

### **Annual Report**

to the

**Utilities Regulatory Authority** 

**Year Ending March 2022** 

#### **Acronyms and Abbreviations**

**EDIP Economic Development Investment Programme** 

Geographic Information System GIS

GCS Glass Coated Steel kWh Kilowatt hour

Power Purchase Agreement PPA SHG St Helena Government

Utilities Regulatory Authority URA Water Resources Management Plan Wind Turbine Generators WRMP

WTGs

#### **Overview**

Connect Saint Helena Ltd commenced the delivery of utility services on 1st April 2013. Previously these services were provided by the St Helena Government. The Utilities Regulatory Authority (the Authority) was established to protect consumers from unreasonably high prices or low levels of service. After each of the previous eight years of trading, annual reports were presented to the Authority with them subsequently issuing in total eight reports on 'The quality of services provided by Connect Saint Helena Ltd.' This report has been prepared for the purpose of demonstrating performance against the targets established with the Authority for the period 2021/22 and should provide sufficient basis for the Authority to independently examine and publicly report on the Company's performance.

#### **Review of the Business**

During the year, the principal activities of Connect Saint Helena Limited (the Company) continued to be the provision of utility services on St Helena Island, as mandated at its formation when St Helena Government (SHG) divested the service.

As the Company entered its ninth year of trading, there were well-established systems and processes in place for day-to-day operational activities. In addition, work continued on areas that support the Island's Energy Strategy and Water Strategy.

Notable in 2021/22 were:

- Continued impact of the COVID-19 global pandemic on supply chains and the business in general
- Cancellation of the Power Purchase Agreement
- 4% decline in electricity revenue
- 21% increase in water revenue
- Ongoing investment in the unaccounted for water programme
- Change in Chief Executive Officer

2021/22 proved to be a challenging year for the Company. In the second year of the COVID-19 global pandemic there continued to challenges in supply chains, surging prices of raw materials and a declining Island population which in turn affected demand. The disruption of global supply chains resulted in longer lead times which adversely affected scheduled maintenance and capital projects. Revenue was also adversely affected by a general decrease in the population, with SHG reporting that there had been a 4.7% decrease in the resident population during the period under review, which adversely impacted the Company's consumer base. This was further exacerbated by COVID-19 travel restrictions and the limited number of flights to St Helena which continued to affect the number of visitors to the island, which in turn negatively impacted consumption at the airport and tourism-related establishments. Growing demand on-island for private PV systems was a further factor impacting on electricity consumption.

Most notable in 2021/22 were the changing circumstances under the Renewable Energy Project. The Project commenced in 2017 when tenders were invited to provide renewable energy

solutions for the island. A Power Purchase Agreement (PPA) was signed between Connect Saint Helena Limited and Sustainable Energy 1 Limited, a subsidiary of PASH, in May 2020. However, following a period of negotiation and planning, amidst changing circumstances worldwide, the PPA was terminated in November 2021.

The Company continues to be committed to delivering the priorities of the Island's Energy Strategy. The Company's Renewable Energy Policy is aligned to the overarching Energy Strategy and the Company fully supports efforts to increase renewable energy generation and to reduce dependence on diesel generation. This has both environmental and financial benefits for the Company. The Company recognises that integration of additional renewable energy will: reduce operating costs; allow for a reduced subsidy; present a possibility to plough savings back into the business to address the many legacy issues that exist and, ultimately, reduce the cost of electricity tariff for the customer.

There is a collaborative approach between SHG and the Company to explore alternative avenues for achieving the objectives under the Energy Strategy. Work in 2022/23 will focus on an Energy Delivery to map out next steps. However, it is recognised that, like the initial procurement in 2017, the likely timeframes are medium-term. This has implications for the performance of the Company in the short-term.

#### **Capital Works**

Infrastructure development plays a significant part in improving service delivery. Capital comes from two sources: SHG capital grants and money generated by the Company. The capital contribution for fully completed assets this year was from internal sources only. The following table shows where capital funds were spent.

Table 1: Capital Works 2021/22

Asset Class	Grant Funded (£)	Company Funded (£)	Total (£)
Electricity infrastructure		9,930	9,930
Equipment			
Lands and Buildings		24,737	24,737
Water infrastructure		375,318	375,318
Total		409,985	409,985

The improvement of infrastructure remains a key priority for the Company. At its inception, Connect Saint Helena Ltd inherited infrastructure that was near to or had exceeded its useful life. This presents a risk to the sustainability of national critical infrastructure and the ongoing delivery of services. It is recognised that in the absence of injections of grant or loan funding from external sources, the Company needs to continue its slow but steady approach to deliver on

infrastructure requirements. Discussions are ongoing to prioritise available funds for capital investment in infrastructure.

During 2021/22 a total of £410k was invested towards completed assets. Investment was prioritised to water infrastructure upgrades in order to improve the reliability of the network and reduce water losses as follows:

- Phases 2 and 3 of a programme to replace the old network in Half Tree Hollow were completed during the year. The water network in Half Tree Hollow had reached the end of its life and deteriorated significantly, causing considerable leaks and bursts over the years. Due to the high investment required to replace the entire network in Half Tree Hollow, a phased approach had to be adopted. The installation of a new water network in areas under both Phase 2 and 3 will provide higher flows, reduce water losses, and meet future demand. The new network will also reduce the trend of leaks and bursts within the area. Although no benchmark data on water losses is available for the area, the number of call-outs has significantly reduced since the completion of the project.
- The Lower Cleughs Plain network upgrade was also completed. In a similar fashion to the water network in Half Tree Hollow, the old system in Cleughs Plain had deteriorated making it more susceptible to leaks and bursts. Its replacement will improve water flow and with a pressure-reducing valves incorporated in the system, this will minimise damage to the mains as well as subsequent bursts and leaks within the network. Again as with Half Tree Hollow, there was no benchmark data to measure the changes in water losses but the number of call-outs has significantly reduced after the replacement of the old network.
- To improve the reliability of the water supply, the replacement of the New Ground Tank was completed during the year. The old galvanised steel sectional tank was replaced with a new glass-coated steel (GCS) tank. The GCS tank material is high strength and has high resistance to corrosion with low maintenance.
- Upgrades of the water network from Pouncey's to Sunnyside and from Scotland to Spring Gut were started and largely completed during the course of the year but final commissioning will take place in 2022/23.

The Annual Report 2020/21 reported on the Rupert's Sewerage Treatment Plant Project which was funded under the Economic Development Investment Programme (EDIP). Construction was completed in 2021/22: the cold commissioning of the plant was carried out and final (hot) commissioning is awaited. The hot commissioning is dependent on the connection of customers required to reach the required minimum flow.

#### **Operational Efficiency**

Tactical implementation plans continue to form the basis for organising planned works with monthly operational reviews performed by the Executive Directors. This has moved the

Company away from the historic reactive maintenance practices and is more akin to how a private sector business should operate.

#### Electricity Distribution

The electricity distribution side of the business closely adhered to its plans. The maintenance programme for the year focussed on replacing and upgrading the distribution network. As noted in previous reports, the modern silicone line hardware is more robust and less liable to failure. Work programmed on high-voltage and low-voltage lines was fully completed.

As works are undertaken, this information is provided to the Company GIS team to update network data. At the year-end, information from 75% of the works undertaken had been captured. This reflects a necessary lag between the works taking place up to and including 31 March 2022 and information then being inputted.

The assessments on the distribution network required to programme work in the following financial year (2022/23) were fully completed.

#### Electricity Generation

During the course of the year, 80% of electricity generated was from diesel generation at the Power Station with the remaining 20% from renewable energy sources. Maintenance continued as planned. In the case of the wind turbine generators (WTGs), maintenance is becoming more challenging as three of the WTGs have exceeded their useful life whilst others are nearing this.

Two of the 1.6MW generators at the Power Station underwent 27,000 hours service. The 27,000 hours service for Generator 1 had been deferred from 2020/21 due to COVID-19 travel restrictions whereby the engineering team from Barloworld had not been able to visit the island. In the interim, the 27,000 hours service for Generator 3 had become due.

Taking two of the largest generators offline during the same period meant that whilst normal generating capacity was maintained at the Power Station, contingency was much reduced. The procedures under the Power Failure Contingency Plan were adhered to during this period. The 27,000 hours service was successfully completed for both engines. Going forward, the normal arrangement of staggering scheduled maintenance will apply so that no two generators are scheduled for major maintenance at any one time.

#### Water

The 2021/22 preventative maintenance programmes for the collection and storage, treatment, and distribution sectors of the water side of the business were all fully completed. As a result, network reliability improved by 2% from the previous year's figure.

Whilst this is a positive step, the water network reliability continues to be a major source of concern due to the ageing infrastructure. The water mains in Half Tree Hollow Phase 2, Scotland to Sunnyside, and Lower Cleughs Plain, were replaced during the financial year. This helped to improve the network reliability and reduced the number of callouts. The Unaccounted for Water Team has assisted to adopt a more proactive approach by conducting water audits and pressure tests to identify areas of the water network that need urgent attention, including night leakage

#### tests.

#### The Unaccounted for Water Programme

The Unaccounted for Water Programme continued to yield positive results with the Island wide unaccounted for water declining by 2% (from 47% the previous year to the current year 45%). The Unaccounted for Water Programme includes works to target four key factors which influence real water losses in distribution systems. These are the speed and quality of repairs; pipeline and asset management - renewal of the water network; active leakage control and pressure management. Operations teams and the out-of-hours contractor have been attending to leaks as quickly as they can. Part of the improvement in the new installation is the detailed hydraulic analysis, making sure that water pressure is managed through the installation of pressure-reducing valves in new networks. Some of the works during the year include the replacement and sizing of meters which contributed to the reduction of apparent losses.

A 2% reduction in water losses translates to approximately 8,000 cubic meters of water saved. When interpreting the results of the Unaccounted for Water Programme, it is also important to note that the Company sustained the savings achieved in prior years and achieved a further 2% reduction in unaccounted for water.

The table below shows the results from the Unaccounted for Water Programme to date:

<u>Table 2: Non Revenue Water - Percentage Losses</u>

Financial Year	Percentage Losses (%)
2017/18	53
2018/19	50
2019/20	49
2020/21	47
2021/22	45

#### Water Consumption and Drought Mitigation Planning

During the year there was a strong focus on monitoring on the water received with focus on the levels of the reservoirs, incoming flows, and consumption. Practical measures such as the maintenance of drought related equipment (e.g. pumps) continued.

Until early January 2022, there were indications of another decrease in supply. This changed in the final quarter of the financial year with water being received in abundance in late January and early February, resulting in the reservoirs being completely full. Earlier in the year, the Company had to pump water into Levelwood and Longwood reservoirs to avoid depleting the available resources to levels where these districts would have been in a water deficit. This process was stopped after the rainfall in the final quarter of the year resulted in the reservoirs returning to

#### over 90% full.

Forecasts had highlighted that 2022 was the third year in the drought cycle and the potential for drought in this year (droughts having previously been recorded in 2013, 2016, and 2019). This was mitigated by intermittent rainfall and action taken by the Company to manage water supplies (e.g. pumping to areas with potential for water deficits). The forecast drought in 2021/22 did not transpire.

This is shown in the table below which records the water balance in February for the years 2019 to 2022. Whilst the position in February 2022 diminished compared to 2021, it was an enhanced position compared to that in 2019 and 2020.

<u>Table 3: Water Balance February 2019 - February 2020</u>

		YEAR							
		2019	2020	2021	2022				
	Consumption (m <sup>3</sup> /d)	1,367	1,016	1,055	1,030				
age	Abstraction (m <sup>3</sup> /d)	993	1,220	1,479	956				
ver	Stored volume (m <sup>3</sup> )	74,801	44,471	105,804	92,633				
А	No of days Stored	55	44	100	90				

#### Sewerage

The preventative maintenance programme for this side of the business was fully completed.

The operations teams worked on the Bottom Woods soakaway that was no longer functioning properly. This was investigated and a solution to replace this was proposed and implemented.

A jetting contractor was engaged to carry out work in the Ladder Hill, Half Tree Hollow, Clay Gut, New Ground and Sapper Way areas. A programme was developed for jetting works to be undertaken in 2022/23, focusing on Jamestown and the Briars.

#### Resilience

As the sole utility provider on St Helena, the Company is responsible for national critical infrastructure: maintaining services is the foremost priority. This aligns with the Authority's objective to ensure stability and predictability of utility services.

In order to promote resilience:

- The Drought Mitigation Plan remains in effect and undergoes regular review. Drought mitigation measures have been discussed in this and previous reports which show the improved resilience against low rainfall situations.
- The Power Failure Contingency Plan is in place and undergoes regular review. This sets out the Company's plans should there be critical loss of electricity generation and/or distribution capacity.

• Business continuity planning is an increasing area of focus. In 2021/22, like the prior year, planning was targeted at maintaining services during the COVID-19 pandemic. As there was no community spread of COVID-19 on St Helena, it was not necessary to activate the plan.

#### **Organisation**

In 2021/22 the business continued with two Executive Directors, the Chief Executive Officer and Business Support Director who also undertakes the Company Secretary duties. During the course of the year the former Chief Executive Officer, Barry Hubbard, left the organisation and Clare Harris, Business Support Director, stepped into the role in an acting capacity. The new Chief Executive Officer, Janet Lawrence, was appointed in February 2022.

#### Reflecting

The divestment of utility services to the Company in 2013 was intended to introduce a more commercial approach to the sector. This report to the Utilities Regulatory Authority highlights the massive improvements made since divestment in respect of reliability, quality and customer service.

However, this is not without challenges. As discussed above, like the rest of the world the Company is contending with the impact of the COVID-19 pandemic and the resulting inflationary pressures, longer procurement lead-in times, and reduced travel in 2021/22 impacting on an already small customer base. The conflict in Ukraine and the resulting fuel price increases, whilst not impacting on 2021/22 performance due to the lag in fuel deliveries, has significant implications for our services. Additionally, whilst investment is being made in replacing fully depreciated assets inherited at the time of divestment, the issue of ageing infrastructure becomes more challenging as time passes.

Alongside the challenges, there are of course opportunities. Most importantly the global movement towards addressing climate change: reducing reliance on diesel and increasing the use of renewable energy sources is an important part of this. The benefits from investment in increased renewable energy are clear. Delivering against the Island's Energy Strategy will be the Company's priority in the short-medium term.

#### Research and Development

The Company continues to pursue the objective of increased electricity generation from renewable energy sources. Options are being considered for alternative ways to deliver the Renewable Energy Project which will form the basis of an Energy Delivery Plan, scheduled for wider circulation and consultation in 2022/23.

Within the financial year 2022/23 the Company intends to conduct a Grid Impact Assessment. The study will assess the impact of private PV systems that are connected to the grid and will be

used to ensure that the grid is safe and reliable to operate. The Company does not plan to implement a Power System Study of the entire grid until 2023/24: this is in order that such a study can be informed by the Energy Delivery Plan and Grid Impact Assessment.

The Company continues to work with SHG on the Saint Helena Climate Change and Drought Warning Network Project funded by Darwin Plus. The project will assist with drought planning and improve water sustainability. Once completed, the project outputs will be used to support water infrastructure planning and the development of a new island Water Resources Management Plan.

#### **Looking Forward**

Plans to open the island in mid-2022/23 will change the context in which the Company operates. The risk to the Company if large numbers of staff are affected by community spread of COVID-19 is highlighted within the Company's principle risks. Business continuity planning has taken place to ensure that there is minimal disruption to critical services.

As discussed above, the Energy Delivery Plan aims to transform the electricity sector on St Helena. Whilst the drive for increased use of renewable energy sources has increased following recent fuel price increases, it is recognised that a staged approach will be required over the short-medium term.

The Company worked with SHG in developing the island's Water Strategy which seeks to increase water sustainability. This needs to be underpinned by a Water Resources Management Plan (WRMP). The WRMP will be a long-term plan focussed on delivery. The WRMP will set out how the Company, together with relevant stakeholders, will manage water supplies on the island to meet current and future needs.

Work started towards the end of 2021/22 on a medium-term capital investment programme. Whilst some projects have been identified under EDIP and applications for funding made, the release of donor funding is beyond the Company's immediate control. The identification of funding sources and securing funding for future developments will be a priority as work progresses on the capital programme.

#### **Regulatory Requirements**

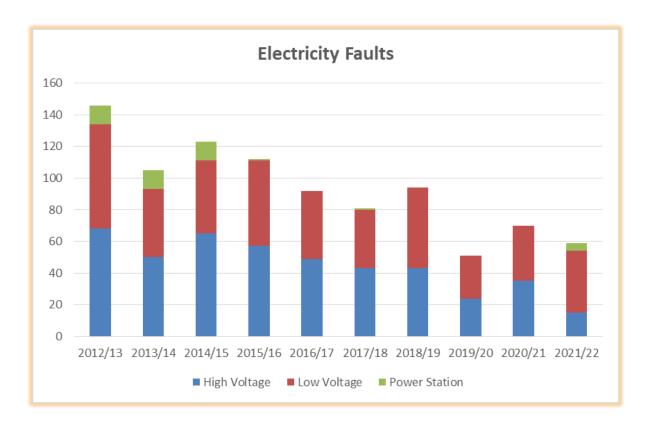
#### A. Public Utilities Development Plan

The details of the plan are located in Appendix 1 of this report. The performance measures are divided into three categories with a commentary on each below.

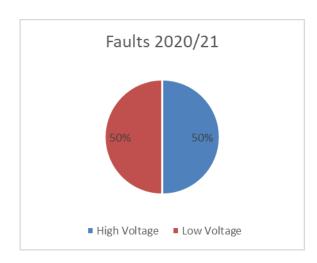
#### 1. Reliability

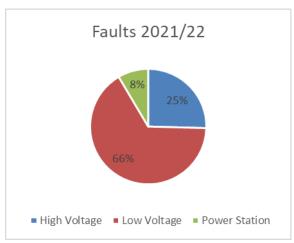
**Electricity** 

There were a total of fifty nine unplanned interruptions to the electricity supply; this exceeded the target of reducing unplanned interruptions to ninety five. Against the pre-divestment benchmark this is an improvement of 60%. The 'total faults' graph with 2020/21 included is shown below.



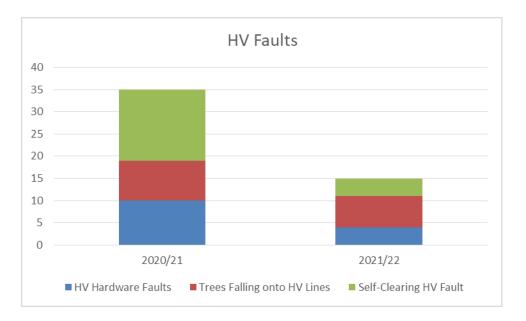
The pie charts below show the spread of faults between the high and low voltage networks and the Power Station. The most significant change has been the increase in blackouts at the Power Station: prior to 2020/21, the last recorded Power Station outage was in 2015. This is cause for concern and is being closely monitored.



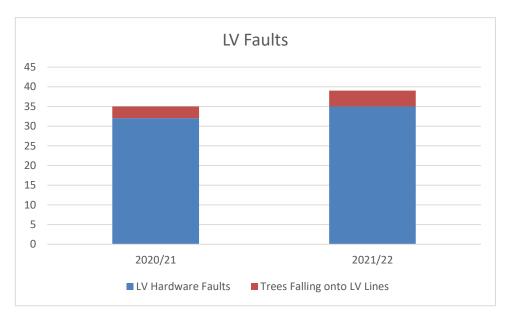


The graph below shows the cause of the faults on the HV network. This shows a significant

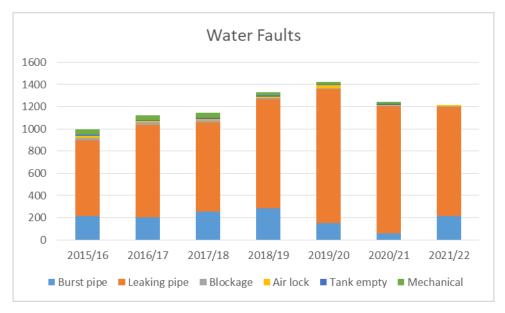
reduction in faults on the HV network in 2021/22 compared to the prior year. This is attributed to the ongoing electricity distribution maintenance programmes discussed earlier as well as more favourable weather conditions during the year.

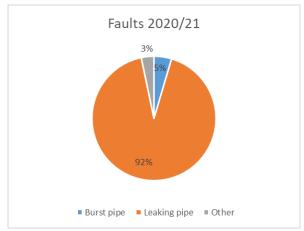


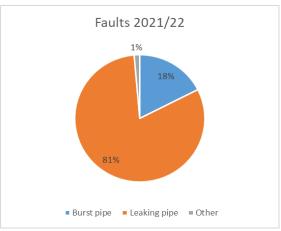
Low voltage faults have less impact than high voltage faults since they relate to single customers or small groups of customers. There was very little change in the number of LV faults or the cause of these faults between 2021/22 and the prior year. This is shown in the graph below.



*Water*An analysis of faults on the water network is shown below.







From the data above it is clear that there have been improvements in the reliability of the water network since divestment. The overall number of faults has decreased and faults arising due to blockages, air locks, empty tanks and mechanical issues have decreased over time to a point where consistently these now make up 5% or less of the total faults reported (compared to 10% at the point of divestment).

However, there continues to be a worrying trend with increasing faults due to leaking pipes. Additionally in 2021/22, the number of faults due to burst pipes grew when this had previously been on a downward trend.

A dedicated team is renewing mains; survey work informs the location of pressure reducing valves which reduce the incidence of over pressure which is a cause of bursts and one can only

conclude that the age and condition of the system are preventing actual improvement in system performance despite the enormous efforts being made to deal with the known issues.

Whilst the ongoing maintenance programmes and capital investment in improvement works discussed earlier in this document contribute towards mitigating faults on the water network, the ageing infrastructure inherited at the time of divestment is a cause for concern. The only way to fully address this is to replace the inherited fully depreciated assets. This is not possible within the existing resource available to the Company and is hampered by a reluctance to generate revenue through tariff increases. This position is unsustainable in the long term.

#### 2. Quality

Appendix 1 records that the appearance of treated water on the Hutts Gate system did not meet the required visual appearance. This relates to an issue at a specific point in the year where there was increased turbidity of the incoming raw water. However, the outcome still represented an improvement over the baseline and the prior year. Moreover, as this issue was not linked to microbiological failure, the WHO standards for water appearance and microbiological integrity were met.

This is shown in detail in Appendix 3. Overall we were 100% compliant in water visual appearance and 100% compliant with microbiological integrity, both favourable against a target of 99.5%.

Planning commenced for calibration works at the Hutts Gate and Red Hill Water Treatment Plants: this will require a visit by a specialist contractor that is planned for 2022/23.

The Environmental Health Department continues to provide independent verification of results with the sampling and testing regime now working well supported by annual training from the Senior Microbiologist on correct sampling methodology.

#### 3. Customer Service

We agreed improved targets for the time to perform new connections to the electricity and water supply networks. The measure is the number of days the Company contributes to the process, for ease of measurement non-working days is included. Electricity connections were favourable against the target, the 2012/13 benchmark was fifty days, whilst in 2020/21 the time taken to perform an electricity connection was one day.

Water connections were also favourably below the target of ten with the average time reduced to just one day. The 2012/13 benchmark was ninety days.

The complaints handling system has 100% compliance. In 2020/21 a total of twenty five were

resolved at the first level with zero being escalated to the second or third level.

#### **B.** Codes of Practice

Details of the Codes of Practice requirements are located in Appendix 2 this report. There was full compliance with the codes of practice.

#### 1. Access to Premises

The majority of customer contact are by the meter readers that are now contracted directly to the Company as opposed to the previous outsourced arrangement. The requirements of the Code of Practice have been included in their contracts so the meter readers are contractually bound by the requirements stated in the Code of Practice. Both the meter reader staff and Company staff have ID badges to readily identify themselves to members of the public. Training material has been provided and information is now printed on the reverse side of the bills directing customers in relation to advice. We are 100% compliant with this Code of Practice.

#### 2. Payment of Bills / Customers in Default

The code of practice was introduced and included in our process with input from the Social Services Manager in respect of those having difficulty in paying their bills. We have a member of our finance staff dedicated to managing customer debt which includes agreeing alternative payment arrangements and liaising with Social Services to ensure the vulnerable are not unduly penalised. Debtors experiencing difficulties in making payment are encouraged to discuss this with our finance staff so that advice can be given on how not to accumulate further debt and how to institute payment plans to clear the current debt. We are 100% compliant with this Code of Practice.

#### 3. Connections & Disconnections

The Code of Practice requires a site visit within five working days. Thirty eight electricity applications were received and sixty one for water. All site visits were carried out within the prescribed time. We are 100% compliant with this Code of Practice.

#### 4. Complaints

A total of twenty five complaints were received during 2021/22. Whilst this is an increase over the prior financial year when there were only 10 complaints received, the increased use of the complaints system and increased engagement with the Company is a positive step. It indicates that customers feel more willing to complain now they understand there is a proper process in place with possible recourse through the Authority whereas pre-divestment there was not.

In managing the complaints process, complaints are reviewed by the management team on a weekly basis. All of the complaints received were resolved at the first level. We are 100%

compliant with this Code of Practice.

#### 5. Meter Readings

Obtaining accurate meter readings is an essential business function and the service provided has achieved this. The meter readers have been trained in identifying potentially dangerous meter installations. During the course of the financial year, nineteen meters were identified as unsafe and the meters have been relocated to a safer location. We are 100% compliant with this Code of Practice.

#### 6. Efficient Use of Electricity

A number of advertisements have been designed to inform the public. Customers are advised on the reverse side of their bills that information leaflets are available. Home visits are offered to disabled and chronically ill customers via Social Services, although there is little uptake of his service. Advertisements are placed weekly in the local papers which is significantly greater than the six monthly requirements; the scope has been expanded to provide water consumers with information on efficient use of water. The Company also publishes on an ad-hoc basis, articles that we feel will be of interest to the general public. We are 100% compliant with this Code of Practice.

#### **Conclusion**

This is the ninth annual report issued to the Authority. All agreed actions from the previous reports have been implemented within agreed timescales.

The infrastructure has received considerable investment and for electricity this is being reflected in the performance against the reliability KPI.

Reliability of the water network is the area where the Company again fell short of the target. The root cause is the ageing infrastructure inherited at the point of divestment and insufficient resource to fully replace this at one time. This necessitates a staged approach. As pointed out in previous reports, the task of addressing the massive underinvestment in the water systems is proving to be quite challenging but the slow and steady approach to upgrades has had proven results.

Adherence to agreed Codes of Practise has been 100%. There has been considerable progress since divestment and the business now resembles a commercial operation which was one of the desired outcomes from the divestment process.

It is recognised that 2021/22 was a challenging year not just for the Company but for the world in light of the COVID-19 pandemic. In looking forward, the conflict in Ukraine arose towards the end of the 2021/22 financial year. The resulting impact on fuel prices will have implication for businesses, particularly the energy sector, in 2022/23 and perhaps beyond.

Despite these additional challenges, the Company is focussed on improvement and growth. The development of the Energy Delivery Plan and the Water Resource Management Plan will provide long-term planning for the energy and water sectors.

The Company has a dedicated team who are committed to delivering services and striving for improvement in the utilities sector.

# Appendix 1 Public Utilities Development Plan

Performance	Benchmark 2012/13	Prior Year Actual 2020/21	WHERE DO WE WANT TO BE?	WHERE ARE WE NOW?		21/22 ACT OMPARED		HOW DO WE GET THERE?	HOW DO WE KNOW WHEN WE ARE THERE?		
Measure	Benchmaı	Prior Actual	Target 2021/22	Actual 2021/22	Baseline 2012/13	Prior Year 2020/21	Target 2021/22	Internal Review & Performance Improvement Plan	Method of Monitoring	Collection & Analysis Process	
1. Reliability											
Overall Reliability of Electricity Network (No. Faults)	146	72	95	59				Proactive maintenance program with regular review of priorities and targeted interventions based on performance data	Weekly review by Management Team, monthly review by Board of Directors	Collation of data from callout contractor and staff callouts.	
Overall Reliability of Water Network (No. Faults)	1,582	1,243	1,150	1,214				Implementation of 20 year water resources plan supplemented with a proactive maintenance program and a regular review of priorities and targeted interventions based on performance data	Weekly review by Management Team, monthly review by Board of Directors	Collation of data from callout contractor and staff callouts.	
2. Quality											
Appearance of Treated Water in CSH Network	4 - 5	2.23	1.75	1.45				Implementation of 20 year water resources plan supplemented with a	Weekly review by Management	Samples taken and analysed at	

Performance	Benchmark 2012/13	Prior Year Actual 2020/21	WHERE DO WE WANT TO BE?	WHERE ARE WE NOW?		21/22 ACT OMPARED		HOW DO WE GET THERE?	HOW DO WE KNOW WHEN WE ARE THERE?		
Measure	Benchma	Prio Actual	Target 2021/22	Actual 2021/22	Baseline 2012/13	Prior Year 2020/21	Target 2021/22	Internal Review & Performance Improvement Plan	Method of Monitoring	Collection & Analysis Process	
Red Hill (NTU)*								proactive maintenance program and a regular	Team, monthly review by Board	water treatment	
Appearance of Treated Water in CSH Network Hutts Gate (NTU)*	4 - 5	2.83	1.75	2.66				review of priorities and targeted interventions based on performance data within 24 hours of reports being received	of Directors	works.	
Appearance of Treated Water in CSH Network Levelwood (NTU)*	4 - 5	1.17	1.75	1.13							
Appearance of Treated Water in CSH Network Jamestown (NTU)*	4 - 5	5.12	5.00	4.81							
Microbiological Integrity of Treated Water in CSH Network	96.5%	100%	99.5%	100%					WM002 E.coli & Coliforms Reported 'Not Detected', management review weekly,	Samples Collected by CSH and analysed by UKAS accredited	

Performance	Benchmark 2012/13	r Year 2020/21	WHERE DO WE WANT TO BE?	WHERE ARE WE NOW?		21/22 ACT OMPARED		HOW DO WE GET THERE?	HOW DO WE KNOW WHEN WE ARE THERE?		
Measure	Benchmaı	Prior Actual 2	Target 2021/22	Actual 2021/22	Baseline 2012/13	Prior Year 2020/21	Target 2021/22	Internal Review & Performance Improvement Plan	Method of Monitoring	Collection & Analysis Process	
									monthly review by Board of	laboratory	
Microbiological Integrity of Treated Water at Consumer Meter	87%	100%	99.5%	100%					Directors	Samples Collected by Environment al Health and analysed by UKAS accredited laboratory	

3. Customer Service								
Time taken to perform Electricity Connection	50 days	14 days	10 Days	1 day		Adherence to agreed	Weekly review by	Number of CSH 'process days' in the overall connection
Time taken to perform Water Connection	90 days	2 days	5 Days	1 day		procedures, adequate levels of stock available	Management Team, monthly review by Board of Directors	Number of CSH 'process days' in the overall connection
Total Customer Complaints handled within	No Benchma rk	100%	100%	100%		Adherence to agreed procedures		Received complaints and resolution

Performance	-k 2012/13	r Year 2020/21	WHERE DO WE WANT TO BE?	WHERE ARE WE NOW?		21/22 ACT	 HOW DO WE GET THERE?	HOW DO WE KNOW WHEN WE ARE THERE?	
Measure	Benchmark	Prior Actual 3	Target 2021/22	Actual 2021/22	aseline 021/22 aseline 012/13 Prior Year 020/21 Target		 Internal Review & Performance Improvement Plan	Method of Monitoring	Collection & Analysis Process
COP parameters									analysis

4. Efficiency KPI's								
Overall Fuel Efficiency (I/kWh)	0.240	0.4514*	0.150	0.1821		Monthly Report, improvements from increased capital investment and maximising renewable yield	Ratio of total fuel consumed divided by total kWh generated	Data from engine, solar and WTG control systems

<sup>\*</sup> Higher than normal fuel usage due to a fault on one of the 1.6MW generators, nearing its 27,000 hours service.

## Appendix 2 Codes of Practice Compliance Monitoring

### Code of Practice Compliance Monitoring 2021/22

LICENCE REFERENCE	CODE OF PRACTICE	MEASURE	TARGET	RESULT
23. Procedures with respect to	access to premises - principles and	procedures in respect of any persor	acting on	its behalf who requires access to
customers premises				
a. Possess the skills necessary to perform the required duties	Trainees or those new to a job will be accompanied by a fully trained person until such time as they are deemed competent to visit independently	New employees being accompanied?	100%	All new employees/trainees are accompanied by a fully trained person.
b. Readily identifiable to members of the public	Employees/contractors visiting premises will carry an ID card showing Company name, their name and a photograph	a)number of new employees issued with ID b)employees advised to request new ID if theirs is lost/damaged	100%	All new employees are issued with ID badges and upon completion of contract of employment the ID badge is destroyed by BSA (HR)
	All contractors visiting customers premises to be required to carry ID	number of new contracts with this clause	100%	Ongoing, as required.
c. Appropriate person to visit	When recruiting new employees, appropriate checks and references will be made as part of the recruitment process	References and any other checks taken up and recorded on employee file.	100%	Ongoing. Police Vetting certificate and work references are obtained and placed on employees file.
& enter customers premises	When available, Connect Saint Helena will subscribe to the SHG vetting service for employees/contractors	Signed up and using system	100%	Connect have advised SHG that they will use the systems once available
d. Inform customers on request, a contact point for help	All employees required to visit customers premises have office contact details printed on the reverse side of their ID badges	Instructions provided on reverse side of ID badges	100%	Ongoing. Instructions are on ID badge
& advice	Contractors required to visit premises to be made aware of office contact details	Letter to contractor on file	100%	Ongoing. Contractors are aware of Connect Saint Helena contact details

LICENCE REFERENCE	CODE OF PRACTICE	MEASURE	TARGET	RESULT
24. Payment of Bills – payment	t of bills and appropriate guidance fo	or the assistance of such tariff custo	mers who	may have difficulty in paying such bills.
a. Methods of payment	Customers advised on how to pay bills	Details on bill	100%	Comprehensive information on reverse of the bill
b. Guidance to customers in difficulty	Information given to customers on what to do/who to contact if they are in difficulty	Details on bill	100%	Comprehensive information on reverse of bill, customers are referred to the appropriate person in Connect Saint Helena who gives specific advice
25. Dealing with Tariff Customodischarging obligations to pay		with tariff customers who, through	misfortun	e or inability to copefind difficulty in
a. Distinguish such customers	Billing Co-ordinator to identify such customers from customer discussions or referral from Social Services. Cases to be highlighted on the computerised billing system	All known cases to be highlighted on debtors spreadsheet	100%	Agreed procedures with SHG Social Services in place to help identify customers with genuine hardship prior to disconnection. Comprehensive spreadsheet of debtors maintained and reported on monthly.
b. Detect failures by such customers to comply with	Use the computerised billing system	1. Monitoring report to be run within 5 working days of month end to check the previous months payments.	100%	Monthly reconciliations conducted
arrangements made for paying by instalments	monthly debtors monitoring report to check	2. Where payments have not been made, customer to be contacted within 10 working days of month end	100%	Billing Coordinator manages the process of debt recovery and works with customers in debt to agree affordable repayment plans.
c. Arrangements to take into account the customers' ability to comply with arrangements in b)	Individual review of case & circumstances by Billing Co-Ordinator and customer - looking at income/expenditure	Details of the individual circumstances are recorded by Billing Co-ordinator	100%	Billing Co-ordinator maintains records as a core part of the role

	1								
LICENCE REFERENCE	CODE OF PRACTICE	MEASURE	TARGET	RESULT					
d. Ascertain with assistance of other persons/organisations the ability of such customers to comply with arrangements in b)	Review of case and agreement made by Billing Co-Ordinator and Finance Manager. Social Services input considered where available	Details of the review recorded by Billing Co-ordinator	100%	Check with SHG Social Services standard procedure and process agreed for dealing with genuine hardship cases identified. In all cases, there is a requirement for a final check prior to authorisation to disconnect					
26. Connections & Disconnection	ions								
	Customers advised of procedure when a new connection, reconnection or disconnection is requested	Advice given either in person or by letter	100%	Customers phone or call in and are provided with application form. Letters at each stage quote timescales. Procedure also on website					
	Visit to assess work required for a new connection within 5 working days of customer confirming property is ready	Number of visits within 5 working days	100%	Water 61/61 Electricity 38/38					
a. Procedure for connections & disconnections	Quotation issued within 5 working days of site visit	Number of quotations issued within 5 working days	100%	Water 61/61 Electricity 38/38					
	Reconnection will be made within 5 working days of customer providing proof of payment of any outstanding charges	Number of reconnections made within 5 working days	100%	All reconnections carried out within 5 days					
	Disconnection will be made within 5 working days of request from property owner	Number of disconnections made within 5 working days	100%	All disconnections carried out within 5 days					
27. Provision of services for tariff customers who are disabled, chronically sick or of pensionable age									
a. Special means of identifying officers	Passwords to be made available where customer requests	Information on bills	100%	No requests for password received.					

LICENCE REFERENCE	CODE OF PRACTICE	MEASURE	TARGET	RESULT		
b. Giving advice on the use of utilities	Information leaflet on saving utilities to be made available	Annual press advert 1009		Tip of the Week been running since Jan 15 with alternating water/electricity savings tips. Sheet is on website and available from office		
	Where such customers are in default, a home visit to offer advice on savings to be offered	Percentage of customers who requested a home visit receive such a visit	100%	One home visit requested and undertaken.		
28. Formal complaint handling	procedure					
a. Level 1 Complaints	L1 - Review/resolution or referral within 5 working day	Number of formal complaints reviewed/resolved/referred on target	100%	25/25 = 100%		
b. Level 2 Complaints	L2 - Review/resolution or referral within 10 working days	Number of formal complaints reviewed/resolved/referred on target	100%	0/0 = 100%		
c. Level 3 Complaints	L3 - Review/resolution within 5 working days	Number of formal complaints reviewed/resolved/referred on target	100%	0/0 = 100%		
29. Reading of customers mete	ers					
Ensure person reading the meter has the appropriate expertise	Training to be given to all new meter readers along with information on how to read different types of meters	number of employees in new job being accompanied	100%	Meter readers have been contracted to Connect since 2019 but had previously been employed by the former meter reading contractor so are experienced in the role. This will apply in the event that new persons are engaged to the role without prior experience.		
		Insert this clause in any meter reading procedures	100%	As above		

LICENCE REFERENCE	CODE OF PRACTICE	MEASURE	TARGET	RESULT		
b. Inspect meter for evidence of deterioration which might	Ensure employees and contractors have advice on meter safety & what	Information issued to employees & contractors on annual basis or as updates become available	100%	Feedback received from all Meter Readers if they detect that the meters are deteriorating		
affect function or safety	to look out for	All meters identified as potentially unsafe to be inspected	100%	19 meters identified and relocated.		
c. Ensure premises are left no less secure as a result of visit	Employees and Meter Reading Contractors shall close all doors/gates following visit.	Reminder to close all doors/gates printed on reverse of employees ID card and clause in contract.		In contract and also ID badges issued		
d. Make good or pay compensation for damage caused by person reading meter	Connect Saint Helena will make good any damage caused by person reading meter	Insert this clause in any meter reading procedures		No claims were made for damage caused by Meter reader		
e. Reporting the reading of the meter	Data collected, entered into the computerised billing system	Successful monthly upload	100%	Data collected and enter on time each month.		
f. Adjusting of charges for erroneous meter readings	If customer queries reading, a 2nd reading is taken and bill adjusted if appropriate	Accuracy of final bill	100%	47 erroneous readings (by Customer CRM and Meter readers) and correct invoices sent to customers.		
30. Efficient use of electricity						
		Availability of leaflet referred to on the bills	100%	Printed on reverse of bill		
a. Set out ways in which advice will be made available to customers	Customers advised that Information leaflets available on request.	Six monthly press advert reminding customers of leaflet availability or article on utility saving ideas	100%	Since Jan 15 there is a "tip of the week" approach in the press. All tips appear on the website and are available from Connect Saint Helena office (ref on reverse of bill)		
	Home visit offered to disabled, chronically sick or pensioners who are in default to identify ways to reduce consumption	Visit offered to identified customers	100%	SHG Social Services are aware we offer this but to date no visits have been requested. In addition to general publicity on the 'tip of the week', electricity and water saving tips leaflets are available on request.		

## Appendix 3 Water Quality Analysis Schedule

	2. QUALITY								
	Water Appearance				robiology				
	% Works	Running Total	% Network	Running Total	% Works	Running Total	% Network	Running Total	
05/04/2021	100%	100%	100%	100%	100%	100%	100%	100%	
12/04/2021	100%	100%	100%	100%	100%	100%	100%	100%	
19/04/2021	100%	100%	100%	100%	100%	100%	100%	100%	
26/04/2021	100%	100%	100%	100%	100%	100%	100%	100%	
03/05/2021	100%	100%	100%	100%	100%	100%	100%	100%	
10/05/2021	100%	100%	100%	100%	100%	100%	100%	100%	
17/05/2021	100%	100%	100%	100%	100%	100%	100%	100%	
24/05/2021	100%	100%	100%	100%	100%	100%	100%	100%	
31/05/2021	100%	100%	100%	100%	100%	100%	100%	100%	
07/06/2021	100%	100%	100%	100%	100%	100%	100%	100%	
14/06/2021	100%	100%	100%	100%	100%	100%	100%	100%	
21/06/2021	100%	100%	100%	100%	100%	100%	100%	100%	
28/06/2021	100%	100%	100%	100%	100%	100%	100%	100%	
05/07/2021	100%	100%	100%	100%	100%	100%	100%	100%	
12/07/2021	100%	100%	100%	100%	100%	100%	100%	100%	
19/07/2021	100%	100%	100%	100%	100%	100%	100%	100%	
26/07/2021	100%	100%	100%	100%	100%	100%	100%	100%	
02/08/2021	100%	100%	100%	100%	100%	100%	100%	100%	
09/08/2021	100%	100%	100%	100%	100%	100%	100%	100%	
16/08/2021	100%	100%	100%	100%	100%	100%	100%	100%	
23/08/2021	100%	100%	100%	100%	100%	100%	100%	100%	
30/08/2021	100%	100%	100%	100%	100%	100%	100%	100%	
06/09/2021	100%	100%	100%	100%	100%	100%	100%	100%	
13/09/2021	100%	100%	100%	100%	100%	100%	100%	100%	
20/09/2021	100%	100%	100%	100%	100%	100%	100%	100%	
27/09/2021	100%	100%	100%	100%	100%	100%	100%	100%	
04/10/2021	100%	100%	100%	100%	100%	100%	100%	100%	
11/10/2021	100%	100%	100%	100%	100%	100%	100%	100%	
18/10/2021	100%	100%	100%	100%	100%	100%	100%	100%	
25/10/2021	100%	100%	100%	100%	100%	100%	100%	100%	
01/11/2021	100%	100%	100%	100%	100%	100%	100%	100%	
08/11/2021	100%	100%	100%	100%	100%	100%	100%	100%	
15/11/2021	100%	100%	100%	100%	100%	100%	100%	100%	
22/11/2021	100%	100%	100%	100%	100%	100%	100%	100%	
29/11/2021	100%	100%	100%	100%	100%	100%	100%	100%	
06/12/2021	100%	100%	100%	100%	100%	100%	100%	100%	
13/12/2021	100%	100%	100%	100%	100%	100%	100%	100%	
20/12/2021	100%	100%	100%	100%	100%	100%	100%	100%	
27/12/2021	100%	100%	100%	100%	100%	100%	100%	100%	
03/01/2022	100%	100%	100%	100%	100%	100%	100%	100%	
10/01/2022	100%	100%	100%	100%	100%	100%	100%	100%	

	2. QUALITY								
		Water Ap	<u>pearance</u>		Water Microbiology				
	% Works	Running Total	% Network	Running Total % Works		Running Total	% Network	Running Total	
17/01/2022	100%	100%	100%	100%	100%	100%	100%	100%	
24/01/2022	100%	100%	100%	100%	100%	100%	100%	100%	
31/01/2022	100%	100%	100%	100%	100%	100%	100%	100%	
07/02/2022	100%	100%	100%	100%	100%	100%	100%	100%	
14/02/2022	100%	100%	100%	100%	100%	100%	100%	100%	
21/02/2022	100%	100%	100%	100%	100%	100%	100%	100%	
28/02/2022	100%	100%	100%	100%	100%	100%	100%	100%	
07/03/2022	100%	100%	100%	100%	100%	100%	100%	100%	
14/03/2022	100%	100%	100%	100%	100%	100%	100%	100%	
21/03/2022	100%	100%	100%	100%	100%	100%	100%	100%	
28/03/2022	100%	100%	100%	100%	100%	100%	100%	100%	

Overall appearance = 100%Overall microbiology = 100%

### Appendix 4 Performance against Pre-Divestment Benchmarks

	<u>WHERE</u>	<u>Our</u>	WHERE WE	IMPROVE-							
	WERE WE	<u>Progress</u>	ARE NOW	<u>MENT</u>							
	THEN?	Year 1	Year 2	Year 3	Year 4	<u>Year 5</u>	<u>Year 6</u>	<u>Year 7</u>	Year 8		
Performance Measure	Benchmark 2012/13	Result 2013/14	Result 2014/15	Result 2015/16	Result 2016/17	Result 2017/18	Result 2018/18	Result 2019/20	Result 2020/21	Result 2021/22	%
	-										
1. Reliability											
Overall Reliability of											
Electricity Network	146	105	123	112	92	81	94	51	72	59	60%
(No. Faults)											
Overall Reliability of											
Water Network	1,582	689	897	996	1,122	1,160	1,331	1,421	1,243	1,214	23%
(No. Faults)											
	1										
2. Quality											
Appearance of Treated											
Water in Network &	99.0%	97.7%	96.8%	99.6%	100.0%	99.2%	100.0%	100.0%	100.0%	100%	1%
Premises (Average)											
Microbiological											
Integrity of Treated	96.5%	89.0%	91.8%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100%	4%
Water Network &											
Premises (Average)											
3. Customer Service											
Time taken to perform	50 days	44 days	13 days	19 days	17 days	12 days	3 days	6 days	14 days	1 day	98%
Electricity Connection	50 days	44 uays	15 uays	19 uays	17 uays	12 uays	5 uays	o uays	14 uays	1 uay	9070
Time taken to perform											/
Water Connection	90 days	91 days	16 days	14 days	11 days	11 days	1 days	2 days	2 days	1 day	99%