

# Top Energy

[Excel workbook](#)

Explanatory documentation: [Link](#)

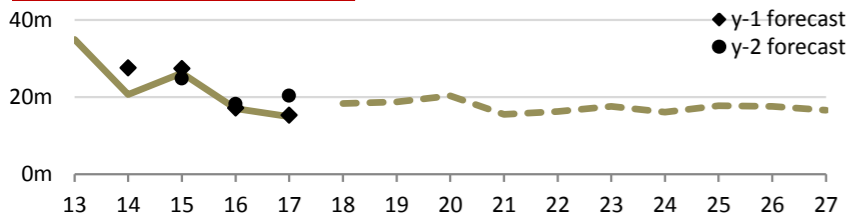
Summary database: [Link](#)

2017

## Summary statistics

|                            | 2017 value  | 5 year trend | 3 year CAGR | Rank |
|----------------------------|-------------|--------------|-------------|------|
| Regulatory asset base      | \$238m      |              | +5.3%       | 13   |
| Regulatory profit          | \$20.4m     |              | +33.8%      | 7    |
| Return on investment       | 9.37%       |              |             | 3    |
| Line charge revenue        | \$50.3m     |              | +10.3%      | 12   |
| Other income               | \$0.5m      |              | -3.6%       | 15   |
| Customer connections       | 31,365      |              | +0.8%       | 15   |
| Energy delivered           | 322 GWh     |              | -0.2%       | 21   |
| Peak demand                | 69 MW       |              | -0.6%       | 20   |
| Network capacity           | 321 MVA     |              | +1.4%       | 17   |
| Capital expenditure        | \$14.9m     |              | -10.2%      | 13   |
| Operating expenditure      | \$14.2m     |              | +3.3%       | 13   |
| Capital contributions      | \$1.0m      |              | +24.0%      | 15   |
| Related party transactions | \$12.2m     |              | -0.3%       | 12   |
| Line length                | 4,030km     |              | +0.6%       | 14   |
| Outages - SAIDI            | 621 minutes |              | +7.5%       | 27   |
| Outages - SAIFI            | 5.65 faults |              | +1.0%       | 29   |

## Capital expenditure



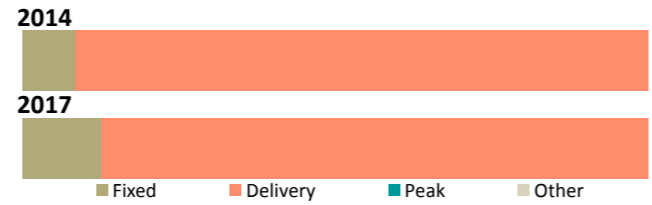
### 3 year ratios

| Total capex / asset base | Total capex / connections | Total capex / depreciation |
|--------------------------|---------------------------|----------------------------|
| 8.5% Rank: 20            | \$624 Rank: 24            | 2.34 Rank: 23              |

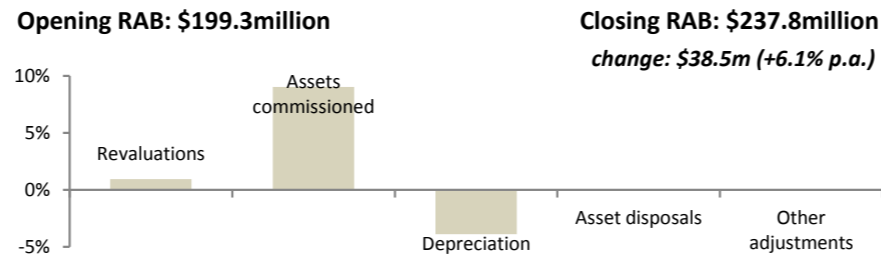
| Capex by expenditure category     | Average (2015-2017) | 5 year trend | % of capex |
|-----------------------------------|---------------------|--------------|------------|
| Asset replacement & renewal       | \$8.1m              |              | 41.6%      |
| Reliability, safety & environment | \$6.4m              |              | 32.8%      |
| System growth                     | \$2.9m              |              | 14.9%      |
| Consumer connection               | \$1.5m              |              | 7.6%       |
| Non-network assets                | \$0.6m              |              | 3.2%       |
| Asset relocations                 | \$0.0m              |              | 0.0%       |
| Total capital expenditure         | \$19.4m             |              | 100.0%     |
| Related party transactions        | \$5.4m              |              | 27.6%      |

## Line charge revenues

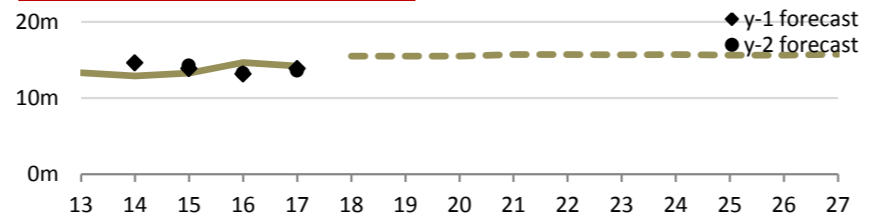
|                      | Proportion of revenue | Charges per unit | Rank |
|----------------------|-----------------------|------------------|------|
| Average daily charge | 12.7%                 | 55.9¢/ICP        | 13   |
| Delivery (kWh)       | 87.3%                 | 13.7¢/kWh        | 29   |
| Peak based           | 0.0%                  | N/A              | 1    |



## Annualised RAB changes (2015-2017)



## Operating expenditure

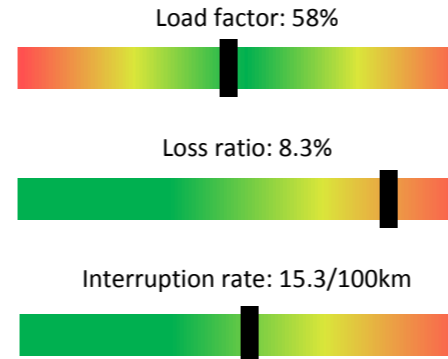


### 3 year ratios

| Network opex / metre of line | Non-network opex / connections | Total opex / kW |
|------------------------------|--------------------------------|-----------------|
| \$1.51 Rank: 17              | \$259 Rank: 23                 | \$204 Rank: 27  |

| Opex by expenditure category        | Average (2015-2017) | 5 year trend | % of opex |
|-------------------------------------|---------------------|--------------|-----------|
| Business support                    | \$4.2m              |              | 29.9%     |
| System operations & network support | \$3.8m              |              | 27.2%     |
| Vegetation management               | \$2.0m              |              | 14.3%     |
| Routine & corrective maintenance    | \$1.7m              |              | 11.8%     |
| Service interruptions & emergencies | \$1.6m              |              | 11.3%     |
| Asset replacement & renewal         | \$0.8m              |              | 5.5%      |
| Total operating expenditure         | \$14.1m             |              | 100.0%    |
| Related party transactions          | \$7.0m              |              | 49.5%     |

## Network ratios



## Company details

|               |  |                    |
|---------------|--|--------------------|
| PQ Regulated? | Yes  | Price breach: No   |
|               |  | Quality breach: No |
| CEO:          | Russell Shaw   |                    |
| Ownership:    | Top Energy Consumer Trust                                    |                    |
| Head Office:  | Level 2, 60 Kerikeri Road; Kerikeri                          |                    |
| Phone number: | 09 401 5440  |                    |
| Website:      | <a href="http://www.topenergy.co.nz">www.topenergy.co.nz</a> |                    |

## Lines and cables

| Estimated state of the assets |                             |                              |                                  |              |
|-------------------------------|-----------------------------|------------------------------|----------------------------------|--------------|
|                               | Distribution & LV O/H lines | Distribution & LV U/G cables | Subtransmission lines and cables | Poles        |
| Quantity                      | 2,801km                     | 849km                        | 377km                            | 36,458       |
| RAB Value                     | \$47.8m                     | \$36.9m                      | \$61.8m                          | *            |
| Average grade                 | 2.90                        | 3.01                         | 3.13                             | 3.04         |
| Grade 1 / 2                   | 5.1% / 3.5%                 | 1.0% / 4.1%                  | 0.0% / 0.0%                      | 1.0% / 1.0%  |
| Unknown grade                 | 0.0%                        | 0.0%                         | 0.0%                             | 0.0%         |
| Average age                   | 37 years                    | 22 years                     | 29 years                         | 32 years     |
| Over generic age              | 305km (10.9%)               | 0km (0.0%)                   | 4km (1.1%)                       | 1,295 (3.6%) |
| Unknown age                   | 0.0%                        | 0.0%                         | 0.0%                             | 0.0%         |
| 5yr replacement req (est)     | 6.8%                        | 3.1%                         | 0.0%                             | 1.5%         |
| 5yr planned replacement       | 0.0%                        | 0.0%                         | 0.0%                             | 2.1%         |
| Forecast repex (ave)          | \$4.5m +38%                 | \$0.2m +119%                 | \$1.5m -17%                      | *            |
| Repex series                  |                             |                              |                                  |              |

\* RAB and expenditure on poles is included within Distribution and LV lines

## Switchgear and transformers

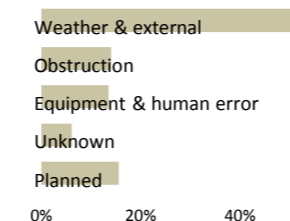
| Estimated state of the assets |                           |                         |                              |                            |
|-------------------------------|---------------------------|-------------------------|------------------------------|----------------------------|
|                               | Distribution transformers | Distribution switchgear | Zone-substation transformers | Zone-substation switchgear |
| Quantity                      | 6,015                     | 1,838                   | 24                           | 364                        |
| RAB Value                     | \$27.8m                   | \$16.2m                 | <----- \$38.1m ----->        |                            |
| Average grade                 | 2.98                      | 2.95                    | 2.83                         | 3.11                       |
| Grade 1 / 2                   | 7.1% / 2.7%               | 8.7% / 4.4%             | 0.0% / 37.5%                 | 7.6% / 12.9%               |
| Unknown grade                 | 0.0%                      | 0.0%                    | 0.0%                         | 0.0%                       |
| Average age                   | 21 years                  | 18 years                | 34 years                     | 16 years                   |
| Over generic age              | 634 (10.5%)               | 396 (21.6%)             | 11 (45.8%)                   | 64 (17.5%)                 |
| Unknown age                   | 0.0%                      | 0.0%                    | 0.0%                         | 0.0%                       |
| 5yr replacement req (est)     | 8.4%                      | 10.9%                   | 18.8%                        | 14.1%                      |
| 5yr planned replacement       | 0.0%                      | 1.5%                    | 0.0%                         | 21.0%                      |
| Forecast repex (ave)          | \$0.1m -76%               | \$0.3m -19%             |                              | \$1.3m -30%                |
| Repex series                  |                           |                         |                              |                            |



## Reliability

|               | Unplanned | Planned | Trend |
|---------------|-----------|---------|-------|
| Interruptions | 409       | 207     | ↑     |
| SAIDI         | 578.5     | 42.9    | ↑     |
| SAIFI         | 5.37      | 0.28    | ↑     |
| CAIDI         | 107.8     | 152.3   | ↑     |

### SAIDI causes



### SAIFI causes

