



MARCH 2005

AMENDED REPORT

**MASTER BUILDERS QUEENSLAND
& CORDELL HOUSING COST INDEX**

Regulatory Impact Statement Costing

**“Proposed amendments to building and plumbing regulations
to improve sustainability of new housing”**

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1 – BREIF

The March 2005 Amended Report has been commissioned by the Master Builders Queensland to supplement the original costings from the February 2005 Special Report. This report uses a comparison of the Solahart range of solar hot water systems, in place of the Dux brand that was consistent with the other types of hot water systems. **NOTE:** No allowance has been made for additional support required to accommodate the Solahart tank and solar collector on the roof, as the Dux range locates the tank at ground level with separate collectors on the roof.

2 – METHOD

The cost analysis was performed using the current standard practice in new house construction as a base. The proposed changes were then introduced into the construction of the house, providing a variety of options and associated costs. The results have been tabulated in the Analysis Summary below. The various options were then analysed through the Affordability Index to view the different implementation costs.

3 – COST MODEL

The model chosen for this cost analysis is a single storey brick veneer home, typical of many constructed in today's market. At just over 200 square metres, the home consists of four bedrooms; a main bathroom, with an en-suite to the master bedroom; a double lock-up garage with internal access; a large family room, with formal lounge and dining rooms at the front of the home. All bedrooms have built-in wardrobes, with the main having a walk-in style wardrobe. There is a courtyard area flowing from the family room suitable for outdoor entertaining.

The Cost Model is produced by Reed Construction Data on behalf of the Master Builders Queensland to monitor changes that affect the cost of new housing within South-East Queensland. The Master Builders Queensland (QMBA) is the largest employer association in Queensland, and represents the interests of businesses operating within the building and construction industry. Reed Construction Data is Australia's market leader in construction-based information, providing authoritative costing information for construction projects. The extensive database breaks costs down into material, labour, plant costs, alongside professional and government fees and charges.

4 – VARIATIONS OF CONSTRUCTION

The Regulatory Impact Statement “Proposed amendments to building and plumbing regulations to improve sustainability of new housing” provides a number of options for consideration. These options relate specifically to energy use and water saving devices. All options outlined below contain the additional recommendations of

- AAA Rated shower roses
- Rainwater tank (3,000 litre)
- Dual-flush toilets
- Efficient lighting
- Water pressure limiting device

The options include

BASE – Standard current practice **Electric Storage HWS (Off-peak)**

OPTION 1 – Standard current practice with additional recommendations listed above

OPTION 2 – As for Option 1 with **Solar HWS (Electric boost) – Solahart 302LD**

OPTION 3 – As for Option 1 with **Solar HWS (Gas boost) – Solahart 302JD**

5 – DATA

5.1 - Reed Construction Data

The data used for construction costs associated with this cost analysis have been calculated using the Cordell Queensland Housing Building Cost Guide. The database of information is researched and updated on a daily basis, capturing movements in labour, material, plant hire and fees and charges. This information is published quarterly in the Cordell Building Cost Guide, and on the Internet via the Reed Construction Data e-Costing program. The database is also used for various insurance-based products, providing replacement costs for major insurance companies.

5.2 - Additional Data Sources

Data used for comparative analysis of affordability were sourced from the Australian Bureau of Statistics, including information on Average Weekly Income and the Consumer Price Index relating specifically to Queensland.

6 – ANALYSIS SUMMARY

6.1 – Implementation Costs

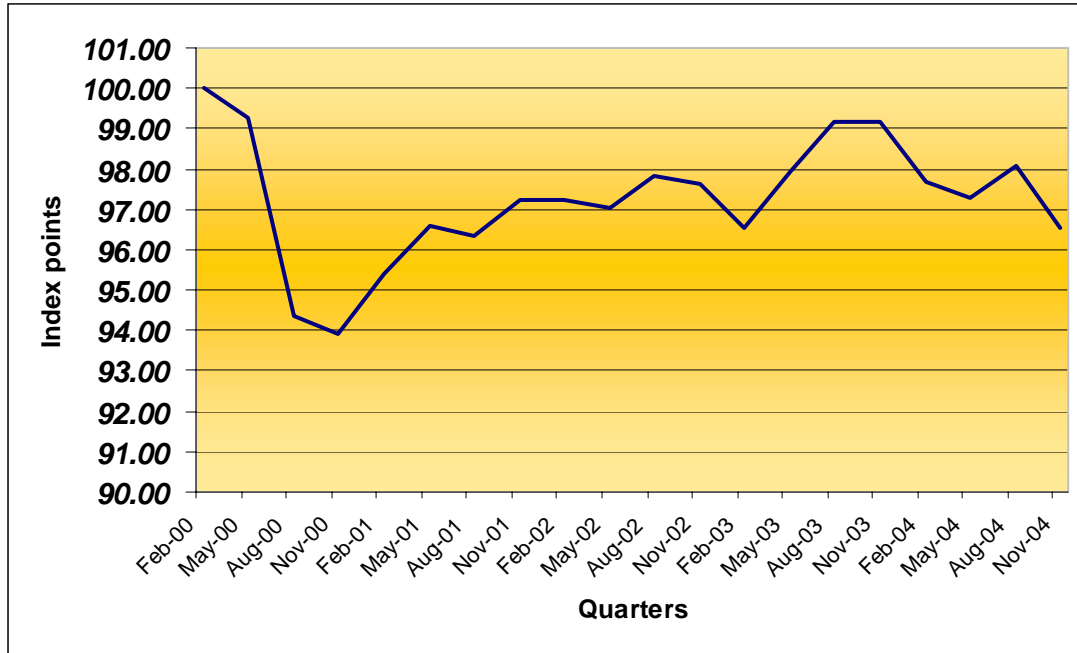
The implementation costs tabulated below reflect the current trade rates with the addition of the GST and builders margin. This is the additional end cost to the homeowner. The new totals are for including the option cost within the base house. These costs have been substituted into the affordability index for further analysis.

Option	Construction Method	HWS Cost	Implementation Cost	New Total
Base	Electric – Storage DUX Proflo 250F	\$ 1,081.00	\$ -	\$229,119.20
Option 1	Electric – Storage DUX Proflo 250F	\$ 1,081.00	\$ 2,294.64	\$231,413.84
Option 2	Solar – Electric Solahart 302LD	\$ 3,692.00	\$ 4,905.64	\$234,024.84
Option 3	Solar - Gas Solahart 302JD	\$ 4,075.00	\$ 5,288.64	\$234,407.84

6.2 - Affordability Index – Base

Quarterly Affordability Index of Building Costs and Weekly Earnings

Graph 1. (February 2000 to November 2004)

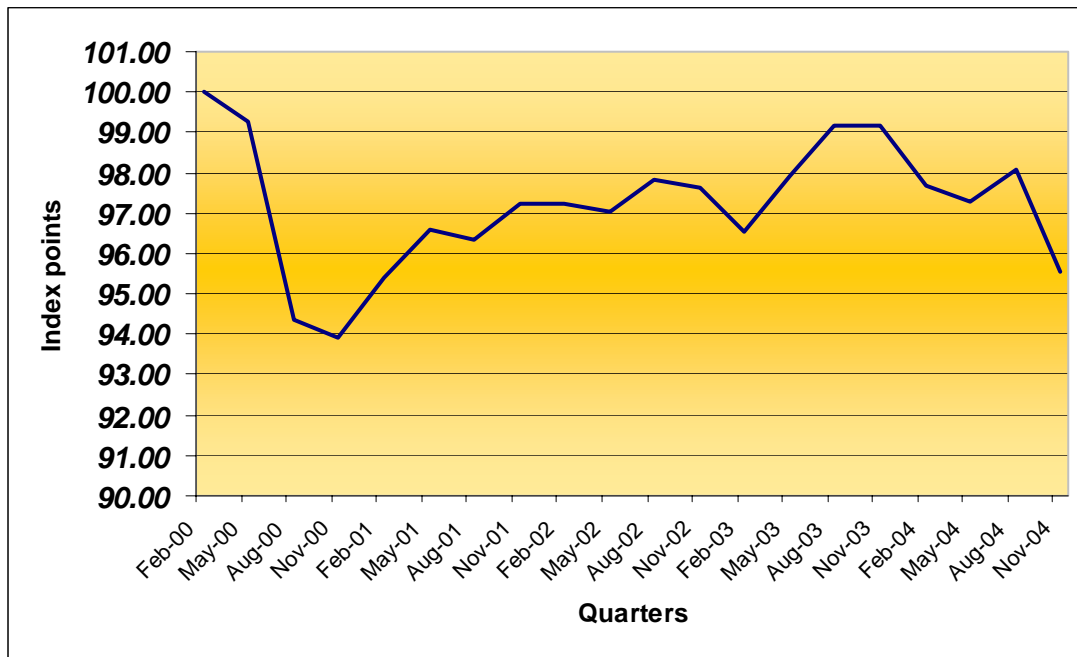


February 2000 = 100 index points.
 Note: Forecast used for average weekly earnings for November 2004 index point.
 Sources: Reed Construction Data; ABS catalogue No. 6302 August 2004.

The Affordability Index is based on the ratio of the total cost of building to average weekly earnings. The total cost of building was based on the cost of building a 200 square metre, 4-bedroom single storey brick veneer house in South-East Queensland. Average weekly earnings were based on the gross average weekly earnings in Queensland. Increases in the index represent the cost of building being more affordable to the average wage earner. Decreases in the index represent the cost of building being less affordable to the average wage earner.

6.3 - Affordability Index – Option 1 (Electric Storage)

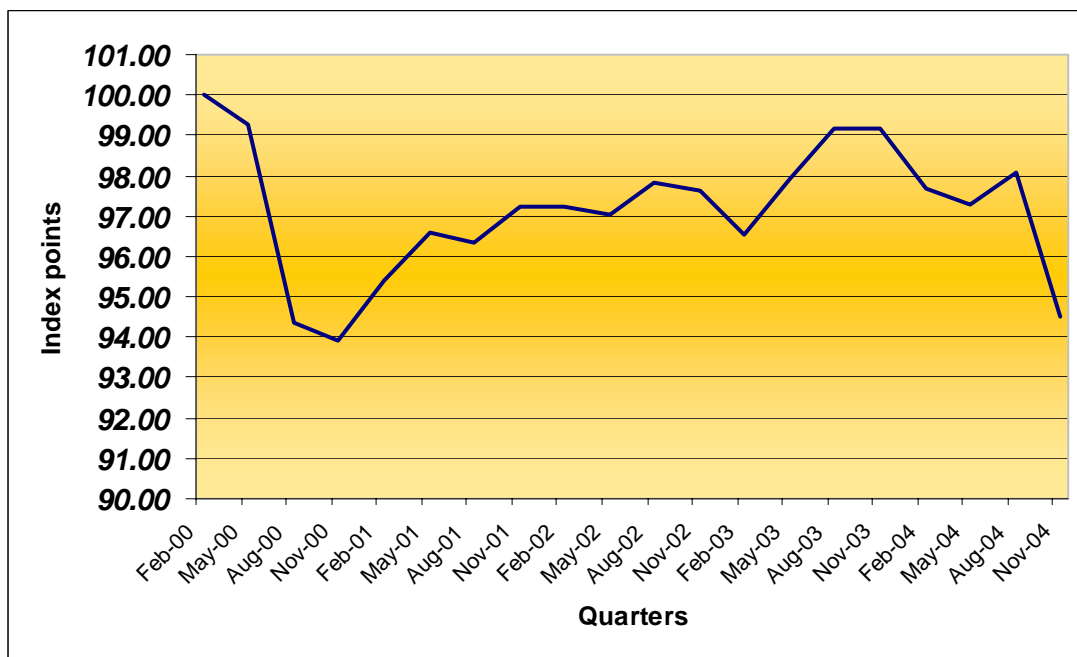
Quarterly Affordability Index of Building Costs and Weekly Earnings
Graph 2. (February 2000 to November 2004)



February 2000 = 100 index points.
 Note: Forecast used for average weekly earnings for November 2004 index point.
 Sources: Reed Construction Data; ABS catalogue No. 6302 August 2004.

6.4 - Affordability Index – Option 2 Solar Electric Boost Solarhart 302LD

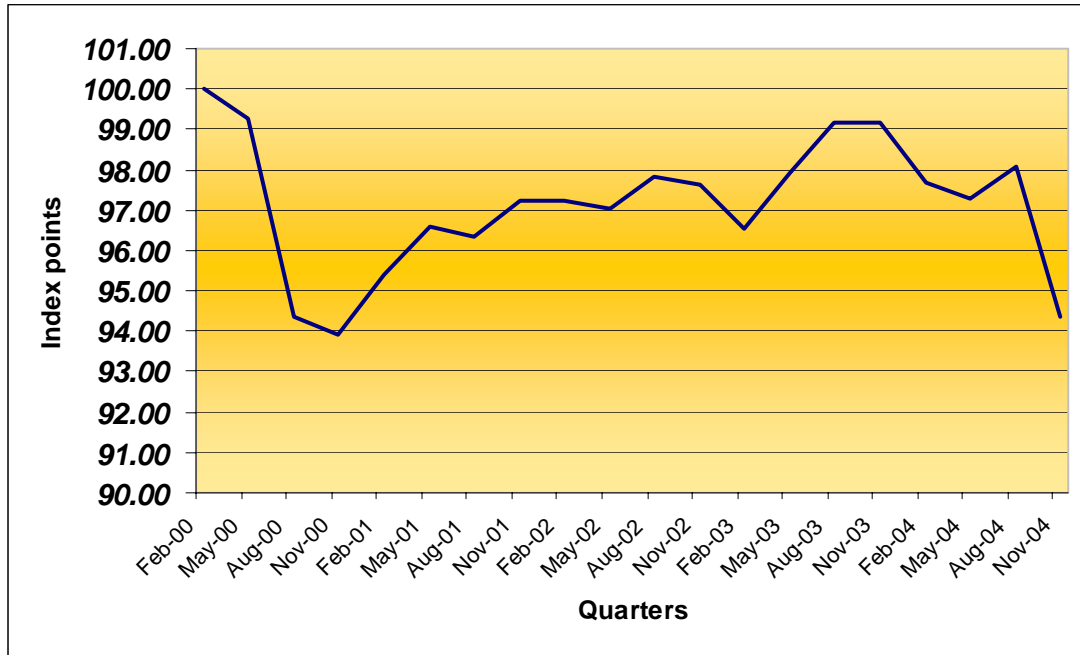
Quarterly Affordability Index of Building Costs and Weekly Earnings
Graph 3. (February 2000 to November 2004)



February 2000 = 100 index points.
 Note: Forecast used for average weekly earnings for November 2004 index point.
 Sources: Reed Construction Data; ABS catalogue No. 6302 August 2004.

6.5 - Affordability Index – Option 3 Solar – Gas Boost Solahart 302JD

Quarterly Affordability Index of Building Costs and Weekly Earnings
Graph 4. (February 2000 to November 2004)



February 2000 = 100 index points.

Note: Forecast used for average weekly earnings for November 2004 index point.

Sources: Reed Construction Data; ABS catalogue No. 6302 August 2004.