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# Inquiry into the impact of the carbon tax on health services

Legislative Council

Economy and Infrastructure Legislation Committee

Report No. 3

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**Inquiry into the impact of the carbon tax on health services**

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# Economy and Infrastructure Legislation Committee

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## Chair's Foreword

I am pleased to present the final report of the Economy and Infrastructure Legislation Committee for the inquiry into the impact of the carbon tax on health services in Victoria.

The introduction of the carbon tax by the former federal government has imposed a financial burden on businesses across the country. One of the many sectors to feel the impact is the health sector. The Committee found that in 2012-13, in its first year of operation, the carbon tax cost Victorian health services just over \$13.5 million. Had this cost not been imposed on the health sector, \$13.5 million could have been spent on providing services for Victorians, and an additional 2700 patients across Victoria could have potentially received elective surgery.

The Committee also found however that improvements have been made in energy efficiency in Victorian health services, and numerous incentives to improve energy efficiency have played an important role in that process. Projects to improve energy efficiency have been undertaken in Victorian health services for over ten years, and the result has been that whilst demand on health services has increased, energy consumption has remained relatively stable.

The Committee believes that continuing to improve energy efficiency in the health sector is an important and worthwhile task, which will not only help in reducing energy costs, but will also allow health services to potentially increase their capacity to treat more patients. The Committee has therefore recommended that the Department of Treasury and Finance notes the importance of improving energy efficiency in Victorian hospitals and ensures that hospitals are given priority in the implementation of the new Efficient Government Buildings program, a program designed to fund energy efficiency projects.

I would like to thank everyone who made a submission to the Committee or provided evidence at a hearing; their expertise on the subject was very helpful and much appreciated in the writing of this report. I would also like to thank the Department of Health for their assistance in providing the Committee with important details and data.

Finally, I would like to thank my fellow Committee members for the professional and constructive manner in which they undertook this inquiry.

**ANDREA COOTE, MLC**

Chair



## Finding and recommendation

### **FINDING 1**

Health services have made significant improvement in energy efficiency performance.

**[Page 11]**

### **RECOMMENDATION 1**

That the Department of Treasury and Finance notes the importance of improving energy efficiency in Victorian hospitals and ensures that hospitals are given priority in the implementation of the new Efficient Government Buildings program.

**[Page 13]**



## Acronyms

AIMS	Agency Information Management System
AMA Victoria	Australian Medical Association (Victoria)
c/kWh	Cents per kilowatt hour
CO <sub>2</sub>	Carbon dioxide
CSIRO	Commonwealth Scientific and Industrial Research Organisation
DOH	Department of Health
DTF	Department of Treasury and Finance
EGB	Efficient Government Buildings program
GGB	Greener Government Buildings program
GJ	Gigajoule
LPG	Liquefied Petroleum Gas
M <sup>2</sup>	Metres squared
MWh	Megawatt-hour
PHIAC	Private Health Insurance Administration Council
RCSF	Rural Capital Support Fund
SKM	Sinclair Knight Merz
SPP	Specific Purpose Payment funding
VAGO	Victorian Auditor-General's Office



# Chapter One – Introduction

## 1.1 Terms of reference

On 10 December 2013 the Legislative Council agreed to the following motion:

*That this house —*

*(1) notes the details in appendix 4 of the Department of Treasury and Finance’s 2012–13 annual report and further notes the discussion on pages 159 and 160 of the Department of Health’s 2012–13 annual report, and in particular, the sections titled energy consumption and greenhouse emissions;*

*(2) further notes that some degree of energy consumption in the production of health services is inevitable and unavoidable but nevertheless incurs a carbon tax;*

*(3) requires the Economy and Infrastructure Legislation Committee to inquire into and consider —*

*(a) the impact on public health services of the carbon tax introduced by the former commonwealth government on 1 July 2012; and*

*(b) the benefits to Victorian public and private health services and their patients of the current commonwealth government’s promised abolition of the carbon tax;*

*and to present a final report by 30 May 2014 and make any interim reports the committee thinks fit.*

## 1.2 Background to the Inquiry

This is the third report of the Economy and Infrastructure Legislation Committee for the 57<sup>th</sup> Parliament.

This Committee has the power to investigate any annual report, estimates of expenditure or other documents laid before the Legislative Council in accordance with an Act, provided these are relevant to its functions.<sup>1</sup> The functions of the Committee are to inquire into and report on any proposal matter or thing concerned with agriculture, commerce, infrastructure, industry, major projects, public sector finances and transport.<sup>2</sup>

Following a resolution of the Legislative Council under Standing Order 23.02(5), responsibility for references concerning the Department of Treasury and Finance were

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<sup>1</sup> Legislative Council of Victoria, *Standing Orders*, 2014, 23.02(4)(a).

<sup>2</sup> *ibid*, SO 23.02(1).

allocated to this Committee. The terms of reference for the Inquiry cite the 2012-13 annual reports of the Department of Treasury and Finance and the Department of Health respectively.

### 1.3 Conduct of the Inquiry

On 6 February 2014 the terms of reference were advertised on the Parliament website and through the Parliamentary Committees Twitter account, with submissions to be received by 28 February 2014. The Committee also wrote to over 300 individuals and organisations seeking input. A total of 17 submissions were received (see list of submissions, Appendix C; all submissions may be viewed on the Committee's website: <http://bit.ly/1dwuuUv>).

Two public hearings were held to receive further evidence. On 19 February 2014 witnesses from the Department of Environment and Primary Industries, the Department of Health and the Department of Treasury and Finance appeared before the Committee. On 26 March 2014 the Committee heard from the Energy Efficiency Council. A total of nine witnesses provided oral evidence to the Committee (see list of witnesses, Appendix D).

The Committee wishes to extend its gratitude to all those who contributed through submissions or the public hearing process.

### 1.4 The 'carbon tax'

On 1 July 2012 the former federal government introduced a carbon pricing mechanism (commonly known as the 'carbon tax') under the *Clean Energy Act 2011* to place a price on carbon pollution. The tax was one element of a package of initiatives (the Clean Energy Futures Plan) developed, in part, by a multi-party climate change committee, with the aim of cutting 159 million tonnes a year of carbon pollution from the atmosphere by 2020.<sup>3</sup>

The Clean Energy Futures Plan stated:

A price on carbon pollution will create incentives to reduce pollution and invest in clean energy.  
A carbon price will ensure that pollution is reduced at the lowest cost to the economy.<sup>4</sup>

The carbon tax is applicable to the stationary energy sector, industrial processing sector, non-legacy waste sector and fugitive emissions sector (among others).<sup>5</sup> Any facility that emits above an annual threshold of 25,000 tonnes of CO<sub>2</sub> emissions is liable to pay for each

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<sup>3</sup> Senate Environment and Communications Legislation Committee, *Clean Energy Legislation (Carbon Tax Repeal) Bill 2013 [Provisions] and related bills – final report*, December 2013, p. 6.

<sup>4</sup> Australian Government, *Securing a clean energy future: the Australian Government's Climate Change Plan*, 2011, p. vii.

<sup>5</sup> Australian Government, *Clean Energy Futures, An overview of the Clean Energy Legislative Package*, April 2012, p. 2.

tonne of carbon pollution it emits above the threshold. At the end of each year, the entity surrenders the number of carbon units which represents its total emissions to the Clean Energy Regulator or pays a charge. Liable entities may purchase units or acquire them through industry assistance measures.<sup>6</sup>

The carbon price does not apply to household transport fuels, light vehicle business transport and off-road fuel use by the agriculture, forestry and fishing industries.<sup>7</sup>

It is important to note that the carbon tax does not apply directly to healthcare providers, such as public and private hospitals. However, energy companies incur increased costs from the carbon tax and pass this on to healthcare providers (i.e. their customers). Health services, like other commercial energy customers, generally see the carbon tax itemised on their energy bills. Other (lesser) impacts of the carbon tax on the health system include cost increases in hospital supply chains, nitrous oxide supply, capital works and food.

#### **1.4.1 Moves to abolish the carbon tax**

A new federal government was elected in September 2013 and promised to abolish the carbon tax. On 14 November 2013 the Senate referred a package of Bills intended to meet that promise to the Environment and Communications Legislation Committee for inquiry and report by 2 December 2013. In its final report the Committee supported the Government's intention to repeal the carbon tax and recommended that the Bills be passed by the Senate. Dissenting comments were attached to the report.

The *Clean Energy Legislation (Carbon Tax Repeal) Bill 2013* and ten related Bills passed the House of Representatives on 21 November 2013 without amendment.

On 10 December 2013 one of the related Bills, the *Clean Energy Finance Corporation (Abolition) Bill 2013*, was negatived in the Senate on the second reading. The Bill was reintroduced and passed the House of Representatives a second time on 27 March 2014.

On 25 February 2014 the federal Environment Minister Mr Greg Hunt revoked all carbon auctions scheduled to be held by the Clean Energy Regulator before June 2014.<sup>8</sup>

On 2 March 2014 another of the related Bills, the *Climate Change Authority (Abolition) Bill 2013*, was negatived in the Senate.

On 20 March 2014 the *Clean Energy Legislation (Carbon Tax Repeal) Bill 2013* and eight related Bills were negatived in the Senate on the third reading.

<sup>6</sup> *Clean Energy Act 2011* (Cth), subsection 22(4).

<sup>7</sup> *Clean Energy Futures, An overview of the Clean Energy Legislative Package*, p. 2.

<sup>8</sup> Under existing arrangements, on 1 July 2015 the carbon pricing mechanism will move to a flexible, market-driven approach. The Government will issue a fixed number of carbon units each year, some of which were to be sold at auctions conducted by the Clean Energy Regulator in the first half of 2014.

The future of the carbon tax is likely to become clear after new Senators take their seats on 1 July 2014.

## **1.5 Scope of the Inquiry**

The broader debates concerning the introduction, merits and effectiveness of the former federal government's carbon pricing scheme have been exhaustively canvassed in recent years, including during the 2013 federal election campaign. It is not the intent of this Inquiry to review those matters and the report does not go into detail on those aspects of the carbon tax.

Committees have the power to interpret their terms of reference as necessary, for example, to resolve ambiguities or focus on a line of investigation. In this case the Committee determined at an early stage that terms of reference 3(b) – which asks the Committee to report on the benefits of abolishing the carbon tax – would be interpreted to admit a wider scope of evidence. The Committee has considered evidence received concerning both the potential benefits and disbenefits of abolishing the tax for Victoria's health system. The Committee has also received and considered evidence on energy consumption in Victorian hospitals, which provides context for assessing the impact of the carbon tax.

Terms of Reference 3(b) makes reference to the impact on private health services. The private health industry is a key part of the health system. Around 45 percent of Victorians hold private health insurance<sup>9</sup> and there are over 70 private hospitals in Victoria. Despite requests, the Committee received very limited information from the private health industry for this Inquiry and therefore could not look in detail at the impact of the carbon tax on that industry.

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<sup>9</sup> PHIAC, *December 2013 quarter: Membership and coverage*, February 2014.

## Chapter Two – Energy use in the health sector

### 2.1 Overview

This Chapter provides background information on energy consumption in the Victorian health sector. It discusses the different sources of energy used, the costs of energy to the health sector and the emissions associated with this use. The Chapter then examines recent trends in energy consumption in the health sector, and initiatives that have impacted on the levels of energy consumption. As discussed previously, the Committee received very limited information from the private health industry, therefore this chapter focuses on energy use by public health services.

Energy use and energy efficiency has been examined extensively by both the Victorian Department of Health and the Victorian Auditor-General, as well as in analysis and modelling undertaken by consultants. This Chapter draws upon this research.

### 2.2 Energy use

Health care providers – health services and hospitals – are the largest consumers of energy in the Victorian public sector. According to a 2012 report on energy efficiency by the Victorian Auditor-General, health services account for just over one quarter of all public sector energy consumption.<sup>10</sup> The Department of Health put this energy usage at 4.4 petajoules of energy use per year.<sup>11</sup> This level of consumption is roughly equivalent to the energy used by 88,000 households each year.<sup>12</sup>

Figure 2.1 illustrates the share of overall energy used by different public sector services. Health care is shown to be the largest consumer of energy, followed by ‘other’ uses and the water sector. The high consumption of energy by the health sector is due to both the wide scope of the sector and its energy intensive functions.

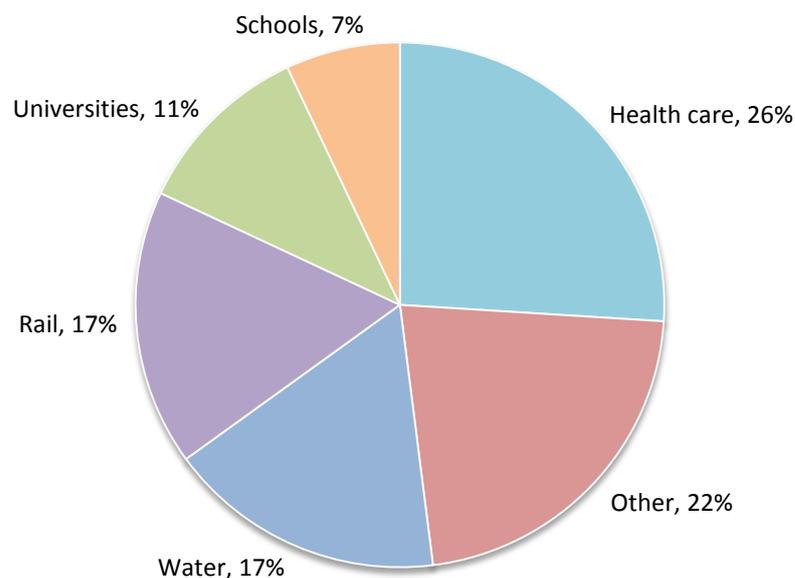
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<sup>10</sup> VAGO, *Energy Efficiency in the Health Sector*, September 2012, p. vii.

<sup>11</sup> Ms F. Diver, *Transcript of Evidence*, 19 February 2014, p. 9.

<sup>12</sup> DOH, *Energy management in the public healthcare system*, May 2013, p. 1.

**Figure 2.1 - Energy consumption in the Victorian public sector<sup>13</sup>**



The public health system incorporates 86 health entities across Victoria, some of which consist of numerous campuses.<sup>14</sup> These range from large metropolitan hospitals to small regional health centres, with differing energy requirements. Metropolitan and large regional hospitals for example are large users of energy, due to the following functions identified by the Auditor-General:

- continuous operation — numerous areas such as intensive care units are operational 24 hours a day, while other areas such as operating theatres are kept on standby should they be required at short notice
- use of energy intensive medical equipment — health services tend to use sophisticated equipment that consumes high volumes of energy, for example machines for magnetic resonance imaging, magnetic resonance tomography and computed tomography scans
- infection control — health services' ventilation systems must keep the air sufficiently clean inside critical areas, such as operating theatres and isolation rooms
- temperature control — health services maintain a tight temperature range, and this includes particularly stringent requirements for areas such as intensive care
- on-site services — large specialist and regional health services often have kitchens and laundries that consume high levels of energy.<sup>15</sup>

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<sup>13</sup> VAGO, *Energy Efficiency in the Health Sector*, September 2012, p. 1.

<sup>14</sup> Ms F. Diver, *Transcript of Evidence*, 19 February 2014, p. 9.

<sup>15</sup> VAGO, *Energy Efficiency in the Health Sector*, September 2012, pp. 1-2.

Acute care spaces, such as wards, emergency departments and surgical areas typically consume the most energy of all functional areas. This is due to their 24 hour operation and specific domestic hot water requirements, reliance on medical equipment and stringent infection control requirements.<sup>16</sup>

## 2.3 Types of energy used

Health facilities use a range of energy sources to meet their energy requirements, and often utilise a mix of different sources to meet their needs. Sources of energy include:

- Electricity
- Natural gas
- LPG & diesel
- Solar power/solar hot water.<sup>17</sup>

The decision by health facilities to use a particular type of energy is based on numerous factors, including cost (ongoing and capital), existing engineering infrastructure systems, security of supply, availability, maintenance requirements, and carbon intensity.<sup>18</sup> The carbon intensity of each energy source varies.

Electricity and natural gas are the most used energy sources, each making up about 40 percent of energy used in the sector. Cogeneration steam provides 15 percent of energy needs and LPG and diesel (for stand-by generators) make up the remaining five percent.<sup>19</sup>

### 2.3.1 Electricity

As stated above, electricity is one of the main sources of energy used in the health sector. Electricity is predominantly sourced through the grid, although the sector has around 36 megawatts of cogenerated electricity produced onsite, which produces electricity, thermal heat and chilled water.<sup>20</sup> Cogenerated electricity in Victorian hospitals tends to be generated through gas engines, and utilises heat that would otherwise be considered waste and released into the environment.<sup>21</sup>

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<sup>16</sup> VAGO, *Energy Efficiency in the Health Sector*, September 2012, p. 2.

<sup>17</sup> DOH, *Presentation to the Committee*, 19 February 2014 (slide 4).

<sup>18</sup> DOH, *Energy management in the public healthcare system*, p. 2.

<sup>19</sup> *ibid.*

<sup>20</sup> *ibid.*

<sup>21</sup> DOH, 'Cogeneration', <http://www.health.vic.gov.au/sustainability/energy/cogeneration.htm>

As illustrated in Figure 2.2, electricity consumption over the past eight years has remained relatively equal to natural gas consumption (in gigajoules). Figure 2.3 shows that the cost of electricity is far higher, with \$74,397,967 spent on electricity in 2012-13.

Electricity costs rose considerably in 2012-13, increasing by 27 percent from 2011-12. The increase in electricity costs is discussed further in Chapter Three.

### **2.3.2 Natural gas**

Natural gas is the second most highly utilised source of energy in the health sector. In financial year 2012-13 natural gas made up almost 45 percent of total energy consumed. While electricity consumption has slowly increased over the past eight years, the consumption of natural gas has remained relatively stable, with a slight increase in consumption in 2012-13. Health service expenditure on natural gas in 2012-13 was \$15,291,559. As outlined in Chapter Three, gas prices are predicted by some to increase markedly in coming years.

### **2.3.3 LPG and diesel**

LPG is also used by some health services, generally rural facilities that are not on the natural gas reticulated network, to provide thermal energy. LPG accounts for around 3 percent of the health portfolio's total energy cost.<sup>22</sup> The consumption of LPG in Victorian public hospitals has decreased over the last five years.<sup>23</sup>

Diesel is used for emergency generators and accounts for around 0.1 percent of the health portfolio's total energy cost.<sup>24</sup>

### **2.3.4 Aviation fuel**

Aviation fuel is used as an energy source by Ambulance Victoria for its air ambulance fleet. Under the carbon pricing arrangements, aviation fuel is subject to the carbon tax, implemented as an increase in domestic aviation fuel excise. According to the Victorian Health Minister, in 2012-13 Ambulance Victoria used 3445 kilolitres of aviation fuel.<sup>25</sup> Historical data on fuel consumption and expenditure was not provided to the Committee.

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<sup>22</sup> DOH, *Answer to questions on notice*, 26 February 2014.

<sup>23</sup> SKM MMA, *Impact of carbon pricing on the Victorian health care system*, 12 August 2011, p. 22.

<sup>24</sup> DOH, *Answer to questions on notice*, 26 February 2014.

<sup>25</sup> Minister for Health, *Ambulance hit by \$350,000 carbon tax bill*, Media Release, 5 September 2013 <http://www.premier.vic.gov.au/media-centre/media-releases/7775-ambulance-hit-by-350-000-carbon-tax-bill.html>

Figure 2.2 – Public health system energy consumption (in GJ)<sup>26</sup>

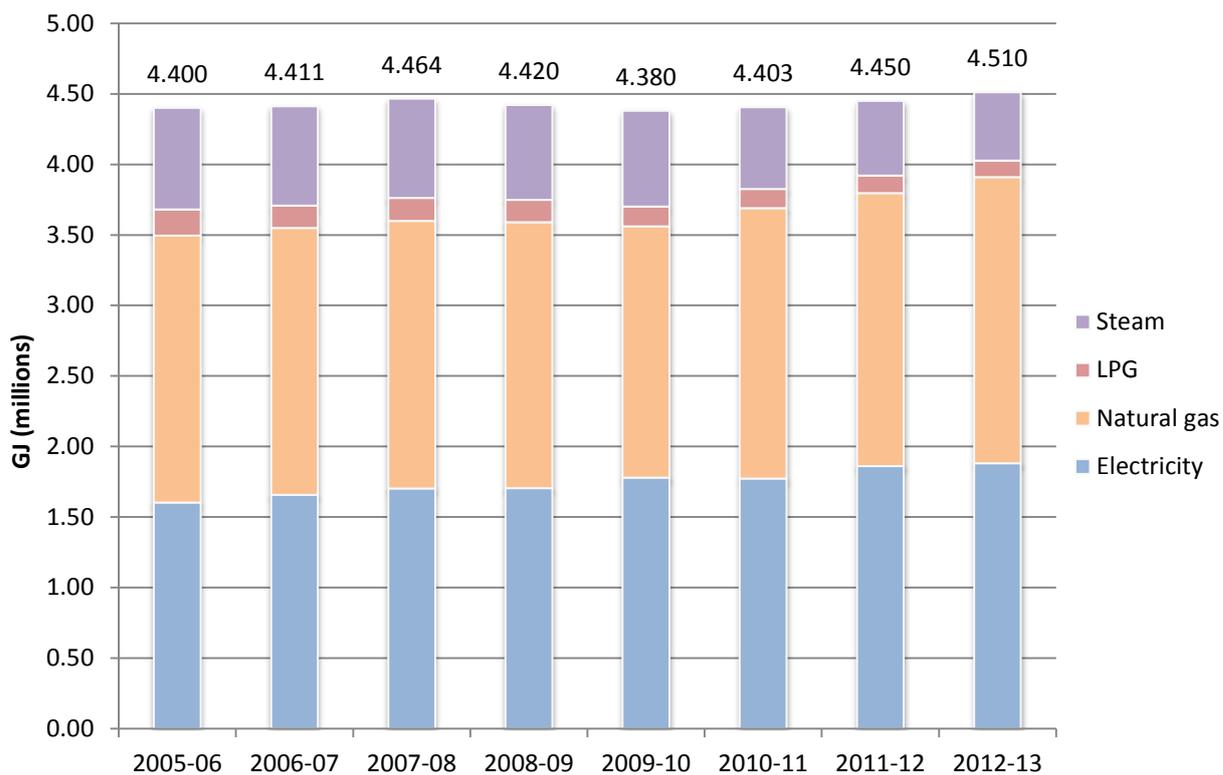
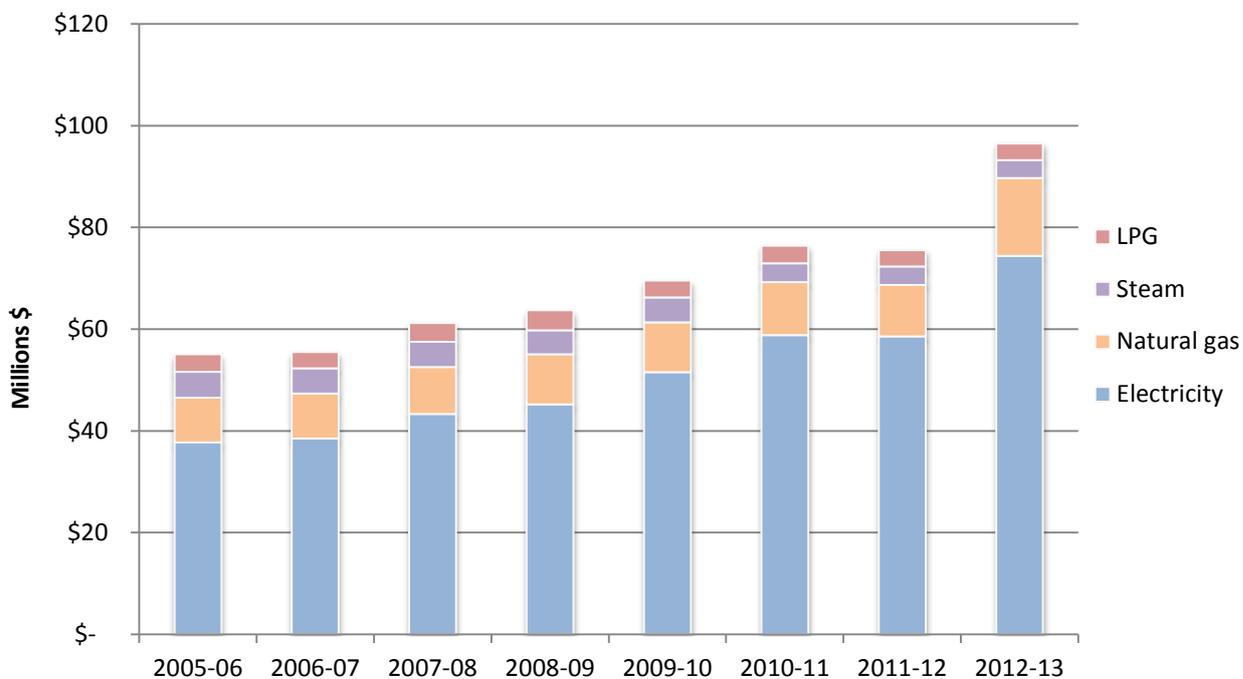


Figure 2.3 – Public health system energy expenditure<sup>27</sup>



<sup>26</sup> Data provided by DOH (Appendix B).

<sup>27</sup> Ibid.

## 2.4 Costs to the health sector

In 2012, the Victorian Auditor-General noted that health services' energy costs had grown by around 25 percent since 2005–06, with the increase in costs primarily attributable to increases in energy prices.<sup>28</sup> The carbon tax came into effect on 1 July 2012, and therefore was not responsible for price rises prior to that date. This subject is discussed further in Chapter Three.

## 2.5 Emissions

Victorian public hospitals generate approximately 700 megatonnes of carbon each year.<sup>29</sup> Overall the health sector is the second largest public sector emitter of greenhouse gases, behind water entities, accounting for around 20 percent of public sector emissions.<sup>30</sup>

According to the Victorian Auditor-General's report, Victorian health services' total greenhouse gas emissions increased by approximately seven percent since 2005–06. The Department of Health projected that emissions, along with health services' total energy consumption, would grow substantially due to increasing demands on health services.<sup>31</sup>

## 2.6 Trends in energy use

According to data obtained from the Department of Health (see Figure 2.2), from 2005-06 to 2012-13 total energy consumption by Victorian health services increased by just over two percent.

Health services have managed to keep overall energy consumption relatively stable despite increased capacity and demand. Figure 2.4 shows three different energy performance indicators for the health system: gigajoules per floor space (GJ/m<sup>2</sup>), gigajoules per bed day (GJ/Bed-days) and gigajoules per separation (GJ/Sep). In September 2012 the Victorian Auditor-General noted that this was a 'positive result'.<sup>32</sup>

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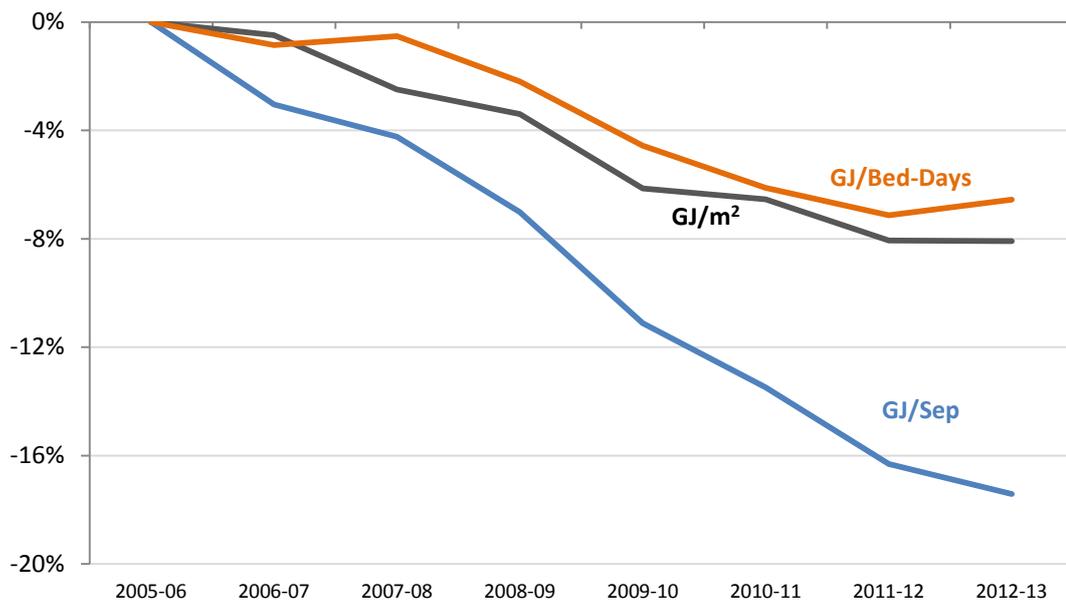
<sup>28</sup> VAGO, *Energy Efficiency in the Health Sector*, September 2012, p. viii.

<sup>29</sup> DOH, *Energy management in the public healthcare system*, p.1

<sup>30</sup> VAGO, *Energy Efficiency in the Health Sector*, p. vii .

<sup>31</sup> *Ibid*, p. ix.

<sup>32</sup> *Ibid*, p. viii.

**Figure 2.4 - Energy efficiency indicators - % reduction in energy use since 2005-06<sup>33</sup>**

As the demand on health services is predicted to rise and push energy consumption and costs higher, it is in the interests of the health sector to improve energy efficiency in health facilities. This means using less energy to achieve the same level of outcome, or improved level of outcome for the same amount of energy.<sup>34</sup>

Improving energy efficiency not only has the potential to reduce energy costs to the health sector, but to also increase the capacity of health facilities. With demand projected to increase, this may avoid the need to upgrade energy supplies required to increase capacity.<sup>35</sup>

#### **FINDING 1**

Health services have made significant improvement in energy efficiency performance.

### **2.6.1 Energy efficiency initiatives**

Victorian public health services have been implementing energy efficiency initiatives for over ten years. Some of the more common initiatives include:

- installing more efficient lighting
- installing lighting controls, for example motion sensors in infrequently occupied rooms, such as store rooms
- installing variable speed drives for fans or pumps

<sup>33</sup> DOH, *Presentation to the Committee*, 19 February 2014 (slide 6).

<sup>34</sup> <http://www.health.vic.gov.au/sustainability/energy/efficiency.htm>

<sup>35</sup> DOH. *Energy management in the public healthcare system*, p. 2

- installing newer and more efficient air-conditioning plants
- installing air-conditioning controls such as time controllers that switch equipment off after hours
- improving the maintenance of building systems.<sup>36</sup>

There are also a range of programs and grants (outlined below) that have been made or are still available to health services to assist them to improve their energy efficiency.

### **Greener Government Buildings program**

The Greener Government Buildings (GGB) program was a whole-of-government program established in 2009 and administered by the Department of Treasury and Finance. The program aimed to reduce greenhouse gas emissions, energy costs and water use across all government buildings. The GGB program provided loans to public sector entities for implementing energy and water efficiency retrofits through energy performance contracting.<sup>37</sup>

On 25 March 2014, during the course of this Inquiry, the Assistant Treasurer, Mr Gordon Rich-Phillips, announced in Parliament that the GGB program would cease and be replaced by the Efficient Government Buildings program (EGB). The Assistant Treasurer stated that the EGB would allow departments and agencies 'greater autonomy to identify and choose those upgrades to their buildings that will produce the best efficiency savings, with the capital requirement either funded internally or through a budget capital bid.'<sup>38</sup>

The following day the Committee took evidence from the Energy Efficiency Council at a public hearing. Mr Rob Murray-Leach, CEO, expressed concern at the decision to move away from the GGB and its loans-based approach to public sector energy efficiency:

The challenge we have is that this decision, as we know from the DTF's own work, is going to cause \$20 million of absolute cost to the government for every year of delay before that loans facilities is brought back in. It will damage both the health sector and the budget. It will cause immense damage to the energy efficiency sector in Australia, particularly in Victoria.<sup>39</sup>

Mr Murray-Leach pointed to a 'range of opportunities' in hospitals to improve energy efficiency and informed the Committee:

Hospitals or health regions do not normally have the spare cash lying around to do a multimillion dollar upgrade to their facilities which would then be paid back over time. That is why a loan is the ideal sort of vehicle for delivering this rather than a grant or rather than them trying to find this in their existing resources. From my experience of being within government I can say that I have seen it try the budget bid process. I have seen what a nightmare it is and how it causes these types of projects to grind to a halt.<sup>40</sup>

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<sup>36</sup> DOH, 'Sustainability in health care', <http://www.health.vic.gov.au/sustainability/energy/efficiency.htm>

<sup>37</sup> DOH, *Energy management in the public healthcare system*, p. 4

<sup>38</sup> Assistant Treasurer, Mr Rich-Phillips, *Legislative Council Hansard*, 25 March 2014, p. 791.

<sup>39</sup> Mr R. Murray-Leach, *Transcript of Evidence*, 26 March 2014, p. 30.

<sup>40</sup> *ibid.*

The Committee notes concerns expressed by the Energy Efficiency Council regarding the EGB and encourages the Government to take these issues into account as it implements the new program. The Committee also notes the evidence from the Energy Efficiency Council that there remain considerable opportunities within the health sector to further improve energy efficiency and reduce waste. The Committee is of the opinion that DTF should give priority to applications from health services to participate in the EGB.

**RECOMMENDATION 1**

That the Department of Treasury and Finance notes the importance of improving energy efficiency in Victorian hospitals and ensures that hospitals are given priority in the implementation of the new Efficient Government Buildings program.

**Rural Capital Support Fund (RCSF)**

This is a fund provided for in the state budget. It aims to strengthen and sustain existing rural and regional health services through the upgrade of their local facilities. This RCSF is being delivered as a grants program over four years from 2011 to 2014.<sup>41</sup> To date, a small number of funded projects have related to energy efficiency.

**Securing our Health System initiative**

The Securing Our Health System initiative provides funding for replacement of prioritised highest critical risk capital medical equipment/plant items and essential engineering infrastructure across the state.<sup>42</sup>

**Guidelines for sustainability in healthcare capital works**

A set of guidelines created by the Department of Health, these establish the minimum sustainability requirements for capital works funded and delivered through its capital works program. There are 80 standards with which all new constructions must comply.<sup>43</sup>

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<sup>41</sup> <http://health.vic.gov.au/ruralhealth/rural-capital-support-fund.htm>

<sup>42</sup> <http://www.health.vic.gov.au/med-equip/>

<sup>43</sup> DOH, *Energy management in the public healthcare system*, p. 5.



## Chapter Three – Key Issues

### 3.1 Overview

Chapters One and Two of this report focused on the background to the Inquiry and energy use by the health sector respectively.

This chapter discusses the range of evidence received by the Committee on the carbon tax, its impact on the health sector and the benefits which may result if the tax is abolished. The chapter presents key data received from the Department of Health which goes some way to quantifying the carbon tax impact, as directed by the terms of reference. As noted previously, the Committee also considered evidence from submissions and public hearings which put forward possible disbenefits and disadvantages from the proposed abolition of the tax.

### 3.2 Financial impact of the carbon tax on health services

The Department of Health provided the Committee with information on the carbon tax paid on energy consumption by Victorian health services in 2012-13. The full set of figures is provided in Appendix A.

The data provided to the Committee to quantify the impact of the carbon tax in 2012-13 was compiled by the Department from an audit of actual energy bills sent to health services. The Department informed the Committee that the audit was a one-off exercise; more recent data for the first half of the 2013-14 financial year was not obtainable.<sup>44</sup>

Commercial energy bills generally itemise the cost of the carbon tax. Where bills were not available or the carbon tax was not itemised, the Department modelled the likely carbon tax component based on historical energy consumption by the health service in question. Fourteen percent of the carbon price values were calculated in this way. The totals exclude LPG, as the carbon price is not itemised on LPG bills.

Figure 3.1 shows the total energy consumption and carbon tax paid for a selection of health services. These services are chosen to give a representative sample of rural and urban, large and small health services.

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<sup>44</sup> Ms F. Diver, *Transcript of Evidence*, 19 February 2014, p. 16.

**Figure 3.1 – Carbon tax payments 2012-13 (for selected health services)<sup>45</sup>**

Health service	1 July 2012 to 30 June 2013				
	% of carbon price based on actual billing data	Total energy (GJ)	Carbon cost (\$)	Total energy spend (\$)	Carbon bill as a share of total energy spend
Alexandra District Hospital	100%	2,657	\$16,168	\$113,359	14%
Alfred Health	100%	304,692	\$814,612	\$6,338,303	13%
Ballarat Health Services	80%	182,166	\$502,735	\$3,297,506	15%
Central Gippsland Health Service	100%	54,145	\$146,632	\$972,164	15%
East Wimmera Health Service	0%	4,829	\$28,739	\$223,436	13%
Eastern Health	99%	194,308	\$688,134	\$3,993,889	17%
Heathcote Health	0%	1,652	\$9,830	\$71,220	14%
Kerang District Health	0%	2,813	\$16,743	\$137,220	12%
Latrobe Regional Hospital	100%	45,063	\$161,641	\$983,360	16%
Melbourne Health	89%	321,640	\$703,420	\$6,962,928	10%
Mercy Public Hospitals Inc	100%	70,753	\$106,537	\$1,681,941	15%
Orbost Regional Health	0%	1,847	\$10,995	\$118,195	9%
Peninsula Health	96%	140,191	\$462,535	\$2,556,510	18%
Robinvale District Health Services	0%	3,441	\$20,480	\$186,912	11%
Seymour Health	100%	9,533	\$31,876	\$228,975	14%
St Vincent's Health	93%	248,849	\$629,402	\$5,883,376	11%
Terang and Mortlake Health Service	100%	1,652	\$10,488	\$80,821	13%
The Royal Children's Hospital	100%	235,355	\$729,645	\$3,793,594	19%
West Gippsland Healthcare Group	100%	88,320	\$176,234	\$1,041,025	17%
Yea and District Memorial Hospital	100%	1,256	\$7,646	\$59,846	13%

In 2012-13, the carbon tax made up between nine and 23 percent of the total energy spend for each individual health service in Victoria. The average across all health services was 15 percent.

Orbost Regional Health service, for example, is a rural health service providing acute, emergency, medical, surgical and obstetric services for the Far East Gippsland area.<sup>46</sup> In 2012-13, Orbost Regional Health spent \$118,195 on energy. Of this, \$10,995 was spent on

<sup>45</sup> Data provided by the Department of Health. Column two (headed '% of carbon price based on actual billing data') in the table indicates where and to what extent the carbon cost was estimated for a health service. See Appendix A for further explanation.

<sup>46</sup> <http://orbostregionalhealth.com.au/home.html>

the carbon tax. This represents nine percent of their total energy spend, one of the lowest percentages of Victorian health services.<sup>47</sup>

Alexandra District Hospital is a rural hospital providing both inpatient and out-patient services for the township of Alexandra and surrounding areas. In 2012-13, Alexandra District Hospital spent \$113,359 on energy costs, only slightly less than Orbost Regional Health. Of this total spend, the cost of the carbon tax was \$16,168, 14 percent of the total energy cost.

As discussed in Chapter Two, large metropolitan hospitals have much higher energy costs. St Vincent's Health for example spent \$5,883,376 on energy costs in 2013-13, \$629,402 of which related to the cost of the carbon tax. Alfred Health had a similar energy bill, spending \$6,338,303 on energy costs in 2012-13 — \$814,612 of this was attributable to the carbon tax. Despite the higher charges compared to the energy and carbon tax costs of the smaller regional hospitals, the carbon tax bills for St Vincent's Health and Alfred Health represented 11 percent and 13 percent of their total energy cost respectively.

Austin Health, a major metropolitan health service, paid the highest carbon tax bill of all Victorian health services in 2012-13. Of a total energy bill of \$7,807,753, Austin Health paid \$1,440,720 in carbon tax.

### 3.2.1 Increase in energy charges

As discussed in Chapter Two (see Figure 2.3), total energy expenditure by Victorian health services was \$96,492,678 in 2012-13, an increase of almost 28 percent from \$75,503,084 in 2011-12. Whilst energy expenditure has generally increased slightly each year since 2005-06, this increase is considerably higher than increases in previous years. A list of energy spends from 2005-6 to 2012-13 is provided in Appendix B. This data was submitted by health services to the Department via the Agency Information Management System (AIMS).<sup>48</sup> The detail and sophistication of data collected varies between health services.

Part of the increase in expenditure can be attributed to the \$13,593,848 paid in carbon tax in 2012-13, the first year of the federal government's carbon pricing scheme. This is just under 15 percent of the total energy spend for 2012-13 of \$96,492,678.<sup>49</sup>

To put this in broader perspective, the Department of Health's Annual Report for 2012-13 shows that the Victorian public health system had a total expenditure of \$10.3 billion in 2012-13, of which the carbon tax made up 0.13 percent.<sup>50</sup>

<sup>47</sup> Note that the amount given here for the carbon tax paid by Orbost Health is the Department of Health's estimate; it is not based on itemised energy bills. See Appendix A for further explanation.

<sup>48</sup> DOH, *Energy management in the public healthcare system*, p. 2

<sup>49</sup> The total carbon tax cost was calculated in 2013 by the Department of Health. Updated data was provided to the Committee in 2014 and has been used where available.

<sup>50</sup> DOH, *2012-13 Annual Report*, p. 37

### **Sinclair Knight Merz report**

A 2011 report undertaken by consultants Sinclair Knight Merz (SKM) for the Department of Health projected that in its first full year of introduction, 2012-13, the carbon tax would cost Victorian health services \$13,405,000 (in real dollars).<sup>51</sup> SKM estimated that the cost would rise to \$19 million by 2020. Further details of the projections made by SKM can be found in Appendix C.

The SKM report made projections based on a range of contributing factors, including the costs of the carbon tax on capital works in the health service, food at health facilities, ambulance fuel and other indirect costs faced by the health service. The data provided to the Committee by the Department of Health is based only on energy bills paid by health services (or modelled in a small number of cases) and consequently does not take into account these other potential costs. For example, the SKM report estimated a carbon tax impact on the ambulance service of approximately \$334,000 in 2013. Such estimates are not included in the Department's calculations.

It is possible, therefore, that the total cost to Victorian public health services of the carbon tax in 2012-13 was somewhat greater than the \$13.5 million recorded in the Department of Health's audit. However, without actual data to compare against SKM's projections, the Committee believes the Department of Health's data is a more appropriate measure to use.

### **3.2.2 A range of factors are driving energy prices**

Rapidly escalating energy prices were a concern for governments, business and the general community even before the introduction of the carbon pricing scheme.<sup>52</sup> In real terms, electricity prices for households increased by 70 percent between June 2007 and December 2012.<sup>53</sup> Gas prices rose by 54 percent in the 10 years to June 2013.<sup>54</sup> Prices for businesses showed similar sharp increases over the period.<sup>55</sup>

The carbon tax has been one factor among several others to have contributed to the rising costs of energy in recent years.

AMA Victoria, while acknowledging that the tax had increased costs for health services, considered that in the context of prior energy price increases and other factors affecting healthcare funding, the carbon tax impact was 'small'.<sup>56</sup>

According to the Australian Industry Group, the increase in energy prices prior to the introduction of the tax 'greatly exceeded the impact of the carbon tax'. The most significant

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<sup>51</sup> SKM MMA, *Impact of carbon pricing on the Victorian health care system*, 12 August 2011, p. 43.

<sup>52</sup> Productivity Commission, *Electricity Network Regulatory Frameworks*, report no. 62, p. 104.

<sup>53</sup> AMA Victoria, *Submission no.5*, 27 February 2014, p. 1.

<sup>54</sup> Kai Swoboda, *Energy prices—the story behind rising costs*, Parliamentary Library, <http://bit.ly/1lpOoTF>

<sup>55</sup> Productivity Commission, *Electricity Network Regulatory Frameworks*, report no. 62, p. 104.

<sup>56</sup> AMA (Vic), *Submission no.5*, 27 February 2014, p. 1.

factor for electricity prices was ‘substantial increases in the regulated revenues of electricity network businesses, particularly distribution (poles and wires), to cover expansion, reinforcement and renewal of network infrastructure.’<sup>57</sup>

The carbon tax added around 2.2 c/kWh to electricity prices in 2012-13 (in line with forecasts by the former federal Department of Climate Change and Energy Efficiency). This is projected to rise to 2.5 c/kWh in 2013-14.<sup>58</sup> By one estimate, the carbon tax increased electricity bills by around nine percent nationally in the first year of operation.<sup>59</sup>

Consequently, the federal government has announced that abolishing the carbon tax will lead to prices for retail electricity and gas to be around nine percent and seven percent (respectively) lower than they would otherwise be in 2014-15.<sup>60</sup> A group of energy sector peak bodies is less certain, stating that ‘it is difficult to specify exactly how much electricity prices will fall once the carbon price is repealed.’<sup>61</sup>

In relation to gas, the Committee received evidence that rapid increases in gas prices could be expected in coming years, which would have a cost impact on Victorian health services. The development of new gas export terminals is expected to lead to a tightening of supply, although this will depend on how quickly new gas resources are developed.<sup>62</sup> At a public hearing, Mr Murray-Leach from the Energy Efficiency Council informed the Committee:

The increase in gas prices is going to have a very substantial impact because we see them moving from around \$3.50 to a long term average of around \$9, but there are some short term spikes in the market. We are seeing \$11 at the moment... If your concern is energy bills, the impact of rising gas prices is going to be far more substantial than the carbon price.<sup>63</sup>

### 3.3 Impacts on service delivery

The Committee notes it is self-evident that in the absence of the carbon tax, the amounts incurred by health services since July 2012 (and detailed in Appendix A) would otherwise not have been paid. It follows that a benefit of abolishing the carbon tax is to free up those funds to be used for service delivery (or other purposes).

Putting the carbon tax impact in service delivery terms, the Department of Health informed the Committee that the abolition of the carbon tax would allow for an additional 2,700

<sup>57</sup> AIG, *Ai Group Survey: Business picks up carbon tax bill*, June 2013, p. 16.

<sup>58</sup> AEMC, *Possible future retail electricity price movements: 1 July 2012 to 30 June 2015, Electricity price trends report*, 22 March 2013, p. 69.

<sup>59</sup> <http://www.abc.net.au/news/2013-10-30/tony-abbott-carbon-tax-gas-electricity-bills/5050348>

<sup>60</sup> Australian Government, Department of the Environment, ‘Repealing the carbon tax’, <http://www.environment.gov.au/topics/cleaner-environment/clean-air/repealing-carbon-tax>

<sup>61</sup> Energy Supply Association of Australia, Energy Retailers Association of Australia, Energy Networks Association and Australian Pipeline Industry Association, *Submission to Carbon Tax Repeal Taskforce*, 4 November 2013, p. 4.

<sup>62</sup> Kai Swoboda, Energy prices—the story behind rising costs, Parliamentary Library, <http://bit.ly/1pOoTF>

<sup>63</sup> Mr R. Murray-Leach, *Transcript of Evidence*, 26 March 2014, p. 28.

patients each year to potentially receive elective surgery across the state. This is based on an average cost of \$5000 per elective surgery case.<sup>64</sup>

On an individual health service level, Bendigo Health Care Group, which by its own estimates paid approximately \$500,000 in carbon tax-related energy charges, stated in a submission:

For a health service the size of Bendigo Health this expenditure, if available, could be used in a variety of ways to provide additional services that could not be provided while the carbon tax is in place. For example close to 100 additional patients could have received elective surgery over the last year had those funds been available.<sup>65</sup>

Melbourne Health stated that its electricity costs rose by over 30 percent in the first year of the carbon tax (a 'significant impact') and abolishing the tax will 'benefit all Victorian Health Services and their patients by returning significant spend back to hospital budgets.'<sup>66</sup>

The carbon tax also has an impact on the private hospitals sector. A submission from private hospital operator Epworth Health stated that the 'additional \$1 million per annum' in costs caused by the carbon tax would, on the abolition of the tax, be reinvested in one of 'equipment, our people's development, research and teaching or expansion of our services.'<sup>67</sup>

Western Health also highlighted other (unquantified) potential benefits from the abolition of the carbon tax, including reduced prices for health care supplies and necessary services, such as refrigerants, gases, linen and waste disposal.<sup>68</sup>

### 3.4 Impacts on energy efficiency

Several submissions from health services noted that the carbon tax had improved organisational awareness of energy efficiency and created a financial incentive to reduce overall energy consumption. The submission from Northern Health noted that:

The introduction of the carbon tax has led to greater interest amongst hospital staff to improve hospital energy efficiency. Hospital staff increasingly realise the importance of implementing sustainable measures to combat climate change and improving sustainability.<sup>69</sup>

Western Health indicated that since the introduction of the carbon tax there had been a 'marked increase in interest amongst hospital staff to improve hospital energy efficiency', and as a consequence of its introduction, Western Health implemented a continuous quality

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<sup>64</sup> Ms F. Diver, *Transcript of Evidence*, 19 February 2014, p. 11.

<sup>65</sup> Bendigo Health, *Submission no.11*, 28 February 2014, p. 1.

<sup>66</sup> Melbourne Health, *Submission no.2*, 24 February 2014, p. 1.

<sup>67</sup> Epworth Health, *Submission no.17*, 12 March 2014, p. 1.

<sup>68</sup> Western Health, *Submission no.13*, 4 March 2014, p. 2.

<sup>69</sup> Northern Health, *Submission no.4*, 27 February 2014, p. 1.

improvement approach to reducing environmental impacts and developed an environmental management strategy.<sup>70</sup>

Similarly, Colac Area Health stated that the carbon tax had had the beneficial impact of 'promoting energy usage awareness and energy savings consciousness' in the organisation.<sup>71</sup> This increased awareness has resulted in the better usage of lighting, heating and cooling, and energy efficient facility design. The submission further stated that:

While it can be argued that these outcomes could have been built into design without the "carbon tax" focus there is no doubt the future impost of additional recurrent costs and the legacy of leaving a burden not a benefit gave additional impetus to ensure the designs are the best that can be within the resource allocated.<sup>72</sup>

Investments in energy efficiency have in turn resulted in reduced consumption and reduced costs. According to doctors Forbes McGain and Tim Read, the carbon tax has:

...provided an economic incentive to managers to cut power consumption. It is very likely that after some initial investment in energy conservation and efficiency, some hospitals will be financially better off because of the significant potential for reduced consumption, despite the modest increase in the price of power attributable to the tax.<sup>73</sup>

As discussed in Chapter Two, various programs and initiatives have been made available to public health services to achieve these goals, one of them being the former Greener Government Buildings (GGB) program (now the Efficient Government Buildings program). The Energy Efficiency Council stated that:

If energy use remained steady, we would anticipate the impact of the carbon tax would decline from \$13 million per annum in 2014–15 to well under \$8 million in 2015, when the system would have moved to a floating price. With the GGB in operation along with the carbon price, the impact of the carbon tax bill on the Department of Health by 2020 would probably be around \$5 million or maybe slightly more per annum.<sup>74</sup>

### 3.5 Impacts on the private health industry

Given the limited information available, the Committee found it difficult to assess the impact of the carbon tax on the private health sector in Victoria, or the possible benefits that could flow to the sector if the tax were abolished.

Media reports suggest the industry was concerned about the impact of the tax prior to its introduction. In July 2012 the Australian Private Hospitals Association stated that the carbon

<sup>70</sup> Western Health, *Submission no.13*, 4 March 2014, p. 2.

<sup>71</sup> Colac Area Health, *Submission no.7*, 27 February 2014, p. 2.

<sup>72</sup> *ibid.*

<sup>73</sup> Dr Tim Read & Dr Forbes McGain, *Submission no.9*, 28 February 2014, p. 1.

<sup>74</sup> Energy Efficiency Council, *Transcript of Evidence*, 26 March 2014, pp. 27-28.

tax would cost its members up to \$1,200 per bed and would cost up to \$36 million in 2012-13.<sup>75</sup> In March 2012, the Managing Director of private hospital operator Ramsay Health Care predicted a 16 percent increase in energy costs for their hospitals from 2013.<sup>76</sup>

It is conceivable that the carbon tax, by driving up hospital costs, could contribute to higher health insurance premiums. In the four years from 2010 to 2013, premiums increased by an average of 5.5 percent annually. The 2014 premium increase was 6.2 percent. A larger than 'normal' rise could prompt Victorians to drop their insurance and/or use public hospitals. However, there is no clear evidence of the carbon tax having an inflationary effect on health insurance and neither health insurers nor the federal Health Minister or the federal Department of Health and Ageing cited the carbon tax as a contributing factor to the latest rises.<sup>77</sup>

### 3.6 The carbon tax in the context of overall health funding

The Committee received evidence from some inquiry participants arguing that the financial impact of the carbon tax should be considered within the context of the overall health funding provided to the states and territories by the federal government.<sup>78</sup>

As stated above, the impact of the carbon tax in 2012-13 was around \$13.5 million. Figures provided to the Committee by DTF (below) show that Commonwealth payments to support Victorian health services increased by \$203 million in 2012-13, the first year of the carbon tax, and \$223 million in 2013-14 compared to the previous financial year.

**Figure 3.2: Commonwealth payments to Victorian health system (\$million)<sup>79</sup>**

2011-12	3 060
<b>2012-13</b>	<b>3 263</b>
2013-14	3 486

The Healthcare Specific Purpose Payment (SPP) funding that existed prior to 1 July 2012 has been replaced with a new funding system: National Health Reform Funding. The first two years of the new system are transitional. In 2012-13 and 2013-14 the Commonwealth's contribution to public hospital services will be amounts equivalent to those that would otherwise have been payable through the former National Healthcare SPP, and the SPP indexation arrangements will continue to apply.<sup>80</sup>

<sup>75</sup> news.com.au, 'Libs tip \$560m carbon tax bill on buildings', May 9 2013; Michael Owen, 'Carbon tax pinches small hospitals' *The Australian*, 31 July 2012.

<sup>76</sup> Steve Lewis, 'Carbon tax adds to bills', *The Daily Telegraph*, 8 March 2012.

<sup>77</sup> The federal Health Minister approves premium increases.

<sup>78</sup> For example, Australian Nursing & Midwifery Federation, *Submission no.12*, 4 March 2014.

<sup>79</sup> DTF, *Response to questions taken on notice*, 7 March 2014, p. 2.

<sup>80</sup> Commonwealth Budget Papers 2013-14, Part 3, p. 24, <http://bit.ly/RKyelh>

National Healthcare SPP is indexed by the growth factor defined in an intergovernmental agreement. The growth factor for the National Healthcare SPP was estimated to be 6.46 percent in 2012-13.<sup>81</sup>

At a public hearing with officials from the Department of Health, the Committee sought to further understand the issue of indexation under the national health funding arrangements.

It is a very complex environment because we are moving from one funding system to another funding system...The calculation of the specific purpose payment increase in funding relies on a few things. It relies on a population demographic number, it relies on a utilisation factor and it relies on a cost increase factor. Because the specific purpose payment covered both growth in services and the increase in price of services, one of the issues that we have confronting us is that under that arrangement and the new arrangement's price — so the increased cost of delivering the same level of services, just if you use that as an example — the price is based on historic costs so it uses a five-year rolling average of increased price. When there is a new cost into the system — for example, the carbon tax cost, that \$13 million — that is not accounted for in the indexation arrangements that are provided from the commonwealth.<sup>82</sup>

The Committee notes there were protracted negotiations in 2011 regarding federal health funding for Victorian hospitals. A 2012 letter from the Victorian Minister for Health to the former federal Minister for Health expressed concern about the impact of the carbon tax on Victorian public health services and individual private health services. The Committee further noted a response from the former federal Minister for Health indicating that the carbon tax was not raised in negotiations about federal funding for Victorian hospitals.<sup>83</sup>

### 3.7 The carbon tax and human health impacts from climate change

Some of the submissions received sought to compare the cost of the carbon tax to the potential financial impact on the health system from the effects of climate change on human health.<sup>84</sup> In these submissions it was argued that the carbon tax was an effective strategy to mitigate climate change and its abolition, while a short-term saving, could add costs to the health system in the longer term.<sup>85</sup>

<sup>81</sup> Commonwealth Budget Papers, 2012-13, Part 3, p. 28, <http://bit.ly/1f4aYzb>

<sup>82</sup> Ms L. Price, *Transcript of Evidence*, 19 February 2014, pp. 11-12.

<sup>83</sup> Correspondence from Hon. David Davis, Victorian Minister for Health, to Hon. Tanya Plibersek, Minister for Health, dated 18 July 2012 and correspondence from Hon. Tanya Plibersek to Hon. David Davis, dated 10 September 2012.

<sup>84</sup> For example, Consumers Health Forum, *Submission no.3*, 28 February 2014; Environment Victoria, *Submission no.6*, 27 February 2014; Climate and Health Alliance, *Submission no.14*, 4 March 2014.

<sup>85</sup> For example, Consumers Health Forum, *Submission no.3*, 28 February 2014; Environment Victoria, *Submission no.6*, 27 February 2014; Climate and Health Alliance, *Submission no.14*, 4 March 2014.

### **3.8 Committee view**

The Committee believes that Victoria's hospitals and health services have made important gains in achieving greater energy efficiency and moving towards reduced carbon emissions. The Victorian Government has supported a number of initiatives which seek to further improve energy use in health facilities and across government. Evidence provided to the Committee confirms that health services see opportunities to do more to reduce energy waste and unnecessary expenditure.

In this context, notwithstanding an increase in federal to state health funding in 2012-13, the Committee believes the former federal government's carbon tax has been an additional burden for our health system since it was introduced in July 2012.

Committee Room

3 April 2014

## Appendix A – Carbon tax payments 2012-13

\* This data was provided to the Committee by the Department of Health from an audit of health service energy bills. Note: in several instances, the carbon tax costs paid by a health service have been estimated by the Department. Column two (headed ‘% of carbon price based on actual billing data’) in this table indicates the proportion of the data which was based on actual energy bills for each health service. For example, 55 percent of the carbon cost for Albury Wodonga Health was based on actual billing data and 45 percent was estimated. The Department estimated the carbon cost where billing information was not readily available or carbon charges were not itemised for that health service. According to the Department, around 14 percent (\$1.9 million) of the total carbon cost was derived from estimates in this manner.

Estimates were based on historical data and actual carbon price rate. Carbon price was estimated by multiplying historical usage (values for 2011-12 used or 2012-13 where available) with average carbon price rate. Average carbon price values used in the analysis are: \$1.25/GJ for gas, and \$21.4/MWh for electricity.

Health service	Period 1 July 2012 to 30 June 2013				
	% of carbon price based on actual billing data	Total energy (GJ)	Carbon cost (\$)	Total energy spend (\$)	Carbon bill as a share of total spend
Albury Wodonga Health	55%	56,164	\$208,183	\$1,668,792	12%
Alexandra District Hospital	100%	2,657	\$16,168	\$113,359	14%
Alfred Health	100%	304,692	\$814,612	\$6,338,303	13%
Alpine Health	0%	6,001	\$35,715	\$358,379	10%
Austin Health <sup>2</sup>	92%	437,851	\$1,440,720	\$7,807,753	16%
Bairnsdale Regional Health Service	100%	23,546	\$76,402	\$523,464	15%
Ballarat Health Services	80%	182,166	\$502,735	\$3,297,506	15%
Barwon Health	60%	211,529	\$494,120	\$4,315,820	11%
Bass Coast Regional Health	73%	20,562	\$60,659	\$521,151	12%
Beaufort and Skipton Health Service	0%	1,426	\$8,485	\$89,655	9%
Beechworth Health Service	100%	3,214	\$20,023	\$132,597	15%
Benalla Health	0%	18,363	\$57,249	\$371,905	15%
Bendigo Health Care Group	98%	121,161	\$412,896	\$2,680,747	15%
Boort District Health	100%	1,601	\$10,523	\$81,889	13%
Calvary Health Care Bethlehem	0%	6,964	\$25,678	\$158,734	16%
Casterton Memorial Hospital	0%	2,568	\$15,286	\$112,201	14%
Castlemaine Health	0%	36,032	\$80,181	\$568,435	14%
Central Gippsland Health Service	100%	54,145	\$146,632	\$972,164	15%
Cobram District Health	0%	8,200	\$31,336	\$257,572	12%
Cohuna District Hospital	0%	1,433	\$8,527	\$61,672	14%
Colac Area Health	0%	18,178	\$60,019	\$459,132	13%
Dental Health Services Victoria	100%	21,831	\$77,813	\$494,798	16%
Djerriwarrh Health Services	86%	12,976	\$51,562	\$390,342	13%
Dunmunkle Health Services	0%	1,320	\$7,854	\$68,293	12%
East Grampians Health Service	79%	19,082	\$66,773	\$425,947	16%
East Wimmera Health Service	0%	4,829	\$28,739	\$223,436	13%
Eastern Health	99%	194,308	\$688,134	\$3,993,889	17%
Echuca Regional Health	100%	32,027	\$86,080	\$571,603	15%
Edenhope and District Hospital	0%	2,107	\$12,542	\$127,666	10%
Gippsland Southern Health Service	0%	12,629	\$40,609	\$383,253	11%
Goulburn Valley Health	100%	73,858	\$257,884	\$1,507,509	17%
Heathcote Health	0%	1,652	\$9,830	\$71,220	14%
Hepburn Health Service	0%	8,975	\$30,163	\$226,805	13%
Hesse Rural Health Service	0%	1,454	\$8,653	\$65,271	13%
Heywood Rural Health	0%	1,345	\$8,008	\$62,357	13%
Inglewood and District Health Service	100%	1,080	\$6,915	\$52,753	13%
Kerang District Health	0%	2,813	\$16,743	\$137,220	12%

## Inquiry into the impact of the carbon tax on health services

Kilmore and District Hospital	100%	9,307	\$24,515	\$182,142	13%
Kooweerup Regional Health Service	0%	2,049	\$12,193	\$86,451	14%
Kyabram and District Health Service	100%	12,125	\$42,456	\$329,183	13%
Kyneton District Health Service	100%	7,409	\$21,388	\$154,447	14%
Latrobe Regional Hospital	100%	45,063	\$161,641	\$983,360	16%
Lorne Community Hospital	0%	1,251	\$7,444	\$71,043	10%
Maldon Hospital	0%	747	\$4,447	\$37,565	12%
Mallee Track Health and Community Service	0%	2,516	\$14,974	\$138,116	11%
Mansfield District Hospital	0%	2,892	\$17,210	\$150,464	11%
Maryborough District Health Service	100%	14,826	\$50,452	\$351,241	14%
Melbourne Health	89%	321,640	\$703,420	\$6,962,928	10%
Mercy Public Hospitals Inc	100%	70,753	\$106,537	\$1,681,941	15%
Mildura Base Hospital	0%	29,429	\$104,522	\$893,008	12%
Monash Health	99%	424,347	\$1,299,009	\$8,847,410	15%
Moyne Health Services	0%	7,002	\$19,840	\$169,362	12%
Nathalia District Hospital	100%	1,845	\$11,963	\$89,878	13%
Northeast Health Wangaratta	99%	42,888	\$148,492	\$990,902	15%
Northern Health	99%	131,961	\$429,630	\$2,610,141	16%
Numurkah District Health Service	0%	4,514	\$22,692	\$212,741	11%
Omeo District Health	0%	666	\$3,966	\$39,468	10%
Orbost Regional Health	0%	1,847	\$10,995	\$118,195	9%
Otway Health and Community Services	0%	815	\$4,850	\$43,361	11%
Peninsula Health	96%	140,191	\$462,535	\$2,556,510	18%
Peter MacCallum Cancer Institute	93%	79,049	\$364,727	\$1,985,079	18%
Portland District Health	100%	14,935	\$53,102	\$352,457	15%
Queen Elizabeth Centre	0%	3,044	\$9,183	\$58,036	16%
Red Cliffs and Community Aged Care Services Inc.	0%	3,365	\$13,403	\$114,963	12%
Robinvale District Health Services	0%	3,441	\$20,480	\$186,912	11%
Rochester and Elmore District Health Service	87%	5,958	\$24,687	\$176,896	14%
Rural Northwest Health	0%	5,824	\$34,661	\$281,621	12%
Seymour Health	100%	9,533	\$31,876	\$228,975	14%
South Gippsland Hospital	0%	840	\$5,000	\$50,505	10%
South West Healthcare	98%	65,183	\$214,378	\$1,429,049	15%
St Vincent's Health	93%	248,849	\$629,402	\$5,883,376	11%
Stawell Regional Health	76%	11,409	\$36,114	\$216,234	17%
Swan Hill District Health	100%	9,553	\$62,415	\$410,046	15%
Tallangatta Health Service	0%	1,581	\$9,408	\$41,772	23%
Terang and Mortlake Health Service	100%	1,652	\$10,488	\$80,821	13%
The Royal Children's Hospital	100%	235,355	\$729,645	\$3,793,594	19%
The Royal Victorian Eye and Ear Hospital	100%	33,808	\$110,512	\$658,147	17%
The Royal Women's Hospital	0%	36,998	\$220,191	\$1,566,334	14%
Timboon and District Healthcare Service	100%	1,075	\$6,823	\$51,629	13%
Tweddle Child and Family Health Service	0%	1,306	\$3,871	\$37,017	10%
Upper Murray Health and Community Services	0%	1,748	\$10,401	\$75,831	14%
West Gippsland Healthcare Group	100%	88,320	\$176,234	\$1,041,025	17%
West Wimmera Health Service	0%	13,311	\$79,221	\$516,168	15%
Western District Health Service	89%	54,918	\$145,620	\$998,027	15%
Western Health	99%	221,151	\$785,822	\$4,669,045	17%
Wimmera Health Care Group	100%	58,779	\$145,689	\$1,076,850	14%
Yarram and District Health Service	0%	1,751	\$10,418	\$80,695	13%
Yarrawonga Health	0%	10,794	\$32,810	\$227,712	14%
Yea and District Memorial Hospital	100%	1,256	\$7,646	\$59,846	13%
<b>TOTAL</b>	<b>86%</b>	<b>4,411,604</b>	<b>\$13,593,848</b>	<b>\$93,742,111</b>	<b>15%</b>

### Notes:

1. Total excludes LPG, as carbon price is not itemised on available LPG bills. Health services not using natural gas, typically use LPG.
2. Mercy Hospital for Women is co-located with Austin Hospital. It is estimated that carbon costs associated with Mercy Hospital for Women is around \$149,000.
3. The Royal Women's Hospital is collocated with the Royal Melbourne Hospital - City Campus. Energy is supplied from RMH, and sub-metering information is not available for the purposes of this analysis. Some carbon charges associated with The Womens are reported under Melbourne Health.

## Appendix B – Energy usage and expenditure data

AIMS Energy Data (converted to GJ)								
	2005-06	2006-07	2007-08	2008-09	2009-10	2010-11	2011-12	2012-13
Electricity	1,602,770	1,656,622	1,702,260	1,705,254	1,780,317	1,771,746	1,860,518	1,880,529
NG	1,891,115	1,892,287	1,896,461	1,883,369	1,778,872	1,916,310	1,934,823	2,027,821
LPG	184,905	157,278	162,152	160,181	139,975	137,363	124,074	118,399
Steam	721,305	705,247	703,497	671,345	680,890	577,797	530,159	483,014
<b>TOTAL GJ</b>	<b>4,400,095</b>	<b>4,411,434</b>	<b>4,464,369</b>	<b>4,420,149</b>	<b>4,380,054</b>	<b>4,403,217</b>	<b>4,449,574</b>	<b>4,509,763</b>

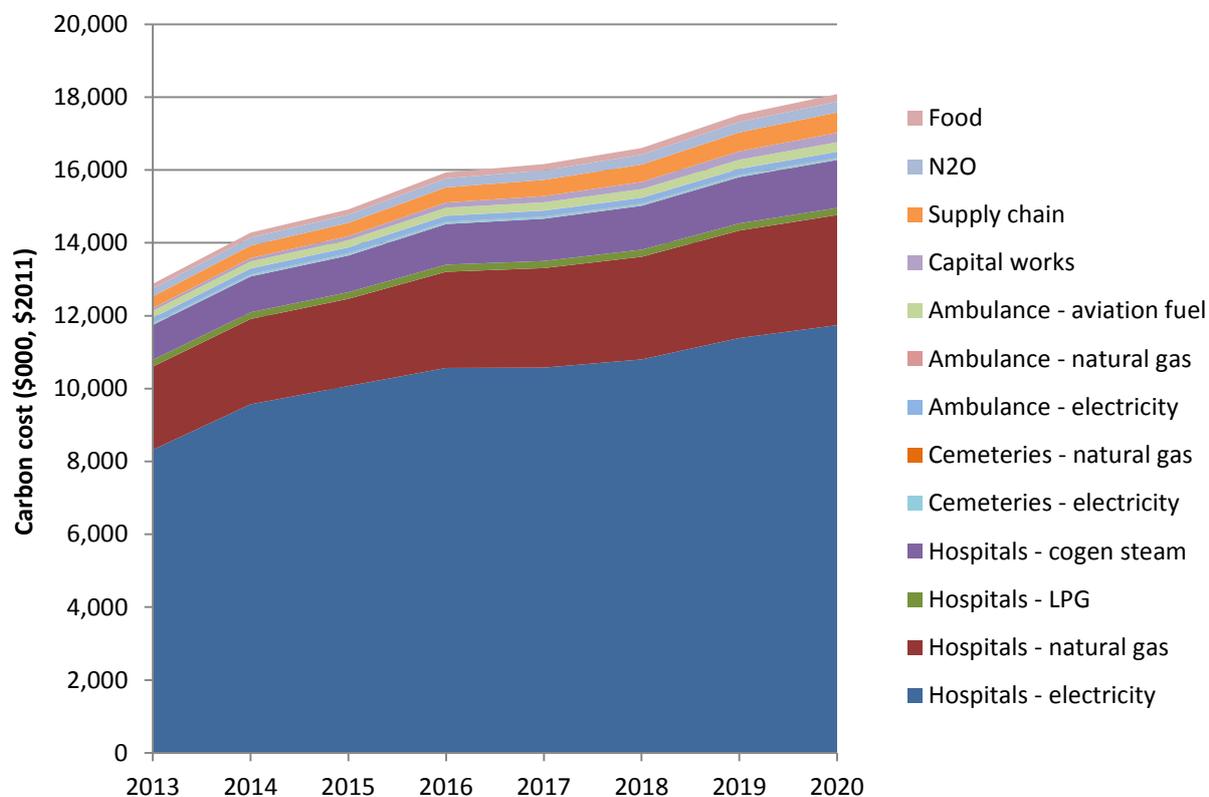
Energy Expenditure Data reported in AIMS								
	2005-06	2006-07	2007-08	2008-09	2009-10	2010-11	2011-12	2012-13
Natural gas	\$8,826,799	\$8,794,524	\$9,223,959	\$9,863,025	\$9,788,771	\$10,383,487	\$10,149,991	\$15,291,559
LPG	\$3,407,743	\$3,258,993	\$3,707,505	\$3,902,862	\$3,368,062	\$3,450,150	\$3,224,034	\$3,304,484
Steam	\$5,084,799	\$4,956,561	\$4,909,710	\$4,699,319	\$4,860,264	\$3,691,025	\$3,586,549	\$3,498,668
Electricity	\$37,699,286	\$38,502,433	\$43,341,464	\$45,212,194	\$51,544,893	\$58,840,359	\$58,542,510	\$74,397,967
<b>TOTAL</b>	<b>\$55,018,627</b>	<b>\$55,512,511</b>	<b>\$61,182,638</b>	<b>\$63,677,400</b>	<b>\$69,561,990</b>	<b>\$76,365,021</b>	<b>\$75,503,084</b>	<b>\$96,492,678</b>

## Appendix C – Sinclair Knight Merz projections

Impact of carbon pricing on health services, \$k/year, real (\$2011)

	2013	2014	2015	2016	2017	2018	2019	2020
Hospitals - grid electricity	8,321	9,569	10,070	10,566	10,575	10,799	11,387	11,739
Hospitals - cogen electricity	531	560	589	680	731	784	854	913
Hospitals - natural gas	2,281	2,340	2,392	2,639	2,731	2,817	2,949	3,023
Hospitals - LPG	186	184	182	195	195	195	197	196
Hospitals - cogen steam	959	983	1,007	1,115	1,160	1,204	1,271	1,316
Cemeteries - electricity	47	52	53	54	53	52	54	54
Cemeteries - natural gas	6	6	6	7	7	8	8	8
Ambulance - electricity	143	159	162	165	160	159	162	162
Ambulance - natural gas	5	5	5	5	6	6	6	6
Ambulance - aviation fuel	186	191	196	217	225	234	247	256
Capital works	72	91	111	143	170	197	231	262
Supply chain	324	343	363	415	445	477	519	555
N2O	214	219	225	249	259	269	284	294
Food	131	137	144	163	174	184	199	211
<b>TOTAL</b>	<b>13,405</b>	<b>14,839</b>	<b>15,506</b>	<b>16,612</b>	<b>16,890</b>	<b>17,385</b>	<b>18,369</b>	<b>18,996</b>

Carbon price impact by service sector



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## Appendix D – List of submissions

1. Colac Otway Shire
2. Melbourne Health
3. Consumers Health Forum of Australia
4. Northern Health
5. AMA Victoria
6. Environment Victoria
7. Colac Area Health
8. Australian Dental Association - Victoria
9. Dr Forbes McGain and Dr Tim Read
10. Western District Health Service
11. Bendigo Health
12. Australian Nursing and Midwifery Federation
13. Western Health
14. Climate and Health Alliance
15. Energy Efficiency Council
16. Doctors for the Environment Australia
17. Epworth Healthcare

## **Appendix E – List of witnesses at hearings**

### **Wednesday 19 February 2014**

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Department of Environment and Primary Industries

Mr P. Smith, Deputy Secretary - Land, Fire and Environment

Ms K. Wood, Director - Climate Adaptation Policy

Department of Health

Ms F. Diver, Deputy Secretary

Ms L. Price, Director - Capital Projects and Service Planning

Department of Treasury and Finance

Mr D. Martine, Secretary

Ms M. Skilbeck, Deputy Secretary - Budget and Finance

Mr M. Johnstone, Director - Economic Policy Group

### **Wednesday 26 March 2014**

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Energy Efficiency Council

Mr R. Murray-Leach, CEO

Mr L. Menzel, Manager, Sector Development

## Appendix F – Transcripts

# CORRECTED VERSION

### STANDING COMMITTEE ON ECONOMY AND INFRASTRUCTURE

#### LEGISLATION COMMITTEE

#### Inquiry into the impact of the carbon tax on health services

Melbourne — 19 February 2014

#### Members

Mr G. Barber

Mrs A. Coote

Mr D. Drum

Mr B. Finn

Mr J. Lenders

Mr C. Melhem

Ms J. Pulford

Mr S. Ramsay

#### Substituted members

Mr J. Scheffer for Mr J. Lenders

#### Participating members

Ms G. Crozier

Ms C. Hartland

Mr S. Leane

Mr C. Ondarchie

Mr J. Scheffer

Chair: Mrs A. Coote

Deputy Chair: Ms J. Pulford

#### Staff

Secretary: Mr K. Delaney

#### Witnesses

Mr P. Smith, deputy secretary, land, fire and environment,

Ms K. Wood, director, climate adaptation policy, Department of Environment and Primary Industries.

**The CHAIR** — Good evening, Kate Wood and Paul Smith. How do you do? I am Andrea Coote, the chair of this committee. Thank you very much indeed for coming in tonight. I know it is a little obscure to come to a public hearing at night, but I welcome you and those who have accompanied you as well.

I declare open this public hearing of the Legislative Council's Standing Committee on Economy and Infrastructure Legislation Committee. This hearing is in relation to the inquiry into the impact of the carbon tax on health services. I welcome Kate Wood, the director of climate adaptation policy, and Paul Smith, the deputy secretary, land, fire and environment, both from the Department of Environment and Primary Industries.

All evidence taken at this hearing is protected by parliamentary privilege as provided by the Constitution Act 1975 and further subject to the provisions of the Legislative Council standing orders; therefore you are protected against any action for what you say here today. But if you go outside and repeat the same things, those comments may not be protected by this privilege. All evidence is being recorded, and you will be provided with proof versions of the transcript in the next couple of days. I ask you to begin by introducing yourselves and by providing your business mailing address so that we can send you a copy of the transcript.

**Mr SMITH** — I will start, if you like. Thank you for the introductions. My role is deputy secretary, land, fire and environment, so I pick up all of the public land estate in Victoria, all the natural assets on that public land — fire management, environmental protection and management.

**Ms WOOD** — My role is, as you said, director of the climate adaptation policy branch, so my branch is responsible for the implementation of the Victorian Climate Change Adaptation Plan. We also provide support for the Victorian Adaptation and Sustainability Partnership and broad adaptation policy.

**The CHAIR** — Just for the record, could you state where you would like the transcript sent to you?

**Mr SMITH** — I think the secretary has our email addresses at DEPI, so I will just confirm that.

**The CHAIR** — Email is best?

**Mr SMITH** — Yes.

**The CHAIR** — Fine, thank you. We will do that. Thank you very much, I welcome your presentation.

**Mr SMITH** — I am very keen for the committee to understand that our role in our department is to assist the Minister for Environment and Climate Change in respect of his policy delivery. That principally sits in respect of the implementation of the statewide adaptation plan and the programs that support it. Out of the *Review of the Climate Change Act 2010*, the role of the state is that of being complementary to the national system which is currently in place. That relates principally to adaptation. I have brought along copies of the policy context here and the adaptation plan that is currently the policy of the Victorian government.

**The CHAIR** — Thank you. You are happy to table that?

**Mr SMITH** — I am happy to provide that, yes. I have copies of the review, and the government response. We can provide these electronically.

At the point of the federal Parliament introducing a bill to enact a carbon tax, the trigger in the climate change act caused a review of the Climate Change Act 2010 in Victoria. That was led by Dr Lynne Williams. Copies of that review are being handed out. The government's response, which was tabled in Parliament on 27 March 2012, set out the state government's response to the recommendations of the Climate Change Act review and clarified its policy responsibilities in that regard. The review response

contains, on page 3, a very crisp summary of that policy intent. I might conclude my introduction at that point, Chair, and offer an opportunity for people to ask questions.

**The CHAIR** — Thank you very much indeed. Kate, would you like to add something?

**Ms WOOD** — No, there is nothing for me to add.

**The CHAIR** — I will ask the Deputy Chair to start the questions.

**Ms PULFORD** — Thanks for joining us this evening. Is it the Victorian government's view that climate change is a consequence of human activity?

**Mr SMITH** — I think that question is outside the terms of reference for the committee, and I would ask the Chair to clarify that it is the intent of the committee to put that question to us?

**Ms PULFORD** — Perhaps if I could — —

**The CHAIR** — Would you like to rephrase that?

**Ms PULFORD** — Perhaps if I could get to the second part of my question. Does the Victorian government accept that carbon pricing can positively impact on reducing emissions?

**Mr SMITH** — If you look at the content of the *Review of the Climate Change Act 2010* you will see what the current government's view is in respect of its role in the mitigation of carbon. That is my answer.

**The CHAIR** — In the documentation that you have given us, do you have a clear definition that you could use to perhaps help address Ms Pulford's question?

**Mr SMITH** — A definition of what?

**Ms PULFORD** — Climate change.

**The CHAIR** — Climate change or carbon tax?

**Mr SMITH** — That is well defined in the documentation within the act.

**The CHAIR** — Would you like to just direct us to the right page?

**Mr SMITH** — Certainly. It is in the adaptation plan, which I will pass across. I refer the committee to the Climate Change Act as well for relevant government definitions and objects as a starting point.

**The CHAIR** — We are interested, Mr Smith, just because we want to know officially what is uniformly, and I think that is the heart of the question — —

**Ms PULFORD** — I thought I would start at the beginning.

**The CHAIR** — Yes.

**Mr SMITH** — Right. I refer the committee to the contents of this plan, and specifically its purpose. That is very clearly preparing for a changing climate, so you would take that as anticipating climate risk. It is anticipatory in making sure that the state is well-placed to manage risk in that regard, and that is the purpose behind the adaptation plan.

**The CHAIR** — Ms Pulford, are you happy with that?

**Ms PULFORD** — Yes, that is okay for now.

**Mr BARBER** — Just picking up on that point, you said the purpose of the climate change adaptation plan is to ensure that the state is well-placed to manage risk.

**Mr SMITH** — Yes.

**Mr BARBER** — According to the Auditor-General's most recent report on the implementation of the Victorian Government Risk Management Framework it says, in the first appendix:

The 2012 *State of the Climate* publication by the Commonwealth Scientific and Industrial Research Organisation (CSIRO) and the Australian Bureau of Meteorology confirms the strength and direction of temperature change and the forecast impacts on sea levels and the environment.

Against this backdrop it is a concern that there is no documented whole-of-government policy and plan for managing the risks of climate change.

He knew you had an adaptation plan when he wrote that, so — —

**Mr SMITH** — That is a view that has been expressed by the Auditor-General — —

**Mr BARBER** — That is a finding of the Auditor-General.

**Mr SMITH** — potentially in the absence of very close knowledge of the fact that the government in fact did have a plan, and this is it.

**Mr BARBER** — You think he was ignorant of the existence of the climate change adaptation plan?

**Mr SMITH** — I would refer that question to the Auditor-General for clarification.

**Mr BARBER** — What is your plan, the government's plan, to mitigate the impacts of the risks of climate change as they relate to burdens that it is likely to put on the health sector?

**Mr SMITH** — That is outside my area of responsibility. Frankly, this is a multi-sectoral plan. It contains sector by sector, if I refer you to — —

**Mr BARBER** — What does it say about health?

**Mr SMITH** — I would refer you to 'People and the community', the section which commences at 5.1. It takes you through a number of sectors and into 'People and the community', which includes a double-page section, halfway down the page: 'Victorian government responses — disaster resilience' — —

**The CHAIR** — Could you give us a page number?

**Mr SMITH** — I beg your pardon?

**The CHAIR** — Page 62, is it?

**Mr SMITH** — Page 62 is correct.

**Mr BARBER** — Thank you. So since that plan was drafted, and since the Auditor-General made his finding, what further work has been done — —

**The CHAIR** — Mr Barber, could you please give us the courtesy of explaining on the record the date of the Auditor-General's report that you are referring to?

**Mr BARBER** — For the benefit of Hansard, it is *Implementation of the Government Risk Management Framework*. It says 'Victorian government printer — October 2013' and 'Session 2010–13'. It was tabled in the Parliament on 30 October 2013.

**Mr FINN** — On a point of order, Madam Chair, my understanding is that the role of this inquiry is to examine the impact of the carbon tax on health services — not climate change or global warming or other fairy stories we might come up with from time to time but in fact just the carbon tax.

**The CHAIR** — I uphold the point of order, not quite as to the way in which it was expressed, but the essence of it. Mr Barber, I would remind you that we have invited the department here tonight to give us an understanding of what the across-government position is and to see if we can obtain a definition that is going to help us with the rest of our inquiry. Would you like to rephrase your question?

**Mr MELHEM** — Just on that point — —

**The CHAIR** — Further to the point of order?

**Mr MELHEM** — If the position of Mr Smith and Ms Wood is to give us an overview, I think Mr Barber's question is quite relevant. It is trying to enlighten us. I mean, the question was quite relevant. Mr Finn is talking about how it is only in relation to the carbon tax implications for the health service.

**The CHAIR** — I would like to see if Mr Barber would rephrase slightly his question. He knows exactly what I am speaking about.

**Mr BARBER** — I am not sure I do, Chair. We have had a point of order from the witness and a point of order from Mr Finn saying that I cannot ask about climate change, I can only ask about the impact of the carbon tax on hospitals. If that is the case, then I do not have any further questions for the witness.

**The CHAIR** — Okay, if that is the way you are going to be.

**Mr RAMSAY** — I have no questions; in fact I question whether DEPI should actually even be here in relation to the carbon tax, and I suspect they are probably thinking the same thing themselves.

**The CHAIR** — We do not need any additional comments; thank you.

**Mr MELHEM** — I have no question.

**The CHAIR** — That is fine; thank you.

**Mr BARBER** — We will get you home in time for *My Kitchen Rules* at this rate.

**Mr SCHEFFER** — I must confess I am feeling a trifle restricted in what I can ask, but I will start off where Mr Smith left off, where you talked about, I think, the spread of risk that the policy was to deal with. I wonder if you could explain to the committee — and I know you pointed us to this document; forgive me, but I have not had the opportunity to read through it at this stage — and expand for us on what the spread of those risks are and how the department is addressing them across the state?

**Mr SMITH** — The spread of the risk was very deliberate in the sense that government made a decision to look at the policy and programmatic risk for government in its program delivery — so what are the things we need to do to make sure there is a continuity of delivery to communities. The second was risk to infrastructure assets and natural resources and natural resource-based industries. The third objective was to manage the risk to and protect our ability to respond to disasters and emergencies. So those are the three fundamental tenets behind the scope of the adaptation plan. Based on that we have taken, as I said, a multisectoral risk-based approach, and we have been inclusive across all aspects of government, service delivery and program design. In doing so we have prepared the plan in consultation with all relevant government agencies and have undertaken significant consultation with our local government colleagues as well to make sure that the roles and responsibilities are clear. That is supported by a COAG agreement about what roles and responsibilities are between the

commonwealth and the states and between states and local government. In respect of implementation we have an interdepartmental committee which is driving that implementation across government.

**Mr SCHEFFER** — Through the Chair, that explains or goes towards explaining how you are dealing with the risk, but what are the actual risks? I do not want to put words into your mouth, but things like sea level rise, temperatures — —

**Mr SMITH** — Well, those things are here.

**Mr SCHEFFER** — Yes. I realise they are in there, but I am inviting you to speak about them to us.

**Mr SMITH** — I would refer you to what is currently documented in the government adaptation plan.

**Mr SCHEFFER** — Page?

**Mr SMITH** — If we go to appendix 1, page 82, that provides a fairly rich rendition — a cross-sectoral rendition — of risks to Victoria.

**Mr FINN** — Any mention of the carbon tax in there at all?

**Mr SCHEFFER** — So can you point me to — —

**The CHAIR** — Just a minute. Excuse me; just one at a time.

**Mr SMITH** — I would refer members to that list for that risk assessment.

**Mr SCHEFFER** — Through you, Chair,

they look like they are measures to address risk. I guess what I am after is: what is the risk?

**The CHAIR** — Answer as you like, and then I would like to make a comment.

**Mr SMITH** — I would refer the committee to the risks that are here provided as a guide for the various sectors. It is a starting point for detailed sectoral and region-specific risk assessment and management to build climate resilience. I think that is as good a summation of the risks available right now that I can provide to the committee.

**Mr SCHEFFER** — I just make the comment that it is difficult to know how to proceed unless we know what we are talking about. We can talk about mitigating anything, but unless we know what it is that we are mitigating — —

**The CHAIR** — As I suggested at the outset, we are here to get a framework with which we can go further in our inquiry so that we have an understanding of what tools are being used across the government to be able to come to this question. I think you have given us those tools and pointed us in the right direction this evening, for which I am particularly grateful to you both. It will certainly be helpful to us to be able to understand the framework in which this issue is in fact balanced right across all government departments. I would like to thank you for pointing us in both of those directions. I know that Ms Pulford has another question, if you could bear with us.

**Ms PULFORD** — This question goes to the responsibility for whole-of-government adaptation. Would you be so kind as to describe the Sustainability Fund and what, if anything, you know about the extent to which it is used for the health sector?

**Mr SMITH** — I would refer you to the legislation that creates and governs the Sustainability Fund and the guidance that is provided by the priority statement for that fund.

**Ms PULFORD** — Could you tell us a bit about that?

**The CHAIR** — Could you just enlighten us on that now? We do not have that information in front of us, so could you elaborate on that slightly for us, please?

**Mr SMITH** — I would refer the committee to the appropriate government website with the current statement, which is the priority statement. It is signed by the Minister for Environment and Climate Change and the Premier and sets out the priorities, which relate to investment in waste and resource recovery activities and climate-related adaptation.

**Ms PULFORD** — Without having seen that or having the website handy, does the Sustainability Fund go to energy use reduction in any respects?

**Mr SMITH** — In reading the government response to the review of the Climate Change Act, the decision was taken at that stage that mitigation measures would be a matter for a national system and that the state would therefore follow suit in a complementary measures environment, with adaptation as its principal programmatic space. In the review of complementarity, which I can provide further information about, there are complementarity principles for climate change mitigation measures. Those principles were created by COAG in November 2008. They were the things that were agreed to be the principles used by jurisdictions in making sure that their mitigation measures were complementary to a national system. Those reviews were completed, and the current government is investing accordingly.

**Ms PULFORD** — So no part of the Sustainability Fund is used to help hospitals reduce their electricity and gas bills?

**Mr SMITH** — That would be a matter for the health portfolio in respect of receipt of grants —

**Ms PULFORD** — That is why we are here.

**Mr SMITH** — from particular fund sources, which I am unable to comment on.

**Ms PULFORD** — So your department does not administer that fund?

**Mr SMITH** — No, Sustainability Victoria administers that fund.

**Mr RAMSAY** — I am just wondering if you could comment on what cost the carbon tax has had on health services in Victoria?

**Mr SMITH** — I am unable to provide that advice; that is not my area of expertise. The question of the impact of a pricing mechanism on service delivery in Victoria is really a matter for the sectoral service providers; they could most aptly provide you with more detailed advice about the input costs, energy potentially being an input cost that may have been affected by way of a national pricing system on carbon. I am unable to provide that information.

**Mr RAMSAY** — Are you aware that that is what the inquiry is about?

**Mr SMITH** — I am well aware of the scope and terms of reference for this inquiry.

**The CHAIR** — Thank you. We are here to ask for tools, and we have been given a list of tools. Thank you very much indeed. Mr Scheffer has one final question.

**Mr SCHEFFER** — I found what I am looking for, and it is at 1.1. It lists what the risks are, which is what I was after before. They include the number of days over 35 degrees centigrade, reduced rainfall, heavier rainfall days, reduced snow cover and so forth. Further on it states that:

Recent events (such as heatwaves, drought, bushfires and flooding) are consistent with scientific understanding of conditions that may ...

lead to warming and so forth.

Can you give us an idea what the mitigation against those risks costs?

**Mr SMITH** — Again, I would seek to confirm that question and its relevance to the terms of reference, with respect, through the Chair, in addition to which I have no further information available to me to add to that explanation of climate risk.

**Mr SCHEFFER** — Am I right in concluding that because these statements are made at 1.1 of this document that is the government's policy and position on risk from climate change?

**Mr SMITH** — That would be a reasonable expectation, given it is a government policy.

**Mr SCHEFFER** — Not that you can answer for the minister, but it would therefore be unreasonable to think that Minister Smith would not stand by 1.1?

**Mr SMITH** — If I were you, that would be a question I would put to Minister Smith, but I would not answer on his behalf.

**Mr SCHEFFER** — No, of course not, but I am making that as a point.

**Mr SMITH** — You may.

**The CHAIR** — Thank you very much indeed. You are the first people we have had appear before our inquiry. We wanted to get a framework which we can go on with for the rest of our investigations. Thank you very much. You have given us a good direction and framework upon which to base a number of the other questions we have for other departments. Thank you very much indeed for your time and for coming in to see us.

**Mr SMITH** — Thank you.

**Witnesses withdrew.**

# CORRECTED VERSION

## STANDING COMMITTEE ON ECONOMY AND INFRASTRUCTURE

### LEGISLATION COMMITTEE

#### **Inquiry into the impact of the carbon tax on health services**

Melbourne — 19 February 2014

#### Members

Mr G. Barber

Mrs A. Coote

Mr D. Drum

Mr B. Finn

Mr J. Lenders

Mr C. Melhem

Ms J. Pulford

Mr S. Ramsay

#### Substituted members

Mr J. Scheffer for Mr J. Lenders

#### Participating members

Ms G. Crozier

Ms C. Hartland

Mr S. Leane

Mr C. Ondarchie

Mr J. Scheffer

Chair: Mrs A. Coote

Deputy Chair: Ms J. Pulford

#### Staff

Secretary: Mr K. Delaney

#### Witnesses

Ms F. Diver, deputy secretary, and

Ms L. Price, director, capital projects and service planning, Department of Health.

**The CHAIR** — Good evening. I would like to welcome you both here and thank you very much indeed for coming out on what has turned out to be a very wet evening. I realise that it is an unorthodox time, but thank you very much indeed for being here with us this evening. I have some formalities to read through, and then we will begin proceedings.

I declare open the Legislative Council Economy and Infrastructure Legislation Committee public hearing. This hearing is in relation to the inquiry into the impact of the carbon tax on health services. I welcome Ms Frances Diver, deputy secretary, and Ms Leanne Price, director, capital projects and service planning, from the Department of Health. All evidence taken at this hearing is protected by parliamentary privilege as provided by the Constitution Act 1975 and is further subject to the provisions of the Legislative Council standing orders, therefore you are protected against any action for what you say here today, but if you go outside and repeat the same things, those comments may not be protected by this privilege.

All evidence is being recorded, and you will be provided with proof versions of the transcript in the next couple of days. I ask you to begin by introducing yourselves. Once again I welcome you here today.

**Ms DIVER** — Thank you for the opportunity to present to the committee. My name is Frances Diver. I have broad responsibility for health service performance across the system. That includes funding, quality, capital and a broad range of issues in relation to hospitals. My colleague Leanne Price is here with me today.

**Ms PRICE** — I am the director of capital projects and service planning. The title says it all, but I am responsible for the capital program in health, including asset management and the property portfolio.

**The CHAIR** — Thank you. If you could begin your presentation, we would most welcome it.

**Ms DIVER** — Thank you very much. I have about 10 slides to give you an overview of where we are in terms of our action on dealing with the impact of the carbon tax. I will just take you through them.

**Overheads shown.**

**Ms DIVER** — Just to be clear at the outset, the health system in Victoria is broader than just public hospitals. My main responsibility relates to public hospitals and health services. The carbon tax impacts the private sector, but I am confining most of my comments to the public sector.

There are 86 entities across Victoria broadly spread across rural and metropolitan regions. Probably the most significant part of the spread of our services is that there is a range of size of services, from very large services to very small services. We undertake monitoring of environmental and energy performance across all of our services, and we have a system to monitor that for about 115 campuses. We have 86 entities, but some entities have a number of campuses. A good example of that would be Monash Health; it is a single entity, but it has a number of major hospitals, including Monash Medical Centre, Dandenong and Casey et cetera. We do have a system to monitor the energy performance in each of our campuses.

The Victorian public health services use 4.4 petajoules of energy. There are an awful lot of zeros after that — 15 zeros. That is a petajoule. Generally you would say we use a really large amount of energy. About a quarter of the Victorian government energy use is for public health services. Obviously there is a mix of energy, including electricity, gas, LPG, diesel and solar. The carbon intensity is variable in each of those kinds of energy that we use. There is a different mix of energy use at each of our agencies.

Another comment on energy use in the public health services is that one of the particularly important issues is security of supply. There is a pricing issue and there is a mix issue and there is carbon intensity, but prominent for us is the security of supply in terms of continuity of services.

What are we doing in terms of energy efficiency in the health sector? We are doing a number of things, particularly in our existing facilities. A range of initiatives have been undertaken to improve energy efficiency within our existing infrastructure. Those are undertaken mostly locally, but at times they are funded by government programs — the Rural Capital Support Fund, for example and infrastructure works. Health services will assess on its merits any business case that can improve energy efficiency, and there are a range of things that have been undertaken. We have solar panels in Echuca, I think it is, and the other panels are in Yarrawonga. That is energy efficiency in existing facilities. We then go to cogeneration. We understand that public hospitals have the largest amount of cogenerated energy in Victoria. That assists us with continuity and security of supply as well as with efficiency and price.

Capital works is also a really important part of energy efficiency across hospitals. In our development of business cases and our budgeting for new capital works we have a standard allowance for sustainability initiatives that ensures that there is capacity to undertake sustainable design and construction. We also have 80 practices that are standards that are provided to construction companies and designers, and they are required to comply with them when they are approaching the design and development of new facilities.

Regarding environmental management planning, the last area there is about our capacity to monitor and measure health service energy performance. We use a range of indicators, and we are also in the process of acquiring a new software system so that we can have regular reports from the vendors or the retailers that provide the energy for our health services.

In terms of what has been achieved, this is a graph of our energy efficiency indicators. They are gigajoules. We have a couple of measures there. That is according to bed days, according to square metres — that is, the physical area in a health service — and separations. Bed days is a proxy measure of activity in hospitals. Separations is another measure of activity in hospitals. A separations is really just an admission. A patient might be in there for one day or five days, but that is considered one separation. From 2005–06 to 2012–13 you can see that our efficiency has improved on a square metre basis and on bed-day use.

I will now move on to VAGO. VAGO undertook an energy efficiency audit and made a range of recommendations in relation to energy efficiency across the health sector. The first two recommendations were specifically directed to the Department of Health. The last recommendation — we have grouped them — relates to the Greener Government Building program. The Department of Health accepted the recommendations from the VAGO report. In general the VAGO report, as an overall comment, pretty much said that there had been a lot achieved in health in terms of improving energy efficiency, but that more could possibly be done. It made some recommendations to ensure that we were able to optimise improvements in our energy efficiency.

One of the recommendations was around measurement of energy efficiency and reporting energy against a wider range of measures. That has been instituted. VAGO was critical of using just separations. We have added bed days and square metres to our measures. There was also some criticism, or a recommendation I should say, that we should have guidelines; and we have reporting guidelines which I am happy to table here. We have issued reporting guidelines to health services.

In relation to the development of a portfolio energy data management system, we are in the process of procuring a software solution that will enable us to have data on the energy performance in our individual agencies. That then provides us with the opportunity to benchmark an individual agency's performance with similar sized services.

The next recommendation is focused on getting a more strategic approach to our energy efficiency, and the department has produced some guidelines around that. We have produced guidelines that cover off our roles and responsibilities: so the separation of what is the role and the responsibility of the department, and what is the responsibility of individual agencies. We were also encouraged to, or it was recommended, that

there be a more strategic approach to implementing the greener government buildings program, and we released guidelines on energy performance contracting, which we can also table.

There are also three recommendations that relate to the greener government buildings program, and we have acted on those recommendations with more extensive interaction with DTF, with industry and with health services. We have progressed under the greener government buildings program with two services — Austin and West Gippsland — with energy performance contracts in place; and the work has commenced on the design of the energy improvements. We have a further 10 health services for which a tender was released to support energy performance contracts being put in place in those services.

In terms of the cost of energy, you can see the graph shows the total energy usage across the top — that is the blue line. You can see the cost going from 2005–06 through to 2012–13, and you can see that there has been an incremental increase in the cost of energy across the health system. The colours on the graph relate to natural gas, LPG, steam and electricity; and what you can see from that graph is that there was a significant increase in cost in 2012–13.

We had undertaken a piece of work by SKM, Sinclair Knight — —

**The CHAIR** — Merz.

**Ms DIVER** — Thank you: I only know them as SKM; so SKM had undertaken some modelling for us. That modelling indicated that there was expected to be an approximately \$13 million impact on the cost of energy for health services. We were then in a position to collect the information from health services' invoices and determine what the cost actually has been. It turned out to be very close to what was forecast, so it is \$13.5 million. That is not a forecast number; it is actually off the bills. There is an example of Bendigo's bill, and you can see there that the carbon charge is actually itemised. We have had an audit of the invoices from health services to determine what the impact is. A small amount of that \$13 million — about 14 per cent — was forecast based on historical data, but the majority of it was based on actual invoices. I can table the impact on each of the individual services — that is, the results of the audit.

That was the cost. The other terms of reference relate to the benefits of repealing the carbon tax, so for us there is an assumption that the costs that are currently incurred as a result of the carbon tax would be removed. We expect a reduction in energy costs of around \$13 million assuming that those savings are directly passed through. Whilst we are not sure of the details of the direct action programs that have been proposed by the commonwealth government, obviously we will be very interested to see if there is an opportunity to access funding through those programs to support health services in improving their energy efficiency.

**The CHAIR** — Thank you very much indeed. Could we have a copy of those slides?

**Ms PRICE** — Yes, they have been provided.

**The CHAIR** — Thank you very much indeed. Could you give me some indication of what you would get in the hospital system for \$13 million? How many beds would you get?

**Ms DIVER** — Probably a good way to describe it would be an elective surgery case, which we usually say is about \$5000, so \$5000 would buy you one elective surgery patient. That means that \$13 million is — if I just do my maths very quickly: \$10 million divided by 5000 is 2000. If someone can do the maths for me — we will do the maths, but it is 13 million divided by 5000 per case.

**The CHAIR** — Thank you very much indeed. That just gives us a relative cost.

**Ms DIVER** — Yes, just to give you a sense.

**Ms PULFORD** — Thank you, and thank you for the breakdown. That probably saved us a whole lot of questions that we were ready to ask you. Thank you very much for the presentation. The national health partnership agreement between the commonwealth and Victorian government was negotiated with projected growth in expenditure in the health system. Is that more or less than \$13 million?

**Ms DIVER** — I think you are probably referring to the national health reform agreement, and you are referring to the indexation that is provided by the commonwealth to the state. Previously there was an SPP — specific purpose payment — that the commonwealth government provided as their contribution to the cost of delivering public hospital services. The national health reform agreement has now replaced those arrangements under the specific purpose payment, and we now have the Independent Hospital Pricing Authority that provides a determination of what the indexation arrangements are for hospitals. A final determination has not been made for 2014–15, and, from memory, the determination for this financial year was around 4 per cent. It gets a little bit complicated because we have gone from a block funding model through the specific purpose payment to an activity-based funding model, and that activity-based funding model will have an impact from 2014–15.

It is a very complex environment because we are moving from one funding system to another funding system. The key issue would generally be health price, so the ABS would declare the price increases in health. The most recent ABS indicator for health price increases is 4.1 per cent. That is what the ABS has declared. The commonwealth government contribution is less than that, and I will have to get back to you with the exact detail of what we were provided from the commonwealth. But the \$13 million increase is greater than the indexation that we received from the commonwealth government.

**Ms PULFORD** — Does the new commonwealth funding agreement — pardon my clunky terminology; the one that applied, say, for 2013 — account for other growth in costs to the health service, such as an ageing population and an increasing population?

**Ms DIVER** — The calculation of the specific purpose payment increase in funding relies on a few things. It relies on a population demographic number, it relies on a utilisation factor and it relies on a cost increase factor. Because the specific purpose payment covered both growth in services and the increase in price of services, one of the issues that we have confronting us is that under that arrangement and the new arrangement's price — so the increased cost of delivering the same level of services, just if you use that as an example — the price is based on historic costs so it uses a five-year rolling average of increased price. When there is a new cost into the system — for example, the carbon tax cost, that \$13 million — that is not accounted for in the indexation arrangements that are provided from the commonwealth.

**Ms PULFORD** — Chair, if you will just bear with me as I follow up this point.

**The CHAIR** — Yes, a final question because we are going to run out of time.

**Ms PULFORD** — Was the Victorian government seeking compensation or some additional contribution in the negotiations around that funding agreement to account for the anticipated carbon tax?

**Ms DIVER** — Correct. The minister wrote to the federal health minister at the time and also the federal climate change minister at the time. His correspondence to the federal minister for health was to seek compensation for this in terms of extra price in the indexation arrangements, and his correspondence to the federal climate change minister was in relation to allowing public health services to access some of the programs to support industry to reduce their carbon intensity, because health was excluded from those arrangements. I am happy to table those letters, if that helps. We just have not got copies.

**The CHAIR** — That would be very helpful, thank you.

**Mr DRUM** — It is quite amazing that you have been able to maintain the level of energy use in the health system over eight or so years, effectively with no discernible increase. How have you been able to do that?

**Ms PRICE** — Energy usage has gone up because I think it is fair to say that our activity has gone up. What we have tried to do is improve the efficiency of our services, so that is why the unit measures have actually fallen. The usage per floor area that was shown before and the usage per separations have decreased so we have been driving efficiency. The absolute usage has in fact increased marginally over time or kept relatively level.

**Ms DIVER** — It also partly relates to the improved efficiency that we have in delivering hospital services so that we are able to treat more patients by reducing the length of stay, increasing same-day care and the changes in model of care where we have driven significant improvements in the actual service delivery model, so it has allowed more patients to be treated within the same square metres, if that makes sense. That has also had an impact. There are a couple of things operating. There is the efficiency of the service delivery model and the use of the asset, and there is the efficiency of the energy performance of the asset, and the investments we made probably in the early years in some relatively low-hanging fruit or some of the relatively straightforward energy efficiency initiatives have shown to be effective.

**Mr DRUM** — In the slides you showed earlier we could see that LPG is a smaller but significant part of energy use in the system. Is there any way that we can reasonably and accurately cost the carbon tax on other types of energy other than electricity? With electricity it is quite simple. We just go to the bill, we tally the bills up and we come out with \$13.5 million. But in relation to LPG and some of those other forms of energy that are still critical — every hospital has a diesel back-up generator, for example — what is the cost of the carbon tax on diesel, what is the cost of the carbon tax on LPG and all the other subsidiary types of energy uses that are important?

**Ms DIVER** — Sure. I am not in a position to answer that right now.

**Ms PRICE** — We will take that question on notice. But I can say that to the extent that they are documented on bills, we definitely could identify it. It is the amount of work that would be required to get into that.

**Mr DRUM** — I am just looking for an estimation.

**Ms PRICE** — Electricity is much easier for us because a large amount of electricity is actually purchased through a single buying group so we are able to tap into that and get it from the retailers. Getting into the other sources of fuels means that we would have to go in and do a fair amount of work, so I do not have the relativity of that.

**Mr SCHEFFER** — Chair, can I seek clarification on Mr Drum's question? Are you saying that the carbon charge is only on the electricity charge?

**Ms DIVER** — What we have shown you is that it is identified on the electricity bill; it is not identified, that I am aware of, on the other invoices to health services.

**Mr SCHEFFER** — From what Mr Drum was saying, it only refers to electricity.

**Mr BARBER** — There is no carbon tax on diesel, Mr Drum.

**Mr DRUM** — But there is a cost associated with it, Mr Barber.

**Mr BARBER** — There is no carbon tax on diesel.

**The CHAIR** — Ms Price has offered to give us some clarification in writing on just this question. She will give us a breakdown of those figures on notice.

**Ms PRICE** — Yes.

**The CHAIR** — Mr Drum, are you happy about that information?

**Mr DRUM** — That is fine, absolutely.

**Mr BARBER** — It was an excellent presentation. You answered a lot of questions I was going to ask. I have a couple more arising out of your presentation though.

**Ms DIVER** — Sure.

**Mr BARBER** — That chart tells us that despite more or less static levels of energy consumption, no carbon tax and you working as a big health buying group for electricity and gas, your power bills went up 25 per cent in the five or so years; is that correct?

**Ms DIVER** — Assuming you have done the maths right, yes. That sounds right.

**Mr BARBER** — The Auditor-General said 25 per cent, and that looks like 25 per cent to me.

**Ms DIVER** — It sounds right to me.

**Mr BARBER** — Your bills have been going up a lot over those five years. The Auditor-General in the report that you referred to made the following conclusion:

The Department of Health's ... approach to statewide planning for energy efficiency is inadequate. It does not have a documented policy or plan and lacks a strategic focus and a coordinated approach. It also does not align with health services' local planning.

While there have been improvements in energy efficiency across the health system over the past seven years, the lack of an adequate planning approach has potentially limited the gains that could have been made.

He then goes on to note that in June 2012, when he started this audit and on the eve of the imminent financial holocaust of the carbon tax that we had all known about for years —

**The CHAIR** — We can do without the emotions, Mr Barber.

**Mr BARBER** — including since 2007 when the Howard government went to an election promising to —

**The CHAIR** — We can do without the emotions; just stick to the question, Mr Barber.

**Mr BARBER** — you had just then, according to the Auditor-General, developed an energy framework. When I looked at your chart and you did those measures of energy use per bed day and energy use per metre squared, what it showed in the year since the Auditor-General made his report is that your energy efficiency had got worse, not better in that last year. Can you account for that?

**Ms DIVER** — I will just bring the slide up. I think what you are referring to here is that we have continued with the improvement in the energy efficiency and separations. The energy efficiency in the square metres has flattened and the energy efficiency in 2012–13, according to bed days, has risen slightly. There are two things at play. One is the use of bed days and one is the energy consumption. I cannot directly explain the fact that that has flattened or that bed days have increased, but the other two measures are still heading in the right direction.

I guess one of the issues in our assessment of the environment is that we made significant gains in energy efficiency in the early years, as we talked about with other initiatives. That has made a significant impact on our energy efficiency. Then we have the intention to make more investment through the energy performance contracts that we have in place with Austin Health and West Gippsland Healthcare Group at the moment.

**Mr RAMSAY** — I have a quick question, and thank you very much for your presentation. I was interested in the methodology. The only query I have is that we have only one written submission from the Colac Otway shire indicating that there is negligible cost of the carbon tax to the health services in its particular shire, and yet I look at your chart and I see that Colac Area Health has a carbon cost of \$60 019, in Lorne it is \$7444 and in

Timboon it is \$6823, so it is 13 per cent, 10 per cent and 13 percent. Either Mr Small, as chief executive officer of the Colac Otway shire, is not aware of the significant cost of the carbon tax within his municipality or your figures are not accurately reflecting his submission.

**The CHAIR** — I think she is slightly at a disadvantage in not knowing what their submission is. Would you care to answer?

**Ms DIVER** — Sure. We can validate it. We have done an audit. We have collected the invoices of those individual services. They are part of the audit, we have collected the invoices and we have identified the carbon price on the invoices for those services.

**Mr RAMSAY** — I take it then that this written submission is in fact inaccurate?

**Ms DIVER** — I have not seen the submission, and I cannot comment on the shire.

**The CHAIR** — We have only just passed the submission. It is not a public document as yet, so the reality is — —

**Mr RAMSAY** — Yes, but we want to put factual information on the website.

**The CHAIR** — We can write to Mr Small. We can have a discussion about that later. This is neither the time nor the place to do that. Would you care to say anything else?

**Ms DIVER** — The only clarification that I can make is that some of the smaller health services buy energy directly off the retail market and it would be quite difficult for us to collect the invoices from them. I am saying that the \$13.5 million across the sector has been derived mostly from actual bills; 14 per cent of that \$13.5 million has been modelled as the impact based on the impact on the other services. I would need to check if Colac, Timboon and those services in that shire were from actual invoices or whether we had modelled the impact.

**Mr BARBER** — Can I just clarify that; it is very important. So some of the numbers on the spread sheet you have provided us with are actual and some are models; is that what I am hearing?

**Ms DIVER** — Correct — \$1.9 million of the \$13.5 million is modelled.

**Mr BARBER** — Chair, could we ask that another spread sheet be produced with a little ‘M’ next to the ones that are modelled?

**Ms DIVER** — Sure.

**Mr FINN** — So it could be more than \$13.5 million?

**Ms DIVER** — Yes, I guess that is true.

**The CHAIR** — Could I ask that for clarification you take that on notice? Is it a possibility that we could have that detail?

**Ms DIVER** — Sure.

**The CHAIR** — Thank you very much indeed.

**Mr MELHEM** — Just on that, when you get the bill from the electricity companies does it actually state, ‘The carbon tax is X’, or is it something that you worked out, the difference between kilojoule and — —

**Ms DIVER** — Here it is here. That is an example of an invoice from Bendigo Health Care Group, and circled there is ‘Carbon charge’.

**Mr MELHEM** — Yes, but is that from the electricity company or from the hospital?

**Ms DIVER** — That is the electricity company sending a bill to Bendigo Health.

**Mr MELHEM** — So that is exactly it, because I do not get that on my bill, so how do you get it and I do not get it?

**Ms DIVER** — My understanding is that for domestic and commercial there is a different arrangement. So domestically you do not see it on your bill, but for commercial hospitals, that is a live bill from the energy retailer to Bendigo Health. I think that is right.

**Mr MELHEM** — I am not doubting you, just clarifying.

**Ms DIVER** — That is all right. Just to clarify.

**Mr SCHEFFER** — I have a question in principle. You have described that some of your energy comes from fossil fuels and some of it could be from solar sources and some of it is CoGen?

**Ms DIVER** — Yes.

**Mr SCHEFFER** — And you are drawing a general argument that your efficiency is improving, notwithstanding the questions that Mr Barber asked. As you improve your efficiency and lower your reliance on power inputs, do you expect that carbon charge to decline?

**Ms DIVER** — Our expectation is that the carbon charge will no longer be in existence.

**Mr SCHEFFER** — Yes, I understand that, in the new world, but we are doing a rear vision in a lot of ways. We are looking at the carbon pricing system as it existed. This quantum that SKM put together of \$13 million is based on that; it is not based on a future direct action world.

**Ms DIVER** — Yes.

**Mr SCHEFFER** — In that world, where we have this quantum that you are paying, the whole purpose was to reduce the cost as you became more efficient. I am asking you to comment on that.

**Ms DIVER** — Sure. Our aim is to improve the energy efficiency so we have less energy required and therefore the carbon tax being paid will be less.

**Mr SCHEFFER** — So therefore partly it is in your hands to reduce your carbon charge?

**Ms DIVER** — The second part is that it is the mix of energy sources that we use and the type of energy sources in terms of their carbon intensity that would have an impact. So if you go from a high carbon energy intense source to a lower carbon energy intense source, then you will reduce your carbon usage and reduce how much you pay.

**Mr SCHEFFER** — So it is within the health system’s power to reduce its electricity and then the charge?

**Ms DIVER** — Yes. It is our aim to improve our energy efficiency and reduce our energy consumption.

**The CHAIR** — I can see that in the graph. Thank you very much indeed. In the information you have given us and the detail between what was actual and what was in a formula, do you have any statistics that are more recent than 13 June? Is there anything for the last half of last year? Do you just do it by fiscal year?

**Ms DIVER** — We do not routinely collect the invoices in terms of the identification of the carbon tax. We did that as a one-off exercise to determine what the impact was on the price or the cost base for health services. We do monitor health service energy use through our data systems, but I do not have more recent data than that.

**The CHAIR** — Thank you. It says here, 'Period 1 July 2012 to 30 June 2013', so it is obviously done by fiscal year.

**Ms DIVER** — Yes, that is correct.

**The CHAIR** — Thank you both very much indeed for a very comprehensive presentation and for the courtesy of giving us additional information. I thank you both very much indeed for coming tonight.

**Witnesses withdrew.**

# CORRECTED VERSION

## STANDING COMMITTEE ON ECONOMY AND INFRASTRUCTURE

### LEGISLATION COMMITTEE

#### **Inquiry into the impact of the carbon tax on health services**

Melbourne — 19 February 2014

#### Members

Mr G. Barber

Mrs A. Coote

Mr D. Drum

Mr B. Finn

Mr J. Lenders

Mr C. Melhem

Ms J. Pulford

Mr S. Ramsay

#### Substituted members

Mr J. Scheffer for Mr J. Lenders

#### Participating members

Ms G. Crozier

Ms C. Hartland

Mr S. Leane

Mr C. Ondarchie

Mr J. Scheffer

Chair: Mrs A. Coote

Deputy Chair: Ms J. Pulford

#### Staff

Secretary: Mr K. Delaney

#### Witnesses

Mr D. Martine, secretary,

Ms M. Skilbeck, deputy secretary, budget and finance, and

Mr M. Johnstone, director, economic policy group, Department of Treasury and Finance.

**The CHAIR** — Ms Skilbeck, Mr Martine and Mr Johnstone, welcome this evening, and thank you for coming to meet with our committee during what must be after hours for you. I have some housekeeping to take care of; I have to read an official document to start this evening.

I declare open the Legislative Council Economy and Infrastructure Legislation Committee public hearing. This hearing is in relation to the inquiry into the impact of the carbon tax on health services. All evidence taken at this hearing is protected by parliamentary privilege as provided by the Constitution Act 1975 and further subject to the provisions of the Legislative Council standing orders, therefore you are protected against any action for what you say here today, but if you go outside and repeat the same things, those comments may not be protected by this privilege. All evidence is being recorded, and you will be provided with proof versions of the transcript within the next couple of days. We have allowed 30 minutes for this session, and to ensure that there is sufficient time for questions, the committee asks that any opening comments be kept to about 5 to 10 minutes. I ask you to begin by introducing yourselves.

**Mr MARTINE** — I might commence. My name is David Martine, secretary of the Department of Treasury and Finance. I should point out that I have been in the job for two and a half weeks now.

**The CHAIR** — So you have all the answers.

**Mr MARTINE** — Absolutely. I have with me Melissa Skilbeck, who is the deputy secretary, budget and finance, and Mark Johnstone, who is the director of our economic policy group.

**The CHAIR** — Welcome.

**Mr MARTINE** — Thank you. Thanks for the opportunity to come along today, particularly as the committee is commencing its inquiry. We do not have a presentation to give or an opening statement. We are very happy to answer as many questions as you wish to ask today, and certainly if we cannot answer them tonight, we will endeavour to get the relevant information back to you as quickly as possible.

**The CHAIR** — Thank you. I assume you are all very familiar with our terms of reference, and I trust that you found the submission of the Department of Health interesting.

**Mr MARTINE** — Yes, I will have to get a copy of the slides.

**The CHAIR** — I will start by asking our Deputy Chair if she has some questions.

**Ms PULFORD** — Thanks for joining us this evening. I would like to further explore the health partnership funding agreement between the commonwealth and Victoria and ask whether or not the impact of the carbon price was a consideration in the negotiations.

**Mr MARTINE** — I might need to check with — —

**Ms SKILBECK** — I am afraid none of us here were involved in the negotiations, so we might need to take that on notice and ask those who were.

**Mr MARTINE** — I should not guess, so let me endeavour to find out from our commonwealth-state area within the department and get back to you quickly.

**The CHAIR** — Thank you.

**Mr MARTINE** — I will get you the proper answer on that.

**Ms PULFORD** — Further to that, it would be great if you could provide us with some advice on whether or not the national health partnership agreement was designed to guarantee the anticipated growth in costs and

increased costs for a variety of factors. One would assume that in negotiating agreements like this, people take into account things like population growth — —

**Mr MARTINE** — I know there are certainly growth factors et cetera.

**Ms PULFORD** — and other costs, including the carbon tax.

**Mr MARTINE** — We will certainly endeavour to get that for you. The agreements are there. We can extract that information straight out of the agreements.

**Mr FINN** — What percentage of the overall cost to the state of the carbon tax is dedicated to health?

**Mr MARTINE** — I am not quite sure whether centrally we have ever done that analysis. We are certainly aware of the figures that were identified in the PowerPoint slides of around \$13 million or \$13.5 million. I understand that last year the health minister released numbers in that order of magnitude. I can take this on notice, but I am not sure whether broader analysis has gone through and identified something similar for all of the other areas of government. One can easily do the maths of \$13.5 million divided by that number, but I would need to take on notice whether — —

**Mr FINN** — So at this point you have no overall figure?

**Mr MARTINE** — I am not aware of any overall number that has gone through a similar analysis of looking at, for example, electricity bills across different areas of government and trying to add it up. I am not saying that it does not exist; I will just have to check. Once again, even if it is there, I am not quite sure whether or not we would hold that centrally in the department, but I can certainly check on that.

**Mr BARBER** — I have a few quick questions with very quick preambles.

**The CHAIR** — You are learning fast. It must be the hour.

**Mr BARBER** — We have just heard testimony from the Department of Health that they are assuming there will be no carbon tax in the next financial year, and they are assuming that the \$13 million they originally projected will in fact be wiped off. Is that assumption or are assumptions like it being used by Treasury as it goes about framing this financial year's budget?

**The CHAIR** — We certainly take into account announced government policies, so certainly at the time of the introduction of the carbon tax — I understand the economic forecasts were obviously adjusted at the time. They were outlined in one of the earlier budget papers from a couple of years ago. We would be making that assumption. The issue for the Department of Health, for example, is that there are set indexation arrangements that are not actually affected by CPI or the carbon tax, so they would just be maintained and continued. They would not actually be affected by the government's — —

**Mr BARBER** — There are two assumptions here — one is the assumption that there will be no carbon tax, possibly from the beginning of the financial year and possibly not, and the other assumption is that the power companies will be willing to give back those estimated amounts. So you are working on those assumptions?

**Mr MARTINE** — In terms of the funding to the department — and I will let Ms Skillbeck correct me if I am wrong here — the funding to health is actually determined by a different formula, which is a set percentage increase. So whether electricity companies, for example, fully pass on the reduction does not in itself affect the amount of money that is passed to health. It certainly affects their ability to manage and how much money they have got to spend as they are trying to manage their costs, and that is certainly a very important issue. But in terms of what the budget provides, it is not directly affected by that.

**Mr BARBER** — A second question: specifically, what grants, funds — perhaps stuff of a capital nature — have been made available or will be made available to health services that would like to put up a business case to invest in their own energy efficiency?

**Mr MARTINE** — Okay. I think I might defer to my colleague in a minute, but there is certainly — and I think it was mentioned in the health presentation — the Greener Government Buildings program, and I think there were a couple of examples of projects identified there.

**Mr BARBER** — I guess what I am saying is: what dollar amount has been invested in the last year or so in helping the health system become more energy efficient, bearing in mind some of them are owned by the state government, some of them are funded out there and the rest of it?

**Mr MARTINE** — I am not quite sure whether we would have — —

**Mr JOHNSTONE** — I do not think we have. We do not have specific numbers in terms of amounts invested. I guess part of the issue is the kinds of arrangements we have in place for the purchase of electricity — they were referred to by one of the previous speakers — where DTF, on behalf of government agencies, has a state purchasing contract for energy. From time to time that gets renegotiated. So as part of that process we would clearly be seeking to improve the deal, if you like, that we get from the preferred energy provider, which might involve a mix of different types of energy sources, including from green-powered renewables et cetera, which might have an impact on the overall cost.

**Mr BARBER** — We saw that despite your best efforts the power companies squeezed an extra 25 per cent out of us, despite there not being any carbon tax at that point. I just wanted to know: if health services came to Treasury and said, ‘We’ve got this great business case. We can reduce our energy use. The feds don’t want to hear about it’, is there a pool of money, or have there been actual instances of that money, being handed over from Treasury to health services to let them fund such a business case — which would probably be of a grant or capital nature, I would imagine?

**Ms SKILBECK** — I cannot think of a specific capital program in the short time I have been in this role, but we should go back and check that and take that on notice. There are a couple of means by which it might occur. As you have noted, funding for a business case for a project involves a significant amount of capital. It might come up to the central fund, but it would need to be a significant project to do so, or it might be a project within the Greener Government Buildings program, which another part of our department oversees, in which case it gets the collective wisdom of the accumulated experience of that program. But if it is, as the Department of Health covered, part of the ongoing business of running the health services, overwhelmingly that is within the Department of Health’s portfolio and their oversight of those businesses. So we would not necessarily see that degree of specificity.

**Mr BARBER** — If you can find any examples, that would be awesome.

**Ms SKILBECK** — Okay.

**Mr MARTINE** — We will endeavour to get back to you as soon as we can.

**Mr RAMSAY** — I am wondering if you could make comment on whether the indexation of the federal health funding would help offset some of the costs of the carbon tax to health services, and also what part the Greener Government Buildings program would have in relation to reducing emissions, or reducing the energy requirements and emissions, presumably, even though I understand the Auditor-General says there is more scope for that program to be more efficient.

**Mr MARTINE** — My apologies; I missed the very start, the first bit, of your question.

**Mr RAMSAY** — Indexation and the federal government funding, I guess trying to offset the cost of the carbon tax.

**Mr MARTINE** — I think the first bit of the question probably comes back to that first question about which we will endeavour to get back to the committee as soon as we can, just on the indexation arrangements of the whole health agreement.

**Mr RAMSAY** — I did not quite hear Ms Pulford.

**Mr MARTINE** — I suspect the answer to your question is kind of embedded in our answer to that.

**Ms SKILBECK** — I would reiterate Ms Diver's answer in the previous testimony, that at the moment the national health reform agreement arrangements are new, and so as at this point we actually do not know the outcome of the commonwealth contribution to growth, quantity or price. We know that we have an agreement in place, but the mechanisms, including the administrator that Ms Diver referred to, have yet to actually really undertake their job. So it is quite an uncertain period.

**Mr MARTINE** — I might get Mr Johnstone to talk a little bit about the greener buildings program.

**Mr JOHNSTONE** — So the greener buildings program, clearly the Department of Health has already accessed that program in order to drive forward a range of potential benefits in terms of energy efficiency at particular locations. Two of those projects seem to be up and running. There are another 10 or so, I understand, based on the evidence provided earlier, that are in train, in progress. So there is an existing arrangement within government whereby good ideas around improving the energy efficiency of government-run buildings can be accessed to facilitate those improvements. And clearly the evidence from the Department of Health indicated that over time their energy usage is starting to be impacted by that.

**Mr BARBER** — No, that is not quite what it showed. It showed that they were using patients or bed days as their denominator, and because people are going through hospitals and coming out the other end quicker and sicker these days, and despite no real change in their energy use, is it the right measure of efficiency?

**The CHAIR** — Do you wish to comment on that?

**Mr MARTINE** — I am happy not to comment, Madam Chair.

**Mr FINN** — If you do not, I will.

**The CHAIR** — I think we can save that for a discussion within the committee.

**Mr MELHEM** — The current funding, on my understanding, between federal and state for hospital funding is about 50–50?

**Mr MARTINE** — It is changing, I think, in 2017.

**Mr MELHEM** — What is the current one?

**Ms SKILBECK** — The proposal under the new agreement is that the commonwealth would fund a proportion of the growth each year. So it is not the total amount, it is a proportion of the growth year on year, and it is at 45 per cent of the growth and then it extends to 50, I think from about 2017.

**Mr MELHEM** — Currently what is it — 40 or 45 per cent?

**Mr MARTINE** — It is about 45 of growth, commonwealth, going to I think about 50 per cent from about 2017.

**Ms SKILBECK** — But it is the growth, not the total.

**Mr MELHEM** — So the tax bill of \$13 million, you think the commonwealth will get back about 45 per cent of that?

**Mr FINN** — It is 13.5 at least.

**Mr MELHEM** — In carbon tax?

**Mr MARTINE** — In total, if you add all those numbers up, based on the presentation, the total carbon tax going back to the commonwealth is roughly 13 and a half, yes.

**Mr MELHEM** — Yes, so it will get some money back.

**Mr SCHEFFER** — The *Victorian Climate Change Adaptation Plan* states that DTF has already spent over the past 10 years \$4 billion on climate change-related events, on the recovery, and then there is a list here of the issues: bushfires, heatwaves, floods and so forth. We are seeing at the moment the bushfire that caused the fire in the Hazelwood mine, which is causing huge health impacts in Morwell, with a lack of equipment, lack of servicing and lack of process. How is DTF working with the Department of Health in making sure that there are sufficient resources available to fulfil the obligation of DTF to provide those kinds of resources?

**Mr MARTINE** — Are you talking about immediate?

**Ms SKILBECK** — This particular fire?

**Mr SCHEFFER** — Yes. On the one hand there is a set of risks that the government has agreed exists. There is expenditure — —

**The CHAIR** — I am not sure that this fits within our parameters.

**Mr SCHEFFER** — What I am asking is: how are you working together on that? What is your process?

**Mr JOHNSTONE** — Sorry, I do not know which document you are quoting from.

**Mr SCHEFFER** — I am referring to the *Victorian Climate Change Adaptation Plan*, which was given to us previously.

**Mr MELHEM** — By another department.

**Mr SCHEFFER** — It is the government's document. If you look at the — —

**The CHAIR** — This is about service provision rather than actual carbon tax. I think this is stretching it. How does your question correlate with our terms of reference?

**Mr MARTINE** — I am not quite sure of the date of this document.

**Mr SCHEFFER** — It is current.

**Mr MARTINE** — The way I read the quote here is:

The department ... has estimated that the Victorian government has spent over \$4 billion over the past 10 years on response and recovery to climate-related events such as bushfire, flood and drought.

I would need to take it on notice and get a little bit more information. It is, in a sense, a summation. Certainly after an event such as a bushfire et cetera, as part of reviews et cetera, there is certainly a consideration of, 'How much did that event particularly cost us?'. Because there are obviously discussions,

particularly with some of the emergency services, about their budget funding for the year and whether they can — —

**Mr SCHEFFER** — I am guided by the Chair. It needs to relate to — —

**The CHAIR** — It needs to relate to our terms of reference, if you are coming back to us with some information. I would be grateful for that with specific reference to item 3, particularly, of our terms of reference.

**Mr FINN** — I am resisting the temptation to ask what caused fire, drought and flood before climate change. Apparently it did not happen before that.

**The CHAIR** — We will stick with questions to the witnesses, thank you.

**Mr FINN** — What I would really love to know before we can get any sort of handle on the full impact of the Greener Government Buildings program is the cost differential. What is the cost differential between the Greener Government Buildings program and what would be a normal government buildings program? In other words, how much do you add because it has the word 'greener' in front of it?

**Mr SCHEFFER** — Does that relate to the terms of reference?

**The CHAIR** — Do you have some comparative data that you would be able to research, do you believe?

**Mr MARTINE** — I do not have it with me or in the top of my head at the moment.

**The CHAIR** — No, I am certain you do not have it on the top of your head. Is it something that you could search for us?

**Mr MARTINE** — I am happy to try to have a look at that.

**Mr FINN** — That would be fascinating.

**The CHAIR** — If you could, we would be most appreciative. We have one final question from the Deputy Chair.

**Ms PULFORD** — I have one more question on the numbers. When comparing the 2011–12 financial year with 2012–13 and then that year again with 2013–14, has the commonwealth contribution to Victorian health services, from one year to the next, increased by more than \$13.5 million in each of those year-on-year statistics?

**Mr MARTINE** — I would need to take that on notice and just double-check. Certainly any changes that were agreed as part of the initial agreement would be factored into our numbers. I am just not aware or sure of whether it is more or less than the numbers you have quoted, but we will endeavour to get that back to you as soon as we can.

**Ms PULFORD** — Just in overall dollar figures.

**Mr MARTINE** — We will break it down for those three years.

**Ms PULFORD** — Thank you very much.

**The CHAIR** — I would like to thank all of you for being here with us this evening and for taking on the ability to give us some more information. We will be very pleased to receive it. Thank you very much indeed for your presentation.

**Committee adjourned.**



# CORRECTED VERSION

## STANDING COMMITTEE ON ECONOMY AND INFRASTRUCTURE

### LEGISLATION COMMITTEE

#### **Inquiry into the impact of the carbon tax on health services**

Melbourne — 26 March 2014

#### Members

Mr G. Barber

Mrs A. Coote

Mr D. Drum

Mr B. Finn

Mr J. Lenders

Mr C. Melhem

Ms J. Pulford

Mr S. Ramsay

#### Substituted members

Mr J. Scheffer for Mr J. Lenders

#### Participating members

Ms G. Crozier

Ms C. Hartland

Mr S. Leane

Mr C. Ondarchie

Mr J. Scheffer

Chair: Mrs A. Coote

Deputy Chair: Ms J. Pulford

#### Staff

Secretary: Mr K. Delaney

#### Witnesses

Mr R. Murray-Leach, chief executive officer, and

Mr L. Menzel, manager, sector development, Energy Efficiency Council.

**The CHAIR** — I declare open the Legislative Council Economy and Infrastructure Legislation Committee public hearing in the inquiry into the impact of the carbon tax on health services. I welcome Mr Luke Menzel, manager, sector development, and Mr Rob Murray-Leach, chief executive officer, at the Energy Efficiency Council. Thank you both so much for coming.

All evidence taken at this hearing is protected by parliamentary privilege. Therefore you are protected against any action for what you say here today but if you go outside and repeat the same things, those comments may not be protected by parliamentary privilege. All evidence is being recorded and you will be provided with a proof version of the transcript in the next couple of days.

We have allowed 30 minutes for this session. To allow time for questions, could you keep your opening statements to around 10 minutes and then we shall ask questions, if that will be okay. It is over to you.

**Mr MURRAY-LEACH** — Thank you so much for the opportunity to come and talk to you today. To explain the organisation very quickly, the Energy Efficiency Council is a combination of an industry body and an expert body on energy management. Our members are large global multinationals like Philips, Siemens, Honeywell and Dalkia. We have Australian companies as well — AGL and Origin — and a range of companies that go from very large to very small local employers situated around the country. Our members also include the City of Sydney, the City of Melbourne, the City of Brisbane and a range of academics and experts in energy efficiency.

The purpose of the organisation more than anything else is to build the capability of the country in the energy management space. The reason is that in the last five years energy prices in Australia have risen quite dramatically, in case you have not noticed, and gas prices are about to do the same thing as electricity prices. As a result, energy efficiency, which was a benefit for the economy before but was not taken very seriously, I suppose, in the 80s and 90s, now has become a much more serious issue for a lot of people. It is really a global competitiveness issue more than anything else. If you look around the world, energy prices are going up in pretty much every single country, and what we are seeing is the energy markets in Australia have fairly similar sorts of features to what is happening throughout Europe, the US and most countries, so it is a growing global industry as well, with recent work by the IEA and various banks putting it at trillions of dollars.

Rather than going on with a general discussion, energy efficiency is really about saving money. It is about the efficient use of resources. It is a pretty simple concept in lots of ways. There is a substantial opportunity to save energy in the health sector. The target across the whole sector was estimated to be about a 25 per cent saving in energy. That is what we would call economically viable, at sort of around a 12 per cent internal rate of return, which is the rate of return that government generally is looking for in these sorts of investments. When you take in the fact that you are basically upgrading infrastructure, it is around a sort of 20 to 24 per cent return on investment. Those are the sorts of figures we have been getting from DTF from the projects that they have looked into.

Our members have done all the work in the hospitals, actually looking at what those energy saving opportunities are. Those opportunities are replacing lights with much more efficient ones and upgrading the heating, ventilation and cooling systems. Some of the systems in hospitals are very, very old. Some of the boiler systems were built in the 50s and they are as efficient as you would expect a piece of equipment from the 50s that has not been upgraded since that time to be, so in some cases we have seen hospitals with well over 50 per cent energy saving opportunities.

The reason these opportunities were not accessed by the health sector until recently was fundamentally that it lacked expertise. I did notice the presentation from the Department of Health saying that they had done lots of nice small projects, but to a certain extent nice small projects are a bit of a waste of everyone's time. The way you generally do these things properly — and this is what started happening in 2009 — is that you take a whole-of-hospital approach and you upgrade everything at once. It is the difference between having builders come in and do tiny little tweaks to your house 20 times as opposed to you just doing the whole thing. You look at what is economically viable as a whole upgrade.

There really was a lack of expertise in the health sector, not actually in energy efficiency because you do not need to do it yourself — you need to find experts — but in terms of how you manage those contracts, because they are a little bit unusual. If you do them correctly, you are actually not contracting for work; you are contracting for a guaranteed energy saving. Generally around the world the way they upgrade hospitals or other health facilities is using what is called an 'energy performance contract'.

An expert will come in, look at the hospital — you will not know how much saving there is going to be beforehand — and the expert will say, 'For this one to hit that financial hurdle rate of, say, 12 per cent internal rate of return, we can change these lights, we can change these systems, we can potentially put in a cogeneration system'. There is a range of different opportunities. They are going to vary from hospital to hospital; a new one is going to have much less opportunity, while a really old one is going to have a lot of opportunities. The way you do it is that you basically contract with an expert who comes in and looks at the opportunities and then signs a contract with you to say, 'In this case I will deliver 34 per cent energy savings'. And there is normally a financial figure attached to it.

Things that hospitals lack: one is the lack of expertise on how to go about this; two is they are exceptionally busy; and three is their lack of access to capital. It is a really key point that to do energy efficiency upgrades — unsurprisingly — you actually need access to capital; you actually need to invest in it. Also, what is quite different and why grants are not a very good way for government departments is that if you do a grant, it is money going out and then the department has that money. Instead of giving that money out to a department that is then going to save money and that money is then staying there, a much better way to do it — and the way they are doing it around the world — is to set up a loan system. So you give the money to the hospital, it invests it in the upgrade, the energy savings pay back the loan over time, and then you also add an efficiency dividend over the top. What we are seeing around the world as the best way to manage these things is actually to have it managed out of the Department of Treasury and Finance.

In 2008–09 the Department of Treasury and Finance put up a proposal to set up a program called — I hate the name of it — the Greener Government Buildings program. The name has a nice bit of spin on it, but it is fundamentally an energy saving program. The reason I like it is that it is so brutally financial, and that is actually really what we are about with energy efficiency. It stands on its own two feet financially. The way that it works as a program, as we outlined in our submission, is the government said it wanted to achieve a minimum of 12 per cent Internal Rate of Return, or IRR, on all its projects. As I said, when you take into account savings and maintenance and the fact that you are going to really need to upgrade some of these facilities before they completely conk out, it is more like about 20 to 24 per cent.

Then the Department of Treasury and Finance actually facilitated these quite complex contracts. The point is they had an expertise in there, rather than each health unit having to get its head around how

you do this kind of contract where you guarantee energy savings. The contracts themselves are quite complex; once you have done them it is very simple, because you are transferring the risk onto the energy efficiency provider. DTF facilitated those, and then they provided loans. What was set up is actually very simple under section 57 of the Financial Management Act. There is an existing provision, which is the reason it is not done under the budget. Under section 57 of the Financial Management Act the Treasury can provide loans to any agency for works that are actually going to pay back. Because energy efficiency clearly fits into this category, that is how it is done.

We looked around the world in 2008–09 at how energy efficiency programs work well. To be honest, we actually developed our recommendations and we came out with a paper on what were the best practice ones with all the energy efficiency experts in Australia. Confidentially, Victoria had been working in turn on this — a couple of people within DTF. They came up with a proposal, and it looked pretty much identical. Instead of saying targets that say ‘You must save 25 per cent’ or ‘You must do this’, it laid out really clear financial goals. There was a really good facilitation unit based at Treasury and a loans facility.

The outcome for health, if it fully implemented this program, was going to be a minimum of \$21 million a year savings, and that is based on less than 25 per cent, so we are being conservative on the \$70 million that we had in 2011–12, but of course the bill is substantially higher now. That is (a) because of the carbon tax and (b) because of a whole range of other factors. Really the absolute minimum, excluding the carbon tax, is a \$21 million a year saving. In reality we expect by 2020 it will be much more in the region of \$30 million-plus, particularly because what we have seen is such massive transformations happening in the energy sector around the world. One of the corollaries of that is increased energy prices.

We are very lucky we are not operating in a US state. They have insane rules in the US that the states are not allowed to borrow money based on that sort of ‘household budget’ idea, so they actually had to set up separate legislation in the US in each state to allow them to borrow money to do these things, because they made such good financial sense. What we found in Victoria when the original DTF case went up, which they made public, I think it was a \$20 million or \$24 million — I will get back to you on the exact figure — opportunity cost for every year of delay in this program, because you are missing out on all these energy savings.

What they do it for in the US is it is a really useful way for cash-strapped state governments to upgrade their local facilities. You have hospitals which often have massively outdated equipment upgraded, which means much more comfort for patients, it means much lower energy bills, and it means you have replaced some assets that needed to be replaced in the very near future anyway, and you have paid for those assets using the energy savings. It is pretty much a no-brainer in many ways.

Across the whole government the estimates from the department were originally that it was going to save \$1 billion over a 25-year period. It is a 25-year period because you make those investments and they pay them back over time, and then they generate revenue. It has now been upgraded to \$2 billion. The reason is that every single one of these projects they have done so far has exceeded its targets quite substantially. We know it is working, and it is working well.

I am going to pass over to my colleague to talk about some of the side impacts. The fundamental reason for governments doing this is that it saves government money and upgrades their facilities.

**The CHAIR** — Thank you very much indeed; that was extremely interesting.

**Mr MURRAY-LEACH** — I will come back to a couple more points after Luke.

**Mr MENZEL** — I think that the overarching thrust of our submission is that GGB is a financially prudent program. It is also important to note that there is a range of co-benefits that accrue to the Victorian economy at no extra cost. The GGB program encourages multinational companies to establish operations in Victoria and expand the operations they already have, which means the creation of local jobs. It also helps Australian companies move into the energy efficiency space, upskilling current employees and bringing new employees into the sector. This increase in capacity is made possible because of the bipartisan commitment to invest in energy efficiency over a period of time.

It is important to note that the benefits associated with this increase in capacity and jobs in the sector mean that services that were previously unavailable or underprovided to the private sector start to be provided. So the private sector has access to energy efficiency services that they did not have access to before. They can improve the productivity and efficiency of their operations, and over the longer term that improves the resilience of the overall Victorian economy in the face of rising energy prices.

I think it is reasonable to say that the jobs investment by both local and multinational companies specifically in Victoria on the basis of the GGB program has been very large and that hundreds of Victorian jobs have been created. Significant expertise in the delivery of complex energy efficiency projects has been developed. We are talking about highly skilled positions. Engineers and construction experts have moved into this space on the basis that there was a forward pipeline of work coming into the system. The loss of these jobs would result in a massive downgrade of expertise and capacity in the energy efficiency industry in Victoria.

**Mr MURRAY-LEACH** — Which brings me to the unfortunate news that I got yesterday from the Assistant Treasurer's office that the Victorian government has decided to move from a loans system for this program to putting it into the normal budget bid process. That sounds like a very minor change, but to anyone who understands the energy efficiency sector this is unfortunately going to bring this program to a screeching halt.

The inquiry's term of reference (3)(a) asks about what the impact on public health services of the carbon tax introduced by the former commonwealth government is. That is going to vary with energy use. The GGB program would have reduced the department's carbon bill by 30 per cent by 2020, as a minimum. We know that the submissions from the Australian Medical Association, Northern Health, Western Health and a number of others noted that the priority should be on reducing energy spend in order to reduce exposure to any current or future Australian or global carbon prices.

If energy use remained steady, we would anticipate the impact of the carbon tax would decline from \$13 million per annum in 2014–15 to well under \$8 million in 2015, when the system would have moved to a floating price. With the GGB in operation along with the carbon price, the impact of the carbon tax bill on the Department of Health by 2020 would probably be around \$5 million or maybe slightly more per annum.

Term of reference (3)(b) asks about the benefits to the Victorian public and private health services and their patients to the current commonwealth government's promised abolition of the carbon tax. That would depend on what is going on, but around \$13 million in 2014–15 is the fairly well accepted figure. That would drop down to around \$8 million when it moves to a floating price. The GGB would further reduce that by about 30 per cent.

There are other factors going on in energy prices at the moment, so it is very difficult to see what is going to happen in terms of pass-through, and it is very hard to understand what is going to happen with a range of other factors. The increase in gas prices is going to have a very substantial impact because we see them moving from around \$3.50 to a long-term average of around \$9, but there are some short-term spikes in the market. We are seeing \$11 at the moment. So gas price is a very serious issue for Australian manufacturing in general and one we would like to talk about to the people around this table at another time.

If the removal of the carbon tax was the rationale for downgrading the GGB program, it means that the impact of the Victorian government's decision to change the loans facility and move it to a grant facility will actually have four times the impact on the health budget than the carbon tax would have by 2020, which is an unfortunate outcome. It will keep health exposed to rising gas price risks and other factors.

We also have a list of hospitals, because even though this decision was apparently made some time ago, tenders were still put out for \$80 million to \$100 million worth of work. My members spent millions of dollars tendering for engineering work. The hospitals that will now miss out include hospitals in the Northern Health area, which include the Northern Hospital at Epping, Broadmeadows Health Service, Bundoora Extended Care Centre, Craigieburn, Panch Northcote, the Monash Health area, Monash Medical Centre Clayton, Casey Hospital, Dandenong Hospital, Kingston Centre, Monash Moorabbin, Latrobe Regional Hospital, Peninsula Health region, Western Health region and Alfred Health. St Vincent's Health and Barwon Health were put out to tender, and there is a huge amount of uncertainty about whether or not they will proceed. There were also six other tranches of work expected to be put out in the future.

The challenge we have is that this decision, as we know from the DTF's own work, is going to cause \$20 million of absolute cost to the government for every year of delay before that loans facilities is brought back in. It will damage both the health sector and the budget. It will cause immense damage to the energy efficiency sector in Australia, particularly in Victoria. Unfortunately our members have already had to lay off staff, and they will have to lay off further staff in the future. We have some members saying they will be laying off around 70 per cent of their Victorian staff, which is a deeply unfortunate situation given that we have just spent the last four years investing in building our capacity because of the bipartisan support for this program.

Our final point would be to urge the Minister for Health to put in a budget bid under the new process to upgrade those hospitals which will now no longer be upgraded across the state. This is a deeply unfortunate situation, one which we were very disappointed to hear about yesterday. I can assure you that our members are very disappointed about the outcome for jobs in this state.

**Ms PULFORD** — I had a number of questions, but I think you have answered many of them on the way through your presentation, so thank you for such a detailed overview. In announcing the change to the efficient government buildings program in Parliament yesterday the minister said that:

EGB will provide government departments and agencies with greater autonomy to identify and choose those upgrades to their buildings that will produce the best efficiency savings, with the capital requirement funded either internally or through a budget capital bid.

What you have told us would suggest that that is really quite a bad development. I invite you to comment on that.

**Mr MURRAY-LEACH** — Yes. It is very good question about why you would want to have it through a loan facility rather than a budget. It is fundamentally because it is an investment that delivers returns that pay off that initial loan. So if you are going into the budget bidding process, you are competing with things like roads, infrastructure and building hospitals. They do not deliver direct returns to the government. They are very good things to do for the state. But you do not really want to be competing with them with something that actually pays back. That is why in the US they actually have specific legislation that allows states to borrow for these projects, because otherwise it is an absolute lost opportunity cost.

The first thing is: that is the rationale. The second thing is: the way it works is that around the world these things work best, because we are often talking quite small projects. You are talking \$1 million here, half a million dollars of investment there. Instead of each one going in on its budget bid, it actually makes sense for it to be a whole-of-government process. In other words what was done before is that DTF basically put in a whole-of-government bid and said, ‘Okay, over the next few years we’re going to invest up to \$30 million a year. We’re only going to invest in projects that deliver more than 12 per cent internal rate of return and we are going to basically structure it to make it as streamlined and simple for agencies to identify projects and put them in’.

I think telling people that they have more flexibility when they have to find it in an extremely cramped health budget where they have to pay for beds is maybe not the way I would phrase it, but I would certainly say we are expecting a substantial downgrade in the number of projects that will go ahead. As I said, we had health projects which we estimate to be around \$80 million to \$100 million tendered and put out. We have no certainty about those going ahead right now.

The other thing — and it is the important reason why you need to have a loans facility — is that the way these projects work is that you engage an expert to come and look at your site. They do not know how much is actually going to be cost-effective on that site. So you do not want to go and say ‘It’s going to be \$3 million invested’ when in fact the sensible cost-effective level is, say, \$900 000. It is much better to go in there, do your assessment and your detailed work, which can cost a lot of money, and then from that you actually work out how much needs to be borrowed.

If you put need to then put it back into budget proposals — and I can say this having been inside government and having seen it happen — it basically gets stalled. Somebody does all the engineering. It is expensive enough for our members to do this anyway, because you do the engineering work up-front and you do not get paid normally for something like 18 months. What has happened now is that you have put a budget bid process in the middle of that.

**Ms PULFORD** — So in your experience do Victorian government departments have the required expertise to put together the kinds of projects that would succeed?

**Mr MURRAY-LEACH** — Under a budget bid process the problem is that people are busy. The whole point of the process before was that it was a very simple, streamlined, facilitated process where DTF set up the structure. The Department of Health, in response to a very scathing Auditor-General’s report a couple of years ago, really upgraded and put an enormous amount of effort, time and money into getting their systems in place to be able to run through this pipeline. The point is that once you have set up your process once, you can then just pile these things through. The transaction costs are actually quite low. If you have to put each one through a separate budget bid process, the transaction costs are going to be absolutely through the roof for these projects. My experience is that this will result in something like more than a 70 per cent reduction in projects going ahead and forfeiture of 70 per cent of energy savings.

**Ms PULFORD** — You talked about \$80 to \$100 million worth of projects tendered. Do you have an estimation of how many jobs are linked to those projects?

**Mr MURRAY-LEACH** — We do not have a precise number of those jobs. The reason for that is that if you think about a large company, they will have a few energy efficiency experts in house and then they will draw from a much broader pool of expertise in engineering. We know that those in-house energy efficiency specialists will be let go. It is hard to know how many of those other ones will be affected, because those companies also work in other fields. We anticipate it to be in the hundreds of jobs. Those are DTF's own figures.

**The CHAIR** — Normally I would ask Mr Finn, but along the same lines, if I may ask the indulgence of the committee, I wish to follow through with what the Assistant Treasurer went on to say in Parliament yesterday, leading on from what Ms Pulford said. With the establishment of the Efficient Government Buildings program as a successor to the GGB he said:

This will remove the existing funding constraints on energy efficiency projects and allow those projects to compete on an equal footing with other capital bids

Would you like to comment on that?

**Mr MURRAY-LEACH** — As mentioned, if you are putting in a project that delivers a return to government almost immediately versus projects which are, long term, very sound, sensible pieces of infrastructure investment, you are looking at two different things. You do not need to provide a grant to a department to do energy efficiency; you just need to provide a loan to pay for that up-front investment, and then it pays itself back to Treasury. It actually frees up more money in Treasury because instead of giving out a grant and then not having that money come back, you give out that money and the money is paid back. Beforehand all this money was committed to electricity bills. By lowering those electricity bills you have actually got more money going back into central revenue that can be allocated to more and various projects. We see it as like saving money by not maintaining your car; sure you might have some short-term financial returns, but it is not a very sensible strategy.

**The CHAIR** — He said:

Importantly the savings that are generated through efficient government buildings will be recouped by the agencies that make the savings.

He then went on to say what I quoted him as saying before regarding removing the existing constraints. They are believing that they are going to recoup that.

**Mr MURRAY-LEACH** — The agencies will, but the DTF will not. Therefore you will not have that funding coming back into the central agencies to be allocated to whatever the high priority is in that period, whether it is roads, schools or hospitals. With all due respect to the Assistant Treasurer, I have to say that I would respectfully disagree quite extensively with his analysis of the situation and about it increasing the flexibility. The way we see it happening is that it effectively grinds projects to a halt, massively increasing the transaction and the effort required to get even simple projects over the line.

Hospitals or a health regions do not normally have the spare cash lying around to do a multimillion-dollar upgrade to their facilities which would then be paid back over time. That is why a loan is the ideal sort of vehicle for delivering this rather than a grant or rather than them trying to find this in their existing resources. From my experience of being within government I can say that I have

seen it try the budget bid process. I have seen what a nightmare it is and how it causes these types of projects to grind to a halt.

There are a lot of things that we in government do sensibly as whole-of-government processes. It is a lot more efficient than every single unit doing it itself in its own way. In the same way it makes a lot more sense for this to be done as a whole-of-government process. While I can respectfully disagree with the Assistant Treasurer's estimates, our understanding is that this is fundamentally around dealing with balance sheet issues. Our own analysis suggests it is not going to assist with those issues, because you have got guaranteed rates of return, it delivers a reduction in outgoings and it increases the surplus and the operating statement. In net debt you have some short-term issues, but because of the way that it increases short-term net debt it decreases long-term debt. It is normally regarded as a positive by rating agencies because you are reducing your long-term exposure.

As I said, with all due respect to the Assistant Treasurer, I have to say we have looked globally. I have talked to the top experts in energy efficiency in governments in the US, Europe and throughout Asia. We developed a best practice guide several years ago. This government came to the same conclusions at the same time, and there was bipartisan support for this program. This came out of the DTF; it was not a political issue. I rest my difference of opinion there.

**Mr SCHEFFER** — Could you just go back? Earlier on I think I got lost in part of your explanation. What we have been asked to look at is whether the carbon tax has harmed hospitals and whether its removal benefits them. Could you talk to us about that particular part of it?

**Mr MURRAY-LEACH** — Sure. Very quickly, the impact of the carbon tax is going to vary with energy use; it is not fixed. The GGB program would reduce departments' carbon bills by, we estimate, a minimum of about 30 per cent by 2020.

**Mr SCHEFFER** — But on that 30 per cent there is still an amount to be paid, is there not?

**Mr MURRAY-LEACH** — There is.

**Mr SCHEFFER** — If you think that the tax at any level is a problem, it would still be a problem even at 70 per cent of the original tax.

**Mr MURRAY-LEACH** — Yes, and what we anticipate is that the impact of the carbon tax next year will be \$13 million. The removal of the carbon tax will save \$13 million in that financial year. When the carbon tax moves to a floating ETS, which is in the legislation, it will drop down substantially to under \$8 million, because the expectation is the carbon price will drop to around \$10 a tonne or slightly over that. If you combine the impact of the GGB with the carbon tax dropping to a floating price, you are talking about an impact of around \$5 million to \$6 million a year. So that is the impact — —

**Mr SCHEFFER** — So with a government that thinks that even a dollar is a dollar too much, then it is still a detriment?

**Mr MURRAY-LEACH** — I cannot comment on the government's view on whether a dollar is too much. I can only talk about costs and benefits, rather than talking about whether it is a positive or negative.

**Mr SCHEFFER** — Okay, thanks.

**Mr MURRAY-LEACH** — In relation to the benefits of removing it, as I said, I cannot talk financially about it, but if the concern is around energy bills, the removal of the GGB program, or the changing of the

GGB program, has roughly four times the impact of the existence of the carbon price in 2020. If your concern is energy bills, the impact of rising gas prices is going to be far more substantial than the carbon price.

**Mr SCHEFFER** — What I do not understand — and I am sure it is me rather than you — is the connection between the preliminary fixed price, which is generally called a tax, and the energy saving and energy efficiency measures you have been explaining to us. Are you saying that when you put them together, it ends up being a benefit for the health system, or are you saying that — —

**Mr MURRAY-LEACH** — What I am saying is that if you are trying to quantify the impact of the carbon tax, next year the carbon tax would have a \$13 million impact, the year after most likely it would be under \$8 million per annum and then once you add in the energy saving efforts, you are really bringing it down to around \$5 million or \$6 million a year. So the removal of the carbon tax would deliver that level of benefit.

**Mr SCHEFFER** — The dollar benefit.

**Mr MURRAY-LEACH** — The dollar outcomes and a dollar reduction on the budget.

**Mr SCHEFFER** — You are saying it is about combining that discussion with the energy efficiency measures you have talked about. Is the meaning of that that it is of benefit to the system or a disbenefit?

**Mr MURRAY-LEACH** — The carbon tax?

**Mr SCHEFFER** — Yes.

**Mr MURRAY-LEACH** — We do not have a view of the appropriateness of the carbon tax in relation to the health department. Our views are really around energy management. From a policy perspective, the council does have the view that either an emissions trading scheme, a carbon tax or some kind of purchasing scheme like the Emissions Reduction Fund providing what we call a shadow price on carbon as the carbon price is the most effective way to deal with the economic externality of carbon emissions on the economy.

**Mr FINN** — I just wanted to clarify, and I know you probably said this about 20 times already, so my apologies for that, but are you saying that under this current carbon tax, the bottom line for the health system will be \$30 million this financial year — that is, the hit to the bottom line? Is that what you are saying?

**Mr MURRAY-LEACH** — What I am saying is that according to the figures released by this government, it is \$13 million per annum in 2014–15. In 2015–16 that would decline to roughly \$8 million per annum, and after that it would decline with improved energy efficiency down to, we assume, around \$5 million or \$6 million per annum.

**Mr FINN** — So we are looking at a \$30 million hit this year?

**Ms PULFORD** — Thirteen.

**Mr MURRAY-LEACH** — Thirteen.

**Mr FINN** — Thirty?

**Mr MURRAY-LEACH** — No.

**The CHAIR** — Three zero or one three?

**Mr MURRAY-LEACH** — The figure given by the Victorian government and the data we have seen released by various sources in this is \$13 million in the coming financial year.

**Mr FINN** — I am sorry; I thought it was \$30 million.

**Mr BARBER** — So it is a tax you can avoid if you get your act together?

**Mr FINN** — Yes, you do not use electricity.

**Mr MURRAY-LEACH** — Correct. Our view on the carbon price is that it is an effective way to internalise the external impacts of — —

**Mr BARBER** — It is a tax you can avoid if you get your act together?

**Mr MURRAY-LEACH** — It is a tax you can avoid.

**Mr BARBER** — In terms of getting your act together — I did not follow the blizzard of numbers — you said that there are \$80 million to \$100 million worth of projects that are kind of lined up under the GGB more or less now that could be deployed pretty quickly.

**Mr MURRAY-LEACH** — Yes. Tenders went out in November. We are not sure if those tenders went out after the decision had been made to change the nature of the program, but having a look, we have Northern Health, Monash Health, Latrobe Regional Hospital, Peninsula Health, Western Health, Alfred Health, St Vincent's Hospital, Barwon Health and all the multiple hospitals within that. We have something in the region of around 25 major hospitals and associated minor medical centres where the tenders were put out and members in good faith spent millions of dollars doing engineering work. Staff were actually flown in from overseas to assist in this, so Australians were returning here to work, and the projects were just put on ice.

**Mr BARBER** — You said that DTF's initial cost-benefit study of the GGB estimated it would deliver \$1 billion in energy and maintenance savings. A minute ago you told me about the amount of money that would be invested — \$80 million to \$100 million — and I am presuming the savings on that are, as you say, around about your IRR, somewhere around, but maybe even higher? Twenty-four? Just to convert backwards for me, you said they could deliver \$1 billion of savings. That was assuming what sort of size of loan portfolio?

**Mr MURRAY-LEACH** — That is covering the whole portfolio of government. In the health sector alone it is obviously a fraction, but, as you know, the health sector is a very substantial consumer within the Victorian government. That \$1 billion figure has been upgraded to \$2 billion for the very simple reason that energy prices escalated so fast and the energy savings they have found in the early investigations were so much larger than was previously thought. You can actually go a lot deeper and the energy savings are bigger. The proportion of that I can attribute to the health department, I would have to come back to you with that, because I am not sure which part of government is referred to in that, because as you know there is government, there is government and there is government.

**Mr BARBER** — In relation to the \$2 billion worth of savings over 25 years, can you give me a rough estimate of how much in terms of the size of the loan portfolio would need to be out there and then be rolled over in those 25 years?

**Mr MURRAY-LEACH** — That is basically a pipeline of projects. Perhaps Luke will be able to help me with this. Generally with the modelling it is actually very conservative. It is assumed there is a 15-year life span for the equipment that you were talking about, and generally with the loading on the age of the equipment it is very conservative. You are talking about a rollout of projects between 2010 and 2020, so the idea is you get your projects done in that period of time. After that it is all pure return to government.

**Mr BARBER** — So it is just a short-term burst of expenditure?

**Mr MURRAY-LEACH** — The idea is we have a lot of ageing infrastructure. After that you will be putting in investments over that time, but you will not have that massive backlog of work you need to do.

**Mr BARBER** — You say it would be better to have a specific purpose loan fund within Treasury that is just the energy efficiency loan?

**Mr MURRAY-LEACH** — It is actually not even a loan fund. The way it works is that there is a general loans package that is allowed to go out to any investment that delivers, and then basically they allow within that up to \$30 million from a general loan fund for energy efficiency. So they make a provision with the general loan fund for energy efficiency rather than there being some nice little pot of money.

**Mr MELHEM** — It will you get you a 12 per cent return?

**Mr MURRAY-LEACH** — Minimum.

**Mr BARBER** — So a facility within Treasury, or maybe something like the Clean Energy Finance Corporation, which I think at the federal level is now looking at energy efficiency loans, would be the vehicle you would want to see?

**Mr MURRAY-LEACH** — From our perspective, there are a number of options you can choose. You just need to access finance to invest in this and to deliver the returns. There is actually some very interesting research in the US that even though private finance delivers a much worse rate of return, it actually makes sense to even start tomorrow rather than waiting to go to governments, where you can access it a lot more cheaply. It actually makes sense to start tomorrow with private finance rather than waiting two years down the line to get public finance, because the opportunity cost is so big a delay.

**Mr BARBER** — You make the point that they cannot borrow externally.

**Mr MURRAY-LEACH** — Departments are not allowed to borrow externally. They have to borrow through Treasury loans.

**Mr BARBER** — Treasury has stuff coming out of everywhere, some of which is energy efficiency, but its job is to compare apples with oranges with chairs with shovels. Energy efficiency is its own thing, so what if you had a special facility and called it a clean energy finance corporation or just called it a Treasury loan that is for energy efficiency? Is that the kind of vehicle you are seeking?

**Mr MURRAY-LEACH** — That was the existing vehicle, which has only just been changed. It did not have a fancy name. It was not called clean energy. It was just, 'Here is some money to go and do some good stuff that saves us money', but you can label it.

**The CHAIR** — Thank you. Any further questions?

**Mr SCHEFFER** — No, that was great.

**The CHAIR** — Thank you very much indeed for both your written submission and for making such a comprehensive submission tonight. I want to thank you enormously for coming along and being with us tonight. It was extremely interesting.

**Mr MURRAY-LEACH** — Thank you.

**Committee adjourned.**