

SUSTAINABILITY REPORT



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ABOUT THIS REPORT

WELCOME TO THE 2020 SAPREF SUSTAINABILITY REPORT.

THIS IS OUR PRIMARY REPORT TO OUR STAKEHOLDERS. IT PROVIDES AN OVERVIEW OF THE MATERIAL SUSTAINABILITY ASPECTS OF OUR BUSINESS.

SCOPE OF THE REPORT

THE REPORT COVERS THE OPERATING PERIOD 1 JANUARY TO 31 DECEMBER 2020 AND FOCUSES PREDOMINANTLY ON THE REFINERY'S OPERATIONS AT PROSPECTON AND OUR STORAGE FACILITIES AT THE HARBOUR. THE REPORT DOES NOT COVER THE ENTIRE SUPPLY CHAIN OR OUTSOURCED OPERATIONS.

GLOBAL REPORTING INDICATORS (GRI)

THIS IS THE 19TH REPORT PRODUCED FOR OUR STAKEHOLDERS. THIS REPORT IS IN ACCORDANCE WITH SELECTED GLOBAL REPORTING INDICATORS (GRI).

INDEPENDENT ASSURANCE REPORT

THE AUTHENTICITY AND ACCURACY OF THE REPORT'S CONTENT HAS BEEN ASSURED THROUGH A REVIEW BY THE INTERNAL AUDIT TEAM.

TO THIS END, THE INFORMATION THAT HAS BEEN VERIFIED IS INDICATED BY THE \checkmark SYMBOL AFTER CERTAIN DATA AND STATEMENTS,

DEMONSTRATING THAT THE INFORMATION HAS BEEN VERIFIED BY THE AUDITORS.

INTERNAL AUDITOR'S STATEMENT

With the mandate of the Managing Director, the Internal Audit Team, that is responsible to provide independent assurance for the organisation, reviewed the 2020 Sustainability Report. The review was conducted to verify certain statements and performance related data contained in the Report based on random sampling.

Work Performed

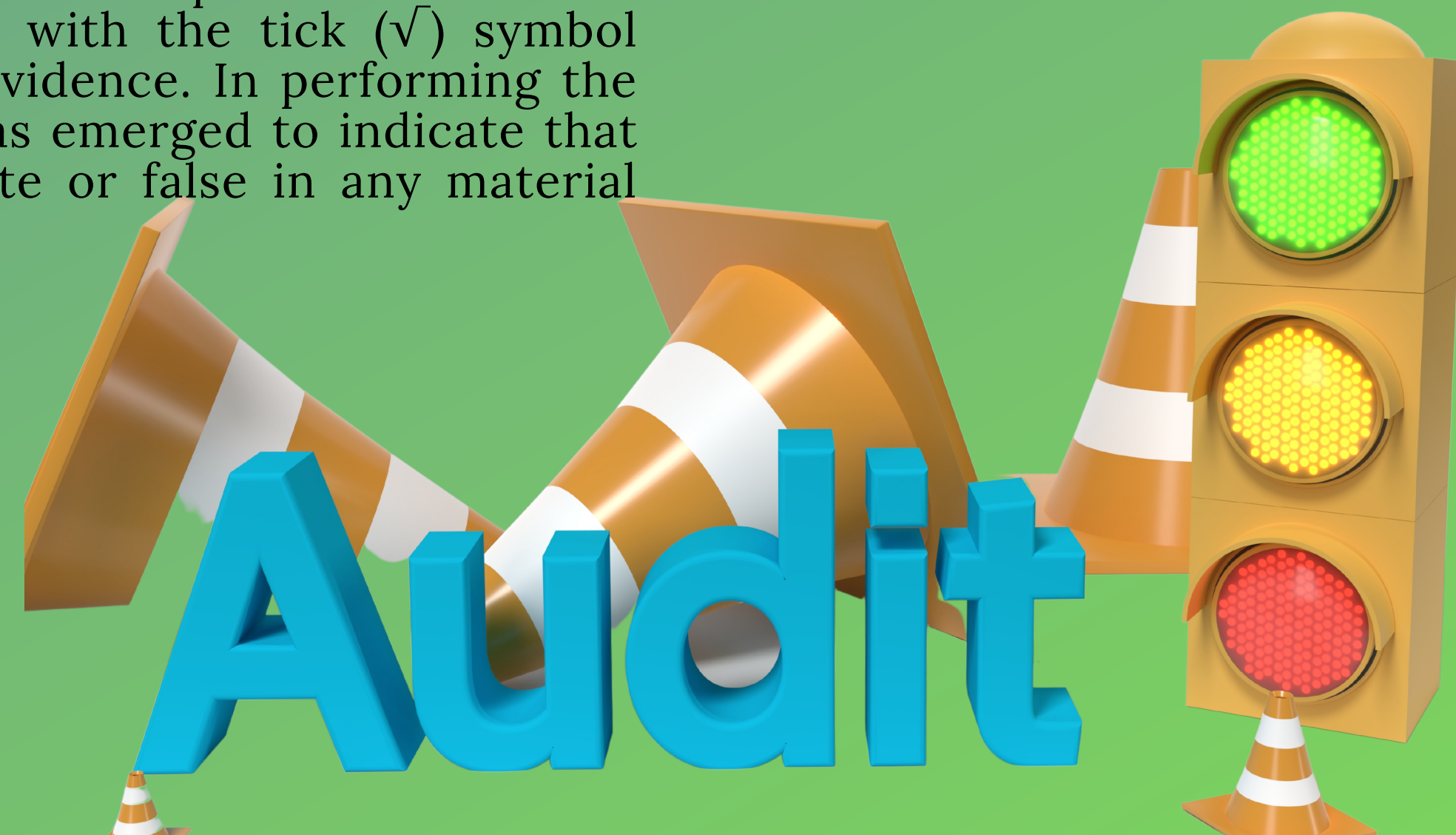
The review was conducted virtually based on the current way of working due to the Pandemic. The following work was carried out for the reported information that was selected for verification:

- Evaluated the systems, processes and controls used for recording and reporting the information;
- Reviewed content and supporting documents and where required requested additional information;
- Verified calculations and statistics provided;
- Conducted interviews to confirm stated actions and activities.

Conclusion

The preparation and content of the 2020 Sustainability Report is the responsibility of the management of SAPREF. The internal auditor's responsibility is to provide assurance that the Report is free from material misstatement. The internal auditor carried out this responsibility in an independent and objective manner with due care and professional competence. Based on the work performed and the evidence obtained, all statements and performance related data marked with the tick (√) symbol throughout the Report have been verified and supported by appropriate evidence. In performing the review of the Sustainability Report for the selected sample, no evidence has emerged to indicate that the statements and performance related data in the Report are inaccurate or false in any material respect.

**Chief Internal Auditor
SAPREF**



MD'S MESSAGE



Sustainability at SAPREF means Safe, Reliable and Profitable Operations done in a Responsible Way. Our goal is to be a respected member of the community in which we operate, contributing to the wellbeing of our employees and stakeholders.

Our personal and process safety performance has shown much improvement over time, proving that the effective implementation of our safety management system is yielding results. Our Goal Zero ambition of no harm and no leaks is driving a desired culture of risk competence and continuous improvement with a belief that work must and can be done safely. The TRCFR has been trending down over many years and in 2020 we saw a long period without any injury, achieving a total of 396 injury free days from 2019 to 2020. We continue to progress our safety improvement journey with the introduction of a Serious Injury and Fatality prevent program based on Human Performance principles. In addition, we strengthened our safety culture with the re-introduction of Stop Work Authority.

2020 has been an unprecedented year due to the COVID-19 pandemic. The pandemic claimed lives of many people globally including 6 of our dear colleagues at SAPREF. For SAPREF the second COVID-19 wave claimed 5 of the 6 lives lost. Throughout the pandemic our priority remained to Protect the Health and Safety of our People by implementing strict COVID-19 protocols and new ways of working through digital tools thereby minimizing the risk of infections for our staff. Our staff displayed absolute resilience and adaptability in the face of the ever-increasing uncertainty caused by the pandemic. Our frontline teams continued to operate our assets to support the economy and necessary infrastructure need to combat the pandemic. SAPREF supported local clinics with supply of face masks, goggles, and sanitisers.

As a respected member of the community we must also operate responsibly to safeguard the environment and stay within the environmental operating limits. We continued to focus our efforts on the efficient use of resources like water and reduced waste generated from our operations. The number of loss of containment events remains a key focus area on our path to achieve our Goal Zero ambition of no leaks. In 2020 we streamlined our loss of containment reduction plan to be more focused, driving ownership within the various asset teams. Since the implementation of the revised plan, we've seen a significant reduction in leaks, achieving 100 days without a major leak in the last quarter of 2020.



MD'S MESSAGE

The SAPREF Code of Conduct is a good guide for ethical conduct. We must show absolute integrity every day – meeting the ethical standards that SAPREF and society expects. The Code of Conduct is very clear that it is not enough for our actions and behaviours to be legally sound but they have to be ethical as well. We must take a broad view that also considers the wider implications of our commercial choices and our stakeholders' view of them. We have taken deliberate step to improve ethical conduct and reinforce the behaviours we expect – all leaders must set the tone from the top.

2020 saw SAPREF continue to optimize our energy efficiency performance lowering SAPREF's Energy Intensity Index. We are making progress with increasing our use of reclaimed water instead of fresh water and saw a significant reduction in waste volumes disposed to landfill. Our interventions on air emissions allowed us to meet compliance to the new minimum emission standard introduced in April 2020.

Meeting society's expectations means playing a positive role in our fence-line communities and society at large. We do this by creating jobs, developing talent and using local suppliers. This year SAPREF obtained a Level 3 BBBEE status with full scores obtained on the ownership and socio-economic development elements. Our enterprise and supplier development element also scored high for a company in our industry. We also invest in education programmes to equip young aspiring engineers, artisans and scientists with the tools and skills needed to contribute to our business and the economy. Our Training Centre is fully accredited by the Quality Council for Trades and Occupation (QCTO) and the South African Qualifications Authority (SAQA) to provide Learnerships and Apprenticeship programmes. Learners were recruited through our partnership with local community, schools and educational institutions.

The Sustainability Report outlines our activities during 2020 building on our actions with much progress. We continue to make a real contribution to people's lives with a focus to protect and run the business while preparing for the future.

I would like to thank the Internal Auditing Team for verifying the authenticity and accuracy of the report.



ABOUT SAPREF REFINERY



Shell & BP South African Petroleum Refineries (Pty) Ltd; (SAPREF) is a joint venture between Shell SA Refining and BP Southern Africa. SAPREF is the largest crude oil refinery in sub-Saharan Africa with a refining capacity of 8.5 million tons a year. The Refinery was established in 1963 and has over 700 employees.

SAPREF manufactures a variety of petroleum products in different grades, including petrol, diesel, paraffin, aviation fuel, liquid petroleum gas, base oil, solvents and marine fuel oil. Situated in Prospecton, it is home to some of South Africa's top petrochemical professionals. SAPREF's facilities are of national strategic importance and the site is therefore covered under the National Key Point Act. In 2020 SAPREF was a level 3 BBBEE contributor. It is ISO 9001 and ISO 14001 certified.



OUR VALUES

Safety
Respect
Teamwork
Responsibility
Honesty & Integrity

OUR VISION

Through safe, reliable and profitable operations we will be the best refinery in South Africa and competitively placed against refineries in Asia Pacific, thus remaining a partner of choice to our employees, shareholders and our community.





bp

BUSINESS COMMITTEE
BUSINESS ETHICS COMMITTEE
SOCIAL & ETHICS COMMITTEE
SAFETY & INTEGRITY COMMITTEE
BUSINESS ASSURANCE COMMITTEE



VICTOR BESTER
Managing Director

SAPREF IS OWNED BY SHELL AND BP SOUTH AFRICA.

THE REFINERY LEADERSHIP TEAM, LED BY THE MANAGING DIRECTOR REPORTS INTO THE BOARD WHICH IS MADE UP OF SHAREHOLDER REPRESENTATIVES.

THE BOARD HAS SUB-COMMITTEES THAT DEAL WITH DIFFERENT ASPECTS OF THE RUNNING OF THE BUSINESS.



NINGSI KHUMALO
Finance



CHRIS KALABA
Engineering



LINDIWE KHUZWAYO
Human Resources



RICARDO VALBUENA
Maintenance



JOHN VAN BELKUM
Production



KOOGAN GOVENDER
Commercial



RODNEY YOULDON
Strategy Advisor



LUBIN SCHABALALA
Health, Safety, Security & Environment



ASHLEY BILLAT
Programme Management Office

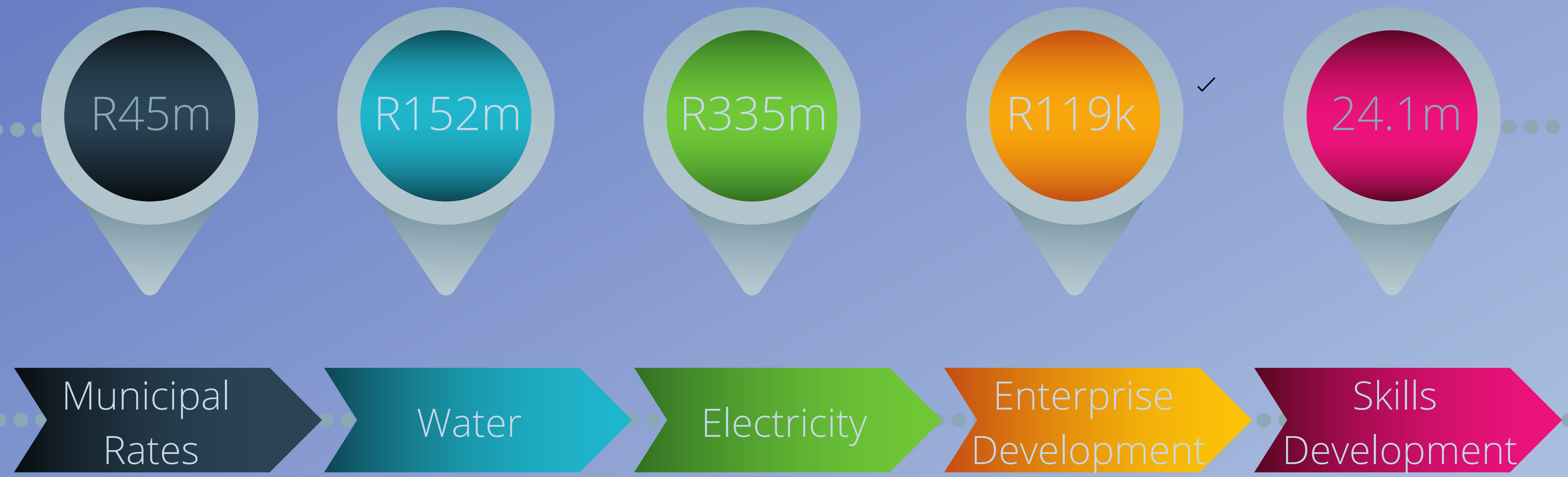


SAMI SAPMAZ
Technology



ROMANUS DINDI
Information Technology

ECONOMIC CONTRIBUTION



SAPREF managed to retain its level 3 BBBEE Scorecard rating during the 2020 verification. This continued performance in the BBBEE space is evidence of SAPREF's commitment to the broader development agenda. ✓

Above are figures of how much SAPREF spent on key economic contributors in the year 2020.



REFINERY PERFORMANCE



Safe, reliable and profitable operations, these are SAPREF's long-term sustainability levers. In 2020 SAPREF had to shine in proving itself as a reliable supplier of VLSFO (Very low sulphur fuel oil), as the only producer in the Southern African region, as the IMO regulations came into effect at the beginning of the year.

The total crude processed in 2020 was 5.4 million tons, of the available design capacity of 180 000 barrels per day (or 24550 tons per day), which is crude type dependant. The crude slate consisted of 71% African crudes a significant increase from the previous year of 66%, the rate was also mainly impacted by the COVID pandemic, which impacted market demand. The production consisted of approximately 26% marine fuels and specialities, 29% petrol and 38% of Jet and diesel fuels. ✓

Planned shutdowns executed during the year:

- Visbreaker had its annual maintenance in February.
- The SBM underwent its annual maintenance during May and the work was executed safely.
- The North Zone complex had a planned maintenance pit stop in May that presented an opportunity to address a number of units to restore efficient operations.

Operational Constraints:

In the first quarter of the year the refinery was constrained mainly reliability and integrity issues related to key equipment as well as disruptions from external power outages. As we commenced the second quarter there was a national lock-down announced in South Africa, in response to the COVID pandemic. In this period, we also coincided with the work which had been planned for the NZ complex as well as repairs that needed to be done on the PFU -F3202.

The third quarter continued to see low demand due to COVID restrictions, however we also had a disruption on the FCCU where low catalyst activity impacted the unit performance. Our final quarter had a number of disruptions from our utilities substation failure, which resulted in the whole site being down to multiple constraints on FCCU due to performance issues on K6101/2 as well as a leak on E6101 and a VBU tempered water incident as well, which impacted a number of units.

Unplanned Shut downs:

- The diesel hydrogen desulphuriser unit (HDS1B) feed / effluent exchanger leak outage continued into January from the previous year (December 2019).
- The Sulphur recovery unit (SRU4) experienced a main burner (M8502) shell failure in January .
- The planned Visbreaker unit outage in February required an extension into March and April for further maintenance activities.
- The Deep Flasher Unit (FP2) Furnace - F7701 air preheater intervention was executed in March.
- The North Zone and Lubes complex were shut down for the Lube Oil High Vacuum unit (HVAC-C4102) outage in April.
- The refinery was shut down in April and May for the PFU waste heat boiler (F3202) intervention.
- The Utilities substation fault (sub 27) resulted in a refinery outage in November.
- The Visbreaker unit and parts of Fuels refinery was shut down due to a tempered water system outage in November and December.
- The FCCU unit experienced multiple outages in the second half of the year (absorber reboiler flange leak - E6253, main air blower outage - K6101, reactor R6102 regen stem pipe outage and compressors (K6101/K6102) intervention at the end of the year.





STAKEHOLDER ENGAGEMENT

Most of our planned engagement programmes had to be suspended due to the lockdown. But, we soon learnt new ways of working and starting to implement them. Therefore, 2020 saw us hosting our very first Virtual Take A Child to Work Day which was attended by over 10 schools that had never visited our refinery before as well as children of employees. This programme offered high school learners an insight into the careers that exists in our refinery. This was presented by our young newly qualified professionals.



In response to the COVID-19 pandemic, we engaged our local municipal clinics to ascertain their needs as the call for personal protective equipment (PPE) was heard nationally. We confirmed that this was the case for our neighbours as well. We then donated from our stock of PPE; masks, goggles and sanitizers. Donations of masks and sanitizers were also made to Old Age Home and Orphages in our neighbouring communities.

Our Community Liaison Forum was suspended for most of the year. However, virtual meetings commenced towards that end of the year. SAPREF continues to keep its stakeholders informed of refinery updates a number of communication channels. The main channels are the bulk sms system as well as the Facebook page (SAPREF Refinery).

We look forward to more engagements with our stakeholders in 2021.

HUMAN CAPITAL

Our Refinery requires constant focus on skills development in order to ensure sustainability and to maintain good performance. Our journey towards achieving safe reliable operations is strongly supported by comprehensive skills programs so that these key objectives are met. Therefore, in 2020, the business continued to strengthen its efforts towards achieving a highly competent workforce and a strong talent pipeline through a number of Skills Development initiatives.



Technical Development

Ensuring capability within our production department is one of the major focus areas in terms of the People Agenda. In 2020, the business appointed 4 interns into permanent operator positions after they had successfully completed their structured internship programs. In addition, 71 employees were promoted within the organization after successfully achieving various competencies and other requirements linked to their career paths.

SAPREF has recognized that despite the learners being Trade Tested, the lack of work experience makes it difficult for learners to secure employment. Therefore, the company has extended its program to provide a two-year Internship program in the Maintenance space. With the implementation of the Artisan and Technician Internship programs in Maintenance, 4 previous learners from the Apprenticeship and In-service training programs were recruited into this program. In 2020 18 of the Interns whom completed a year Internship were promoted into permanent roles as Artisans or Technicians. ✓

Staff Education

In 2020 we invested R939 342 towards developing our staff, 31 of our employees studied various training programs at tertiary institutes in line with their Personal Development plans. ✓

HUMAN CAPITAL



Investing in School Programs

Our talent school pipeline program supported 60 learners with bursaries to complete grade 11 and 12 in various high schools around the Durban South Basin. This flagship program aims at building relation between high school learners and the engineering sector by providing financial support as well as industry exposure and mentorship to the selected Mathematics and Science learners. Our investment of R317 750 in 2020 is a continuation of our efforts towards empowerment of unemployed youth, with a hope that the beneficiaries of this program will build successful careers in the engineering sector of our economy.

University Bursaries

SAPREF offers a bursary program to university students to study towards BSc Engineering degrees in different disciplines. The business made a contribution worth R1.99 million to support 20 university students. Each SAPREF bursary covers tuition, residence fees, books, meals, a monthly allowance as well as exposure to refinery operations during school vacation.

The bursary program feeds into a pipeline of our graduate engineer program that trains qualified graduates in the workplace in order to gain industry experience.

Investing in Learnerships

An additional 21 unemployed youngsters joined SAPREF Training programs to pursue various CHIETA accredited programs such as chemical operations and analytical chemistry. The total investment of R 2.8 million ensured that we grow our own future talent by providing qualifications and experience to youth so that they are employable in the rest of the chemical industry. ✓

Some of the learners in our Learnership school are trained through the Isipingo – based, Durban South Training Trust (DSTT), where provide artisan training in boiler making, welding and mechanical fitting from the Durban South community. In 2020 this part of the program invested R 5 million towards training 126 learners. ✓

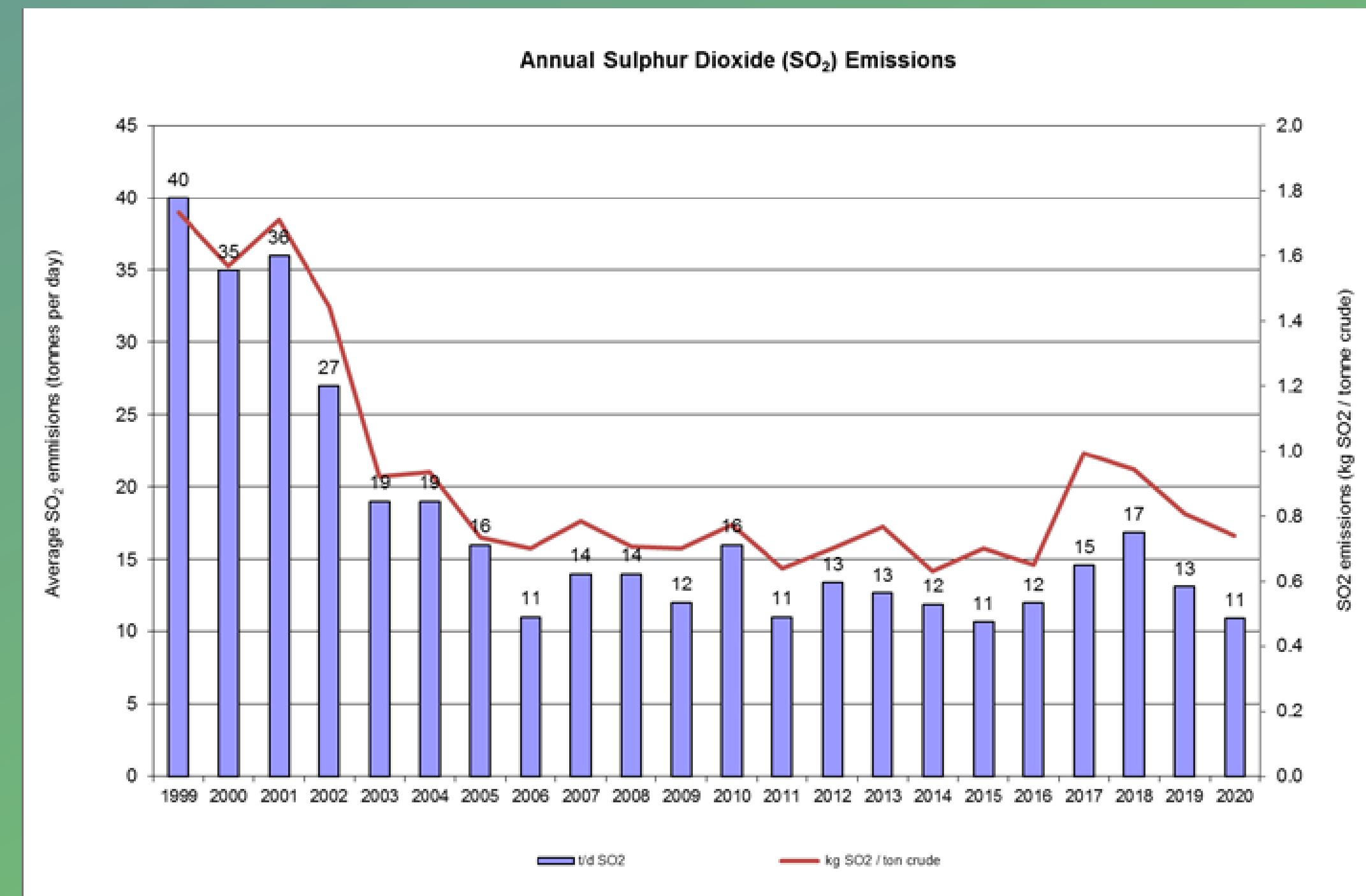
ENVIRONMENTAL PERFORMANCE

SAPREF is committed to carrying out our business in such a way that the health and safety of people, both on and off our sites, is not endangered and that the impact on the environment is minimized. We aim to comply with environmental legislation, continually improve our performance and prepare for Environmental legislation changes and opportunities.

Our Environmental Management system is ISO 14001:2015 certified and also complies to the Shell HSSE Control Framework standards which provide minimum compliance requirements for Air Emissions, Greenhouse gases, Waste and Water management. We frequently review our environmental risks and opportunities and ensure that management plans are in place for all our significant environmental risks.

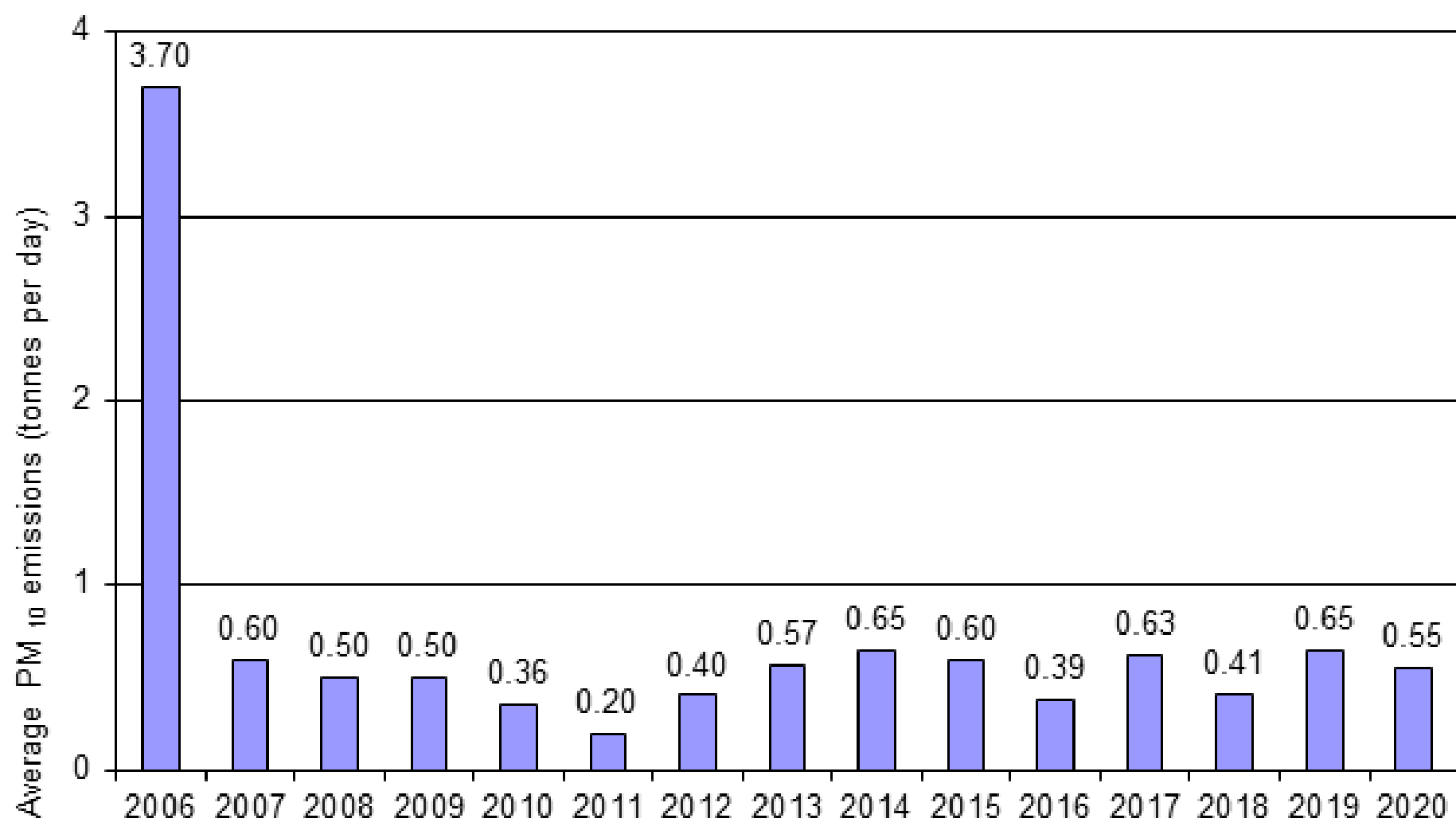
AIR EMISSIONS MANAGEMENT

SAPREF monitors its emissions of priority pollutants, namely sulphur dioxide (SO₂), nitrogen oxides (NO_x) and particulate matter (PM₁₀) and reports performance to the relevant authorities as per specified time-frames. In 2020 being a challenging year due to COVID-19; we continued to strive for compliance to environmental legislation and continued with engagement with our stakeholders.



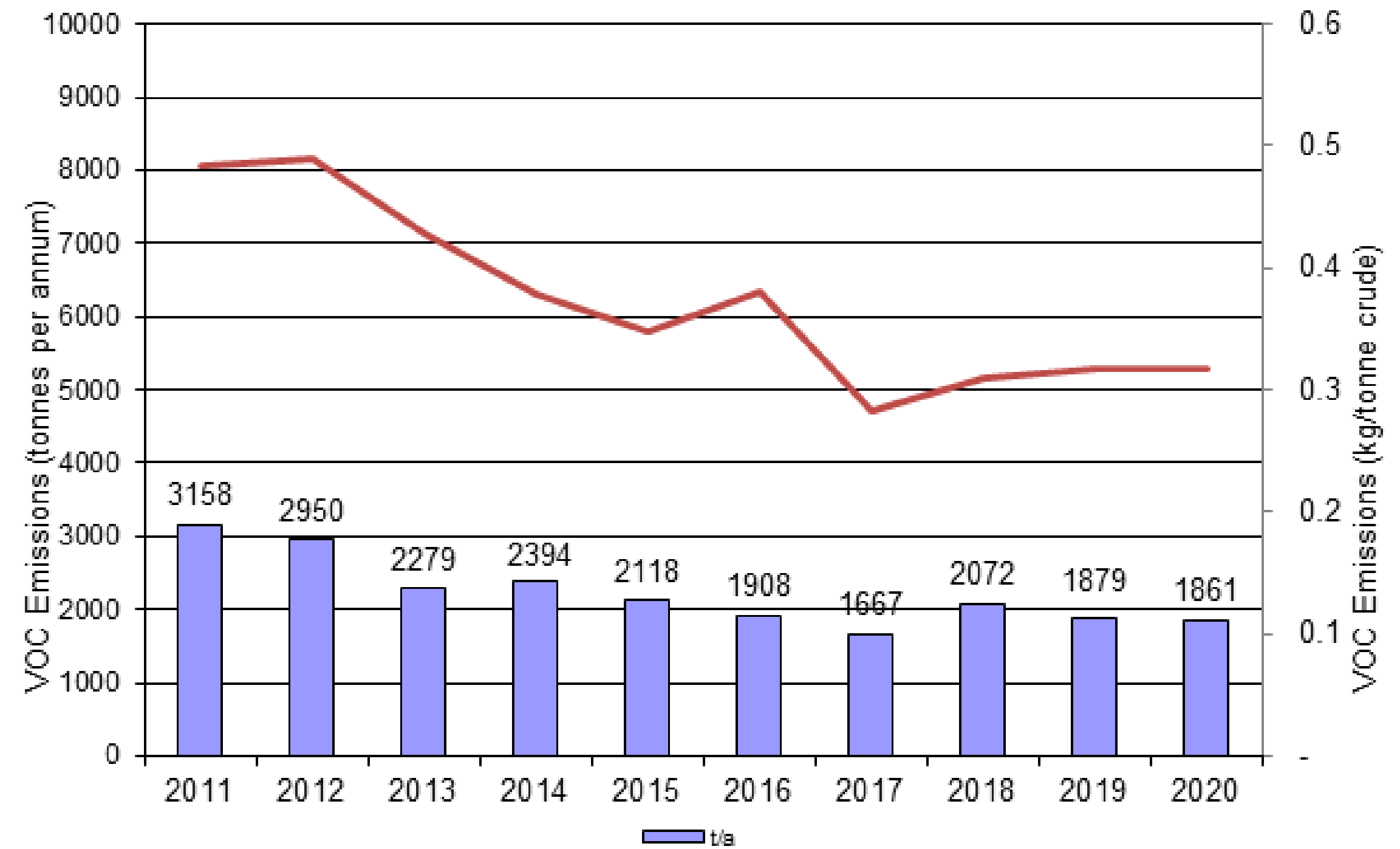
The graph above indicates, the average SO₂ tons per day for 2020 showed a reduction from 2019. This is due to the change to low Sulphur crude in one of our crude distiller units. The graph above indicates on the secondary axis, the average performance in “kg SO₂ /tonne of crude throughput”. ✓

Particulate Matter (PM₁₀) Emissions



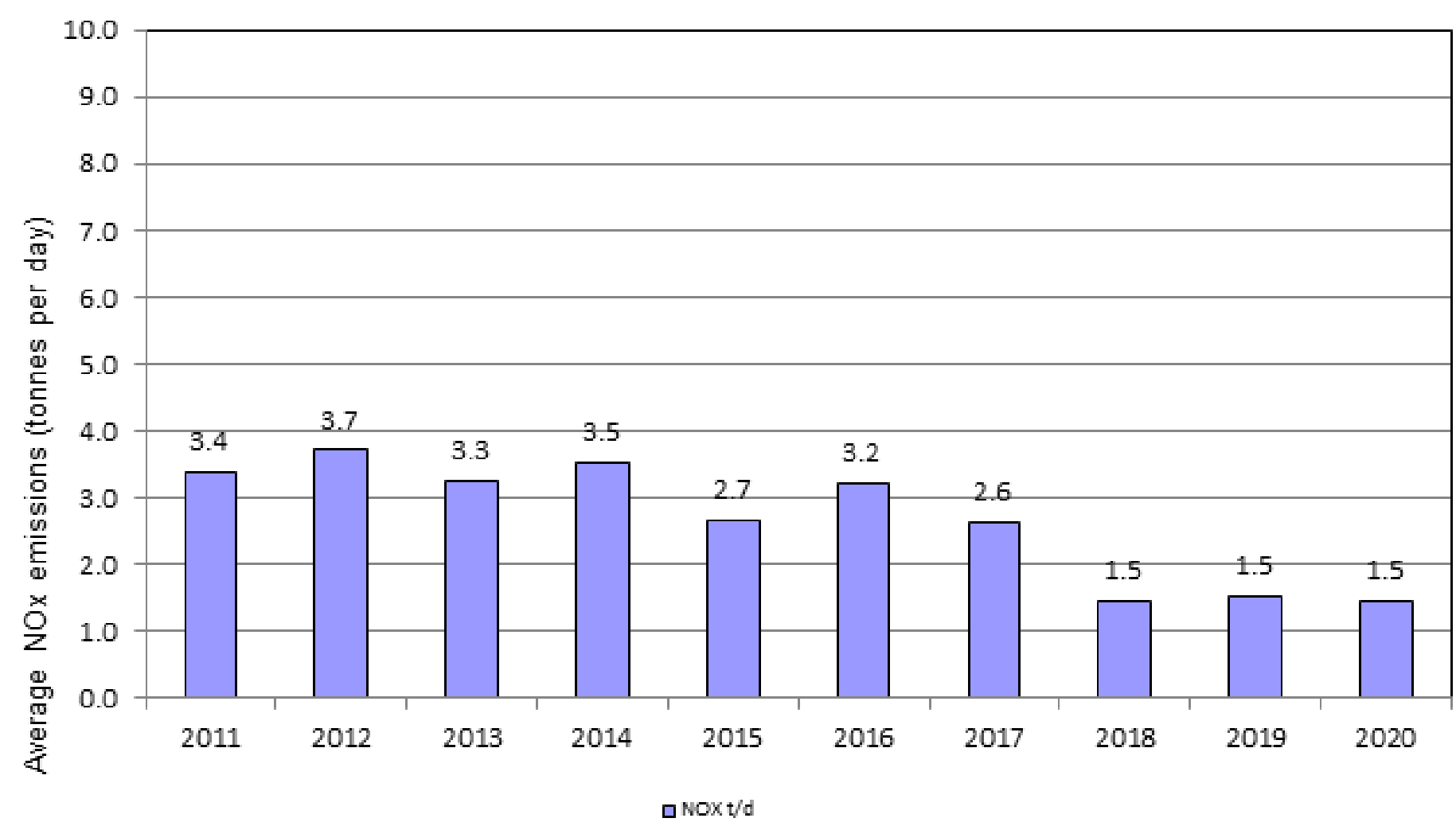
Since 2007, SAPREF has achieved a reduction of more than 85% in PM10 emissions through utilizing cleaner burning fuels, capital investment and operational improvements. Planned maintenance on the FCCU in 2021 and 2022 is expected to provide further reductions in emissions.

Average VOC Emissions



The main contributor to VOC emissions are fugitive emissions from tanks and equipment. The installation of double seals on floating roof tanks has contributed to the reduction in VOC emissions. In addition, SAPREF has a well established Leak Detection and Repair (LDAR) Programme which was implemented in 2005 and assists us with identifying sources of fugitive VOC emissions within the refinery through the use of an infra red camera. Annual surveys are followed by a repair programme.

Nitrogen Oxide (NOx Emissions)



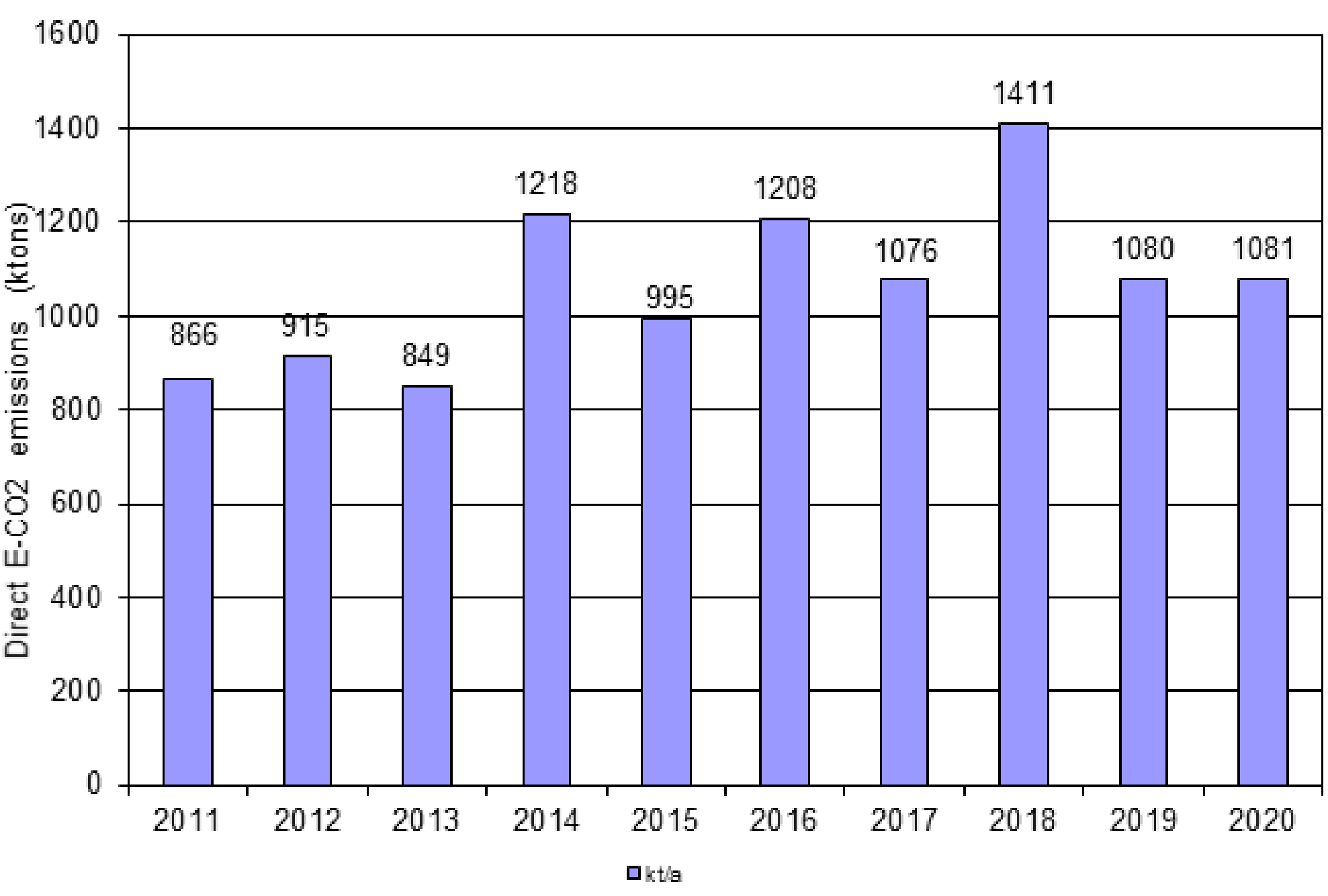
NOx is impacted by crude throughput and the blend of fuels used in the refinery operations. In 2018, the NoX concentrations reduced due to changes in the FCCU feed quality. This reduction has been sustained in 2019 and 2020.



Green House Gases

The reported green house gases comprise of the direct CO2 and equivalent methane emissions. Reduced emissions in 2017 are due to the maintenance Turnaround. 2018 was a non-turnaround year which resulted in increased emissions. Reduced emissions in 2020 (when comparing with previous non-Turnaround year) was due to a planned maintenance shutdown which was extended in duration due to the Covid-19 pandemic.

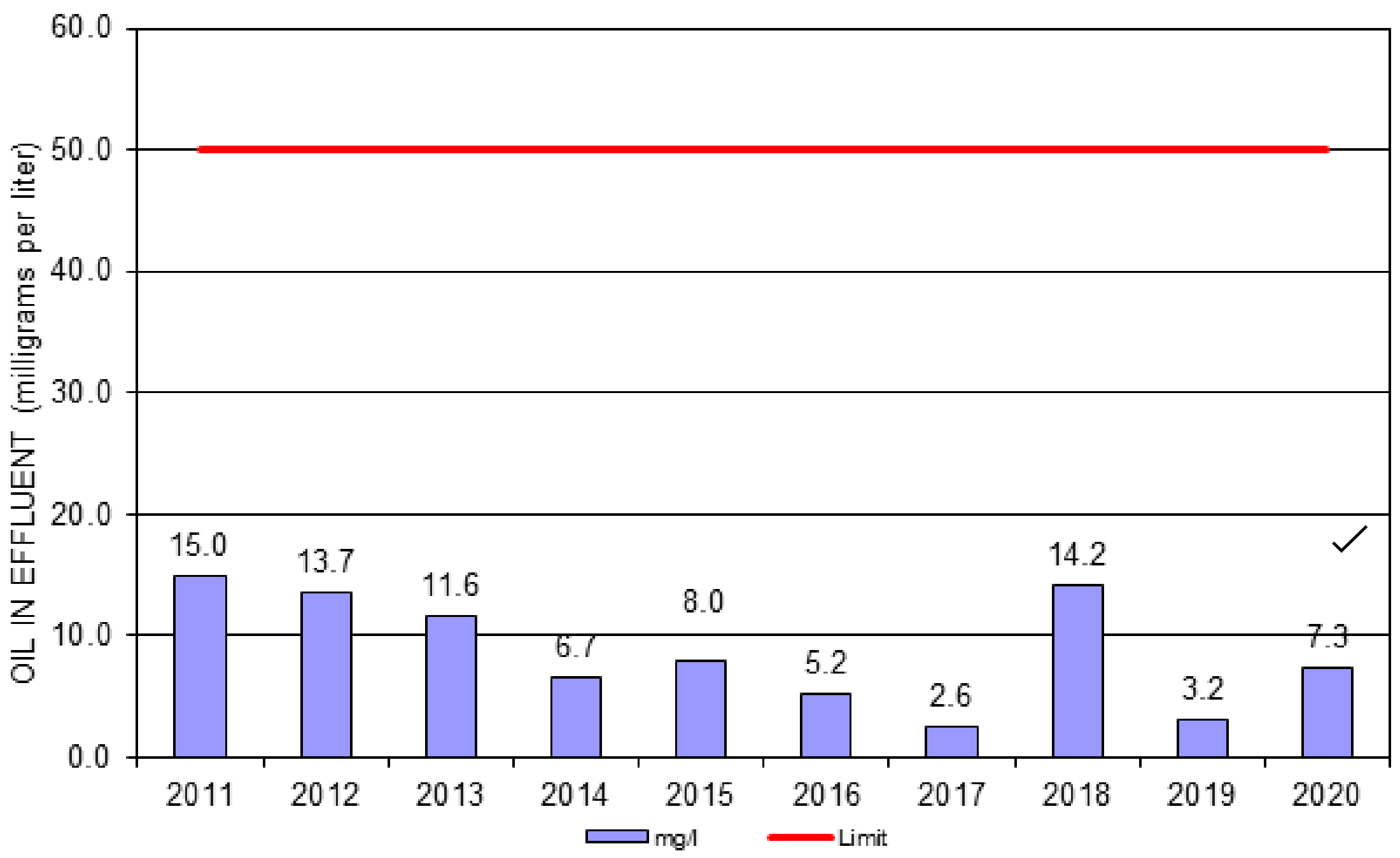
Direct E-CO2 EMISSIONS



Fence line monitoring

SAPREF runs an independent external fenceline air monitoring programme for benzene, toluene, ethylbenzene and Xylene (BTEX). The 2020 results show the annual average for total benzene at the fenceline is 0.83 micrograms per meter cubic, which is well below the National Ambient Air Standard of 5 micrograms per meter cubic. ✓

OIL IN EFFLUENT



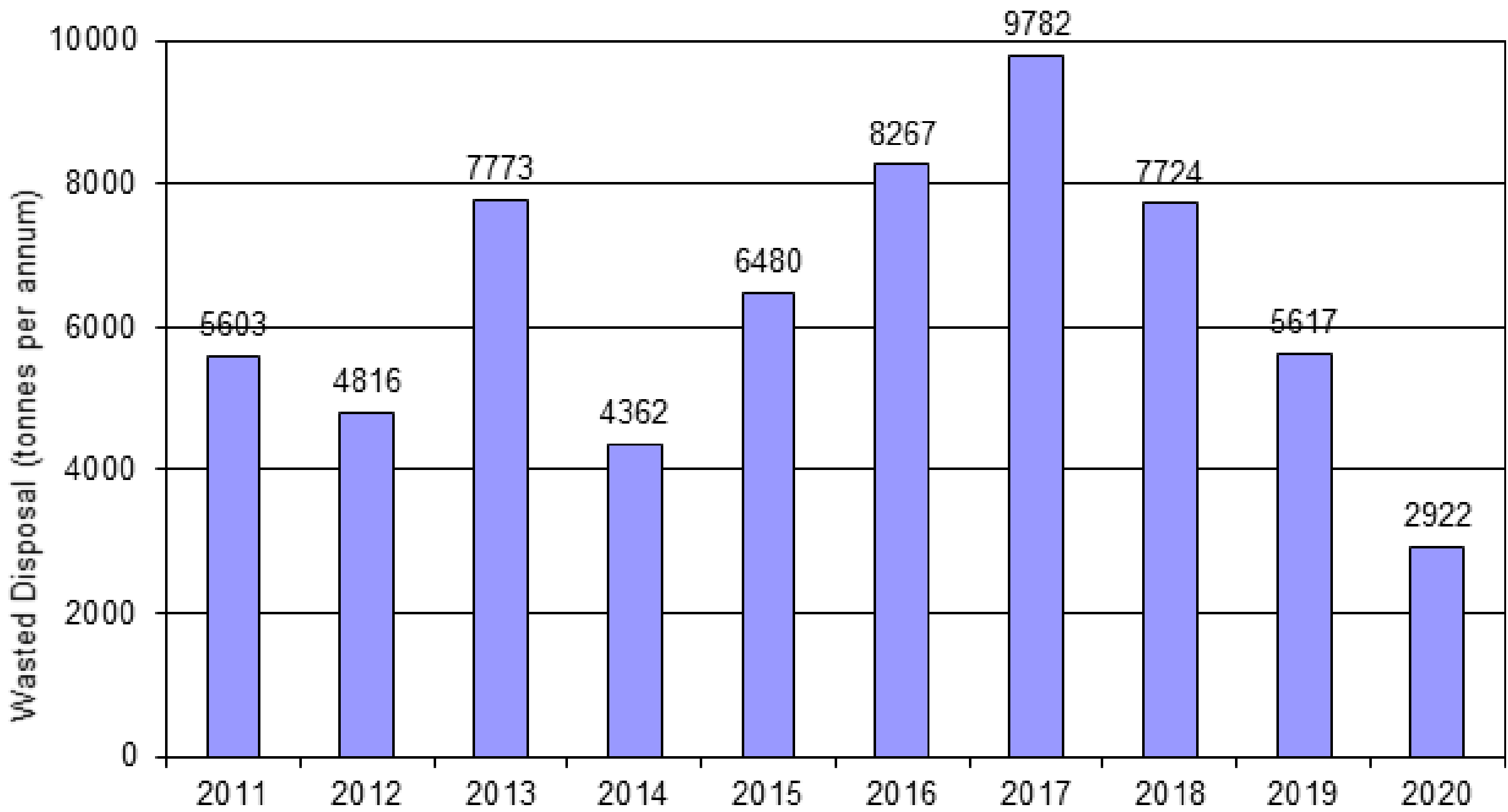
The average oil concentration in effluent has been below 20 mg/l since 2009 compared to the specified limit of 50 mg/l. The introduction of online cleaning of Crude Tanks contributed in maintaining average oil concentration in effluent at below 20mg/l.



Management of Waste

The reduction in non-recyclable waste volumes in 2020 was largely due to the reduced number of people onsite and the related reduction of maintenance work. Although SAPREF was not required to shutdown at any stage of the Covid-19 lockdown, the numbers of people onsite were reduced as a precaution to minimize the potential for Covid-19 infections.

Non-Recyclable Waste



In 2021 we will focus on the following:

- Ensuring compliance with all applicable legal requirements;
- Maintaining consistent ambient performance as measured by the eThekweni ambient monitoring stations;
- Implementing projects to ensure compliance to current and future air quality, effluent and waste management regulatory standards within specified time-frames;
- Continue to look for opportunities for water and energy conservation.



HEALTH PERFORMANCE

The engagement with service providers and our own staff with the aim of gaining their input in managing key health related hazards is taken seriously at SAPREF. Some examples of such engages are detailed below:



- Health is represented in workforce Health and Safety committees to enable active involvement and consultations on health risk management.
- SAPREF also has a multidisciplinary team (including Service providers) responsible to assess, evaluate and select PPE to be used at SAPREF sites.
- Pro-active health risk reporting via the continuous improvement reporting system and BBS observations reporting, service provider Eyethu programme i.e. Contractor peer to peer observations and intervention programme.
- Management of change processes where health risks are considered in case of process changes and new projects.
- We utilised online tools for travel and health declaration forms, online symptom screening tool.
- Mental health support to site via ICAS which is our employee assistant program.

The objectives of Occupational Health are to support the site in the execution of safe, reliable and profitable operations..

It is also to protect the health of every person on site through early detection of adverse changes which may be attributed to exposure to hazardous agents and thus enable appropriate action to be taken;

- coordinate the collection of data for the identification and evaluation of agents hazardous to health.
- to assist in the evaluation of exposure control measures and to advise the company thereof;
- to provide assurance on health risks controls.
- to manage Covid-19 risks onsite for our employees including business continuity risk management and;
- to ensure management of workplace injuries, occupational illnesses and diseases.



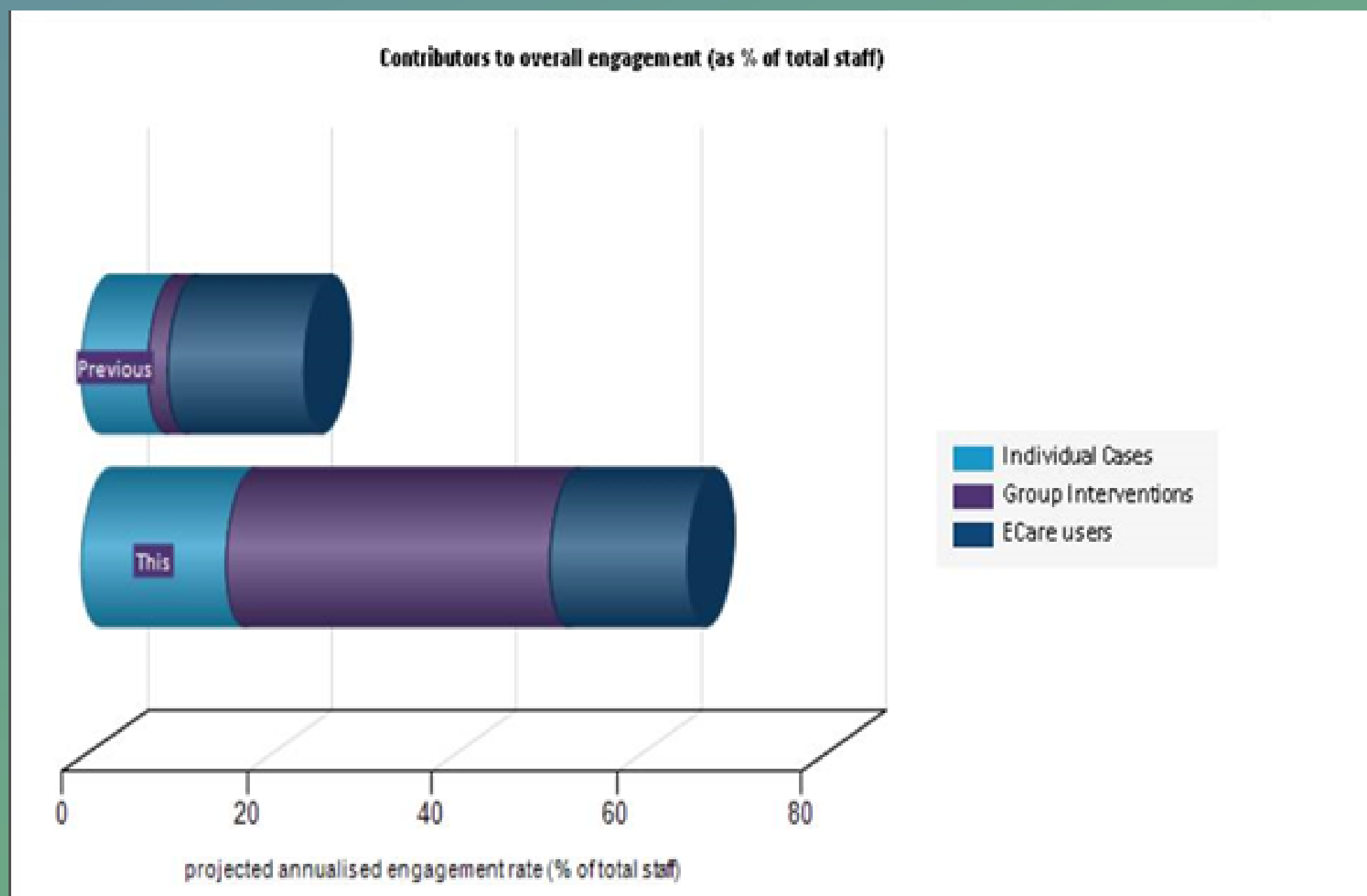
HEALTH PERFORMANCE

We seek to enhance the physical and mental wellbeing of our employees by providing the following:

- ICAS (SAPREF Employee Assistance Programme partner company) online services staff mass enrolment – for wellness information, self-assessments, Talk to the specialist service etc. Group debriefing, resilience training for leaders, information has been entered on our Business Management System for easy access. this has led to increased usage.
- Employees were encouraged to take flu vaccines.

Rigorous follows up via access control are done by the on-site Occupational Health Clinic on personnel with risk factors.

Increased ICAS utilisation by employees and their families: 2020 (Refer to Figure 1 below).



Our approach in relation to health engagement process is Near Miss Reporting, Hazard Communication via induction, Toolbox Talks, Signage and inclusion of staff and service providers in risks management.

OCCUPATIONAL HEALTH

Our occupational health programme seeks to prevent and mitigate Occupational Health risks. We analyse, monitor and manage exposure and provide preventative measures for a range of issues.

The following health assurance processes are in place to test existing control measures:

- Occupational Hygiene Surveys. ✓
- Canteen inspections –there were no food poisoning incidents reported during the reporting period and quarterly assurance returned minor findings.
- Legionella management assessments – All Cooling water towers (CWT) were under control during the reporting period. ✓
- Drinking water management- samples of the site drinking water were taken for analysis and corrective actions conducted on all that were out of specification ✓



HEALTH PERFORMANCE

OCCUPATIONAL ILLNESS TRENDS

2x SO2 down draft Occupational illnesses related and 15x COVID internal transmission related Occupational illness cases reported, these were three service providers and 12 SAPREF staff (Refer to Figure 2 below).

Occupational Illnesses Trends



We continued in implementing and maintaining exposure controls. These included active participations of Occupational Hygiene team in HAZOPS and High level TRA's. it also included COVID administrative controls improvements whereby employees were put on rotational base and administrative roles working from home. We had site wide virtual expert panel discussions for dealing COVID AT WORK. These were aimed to assist employees to get expert advice as well learn coping skills from those who have had the experience. We had continuous COVID health risk assessment site verifications and support.

Plans for 2021

- Virtual training of staff on hazardous chemical agent, noise and legionella.
- Covid-19 Management.
- Ergonomics regulations compliance plan and its execution.
- Develop Ergonomics Electronic learning module.
- Noise reduction plans - including installation of silencers and acoustic insulation.
- Embed use of Respiratory Protective Equipment during Welding activities, sampling and draining of VOCs (benzene containing streams).
- 2021 Turnaround projects Mercury Management support.

Long Term Plans

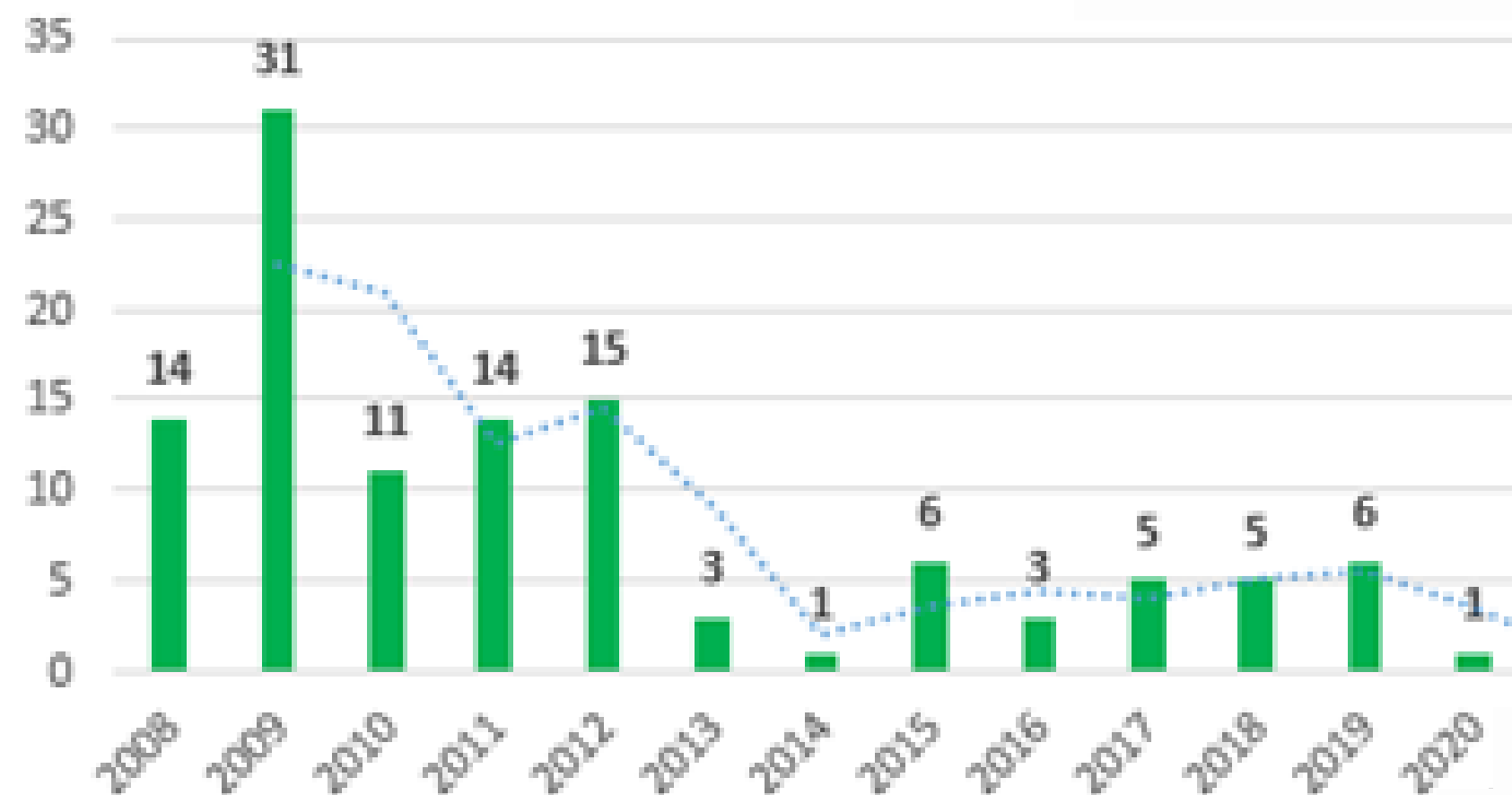
- Extension of the Clinic to improve capability to handle multiple casualties.
- Noise reduction plans implementation e.g. installation of Engineering controls.
- Develop Health mandatory training (HCS, NIHL, Legionella) Electronic Learning modules.
- Re-engineer the few outstanding Benzene containing sampling points to Dopak type.



SAFETY PERFORMANCE

Health and safety is core to our “Goal Zero” vision – this is our relentless pursuit of our zero harm vision where everyone goes home unharmed at the end of the every day. To maintain a healthy and safe work place, we know it’s about more than just policies and procedures – it’s about building a culture of health and safety alongside our employee well-being. “Goal Zero” is our commitment that we will continually strive to reach the highest standards of health and safety for our own staff as well as our Service Provider colleagues. To this end, in 2020 we engaged in a number of initiatives One of those initiatives was the launching our Stop Work Authority. This empowers and encourages our frontline workers to step up and stop work should they believe that there is potential for an incident, and to then be part of the corrective action team that addresses the concerns.

Cumulative TRC's



We believe that all incidents, no matter how small are avoidable and provide opportunities for learning through structured and focused methods. This supports the intent of reducing the number of incidents and nourishes our Safety Culture to bring about continuous improvement. Among the items in our Action Plan are:

- Learning from Near misses, with Deep dives on selected HiPo Near misses – distil and prioritise themes and interventions.
- Continue to drive Goal Zero mind-set and behaviours.
- Drive Safety stewardship at all levels.
- Conduct field assurance checks on High risk activities and Permit to Work.
- Focus on Contractor Safety Leadership by improving the effectiveness of Contract Holder & Contractor leadership partnership.

“ The graph shows our 2020 Personal Safety performance. A Lost Time Injury occurred in our Stores area in the latter part of the year when an employee was startled by an aggressive monkey, causing him to lose his footing and sustain a fracture to his foot. He has recovered well from his injury. ✓ ”



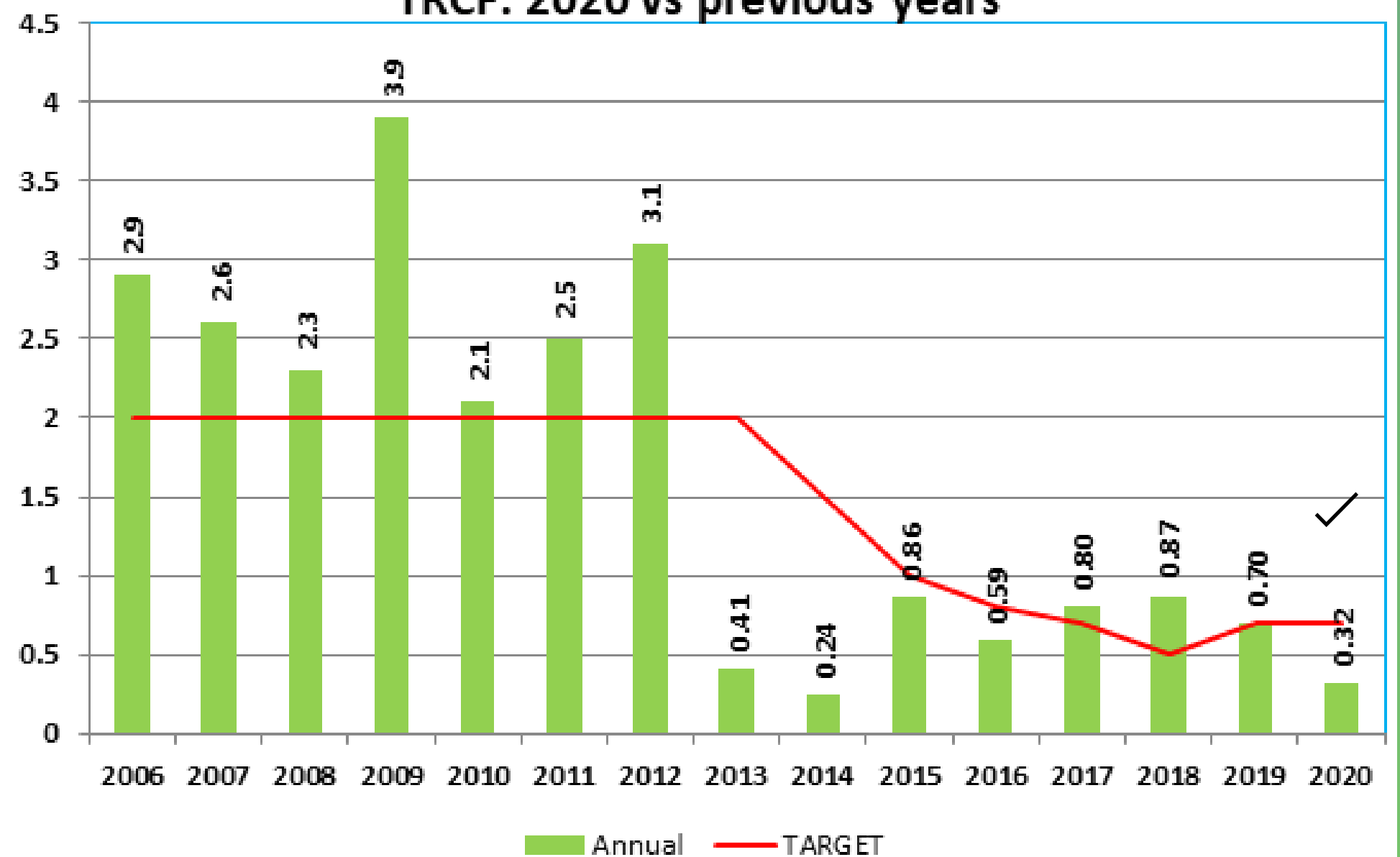
In 2020 COVID-19 became a reality that led to life-altering circumstances, which brought about renewed emphasis on our Behavior Based Safety (BBS) process with changes in our Inventory of Critical Behaviors (ICB). This pinpointed critical COVID-19 exposure reduction behaviors observed and practiced. It also assisted us to focus on methods and systems to ensure the health and safety of all on site. Focus was given to the sensitivity of Leaders to mental state of the workforce, during this time.

In addition, we continued to focus and plan for the upcoming decentralization of the BBS process which is to take place in 2021. During 2020, BBS announced plans to decentralize the BBS process. The replacing of the RINCON software is part of the BBS decentralization. Our investment in the new BBS ADAPTIVE software is the first of these initiatives that talks to decentralization of BBS.

BBS ADAPTIVE is a modern and versatile software to assist teams to smoothly transition and take ownership of the BBS process. The ADAPTIVE software for BBS will help to drive continuous improvement of the SAPREF safety Initiatives by providing each Team / Zone with highly customizable observation processes, that will support and drive good quality safety discussions and provide accurate as well as dependable reporting features.



TRCF: 2020 vs previous years



The graph shows TRCF for 2020 vs previous years. There is a significant drop in 2020 compared to the previous 5 years as well as compared to target,

WATER UTILISATION

SAPREF has made significant progress towards water utilization efficiency. This has been accomplished by reducing Demin water demand and utilizing Reclaimed water as a cheaper alternative to municipal potable water. The following interventions have significantly reduced water consumption.

- The reverse osmosis unit, was returned to reclaimed water feed instead of potable water, at the capacity of 2800 tons per day. This allows SAPREF to reduce municipal potable water consumption by the same amount. This is in line with SAPREF's commitment to reduce potable water consumption.
- Cooling water make-up is supplied by the reclaimed water and if it is not adequate, potable water is used as additional make-up water. The Cooling water return networks were integrated which reduced evaporation loss, due to high cooling water return temperature. This resulted in a significant reduction in make-up water demand. Therefore, potable water consumption was reduced and the bulk of the makeup water came from reclaimed water.
- Steam leak repair conducted resulted in a significant reduction in steam water demand. Fresh water is used for steam production as steam is the main heat transfer fluid in the refining process. Therefore, a reduction in steam demand, reduced refinery water demand.

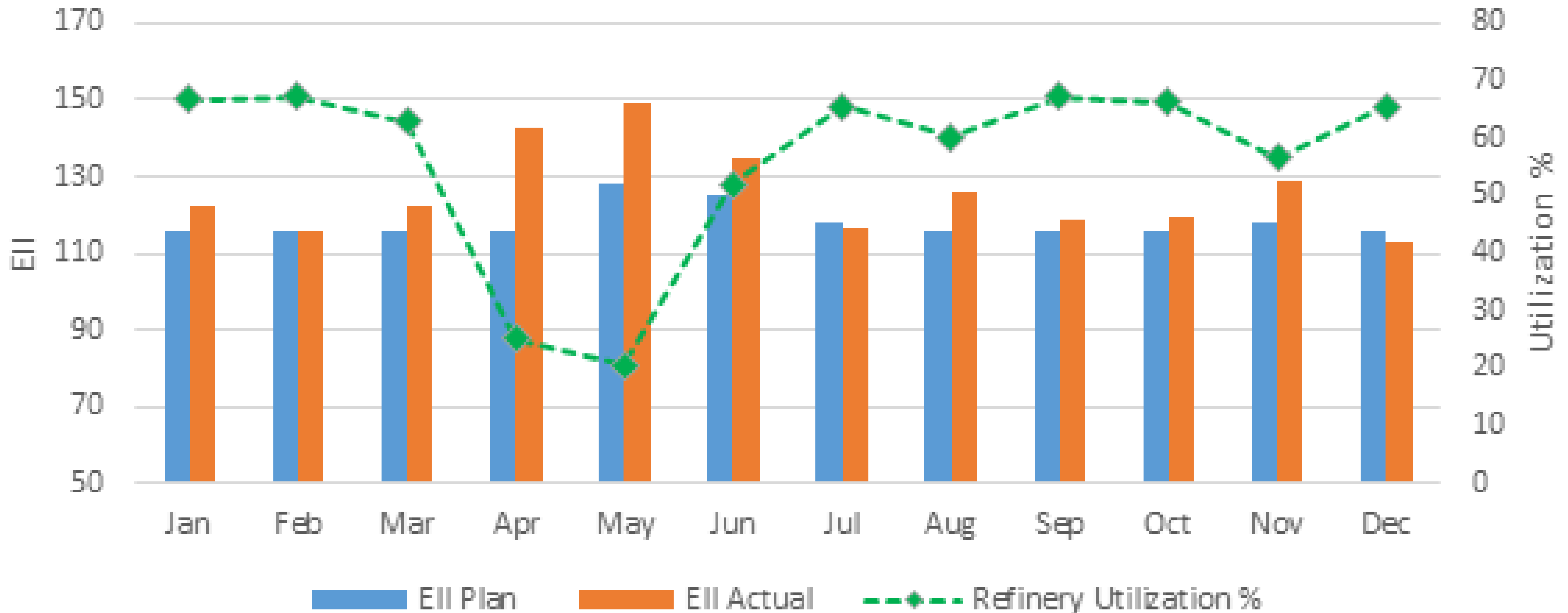
Future Focus Areas

Restore reverse osmosis unit to design capacity of 3200 tons per day and maximize up-time of the unit. This will see SAPREF utilizing its maximum allocation of reclaimed water from Durban Water Recycling. Increasing the reliability and availability of the reverse osmosis plant would allow optimization of the Demin Train units, therefore reducing potable water consumption.

Two of SAPREF cooling towers use municipal potable water (approximately 600 tons per day) as make-up. A project is being developed to introduce reclaimed water as primary make up to these cooling towers. This will further reduce SAPREF's potable water consumption.

ENERGY UTILISATION

Refinery EII Actual vs Plan



SAPREF EII for 2020 was 126 vs a plan of 118.

The low refinery utilisation is the, main contributor to high refinery EII. However, by maintaining high refinery utilization, optimizing FCCU torch oil consumption, maximizing Waste Heat Boiler steam production, and constant focus on fired heaters optimization, the refinery can meet the target. SAPREF was able to recommission the Generator, which can reduce refinery EII by up to 1.53 points.

SOCIO-ECONOMIC DEVELOPMENT

The year 2020 to many people as well as organisations presented a loss of hope as well as postponement in a lot of activities. We as SAPREF are proud that even in the midst of a pandemic we managed to make a difference throughout socio economic development projects.

In 2020 SAPREF spent R3 995 242. We pride ourselves in all the efforts that went into executing these projects especially during lockdown. Of this spend, R3.8 Million is as the results of the deeds registration and transfer of the 3 houses previously owned by SAPREF to local NGOs namely: 1 to Umzamo Child and Guidance and Training and 2 houses to the SOS Children’s Village.



In response to COVID-19, we procured masks to the value of R75 000 as well as sanitisers to the value of R50 000. We distribute a portion of them to various vulnerable groups and institutions. The remainder of masks and sanitisers will be distributed in 2021. Organisations that work with vulnerable groups were targeted as they were identified as the most “at-risk” groups this this year. This resulted in Issy Geshen Old Age Home receiving a donation of specialised mattresses to assist in caring for bed ridden aged residents. A further donation of furniture to capacitate the Bessie Makatini Foundation with tools for their training programme, educating people about mental illnesses such as dementia.

Project Serve continued in spite of lockdown restriction whilst ensuring that all protocols were observed. Our teams continued to make a difference in their communities through soup kitchens, orphanages, and schools. It is wonderful to see that our retired employees are also continuing with their Project Serve initiatives.

BENEFICIARY	DONATION	VALUE
John Dunn House	Masks & Sanitisers	R 10,250
St Monica's Child & Youth Care	Masks & Sanitisers	R 8,500
Merewent Cheshire Home	Masks & Sanitisers	R 4,750
Issy Geshen Home for the Aged	Masks & Sanitisers	R 13,750
St Gabriel Church Soup Kitchen	Masks	R 10,250
Wentworth Victim Friendly Centre	Masks	R 5,000
Lakehaven Child Welfare	Winter Tracksuits & Sanitisers	R 16,730
Imbewu Community Development	Gardening Tools	R 33,275
Issy Geshen Home for the Aged	Specialised Mattresses and Covers	R 20,841
Bessie Makatini Foundation	Training Material for Dementia Support Programme	R 23,378
Dr Nembula High School	Study Support Material	R 22,564
SOS Children's Village	2 Houses ✓	R 2,450,000
Mzamo Child Guidance & Training	1 House ✓	R 1,250,000
3 Houses on Anglier Road	Transfer Costs ✓	R 125,954
Total		R 3,995,242



FOR FEEDBACK ON THE REPORT:

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