IPART
New South Wales

Independent Pricing and Regulatory Tribunal

2012/13 Rate Peg

Incorporating the Local Government Cost Index, productivity factor and carbon price advance

Local Government — Information Paper
December 2011

Independent Pricing and Regulatory Tribunal

2012/13 Rate Peg

Incorporating the Local Government Cost Index, productivity factor and carbon price advance

Local Government — Information Paper

December 2011

ISBN 978-1-921929-54-0

The Tribunal members for this review are:

Dr Peter J Boxall AO, Chairman

Mr James Cox PSM, Chief Executive Officer and Full Time Member

Ms Sibylle Krieger, Part Time Member

Inquiries regarding this document should be directed to a staff member:

Mike Solo	(02) 9290 8458
Tony Camenzuli	(02) 9113 7706
Dennis Mahoney	(02) 9290 8494
Alison Milne	(02) 9290 8443

Independent Pricing and Regulatory Tribunal of New South Wales
PO Box Q290, QVB Post Office NSW 1230
Level 8, 1 Market Street, Sydney NSW 2000

T (02) 9290 8400 F (02) 9290 2061

www.ipart.nsw.gov.au

Contents

1 Executive summary

The Independent Pricing and Regulatory Tribunal (IPART) is responsible for setting the maximum allowable percentage increase in general income (the 'rate peg') each year for all NSW councils. For 2012/13 we have set the rate peg at 3.6%.

This Information Paper sets out how we determined the rate peg using a Local Government Cost Index (LGCI) and a productivity factor. It also explains:

- that we will be including a carbon price advance in the rate peg in 2012/13 to assist councils to meet higher prices arising from the introduction of the carbon price from 1 July 2012
- how we will remove the advance from the rate peg in the following 2 years (2013/14 and 2014/15) as the actual impact of the carbon price is reflected in the LGCI and the rate peg.

1.1 The components of the 2012/13 rate peg

Last year the rate peg was set based on 2 components: the movement in local government costs as measured by the LGCI and a productivity factor. This year's rate peg is based on 3 components:

- the rise in the LGCI for the year ending with the September quarter 2011
- a productivity factor based on ABS estimates of labour productivity growth in the market sector
- a carbon price advance to assist councils to meet higher prices arising from the introduction of the carbon price from 1 July 2012.

Table 1.1 shows the percentage change determined for each component of the rate peg and the overall rise in the peg (which is rounded to 1 decimal place).

Table 1.1 The 2012/13 rate peg and its components

Component	Percentage change
Local Government Cost Index	3.41
less Productivity factor	-0.22
LGCI less productivity factor	**3.19**
plus carbon price advance	0.40
Total	3.59
Rate peg (total above rounded to one decimal place)	**3.6**

1.2 Why an adjustment for the effects of the carbon price is needed

We have included an advance for the carbon price because:

- the prices that councils will pay for certain goods and services will increase in 2012/13 as a result of the introduction of the carbon price from 1 July 2012, and
- the impact of the carbon price will not be included in the LGCI we use to set the 2012/13 rate peg, since we use a 'lagged index'.[1]

If we made no adjustment to the rate peg for the carbon price, the LGCI would eventually reflect the impact of the carbon price, but this may not occur for some time. While we acknowledge that there is considerable uncertainty about how quickly the carbon price will flow into various prices in the economy, we expect that the carbon price will not be fully reflected in the rate peg until we set the rate peg for 2014/15 (using the LGCI for the year to September 2013).

If we did not make an up-front adjustment, councils would have to meet the higher prices flowing from the carbon price from July 2012, but the amount allowed by the rate peg for 2012/13 would not provide councils with the income needed to meet the additional expenditure.

The effects of the carbon price will eventually be captured in the LGCI. We expect this to occur in 2013/14 and 2014/15. We will therefore reverse the up-front adjustment we have made in the 2012/13 rate peg over 2 years. We will deduct 0.1% in 2013/14 and 0.3% in 2014/15.

1.3 The structure of this paper

In the rest of this paper we first review the principal features of the LGCI and the main reasons for the increase in the LGCI in the year to September 2011.

In section 3 we explain how we determined the productivity factor.

In section 4 we show how we estimated the carbon price adjustment.

Section 5 then considers the rate peg for 2012/13, and indicates how future rate pegs will be affected as the actual effects of the carbon price are captured in the LGCI.

Section 6 considers some implications for councils with, or contemplating applying for, special variations and minimum rate variations.

---

1 The LGCI is calculated using data for the year ending with the September quarter. This result is then used to inform the rate peg which applies for the financial year beginning the following July. Therefore, there is a sizeable lag before councils to receive general income in line with past price movements.

2 Local government costs

2.1 What is the rate peg?

Since 1977, an arrangement known as 'rate pegging' has regulated certain council revenues (known as 'general income'). General income mainly comprises rates revenue, but also includes certain annual user charges. It excludes stormwater and waste charges, and water and sewer charges.

The rate peg is the maximum percentage amount that a council may increase its general income each financial year. Previously, the rate peg was set by the Minister for Local Government. Since 2011/12, it has been set by IPART under a delegation by for the Minister for Local Government.

In setting the rate peg, IPART is informed by the 'annual average' change in the LGCI. This is calculated as the percentage change in the average level of the LGCI in the year to September quarter, from the previous year's average to September quarter.

2.2 What is the LGCI?

The LGCI measures the average movement in the prices paid for inputs for ordinary council activities that are funded from general rate revenue.

The LGCI is designed to measure the change in price of a fixed 'basket' of goods and services purchased by councils in a *given period,* relative to the price of that same basket in the *base period*.[2] The basket we use in the LGCI is based on our survey of the costs incurred by NSW councils in 2008/09 and 2009/10.[3]

The design of the LGCI is similar to the design of the Consumer Price Index (CPI) and the South Australian Local Government Price Index. All 3 measure the average price changes over time of a given basket of items.

2 The construction of a base-weighted price index is explained in more detail in *Local Government Cost Index*, *Local Government Information Paper*, December 2010, Appendix A.

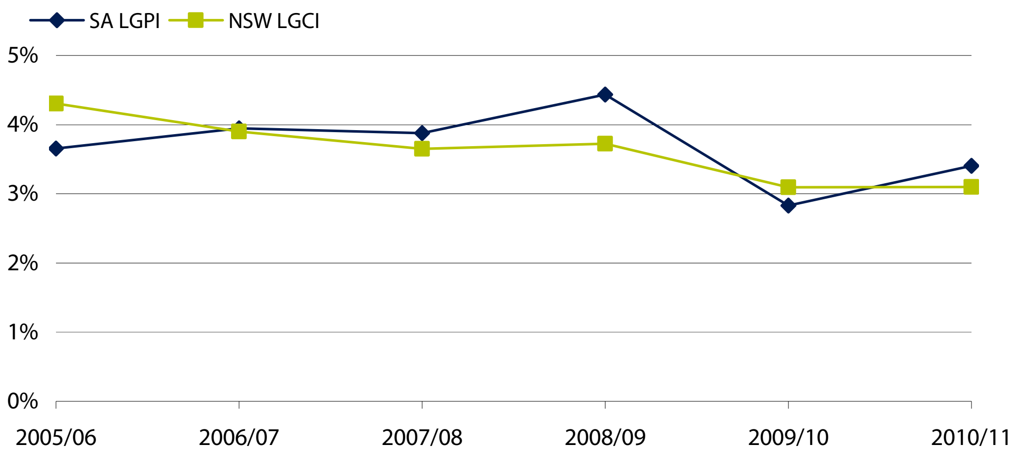
3 For more information on the survey, see IPART, *Local Government Cost Index*, *Local Government Information Paper*, December 2010, p 24.

The CPI measures the weighted average change in the prices of a specified basket of goods and services purchased by households in Australia's capital cities. It does not measure the change in the prices faced by any individual household or groups of households.[4]

Similarly, the LGCI measures the weighted average change in the prices of a specified basket of goods and services purchased by NSW councils on average, and not the change in prices faced by any individual council or groups of councils. We use labour, consumer and producer prices that are collected and published by the ABS to estimate the changes that occur in the cost components of the LGCI, year-by-year.[5]

In the case of the SA Local Government Price Index (LGPI), the basket reflects the costs incurred by SA councils. Not surprisingly, therefore, the NSW and SA indices show similar movements (Figure 2.1). Over the 6 years to 2010/11, the average annual rise was 3.6% for the NSW LGCI and 3.7% for the SA LGPI. For both indices, the rises in 2009/10 and 2010/11 were the smallest for several years.

Figure 2.1 Annual average changes in local government cost indices in NSW and SA



Note: Data are in financial years.

Sources: IPART and http://www.lga.sa.gov.au.

[4] The ABS measures the change in prices faced by certain household types based on their principal source of income. The 4 types are: *employee* (principal income from wages and salaries); *age pensioner* (age pension or veteran affairs pension*); other government transfer recipient* (all other government pensions) and, *self-funded retiree* (superannuation or property income). In the year to September 2011 their prices rose 4.4%, 3.9%, 4.6% and 3.5% respectively. See ABS, *Analytical Living Cost Indices for Selected Australian Household Types,* Cat. 6463.0, September 2011.

[5] A detailed listing of the ABS indices is in Appendix B.

2.3 The rise in NSW council costs in the year to September 2011

We measure the average rise in NSW council costs by measuring the weighted-average rise in component indices that make up the LGCI, based on the latest data available. The rise in the LGCI is calculated by weighting the price changes in each cost item to derive their contributions to the rise in the LGCI overall (Table 2.1).

The rise in the LGCI over the year to September quarter 2011 was 3.41%. The main components contributing to this rise were:

- A 3.5% increase in Employee benefits and on-costs, measured by the ABS labour price index for the public sector, NSW. Due to its large weight in the LGCI, the rise in labour costs contributed just under half of the rise in the LGCI this year.
- A 3.5% increase in Construction works, measured by the ABS producer price series for Road and Bridge Construction, NSW.
- The 2 largest price rises were for fuel and electricity. The former reflected high world oil prices and the latter the continued flow-through of higher regulated network charges and the cost of renewable energy schemes mandated by Federal and State Governments.
- The cost item for which we construct our own price index, the Emergency Services Levy, also rose strongly this year, by 9.4%. This reflects the delayed impact of the increase in the effective rate of levy in 2010/11 (see Appendix B).
- The biggest price falls were for 'Information technology & software' and 'Printing, publishing and advertising'. Neither had much effect on the index because of their small weights.

Table 2.1 Calculating the rise in the LGCI for the year ended September 2011

Cost items	Effective weights as at end-Sep 2010 (%)	Price change (% annual average)	Contribution to index change (percentage points)
Operating costs			
Employee benefits and on-costs	41.9	3.5	1.51
Plant & equipment leasing	0.4	3.8	0.02
Operating contracts	1.4	2.1	0.03
Legal & accounting services	1.1	3.2	0.04
Office & building cleaning services	0.2	4.9	0.01
Other business services	6.0	3.7	0.23
Insurance	1.8	3.3	0.06
Telecommunications, telephone & internet services	0.6	-0.1	0.00
Printing publishing & advertising	0.6	-4.3	-0.03
Motor vehicle parts	0.5	0.6	0.00
Motor vehicle repairs & servicing	0.7	-0.2	0.00
Automotive fuel	1.1	11.1	0.13
Electricity	2.8	10.7	0.32
Gas	0.1	5.7	0.00
Water & sewerage	0.5	6.3	0.03
Road, footpath, kerbing, bridge & drain building materials	3.0	3.5	0.11
Other building & construction materials	0.8	2.4	0.02
Office supplies	0.4	-1.0	-0.01
Emergency services levies	1.4	9.4	0.13
Other expenses[a]	8.7	3.2	0.29
Capital costs			
Buildings – non-dwelling	6.5	2.4	0.17
Construction works - road, drains, footpaths, kerbing, bridges	13.5	3.5	0.50
Construction works - other	1.4	3.5	0.05
Plant & equipment – machinery	4.1	-1.7	-0.07
Plant & equipment – furniture etc.	0.2	-1.0	0.00
Information technology & software[b]	0.4	-10.2	0.01
Total change in LGCI	**100.0**		**3.41**

a Includes miscellaneous expenses with low weights in the Index, eg, councillor and mayoral fees.

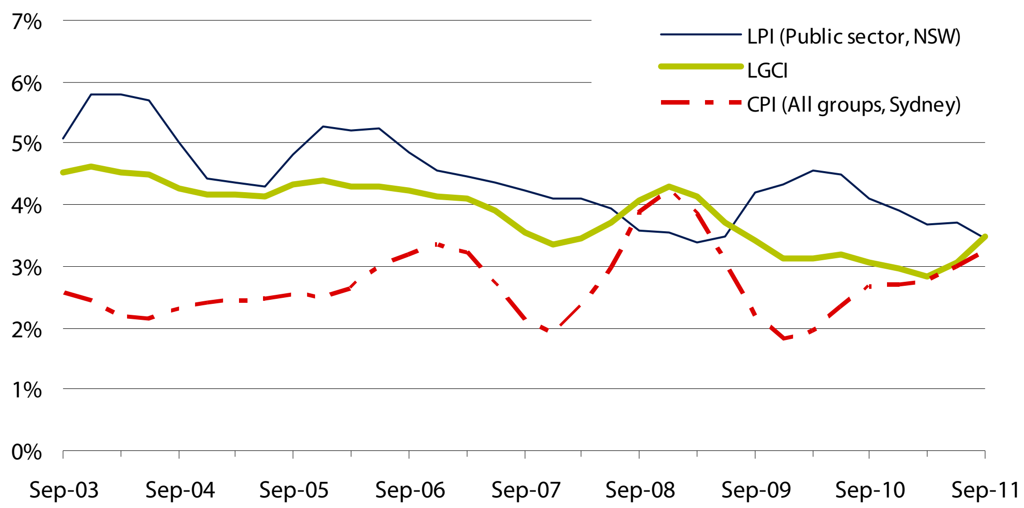
b Because we have changed the inflator we use for this item, the measured change over last year's index produces a positive contribution to the change in this year's LGCI.

Notes: Figures may not add due to rounding. Percentage changes are calculated from unrounded index numbers.

Overall, the LGCI in the year to September 2011 was 3.41% higher than it was in the year to September 2010. This rise is set against a backdrop of relatively modest inflation in the Australian economy.

Inflation has been relatively low in Australia since the early 1990s. Figure 2.2 shows how annual increases in the LGCI have compared with annual increases in the Sydney CPI since 2003. It also includes the annual increases in NSW public sector labour costs as measured in the Labour Price Index (LPI) because these are the largest components in the LGCI.[6]

Figure 2.2 Annual average rises in the LGCI, LPI and CPI



Source: ABS, various data release for consumer, producer and labour prices, IPART.

The rise in the LGCI has usually been above that of the Sydney CPI. This is not surprising, given its basket of goods and services, which includes a large weighting for labour costs. The CPI includes many items that are not in the LGCI and often gives a greater weight to those that are. For example, food is in the CPI but not in the LGCI. Housing-related costs (rent, purchase, maintenance and utilities) are much more heavily weighted in the CPI than in the LGCI. When the prices of food or housing rise strongly, so does the CPI. The LGCI is much less affected by these items.

The rise in the LGCI is usually less than the growth in public sector unit wages and other labour costs as measured in the LPI. This is because the LGCI basket includes non-labour cost items.

6 Although we only constructed the LGCI in 2010, we have backcast its annual changes by using past changes in the cost items in the index and the current basket of weights. We used annual increases in the CPI to substitute for annual increases in the Emergency Services Levy, as a separate price index for this item was not calculated prior to September 2008.

In the past 8 years, only twice has consumer price inflation matched, or almost matched, the rise in the LGCI. This occurred in 2008/09, when public sector wages growth slowed while consumer prices were boosted strongly by an economy at full capacity. It occurred again in 2010/11, when public sector wages growth slowed. The LGCI rise of 3.41% is higher than last year but it is below the 5-year average to 2009/10 of 3.78%.

2.3.1 Re-examining the price series used in the LGCI

We re-examined the price indices we used last year, both as a matter of course and because of the introduction of the 16th series for the CPI. Despite some name changes and a change in the composition of one of the CPI sub-groups, we determined that the indices used last year continue to be the most relevant.

The one exception was the price series we used to measure changes in councils' 'Information technology & software' costs. Last year we used the CPI sub-index 'Audio, visual and computing equipment - Sydney' as our proxy but it does not measure the change in prices for software.[7]

The sub-index 'Audio, visual and computing equipment and services' includes both hardware and software in its basket. It is therefore the more appropriate series.[8]

We have included the replacement index and recalculated the cumulative rise in the LGCI. Because of the item's small weight in the LGCI, the replacement makes no difference to the overall rise in the LGCI rounded to one decimal place and therefore no difference to the setting of the rate peg this year.

2.4 What the LGCI does not measure

The LGCI measures the average movement in prices for a basket of inputs purchased by councils. It is worth emphasising that there are several important things that the LGCI does not do. It does not:

- reflect any individual council's expenditure pattern, because it takes as its weights the average spending pattern across all councils
- reflect unusual or local price impacts eg, local competition with mining companies leading to higher wages for certain staff, or natural disasters

---

7 In *Consumer Price Index: Concepts, Sources and Methods – Information Paper* 2009, p 70; *A Guide to the Consumer Price Index, 16th Series*, 2011, Appendix 2.

8 We considered further modifying the falls in the broader index because the ABS removes improvements in the quality of computer equipment before it measures price changes. The drawback of such a 'constant-quality' approach is that it overstates the size of the reductions in sticker prices that councils pay when they buy new computer equipment. We could not measure the fall in sticker prices because the ABS does not publish the split in its measured price falls between falls in sticker prices and rises in quality. It discusses some of the issues in *CPI: Concepts, Sources and Methods,* 2009, Chapter 4.

- provide an allowance for councils to fund extraordinary expenditures, such as a rapid reduction in existing infrastructure backlogs that may have accumulated over many years, new services or increases in the quality of existing services.

The *Local Government Act 1993* provides flexibility for councils experiencing cost pressures that are not reflected by the movement in the rate peg. Some of these matters are more appropriately addressed through funding from other sources eg, grants, or through the special variation and minimum rate variation processes, which recognise the specific characteristics and needs of individual councils and their communities.

3 The productivity factor

The rate peg includes a productivity factor to allow ratepayers to share in the efficiency gains made by councils. IPART must develop a productivity factor to apply when determining the rate peg.

Before we determined the productivity factor this year, we released a discussion paper and sought comments from councils and other stakeholders on aspects of productivity and using a productivity factor in the rate setting process.

We have determined a productivity factor of 0.22 percentage points for 2012/13. This is based on a methodology similar to last year. We applied an estimate of the rise in ABS Market sector labour productivity to the labour component in the LGCI and then discounted it for measurement uncertainties.

Having considered the measurement uncertainties in some detail, we have, as a matter of judgement, reduced the discount to 50% (from 60% last year) and will further consider the size of the discount in future years. This is discussed further in section 3.4.

The derivation of the productivity factors in 2011/12 and 2012/13 is summarised in Table 3.1.

Table 3.1 Productivity factors in 2011/12 and 2012/13

	2011/12	2012/13
5-year average Market sector productivity	1.22	1.03
After applying to the Labour component	0.50	0.43
Discount factor	–60%	-50%
Productivity factor	0.20	0.22
LGCI	3.01	3.41
LGCI minus productivity factor	2.81	3.19

The following sections outline our rationale for including a productivity factor in the rate peg and report on our consultation process. We then explain how we set the productivity factor for 2012/13.

3.1 Rationale for a productivity factor

IPART's terms of reference from the Government require us to have regard to the LGCI *and* a productivity factor when setting the rate peg. This follows from a recommendation we made in our 2009 review of the *Revenue Framework for Local Government* and reflects our view that the rate peg should allow ratepayers to share in the efficiency gains made by their councils.

In other, more market oriented, sectors of the economy the pressure of competition usually provides sufficient incentives to share efficiency improvements with consumers through lower prices. As a result, productivity gains result in prices in competitive markets that generally grow more slowly than the prices paid for units of inputs.

As local councils have suggested, they seek to make, and do make, efficiency and productivity gains over time, as do other sectors of the economy. Such gains may come from various sources, such as higher educational and skills levels of council staff and contractors, or from improved technology that is built into the latest capital equipment. As the evidence from all sectors of the economy shows, such productivity improvements are occurring repeatedly over time. However, a rise in the LGCI makes no allowance for such rising productivity.

IPART considers that there is scope for councils to make productivity gains and to continue to do so. We consider that these gains should be shared with ratepayers.

3.2 Council views on the productivity factor

29 councils and council-related bodies made submissions in response to a Discussion Paper we released in September entitled *Measuring and Assessing Productivity Performance in Local Government.* Key council observations on issues related to the productivity factor in the rate peg are summarised below. We also sought comments on how to assess council productivity as part of the special variation process.

Almost all submissions from councils and council representative groups did not support deducting a productivity factor from the LGCI, for various reasons. For example:

- productivity is difficult to measure for local government
- using private or market sector productivity is inappropriate
- councils should be left to decide what to do with all their efficiency gains and not have a portion returned to ratepayers as lower rates
- rate pegging has forced councils to repeatedly make such gains over many years
- a 'one-size-fits-all' approach to a productivity factor is not appropriate for local councils because of the wide range of services and levels of service they provide
- (some) councils already attempt, to the extent that this is possible, to factor productivity gains into their Long Term Financial Plans by not automatically lifting expenditures in line with expected increases in non-labour related costs even though service levels are to be maintained
- the productivity factor forces councils to lift efficiency through limiting the use of inputs with no opportunity to achieve higher output/better levels of services, and
- applying for a special variation is difficult and costly.

3.2.1 Ratepayers see desirable links between efficiency and rates

During the special variation process this year, we received submissions from a number of ratepayers commenting on council efficiency.

Issues of ratepayer protection were of high importance in the submissions we received. Additionally, it appeared that whether or not councils had undertaken efficiency or productivity improvements, ratepayers considered that councils still had scope for further gains.

3.2.2 Possible refinement of the productivity factor

The Discussion Paper asked councils to consider whether we should broaden our measure of labour productivity beyond the Market sector productivity figure we used last year, or whether we should narrow it onto a relevant sectoral measure. As a broader measure, we offered the 'All industries' series. As a sectoral measure we identified the 'Public administration and safety' (PAS) series as the sector with activities and services that most aligned with those of local councils.

Many councils supported the selection of the sectoral measure, and noted that some of the law enforcement, public safety and emergency services functions in the PAS sector are also undertaken by local councils.

They also noted that commercial and business services undertaken by councils are not usually funded from rate income and are excluded from the PAS, so their exclusion improves the PAS coverage of relevant rate-related council activities.

3.2.3 Why we cannot use the PAS sector as a measure of productivity

The ABS measures labour productivity as the volume of value added per man-hour worked. It calculates this measure by dividing the volume of gross value added (GVA) in each sector by the number of hours worked in that sector. For the economy as a whole, the ABS divides the nation's Gross Domestic Product (GDP) by the total number of hours worked.

We examined the basis for the reported measure of productivity for the PAS sector and found that it is not suitable for our purposes. This is because the PAS sector generally does not sell its services.[9] As a result, the ABS uses the value of inputs to measure the output of the sector. This is not a true measure of productivity. Without sales data (that are deflated by the ABS to eliminate the effects of price changes) the volume of output cannot be derived.[10]

In summary, despite widespread agreement that the coverage of the PAS sector is the closest available to local government, we do not consider that the reported productivity measure is suitable for our purposes. Therefore, we have decided to retain the approach we adopted last year by using the labour productivity measure for the Market sector as a whole. This is a genuine measure of labour productivity growth.

---

9 These sectors "are dominated by the general government sector. The production of these government dominated industries largely comprises those goods and services which … are not for sale, eg, the provision of government services which relate to the community as a whole or for which no charge (or a purely nominal charge) is made." *Australian National Accounts: Concepts, Sources and Methods*, 2000, chapter 27 para 27.13, p 363.

10 In the context of measuring multi-factor productivity, the ABS notes that "using a method in which input data are used as measures of output [means that] meaningful productivity measures cannot be derived for these industries at present because the measure of real [output] effectively assumes that there has been no change in [multi-factor] productivity. ABS, *Australian National Accounts: Concepts, Sources and Methods*, 2000, para 27.12, p 363.

3.3 Latest productivity trends

Although we base the productivity factor on trends in past productivity, we are primarily interested in the scope for councils to achieve productivity gains in the future.

Since the Discussion Paper was released in September 2011, the 2010/11 ABS National Accounts have been published, showing the latest rises in labour productivity across various sectors of the economy, including some revisions to previous releases. The Market sector measure of labour productivity growth is shown in Table 3.2.

Table 3.2 ABS measure of Market sector labour productivity (annual average percentage changes)

	2006/07	2007/08	2008/09	2009/10	2010/11	5-year compound average to 2010/11
Market sector	0.95	1.26	0.62	2.67	-0.30	**1.03**

Source: ABS Australian System of National Accounts, 5204.0, 2010/11. Data has been rounded to 1 decimal place.

As with last year, we take a 5-year compound average to smooth out year by year volatility. The latest 5-year average has fallen to 1.0% (from 1.2% last year) because the Australian economy has slowed in terms of output growth while aggregate employment and hours worked continued to rise.

3.4 Our approach to the productivity factor for 2012/13

Our approach to determining a productivity factor for this year may be summarised as follows:

1. Adopt the 1.03% rise in Market sector labour productivity (annual average increase over the 5 years to 2010/11 to 2 decimal places) as our starting point.
2. Apply this rise to the labour cost component in the LGCI. Since labour costs carry a 41.9% weighting in the current LGCI, the productivity factor would reduce the LGCI by 0.43 percentage points.

   Our justification for this approach is as follows:

   - The productivity component is applied only to the labour component – this is consistent with the practice within other industries IPART regulates where it applies a productivity factor. It is justified on the assumption that the level of expenditure on labour is the main controllable cost of councils.
   - Local government regularly contracts out works and services via competitive tender. This should lead to higher levels of efficiency if undertaken well.

3. Due to uncertainty as to the extent to which Market sector productivity reflects productivity in the NSW local government sector, we discount the measure by 50%, reducing it to 0.22 percentage points.

   There are several arguments that might reasonably be advanced against discounting the productivity factor. These include:

   - Local government labour should be expected to make the same level of productivity improvement as the rest of the economy.
   - State Governments regularly require demonstrated productivity improvements in wage negotiations.
   - Productivity and efficiency dividends across the rest of government typically average 1% to 2% per year across all expenditure.
   - Many members of the community consider that councils should make efficiency gains and share these with ratepayers in the form of lower rates

   By contrast, arguments in favour of some discounting include:

   - Productivity growth in local government may be lower than in the Market sector, which is largely privately owned. This is because the private sector has direct competitive and profit incentives for greater productivity, and fewer constraints on achieving it, than public sector organisations.
   - Local governments pursue multiple objectives, including social objectives, and efficiency gains may be more difficult to achieve than in the market-oriented sectors.
   - Local government productivity improvement may be limited by the geography and demographics of the local community. For example, facilities may need to be duplicated in dispersed townships. Private enterprise may choose where to operate and what to produce; local government cannot
   - Councils consider that efficiency gains should be directed towards improving services rather than lowering rates.

   We have balanced these competing considerations in deciding on a discount factor of 50%.

4 Adjusting the rate peg for the effect of the carbon price

The introduction of a carbon price from 1 July 2012 is expected to affect the prices that local councils pay for their inputs in 2012/13 and future years. We have therefore included an advance in the 2012/13 rate peg of 0.4% to assist councils to meet higher prices arising from the introduction of the carbon price from 1 July 2012. It will be reversed over the following 2 years.

Our decision to include an advance in the 2012/13 rate peg is an exception to our standard practice of basing the LGCI on past, known increases in prices. We have decided to do this because the impact of the carbon price is expected to be significant and we have reasonable estimates of its possible effects on input costs in 2012/13.

The alternative would be to do nothing and allow the impact of the carbon price on the LGCI to flow through over the next 2 financial years. However, we consider that it would be unfair to set a rate peg that ignored the likely effects of the carbon price on council costs when councils must fund those costs in 2012/13.

We established the 0.4% adjustment based on:

- a calculation applying Commonwealth Treasury and our own estimates of the impact of the carbon price to the various component items in the LGCI to give an estimated impact of 0.6%[11]
- reducing this calculation of 0.6% to 0.4% to reflect:
  - uncertainties surrounding how quickly the carbon price will flow into the economy
  - our expectation that councils may take up various financial offset programs
  - our expectation that councils may switch to products less affected by the carbon price.

The following sections outline how we estimated the impact of the carbon price on the LGCI and our rationale for applying a discount to this estimate in determining the rate peg for 2012/13. We also explain how and why we intend to reverse the carbon price advance in the rate pegs for 2013/14 and 2014/15.

4.1 Estimating the impact of the carbon price in the LGCI

The Commonwealth Treasury has published estimates of the effect of the carbon price on a range of consumer prices. Treasury's estimates assume that:

- the carbon price is passed through immediately and in full
- there is no substitution by buyers from carbon-price-affected products to cheaper substitutes.

As a guide to changes in the LGCI, we have used estimates by the Commonwealth Treasury on the impact of the carbon price on the 'CPI – All Groups' and various CPI sub groups. For 2012/13, these estimates are that:

- Prices for utilities (electricity, gas and water and sewerage) will increase by 7.9%, of which electricity is expected to increase by 10%, leaving the other utilities prices in the CPI to rise on average by a residually calculated 5.32%.
- Motor vehicle costs will increase by 0.3%.

[11] IPART, *Effects of the carbon price on local councils*, December 2011.

- Insurance costs will increase by 0.3%.
- Telecommunications will increase by 0.5%.
- IT and software will increase by 0.4%.[12]

Other assumptions are required if other local government costs are to be covered. These are that:

- Prices for most other components of the LGCI, which are normally inflated by producer prices, will increase by 0.45%. This figure is the expected increase in CPI excluding utilities, motor vehicles, insurance, telecommunications and IT and software. We have used it in the absence of better estimates.[13]
- The effective fuel price will increase by 0.72% for councils reflecting a reduction in credits under the fuel tax credit system applied to certain fuel uses.[14]
- Employee costs will not rise because the compensation packages of the Federal Government to many households should mollify any extra wage demands.
- Emergency services levies and Other services will increase by 0.7%.[15]

To calculate the impact on the LGCI we combined the assumed changes in prices with their relative importance in local government costs (measured by the effective weights in the LGCI as at September 2011). The result is that the introduction of the carbon price could add up to 0.6% to the LGCI in 2012/13.[16]

This is slightly lower than the Commonwealth Treasury estimate of a 0.7% increase in the CPI as a result of the carbon price. It is lower because the LGCI includes employee costs and the CPI does not, and labour costs are not expected to rise in response to the carbon price since households will be compensated by the Federal Government.

---

12 Commonwealth Treasury, *Modelling the impact of a carbon price on household expenditure*, 18 September 2011, http://www.treasury.gov.au/contentitem.asp?NavId=035&ContentID=2118.

13 Since the electricity-intensity of items in the CPI and PPI seem to be about the same, we have used estimated changes in the CPI items as proxy for producer-price related items in the LGCI.

14 In 2012/13, the simple average of the expected carbon-related price increases in petrol, diesel and LPG is 4.8%, of which we have taken 15% as representing the proportion used on off-road or non-transport vehicles (based on limited council data). We will collect more data on this proportion. The small fuel adjustment will remain in the rate peg because it will not be captured in the LGCI which uses CPI automotive fuel as its proxy.

15 In the absence of other reliable data, we have assumed these components will increase in line with the Commonwealth Treasury estimate for the CPI.

16 This calculation is shown in detail in Appendix C.

4.2 Why we have discounted our calculation of the advance on the LGCI

As previously stated, Treasury's estimates assume that:

- the carbon price is passed through immediately and in full
- there is no substitution by buyers from carbon-price-affected products to cheaper substitutes.

We consider that there may be a delay in businesses passing on the effects of the carbon price and/or businesses may absorb some of the impact of the carbon price. Treasury's estimates may therefore overstate the effects of the carbon price.

Our calculations also do not recognise that councils will have opportunities to offset the effect of the carbon price by varying the quantities of various goods and services they buy in 2012/13.

In particular, several Federal Government programs will fund energy efficiency and other schemes.[17] To the extent that councils receive this funding and so reduce their energy use, they will not need rate revenue to cover their costs. This means that there should be some offsetting of the effect of the carbon price on councils' total costs even if they cannot avoid the impact on the unit costs they face.

It is difficult to know how much individual councils and the NSW local government sector as a whole will be able to take advantage of the various schemes to contain their costs as the carbon price is introduced. It seems likely that there will be *some* action in this regard taken by every council.

Because we cannot be certain of the size of the offsets council are likely to gain, as a matter of judgement we have decided to reduce the carbon price advance in the rate peg for 2012/13 from the estimated 0.60% to 0.40%.

Our advance of 0.40% is shown separately in the rate peg rather than being included in the LGCI, for 2 reasons:

1. the effect of the carbon price is not yet captured in the LGCI which only measures price changes to the September quarter 2011, and
2. the impact of the carbon price will be reflected in the LGCI over time, as the prices that are in the LGCI respond to the carbon price.

17 These include the Low Carbon Communities Program and the Carbon Farming Initiative. They are described in our *Effects of the carbon price on local councils – Information Paper, December 2011* posted on our website.

4.3 Reversing the carbon price advance

Once the effect of the carbon price has flowed through to electricity and other prices that are used in the LGCI, the up-front adjustment made to the 2012/13 rate peg will be removed. This removal will start with the 2013/14 rate peg and conclude with the 2014/15 rate peg.

If we did not remove the up-front adjustment when the carbon price effect is realised in the LGCI, we would be double-counting the effect of the carbon price. The removal will take place in 2 steps, based on the assumption that the full effects of the carbon price on the LGCI will occur by the end of 2012/13. These full effects will be reflected in the change in LGCI that is calculated for the year ended September 2013.

Therefore, the actual effect of the carbon price will show up in the change in the LGCI in the year ending September 2012 and in the change in the LGCI in the year ending September 2013. The reversal will be in 2 steps: 0.1% in the 2013/14 rate peg and 0.3% in the 2014/15 rate peg.

Our approach to reversing the carbon price advance is shown in Table 4.1.

Table 4.1 Adding and removing the carbon price advance (percentage changes)

	2012/13	2013/14	2014/15
Rise in LGCI net of the productivity factor	3.2	*3.3*	*3.5*
Carbon price advance	0.4	-0.1	-0.3
Rate peg	**3.6**	***3.2***	***3.2***
Cumulative rise in LGCI	3.2	6.7	*10.3*
Cumulative rise in rate peg	3.6	*6.9*	*10.3*
Difference in cumulative result	0.4	*0.2*	*0.0*

Note: The data in italics for 2013/14 and 2014/15 signify that they are estimates only.

Table 4.1 shows actual and illustrative rises in the LGCI after allowing for the productivity factor, the actual and proposed carbon price advance and removals, and the resulting rate pegs.

The rate peg for 2012/13 is set at 3.6%. It is the 3.2% net rise in the LGCI in the year to end September quarter 2011 plus the 0.4% carbon price advance.

The rate peg for 2013/14 is set at 3.2%. It is the illustrative 3.3% net rise in the LGCI[18] minus the first removal of part of the carbon price advance. In the following year, the illustrative net rise in the LGCI of 3.5% minus the second removal results in a 3.2% rate peg.

18 It is likely to rise more than in the year to September 2011 because the LGCI to September 2012 will be capturing some of the impact of the carbon price as it flows through to other prices in the LGCI. The rise may be larger again in the year to September 2013, for the same reason.

Importantly, over the 3 years, the cumulative rise in the rate peg is the same as the cumulative rise in the LGCI net of the productivity factor.

Whether or not the actual effects of the carbon price are as we have estimated, councils will experience a cumulative rate peg rise consistent with those actual effects. Only the timing of the size of the annual increments has been altered. Once the adjustment is completed in 2014/15, councils will be no worse off than they otherwise would have been without the advance and its removal.

5 Deriving the rate peg for 2012/13

The derivation of the rate peg from the rise in the LGCI, the productivity factor and the carbon price advance is straightforward. The rate peg is simply the rise in the LGCI of 3.41% less the productivity factor of 0.22 percentage points plus the carbon price adjustment of 0.40 percentage points. That is, 3.59%.

The rate peg for 2012/13 is therefore 3.6% (rounded to 1 decimal place).

Table 5.1 The 2012/13 rate peg and its components

Component	Percentage change
Local government cost index	3.41
less Productivity factor	-0.22
LGCI less productivity factor	**3.19**
plus Carbon price advance	0.40
Total	3.59
Rate peg (Total above rounded to one decimal place)	**3.6**

This means that councils may increase their general income by a maximum of 3.6% in 2012/13.

In practice, setting future rate pegs will depend on the actual sizes of the rises in the LGCI, the productivity factor and the fuel price adjustment.[19]

[19] The fuel price adjustment was explained in footnote 13. It will be absorbed at the next re-weighting of council costs in the LGCI in 2015/16.

6 Implications for councils with special variations

The carbon price is an additional cost for councils that would be included in council cost projections within applications for special variations.

For councils with no special variations over the period, the rate peg adjustment in 2012/13 and subsequent re-adjustment in 2013/14 or later years will require no specific response.

For councils with current special variations expiring in 2012/13 or 2013/14, or those intending to apply for a special variation, there may be an impact on allowed revenue. This is because councils that had previously assumed that the rate pegs in 2013/14 and 2014/15 would cover rises in costs, will now be receiving a reduced rate peg (because of the removal of the advance), without having benefited from the initial advance in 2012/13.

In general, councils always face some forecasting risks (both positive and negative) in their cost projections for special variations, so the possible variation to cost forecasts resulting from the introduction of the carbon price may not cause particular difficulty. However, there may be councils that are significantly affected by the carbon price. In this case, one option would be to apply for a special variation to compensate.

Councils may have anticipated some effects of the carbon price when making their long-term projections. Thus any applications for special variations would need to demonstrate the need for additional funds.

The advance may also affect special variations for 2012/13. Councils applying under section 508(2) would include a cost estimate that reflects expected carbon price impacts. If they assume that costs will be covered by the rate peg in 2013/14, they should remember that the rate peg will be reduced as the carbon price advance is reversed.

Table 6.1 summarises 5 council scenarios and their possible ramifications.

Table 6.1 Special variations in the light of the carbon price advance and reversal

Council scenario	Effect	Action
1. Councils with no special variation in 2012/13, 2013/14 or 2014/15.	Carbon advance added to rate peg in 2012/13; removed in 2013/14 and 2014/15.	No action required.
2. Councils planning to apply for a single year 508(2) special variation in 2012/13 or 2013/14.	If carbon price impact not in cost projections, may be disadvantaged by a reduced rate peg in 2013/14 and 2014/15.	Impact of carbon price should be in cost projections within the special variation application.
3. Councils planning to apply for a multi-year 508(a) special variation in 2012/13 or 2013/14.	If carbon price impact not in cost projections, may face additional cost pressures.	Impact of carbon price should be in cost projections within the special variation application.
4. Councils with a current special variation expiring in 2012/13 or 2013/14.	If carbon price impact not in projections, may be disadvantaged by a reduced rate peg in 2013/14 and 2014/15.	If the impact is material, they may apply for a special variation.
5. Councils with a current special variation expiring in 2014/15 or later.	If carbon price impact not in cost projections, may face additional cost pressures.	If the impact is material, they may apply for a special variation.

Appendices

A Component Price Indexes

Table A.1 Cost items in the LGCI and the price indices that measure their changes

Recurrent cost items	**Component price indexes**[a]
Employee benefits and on-costs	LPI - Public sector, NSW
Plant & equipment leasing (excluding waste management)	PPI - 663 Other goods & equipment rental and hiring
Operating contracts (excluding waste management)	PPI – 729 Other administrative services
Legal & accounting services	PPI - 693 Legal & accounting services
Office & building cleaning services	PPI - 7311 Building & other industrial cleaning services
Other business services	PPI - 7299 Other administrative services n.e.c
Insurance	CPI – Insurance Services, Sydney
Telecommunications, telephone & internet services	CPI – Telecommunications, Sydney
Printing publishing & advertising	PPI - 16 Printing (including reproduction of recorded media)
Motor vehicle parts	CPI - Spare parts and accessories for motor vehicles, Sydney
Motor vehicle repairs & servicing	CPI – Maintenance and repair of motor vehicles, Sydney
Automotive fuel	CPI - Automotive fuel, Sydney
Electricity	CPI – Electricity, Sydney
Gas	CPI - Gas & other household fuels, Sydney
Water & Sewerage	CPI - Water & sewerage - Sydney
Road, footpath, kerbing, bridge & drain building materials	PPI - 3101 Road & bridge construction, NSW
Other building & construction mats	PPI - 3020 Non-residential building construction, NSW
Office supplies	CPI - Audio, visual & computing media & services, Sydney
Emergency services levies	IPART index of council ESL per rateable property
Other expenses	CPI – All groups, Sydney
Capital cost items	
Buildings – non-dwelling	PPI - 3020 Non-residential building construction, NSW
Construction works - road, drains, footpaths, kerbing, bridges	PPI - 3101 Road & bridge construction, NSW
Construction works - other	PPI - 3101 Road and bridge construction, NSW
Plant & equipment – machinery	PPI - 231 Motor vehicle & motor vehicle part manufacturing
Plant & equipment – furniture etc.	PPI – 24 Machinery & equipment manufacturing
Information technology & software	CPI - Audio, visual & computing media & services, Sydney

[a] Detailed data sources were provided in our *Local Government Cost Index – Information Paper*, December 2010. 'LPI' = ABS Labour Price Index, 'PPI' = Producer Price Index and 'CPI' = Consumer Price Index.

B Emergency Services Levies

The local government sector, the insurance industry and the state government are required to make statutory contributions to the cost of maintaining the 3 emergency service agencies: Fire & Rescue NSW (formerly the NSW Fire Brigade), the Rural Fire Service and the State Emergency Service. The statutory contributions are also called 'emergency services levies' (ESL).

Local councils fund 11.7% of the total cost of running the emergency services, the insurance industry funds 73.7% and the state government funds the balance of 14.6%.

For the purposes of the LGCI, it is the aggregated ESL contribution of all councils that matters and not the ESL paid by individual councils. Each year we obtain the latest estimate of the ESL payable by councils from NSW Treasury and divide it by number of rateable properties in New South Wales to arrive at an 'effective rate of levy' on councils.

Table B.1 shows our estimates of the average ESL per property over the past 5 years. For 2011/12 the rises in both estimated costs and the councils' ESL have been modest so that the effective rate of levy has changed little.

Table B.1 Effective rate of levy 2007/08 to 2011/12

	2007/08	2008/09	2009/10	2010/11	2011/12 (Budgeted)
NSW Councils contribution					
Fire & Rescue NSW ($m)	61.2	63.2	64.0	69.6	69.2
Rural Fire Service ($m)	26.4	29.9	23.5	29.2	30.9
State Emergency Service ($m)	0.0	0.0	5.5	7.0	7.4
Total contributions ($m)	**87.6**	**93.1**	**93.1**	**105.8**	**107.4**[a]
NSW Rateable properties	2,857,400	2,885,120	2,906,613	2,932,273	2,957,665[b]
Effective rate of levy (contribution per property), ($)	30.7	32.3	32.0	36.1	36.3
change in effective rate of levy		5.2%	-0.7%	12.6%	0.7%

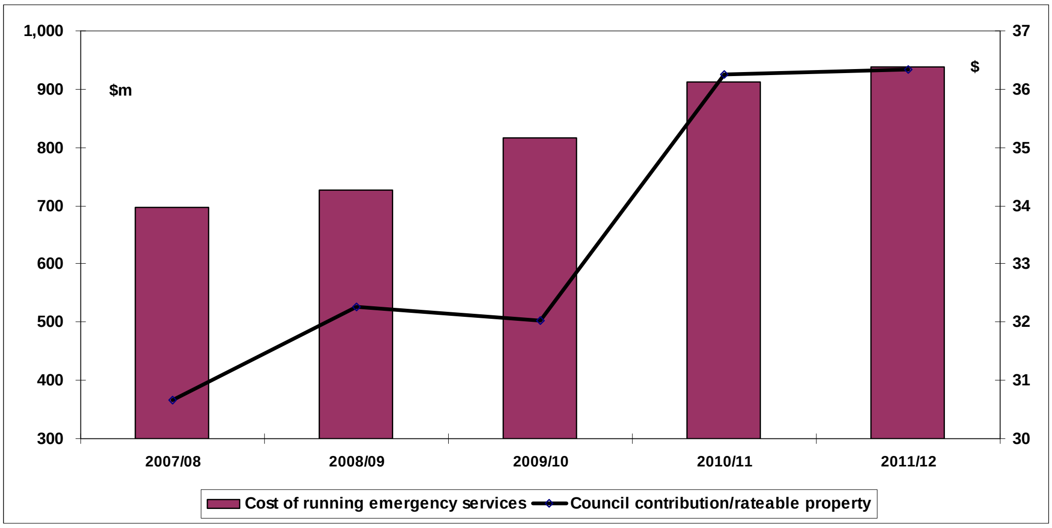
a Excludes a $2.3m government subsidy towards the price increases for the Government Radio Network.
b Estimated on the basis that the recent pace of growth in the number of rateable properties has continued.
Source: NSW Treasury and DLG. Numbers may not add due to rounding.

Several factors affect the effective rate of levy. They are:

- the total cost of running the relevant emergency service agencies
- the percentage of those costs required to be funded by the local government sector
- the growth in the number of NSW rateable properties.

The percentage of costs to be funded by the council ESL was reduced from 12.3% for FRNSW and 13.3% for RFS in 2009/10 when the costs of the SES were added to the total pool to be funded. Since then it has remained unchanged at 11.7%. The estimates by DLG of the number of rateable properties in NSW have grown slowly but steadily in recent years. Therefore, the main driver of the effective rate of levy has been the estimated costs of running the agencies, as indicated by Figure B.1.

Figure B.1 Estimated cost of running RFS, FRNSW and SES ($m) and the ESL/rp ($)



Source: NSW Treasury, DLG and IPART.

For the purpose of inserting the change in the effective rate of levy into the LGCI, we assume that it takes effect in the September quarter of the financial year in which it occurs. This means that councils get full compensation for a rise in the ESL/property, some in the rate peg year in which the rise occurs and the bulk in the next rate peg year (Table B.2). Last year's rise of 12.6% has now been fully captured in the LGCI.

Table B.2 Index of effective rate of levy and impact on the LGCI

	Change in ESL rate (%)	Price Index	Average for year to Sep	Annual avg chge (%)	Contribution to LGCI
Dec 2008	0.0	172.7			
Mar 2009	0.0	172.7			
Jun 2009	0.0	172.7			
Sep 2009	-0.7	171.4	172.4		
Dec 2009	0.0	171.4			
Mar 2010	0.0	171.4			
Jun 2010	0.0	171.4			
Sep 2010	12.6	193.1	176.8	2.6	0.04
Dec 2010	0.0	193.1			
Mar 2011	0.0	193.1			
Jun 2011	0.0	193.1			
Sep 2011	0.7	194.4	193.1	9.4	0.13

Source: IPART using data provided by NSW Treasury and DLG.

C Estimating the effect of the carbon price on the LGCI

The price changes described in the text are weighted by the effective LGCI weights as at September 2011 to derive the effect of the carbon price on council costs. This is done in the table below. It shows that the effect of the carbon price is to increase council costs by 0.60 percentage points.

Table C.1 Local Government Costs – impact of carbon price in 2012/13 [update]

	LGCI effective weights, year to Sep 2011 (%)	Price Change (% annual average)	Contribution to index (percentage points)
Employee benefits and on-costs	41.9	0.00	0.0000
Plant & equipment leasing (excl waste mgt)	0.4	0.45	0.0018
Operating contracts (excl waste mgt)	1.3	0.45	0.0060
Legal and accounting services	1.1	0.45	0.0049
Office and building cleaning services	0.2	0.45	0.0011
Other business services	6.0	0.45	0.0269
Insurance	1.8	0.30	0.0053
Telecoms, telephone & internet services	0.5	0.50	0.0027
Printing publishing and advertising	0.5	0.45	0.0023
Motor vehicle parts	0.5	0.30	0.0015
Motor vehicle repairs and servicing	0.7	0.30	0.0021
Automotive fuel	1.2	0.72	0.0086
Electricity	3.0	10.00	0.3035
Gas	0.1	5.32	0.0030
Water and Sewerage	0.5	5.32	0.0287
Road, footpath, kerbing, bridge, drain blg mats	3.0	0.45	0.0135
Other building and construction materials	0.8	0.45	0.0036
Office supplies	0.4	0.45	0.0017
Emergency Services Levies	1.4	0.70	0.0101
Other expenses	8.7	0.70	0.0610
Buildings – non-dwelling	6.4	0.45	0.0290
Construction works	13.6	0.45	0.0611
Construction works - other	1.4	0.45	0.0061
Plant & equipment – machinery	3.9	0.45	0.0175
Plant & equipment – furniture etc.	0.2	0.45	0.0010
Information technology & software	0.3	0.40	0.0014
Sum of contributions			**0.604**
Total change in LGCI	**100.0**		**0.60%**