Report

Analysis of

Queensland Government

Electricity Sector Cash Flows

February 2014

ORION Consulting Network

Analysis of Queensland Government Electricity Sector Cash Flows

February 2014

David Spearritt
Director
ORION Consulting Network Pty Ltd
ABN 65 048 737 179
PO Box 1391
Toowong BC QLD 4066
Tel: 1300 767 466
Email: david@orionco.net
Web: www.orionco.net

ORION Consulting Network

Contents

List of Acronyms

CSO	Community Service Obligation
ETU	Electrical Trades Union
kWh	Kilowatt-hour
GOC	Government Owned Corporation
MW	MegaWatt
PV	(Solar) Photovoltaic (Panels)
Qld	Queensland
SBS	Solar Bonus Scheme
SEQ	South East Queensland
SFiT	Solar Feed-in Tariff
TEP	Tax Equivalent Payment
UTP	Uniform Tariff Policy

1. Executive summary

1.1 Summary of findings

1. Dividend payments to the Queensland Government from energy related Government Owned Corporations (GOCs) amounted to $779 million (m) in 2012-13 and are forecast to increase to $893m in 2013-14.
2. Tax equivalent payments to the Queensland Government from energy GOCs totalled $151m in 2012-13 and are expected to increase to $295m in 2013-14.
3. A greater than expected uptake of the Solar Bonus Scheme (SBS) has resulted in more Solar Feed-in Tariff (SFiT) payments made by the GOCs than was initially forecasted. This has resulted in additional pass through cost recovery applications to Australian Energy Regulator (AER) from the GOCs.
4. Approximately 300,000 solar energy systems are connected to the electricity network as a part of the SBS.
5. Allowed pass through recovery of SFiT costs were $33m in 2012-13 and will to increase to $119m in 2013-14 and $283m by 2014-15.
6. The Uniform Tariff Policy (UTP) resulted in Community Service Obligation (CSO) payment of $596m from the Queensland Government to Ergon Energy in 2012-13.
7. Other electricity related rebates and schemes are forecast to amount to approximately $149m in 2013-14, a decrease from $199m the previous year.
8. Dividends net of the cost of UTP and SBS resulted in negative cash flows to the Queensland Government in 2012-13, but is expected to generate positive cash flow in 2013-14.
9. The cumulative balance of dividends net of cost of UTP and SBS was $466m for the period 2007-08 to 2012-13. This is equal to $246 per Queensland household.
10. GOC dividends and tax equivalents net of the cost of UTP and SBS resulted in approximately $88m in cash flows to the Queensland Government during 2012-13.
11. The cumulative balance of dividends and tax equivalents net of cost of UTP and SBS was $1,312m for the period 2007-08 to 2012-13. This is equal to $694 per Queensland household
12. During 2012-13, dividends and tax equivalent payments from GOCs to the Queensland Government totalled $930m or an estimated $492 per Queensland household.

1.2 Background

The Queensland electricity supply industry currently comprises:

- Electricity Generators, which compete and operate independently - there are two publicly owned generators (Stanwell & CS Energy) and several privately owned generators;
- Powerlink Queensland, which owns and maintains the high voltage transmission grid;
- Two distribution businesses - Energex and Ergon Energy have an effective monopoly over the distribution network within their regions;
- Ergon Energy Queensland - a subsidiary of Ergon Energy, which provides retail services to non-market customers that have not entered a negotiated contract; and
- Independent retailers.

The Queensland State Government owns and receives dividends from Ergon, Energex, Powerlink, Stanwell and CS Energy. These are corporations are known as Government Owned Corporations (GOCs).

Queensland State Government receives tax equivalent payments from the GOCs, and as shareholder of the GOCs, the Queensland State Government is also entitled to receive dividends from the GOCs.

The Electrical Trades Union (ETU) is currently investigating the viability of a new economic policy which seeks to isolate the dividends collected from the electricity related GOCs and solely use these proceeds to fund energy related programs and rebates to Queensland customers (Community Service Obligations (CSOs)).

As a part of its investigation, ETU engaged Orion to collect data related to the cash flows between the GOCs and the Queensland State Government.

1.3 Terms of Reference

The Terms of Reference for this assignment are as follows:

The overall objective of this project is to research and document cash flows from energy GOCs to Queensland Government. The data is collected from publicly available material with standard calculations applied to show trends or overall positions.

This review will use tables and graphs to illustrate the findings of the research and will provide objective and unbiased commentary to support report findings.

2. Financial Statements

Financial information relating to the Government Owned Corporations (GOCs) was collected from publicly available annual financial statements published by the GOCs.

The GOCs are public, unlisted company, with two shareholding Ministers who hold the shares on behalf of the State of Queensland. Dividends are payable to the shareholders is in accordance with the *Government Owned Corporations Act 1993* (GOC Act). In determining the dividends payable to shareholders, the nature of revenue is considered with special treatment of the Community Service Obligations (CSOs) provided during the year.

Discrepancies between dividends and tax equivalents received by the Queensland Government and those reported by the GOCs will occur due to timing issues in declaring dividends, internal accounting procedures, and regulated under-recoveries.

Under the current framework imposed by the National Electricity Rules, the distributors are entitled to recover any under-recovery of regulated revenue and any costs incurred as a result of the solar photovoltaic (PV) feed-in tariff rebate (Solar Bonus Scheme). This can be recovered through future increases to the distribution use of system (DUOS) charges. On this basis, regulated revenue under-recoveries incurred in any year are considered to be fully recoverable.

The following tables outline key financial information of the GOCs and include CSO payments made by the Queensland Government to the GOCs.

2.1 Energex

Energex ($million)	2007-08 $m	2008-09 $m	2009-10 $m	2010-11 $m	2011-12 $m	2012-13 $m
Revenue	$1,403.0	$1,336.2	$1,467.9	$1,736.4	$2,005.0	$2,286.0
Profit before income tax equivalent	$199.1	$175.7	$280.5	$331.7	$403.2	$516.5
Income Tax equivalent	$58.3	$47.2	$75.3	$97.0	$120.8	$155.1
Profit after tax equivalent	$140.8	$128.5	$185.2	$234.7	$282.4	$361.4
Dividends	$102.8	$112.6	$148.2	$187.8	$225.9	$294.1

Table 2.1 Energex key financial information (Source: Energex Annual Reports)

Revenue collected by Energex increased by approximately 63% over the past six years to $2,286 million (m), with 54% of the increase attributable to the period 2010-11 to 2012-13. During the period 2007-08 to 2012-13 income tax equivalents reported by the entity increased by 166% to $155.1m, with profit after tax equivalent increasing by 157% during the same period.

Dividends payable to shareholders have increased by 186% since 2007-08, to $294.1m for the 2012-13 financial year (FY).

2.2 Ergon Energy

Ergon Energy ($million)	2007-08 $m	2008-09 $m	2009-10 $m	2010-11 $m	2011-12 $m	2012-13 $m
Revenue	$2,598.3	$2,279.1	$2,203.7	$2,538.5	$2,692.9	$3,012.0
Profit before income tax equivalent	$230.0	$185.5	$234.9	$450.4	$456.6	$611.0
Income Tax equivalent	$67.1	$55.2	$68.4	$128.8	$136.8	$177.0
Profit after tax equivalent	$162.9	$129.3	$166.5	$321.6	$319.8	$434.0
Dividends	$118.4	$116.6	$137.5	$252.6	$255.9	$326.0

Table 2.2 Ergon Energy key financial information (Source: Ergon Energy Annual Reports)

Revenue collected by Ergon Energy increased by approximately 16% over the past six years to $3,012m. During the period 2007-08 to 2012-13 income tax equivalent reported by the entity increased by 164% to $177m, with profit after tax equivalent increasing by 166% during the same period.

Dividends payable to shareholders have increased by 175% since 2007-08, to $326m for the 2012-13 financial year (FY).

2.3 Powerlink Queensland

Powerlink Queensland ($Million)	2007-08 $m	2008-09 $m	2009-10 $m	2010-11 $m	2011-12 $m	2012-13 $m
Revenue	$611.6	$682.8	$735.0	$824.1	$922.0	$1,325.6
Profit before income tax equivalent	$148.0	$173.6	$183.5	$223.9	$300.9	$649.2
Income Tax equivalent	$44.9	$51.7	$54.9	$66.7	$97.1	$192.3
Profit after tax equivalent	$103.1	$121.9	$128.6	$157.2	$203.8	$457.0
Dividends	$84.4	$98.8	$100.2	$121.4	$146.7	$177.4

Table 2.3 Powerlink Queensland key financial information (Source: Powerlink Queensland Annual Reports)

Reported revenue increased by approximately 117% over the past six years to $1,325.6m. During the period 2007-08 to 2012-13 income tax equivalent reported by the entity increased by 328% to $192.3m, with profit after tax equivalent increasing by 343% during the same period.

Dividends payable to shareholders have increased by 110% since 2007-08, to $177.4m for the 2012-13 financial year (FY). It should be noted that the strong result for 2012-13 was partly due to proceeds from the divestment in ElectraNet ($353.3m) and efficiency measures introduced by Powerlink. In light of the strong result, the board approved a dividend payout ratio for 2012-13 of 90% to the Queensland Government (standard dividend payout ratio for GOCs is 80%).

2.4 CS Energy

CS Energy ($Million)	2007-08 $m	2008-09 $m	2009-10 $m	2010-11 $m	2011-12 $m	2012-13 $m
Revenue	$835.3	$970.3	$770.2	$716.7	$481.2	$750.0
Profit before income tax equivalent	$76.7	$127.0	($63.9)	($885.0)	($74.8)	($67.7)
Income Tax equivalent	$17.7	$33.2	($16.3)	($270.4)	($23.4)	($19.8)
Profit after tax equivalent	$59.0	$93.8	($47.6)	($614.6)	($51.5)	($47.9)
Dividends	$47.2	$75.1	$0.0	$0.0	$0.0	$0.0

Table 2.4 - CS Energy key financial information (Source: CS Energy Annual Reports)

Reported revenue decreased by approximately $40.5m or 5.3% over the past six years to $730.9m. Since FY 2010 CS Energy has been reporting negative tax equivalents (tax benefits) and paid no dividends to its stakeholders. The tax benefits reported by CS Energy peaked during FY 2011 with $270.4m. The noticeable decline in profit before and after tax equivalents during the FY 2011 was primarily due to impairment write-downs taken on generation assets as a result of the *Shareholder Review of Queensland Government Owned Corporation Generators*.

2.5 Stanwell

Stanwell	2007-08 $m	2008-09 $m	2009-10 $m	2010-11 $m	2011-12 $m	2012-13 $m
Revenue	$540.9	$688.2	$688.3	$851.0	$1,359.8	$1,739.2
Profit before income tax equivalent	$187.6	$265.9	$205.5	($24.6)	$105.5	$18.6
Income Tax equivalent	$52.0	$70.3	$56.1	($12.6)	$25.6	$4.0
Profit after tax equivalent	$135.6	$195.6	$149.5	($12.0)	$79.9	$14.6
Dividends	$92.1	$148.9	$116.7	$0.0	$63.9	$11.7

Table 2.5 – Stanwell Corporation key financial information (Source: Stanwell Corporation Annual Reports)

The restructure of Queensland Government owned generators was effected on 1 July 2011 and made Stanwell the largest electricity generator in Queensland at the time. Following the restructure, Stanwell's revenue grew by $756m (or 134%) in the FY 2012, and further $350.9m to FY 2013 resulting in a total revenue of $1,669.9m.

Profit before tax equivalent for FY 2013 was $18.6m, with $4m reported as income tax equivalent payments and $11.7m. Stanwell concluded that the FY 2013 result is a reflection of a weaker and more challenging market and an inability to recover cost due to falling demand and significant surplus capacity in the electricity market in Queensland.

2.5.1 Generator Utilisation

The Queensland Commission of Audit Final Report (tabled 30 April 2013) included an overview of the utilisation rate of Queensland power generators. From this table, the generators related to the GOCs have been extracted to estimate the total utilisation rate of the GOC generators.

Station	Owner	Fuel	Capacity (MW)	Utilisation 2011-12 (%)
Stanwell Power Station	Stanwell	Coal	1,400	60
Tarong Power Station	Stanwell	Coal	1,400	57
Callide C Power Station	CSE	Coal	840	6
Kogan Creek	CSE	Coal	744	72
Callide B Power Station	CSE	Coal	700	65
Wivenhoe Power Station	CSE	Water	500	0
Tarong North	Stanwell	Coal	443	71
Swanbank E	Stanwell	Gas	385	62
Kareeya	Stanwell	Water	81	63
Barron Gorge	Stanwell	Water	60	52
Barcaldine Power Station	Ergon	Gas	55	3
Mackay Gas Turbine	Stanwell	Liquid fuel	30	0

Table 2.6 – GOC Generator Utilisation 2011-12 (Source: Queensland Commission of Audit Final report to Queensland Government, Volume 2 Table B2.1)

Grouping the generators by ownership, allows identification of the GOC owned generators. The overall utilisation rate can be deducted using the information available in the table.

	Capacity (MW)	Implied utilisation (MW)	Utilisation 2011-12 (%)
Stanwell	3799	2273	60%
CSE	2784	1041	37%
Ergon	55	2	3%
Total GOCs	**6638**	**3316**	**50%**

Table 2.7 – GOC Implied Generator Utilisation 2011-12 (Source: Queensland Commission of Audit Final report to Queensland Government, Volume 2 Table B2.1)

The table implies that Stanwell generators utilised approximately 60% of its producing capacity during 2011-12, while CS energy utilised around 37% and Ergon 3%. The total utilisation of GOCs' generator capacity was 50% in 2011-12.

2.6 Revenue distribution

GOCs cover all aspects of the electricity grid, from electricity generation, to transportation, distribution and retailing. The utilisation of revenue collected therefore differs significantly depending on the entity's role in the supply chain.

To get an idea of the average utilisation of GOC revenue, an analysis of the average distribution of generated revenue for energy GOCs for the year 2012-13 was completed using available financial information from published 2012-13 annual reports and financial statements.

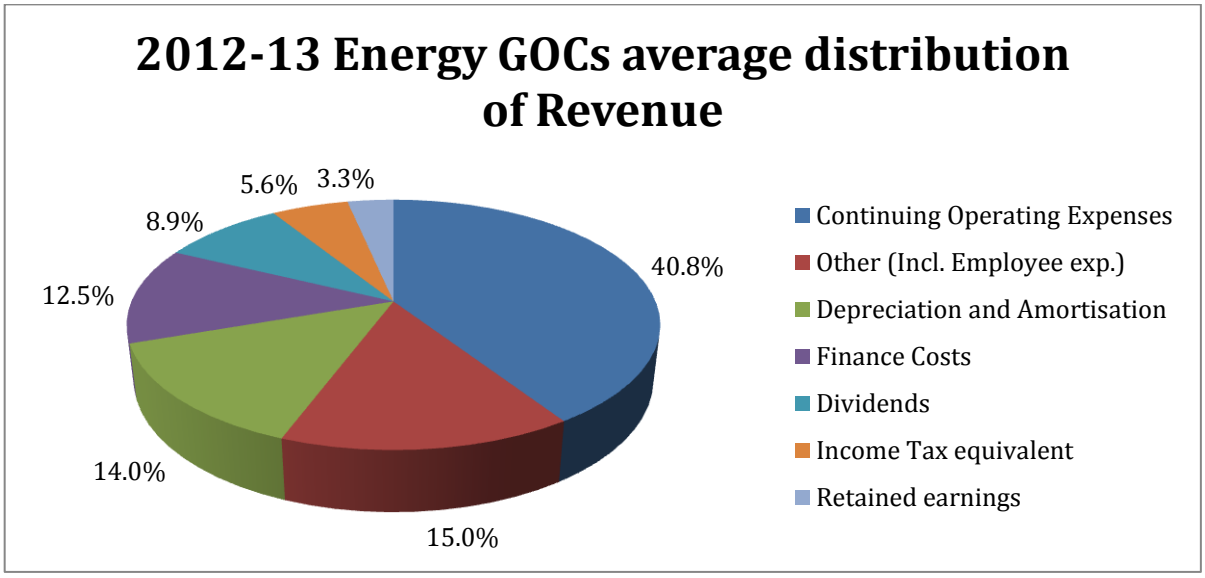

Figure 2.1 – 2012-13 Energy GOCs average distribution of revenue. (Source: GOC annual reports and financial statements 2012-13)

As illustrated by the above figure, approximately 40.8% of the revenue collected by GOCs was spent on expenses related to the ongoing operation of the GOCs. This includes costs such as materials, transmission charges, maintenance, carbon emission expenses etc.

Approximately 15% of revenue was used on other expenses including employee and contractor expenses.

Depreciation and amortisation accounted for the second highest share of revenues with 14.0% and reflects the size of the electricity network for which revenue is collected.

Cash flows from GOCs to the Queensland Government totalled 14.5%, with dividends accounting for 8.9% and income tax equivalents accounting for an average of 5.6% for the 2012-13 year.

Finance cost was reported by the GOCs to account for 12.5% of revenue collected during 2012-13.

Retained earnings averaged 3.3%, but could be slightly overstated for the 2012-13 year due to the large one-off revenue stream received by Powerlink through its divestment in ElectraNet.

2.7 Return on Asset Investment

When a GOC invests in an asset, regulatory and accounting mechanisms will in most cases ensure that the GOC receives an annual profit from its investment. While this benefits the profitability of the GOC, it also provides additional cash flow to the Queensland Government in form of increased tax equivalent and dividend payment.

To illustrate the magnitude of the cash flows generated through asset purchases, a scenario was generated. Using data from the AER *distribution determination 2010-11 to 2014-15,* the average operating and maintenance cost of Energex assets was estimated and applied to the scenario. Due to the 'lumpy' nature of regulatory depreciation and financing costs over the life of a regulated asset, an average annual cash flow approach was taken to illustrate the average annual cash flow to the Queensland Government.

The scenario assumes an annual inflation rate of 2.5%, Dividend payout rate of 80%, rate of return on assets of 9.72%, and interest expense of 6.79% (Energex weighted average interest expense 2012-13). Principal repayments are not required on long term debt funding with QTC, this scenario is therefore based on an interest only loan.

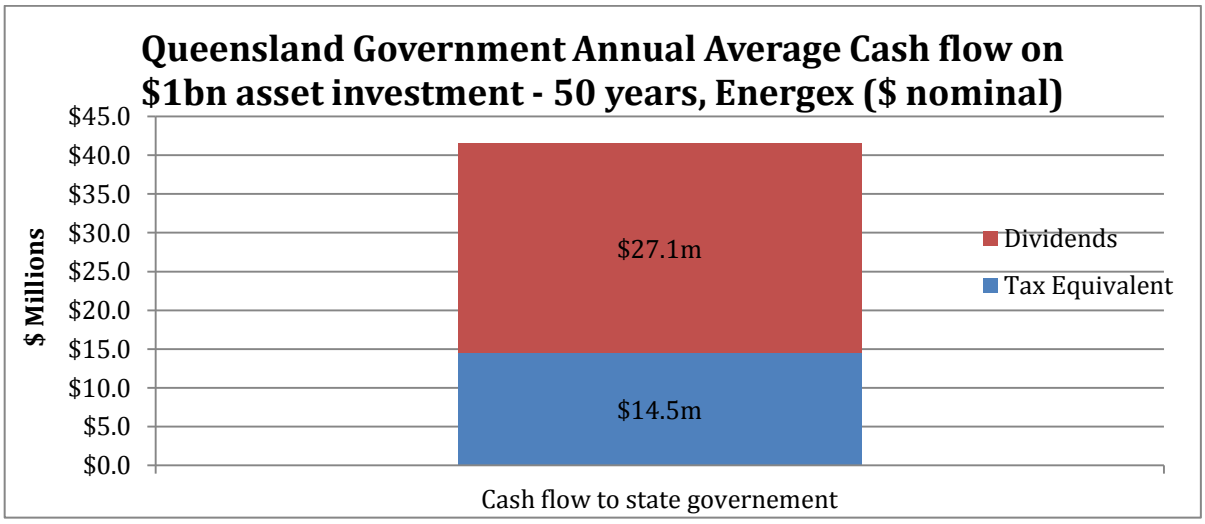

Figure 2.2 – Average annual cash flow to Queensland Government on $1billion asset investment by Energex, 50 year asset life, $nominal (Source: AER Queensland distribution determination 2010-11 to 2014-15, Orion Calculations)

Using the outlined parameters, the scenario suggests that an asset investment by Energex of $1billion will generate an additional average annual cash flow to the Queensland Government of $27.1m in dividends and $14.5m in tax equivalents, totalling $41.6m.

While the Queensland Government receive additional cash flow from the purchase of assets by the GOCs, the Government does not directly finance the GOC asset investments. Asset investments are financed by the GOCs from a combination of retained earnings (equity) and new borrowings.

3. Dividends and Tax Equivalents

As discussed earlier, the dividends and tax equivalents reported by the GOCs does not always align with those reported in the Queensland State Budget due to timing and accounting issues.

Data collection from the Queensland State Budgets was therefore also carried out to show the actual dividends and tax equivalents collect by the state from its energy GOCs.

	2007-08	2008-09	2009-10	2010-11	2011-12	2012-13	2013-14
Energy GOC payments to State	**$m**	**$m**	**$m**	**$m**	**$m**	**$m**	**$m**
Dividends Received	$ 444.9	$ 552.0	$ 502.6	$ 561.8	$ 692.4	$ 779.0	$ 893.0
Tax Equivalent	$ 137.0	$ 143.0	$ 137.0	$ 184.0	$ 94.0	$ 151.0	$ 295.0
Dividends & Tax Equivalent	$ 581.9	$ 695.0	$ 639.6	$ 745.8	$ 786.4	$ 930.0	$ 1,188.0

Table 3.1 - Dividends and tax equivalents received by Queensland Government from energy GOCs (source: Queensland State Budget papers)

The dividends and tax equivalent payments received by the state from its energy GOCs is forecast by the Queensland Government to amount to approximately $1,188m in 2013-14. This is more than double the payments received from the energy GOCs in 2007-08.

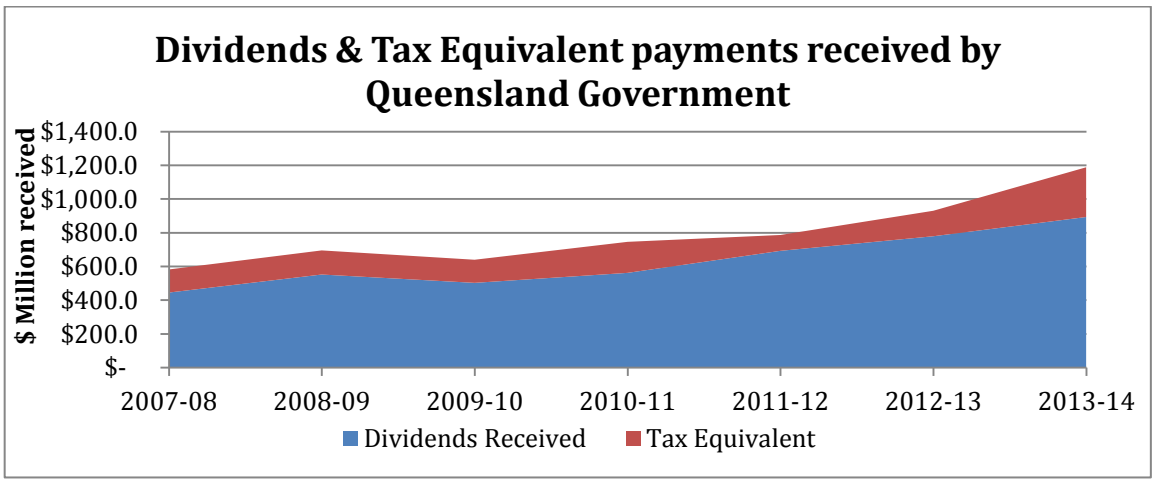

Figure 3.1 - Dividends and tax equivalents received by Queensland Government from energy GOCs (source: Queensland State Budget papers)

As illustrated in the above figure, dividends make up the majority of the payments received with over 75% of forecast payments for 2013-14 expected to be dividends.

The large increase in tax equivalent payments (TEP) from 2012-13 to 2013-14 is explained in the *Queensland State Budget 2013-14 (budget paper 2, p.133)* as:

> *"The substantial increase in TEPs between 2012-13 and 2013-14 is largely due to a change in the allowable tax treatment for capitalised labour affecting the electricity network sector, timing differences for tax accounting purposes when revenue recoveries are affected by electricity demand being below forecast and the lag in receipt of solar feed-in tariff revenue."*

The “lag in receipt of solar feed-in tariff revenue” referred to in the budget will be explained in the following chapter of this report.

4. Energy Schemes

4.1 Solar Bonus Scheme

The Solar Bonus Scheme (SBS) was established in 2008 and with the purpose of to stimulating the solar power industry and encourage energy efficiency amongst Queensland households.

The scheme involves a government mandated solar feed-in tariff (SFiT), where eligible customers are paid for the surplus electricity generated from solar photovoltaic (PV) systems which is exported to the Queensland electricity grid.

Customers who joined the scheme before 10 July 2012 are paid 44 cent per kilowatt hour (kWh), while customers joining after this date will be paid 8 cents per kWh.

The SBS is funded by all Queensland electricity customers, with the cost of the scheme being passed through to electricity customers through increased revenue cap allowance set by the Australian Energy Regulator (AER). Cost pass through applications are approved by the AER and can be applied to the price setting two years after the SFiT related cost originated. There is therefore a two year lag from the cost occurring to the recovery of the revenue, meaning that costs incurred during the 2012-13 regulatory year will be recoverable through increased revenue allowance in 2014-15.

The 2010-15 AER price determination included a forecast annual allowance for solar feed-feed-in tariff payments. These forecast allowances have showed to significantly under estimating the actual annual SFiT payments made by the GOCs due to a higher than expected uptake rate of the SBS and subsequent installation of solar PV systems. The AER determination allows for Ergon and Energex to apply to the AER to pass through to its customers any SFiT related costs above the allowance already included in the determination.

	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17
Solar Bonus Scheme/Solar Feed-in Tariff	**$m**	**$m**	**$m**	**$m**	**$m**	**$m**	**$m**
Energex ($m, years dollars)							
Forecast allowance	$ 4.8	$ 6.2	$ 7.7	$ 8.5	$ 9.7		
*Additional Solar feed-in payments**	$ 14.6	$ 68.4	$ 161.5	$ 165.1	$ 159.5		
Additional Pass Through recovery (revenue)			$ 16.7	$ 78.6	$ 185.6	$ 199.36	$ 171.73
Ergon ($m, years dollars)							
Forecast allowance	$ 2.5	$ 3.0	$ 3.5	$ 3.6	$ 4.0		
*Additional Solar feed-in payments**	$ 4.1	$ 24.2	$ 73.1	$ 73.0	$ 72.2		
Additional Pass Through recovery (revenue)			$ 4.8	$ 27.8	$ 84.0	$ 88.1	$ 89.4
Solar Feed-in Tariff Total Cost	**$ 25.9**	**$ 101.7**	**$ 245.8**	**$ 250.2**	**$ 245.4**		
Pass Through recovery allowed (revenue)	**$ 7.3**	**$ 9.2**	**$ 32.6**	**$ 118.5**	**$ 283.4**	**$ 303.6**	**$ 279.8**

**2013-14 and 2014-15 'additional solar feed-in payments' are forecasts only and assumes the discontinuation of the 8c/kWhSFiT payments post 2013-14*
Shaded areas are forecasts only

Table 4.1 – Solar Bonus Scheme Cost (source: AER price determination 2010-15, Energex and Ergon cost pass through applications)

The above table shows the forecast allowance from the AER 2010-15 Queensland distribution determination, the additional SFiT payments incurred by the GOCs in the respective years and the AER approved pass through recovery (cost plus inflation).

For the 2014-15 regulatory year, the 2010-15 determination forecast a total allowance of $13.7m to be recovered in relation to SFiT payments. However, as a result of higher than expected SFiT related payments during the 2012-13 regulatory year, both Energx and Ergon applied for addition cost pass through to recover the cost above the forecast allowance incurred from the SFiT payments. AER has subsequently approved an additional $269.7m to be passed through to customers in the 2014-15 regulatory year, bringing the total pass through SFiT related cost to $283.4m for the year. This is more than double the approved pass through of 2013-14 which amounted to $118.5m

It is estimated that the SFiT pass through recovery allowed will peak in 2015-16 where approximately $300m will be passed on to customers as a result of the SFiT payments incurred during the 2013-14 regulatory period.

For the purpose of this analysis it is assumed that the 8c/kWh SFiT payment will be discontinued after 2013-14, resulting in a slight decrease in expected SFiT payments for 2014-15.

4.2 Uniform Tariff Policy

The Uniform Tariff Policy (UTP) was introduced with the aim of ensuring that customers outside of South East Queensland (SEQ), where market competition is limited, should pay no more than similar customers in SEQ. However, as the cost of supplying regional customers is higher than the revenue received from the uniform tariffs, an annual Community Service Obligation (CSO) payment is made from the Queensland Government to Ergon Energy to compensate for this loss of revenue.

Uniform Tariff Policy (CSO $m)	2007-08	2008-09	2009-10	2010-11	2011-12	2012-13	2013-14
Ergon Energy CSO	$ 585.4	$ 446.2	$ 251.6	$ 399.3	$ 415.2	$ 596.0	$ 615.0

Table 4.2 Estimated Uniform Tariff Policy CSO payments (Source: Queensland State Budget Papers)

The Queensland State Budget 2013-14 estimates that the total CSO payment to compensate Ergon Energy for the loss of revenue due to the uniform tariffs are $615m, a slight increase on the previous year where an estimated $587m as paid in UTP related CSO payments.

It is estimated that since financial year (FY) 2008, approximately $3.3 billion has been transferred from the Queensland Government to Ergon as CSO payments for the UTP.

4.3 Other Schemes and rebates

Since 2007-08 a range of energy related schemes and rebates aimed at the consumer have been funded by the Queensland Government. The following table highlights the cost the schemes and rebates funded by the State Budget which were identified for this analysis.

Other identified energy schemes/rebates ($m)	2007-08	2008-09	2009-10	2010-11	2011-12	2012-13	2013-14
Electricity rebate (Pensioner)	$ 67.5	$ 77.0	$ 91.0	$ 104.0	$ 114.5	$ 108.5	$ 136.8
Tariff 11 freeze						$ 63.0	
Electricity Life support scheme	$ 0.7	$ 1.0	$ 1.2	$ 1.5	$ 1.6	$ 1.7	$ 2.1
Home Energy Emergency Assistance Scheme	$ 1.1	$ 0.3	$ 1.8	$ 2.5	$ 3.8	$ 4.1	$ 10.0
Medical Cooling and Heating Electricity Concession Scheme	$ -	$ -	$ -	$ 0.5	$ 0.6	$ 0.7	$ 1.8
Other schemes	$ -	$ 57.9	$ 8.5	$ 49.0	$ 69.9	$ 21.4	-$ 1.5
Total Identified schemes and rebates	**$ 69.3**	**$ 136.2**	**$ 102.5**	**$ 157.5**	**$ 190.4**	**$ 199.4**	**$ 149.2**

Table 4.3 – Other identified energy schemes and rebates (Source: State Budget Papers)

Eligible Queensland pensioners can apply for an electricity rebate through their electricity retailers. The retailers are then compensated by the Queensland Government for the revenue foregone. The total cost of the pensioner rebate has increased over the years as both the rebate and the number of eligible pensioners has increased.

In 2013, a ministerial direction notice was issued, ensuring a freeze to the residential tariff 11 for 2012-13 at the 2011-12 level. This was estimated by the Queensland Government to cost $63m in compensation for foregone revenue to the electricity GOCs.

'Other schemes' includes, but are not limited to schemes like the climate smart service, the energy conservation and demand management program, retrofit programs and Solar hot water rebates. The category 'other schemes' also includes savings identified by the government such as the discontinuing support for the Australian Energy Market Commission, allowing the total balance for other schemes to produce a negative result for 2013-14.

For 2013-14 it is estimated that identified energy related schemes and rebates will cost the Queensland Government around $149m, a decrease of $50m from the previous year. This is primarily as a result of the discontinuation of programs and the reduction in cost due to the one-off nature of the Tariff 11 freeze.

Since the change of Queensland Government in 2012, some electricity related schemes like the Climate Smart Home/Business service and the solar hot water rebate have been discontinued.

5. GOC net balance payments

ETU has requested Orion to analyse the cash flow implications of financing the UTP and SBS solely with dividends and tax equivalents received from the energy GOCs, as it is the belief of ETU that other energy related schemes and rebates should be funded by the state through general revenue and is more than compensated for financially by reductions in other programs. The following analysis utilises data from the previous chapters to highlight the resulting cash flow outcome of such an exercise and will also highlight the outcome of other related scenarios.

5.1 Dividends

This section will investigate the financial outcome of funding the UTP and SBS solely with dividends received. As dividends accounts for roughly three quarters of all payments received from energy GOCs, this will give an indication of the financial viability of the ETU proposed economic policy of ring-fencing energy related schemes and payments.

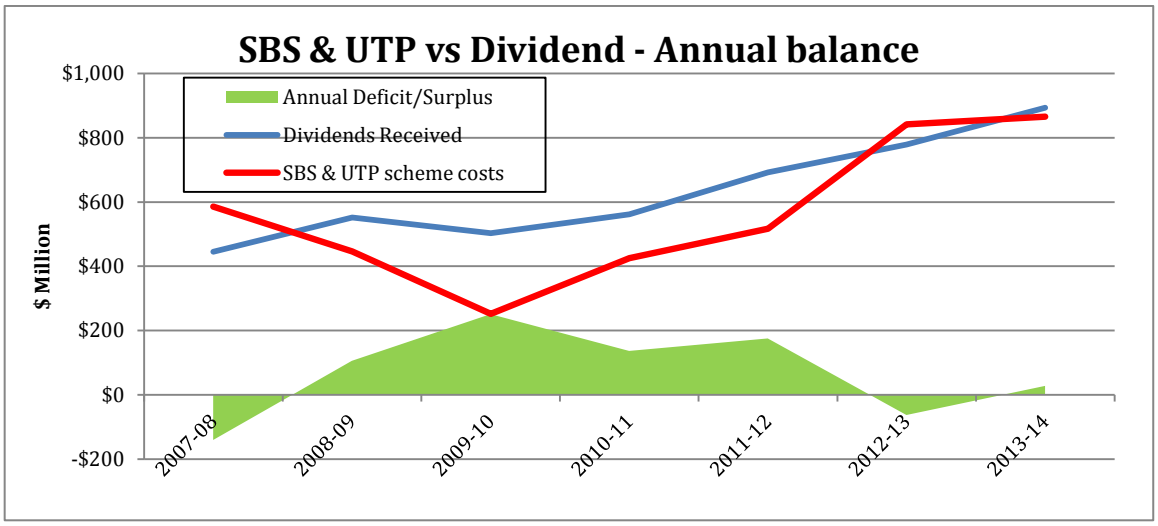

Figure 5.1 Dividend as funding for SBS and UTP - Annual balance

The above figure suggests net cash flow has hovered around a balanced state since 2011-12. However consideration needs to be given to the lag effect of the revenue received from the SFiT payments.

As shown earlier, the SFiT costs incurred by GOCs increased significantly in 2012-13 and 2013-14, with the foregone revenue to be collected from 2014-15 onwards. As revenue is expected to increase in the coming years, the dividends are likely to follow, resulting in higher annual positive cash flow balance after the SBS and UTP schemes have been funded.

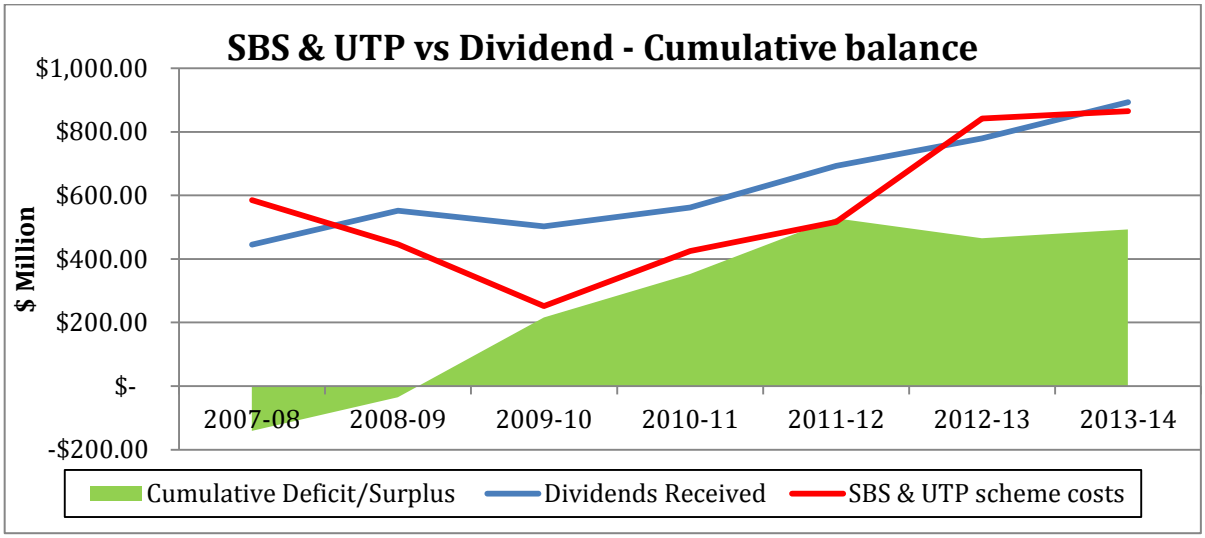

Figure 5.2 Dividend as funding for SBS and UTP - Cumulative balance

Although the annual cash flow balance between dividends and the SBS/UTP schemes is currently negligible, the cumulative balance of the annual payment surplus shows that the 2012-13 deficit could have been financed with proceeds from earlier years if these had been kept separately.

GOC Dividends net of SBS & UTP	2007-08 $m	2008-09 $m	2009-10 $m	2010-11 $m	2011-12 $m	2012-13 $m	2013-14 $m
Annual Deficit/Surplus	-$140.5	$105.8	$251.0	$136.6	$175.4	-$62.8	$27.8
Cumulative Deficit/Surplus	-$140.5	-$34.7	$216.3	$352.9	$528.3	$465.5	$493.3

Table 5.1 Net GOC dividend balance

Analysis shows that If dividends were used to fund the SBS and UTP schemes every year since 2007-08 and the balance was ring-fenced and not used for other purposes, the 2013-14 cumulative balance would be approximately $493.3m without including any interest on the balance.

5.2 Dividends and Tax equivalent

If dividends and tax equivalents received by the Queensland Government from energy GOCs were ring-fenced and the SBS and UTP schemes paid with these monies, the outcome would be as follows.

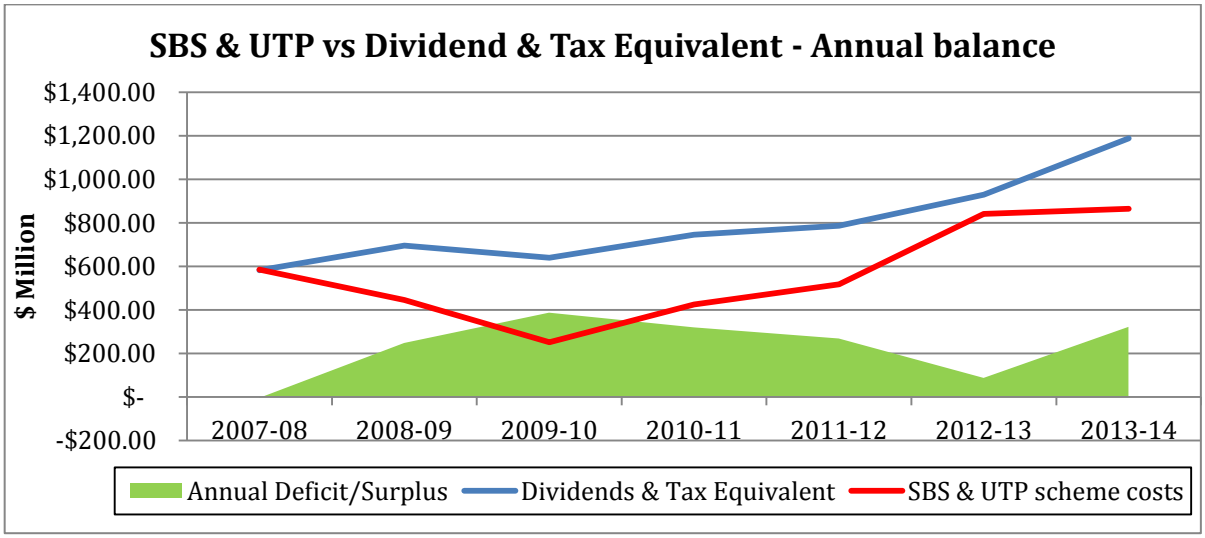

Figure 5.3 Dividend and Tax equivalent as funding for SBS and UTP - Annual balance

As could be expected following the analysis of dividends only option, when combining dividends and tax equivalents to fund the energy schemes, every year (except 2007-08; -$3.5m) shows a surplus in payments to the Queensland Government. It should therefore also be expected that the cumulative sum of the annual balances will be greater than under the 'dividends only' scenario.

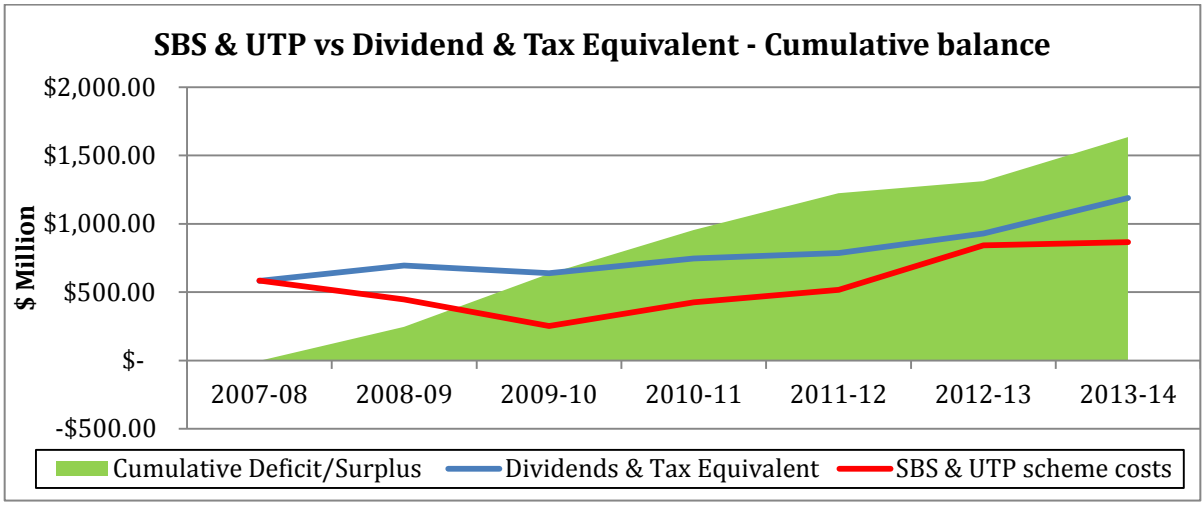

Figure 5.4 Dividend and Tax equivalent as funding for SBS and UTP - Cumulative balance

The cumulative net balance of using dividends and tax equivalents to fund the SBS and UTP schemes is estimated to be around $1.6 billion by 2013-14 if this approach to funding was applied back in 2007-08.

GOC Dividends and Tax equivalent net of SBS & UTP	2007-08 $m	2008-09 $m	2009-10 $m	2010-11 $m	2011-12 $m	2012-13 $m	2013-14 $m
Annual surplus/deficit ($m)	-$3.5	$248.8	$388.0	$320.6	$269.4	$88.2	$322.8
Cumulative surplus/deficit ($m	-$3.5	$245.3	$633.3	$953.9	$1,223.3	$1,311.5	$1,634.3

Table 5.2 Net Dividend and Tax equivalent balance

2013-14 is forecast to be the second largest annual surplus of the monitoring period, only surpassed by 2009-10 where the balance after SBS and UPT funding was $388m.

5.2.1 All energy schemes/rebates

While not the primary focus of this analysis further analysis was completed to estimate the financial outcome if all other energy related schemes and rebates identified in this report were financed by dividends and tax equivalents as well.

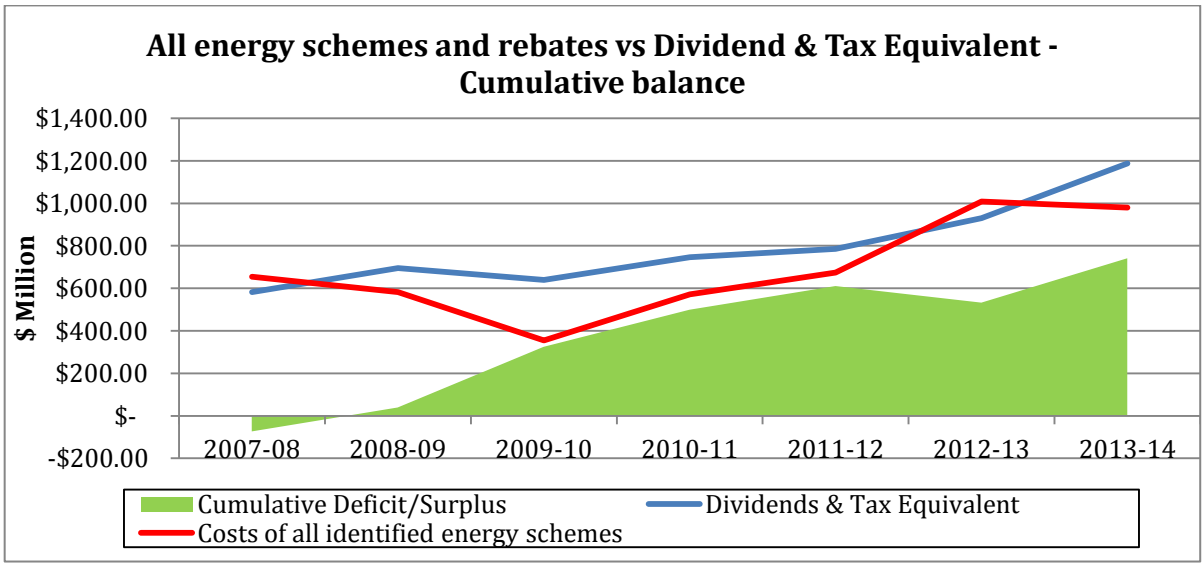

Figure 5.5 Dividend and Tax equivalent as funding for all identified rebates and schemes - Cumulative balance

The above figure shows that the annual surplus between payments received and the costs of financing the energy schemes and rebates have narrowed after including all other identified energy schemes and rebates. Using this approach gives a surplus balance of approximately $742m at the end of 2013-14.

6. Household equivalent

To put the cash flows between GOCs and Queensland Government into perspective of the average Queensland household, an analysis of household equivalents was undertaken. For this analysis the most recent OESR household projections (2011) for 2006 to 2031 was used. As this projection only contains five year intervals, a straight line interpolation was used to estimate the approximate number of Queensland households in the years between the forecast years.

A detailed 'cash flow per connection' analysis could also be undertaken, however for the use of this report and the usefulness of the data to the ETU, this report will mainly focus on analysis of cash flow per Queensland household. Forecasts of connections have been based on historical trends obtained from the GOCs annual reports.

6.1 Solar Feed-in Tariff

Following the introduction of the SBS, the uptake rate of solar photovoltaic (PV) panels connected to the electricity network experienced significant growth. In 2012-13 it was estimated that approximately 300,000 solar energy systems were connected to the grid.

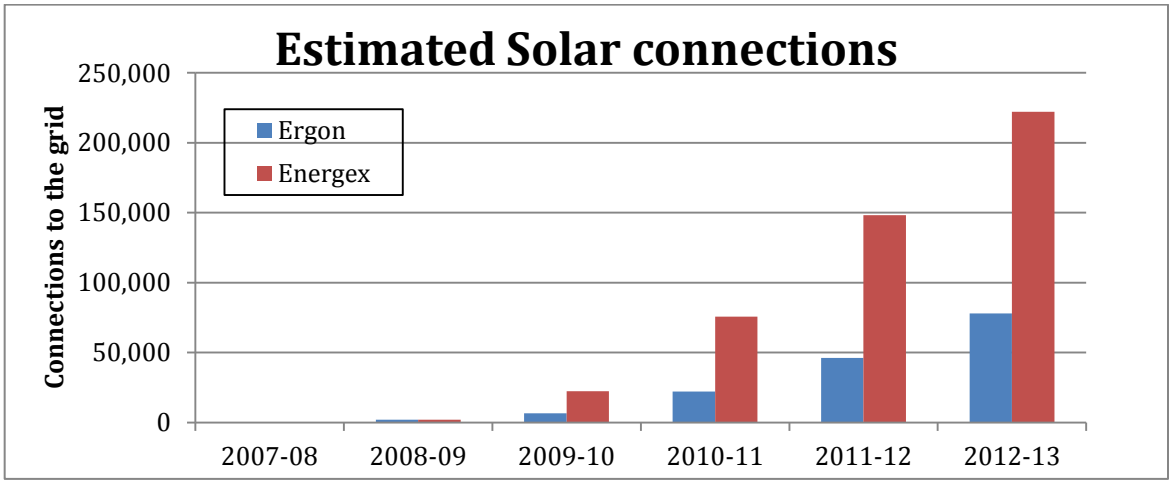

Figure 6.1 - Estimated solar energy systems connected to the grid (source: Ergon and Energy annual reports).

The growth in connected solar PV systems is especially noticeable in 2011-12 and 2012-13, with the majority of 2012-13 increase falling in the first few weeks of July, leading up to the cut-off date for the 44c/kWh rebate.

Solar Feed-in Tariffs recovered as price pass through ($m)	2010-11	2011-12	2012-13	2013-14	2014-15
Forecast Allowance	$ 7.3	$ 9.2	$ 11.2	$ 12.1	$ 13.7
Additional Pass through	$ -	$ -	$ 21.5	$ 106.4	$ 269.6
Total Solar FiT Pass Through Cost	$ 7.3	$ 9.2	$ 32.6	$ 118.5	$ 283.4
Solar FiT Pass Through Cost per QLD Household	$ 4.0	$ 5.0	$ 17.3	$ 61.3	$ 143.3

Table 6.1 - Estimated cost of solar energy systems connected to the grid (source: Ergon and Energex annual reports).

Using the growth in solar connections (since the removal of the 44c/kWh payment to new connections) to derive a forecast estimate for solar connections, it is estimated that SFiT costs recovered through increased pricing in 2014-15 will amount to approximately $143 per Qld household.

6.2 Uniform Tariff Policy

Uniform Tariff Policy CSO	2007-08	2008-09	2009-10	2010-11	2011-12	2012-13	2013-14
UTP CSO (Ergon, $m)	$ 585.4	$ 446.2	$ 251.6	$ 399.3	$ 415.2	$ 596.0	$ 615.0
UTP Cost per Ergon Customer	$ 900.6	$ 668.5	$ 369.9	$ 578.1	$ 592.3	$ 836.3	$ 847.3
UTP Cost per QLD Household	$ 350.0	$ 260.0	$ 143.0	$ 221.4	$ 224.8	$ 315.3	$ 318.1

Table 6.2 - Estimated cost of solar energy systems connected to the grid, per household and Ergon Customer (source: Ergon annual reports).

The above table illustrates the CSO payments made to Ergon by the Queensland Government as compensation for foregone revenue caused by the UTP. In 2012-13, the CSO payment to Ergon equated to approximately $836 per Ergon Customer, or $315 per Qld household. It is estimated that without the UTP, Ergon customers would in 2013-14 on average experience increases to electricity bills of around $847. Was the forecast 2013-14 CSO payments to be distributed across all Qld households, this would equate to $318 per Qld household.

This is more than double the household payment equivalents made in 2009-10, but less than the household equivalent of 2007-08 which amounted to approximately $900 per Ergon customer. The reason for the variation in CSO payments over the observed time period is to be found in the ever changing gap between the cost of supplying electricity to regional and urban customers in Queensland.

Over the period 2007-08 to 2012-13 it is estimated that Ergon customers on average have received UTP related discounts to their electricity bills of around $3,945.

6.3 GOC payments

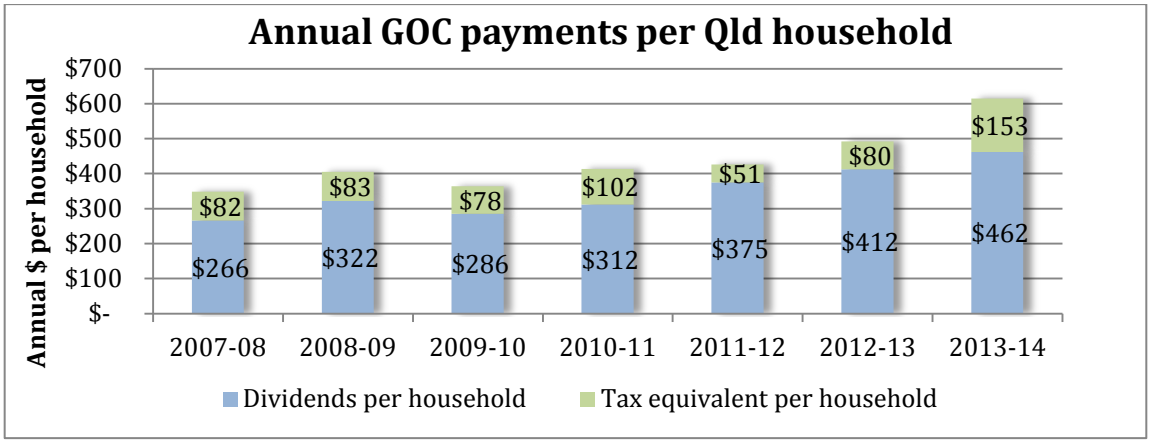

Figure 6.1 – Annual GOC payments, per household equivalent (Source: Queensland State Budgets, OESR household projections)

In 2012-13, GOC payments to the Queensland Government from dividends and tax equivalents amounted to $930m. This equates to approximately $492 per Qld Household. The State Budget estimates an increase to both dividends and tax equivalent payments in 2013-14, with a total of $1,188m forecast in payments from the Energy GOCs, equating to $614 per Qld household.

6.3.1 Net Dividends

This section analyses the GOC dividend payments to the Queensland Government net of the cost of maintaining the SBS and UTP. The net result is displayed on a per household basis.

GOC Dividends net of SBS & UTP	2007-08	2008-09	2009-10	2010-11	2011-12	2012-13	2013-14	2014-15
Annual surplus/deficit ($m)	-$ 140.5	$ 105.8	$ 251.0	$ 136.6	$ 175.4	-$ 62.8	$ 27.8	$ 143.7
Net Dividends per Qld household	-$ 84	$ 62	$ 143	$ 76	$ 95	-$ 33	$ 14	$ 73
Cumulative surplus/deficit ($m)	-$ 140.5	-$ 34.7	$ 216.3	$ 352.9	$ 528.3	$ 465.5	$ 493.3	$ 637.0
Per Qld household	-$ 84	-$ 20	$ 123	$ 196	$ 286	$ 246	$ 255	$ 322

Table 6.2 – GOC dividends net of SBS and UTP costs, per household (Source: Queensland State Budgets, OESR household projections, OESR household projections, Orion forecast)

For 2012-13 the net dividends received by the Queensland Government net of the costs of the SBS and UTP was negative $33. However, the cumulative net payments received by the Queensland Government from Energy GOCs since FY 2008 equated to approximately $246 per Qld household. Based on data collected, it is estimated that 2013-14 and 2014-15 will generate positive net cash flow from GOCs to the Queensland Government, with each year expected to have large increases in dividends as a result of the increased SFiT cost pass through, forecast price increases and time lag in revenue recovery. However, both 2013-14 and 2014-15 are forecasts and should be considered as such.

6.3.2 Net Dividends and Tax Equivalents

GOC Dividends and Tax equivalent net of SBS & UTP	2007-08	2008-09	2009-10	2010-11	2011-12	2012-13	2013-14	2014-15
Annual surplus/deficit ($m)	-$ 3.5	$ 248.8	$ 388.0	$ 320.6	$ 269.4	$ 88.2	$ 322.8	$ 481.8
Net Dividends & Tax equivalent per Qld household	-$ 2	$ 145	$ 220	$ 178	$ 146	$ 47	$ 167	$ 244
Cumulative surplus/deficit ($m)	-$ 3.5	$ 245.3	$ 633.3	$ 953.9	$ 1,223.3	$ 1,311.5	$ 1,634.3	$ 2,116.2
Per Qld household	-$ 2	$ 143	$ 360	$ 529	$ 662	$ 694	$ 845	$ 1,070

Table 6.2 – GOC dividends and tax equivalents net of SBS and UTP costs, per household (Source: GOC annual reports, Queensland State Budgets, OESR household projections, Orion forecast)

Dividends and tax equivalent payments net of UTP and SBS for 2012-13 equated to approximately $88.2m, or $47 per Qld household. If net payments had been accumulated since 2007-08, the total cumulative net cash flow to the Queensland Government would have been $1,311.5m by 2012-13. State Budget forecasts suggest that this will increase by approximately $323m in 2013-14, taking the cumulative net cash flow to $1,634m. This is equivalent to around $845 per Qld household.

6.4 Summary

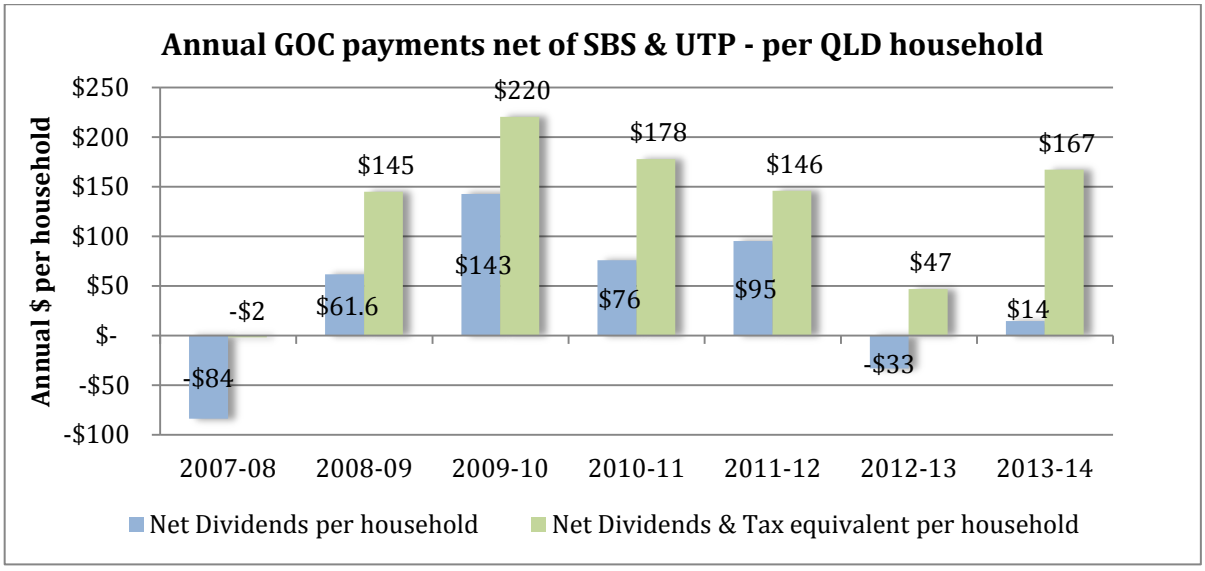

Figure 6.2 – Annual GOC dividends and tax equivalents net of SBS and UTP costs, per household (Source: Queensland State Budgets, OESR household projections, Orion forecast)

The above figure illustrates the household equivalent of the annual energy GOC payments to the Queensland Government. As can be seen, including the tax equivalents results in a higher per household equivalent as expected.

It is expected that net payments to the Queensland Government in 2013-14 would equate to approximately $167 per household if SBS and UTP costs were funded by GOC payments.

Thomas Bidstrup

Principal Economist,

B.Econ

David Spearritt,

Director

B.Com(Qld), M.Pub.Ad (Qld), FCPA, FAICD

February 2014