

Socio-Economic Impact of Connect Tariff Changes 2018

Introduction

It is recognised that any price rise can have adverse socio-economic impacts on St Helena's population and on households in particular. The Connect proposals are no different and as such this assessment aims to analyse where the impacts will fall and whether the price rises are in line with past increases, government policy and current inflation rates. As such it will help members and officers assess whether the impacts are reasonable and what, if any, policy changes might be required.

Context and background

It must be noted at the outset of this assessment that the strategy of Connect to ensure they can raise enough revenue to operate, whilst shifting the burden away from electricity prices and on to water prices is a sensible one and fits with the island's strategy for water conservation and renewable energy. Water has been relatively cheap on the island for a number of years, both in comparison to electricity and to other islands and countries. As such it could be seen that it has been undervalued as a vital and limited resource.

Water shortages in recent years have shown that this resource should not be taken for granted and the rise in prices, over and above inflation, can both signal its value and influence behaviourally changes towards conserving water. Ensuring that these price increases do not adversely impact households however is also a vital part of the policy and as such the aim should be for household prices, across both water and electricity to be no more than they normally would, even if that rise is made up in a different way to past years.

The amendments to electricity bands (usage rates) in past years was also a welcome move, largely having positive impacts and simplifying the understanding for consumers. It is noted that whilst this happened for electricity, no such review has occurred for water. With the significant increases in water prices, it might be prudent to review the current band levels.

The band level between low and high usage currently sits at 15 cubic meters. As water is essential to life, well-being and the standard of living it is worth ensuring that this band level is currently set at the correct amount. It would be fully justifiable in terms of a policy approach to try and set the band rate at a level where minimum needs for the average household are covered by the lower cost tariff level.

To assess the banding, this report assumes the average household is 2.5 people (from the 2016 census). It also makes an assumption on what level of water usage is required and this is based on internationally accepted work. The table below outlines the World Health Organisation usage chart for water (per person per day).

Hierarchy of water requirements (inspired by Abraham Maslow's (1908-1970) hierarchy of needs) – Accepted by the UN and World Health Organisation



Therefore, if taking a need of 70litres per person, per day, the average household would consume 15.75 cubic meters per quarter. This would suggest that the band level is currently correct (or quite close) and that households that are using more than the current 15 cubic meters per quarter would generally be using more than normal household needs and as such it is justifiable that they can be asked to pay a higher amount over and above through a higher tariff level.

As part of the context, this report also makes two further assumptions. The average income on the island per person is taken to be £7,100 per year. This is outlined in the 2015 State of the Island document with an update to this figure currently unavailable this is the figure used. As it would be expected that there has been some wage growth in the past 3 years, the impacts on households may be less than this report indicates.

Following a post Brexit spike in inflation that rate has fallen recently. At the end of 2017 annual inflation was reported at 4%, the latest annual inflation figure for the first quarter of 2018 is however lower and now stands at 2.8%. For the basis of comparison of price rises, both these figures offer some context for comparison.

Socio-economic impact

As the electricity prices are staying the same as part of this proposal there is no impact on the household from this. The assessment is therefore based solely on the water price rises and the impact that will have on households on the island. The table below outlines three different types of household users, low, medium and high and shows the price rise increases which would apply to household bills.

| | Water Units (pa) | Current | Proposed | Increase | Electricity Units (pa) | Current | Proposed | Increase | Total | Total Increase |
|-----------|---------------------|---------|----------|----------|---------------------------|-----------|-----------|----------|-----------|----------------|
| Low user | 40 | £80.84 | £113.00 | 39.78% | 2000 | £600.00 | £600.00 | 0% | £713.00 | 4.72% |
| Mid User | 60 | £104.04 | £145.40 | 39.75% | 4000 | £1,200.00 | £1,200.00 | 0% | £1,345.40 | 3.17% |
| High User | 88 | £146.88 | £205.32 | 39.79% | 6000 | £2,120.00 | £2,120.00 | 0% | £2,325.32 | 2.58% |

To gain a full understanding on the impacts on households it is important to factor in the lack of an increase to electricity prices. Whilst water prices are propose to increase by nearly 40%, water bills make up a small proportion of the total household bill for Connect. When taken in its entirety, the total Connect household bill will rise by approx. 2.5%-5% dependent upon respective usage.

From these calculations it shows that the price increase in terms of percentage is greater on lower users than high. However, it has to be made clear that because of the significant increase in water prices, the overall increases are very much dependent upon the different combinations of consumption and the ratio of use between water and electricity. However, it is a fair assumption that a household would consume energy and water in similar ratios, hence the approach in the table above.

With inflation currently recorded at between 2.8% the increases in costs to households to operate look relatively high. However, for context Connect more than likely used the previous 4% inflation figure for guidance and as such the increases fall closer to these boundaries. Although the increase to low users is over and above current inflation rates; this therefore might be an area that is investigated further.

Taking a 'mid user' and applying the assumption of the average income, the electricity bill would represent 16.9% expenditure of income. If water is also included the figure rises to 18.9%. However, as this is modelling the 'mid user' for a household, and therefore likely to be a middle income house, it could also be assumed that there would be two incomes within the household. As such, applying the average income for two people, then these figures drop to 8.5% and 9.5% respectively.

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. This theory will apply to some people in St Helena, in that they will pay more than 10% of income on energy. However, currently the average household, with two incomes and using a mid-range of energy would not fall into this category. This would suggest that the majority of people would not be suffering from fuel poverty on the island. There is some usage of gas and firewood on the island and this could add a further 1.1% to the figures when used and if electricity was not reduced accordingly by individual households.

There are also some further concerns about the impacts on businesses, in particular those that use high water usage. In particular: Feed and water for animals and crops; Coffee growers; Hospitality; Construction; Horticulturalists; Vehicle hire, car wash and valet services; Scuba diving business; Laundrettes; Fisheries Corp. However as

the table shows the impact of no increase in electricity prices, which would normally be expected will offset some of this increase.

Policy mitigation

For the hardest hit members of society there are two sources of support. Connect itself has a social fund that can be used to provide services for those in the direst need. This would be of particular use to those needing emergency works done such as unblocking a sewer line or emptying a septic tank.

Secondly the Minimum Income Standard provided by SHG includes energy and water as part of the base calculation therefore protecting the most vulnerable in society. As these prices increase through Connect, the MIS should also increase to reflect the impact and effectively make this a neutral impact on the poorest households. There is however usually a time lag of up to 6 months, but typically 2-3 months between the Connect rise and MIS rise which could cause some level of difficulty.

The current proposals also include a £73,000 reduction in the subsidy from SHG, this can be used on other services as well as providing mitigation against the increase as part of the annual rise in the MIS and subsequent rises in benefits.

In terms of cost to the MIS the current allowance for water is £2.82 per week and electricity is £9.64 per person allowance. If assuming that people on MIS will be often be low users and that the price rises are as stated then the electricity allowance would remain the same and water would rise to £3.95 per week. This would equate to an extra £60 per allowance per year (or pro rata).

In terms of cost to government and taking into account the reduced subsidy to Connect the break-even point for paying MIS is fewer than 1200 allowances. If fewer than 1200 people are claiming MIS, the increased cost to benefits should be mitigated by the reduced subsidy.

Benchmarking

It is worth looking at other countries, particularly comparable islands to discover how Saint Helena compares in terms of cost. In previous reports this was produced as part of the assessment, however this year Connect have provided comparable data within their submission. This data has been verified and is reproduced below.

Electricity prices in Saint Helena are often said to be very high and whilst this can be seen to be true, it is worth taking into account that actual bills in other countries are much higher and that gas costs are also not a factor on the island.

Water is benchmarked at 22 cubic meters, slightly above the basic needs for households, which does take into account some pricing at the higher tariff level:

| | Population | Unit | Standing | 22 Cubic Meter Bill | Comparison to St Helena | |
|------------------|------------|--------|----------|---------------------|-------------------------|------|
| St Helena | 4,000 | £1.62 | £12.05 | £47.69 | | |
| Montserrat | 5,000 | £5.69 | £0.00 | £125.18 | £77.49 | More |
| Ascension Island | 900 | £23.50 | £0.00 | £517.00 | £469.31 | More |
| Alderney Island | 1,903 | £0.43 | £0.00 | £67.00 | £19.31 | More |
| Sark Island | 500 | N/A | N/A | N/A | N/A | N/A |
| Aruba | 105,000 | £3.13 | £0.00 | £68.86 | £21.17 | More |

In terms of electricity consumption costs per kWh the following charges apply for an average consumer using 500 kWh per quarter:

| | Population | Unit | Standing | 500kWh Bill | Comparison to St Helena | |
|------------------|------------|-------|----------|-------------|-------------------------|------|
| St Helena | 4,000 | £0.30 | £0.00 | £150.00 | | |
| Montserrat | 5,000 | £0.32 | £0.00 | £160.00 | £10.00 | More |
| Ascension Island | 900 | £0.47 | £0.00 | £236.05 | £86.05 | More |
| Alderney Island | 1,903 | £0.38 | £9.45 | £198.60 | £48.60 | More |
| Sark Island | 500 | £0.66 | £0.00 | £330.00 | £180.00 | More |
| Aruba | 105,000 | £0.14 | £4.94 | £74.94 | -£75.06 | Less |

Whilst this does show electricity is relatively expensive on the island, to the average salary (compared to a UK average this would also be true); there are significant economic reasons for this, particularly the economies of scale, fuel transportation costs and reliance on diesel which is significantly more expensive than coal or gas which most developing countries use.

In comparison to similar islands Saint Helena fairs well and is cheaper than both Montserrat and Ascension Island. Fuel is the most significant single cost to the business and the geographical remoteness of both Ascension Island and St Helena and the predominantly Saint Population makes Ascension the most meaningful benchmark. Against this benchmark the proposal for electricity tariff is 57% below Ascension Island, two years ago the difference was 34%, showing that St Helena has not put up prices as quickly as Ascension Island. Given the current policy, this is an expected result.

Despite the significant increases to water charges over the past two years, St Helena is still considerably cheaper than all other comparison islands, in cases such as Montserrat it is less than half the current costs.