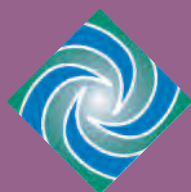


# THE NHS ESTATE IN WALES



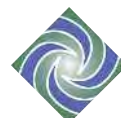
Estate Condition and  
Performance Report 2009/10



WELSH HEALTH ESTATES  
YSTADAU IECHYD CYMRU

# THE NHS ESTATE **IN WALES**

Estate Condition and  
Performance Report  
2009/10



WELSH HEALTH **ESTATES**  
**YSTADAU** IECHYD CYMRU

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# 1 INTRODUCTION

## 1.1 Background of the report

1.1.1 The 2009/10 Estate Condition and Performance Report is based on annual estate data returns for the 2009/10 financial year submitted to the on-line Estates and Facilities Performance Management System (EFPMS) by seven Health Boards, Velindre NHS Trust and the Welsh Ambulance Services NHS Trust. The system was introduced by the Welsh Assembly Government (Assembly) in April 2002 and is managed by Welsh Health Estates (WHE).

In October 2009, following a shadow period of 6 months, the NHS in Wales was restructured and, as a result, seven of the NHS Trusts and Powys Teaching Local Health Board, that had submitted data to the EFPMS, have been replaced by seven Local Health Boards sitting alongside Velindre NHS Trust, the Welsh Ambulance Services NHS Trust and the new Public Health Wales NHS Trust, although the latter is not included in the collection of data for this report. For this reason, the report makes reference to the new Health Boards/Trusts, which became operational on the 1st October 2009, as they now have the responsibility for achieving the estate national performance targets set by the Assembly.

## 1.2 Purpose, format and scope of the report

1.2.1 The report serves two main functions:

- ❖ It provides the Welsh Assembly Government with high-level data and information on the condition of the health estate in order to monitor year-on-year performance trends, inform the strategic planning process and assist in the prioritisation and allocation of resources.
- ❖ It provides Health Boards and Trusts with data and information that enables them to compare their own performance with that of other Health Boards/Trusts, as well as against national trends. They should, therefore, be a driver in the process of improving the performance and efficiency of the health estate.

1.2.2 The report generally follows the format of previous ones, focusing on the condition and performance of the health estate measured against the following national performance indicators (PI)s:

- ❖ Physical condition
- ❖ Statutory and safety compliance
- ❖ Functional suitability
- ❖ Space utilisation
- ❖ Energy performance

In addition, the report provides performance data on *Fire safety compliance* as a sub-set of the *Statutory and safety compliance* data.

Once again the familiar 'traffic light' system has been used to measure Health Boards/Trusts' performance against the 2005 and 2008 PI targets set by the Welsh Assembly Government in 2002. The use of the traffic light system is fully explained in Section 4.

- 1.2.3 The report also recognises the importance of environmental issues and significant efforts have been made to evaluate the performance of the health estate in respect of waste, transport and water. Reference is also made to the Assembly's Sustainable Development Action Plan, the UK Government's Sustainable Development Strategy and any requirements and targets associated with these documents.

Whilst the performance indicator for *Statutory and safety compliance* includes costs associated with fire safety, more comprehensive data on fire safety standards and management is collated annually through the on-line Fire Audit Information System and the Fire and UwFS Incident Reporting System. Separate reports analysing this data are published by WHE.

- 1.2.4 The report includes data and information relating to all hospital sites and the remainder of the estate aggregated into one group. This composite aggregate category represents the total for the five separate categories used prior to 2008:

Aggregate 1: Freehold - Diagnostic & Treatment Centres, Health Centres, Clinics, Ambulatory Diagnostic Centres, One-Stop Centres and Primary Care Units

Aggregate 2: Freehold – all other sites

Aggregate 3: Leased and fully serviced by the NHS Health Board/Trust

Aggregate 4: Leased and fully serviced by the Landlord

Aggregate 5: Leased and part serviced by the NHS Health Board/Trust/Landlord

It should be noted that not all of the aggregate categories are applicable to all Health Boards/Trusts.

### 1.3 Comparison with previous years' performance

- 1.3.1 During 2008 a number of Trusts merged and, wherever feasible, the data submitted by these individual Trusts for the 2007/08 return has been combined to enable comparisons to be made against this year's return in each case. This applies to data for the following Trusts:

- ❖ Abertawe Bro Morgannwg University NHS Trust formed from the merger of the former Bro Morgannwg and Swansea NHS Trusts;
- ❖ Cwm Taf NHS Trust, formed from the merger of the former North Glamorgan and Pontypridd & Rhondda NHS Trusts;
- ❖ Hywel Dda NHS Trust, formed from the merger of the former Carmarthenshire, Ceredigion & Mid-Wales and Pembrokeshire & Derwen NHS Trusts;
- ❖ North Wales NHS Trust, formed from the merger of the former Conwy & Denbighshire and North East Wales NHS Trusts.

- 1.3.2 On the 1st October 2009 a number of health organisations merged and, in the case of Betsi Cadwaladr University Health Board, the data submitted by the two individual former Trusts for the 2008/09 return has been combined to enable comparisons to be made against this year's return. The other new organisations merged with Local Health Boards to create the following Health Boards/Trusts:

- ❖ Abertawe Bro Morgannwg University Health Board formed from the merger of the former Abertawe Bro Morgannwg University NHS Trust, and the former Bridgend, Neath Port Talbot and Swansea LHBs;
- ❖ Aneurin Bevan Health Board, formed from the merger of the former Gwent Healthcare NHS Trust, and Blaenau Gwent, Caerphilly, Monmouthshire, Newport and Torfaen LHBs;
- ❖ Betsi Cadwaladr University Health Board, formed from the merger of the former North Wales NHS Trust, North West Wales NHS Trust and the former Anglesey, Conwy, Denbighshire and Flintshire LHBs;
- ❖ Cardiff and Vale University Health Board, formed from the merger of the former Cardiff and Vale NHS Trust, and Cardiff and Vale of Glamorgan LHBs;
- ❖ Cwm Taf Health Board, formed from the merger of the former Cwm Taf NHS Trust, and the Rhondda Cynon Taff and Merthyr Tydfil LHBs;
- ❖ Hywel Dda Health Board, formed from the merger of the former Hywel Dda NHS Trust, and the former Carmarthenshire, Ceredigion and Pembrokeshire LHBs;
- ❖ Powys Teaching Health Board;
- ❖ Velindre NHS Trust;
- ❖ Welsh Ambulance Services NHS Trust.

- 1.3.3 Information on the Welsh Ambulance Services NHS Trust (WAST) this year has been received on a regional basis. Comparison with last year's performance will be on a whole-Trust basis but in future years will be compared on a regional basis. The scope of the data submitted by the WAST covers all of the facets of estate performance and has been included in this report where comparable.

## 1.4 Report validation

- 1.4.1 Whilst WHE has not carried out a systematic validation of data submitted by the Health Boards/Trusts, every effort has been made to identify and address anomalies. Responsibility for the accuracy of the data submitted to WHE, however, rests ultimately with the Health Boards/Trusts.

All the data used in the preparation of the two reports is available electronically from the WHE intranet website.

## 1.5 2009/10 Facilities Performance Report

- 1.5.1 This report is complemented by the 2009/10 Facilities Performance Report which focuses on facilities management services included in the EFPMS. These cover telecommunications, car parking, cleaning, catering, laundry & linen, security, portering and postal services. The report is published as a separate, stand-alone document.

## 2 EXECUTIVE SUMMARY

### 2.1 Context of the report

This report addresses the condition and performance of the NHS Estate in Wales for the period 2009/10. It has been compiled by Welsh Health Estates (WHE) and is based on the Estates and Facilities Performance Management System (EFPMS) data submitted by seven Health Boards, Velindre NHS Trust and the Welsh Ambulance Services NHS Trust.

As well as hospital sites, the report includes data on other NHS sites, aggregated on the basis set down in the EFPMS data definitions. The report also includes a limited amount of data aggregated by region thus enabling performance comparisons between the three health regions set up in 2003.

The effectiveness of the EFPMS is largely dependent upon the reliability and consistency of its data. Whilst the quality of the data submitted this year has improved, the level of improvement ten years after the introduction of the EFPMS remains an issue of concern.

The 2009/10 report generally follows the format of previous ones and uses the 'traffic light' performance code in the same way as the report for 2008/09 (the use of the traffic light code is explained fully in Section 4).

### 2.2 Estate profile

The profile of the estate has not changed significantly over the last year, with almost half of it being over 35 years old and over a quarter over 55 years old. The benefits of implementing the disposal programme of the surplus estate, however, continue to be felt. The disposal programme, managed by WHE, is continuing and the significant benefits, both in terms of reduced surplus land area and backlog maintenance liability, will become more apparent in due course.

The modernisation of the health estate continues to be an important priority for both the Welsh Assembly Government, and the NHS. Key to the modernisation process is the development of estate strategies that support service plans, leading to the requirement for new buildings and the refurbishment of old stock.

The identification of essential and non-essential buildings, based on whether or not they have a health use exceeding five years, is designed to encourage NHS organisations to dispose of stock with a short-term future as quickly as possible. Data submitted by the NHS indicates that 196,658m<sup>2</sup> of building area has been identified as non-essential – an increase of 32,691m<sup>2</sup> since last year. The rationalisation process also involves the disposal of non-essential land. According to the data provided, 94ha of land have only a short-term future - an increase of 23 ha since last year. This increase is mainly accounted for with plans to dispose of Mountain Ash and Aberdare Hospitals with the opening of the new hospital in the Cynon Valley in 2011, the disposal of Llwynpia Hospital now that the new Ysbyty Cwm Rhondda has opened and HM Stanley Hospital which has been identified as non-essential.

Early disposal of the non-essential estate is vital if scarce resources are to be directed where they can be used more effectively. This, combined with the current and projected capital made available by the

Assembly and the implementation of *Designed for Life: Building for Wales* - the construction procurement framework based on collaborative working - will play a significant part in revitalising and modernising the estate.

## 2.3 Estate performance

### 2.3.1 General

The NHS is committed to meeting a number of targets based on the following national performance indicators (NPIs):

- ❖ Physical condition
- ❖ Statutory and safety compliance
- ❖ Functional suitability
- ❖ Space utilisation
- ❖ Energy performance

The targets relate to the essential estate.

### 2.3.2 Physical condition and statutory and safety compliance

Over the reporting year, backlog maintenance costs decreased by almost £45 million to £460 million. The decrease can be largely attributed to large reductions reported by Abertawe Bro Morgannwg, Betsi Cadwaladr and Cardiff and Vale Health Boards. Details of the individual reductions can be found in Appendices II, IV & V.

The overall reduction hides the fact that, on a site-by-site basis, excluding the aggregate grouped properties, there have been swings in both directions, with 49 sites showing reductions totalling £48 million and 51 sites showing increases totalling over £20 million.

Some of the swings on an individual site basis are likely to reflect difficulties Health Boards/Trusts continue to experience in providing consistent and accurate data in line with the EFPMs definitions of backlog maintenance rather than actual improvement or deterioration in the condition of the estate.

It is noted that, using the risk adjusted backlog (RAB) formula introduced for the 2005/06 reporting period the overall backlog maintenance figure is approximately £232 million. The RAB is now widely regarded as a more appropriate indicator for the overall condition of the estate and, over time, it is anticipated that this method of reporting backlog maintenance will replace the one currently used.

The report also points to opportunities for significant reductions in the backlog maintenance liability through the disposal of the residual estate and sites that are either closed, scheduled to close or have been sold. These include Llwynypia Hospital which is closed and expected to be sold this year and Minffordd, Bryn Seiont and Abertillery Hospitals which have all been sold.

The cost of complying with statutory and safety requirements, including fire safety, is estimated to be £161 million, of which £152 million relates to the essential estate. This includes almost



£19 million associated with the Disability Discrimination Act legislation, which is of on-going concern as the legislation came into full force in October 2004.

According to the data provided by Health Boards/Trusts, the all-Wales average for the *Physical condition* performance indicator improved from almost 76% in 2008/09 to just over 78% in 2009/10, against the 2008 target of 90% of the estate to be in Estatecode condition B or better.

The average for the *Statutory and safety compliance* performance indicator improved from 81.5% in 2008/09 to almost 83.5% in 2009/10, against the 2008 target for 90% of the estate to be in Estatecode condition B or better.

### 2.3.3 Functional suitability and space utilisation

Data submitted in respect of the *Functional suitability* performance indicator shows that the all-Wales average reduced again from just over 80% in 2008/09 to 77.6% in 2009/10, against the 2008 target of 90% of the estate to be in Estatecode condition B or better.

As for the *Space utilisation* performance indicator, the data submitted points to an improvement again in the all-Wales average for 2009/10 compared with 2008/09, rising from just over 88% to almost 91% against the 2008 target of 90% of the estate to be in Estatecode condition F.

### 2.3.4 Energy performance

Weather-corrected net energy consumption remained basically the same as the previous reporting year and is now 17% below the 1999-2000 base year, continuing the downward trend.

Four Health Boards/Trusts reported decreases in primary energy consumption resulting in a small all-Wales decrease over the previous year. The returns also show that, for the second year running, electrical consumption has fallen with regard to the total energy mix.

With regard to CHP output, the total amount of electricity generated by CHP rose from almost 8.9% of total electricity requirements last year to 15% this year. This was mainly due to the commissioning of new and larger capacity systems during the year. The amount of electricity generated from good quality CHP is now at the government's target for the public sector of 15% by 2010.

Rises in energy consumption associated with increases in service demand and heated volume are long-term issues and are likely to increase rather than level out in future. The emphasis, therefore, must continue to be placed on efficiency, by improving the way energy is used. The energy efficiency PI for 2009/10 is 55.1GJ/100m<sup>3</sup>, indicating an improvement of 21% on the base year and well above the U.K. Government target of a 15% reduction by 2010.

As with primary energy, carbon emissions have stayed relatively the same, with only a small increase recorded. This is despite the factors described above and the severe winter weather conditions over this period. Absolute carbon emissions have slightly increased on the 2008/09 figure, though are still 36% below the base year. It should be noted that the overall reduction since base year has been achieved by the use of 'green' electricity purchase contracts and that this achievement is vulnerable to Health Boards/Trusts reverting to brown electricity in future. The NHS must, therefore, not lessen its drive on energy efficiency and the use of green technologies.

A summary of the main findings of this year's returns is given below:

- ❖ The trend in net energy consumption remains downward.
- ❖ Absolute carbon emissions have stayed stable with only a slight increase from 118,746 to 118,926 tonnes of CO<sub>2</sub>, an increase of 1.43%.
- ❖ The energy efficiency PI is 55.1GJ/100m<sup>3</sup>, an improvement of 21% over the base year figure of 69.14/100m<sup>3</sup>.
- ❖ The amount of CHP-generated electricity has increased from almost 8.9% to 15.7% of the total electricity requirement and, at 119,484GJ, continues to provide a significant amount of the electricity needs.

## 2.4 Environmental

### 2.4.1 Waste

Data submitted shows an encouraging 5% reduction in the overall amount of waste reported, and there has been a corresponding 2.5% reduction in disposal costs, despite the increasing cost pressures that exist in waste management. Overall, clinical waste has seen a reduction of approximately 7% in volume with a smaller decrease in costs. This may illustrate the potential for savings from the wider uptake of the new colour coding segregation requirements set out in HTM 07-01. The data shows that 14% of the clinical waste in Wales goes for incineration while the majority, 86%, goes for alternative non-incineration treatment with a cost split of 20% and 80% respectively.

The figures indicate that composition of the waste stream is approximately the same as previous years. There are, however, continuing positive signs from the landfill waste and, to a lesser extent, recycling figures, suggesting that NHS Wales is continuing to build on its waste minimisation performance. There has been a 4% reduction in volume of waste being sent to landfill compared with the previous year's figure (set against continued increasing costs for disposal) which is an encouraging trend, although recycling performance has remained static at 12.5%.

### 2.4.2 Transport

Data submitted on transport for 2009/10 was, once again, largely incomplete.

The data shows that all organisations, with the exception of one, reported having board-approved Sustainable Travel Plans in place, as required by WHC (2008) 058. It is likely that the inclusion of this data in the EFPMS will be reviewed in future.

### 2.4.3 Water usage

Although there was an increase of 4.2% in water consumption in this period, the trend is downward, with consumption 11% lower than in 2000.

There continues to be a great variation in consumption across Health Boards/Trusts, which suggests there is scope for improvement. As the cost of water continues to increase, the benefits of conservation measures and the introduction of additional metering on sites should be fully exploited.

## 2.5 Key issues arising from the report

### 2.5.1 Significance of the 2009/10 Report

As with last year's report, the 2009/10 Estate Condition and Performance Report is significant for three main reasons:

- ❖ On the 1st October 2009 a number of Trusts merged and, wherever feasible, the data submitted in 2008/09 has been combined to enable comparisons to be made against this year's returns.
- ❖ The information contained within it is based on data submitted by the seven new Local Health Boards, Velindre NHS Trust and the Welsh Ambulance Services NHS Trust.
- ❖ As the Welsh Ambulance Services NHS Trust's estate is significantly different from that of other NHS property holding organisations, it is expected that Trust data submitted on a regional basis will enable more effective year-on-year comparisons of performance to be made within the Trust. Therefore, data submitted to the EFPMS has been reported on a three-region basis.

In the light of these issues it is appropriate to briefly reflect on the performance of the NHS during the 2009/10 reporting period and review its performance since the EFPMS was introduced in 2002.

### 2.5.2 Performance in 2009/10

Health Boards/Trusts' performance against the five national estate key performance indicators provides a mixed picture that includes only a few good examples of excellent performance where the 90% target set for 2008 has been comfortably exceeded. Typically, the higher levels of performance are associated with Health Boards/Trusts managing a modern property portfolio.

Overall, however, the report portrays a less positive picture in which a significant number of Health Boards/Trusts failed to meet the 2008 targets, some by a wide margin, despite the mergers having served to smooth out extremes in some cases. This continues to be particularly the case in respect of physical condition and functional suitability, although there has been an improvement in space utilisation with six Health Boards having achieved the 90% target.

There is also an improvement in respect of the backlog maintenance costs which have decreased by £45 million from just over £505 million in 2008/09 to £460 million in 2009/10.

Both the performance against the national PIs and the high levels of backlog maintenance suggest that, whilst initiatives such as the Major Risk Framework have had a positive impact alongside the ongoing disposal programme, significant improvements in performance and reductions in backlog maintenance costs will be achieved only through the implementation of a radical modernisation programme. In this context, there is an expectation that the current development of new healthcare facilities procured through the *Designed for Life: Building for Wales* framework will deliver the improvements the NHS requires.

On the energy front, despite the severe winter weather conditions over this period, primary energy consumption is almost unchanged, indicating that considerable improvements have been made in energy efficiency. A major contributing factor has also been the substantial increase in CHP-derived electricity which now stands at 15.7% of the total electrical demand for the NHS in Wales.

### 2.5.3 Performance over the nine-year EFPMS reporting period

The introduction of the five national performance indicators in 2002 created an expectation that the NHS should achieve the 2005 intermediate and 2008 long-term targets. An analysis of the data submitted during this period shows that, whilst there have been improvements across all of the indicators, none of the Health Boards/Trusts have met all the 2008 targets, some by a very wide margin.

During the nine-year reporting period, backlog maintenance costs have risen from £431 million in 2001/02, to a maximum of £505 million in 2008/09 down to £460 million in 2009/10. It is worthy of note, however, that, in real terms, backlog maintenance costs have fallen by £147 million since the peak in 2000/01. The low level of capital investment in the estate during the early years explains, to a degree, the continuing high levels of backlog maintenance. On a positive front, however, there is an expectation that, over the next few years, backlog maintenance costs will see a clear downward trend as new facilities and major upgrading works procured under the *Designed for Life: Building for Wales* framework replaces old and inappropriate facilities.

Age profile has been consistently highlighted as a useful indicator of the likely condition of the estate. Over the nine-year period there has been little movement in the overall profile and a slow decline in the proportion of buildings pre-dating 1948 along with a slow increase of those dating from 2005. It is expected that the current modernisation programme will have a clear impact on the age profile.

The importance of driving forward a vigorous land and property disposal programme, focusing on those elements of the estate in particularly poor physical condition, that fail to comply with statutory requirements and present major challenges in delivering modern clinical services, has also been consistently stated. Accordingly, during the EFPMS nine-year reporting period significant progress has been made, resulting in the disposal of 220 hectares of land and 180,000m<sup>2</sup> of building with a disposal value of over £90 million.

On the energy front, the trends regarding energy consumption continue to be encouraging with further improvements in the energy efficiency performance indicator and the stabilisation of absolute carbon emissions. Similarly with water usage, improvement in performance has continued for this reporting period with a further significant reduction in water consumption.

Concerning data dealing with waste, overall, total waste tonnages have fallen for five consecutive years and are now slightly below the 2002-03 baseline. Recycling figures are showing a gradually improving trend over recent years, but are still low compared with other sectors.

## 3 ESTATE PROFILE

### 3.1 Key statistics of the NHS estate in Wales

3.1.1 The current portfolio of NHS properties in Wales is diverse, complex and geographically widespread and comprises:

- ❖ A total land area of approximately 700 hectares;
- ❖ Approximately 110 hospitals of varying age, construction, size and function;
- ❖ Over 200 health centres and clinics;
- ❖ Approximately 50 mental health units;
- ❖ Approximately 90 ambulance stations;
- ❖ Over 160 miscellaneous properties in the form of offices, housing, storage and distribution warehouses.

Despite extremely difficult conditions in the property market during 2009/10 receipts of approximately £2.7m were received from the sale of surplus NHS properties. This included the sale of three hospitals as programmed which consisted of Minffordd Hospital, Bangor, Bryn Seiont Hospital, Caernarfon and Abertillery Hospital in Gwent.

Llwynypia Hospital closed in January 2010 following the opening of the new Ysbyty Cwm Rhondda and is expected to be sold by December 2010. There were a further seven smaller sites sold and the lease on Oakdale Hospital was surrendered in December 2009.

There are also plans to dispose of both Mountain Ash and Aberdare Hospitals in the future following the opening of the new hospital in the Cynon Valley.

### 3.2 The age of the estate

3.2.1 Figure 1 shows the age profile of the NHS estate in Wales and illustrates the changes in profile since the EFPMS was introduced in 2001/02.

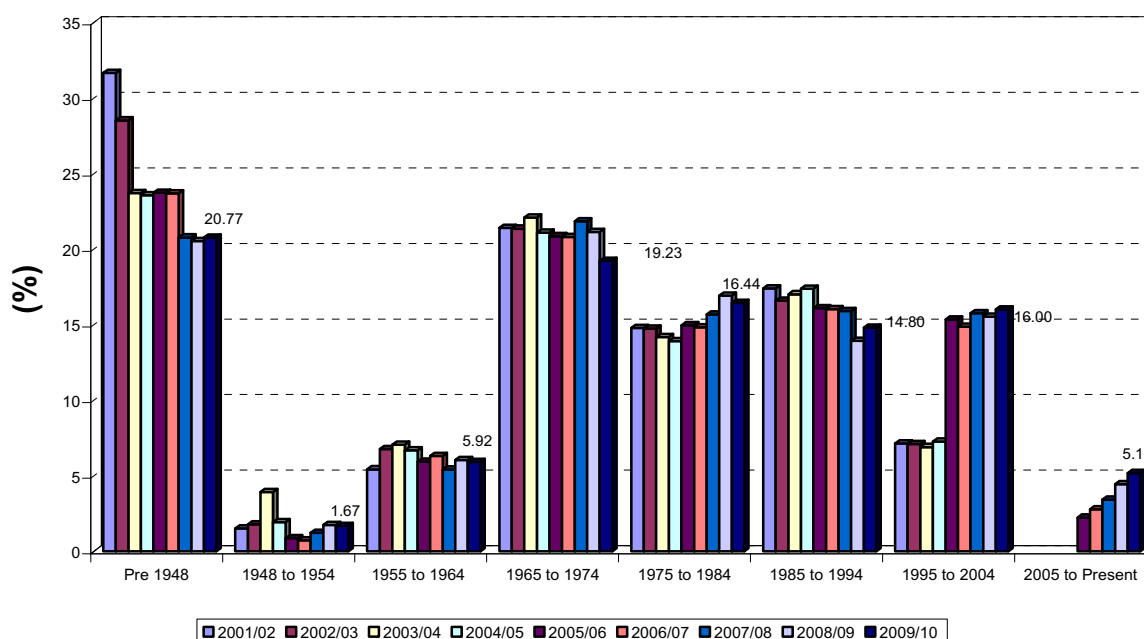


Figure 1: Age profile of the NHS estate in Wales

Age profile can be a useful indicator of the likely condition of the estate. **Figure 1** graphically illustrates the challenges the NHS faces in modernising the health estate in Wales where almost 50% of the buildings are over 35 years old and 20% pre-date 1948. It is noted, however, that approximately 35% of the estate is 25 years old or less. The chart demonstrates that, since the introduction of the EFPMS, there has been a clear reduction in the proportion of buildings pre-dating 1948 along with a small increase of those dating from 2005. More significant changes to the profile are expected over the next few years as a number of older hospitals will be replaced with the opening of Ysbyty Cwm Rhondda replacing Llwynypia Hospital; Ysbyty Ystrad Fawr in Ystrad Mynach; Ysbyty Aneurin Bevan in Ebbw Vale and the new hospital in the Cynon Valley replacing both Mountain Ash and Aberdare Hospitals.

### 3.3 The essential and non-essential estate

3.3.1 The WAG requires NHS property holding bodies to develop estate strategies that support service plans. This process can lead to the requirement for new buildings and the rationalisation of old stock. If a building or land has a health use of more than five years it is categorised as *essential*, and five years or less as *non-essential*. It is important for the Service that non-essential buildings and land are disposed of as quickly as possible to ensure that resources tied up in maintaining these assets are directed to where they can be used more efficiently.

Figures 2 and 3 show the extent of essential and non-essential buildings and land for all Health Boards/Trusts.

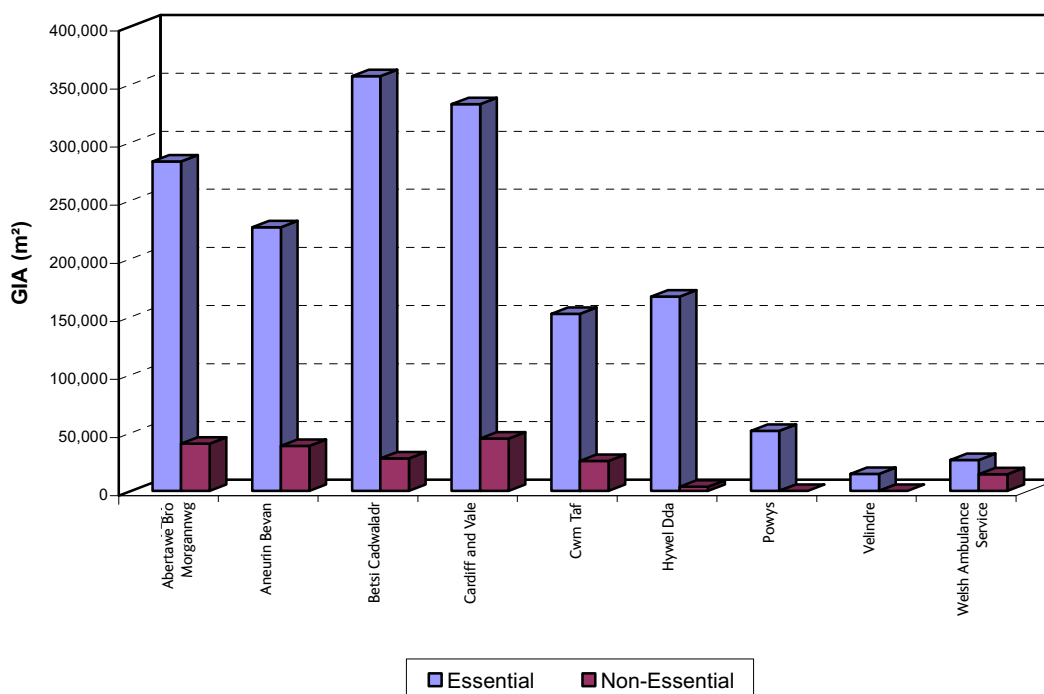


Figure 2: Essential and non-essential building areas

With reference to **Figure 2**, the essential building area throughout Wales has increased by 32,691m².

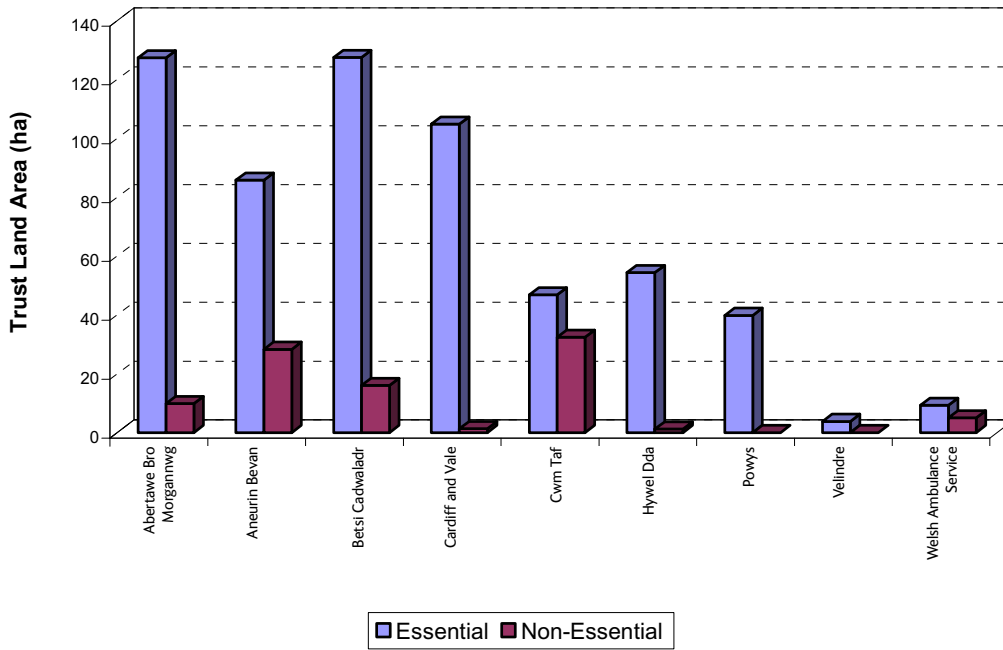


Figure 3: Essential and non-essential land areas

With reference to Figure 3, the essential land area throughout Wales has increased by 23 ha.

### 3.4 Expenditure on the NHS estate

3.4.1 The NHS estate is an extremely important resource which, based on a valuation date of 1 April 2010, the Valuation Office has valued at an existing use value of £2.3 billion. Its annual running cost is estimated at over £300 million and, in addition, capital is required to maintain and modernise it, and to develop new facilities.

Figure 4 opposite, shows the capital investment in the NHS since 1992/93 and backlog maintenance costs since 1995/96. Also shown is the projected growth in capital expenditure and its predicted effect on the underlying backlog maintenance liability. The figures include capital investment provided by the Private Finance Initiative (PFI). As the Residual Estate is no longer an Assembly asset, the forecasts and historic figures have been re-cast to exclude adjustment for land sale receipts.

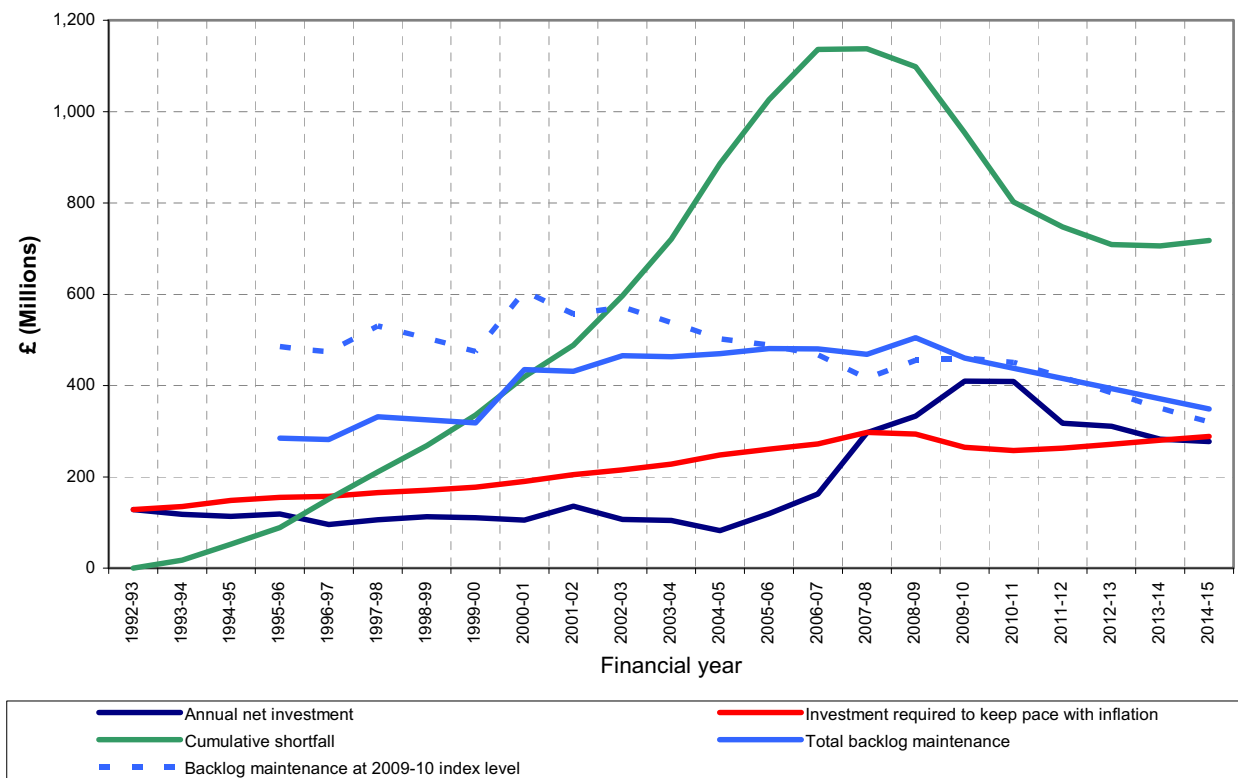


Figure 4: Capital investment in the NHS in Wales



## 4 ESTATE PERFORMANCE

### 4.1 General information

4.1.1 Welsh Health Circular (2002)50 *Introduction of an Estates Performance Management System*, was issued in April 2002 and provided details of five national PIs and their associated targets. The targets set by the Assembly for 2005 and 2008, shown in **Figure 5**, relate to the essential estate, that is, the estate that is deemed to have a long-term health use of five years or more. They are based on the performance indicators set out in the *Estatecode* guidance and cover *Physical condition*, *Statutory and safety compliance*, *Energy performance*, *Space utilisation* and *Functional suitability*. Whilst the target dates have passed, they are considered to provide a useful benchmark for use in this report.

PERFORMANCE TARGET	TARGET DATES	COMMENTS
<b>Physical condition</b>		
<ul style="list-style-type: none"> <li>▪ 75% of the estate to be in category 'B' or above</li> </ul>	2005	Category 'B' applies to buildings that are sound, operationally safe and exhibit only minor deterioration
<ul style="list-style-type: none"> <li>▪ 90% of the estate to be in category 'B' or above</li> </ul>	2008	
<b>Statutory and safety compliance</b>		
<ul style="list-style-type: none"> <li>▪ 75% of the estate to be in category 'B' or above</li> </ul>	2005	Category 'B' applies to buildings where action will be needed in the current plan period to comply with relevant guidance and statutory requirements
<ul style="list-style-type: none"> <li>▪ 90% of the estate to be in category 'A'</li> </ul>	2008	Category 'A' applies to buildings that comply with all statutory requirements and relevant guidance
<b>Functional suitability</b>		
<ul style="list-style-type: none"> <li>▪ 75% of the estate to be in category 'B' or above</li> </ul>	2005	Category 'B' applies to buildings that are satisfactory and minor changes are needed
<ul style="list-style-type: none"> <li>▪ 90% of the estate to be in category 'B' or above</li> </ul>	2008	
<b>Space utilisation</b>		
<ul style="list-style-type: none"> <li>▪ 75% of the estate to be in category 'F'</li> </ul>	2005	Category 'F' applies to buildings that are fully used
<ul style="list-style-type: none"> <li>▪ 90% of the estate to be in category 'F'</li> </ul>	2008	
<b>Energy performance</b>		
<ul style="list-style-type: none"> <li>▪ 15% reduction in primary energy consumption</li> </ul>	2010	This is a UK Government primary energy reduction target
<ul style="list-style-type: none"> <li>▪ 75% of the estate to be in category 'B' or above</li> </ul>	2005	Category 'B' applies to buildings with an energy performance of < 65 GJ/100m <sup>3</sup>
<ul style="list-style-type: none"> <li>▪ 90% of the estate to be in category 'B' or above</li> </ul>	2008	

Figure 5: Table showing national performance indicators and targets

4.1.2 The PIs and Health Board/Trust progress in meeting the targets are discussed in more detail later in this report.

4.1.3 The 'traffic light' compliance code adopted previously has been used again in this report as a way of visually expressing Health Boards/Trusts' progress in meeting the targets set out in **Figure 5**. Although the target dates have passed, they are considered to provide a useful benchmark. Each PI has again been split into three bands of compliance, colour coded as follows:

- Failed to meet the 2005 & 2008 targets
- Met the 2005 75% target
- Met the 2008 90% target

All Health Boards/Trusts have been banded according to the above criteria for each of the national PIs.

4.1.4 Health Board/Trust performance against each of the targets has been estimated from the data submitted and used to obtain an average figure for each Health Board/Trust as well as an all-Wales figure.

## 4.2 Physical condition

### Backlog maintenance

4.2.1 Backlog maintenance costs across Wales have decreased by approximately **£45 million**, from **£505.2 million** reported in 2008/09 to **£460.2 million** in 2009/10. The main reasons for this reduction are the investment of **£4.5m** in the electrical infrastructure at Morriston Hospital, demolitions and estate rationalisation in Cardiff and Vale University Health Board and investment of over **£18 million** in the electrical infrastructure at Ysbyty Gwynedd.

4.2.2 The backlog maintenance position for the 10-year period from 2000 is summarised in **Figure 6**. It is noted that during this period backlog maintenance costs, in real terms, have fallen by **£147 million** from a peak in 2000/01, as illustrated previously in **Figure 4**. It should also be noted that energy-upgrading costs are included in the physical condition costs and cannot be identified separately. A breakdown of the individual Health Board/Trust costs is detailed in **Appendices II-X**.

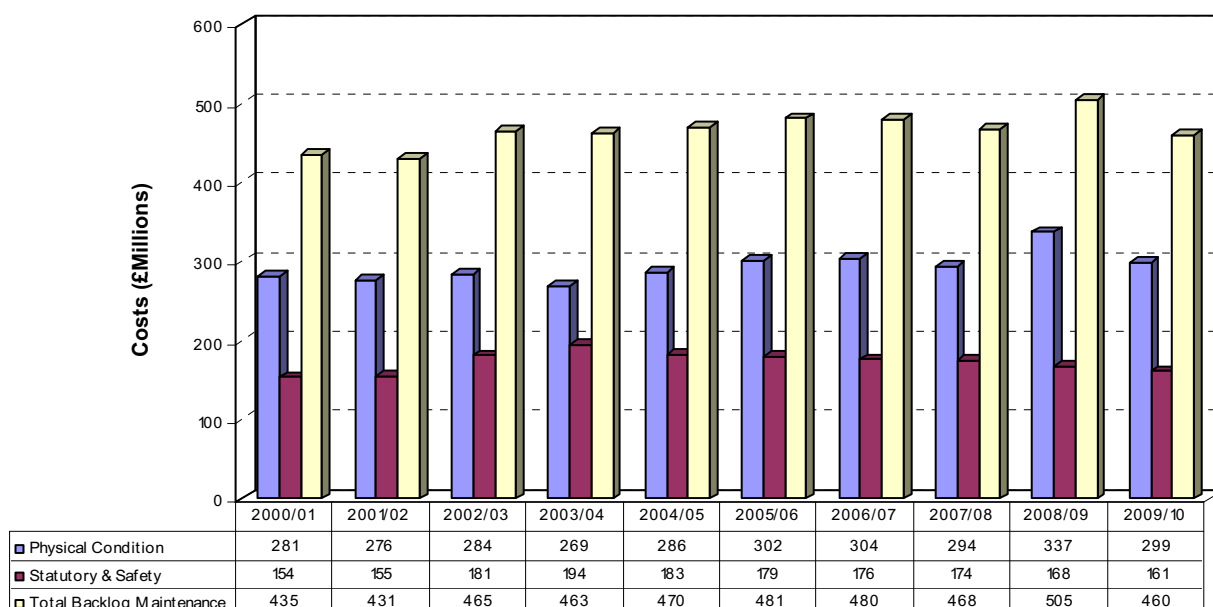
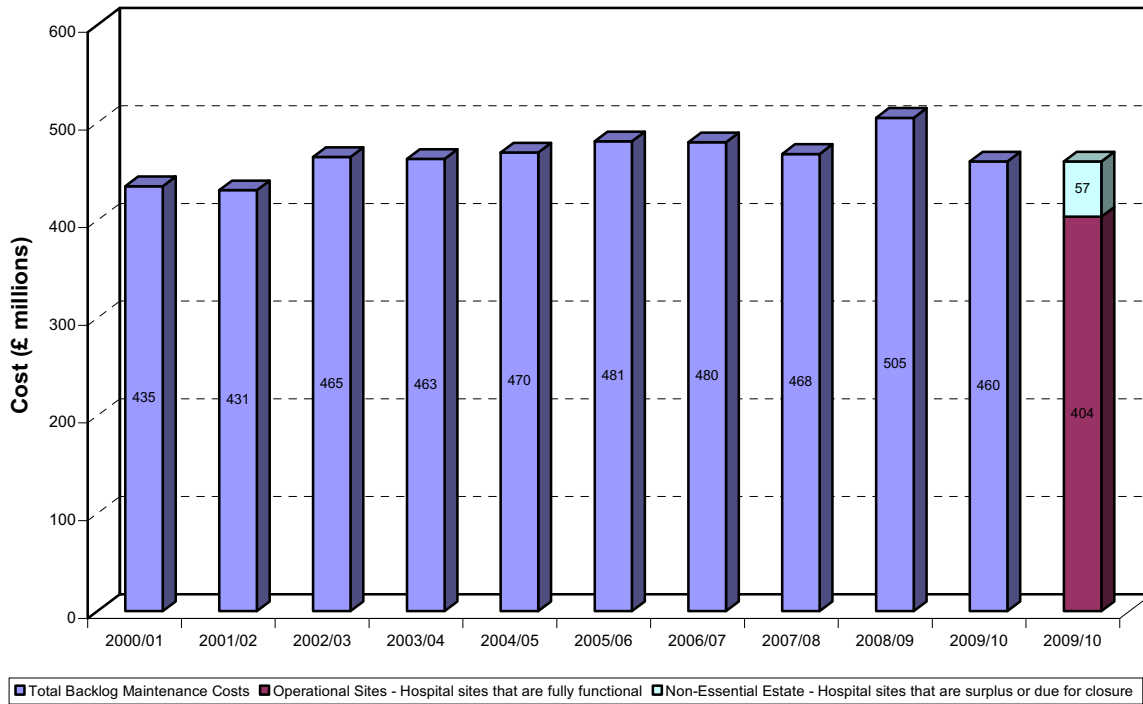


Figure 6: Graph showing trend in backlog maintenance costs 2000-2010

4.2.3 It should be noted that the overall reduction in backlog maintenance since last year hides the fact that, on a site-by-site basis, excluding the aggregate grouped properties, there have been swings in both directions, with 49 sites showing reductions totalling £48 million and 51 sites showing increases totalling over £20 million.

Where increases in backlog maintenance have been recorded, these are spread across a large number of sites. A detailed breakdown of the backlog maintenance costs by site is included in **Appendices II-X**.



**Figure 7: Trend in backlog maintenance costs illustrating the effect of the estate and sites that are closed or due for closure**

4.2.4 The reported backlog maintenance costs include £57 million associated with sites that have been designated non-essential Health Board/Trust properties and declared surplus, compared with £91 million in 2008/09. The reason for the decrease relates primarily to Cardiff Royal Infirmary (£54m) that has been reported this year as having a future beyond 5 years and is no longer considered non-essential. It can be seen from **Figure 7** that the implementation of the disposal programme for the estate would reduce the overall backlog maintenance costs considerably.

Further details relating to these sites can be found in **Appendix XI**.

4.2.5 During the reporting period 2009/10 Llwynypia Hospital closed and patients transferred to the new Ysbyty Cwm Rhondda. In future, the disposal of this property will reduce the backlog maintenance liability of the NHS in Wales by £3.5 million.

4.2.6 The breakdown of the backlog maintenance costs by health region is detailed in Figures 8 and 9.

Region	Physical Cost to 'B' (£)	Stat & Safety Cost to 'B' (£)	Fire Safety Cost to 'B' (£)	DDA Costs (£)	Total Backlog Cost (£)	Cost/m <sup>2</sup> (£/m <sup>2</sup> )
Mid & West Wales	103,912,321	19,652,976	6,757,734	9,361,456	130,323,031	238.31
North Wales	67,630,584	13,853,349	59,624,191	1,913,681	141,108,123	330.90
South East Wales	127,553,352	53,366,578	7,921,967	4,598,244	188,841,897	225.64
<b>All-Wales Total</b>	<b>299,096,257</b>	<b>86,872,903</b>	<b>74,303,892</b>	<b>15,873,381</b>	<b>460,273,051</b>	<b>254.27</b>

Figure 8: Backlog maintenance costs by Health Region

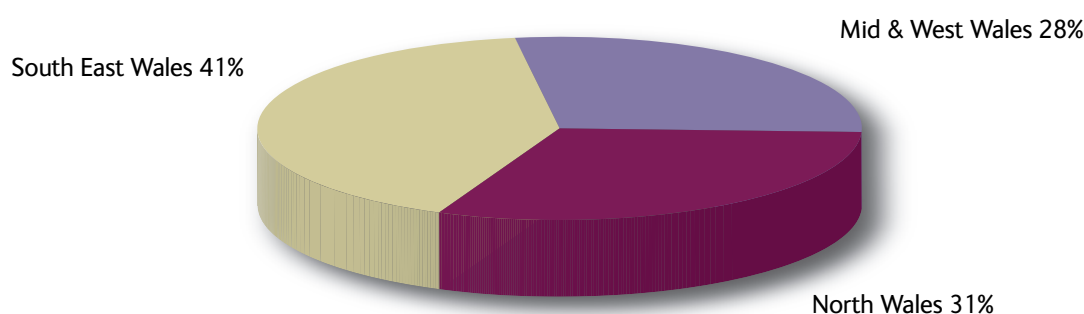


Figure 9: Percentage of backlog maintenance by Health Region

4.2.7 A risk based methodology for establishing and managing risk was introduced in December 2004 under the cover of WHEN 04/28 - *EFPMs data definitions and completion notes 2004-05*, and the EFPMs now includes data fields to enable this information to be collected.

Figures 10 and 11 overleaf, detail the risk assessed backlog costs apportioned by Health Region in the four risk categories set out in the risk based methodology.

Region	High Risk Cost (£)	Significant Risk Cost (£)	Moderate Risk Cost (£)	Low Risk Cost (£)	Risk Adjusted Cost (£)
Mid & West Wales	23,344,694	53,956,119	26,321,890	26,700,327	79,924,228
North Wales	19,620,551	20,827,753	40,020,334	60,639,488	45,843,224
South East Wales	24,255,412	67,053,381	43,847,741	53,685,363	106,165,454
<b>All-Wales Total</b>	<b>67,220,657</b>	<b>141,837,253</b>	<b>110,189,965</b>	<b>141,025,178</b>	<b>231,932,906</b>

Figure 10: Risk assessed backlog maintenance costs by Health Region

It can be seen from Figure 10 that the sum of the high and significant risks totals £209 million, which represents 40% of the total risk assessed backlog. The figure has decreased by £32 million compared with that reported for 2008/09. The guidance that supports the new methodology recommends that the elements that make up this figure should be given priority and addressed at the earliest possible opportunity.

In addition to the four risk-assessed categories there is a weighted methodology for calculating the Risk Adjusted Backlog (RAB). The RAB is considered to provide a more realistic assessment of the overall condition of the estate and, over time, it is anticipated that this method of reporting backlog

maintenance will replace the one currently used. Using this methodology the reported RAB for 2009/10 is £231,932,479 whereas the corresponding total backlog maintenance figure is £460,273,051.

Figure 11 illustrates the breakdown of the total backlog maintenance cost in terms of the four risk assessed categories.

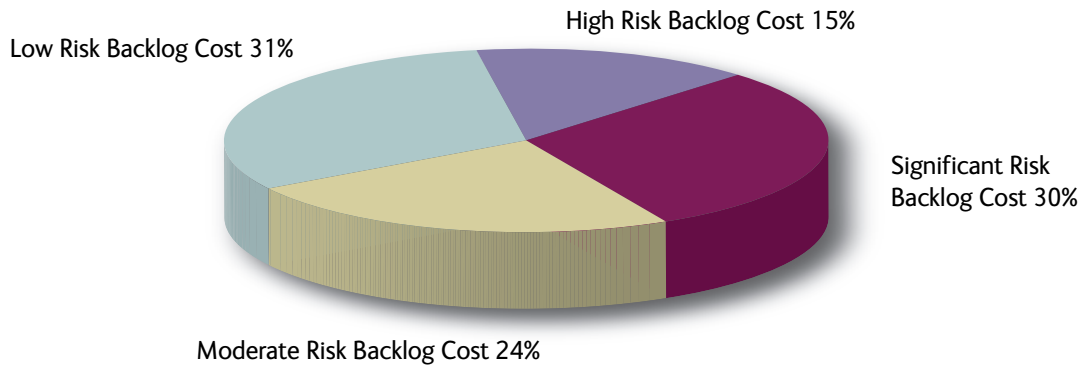


Figure 11: Percentage of risk assessed backlog maintenance

4.2.8 Figure 12 shows the four risk categories of each Health Board/Trust’s total backlog, (as a percentage of total backlog) and reported capital investment in backlog (as a percentage of total backlog). Capital investment in backlog is defined as *The amount contained within the Total Capital Investment figure which was invested in the NHS Trusts’ estate specifically to reduce backlog maintenance costs, inclusive of physical condition, fire safety, and health & safety.*

It can be seen that only 4 Health Boards/Trusts appear to have invested sufficient capital to meet the high-risk backlog. The remainder are either awaiting funding associated with outstanding business cases or are striving to manage the risks.

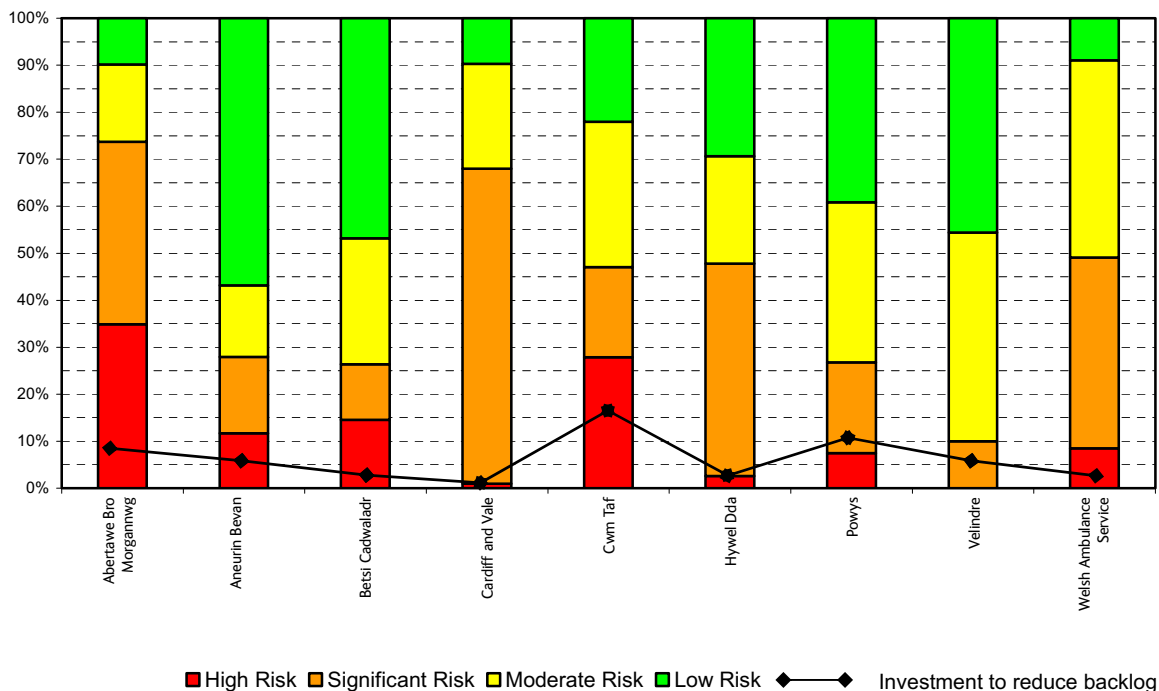


Figure 12: Risk profile of backlog and investment to reduce backlog

- 4.2.9 Figure 13 shows backlog maintenance costs by Health Board/Trust submitted for the period 2009/10. Detailed analysis of the individual Health Board/Trust information is included in Appendices II-X.

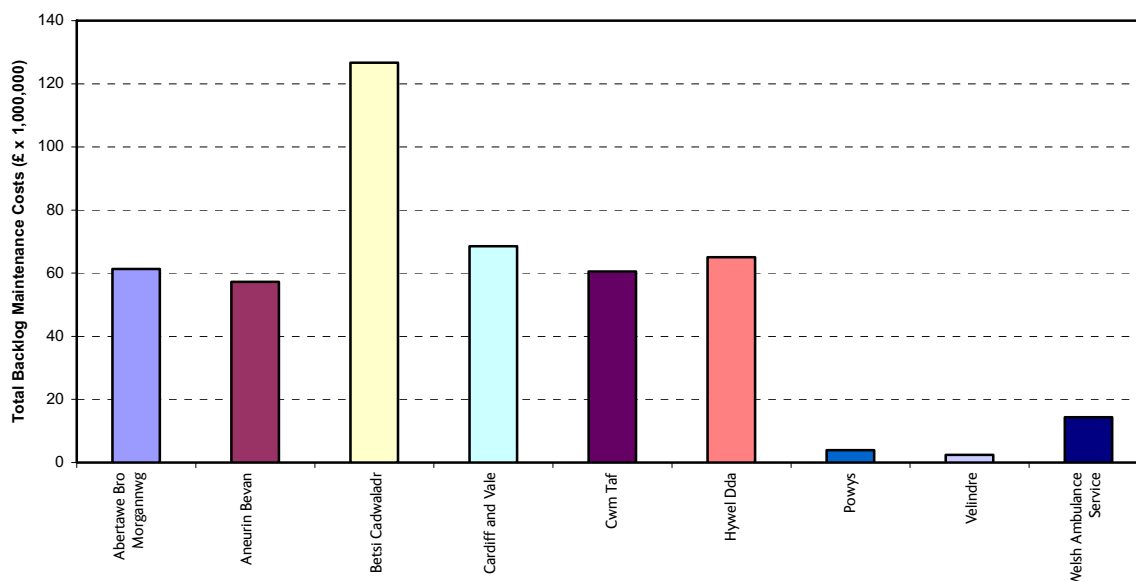


Figure 13: Comparison of backlog maintenance costs by Health Board/Trust

#### Physical condition targets

- 4.2.10 Figure 14 shows the percentage of the estate under *Physical condition* that is in Estatecode condition B or above. The figures for Betsi Cadwaladr for 2008/09 are derived from the combined data submitted by the former North Wales and North West Wales NHS Trusts. This adjustment has enabled performance to be compared with that of 2009/10.

It is noted that none of the Health Boards/Trusts have met the 90% target set for 2008. The all-Wales performance, however, has improved but is falling still far short of the target required in order to move it into the green band.

Health Board/Trust	Physical Condition of Health Organisations			
	2009 - 10		2008 - 09	
Abertawe Bro Morgannwg		73.65		67.72
Aneurin Bevan		73.11	76.50	
Betsi Cadwaladr	82.75		81.22	
Cardiff and Vale	87.28		84.41	
Cwm Taf	78.17			71.33
Hywel Dda	82.88		83.93	
Powys Teaching		53.48		53.48
Velindre	83.80		79.26	
Welsh Ambulance Services		30.52		33.50
<b>All Wales Average</b>		<b>78.07</b>		<b>75.96</b>

#### Key

	Met 2008 90% Target		Met 2005 75% Target		Failed to meet 2005 & 2008 Targets
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Figure 14: Physical condition of Health Organisations – percentage of the estate in condition category B or above

### 4.3 Statutory and safety compliance

4.3.1 All NHS Health Boards/Trusts must comply with current Health and Safety Standards and Codes of Practice. Some examples of the main health and safety requirements that Health Boards/Trusts have to comply with include:

- ❖ Electricity at Work Regulations
- ❖ Control of legionella
- ❖ Firecode
- ❖ Control of Substances Hazardous to Health
- ❖ Health and Safety at Work
- ❖ Asbestos
- ❖ Pressure systems
- ❖ Disability Discrimination Act (DDA)
- ❖ The Hazardous Waste Regulations

This list is not exhaustive and there are many other statutory requirements that Health Boards/Trusts have to comply with in order to protect the safety of their staff, patients and visitors on their sites.

4.3.2 The EFPMS does not itemise all health and safety elements and, as a consequence, it is not possible to identify the separate costs for these items. The only health and safety issues that are individually costed are those dealing with fire safety compliance and the DDA.

4.3.3 The cost of complying with statutory and safety requirements (including fire safety) for all the sites included in the EFPMS is estimated to be £161 million, of which £120 million relates to the essential estate.

4.3.4 Health Boards/Trusts should have been fully compliant with the DDA by October 2004. All nine Health Boards/Trusts have carried out surveys to identify the extent of the work required to achieve compliance. Costs associated with this work are shown in **Figure 15**.

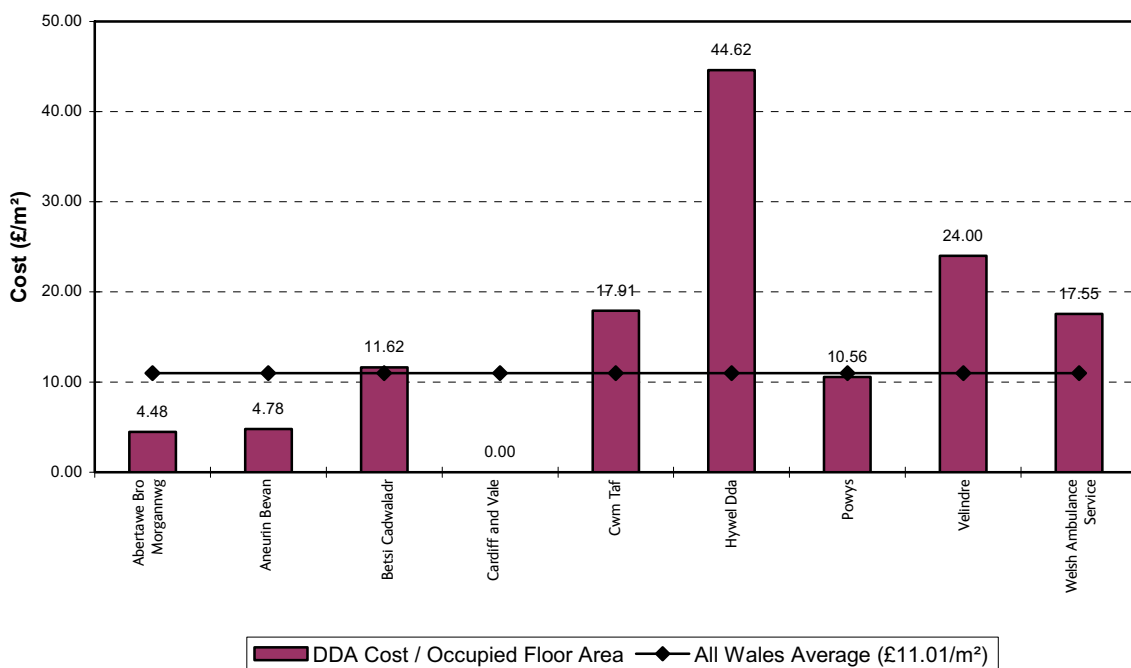


Figure 15: Comparison of DDA costs/occupied floor area

- 4.3.5 It has been estimated that the total cost of implementing DDA work is nearly £16 million, which is a reduction of £3 million compared with the figure reported in 2008/09. Cardiff and Vale did not submit any figures this year as their DDA survey is out of date although the Health Board invests £150,000 per year across all sites. Their next Estatecode surveys will reassess DDA.
- 4.3.6 Figure 15 indicates that the estimated cost/m<sup>2</sup> for carrying out the required DDA works varies from £4.48/m<sup>2</sup> in Abertawe Bro Morgannwg University Health Board to £44.62/m<sup>2</sup> in Hywel Dda Health Board. Taking into account the zero return from Cardiff and Vale, the all-Wales average is estimated to be £11.01/m<sup>2</sup> compared with £11.43/m<sup>2</sup> last year.
- 4.3.7 The cost of complying with Firecode across Wales is estimated to be £14 million, which is an increase of £2 million on 2008/09. The estimated cost excludes specific remedial works associated with Ysbyty Glan Clwyd and Prince Charles Hospital, which total approximately £60 million, the latter having reduced their costs by the implementation of a major ward refurbishment programme, new lifts and asbestos management works.

### Statutory and safety compliance targets

- 4.3.8 Figure 16 shows the percentage of the estate under *Statutory and safety compliance* that is in Estatecode condition B or above. The figures for Betsi Cadwaladr for 2008/09 are derived from the combined data submitted by the former North Wales and North West Wales NHS Trusts. This adjustment has enabled performance to be compared with that of 2009/10.

Health Board/Trust	Statutory and safety compliance of Health Organisations			
	2009 - 10		2008 - 09	
Abertawe Bro Morgannwg	79.67			65.72
Aneurin Bevan	84.49		83.44	
Betsi Cadwaladr	84.86		94.29	
Cardiff and Vale	88.02		86.94	
Cwm Taf	81.17		80.45	
Hywel Dda	83.77		86.63	
Powys Teaching	85.62		85.62	
Velindre	87.40		82.91	
Welsh Ambulance Services		63.20		19.50
<b>All Wales Average</b>	<b>83.49</b>		<b>81.53</b>	

Key




	Met 2008 90% Target		Met 2005 75% Target		Failed to meet 2005 & 2008 Targets
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Figure 16: Statutory and safety compliance of Health Organisations

It is noted that in 2009/10, with the exception of one, all Health Boards/Trusts have met the 2005 all-Wales performance target but none have met the 90% target set for 2008. Although the all-Wales average has increased by almost 2% it remains far short of the 90% needed to move into the green band.



4.3.9 In addition to statutory and safety compliance, the EFPMS collects separate data relating to the level of fire safety compliance within each Health Board/Trust, together with an estimate of the costs required to achieve that compliance. These costs are summarised in 4.3.7.

Figure 17 shows the percentage of essential building area considered to be in full fire safety compliance with two Health Boards/Trusts falling significantly short of the 90% target set for 2008. It can be seen that the all-Wales performance has improved but remains within the amber band and falling slightly short (1%) of the target required to move it into the green band.

Health Board/Trust	Fire safety compliance of Health Organisations					
	2009 - 10			2008 - 09		
Abertawe Bro Morgannwg	100.00				85.93	
Aneurin Bevan	93.40			93.08		
Betsi Cadwaladr		79.41			78.48	
Cardiff and Vale	95.03			95.09		
Cwm Taf			72.79			69.14
Hywel Dda	90.66			92.01		
Powys Teaching			74.21			74.21
Velindre		82.40			82.71	
Welsh Ambulance Services	90.38				85.00	
<b>All Wales Average</b>		<b>88.99</b>			<b>85.64</b>	

Key

	Met 2008 90% Target		Met 2005 75% Target		Failed to meet 2005 & 2008 Targets
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Figure 17: Fire safety compliance of Health Organisations

## 4.4 Functional suitability

4.4.1 *Functional suitability* is used to determine how effectively a building (or part of a building) supports the delivery of specific Health Board/Trust services. Key factors, which contribute to these assessments, are:

- ❖ Internal space relationships including walking distances, observation of patients by staff and security;
- ❖ Support facilities such as the adequate provision of toilets and bathrooms, adequate seating and waiting space, and provision for disabled people;
- ❖ Location, including distance to key linked facilities, access to parking areas and access to public transport.

4.4.2 Figure 18 opposite, shows the percentage of the estate under *Functional suitability* that is in Estatecode condition B or above. The figures for Betsi Cadwaladr for 2008/09 are derived from the combined data submitted by the former North Wales and North West Wales NHS Trusts. This adjustment has enabled performance to be compared with that of 2009/10.

It can be seen that only two Health Boards/Trusts have met the 90% target set for 2008. The all-Wales performance has deteriorated, although it remains within the amber band, falling still far short of the target required to move it into the green band.

Health Board/Trust	Functional suitability of Health Organisations					
	2009 - 10			2008 - 09		
Abertawe Bro Morgannwg	92.51			91.94		
Aneurin Bevan			74.52		75.23	
Betsi Cadwaladr			62.06			74.74
Cardiff and Vale		85.13			88.11	
Cwm Taf			70.10			64.07
Hywel Dda		86.92			86.55	
Powys Teaching		88.20			80.41	
Velindre	90.39			90.00		
Welsh Ambulance Services			35.68			26.00
<b>All Wales Average</b>		<b>77.63</b>			<b>80.06</b>	




<b>Key</b>		Met 2008 90% Target		Met 2005 75% Target		Failed to meet 2005 & 2008 Targets
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Figure 18: Functional suitability of Health Organisations

## 4.5 Space utilisation

- 4.5.1 *Space utilisation* explores how well available space is being used. The objective is to hold no more space than is necessary to satisfy the reasonable demands of the present function and planned requirements.
- 4.5.2 Figure 19 shows the percentage of the estate under *Space utilisation* that is in Estatecode condition F. The figures for Betsi Cadwaladr for 2008/09 are derived from the combined data submitted by the former North Wales and North West Wales NHS Trusts. This adjustment has enabled performance to be compared with that of 2009/10.

Health Board/Trust	Space Utilisation of Health Organisations					
	2009 - 10			2008 - 09		
Abertawe Bro Morgannwg	98.22			96.82		
Aneurin Bevan		79.21				74.18
Betsi Cadwaladr		87.50			88.13	
Cardiff and Vale	92.87			94.52		
Cwm Taf	92.53				75.99	
Hywel Dda	94.41			93.73		
Powys Teaching		86.93				74.64
Velindre	93.33			93.00		
Welsh Ambulance Services	92.90			92.00		
<b>All Wales Average</b>	<b>90.72</b>				<b>88.20</b>	




<b>Key</b>		Met 2008 90% Target		Met 2005 75% Target		Failed to meet 2005 & 2008 Targets
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Figure 19: Space utilisation of Health Board/Trust Organisations

It is noted that six Health Boards/Trusts have met the 90% target set for 2008. The all-Wales performance has improved accordingly and moved into the green band.

## 4.6 Energy performance

### Net energy

4.6.1 Net energy consumption for the whole of Wales rose from 2,577,784GJ in 2008/09 to 2,585,169GJ in 2009/10. However, it has been noted that 'degree days', which are used as the standard method for weather correction, have increased due to the exceptionally cold winter. Therefore, in order to accurately determine the trend in energy consumption, a factor to allow for weather correction has been used. Accordingly, based on weather-corrected figures, consumption remained basically the same as 2008/09 at approximately 2,400,000GJ in 2009/10. This is 17% below the 1999-2000 base year weather-corrected figure of 2,900,000GJ.

Transposing these figures to the graph in **Figure 20** shows that, since 1999, there has been a general downward trend in weather-corrected consumption.

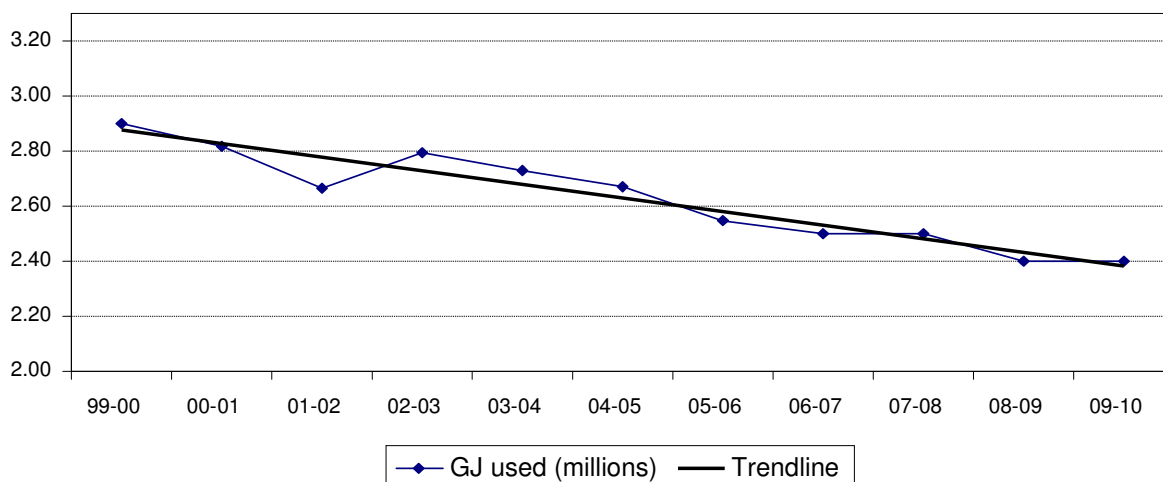


Figure 20: Graph showing net energy consumption and trend

### Primary energy

4.6.2 **Figure 21** opposite, shows primary energy consumption data for 2009/10. The figures are derived from data submitted by individual Health Boards/Trusts, combined as necessary, to take into account the reorganisation of the NHS since April 2008. This adjustment has enabled performance to be compared with that of 2009/10.

It can be seen that primary energy consumption in the whole of Wales during 2009/10 was 3,726,403GJ, compared with 3,737,597GJ for 2008/09. This equates to a reduction in primary energy consumption of 0.3%. This reduction occurred during a period which included an exceptionally cold winter and highlights the increasing contribution of CHP to the energy mix. The table shows that primary energy consumption has risen by 1.9% since the target base year of 1999-2000.

Health Board/Trust	1999 - 2000 PRIMARY (Base Year) (GJ)	2008 - 09 PRIMARY (GJ)	2009 - 10 PRIMARY (GJ)	Change on Previous Year (%)	Change on Base Year (%)
ABM	753,752	798,642	769,674	-3.63	2.11
Aneurin Bevan	554,405	576,644	574,633	-0.35	3.65
Betsi Cadwaladr	715,901	754,730	796,763	5.57	11.3
Cardiff and Vale	811,934	735,904	731,391	-0.61	-9.92
Cwm Taf	324,289	352,429	340,623	-3.35	5.04
Hywel Dda	371,661	386,649	384,971	-0.43	3.58
Powys	102,536	94,196	87,613	-6.99	-14.55
Velindre	22,552	38,403	40,735	6.07	80.63
<b>All Wales Total</b>	<b>3,657,029</b>	<b>3,737,597</b>	<b>3,726,403</b>	<b>-0.30</b>	<b>1.90</b>

Figure 21: Table showing energy consumption in Gigajoules

4.6.3 Figure 22 shows the trend in primary energy consumption since 1990/91 and Figure 23 overleaf, shows the primary energy trend on a Health Board/Trust basis.

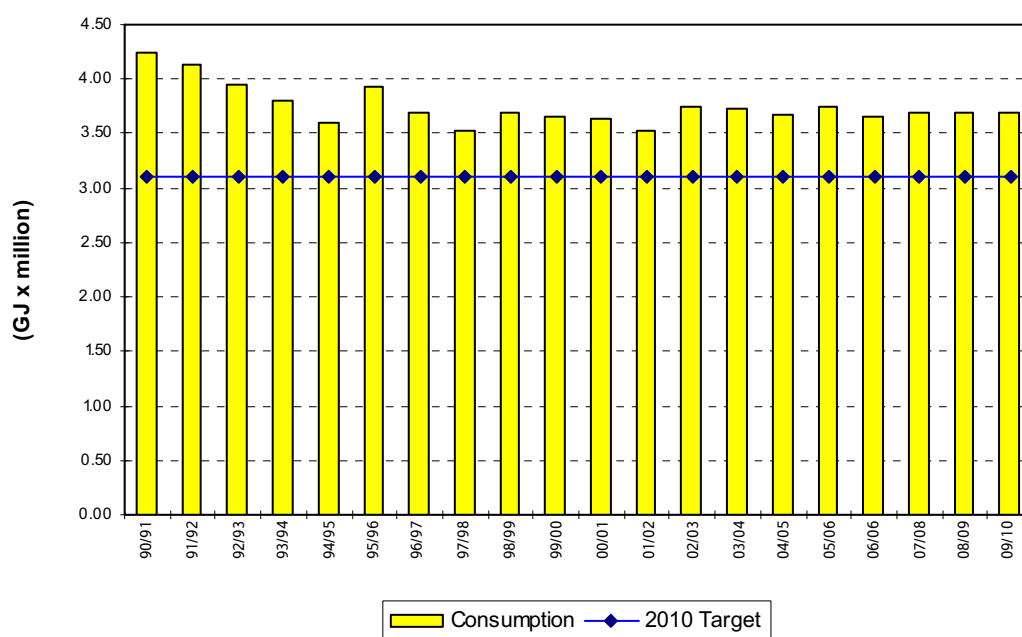


Figure 22: Chart showing primary energy usage 1990/91 to 2009/10

4.6.4 The returns show that total electrical energy is now just under 25% of the total bought-in energy which is virtually unchanged at slightly less than the 2008/09 figure. This is the second year that a reduction of electricity in the energy mix has been recorded and could be an indication that the rise in demand for grid electricity recorded in previous years, is stabilising.

Primary energy consumption rises disproportionately as the amount of grid electricity increases and the figures still show electricity as a high percentage of the energy mix, emphasising the need for Health Boards/Trusts to focus on electrical savings as part of any energy-saving schemes they may consider. Also, it should be noted that the increased output from CHP is the most significant factor in the reduced intake of grid electricity rather than a fall in electricity usage.

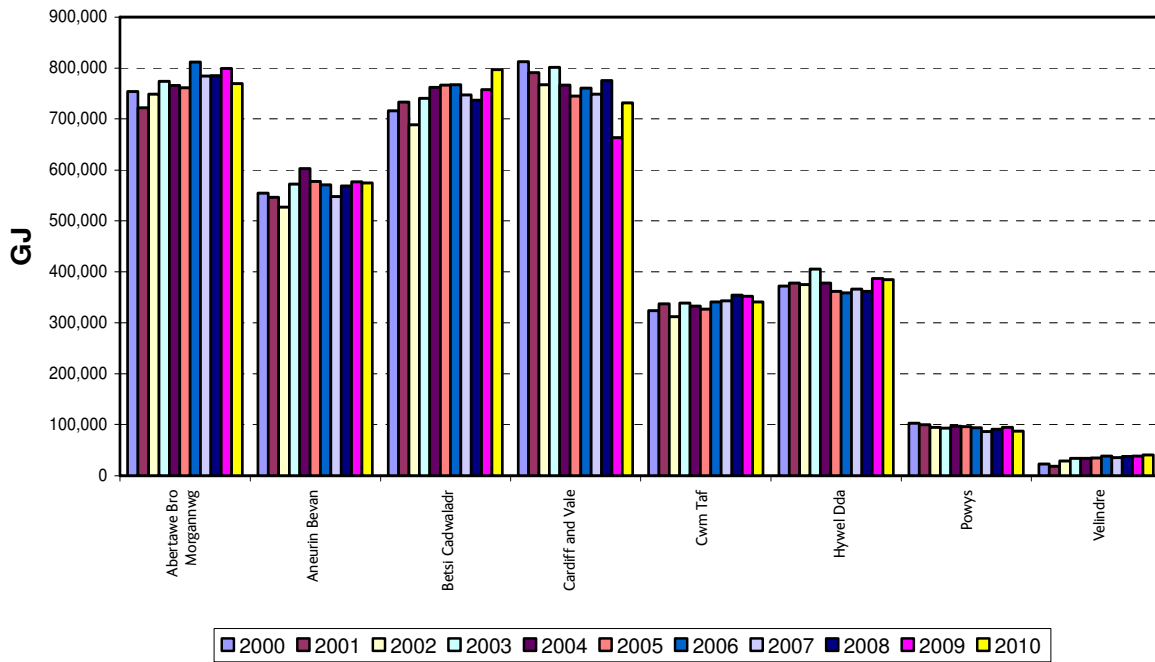


Figure 23: Chart showing primary energy usage over the assessment period

4.6.5 In addition to purchased electricity, a further 119,484GJ of CHP on-site generated electricity was reported for 2009/10, which was 15.7% of the total electrical consumption. This compares with a figure of 8.86% for the previous reporting year. This compares favourably with the government’s target for the public sector of sourcing 15% of electricity from good quality CHP by 2010. These figures do not include the output from the installation at Llandough Hospital as this is treated as local energy in the EFPMS. This output is now greatly reduced due to the age and condition of the installation, so its inclusion would not have a significant effect on the reported figures.

The new installation at the University Hospital of Wales is now fully operational, resulting in a greater CHP capacity, with extended operating times, thus increasing the percentage of electricity derived. This has made a major contribution to the increase in on-site generated electricity reported this year.

During this reporting year a number of CHP sites have experienced maintenance problems that have reduced their output. If these problems are resolved during the next reporting period it is expected that another increase in output will be reported, with a consequential reduction in the amount of grid-derived electrical energy.

Further analysis on an individual Health Board/Trust basis can be found in **Appendices II-X**.

4.6.6 It is noted that Health Boards/Trusts are reporting a greater heated volume (12% increase over the base year) resulting from new developments. Similarly, they are reporting increased service demand for high electrical energy consuming clinical services such as diagnostic imaging. Both issues are impacting on energy consumption; however, it is difficult to quantify the impact with no direct statistical comparison.

4.6.7 The total cost of energy across the NHS in Wales for 2009/10 was £33.2 million compared with £35.3 million last year, a reduction of 6%. It should be remembered that last year’s figure was a rise of

26% on the previous year. Although no clear long term trend can be predicted, forecasts are anticipating considerable rises in the cost of energy in the near future.

Costs of individual bought-in fuels (i.e. taking no account of the small amount of “local” energy), were £28.24/GJ for electricity compared with £27.48/GJ last year, £7.17/GJ for gas compared with £8.41/GJ last year and £11.86/GJ for oil compared with £12.33/GJ last year. The average overall cost was approximately £12.58/GJ compared with £13.19/GJ last year, a decrease of 4.6%.

Figure 24 shows the average overall energy cost since 1984/85, with and without adjustment for inflation. The chart shows that, although there are year-on-year fluctuations that may reduce the cost of energy, there is an increasingly rising trend that is unlikely to change in the long term.

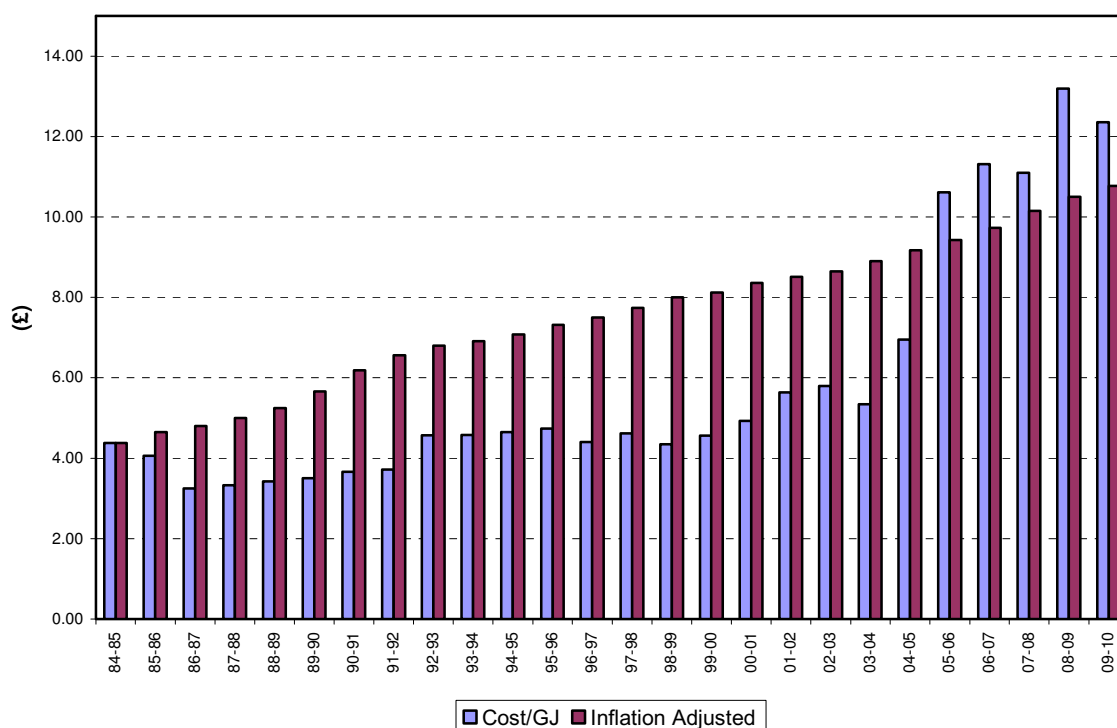


Figure 24: Average energy cost

### Carbon emissions

4.6.8 Figure 25 overleaf, shows the amount of carbon dioxide emissions for each Health Board/Trust over the last two years. It can be seen that in 2009/10 the NHS in Wales produced 118,926 tonnes of CO<sub>2</sub> compared with 117,245 tonnes in 2008/09, a relatively small increase of 1.43% due mainly to service pressures and an increase in consumption due to the exceptionally cold winter. This highlights the significance of low carbon technologies and the importance of continuing to drive forward CHP, renewable energy and other low carbon technologies to achieve genuine reductions in carbon emissions rather than rely on the purchase of electricity from “green tariffs” and assuming a zero emission.

4.6.9 Notwithstanding this increase, a comparison with the base year figure of 185,000 tonnes of carbon dioxide indicates that a reduction of approximately 35% has been achieved.

Health Board/Trust	2009-10 CO <sub>2</sub> (Tonnes)	2008-09 CO <sub>2</sub> (Tonnes)	Variation CO <sub>2</sub> (%)
Abertawe Bro Morgannwg	21,830	23,304	-6.33
Aneurin Bevan	18,927	19,393	-2.4
Betsi Cadwaladr	21,887	23,095	-5.23
Cardiff and Vale	27,139	20,929	29.67
Cwm Taf	12,113	13,102	-7.55
Hywel Dda	12,953	13,101	-1.13
Powys	3,405	3,705	-8.10
Velindre	672	616	9.09
<b>All Wales Total</b>	<b>118,926</b>	<b>117,245</b>	<b>1.43</b>

Figure 25: Carbon Dioxide Emissions

4.6.10 It should be noted that the above figures zero rate 'green' electricity consumption. This has the effect of penalising CHP installations when calculating emissions. This is most clearly seen in the figure for Cardiff & Vale where emissions have risen substantially. This is caused by the increase in CHP output and a consequent reduced intake of "green" electricity. As CHP is regarded as a carbon efficient technology this is something of an anomaly. If the usual grid factor is applied to all imported electricity consumption, the emissions figure would be 188,127 tonnes, approximately 2% higher than the base year figure.

#### Energy performance - Targets

4.6.11 Energy PIs have been set for new and existing buildings. The targets are 35-55GJ/100m<sup>3</sup> for new buildings and 55-65GJ/100m<sup>3</sup> for existing buildings.

4.6.12 Figure 26 shows Health Boards/Trusts' performance against the energy PI for existing buildings. It is noted that all Health Boards/Trusts, with the exception of one, fall within the green band having met the target. With a figure of 55.1GJ/100m<sup>3</sup> the all-Wales performance has improved since last year and

Health Board/Trust	Energy performance indicators Health Organisations					
	2009 - 10			2008 - 09		
Abertawe Bro Morgannwg	57.33			62.51		
Aneurin Bevan		65.24		60.37		
Betsi Cadwaladr	55.67			58.15		
Cardiff and Vale	48.70			45.06		
Cwm Taf	47.58			50.32		
Hywel Dda	58.25			58.69		
Powys Teaching LHB	48.20			52.73		
Velindre	60.69			55.23		
<b>All Wales Average</b>	<b>55.10</b>			<b>55.07</b>		




Key  < 65 GJ/100m<sup>3</sup>  65-67 GJ/100m<sup>3</sup>  > 67 GJ/100m<sup>3</sup>

Figure 26: Energy performance indicators of Health Organisations

represents a 21 % improvement over the 1999-2000 base year figure of 69.41GJ/100m<sup>3</sup>. This is well above the UK target for the government estate, which is an improvement in energy efficiency of 15% by 2010/11 from a base of 1999-2000.

A more detailed analysis of individual Health Boards/Trusts' performance can be found in **Appendices II-X**.

Health Board/Trust	Energy performance of Health Organisations % of estate in category B					
	2009 - 10			2008 - 09		
Abertawe Bro Morgannwg	91.90					56.03
Aneurin Bevan			41.50			58.40
Betsi Cadwaladr		75.50				73.65
Cardiff and Vale	96.21			96.26		
Cwm Taf	90.54			90.29		
Hywel Dda			68.25			68.53
Powys		85.30			76.80	
Velindre	100.00			100.00		
<b>All Wales Average</b>		<b>79.50</b>				<b>74.22</b>

Key



Met 2008  
90%  
Target



Met 2005  
75%  
Target



Failed to  
meet 2005  
& 2008  
Targets

Figure 27: Energy performance of Health Organisations

4.6.13 Figure 27 shows the percentage of the estate under Energy performance that is in Estatecode condition B or above.

4.6.14 This is the first year that the Welsh Ambulance Services Trust has submitted figures for Energy, however, these are not included as their estate is not representative of health care buildings.

It can be seen that five Health Boards/Trusts have met the 90% target set for 2008. The all-Wales performance has improved since 2008/09 and now falls within the amber band but still well short of the 90% target.



## 5 ENVIRONMENTAL ISSUES

### 5.1 Waste

5.1.1 The total quantity of waste disposed of by the NHS in Wales in 2009/10 was reported as 17,772 tonnes, compared with 18,865 tonnes in the previous year (excluding recycled material) and the cost of disposal of this waste in 2009/10 was £4.94 million compared with £5.07 million in the previous year. This headline figure, shown in **Figure 28** represents an encouraging 5% overall reduction in the amount of waste disposed, with a corresponding decrease in costs of 2.5% over the year following several years of gradual increases and despite the continuing cost pressures such as the landfill tax escalator.

5.1.2 Against this headline picture of reducing overall waste, the target from the Healthcare Waste Strategy for Wales was that by 2010 Health Boards/Trusts should reduce their overall waste tonnage by 10% against a 2002-03 baseline. Following initial years of steadily increasing levels of waste, over the last five years there has been a steady progression of reductions. Therefore, when compared against the baseline year, NHS Wales' total waste production has shown a decrease of 497 tonnes. The original 10% target has not been achieved but encouraging progress is being made against a backdrop of expanding healthcare services.

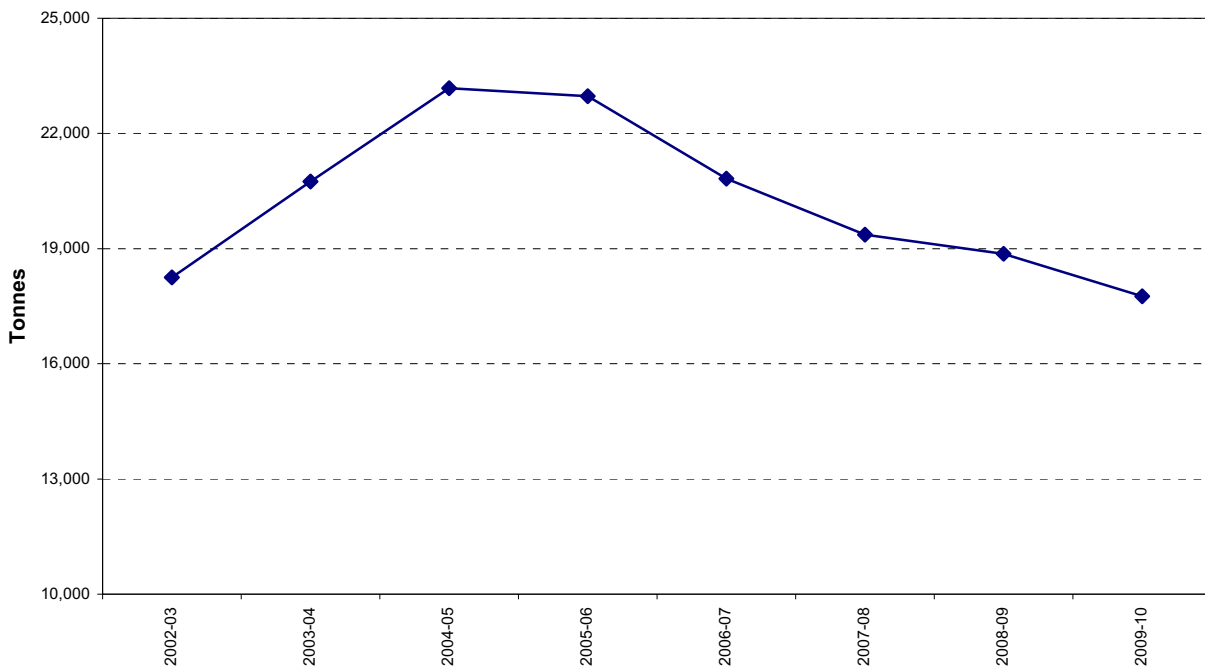


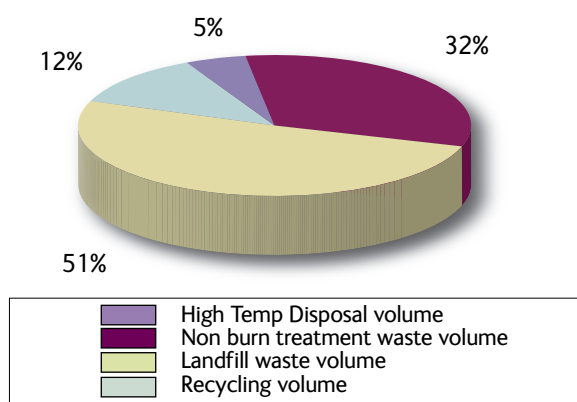
Figure 28: Overall waste trend 2003-2010

5.1.3 Over recent years there have been many changes in the reporting categories for waste which has affected the analysis of trends. However, this year, whilst the only change in reporting has been to alter the way in which recycling is reported, the number and structure of NHS bodies in Wales has changed due to the merger and re-organisation programme. It remains important to note that reported figures and totals do not necessarily represent all waste that is generated, only that which is covered by the EFPMS categories, i.e. waste that goes to landfill, clinical waste disposal facilities, disposal as WEEE or that is recycled. In general, the quality of data being reported is improving year-on-year. The principal

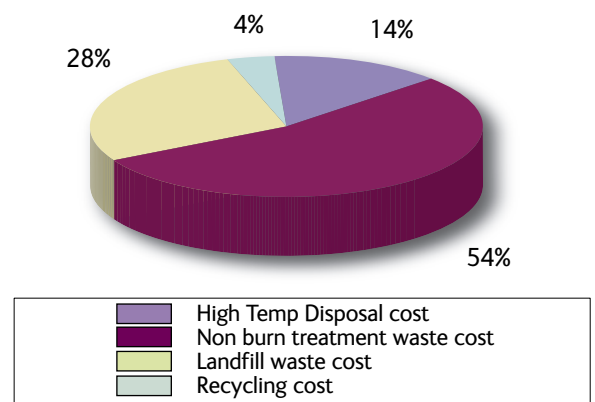
concern this year is that data submitted from Powys is the same as for 2008/09. Therefore any figures or results within this report from Powys Teaching Health Board should be treated with caution.

5.1.4 **Figure 29** shows that the principal waste streams by volume are comprised of approximately 51% landfill waste and 37% clinical waste. These proportions are similar to last year but it is now possible to include the proportion of recycling and highlight this within the figures. Recycling accounts for 12% of waste by tonnage.

5.1.5 **Figure 30** shows that the cost of disposal is split into 68% clinical versus 28% landfill waste with recycling costs accounting for only 4% of overall costs. This demonstrates that, as in previous years, clinical and hazardous waste still accounts for the majority of the costs, although they make up a smaller fraction of the waste. This, of course, reflects the more complex treatment and disposal requirements of clinical wastes.



**Figure 29: Breakdown of waste streams in 2009/2010**



**Figure 30: Breakdown of waste costs in 2009/2010**

### Clinical waste

5.1.6 The reporting of clinical waste is sub-divided into incinerated (high temperature disposal) waste and alternative (non-incineration) treatment waste. As noted above, figures relating to Powys Teaching Health Board are included in the analysis, but should be regarded with caution.

5.1.7 The combined total clinical waste disposed of during 2009/10 is 7,531 tonnes compared with 8,086 tonnes in 2008/09. This represents a reduction of almost 7% in clinical waste volumes over the last year. This may, in part, be due to the gradual increase in adoption of the “tiger-stripe” non-infectious clinical waste stream which diverts the waste away from the alternative treatment stream.

5.1.8 The breakdown of how much clinical waste in total has been generated across the Health Boards/Trusts in Wales over the past 5 reporting years is illustrated in **Figure 31** overleaf. Currently, the proportion of clinical waste going to incineration is 14% whereas the aim, as expressed by the all-Wales contract provider, is for 10% or lower. However, as noted above, continued uptake of the “tiger-stripe” waste stream could, in fact, remove more waste from the alternative treatment stream, resulting in a proportionally higher incineration rate, whilst still delivering cost savings in clinical waste disposal. A good example of this is at Aneurin Bevan Health Board where there has been a significant diversion away from alternative treatment with consequential reductions in clinical waste disposal at the

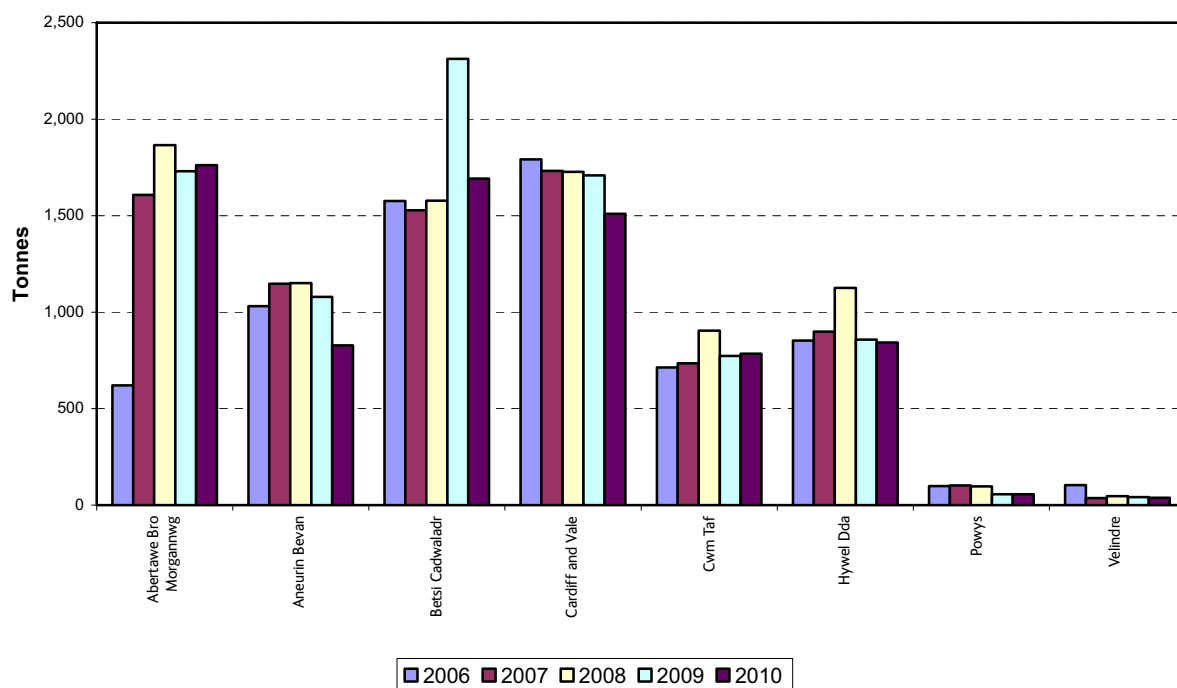


Figure 31: Clinical waste volumes 2006-2010

Health Board. Clinical waste disposal costs have fallen by approximately £50,000 per year for the last two years.

- 5.1.9 Across Wales the cost for the disposal of clinical waste in 2009/10 was reported at £3.5 million compared with £3.7 million in 2008/09. This gives an all-Wales average disposal cost of £467 per tonne, an increase on last year. It is important to note that this is a combined figure including incinerated and non-incinerated clinical wastes.
- 5.1.10 As stated above, incinerated waste accounts, on average, for 14% of the overall clinical waste volume with a total of 1,082 tonnes generated. Non-incineration alternative treatment accounts for 6,449 tonnes or 86% of clinical waste. The costs of each stream are £715,454 for incineration and £2.802 million for alternative treatment, representing 20% and 80% respectively of the total clinical waste cost.

### Landfill waste

- 5.1.11 Landfill waste, as a reporting category, corresponds approximately with the old category for domestic/commercial waste. Health Boards/Trusts in Wales disposed of 10,126 tonnes of waste to landfill in 2009/10 compared with last year's domestic/commercial waste figure of 10,525 tonnes, a further reduction approaching 4% following a 7% reduction the previous year. However, the cost of landfill waste disposal increased from £1.37 million in 2008/09 to £1.43 million in 2009/10.
- 5.1.12 The average all-Wales disposal cost for landfill waste for 2009/10 is £141 per tonne, an increase of £11 per tonne on the previous year, with significant local variations across some individual organisations. These raise doubts over the robustness of some of the data submitted, especially by Powys Teaching Health Board, where reported costs are £557 per tonne and where concerns were highlighted earlier in the report.

5.1.13 In general across Wales, disposal cost increases are attributable to the year-on-year landfill tax escalator imposed by government to act as an incentive to waste minimisation and recycling. Currently, the escalator increases by £8 per tonne per year and will continue to apply until at least 2013, as announced by the Treasury in April 2009.

5.1.14 Hence the landfill waste stream will continue to represent a key opportunity for the new Health Boards/Trusts to reduce their waste, and thereby improve their environmental performance, by initiating recycling and recovery schemes as the cost pressure to reduce waste increases. The trend thus far is encouraging.

### Waste recovery/recycling of waste

5.1.15 Data submitted this year shows that all Health Boards/Trusts in Wales report having some waste recovery/recycling activity in place with the exception of the Welsh Ambulance Services Trust. This is a further improvement on previous years and an encouraging trend. The overall picture, however, is still very patchy with figures varying greatly and with many individual hospital sites still reporting zero recycling. These tend to be the smaller community sites which may reflect a lack of available resources to manage recycling initiatives across a large estate. However, it is positive to note that all major hospitals are now involved in recycling initiatives in some form.

5.1.16 The All-Wales average recycling figure for domestic waste for 2009/10 is now 12.5%, almost unchanged on the previous year's rate of 13%. A comparison of recycling rates is shown in **Figure 32**. It should be noted that, as mentioned previously, there has been a change in the way in which figures are reported this year, with absolute tonnages and costs now reported rather than relative percentage rates. It is hoped this will be a more reliable measure of performance and with an all-Wales rate of only 12.5%, it appears that the NHS is still falling well short on domestic waste recycling and there is much scope for improvement.

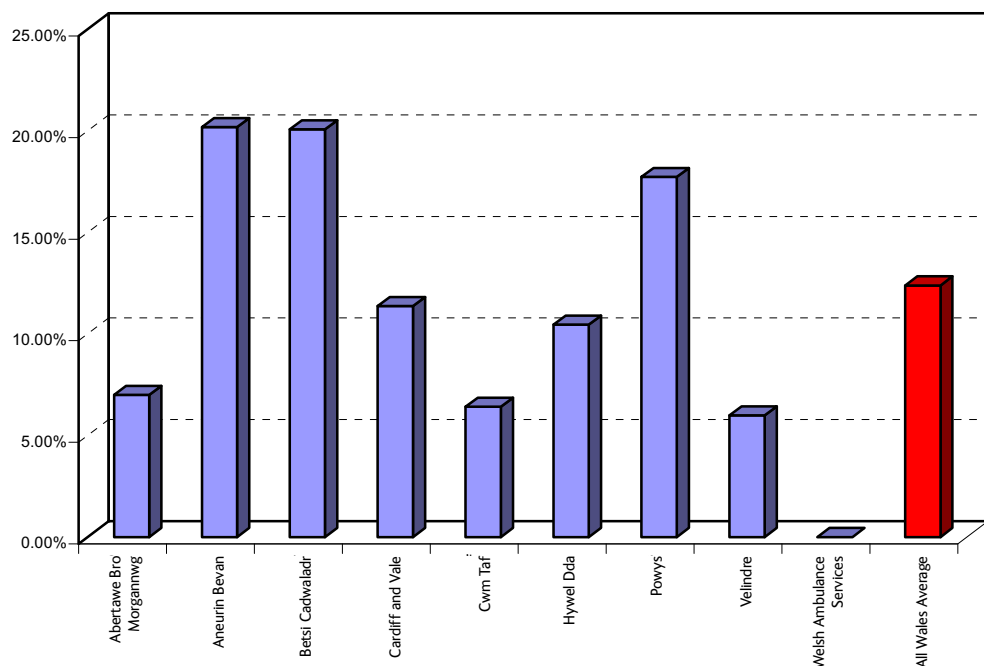


Figure 32: Waste recycling performance in 2009/10

## Waste electrical and electronic equipment (WEEE)

- 5.1.17 Due to the wide range of items and equipment which come under the umbrella of WEEE, which may all have differing disposal treatment requirements, and the absence of national arrangements for waste disposal, there are still no apparent and meaningful trends for the data supplied for waste electrical and electronic waste.
- 5.1.18 WEEE Waste this year totals 113.33 tonnes and £49,990 for the whole of Wales but this is distributed very unevenly with, for example, Betsi Cadwaladr University Health Board reporting 53.5 tonnes whilst Cardiff and Vale University Health Board reported only 2.4 tonnes. Disposal costs also vary greatly between Health Boards/Trusts with, for example, Aneurin Bevan and Cwm Taf Health Boards reporting disposal costs of £105-107 per tonne compared with £749 per tonne at Abertawe Bro Morgannwg University Health Board.
- 5.1.19 Again for 2009/10, whilst the situation is improving slightly, there remain concerns over the degree of completeness and consistency of data giving rise to these wide variations. Powys Teaching Health Board has failed to provide any data for this category while at Hywel Dda Health Board and others there appears to be incomplete reporting Health Board – wide.

## 5.2 Transport

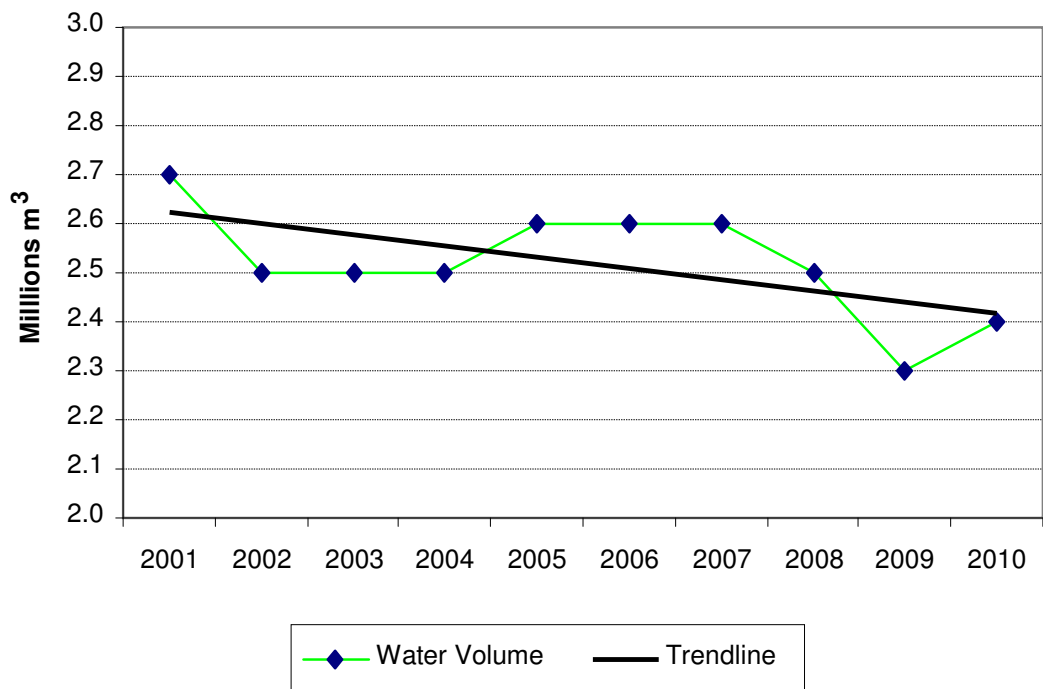
- 5.2.1 The reporting of transport information remains poor with gaps in much of the required data from several Health Boards/Trusts. For example, no data was submitted by any Health Board/Trust for visitor transport mileage that is provided by the organisation.
- 5.2.2 In terms of the number of organisations that have implemented Sustainable Transport Plans, it is noted that all, except for Cwm Taf Health Board, reported having a board-approved plan in place at hospitals requiring them. Sustainable travel plans are a requirement for certain specified hospital sites under WHC (2008) 058 issued in July 2008, and there is a dedicated resource from the sustainable travel organisation, “Sustrans”, to support the NHS in Wales in implementing travel plans.
- 5.2.3 As stated above, the reporting of patient, visitor and staff transport mileage continues to be very patchy with no organisation being able to provide data for all three indicators and with no consistent or meaningful year-on-year trends to interpret from data that is provided. Therefore, detailed analysis of the data covering this area of the EFPMS has not been included.

### 5.3 Water usage

5.3.1 The total water consumption in 2009/10 was just under 2.4 million m<sup>3</sup>, 4.2% higher than the previous year. **Figure 33** shows the trend in water consumption to be downward with consumption now 11% lower than in 2000. It should be noted that Powys Teaching Health Board entered a zero return for the current year.

5.3.2 The average cost of water, including sewage and other charges, was £2.58/m<sup>3</sup>, representing an increase of 4% on the previous year. Costs varied between £2.41/m<sup>3</sup> and £2.88/m<sup>3</sup>.

**Figure 33** shows total consumption for 2001/10 and the trend for that period.



**Figure 33: Total water consumption and Trend 2001/2010**

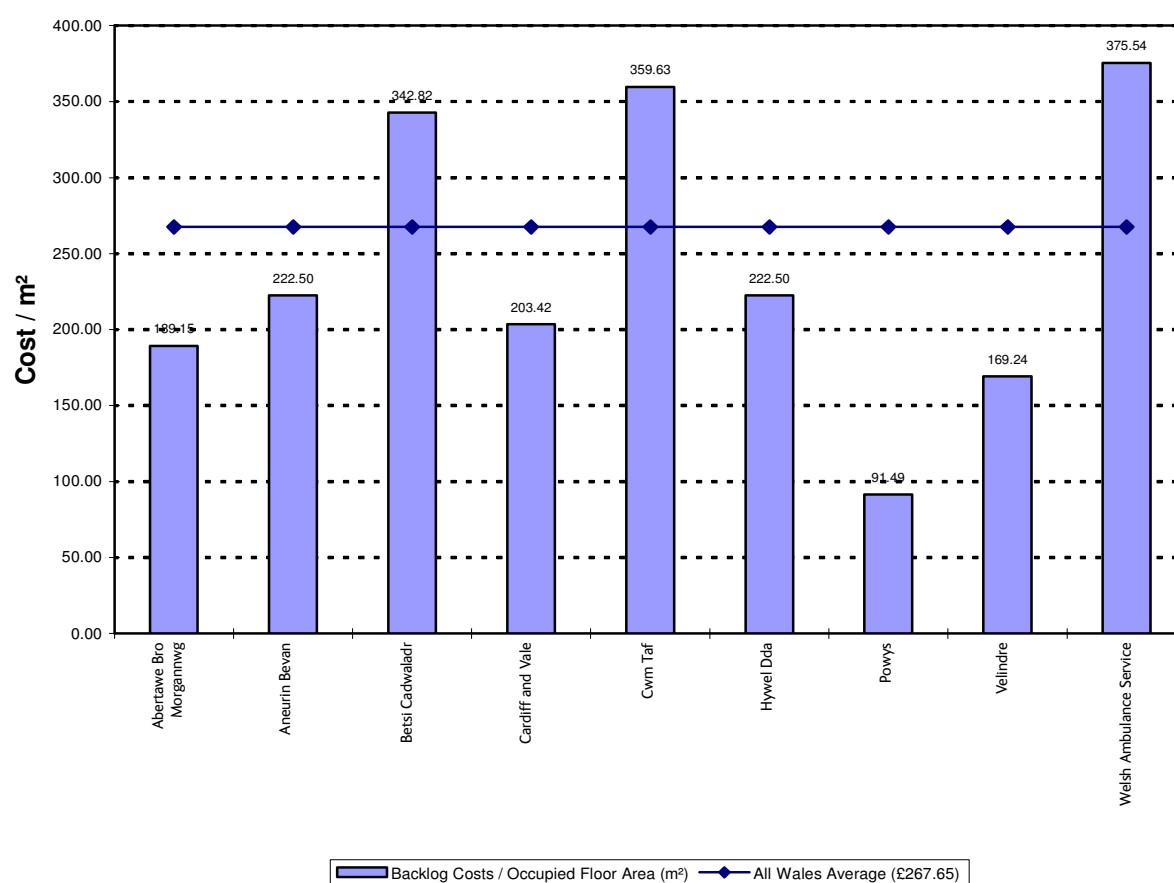
# *APPENDIX I*

## Health Board/Trust backlog maintenance costs

Health Board/Trust	Physical Cost to 'B'	Statutory & Safety Cost to 'B'	Fire Safety Cost to 'B'	Total Backlog Maintenance Costs 2009-2010	Total Backlog Maintenance Costs 2008-2009	Variation
	(£)	(£)	(£)	(£)	(£)	(£)
Abertawe Bro Morgannwg	57,682,679	2,004,527	1,641,783	<b>61,328,989</b>	70,451,668	<b>-9,122,679</b>
Aneurin Bevan	51,256,312	4,575,242	1,467,017	<b>57,298,571</b>	55,630,668	1,667,903
Betsi Cadwaladr	54,666,368	13,337,062	58,737,778	<b>126,741,208</b>	145,546,906	<b>-18,805,698</b>
Cardiff and Vale	35,509,734	32,920,386	120,053	<b>68,550,173</b>	88,207,713	<b>-19,657,540</b>
Cwm Taf	38,880,893	15,334,219	6,287,189	<b>60,502,301</b>	59,671,503	830,798
Hywel Dda	43,458,067	16,946,449	4,663,951	<b>65,068,467</b>	63,100,856	1,967,611
Powys Teaching LHB	2,771,575	702,000	452,000	<b>3,925,575</b>	4,997,075	<b>-1,071,500</b>
Velindre	1,906,413	536,731	47,708	<b>2,490,852</b>	2,880,334	<b>-389,482</b>
<b>Total for 2009-10 excl. WAST</b>	<b>286,132,041</b>	<b>86,356,616</b>	<b>73,417,479</b>	<b>445,906,136</b>	<b>490,486,723</b>	<b>-44,580,587</b>
Welsh Ambulance Services	12,964,216	516,287	886,413	<b>14,366,915</b>	14,731,343	<b>-364,428</b>
<b>Total for 2009-10 incl. WAST</b>	<b>299,096,257</b>	<b>86,872,903</b>	<b>74,303,892</b>	<b>460,273,051</b>	<b>505,218,066</b>	<b>-44,945,015</b>

Note: Total Backlog Maintenance = Physical + Statutory & Safety + Fire Safety Costs to 'B'

### Health Board/Trust backlog maintenance costs



### Comparison of Health Board/Trust backlog maintenance costs/occupied floor area



## *APPENDIX II*

Summary of Health Board/Trust information

ABERTAWE BRO MORGANNWG UNIVERSITY HEALTH BOARD



## Organisation: Abertawe Bro Morgannwg University Health Board

No of Returns: 16 Individual hospital sites

Aggregate sites – All other non-hospital sites

### 1.0 Backlog maintenance

1.1 Abertawe Bro Morgannwg University Health Board was formed from the merger of the former Abertawe Bro Morgannwg University NHS Trust, and the former Bridgend, Neath Port Talbot and Swansea LHB on the 1st October 2009 after the restructuring of the NHS in Wales.

1.2 Figure 1 shows that the Health Board's backlog maintenance costs have reduced by 13% from £70,451,668 in 2008/09 to £61,328,989 in 2009/10.

Site Name	Physical Condition Costs	S & S Costs	Fire Safety Costs	DDA Costs	Backlog Maintenance Costs 2009/10	Backlog Maintenance Costs 2008/09	Variation
	(£)	(£)	(£)	(£)	(£)	(£)	(£)
Cefn Coed Hospital	6,818,141	50,760	115,000	50,760	6,983,901	6,733,901	250,000
Cimla Hospital	5,000	32,878	0	32,878	37,878	281,304	-243,426
Fairwood Hospital	8,000	6,000	5,000	6,000	19,000	19,000	0
Garngoch Hospital	295,744	0	0	0	295,744	307,535	-11,791
Gellinudd Hospital	8,611	0	0	0	8,611	56,478	-47,867
Glanrhyd Hospital	1,340,697	50,590	64,500	0	1,455,787	2,018,226	-562,439
Gorseinon Hospital	28,864	0	0	0	28,864	281,519	-252,655
Hill House Hospital	201,163	0	21,115	0	222,278	224,844	-2,566
Llwyneryr Hospital	2,500	24,010	0	11,330	26,510	48,237	-21,727
Maesgwyn Hospital	95,514	68,145	18,000	64,945	181,659	207,108	-25,449
Maesteg Community Hospital	720,824	249,995	19,000	111,395	989,819	1,007,024	-17,205
Morrison Hospital	19,013,002	0	750,544	0	19,763,546	27,255,728	-7,492,182
Neath Port Talbot Hospital	0	0	0	0	0	0	0
Princess of Wales Hospital	7,962,383	552,115	104,500	550,115	8,618,998	8,690,264	-71,266
Singleton Hospital	18,010,355	200,160	270,000	195,160	18,480,515	19,014,697	-534,182
Tonna Hospital	188,917	60,788	5,000	57,938	254,705	351,494	-96,789
Aggregate sites	2,982,964	709,086	269,124	370,988	3,961,174	3,954,309	6,865
<b>Totals</b>	<b>57,682,679</b>	<b>2,004,527</b>	<b>1,641,783</b>	<b>1,451,509</b>	<b>61,328,989</b>	<b>70,451,668</b>	<b>-9,122,679</b>

Figure 1: Backlog maintenance costs by site

1.3 The largest reduction is associated with Morrison Hospital where backlog maintenance costs have decreased by £7,492,182. Increases have been reported at Cefn Coed Hospital and the Aggregate sites totalling £250,000 and £6,865 respectively.

1.4 The Health Board has confirmed that the large reduction associated with Morrison Hospital is as a result of the completion of the electrical infrastructure work together with a re-assessment and review of condition of the electrical panels installed throughout the site.

- 1.5 Figure 2 identifies the backlog maintenance costs broken down by risk category. It can be seen that the high and significant risk costs total £45,174,548 which is a decrease of £286,546 compared with the figure reported for 2008/09.

Site Name	High Risk backlog cost (£)	Significant Risk backlog cost (£)	Moderate Risk backlog cost (£)	Low Risk backlog cost (£)	Risk adjusted backlog cost (£)
Cefn Coed Hospital	665,000	1,850,493	4,138,486	329,922	2,662,432
Cimla Hospital	0	0	0	37,878	0
Fairwood Hospital	5,000	8,000	0	6,000	13,000
Garngoch Hospital	40,000	0	29,319	226,425	48,283
Gellinudd Hospital	0	0	0	8,611	221
Glanrhyd Hospital	0	305,000	347,640	803,147	343,638
Gorseinon Hospital	0	27,000	0	1,864	27,068
Hill House Hospital	78,345	0	85,866	58,067	83,161
Llwyneryr Hospital	0	0	600	25,910	255
Maesgwyn Hospital	0	35,000	43,614	103,045	38,623
Maesteg Community Hospital	0	25,000	295,350	669,469	45,352
Morryston Hospital	1,666,195	14,900,071	2,264,848	932,432	16,659,420
Neath Port Talbot Hospital	0	0	0	0	0
Princess of Wales Hospital	2,336,500	4,906,500	339,750	1,036,248	7,260,728
Singleton Hospital	15,781,846	390,000	1,887,901	420,768	16,257,819
Tonna Hospital	24,000	88,000	8,750	133,955	113,992
Aggregate sites	788,500	1,254,098	665,925	1,252,651	2,094,705
<b>Totals</b>	<b>21,385,386</b>	<b>23,789,162</b>	<b>10,108,049</b>	<b>6,046,392</b>	<b>45,648,697</b>

Figure 2: Backlog maintenance costs by risk category

- 1.6 Figure 3 shows the Health Board's performance against the key all-Wales targets for the essential estate. It can be seen that the Health Board has exceeded the national performance indicator targets for *Fire*, *Functional suitability*, *Space utilisation* and *Energy*.

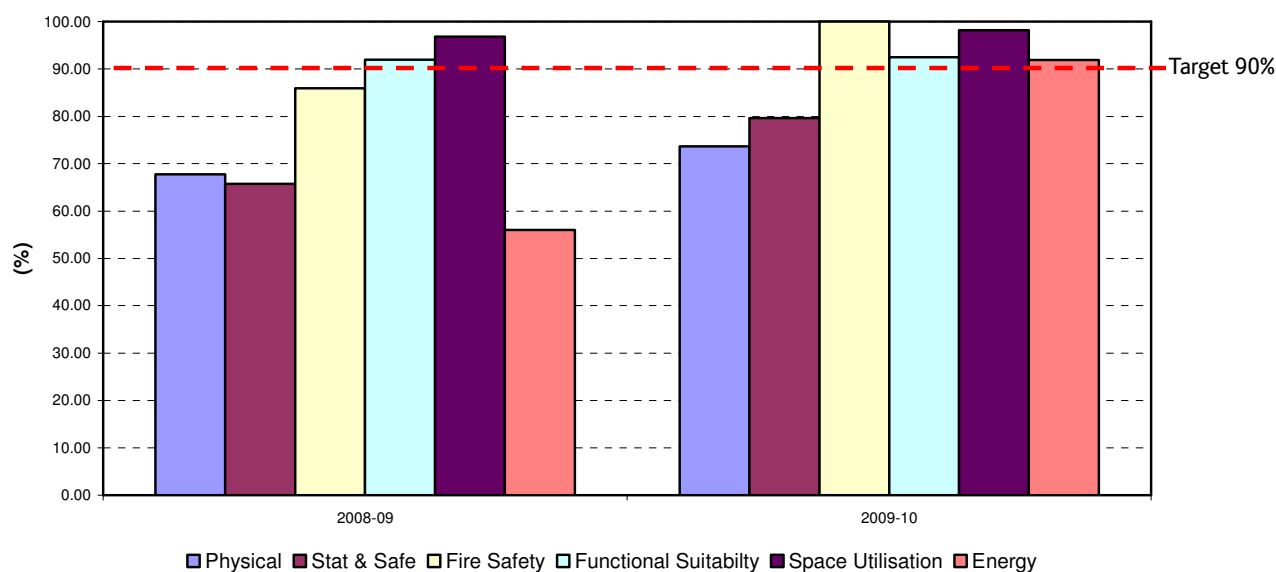
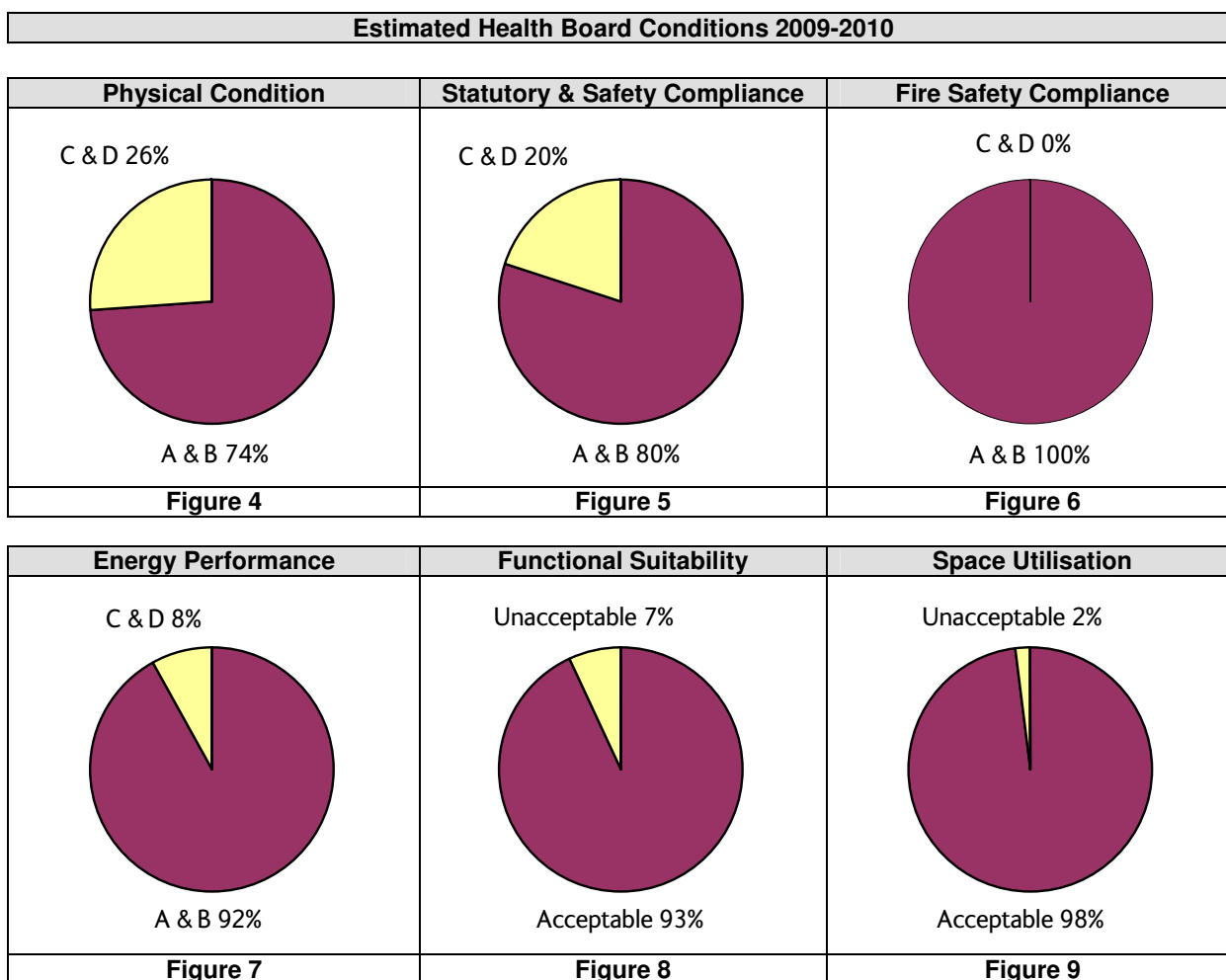


Figure 3: Health Board performance against all-Wales 2008 targets



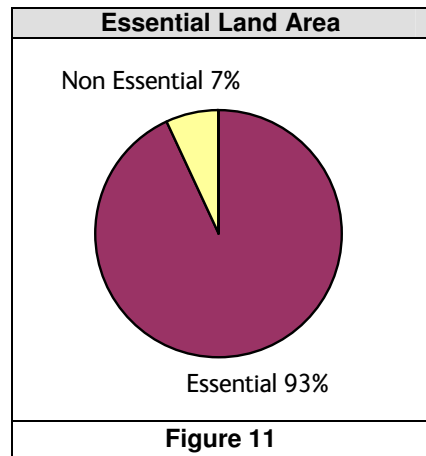
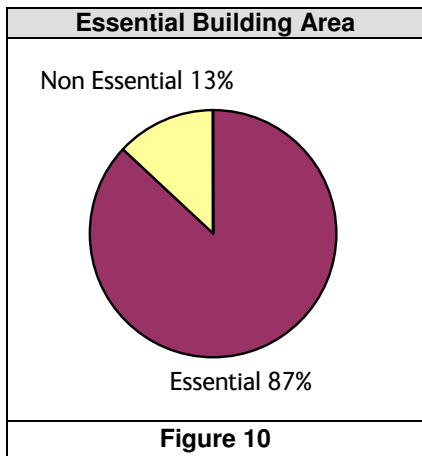
1.7 Figures 4-9 graphically illustrate the Health Board's performance against the key all-Wales targets for the essential estate.

- Physical condition: improvement from 68% to 74%
- Statutory and safety compliance: improvement from 66% to 80%
- Fire safety compliance: improvement from 86% to 100%
- Functional suitability: remains at 93%
- Space utilisation: improvement from 97% to 98%
- Energy Performance: improvement from 56% to 92%

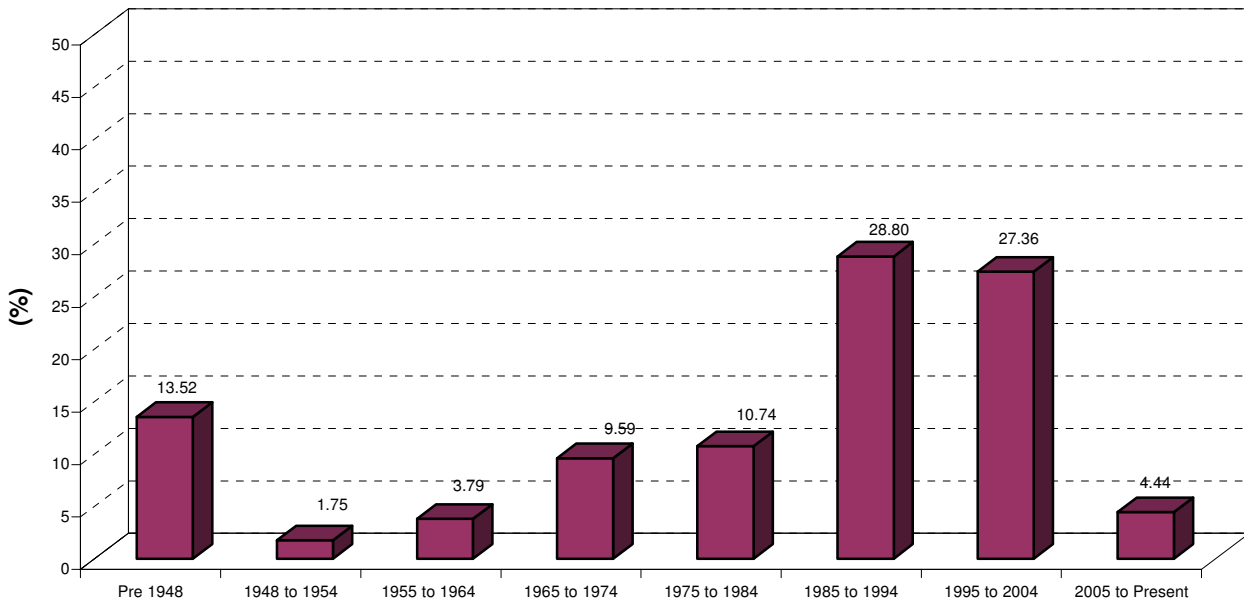
The performance of Abertawe Bro Morgannwg University Health Board against that of other Health Boards/Trusts in Wales is graphically represented in Appendix XII.

1.8 Figures 10 and 11 overleaf, show the essential building and land areas of the Health Board and are reported to be 87% and 93% respectively.

**Estimated Health Board Conditions 2009-2010**



1.9 Figure 12 illustrates the age profile of the Health Board. It can be seen that just under 14% of the Health Board’s estate pre-dates 1948 and approximately 60% is 25 years old or less.



**Figure 12: Age profile of the estate**

**2.0 Energy performance**

2.1 In 2009/10 hospitals in the Health Board recorded a net energy consumption of 506,226GJ, a decrease of 4.8% on last year’s figure of 531,808GJ.

The main reason for the reduction is the decreased consumption reported at the Health Board’s three largest hospital sites, Princess of Wales, Morriston and Singleton. Each of these sites has reported a considerable reduction in consumption ranging between 4% and 7%. These sites account for more than two thirds of the total consumption of the Health Board.

2.2 Primary energy consumption figures show a reduction of 3.6%, from 798,642GJ in 2008/09 to 769,674GJ this year.

The latest sets of figures indicate that the Health Board primary energy consumption is 2.1% above the level of the base year.

- 2.3 The intake of grid electricity at the Princess of Wales Hospital has risen from 25,744GJ in 2008/09 to 28,412GJ in 2009/10, an increase of 10%. This is partly accounted for by the slight drop in the output of the CHP installation at the site by comparison with the previous reporting period.
- 2.4 With reference to **Figure 13**, the overall PI has improved to 54.73GJ/100m<sup>3</sup> which is below the lower limit of the target range of 55-65GJ/100m<sup>3</sup>.

At 38.33GJ/100m<sup>3</sup>, the performance of Neath Port Talbot Hospital is the best in the Health Board.

The PI of the Health Board's largest site, Morriston Hospital, at 56.67 GJ/100m<sup>3</sup> is now within the target range. This figure is significantly better than its PI of two years ago of 79.48 GJ/100m<sup>3</sup>. Improvements to the energy efficiency at this site have made a considerable difference to the overall Health Board's performance. Morriston Hospital's net energy consumption decreased by 5.4%, this figure has not been weather-corrected so, in view of the cold winter, the performance is impressive as is the performance at the other larger sites.

Hospital	Net Hospital Energy Consumption (GJ)	Change on Previous Year (%)	Heated Volume (m <sup>3</sup> )	Site PI (GJ/100m <sup>3</sup> )
Cefn Coed Hospital	36,175	4.68	53,669	67.40
Cimla Hospital	4,183	-1.83	8,590	48.70
Fairwood Hospital	1,158	-2.69	1,754	66.02
Garngoch Hospital	3,013	-3.46	4,500	66.96
Gellinudd Hospital	1,530	-2.17	2,548	60.05
Glanrhyd Hospital	22,609	-16.72	50,310	44.94
Gorseinon Hospital	4,416	-5.24	10,454	42.24
Hill House Hospital	7,233	9.10	10,414	69.45
Llwyneryr Hospital	1,514	-1.24	2,839	53.33
Maesgwyn Hospital	2,452	-11.42	3,873	63.31
Maesteg Community Hospital	5,225	0.85	9,814	53.24
Morriston Hospital	155,077	-5.41	273,629	56.67
Neath Port Talbot Hospital **	49,275	-3.93	128,561	38.33
Princess of Wales Hospital*	87,453	-7.03	167,164	52.32
Singleton Hospital	115,600	-4.33	182,759	63.25
Tonna Hospital	9,313	2.75	13,995	66.55
<b>Totals</b>	<b>506,226</b>	<b>-4.81</b>	<b>924,873</b>	<b>54.73</b>

Figure 13: Individual hospital energy PIs

\* Site with CHP installed

\*\* PFI Hospital

### 3.0 Summary

- 3.1 The Abertawe Bro Morgannwg University Health Board has made significant progress in meeting four of the 2008 estate national performance indicator targets set by the Welsh Assembly Government in 2002.

- 3.2 The Health Board's backlog maintenance costs are still high. It is noted that four hospitals contribute to approximately 70% of the backlog costs. Accordingly, the Health Board will need to focus its attention on the Princess of Wales, Morriston and Singleton sites as Cefn Coed Hospital has been identified as non-essential estate. The largest reduction in backlog maintenance costs are attributed mainly to Morriston Hospital.
- 3.3 Energy performance figures suggest that very significant progress has been made by the Health Board.



## *APPENDIX III*

### Summary of Health Board/Trust information

#### ANEURIN BEVAN HEALTH BOARD

## Organisation: Aneurin Bevan Health Board

No of Returns: 21 Individual hospital sites

Aggregate sites – All other non-hospital sites

### 1.0 Backlog maintenance

1.1 Figure 1 shows that the Aneurin Bevan Health Board's backlog maintenance costs have increased by £1,667,903 from £55,630,668 in 2008/09 to £57,298,571 in 2009/10. Apart from Abertillery and Oakdale hospitals, which have closed, reductions totalling £599,585 have been reported at seven sites, the largest being £269,983 at Caerphilly Miners' Hospital.

1.2 Increases in backlog maintenance costs have been reported in respect of 12 sites, the largest being £1,279,463 at Nevill Hall Hospital.

Site Name	Physical Condition Costs (£)	S & S Costs (£)	Fire Safety Costs (£)	DDA Costs (£)	Backlog Maintenance Costs 2009/10 (£)	Backlog Maintenance Costs 2008/09 (£)	Variation (£)
Aberbargoed & District	66,190	44,407	30,264	44,011	140,861	140,898	-37
Abertillery & District	0	0	0	0	0	639,395	-639,395
Blaenavon Health Care Unit	193,287	30,064	3,755	25	227,106	218,415	8,691
Blaina & District Hospital	491	9,255	32,430	8,633	42,176	44,117	-1,941
Caerphilly District Miners	6,874,877	438,392	116,157	17,475	7,429,426	7,699,409	-269,983
Chepstow Community	0	29,486	12,211	29,486	41,697	41,414	283
County Hospital	3,425,638	559,561	101,180	115,694	4,086,379	4,202,482	-116,103
Llanfrechfa Grange Hospital	953,540	210,316	109,839	6,828	1,273,695	1,227,755	45,940
Maindiff Court Hospital	514,754	160,518	86,468	32,663	761,740	742,341	19,399
Monnow Vale Health facility	0	0	0	0	0	0	0
Nevill Hall Hospital	9,303,660	1,594,622	200,000	262,828	11,098,282	9,818,819	1,279,463
Oakdale Hospital	0	0	0	0	0	206,741	-206,741
Redwood Memorial Hospital	29,071	60,432	11,963	18,564	101,466	102,108	-642
Royal Gwent Hospital	10,349,344	394,029	250,000	352,187	10,993,373	10,284,586	708,787
St Cadoc's Hospital	2,079,118	62,291	10,006	54,336	2,151,415	2,348,653	-197,238
St Woolos Hospital	6,802,603	62,440	250,000	34,439	7,115,043	6,460,410	654,633
Talgarn & Ty Siroil	6,218	70,168	7,553	65,435	83,939	66,896	17,043
Tredegarr General Hospital	67,256	129,249	50,000	62,464	246,505	260,146	-13,641
Ty Sirhowy Unit	2,129	6,862	42,309	5,044	51,300	51,087	213
Ysbytyr Tri Chwm	170,945	21,230	12,155	15,153	204,330	202,369	1,961
Ystrad Mynach Hospital	8,525,021	501,222	66,257	101,518	9,092,500	8,974,904	117,596
Aggregate sites	1,892,170	190,698	74,470	5,364	2,157,338	1,897,723	259,615
<b>Totals</b>	<b>51,256,312</b>	<b>4,575,242</b>	<b>1,467,017</b>	<b>1,232,147</b>	<b>57,298,571</b>	<b>55,630,668</b>	<b>1,667,903</b>

Figure 1: Backlog maintenance costs by site

1.3 Figure 2 overleaf, identifies the backlog maintenance costs broken down by risk category. It can be seen that the high and significant risk costs total £16,010,634, an increase of £2,579,497 compared with 2008/09.

The Health Board has confirmed that the delay in the clinical futures programme has resulted in the risk profile for the Health Board changing in order to take account of the extended lifespan of some of the sites together with subsequent survival plans that have been put in place.

Site Name	High Risk backlog cost (£)	Significant Risk backlog cost (£)	Moderate Risk backlog cost (£)	Low Risk backlog cost (£)	Risk adjusted backlog cost (£)
Aberbargoed & District	36,206	41,697	13,467	49,491	109,382
Blaenavon Health Care Unit	13,730	36,612	37,811	138,953	59,645
Blaina & District Hospital	28,476	13,221	105	374	41,936
Caerphilly District Miners	564,435	343,746	1,449,166	5,072,079	4,168,803
Chepstow Community	17,289	24,408	0	0	41,697
County Hospital	502,398	359,408	716,572	2,508,001	1,015,357
Llanfrechfa Grange Hospital	198,824	200,858	186,955	687,058	448,238
Maindiff Court Hospital	139,329	155,601	102,035	364,775	320,864
Monnow Vale Health Facility	0	0	0	0	0
Nevill Hall Hospital	1,054,629	2,860,821	1,465,976	5,716,856	4,428,509
Redwood Memorial Hospital	25,425	48,816	5,951	21,274	87,835
Royal Gwent Hospital	2,845,566	2,822,175	1,097,904	4,227,728	6,048,143
St Cadoc's Hospital	106,785	147,465	258,263	1,638,902	400,186
St Woolos Hospital	366,120	823,770	1,295,116	4,630,037	1,519,065
Talygarn & Ty Siriol	30,510	48,816	1,009	3,604	79,485
Tredegar General Hospital	107,802	112,887	5,582	20,234	233,597
Ty Sirhowy Unit	35,595	13,730	432	1,543	49,435
Ysbytyr Tri Chwm	21,357	25,425	34,437	123,111	52,409
Ystrad Mynach Hospital	508,500	753,597	1,711,564	6,118,839	5,177,298
Aggregate sites	113,904	460,701	338,553	1,244,180	657,907
<b>Totals</b>	<b>6,716,880</b>	<b>9,293,754</b>	<b>8,720,898</b>	<b>32,567,039</b>	<b>24,939,791</b>

Figure 2: Backlog maintenance costs by risk category

1.4 Figure 3 shows the Health Board's performance trend between 2001-10 against the key all-Wales 2008 targets for the essential estate. It can be seen that there has been very little improvement across the indicators over the monitoring period.

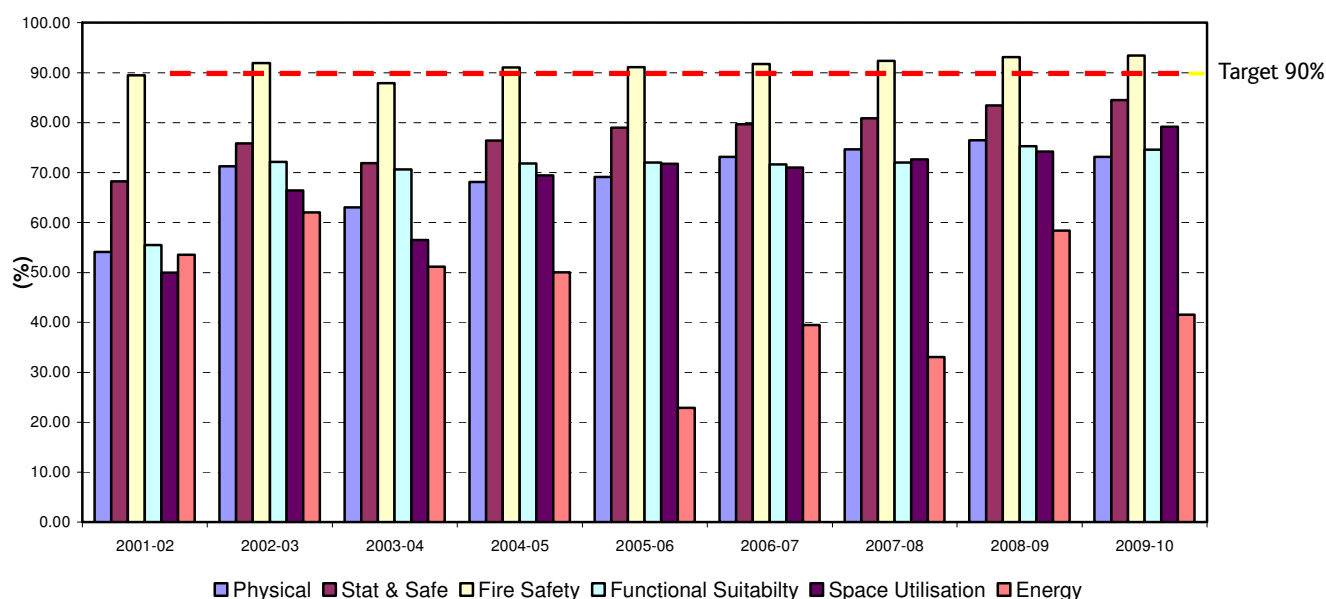


Figure 3: Trend in Health Board performance between 2001-10 against all-Wales 2008 targets

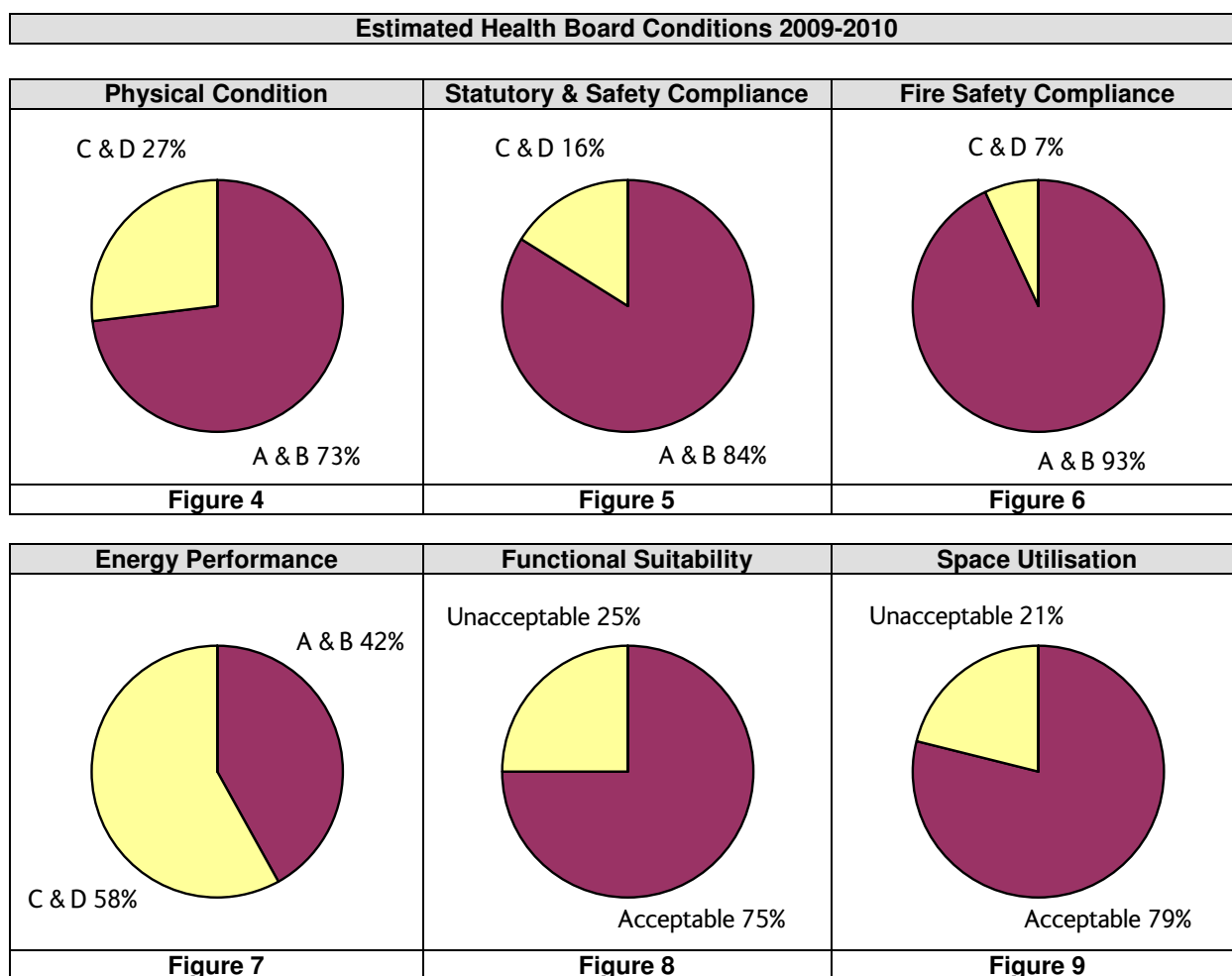
1.5 Figures 4-9 graphically illustrate the Health Board's performance against the key all-Wales targets for the essential estate.

Performance against last year's figures is as follows:

- Physical condition: reduction from 77% to 73%
- Statutory and safety compliance: improvement from 83% to 84%
- Fire safety compliance: remains at 93%
- Functional suitability: remains at 75%
- Space utilisation: improvement from 74% to 79%
- Energy Performance: reduction from 58% to 42%

It can be seen from this analysis that, with the exception of fire safety, the Health Board has not met the targets set for 2008.

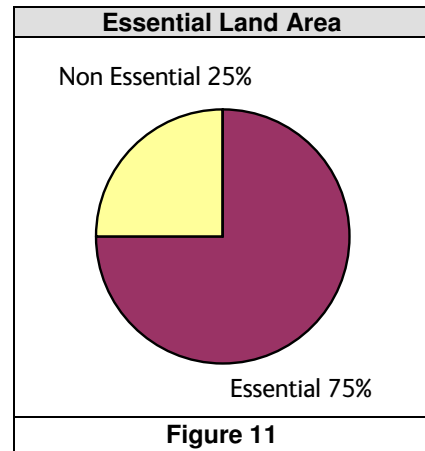
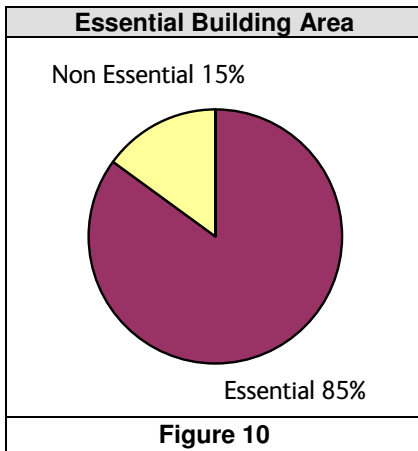
The performance of Aneurin Bevan Health Board against that of other Health Boards/Trusts in Wales is graphically represented in Appendix XII.



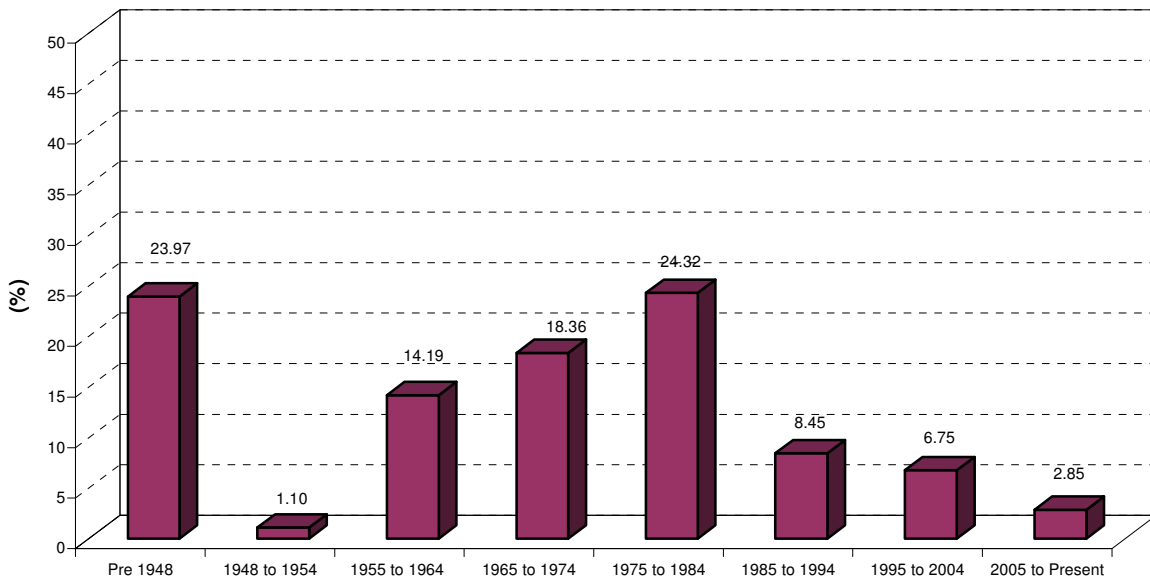
1.6 Figures 10 and 11 overleaf, illustrate the amount of essential building area and land the Health Board has in its ownership.

It is noted that the essential building and land figures remain virtually unchanged from those reported in 2008/09.

**Estimated Health Board Conditions 2009-2010**



1.6 **Figure 12** illustrates the age profile for the Health Board. It can be seen that almost a quarter of the Health Board’s estate pre-dates 1948 and approximately 18% is 25 years old or less. The age profile of the estate has changed little over the last few years. However, with the recent completion of Ysbyty Aneurin Bevan in Ebbw Vale, the completion of Ysbyty Ystrad Fawr in Ystrad Mynach in 2010/11 and the subsequent closure of the non-essential estate, the age profile will dramatically change.



**Figure 12: Age profile of the estate**

**2.0 Energy performance**

2.1 In 2009/10 hospitals in the Health Board recorded a net energy consumption of 406,907GJ compared with 404,849GJ last year, an increase of 0.5%. This equates to a primary energy consumption of 574,633GJ, a decrease of 0.3% on last year’s figure of 576,644GJ and 3.6% up on the base year consumption.

In the last two years, the energy consumption at the Royal Gwent Hospital and St Woolos Hospital sites has been aggregated to avoid the inaccuracies caused by the method of apportionment of energy used previously.

- 2.2 With reference to **Figure 13**, the overall PI has deteriorated marginally from 62.02GJ/100m<sup>3</sup> last year to 60.73GJ/100m<sup>3</sup>; this is within the target range of 55-65GJ/100m<sup>3</sup>. The individual hospital PIs suggest that savings can be made by focusing on several poor performing hospitals, particularly at some of the larger sites, such as Nevill Hall Hospital where net consumption continues to rise, increasing this year by 5.44%.
- 2.3 The Health Board has invested heavily on Central Energy Fund projects receiving funding to the value of £493,000. The energy savings benefit of these schemes is not apparent from the consumption reported. It is likely that increased demand has negated the savings made by these projects.

Hospital	Net Hospital Energy Consumption (GJ)	Change on Previous Year (%)	Heated Volume (m <sup>3</sup> )	Site PI (GJ/100m <sup>3</sup> )
Aberbargoed & District	2,974	-5.80	4,235	70.22
Blaenavon Health Care Unit	1,622	-3.16	3,316	48.91
Blaina & District Hospital	4,672	1.04	9,210	50.73
Caerphilly District Miners	18,210	7.58	30,550	59.61
Chepstow Community**	9,242	7.17	15,243	60.63
County Hospital	16,497	17.61	38,928	42.48
Llanfrechfa Grange Hospital	18,392	-11.89	44,876	40.98
Maindiff Court Hospital	8,027	11.15	14,143	56.76
Monnow Vale Health Facility	3,774	15.98	6,880	54.85
Nevill Hall Hospital *	93,919	5.44	125,400	74.90
Redwood Memorial Hospital	2,058	-13.31	2,223	92.58
Royal Gwent Hospital	177,698	1.77	267,548	66.42
St Cadoc's Hospital*	21,648	-19.79	61,851	35.00
St Woolos Hospital*	0	0	0	0.00
Talygarn & Ty Siriol	4,631	0.43	9,443	49.04
Tredegar General Hospital	6,273	15.80	7,840	80.01
Ty Sirhowy Unit	867	-0.34	3,035	28.57
Ysbytyr Tri Chwm	4,100	-7.22	6,353	64.54
Ystrad Mynach Hospital	12,303	0.33	18,973	64.84
<b>Totals</b>	<b>406,907</b>	<b>0.05</b>	<b>670,047</b>	<b>60.73</b>

Figure 13: Individual hospital energy PIs

\* Sites with CHP installed

\*\* PFI Hospital

### 3.0 Summary

- 3.1 There has been no marked improvement in respect of meeting the 2008 estate national performance indicator targets set by the Welsh Assembly Government in 2002. The Fire safety target has remained the same as last year.

- 3.2 The Health Board's backlog maintenance costs have increased slightly compared with last year, although the planned replacement of a number of older hospitals, along with the opening of the two new local general hospitals at Ystrad Mynach and Ebbw Vale will have a big impact on reducing backlog maintenance. Three hospitals account for approximately 53% of the total backlog maintenance costs, posing significant challenges for the Health Board as it seeks to reduce its backlog burden.
- 3.3 Whilst the Health Board's energy performance figures fall within the target range, it is evident that there is still scope for improvement at a number of poor performing sites. Significant investment on Central Energy Fund projects has not resulted in the carbon, energy and cost savings that were anticipated. It must be assumed that the reported increase in consumption would have been greater if it were not for this funding.

## *APPENDIX IV*

Summary of Health Board/Trust information

BETSI CADWALADR UNIVERSITY HEALTH BOARD





**Organisation:** Betsi Cadwaladr University Health Board

**No of Returns:** 37 Individual hospital sites

Aggregate sites – All other non-hospital sites

### *General note*

Betsi Cadwaladr University Health Board was formed from the merger of the former North Wales and North West Wales NHS Trusts and, Anglesey, Conwy, Denbighshire and Flintshire Local Health Boards on the 1st October 2009. Wherever feasible, the data submitted by the two former Trusts for the 2008/09 returns has been combined to enable comparisons to be made against this year's return for the Betsi Cadwaladr University Health Board.

## 1.0 Backlog maintenance

- 1.1 **Figure 1 overleaf**, shows that the Health Board's backlog maintenance costs have decreased by £18,805,698 from £145,546,906 in 2008/09 to £126,741,208 in 2009/10.
- 1.2 Bron y Garth and Cedar Court have closed and this has resulted in a reduction of backlog totalling approximately £750,000.
- 1.3 The biggest change is associated with Ysbyty Gwynedd, where backlog maintenance costs have decreased by £19,262,140 from £35,622,965 to £16,360,825 largely due to an investment of over £18 million in the site's electrical infrastructure which will be completed in 2010/11. Ysbyty Glan Clwyd backlog has increased by £658,026 as a result of the condition of the asbestos structural fire cladding and risk levels being re-evaluated.
- 1.4 **Figure 2** on page 65, identifies the backlog maintenance costs broken down by risk category. It can be seen that the high and significant risk costs total £33,394,717 which is £12,783,375 less than the figure reported by the two individual Trusts in 2008/09.

Site Name	Physical Condition Costs (£)	S & S Costs (£)	Fire Safety Costs (£)	DDA Costs (£)	Backlog Maintenance Costs 2009/10 (£)	Backlog Maintenance Costs 2008/09 (£)	Variation (£)
Abergele Hospital	3,248,260	394,375	120,000	205,403	3,762,635	3,678,512	84,123
Ablett Unit	246,995	99,847	0	98,677	346,842	402,841	-55,999
Bodnant Psychiatric Unit	363,399	33,091	10,250	32,066	406,740	386,105	20,635
Bron-y-Garth	0	0	0	0	0	750,243	-750,243
Bryn Beryl Hospital	251,190	11,515	32,290	10,500	294,995	262,675	32,320
Bryn Esket EMI	85,132	33,299	12,813	32,274	131,244	127,331	3,913
Bryn-y-Neuadd Hospital	1,666,750	60,000	330,380	60,000	2,057,130	2,036,505	20,625
Cedar Court	0	0	0	0	0	24,348	-24,348
Cefni Hospital	47,750	8,000	0	8,000	55,750	63,184	-7,434
Chirk Community Hospital	0	6,000	0	6,000	6,000	6,000	0
Coed Celyn Support Unit	0	0	0	0	0	0	0
Colwyn Bay Community	415,222	184,109	6,663	121,526	605,994	720,128	-114,134
Deeside Community	35,000	18,000	54,000	2,500	107,000	53,000	54,000
Denbigh Community	431,638	86,633	1,539	84,839	519,810	504,637	15,173
Dolgellau & Barmouth	269,820	57,400	44,798	42,000	372,018	367,904	4,114
Eryri Hospital	1,355,408	36,500	30,000	36,500	1,421,908	1,149,957	271,951
Ffestiniog Memorial	162,091	43,815	16,500	42,000	222,406	211,891	10,515
Flint Community Hospital	0	25,000	0	13,000	25,000	25,000	0
Glan Traeth Day Hospital	145,327	14,708	0	13,683	160,035	121,004	39,031
Glan Traeth Day	110,220	14,708	0	13,683	124,928		124,928
Hafod MHRC	134,743	23,503	500	22,274	158,746	153,386	5,360
HM Stanley Hospital	2,317,065	396,564	90,000	278,591	2,803,629	2,606,230	197,399
Holywell Community	0	0	0	0	0	0	0
Llandudno General Hospital	1,006,943	229,790	120,000	36,000	1,356,733	857,465	499,268
Llangollen Community	1,079,578	34,436	105,063	32,092	1,219,077	1,187,343	31,734
Mold Community Hospital	5,000	25,000	0	4,000	30,000	30,000	0
Nant y Glyn Centre	155,369	22,633	0	21,803	178,002	177,729	273
Penley Hospital	0	0	0	0	0	0	0
Prestatyn Community	99,751	23,792	0	22,561	123,543	119,530	4,013
Royal Alexandra Hospital	3,829,321	265,301	285,406	249,843	4,380,028	4,341,786	38,242
Ruthin Community Hospital	402,086	66,321	0	64,706	468,407	455,983	12,424
Tywyn & District War	261,037	28,650	70,000	20,000	359,687	257,863	101,824
Ysbyty Alltwen	0	0	0	0	0	0	0
Ysbyty Glan Clwyd	3,427,834	8,700,528	55,930,750	1,525,528	68,059,112	67,401,085	658,027
Ysbyty Gwynedd	14,663,000	586,825	1,111,000	200,000	16,360,825	35,622,965	-19,262,140
Ysbyty Maelor	10,620,500	1,135,000	0	500,000	11,755,500	12,523,600	-768,100
Ysbyty Penrhos Stanley	263,000	2,768	60,000	0	325,768	267,045	58,723
Aggregate sites	7,566,939	668,951	305,826	499,192	8,541,716	8,653,631	-111,915
<b>Totals</b>	<b>54,666,368</b>	<b>13,337,062</b>	<b>58,737,778</b>	<b>4,299,241</b>	<b>126,741,208</b>	<b>145,546,906</b>	<b>-18,805,698</b>

Figure 1: Backlog maintenance costs by site

Site Name	High Risk backlog cost (£)	Significant Risk backlog cost (£)	Moderate Risk backlog cost (£)	Low Risk backlog cost (£)	Risk adjusted backlog cost (£)
Abergele Hospital	74,465	148,929	2,606,258	932,983	388,866
Ablett Unit	3,468	6,937	41,621	294,816	22,007
Bodnant Psychiatric Unit	0	2,440	101,685	302,615	20,608
Bron-y-Garth	0	0	0	0	0
Bryn Beryl Hospital	4,381	33,142	163,322	94,151	48,716
Bryn Esket EMI	0	2,100	31,499	97,645	6,649
Bryn-y-Neuadd Hospital	569,038	993,364	340,152	154,576	1,582,191
Cedar Court	0	0	0	0	0
Cefni Hospital	28,800	16,900	6,350	3,700	45,979
Chirk Community Hospital	0	0	6,000	0	250
Coed Celyn Support Unit	0	0	0	0	0
Colwyn Bay Community	18,180	157,558	284,817	145,439	193,911
Deeside Community	0	0	30,000	77,000	3,242
Denbigh Community	0	9,357	58,219	452,234	44,178
Dolgellau & Barmouth	10,220	152,279	152,179	57,340	170,558
Eryri Hospital	382,950	500,650	441,257	97,051	903,537
Ffestiniog Memorial Hospital	6,032	56,195	30,426	129,754	69,854
Flint Community Hospital	0	0	25,000	0	5,000
Glan Traeth Day Hospital	0	1,600	12,803	145,632	14,112
Glan Traeth Day	0	1,249	6,246	117,433	6,442
Hafod MHRC	0	0	7,937	150,809	7,189
HM Stanley Hospital	108,565	1,085,654	434,262	1,175,148	1,502,785
Holywell Community	0	0	0	0	0
Llandudno General Hospital	34,979	681,590	549,556	90,608	743,243
Llangollen Community	0	60,954	731,446	426,677	115,068
Mold Community Hospital	0	0	5,000	25,000	1,200
Nant y Glyn Centre	0	0	10,680	167,322	8,458
Penley Hospital	0	0	0	0	0
Prestatyn Community	0	0	9,883	113,660	5,654
Royal Alexandra Hospital	175,201	569,404	2,671,817	963,606	889,802
Ruthin Community Hospital	0	18,736	121,786	327,885	66,321
Tywyn & District War	9,865	68,830	216,812	64,180	90,403
Ysbyty Alltwen	0	0	0	0	0
Ysbyty Glan Clwyd	7,486,502	2,041,773	14,973,005	43,557,832	12,517,434
Ysbyty Gwynedd	8,299,783	3,242,348	879,130	3,939,565	11,751,638
Ysbyty Maelor	878,000	3,947,000	3,710,000	3,220,500	4,998,263
Ysbyty Penrhos Stanley	16,277	235,830	49,107	24,554	254,940
Aggregate sites	294,150	959,042	5,289,834	1,998,690	1,816,114
<b>Totals</b>	<b>18,400,856</b>	<b>14,993,861</b>	<b>33,998,089</b>	<b>59,348,405</b>	<b>38,294,612</b>

Figure 2: Backlog maintenance costs by risk category

- 1.5 Figure 3 overleaf, shows the Health Board's performance against the key all-Wales targets for the essential estate. It can be seen that the newly merged Health Board has not met any of the 2008 national performance indicator targets.

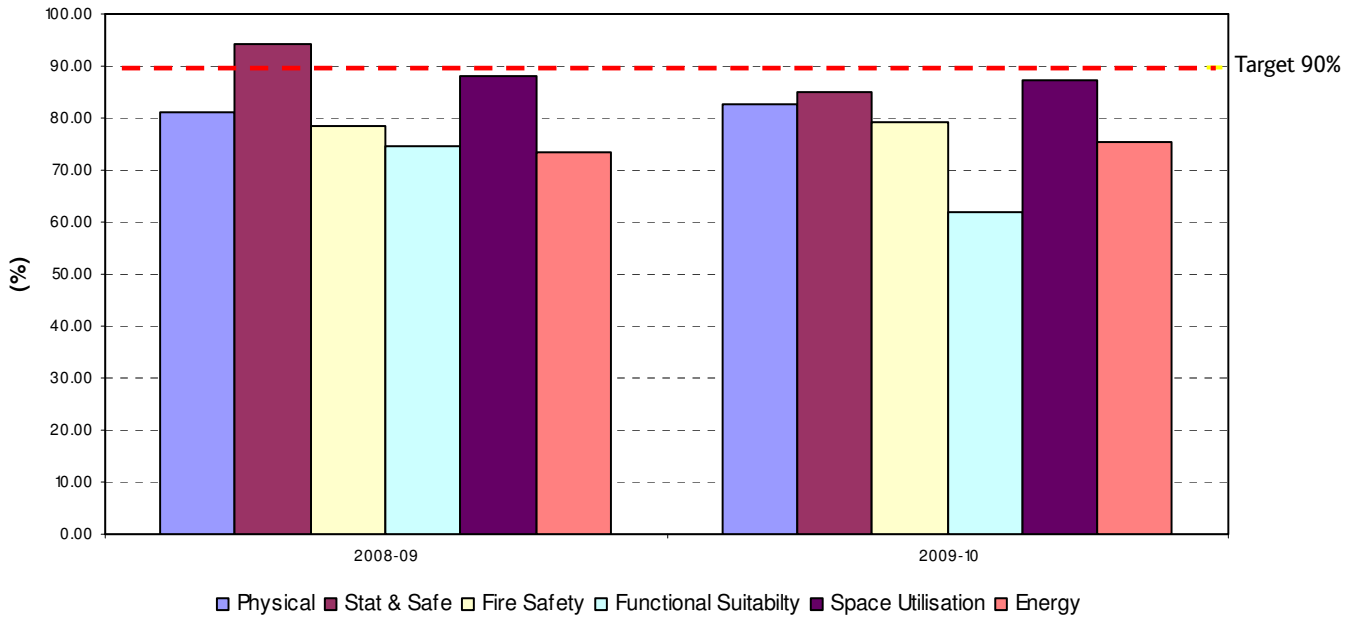
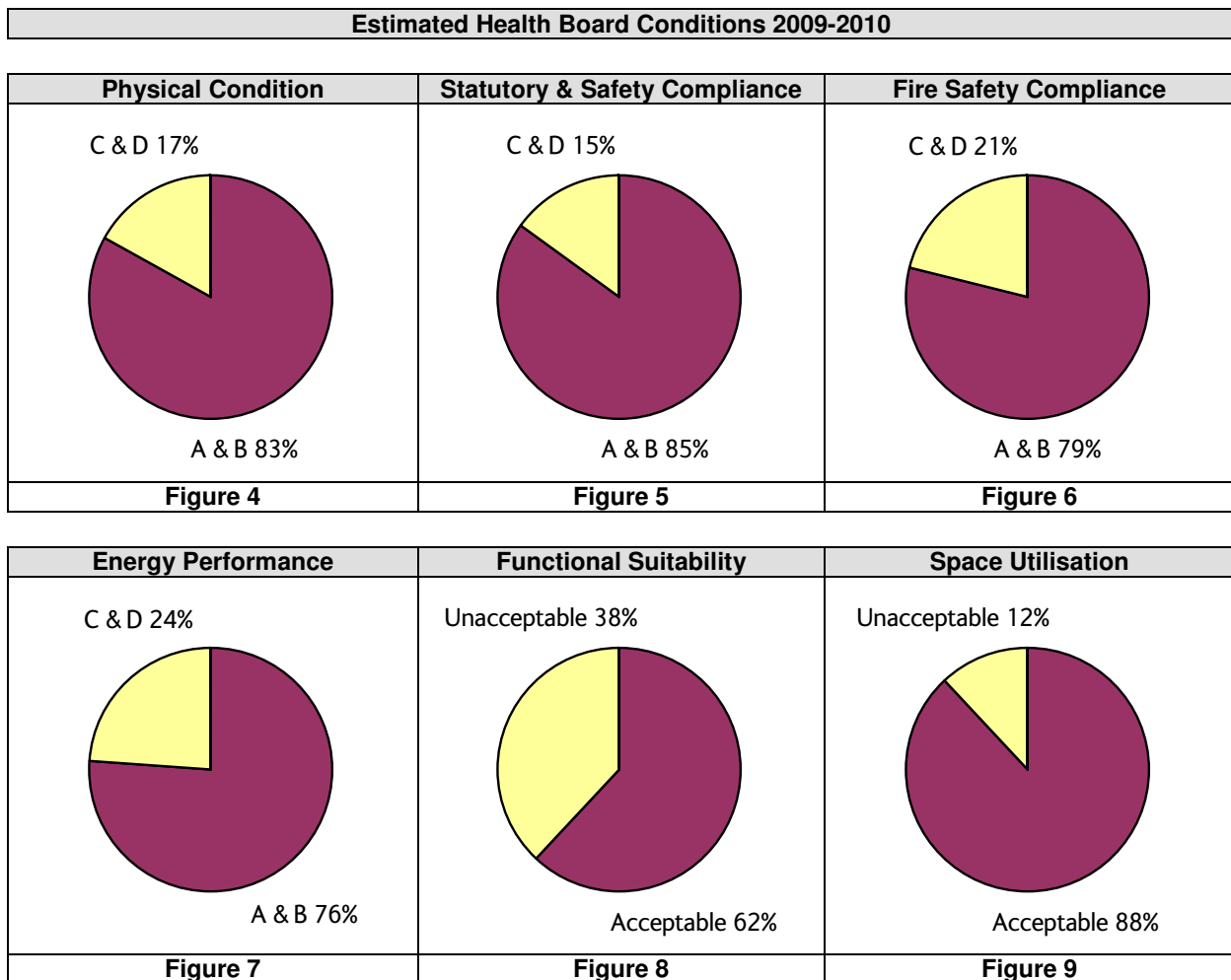


Figure 3: Health Board performance against all-Wales 2008 targets

1.6 Figures 4-9 graphically illustrate the Health Board’s performance against the key all-Wales targets for the essential estate.



The performance indicators for 2008/09 have been re-calculated using the data submitted by the former individual Trusts. The Health Board's performance against last year's re-calculated figures is as follows:

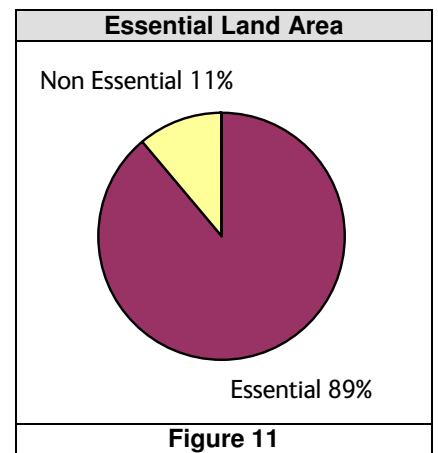
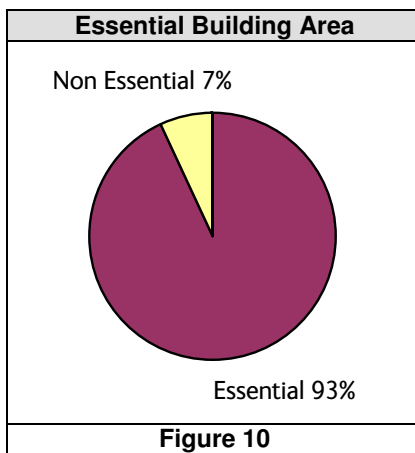
- Physical condition: improvement from 81% to 83%
- Statutory and safety compliance: reduction from 95% to 85%
- Fire safety compliance: improvement from 78% to 79%
- Functional suitability: reduction from 74% to 62%
- Space utilisation: remains at 88%
- Energy performance: improvement from 74% to 76%

It can be seen from this analysis that the Health Board has failed to attain the targets for the performance facets.

The performance of Betsi Cadwaladr University Health Board against that of other Health Boards/Trusts in Wales is graphically represented in **Appendix XII**.

- 1.7 **Figures 10 and 11** illustrate the amount of essential building area and land the Health Board has in its ownership.

#### Estimated Health Board Conditions 2009-2010



1.8 Figure 12 illustrates the age profile for the Health Board. The 2009/10 age profiles for the two former Trusts have been included on the chart and this clearly shows the effect that the two former Trusts have on the overall age profile of the new Health Board. It can be seen that almost 22% of the Health Board's estate pre-dates 1948 and almost 37% is 25 years old or less.

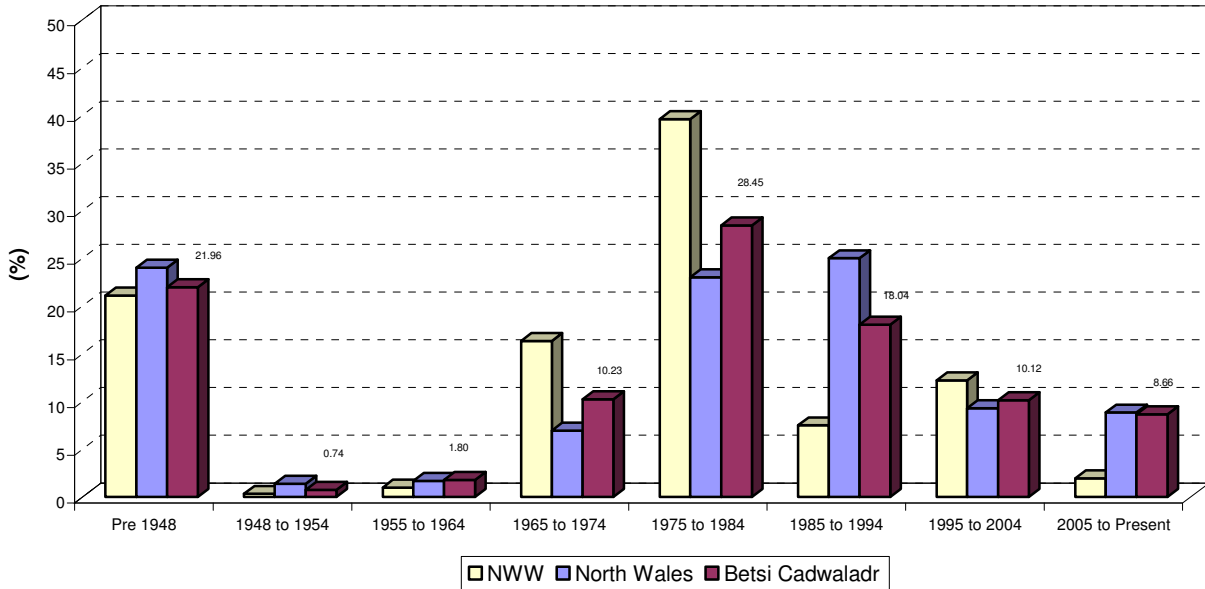


Figure 12: Age profile of the estate

## 2.0 Energy performance

2.1 In 2009/10 hospitals in the Health Board recorded a net energy consumption of 577,255GJ compared with 556,903GJ last year, an increase of 7.5%. This equates to a primary energy consumption of 796,763GJ, an increase of 5.6% on last year's figure of 754,730GJ and 11.3% up on the base year consumption.

These figures refer to the aggregated data for the former North West Wales NHS Trust and the North Wales NHS Trust which now form the new Health Board.

2.2 With reference to Figure 13, the overall Health Board PI is 61.43GJ/100m<sup>3</sup>. Last year the North Wales NHS Trust PI was 62.27GJ/100m<sup>3</sup>, and the figure for North West Wales NHS Trust was 56.13GJ/100m<sup>3</sup>. The current combined PI is within the target range of 55-65GJ/100m<sup>3</sup>. The individual hospital PIs suggest that savings can be made by focusing on the poorer performing hospitals, though the long term future of some of these sites may be uncertain.

2.3 The two former Trusts invested heavily in Central Energy Fund projects over the course of the scheme, receiving combined funding to the value of £597,000. It must be assumed that increases in consumption in other areas have negated the benefit of this expenditure in terms of overall savings.

Hospital	Net Hospital Energy Consumption (GJ)	Change on Previous Year (%)	Heated Volume (m <sup>3</sup> )	Site PI (GJ/100m <sup>3</sup> )
Abergele Hospital	18,162	2.60	28,838	62.98
Ablett Unit	4,423	-1.71	10,050	44.01
Bodnant Psychiatric Unit	2,130	-7.79	2,834	75.16
Bryn Beryl Hospital	3,474	7.79	5,762	60.29
Bryn Esket EMI	1,598	-3.03	2,861	55.85
Bryn-y-Neuadd Hospital	28,760	16.40	59,371	48.44
Cefni Hospital	3,619	-3.34	7,065	51.22
Chirk Community Hospital	4,234	7.52	6,511	65.03
Coed Celyn Support Unit	452	9.98	768	58.85
Colwyn Bay Community Hospital	6,773	10.11	13,340	50.77
Deeside Community Hospital	7,196	0.13	11,960	60.17
Denbigh Community Hospital	4,262	-10.67	8,261	51.59
Dolgellau & Barmouth District Hospital	5,237	16.71	6,107	85.75
Eryri Hospital	7,427	10.46	13,603	54.60
Ffestiniog Memorial Hospital	1,446	25.52	1,963	73.66
Flint Community Hospital	1,489	-2.81	2,424	61.43
Glan Traeth Day Hospital	937	88.15	1,393	67.26
Glan Traeth Day Hospital (EMI)	562	0	1,506	37.32
Hafod MHRC	711	-3.40	2,694	26.39
HM Stanley Hospital	19,765	11.38	23,953	82.52
Holywell Community Hospital	5,559	-28.58	10,969	50.68
Llandudno General Hospital	19,639	-3.20	36,981	53.11
Llangollen Community Hospital	1,734	-5.61	2,459	70.52
Mold Community Hospital	5,299	0.08	8,860	59.81
Nant y Glyn Resource Centre & Day Hospital	915	-8.41	2,324	39.37
Penley Hospital	615	-4.21	975	63.08
Prestatyn Community Hospital	1,023	-15.94	1,834	55.78
Royal Alexandra Hospital	7,413	1.27	22,091	33.56
Ruthin Community Hospital	3,562	-9.32	5,817	61.23
Tywyn & District War Memorial Hospital	3,947	5.51	5,033	78.42
Ysbyty Alltwen	8,060	0	15,741	51.20
Ysbyty Glan Clwyd*	120,538	-13.50	200,199	60.21
Ysbyty Gwynedd*	116,018	0.43	194,191	59.74
Ysbyty Maelor	152,079	23.65	208,732	72.86
Ysbyty Penrhos Stanley	8,197	10.07	12,193	67.23
<b>Totals</b>	<b>577,255</b>	<b>3.7</b>	<b>939,663</b>	<b>61.43</b>

Figure 13: Individual hospital energy PIs

\* Sites with CHP installed

### 3.0 Summary

- 3.1 The Betsi Cadwaladr University Health Board has not met any of the 2008 estate national performance indicator targets set by the Welsh Assembly Government in 2002. The new Health Board is faced with a considerable challenge as it seeks to achieve these targets.
- 3.2 The Health Board has made some progress in reducing its overall backlog maintenance largely as a result of the electrical infrastructure works carried out at Ysbyty Gwynedd which are nearing



completion. However, the new Health Board faces considerable difficulties in order to reduce the overall backlog costs, which are still dominated by Ysbyty Glan Clwyd that, alone, accounts for approximately 50% of the Health Board's total backlog maintenance.

- 3.3 Energy performance figures demonstrate some deterioration with rises in both net and primary energy consumption, although the overall PI is within the target band. The severe winter could be the most significant reason for these increases. Improvements could be made by focusing on a number of poor performing sites.

Any benefits of the Health Board's investment in Central Energy Fund projects over the last three years are not apparent due to the reported increase in consumption. It must be assumed that these increases would have been greater were it not for the Central Energy Funding.

# *APPENDIX V*

Summary of Health Board/Trust information

CARDIFF AND VALE UNIVERSITY HEALTH BOARD

## Organisation: Cardiff and Vale University Health Board

No of Returns: 9 Individual hospital sites

Aggregate sites – All other non-hospital sites

### 1.0 Backlog maintenance

1.1 Figure 1 shows that the Cardiff and Vale University Health Board's backlog maintenance costs have decreased by £19,657,540 from £88,207,713 in 2008/09 to £68,550,173 in 2009/10.

1.2 All sites, with the exception of the Iowerth Jones Centre and St David's Hospital, have reported a reduction in the backlog cost.

The most significant change is associated with Cardiff Royal Infirmary Hospital (CRI), where a reduction of £16,380,094 has been reported.

1.3 The highest backlog maintenance costs are again associated with the CRI and are reported to be £37,562,096 (55% of the Health Board's total).

1.4 The Health Board has not reported any costs for DDA compliance, but has confirmed that the previous DDA data is now out-of-date and they will be reassessed during the next Estatecode survey.

Site Name	Physical Condition Costs (£)	S & S Costs (£)	Fire Safety Costs (£)	DDA Costs (£)	Backlog Maintenance Costs 2009/10 (£)	Backlog Maintenance Costs 2008/09 (£)	Variation (£)
Barry Hospital	10,948	5,796	0	0	16,744	17,258	-514
Cardiff Royal Infirmary	6,513,639	31,048,457	0	0	37,562,096	53,942,190	-16,380,094
CRI - West Wing	1,932,726	26,263	51,461	0	2,010,450	2,082,666	-72,216
Iowerth Jones Centre	0	0	0	0	0	0	0
Llandough Hospital	6,197,485	587,136	4,125	0	6,788,746	7,785,439	-996,693
Rookwood Hospital	1,577,750	1,340	0	0	1,579,090	1,718,176	-139,086
St David's Hospital	0	0	0	0	0	0	0
University Hospital of Wales	10,357,062	445,073	29,636	0	10,831,771	11,921,259	-1,089,488
Whitchurch Hospital	6,016,321	649,837	0	0	6,666,158	7,260,430	-594,272
Aggregate sites	2,903,803	156,484	34,831	0	3,095,118	3,480,295	-385,177
<b>Totals</b>	<b>35,509,734</b>	<b>32,920,386</b>	<b>120,053</b>	<b>0</b>	<b>68,550,173</b>	<b>88,207,713</b>	<b>-19,657,540</b>

Figure 1: Backlog maintenance costs by site

1.5 Figure 2 overleaf, identifies the backlog maintenance costs broken down by risk category. It can be seen that the high and significant risk costs total £46,595,227 which is a reduction of £24,337,882 compared with the figures reported in 2008/09.

The Health Board has confirmed that the reduction in backlog maintenance is mainly due to demolitions, estate rationalisation and the reduction in the risk profile as a result of a review of the estate risks.

Site Name	High Risk backlog cost (£)	Significant Risk backlog cost (£)	Moderate Risk backlog cost (£)	Low Risk backlog cost (£)	Risk adjusted backlog cost (£)
Barry Hospital	0	0	5,796	10,948	654
Cardiff Royal Infirmary	0	37,562,096	0	0	37,562,096
CRI - West Wing	0	1,041,402	791,424	177,624	1,095,238
Iorwerth Jones Centre	0	0	0	0	0
Llandough Hospital	0	3,121,031	2,591,489	1,076,227	3,316,324
Rookwood Hospital	643,682	636,309	188,862	110,237	1,294,689
St David's Hospital	0	0	0	0	0
University Hospital of Wales	10,584	2,218,377	6,646,189	1,956,621	2,594,905
Whitchurch Hospital	0	649,837	3,585,952	2,430,369	857,479
Aggregate Sites	16,091	695,818	1,500,952	882,257	821,440
<b>Totals</b>	<b>670,357</b>	<b>45,924,870</b>	<b>15,310,664</b>	<b>6,644,283</b>	<b>47,542,825</b>

Figure 2: Backlog maintenance costs by risk category

1.6 Figure 3 shows the Health Board's performance trend between 2001-10 against the key all-Wales 2008 targets for the essential estate. It can be seen that the Health Board has exceeded the targets in respect of *Fire safety, Space utilisation and Energy*.

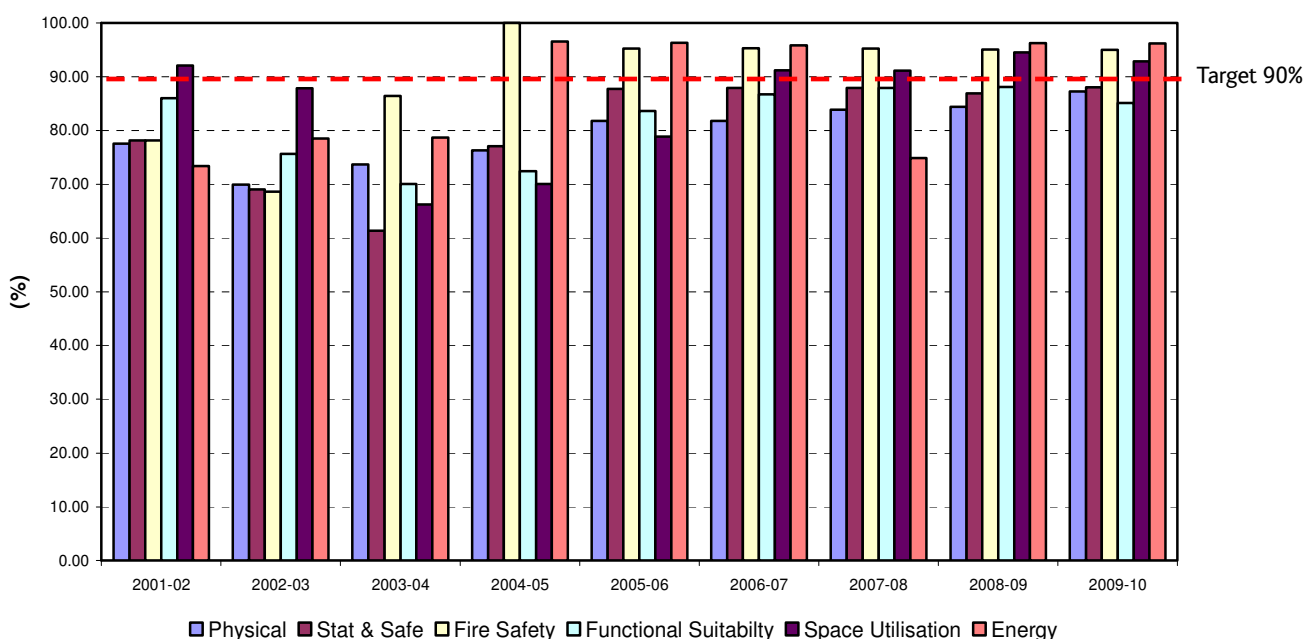


Figure 3: Trend in Health Board performance between 2001-10 against all-Wales 2008 targets

1.7 Figures 4-9 opposite, graphically illustrate the Health Board's performance against the key all-Wales targets for the essential estate.

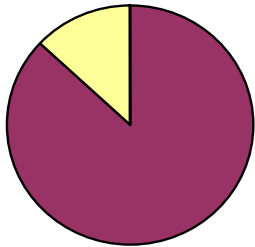
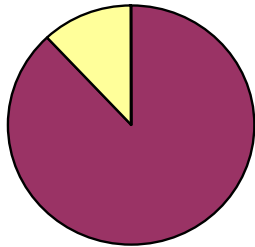
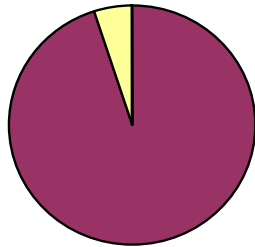
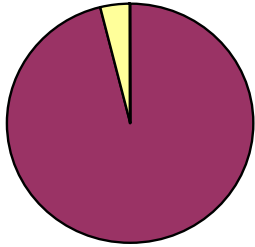
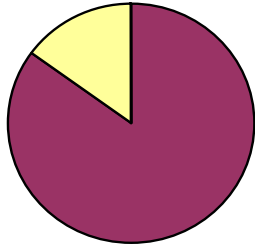
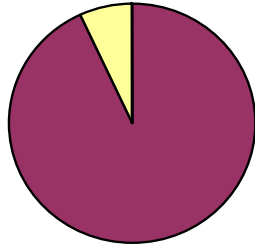
Performance against last year's figures is as follows:

- Physical condition: improvement from 84% to 87%
- Statutory and safety compliance: improvement from 87% to 88%
- Fire safety compliance: remains the same at 95%
- Functional suitability: reduction from 88% to 85%

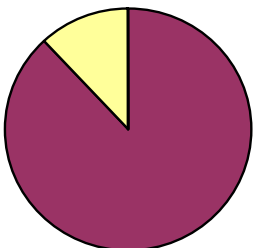
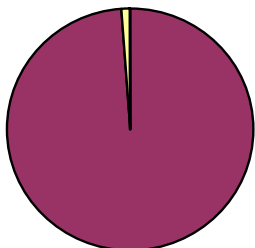
- Space utilisation: reduction from 95% to 93%
- Energy performance: remains the same at 96%

It can be seen from this analysis that the Health Board has met the 2008 estate national performance indicator target for *Fire safety compliance*, *Space utilisation* and *Energy*.

The performance of Cardiff and Vale University Health Board against that of other Health Boards/Trusts in Wales is graphically represented in Appendix XII.

Estimated Health Board Conditions 2009-2010		
<p><b>Physical Condition</b></p> <p>C &amp; D 13%</p>  <p>A &amp; B 87%</p> <p><b>Figure 4</b></p>	<p><b>Statutory &amp; Safety Compliance</b></p> <p>C &amp; D 12%</p>  <p>A &amp; B 88%</p> <p><b>Figure 5</b></p>	<p><b>Fire Safety Compliance</b></p> <p>C &amp; D 5%</p>  <p>A &amp; B 95%</p> <p><b>Figure 6</b></p>
<p><b>Energy Performance</b></p> <p>C &amp; D 4%</p>  <p>A &amp; B 96%</p> <p><b>Figure 7</b></p>	<p><b>Functional Suitability</b></p> <p>Unacceptable 15%</p>  <p>Acceptable 85%</p> <p><b>Figure 8</b></p>	<p><b>Space Utilisation</b></p> <p>Unacceptable 7%</p>  <p>Acceptable 93%</p> <p><b>Figure 9</b></p>

1.8 Figures 10 and 11 illustrate the amount of essential building area and land the Health Board has in its ownership. There has been no change with these categories since last year.

Estimated Health Board Conditions 2009-2010	
<p><b>Essential Building Area</b></p> <p>Non Essential 12%</p>  <p>Essential 88%</p> <p><b>Figure 10</b></p>	<p><b>Essential Land Area</b></p> <p>Non Essential 1%</p>  <p>Essential 99%</p> <p><b>Figure 11</b></p>

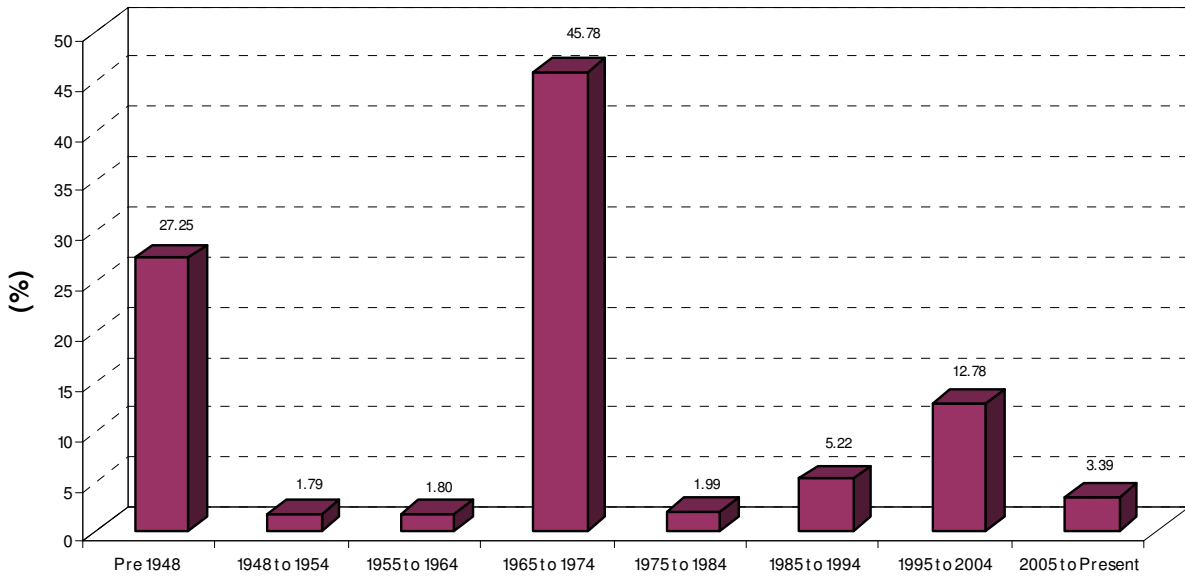


Figure 12: Age profile of the estate

1.9 Figure 12 illustrates the age profile of the Health Board. It can be seen that over 27% of the Health Board’s estate pre-dates 1948 and approximately 21% is 25 years old or less.

## 2.0 Energy performance

2.1 In 2009/10 hospitals in the Health Board recorded a net energy consumption of 495,560GJ, an increase of 1.8% on last year’s figure of 486,922GJ. Several sites show large variations compared with consumption figures reported last year. It is understood that the current figures are correct.

2.2 Primary energy consumption figures show a reduction of 0.6%, from 735,904GJ in 2008/09 to 731,391GJ this year. The latest set of figures indicates that the Health Board’s consumption is 9.92% below the level of the base year.

2.3 The new CHP installation at the University Hospital of Wales continues to have a significant effect on the hospital’s energy performance during the reporting period, this being the first full year of operation. The installation contributed to the reduction in primary energy but, as stated in last year’s report, replacement of zero rated “green” electricity with gas fired self generation causes an increase in reported carbon emission at the site. If, as should be the case, “green” electricity was treated as standard grid electricity the true carbon benefits of this installation would be apparent.

2.4 With reference to **Figure 13** the overall PI of 50.56GJ/100m<sup>3</sup> remains below the target range of 55-65GJ/100m<sup>3</sup>.

It is noted that Rookwood Hospital is the only site with a PI above the upper limit of the range, suggesting there is scope for significant improvement in performance at this site. The site, however, is scheduled for closure.

Hospital	Net Hospital Energy Consumption (GJ)	Change on Previous Year (%)	Heated Volume (m <sup>3</sup> )	Site PI (GJ/100m <sup>3</sup> )
Barry Hospital	3,555	-19.97	21,168	16.79
Cardiff Royal Infirmary	8,654	-60.92	20,927	41.35
CRI - West Wing	10,399	1.80	22,298	46.64
Iorwerth Jones Centre	3,644	0.00	5,942	61.33
Llandough Hospital*	113,342	-1.42	182,038	62.26
Rookwood Hospital	25,906	3.21	34,947	74.13
St Davids Hospital**	12,713	46.77	34,089	37.29
University Hospital of Wales*	280,827	6.00	546,832	51.36
Whitchurch Hospital	36,520	0.20	111,943	32.62
<b>Totals</b>	<b>495,560</b>	<b>1.77</b>	<b>980,184</b>	<b>50.56</b>

Figure 13: Individual hospital net energy PIs

\* Sites with CHP installed

\*\* PFI Hospital

### 3.0 Summary

- 3.1 The Cardiff and Vale University Health Board has met the 2008 estate national performance indicator targets set by the Welsh Assembly Government in 2002 in respect of three of the indicators. The new Health Board, which came into operation in October 2009, faces a challenge to restore its statutory compliance performance to the levels achieved in previous years.
- 3.2 The high backlog maintenance figures for the Health Board continue to be dominated by Cardiff Royal Infirmary, which is approximately 50% of the total backlog maintenance. It is noted that the current modernisation programme for this site will have a huge impact on the new Health Board's backlog maintenance costs.
- 3.3 The Health Board's investment in large scale CHP units at the University Hospital of Wales is reflected in the fact that 65% of the site's electricity requirement, is now generated on site. This provides considerable financial benefits to the Health Board.

# *APPENDIX VI*

## Summary of Health Board/Trust information

### CWM TAF HEALTH BOARD



## Organisation: Cwm Taf Health Board

No of Returns: 10 Individual hospital sites

Aggregate sites – All other non-hospital sites

### 1.0 Backlog maintenance

1.1 Figure 1 shows that the Cwm Taf Health Board's backlog maintenance costs have increased by £830,798 from £59,671,503 in 2008/09 to £60,502,301 in 2009/10.

1.2 The largest backlog is associated with Prince Charles Hospital, where the estimated backlog maintenance costs are £32,817,662, which equate to 54% of the Health Board's total costs. This hospital is currently carrying out significant redevelopment works which, on completion, will significantly reduce the backlog maintenance costs at this site.

1.3 Llwynypia Hospital has been replaced by the new Ysbyty Cwm Rhondda, which opened in January 2010. This will have the effect of reducing the backlog costs by £3,502,629 which will be reflected in the 2010/11 EFPMS returns.

1.4 Pontypridd and District Hospital and the Aggregate sites are the only locations that have reported reductions totalling £1,898,644.

Site Name	Physical Condition Costs (£)	S & S Costs (£)	Fire Safety Costs (£)	DDA Costs (£)	Backlog Maintenance Costs 2009/10 (£)	Backlog Maintenance Costs 2008/09 (£)	Variation (£)
Aberdare General Hospital	4,322,338	2,804,205	709,071	49,610	7,835,614	7,559,228	276,386
Dewi Sant Hospital	50,604	32,000	30,000	0	112,604	71,986	40,618
Llwynypia Hospital	2,798,557	704,072	0	204,072	3,502,629	3,202,484	300,145
Mountain Ash General	3,017,600	1,688,753	832,877	85,950	5,539,230	5,179,809	359,421
Pontypridd & District	119,480	32,250	10,000	0	161,730	166,824	-5,094
Prince Charles Hospital	20,083,693	8,278,347	4,455,622	2,261,637	32,817,662	32,334,408	483,254
Royal Glamorgan Hospital	694,775	253,000	100,000	0	1,047,775	869,220	178,555
St Tydfil's Hospital	6,153,213	1,201,447	81,319	169,760	7,435,979	6,539,560	896,419
Tonteg Hospital	375,229	14,875	0	0	390,104	294,840	95,264
Ysbyty George Thomas	179,487	38,500	35,000	0	252,987	153,607	99,380
Aggregate sites	1,085,917	286,770	33,300	241,770	1,405,987	3,299,537	-1,893,550
<b>Totals</b>	<b>38,880,893</b>	<b>15,334,219</b>	<b>6,287,189</b>	<b>3,012,799</b>	<b>60,502,301</b>	<b>59,671,503</b>	<b>830,798</b>

Figure 1: Backlog maintenance costs by site

1.5 Figure 2 overleaf, identifies the backlog maintenance costs broken down by risk category. It can be seen that the high and significant risk costs total £28,454,420, which is £2,717,814 more than the figure reported by the Health Board in 2008/09, and mainly attributed to Prince Charles Hospital.

Site Name	High Risk backlog cost (£)	Significant Risk backlog cost (£)	Moderate Risk backlog cost (£)	Low Risk backlog cost (£)	Risk adjusted backlog cost (£)
Aberdare General Hospital	3,332,110	1,039,363	1,979,508	1,484,632	6,103,542
Dewi Sant Hospital	38,110	55,954	18,540	0	94,682
Llwynypia Hospital	391,709	204,072	2,906,848	0	650,917
Mountain Ash General	2,018,800	940,850	1,474,069	1,105,511	4,249,440
Pontypridd & District	46,350	104,790	10,590	0	151,581
Prince Charles Hospital	8,683,125	7,122,281	9,721,289	7,290,967	16,545,067
Royal Glamorgan Hospital	0	504,120	397,299	146,356	527,693
St Tydfil's Hospital	2,090,276	654,453	1,512,139	3,179,111	3,682,979
Tonteg Hospital	20,394	129,780	239,930	0	158,447
Ysbyty George Thomas	20,207	212,180	10,300	10,300	233,123
Aggregate sites	227,094	618,402	440,074	120,417	868,638
<b>Totals</b>	<b>16,868,175</b>	<b>11,586,245</b>	<b>18,710,586</b>	<b>13,337,294</b>	<b>33,266,109</b>

Figure 2: Backlog maintenance costs by risk category

1.6 Figure 3 shows the Health Board's performance against the key all-Wales targets for the essential estate. It can be seen that the Health Board has met or exceeded the 2008 estate national performance indicator targets for *Space Utilisation* and *Energy*.

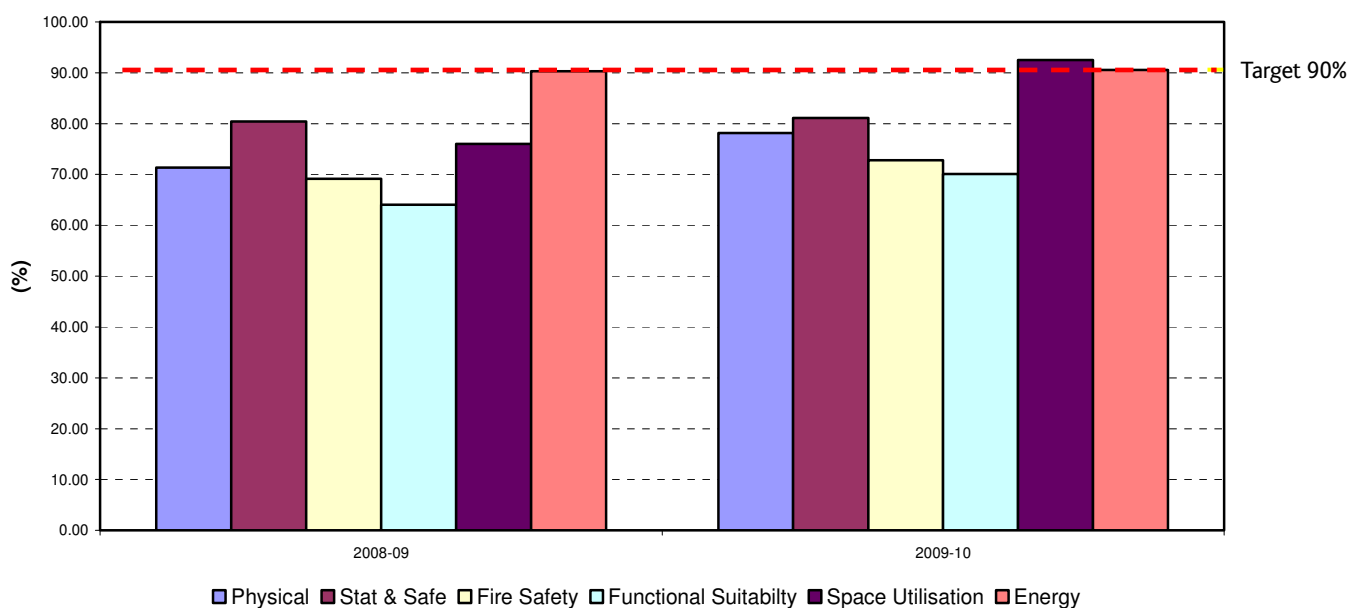


Figure 3: Health Board performance against all-Wales 2008 targets

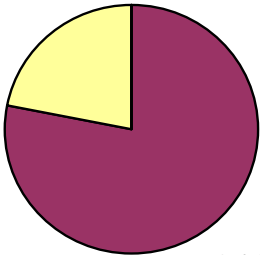
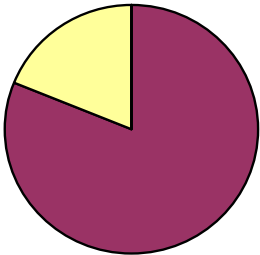
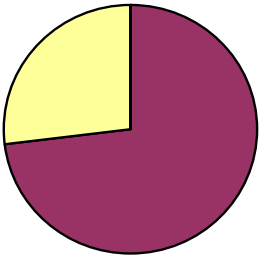
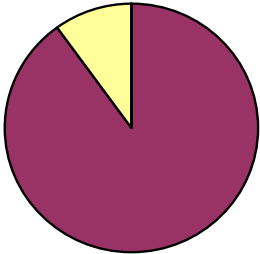
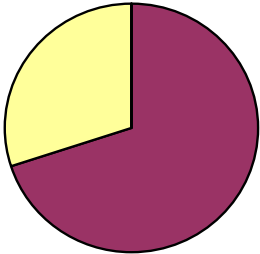
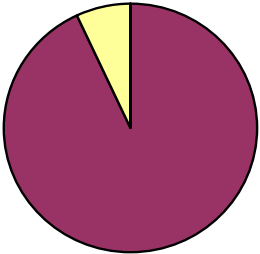
1.7 Figures 4-9 opposite, graphically illustrates the Health Board's performance against the key all-Wales targets for the essential estate.

Performance against last year's figures is as follows:

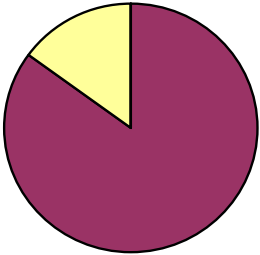
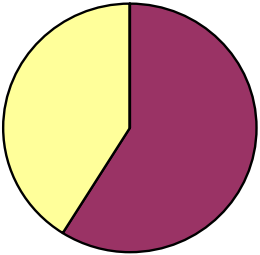
- Physical condition: improvement from 71% to 78%
- Statutory and safety compliance: improvement from 80% to 81%
- Fire safety compliance: improvement from 69% to 73%
- Functional suitability: improvement from 64% to 70%

- Space utilisation: increase from 76% to 93%
- Energy performance: remains at 90%

The performance of Cwm Taf Health Board against that of other Health Boards/Trusts in Wales is graphically represented in Appendix XII.

Estimated Health Board Conditions 2009-2010		
<b>Physical Condition</b>	<b>Statutory &amp; Safety Compliance</b>	<b>Fire Safety Compliance</b>
C & D 22%  A & B 78%	C & D 19%  A & B 81%	C & D 27%  A & B 73%
<b>Figure 4</b>	<b>Figure 5</b>	<b>Figure 6</b>
<b>Energy Performance</b>	<b>Functional Suitability</b>	<b>Space Utilisation</b>
C & D 10%  A & B 90%	Unacceptable 30%  Acceptable 70%	Unacceptable 7%  Acceptable 93%
<b>Figure 7</b>	<b>Figure 8</b>	<b>Figure 9</b>

1.8 Figures 10 and 11 illustrate the amount of essential building area and land the Health Board has in its ownership. Since 2008/09 the Health Board has changed the classifications of Aberdare and Mountain Ash Hospitals, and this has resulted in the amount of essential building area changing from 94% and 85%. Similarly, the amount of essential land has changed from 75% to 59%.

Estimated Health Board Conditions 2009-2010	
<b>Essential Building Area</b>	<b>Essential Land Area</b>
Non Essential 15%  Essential 85%	Non Essential 41%  Essential 59%
<b>Figure 10</b>	<b>Figure 11</b>

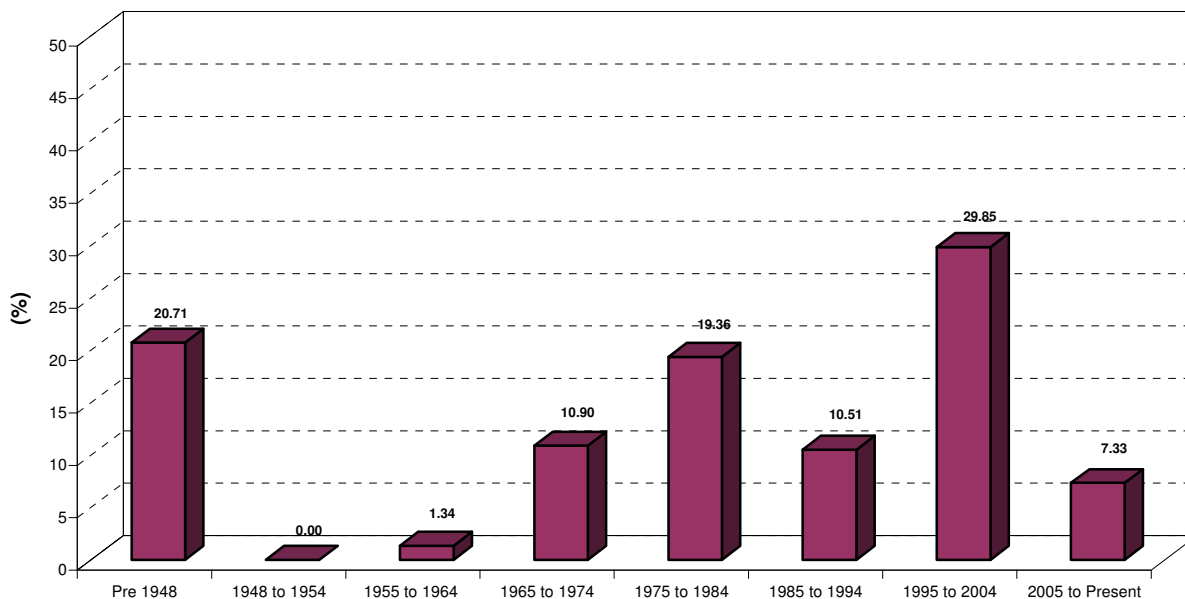


Figure 12: Age profile of the estate

1.9 Figure 12 illustrates the age profile for the Health Board. It can be seen that almost 21% of the Health Board's estate pre-dates 1948, and almost 48% is 25 years old or less.

## 2.0 Energy performance

2.1 In 2009/10 hospitals in the Health Board recorded a net energy consumption of 238,573GJ, a decrease of 4.02% on last year's figure of 248,568GJ. The main reason for this is the reduced consumption reported at the Health Board's two largest sites, Prince Charles Hospital and Royal Glamorgan Hospital. Net consumption at these two sites fell by 4.89% and 4.12% respectively.

2.2 Primary energy consumption figures show a reduction of 3.35%, from 352,429GJ in 2008/09 to 340,623GJ in 2009/10.

The latest set of figures indicates that the Health Board's primary energy consumption is 5% above the level of the base year.

2.3 CHP output has fallen and figures indicate ongoing problems at the Royal Glamorgan Hospital, where no CHP output has been reported, although output from the installation at Prince Charles Hospital has increased.

2.4 With reference to Figure 13, the overall PI of 43.9GJ/100m<sup>3</sup> remains below the lower level of the target range of 55-65GJ/100m<sup>3</sup>, with none of the sites above the upper level of the range.

Hospital	Net Hospital Energy Consumption (GJ)	Change on Previous Year (%)	Heated Volume (m <sup>3</sup> )	Site PI (GJ/100m <sup>3</sup> )
Aberdare General Hospital	14503	2.57	29,167	49.72
Dewi Sant Hospital	8472	1.34	30,565	27.72
Llwynypia Hospital	17781	-17.58	33,000	53.88
Mountain Ash General Hospital	4537	5.12	11,978	37.88
Pontypridd & District Hospital	3203	-23.15	6,952	46.07
Prince Charles Hospital*	77764	-4.89	168,667	46.11
Royal Glamorgan Hospital*	83633	-4.12	201,815	41.44
St Tydfil's Hospital	18379	9.72	42,934	42.81
Tonteg Hospital	1976	8.45	4,344	45.49
Ysbyty George Thomas	8325	-1.43	13,964	59.62
<b>Totals</b>	<b>238,573</b>	<b>-4.02</b>	<b>543,386</b>	<b>43.9</b>

Figure 13: Individual hospital net energy PIs

\* Sites with CHP installed

### 3.0 Summary

- 3.1 The Cwm Taf Health Board has met only two of the 2008 Estate performance targets set by the Welsh Assembly Government in 2002. The Health Board faces a significant challenge if it is to achieve the 2008 targets for the other indicators.
- 3.2 The backlog maintenance costs of Cwm Taf Health Board, which came into operation in October 2009, will significantly reduce following the completion of the current modernisation programme at Prince Charles Hospital. Backlog maintenance costs for the Royal Glamorgan Hospital have slightly increased for the second year running.
- 3.3 Energy performance figures indicate progress in terms of efficiency and net energy consumption, which has fallen significantly despite there being a cold winter. Problems reported last year with the CHP units at the Royal Glamorgan have continued, and no CHP output was reported at this site. It is understood that a new CHP installation will provide a worthwhile contribution to the site's energy requirements.

## *APPENDIX VII*

### Summary of Health Board/Trust information

#### HYWEL DDA HEALTH BOARD



## Organisation: Hywel Dda Health Board

No of Returns: 14 Individual hospital sites

Aggregate sites – All other non-hospital sites

### 1.0 Backlog maintenance

1.1 Figure 1 shows that the Hywel Dda Health Board's backlog maintenance costs have increased by £1,967,611 from £63,100,856 in 2008/09 to £65,068,856 in 2009/10.

Site Name	Physical Condition Costs	S & S Costs	Fire Safety Cost	DDA Costs	Backlog Maintenance Costs 2009/10	Backlog Maintenance Costs 2008/09	Variation
	(£)	(£)	(£)	(£)	(£)	(£)	(£)
Aberaeron Hospital	1,540,440	169,489	76,784	97,930	1,786,713	1,751,713	35,000
Amman Valley Hospital	222,257	315,979	16,575	265,857	554,811	545,061	9,750
Bro Cerwyn & St Brynach Day	30,585	48,311	14,300	43,511	93,196	93,196	0
Bronglais General Hospital	4,282,296	3,962,749	1,226,880	2,832,255	9,471,925	9,266,925	205,000
Cardigan & District Memorial	5,141,487	409,019	35,274	202,331	5,585,780	5,672,456	-86,676
Hafen Dawel	294,281	60,360	34,000	23,910	388,641	388,641	0
Llandoverly Hospital	168,826	149,416	16,738	115,632	334,980	334,980	0
Mynydd Mawr Hospital	673,186	259,868	0	175,877	933,054	964,527	-31,473
Prince Philip Hospital	9,141,834	1,841,125	74,750	575,821	11,057,709	11,082,709	-25,000
South Pembrokeshire Hospital	461,805	48,684	25,450	31,134	535,939	535,939	0
Tenby Hospital	0	0	0	0	0	0	0
Tregaron Hospital	3,065,354	217,697	153,579	51,461	3,436,630	3,436,630	0
West Wales General	12,759,246	4,982,307	1,838,061	1,129,050	19,579,614	17,887,764	1,691,850
Withybush General Hospital	3,985,265	3,196,686	859,208	1,022,351	8,041,159	7,841,159	200,000
Aggregate sites	1,691,205	1,284,759	292,352	889,827	3,268,316	3,299,156	-30,840
<b>Totals</b>	<b>43,458,067</b>	<b>16,946,449</b>	<b>4,663,951</b>	<b>7,456,947</b>	<b>65,068,467</b>	<b>63,100,856</b>	<b>1,967,611</b>

Figure 1: Backlog maintenance costs by site

1.2 West Wales General Hospital has the largest backlog costs, which are reported to be £19,579,614, equating to 30% of the Health Board's total costs.

The largest year-on-year increase is also associated with West Wales General Hospital from £17,887,764 to £19,579,614 which represents a 9.5% increase. This is due to £2 million being added to the backlog for an electrical infrastructure project, which is waiting for business case approval from the Welsh Assembly Government.

1.3 Figure 2 overleaf, identifies the backlog maintenance costs broken down by risk category. It can be seen that the high and significant risks total £31,074,565 which is £1,821,405 more than the figure reported in 2008/09.



Site Name	High Risk backlog cost (£)	Significant Risk backlog cost (£)	Moderate Risk backlog cost (£)	Low Risk backlog cost (£)	Risk adjusted backlog cost (£)
Aberaeron Hospital	35,000	14,639	184,664	1,552,410	207,555
Amman Valley Hospital	0	101,136	125,368	328,307	121,758
Bro Cerwyn & St Brynach	0	500	59,595	33,101	4,530
Bronglais General Hospital	1,222,828	1,194,226	2,656,555	4,398,316	2,669,014
Cardigan & District Memorial	0	5,134,664	24,431	426,685	5,585,780
Hafen Dawel	0	44,200	198,046	146,395	58,551
Llandovery Hospital	0	41,155	137,462	156,363	52,908
Mynydd Mawr Hospital	0	497,420	217,833	217,800	515,571
Prince Philip Hospital	72,500	5,430,323	1,546,222	4,008,664	5,687,986
South Pembrokeshire	0	145,250	161,430	229,259	158,722
Tenby Hospital	0	0	0	0	0
Tregaron Hospital	0	3,054,396	167,730	214,504	3,181,807
West Wales General	155,480	10,658,944	5,051,688	3,713,502	11,195,519
Withybush General Hospital	165,000	2,573,999	2,980,432	2,321,728	3,004,107
Aggregate sites	16,000	516,905	1,364,585	1,370,826	676,874
<b>Totals</b>	<b>1,666,808</b>	<b>29,407,757</b>	<b>14,876,041</b>	<b>19,117,860</b>	<b>33,120,682</b>

Figure 2: Backlog maintenance costs by risk category

1.4 Figure 3 shows the Health Board's performance against the key all-Wales targets for the essential estate. It can be seen that the Health Board has exceeded the 2008 estate national performance indicator targets for *Fire safety* and *Space utilisation*.

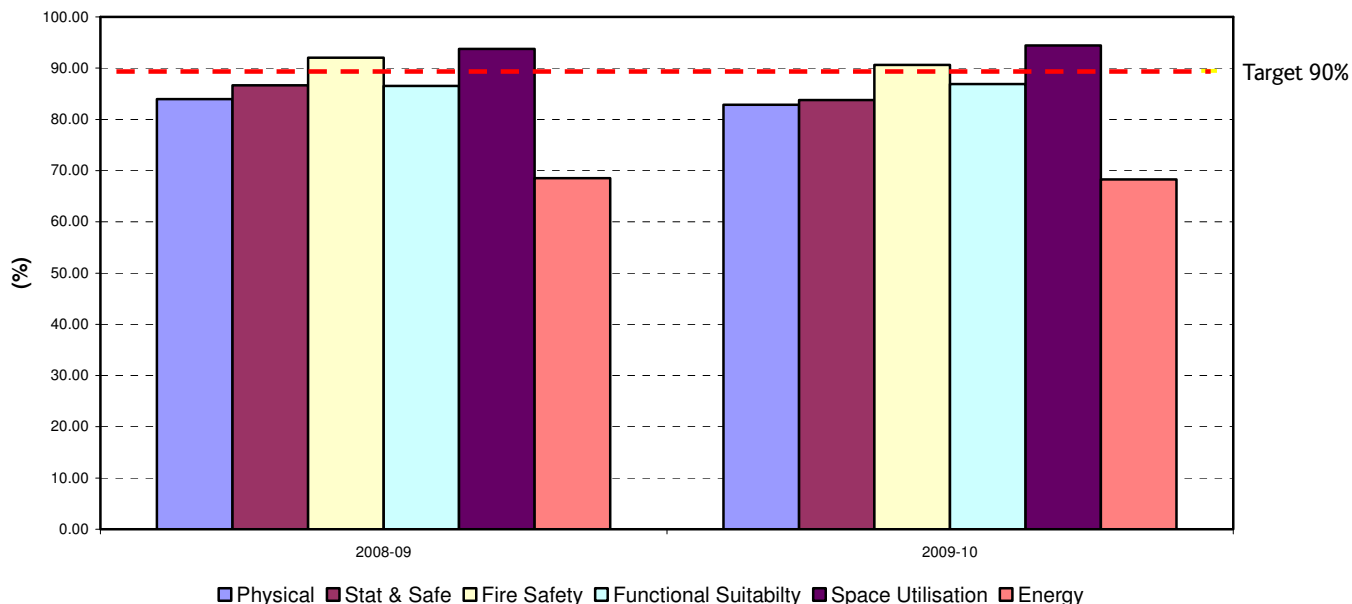


Figure 3: Trust performance against all-Wales 2008 targets

1.5 Figures 4-9 opposite, graphically illustrate the Health Board's performance against the key all-Wales targets for the essential estate.

The Health Board's performance against last year's re-calculated figures is as follows:

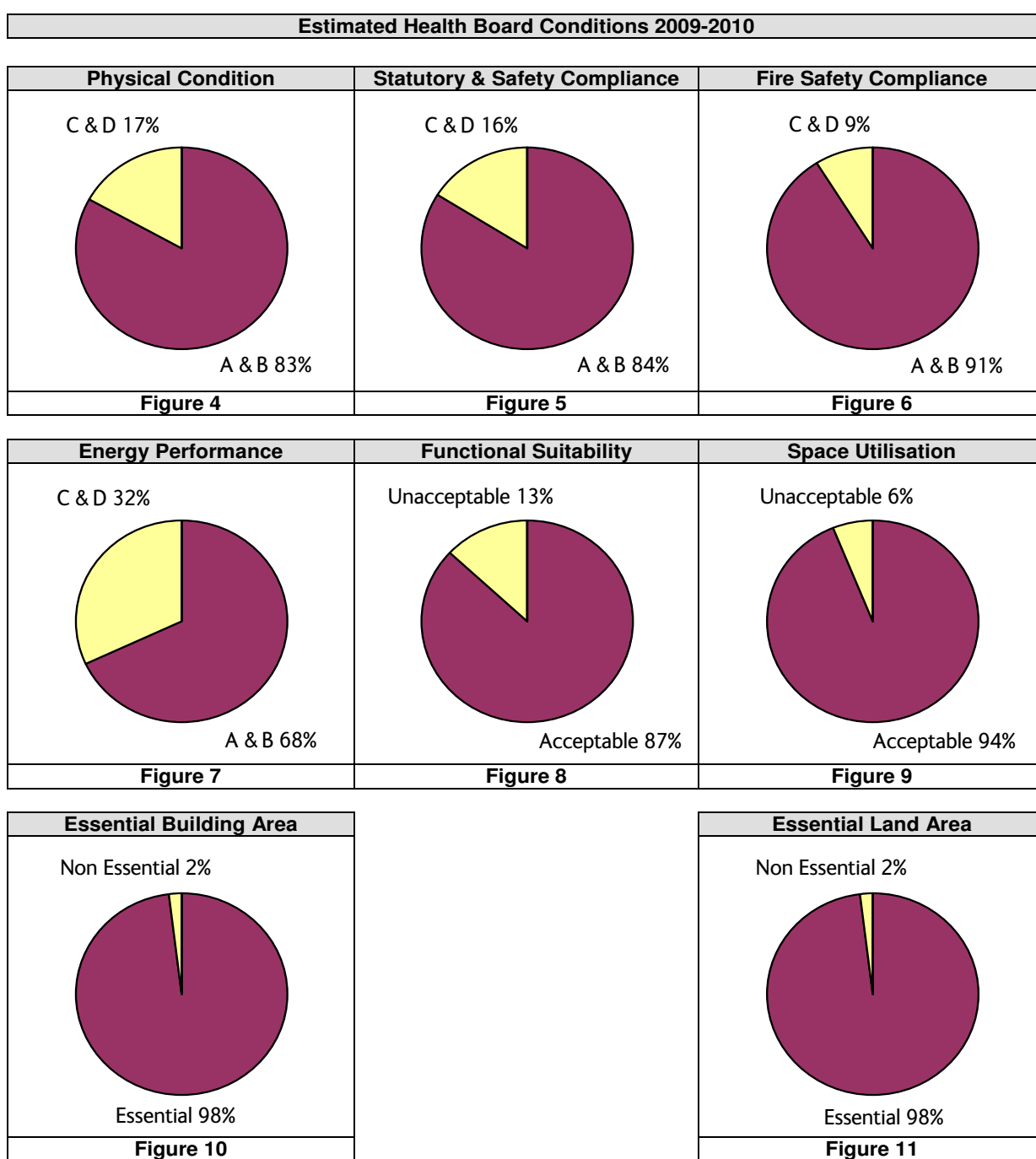
- Physical condition: reduction from 84% to 83%
- Statutory and safety compliance: reduction from 87% to 84%

- Fire safety compliance: reduction from 92% to 91%
- Functional suitability: remains at 87%
- Space utilisation: remains at 94%
- Energy performance: reduction from 69% to 68%

It can be clearly seen from this analysis that the Health Board has met the 2008 estate national performance indicator targets for *Fire safety* and *Space utilisation* only.

The performance of Hywel Dda Health Board against that of other Health Boards/Trusts in Wales is graphically represented in **Appendix XII**.

1.6 **Figures 10 and 11** illustrate the amount of essential building area and land the Health Board has in its ownership.



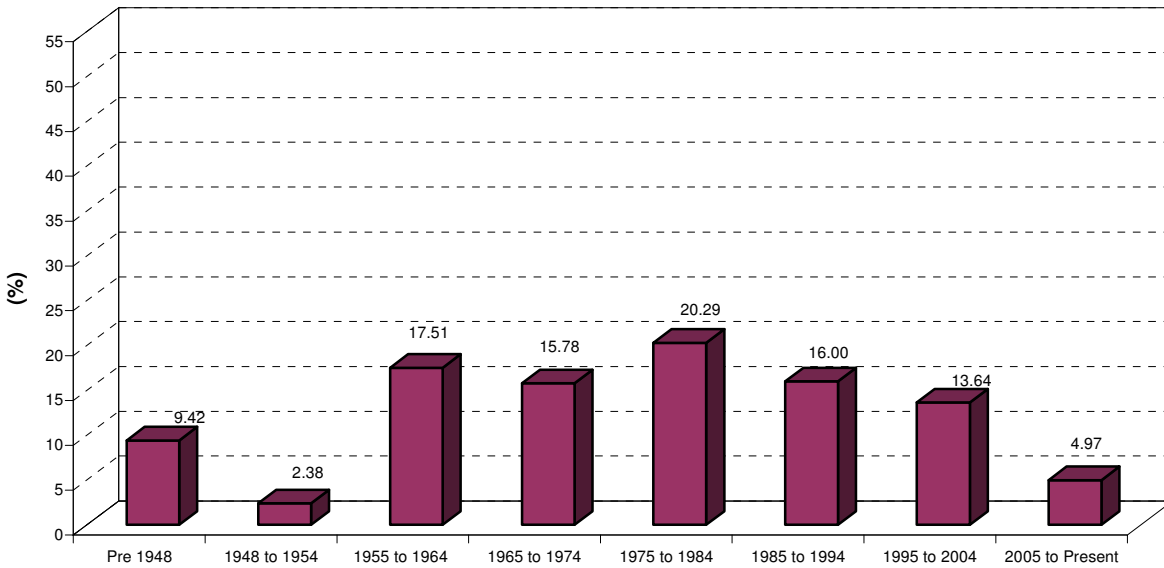


Figure 12: Age profile of the estate

1.7 Figure 12 illustrates the age profile for the Health Board. It can be seen that almost 10% of the Health Board's estate pre-dates 1948 and almost 35% is 25 years old or less.

## 2.0 Energy performance

2.1 In 2008/09 hospitals in the Health Board recorded a net energy consumption of 269,177GJ compared with 272,252GJ last year, a decrease of 1.13%. This equates to a primary energy consumption of 384,971GJ, a decrease of 0.43% on last year's figure of 386,649GJ and 3.58% up on the base year consumption.

2.2 With reference to Figure 13, the overall PI has improved slightly to 60.52GJ/100m<sup>3</sup> from last year's 60.78GJ/100m<sup>3</sup>. This is within the target range of 55-65GJ/100m<sup>3</sup>. The individual hospital PIs suggest that savings can be made by focusing on several poor performing hospitals, particularly at some of the larger sites. Bronglais and Withybush Hospitals, for example, are both outside the target range although, in the case of the latter, it is only marginally outside the range.

2.3 The three former Trusts that merged to form the Hywel Dda Health Board invested heavily in Central Energy Fund projects over the course of the last three years, receiving funding to the value of £476,000 during this period. The full benefit of these schemes in terms of carbon, energy and cost savings is now being realised, and could at least be partly responsible for the improvement in performance in spite of a severe winter.

Hospital	Net Hospital Energy Consumption (GJ)	Change on Previous Year (%)	Heated Volume (m <sup>3</sup> )	Site PI (GJ/100m <sup>3</sup> )
Aberaeron Hospital	696	-0.85	1,588.00	43.83
Amman Valley Hospital	3,246	-6.37	5,419.00	59.90
Bro Ceryn & St Brynach Day	4,601	-3.54	9,400.00	48.95
Bronglais General Hospital	41,141	3.81	52,447.00	78.44
Cardigan & District Memorial	2,369	-15.81	4,715.00	50.24
Hafen Derwen (St David's Hospital)	8,571	-10.69	21,353.00	40.14
Llandovery Hospital	2,167	3.54	2,850.00	76.04
Mynydd Mawr Hospital	5,206	-2.80	6,611.00	78.75
Prince Philip Hospital*	50,754	-9.02	97,998.00	51.79
South Pembrokeshire Hospital	6,329	-3.11	12,559.00	50.39
Tenby Hospital	815	-29.80	2,769.00	29.43
Tregaron Hospital	2,755	-6.74	3,935.00	70.01
West Wales General*	81,801	3.74	134,077.00	61.01
Withybush General Hospital	58,726	0.31	89,083.00	65.92
<b>Totals</b>	<b>269,177</b>	<b>-1.13</b>	<b>444,804</b>	<b>60.52</b>

Figure 13: Individual hospital energy PIs

\* Sites with CHP installed

### 3.0 Summary

- 3.1 The Hywel Dda Health Board have met only two of the 2008 Estate performance targets set by the Welsh Assembly Government in 2002. The Health Board faces some challenges in achieving all of these targets especially in relation to energy although some progress is being made in this area.
- 3.2 The Health Board's backlog maintenance costs have increased slightly in 2009/10, due mainly to West Wales General Hospital. However, the Health Board will need to focus on all its major acute sites if it is to make a significant impact on its backlog maintenance.
- 3.3 The Health Board has benefited from the Central Energy Fund schemes in terms of the carbon, energy and cost savings now being realised.

## *APPENDIX VIII*

### Summary of Health Board/Trust information

#### POWYS TEACHING HEALTH BOARD

## Organisation: Powys Teaching Health Board

No of Returns: 10 Individual hospital sites

Aggregate sites – All other non-hospital sites

### 1.0 Backlog maintenance

1.1 Figure 1 shows that the Powys Teaching Health Board backlog maintenance costs have decreased by £1,071,500 from £4,997,075 in 2008/09 to £3,925,575 in 2009/10.

Eight sites have reported increases totalling £402,000. The backlog costs associated with Bronllys Hospital and Aggregate sites are unchanged and the costs associated with Ystradgynlais have reduced.

1.2 The largest decrease is associated with Ystradgynlais Hospital, which has reduced the backlog maintenance by £1,473,500. The Health Board has confirmed that the reduction in backlog at this site is as a direct result of work carried out to replace the roof and the boiler plant.

The largest backlog costs are associated with Bronllys Hospital which at £1,728,375 equates to 44% of the Health Board's total.

Site Name	Physical Condition Costs (£)	S & S Costs (£)	Fire Safety Costs (£)	DDA Costs (£)	Backlog Maintenance Costs 2009/10 (£)	Backlog Maintenance Costs 2008/09 (£)	Variation (£)
Brecon War Memorial	24,000	50,000	45,000	5,000	119,000	37,000	82,000
Broddyfi Community Hospital	475,000	46,500	32,500	30,000	554,000	504,000	50,000
Bronllys Hospital	1,557,375	91,000	80,000	51,000	1,728,375	1,728,375	0
Builth Wells Cottage Hospital	86,000	106,000	36,000	50,000	228,000	178,000	50,000
Knighton Hospital	62,000	32,000	51,000	2,000	145,000	95,000	50,000
Llandrindod Wells Hospital	84,000	35,000	35,000	30,000	154,000	114,000	40,000
Llanidloes & District Hospital	72,000	40,000	35,000	30,000	147,000	87,000	60,000
Montgomery County Infirmary	45,000	49,500	32,500	30,000	127,000	107,000	20,000
Victoria Memorial Hospital	9,200	32,000	35,000	30,000	76,200	26,200	50,000
Ystradgynlais Community	244,000	35,000	30,000	30,000	309,000	1,782,500	-1,473,500
Aggregate sites	113,000	185,000	40,000	165,000	338,000	338,000	0
<b>Totals</b>	<b>2,771,575</b>	<b>702,000</b>	<b>452,000</b>	<b>453,000</b>	<b>3,925,575</b>	<b>4,997,075</b>	<b>-1,071,500</b>

Figure 1: Backlog maintenance costs by site

1.3 Figure 2 overleaf, identifies the backlog maintenance costs broken down by risk category. It can be seen that the high and significant risk costs total £1,051,700, which is a decrease of £1,474,000 compared with 2008/09.

A large proportion of the high and significant risk costs are associated with Broddyfi Hospital, which at £480,000 equates to 46% of the Health Board's total.

Site Name	High Risk backlog cost (£)	Significant Risk backlog cost (£)	Moderate Risk backlog cost (£)	Low Risk backlog cost (£)	Risk adjusted backlog cost (£)
Brecon War Memorial	10,000	10,000	94,000	5,000	23,667
Broddyfi Community	30,000	450,000	62,000	12,000	483,217
Bronllys Hospital	115,000	55,000	464,000	1,094,375	222,113
Builth Wells Cottage	26,000	72,000	115,000	15,000	103,417
Knighton Hospital	20,000	10,200	89,800	25,000	35,940
Llandrindod Wells Hospital	7,500	25,000	64,500	57,000	38,023
Llanidloes & District Hospital	15,500	12,500	90,000	29,000	33,667
Montgomery County	15,000	47,000	60,000	5,000	64,826
Victoria Memorial Hospital	0	15,000	55,000	6,200	16,654
Ystradgynlais Community	8,500	50,000	88,500	162,000	69,886
Aggregate sites	45,000	12,500	155,000	125,500	63,439
<b>Totals</b>	<b>292,500</b>	<b>759,200</b>	<b>1,337,800</b>	<b>1,536,075</b>	<b>1,154,849</b>

Figure 2: Backlog maintenance costs by risk category

1.4 Figure 3 shows the Health Board's performance trend between 2001-10 against the key all-Wales 2008 targets for the *essential* estate. It can be seen that there has been some improvement against three performance targets but none have met the national targets.

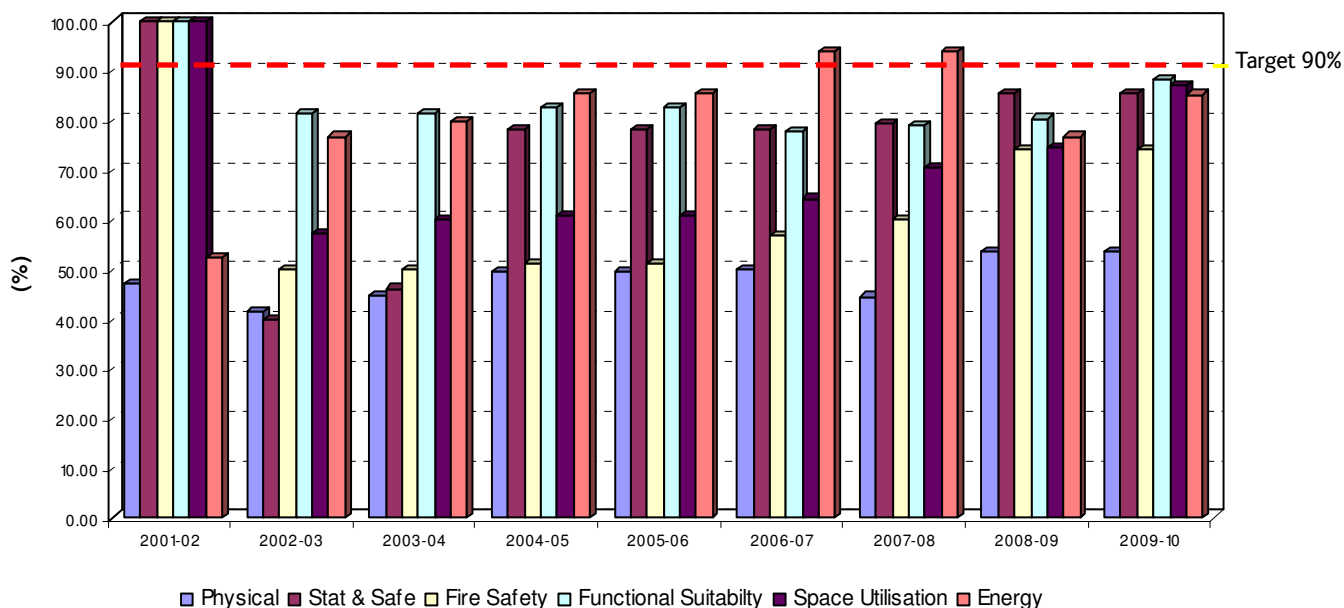
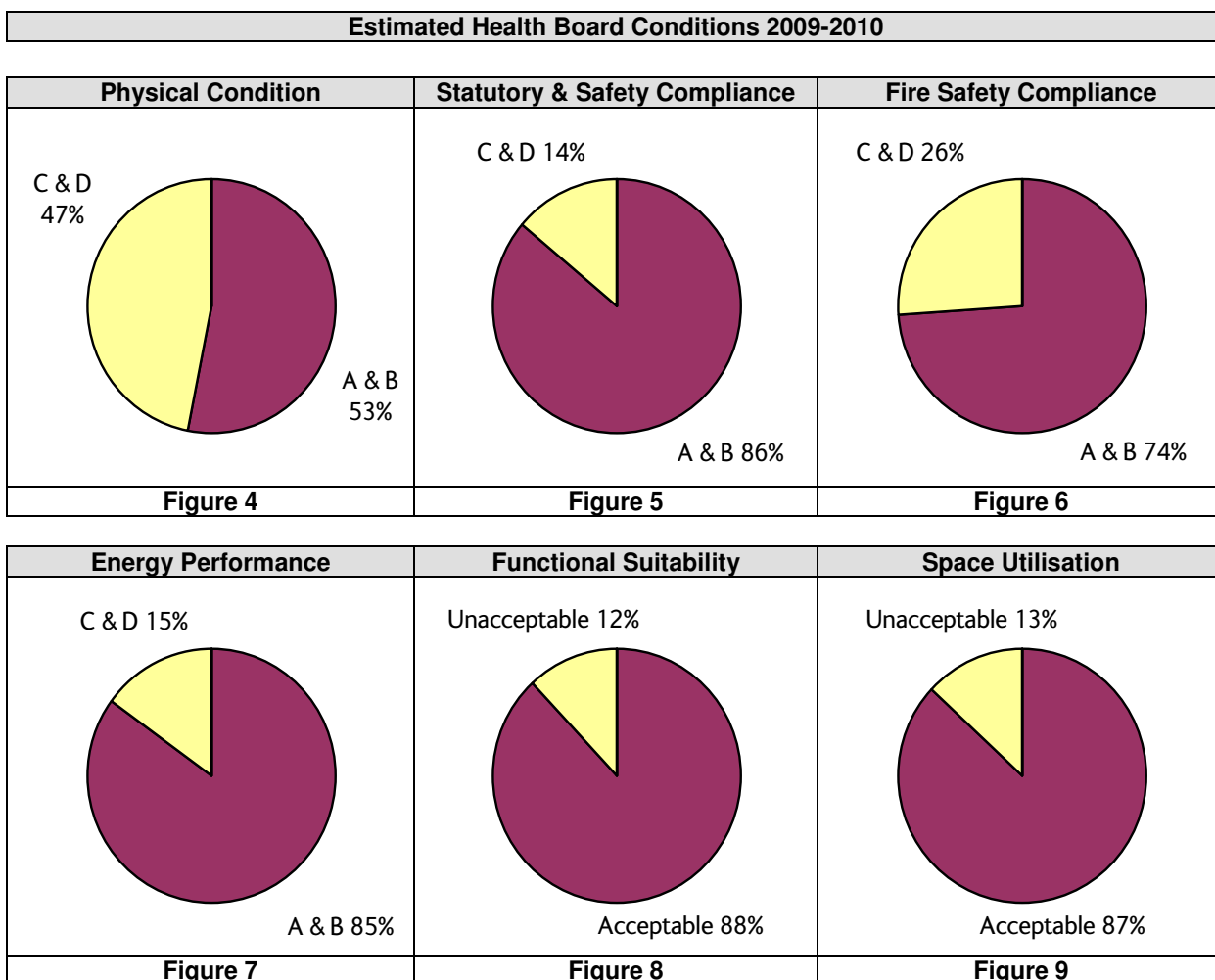


Figure 3: Trend in Health Board performance between 2001/10 against all-Wales 2008 targets



1.5 Figures 4-9 graphically illustrate the Health Board's performance against the key all-Wales estate national performance indicator targets for the essential estate.

Performance against last year's figures is as follows:

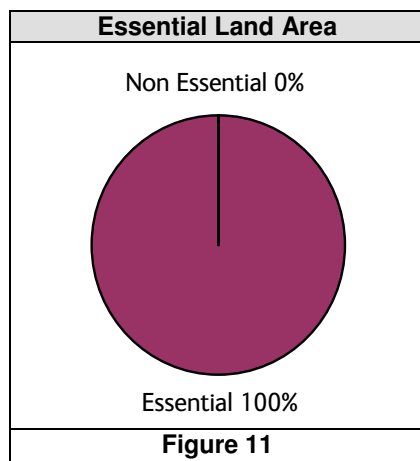
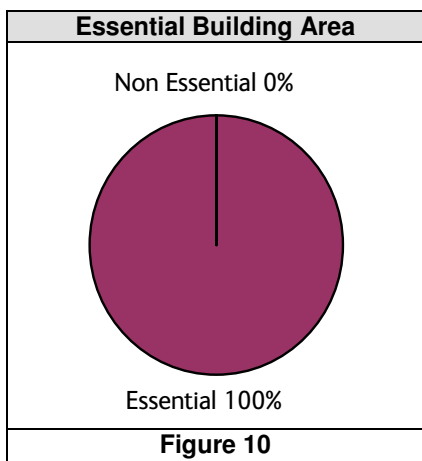
- Physical condition: remains at 53%
- Statutory and safety compliance: : remains at 86%
- Fire safety compliance: remains at 74%
- Functional suitability: improvement from 80% to 88%
- Space utilisation: improvement from 75% to 87%
- Energy Performance: improvement from 77% to 85%

It can be seen from this analysis that the Health Board has not met the targets for any of the national performance indicators.

The performance of Powys Teaching Health Board against that of other Health Boards/Trusts in Wales is graphically represented in **Appendix XII**.



**Estimated Health Board Conditions 2009-2010**



- 1.6 Figures 10 and 11 illustrate the amount of essential building area and land the Health Board has in its ownership. There has been no change with these indicators over the reporting period.
- 1.7 Figure 12 illustrates the age profile for the Health Board. It can be seen that just over 46% of the estate pre-dates 1948 and just over 38% is 25 years old or less. Furthermore, there has been no change over the last five years.

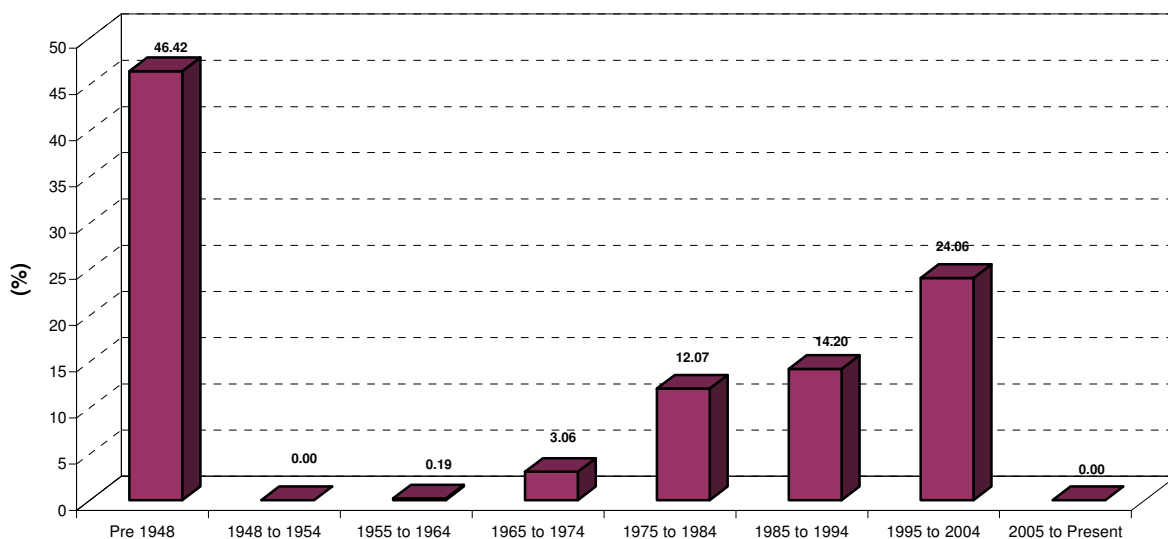


Figure 12: Age profile of the estate

## 2.0 Energy performance

- 2.1 In 2009/10 hospitals in the Health Board recorded a net energy consumption of 67,979GJ compared with 74,539GJ last year, a decrease of 8.8%. This equates to a primary energy consumption of 87,613GJ, a decrease of 7% on last year's figure of 94,196GJ and 14.55% below the base year consumption, and very close to the 15% target reduction set for 2010.
- 2.2 With reference to Figure 13, the overall PI has improved from 52.4GJ/100m<sup>3</sup> last year to 47.8GJ/100m<sup>3</sup>, which is below the lower limit target range of 55-65GJ/100m<sup>3</sup>. The individual hospital PIs suggest that some savings can be made by focusing on several hospitals that have higher PIs.

Hospital	Net Hospital Energy Consumption (GJ)	Change on Previous Year (%)	Heated Volume (m <sup>3</sup> )	Site PI (GJ/100m <sup>3</sup> )
Brecon War Memorial Hospital	9,400	-7.02	29,900	31.44
Broddyfi Community Hospital	5,659	-6.54	12,300	46.01
Bronllys Hospital	17,843	-19.13	43,852	40.69
Builth Wells Cottage Hospital	3,061	-4.58	4,600	66.54
Knighton Hospital	3,006	0.20	5,292	56.80
Llandrindod Wells Hospital	9,040	4.27	12,360	73.14
Llanidloes & District Hospital	3,385	-0.47	5,065	66.83
Montgomery County Infirmary	4,513	0.49	7,852	57.48
Victoria Memorial Hospital	4,697	-0.15	7,965	58.97
Ystradgynlais Community Hospital	7,375	-16.53	13,064	56.45
<b>Totals</b>	<b>67,979</b>	<b>-8.8</b>	<b>142,250</b>	<b>47.79</b>

Figure 13: Individual hospital energy PIs

2.3 The Health Board invested in several Central Energy Fund projects during the first year of the programme and the benefits of these schemes may be partly responsible for the improvements recorded.

### 3.0 Summary

3.1 The Powys Teaching Health Board's performance against the 2008 estate national performance indicator targets is, once again poor, despite some minor improvements across three of the indicators. The new Health Board will face a major challenge if it is to achieve the 2008 targets set by the Welsh Assembly Government in 2002.

3.2 The Health Board has achieved a slight overall reduction in backlog maintenance costs since the previous reporting year, following an investment in Ystradgynlais Community Hospital, its largest site, which alone accounts for approximately 44% of its backlog maintenance costs.

3.3 Energy performance figures demonstrate considerable improvement, one of the factors being the Health Board's investment in several Central Energy Fund Projects.

# *APPENDIX IX*

## Summary of Health Board/Trust information

VELINDRE NHS TRUST

## Organisation: Velindre NHS Trust

No of Returns: 1 Individual hospital site

### 1.0 Backlog maintenance

1.1 Figure 1 shows that the Velindre Trust's backlog maintenance costs have decreased by £389,482 from £2,880,334 in 2008/09 to £2,490,852 in 2009/10.

Site Name	Physical Condition Costs (£)	S & S Costs (£)	Fire Safety Costs (£)	DDA Costs (£)	Backlog Maintenance Costs 2009/10 (£)	Backlog Maintenance Costs 2008/09 (£)	Variation (£)
Velindre Hospital	1,906,413	536,731	47,708	353,298	2,490,852	2,880,334	-389,482
<b>Trust Totals</b>	<b>1,906,413</b>	<b>536,731</b>	<b>47,708</b>	<b>353,298</b>	<b>2,490,852</b>	<b>2,880,334</b>	<b>-389,482</b>

Figure 1: Backlog maintenance costs by site

1.2 Figure 2 identifies the backlog maintenance costs broken down by risk category. It can be seen that the significant risk costs total £248,512 which is a reduction of £1,020,623 compared with 2008/09. It is noted that the Trust has not identified any backlog in the high risk category.

Site Name	High Risk backlog cost (£)	Significant Risk backlog cost (£)	Moderate Risk backlog cost (£)	Low Risk backlog cost (£)	Risk adjusted backlog cost (£)
Velindre Hospital	0	248,512	1,105,593	1,136,747	416,729
<b>Trust Totals</b>	<b>0</b>	<b>248,512</b>	<b>1,105,593</b>	<b>1,136,747</b>	<b>416,729</b>

Figure 2: Backlog maintenance costs by risk category

1.3 Figure 3 overleaf, shows the Trust's performance trend from 2001/10 against the key all-Wales 2008 targets for the essential estate. It can be seen that the Trust has met or exceeded the 90% target in respect of *Functional suitability*, *Space utilisation* and *Energy*.

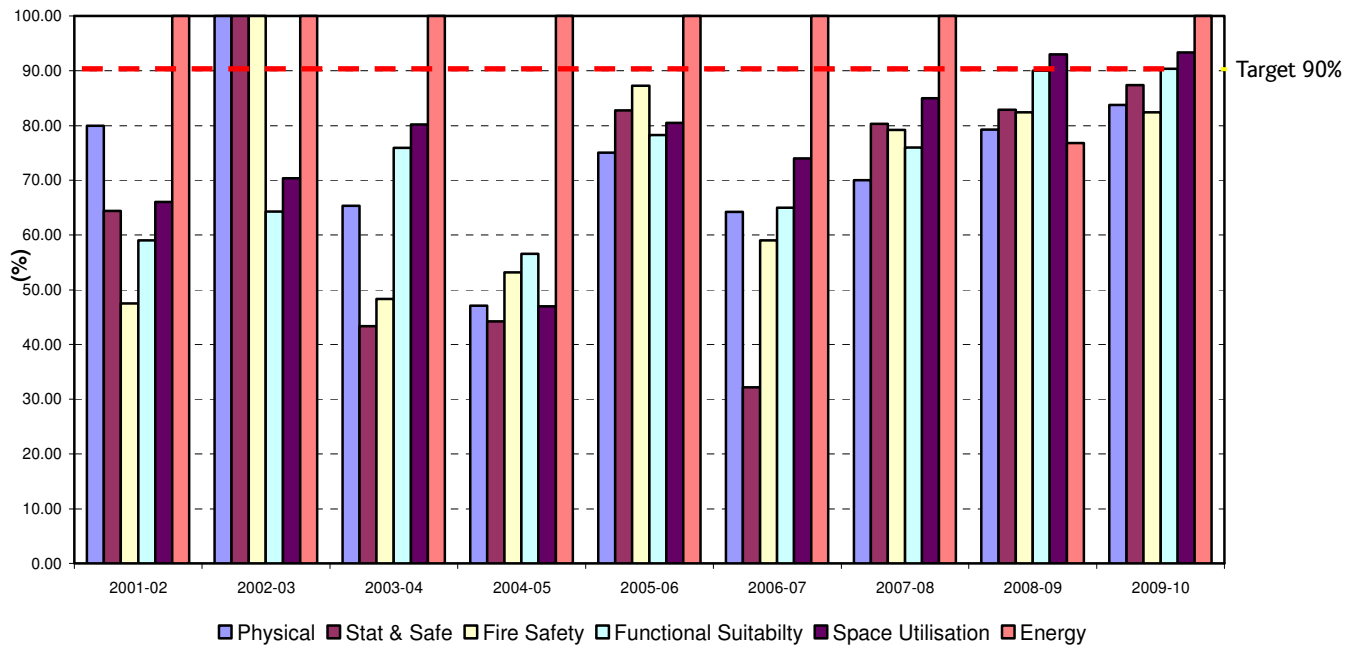


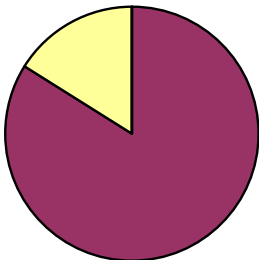
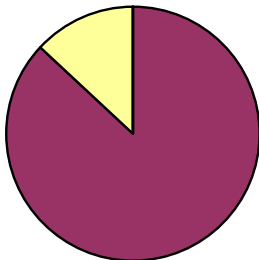
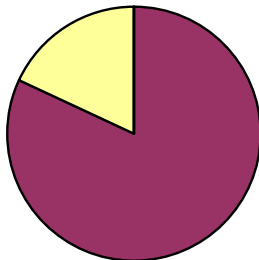
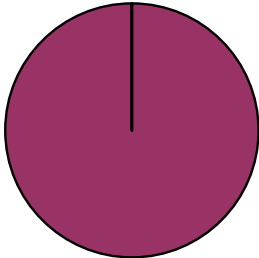
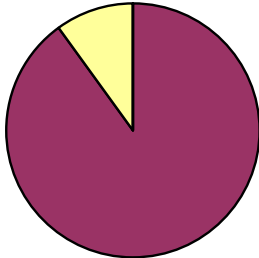
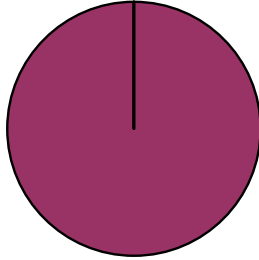
Figure 3: Trend in Trust performance between 2001/10 against all-Wales 2008 targets

1.4 Figures 4-9 graphically illustrate the Trust's performance against the key all-Wales targets for the essential estate.

- Physical condition: improvement from 79% to 84%
- Statutory and safety compliance: improvement from 83% to 87%
- Fire safety compliance: reduction from 83% to 82%
- Functional suitability: remains at 90%
- Space utilisation: remains at 93%
- Energy Performance: remains at 100%

The performance of Velindre NHS Trust against that of other Health Boards/Trusts in Wales is graphically represented in **Appendix XII**.

1.5 Figures 10 and 11 illustrate the amount of essential building area and land the Trust has in its ownership at its only hospital site and both elements are considered to be 100% essential.

Estimated Trust Conditions 2009-2010		
<b>Physical Condition</b>	<b>Statutory &amp; Safety Compliance</b>	<b>Fire Safety Compliance</b>
C & D 16%	C & D 13%	C & D 18%
		
A & B 84%	A & B 87%	A & B 82%
<b>Figure 4</b>	<b>Figure 5</b>	<b>Figure 6</b>
<b>Energy Performance</b>	<b>Functional Suitability</b>	<b>Space Utilisation</b>
C & D 0%	Unacceptable 10%	Unacceptable 7%
		
A & B 100%	Acceptable 90%	Acceptable 93%
<b>Figure 7</b>	<b>Figure 8</b>	<b>Figure 9</b>
<b>Essential Building Area</b>	<b>Essential Land Area</b>	
Non Essential 0%	Non Essential 0%	
		
Essential 100%	Essential 100%	
<b>Figure 10</b>	<b>Figure 11</b>	

1.6 Figure 12 overleaf, illustrates the age profile for the Trust. It can be seen that almost 50% of its estate is 25 years old or less. There has been little change since 2008/09, although the completion of the new building for LINACS 7 & 8 currently under construction, will impact on the age profile of the Trust in 2010/11.

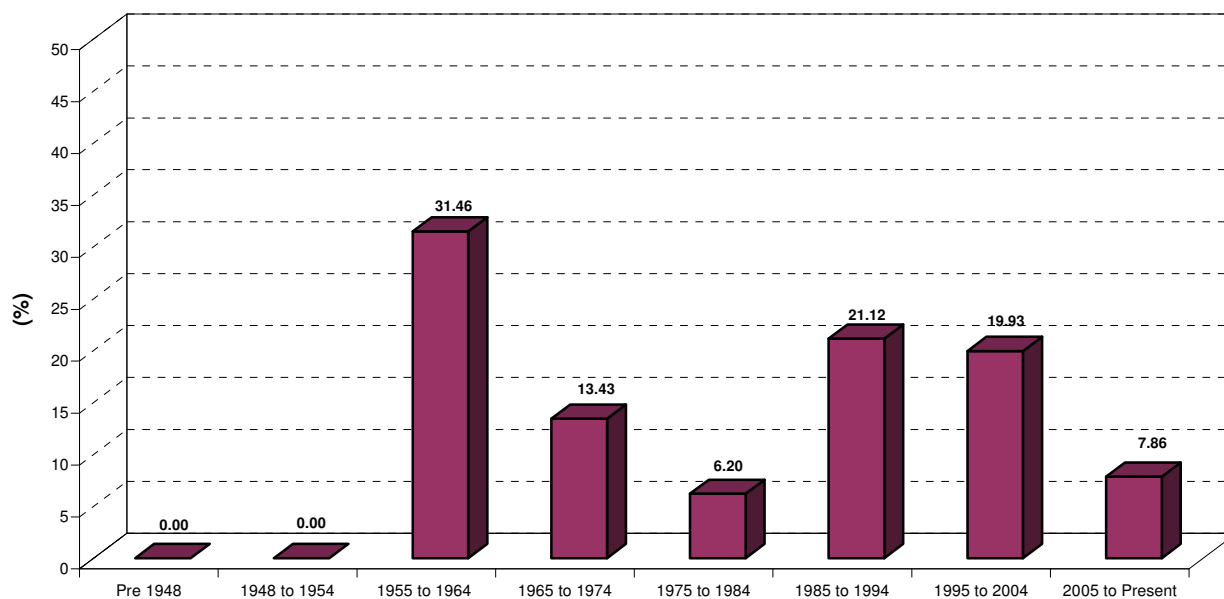


Figure 12: Age profile of the estate

## 2.0 Energy performance

- 2.1 In 2009/10 the only hospital in the Trust recorded a net energy consumption of 23,493GJ compared with 21,942GJ last year, an increase of 7.07%. This equates to a primary energy consumption of 40,735GJ, an increase of 6.1% on last year's figure of 38,403GJ and 80.63% above the reported base year consumption. It is believed that the base year figure consisted in part of apportioned electricity consumption from the adjacent Whitchurch Hospital site, and cannot be regarded as accurate.
- 2.2 With reference to Figure 13, the PI for the Velindre Hospital site has deteriorated from 55.24GJ/100m<sup>3</sup> last year to 60.69GJ/100m<sup>3</sup>, which is within the target range of 55-65GJ/100m<sup>3</sup>.
- 2.3 The Trust completed all its Central Energy Fund projects during the first two years of the programme, which were funded to a value of £56,000.

Hospital	Net Hospital Energy Consumption (GJ)	Change on Previous Year (%)	Heated Volume (m <sup>3</sup> )	Site PI (GJ/100m <sup>3</sup> )
Velindre Hospital	23493	7.07	38,708	60.69
<b>Totals</b>	<b>23493</b>	<b>7.07</b>	<b>38,708</b>	<b>60.69</b>

Figure 13: Individual hospital energy PIs

### 3.0 Summary

- 3.1 The Trust's performance has remained the same as last year in respect of three of the 2008 estate national performance targets. The Trust has made a slight improvement with two of the indicators but if it is to achieve the 2008 targets set by the Welsh Assembly Government in 2002 further work needs to take place.
- 3.2 A further decrease in the reduction in backlog maintenance costs is to be welcomed, with the Trust having to only concentrate on a single site.
- 3.3 Energy consumption figures show some deterioration with rises in both net and primary energy consumption. The continued development of the site's services necessitates the installation of energy-intensive medical equipment that inevitably leads to increased consumption.



# *APPENDIX X*

Summary of Health Board/Trust information

WELSH AMBULANCE SERVICES NHS TRUST

## Organisation: Welsh Ambulance Services NHS Trust

No of Returns: Aggregate sites – All other non-hospital sites

### 1.0 Backlog maintenance

1.1 Figure 1 shows that the Welsh Ambulance Services NHS Trust's backlog maintenance costs have reduced by £364,428 from £14,731,343 in 2008/09 to £14,366,915 in 2009/10, equating to a 2.4% decrease.

1.2 This year the Trust has split the backlog costs between the three regions within its Trust. It can be seen from Figure 1 that the largest backlog maintenance costs are associated with the South East Region which total £6,545,013, and equate to approximately 45% of the Trust's total.

Site Name	Physical Condition Costs (£)	S & S Costs (£)	Fire Safety Costs (£)	DDA Costs (£)	Backlog Maintenance Costs 2009/10 (£)	Backlog Maintenance Costs 2008/09 (£)	Variation (£)
Central & West Region	3,513,082	372,224	147,221	101,409	4,032,527	0	N/A
North Region	3,328,526	72,696	388,154	189,748	3,789,376	0	N/A
South East Region	6,122,608	71,367	351,038	380,385	6,545,013	0	N/A
Welsh Ambulance Services						14,731,343	N/A
<b>Trust Totals</b>	<b>12,964,216</b>	<b>516,287</b>	<b>886,413</b>	<b>671,542</b>	<b>14,366,915</b>	<b>14,731,343</b>	<b>-364,428</b>

Figure 1: Backlog maintenance costs by site

1.3 Figure 2 identifies the backlog maintenance costs broken down by risk category. It can be seen that the high and significant risk costs total £7,053,587, which are 49% of the total backlog costs. An Estate Strategy has been put forward showing that between the next 4 – 7 years, depending on affordability, many of the existing 88 ambulance station buildings will be surplus to operational requirements.

Site Name	High Risk backlog cost (£)	Significant Risk backlog cost (£)	Moderate Risk backlog cost (£)	Low Risk backlog cost (£)	Risk adjusted backlog cost (£)
Central & West Region	650,559	1,425,968	1,570,575	385,425	2,235,072
North Region	28,031	1,776,574	1,324,574	660,198	1,933,136
South East Region	541,105	2,631,351	3,127,096	245,460	3,380,404
<b>Trust Totals</b>	<b>1,219,695</b>	<b>5,833,892</b>	<b>6,022,245</b>	<b>1,291,083</b>	<b>7,548,612</b>

Figure 2: Backlog maintenance costs by risk category

1.4 Figure 3 overleaf, shows the Trust's performance against the key 2008 all-Wales targets for the essential estate. It can be seen that the Trust has exceeded, or met the national performance indicator targets for *Fire safety* and *Space utilisation*.

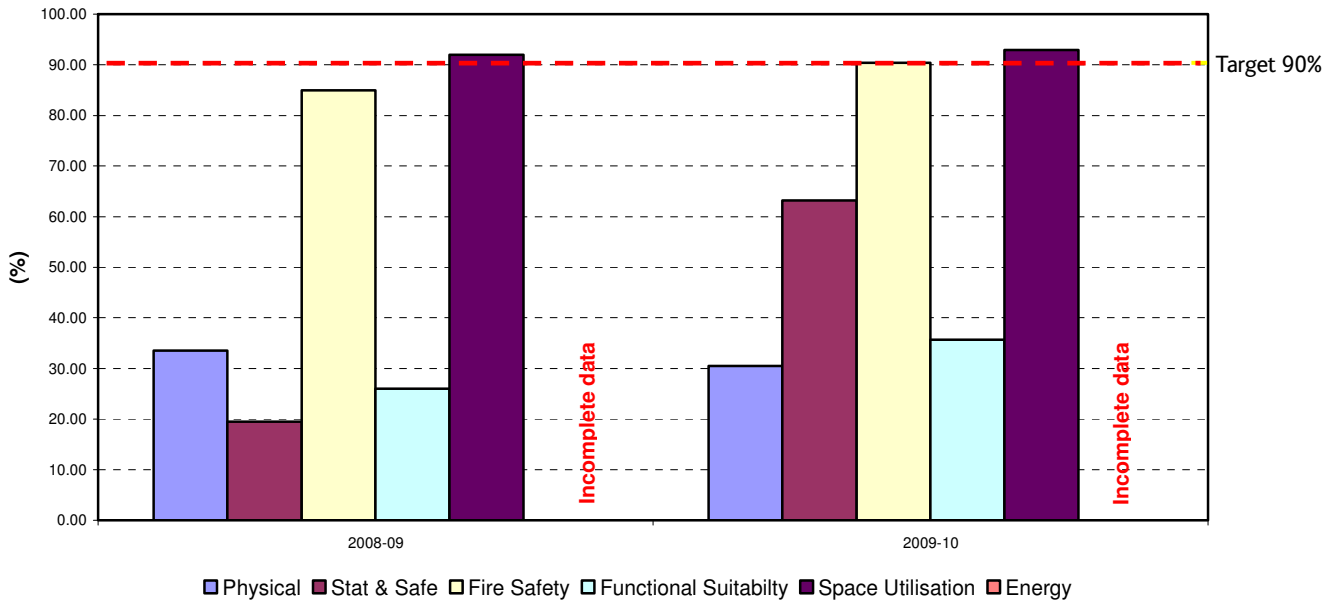


Figure 3: Trust performance against all-Wales 2008 targets

1.5 Figures 4-9 opposite, graphically illustrate the Trust's performance against the key all-Wales targets for the essential estate.

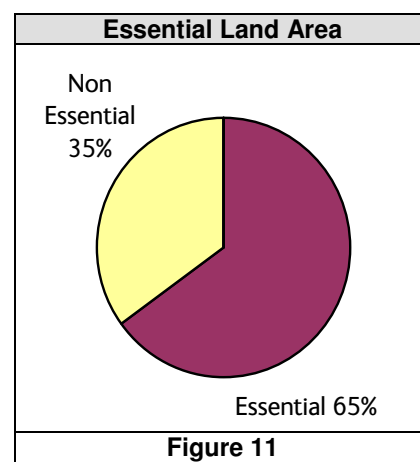
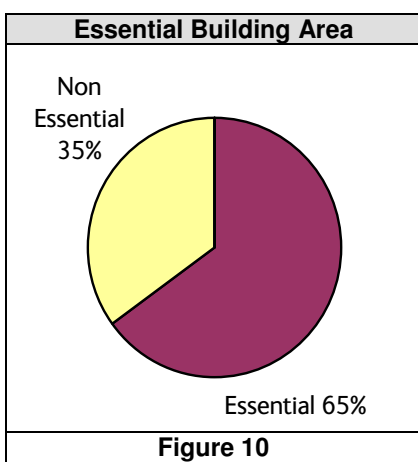
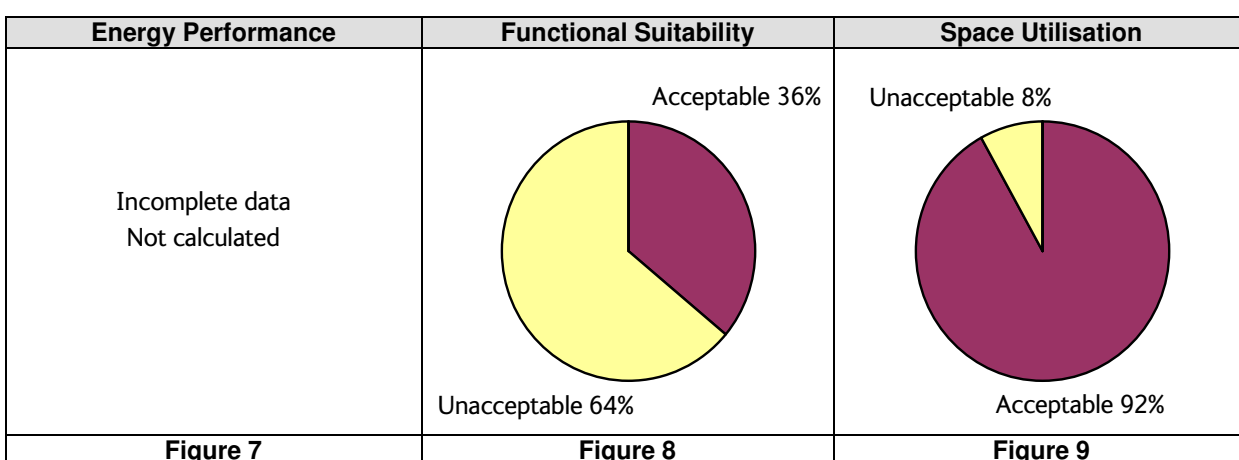
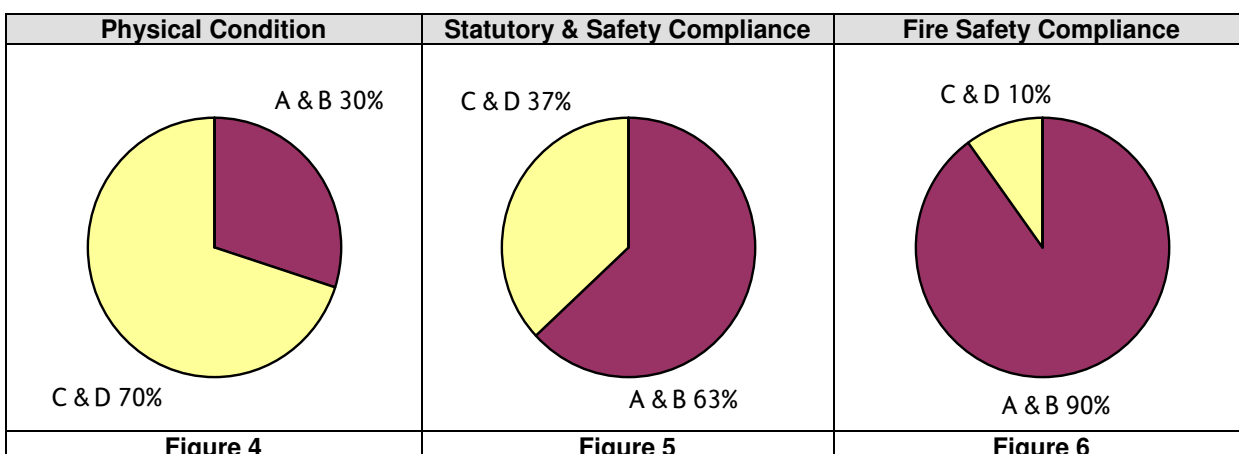
- Physical condition: reduction from 34% to 30%
- Statutory and safety compliance: improvement from 20% to 63%
- Fire safety compliance: improvement from 85% to 90%
- Functional suitability: improvement from 26% to 36%
- Space utilisation: remains at 92%
- Energy Performance: Data incomplete, PI not calculated

It can be seen from this analysis that, with the exception of *Fire safety* and *Space utilisation*, the Trust has not met the targets set for 2008.

The performance of Welsh Ambulance Services NHS Trust against that of other Health Boards/Trusts in Wales is graphically represented in **Appendix XII**.

1.6 Figures 10 and 11 opposite, illustrate the amount of essential building area and land the Trust has in its ownership. In both cases the amount of essential building and land has reduced from 90% in 2008/09 to 65% in 2009/10. This is reported as a result of a logistical review of WAST operations conducted this year, which highlighted that existing WAST ambulance station locations are, in general, not well located in terms of being proximate to the demand from the patient. The review has informed the WAST Estates Strategy which is in draft, and in the process of finalisation.

**Estimated Trust Conditions 2009-2010**



1.7 Figure 12 overleaf, illustrates the age profile for the Trust. It can be seen that almost 10% of the Trust's estate pre-dates 1948 and just over 31% is 25 years old or less.

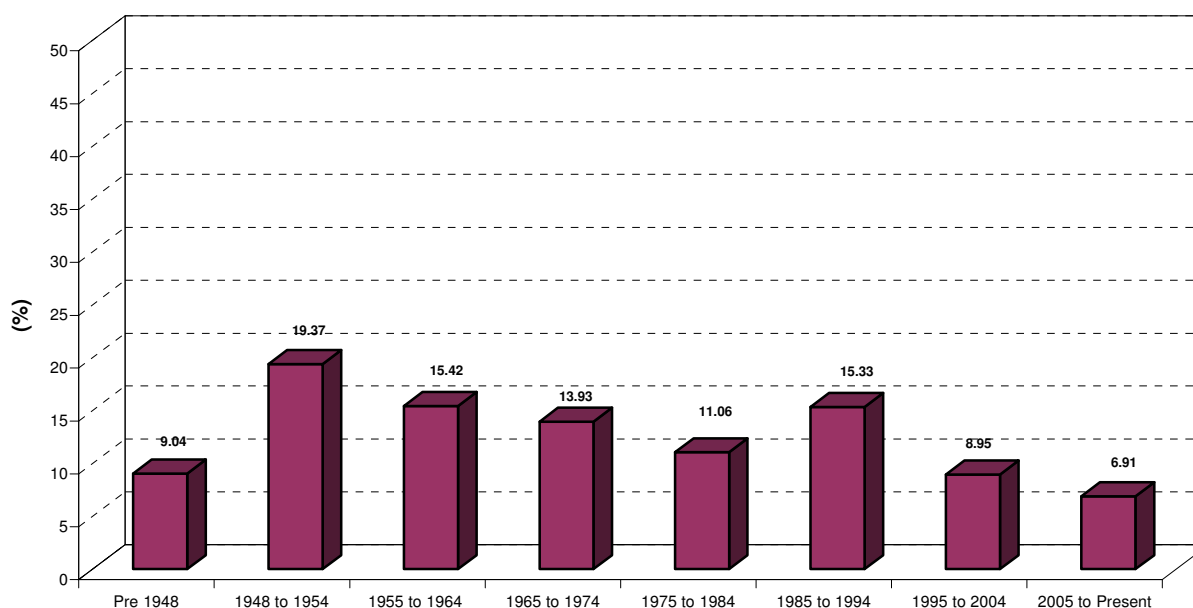


Figure 12: Age profile of the estate

## 2.0 Energy performance

2.1 The Trust submitted data on energy consumption on a regional basis. As data has not been submitted for previous years no comparison can be made. The Figure 13 data submitted has not been included in the all Wales information quoted in other sections of this report.

Region	Net Energy Consumption (GJ)	Change on Previous Year (%)	Heated Volume (m <sup>3</sup> )	Site PI (GJ/100m <sup>3</sup> )
Central & West Region	14,568		41,338	35.24
North Region	16,273		46,703	34.84
South East Region	10,499		41,783	25.13
<b>Trust Totals</b>	<b>41,340</b>		<b>129,824</b>	<b>31.84</b>

Figure 13: Individual Region PIs

## 3.0 Summary

- 3.1 The Welsh Ambulance Services NHS Trust has met only two of the 2008 estate national performance targets. The Trust faces an enormous challenge if it is to achieve any of the targets set by the Welsh Assembly Government in 2002.
- 3.2 The high backlog maintenance costs reported for 2009/10 show a further increase on the previous reporting period, but the Trust's Estates Strategy is anticipated to lead to a significant reduction in due course.
- 3.3 The Trust has for, the first time, submitted energy data on a regional basis, which will be compared with data in future years.

# *APPENDIX XI*

## Details of non-essential Health Board/Trust property

<b>Non-Essential Health Board/Trust Property</b>					
<b>Hospital</b>	<b>Physical Cost to 'B' (£)</b>	<b>Statutory &amp; Safety Cost to 'B' (£)</b>	<b>Fire Safety Cost to 'B' (£)</b>	<b>Backlog Maintenance Cost (£)</b>	<b>Date of Closure</b>
Aberbargoed & District Hospital	66,190.00	44,407.00	30,264.00	140,861	
Aberdare General Hospital	4,322,338.00	2,804,205.00	709,071.00	7,835,614	
Blaenavon Health Care Unit	193,287.00	30,064.00	3,755.00	227,106	
Blaina & District Hospital	491.00	9,255.00	32,430.00	42,176	
Bodnant Psychiatric Unit	363,399.00	33,091.00	10,250.00	406,740	
Caerphilly District Miners Hospital	6,874,877.00	438,392.00	116,157.00	7,429,426	
Cefn Coed Hospital	6,818,141.00	50,760.00	115,000.00	6,983,901	
CRI - West Wing	1,932,726.00	26,263.00	51,461.00	2,010,450	
Gellinudd Hospital	8,611.00	0.00	0.00	8,611	
HM Stanley Hospital	2,317,065.00	396,564.00	90,000.00	2,803,629	
Llanfrechfa Grange Hospital *	953,540.00	210,316.00	109,839.00	1,273,695	
Llwynypia Hospital	2,798,557.00	704,072.00	0.00	3,502,629	January 2010
Mountain Ash General Hospital	3,017,600.00	1,688,753.00	832,877.00	5,539,230	
Redwood Memorial Hospital	29,071.00	60,432.00	11,963.00	101,466	
St Cadoc's Hospital	2,079,118.00	62,291.00	10,006.00	2,151,415	
Tredegar General Hospital	67,256.00	129,249.00	50,000.00	246,505	
Ty Sirhowy Unit	2,129.00	6,862.00	42,309.00	51,300	
Whitchurch Hospital	6,016,321.00	649,837.00	0.00	6,666,158	
Ystrad Mynach Hospital	8,525,021.00	501,222.00	66,257.00	9,092,500	
<b>Totals</b>	<b>46,385,738</b>	<b>7,846,035</b>	<b>2,281,639</b>	<b>56,513,412</b>	

\* Part of this hospital site is planned for future use.

# *APPENDIX XII*

## Performance Indicators and Targets



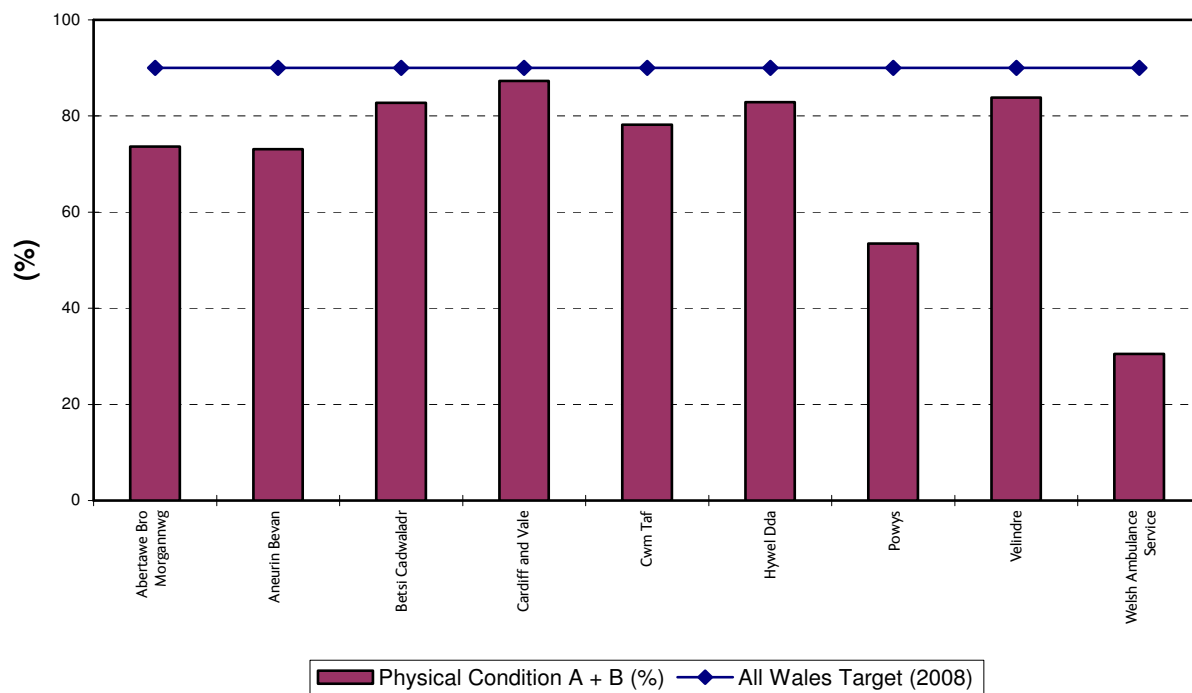


Figure 1: Physical Condition (Categories A & B %)

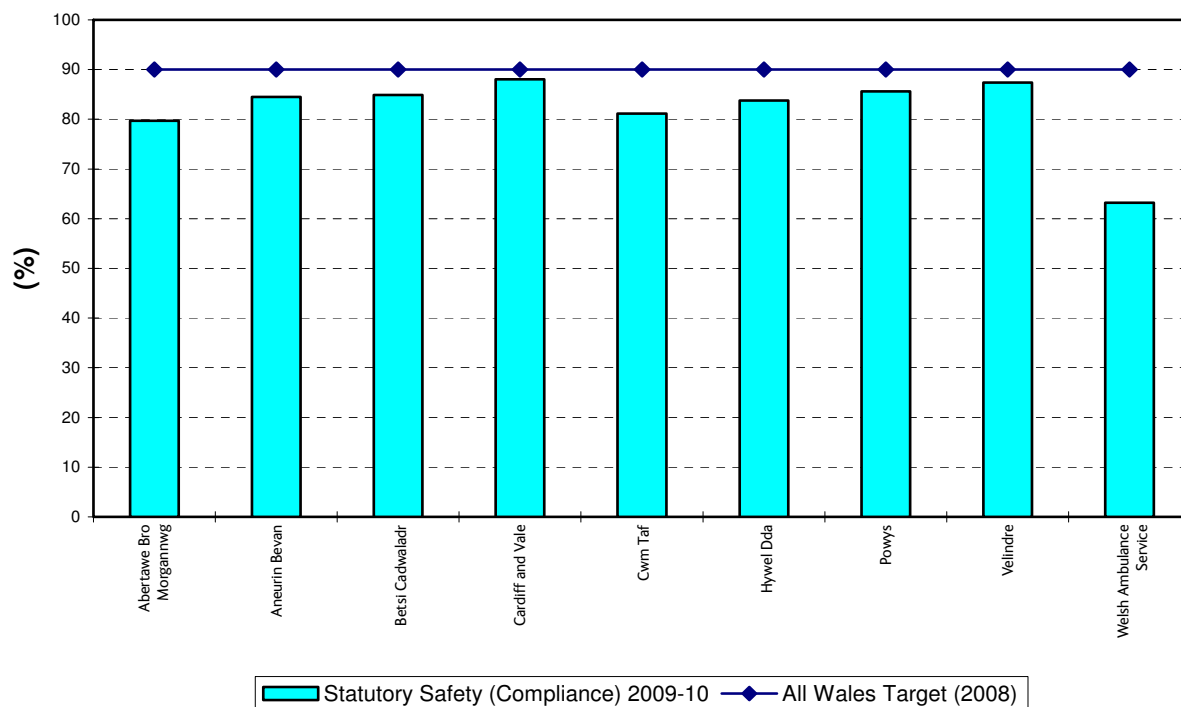


Figure 2: Statutory & Safety Compliance (Categories A & B %)

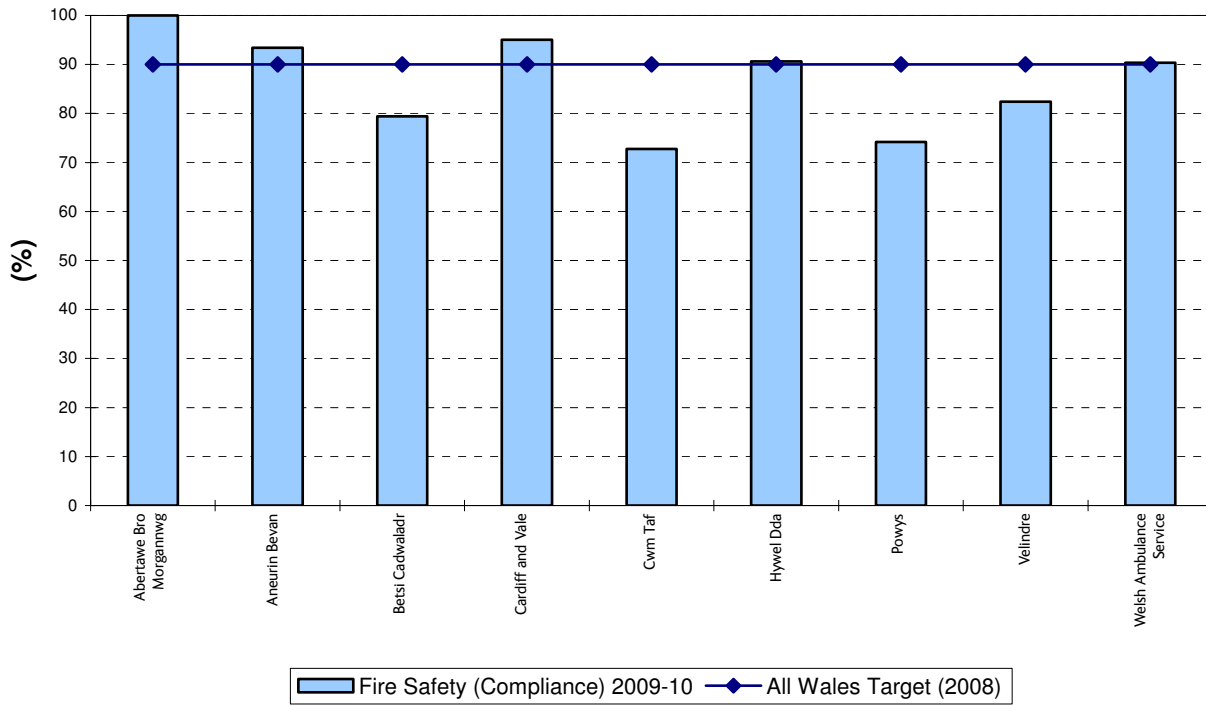


Figure 3: Fire Safety Compliance

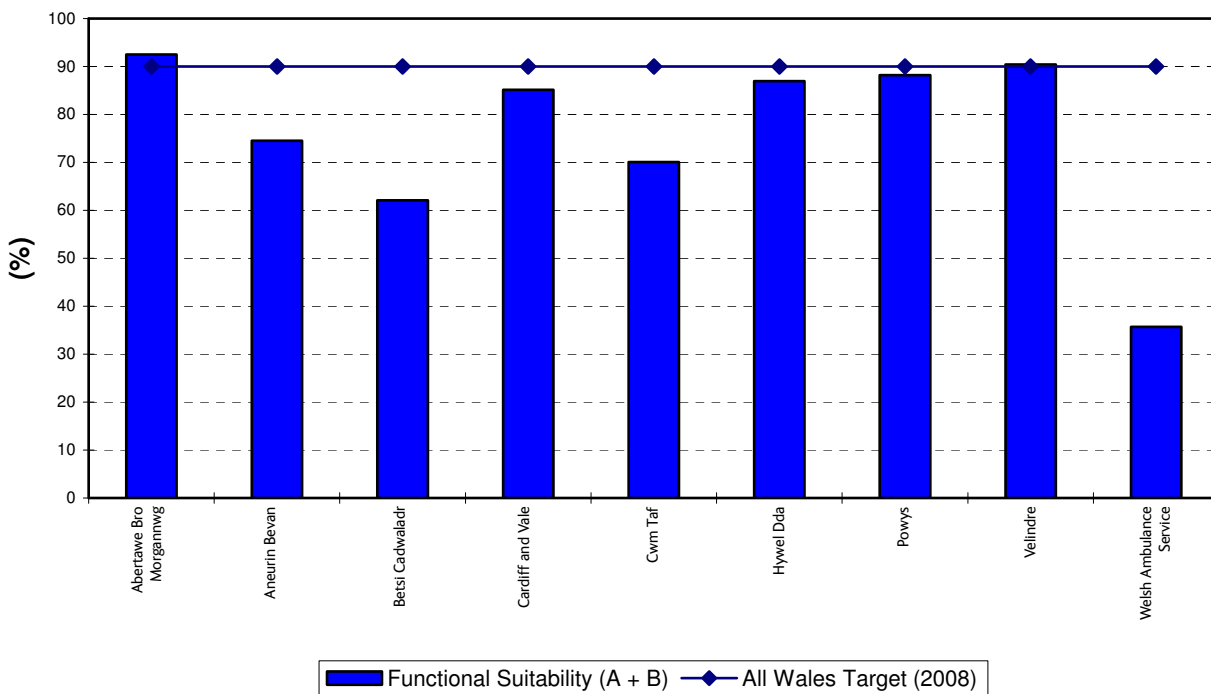


Figure 4: Functional Suitability

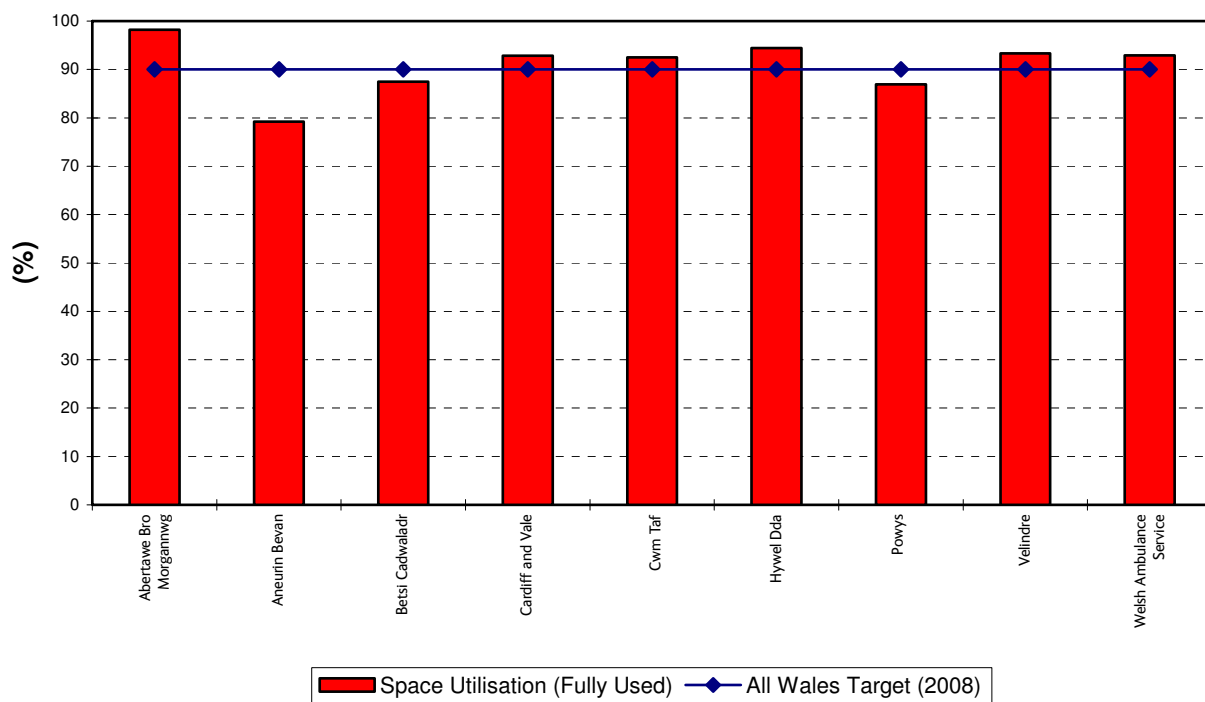


Figure 5: Space Utilisation

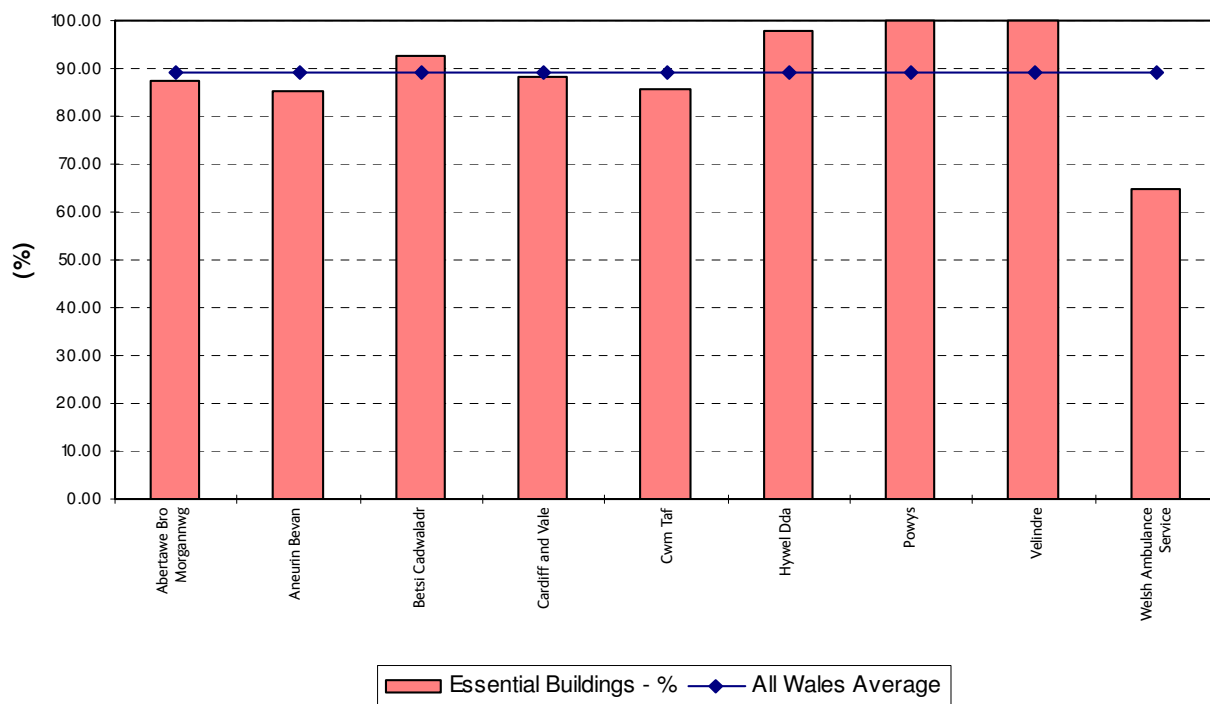


Figure 6: Essential Buildings

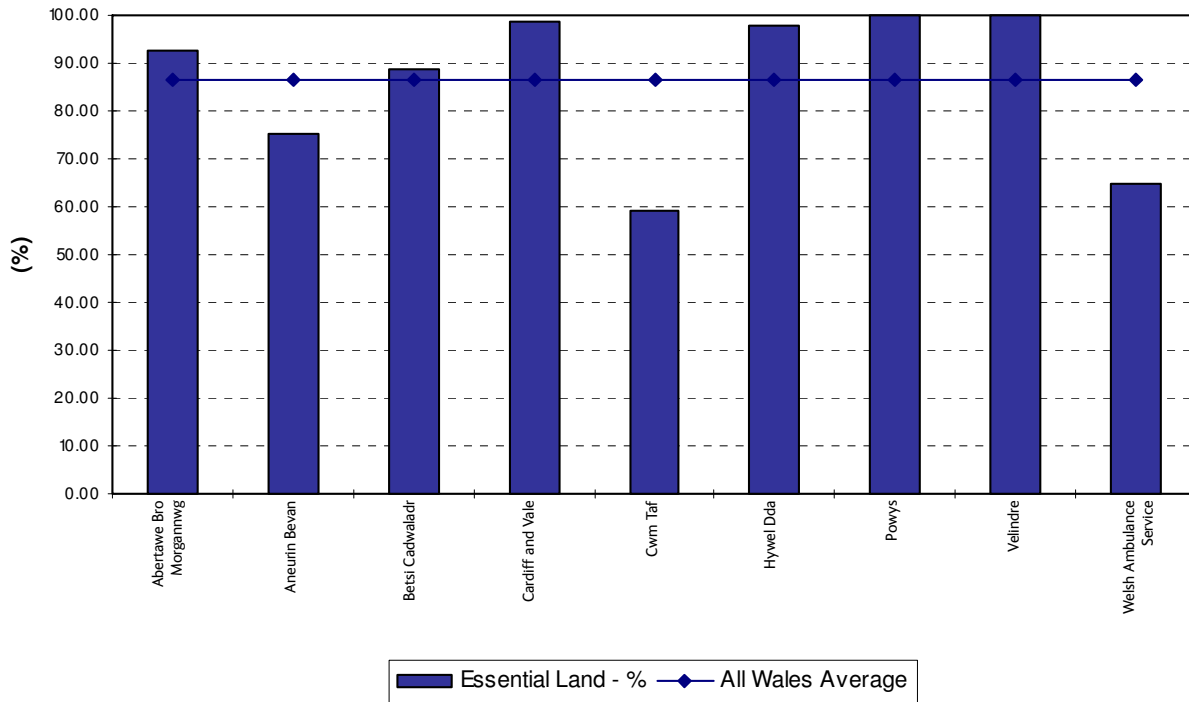


Figure 7: Essential Land

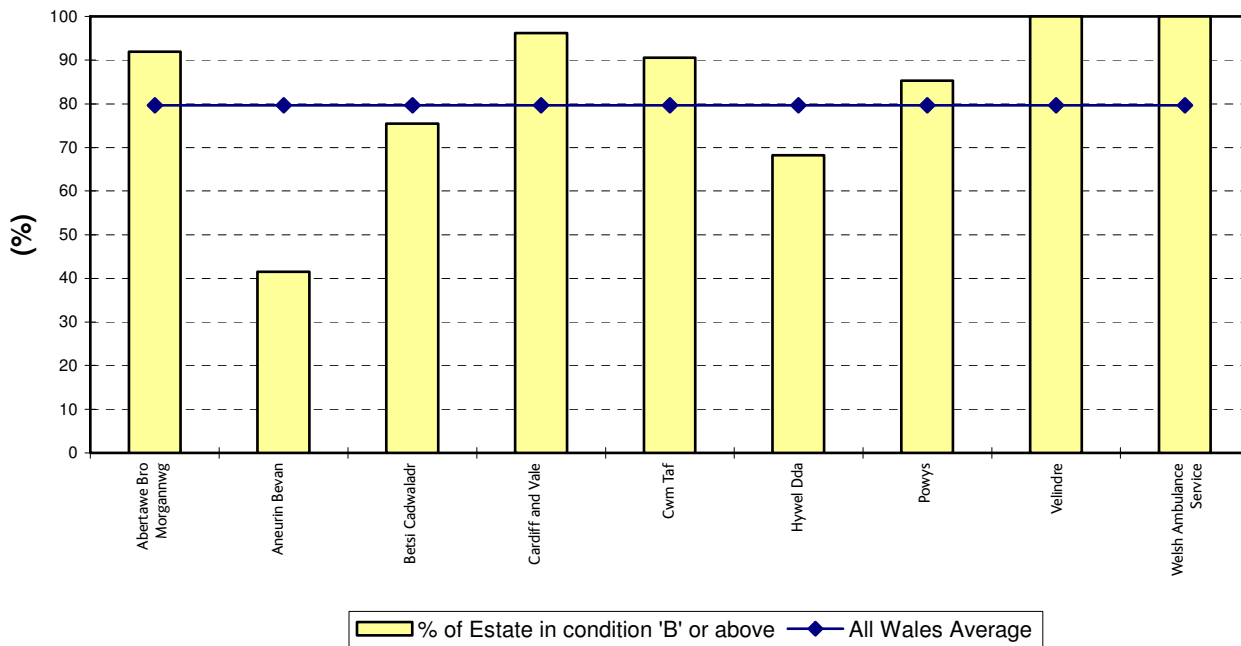


Figure 8: Estatecode Category 'B' Energy Performance

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1, Ysbyty Aneurin Bevan, Ebbw Vale.

2, Ysbyty Alltwen, Tremadog.

*Back Cover photographs:*

3	
4	5

3, Wrexham Maelor Hospital, Older Adult Unit.  
*Courtesy of Interserve*

4, Ysbyty Aneurin Bevan, Ebbw Vale. Biomass Boiler.

5, University Hospital of Wales, CHP Plant.



**WELSH HEALTH ESTATES**  
**YSTADAU IECHYD CYMRU**

PO Box 182,  
Bevan House, 24-30 Lambourne Crescent, Llanishen  
Cardiff CF14 5GS

PO Box 182,  
Tŷ Bevan, 24-30 Cilgant Lambourne, Llanisien  
Caerdydd CF14 5GS