



# STRATEGIC PLAN 2020/21 – 2024/25

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higher education  
& training

Department:  
Higher Education and Training  
REPUBLIC OF SOUTH AFRICA

The catalyst for enhanced skills, economic growth and employability

# CHEMICAL INDUSTRIES EDUCATION AND TRAINING AUTHORITY (CHIETA)

## Strategic Plan for the Fiscal Years

2020/21 – 2024/25



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## PREFACE BY THE MINISTER



The mandate of the Sector Education and Training Authorities is derived, in the main from the Skills Development Act, 1998 (Act no. 97 of 1998), as amended, which amongst others, directs SETAs to develop Sector Skills Plans (SSPs). In their Sector Skills Plans, SETAs must reflect and incorporate government priorities, especially those that address our priority developmental goals, that of tackling the triple challenges of poverty, unemployment, and inequalities. The SSPs are intended to ensure that skills are not a constraint to the economic development of our country.

The mandate of the SETAs must be understood within our vision of the post-school education and training system of having an integrated, coordinated and articulated PSET system for improved economic participation and the social development of youth and adults. Critical to this vision is our challenge of addressing the plight of the youth that are Not in Education, Employment, or Training (NEET), which is standing at over 3.4 million in the fourth quarter of 2022.

The White Paper for Post-School Education and Training (WPPSET) envisages the post-school education and training system as an important institutional mechanism that must be responsive to the needs of society. Critical to this, is our transformational and developmental imperatives which include amongst others: class, gender, race, geography and youth, which must be reflected at all material times in our SETA interventions. The Ministry of Higher Education, Science and Innovation is among the leading ministries for the 2019–2024 Medium Term Strategic Framework (MTSF) Priority 3: Education, Skills and Health, and the following medium-term outcomes have been identified:

- An integrated and coordinated PSET system;
- Expanded access to PSET opportunities;
- Improved success and efficiency of the PSET system;
- Improved quality of PSET provisioning; and
- A responsive PSET system.

The President launched the Economic Reconstruction and Recovery Plan (ERRP) in October 2020 reaffirming skills development, science, and innovation as enablers in driving South Africa's economic reconstruction and recovery, but also key in sustaining it. In support of this initiative, the Department working with social partners at the National Economic Development and Labour Council (NEDLAC) & the National Skills Authority, in the main developed the Skills Strategy to support the government's efforts to mitigate the impact of COVID-19 global health pandemic and the initiatives towards economic and social recovery.

The Economic Reconstruction and Recovery Plan Skills Strategy (ERRP SS) aims to support the Economic Reconstruction and Recovery Plan (ERRP), ensuring that it is not compromised by skills shortages. It is born out of the urgency for a well-coordinated strategy of skills development to support both the management of the COVID-19 global health pandemic and economic and social recovery.

President Ramaphosa captured our determination to reset the South African economy when he said: “We are determined not merely to return our economy to where it was before the coronavirus, but to forge a new economy in a new global reality.” As stated in the ERRP, South Africa is now on the threshold of an important opportunity to imaginatively, and with a unity of purpose, reshape its economic landscape.

The ERRP SS is located within the broader skills planning arsenal of the Post-School Education and Training (PSET) system, which promotes the use of labour market intelligence (including future work scenarios) to inform PSET provisioning. The Department of Higher Education and Training has identified skills needs in the form of the List of Occupations in High Demand, the Priority Skills List, and the Critical Skills List (which it prepared on behalf of the Department of Home Affairs). The SETAs will continue to play a critical role in the implementation of the Skills Strategy to support the Economic Reconstruction and Recovery Plan (ERRP).

The National Skills Development Plan (NSDP) 2030 remains at the centre in directing how the skills development levy will be disbursed up to 31 March 2030. For this reason, the Sector Education and Training Authorities (SETAs) have been re-established until 2030, in alignment with the National Development Plan to ensure that the SETAs focus on skills required for our socio-economic development. For the financial year, we aim to expand the participation of young people in skills development programs as well as workplace-based learning opportunities.

We have surpassed the State of the Nation Address (SONA) 10,000 Technical and Vocational Education and Training (TVET) target placements in 2022 leading to setting a target for 2023 of 20,000 TVET placements.

For the 2023/24 financial year, the entire SETA system has set itself the following targets, as part of expanding post-school opportunities:

- 110,500 workplace-based learning (WBL) opportunities;
- 149,000 learners registered in skills development programs;
- 23,000 learners entering artisanal programs;
- 21,000 learners passing artisanal trades;
- 32,550 learners completing learnerships; and
- 6,450 learners completing internships.

The SETA will enter into the Service Level Agreement (SLA) with the Director-General (DG) of the Department and commit that 25% of all targets be achieved quarterly, with 100% achievement in the last quarter of the financial year.

The SETA Annual Performance Plan (APP) provides a clear commitment to the delivery of our skills development priorities and targets for implementation during the 2023/24 financial year.



**DR. BE NZIMANDE, MP**  
**EXECUTIVE AUTHORITY**  
**HIGHER EDUCATION, SCIENCE & INNOVATION**



South Africa's youth unemployment and poverty rate remain the single largest socio-economic challenge faced by our young democracy. This is aggravated by an economy that stubbornly refuses to grow at a decent pace and rate that will allow for opportunities and inclusivity in the various economic sectors, including the country's chemical industry. Our ability to find sustainable and innovative solutions to this macro challenge will determine our collective success as a nation.

As the governing board we have adopted strategic and implementation plans that are a focused and impact-driven response to directly confront these socio-economic challenges tangibly and measurably. Through these plans, we seek to accelerate the development of future skills, in what we have identified as growth areas which we are keeping under the microscope over the medium term. We seek to position the sector and to effectively tackle the increasing demand for digitised service delivery platforms within a volatile, uncertain, complex and ambiguous (VUCA) business environment. Also, this is designed to optimise the opportunities presented by the Fourth Industrial Revolution (4IR) to advance our strategy that is anchored in innovation.

While many unemployed South Africans are hoping to find jobs in the formal economy someday, conventional wisdom shows that the real employment growth will come from SMMEs and entrepreneurship development. We need to find ways of developing more entrepreneurs who, in turn, can create more jobs.

What is evident about the skills development problem in South Africa is that it is not something that the government will be able to manage by itself. There needs to be a collaboration between the government and the private sector – not only big business but also SMMEs. Investment in SMME development is not only set as a target but also finds expression in multi-level partnerships to set up new and growing existing SMMEs; particularly those owned by designated groups, i.e. historically disadvantaged individuals (HDIs), women and youth. Skills development will play an important part in this process if we hope to grow an inclusive economy.

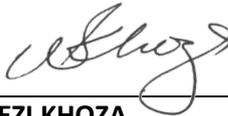
We remain firmly committed to aligning our plans to the goals of the National Skills Development Plan (NSDP) and the Skills Strategy of the Economic Restructuring and Recovery Plan (ERRP), to play our role in meaningfully ameliorating the calamitous effect of COVID-19.

As CHIETA, we will continue to ensure that we make a real difference through collaboration and coordinating our plans and resources, with the participation of our stakeholders as envisaged by our Strategic and Annual Performance Plans. Our plans promote strategic partnerships with public and private training providers across the further and higher education sphere to continue working effectively, and with employers from member companies that provide access to workplaces.

In this endeavour, we will also continue to support fundamental skills focus areas including artisan training, learnerships, work-integrated learning, and coherent skills training programmes (also known as part qualifications) that allow for immediate job mobility. Also, opportunities will be facilitated for candidates to further enhance their learning to obtain the remaining parts of the qualification incrementally, embedding the lifelong learning principle. We have also sought to align our Sector Skills Plan, Strategic Plan, annual roll-down of the APP and the discretionary grant funding framework; to ensure that the resources are placed and allocated correctly in achieving the APP deliverables agreed with the Executive Authority.

To this end, the board has approved the Strategic Plan that has its firm grounding in the eight outcomes of the NSDP and takes cognisance of core or priority and scarce skills needs, as articulated and confirmed through research and stakeholder engagements. Informed by innovation, digitisation, collaboration and transformation as our key change drivers, this Plan elevates the transformational priorities of institutional planning for women, youth and people living with disabilities. Within this context, CHIETA will facilitate the delivery of planned and specific skills interventions in the chemical industries sector as was identified by our stakeholders and articulated in our Sector Skills Plan.

I am proud to present our plans for the current planning cycle that is characterised by the uncertainties of COVID-19 that the world is still mired in, strongly convinced of the impact CHIETA will continue to make notwithstanding these obvious hardships.



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**MS WEZI KHOZA**  
**BOARD CHAIRPERSON**

## STATEMENT BY THE CHIEF EXECUTIVE OFFICER



The realities of the tightening global competition call on South Africa, CHIETA and the broader chemical industry to embrace the opportunities presented by 4IR and the drive towards a digitised environment. To be truly globally competitive will require a new innovative and transformative mindset supported by collaborations at all levels. Resources are progressively constrained thus requiring innovative thinking for the most prudent deployment of limited financial resources to optimise the return on investment. Developing strategic skills is going to be central to achieving sustainable improvement of the chemical industry's competitiveness in the national and global context.

In the position I am privileged to occupy, I am acutely aware of both these challenges as well as the opportunities they present in further strengthening CHIETA's role as a true business partner to the government and the sector in countering the socio-economic challenges we face as a collective.

There can be no doubt, given the current challenges facing our economy that CHIETA, alongside other SETAs fulfil an unprecedentedly critical role in producing the skills the economy lacks. We shoulder a mammoth responsibility and obligation to support employers who have been most adversely affected by the challenging current global economic environment. The key focus of our performance planning framework is to contribute and ensure that enough skilled and competent workers are at the disposal of business, to drive productivity and sector competitiveness.

In giving effect to these aspirations, we will focus on key aspects such as improving digital skills, including increased digital service delivery platforms to our stakeholders and promote STEM education among the youth. We are intentional with regard to ensuring that advancing the national transformational agenda, particularly gender equality, is foremost in all our endeavours within the organisation and the broader industry.

The bedrock of our strategy and implementation plans at both organisational and business unit levels is the innovation that sets us on a new path towards turning the COVID-19 tide. This phenomenon precipitated the change that has influenced our case for change as CHIETA resting on four key pillars, namely, innovation, digitisation, collaboration and transformation. These foundational layers coupled with strategic research and skills planning and aligned implementation are important in the creation of the skills pipeline relevant to the needs of the chemical industry. They are intended to contribute to sustainable employment and entrepreneurial opportunities to new sector entrants and to support the transformational agenda, as espoused in the National Development Plan 2030.

The collaboration pillar underscores the critical importance of working closely with our stakeholders, particularly our labour and employer constituencies to ensure high-impact implementation and capitalise on opportunities that are being brought about by the current COVID 19 environment. In this

quest, a robust Stakeholder Management Strategy will be among the priority strategies devised to shore up the implementation of the Strategic Plan for the remainder of the current MTSF period.

As we transition CHIETA towards our 2030 vision of becoming an innovation leader in education and training, our results-based approach to strategic planning remains focused on the maximum impact of contributing to sustainable livelihoods through our skills development efforts. Our role has been further amplified by the need to contribute to overturning the effects of COVID-19 by diligently executing the responsibilities assigned to us through the Economic Reconstruction and Recovery Plan (ERRP). Our responsibility will be discharged within the confines of the eight outcomes of the National Skills Development Plan (NSDP). The NSDP supports transformation imperatives around gender and youth development, SMME development and assisting with the creation of new black entrepreneurs in the industry value chain. Further, it seeks to increase access to training and development opportunities and, employability through strong partnerships with TVET colleges, public and private service providers, as well as the industry at large.

Having ably guided the management team in the crafting of the revised Strategic Plan and the Annual Performance Plan that both take us to the end of office term of the current administration, we count on the continued support of our Board to see these plans through. The planning process has been bolstered by catering for numerous scenarios to ensure that the organisation is as agile as possible to deliver results even in the face of uncertainties and rapid change required in our new world of work.

Our strategic planning is supported by an integrated organisational risk management framework to mitigate risks that have the potential to prevent CHIETA from achieving the defined performance targets in the Annual Performance Plan. This framework is aligned to our new monitoring and evaluation (M&E) mechanism designed to keep a firm pulse on performance and become more adept in picking up early warning signals for timeous remedial action.

I conclude by affirming CHIETA's commitment to the delivery of the strategic outcomes outlined in the Strategic Plan and Annual Performance Plan 2023/24 for the current planning cycle.



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**MR YERSHEN PILLAY**  
**CHIEF EXECUTIVE OFFICER**

**OFFICIAL SIGN-OFF**

It is hereby certified that this Strategic Plan:

- ▶ Was developed by the management under the guidance and support of the Governing Board of the Chemical Industries Education and Training Authority (CHIETA).
- ▶ Takes into account all the relevant policies, legislation and other mandates for which the CHIETA is responsible.
- ▶ Accurately reflects the impact and outcomes of the CHIETA management workshop on the 14<sup>th</sup> and 15<sup>th</sup> June 2023 and 22<sup>nd</sup> and 23<sup>rd</sup> June 2023 strategy workshop of the Board, which the CHIETA will endeavour to achieve over the period 2023/24–2024/25.

**MS. KEDIBONE MOROANE**  
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SIGNATURE

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## ACRONYMS AND ABBREVIATIONS

<b>4IR</b>	Fourth Industrial Revolution
<b>AfCFTA</b>	Africa Continental Free Trade Agreement
<b>AI</b>	Artificial Intelligence
<b>APP</b>	Annual Performance Plan
<b>AR</b>	Augmented Reality
<b>ATR</b>	Annual Training Reports
<b>CET</b>	Community Education and Training
<b>CHIETA</b>	Chemical Industries Education and Training Authority
<b>COVID</b>	Corona Virus Disease
<b>DHET</b>	Department of Higher Education & Training
<b>dtic</b>	Department of Trade Industry and Competition
<b>ExCo</b>	Executive Committee
<b>ERP</b>	Enterprise Resource Planning
<b>ERRP</b>	Economic Reconstruction & Recovery Plan
<b>ETQA</b>	Education and Training Quality Assurance
<b>FSAPPs</b>	Framework for Strategic and Annual Performance Plans
<b>GDP</b>	Gross Domestic Product
<b>HDI</b>	Historically Disadvantaged Individual
<b>HPO</b>	High-Performance Organisation
<b>HySA</b>	Hydrogen South Africa
<b>MIS</b>	Management Information System
<b>MTSF</b>	Medium-Term Strategic Framework
<b>ICT</b>	Information and Communication Technology
<b>IoT</b>	(The) Internet of Things
<b>NDP</b>	National Development Plan

<b>NGP</b>	New Growth Path
<b>NSDP</b>	National Skills Development Plan
<b>PFMA</b>	Public Finance Management Act
<b>PSET</b>	Post-School Education and Training
<b>POPI</b>	Protection of Personal Information
<b>R&amp;D</b>	Research and Development
<b>ROI</b>	Return on Investment
<b>RPL</b>	Recognition of Prior Learning
<b>SDA</b>	Skills Development Act
<b>SDL</b>	Skills Development Levy
<b>SDLA</b>	Skills Development Levies Act
<b>SEDA</b>	Small Enterprise Development Agency
<b>SME</b>	Subject Matter Expert
<b>SLA</b>	Service Level Agreement
<b>SOE</b>	State-Owned Enterprise
<b>SONA</b>	State of the Nation Address
<b>SOP</b>	Standard Operating Procedure
<b>SSP</b>	Sector Skills Plan
<b>SETA</b>	Sector Education & Training Authority
<b>SST</b>	Stakeholder Support Team
<b>STEM</b>	Science, Technology, Engineering and Mathematics
<b>TERS</b>	Temporary Employee Relief Scheme
<b>TOR(s)</b>	Term(s) of Reference
<b>TVET</b>	Technical and Vocational Education and Training
<b>VR</b>	Virtual Reality
<b>VUCA</b>	Volatility, Uncertainty, Complexity and Ambiguity
<b>WIL</b>	Work-Integrated Learning

<b>WSP</b>	Work Skills Plan
<b>YES</b>	Youth Employment Service

**1. CONSTITUTIONAL MANDATE**

The South African Constitution provides in its Bill of Rights for the right to basic education, including adult basic education, and further education. The State is obligated to ensure through reasonable measures that such opportunities are progressively available and accessible to all citizens. Sector Education and Training Authorities (SETAs) are one of such measures. These are bodies established under the Skills Development Act (SDA), located in the Department of Higher Education and Training (DHET). Their purpose is to contribute to the improvement of skills in South Africa through achieving a more favourable balance between demand and supply, and by ensuring that education and training:

- Acknowledges and enhances the skills of the current workforce (in addition to ensuring that new entrants to the labour market are adequately trained);
- Meets agreed standards within a national framework;
- Is provided subject to validation and quality assurance; and
- Where appropriate, is benchmarked against international standards.

In the case of chemical industries, the Chemical Industries Education and Training Authority (CHIETA) was established to fulfil the following responsibilities, based on its own Constitution:

- Develop a Sector Skills Plan (SSP) within the National Skills Development Plan (NSDP) framework.
- Implement its SSP by:
  - a. Establishing learning programmes.
  - b. Approving Workplace Skills Plans (WSPs) and Annual Training Reports (ATRs).
  - c. Allocating grants in the prescribed manner and according to any prescribed standards and criteria, to employers, skills development providers and workers; and
  - d. By monitoring the quality of occupation-based learning in the sector
- Promote occupation-based programmes that include work experience by:
  - a. Identifying workplaces for practical work experience;
  - b. Improving the facilitation and assessment of learning; and
  - c. By assisting with the conclusion of agreements for learning programmes.
- Register agreements for learning programmes.
- Support and form partnerships with other agencies on matters related to skills development.

- When required to do so, as contemplated in section 7(1) of the Skills Development Levies Act (SDLA), collect, and disburse the skills development levies, allocated to it in terms of sections 8 and 9 of the SDLA, in its sector.
- Submit to the Director-General any budgets, reports and financial statements on its income and expenditure, which it is required to prepare in terms of the Public Finance Management Act (PFMA), as well as plans and reports on the implementation of its Service Level Agreement (SLA).
- Liaise with the provincial office of the department, the provincial skills development forums, and any relevant education bodies, established in terms of any law regulating education and training in the Republic, to improve information about placement opportunities, as well as between skills development providers and the labour market.
- Formulate policies and procedures of the SETA.
- Appoint the employees necessary for the performance of its functions.
- Promote the national standard, established in terms of section 30 B of the Act: and
- Perform any other functions and duties imposed on it by the Act, the SDLA, other relevant legislation and this Constitution, or that are consistent with the purposes of the Act, the SDLA, in other relevant legislation and this Constitution.

## **2. LEGISLATIVE AND POLICY MANDATES**

### 2.1 LEGISLATIVE MANDATE

Various government policies and plans have been developed over the last five to ten years by different organs of state. Many of them overlap and some have been subsumed within others. The two goals that all the policies and plans have in common are the stimulation of the South African economy and to assist with job creation and the quality of life for all South Africans. While the National Development Plan (NDP) provides an overall vision and framework for most of the other policies and plans, the Industrial Policy Action Plan (IPAP) and the projects steered by the Department of Trade Industry and Competition (dtic) and some of the infrastructure projects have a direct bearing on the Chemicals Industry.

The following policy mandates are outlined, below:

- The National Development Plan 2030;
- National Skills Development Plan;

- Human Resources Development (HRD SA);
- Industrial Policy Action Plan (IPAP II);
- The White Paper for Post Education and Training (Referenced in the NSDP);
- The New Growth Path;
- Rural Development Strategy;
- The Economic Reconstruction and Recovery Skills Strategy (ERRP); and
- The COVID – 19 Adjusted Risk Management Strategy

The legislative and policy framework 2030 directs and guides CHIETA functions as tabulated below:

**Table 1: Legislation and policies guiding CHIETA**

#	LEGISLATION/POLICIES	CHIETA CONTEXT
1.	National Development Plan (2030)	Contribute towards eliminating poverty and reducing inequality by 2030 through skills development provisioning for both existing and new entrants to the workforce.
2.	Skills Development Act,1998 (Act 97 of 1998)	Expand the knowledge and competencies of the labour force to improve productivity and employment through supporting an array of skills development initiatives based on industry needs and skills forecasting.
3.	Skills Development Amendment Act, 2003 (Act 31of 2003)	
4.	Skills Development Act,2008 (Act 3 of 2008)	
5.	Skills Development Levies Act,1999 (Act 9 of 1999)	Fund the Skills Development Initiative - in the Chemical industry guided by industry demand and triangulated research to determine priority funding
6.	National Skills Development Plan (NSDP)	Ensure that South Africa has adequate, appropriate, and high-quality skills that contribute towards economic growth, employment creation and social development through the development of industry-relevant and well-researched SSP that will inform priority areas for partnerships and skills interventions.
7.	White Paper for Post-School Education and Training (2013)	Promote and facilitate links between colleges and employers through the establishment of functional stakeholder forums and chambers. These consultative platforms provide an important role in the responsiveness and relevancy of labour market needs and curriculum design.
8.	Service level agreement regulations under regulation R 716 of 18 July 2005	Meet the NSDP targets, ministerial priorities, and implement the strategic plan and annual performance plan that are informed by the SSP.

#	LEGISLATION/POLICIES	CHIETA CONTEXT
9.	Sector Education and Training Authorities (SETAs) grant regulations regarding monies received by a SETA and related matters (Government Notice R990) in terms of the Skills Development Act, 1998 (Act No. 97 of 1998) dated 3 December 2012;	Ensure continuous collection of WSP-ATRs to the quality and standards set by CHIETA, and the disciplined management and allocation of available funds as per the SETA grants regulations.
10.	Public Finance Management Act, 1999 (Act No. 1 of 1999 as amended) (PFMA);	Ensure that all revenues, expenditures, assets, and liabilities are managed efficiently and effectively through tight financial controls, accountability, and good governance.
11.	Treasury Regulations issued in terms of the PFMA (Treasury Regulations) of 2005;	
12.	Public Audit Act, 2004 (Act No. 25 of 2004);	
13.	Directive; PFMA Act under GN 647 of 27 May 2007	
14.	Constitution for the Chemical Industries Education and Training Authority (CHIETA);	Achieve world-class education and training for the chemical industry through stakeholder-driven research and training and demonstrate high standards of quality assurance and performance throughout the organisation's value chain.
15.	Protection of Personal Information Act, 2013 (Act No. 4 of 2013).	Promote the protection of personal information by developing and maintaining CHIETA's management information system (MIS). Ensure stakeholder information stored on the MIS and all other functions related to data processing are secure and in full compliance with the Protection of Personal Information (POPI) Act.
16.	Promotion of access to information Act, 2000 (Act 2 of 2000)	Maintain the right to access to information held by upholding King IV report on corporate governance principles of transparency. CHIETA's MIS will provide an enabling environment to support this legislation as it will provide the ease to access organisational and stakeholder information.
17.	Employment Equity Act, Labour Relations Act, Basic Conditions of Employment Act and Occupational Health and Safety Act;	Promote equity, fairness, and equal opportunity in the workplace.
18.	Regulations regarding the establishment of Sector Education and Training Authorities under Notice R106 of 4 February 2005, (SETA Establishment Regulations);	CHIETA has been Licensed to 2030

### 3. INSTITUTIONAL POLICIES AND STRATEGY GOVERNING THE FIVE-YEAR PLANNING PERIOD

#### 3.1 INSTITUTIONAL POLICIES

Over its many years of existence, CHIETA has instituted policies, business processes and standard operating procedures (SOPs) that are subjected to ongoing review and reengineering; to ensure that they remain relevant to the organisation's dynamic operational environment. The most recent policies that are aligned to the organisation's strategic direction cover Risk Management, Research, Grants and Bursary, Conflict of Interest and the Education and Training Quality Assurance (ETQA).

Based on the ambitious plans to transition towards being a leader in innovation, the organisation anticipates introducing a wide range of policies that will support its plan over the remainder of the current Medium-Term Strategic Framework (MTSF) period. For instance, the open innovation approach entails collaborations with a range of strategic partners who fulfil specific roles. Such collaborations need to be driven through structured processes that would require institutional policy guidelines for effective implementation to harness their full value.

#### 3.2 INSTITUTIONAL STRATEGIES

CHIETA plans to develop the following strategies within the current five-year cycle that are critical to the business of CHIETA, both strategically and operationally:

##### **1. Innovation Strategy**

The Innovation Strategy will seek to ensure that both CHIETA and the broader sector embrace innovation as a catalyst for change within the skills development space. Developed in collaboration with strategic sector partners, the Strategy will entail the analysis of the sector's competitive and technological environment, challenges, opportunities, and distinctive advantages. It will guide decisions on how resources are to be used to meet the sector's objectives for innovation, deliver value and build competitive advantage.

##### **2. Information and Communication Technology (ICT) Strategy**

The ICT Strategy is overarching in ensuring an integrated ICT Management Framework where ICT is a core enabler of strategic delivery. It provides the foundation for an enabling ICT environment with specific reference to ICT Policy, ICT Risk Management, ICT Governance

Charter, ICT Management Framework, ICT Portfolio Management, ICT Information Plan, ICT Business Continuity, Change Management Plan to correctly direct organisational behaviour toward accountability and awareness and independent assurance by Internal and External Audit as part of the CHIETA Combined Assurance Model.

### **3. Risk Management Strategy**

The Risk Management Strategy is developed to provide an effective risk management framework which is designed to promote a standard approach to enterprise risk management at the CHIETA and to ensure that all risks that could affect our people, reputation, business processes and systems, financial and environmental performance are identified, assessed and mitigated to an acceptable level and within risk appetite levels as approved by the Governing Board.

### **4. Monitoring and Evaluation (M&E) Strategy**

The M&E strategy is developed to provide an effective M&E framework that is designed to measure progress towards the achievement of the overall goal and objectives of the organisation.

### **5. Digital Transformation Strategy**

The purpose of the Digital Transformation strategy is to outline the problem statement of what is needed to transform CHIETA into a digital environment. This is done by various digital transformation strategies.

### **6. Post-Learnership Absorption Strategy**

The Post-learnership Absorption Strategy is aimed at improving post-education and training of placements in employment or entrepreneurship opportunities, utilising the re-envisioned programmes such as work readiness and job preparedness programmes, Entrepreneurship development programmes, mentorship, and market access programmes.

### **7. Regional Outreach Strategy**

This strategy is aimed at supporting sector companies in rural areas to achieve meaningful impacts from skills development in transforming and growing the sector.

## **8. Sector Skills Plan (SSP)**

The SSP serves as a comprehensive and well-researched document for providing a credible institutional mechanism for skills planning.

## **9. Stakeholder Management Strategy**

The nature of the role of CHIETA in coordinating the sector human resource development (HRD) and facilitating employment creation requires that all key stakeholders in the value chain are effectively managed. Individual business units within CHIETA interact with stakeholders that are relevant to their operations. These relationships are invaluable to the effective operations and strategic positioning of CHIETA.

## **4. RELEVANT COURT RULINGS**

There are no court rulings that affect CHIETA and its mandate, directly or otherwise.

## PART B: OUR STRATEGIC FOCUS

### 1. VISION

In recognition of, and response to technological and process shifts taking place globally that impact the world of work, CHIETA is adopting innovation to anchor its efficiency and sustainability to deliver stakeholder value. The vision statement has been revised as follows, to reflect this aspiration:

***“To be an innovation leader in education and training.”***

### 2. MISSION

In the execution of its functions and responsibilities in line with the legislative mandate, CHIETA’s mission is:

***“To facilitate skills development, education and training through innovative solutions for sustainable livelihoods.”***

### 3. VALUES

To attain the desired impact, CHIETA seeks to inculcate behaviour in the organisation that is underpinned by these shared values to deliver benefits for its entire stakeholder community.

	VALUE	WHAT IT MEANS IN PRACTICE (BEHAVIOURAL STANDARDS STILL UNDER DEVELOPMENT)
1.	<b>Caring</b>	People, Planet, Profit (triple bottom-line)
2.	<b>Lifelong learning</b>	Adaptive leadership, continuous learning
3.	<b>Integrity</b>	Doing the right thing even when no one is watching
4.	<b>Accountability</b>	Transparency, public confidence
5.	<b>Collaboration</b>	Teamwork, stakeholder inclusivity
6.	<b>Excellence</b>	Exacting performance in everything

### 4. SITUATIONAL ANALYSIS

The operating environment continues to be a volatile VUCA-BANI<sup>1</sup>, one with a myriad of uncertainties. The planning context remains one of the high demand for skills to grow the economy and support the government’s post-pandemic economic recovery plan. The impacts of this context show a need for up

<sup>1</sup> Volatility, Uncertainty, Complexity & Ambiguity (VUCA) - Brittleness, Anxiety, Nonlinearity & Incomprehensibility (BANI)

to 44% of workers requiring reskilling as a result of the proliferation of Artificial Intelligence (AI) tools like ChatGPT replacing many administration jobs.

Against this challenge of skills demand is the staggering numbers of youth between the ages of 15-24, not in employment, education, or training (NEET), measured at an estimated 3.5 million in Q3 of 22, as reported by the Department of Higher Education. The survey conducted indicates a gender split where more women are NEET, based on race black people are the most affected; with the highest concentration in Gauteng followed by Kwa-Zulu Natal. This category of youth is the target for CHIETA as part of the broader Post-School Education and Training (PSET) system aimed at reducing unemployment through relevant education and training.

Various stakeholders at a macro level like the International Labour Organization (ILO), the United Nations Development Programme (UNDP) and the Department of Communications and Digital Technology have launched a South African Skills Innovation call to training institutions in the digital skills development space to upskill NEET youth for employment.

#### 4.1 EXTERNAL ENVIRONMENT

For the assessment of our external environment, we used the TPESTRE analysis (as seen in Figure 1 below). This tool is in the PESTEL family of analysis extended to include a second T and E, this is Trust and Ethics as a pillar, demonstrating our responsiveness to the current issues around corruption.

*Figure 1: TPESTRE analytical tool*



#### 4.1.1 Technological trends

Technological trends in the chemical industry inform CHIETA on areas of skilling and re-skilling that employers need support in for the future and where potential areas of collaboration are. The release of ChatGPT in November of 2022 can be said to have unleashed an innovation revolution in the Artificial Intelligence realm that is redefining the nature and sustainability of different industries.

The chemical industry is not immune to AI and as identified in the previous year as an emerging trend. According to StartUs Insights, a Startup insights online service, there are eight key emerging trends which are AI, Data Analytics, the Internet of Things (IoT), Cloud Technology, Blockchain, Green Chemistry, Innovative Materials and Advanced Manufacturing. Startups in the chemical industry are introducing innovative technologies such as artificial intelligence, computational chemistry, and solutions for the circular economy and biotechnology. They tap into corporate venturing and collaborate with academic spin-offs and entrepreneurs to commercialise innovative ideas.

The significant growth in chemical-related startups indicates that new entrants are filling gaps. This influx of startups brings fresh talent and expertise to the industry. Startups are addressing important growth and innovation areas such as building materials, waste management, additive manufacturing, and machine learning (ML).

#### 4.1.2 Political trends

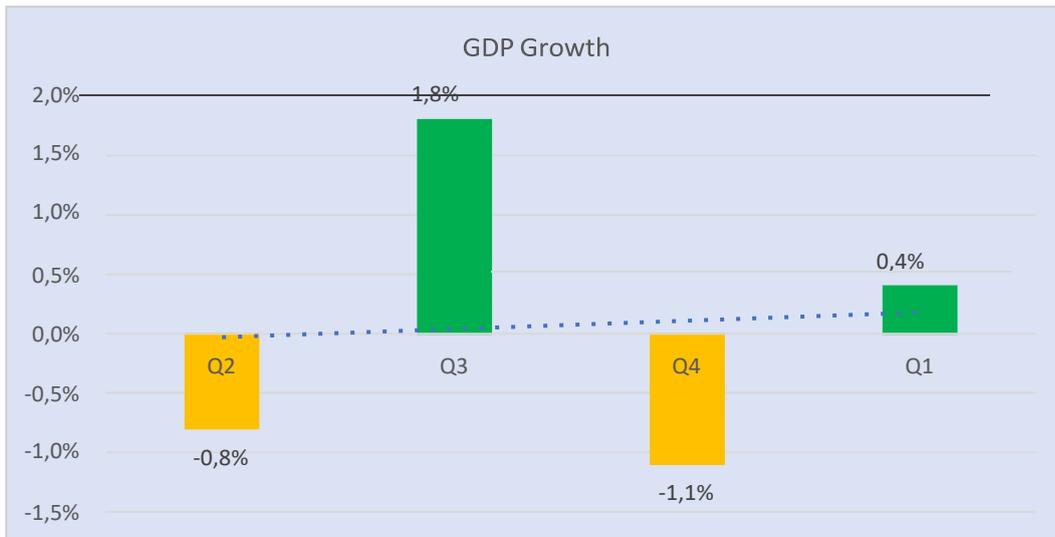
The end of the MTSF planning period also marks the ushering in of the new political administration which will take place through the seventh instalment of a democratic national elections process due to take place in 2024. The outcomes of the Zondo Commission probing the levels of corruption in the state continue to create heated interactions between the current administration and opposition parties which is expected to increase the closer we move towards the general elections. Despite the commitment by the President to fighting corruption and successful recoveries from the Special Investigation Unit, the perception that South Africa has a high prevalence of corruption remains high as demonstrated by the Transparency International global ranking on corruption slipping back to the 2012 level of 72 out of 180 countries.

Policies on education and training remain stable, however high unemployment is impacting immigration policies making it difficult to import talent with regard to labour mobility.

### 4.1.3 Economic trends

In the first quarter of 2023, South Africa achieved a 0.4% Economic growth as reported by Statistics South Africa, from the previous year's fourth quarter contraction of 1.1%.

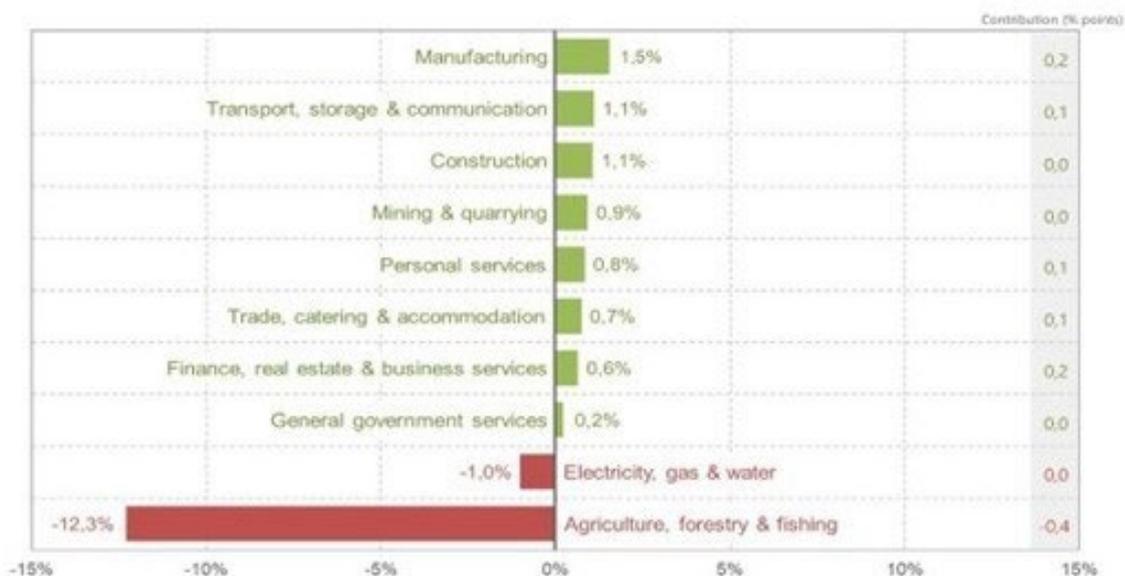
**Figure 2: Gross domestic product – Q1, 2023**



**Source:** Gross domestic product (GDP), 1<sup>st</sup> quarter 2023 (Statistics South Africa, 2023)

The major driver of the recorded growth came from the manufacturing sector, which the chemicals industry contributes an estimated 23%.

**Figure 3: Eight of the industries recording a rise in economic activity in Q1, 2023**



**Source:** Gross domestic product (GDP), 1st quarter 2023

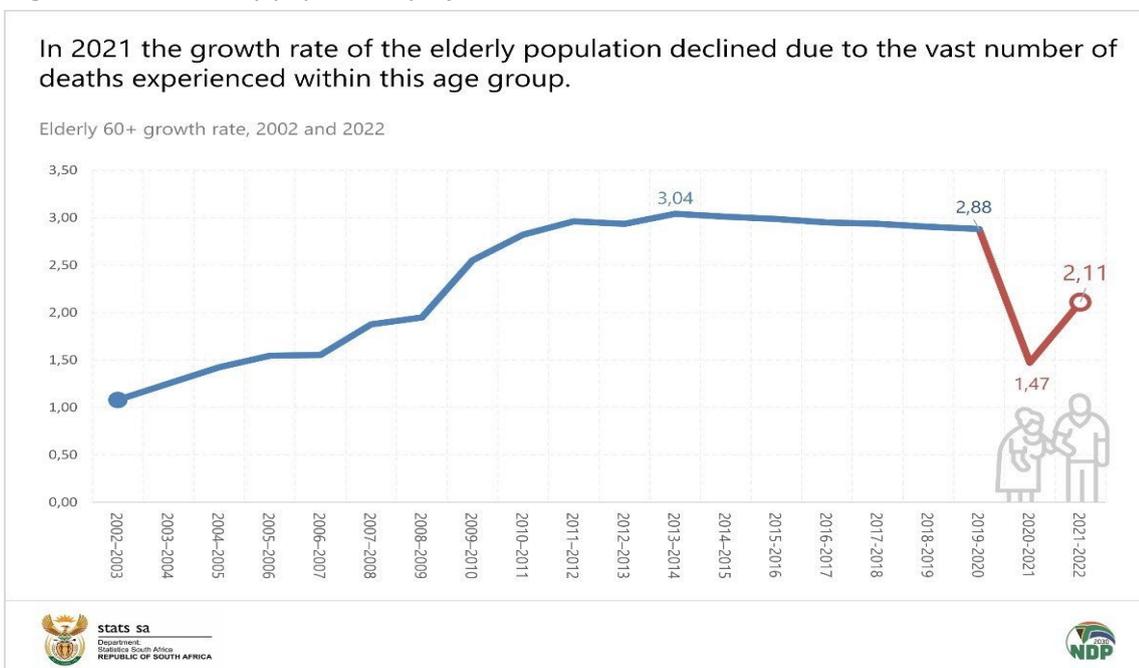
The Organization for Economic Cooperation and Development (OECD) is forecasting the global average GDP growth in the range of 2.7% in 2023 and increasing to 2.9% in 2024. For South Africa, GDP growth is forecasted at 1% with a debt-to-GDP ratio of 74.9%. The maintenance of the monetary policy credibility in managing inflation is noted positively, however, at the household and labour market level, the increasing interest rates are creating pressure as the cost of debt increases. In this environment member trade unions are negotiating hard for their members to get above-inflation salary increases and overall protesting against the increasing of interest rates.

The inequality gap remains the highest in the world sitting at 0.65 as last measured in 2015 according to IMF reports. Our NDP targets aim to reduce this gap to 0.60 by 2030. Overall business and investor confidence remains weak post-pandemic, with energy security being a significant challenge.

#### 4.1.4 Social/ cultural trends

The latest population statistics from the June 2022 Mid-Year Population Estimates report, estimate the population at 60.6 million with the most populous province being Gauteng followed by Kwa-Zulu Natal and the least populated being the Northern Cape. Despite COVID-19, there has been a noted increase in population numbers as well as improved life expectancy from 61.7 in 2021 to 62.8 in 2022. Of the different population groups, the elderly people were the most devastated by COVID-19 as seen in the graph in Figure 4 below.

**Figure 4: 2021 elderly population performance**



Source: Statistics South Africa (StatsSA), 2022

The chemical industry employs an estimated twenty million people globally and in South Africa contributes 23% to manufacturing sales, employing 169 739, contributing 3.0% to GDP. The gender split falls in favour of men and on race, and demographic representation at decision-making levels is skewed in favour of traditional white male managers. A sizeable number is about to retire and without an industry succession plan to build a pipeline, this presents a significant risk. A risk that threatens the transformation agenda from a racial and gender diversity perspective.

With the current skills landscape as it is, research highlights key challenges for the chemical industry in South Africa being the attraction and retention of skilled talent. In addition, the industry is facing an aging and about-to-retire talent making up an estimated 25% of the workforce, without a Science, Technology, Engineering & Mathematics (STEM) skills pipeline to replace the potential 106 000 skills shortage. The availability of skilled workers and immigration policies affect the industry's ability to attract talent and meet labour demands. The industry needs are a blend of traditional engineering and technical skills with digital capabilities.

The industry is also facing disruptive changes in chemical industry processes brought by the biologisation of chemistry that sees the shift to biochemistry and related skill set. Sustainability and climate change have also necessitated the industry to redesign its processes to be more environmentally conscious and towards achieving this, the industry is adopting the circular economy model of production that promotes sharing, re-using, and repairing.

Sustainability is also being driven by leveraging internet technologies driven by 4IR with the development of Chemistry 4.0 innovative management concepts. Developments in this area can be seen in industry transformation that speaks to the digital revolution, sustainability, climate protection, closing material cycles and raw materials the intensive use of data, recycling of carbon-containing waste, and H<sub>2</sub> from renewable energies in combination with CO<sub>2</sub> used to produce base chemicals. Against these developments in the sector, the skills needs for which the organisation must plan and deliver are tabulated in Table 2, below.

**Table 2: Change drivers and skill needs**

CHANGE DRIVERS	SKILLS NEEDED
<b>The current talent and the evolution of work</b>	Extensively trained Chemical laboratory technicians and Quality Assurance managers. Advanced chemical engineering, data science  Digital skills such as cloud computing, artificial intelligence, machine learning
<b>The Circular Economy (The Chemical Industry's key role)</b>	Modular production skills, understanding robotics, Customer Data Analysis, Waste Management Logistics, environmental engineering, Synthetic Chemistry, Resource Management, lifecycle assessment, sustainable supply chain management, Recycling Technologies, professionals who understand sustainability strategies and can implement them at a corporate level, Waste-to-value Conversion, Sustainability Strategy Development
<b>Disruptive changes in processes in the Chemical industry</b>	Electrochemistry, sustainable materials science, process engineering, environmentalists, hydrologists, and biochemists, green engineering and technical skills, operation management and system integration skills of engineers, technicians and green artisans, hydrogen fuel transporters, business process management, and Information technology, Digital agriculture, additive manufacturing (3D printing), and e-health technologies
<b>Start-Ups in the chemical industry</b>	Computational chemistry, 3D printing, E-commerce, Digital Economy Skills, soft skills, entrepreneurship
<b>Development from Chemistry 4.0</b>	Requires skills in strategic planning and Customer Relationship management. Skills related to the integration of digitisation, Digital technologies, resource-efficient practices, and sustainability measures, environmentally friendly practices
<b>Energy Transition</b>	New skills demand in renewable energy technologies, advanced drilling underwater, environmental skills for sea life, Environmental-Marine Ecosystems Skills, Research, and development

#### 4.1.5 Trust and ethics trends

Trust levels between government and its citizens are low as demonstrated by the consistently high perception of corruption levels in the country. Among the State of the Nation Address (SONA) commitments towards combatting corruption – and thus improving the perceptions and trust levels – was to implement recommendations from the Zondo Commission on state capture and to recover funds stolen through corruption.

Alongside these actions, there has also been an increasing demand for lifestyle audits to be conducted on politicians and public servants as a means of rooting out corruption.

#### 4.1.6 Regulatory/legal environment

The chemical industry and manufacturing sector as a whole remain well-regulated and able to consistently contribute to economic recovery and growth. There are new developments in the education and training space. They regard phasing out the unit standards and aligning the skills programmes intended for the workplace, with the new QCTO qualifications; as part of the main qualifications framework, the National Qualifications Framework (NQF).

This development has been well received by industries and it is believed that this approach will make a dent in the numbers of unemployable youth and reduce skills shortages in the market.

For SMMEs and startups, barriers to entry based on compliance and licensing differ on the sub-sector of the chemicals industry one wishes to operate in. The cosmetics and household cleaning chemicals remain the easiest with the petroleum and hydrogen limited to a few participants due to the cost of technology and compliance.

##### *4.1.6.1 Diversity and inclusive participation*

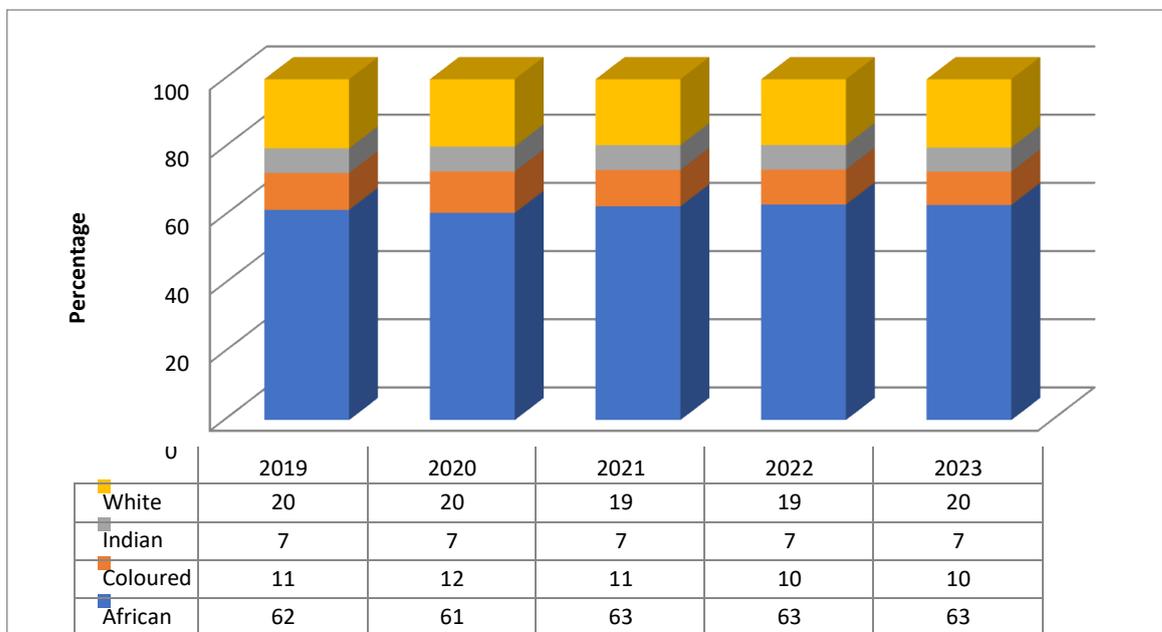
Participation of women and other marginalised groups in the sector remains a challenge, with numbers gleaned from the Sector Skills Plan 2023/2024. The report indicates that the Chemicals Industry lags in the employment of African people in technical, professional, and managerial positions, as well as gender equity and employing disabled workers (CHIETA, 2020).

Although the Petroleum subsector is the only subsector that is subject to a transformation charter (the Liquid Fuels Industry Charter), recruitment throughout the Chemicals Industry is very much influenced by EE targets and broad-based black economic empowerment (BBBEE).

#### 4.1.6.2 Labour market racial profile

The number of people employed in the sector mirrors the demography of the population, with Africans registering the higher percentages. The participation statistics however at decision making, higher income, and professional levels, has African representation lower than the other groups, a consequence of historical inequality that needs targeted intervention.

**Figure 5: Chemical industry labour market racial profile**

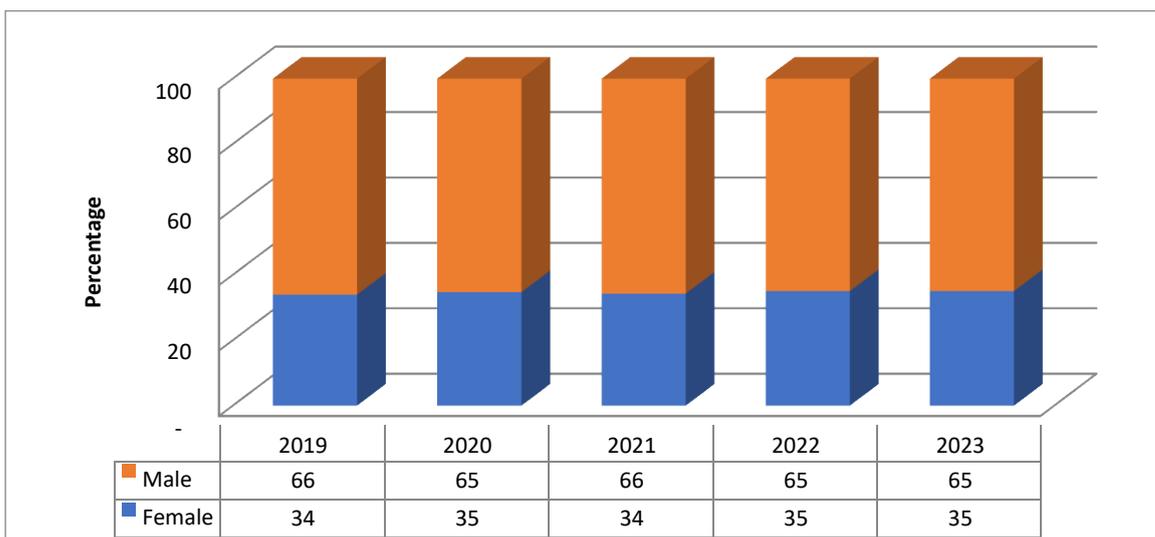


Source: Sector Skills Plan 2023/24

##### 4.1.6.2.1 Women Empowerment

Historically the sector has been male-dominated, and with recent local and global policy interventions on gender parity through the empowerment of women, there is a steady but slow increase in the participation of women, as can be seen in Table 6 below. This slow pace may indicate the lack of capacity in the sector for transformation aimed at the genderpillar. More needs to be done to address the challenges impacting this area.

**Figure 6: Gender distribution of employment in the chemicals sector: 2019 – 2023**



Source: Sector Skills Plan 2023/24

#### 4.1.6.2.2 Youth empowerment

CHIETA introduces young people to careers in the chemical industry through various interventions across the three skills levels and entrepreneurship.

Programmes that support youth are run under the following interventions:

- **Lesedi Youth Fund:** Supporting final year unemployed bursary students in the so-called “missing middle” with study fees and the alleviation of study debt.
- **Work-Integrated Learning:** Support is given to learners to gain practical through placement opportunities.
- **Entrepreneurship:** Young people are supported through the multi-seta enterprise development programme in partnership with the University of Johannesburg.

#### 4.1.6.2.3 Participation of people with disabilities

The National Development Plan, states that people with disabilities will have enhanced access to education and employment opportunities. In the chemical sector, the proportion of workers with disabilities over the 2019 to 2023 period has been around 1%. Females only form approximately a third (35%) of the total workforce, but they constitute close to half (45%) of the workers with disabilities.

**Table 3: Racial, gender and age profile of workers with disabilities**

Disabled workers		2019		2020		2021		2022		2023	
		N	%	N	%	N	%	N	%	N	%
Population group	African	853	56	1 032	58	1 103	63	1 251	63	1 160	60
	Coloured	223	14	231	13	218	12	193	10	250	13
	Indian	113	7	126	7	103	6	123	6	112	6
	White	343	22	406	23	318	18	405	21	416	21
	<b>Total</b>	<b>1 541</b>	<b>100</b>	<b>1 795</b>	<b>100</b>	<b>1 742</b>	<b>100</b>	<b>1 971</b>	<b>100</b>	<b>1 937</b>	<b>100</b>
		<b>N</b>	<b>%</b>								
Gender	Female	668	43	785	44	809	46	965	49	865	45
	Male	873	57	1 011	56	933	54	1 006	51	1 072	55
	<b>Total</b>	<b>1 541</b>	<b>100</b>	<b>1 795</b>	<b>100</b>	<b>1 742</b>	<b>100</b>	<b>1 971</b>	<b>100</b>	<b>1 937</b>	<b>100</b>
		<b>N</b>	<b>%</b>								
Age	16–34	510	33	571	32	739	42	847	43	908	47
	35–54	721	47	855	48	688	40	797	40	63	36
	55–59	193	13	192	11	176	10	202	10	198	10
	60–64	94	6	152	8	108	6	97	5	112	6
	60+	23	1	25	1	31	2	28	1	26	1
	<b>Total</b>	<b>1 541</b>	<b>100</b>	<b>1 795</b>	<b>100</b>	<b>1 742</b>	<b>100</b>	<b>1 971</b>	<b>100</b>	<b>1 937</b>	<b>100</b>
<b>Percentage of total employment</b>			<b>0.9</b>		<b>1.1</b>		<b>1.0</b>		<b>1.2</b>		<b>1.0</b>

Source: CHIETA 2023/24 Sector Skills Plan

In its role as a skills facilitator, CHIETA’s interventions are underpinned by inclusive participation. To this end, its skilling interventions are integrated with placement and entrepreneurship.

**Employment:** In the first of its kind in the chemicals sector, young interns diagnosed with various hearing impairments were successfully placed at AspenPharmaceuticals in Gqeberha where some of the COVID-19 vaccinations are being manufactured.

**Entrepreneurship:** There is a 10% participation of people with disabilities in the multi-SETA enterprise development programme.

#### 4.1.6.2.5 Skills demand and supply trends

The global chemicals industry is entering an era where companies will need to start viewing and valuing people as one of their most critical assets. The industry is heavily reliant on qualified professionals and scientists. In many instances, a very specific specialisation is needed. These skills are generally in short supply and the industry competes for them not only in the local market but also in the international labour market. This drives up the cost of employment for companies in the industry. The time it takes to close a skills gap has

increased, and organisations must find ways to ensure that their workforce skills stay relevant.

New skills requirements that continue to emerge as others become obsolete only complicates the problem. The labour force has a significant impact on enterprise vitality. Without skilled workers, organisations struggle to innovate, deliver value to customers, grow their businesses, and create new jobs. The specialty chemicals subsector faces the biggest talent shortages because they require specialised skills, and this shortage is expected to grow over the next ten years. The UK oil and gas industry estimates that it needs to attract 25 000 new employees by 2025. Further, 4 500 of them will be in completely new roles that do not currently exist in areas such as data science, automation, engineering, and new materials. The challenge is not a shortage of workers but a shortage of workers with the right skills. Globally, engineers are the fourth most difficult-to-fill position.

The rate at which professional skills become obsolete is increasing, which worsens the issue. Data suggests that the half-life of professional skills was once estimated at 10-15 years. This estimate means that the value of those skills would decline by half or that half the knowledge associated with the skills would become irrelevant in approximately a decade (Research Insights, 2020). Today, the half-life of a learned skill is estimated to be five years and even shorter for technical skills. This suggests that a skill learned today will be about half as valuable in just five years or less. However, the path remains unclear; therefore, to alleviate the skills gap and demand, skills development must be prioritised and personalised at scale, and new partnerships and platforms that integrate data and insights across the employee lifecycle must be used.

The CHIETA tracer study on the beneficiary impact of artisan-related programmes, learnerships, apprenticeship and WIL completed since 2000 found that out of the 1 966 learners 62% were employed after training, 34% were unemployed while 4% were self-employed (Tracer Study, 2021).

#### 4.1.7 Environmental impacts

The manufacturing of chemicals has a significant impact on natural resources such as water, air, and soil, which all living beings depend on. Linked to the previous pillar on regulation, it becomes necessary for the industry's activities to be monitored closely to ensure its positive contribution to development

growth is not at the expense of the environment. In other words, there is a need to decouple the industry's success and environmental degradation. Thus, education and training play a major role in ensuring that all those that work in the industry are well-trained to eliminate risks that can result in the contamination of the environment.

In addition, and most critical is an investment in research and innovation to improve manufacturing processes, reducing contribution to climate change and where possible reversing the impacts of previous processes. In support of integrated sustainability reporting CHIETA has also developed an Environmental, Social and Governance (ESG) Reporting Framework that will assist in reporting to stakeholders on how CHIETA deliver on its mandate as part of being a responsible Corporate Citizen.

## **4.2 INTERNAL ENVIRONMENT**

The organisation consists of four programmes in the following order that make up its operations that enable the efficient delivery of services and products; enabling the organisation to meet and exceed its performance targets:

- **ADMINISTRATION:**

Instil and maintain a culture of good governance within CHIETA.

- **RESEARCH AND SKILLS PLANNING:**

A professional and credible skills development planning tool for the chemical industry articulating sector realities and needs and agreed sector strategies to address skills need.

- **OCCUPATIONALLY DIRECTED PROGRAMME:**

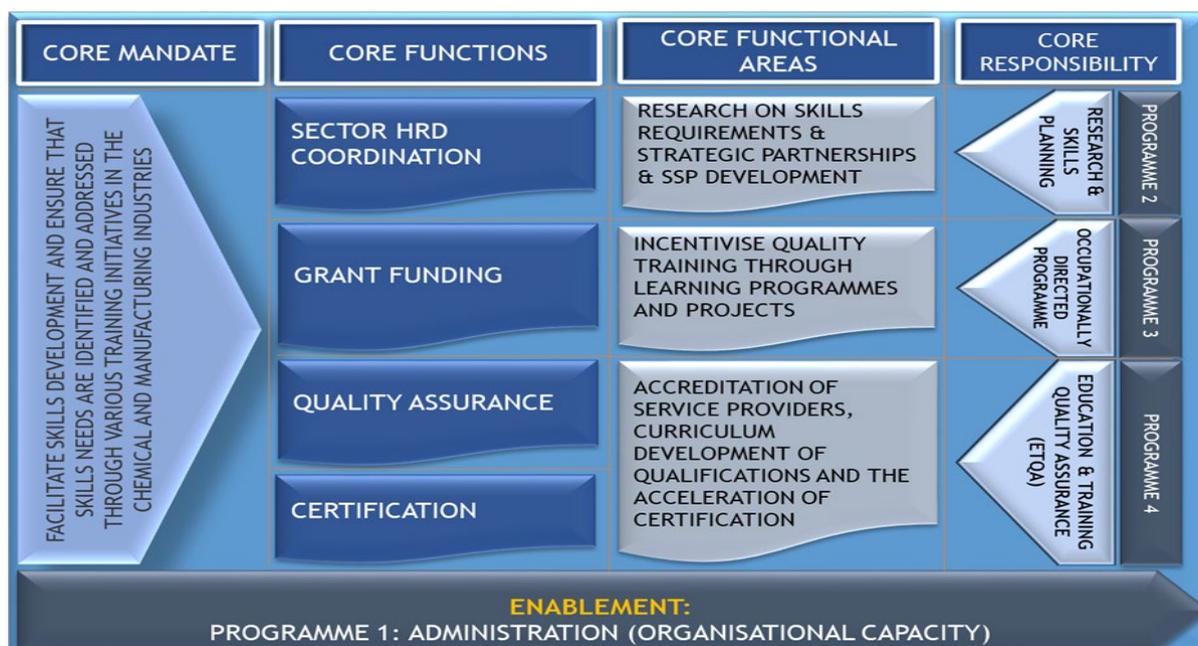
To ensure continuous training of the chemical industry workforce through low-level / mid-level skills need and high-level apprenticeship training and addressing of high level national scarce skills through work-ready graduates from higher education institutions (HEIs) as is defined in the NSDP.

- **EDUCATION & TRAINING QUALITY ASSURANCE:**

To ensure the sustainability of Chemical accreditation of service providers, the curriculum development of qualifications and the acceleration of certification

In executing its core mandate, the operational framework of the Authority is configured as depicted in figure 5 below.

**Figure 7: CHIETA operational framework**



**Source:** Adapted from the CHIETA mandate by Moonraises Strategy & Training

#### 4.2.1 SOAR analysis

Through the lens of the SOAR analysis the focus is primarily on the strengths and opportunities necessary for the desired long-term results while, unlike the conventional SWOT analysis, it also takes a more aspirational approach to directly tackle identified weaknesses and threats.

**Table 4: CHIETA SOAR analysis**

<b>STRENGTHS</b>	<ol style="list-style-type: none"> <li>1. A dedicated chemical industry education and training authority.</li> <li>2. Effective and sustainable mechanisms in place to maintain good relations with key sector partners.</li> <li>3. Systems to manage industry data.</li> <li>4. Effective and functional organisational performance, planning, monitoring and reporting frameworks as per independent assurance reports over several financial years</li> <li>5. Sound leadership capabilities</li> </ol>
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<p style="text-align: center;"><b>OPPORTUNITIES</b></p>	<ol style="list-style-type: none"> <li>1. Improve existing sector stakeholder relations and foster new strategic alliances and partnerships with players outside the chemical industries.</li> <li>2. Repurposing of disused power facilities in Mpumalanga</li> <li>3. Need to adopt innovative solutions to counter the impact of: <ul style="list-style-type: none"> <li>• Increased downtime in the sector due to power supply uncertainty and the pandemic</li> <li>• The slow pace in adopting remote learning and other technologies to support the transition of learners into the chemical world of work and entrepreneurs into market opportunities – digital innovation (4IR)</li> <li>• New economy skill demands on the organisation</li> </ul> </li> <li>4. CHIETA could fill gaps to facilitate inclusive participation to drive diversity in the sector</li> <li>5. Facilitate participation by SMMEs in the industry value chain, including the manufacturing of sanitisers through planned interventions with the fast-tracking of SABS approvals.</li> <li>6. Partner with institutions of higher learning for skills development of CHIETA staff to encourage lifelong learning from the formal education perspective to augment the anticipated mentorship programme for informal on-the-job learning.</li> <li>7. Implement more robust systems to manage the industry data collected through WSPs and ATRs to optimise its strategic value.</li> <li>8. Showcase industry opportunities to improve the awareness that may induce greater industry interest</li> </ol>
<p style="text-align: center;"><b>ASPIRATIONS</b></p>	<ol style="list-style-type: none"> <li>1. Become a repository of sector intelligence regarding specific innovations including the green economy.</li> <li>2. Entrench standard practice of augmented/virtual reality to expand or broaden the reach of artisan training beneficiaries.</li> <li>3. End-to-end digitisation to create a paperless operational environment</li> <li>4. Equitable national presence across provinces</li> </ol>
<p style="text-align: center;"><b>RESULTS</b></p>	<ol style="list-style-type: none"> <li>1. Efficient systems to track, trace, and monitor developments relating to beneficiary programmes</li> <li>2. Increased the number of new SMMEs and cooperative market entrants facilitated through CHIETA interventions</li> <li>3. Partnerships and systems that are aligned to outcomes</li> <li>4. Employment of learners and thriving entrepreneurs</li> <li>5. Diversified revenue streams</li> </ol>

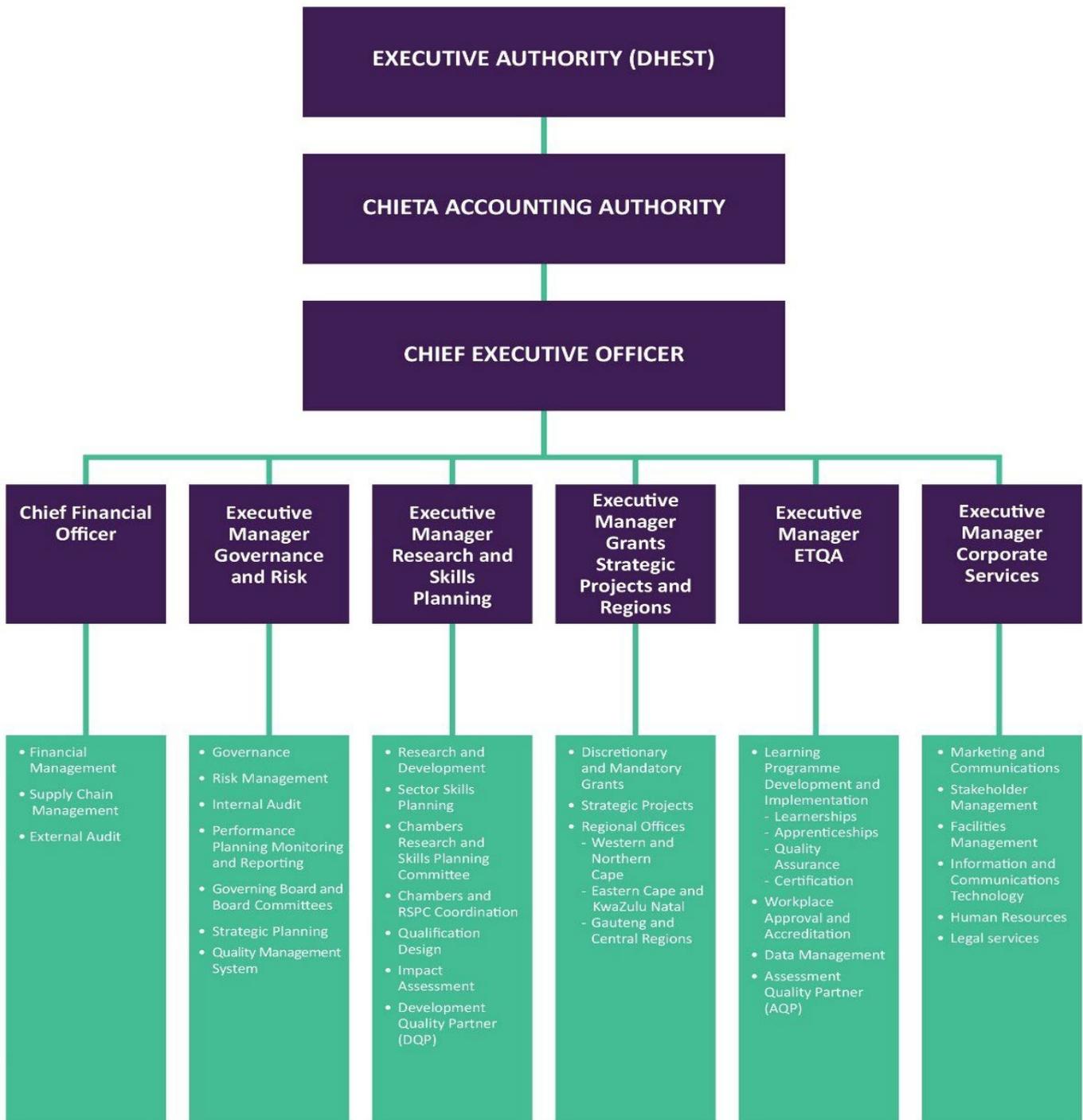
#### 4.2.2 Organisational capacity

To deliver on the aspirations, take advantage of the opportunities and ultimately realise the results and as outlined in the SOAR analysis, adequate organisational capacity in terms of all resources is critical. CHIETA is acutely aware of the preconditions that must prevail for the organisation to maintain and further improve its internal strengths in which to anchor its endeavours.

CHIETA has a staff complement of 86 employees and twelve interns to deliver on its mandate; configured as per the organisational structure in figure 6 below.

The operations of CHIETA are centralised at the head office in Midrand, Johannesburg and has regional offices in KZN, Western Cape and the Eastern Cape. There are twelve fully cross- functional business units to meet the institution's mandate of service delivery requirements within the skills development arena nationally.

Figure 8: Organisational structure



CHIETA continues to receive its revenue from the levies collected from its constituent employers as legislated through the Skills Development Levies Act.

Through employee personal development plans emanating from CHIETA’s performance

management processes, staff members and line managers agree on developmental areas to ensure a culture of continuous learning for the ultimate benefit of organisational performance and self-actualisation.

#### 4.2.3 Industry partnerships

The organisation has adopted a partnership mode informed by the four strategic pillars (innovation, collaboration, digitisation, and transformation). The strategic value of this approach is the contribution of these partnerships towards consolidating the organisational capacity to deliver stakeholder value and achieving the desired social impact.

**Table 5: List of active partnerships and their respective value**

	NAME OF INSTITUTION / PARTNER ORGANISATION	BRIEF DESCRIPTION OF PARTNERSHIP	OBJECTIVES & VALUE OF PARTNERSHIP
1.	<b>Technical and Vocational Education and Training (TVET) college sector</b>	The partnerships are in line with CHIETA’s mandate of capacitating the TVET college sector. The chemicals industry relies heavily on technical and artisan skills which TVET colleges play a critical role in supplying.	The value of the partnership is seen to be improving the quality of learning and the delivery and supply from TVET colleges.
		<b>Coded-welding e-learning</b> as part of the digitisation of technical skills at TVET colleges	A pilot e-learning project to develop coded welders to curb youth unemployment, improve livelihoods and support economic development.
		The <b>Centres of Specialisation</b> initiative is designed to meet two objectives simultaneously, 1) to address the demand for priority trades needed for the implementation of the government’s NDP in general and its National Infrastructure Plan in particular and 2) to contribute to the building of the capacity of its public TVET college system to deliver trade qualifications with employer partners.	The value for the programme lies in its partnership approach that links TVET colleges and workplaces. The programme aims to develop 13 priority trades that have been identified as being in high demand for the infrastructure programmes, as well as for other strategic programmes such as the War-on-Leaks and the new Operation Phakisa: Ocean Economy programme. If the government decides on nuclear energy, many of the same trades will be needed for that investment as well, which can be delivered through the Centres of Specialisation model. The programme is in its third term.
2.	<b>Gandhi Mandela Centre of Specialisation for Artisan Skills in South Africa</b>	Now in its third term, the project meets the training requirements of young people and the artisan skill requirements of the country by linking institutions with industry.	A collaborative partnership aimed at expanding and strengthening bilateral cooperation in skills development and promote quality vocational education and training.

NAME OF INSTITUTION / PARTNER ORGANISATION	BRIEF DESCRIPTION OF PARTNERSHIP	OBJECTIVES & VALUE OF PARTNERSHIP
3.	<b>University of Johannesburg</b>	SMME survival – the need for collaborative partnerships is of a national priority against the increasing unemployment rate.  The partnership offers a high-quality programme that ensures the suitability of the SMME. The Programme with the University of Johannesburg is designed for existing business owners and is offered at NQF Level 5 and implemented over four months. Entrepreneurs are required to present their turnaround strategies based on the lessons learnt on the programme.
4.	<b>Vaal University of Technology</b>	The advancement of postgraduate education and Innovation and Research  CHIETA funded the Vaal University of Technology to produce Nanosilica from Waste Glass. Unemployed youth in the Vaal Region townships will be collecting and recycling the glass bottles which will be used to produce nano silica products for tyre manufacturers, pharmaceutical and plastics industries, which will benefit exporting than importing. The project will also contribute to addressing environmental issues such as reducing pollution through recycling.  As part of Research capacity building for students from previously disadvantaged institutions, the CHIETA funded the Vaal University of Technology to develop Master's students, through the development of a chitosan membrane for electricity production project; which will be utilised to develop fossil batteries for electric cars and capacitate the students with fourth industrial revolution skills. The University will be working with Pet Industrial, using their facilities for membrane development
5.	<b>Sefako Makgatho Health Sciences University</b>	Work-integrated learning for undergraduate students  CHIETA funded Sefako Makgatho Health Sciences University to partner with pharmaceutical companies in offering work-integrated learning for undergraduate students who are studying pharmaceutical-related qualifications. The project will provide students with workplace experience and thereby create a pool of graduates for possible absorption into the pharmaceutical sector.
6.	<b>CHIETA /UJ Multi-SETA Project</b>	InterSETA collaboration and cross-sectoral SMME development  <ul style="list-style-type: none"> <li>• Grow collaboration among SETAs (envisioned partnership with EWSETA, ETDPSSETA, Services SETA, AgriSETA &amp; INSETA)</li> <li>• Co-funding to increase budget for SMME development across sectors</li> <li>• Industry-institution</li> </ul>

NAME OF INSTITUTION / PARTNER ORGANISATION	BRIEF DESCRIPTION OF PARTNERSHIP	OBJECTIVES & VALUE OF PARTNERSHIP
	partnership	
<b>7.</b>	<b>CHIETA/CHEMIN Innovation Hub</b>	Incubation of early-stage businesses and start-ups in the Chemicals Industry  Under the Small Enterprise Development Agency (SEDA) incubation project, development of early-stage technology-based businesses and start-ups.
<b>8.</b>	<b>Sector Trade Unions</b>	Partnership with 5 sector trade unions for the reskilling of chemicals industry's retrenched workers  Reskilling of the chemicals industry's retrenched workers focusing on: <ul style="list-style-type: none"> <li>• Support and work-readiness</li> <li>• Career development</li> <li>• Entrepreneurial skills</li> </ul>
<b>9.</b>	<b>SMART Skills Centres</b>	<ul style="list-style-type: none"> <li>• SMMEs/Entrepreneurial digital support</li> <li>• Provide internet, WiFi and e-learning services.</li> <li>• Digitisation of skills development</li> </ul> Close the digital divide and give access to digital services or technology to SMMEs in rural communities

#### 4.2.4 Governance

CHIETA is governed by a Governing Board and its sub-committees which provide strategic management direction to CHIETA. The performance environment in which CHIETA must contribute is clear and explicit. Of critical importance for CHIETA is to clearly illustrate the translation of the macro and high-level strategic outcomes and output into cross-cutting organisational programmes supported by measurable performance indicators and pre-determined targets for each performance cycle and financial year. This clearly illustrates the contribution from CHIETA supporting government and Chemical industry priorities in such a manner that sustainable impact can be demonstrated.

The CHIETA Governing Board mandated an organisational architecture arrangement to optimally support the delivery of the NSDP. Specific emphasis was placed on the importance of Research and Skills Planning, multi-stakeholder Partnerships within best practice Governance and Financial Compliance Management Frameworks. The CHIETA Annual Performance Plan targets are linked to CHIETA Business Unit targets and individual performance agreements to ensure common focus, ownership and synchronized organisational behaviour towards target and performance achievement. CHIETA has also implemented an effective Organisation-Wide Risk Management Framework that proactively identifies, analyses, and mitigates strategic and operational risks that potentially can prevent CHIETA from attaining its strategic objectives and predetermined organisational performance targets.

#### 4.2.5 Human capital management

CHIETA aims to establish a challenging, rewarding and fulfilling work experience that leads to a learning, high-performance organisational culture.

The CHIETA strategy focuses on:

- Attracting;
- Engaging;
- Recognising;
- Rewarding talented employees; and
- Retention of critical staff

It continually seeks to develop and implement relevant and legally compliant HR policies, systems, and good practice. It further seeks to continually provide a continuous learning and development opportunity that leads to individual and organisational growth.

The main objective of recruitment at the CHIETA is to appoint candidates with skills and attributes specific to the organisation's needs and who will add the highest value. This is done by conducting competency-based interviews and assessments. Recruitment decisions are also informed by the organisation's current equity profile.

CHIETA has partnered with Reality Wellness Group as our organisational well-being partner to assist in the physical and emotional well-being of our staff, knowing fully that content employees are productive and performing staff members.

CHIETA also realigned its internal environment given the COVID -19 lockdown to still be able to optimally support the stakeholder base to ensure business continuity and balance that with the safety and wellbeing of its staff and stakeholders. In this regard, CHIETA established a COVID-19 Task Team to assist with the monitoring of CHIETA activities under the COVID-19 protocols from the government. CHIETA conducted a detailed COVID-19 Risk Assessment and a COVID-19 Work Ready Plan that is aligned to the five risk-based levels of government to ensure delivery and business continuity on Skills Development Deliverables.

Over the last two years, staff turnover in CHIETA on all collective levels was at an average of 3.6 %. This indicates organisational stability critical to ensure the delivery of strategic objectives.

#### 4.2.6 Equity

The gender ratio of the CHIETA is 56.61% female and 43.41% male, 9% comprises Indians, 2.1 % Whites, 8.1% Coloureds, 81.1% African people and 1% of people with disabilities (PWDs). All races and genders are represented on most of the occupational levels in the organisation. CHIETA views diversity as a business imperative that will contribute significantly towards stakeholder value delivery.

#### 4.2.7 Information Communication Technology

Digitisation is one of the key strategic pillars upon which the vision will be realised. The organisation has mapped the technological needs across the organisation and identified the need to implement an ERP (Enterprise Resource Planning) system that will address the following:

- Automation;
- Coordination of activities across units;
- Data and information sharing;
- Customer focus (improvement of the Management Information System (MIS));
- Improved decision making;
- Enhanced collaboration; and
- Effective reporting.

#### 4.2.8 Financial Resources

The key source of CHIETA revenue is Skills Development Levy (SDL) income contributed by levy-paying member companies. As per the requirements of the skills development legislation, CHIETA member companies contribute 1% of their payroll to the South African Revenue Services (SARS) as a Skills Development Levy. SDL income received by SARS is transferred to the Department of Higher Education and Training (DHET), who then transfer 80% of the levies received to the relevant SETA and the balance of 20% to the National Skills Fund.

Based on the revenue received, the budget is allocated to the four programmes informed by priority and affordability. The priorities, upon which the budget allocations are affected, are aligned to the NSDP.

Discretionary grant budgeting is in line with the costs of training to be provided on the committed initiatives. Mandatory grants projections are based on estimated levy income and

historic claim ratio. Historically, administrative expenses and project administration expenses have been within the legislative threshold of 10.5% and 7.5% respectively, and this trend has been projected going forward into the future.

**Table 6: Financial projections to support the implementation of the Strategic Plan.** <sup>i</sup>

CHIETA BUDGET ITEMS	2022/2023 '000	2023/2024 '000	2024/2025 '000
Skills Levy	648 297	681 677	715 761
Mandatory Grants	129 599	136 079	142 883
Discretionary Grants	440 939	463 951	487 149
Administrative Budget	77 759	81 647	85 729

**Note:** The above financial projections reflect the budgets at the commencement the SP development process, in order to have a baseline for impact measurement, and are subject to contextual and environmental changes on an annual basis within the MTSF period as articulated in the APP.

Diminishing financial resources, mainly because of massive job losses, levy exemptions and business closures, present a challenge for the strategic focus areas of the organisation. However, this equally presents an opportunity and a case for collaboration.

The following are assumptions upon which the CHIETA's budget is based:

- The budget is based on a mandate that must be executed;
- Assumption on staff establishment;
- Assumption for salary increases;
- Performance and recognition for all levels;
- Inflation scenarios on income;
- Inflation of costs;
- Assumptions on Government/Levy funding;
- Equipment replacement strategy;
- Confirm whether the estimated budget presented will enable the SETA to implement activities;
- Cost-saving measures; and
- Reprioritisation of resources.

## PART C: MEASURING OUR PERFORMANCE

### 1. INSTITUTIONAL PERFORMANCE INFORMATION

#### 1.1 IMPACT STATEMENT

##### IMPACT STATEMENT

Improving workforce productivity and enhancing market prospects of employees and entrepreneurs for sustainable livelihoods.

#### 1.2 MEASURING OUTCOMES

OUTCOME		OUTCOME INDICATOR		BASELINE	31 MARCH 2025
1.	<b>A compliant, high-performance CHIETA that is well-capacitated to improve workforce productivity and enhance labour market prospects of employees for sustainable livelihoods</b>	1.1	Implementation of CHIETA Balanced Scorecard Performance Management System (PMS) in support of the effective execution of organisational plans	No baseline	100%
		1.2	Level of Organisational Wide RiskMaturity achieved as per the CHIETA Risk Maturity AssessmentFramework, comprising the following four maturity levels: <ul style="list-style-type: none"> <li>• Level 1: Basic</li> <li>• Level 2: Emerging</li> <li>• Level 3: Mature</li> <li>• Level 4: Advanced</li> </ul>	Mature	Advanced
		1.3	Percentage of an end-to-end fully digitised and functional CHIETA	No baseline	100%
2.	<b>Increased enrolments and completion of occupations in high demand</b>	2.1	Percentage of learner completions from total enrolments	23%	50%
		2.2	Percentage of funded learners absorbed into employment	23%	58%
3.	<b>Seamless work-integrated learning between training institutions employees and Industry</b>	3.1	Number of organised labour-led interventions supported for re- skilling and to prevent job losses	3	12
4.	<b>Improved workforce productivity and diversity through structured industry knowledge and capacity building</b>	4.1	Percentage of female learners funded	35%	50%
		4.2	Percentage of black professionals funded	39%	78%
		4.3	Percentage of disabled learners funded	0.9%	4%
		4.4	Percentage of DG allocated to virtual training and development	0	20%
		4.5	Number of young black female learners participating in the STEM Flagship	250	3 250

OUTCOME		OUTCOME INDICATOR		BASELINE	31 MARCH 2025
5.			Programme		
		4.6	Number of remote assessments and workplace approvals	85	205
		4.7	Number of assessment tools for e-learning materials	4	16
		4.8	Number of CHIETA Innovation Hubs established	0	1
		4.9	Number of research reports on nanotechnology, hydrogen economy, SMME start-ups and green economy	6	18
	Improved support for TVET and CET colleges through effective career and vocational guidance system	5.1	Percentage of DG allocated for strategic projects	27%	50%
		5.2	Number of functional SmartSkills Centres established	0	20
		5.3	Number of learners exposed to CHIETA career guidance events	0	50 000
		5.4	Percentage of people enticed into careers in the Chemical Industry as a percentage of learners exposed to CHIETA career guidance events	0	10%
6.	Skilled and competent Chemical industry entrepreneurs and cooperatives	6.1	Number of sustainable start-up businesses supported	No baseline	120
		6.2	Percentage of start-up SMMEs as CHIETA levy-paying members	No baseline	20%
		6.3	Number of SMMEs supported with innovative skills for growth	200	2 350

### 1.3 EXPLANATION OF PLANNED PERFORMANCE OVER THE FIVE-YEAR PLANNING PERIOD

As the country's blueprint for long-term socio-economic growth and development, the NDP identifies the role of education and training as critical to this desired development, where each citizen is supported to realise their potential. The selected outcomes of the organisation are directly drawn from the National Skills Development Plan<sup>2</sup> which in turn, is also derived from the NDP. The combined effect

<sup>2</sup> National Development Plan, 2030. Pg 12

of these outcomes is envisaged impact that will result in sustainable livelihoods through employment and entrepreneurship.

The NDP highlights the importance of skills to development, and one of the areas highlighted for prioritisation for the achievement of the socio-economic development and growth goals. This is stated as improving the quality of education, skills development, and innovation. Chapter 9 of the Plan further lists numerous targets to be achieved by education and training institutions, covering productions of artisans, expanding the college system, and increasing enrolments, among others.

Directed by the NDP, the NSDP articulates the role of the SETAs in facilitating skills development in their respective sectors, from a demand and supply perspective; translated into eight outcomes. Based on these outcomes, CHIETA developed the outcomes above from the chemicals sector perspective, informed by the annual research conducted in the crafting of the Sector Skills Plan.

**Outcome 1:** A compliant, high-performance CHIETA that is well-capacitated to improve workforce productivity and enhance labour market prospects of employees for sustainable livelihoods

The first of the seven priorities of the current MTSF focuses on building a capable state. In essence, the hallmarks of a capable state are the requisite human capabilities, institutional capacity, service processes and technological platforms to deliver on the NDP through a social contract with the people.

In the specific case of CHIETA, the organisation recognises that its aspirations can only be achieved by building the necessary internal capacity to anchor the entire desired impact; particularly considering the turmoil of the COVID-19 aftermath that has completely disrupted business as usual while it places greater demand on all state institutions.

**Outcome 2:** Improved enrolments and completion of occupations and qualifications in high demand

The first outcome of the NSDP targets improving the responsiveness of the post-school education and training (PSET) system to the economy's skills requirements. This is achieved through tracking occupations in high demand, especially in priority sectors earmarked for economic growth and job creation.

Accordingly, this outcome targeting increased enrolments and completion in qualifications in high demand is a direct response to NSDP Outcome 1.

**Outcome 3:** Seamless work-integrated learning between training institutions, employers, and the labour market

CHIETA's role as a SETA is to facilitate linkages between supply and demand across the different levels of skills. The NSDP Outcomes 2 and 4, highlight this role looking at activities that link education and the workplace, and increasing access to occupationally directed programmes. Both these outcomes articulate the role of the SETA as a bridge between employers and talent. In this role, CHIETA's outcome aims at seamless and integrated learning between training institutions where talent is developed and nurtured, employers who contract the talent and the overall labour market; that is constantly realigning itself to meet the shifting needs of a complex developing economy.

**Outcome 4:** Improved workforce productivity and diversity through structured industry knowledge and capacity building.

The focus of the fourth outcome is on an industry level aiming for interventions that will improve workforce productivity and diversity. This outcome is aligned to NSDP Outcomes 3 and 7 aimed at creating a robust system for work-based learning that inspires confidence among employers and improves employment outcomes for students. Linked to that is the ongoing development of those employed through worker-initiated training, which seeks to strengthen their understanding of their sector and are then better equipped to contribute to the mitigation of risks. The National Growth Path (NGP) highlighted this as one of the areas education and training that should play a role as part of growing the economy overall<sup>3</sup>, driving transformation and addressing imbalances in the labour force market.

**Outcome 5:** Improved support for TVET and CET colleges through effective career and vocational guidance system

The fifth outcome contributes to NSDP Outcomes 5 and 8 that target the improvement of vocational and college training systems. Further, this also improves the provision of a comprehensive career guidance support that enables young people to realise their full potential. Through SETA partnership

<sup>3</sup> NSDP 2030, pg 11

activities under this outcome, colleges will be supported to ultimately increase the number of students benefitting from the linkages with demand, improving their livelihoods in the process.

**Outcome 6:** Skilled and competent chemical industry entrepreneurs and cooperatives

A skilled citizenry is not only for those that are employed but for entrepreneurs as well. To inculcate a culture of entrepreneurship, outcome 6 is focused on supporting entrepreneurs with the necessary skills to realise success in the chemicals industry. Aligned to NSDP outcome 6, this outcome focuses on entrepreneurial skills as part of the overall contribution of skills development to job creation especially targeting women, youth, and people with disabilities as they are most impacted by lack of exposure.

Figure 9: Balanced Scorecard strategic mapping (with rationale and benefit highlights)



The balanced scored targets in Table 4 above are supported by the rationale provided in figure 7 above which provides the strategic mapping of the balanced scorecard.

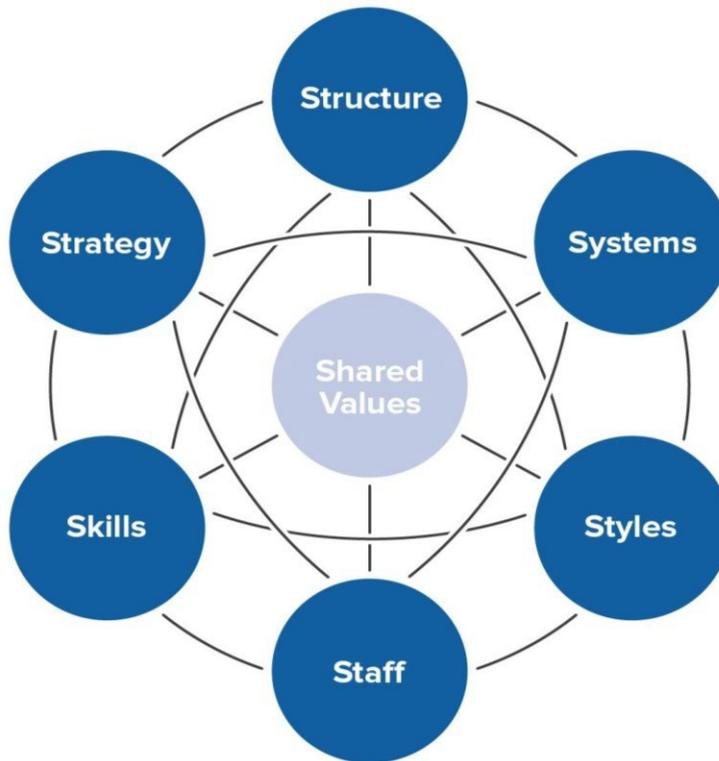
The section below breaks down the plans for the next three years of the current MTSF period, premised on the intentions to transform CHIETA into an innovation leader in education and training. The Annual Performance Plan further breaks down the specific operational initiatives and interventions per programme over the three-year MTEF period of 2022/23-2024/25.

### 1.3.1 Transforming CHIETA into an innovation leader in education and training

Informed by the outcomes of its environmental scan as well as the strategic review process, CHIETA has identified specific interventions that seek to create and maintain a high-performance organisation over the remainder of the MTSF period. This structured approach is predicated on the principles of the McKinsey 7S Model for organisational high performance or impact, which focuses on 1) Strategy; 2) Structure; 3) Systems; 4) Skills; 5) Staff; 6) Style and 7) Shared Values.

In a bid to achieve the targets set in CHIETA's balanced scorecard, the model advocates for each of the seven dimensions working in sync with, and reinforcing each other seamlessly, as depicted in figure 8 below.

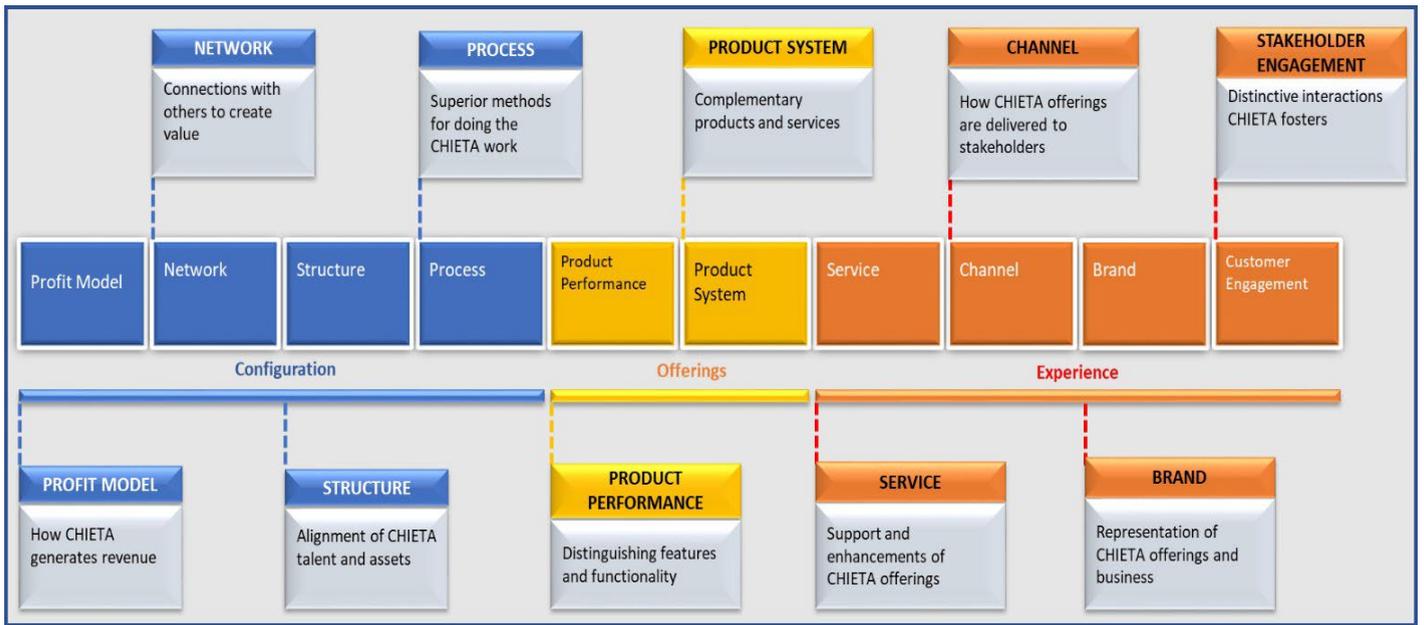
**Figure 10:** McKinsey 7S Model for organisational high performance and impact



**Source:** Expert Program Management

To give effect to the plan, specific actions will be undertaken by relevant managers and/or task teams, delineated through the Annual Performance Plans and individual Programme's Operational Plan, for the remainder of the MTSF period.

**Figure 11: The ten types of innovation**



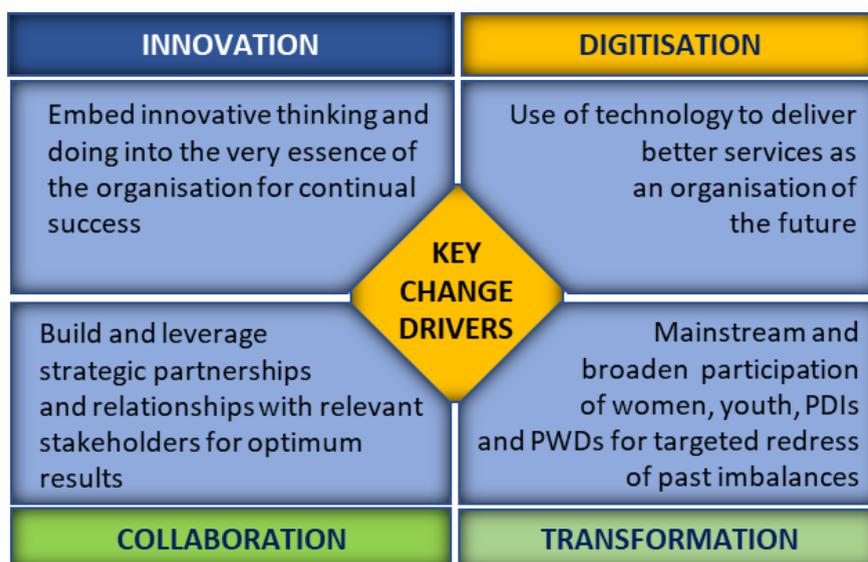
**Source:** Keeley, L (2013). Ten types of innovation: The discipline of building breakthroughs – *as adapted by Moonraises Strategy & Training*

The ten types of innovation in figure 9 above encapsulates the conceptual framework that anchors CHIETA’s key drivers for change as shown in figure 10 below.

### 1.3.1.1 CHIETA’s case and key drivers for change

The devastating impact of COVID-19 that continues to disrupt business as usual and pervades all spheres of life has accelerated the case for innovation. CHIETA’s case for change is about not just making an impact but a massive impact, in line with its mission to facilitate skills development, education and training through innovative solutions for sustainable livelihoods. This rests on the four key pillars, as summarised in figure 10 below.

**Figure 12:** CHIETA's key change drivers



**Pillar 1: Innovation** – Focuses the business on agility that seeks to constantly reinvent and futureproof the organisation to find innovative solutions to current challenges in the delivery of its mandate as the intermediary between supply and demand of skills for the chemicals sector.

**Pillar 2: Collaboration** – The concept of open innovation requires collaboration and sharing of resources with external stakeholders from which new value creation can be realised. The culture of collaboration will be strengthened and targeted for maximum impact over the remainder of the MTSF period.

**Pillar 3: Digitisation** – To enable access to services and products, digitisation is a key starting point as highlighted by the need during the lockdown. The pandemic exposed the chemical industry's weaknesses and significantly accelerated transformation programs. As businesses navigated uncharted territory, it was the digital transformation that proved to be the critical lifeline. Digitisation will continue to be fast-tracked across every aspect of the chemical industry as one of five key trends that will shape 2021 (KPMG, 2021).

**Pillar 4: Transformation** – Achieving a gender balance and racial diversity remains a challenge education and training is addressing on an ongoing basis. In the chemicals sector, various interventions are being explored through partnerships with key industry

players and entrepreneurship initiatives and interventions.

The bold targets linked to the outcome indicators in section 9.2 above give practical expression to this intent.

The broad initiatives and interventions based on the 7S dimensions of the McKinsey framework are captured as follows:

## **1. STRATEGY**

During a crisis, organisations [typically] respond by scaling down, shutting down operations, becoming survivalist, or innovate (Wenzel, Stanske, & Lieberman, 2020). CHIETA has chosen the latter by identifying opportunities for delivering its mandate in smart innovative ways, that contribute to recovery and long-term growth. The strategic response to innovation looks at opening up space and opportunity for strategic renewal by considering what was previously unthinkable or unfeasible.

Based on resource-based limits to preserving over time, innovating can be an effective response to the crisis (Lee & Makhija, 2009; Brinkmann, Villanueva, Grichnik, & Singh, 2019; Wenzel, Stanske, & Lieberman, 2020). However, innovating requires the capacity to think differently and take ownership of change. Accordingly, CHIETA has a wide range of initiatives and interventions that seek to operationalise its mission and cumulatively yield the impact articulated in the impact statement above; anchored in the pillars outlined above and aligned to the NSDP outcomes.

### **A. The development and deployment of the Innovation Strategy: Vision 2030**

To address capacity and change requirements for innovation, the Innovation Strategy will drive CHIETA's vision 2030. As intimated earlier, the Innovation Strategy will seek to ensure that both CHIETA and the broader sector embrace innovation as a catalyst for change within the skills development space. Championed by CHIETA, the strategy will be developed in collaboration with strategic sector partners, detailing the analysis of the sector's competitive and technological environment, challenges, opportunities and distinctive advantages. It will guide decisions on how resources are to be used to meet the sector's objectives for innovation, deliver value and build competitive advantage.

Designed to augment the Sector Skills Plan, the Innovation Strategy will, in essence, guide CHIETA and the sector on, but not limited to:

- Identifying opportunities for diversified or new revenue streams, particularly given the worsening fiscal constraints that continue to adversely affect budget allocations;
- Guiding the optimal and sustainable operations and outputs of the Ideation Committee and open innovation sessions that will not only engender creative thinking but also seek to entrench the translation of ideas into practical solutions;
- The alignment of strategies to ensure innovation as a common thread runs across all of them;
- Forging new collaborations with unconventional strategic partners to deliver new service offerings;
- Infusing the use of virtual reality (VR) and augmented reality (AR) simulated training to extend the reach of CHIETA services and add greater value to learners. Digital training ecosystems;
- The optimal use of sector administrative data generated from WSPs and ATRs as well as other sources as CHIETA's most valuable resource; and
- Mainstreaming the participation of small, medium, and micro-enterprises (SMMEs) in the manufacturing value chain opportunities, particularly as they are presented by the COVID-19 crisis. One of the key interventions would entail an SMME support fund for the South African Bureau of Standards (SABS) testing and approval fees.

To demonstrate agility to adapt to the rapidly changing environment, CHIETA has already embarked on a range of initiatives and interventions that are underpinned by the principles of innovation, while working on developing the Innovation Strategy.

#### **B. Intentional migration from traditional learning programmes to strategic projects for greater impact**

The intent is to reshape the foundation for skills development activities within the sector to stimulate meaningful participation in prioritised programmes. This will require a new innovative approach to strategic projects scoping for quality and high impact in

strengthening skills development. The approach will further intensify the collaborative strategic partnerships and collaborations as a consequence of implementing these strategic projects.

The focus will shift to creating value and sustainable development and not for the sake of mere training. One of the basic tenets of the transformational agenda is embarking on quality projects that yield desirable and targeted outcomes beyond merely meeting output targets. Therefore, training and skills development must conform to the highest standards and be sustainable.

Skills development programmes must be approved by the relevant ETQA and service providers must demonstrate an acceptable level of competence in order to deliver a high standard of service.

#### **C. The establishment of a CHIETA Centre for Innovation or Innovation Hub**

Innovation hubs are social communities or workspace or research centres that provide subject-matter expertise on technology trends, knowledge and strategic innovation management and industry-specific insights.

CHIETA is currently exploring opportunities and planning to open a CHIETA hub, by 2025, working in collaboration with Chemin. Chemin is a not-for-profit South African Chemical Technology Incubator under the Small Enterprise Development Agency (SEDA)'s incubation programme; dedicated to supporting the growth of very early-stage technology-based businesses in the South African Chemical sector.

This presents another example of collaborative initiatives that are already underway to drive the implementation of the Innovation Strategy, even as its development is in progress.

#### **D. The strategic role of smart skills centres**

Smart skills centres are positioned as one of CHIETA's game-changing key special projects, designed to give access to digital services and technology to rural communities. They provide services like access to computers, the internet, printing, scanning, online

platforms, e-learning, and skills development to pragmatically address the digital divide challenges and catalyse entrepreneurship.

#### **E. Fostering a knowledge-driven chemicals industry economy**

A stakeholder-centric research agenda will be set in motion to foster a knowledge-driven economy in the chemicals industry in a way that also bolsters an effective implementation of the Innovation Strategy and a range of other strategies and plans. It is anticipated that as part of an open innovation approach, the knowledge exchange among key sector players will contribute to identifying and ceasing emerging opportunities in a range of growth areas. These include but are not limited to the pharmaceutical industry, bioeconomy, hydrogen economy, nanotechnology and green chemicals. This will augment ongoing studies designed to provide a guide to key occupations and skills requirements for both SMME and learner development in mainstream and emerging opportunities.

##### **1) Impact management studies**

The measurement of impact of all initiatives and interventions is integral to fostering the knowledge-driven economy. Accordingly, impact studies have been scheduled over the MTEF to validate and provide feedback on the return on investment (ROI) in performance priority areas, provide root cause analysis and areas for improvement. The key areas include a baseline of where we are in terms of driving transformation by providing empirical evidence on the critical metrics relating to beneficiaries in terms of enterprise ownership, gender, race, nationality, etc over the five years.

##### **2) Harnessing the power of data at CHIETA's disposal**

CHIETA considers the data collected from industry through WSPs and ATRs as well as other sources, as its most valuable asset. This will now be processed to harness its full value in a way that allows for greater organisational agility predicated on real-time decision-making processes as an integral part of a knowledge-driven chemistry industry economy.

## F. Unwavering commitment to implementing ERRP interventions as a strategic imperative

In heeding the national call, CHIETA has adopted the ERRP as a strategic imperative that has a strategic fit in making the case for change in line with the four key pillars referenced earlier. Accordingly, support and funding were provided to alleviate historic student debt and support work-based learning. A total of 692 beneficiaries were funded. The Lesedi Youth Fund was established in 2021 under the ERRP funding to continue the alleviation of student debt, to assist what is termed “the missing middle”.

Due to the centrality of the chemicals industry to the ERRP for the country, several initiatives are underway with more planned in specific areas as articulated in the ERRP. CHIETA’s response to ERRP will largely characterise the implementation of its strategy for the remainder of the MTSF period, as captured in Table 5 below.

**Table 7: ERRP-specific CHIETA interventions**

ERRP AREA		CHIETA INTERVENTIONS & INITIATIVES
1.	<b>INTENSIFYING SMME PARTICIPATION IN THE FMCG SECTOR</b>	Support 1 000 SMMEs through a multi-SETA project expanding a CHIETA/ University of Johannesburg business development model to grow fast-moving consumer goods (FMCGs)
2.	<b>SUPPORTING YOUNG ENTREPRENEURS AND SMMEs TO BOOST AND INTENSIFY EMPLOYMENT CREATION</b>	<p>Advancement of the post learnership absorption strategy in its focus on the empowerment of particularly young, women and Black-owned businesses</p> <p><b>SMME development focusing specifically on start-up businesses for black women entrepreneurs</b></p> <p>The development of such businesses is targeted at ultimately converting them into CHIETA levy-paying companies that contribute to employment creation. SMMEs face unique challenges in development and service delivery. Rural organisations and enterprises that work in difficult and generally hard-to-access areas require special support and assistance. They have the greatest potential to create jobs and empower black people, women and youth.</p> <p>This initiative will also be assisted through multi-level partnerships with sustainable start-up businesses in the chemical industry value chain, a programme supporting the ERRP. It will be implemented through all CHIETA Learning Programmes (Skills Programmes, RPL &amp; Learnerships) in programme three (3) of the CHIETA 2022/23 Annual Performance Plan.</p>
3.	<b>INNOVATION</b>	<ul style="list-style-type: none"> <li>• Currently exploring opportunities and planning to open CHIETA hub</li> </ul>

ERRP AREA	CHIETA INTERVENTIONS & INITIATIVES
	<p>by 2025 with an approved budget of R3 000 000 for the 2021/2022 financial year. The Innovation Hub would be dedicated to supporting the growth of very early-stage technology-based businesses in the South African chemicals industry.</p> <ul style="list-style-type: none"> <li>• Learning and digitisation of skills development through the virtual/simulated coded welding programme</li> <li>• SMART Skills Centres</li> </ul>
4. SKILLS DEVELOPMENT	<ul style="list-style-type: none"> <li>• Reskilling and retraining of retrenched workers.</li> <li>• Contribution to the 20000-artisan development and related targets to curb the impact of COVID -19</li> </ul>
5. INTEGRATION INTO THE AFRICAN CONTINENT	<p>Take advantage of the African Continental Free Trade Agreement and collaborate on partnerships that open market access for emerging, small, and medium-sized chemical manufacturers</p>
6. ERRP SKILLS STRATEGY	<p><b>Support of learners through Work Integrated Learning and Work Placement</b></p> <p>CHIETA has increased its target for 2022/23 internships and Skills Programmes in support of the occupational shortages.</p> <p>This programme will assist in maximising opportunities for new entrants to access labour markets to boost job creation and to support re-training of employees to prevent further job losses.</p> <p><b>Work-Integrated Learning for unemployed learners at TVET colleges and access to workplace experience through CHIETA employers</b></p> <p>CHIETA has prioritised support to work-integrated learning at TVET colleges to assist learners to complete their qualifications and workplace experience that new entrants require after completing their qualifications for a successful transition into the labour market. CHIETA in partnerships with stakeholders will streamline the incentives in order to make it possible to grow these opportunities in ways that create sustainable employment. This includes ensuring these different forms of workplace experience are recognised in the BBBEE Codes.</p> <p>This programme is also in support of the Presidential Youth Employment Service (YES) initiative to enhance access to these opportunities.</p>
	<p><b>Artisan development through RPL as a cost-effective and accelerated means to develop artisans</b></p> <p>Government studies have found that artisan skills are among national priorities. They are not only essential for government’s national strategic projects (such as the Strategic Integrated Projects) but will also be in strong demand across the economy as growth begins to gain momentum.</p> <p>In response, CHIETA has prioritised the 13 designated priority trades and occupations for economic development through the recognition of</p>

ERRP AREA	CHIETA INTERVENTIONS & INITIATIVES
	<p>prior learning (RPL) intervention as a cost-effective and accelerated means to develop artisans in support of the NDP target of 30 000 artisans by 2030.</p> <p><b>Supporting investment in STEM (Science, Technology, Engineering and Mathematics)</b></p> <p>This programme will seek to expose young women to STEM chemical industry careers in accordance with Priority 2 of the CHIETA SSP and the CHIETA identifying the importance of improving performance of learners in Mathematics and Science to increase their uptake of these studies.</p> <p>This STEM Programme includes programmes in the Fourth Industrial Revolution (4IR) that represents a new era of innovation in technology that will enhance human and machine interaction, unlock new market opportunities and fuel economic growth. This will result in the emergence of game-changing technologies such as Artificial Intelligence &amp; Robotics.</p> <p>Traditional jobs are being transformed while new forms of work are being created. Currently, there is an acute shortage of critical skills. Addressing these shortages of critical skills will ensure that new opportunities are made accessible to all South Africans, in particular youth, to address the current inequalities and these are key skills demand and supply in the chemical sector.</p> <p>This initiative supports 44 unemployed young female learners from rural and informal settlements and township areas. This programme will also specifically prioritise beneficiaries from households with a total monthly income of less than R 5000.</p> <p><b>Supporting Candidacy Programmes</b></p> <p>This initiative is in support of the ERRP Skills Strategy and is implemented in programme three (3) (Artisan Development) of the CHIETA 2022/23 Annual Performance Plan. This is a Graduate Development three (3) year Programme for Engineers which is a comprehensive program that will deliver well-balanced and competent engineers that can add value anywhere in the industry that they have been trained for. This programme is also registered with the Engineering Council of South Africa (ECSA).</p> <p><b>Increased investment into blended learning, e-Learning and virtual learning</b></p> <p>This programme was also identified from the PC4IR Strategic Implementation Plan (PC4IR SIP) through rapid development of 4IR skills as well as involving learners in the Virtual Reality learning platform. Learners will be exposed to a simulated environment allowing the learners to continually retry until competence has been achieved at selected sites. The CHIETA has increased its investment into blended learning, e-learning and virtual reality learning and will gradually</p>

ERRP AREA	CHIETA INTERVENTIONS & INITIATIVES
	increase this percentage by 20% by 31 March 2025. This programme further supports CHIETA to move to a 4IR development on Entrepreneur Development.
	<p><b>Retrenched worker support</b></p> <p>The focus here will be on retraining and upskilling to preserve jobs and job losses. Building on learning from the Temporary Employee Relief Scheme (TERS) the CHIETA through strategic projects fast track support for the upskilling of employees.</p> <p>CHIETA is also in partnership with related industry associations to determine which skills are required for the recovery and re-orientation of identified CHIETA companies.</p> <p><b>Career Guidance</b></p> <p>Six career guidance programmes will be implemented in rural (3) and urban (3) for potential careers in the chemical industry. These career guidance programmes have been revised to discontinue those that are no longer in demand whilst scaling up those that have better labour absorption capacity; energy, digital skilling, online platforms, as well the incorporation of entrepreneurship for self-employment.</p>

#### **G. Strong emphasis on funding rural, youth and female learners for the industry**

All CHIETA programmes of the Funding Strategy support national priorities. While the priorities and targets of the NSDP serve as a critical guide, the policy and programme initiatives of the appropriate national bodies are essential. The National policy agendas represented in the Human Resource Development (HRD) SA Strategy, the BBBEE through equity planning are among key thrusts that have informed projects and programme initiatives. CHIETA has ensured that all projects and programmes will include prioritising rural, youth, female learners and learners living with disabilities to reduce inequality.

#### **H. Accelerated workplace approvals through innovative online assessments**

The ETQA will be implementing the development of a web-based Application, Approval and Monitoring online platform to carry out remote workplace assessments and evaluations.

CHIETA will be able to review the application online and make comments directly into the web app. The work of stakeholder support teams (SSTs) to be physically at the

worksite is at risk with COVID-19. The relevant SST or Subject Matter Expert (SME) will have their own profile indicating their location, skill sets, availability and work to be carried out.

CHIETA representatives will be able to view the appointed SST or SME within the web app and provides an update of their schedules weekly for continuous monitoring and evaluation. Workplace assessments and approvals will allow for electronic sign-off to minimise physical contact.

### **I. CHIETA brand repositioning**

CHIETA will enhance its brand in the hearts and minds of its key stakeholders primarily by transitioning from the current positioning that focuses on *“Enabling today, Transforming the future”* to *“Innovating for impact”*. This will be underpinned by CHIETA living its values in its quest to deliver stakeholder value through its innovative approach to a series of its initiatives and interventions as outlined above.

The CHIETA brand will be positioned to impact the entire education and training landscape, leveraging the legislative framework that no longer confines SETAs to their respective sectors. A strong social media presence for compelling interactions presents an opportunity for unprecedented engagements on matters of education and training that transcend the chemicals industry and the country. This will bode well for the generation of content that will catapult the organisation into a future-proofed operation, for the benefit of the sector and beyond.

## **2. STRUCTURE**

This section primarily focuses on how CHIETA is structured and resourced to deliver its service as efficiently as possible.

### **A. Review of the organisational structure and service delivery model**

The organisation currently centres its operations at its head office in Gauteng with provincial offices in the Western Cape, KwaZulu Natal and the Eastern Cape. Currently, the head office is strictly a corporate office with no services being rendered from it.

Guided by the mantra that *structure follows strategy*, the organisation will revisit its organisational structure and service delivery model, both of which predate the new strategic direction; to test their fitness for purpose.

The service delivery model will determine what services are accessed through what means, as informed by a stakeholder needs analysis, balanced against the reality of CHIETA resources and their optimal use. For instance, there could be options to optimise the smart skills centres to access at least some of the services.

In line with the innovation aspirations that include among other things, end-to-end digitisation a determination will be made concerning what services can realistically be accessed through pure technological or blended platforms.

#### **B. The resourcing of the approved organisational structure/s**

Business units and their core functions will also be reviewed to determine the extent to which they are optimally configured to execute the mandate. Where no changes are made to the structure that was recently approved by the Governing Board or new changes have been confirmed efforts will be made to assign resources accordingly.

#### **C. Investing in Centres of Specialisation**

Centres of Specialisation (COSs) will be integral to the service delivery model. CHIETA plans to support five of these centres in the 2022/23 financial year, with the inclusion of the Gandhi Mandela COS. In line with the collaboration strategic pillar, CHIETA has established strategic partnerships with employers and industry associations to provide workplace-based learning opportunities. Also, they will assist with the workplace approval criteria to ensure that the integrity of the COS Dual System of Artisan Development is not compromised.

CHIETA has prioritised discretionary grants for these designated trades and occupations and will support all continuing apprenticeships and have committed to support the second cohort of COS apprenticeships in 2022/23. This will increase the number of people enrolled in existing qualifications that are identified as priorities in the ERRP by also increasing the capacity of institutions.

### 3. SYSTEMS

The systems perspective focuses on how CHIETA manages its operations, in terms of activities relating to delivering its mandate as well as the technology platforms that support its operations.

In the first instance, the operating model and service delivery model that will be revised will inform CHIETA's business processes and identify priority ones for formalisation, mapping, and automation. These will also include what collaborations the organisation enters into and how these are managed, how decision-making processes and delegations of authority are formalised across the organisation. Formalised business processes for standardisation are critical for purposes of operational effectiveness and efficiency; guided particularly by CHIETA's four key drivers for change or innovation pillars. This process will begin with the identification of key business processes in the context of CHIETA. These will be documented and mapped prior to being automated.

In all its business practices, CHIETA will be intentional in ensuring that equity considerations permeate all its areas of operation to advance the national transformation agenda.

From the perspective of technology systems, CHIETA is already in the process of introducing a series of technological platforms to underpin its innovation. They are at varying levels of development and include, among others:

- An Enterprise Resource Planning (ERP) which is critical to CHIETA's Digital Transformation Strategy;
- Digitised supply chain;
- Integration of systems - MIS, ERP, website and CHIETA app;
- Predictive analytics;
- Track and tracing systems to support monitoring and evaluations;
- CHIETA App to improve the accessibility of services and contact with stakeholders;
- Seamless WSP/ATR submissions;
- Social media for compelling interactions; and
- Remote workplace compliance approvals utilising smart technology for remote assessments.

## 4. SKILLS

Phenomena such as the 4IR and internet of things (IoT) were already impacting the world of work with an increasing mechanisms in a range of industries. COVID-19 accelerated these changes at an unprecedentedly fast rate as it turned the world on its head, as detailed in the situational analysis. Organisations were reluctant or slow in introducing technology for operational efficiencies they were strong-armed into investing in technology to minimise disruptions to their operations as staff were compelled to work from home.

The new world of work requires necessary skills to complement the new technologies that organisations are investing in. In addition to hard skills, staff are compelled to learn new soft or interpersonal skills. For instance, software developers are compelled to develop solutions with heightened levels of interaction with users.

The ambitious plans outlined under the Strategy dimension earlier to drive the implementation of CHIETA innovation vision require that the staff of the organisation have the requisite skills to give effect to the plans. Lifelong learning has been adopted as a value and will be supported by investment in ongoing training and development of personnel and performance management to maintain high levels of not only skills but also competencies across all key operational areas of the organisation.

This section must be read in conjunction with the Staff dimension below.

## 5. STAFF

The capacity to innovate is critical to realising the lead position the organisation is aiming for with talent as a bedrock. The organisation currently has a board-approved structure that is yet to be fully resourced and operationalised. This will be given priority to ensure the pathway to success is not obstructed by lack of talent, together with talent management systems underpinned by new economy skills and the world of work dynamics incorporating remote work.

Talent management will in part ensure recruitment of the best possible quality of staff that will make an immediate impact supported by, inter alia, a formal coaching and mentorship programme. Such programmes will be designed to accelerate competency, augmenting formal

skills development programmes aimed at contributing to lifelong learning, as one of the new values. This recognises and responds to the realities of difficulty in retaining superior talent that might be in high demand and short supply. CHIETA is in the process of introducing a new balanced scorecard performance management system and an innovative reward and recognition programme.

Annual climate surveys will be conducted to keep the finger on the pulse of the extent to which the organisation's most valued asset, its staff, is satisfied and engaged. This is a cornerstone to ensuring that CHIETA remains a stable and competent high performance organisation geared to transitioning to an innovation leader in training and education.

## **6. STYLE**

For the concept of open innovation to thrive, CHIETA is seeking to engender a culture of participative leadership and management in which relevant stakeholders will genuinely feel invested not only in the organisation but also in the sector as a whole. To give practical expression to this intent this planning process was opened up to the broader management team and backed up by an internal communication plan to the entire CHIETA Team to begin the change process. One of the key markers of success will be an organisation embracing innovation as a culture by breaking the mould and trying out new ideas without the fear of failure and its possible repercussions.

The pursuit of transitioning CHIETA to an innovation leader and future-proofing the organisation would require the learning of the new and unlearning of the old on the part of both staff and management with regard to the inner workings of the world of work in general and CHIETA in particular.

CHIETA has already begun to create platforms for creative expression that is open to all its key stakeholders, such as the Innovation Committee (I-Comm) and unprecedented open innovation sessions. The enforcement of the new approach will be guided by structured processes that take cognisance of innovation. A range of business processes will be reengineered to bring onboard innovation as a golden thread underpinned by the revised organisational values that will guide the behavioural standards.

CHIETA will also introduce a robust communication process to enforce the free flow of information not only within the organisation but also among other key stakeholders to anchor open innovation.

## 7. SHARED VALUES

The organisational value system will be critical to driving the execution of the mission and contributing towards attaining the set vision. Mechanisms will be put in place to ensure that these values are shared and embedded in the DNA of CHIETA, as they effectively become the rules of engagement. To this end, CHIETA has identified the following six values as core to its operations towards achieving the desired impact:

- 1. Integrity:** Open innovation, as the chosen approach requires collaboration with stakeholders (internally and externally). To operate with integrity, doing the right thing when no one is watching, is critical to ensure that these relationships yield the kind of mutual benefit partners can appreciate. Integrity is also about how staff members interact with each other and how the organisation operates within the sector contributing to sustainability, growth, and agility.
- 2. Accountability:** Entrusted with resources and responsibilities by the shareholder, partners, and stakeholders, we commit ourselves to be accountable and transparent in the use of these resources. Being accountable builds trust and secures lasting and productive partnerships, internally and externally.
- 3. Lifelong learning:** At the heart of innovation is the ability to constantly seek and find new ideas in the process of change. Innovation was not static and requires constant re-evaluation to anticipate actions and activities in the environment and be able to set the pace. Employees should thus be supported to continuously update their skills. The value system of lifelong learning is critical to also assist the organisation to constantly innovate itself.
- 4. Excellence:** Against a sector that is driven by technological advancement and always exploring new dimensions, we continue to strive for excellence as a value, in attitude and composure. It is the least our stakeholders expect and should accept from us.

5. **Caring:** For each other, stakeholders, and the environment in which we operate including the financial sustainability of the organisation. Externalities present threats and opportunities that can strain resources that make up the DNA of a sustainable organisation. Being able to exercise care and appreciation today, ensures we derive benefits in the present that create positive returns for future generations.
  
6. **Collaboration:** Collaboration as a value makes teams work better together in a spirit that is goal and results-oriented. Our ability to collaborate is important in giving access to the best available knowledge and resources. The ability to collaborate as a value considers behaviour but also the tools to be able to support the value system, for example, project monitoring and evaluations tools to support meaningful feedback to partners and stakeholders.

## 2. KEY RISKS AND MITIGATIONS

OUTCOMES		KEY RISKS		RISK MITIGATIONS
1.	<b>A compliant, high-performance CHIETA that is well-capacitated to improve workforce productivity and enhance labour market prospects of employees for sustainable livelihoods</b>	1.1	Reduction in CHIETA Skills Levy and available discretionary grant for skills development	<ul style="list-style-type: none"> <li>• Effective Marketing and</li> <li>• Digitisation Strategy to recruit new member companies and retain current</li> <li>• member companies.</li> <li>• Cost containment management plan</li> <li>• Co-funding models with industry</li> </ul>
		1.2	Non-compliant with primary skills development and financial legislation	Integrated Legal Compliance Risk Management Framework builds on Combined Assurance
		1.3	Unable to meet agreed targets with the Executive Authority	Pro-active monitoring and line of sight reporting and mandating processes with DHET
		1.4	The potential impact of the BUSA Court Ruling on CHIETA financial capacity	Participation through the office of CEO in assisting DHET in current engagements with BUSA with strategic and operational input and predictive analysis
		1.5	Closure/Restructuring of member companies	Industry intelligence to pro-actively manage in support of resilience and agility
		1.6	Closure of Training Providers	Industry intelligence to pro-actively manage in support of resilience and agility
2.	<b>Increased enrolments and completion of occupations in high demand</b>	2.1	Inability of employers to honour MOA and deliver responsibilities due macro environmental challenges	<ul style="list-style-type: none"> <li>• Pro-active monitoring of MOAs by CHIETA regional offices</li> <li>• Early warning systems through regional offices to Head Office</li> <li>• Pro-active Risk Intelligence gathering with predictive analysis</li> </ul>
		2.2	Reduction in available workplaces for training	<ul style="list-style-type: none"> <li>• Focused Workplace approval Plan/targets by ETQA</li> <li>• SETA Collaboration with other relevant SETAs for maximum benefit on available workplaces</li> </ul>
		2.3	Restructuring in Industry affecting enrolments and completions	<ul style="list-style-type: none"> <li>• Engagements with Industry/sub sectors to identify potential and planned restructuring and impact on CHIETA MOAs</li> <li>• Pro-active measures to place learners at alternative employers and funding allocation</li> </ul>
		2.4	Lack of industry baseline data for monitoring, root cause analysis and reporting	<ul style="list-style-type: none"> <li>• Functional database for tracking and monitoring within subsectors to inform trend analysis, root cause and agile correction by CHIETA</li> </ul>

OUTCOME		KEY RISK		RISK MITIGATION
		2.5	Misalignment of companies not applying for DG's against occupations and qualifications in high demand	Focused DG funding windows against specific occupations and qualifications in high demand- DG Funding matrix  Granular DG funding windows
		2.6	Reduction in DG available and co-funding support from employers	<ul style="list-style-type: none"> <li>• Predictive scenario analysis on DHET/BUSA scenarios</li> <li>• Focused marketing strategy to attract new members built on CHIETA offerings and digitized platforms</li> <li>• CHIETA Retention Strategy and protocol</li> <li>• Focused and deliberate prioritisation of DG funding areas</li> </ul>
3.	<b>Seamless work integrated learning between training institutions and employers</b>	3.1	Lack of confidence by Industry in the capability of TVET Colleges	<ul style="list-style-type: none"> <li>• Through successful collaboration with TVETs assist TVET College to change Industry perception</li> <li>• Canvas for Industry representation on TVET Governance structures</li> </ul>
		3.2	Poor uptake by learners for WIL	<ul style="list-style-type: none"> <li>• WIL appetite assessments through regional offices with root causes and risk treatments responses</li> <li>• Incentivising WIL uptake through improved DG allocation rates</li> </ul>
		3.3	Lack of accredited workplaces for WIL	<ul style="list-style-type: none"> <li>• Workplace approval risk assessment with root cause and mitigation</li> <li>• Workplace approval APP with targeted numbers per subsector</li> </ul>
4.	<b>Improve workplace productivity and diversity through structured industry knowledge and capacity building</b>	4.1	Slow or non-response from Industry to capitalize on requirement and opportunities in 4IR	<ul style="list-style-type: none"> <li>• Focused CHIETA Research Agenda to facilitate and guide areas of opportunity</li> <li>• Strategic Industry engagements forums per subsector to gather business intelligence and alignment</li> </ul>
		4.2	Lack of focused DG and Strategic Projects funding to support transformational priorities	<ul style="list-style-type: none"> <li>• Targeted and ringfenced DG allocation of learning interventions towards youth, female, rural and disabled learners</li> <li>• Impact studies and measurement on sustainability</li> </ul>
		4.3	Misaligned Sector Skills Plan	<ul style="list-style-type: none"> <li>• Effective data analysis of annual WSP and trend analysis</li> <li>• Stakeholder intelligence gathering through CHIETA Chambers</li> <li>• Independent validation and business intelligence through CHIETA commissioned research</li> </ul>

OUTCOME		KEY RISK		RISK MITIGATION
		4.4	Low completion rates of learning interventions	<ul style="list-style-type: none"> <li>Regional MOA monitoring and post</li> <li>mortem analysis with employers and learners</li> <li>Impact assessments with root cause and remedial recommendations</li> </ul>
		4.5	Increased number of learner drop outs	<ul style="list-style-type: none"> <li>Increased contact sessions with employers, learners and providers to establish root cause and corrective action</li> <li>Regular monitoring of MOAs by regional offices for early warning and intervention</li> <li>Minimum threshold of absorption in MOAs</li> </ul>
		4.6	Learner absorption rates below the CHIETA Impact thresholds as per Vision 2025	<ul style="list-style-type: none"> <li>Targeted and ringfenced DG allocation and incentives/co-funding for WIL coupled with absorption with employer</li> <li>Social accord discussions with employers</li> </ul>
		4.7	Ineffective and reduced workplaces	<ul style="list-style-type: none"> <li>Workplace approval plan and targeted approach</li> <li>Root cause analysis of barriers and opportunities to assist employers</li> <li>Collaboration with other SETAs for utilisation of workplaces</li> </ul>
		4.8	Ineffective Skills Planning	<ul style="list-style-type: none"> <li>Focused research and business intelligence on sub sector growth areas in support of relevant skills development</li> </ul>
		4.9	Industry and CHIETA Financial constraints	<ul style="list-style-type: none"> <li>Structuring of Co-funding partnerships with Industry</li> <li>Sponsorships and investments from non-Industry partners</li> <li>Marketing of CHIETA services build on digitised delivery platform</li> <li>Skills Levy Payer retention framework</li> </ul>
		4.10	Ineffective mobility of learners between career paths and changing business needs in a 4IR environment	<ul style="list-style-type: none"> <li>Targeted and specialized skills programme to ensure agility and movement between careers, new generated skills and occupations for the future</li> </ul>
5.	<b>Improved support for TVET and CET colleges through effective career and vocational guidance system</b>	5.1	Lack of industry confidence in TVET and CET Colleges	<ul style="list-style-type: none"> <li>DHET/CHIETA /Industry collaboration to enhance effectiveness of TVETs</li> <li>Industry representation on TVET Governance structures</li> </ul>

OUTCOME		KEY RISK		RISK MITIGATION
		5.2	Inadequate funding and infrastructure at some TVET and CET Colleges	<ul style="list-style-type: none"> <li>• DHET/CHIETA collaboration to understand funding plan to TVETs and CHIETA contribution or role in it.</li> </ul>
		5.3	Lack of quality TVET lecturers with reference to practical exposure	<ul style="list-style-type: none"> <li>• Focused funding of capacity building of TVET lecturers</li> <li>• Industry collaboration and MOAs for practical exposure</li> </ul>
		5.3	Insufficient funding for WIL	<ul style="list-style-type: none"> <li>• Prioritise and dedicated DG funding windows</li> <li>• Predictive analysis and planning of WIL budget to structure delivery and expectation</li> </ul>
6.	<b>Skilled and competent Chemical industry entrepreneurs and cooperatives</b>	6.1	Lack of focus on SSME start-up businesses with biased towards youth and female business owners	<ul style="list-style-type: none"> <li>• Conceptualization of Strategic CHIETA Projects for start-up businesses with focused funding/co- funding, collaboration with investment partners</li> <li>• Targeted approach for start-up businesses per financial year to track and report progress</li> </ul>

### 3. PUBLIC ENTITIES

N/A

# CHEMICAL INDUSTRIES EDUCATION AND TRAINING AUTHORITY (CHIETA) 2022/23 – 2024/25

**CHEMICAL  
INDUSTRIES  
EDUCATION AND  
TRAINING  
AUTHORITY (CHIETA)**

**Part D Technical Indicator Descriptions:  
APP Annexure 1 2023/24**

**ANNEXURE A: District Development Model**

None

**ANNEXURE B: Hard-to-Fill Vacancies**

*Table 8: Hard-to-Fill Vacancies*

OFO group	Occupation code	Name of occupation	Number of organisations (indicated vacancy amount)	Total weighted vacancies	Number of people employed in the occupation across the sector	Total Positions (vacancies and employed)	Reason for vacancy
Managers	122103	Director of Marketing	4	20	232	253	Lack of relevant experience
	132106	Manufacturing Quality Manager	5	11	339	350	Lack of relevant experience Lack of relevant qualifications Unsuitable job location
Professionals	213111	Pharmaceutical Physician	4	6	105	111	Equity considerations Lack of relevant experience Lack of relevant qualifications
	213202	Agricultural Scientist	3	9	84	93	Lack of relevant experience Lack of relevant qualifications
	213302	Environmental Scientist	7	13	73	87	Lack of relevant experience Lack of relevant qualifications
	214101	Industrial Engineer	8	12	337	349	Equity considerations Lack of relevant experience Lack of relevant qualifications Poor remuneration Slow recruitment processes
	214401	Mechanical Engineer	11	27	401	427	Equity considerations Lack of relevant experience Lack of relevant qualifications Slow recruitment processes
	214502	Chemical Engineering Technologist	7	14	197	211	Lack of relevant experience Lack of relevant qualifications New or emerging job not defined before
	215101	Electrical Engineer	3	8	187	196	Lack of relevant experience Lack of relevant qualifications Poor remuneration
	226202	Industrial Pharmacist	10	26	506	532	Lack of relevant experience Lack of relevant qualifications Unsuitable working hours
	241103	Tax Professional	3	8	65	72	Lack of relevant experience Lack of relevant qualifications

OFO group	Occupation code	Name of occupation	Number of organisations (indicated vacancy amount)	Total weighted vacancies	Number of people employed in the occupation across the sector	Total Positions (vacancies and employed)	Reason for vacancy
	242101	Management Consultant	8	18	533	551	Lack of relevant experience Lack of relevant qualifications Poor remuneration Unsuitable job location
	242213	Regulatory Affairs Officer	8	16	469	485	Lack of relevant experience Lack of relevant qualifications
	243103	Marketing Practitioner	11	116	1978	2095	Equity considerations Lack of relevant experience Slow recruitment processes
	243301	Industrial Products Sales Reps	12	64	961	1025	Lack of relevant experience Lack of relevant qualifications Unsuitable job location
Clerical support workers	413201	Data Entry Operator	4	56	240	296	Lack of relevant experience Unsuitable job location
Service and sales workers	541102	Hazardous Materials Removal Workers	4	41	314	356	Lack of relevant qualifications
Skilled and related trades workers	651202	Welder	4	277	274	551	Equity considerations Lack of relevant experience New or emerging job not defined before
	671202	Millwright	6	31	254	284	Equity considerations Lack of relevant experience Poor remuneration
Plant and machine operators and assemblers	718914	Sand Blaster	4	8	49	57	Lack of relevant qualifications
Elementary occupations	832907	Chemical Plant Worker	12	164	4973	5137	Equity considerations Lack of relevant experience

Source: WSP submissions, June 2020, CHIETA system discretionary grant funding, SIPs list, DHET occupations in high demand.

**Note:** The vacancy rates have been rounded off to the nearest whole number. The glaring outliers have not been removed from this table; CHIETA will be doing further investigations to understand the nuances.

## Reasons for hard-to-fill vacancies

The reasons for the existence of hard-to-fill vacancies are complex and it is not possible to provide explanations for all the occupations listed in the above table. However, to better understand all the nuances of occupational shortages, and to get a full understanding of shortages from a chamber and regional perspective, CHIETA consults stakeholders widely through regional skills forums and chamber meetings. The June 2017 CHIETA Strategic Scenario Planning Workshop with chamber members and the 2018 Stakeholder Interview Sessions revealed that the majority of the subsectors are affected by the economic situation and that, in some subsectors, posts are frozen and people are retrenched. This releases skills to the labour market and reduces the upward pressure on salaries. Despite the reductions in demand, the need for engineers, scientists and artisans remains.

Although there is no statistical information available on migration trends, stakeholders from various subsectors reported that they are losing highly skilled professional and technical skills to the international labour market. They also reported that the international demand for these skills drives up labour costs in the local market and contributes to the scarcity of certain skills. The fact that many engineers do not complete their candidate programmes and do not register as professional engineers leads to shortages in positions that require professional registration. Similarly, there is a shortage of EE candidate engineers with the Government Certificate of Competency. The reporting of hard-to-fill vacancies against OFO codes does not always suffice to signal the type of skills that the educational system needs to produce. Due to the technical nature of certain occupations, qualified engineers, pharmacists or medical doctors are appointed – even though the occupational names do not reflect the fact that qualified professionals are required. For example, in many instances, the sales occupations in the Chemicals Industry require high levels of technical knowledge and employers may appoint professionally qualified people in these occupations.

In certain occupations, advanced industry skills are required and people who retire are replaced from the ranks of other occupations. In occupations such as the registered trades, artisans who retire have to be replaced by people who have passed the relevant trade tests. That means that the number of people who pass the trade tests each year should at least be equal to the number who are about to retire (that is if the industry wants to provide for its own needs and does not want to rely on other industries to train artisans). However, in most of the registered trades, there are already shortages, and, for this reason, the number of new qualifiers have to exceed the number of people who are about to retire.

In many of the hard-to-fill vacancies of the industry, a high level of specialist or contextual skills and knowledge is required. Occupational shortages cannot be overcome by simply increasing the number of graduates in the relevant fields of study. Specialised knowledge is obtained through workplace experience and through advanced training programmes that are aimed at those areas of specialisation. Each subsector employs a small number of specialists in each field relevant to that specific subsector. For example, glass architects are architects who have specialised in the technicalities of glass. Flavourists (employed in the FMCG Subsector) are specialists who can discern flavours in food and perfumes. Engineers who specialise in explosives is another example. The number of people needed in these occupations is usually very small, but they are key to the businesses within those industries, and the Chemicals Industry needs to ensure a sufficient supply of these skills – even if they are not specifically listed as hard-to-fill vacancies.

Despite the current economic situation, it is important to retain a long-term perspective on skills development. In the case of the Petroleum and Base Chemicals subsectors, if shale gas exploration comes off the ground, there will be an increased need for drilling engineers and geophysicists, geologists, geochemists, reservoir engineers, petrophysicists, production and completion engineers, economists and safety, health, environment and quality consultants.

Entrepreneurship is seen as a driver of small business development for job creation. This is to be achieved by unpacking CHIETA’s industries’ value chains and identifying opportunities for creating simple business models that can be taken to scale, investing in environments that enable the industry to take up emerging entrepreneurs and provide mentorship and small business subcontracting opportunities for beneficiaries, formulating partnerships with TVET colleges and higher education and training Institutions to ensure sustained capacity for CHIETA in the areas of training and research to test new models and design programmes with scale as a desired end result.

**ANNEXURE C: CHIETA’s Top 10 Sectoral Occupations List**

*Table 9: CHIETA’s Top 10 Sectoral Occupations List*

Rank	SETA	Period	Occupation code	Occupation	Intervention(s) planned	NQF level	NQF aligned (Yes/No)	Quantity needed	Quantity to be supported
1	CHIETA	2022/2023	2019-671101	Electrician	Apprenticeships, learnerships, RPL, WIL, TVET college lecturer development	4	Yes	7 831	586

Rank	SETA	Period	Occupation code	Occupation	Intervention(s) planned	NQF level	NQF aligned (Yes/No)	Quantity needed	Quantity to be supported
2	CHIETA	2022/2023	2019-651302	Boiler Maker	Apprenticeships, learnerships, RPL, TVET college lecturer development	4	Yes	3 013	185
3	CHIETA	2022/2023	2019-214501	Chemical Engineer	Bursaries, learnerships, WIL	6	Yes	1 248	202
4	CHIETA	2022/2023	2019-132102	Manufacturing Operations Manager	Bursaries, learnerships, grant (non-artisan)	4	Yes	943	131
5	CHIETA	2022/2023	2019-211301	Chemist	Bursaries, learnerships, skills programmes, WIL	6	Yes	1 415	235
6	CHIETA	2022/2023	2019-313301	Chemical Plant Controller	Learnerships, WIL	4	Yes	8 164	2 260
7	CHIETA	2022/2023	2019-311101	Chemistry Technician	Bursaries, learnerships, RPL, skills programmes, WIL	6	Yes	2 843	192
8	CHIETA	2022/2023	2019-671202	Millwright	Apprenticeships, RPL (artisan-related)	4	Yes	468	70
9	CHIETA	2022/2023	2019-226302	Safety, Health, Environment and Quality Practitioner	Bursaries, learnerships, skills programmes, WIL	5	Yes	283	11
10	CHIETA	2022/2023	2019-214401	Mechanical Engineer	Bursaries, WIL	6	Yes	44	25

**Source:** WSP submissions, June 2020, CHIETA system discretionary grant funding, SIPs list, DHET's occupations in high demand

## ANNEXURE TO THE STRATEGIC PLAN

The institution's mandate and policy framework remain unchanged under the current Medium-Term Strategic Framework period. However, the following revisions were affected to the current Strategic Plan necessitated by the rationale outlined below:

The following were the eight original Outcomes as crafted during the 2022/23 planning cycle:

1. A compliant, high-performance CHIETA that is well-capacitated to improve workforce productivity and enhance labour market prospects of employees for sustainable livelihoods
2. Increased enrolments and completion of occupations in high demand
3. Seamless work- integrated learning between training institutions employees and Industry
4. Improved workplace productivity and diversity
5. Improved support to TVET and CET Colleges
6. Skilled and competent Chemical Industry entrepreneurs and cooperatives
7. Better equipped workforce understanding the sector operations
8. Effective career and vocational guidance

The strategic engagements during the 2023/24 planning process deemed it more logical to merge Outcomes 4 and 7 as well as Outcomes 5 and 8 which reduced the Outcomes to the following revised six:

1. A compliant, high-performance CHIETA that is well-capacitated to improve workforce productivity and enhance labour market prospects of employees for sustainable livelihoods
2. Increased enrolments and completion of occupations in high demand
3. Seamless work-integrated learning between training institutions employees and Industry
4. Improved workforce productivity and diversity through structured industry knowledge and capacity building.
5. Improved support for TVET and CET colleges through effective career and vocational guidance system
6. Skilled and competent Chemical industry entrepreneurs and cooperatives

Following the realignment of the Outcomes the indicators and targets were duly aligned and the performance narrative was updated in line with the changes.

In addition to the logic of realigning the Outcomes that belong together, this also serves to reduce the total number of Outcomes while duly maintaining the crucial alignment to the National Skills

Development Plan. This realignment process has no material implication for the implementation of the original Strategic Plan and the future tracking of its impact against the impact statement.

In considering the department’s comments on the CHIETA’s 15 September 2023 first draft submission an update is provided on the Part C: Measuring our Performance section, with the following notes: -

1. In line with the Department of Planning, Monitoring and Evaluation’s Revised Framework for Strategic Plans and Annual Performance Plans, the Strategic Plan span a five-year planning horizon and remains unchanged.
2. This Annexure to the Strategic Plan tracks changes done on the SP during the planning period.
3. The outcome indicators detailed on pages 45-46 and being updated below, as they do not all formulate part of CHIETA’s APP/SLA targets.

OUTCOME		OUTCOME INDICATOR		BASELINE	31 MARCH 2025
1.	<b>A compliant, high-performance CHIETA that is well-capacitated to improve workforce productivity and enhance labour market prospects of employees for sustainable livelihoods</b>	1.1	Implementation of CHIETA Balanced Scorecard Performance Management System (PMS) in support of the effective execution of organisational plans	No baseline	100%
		1.2	Level of Organisational Wide Risk Maturity achieved as per the CHIETA Risk Maturity Assessment Framework, comprising the following four maturity levels: <ul style="list-style-type: none"> <li>• Level 1: Basic</li> <li>• Level 2: Emerging</li> <li>• Level 3: Mature</li> <li>• Level 4: Advanced</li> </ul>	Mature	Advanced
		1.3	Percentage of an end-to-end fully digitised and functional CHIETA	No baseline  Target set for 2025	100%
2.	<b>Increased enrolments and completion of occupations in high demand</b>	2.1	Percentage of learner completions from total enrolments	Enrolments: 4398 Completions: 4078  Baseline: 92,72%	95%
		2.2	Percentage of funded learners absorbed into employment	Current Research to determine absorption baseline	March 2025 target to be formulated on completion of baseline research

<b>3.</b>	<b>Seamless work-integrated learning between training institutions employees and Industry</b>	<b>3.1</b>	Number of organised labour-led interventions supported for re-skilling and to prevent job losses	3	12
<b>4.</b>	<b>Improved workforce productivity and diversity through structured industry knowledge and capacity building</b>	<b>4.1</b>	Percentage of female learners funded	35%	50%
		<b>4.2</b>	Percentage of black professionals funded	39%	78%
		<b>4.3</b>	Percentage of disabled learners funded	2%	4%
		<b>4.4</b>	Percentage DG allocated to virtual training and development	2.4%	20%
		<b>4.5</b>	Number of young Black female learners participating in the STEM Flagship Programme	1 018	3 250
		<b>4.6</b>	Number of remote assessments and workplace approvals	85	205
		<b>4.7</b>	Number of assessment tools for e-learning materials	4	16
		<b>4.8</b>	Number of CHIETA Innovation Hubs established	No baseline Target set for 2025	1
		<b>4.9</b>	Number of research reports on nanotechnology, hydrogen economy, SMME start-ups and green economy	6	18
<b>5.</b>	<b>Improved support for TVET and CET colleges through effective career and vocational guidance system</b>	<b>5.1</b>	Percentage of DG allocated for strategic projects	27%	50%
		<b>5.2</b>	Number of functional Smart Skills Centres established	3	9
		<b>5.3</b>	Number of learners exposed to CHIETA career guidance events	30 032	50 000
		<b>5.4</b>	Percentage of people enticed into careers in the Chemical Industry as a percentage of learners exposed to CHIETA career guidance events	0 Currently no system to measure this. Impact study to assist.	10%
<b>6.</b>	<b>Skilled and competent Chemical industry entrepreneurs and cooperatives</b>	<b>6.1</b>	Number of sustainable start-up businesses supported	69	120
		<b>6.2</b>	Percentage of start-up SMMEs as CHIETA levy-paying members	12%	20%
		<b>6.3</b>	Number of SMMEs supported with innovative skills for growth	576	2 350

Note: The financial projections on (p44) reflect the budgets at the commencement the SP development process in order to have a baseline for impact measurement, and are subject to contextual and environmental changes on an annual basis within the MTSF period, as articulated in the APP.