

Commonwealth Bank



ENERGY TRENDS AND ISSUES

ADDRESS TO THE COMMONWEALTH BANK ENERGY EFFICIENCY AND YOUR BUSINESS SEMINAR



WS (BILL) CUMMINGS

Townsville 24th | Cairns 25th | November 2015 | REF: J2921

WHAT LIKELY TO HAPPEN TO GRID ELECTRICITY PRICE?



FAR NORTH QUEENSLAND ELECTRICITY USERS NETWORK

1. Cairns Regional Council
2. Tablelands Regional Council
3. Cook Shire Council
4. Far North Queensland Regional Organisation of Councils
5. Advance Cairns
6. Tourism Tropical North Queensland
7. Regional Development Australia FNQ & Torres Strait
8. Cairns Chamber of Commerce
9. Mareeba Chamber of Commerce
10. Atherton Tablelands Chamber of Commerce
11. Innisfail District Chamber of Commerce, Industry and Tourism
12. Urban Development Institute of Australia (Cairns branch)
13. Consolidated Tin Mines Ltd
14. Canegrowers - Tablelands
15. North Queensland Miners Association
16. Australians in Retirement (Cairns branch)
17. Queensland Dairyfarmers Organisation (Northern Division)
18. Mareeba District Fruit and Vegetable Growers Association
19. Mareeba Shire Council



PRICE RISES

FIGURE 1: AVERAGE QUEENSLAND RESIDENTIAL (TARIFF 11) ANNUAL BILLS 2006-07 TO 2015-16 (\$, NOMINAL)



Source: Department of Energy and Water Supply, based on average usage of 4,053 kWh/annum

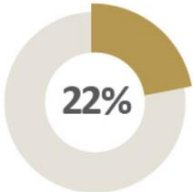
WHY? SOME IMPORTANT ELEMENTS

1. OVER INVESTMENT IN NETWORK RELIABILITY AFTER NATIONAL GRID AND RISING PEAK LOADS
2. AER ALLOWING TOO HIGH A RETURN ON INVESTMENTS
3. COST STRUCTURE OF ELECTRICITY GENERATION AND DISTRIBUTION



PERCENTAGE OF BILL

BUSINESS



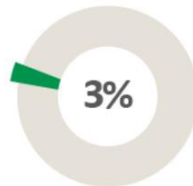
WHOLESALE



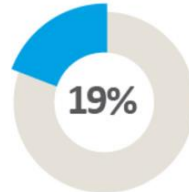
NETWORK



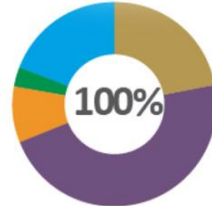
SOLAR



GREEN SCHEMES

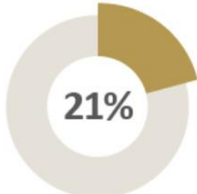


RETAIL



BUSINESS BILL

RESIDENTIAL



WHOLESALE



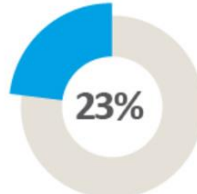
NETWORK



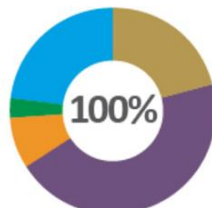
SOLAR



GREEN SCHEMES



RETAIL



RESIDENTIAL BILL





“POLES & WIRES” SEGMENT :
ALMOST 50% OF COST

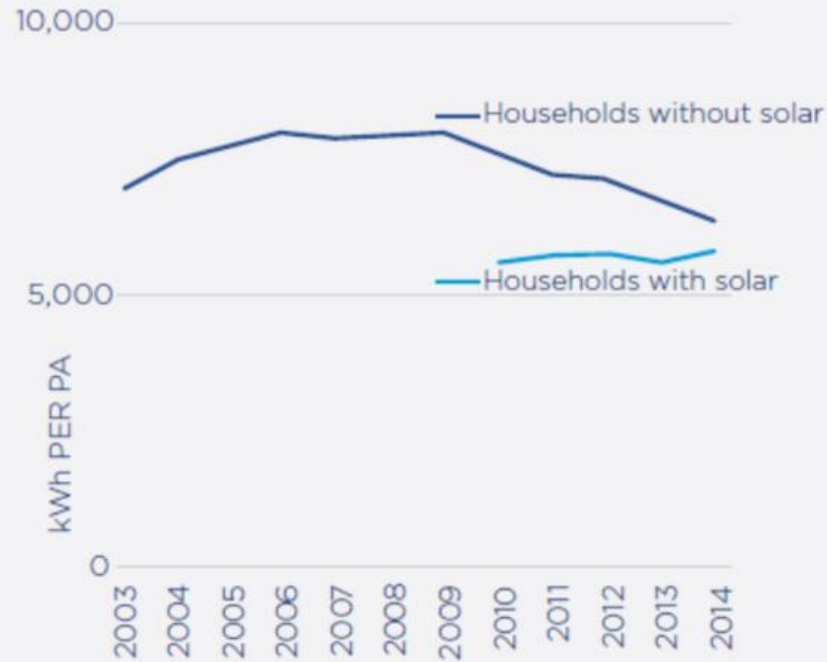
70% OF “POLES & WIRES” COSTS :
SERVICING THE CAPITAL INVOLVED
(ERGON \$11BN)



- **2010-2015 PERIOD LEVELS OF DEMAND FOR ELECTRICITY FROM THE GRID LOWER THAN EXPECTED**
- **INCREASED CHARGES TO MEET FIXED COSTS**
- **FURTHER REDUCTION IN DEMAND**
- **DOWNWARD SPIRAL**



AVERAGE HOUSEHOLD ELECTRICITY USE DOWN⁵



Average household energy consumption across regional Queensland is falling. This drop, which is being exaggerated by the households who are sourcing their electricity from solar energy systems, is pushing up the unit cost of electricity.

Source: ergon energy's presentation to aer's qld public forum, 9th december 2014



AER INQUIRY 2015-2020

- **DETERMINATION : CUTS ERGON'S REVENUE CAP**
- **BUT ONLY HALTS PRICE RISES IN 2016**
- **UNCERTAINTY : IF DEMAND FOR GRID ELECTRICITY LOWER IN COMING YEARS THAN EXPECTED, PRICES LIKELY TO CONTINUE TO RISE**



QUEENSLAND PRODUCTIVITY COMMISSION INQUIRY

- **ELECTRICITY PRICES**
- **SOLAR FEED IN TARIFFS**



MAIN INQUIRY

TENSION

POLICIES OF COST REFLECTIVE TARIFFS
& RETAIL COMPETITION

V'S

UNIFORM TARIFFS

IF NO UNIFORM TARIFF : COST UP

NORTH COAST : 30%

MT ISA : 140%



SOLAR FEED IN

44^c kWh



6^c kWh



?

STATE SOLAR POLICY TO 1 MILLION HOUSEHOLDS, EXTRA 600,000 BY 2020



- **NEW BATTERY TECHNOLOGY**
- **SOLAR POWER PURCHASE AGREEMENTS**



TAKE HOME MESSAGE

- MOST SYSTEMS LIKELY TO DEPEND TO SOME EXTENT ON GRID ELECTRICITY
- PROJECTIONS OF USE OF ELECTRICITY FROM GRID PROBABLY OVER OPTIMISTIC
- FIXED COSTS : HIGHER CHARGES
- GENERATORS ALSO HAVE FIXED COST ELEMENT : OFF-PEAK NIGHT RATES UP
- OVERALL PROBABILITY OF RISES IN GRID ELECTRICITY COSTS, RATHER THAN SAME OR LOWER



NORTH A LONG HISTORY IN RENEWABLES

- HYDRO SCHEMES
- WIND FARMS
- SUGAR MILL COGENERATION
- SOLAR

UNDERLYING ECONOMIC SENSE



Commonwealth Bank



ENERGY TRENDS AND ISSUES

ADDRESS TO THE COMMONWEALTH BANK ENERGY EFFICIENCY AND YOUR BUSINESS SEMINAR



WS (BILL) CUMMINGS

Townsville 24th | Cairns 25th | November 2015 | REF: J2921