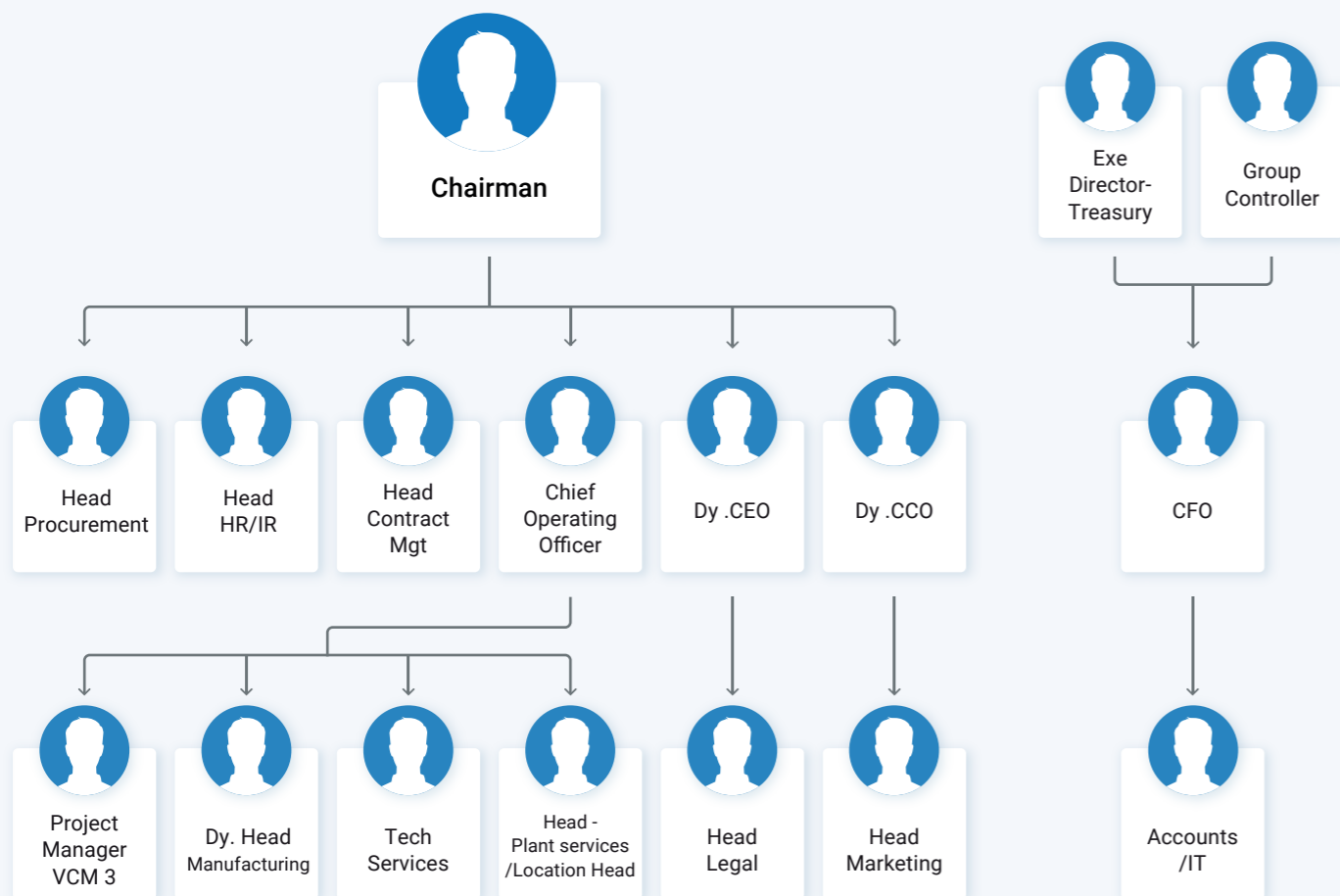
Governance Structure

Our diverse and agile governance structure supports us in creating value for all our stakeholders. Our corporate governance principles define the managerial structure, organization, and processes to provide transparency and guaranteed sustainable long-term success. Accordingly, our internally developed governance policies and procedures include our code of conduct, policy statement of ethics and business statement, code of corporate governance, and available best practices in corporate governance. All of which are guiding pillars towards corporate sustainability, while we conduct our business in compliance with the applicable laws and regulations. Extensive information regarding our code of conduct and related matters can be found in this report.



Top Management Structure

The administrative structure of the company consists of the Chairman of the Board of Directors, the highest administrative authority in the company, and nine directors representing different parties according to the following structure:



Responsibility of the Board of Directors

The Board of Directors is the highest administrative body in charge of the shareholders' General Assembly. The Board's primary roles and functions are as follows:

<p>Draft and approve the strategic directives and goals of the company.</p>	<p>Set up and follow up the control and risk management procedures to ensure efficiency.</p>	<p>Adopt the budgets and internal financial policies.</p>
<p>Develop policies that regulate stakeholder relations.</p>	<p>Protect stakeholder rights, including the development and adoption of policies that emphasize and ensure the official regulations.</p>	<p>Disclose the core of the company and its performance to keep the shareholders and public investors informed to be able to take the right decision and set the strategy for the future of the company.</p>

Management's Role in Sustainability Policy

The Board of Directors play a vital role in determining the company's mission and values. The strategy is executed by the Board Committees, which give input in the formulation, approval, and updating of the company's purpose, values, and mission, as well as strategic policies and goals in relevant areas. The Executive Committee and CSR Committee give rules for long-term operation and effective control, as well as the authority to set guidelines.



Committees of the Board

Name of Committee	Frequency of meetings	Responsibilities
Chemicals Committee	Monthly meeting	Review stock and needs of chemicals to ensure continuous chemical supply for operations
Environment Committee	Monthly meeting	Discussion of the status of the environmental profile for the ongoing projects and future projects inside and outside of the plant.
Health and Safety Committee	Monthly meeting	<ul style="list-style-type: none"> Follow-up on health and safety status profile of all employees and their developmental plans. In case of emergency or risk, urgent meetings are held to ensure the quality of equipment and procedures for prompt action or decision-making.
Modifications Committee	Periodical Meetings	Follow-up on intended or planned change of any equipment or modification of the company's production process flow
Training Committee	Periodical Meetings	Discuss training status for employees and capacity building needs
Internal Audit Committee	Periodical Meetings	Risk management and internal control, internal and external audits, and reporting and monitoring of Key Performance Indicators (KPIs)
Inventory Committee	Meeting monthly	Reviewing the inventory of chemicals, machines, and equipment in the stores
Investment Committee	Annual meeting	To decide on defining the corporation's investment objectives and corporate investing practices
Human Resources Committee	Periodical meetings	<ul style="list-style-type: none"> Oversees developing and implementing values-based processes and policies to guarantee that the company complies with local and state regulations while also generating an appealing environment for existing and potential workers. The committee is also in charge of developing the general philosophy for managing Human Resources inside the firm and the intended corporate culture, and providing the appropriate governance to guarantee that these goals are met.

Business Code of Conduct

TCI Sanmar Code of Conduct, coupled with our fundamental values and Suppliers' Code of Conduct, it gives a clear vision to all our stakeholders of how TCI Sanmar operates ethically following our standards.

The code covers a variety of themes, from our explicit support for Human Rights to our stringent anti-corruption procedures. It also aids in regulatory compliance and avoiding potential risks and liabilities. Our legal department makes sure that our operations, transactions, and decisions follow all relevant laws and regulations. This contributes to minimizing the risk associated with losing legal cases, which in turn reflects in the company's reputation, trust, and profits.

TCI Sanmar aims to establish an atmosphere where workers, contractors, and suppliers may report suspected infractions without fear of repercussions by implementing a whistleblowing reporting system. Leading the workers and contractors being more encouraged to ask questions and seek help on any issues. Finally, using this strategy has resulted in zero tolerance for corruption and adhering to strong ethical standards everywhere it works. Our reputation and integrity are dependent on the actions of all employees, both within and outside the organization.

TCI Sanmar has a Competition Compliance Policy and clarifying documentation that workers must sign annually to avoid corruption and ensure business ethics. Policies, targets, and so on are implemented in each division, for example, through suitable management systems. TCI Sanmar intends to communicate openly about its sustainability efforts and progress, and this Sustainability Report is part of that plan.

Monitoring Sustainability Efforts

Continuous monitoring is required for sustainability activities aimed at reducing negative impacts and increasing value generation potential. We have processes to maintain production safety to prevent the health, safety, and environmental (HSE) implications of industrial activities to the greatest extent practicable. One of the essential company objectives is to assure human safety and environmental protection. As a result, as part of our HSE management, we have built a comprehensive set of policies and measures. Employee training sessions on this subject regularly. The processes, methods, and measurements are constantly monitored, both internally and through external management system audits.

TCI Sanmar is aware that the sustainability management system is a component of the strategy planning, objectives, and processes. It includes an ongoing review of the activities undertaken to ensure that planned sustainability activities are effectively implemented and are professionally managed. We observe and analyze our operations to ensure efficient use of resources, effective waste handling, management of Human Rights impacts, and societal impact of our operations. The implementation is carried out through our Health and Safety manager and relevant departments while it is reviewed at the departmental level. The results are deliberated at executive committees as well as CSR Committee meetings. The results of these activities are included in the risk control system, analyzed for urgency and relevance, and then implemented as per requirement.

We are also making vigorous efforts to include sustainability criteria in our business relationship with our suppliers, contractors, and service providers. The selection procedure is part of procurement management currently considers only economic-related principles and aspects. We are keen to work with our supply chain on fostering sustainability to manage our impacts in the supply chain and to improve the entire value chain.

Reporting To Management

The extensive information on potential risks and opportunities, environment, and social impacts with factors affecting our ability to create value over time, is shared with the management through the network system built by the IT department. Committees use risk management system to record, analyze and present all relevant risks for consideration and action. Reporting is carried out throughout the year and discussed in the relevant Committees. HSE-related risks are communicated through the HSE department, while other risks are reported separately through the Risk Management System of the company. The Audit Committee reviews issues regarding the status of compliance with laws and regulations, and the code of conduct. The internal audit department reports to the Audit Committee regarding the status of compliance with laws, also regarding the code of conduct violations that occurred during the year, how they were investigated, and, if necessary, how violators were disciplined, and organizational measures were implemented to avoid similar violations in the future. Based on the inputs of different Board Committees, the Board of Directors formally reviews and discusses organizational impacts, risks, and opportunities in its quarterly meetings.



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Evaluation Of Corporate Performance

The Human Resources Department and the Committee of the Board of Directors evaluate, on an annual basis, the degree to which our company's objectives have been met, as a whole and particularly those of the Executive Committee. Based on the evaluation of the performance against operational and sustainability-related goals, recommendations are given for approval from the Board of Directors. This procedure ensures that the bonus payments to employees, including executives, are in line with TCI Sanmar's overall performance and objectives. The members of the Board of Directors and the Executive Committee have expertise in managing economic, environmental, and social issues. To ensure that they keep abreast of current trends and developments in the mentioned areas, Sanmar ensures the participation of its management and staff in relevant training and involvements in international and national conferences and meetings.

Shareholder and Employee Recommendations

We value the concerns and recommendations of our shareholders. The shareholders can share their feedback and recommendations in general meetings or by sending letters or emails to the Corporate Relations department. The concerned officials regularly evaluate the feedback and actions are taken as per need. The employees may submit requests or recommendations at any time to the company, its management, or the appropriate bodies through their supervisors or managers.

The HR department at the Head office and plants provide support to ensure that the ethically and legally compliant conduct of employees is followed as per code of conduct and company policies. In this regard, regular checks and inquiries are carried out by the HR department depending on the number of queries received about compliance topics, issues and measures. The company has a dedicated

system on the intranet to further facilitate the process. In addition to the reporting of breaches of the code of conduct, it provides employees with the opportunity to ask questions anonymously via the intranet portal. These questions are answered by the concerned officers within a reasonable period of time.

The legal department also has a vital role to play in meeting the company's objectives on achieving its sustainability goals and issues. The department assists in reducing the legal procedures and costs, working to raise awareness of applicable laws and regulations among the employees, and in the importance of occupational safety and health, and the preservation of the environment. The legal department is also responsible for receiving complaints and claims against the company and seeking an amicable settlement following applicable and suitable laws and regulations. The department represents the company in claims and disputes, filed by or against them, before the competent judicial authorities, reconciliation and arbitration committees and centers.



Risks and Opportunities

Identifying risks and opportunities is critical to our function. We endeavor to continuously improve our risk, and opportunity management system to ensure our success. We identify, assess, and manage emerging and inherent risks and opportunities in line with our organizational goals. This provides us with the essential inputs necessary to conduct an accurate materiality assessment and effective stakeholder engagement.

Our risk management process and procedures resulted in an apt response to the COVID-19 crisis. Diligent monitoring of our operations, contractors, and the health and safety of our employees enabled us to quickly adapt our safety measures and protocols to effectively overcome the threats of the pandemic. In addition, we implemented a precautionary approach by introducing several initiatives to ensure efficient operations. Throughout the risk assessment process, we categorized identified risks as follows:





Risk	Definition
Strategic Risks	All geopolitical and economic risks that impact corporate strategy setting and hence its growth and development path
Laws & Regulations	TCI Sanmar abides by all applicable laws and regulations
Financial Risks	Budgeting and cash flow management, changes in the currency rate
Products Prices Risk	Future products prices of inputs, final products
Operational Risk	Shortage in raw materials (N.G, Raw water, etc), shortage in the chemicals or catalyst used in production, outside the Grid (Electricity Network) failure, and human errors.
Market Supply and Demand	The demand for petrochemicals is expected to increase, resulting in need for raw materials used in this industry. This demand will have a strong consequential effect on establishing the sector's position internationally and developing & supporting several other sectors.
Exchange Rate	The volatility of domestic currency to foreign currencies
Cyber Security and Technological Disruptions	Cyber-attacks are considered a substantial risk for the industry as it relates directly to operations and production on the follow-up and monitoring systems of the plants. Servers and networks infected with a deadly virus could cause a complete shut-down or worse cause hazardous malfunction.
Water Scarcity	The World and Egypt have the challenge to access freshwater
Asset Integrity	Equipment depletion/deterioration
Supply Chain Risk	Trouble in the availability of spare parts, packaging, and other related materials.
HR Risks	Availability of high calibers, and the ability to retain them.
Research and Development	Coping with the state-of-the-art technologies in production, and production of ecologically friendly products considering the challenges facing the agriculture sector worldwide of increasing population.

Stakeholder Engagement

We engage with our stakeholders through traditional and innovative communication channels. Open and honest communication provides us valuable insights regarding the emerging trends, business risks, and opportunities. TCI Sanmar identified its stakeholders based on its operations, activities, and relations in the national, sectoral, and local context.



Based on the various channels of communications with our stakeholders, the following issues and expectation are addressed, and our response are illustrated in the following table:

Stakeholders	Communication Channel	Issues & Expectations	Response to expectations
 Shareholders	Annual general meeting, information disclosures, annual reports.	Financial profitability & sustainable business growth.	TCI Sanmar management follows effective planning and budgeting, efficient management system, continuous performance monitoring, and maximizing resources utilization.
 Board of Directors	Board meetings, various reports.	Financial efficiency, corporate governance, compliance with laws & regulations, risk management, safe and efficient operations, and sustainable business growth.	Effective planning and budgeting, efficient management system, performance monitoring, and reporting system, solutions to reduce costs, maximizing resources utilization.
 Employees	Direct meetings, HR surveys, employees' conferences, special purpose meetings or interviews, direct phone calls.	Safe working environment, attractive benefits package, career path development, training and development, recognition and reward, employee, and family well-being. Transparency and effective strategy and policies communication.	New health plans, updating HR policy, training and career development programs, key-positions retention plan. Internal and abroad training programs. Human Resources data analysis system.
 Clients & customers	Daily operational contacts, scheduled meetings, regular operating reports, direct phone calls, emails.	Company profile, operating costs, quality of products, availability, and quality of products.	Apply international standards in management and operations. Preventive maintenance plans to ensure continuous production, improving operation and sustain the quality of products, 24/7 follow-up, and monitoring system.

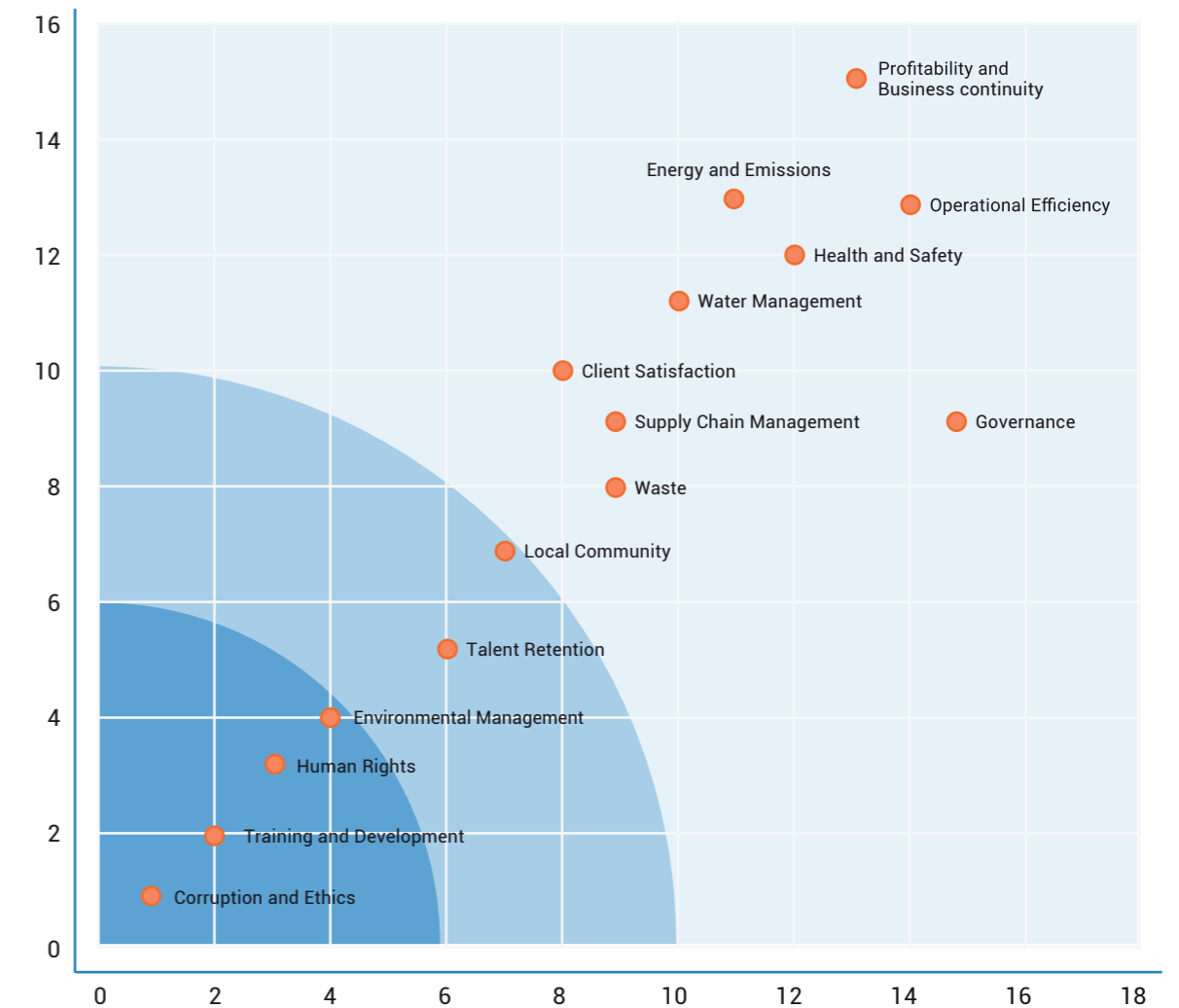
 Suppliers and vendors	Public tenders, regular contacts, vendors registration and inspection process, mails, phone calls, direct meetings,	Transparency in bidding evaluation process, input prices, operation efficiency and profession, times required to provide service, long term relationship, on-time deliveries, on-time payment, compliance to rules and regulations, compliance with safety procedure, commitment to the environment, human rights	Developing supplier's manual and code of ethics, tendering process that assures transparency and fairness, clear payment policy, professional and dedicated employees, strict policy toward human and labor rights.
 Financial institutions	Regular meetings, financial reports, annual audit reports, feasibility studies.	Transparency of management system, professional monetary management system, long-term planning, liquidity, risk management. Exchange rate, interest rate, overdraft facility availability of foreign exchange.	Effective monetary management policy, diversification of sources of funds, compliance with bank rules, medium- and long-term plans, monitoring financial performance and liquidity.
 Peers	Market research surveys, participation in biddings, direct contact through meetings, emails, and phone calls.	Responsible competition, fairness, and equal opportunities, transparency. Recruiting	Transparent disclosure to boost the brand name, responsible competition principles. Cooperation and support when needed.
 Regulator and relevant governmental entities	Reports to/from gov. Agencies, direct meetings, inspections, auditors' reports, focal points.	Compliance with laws and regulations, certifications, licenses, contribution to national priorities, support community development.	Direct environmental monitoring from the MOE. The laws and regulations compliance, third-party quality inspections and certification (ISO 9001-14001, 45001, accountability state authority)

List of Material Topics

Material topics are the key concerns on our radar. These topics have a direct influence on operation of the organization and receive a lot of attention. A set of policies, strategies, and actions are in place for each material incident reported, to ensure that it does not disrupt the operating process or cause any difficulties.



TCI Sanmar Materiality Matrix














10

Our Corporate Shared Value: Local Community, Egypt, and the Globe

- ▶ UNGC Principles Through our Operations
- ▶ TCI Sanmar Mapping with Sustainable Development Goals (SDGs)

Our Corporate Shared Value: Local Community, Egypt, and the Globe

UNGC Principles through our Operations

 <p>Principle 1 TCI Sanmar supports and upholds international declarations of Human Rights.</p>	 <p>Principle 2 TCI Sanmar ensures that business does not involve in any Human Rights violations.</p>	 <p>Principle 3 TCI Sanmar supports associational independence and the right to collective agreements.</p>
 <p>Principle 4 The company prohibits all types of intimidating and forced labor.</p>	 <p>Principle 5 TCI Sanmar contributes to the elimination of child labor both in the production process as well as in its supply chain.</p>	 <p>Principle 6 TCI Sanmar ensures zero tolerance for discrimination in the workplace and any form of discrimination is to be eliminated.</p>
 <p>Principle 7 Environmental concerns are considered with caution by all the production lines.</p>	 <p>Principle 8 TCI Sanmar promotes and encourages better environmental responsibility.</p>	 <p>Principle 9 TCI Sanmar stimulates the creation and spread of ecologically friendly technology</p>

TCI Sanmar Mapping with Sustainable Development Goals (SDGs)

The Sustainable Development Goals, launched by the United Nations in 2015, are a global framework for development by 2030. Through responsible production, use, and management of chemicals, we support the SDGs. Our innovative products and practices minimize negative impacts, protect the environment, promote social progress, and support economic growth.



Goal 3 Good Health and Well Being

Health and safety are top concerns in a chemical industry. We try to reduce the harmful effects of chemical exposure in our workplace, at home, and in our community. Production management and innovation have improved the availability of products with health and safety benefits with diminishing negative environmental impact. Our health and safety department ensures that the workplace is free of risks.

In addition, we ensure that all our employees are in a safe and healthy environment where physical and mental wellbeing is maintained. In the event of an accident, the injured employee is transported to nearest hospital for first aid. We ensure that all our employees have medical insurance.



Goal 4 Quality Education

We believe that quality education supports economic growth as a critical component of a country's human capital. It increases the efficiency of individuals and helps economies move up the value chain beyond manual tasks or simple production processes. This creates a more stable society as education leads to economic prosperity in the global marketplace. We contribute by educating our employees and providing them with training programs to enhance their skills and performance. By educating our employees, we enrich their knowledge and develop a path towards more innovative ideas. In addition, we have summer training programs for university students to develop their abilities to prepare for a successful career. These training programs also assist us in monitoring trainees and identifying their aptitude and talents for employment with TCI Sanmar. This method benefits the firm while also assisting trainees in their personal and professional growth. Our education initiatives increase human capital allowing individuals to secure jobs and provide better opportunities in the future.

A huge percentage of TCI Sanmar's CSR budget is directed towards education. TCI developed the Graduated Engineers Training program (GET) to provide educational support throughout community activities in the Port Said region where we operate. As per the strategic direction of the group, TCI Sanmar's management decided to replicate, the GET program in Egypt like, the successful program in India. The management agreed to the proposal of recruiting 8 GET to begin with. The first phase of candidate selection which includes, screening, tests, and interviews were completed in Dec 2020 and the candidates were offered a one-year paid internship contract. The shortlisted candidates were given both classroom and on-job-training with specific mentors and subject-wise trainers. The training program consists of three major components: Classroom training, in-Plant training, and on-the-Job training and project assignment.

Program graduates were offered full-time employment in the plant in order to build their career, in TCI Sanmar. They contributed efficiently to developing solutions for some operational issues and provided innovative ideas to further enhance our sustainable operations strategy. In the second run of the program (our GET 2022 program), we received more than 150 graduate engineer applicants. They passed through written General Aptitude, and specialized technical exams in the Port Said University – Faculty of Engineering premises.





Goal 6
Clean Water and Sanitation

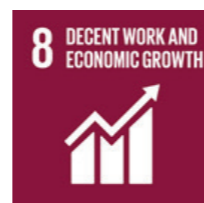
Disinfectants that kill germs and prevent sickness, polymer membrane filters that remove impurities, materials for desalination, and materials for pipelines that safeguard water from its source to the tap are all examples of chemistry advances that contribute to clean water and sanitation. Our production of chlorine and PVC contribute to the production of chlorinated water disinfectants that keep drinking water safely during storage and delivery. PVC is used in a variety of piping applications, from the transportation of drinking water, over drainage solutions to advanced fire-sprinkler systems. These pipes are a safe choice for transportation of drinking water, due to their high degree of inertness and resistance to corrosion. PVC pipes are therefore free from biofilm contamination that can be a breeding ground for bacteria.

By providing clean water, PVC pipes are beneficial to public health. Replacement of lead-based stabilizers in virgin PVC compounds was completed in 2015. Due to it being used below its glass transition temperature (80°C), PVC is a functional barrier preventing any low molecular weight substances from migrating to drinking water. Migration tests have demonstrated migration levels far below the detection limit of the most modern analytical techniques. Moreover, the ultra-smooth surface of PVC pipes reduces pumping costs and energy use, and their leak-free fittings eliminate water loss. This is good for both the environment and the utility bill. We promote water management systems because they aid in the improvement of water quality by reducing pollution, eliminating improper disposal, minimizing the release of hazardous chemicals and materials, reducing the proportion of untreated wastewater, and increasing recycling and safe reuse. Finally, we target two units of Zero Liquid Discharge (ZLD) state-of-the-art facilities that demonstrate almost 80% recycling of water that is used in our production, this leads to minimal water being directed to the wastewater network. TCI Sanmar made a strategic decision to use the ZLD Systems to maintain its operations in a water-stressed country like Egypt.



Goal 8
Decent Work and Economic Growth

We ensure sustainable and inclusive economic growth by providing employment and decent work opportunities for all. Business prospects and a long-term foundation for global expansion are provided by innovation. TCI Sanmar management guarantees that all employees are paid a fair wage that is above the minimum wage, ensuring that TCI Sanmar staff have a good standard of living.



Goal 9
Industry, Innovation, and Infrastructure

In order to promote robustness, we upgraded our production assets. The administration ensures that environmental and resource concerns were addressed, raw material and waste disposal costs were reduced, additional revenue was generated from residues and by-products, circular business models were supported, and business development prospects was established.

We maintained a well-developed infrastructure solution by collaborating with other sectors in Egypt. We support the development of integrated and end-to-end models, to further facilitate open-innovation and manufacturing breakthroughs. Our research and development team is responsible for adapting and maintaining the latest technology models, ensuring their use throughout the production process. Our waste management systems aim to have the least detrimental influence on the environment, while having a positive impact on the population.



Goal 12
Responsible Consumption and Production

Chemical goods aid in the improvement of the quality and efficiency of manufacturing processes in a variety of industries and geographies. We manufacture PVC, which is the primary raw material to produce recyclable PVC cables. Recycling PVC helps satisfy resource sustainability targets, while preserving the national environment. When PVC is recycled, it can save up to 92% on CO₂ emissions: the primary energy consumption of recycled PVC is typically 45% to 90% which is lower than the new PVC manufacture (depending on the kind of PVC and the recycling process). Thus, every kg of PVC recycled saves 2 kg of CO₂, as per estimate. We are committed to the sustainable reduction of waste and reducing its negative impact on the environment. Therefore, we are conducting Life Cycle Impact Assessment (LCA) surveys to identify hotspots that may impact the operating environment to develop more sustainable strategies. The LCA survey is also used to register and publish EPD, the first Environmental Product Declaration for its flagship product PVC.



Goal 13
Climate Change

We continue working hard to combat climate change via a range of efforts, including energy efficiency, product footprint reduction, and the creation of innovative solutions to reduce downstream emissions. We are devoted to reducing waste and its negative environmental consequences in a sustainable manner. Hence our focus is on generating LCA and EPD studies for PVC, our major product. PVC can increase resilience and adaptation efforts in all nations to climate-related threats and natural disasters. As an innately 'low carbon' plastic (only 38% of its molecular mass is carbon, the rest being Chlorine and Hydrogen), it uses less primary energy in the production phase than other polymers. LCA studies reveal that PVC cables outperform other materials in energy usage and corresponding CO₂ emissions.



Goal 17
Partnerships for the Goals

Partnerships are a critical facilitator for accelerating sustainable development and achieving the SDGs. In line with goal #17, TCI Sanmar has decided to:

- ▲ Implement all development assistance commitments
- ▲ Collaborate with downstream partners, government organizations, non-governmental organizations (NGOs), and other stakeholders interested in sustainable development.
- ▲ Contribute to the improvement of Egypt's environmental and safety performance via capacity building.
- ▲ Develop multi-stakeholder and cross-border alliances and agreements with different international organizations to accomplish sustainable development
- ▲ Promote sector-wide openness innovation capabilities.





TCI SANMAR CORPORATE SHARED VALUE INITIATIVES

- ✓ TCI SANMAR PROVIDES ITS EMPLOYEES A COMPREHENSIVE HIGH-END HEALTHCARE PROGRAM THROUGH THE BEST MEDICAL CARE PROVIDERS, TO MAINTAIN THEIR HEALTH AND FITNESS.
- ✓ TCI SANMAR UNDERTAKES A PERIODIC MEDICAL CHECK-UP FOR ALL ITS EMPLOYEES, ALSO MAINTAIN A DATABASE WITH THEIR MEDICAL RECORDS TO PROVIDE FULL HEALTHCARE AND MEDICAL SUPPORT. WE ALSO MAINTAIN EARLY DETECTION AND TREATMENT OF ANY CHRONIC NON-OCCUPATIONAL DISEASES.
- ✓ TCI SANMAR PROVIDES, THROUGH ITS RESIDENT PHYSICIAN, PERIODIC TRAINING FOR GENERAL MEDICAL AWARENESS AGAINST CHRONIC AND COMMON DISEASES
- ✓ TCI SANMAR PROVIDES REGULAR TRAINING SESSIONS TO INCREASE THE AWARENESS OF THE EMPLOYEES OF OCCUPATIONAL HAZARDS AND DISEASES AND THE APPLICABLE SAFETY AND PROTECTION MEASURES.
- ✓ BECAUSE OF THE PANDEMIC COVID-19 CRISIS TCI SANMAR DONATED 100 TONS OF SODIUM HYPOCHLORITE (DISINFECTANT) TO THE LOCAL COMMUNITY TO BE USED FOR DISINFECTING HOSPITALS, HEALTH OFFICES, AMBULANCE CARS, AND GOVERNMENT BUILDINGS.
- ✓ TCI SANMAR PARTICIPATED IN THE RENOVATION ACTIVITIES FOR EMIRATI RESIDENTIAL AREA SCHOOL TO ENSURE A BETTER EDUCATION ENVIRONMENT FOR THE STUDENTS OF THE LOCAL COMMUNITY.



HEALTH CARE INITIATIVES

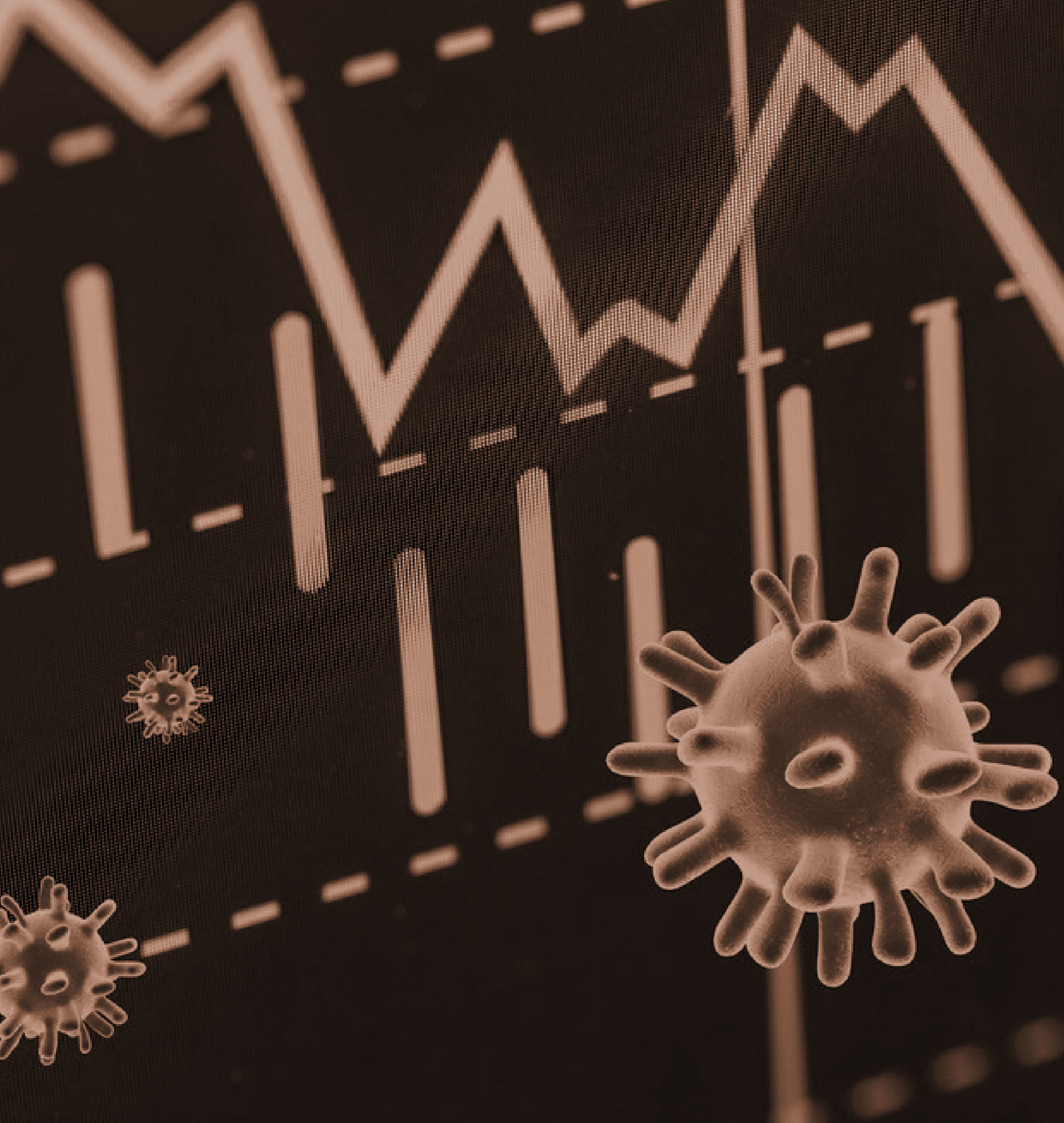


GIVING-BACK TO COMMUNITY



EDUCATION INITIATIVES





11

COVID-19 Crisis Management

- ▶ COVID-19 Story
- ▶ Living with the New Normal
- ▶ Marketing During COVID-19
- ▶ COVID-19 and its Effect on Our Supply Chain
- ▶ COVID Health & Safety Procedures



COVID-19 Crisis Management

COVID-19 Story

Affecting many aspects of business and daily life, COVID-19 had many consequences in 2020 and 2021. To manage the effects of the pandemic we undertook precautionary measures to contain the spread of the virus. Our measures included partial lockdowns and restrictions on capacity within our facility, resulting in a temporary decline in domestic activity. Despite these challenges, we have continued our effective process in handling COVID-19. Our actions reflect both our core values and our commitment towards maintaining the health and safety of our employees.

COVID-19 Cross Functional Team

The COVID-19 pandemic highlights the importance of effective collaboration for long-term commercial success. Particularly, in a crisis, organizations need to pull together experts with unique, cross-functional perspectives to solve the rapidly changing and complex problems that have a long-term implication. The diversity of experience allows us to see risks and opportunities from different angles enabling us to generate fresh solutions and adapt dynamically to the changing situations. Our cross-functional team continues to follow up on COVID-19 cases daily and report on positive COVID-19 and high-risk contact cases to keep the firm updated with potential risks or infections. This ensures that our operation and production process are unaffected and proceed without obstacles.

Employees Support Team

Our HR department selected a team to support employee duties to maintain a positive work environment. The team's duties included supporting employees in performing administrative tasks, familiarizing, and adhering to our policies and procedures, providing recommendations for improving customer's experience, and developing strategies to increase the company's revenue and profitability. Our employee support team's efforts extended beyond working activities to ensure physical safety and mental wellbeing amongst our employees. TCI Sanmar is still operating on last year's edge, in which each group of employees was allocated a mentor to provide emotional support. To mitigate the spread of the virus we educated our employees on how to cope with the new circumstances. They were informed on how to quarantine if in touch with a positive case, sanitize a location, updated on proper hygiene measures, along with a variety of other policies and guidelines.



Living with the New Normal

We installed disinfectant gates at our entrance to guarantee that all personnel is sterilized on their entry and exit points of the plant. The gates are equipped with a temperature monitoring system to record their body temperature. The health and safety department took the most care in choosing the best and suitable supplier to fix the disinfectant gates for our employees safety. Our administration was strongly productive in developing policies and procedures for adapting to new regulations. Our policies ensured that activities are safe and have no adverse impacts on employee's health and safety. They also aim to reduce the number of incidents, and deal with any urgent concerns that may arise. Our Health and Safety department guarantees that all personnel follow sanitization requirements and maintain social distance to assure that the factory operates securely. Research analysis and data collected form helped to identify any person who has been in contact with positive case. Our actions demonstrate our ability, to adapt our operations and production to overcome the challenges emerging from the pandemic.

Marketing During COVID-19

During the pandemic, worldwide supplies and demand for PVC were significantly impacted, because three major PVC plants in the United States were shut down, supply was drastically cut, and demand was not met. As a result, we capitalized on an opportunity to fill the market vacuum and compensate for losses from the previous year. Our manufacturing capability in 2021 was able to cover the market's deficit and meet all requirements. Even-though we have restored to normal production capacity, our marketing team has seen some adverse effects on sales and marketing due to COVID-19. Because face-to-face encounters with current and new clients are no longer feasible, the team believes that, this has built a barrier between them and their clients. Completions and meetings were no longer an option, and contact was restricted to phone conversations. This had an impact on consumer relations.

COVID-19 and its Effect on Our Supply Chain

Our supply chain was highly affected by COVID-19, as spare-parts and raw materials were not available, which led to a huge shortage in supply prohibiting us from meeting market demand requirements. Although there was a delay in shipments, raw materials were not affected due to holding operations and production lines for 14 days. Eventually, due to the rising uncertainty the administration decided to make a stock of the necessary spare parts and raw materials to guarantee that there is no scarcity and that they are available when required. Regular meetings were held with various departments to determine all their supply and raw material requirements are stocked and ready, in the event of another lock-down. Even during the pandemic, suppliers maintained excellent relationships with the firm, and hence none of our suppliers were replaced. Although, certain supply chain interruptions happened due to few misunderstandings and misinformation; one such incident occurred in our salt pan. The people working in the salt pans were scared to come in contact with the factory workers, in the year of the virus. Finally, in 2021, it was proved that TCI Sanmar managed the supply chain more efficiently than other firms, dealing with the pandemic.


















COVID Health & Safety Procedures

It is undeniable fact that the pandemic has impacted both our operations and the health of our employees. However, to abate the propagation of the impacts of COVID-19, we devised a safety plan to offset its repercussions. To protect the health and safety of everyone on-site from the spread of COVID-19, we have devised a plan that consists of guidelines for plant operation, mobile equipment, workplace ventilation, cleaning, and disinfection. At TCI Sanmar, workers, visitors, contractors, and anyone on site must comply with the requirements of this plan.

Operation of plant and mobile equipment during COVID-19 pandemic

 <p>Workers should avoid contact with other workers, contractors, etc.</p>	 <p>For equipment operated by multiple workers, surfaces, or components with high contact frequency, such as buttons and handles, should be disinfected regularly.</p>
 <p>If contact is unavoidable, always practice social distancing (at least 2 meters).</p>	 <p>Gloves should be worn by the operators of mobile equipment.</p>
 <p>Operators of mobile equipment, must disinfect their cabin at the start of the shift and at the end of the shift or when exiting the machine for a break.</p>	 <p>Workers are to avoid sharing tools.</p>
 <p>Where possible principle of "one person, one machine" should be adopted.</p>	 <p>If sharing is required, tools are to be cleaned and disinfected thoroughly between shifts and before being used.</p>







Precautions during the Pandemic

 <p>Focus on COVID-19 vaccine for all the employees.</p>	 <p>Conduct audits to ensure employees wore masks and maintain social distancing.</p>
 <p>Enhance the disinfection activities within the plant premises regularly.</p>	 <p>Company doctors are followed and filled all the COVID-19 cases and suspects to provide the best support and protect others from the virus.</p>
 <p>As well as enhance the disinfection activities with the local community and stakeholders; TCI Sanmar donated chlorine disinfectants worth 10,064 USD to health care centers and government authorities to disinfect buildings.</p>	 <p>Declaration form and PCR test reports were collected before joining the plant.</p>

Apart from the plan, we issued COVID-19 guidelines and instructions, to all employees and contractors. Also, the ministry of health had organized three awareness sessions on COVID-19. Toolbox Talk regarding COVID-19 awareness was arranged before issuing work permits and mock drills. To keep everyone aware, we issued COVID-19 case follow-ups and provided daily reports on positive COVID-19 cases, suspicious cases, and high-risk contact cases.

We are keen to encourage our employees, so we arranged several events to provide safety rewards for plant cross audit, Safety man of the year, and plant best safety performance for 2020-21.

IT Response to COVID-19 Pandemic

 <p>Implementing a VPN connection for all laptop users to work from home when required.</p>	 <p>Providing laptops to more key users to increase productivity by working remotely.</p>	 <p>Enabling virtual meetings and encouraging employees to hold their meetings virtually instead of face to face.</p>
 <p>Provide the essential information, and security guidelines to increase awareness and avoid cyber-attacks.</p>	 <p>Train the user about the proper uses of printers by enabling both side printing and print preview to reduce paper wasting volume, in line with the green initiative.</p>	 <p>Move to cloud email system to increase email availability, redundancy, and security.</p>

GRI Standards Content Index

Disclosure /KPIs	Category of information	Page Number
G102-1	Name of the organization	T.C.I Sanmar Chemical S.A.E
G102-2	Activities, brands, products, and services	10
G102-3	Location of headquarters	1
G102-4	Location of operations	1
G102-5	Ownership and legal form	64
G102-6	Markets served	55
G102-7	Scale of the organization	51
G102-8	Information on employees and other workers	12
G102-9	Supply chain	56,57,58,59
G102-10	Significant changes to operations, its location or supply chain	None
G102-11	Precautionary Principle or approach	17,18
G102-12	External initiatives	10
G102-13	Membership of associations	None
💡 Strategy		
G102-14	Statement from senior decision-maker	6
G102-15	Key impacts, risks, and opportunities	71
❤️ Ethics and integrity		
G102-16	Values, principles, standards, and norms of behavior	18,66
G102-17	Mechanisms for advice and concerns about ethics	66

👤 Governance		
G102-18	Governance structure	63
G102-19	Delegating authority	64
G102-20	Executive-level responsibility for economic, environmental, and social topics	64,65,66
G102-21	Consulting stakeholders on economic, environmental, and social topics	65,69,70
G102-22	Composition of the highest governance body and its committees	64,65
G102-23	Chair of the highest governance body	64
G102-29	Identifying and managing economic, environmental, and social impacts	66
G102-30	Effectiveness of risk management processes	66
G102-31	Review of Economic, Environmental, and Social Topics	66
G102-32	Highest governance body's role in sustainability reporting	67
G102-33	Communicating critical concerns	67
👥 Stakeholder engagement		
G102-40	List of stakeholder groups	69
G102-41	Collective bargaining agreements	59
G102-42	Identifying and selecting stakeholders	60,70
G102-43	Approach to stakeholder engagement	68
G102-44	Key topics and concerns raised	69,70
📄 Reporting practice		
G102-45	Entities included in the consolidated financial statements	Only TCI Sanmar
G102-46	Defining report content and topic Boundaries	62,63,64,65,66,67,68,69,70,71
G102-47	List of material topics	71

G102-48	Restatements of information	None
G102-49	Changes in reporting	None
G102-50	Reporting period	1/4/2020 to 31/03/2021
G102-51	Date of most recent report	2020
G102-52	Reporting cycle	Annual
G102-53	Contact point for questions regarding the report	MHH1T@tci.sanmargroup.com
G102-54	Claims of reporting in accordance with the GRI Standards	1
G102-55	GRI content index	86,87,88,89,90
G102-56	External assurance	91

Economic KPIs

G201-1	Direct economic value	50,51
G202-1	Ratios of standard entry level wage by gender compared to local minimum wage	32,59,75
G202-2	Proportion of senior management hired from the local community	33
G203-2	Indirect economic impacts	19,20,74,83
G204-1	Spending on local suppliers	57,58
G205-2	Communication and training about anti-corruption policies and procedures	66

Environmental KPIs

301-1	Materials used by weight or volume	43
301-2	Recycled input materials used	43
301-3	Reclaimed products and their packaging materials	43
302-1	Energy consumption in Distribution	43
302-2	Energy consumption outside of the organization	43
302-4	Reduction of Energy Consumption	43

303-1	Interactions with water as a shared resource	44
303-2	Management of water discharge-related impacts	44
303-3	Water withdrawal	44
303-4	Water discharge	44
303-5	Water consumption	44
304-1	Operational sites owned, leased, managed in, or adjacent to, protected areas.	44
304-2	Significant impacts of activities, products, and services on biodiversity	45
304-3	Habitats protected or restored	45
304-4	IUCN Red List species and national conservation list species with habitats in areas affected by operations	45
305-1	Direct (Scope 1) GHG emissions	45
305-2	Energy indirect (Scope 2) GHG emissions	45
305-3	Other indirect (Scope 3) GHG emissions	NA
305-5	Reduction of GHG emissions	45
305-6	Emissions of ozone-depleting substances (ODS)	NA
305-7	Nitrogen oxides (NOx), Sulphur oxides (SOx), and other significant air emissions	45
306-1	Water discharge by quality and destination	46
306-5	Water bodies affected by water discharges and/or runoff	46
307-1	Non-compliance with environmental laws and regulations	46

Social KPIs

G401-1	New employee hires and employee turnover	32,33
G401-2	Benefits provided to full-time employees	30,31,32,33,34

G403-1	Occupational health and safety management system	24,25,26,27
G403-2	Hazard identification, risk assessment, and incident investigation	25,26
G403-3	Occupational health services	24
G403-5	Worker training on occupational health and safety	34
G403-6	Promotion of worker health	31
G403-8	Workers covered by an occupational health and safety management system	25,26,75
G403-9	Work-related injuries of worker health	25
G404-1	Average hours of training per year per employee	34
G404-2	Programs for upgrading employee skills and transition assistance programs	33,34
G405-1	Diversity of governance bodies and employees	33
G405-2	Ratio of basic salary and remuneration of women to men	30,31,32
G408- 1	Operations and suppliers at significant risk for incidents of child labor	32,59
G409- 1	Operations and suppliers at significant risk for incidents of forced or compulsory labor	32,59
G411-1	Incidents of violations involving rights of indigenous peoples	30,31,32
G 413-1	Operations with local community engagement, impact assessments, and development programs	73 to 85
G 413-2	Operations with significant actual and potential negative impacts on local communities	73 to 85

Others

Sustainable Development Agenda (SDGs) Mapping **75 to 77**

United Nations Global Compact (UNGC) Mapping **74**

Independent Assurance Statement

**To the Board of Directors
TCI Sanmar Chemicals S.A.E**

Introduction

Dcarbon is a Regional Egyptian sustainability and environmental consultancy firm registered under the Egyptian law no. 159 for the year 1981 and its executive regulation. Dcarbon is a certified training partner to the Global Reporting Initiative (GRI), and a GRI Gold Community member. Our focus is to assist organizations, public and private, in understanding and addressing their economic, environmental, and social impact.

TCI Sanmar Chemicals S.A.E (the ‘Organization’) requested from DCarbon to perform an independent assurance on its sustainability reporting process (‘the Report’), in order to satisfy the requirements of GRI reporting Standards **Core option**.

Scope, Boundary and Limitations

The scope of assurance covers data and information between of 01 April 2020 to 31 March 2021 covering all operations in Egypt, based on Global Reporting Initiative’s (GRI) Standards; **Core option**.

Economic, Social and Environmental impacts, of Material Topics raised by stakeholders, either through the organization’s own activities or because of business relationship across its value chain were identified. The report boundary covers impacts that are directly linked to the organization business operations, products and services produced, as well as impacts that are indirectly related to the organization’s business relationships with business partners, entities in its value chain, CSOs and State entities where applicable.

Assurance scope excludes:

- Data and information in the Report outside this reporting period indicating looking-forward statements by TCI Sanmar Chemicals S.A.E.
- Verification statements indicating testimonials, opinions, success stories, and / or aspirations.
- Verification of claims are limited to data and information presented.

Assurance procedures Back-end reviews and data compilation were initially conducted by DCarbon’s Sustainability researchers, then Assessed and verified by DCarbon’s Team of Experts.

The assurance included DCarbon’s multidisciplinary independent team of experts in auditing environmental, social, and economic information and abiding to our values of integrity, confidentiality, professional competence, objectivity, and due diligence.

The nature, timing and extent of procedures selected depended on our engagements with the organization, data provided, and the approval of TCI Sanmar Chemicals S.A.E Sustainability Governance Body delegated by the Board of Directors. Assurance activities included procedures to obtain evidence about the reliability of the disclosures:

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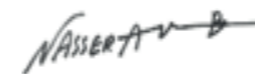
- Review of internal policy, procedures, and other documents as provided by the organization.
- Review of materiality and stakeholders’ engagement framework reported by the organization.
- Assessment of the systems used for data collection and reporting of the standard, including data collection and/or writing prompts; where applicable or available.
- Evaluation of the processing and monitoring of data collection for disclosures.
- Assessment that the report has been prepared in accordance with GRI Standards: Core option.
- Review of the Report to ensure that there is no misrepresentation of disclosures as per the scope of assurance and our findings.

Limited Assurance was obtained regarding the disclosures covering governance, stakeholders’ engagement practices, materiality assessment, scale of the organization, products and services, market presence, employees’ well-being, and management approach of activities under social investments, environmental footprint, and procurement practices.

Conclusion

We have reviewed the Sustainability Report of TCI Sanmar Chemicals S.A.E Considering the risk of material error, we received necessary explanations from the organization to support sufficient evidence to our assurance conclusion. Based on the activities performed and evidence received, in our opinion, TCI Sanmar Chemicals S.A.E. has been complied, in all material respects, in accordance with the GRI Standards for sustainability reporting criteria: core option.

Dr. Nasser Ayoub
Life Cycle Assessment Expert
Lead Report Auditor



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Lead Sustainability Auditor
DCarbon Research & Innovation Director
Ahmed Belal



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