# ST HELENA UTILITIES REGULATORY AUTHORITY

September 2022

REPORT ON THE MAXIMUM CHARGES OR FEES TO BE LEVIED BY CONNECT SAINT HELENA LTD

## PART 1 – OVERVIEW

### 1.1 UTILITY SERVICES ORDINANCE 2013

On 1st April 2013 the Utility Services Ordinance 2013 came into force. This Ordinance established the Utilities Regulatory Authority and created a legal framework to facilitate the private sector provision of licensed public utility services.

These services are —

(a) The generation, distribution and supply of electricity;

(b) The collection, storage, treatment and distribution of water; and

(c) The disposal of waste water.

### 1.2 UTILITIES REGULATORY AUTHORITY

The members of the Authority are the Chief Magistrate (as Chair), Mr Paul Hickling and Mr Bill Scanes. The Judicial Services Manager is the Secretary to the Authority, to whom any communication should be made*. The Authority, and any person acting under its authority, act entirely independently and are not subject to the direction or control of the Governor, the Executive Council, Legislative Council or any other person or authority.

*(yvonne.williams@judicialservices.sh)

### 1.3 OBJECTIVE OF AUTHORITY

The objective of the Authority is to regulate the development and provision of public utility services in a manner which—

(a) Ensures that users of such services are protected from both unreasonable prices and unreasonably low levels of service;

(b) Ensures (so far as is consistent with paragraphs (d) and (e)) that the prices charged for such services do not create unreasonable hardships for households or unreasonable hindrance to commercial and economic development in St Helena;

(c) Motivates Utilities Providers to improve the quality of the services they provide;

(d) Ensures stability and predictability in the public utilities industry in the medium and long terms;

(e) Supports a progressive reduction in levels of subsidy from public funds; and

(f) has regard to such other regulatory objectives (if any) as may be prescribed.

**1.4 DUTIES OF AUTHORITY**

It is the duty of the Authority, having regard to its objectives, to carry out its functions and to ensure that Utilities Providers comply with—

(a) Ordinances, regulations and directives issued thereunder, regulating public utility services; and

(b) The conditions of their licence.

**1.5 POWERS OF THE AUTHORITY**

The Authority may, for the purpose of performing its duties, issue Directives to a Utilities Provider in connection with the provision of any public utility service; and, without prejudice to that generality, such Directives may impose requirements concerning;

(a) The quality or standard of service which the Utilities Provider must deliver to its customers;

(b) Payments of compensation (or abatement of charges) to compensate customers when the service provided does not meet the standards so set;

(c) The maximum charges or fees to be levied by a Utilities Provider for providing the public utility service;

(d) The terms and conditions on which public utility services are to be provided; and

(e) Such other matters (if any) as may be prescribed.

**1.6 PENALTIES BY THE AUTHORITY**

If the Authority is satisfied that a Utilities Provider has failed to comply with a Directive, or with a condition of its licence, the Authority may order the Utilities Provider to pay a penalty not exceeding the sum of £100,000.

A licence may be revoked by the Governor in Council upon recommendation of the Authority, where the Utilities Provider is in substantial and continuing breach of—

(a) Any of the provisions of the licence;

(b) Any Directives issued by the Authority; or

(c) Any other obligations under the Ordinance.

**1.7 UTILITIES PROVIDER- CONNECT SAINT HELENA LTD**

With effect from 1st April 2013 Connect Saint Helena Ltd (“Connect”) were licenced by the Governor in Council to provide all said public utility services in St Helena. The Authority was instrumental in the drafting of such a licence.

Connect is a private limited company which is wholly owned by the St Helena Government (“SHG”). The Board of Directors consist of a non-executive Chair, further non-executive directors and executive directors.

**1.8 PURPOSE OF REPORT**

The Authority received from Connect a request for permission to adjust the tariffs for electricity from 1st October 2022. The detailed proposals, and justification from Connect, are as outlined in the Annex. In order for such to be permitted the Authority would be required to issue a direction to supersede its Direction for Maximum Electricity and Water Tariffs issued in March 2021.

**1.9 CONSULTATION**

The URA invited anyone wishing to do so to forward any representations they may have on the price increases through media advertisements.

## PART 2 – IMPACT OF INCREASES

**2.1 ELECTRICITY PRICING**

At present there are two tariffs. For domestic users for the first 1000 units the tariff is 30p a unit, thereafter it is 46p a unit. For commercial users, those using 3 Phase connections and Government the tariff is 46p a unit for all electricity consumed.

It is proposed to introduce a single tariff for all users of 39p a unit, representing an increase of 9p a unit for domestic users for the first 1000 units and a decrease for all other users by 7p a unit. To put this into perspective just 4% of domestic users consume in excess of 1000 units, 9% of consumers are commercial and 4% Government. The reason for the change is that those paying 46p a unit are subsidising those who pay 30p a unit. The true price for generating one unit of electricity is 39p and so, the argument goes, all should pay the true cost of the electricity they consume.

It is worth noting that the recent fuel price increases do not impact upon consumers directly in the form of higher utility costs, but does involve an estimated cost to SHG of £1,350,000 due to the Fuel Risk Share arrangement. This will have to be funded through public funds and represents a subsidy to Connect. In addition SHG has agreed a subsidy to Connect of £688,000 making a total of £2,038,000.

This needs comparing to recent subsidies as seen in the chart below

| Financial Year | Total Subsidies |
|---|---|
| 2013/14 | £1,109,514 |
| 2014/15 | £845,348 |
| 2015/16 | £777,000 |
| 2016/17 | £605,000 |
| 2017/18 | £668,000 |
| 2018/19 | £703,000 |
| 2019/20 | £681,000 |
| 2020/21 | £681,000 |
| 2021/22 | £446,510 |

| | |
|---|---|
| 2022/23 estimated | £2,038,000 |

This is particularly concerning to the URA as one of its objectives is to support a progressive reduction in levels of subsidy from public funds. It might be argued that Connect is not immune to the increase in diesel costs which represents a significant portion of this year's subsidy, which of course is right. However increase in fuel prices is nothing new and the risk of volatility was appreciated by Connect as can be seen below. Further the Fuel Risk Sharing arrangement is just that, an arrangement. Arrangements can change and we cannot assume that it will continue. It represents a significant cost to the Government, and those that fund the Government.

This reliance on diesel by Connect throws light on the need for renewable energy, the failure to invest in this has placed the population of St Helena at risk of significant hikes in the costs of utilities and provides no opportunity for reduction in tariffs

In 2016 the corporate performance target for Connect in relation to renewable energy generation was 80% by 19/20 (BDO report pp.10/11). The 2016/17 internal audit report for Connect, referred to in the BDO report, contains the following, "The current 2020 Strategic Plan demonstrates a vision for utility supplies that will be cost effective and undoubtedly beneficial to the island. This involves further enhancement of renewable energy supply, thus reducing the dependence on diesel fuel, together with an expansion of water holding capacity by enlarging reservoirs."

The BDO report (p.32) highlighted that, "the Renewable Energy Project should yield further cost savings through substantial reductions in the costs of imported diesel fuel for the Energy Generating Unit at Rupert's Bay. Section 4.2 provides estimates of the potential savings which could range from £1.6 million to £2.6 million per year."

The BDO report (pp.34-5) further stated that, "SHG and CSH have high expectations that the Renewable Energy Project (REP) will give a significant boost to: (i) the operational and financial performance of CSH; (ii) reduce imported diesel requirements for electricity generation to a minimum; (iii) enable CSH to set more appropriate and competitive tariffs for its utility services; and (iv) generate sufficient income to sustain full cost recovery without the need for annual subsidies"

In a SHG Press Release issued in April 2018, SHG and Connect Saint Helena Ltd announced that PASH, based in the UK, has been chosen as the preferred bidder to provide their renewable energy solution to St Helena. The Press Release stated that, "The project will result in the majority of the Island's energy needs being met by renewable sources... The project will also mean that less diesel will be used to produce electricity on St Helena, which will reduce the Island's environmental footprint and reduce sensitivity to future increases in the price of diesel. ...The project supports the aims of the Energy Strategy notably that "St Helena will increase the production of energy through renewable sources, and reduce the Island's reliance on imported fuels, increase fuel security and price stabilisation'. It will also support the 10 Year Plan's aim to 'Invest in renewable energy with a view to becoming 100% self-sufficient' and supports the Sustainable Economic Development Plan by 'increasing the amount of renewable energy on-Island, reducing reliance on diesel and encouraging improvement of distribution networks required to avoid significant increases in energy costs in the future.' Negotiations with PASH Global on the details of the contract are ongoing."

The URA highlights that Connect have long been aware of the benefit of renewable energy in that it reduces reliance on diesel and so would lead to reduced electricity costs and a reduced reliance on the subsidy. In the annual report to the URA for the year ending 2018 Connect advised as follows, "It

is anticipated that during the coming financial year construction of additional solar generation and the battery storage required to optimise the system will be completed with additional wind becoming operational during the following year. This will have a massive impact particularly since the price of diesel is increasing, at worst it will help stabilise the price of electricity and once the full capacity is installed there will be less subsidy requirement and once the subsidy has disappeared there is the opportunity to reduce consumer costs."

In the 2019 report the URA was advised, "As more renewable energy is integrated Connect's operating costs will reduce allowing for reduced subsidy to be taken, the *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."* (URA emphasis)

In 2020 we were advised, "With all the above bearing pressure on the company's finances the only way significant cost efficiencies can be realised is through continual investment in renewable energy. The wind turbines and solar farm together contribute a budgeted 25% of the total power generated. Dependency on diesel generation and the international oil prices variability continue to weigh heavily on the cost, and predictability of the cost of electricity production. To realise tangible cost reduction further investment in renewable energy and power storage assets continue to be needed."

In these tariff submissions we have been advised that renewable energy production is now at 20% which is less than it was in 2017 when it was at 26%. Reference is made to ageing wind turbines. That we are in a position whereby the benefits of renewable energy to the consumer have been recognised for some time, yet the amount of electricity generated by renewables has in fact fallen, is of very real concern.

The Renewable Energy Project has now been replaced by the Energy Delivery Plan which Connect says in its submission to the URA it is giving priority to developing. Connect state this time that, "The Company recognises that the integration of additional renewable energy will: support the Company's environmental objectives, 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.*" (URA emphasis). That part of this submission in 2022 is lifted directly from the 2019 report (see above) is concerning in that it demonstrates a lack of originality in submissions to the URA and is simply a repetition of earlier statements where there has been no subsequent action.

The URA has been advised repeatedly by Connect that renewables are the way forward to reduce reliance on diesel and thereby reduce costs for consumers yet no progress has been achieved, in fact renewable energy production has fallen. Consumers will no doubt come to their own conclusions about Connect's commitment to renewable energy which appears to the URA to be lacking. It is difficult to accept that Connect have the will to move this island forward in the matter of renewable energy production given what has been advised to the URA as to what was intended and the subsequent inaction.

We make this point because had the 19/20 target of 80% renewables been met then the Government would not be having to divert funds to pay for the diesel price increases, the subsidy would be reducing and we should be discussing obtaining parity by price reductions for businesses instead of an increase of 9p a unit for households on an island with limited incomes. Looking at the benchmarking information provided the benefit of high levels of renewable energy are stark when one sees that Aruba residents pay 18p a unit with a standing charge of just £5.73.

We also make this point, it is no surprise that Connect's customers are seeking to install their own PV panels as it reduces costs to them. Connect is running a very real risk of some residents being able to reduce their electricity costs whereas the poorer and more vulnerable members of society will be

wholly reliant on Connect. As reliance on Connect reduces then income will be impacted leading to higher prices being charged by Connect. Increasing costs to householders, as is proposed by Connect, will only increase this trend among the section of society that represents the greatest number of users and the long term viability of Connect as a company would be undermined, especially having regard to the projected population levels.

However this tariff adjustment is not about having to raise additional income but is about equity between users. Whether it is right or wrong we are in a position where there are two tariffs. Householders pay a reduced rate and commercial and Government pay a higher one. The cost of electricity is an overhead to businesses or Government that is factored into the costs to be charged to consumers, householders therefore pay for the extra cost that businesses and Government have to pay through the prices for goods, services and taxation. The reality is that these costs for consumers will not reduce, Government is unlikely to reduce taxes and to suggest that businesses will reduce prices misunderstands the nature of business which is to make a profit. What will increase for householders is their own electricity costs and the costs for goods and services are unlikely to reduce to compensate for that.

It is worth looking at the aims of the URA which are to:

(a) Ensure that users of such services are protected from both unreasonable prices and unreasonably low levels of service;

(b) Ensure (so far as is consistent with paragraphs (d) and (e)) that the prices charged for such services do not create unreasonable hardships for households or unreasonable hindrance to commercial and economic development in St Helena;

(c) Motivate Utilities Providers to improve the quality of the services they provide;

(d) Ensure stability and predictability in the public utilities industry in the medium and long terms;

(e) Support a progressive reduction in levels of subsidy from public funds; and

(f) have regard to such other regulatory objectives (if any) as may be prescribed.

We have already addressed (e) above in that we should not be in a position where the subsidy increases but that is the case due to the lack of investment in renewables, there are no regulatory objectives as referred to in (f). In relation to (d) we have already addressed the impact of increase of costs upon the installation of PV panels among domestic users and the failure to invest in renewables, which the URA sees as the best way that Connect's long term future can be ensured.

However prices are mainly impacted by the approach we take to (a) and (b), yet (d) and (e) are of course relevant because the assessment in (b) must be so far as is consistent with (d) and (e). Consequently we have to take (d) and (e) into account when making our decision.

The test for businesses and householders is different, it is unreasonable hardship for households and unreasonable hindrance to commercial and economic development in St Helena. There is no test referred to for Government but we will of course take the impact upon Government into account, because Government is paid for, at least in part, by the St Helena taxpayer, i.e. householders and businesses.

The response from businesses took the form of a very helpful letter from Mandy Peters at Solomons, no other businesses engaged in the consultation process. Ms Peters points out that her company sought reduced rates for the bakery as it runs overnight but this was refused by Connect. The response of Solomons was to install PV panels and as a consequence the benefit to them of the price reduction is not as great as might be imagined. They had to increase salaries in August 2022 to assist

their employees in addressing the rise in the cost of living. This increase was challenging for the company and it would be undermined by the increase in electricity costs for their employees.

We also had a very helpful response from the Equalities and Human Rights Commission. The Commission is of the view that the proposed increase will create unreasonable hardship. They have made this assessment by reference to the minimum income standard. The EHRC is particularly concerned at the level of poverty on St Helena and expresses the view that the proposed increases will impact most upon the vulnerable members of society.

The consultation responses from householders was extensive. There was significant engagement with a petition that asks the URA to reject the proposals and ensure a detailed public consultation is undertaken before making a final decision. In addition to this were a large number of very well argued letters setting out, sometimes with statistical analyses, the impact of the increase. Some also explained the very real impact the increase will have on them personally.

Government did not take part in the consultation process. We have had no input as to their assessment of the impact upon householders of the increase of electricity costs, this would have been very helpful to the URA. We have had no input as to the commitment to the Government Utility Credit Scheme or how many households will be eligible. We have no idea as to the commitment to the Fuel Risk Sharing arrangement. We do not know whether the benefit that Government obtains from the reduction in their electricity costs has been factored in to the availability of funds to support the measures being introduced to address the rise in the cost of living. We are simply relying on Government press releases and are concerned that the Government's efforts to address the cost of living increase will be significantly undermined by the increase in costs proposed by Connect.

The Government Utility Credit Scheme amounts to £33 a quarter for those with incomes below the minimum wage and who have less than £4,000 in savings. We query how many people will benefit from this, we are not told how many people receive less than the minimum wage. £33 represents 84 units at 39p a unit. Those consuming just 400 units a quarter who fall within this very low income bracket are still going to be paying £3 a quarter more. Those who consume 600 units a quarter who fall in this bracket will be £21 a quarter worse off. It is also the case that those on low incomes often do not have access to modern electrical appliances that consume less electricity and can therefore be higher consumers of electricity due to their poverty.

The Government Utility Scheme is part of a package of measures designed to reduce the impact of the rise of the cost of living. The press release announcing these policy changes advised that they will be reviewed early in the New Year, prior to the 31st March 2023 expiry. It is quite right that Government cannot guarantee that the Utility Credit Scheme will persist beyond March next year. At most the Government can say that for the next 2 quarters those on very low incomes will receive £33 a quarter if they apply for it. The price increase is of course designed to go beyond that date.

## 2.2 WATER AND DRAINAGE CHARGES

There is no proposal to increase these tariffs.

## PART 3 - CONCLUSION

In the absence of responses from businesses and Government (except Solomons) there is nothing to suggest that the current tariff represents an unreasonable hindrance to commercial and economic development in St Helena.

The URA sees the logic in an equal rate for all consumers but finds that an increase of this magnitude would cause unreasonable hardship to households, it is simply too much too quickly and unnecessary when there is no evidence of hindrance to businesses. We can see little benefit to businesses whose pricing structures will take into account their higher costs, and we can see no prospect of a corresponding reduction in costs to householders by the reduction in the tariffs for businesses or Government.

The URA sees parity being obtained over the medium term by the investment in renewable energy leading to a reduction in tariffs for businesses to bring it in line with domestic tariffs.

The Directive issued in March 2021 as to the charges to be applied to customers of Connect remains.

Duncan Cooke, Chairman

Paul Hickling

Bill Scanes

26th September 2022

# ANNEX

# Utilities Tariff Review Paper

**YEAR 2022/23**

## 1. Executive Summary

This paper sets out Connect Saint Helena Ltd.'s proposal and justification for reviewing tariffs effective 1 October 2022. A 10% increase in water and wastewater was last effected in April 2021 whilst electricity tariffs were last revised in April 2016, more than 6 years ago.

There is no increase in tariffs proposed for water and wastewater services. However, the company proposes to change the electricity tariff structure and replace it with a single unit cost-reflective electricity tariff based on the pre-May cost of electricity of 39p/kWh.

The single cost reflective tariff for electricity:

- is more transparent
- is aligned to the company objective of reducing government subsidies
- removes an untargeted subsidy which will be replaced by a targeted subsidy through SHG's Electricity Credit Scheme. This enables funding support to be targeted to those that need it most.
- is more equitable and eliminates cross-subsidisation
- provides wider economic benefits

The recent increases in fuel prices and changing consumption patterns have also necessitated the need to move to a cost-reflective electricity tariff structure.

The resultant impact on domestic consumers is analysed with consumption between 1-1,000kWh realising a 30% (9p) increase for each kWh consumed, whilst consumption above 1,000kWh will reduce by 7p per kWh for domestic consumers. Commercial and government consumers will realise a 7p saving on each unit consumed.

Under the proposed tariff restructure, all consumers will pay at the actual cost of generating and distributing a unit of electricity. Consumers that currently pay above the actual cost per unit of electricity (i.e. large domestic consumers who consume in excess of 1000 kWh per quarter, commercial consumers, and SHG) will be the biggest beneficiaries of the electricity tariff reform and it is expected that the savings made can be invested elsewhere which will have a multiplier effect on the economy.

Whilst domestic consumers who use less than 1000 kWh per quarter will see increased costs, low-income households will not be disadvantaged through the introduction of an Electricity Credit Scheme that will target support to where it is needed, rather than continue with the current untargeted subsidy through the existing tariff structure.

**Connect recommends to the Utility Regulatory Authority that the electricity tariff is re-structured as proposed within this paper and Appendix 1.**

## 2. Introduction

Connect Saint Helena Ltd. (Connect) wishes to adjust electricity tariffs from 1st October 2022. No amendments are proposed to water or wastewater tariffs at this time.

The detailed proposal for revising electricity tariffs is contained within this paper. Connect recommends to the Utilities Regulatory Authority (URA) that the revised tariff structure for electricity is implemented from 1st October 2022 in order to introduce a simpler, fairer and more transparent tariff that will support Connect's efforts to cushion against global inflation and fuel price increases.

## 3. Background

### 3.1 Context

This paper is being written at a point where the world has witnessed significant inflationary pressures, key amongst which have been rapidly rising fuel prices following the war in Ukraine. Issues such as longer procurement times and the availability of materials following the COVID-19 pandemic are also contributing to inflationary pressures.

### 3.2 Impact of the Fuel Price Increases: Electricity

St Helena witnessed an increase of 50.7p/litre in May and a further 27p/litre increase in June: this represents a cumulative 94% increase in the cost of fuel.

As a result, the cost to generate a unit of electricity has increased from 39p/kWh to 55p/kWh. Based on forecast demand, the resulting additional cost of electricity generation (i.e. the increased cost of the fuel required for electricity generation) is £1.31m. Agreement has been reached that this will be funded through the Fuel Risk Sharing Agreement with SHG.

There will also be an impact on the costs of electricity distribution, particularly in relation to transport costs for ongoing maintenance and fault rectification programmes. The additional cost to electricity distribution has not been factored into either the Fuel Risk Sharing Agreement or cost recovery from consumers through a proposed tariff increase. Instead, Connect will manage as far as possible the increased costs of electricity distribution through internal efficiency savings.

As a result, the immediate impacts of the fuel price increases in May and June 2022 have been mitigated and are not factored into the proposed tariff revision. It should be noted, however, that should there be subsequent significant fuel price increases, this will necessitate a further review of electricity tariffs.

## 4. Impact of the Fuel Price Increases: Water and Wastewater

Whilst the most significant impact of the fuel price increases in May and June 2022 has been on the cost of fuel for electricity generation, there have been impacts on water and wastewater services. These include:

- Increased costs of pumping water. This has been mitigated to some extent by recent rainfall which has reduced requirements to pump water to districts in water deficit but nevertheless, day-to-day pumping requirements are ongoing.
- Increased transport costs to support maintenance and fault rectification programmes.

It is not proposed at this time to recover these additional costs through either the Fuel Risk Sharing Agreement or cost recovery from consumers through a proposed tariff increase. Instead, Connect will manage as far as possible the increased costs through internal efficiency savings.

However, should there be further fuel price increases this may necessitate an accelerated review of water and wastewater tariffs.

## 5. Water and Wastewater Tariff Reviews

The Water Section currently operates at a significant loss, funded through the subsidy received via SHG (£688k in 2022/23). Historically, the Wastewater Section has made a small profit (just above the breakeven point) but going forward maintaining this position is becoming increasingly difficult due to the increased need for investment to upgrade ageing infrastructure.

As part of its financial planning, Connect had planned to propose a 10% increase in water and wastewater tariffs during 2022/23. However, given the substantial impact of the recent fuel price increases, in order to reduce the burden on consumers, there is no tariff adjustment proposed for water tariffs and standing charges or wastewater charges during the current financial year. Instead, the Company is making every effort to identify efficiency savings to reduce the impact of global inflation on water and wastewater services. As noted above, this may change if there are further significant fuel price increases in the current financial year.

A comprehensive review of water and wastewater tariffs is underway and submission is planned to the URA for revised tariffs to take effect on 1 April 2023.

## 6. Electricity Tariff Review

### 6.1 The Current Cost of Electricity Generation and Distribution

Table 1 below shows the current cost of electricity generation.

The table shows that fuel is the major cost of electricity generation. The sharp increase in global fuel prices has resulted in a 41% increase in the cost of electricity from the pre-May cost (from 39p/kWh to 55p/kWh).

It remains the Company's objective to reduce reliance on diesel generation through the integration of additional renewables. This will reduce operating costs and ultimately reduce the cost of electricity tariffs for the customer. Work is underway on an Energy Delivery Plan.

As the fuel price increases in May and June 2022 have been buffered through the Fuel Risk Sharing Agreement with SHG, reference should be made to the pre-May 2022 price (the yellow shaded column) to reflect the cost that needs to be recovered from the consumer through the electricity tariff. Currently, the actual cost is **39p/kWh.**

Table 1: Cost of Electricity (2022 prices)

| | **Pre-May** | **May** | **June** |
|---|---|---|---|
| Variable Cost of Fuel | 0.17 | 0.27 | 0.33 |
| Variable Generation Costs | 0.03 | 0.03 | 0.03 |
| ***Variable Costs of Generation and Distribution*** | **0.20** | **0.30** | **0.36** |
| Fixed Generation Cost | 0.08 | 0.08 | 0.08 |
| Distribution Costs (All Fixed) | 0.04 | 0.04 | 0.04 |
| ***Fixed Cost of Generation and Distribution*** | **0.12** | **0.12** | **0.12** |
| **Total Generation and Distribution Costs before Allocate Overheads** | **0.32** | **0.42** | **0.48** |
| Administration and Other Overheads | 0.07 | 0.07 | 0.07 |
| **Total Cost** | **0.39** | **0.49** | **0.55** |

## 7. The Current Electricity Tariff

Electricity tariffs were last revised on 1 April 2016, over six years ago. The current charges are shown in Table 2 below.

The current tariff structure has evolved over time from a three-banded structure for domestic consumption introduced in the late 1990s to a two-banded structure (a lower band for domestic users consuming less than 1000 units per quarter and an upper band for all other consumers.) Whereas the three-banded structure had the lowest band pegged to estimates of energy usage required for subsistence (then based at 400 kWh per quarter) this has become eroded over time so that the upper limit of the lower band is set at 1000kWh per quarter.

Table 2: Tariff structure per kWh

| Consumer Group | Tariff (pence/kWh) | No. Consumers |
|---|---|---|
| Domestic 1-1,000kWh | 30p | 2500 |
| Domestic above 1,000kWh | 46p | 107 |
| Commercial | 46p | 285 |
| Government | 46p | 121 |

## 8. Key Findings from the Electricity Tariff Review

The key findings from the Tariff Review are as follows:

- The tariff structure is overly complex.
  It is not transparent from the current banded tariff structure how the rate charged is derived from the actual cost per unit, or how the rate charged should be adjusted over time as the cost per unit changes.

- The tariff structure incorporates cross-subsidisation
  Currently, those users that consume less than 1000 kWh per quarter are charged at the subsidised rate of 30p/kWh. The remaining users (domestic consumers consuming in excess of 1000kWh per quarter, commercial consumers, and government consumers) are charged at a higher rate.

  In practice, 17% of users are charged at a higher rate to cross-subsidise 83% of consumers who receive a subsidised rate. This is shown in the table below.

  Table 3: Impact of Cross-Subsidisation

| Consumer Group | Tariff (pence/kWh) | Actual Cost/kWh | Impact | No. Consumers | % Total Consumers | |
|---|---|---|---|---|---|---|
| Domestic 1-1,000kWh | 30p | 39p | -9p/kWh | 2500 | 83% | |
| Domestic above 1,000kWh | 46p | 39p | +7p/kWh | 107 | 4% | 17% |
| Commercial | 46p | 39p | +7p/kWh | 285 | 9% | |
| Government | 46p | 39p | +7p/kWh | 121 | 4% | |

- The tariff structure incorporates an untargeted subsidy
  The original premise underpinning the banded tariff structure was that the lowest band reflected a basic level of electricity use required for subsistence. This was then linked to support for low-income households. There appears to be a misconception that low electricity usage represents low income. This does not take into account:

- Empty properties
  There are a number of properties that are not fully occupied throughout the year. As the tariff structure does not incorporate a standing charge, there is no incentive to disconnect from the electricity grid when there are no occupants at the property and then reconnect when the property is occupied. This means that a number of properties connected to the grid will have low consumption of electricity but this is not an indicator of concerns around household income or the ability to pay.

- Investment in Energy Saving Goods
  More affluent households are more likely to invest in energy-saving goods (e.g. more energy-efficient white goods, private photovoltaic [PV] systems, etc). Thus the low levels of electricity consumption are not an indicator of concerns around household income or the ability to pay.

- The Challenge of Targeting Support to Low-Income Households
  Whilst Connect acknowledges the need to support low-income households, it is not the role of the Utilities Provider to define a low-income household. It is likely that support is not being targeted where it is required. Consider, for example:

  - Determining the band that low-income households might sit in has been almost arbitrary. Over time, the band has expanded from 400 kWh/quarter to 1000 kWh/quarter. It is acknowledged that the original 400kWh/quarter was based on an international statistic and that countries will have differing demands for electricity depending on energy access as well as climate (e.g. for heating or air conditioning purposes). In St Helena at the current time, the average domestic use is 480kWh/quarter. As this reflects consumption at a subsidised rate, this may be overstated. Connect would posit that 400kWh/quarter is indicative of basic requirements and that a band based on 1000kWh/quarter is overstated.

  - Electricity demand will vary depending on the requirements of each household. It is more likely that low-income households who do not have the ability to invest in energy-saving goods will have higher rates of electricity consumption. Those that cross the threshold into the upper tariff band (i.e. if their electricity consumption exceeds 1000kWh/quarter) will not benefit from a subsidised rate.

  - In 2021, 215 families were in receipt of Income Related Benefits[1]. In 2020/21, 175 employees (NB: individuals but used in this case as a proxy for families/households) were employed at a rate above the minimum

[1] Source: St Helena in Figures, May 2022, Statistics Office of the St Helena Government

wage but below the income tax threshold[2]. In comparison, 2500 households consume less than 1000 kWh/quarter and are therefore in receipt of the subsidised rate.

Connect therefore posits that the subsidy applied to electricity consumers in the lowest band (less than 1000 kWh/quarter) potentially does not reach all low-income households and certainly reaches households that are not classified as low-income. As a form of untargeted subsidy, the current banding arrangement is a very blunt tool.

## 9. Proposed Electricity Tariff

To ensure cost recovery, Connect proposes to introduce a single unit cost-reflective electricity tariff based on the pre-May cost of electricity of 39p/kWh. The proposal will result in a 30% (9p) increase for each kWh consumed between 1-1,000kWh, however, consumption above 1,000kWh will reduce by 7p per kWh.

The revised tariff is pegged to the actual cost of generating and distributing a unit of electricity. It excludes the increased fuel cost following the May and June 2022 fuel price increases as these have been met under the Fuel Risk Sharing Agreement. The proposed tariff is shown in the table below.

Table 4: Proposed Tariff per kWh

| | Current | Proposed | Change per kWh |
|---|---|---|---|
| Domestic 1-1,000kWh | 30p | 39p | 9p Increase |
| Domestic above 1,000kWh | 46p | 39p | 7p Decrease |
| Commercial | 46p | 39p | 7p Decrease |
| Government | 46p | 39p | 7p Decrease |

## 10. Justification for Electricity Tariff Reform

The proposal being put forward is to introduce a single unit cost reflective tariff for all electricity consumers effective 1 October 2022. The reasons for the proposal are:

- **This is a more transparent method:** each consumer pays for the actual cost of electricity provision. By adopting a more transparent approach to electricity tariffs linked to the actual cost per unit, future proposed tariff adjustments can be easily linked to cost drivers. Unlike the current tariff structure, the single unit tariff makes it evident how tariffs are adjusted if there is a sustained change in the cost per unit. For example, a sustained increase in cost would warrant an increase in tariff but equally a sustained decrease in the

[2] Source: SHG Statistical Bulletin No. 2, 2022 (Published March 2022)

actual cost per unit would warrant a decrease in tariffs. This contributes to the URA's objective of ensuring sustainability and predictability in the public utilities industry in the medium and long-term (Section 4(1) (d) of the Utility Services Ordinance).

This method is simple and transparent. This is consistent with the requirement in Connect's Licence to prepare transparent, non-discriminatory and cost-justified tariffs.

Increasing transparency in utility pricing increases opportunities for the Utilities Provider to be held accountable and to generate efficiency savings wherever possible. One of the stated objectives of the URA is to motivate Utility Providers to improve the quality of services they provide (Section 4(1) (c) of the Utility Services Ordinance). The simpler and more transparent tariff contributes towards this.

- **This is more equitable as all units will be billed at the actual cost of production. The cross-subsidisation between the different categories of consumers will be eliminated:** this will benefit those users who currently pay at an increased rate over and above the actual cost per unit of electricity (currently 17% of users cross-subsidise the remaining 83%). This contributes to the stated objective of the URA to ensure users are protected from unreasonable prices (Section 4(1) (a) of the Utility Services Ordinance).

  For those users that are currently paying at the increased rate, the revised tariff structure will enhance the competitiveness of Connect's services. This is relevant for consumers considering alternative approaches, e.g. off-grid systems or investing in private PV systems connected to the grid. This now becomes a market-based decision based on actual costs rather than increased costs to large domestic consumers, commercial consumers and SHG. In a small isolated community with few options for expansion, such decisions have an impact on the sustainability of the Company. As per Connect's Licence, the Company is required to operate on a commercial basis and thus a tariff structure that is more equitable and reflects actual costs is an advantage.

- **This is in line with the Company's goal of reducing government subsidies and with the wider goal of reducing untargeted subsidy:** currently, 83% of users are billed at a subsidised rate (i.e. there is a 7p subsidy (23% of the actual cost) on each unit charged to domestic users who consume less than 1000 units per quarter. This subsidy is funded through cross-subsidisation (see above) but also increasingly from SHG subsidy.

  By introducing the revised tariff structure, all users will pay the same cost-reflective unit rate. This enables Connect to operate on a commercial basis.

  This does not negate the need to support low-income households. However, as discussed above, the current approach is too blunt a tool that does not necessarily reach all low-income households but certainly reaches households that are not classed as low-income.

  In order to introduce a targeted subsidy that can be directed to where it is needed, the

subsidy contribution currently made to the electricity tariff will be withdrawn and the funding redirected to a SHG-led Utility Credit Scheme. Under this Scheme, from 1 October 2022, eligible families with incomes below the minimum wage and who have less than £4,000 in savings may apply to receive a quarterly utilities credit of up to £33.

- **There are wider economic benefits from the move to a single cost reflective tariff:** for example, the implementation of a single cost-reflective will:
    - result in a 15% savings for all commercial and government consumers. Since electricity represents a huge cost driver for most goods and services, the reduction in unit tariffs will result in savings that can in turn, at the discretion of the business/government entity, be applied to reduce the cost of goods/services to the customer or be invested elsewhere. Either has a multiplier effect within the economy.
    - result in all consumers paying the actual cost per unit of electricity. Currently, 83% of users are charged at a subsidised rate. This in turn suppresses the true cost of electricity. This then has a bearing on the calculation of the basket of goods, IRB, minimum wage, etc.
    - benefit smaller and start-up businesses. In feedback received, the impression has been that the commercial sector can afford to pay a higher rate. This may not be true for smaller and start-up businesses where the higher unit tariff may be a constraint on entering the market.

## 11. Impact on Domestic Consumers

A detailed analysis of the impact of a single cost reflective tariff on domestic consumers was carried out and the results are shown in Table 5:

A detailed analysis of all consumers showed that domestic consumers' bills will increase by between 1p to 9p per kWh depending on usage. A total of 2,465 low users with consumption between 1-1,000 kWh will get an average of 9p increase per kWh whilst 140 users between 1,001-2,400 kWh will get an average increase between 1p-8p on their electricity bills. However, 4 consumers with bills starting from 2,400kWh and above will realise savings of between 1p and 2p. Due to the impact of the proposed tariff on 95% of the domestic consumers, the Company supports the SHG initiative to introduce the electricity credit support scheme. The scheme will remove the current subsidy targeted toward fuel and redirect this to low-income households.

Table 5: Analysis of Impact on domestic consumers

| Quarterly Consumption Bands in kWh | Max. Consumption Per Quarter in kWh | Number of Consumers | Average Impact per kWh | Impact Per Quarter | Impact Per Month | Impact Per Week |
|---|---|---|---|---|---|---|
| 1-200 | 200 | 601 | +£0.09 | £18.00 | £6.00 | £1.50 |
| 201-400 | 400 | 689 | +£0.09 | £36.00 | £12.00 | £3.00 |
| 401-600 | 600 | 580 | +£0.09 | £54.00 | £18.00 | £4.50 |
| 601-800 | 800 | 379 | +£0.09 | £72.00 | £24.00 | £6.00 |
| 801-1000 | 1000 | 216 | +£0.09 | £90.00 | £30.00 | £7.50 |
| 1001-1200 | 1200 | 73 | +£0.08 | £76.00 | £25.33 | £6.33 |
| 1201-1400 | 1400 | 31 | +£0.06 | £62.00 | £20.67 | £5.17 |
| 1401-1600 | 1600 | 20 | +£0.04 | £48.00 | £16.00 | £4.00 |
| 1601-1800 | 1800 | 7 | +£0.02 | £34.00 | £11.33 | £2.83 |
| 1801-2000 | 2000 | 5 | +£0.02 | £20.00 | £6.67 | £1.67 |
| 2001-2200 | 2200 | 2 | +£0.01 | £6.00 | £2.00 | £0.50 |
| 2201-2400 | 2400 | 2 | -£0.01 | -£8.00 | -£2.67 | -£0.67 |
| 2401-2600 | 2600 | 1 | -£0.01 | -£22.00 | -£7.33 | -£1.83 |
| 2601-2800 | 2800 | 0 | -£0.02 | -£36.00 | -£12.00 | -£3.00 |
| 2801-3000 | 3000 | 1 | -£0.02 | -£50.00 | -£16.67 | -£4.17 |

## 12. Impact on Commercial Consumers

A detailed analysis of the impact of a single cost reflective tariff on commercial consumers was carried out and the results are shown in Table 6:

Table 6: Analysis of Impact on Commercial Consumers

| Quarterly Consumption Bands in kWh | Max. Consumption Per Quarter in kWh | Number of Consumers | Impact per kWh | Impact on Quarterly Bill (£) | Impact on Monthly Bill (£) | Impact on Weekly Bill (£) |
|---|---|---|---|---|---|---|
| 1-200 | 200 | 93 | -£0.07 | -£14.00 | -£4.67 | -£1.17 |
| 201-400 | 400 | 49 | -£0.07 | -£28.00 | -£9.33 | -£2.33 |
| 401-600 | 600 | 45 | -£0.07 | -£42.00 | -£14.00 | -£3.50 |
| 601-800 | 800 | 8 | -£0.07 | -£56.00 | -£18.67 | -£4.67 |
| 801-1000 | 1000 | 14 | -£0.07 | -£70.00 | -£23.33 | -£5.83 |
| 1001-1200 | 1200 | 3 | -£0.07 | -£84.00 | -£28.00 | -£7.00 |
| 1201-1400 | 1400 | 4 | -£0.07 | -£98.00 | -£32.67 | -£8.17 |
| 1401-1600 | 1600 | 3 | -£0.07 | -£112.00 | -£37.33 | -£9.33 |
| 1601-1800 | 1800 | 6 | -£0.07 | -£126.00 | -£42.00 | -£10.50 |
| 1801-2000 | 2000 | 1 | -£0.07 | -£140.00 | -£46.67 | -£11.67 |
| 2001-2200 | 2200 | 8 | -£0.07 | -£154.00 | -£51.33 | -£12.83 |
| 2201-2400 | 2400 | 4 | -£0.07 | -£168.00 | -£56.00 | -£14.00 |
| 2401-2600 | 2600 | 1 | -£0.07 | -£182.00 | -£60.67 | -£15.17 |
| 2601-2800 | 2800 | 4 | -£0.07 | -£196.00 | -£65.33 | -£16.33 |
| 2801 and above | 20000 | 42 | -£0.07 | -£1,400.00 | -£466.67 | -£116.67 |

Commercial consumers will realise savings of 7p per kWh consumed. As an example, a commercial consumer with 50,000kWh consumption will realise savings of £3,500 per quarter. Electricity being one of the major costs for most commercial consumers the reduction in tariff from 46p to 39p is likely going to have a positive effect on the economy in general.

## 13. Benchmarking

It is worth looking at other islands to establish how St Helena compares in terms of cost. Electricity prices in St Helena are often said to be very high but in reality, they are favourable compared to other islands which share similar constraints. Island costs will exceed places where fossil fuel generation efficiency is better but of course, nuclear or combined cycle gas

turbines are not viable for remote locations. Aruba benefits from high levels of renewable energy, whilst the cost in the Falkland Islands is subsidised. Table 7 benchmarks the proposed 39p against other Islands:

Table 7: Electricity Tariff Benchmark

| | Population | Unit | Standing | 500kWh Bill | Comparison to St Helena | |
|---|---|---|---|---|---|---|
| St Helena | 4,000 | £0.39 | £0.00 | £195.00 | | |
| Montserrat | 5,000 | £0.44 | £0.00 | £220.00 | £25.00 | More |
| Ascension Island | 900 | £0.47 | £0.00 | £236.05 | £41.05 | More |
| Alderney Island | 1,903 | £0.385 | £7.25 | £199.75 | £4.75 | More |
| Sark Island | 500 | £0.74 | £0.00 | £370.00 | £175.00 | More |
| Falkland Islands | 3,000 | £0.29 | £0.00 | £145.00 | -£50.00 | Less |
| Aruba | 105,000 | £0.18 | £5.73 | £95.73 | -£99.27 | Less |

The Company will continue to seek ways of increasing renewable generation capacity which will further reduce the cost of electricity generation and ultimately reduce electricity tariffs. The Company is therefore giving priority to the development of an Energy Delivery Plan which will map out the next steps in the move towards significantly increasing renewable energy generation on St Helena.

## 14. The Concept of Fuel Poverty

Within the UK there is a concept of fuel poverty. This is the idea that people spend too much of their income on energy requirements. The approach models the fact that households should not spend more than 10% of their income on energy. The UK threshold is used for an indication in the absence of a local figure.

There are complexities to applying this approach as electricity is only one form of energy use. However, in St Helena 99.9% of households use electricity for lighting, 73.2% of households use electricity as the primary energy source for cooking, and 14.5% of households use electricity as the secondary energy source for cooking (source: 2021 Census, SHG Statistics Office). Based on this, it is not unreasonable to use electricity as a proxy when applying the fuel poverty concept.

This concept will apply to some people in St Helena, in that they will spend more than 10% of their income on energy. However, currently, the average household, with two incomes and using a mid-range of energy would not fall into this category.

The table below shows scenarios based on median income data published by SHG (Source: St

Helena in Figures, May 2022, SHG Statistics Office) and on the tax threshold.

Table 8: Fuel Poverty Scenarios

| Scenario 1a: 2 income household @ median income | | Scenario 2a: 2 income household @ tax threshold | |
|---|---|---|---|
| Median Income (2020/21 prices) | £8,880 | Tax threshold | £7,000 |
| Median income (2022/23 prices) | £8,175 | 2 income household | £14,000 |
| 2 income household | £16,350 | | |
| | | | |
| Annual cost if consuming 500 units/quarter | £780 | Annual cost if consuming 500 units/quarter | £780 |
| % of household income | 5% | % of household income | 6% |
| | | | |
| | | | |
| Scenario 1b: 1 income household @ median income | | Scenario 2b: 1 income household @ tax threshold | |
| Median Income (2020/21 prices) | £8,880 | Tax threshold | £7,000 |
| Median income (2022/23 prices) | £8,175 | | |
| | | | |
| Annual cost if consuming 500 units/quarter | £780 | Annual cost if consuming 500 units/quarter | £780 |
| % of household income | 10% | % of household income | 11% |

This would suggest that the majority of people would not be suffering from fuel poverty on the island.

## 15. Business Performance

The Connect Board of Directors is concerned about the declining revenues, especially for electricity. The decline in electricity revenue has been mainly due to low economic activity, declining Island population and the uptake of private PV solar systems. As a result for the year ended 31 March 2022, billed electricity units at 8,888,000 kWh were the lowest since divestment in 2013.

Diesel generation continued to be the major source of electricity generation, contributing an average of 80% during the year with the balance coming from renewable sources (wind and solar). Generation from renewables is being affected mainly by ageing wind turbines and supply chain challenges, leading to increased downtimes for wind turbines. The plan to increase renewables suffered a setback as the Power Purchase Agreement signed on 29 May 2020 between Connect Saint Helena Limited and Sustainable Energy 1 Limited, a subsidiary of PASH, was terminated on 15 November 2022.

The Company recognises that the integration of additional renewable energy will: support the Company's environmental objectives, 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. The Company, therefore, remains committed to delivering the priorities of the Island's Energy

Strategy but recognises that the market has changed considerably since the initiation of the earlier Renewable Energy Project in 2017. Whilst there are constraints such as longer lead-in times for procurement and inflationary pressures, there are also opportunities such as technological advances. The Company is therefore giving priority to the development of an Energy Delivery Plan which will map out the next steps in the move towards significantly increasing renewable energy generation on St Helena.

Despite the challenges, the majority of the Public Utilities Development Plan targets were met at the time of the last review and year to date we are performing well against tighter targets.

## 16. Conclusion

Changes in utility pricing on St Helena are always unpopular with the public. However, the recent increases in fuel prices and changing consumption patterns have necessitated the need to move to a cost-reflective electricity tariff structure. Those consumers that currently pay above the actual cost per unit of electricity (i.e. large domestic consumers who consume in excess of 1000 kWh per quarter, commercial consumers, and SHG will be the biggest beneficiaries of the electricity tariff reform and it is expected that the savings made can be invested elsewhere which will have a multiplier effect on the economy.

Whilst domestic consumers who use less than 1000 kWh per quarter will see increased costs, low-income households will not be disadvantaged through the introduction of an Electricity Credit Scheme that will target support to where it is needed, rather than continue with the current untargeted subsidy through the existing tariff structure.

There is also a significant need to increase revenue for Connect, this will both help reduce the subsidy from SHG and allow for greater levels of investment, which in the long term will help efficiencies and a better level of service provision as proposed in the Utility Services Development Plan.

**Connect therefore recommends to the Utility Regulatory Authority that the electricity tariff is re-structured as proposed within this paper.**

## APPENDIX 1: PROPOSED ELECTRICITY AND WATER TARIFFS COMMENCING 1ST October 2022

Connect Saint Helena Ltd is proposing revised tariffs commencing 1st October 2022. Whilst there has been good progress in reducing operating costs we still require a sizeable subsidy from SHG to remain solvent, putting pressure on Connect to revise charges to the consumer. We are proposing to change the current electricity tariff structure to a single cost reflective tariff and maintain water and sewerage charges at current levels. Low-income households who will be negatively impacted by the revised electricity tariff will receive support from SHG through the Electricity Credit Scheme. Electricity charges have remained static for over 6 years, with the last increase in April 2016.

| | CURRENT TARIFF | PROPOSED TARIFF | Change |
|---|---|---|---|
| **ELECTRICITY TARIFF CHARGES** | | | |
| **Usage Charges** | | | |
| Domestic Band 1 (first 1,000 units) | £0.30 | £0.39 | £0.09 |
| Domestic Band 2 (units over 1,000) | £0.46 | £0.39 | -£0.07 |
| Commercial and 3 Phase | £0.46 | £0.39 | -£0.07 |
| **WATER TARIFF CHARGES** | | | |
| **Quarterly Standing Charges** | | | |
| Domestic | £12.50 | £12.50 | Nil |
| Commercial | £36.41 | £36.41 | Nil |
| Agricultural | £12.50 | £12.50 | Nil |
| **Domestic Use** | | | |
| Treated Water first 15 cubic metres | £1.69 | £1.69 | Nil |
| Treated Water 16 – 24 cubic metres | £2.22 | £2.22 | Nil |
| Treated Water above 24 cubic meters | £4.37 | £4.37 | Nil |
| Untreated | £1.11 | £1.11 | Nil |
| **Other Use** | | | |
| Commercial | £4.37 | £4.37 | Nil |

| | CURRENT TARIFF | PROPOSED TARIFF | Change |
|---|---|---|---|
| Agricultural treated | £2.22 | £2.22 | Nil |
| Agricultural untreated | £1.11 | £1.11 | Nil |

**DRAINAGE TARIFF CHARGES**

| | | | |
|---|---|---|---|
| Domestic Standing | £21.78 | £21.78 | Nil |
| Commercial Standing | £34.39 | £34.39 | Nil |

## APPENDIX 2: INCOME STATEMENT

| | FY 2022-23 Revised Budget | FY 2022-23 Approved Budget | FY 2021-22 Budget | FY 2021-22 Actual |
|---|---|---|---|---|
| Subsidy | 688,000 | 688,000 | 353,000 | 446,510 |
| Fuel Risk Share Estimate | 1,350,000 | - | - | - |
| Tariff income | 4,599,103 | 4,623,148 | 4,853,800 | 4,308,847 |
| General income | 21,060 | 21,060 | 28,594 | 25,501 |
| Service income | 129,516 | 129,516 | 128,719 | 228,901 |
| Gain on Disposal | - | - | - | 2,500 |
| **Total Income** | **6,787,679** | **5,461,724** | **5,364,113** | **5,012,259** |
| | | | | |
| Administrative costs | 401,028 | 401,028 | 381,462 | 388,292 |
| Employee costs | 1,214,637 | 1,214,637 | 1,238,284 | 1,349,700 |
| Premises costs | 216,265 | 216,265 | 210,409 | 213,625 |
| Fuel | 3,013,386 | 1,694,981 | 1,365,518 | 1,605,079 |
| Maintenance/Running Costs | 898,472 | 898,472 | 1,005,395 | 1,174,456 |
| Depreciation | 1,124,232 | 1,124,232 | 1,106,888 | 1,099,238 |
| Contracts | 112,956 | 112,956 | 121,212 | 105,185 |
| **Total Expenditure** | **6,980,976** | **5,662,571** | **5,429,168** | **5,935,575** |
| | | | | |
| **Loss before amortizations** | **(193,297)** | **(200,847)** | **(65,055)** | **(923,316)** |
| | | | | |
| **Amortization of capital grants** | **348,000** | **348,000** | **345,547** | **348,005** |
| | | | | |
| **Net Profit/(loss) before tax** | **154,703** | **147,153** | **280,492** | **(575,311)** |