



AGENDA ITEM

5.3

PLANNING, PERFORMANCE AND FINANCE COMMITTEE

PART A- ESTATES PERFORMANCE – 2021/2022
PART B -ENERGY PERFORMANCE – 2021/2022

Date of meeting	(26/04/2022)
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FOI Status	Open/Public
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If closed please indicate reason	Not Applicable - Public Report
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Presented by	Sally May, Director of Finance
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Approving Executive Sponsor	Executive Director of Finance & Procurement
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Report purpose	FOR DISCUSSION / NOTING
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Engagement (internal/external) undertaken to date (including receipt/consideration at Committee/group)

Committee/Group/Individuals	Date	Outcome
Estates & Capital Governance Board, Estates Operational Management Team Meetings and Energy Compliance Group Meetings	(07/04/2022)	NOTED

ACRONYMS

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PART A- ESTATES OPERATIONAL PERFORMANCE 2021/22 AND NATIONAL PERFORMANCE INDICATORS 2020/21

1. SITUATION/BACKGROUND

The purpose of **Part A** of this report is to provide the Planning, Performance and Finance Committee with the 2021/22 estates operational planned and reactive maintenance performance data for the Health Board and to note the Health Board's estates performance against the 2020/21 II Wales national key performance indicators.

1.1 Operational Maintenance Performance Indicators

The Estates department provides an essential 24 hour, 365 days a year service in the delivery of planned, reactive and help desk maintenance across the estate.

The department measure and monitor a range of indicators related to the service it provides to the organisation. These include the:

- % of statutory jobs undertaken each month.
- % of mandatory jobs undertaken each month.
- % of helpdesk requests completed each month.

The maintenance programme is managed via the Planet Facilities Management system; this enables the scheduling and operation of all planned and reactive maintenance jobs. The performance is reported quarterly to the Estates and Capital Governance Board, and monthly at the Estates Operational Management team meetings.

The department carry out approximately 59,000 jobs per annum covering the three performance areas and the table below shows an improved year on year performance on statutory, mandatory and response desk jobs, this however dropped marginally in 2021/22 largely due to staffing shortages as a consequence of Covid-19.

Year	2016/17	2017/18	2018/19	2019/20	2020/21	2021/22
Statutory PPM Jobs	93.2	93.6	94.8	94.5	95.0	93.8
Mandatory PPM Jobs	80.9	82.3	85	91.5	91.0	89.7
Response Desk Jobs	72.7	74.2	76.5	70.7	70.7	72.9

It is encouraging that over a number of years there has been a demonstrable increase in the performance levels; however, it should be noted that not all jobs can be completed each month.

The risk is minimised wherever possible by ensuring that where a particular statutory planned job is not undertaken one week/month, then it is undertaken on the following cyclical occasion. This is monitored by the Operational Head of Estates and senior operational estates managers at their monthly operational management meetings.

1.2 National Key Performance Indicators

The most recently published (2020/21) National Estates Condition and Performance indicators measure the percentage of the estate that is in a reasonable standard and fall within estate code category B or above. The table below shows Cwm Taf Morgannwg's position and a comparator against the other Health Board's in Wales.

National Key Performance Indicators

Percentage of the estate which is of reasonable standard and therefore falls within Estatecode category 'B'/'F' or above:

	Physical Condition (%)	Statutory & safety compliance (%)	Fire safety compliance (%)	Functional suitability (%)	Space utilisation (%)
ANEURIN BEVAN UNIVERSITY HEALTH BOARD	92	92	85	98	90
BETSI CADWALADR UNIVERSITY HEALTH BOARD	71	76	69	74	93
CARDIFF & VALE UNIVERSITY HEALTH BOARD	77	85	86	64	79
CWM TAF MORGANNWG UNIVERSITY HEALTH BOARD	96	89	94	99	99
HYWEL DDA UNIVERSITY HEALTH BOARD	88	89	94	91	99
POWYS TEACHING LHB	64	80	72	70	88
SWANSEA BAY UNIVERSITY HEALTH BOARD	77	100	100	100	99
VELINDRE UNIVERSITY NHS TRUST	65	95	95	88	99
WELSH AMBULANCE SERVICES NHS TRUST	48	90	90	36	99

Further performance improvements will be seen once the refurbishment of the ground and first floor at Prince Charles Hospital is completed. Work is continually on going on other sites to address health and safety and fire safety issues and

during 2021 / 2022, the Health Board spent £1.1m on statutory compliance from its discretionary capital programme.

PART B - ENERGY PERFORMANCE 21/22

The purpose of **Part B** of this report is to provide the committee with the 2021 /22 energy performance levels for the Health Board's estate and show how they compare against Welsh Government's key performance indicators and the other Health Board's in Wales.

The Board recognises that it has a responsibility to be energy and resource efficient by minimising unnecessary energy usage, reducing emissions & the impact on the environment and through its recently formed Green working group are actively engaged in responding to NHS Wales Decarbonisation Strategic delivery plan.

2.1 Energy Targets

The energy/water consumption targets set by Welsh Government are as follows:

- 90% of the estate to consume 410 kWh/m2 or less.
- Reduce carbon emissions by 3% per annum.
- Reduce water consumption by 2% per annum.

The NHS Wales Decarbonisation Strategic Delivery Plan is aligned to Welsh Ministers ambition for the public sector to be net zero by 2030. As the largest public sector organisation in Wales, the NHS has an important role to play to contribute towards this target.

The reduction of energy usage will deliver benefits of:

- Reducing cost which enables savings made to be reinvested.
- Minimizing the impact on the environment.

2.2 Monitoring

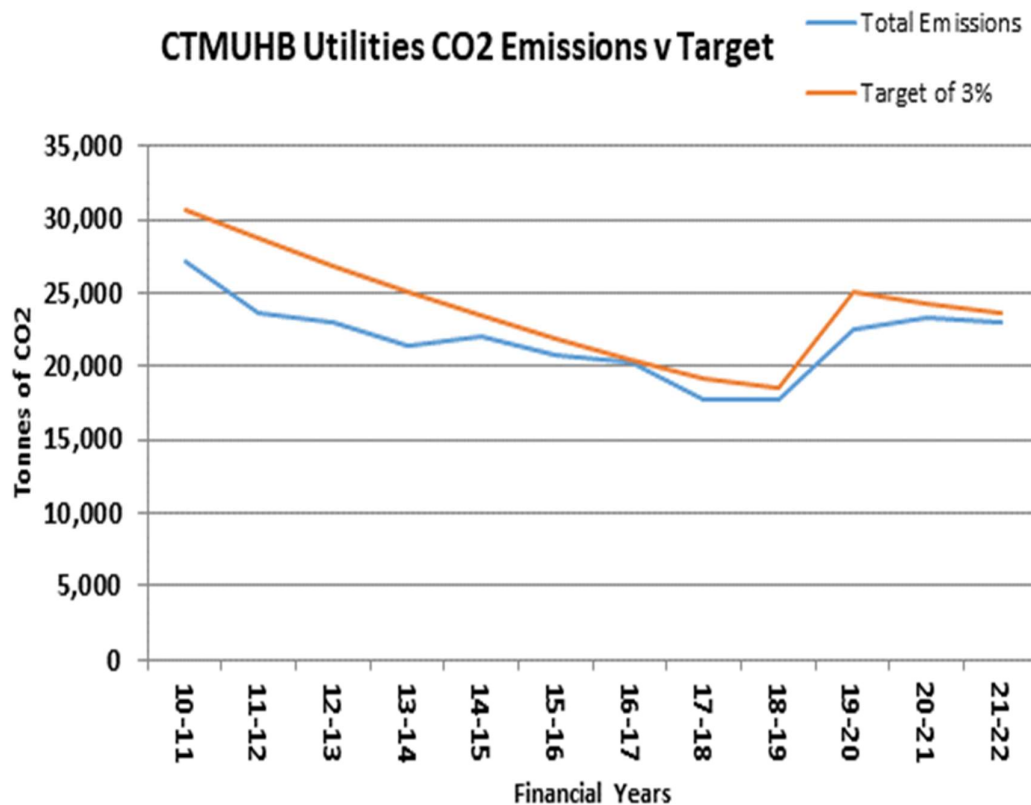
The Health Board utilises a software package to monitor the consumption and cost of energy and water.

The target for the Health Board is to maintain a carbon reduction commitment target of 3% year on year, as directed by the Welsh Government. The trend graph below shows that the emissions are continually reducing, albeit with reducing margins. Acceleration in carbon reduction is required in future years to meet the Welsh Government's Net Zero by 2030 target.



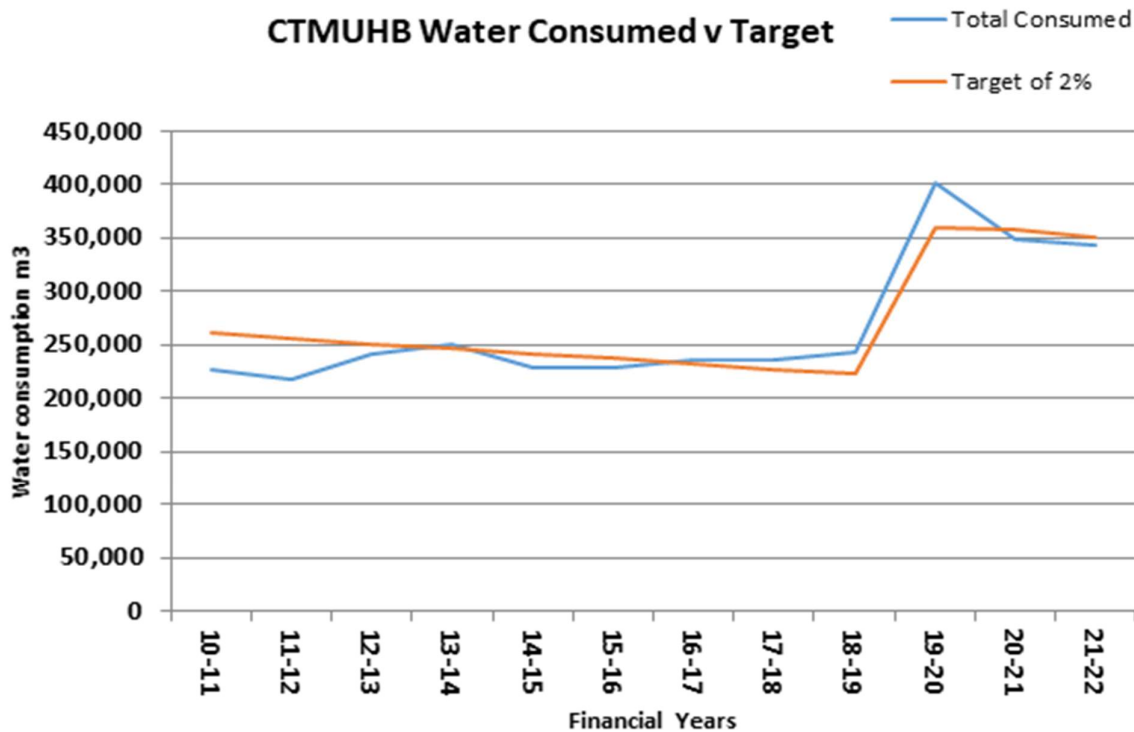
The Cwm Taf Morgannwg 'Strategic Assessment of Energy Efficiency Opportunities' report has been undertaken with consultancy support from the Welsh Government Energy Service (WGES), which recommends six detailed projects. The work identified the potential for a 13% carbon saving that can be achieved across the six audited sites.

The spikes in the graphs below show the effect of the additional Bridgend properties adopted in April 2019 following the Health Board's boundary change.



2.3 Water

In the same way as energy consumption, water is monitored monthly using the Team Sigma software. A reduction target for water is set at 2% annually, which was achieved in 2021-22.



In order to improve reaction times to water leaks smart meters has been installed to circa 20% of water meters to trial the potential benefits. This monitors the consumption and raises an alarm if there is an excessive volume detected for a given period. A planned programme has been developed so that all properties are covered by smart meters from 2025.

2.4 Utility Cost

The table below shows the average costs for energy and water per occupied floor area. The unit rates increased by varying percentages for electricity and gas in 2021 /22.

Total Energy Cost per Occupied Floor Area

Data	Unit	2017/18	2018/19	2019/20	2020/21	2021/22*
Total Energy Cost	£	3,907,959	4,598,379	7,067,401	6,754,671	8,651,318
Occupied floor area	m ²	185,485	185,485	283,837	285,455	285,455
Total Energy Cost per occupied Floor Area	£/m ²	21.1	24.7	24.9	23.7	30.3

* Estimated

This table shows an increased cost per m² of occupied floor during 2021 /22 largely due to increased electricity & gas unit rates from October '21, further exacerbated by recent events in Ukraine.

Although energy costs increased in 2021-22, compared to 2020-21 the electricity consumption decreased by 5%.

During the Covid-19 period, it was encouraged to open windows to provide natural ventilation, however to maintain adequate internal temperatures the gas consumption increased in 2021-22 by 1.89% compared to 2020-21.

The decrease in electrical consumption ensured a cost avoidance of circa £600K in 2021/22.

Two of our three acute hospitals (PCH & RGH) have Combined Heat and Power (CHP) units, which use natural gas to generate electricity and heat on site, minimizing dependence on the electricity purchased from the national grid. Annual gas consumption will therefore vary depending on the performance of the CHP's.

CHP Unit annual savings

Period	Unit	2017-18	2018-19	2019-20	2020-21	2021-22
PCH CHP Annual Saving	£	371,467	468,786	552,493	623,897	927,885
RGH CHP Annual Saving	£	186,549	185,838	263,911	264,995	390,369
TOTAL CHP SAVINGS	£	558,016	654,624	816,404	888,892	1,318,254

The table above shows the considerable financial saving achieved by the Health Board from generating its own electricity with a saving of £1,318,254 in 2021/22



Total Water and Sewage Cost per Occupied Floor Area

This table shows a decrease in cost of water per m² of occupied floor during 2020/21 & 2021 /22.

Data	Unit	2017/18	2018/19	2019/20	2020/21	2021/22
Water Cost	£	309,533	334,556	497,231	469,510	410,958
Sewage Cost	£	305,146	328,212	547,788	502,868	470,445
Total Water & Sewage Cost	£	614,679	662,768	1,045,019	972,378	881,403
Occupied floor area	m2	185,485	185,485	283,837	285,455	285,455
Total Water & Sewage Cost per Occupied Floor Area	£/m2	3.31	3.57	3.68	3.41	3.09

2.5 Energy Efficiency Investment Projects Completed

The Health Board has made a considerable investment on energy efficiency projects which include the installation of LED lighting, efficient boiler replacement, Building Management System controllers across the estate along with the installation of solar panels & battery storage at 9 sites.

The installation of LED lighting in 2021/22 is estimated to save £40K annually and the installation of solar panels at Kier Hardie Health Park, Ysbyty Cwm Cynon, Ysbyty Cwm Rhondda and Dewi Sant Health Park are expected to save £140K annually.

2.6 All Wales Benchmarks

The most recently published All Wales Dashboards for 2020 / 2021 confirms that energy consumption (kWh/m²) in Cwm Taf Morgannwg has decreased from 409 to 407 whilst CO₂ (Kg/m²) emissions has remained static at 84. The dashboards are attached as **Appendix 1**

2019 – 2020
2020 - 2021
**Energy Performance and
Carbon Dioxide (CO₂) Emissions**

	Net Energy Consumption (kWh/m ²)	CO ₂ Emissions* (kg/m ²)
ANEURIN BEVAN UNIVERSITY HEALTH BOARD	337	72
BETSI CADWALADR UNIVERSITY HEALTH BOARD	427	92
CARDIFF & VALE UNIVERSITY HEALTH BOARD	412	87
CWM TAF MORGANNWG UNIVERSITY HEALTH BOARD	409	84
HYWEL DDA UNIVERSITY HEALTH BOARD	461	103
POWYS TEACHING LHB	384	79
SWANSEA BAY UNIVERSITY HEALTH BOARD	451	98
VELINDRE UNIVERSITY NHS TRUST	456	104
WELSH AMBULANCE SERVICES NHS TRUST	168	39

**Energy Performance and
Carbon Dioxide (CO₂) Emissions**

	Net Energy Consumption (kWh/m ²)	CO ₂ Emissions* (kg/m ²)
ANEURIN BEVAN UNIVERSITY HEALTH BOARD	412	84
BETSI CADWALADR UNIVERSITY HEALTH BOARD	439	91
CARDIFF & VALE UNIVERSITY HEALTH BOARD	412	83
CWM TAF MORGANNWG UNIVERSITY HEALTH BOARD	407	84
HYWEL DDA UNIVERSITY HEALTH BOARD	491	107
POWYS TEACHING LHB	382	77
SWANSEA BAY UNIVERSITY HEALTH BOARD	440	91
VELINDRE UNIVERSITY NHS TRUST	394	86
WELSH AMBULANCE SERVICES NHS TRUST	171	38

2.7 Planned Energy Developments

Welsh Government have set out the ambition for the public sector in Wales to be carbon neutral by 2030. This carbon reduction requirement, alongside the need for revenue energy cost reduction demonstrates the need for the Health Board to progress energy efficiency and renewable energy projects at scale, and at pace.

The Cwm Taf Morgannwg 'Strategic Assessment of Energy Efficiency Opportunities' report undertaken in 2018 by the Welsh Government Energy Service (WGES) identified the potential for a £700k annual utility saving that can be achieved across the six sites, with the aid of £3m financing via the Wales Funding Programme. This report and project is being progressed under the Welsh Government Re:fit procurement framework.

Specific project opportunities identified within the report include:

- Lighting & lighting controls;
- Boilers and retrofit improvements;
- De-steaming, steam network maintenance and steam boiler replacement;
- Heating network control, zoning and strategic metering;
- Building management system (BMS) control improvements;
- Solar photovoltaic (PV) renewable energy solutions.



In addition the Health Board are actively working with our three local authority partners in Bridgend, Merthyr and Rhondda Cynon Taf County Borough Councils on various carbon reduction collaboration measures such as heat networks, solar farm private wires & wind turbine farm private wire.

3. IMPACT ASSESSMENT

Quality/Safety/Patient Experience implications	There are no specific quality and safety implications related to the activity outlined in this report.
Related Health and Care standard(s)	Staff and Resources
	If more than one Healthcare Standard applies please list below:
Equality Impact Assessment (EIA) completed - Please note EIAs are required for <u>all</u> new, changed or withdrawn policies and services.	Choose an item.
	Not required.
Legal implications / impact	
	There are no specific legal implications related to the activity outlined in this report.
Resource (Capital/Revenue £/Workforce) implications / Impact	Yes (Include further detail below)
	Recurring management and maintenance costs and a significant rise in energy costs.
Link to Strategic Goals	Improving Care

4. RECOMMENDATION

The Planning, Performance and Finance Committee are asked to:

- Discuss and **NOTE** the report