

ENERGY BRIEFING

The procurement for All Wales Energy contracts for NHS sites is undertaken by NWSSP. The contracts permit tranches of energy to be forward purchased on a monthly or quarterly basis with market experts providing monthly market analysis and briefing documents. Decisions on when and how much to purchase is taken by the Energy Price Risk Management Group (EPRMG). The EPRMG was established a number in 2005 and its membership is made up of representatives from each NHS organisation.

THE EPRMG has been instrumental in ensuring competitive prices for NHS Wales owned premises, forward purchasing of supply to secure price and stability. The volatility in the market over the last few months has reduced the benefit of forward purchasing and increased the complexity of the forecasting.

The forecast used at the start of 2022/23 indicated a cost pressure at that stage of ~£250k, which funding was identified for as part of the financial plan for 2022/23. A number of updated forecasts have been received throughout the year, as market forces have changed and prices fluctuated we have kept track to ensure the financial risk to PHW is mitigated.

The most recent receipt update from NWSSP now takes into account the impact of the Energy Billing Relief Scheme. PHW incremental energy costs are now forecast at £0.194m, which is within the £250k funding set aside.

The following assumptions have been built into our energy forecast:

- Actual costs for M1-5 are now reported in the forecast for the shared service energy cost and other energy costs (4 sites where electricity supply is managed by landlord).
- For other energy costs, we have assumed fixed prices until the end of the year, however, we are awaiting information from landlords on when prices might change.
- Our forecast is based on the fixed charge for gas and electricity as noted by NWSSP per their e-mail on 7th October. This charge is subject to a maximum discount.
- Matrix House is currently included in our other energy forecast (as this was a landlord managed site until NWSSP purchased the building in March 2022). We are awaiting the impact of this site moving onto the NWSSP British Gas contract and so the forecast for this site is likely to change.

We will continue to monitor and update the energy forecast as we receive more information from NWSSP and our landlord managed sites.

Director of Finance Forum

5 October 2022

Energy Update

Context – Energy Market

- Energy Market ‘spiked’ inexplicably in Autumn 2021
- Expected to be short lived because there was no underlying factors such as ‘outages of processing’ or shortage of supply
- When Markets began to reduce to lower levels, Russia invaded Ukraine in Spring 2022
- When markets show sign of reducing to lower levels, flows by Gazprom reduce/stop
- Supply/Demand in Europe is finely balanced due to closure of Nuclear and Coal Plants and loss of Oil and Gas supply from Russia
- UK appears sufficiently supplied but there are pipelines for both Gas and Electricity to Europe – Energy operates on a Global price Market basis
- The outlook and market direction for energy remains unpredictable

NHS Wales Prices August 2021 – August 2022

- Gas £/therm – increased by 670%
- Electricity £/MWH – increased by 484%

Further steep prices increases – forecast £244m (pre price cap)

	Gas p/Th	Electricity £/MWH
August 22	281	218
August 21	42	45
August 20	39	47
August 19	42	40
August 18	44	40

Market Volatility



Current Arrangements - Governance



All Wales Energy Contracts

- Procurement for AW Energy contracts is undertaken by NWSSP
- Gas and Electricity supplied by British Gas (Centrica) through two All Wales Contracts
 - Power (electricity) – let 2015; extended May 2022; contract end date 31 March 2025
 - Gas – commenced 1 April 2022; contract end date 31 March 2027
- Ability to purchase Energy on a Monthly or Quarterly basis through multiple tranches
- Market Experts provide ‘In Person’ monthly Market Analysis and daily Market Overview Briefing documents
- Contracts permit tranches of energy to be forward purchased via the British Gas trading desk
- British Gas announcement in Aug-22 of withdrawal from industrial and commercial sector but will honour current contracts

Other Energy Contracts

- *PFI and Leasehold properties – landlord arranged energy contracts held by individual NHS organisations*
- *Vehicle fuel – WAST fuel supply*

Energy Price Risk Management Group (EPRMG)

- Established in 2005, when energy was administered by WHCSA for NHS trusts.
- Decisions on when and how much to purchase is taken by EPRMG, chaired by Eifion Williams (since its inception)
- Purchasing Strategy determined by EPRMG based on Market Analysis, Current Prices and Inherent Risk
 - Traditionally meetings held 4-6 times per annum
 - Currently on a weekly basis
 - During periods of extreme volatility in the last year – 3 meetings a week
- Daily Monitoring of prices undertaken jointly by Eifion Williams as EPRMG chair and NWSSP which allows prices to be tracked and tranches of volumes secured when appropriate
- EPRMG TORs suggests that the group is established as a sub group under the AWDOFs group and is “accountable to the Directors of Finance” in HBs and Trusts
- EPRMG TORs states that “representatives should have delegated authority of their respective organisations”
- NHS Energy Management in Wales report (Wales Audit Office, Dec-2005) notes that Welsh Health Supplies had established a energy price risk management group to agree, in advance, target price thresholds with “decision-making delegated further down the management chain than is normal”.

Energy Price Risk Management Group

Performance Assessment and Resilience



Energy Price Risk Management Group (EPRMG)

- Audit Wales report / Public accounts Committee/ Consultants report
- EPRMG formed in 2005 - Chaired by Eifion Williams
- Membership circa 50 – estates and finance staff
- Weekly meetings usually have 17 attendees from all NHS Wales Organisations, Monthly meeting usually has 22 attendees
- EPRMG reviews previous week's purchasing activity, considers market advice and position and determines purchasing strategy for week ahead.
- Previous benchmarking shows strong performance eg Due to forward purchasing strategy adopted, a total of **£33.8m** was saved against the actual average daily cost of Gas and Electricity in 21/22

• BUT

Energy Price Risk Management Group

- Market is now very different . Market Volatility is expected to extend into the years ahead
- British Gas has given notice that it will not seek new Commercial energy contracts but will fully support existing contracts
- End Dates of Current Contracts:
 - Gas - March 2027 - Electricity – March 2025
- Retirement of long standing and experienced EPRMG chair
- Clarity of governance arrangements
- Need to consider whether current approach remains appropriate for NHS Wales – consider option of Crown Commercial Services
- NWSSP Committee will be briefed on options later in the year

- Obtain Independent assessment to assure performance against other contract mechanisms
- *For example, it's estimated that, by applying the PCH Veolia unit rates to the CTM sites under the NWSSP-Procurement contract, circa £14.2m would have been saved.*

Energy Price Risk Management Group

Membership and Authority



Alexandra Morland	Cwm Taf Morgannwg University Health Board	Divisional support accountant
Alun Evans	Velindre NHS Trust	Environmental Development Officer
Amy Charles	Hywel Dda University Health Board	Procurement Business Manager
Andy Butler	NWSSP	Director of Finance and Corporate Services
Anthony Fenn	Powys Teaching Health Board	Head of Technical Services
Arwel Hughes	Betsi Cadwaladr University Health Board	Head Of Operational Estates
Ben Baker	Health Education and Improvement Wales (HEIW)	Facilities and Compliance Manager
Chris Payne	Health Education and Improvement Wales (HEIW)	Deputy Director of Finance
Chris Moreton	Velindre NHS Trust	Deputy Director of Finance
Christian Thomas	Powys Teaching Health Board	Assistant Director of Finance
Daniel Hern	Aneurin Bevan LHB	Decision Support Accountant - Facilities
Daniel Purnell	Welsh Ambulance Services NHS Trust	Senior Finance Business Partner
David Thomas	Betsi Cadwaladr University Health Board	Management Accountant
David Williams	Betsi Cadwaladr University Health Board	Chief Finance Officer - Corporate
Des Keighan	Swansea Bay University Health Board	Assistant Director of Estates
Eifion Williams	Powys Teaching Health Board	Senior Advisor - Finance - Support to Executive Team
Emma Cavanagh	NWSSP Procurement Services	Category Manager - Energy
Gary Humphrey	Cwm Taf Morgannwg University Health Board	Energy / Carbon Project Manager
Geraint Norman	Swansea Bay University Health Board	Head of Strategic Financial Planning
Holly McLellan	Powys Teaching Health Board	Estates Environment and Sustainability Officer
Howard Stevens	Swansea Bay University Health Board	Technical Services Manager
Hywel Dda team	Hywel Dda University Health Board	
Ian Emptage	BCUHB/WAST/PTHB	Deputy Head of Procurement (BCUHB/WAST/PTHB)
James Edwards	Cwm Taf Morgannwg University Health Board	Energy Support Officer

Jason Hoskins	Velindre NHS Trust	Assistant Director of Estates, Environment & Capital Development
Jon McGarrigle	Cardiff and Vale University Health Board	Head of Energy and Performance
Jonatan Fear	Velindre NHS Trust	Estates Manager
Julie Davies	NWSSP Procurement Services	Senior Category Officer - Energy
Kyle Jones	Swansea Bay University Health Board	Technical Services Officer Energy and Carbon
Lena Boghossian	NWSSP Procurement Services	Head of National Sourcing – Commissioning/HEIW/Energy/Professional Admin Services/Hotel & Textile
Linsay Payne	NWSSP	Deputy Director of Finance & Corporate Services
Mandy Pady	Cwm Taf Morgannwg University Health Board	Head of Finance
Matthew Bunce	Velindre NHS Trust	Executive Director of Finance
Matthew Lane	Aneurin Bevan LHB	Energy and Carbon Manager
Neil Desmond	Public Health Wales NHS Trust	Facilities & Estates Compliance Lead
Nicola Stephens	Welsh Ambulance Services NHS Trust	Environment and Sustainability Manager
Owen Harris	Hywel Dda University Health Board	Energy & Environment Officer
Paul Lewis	Cwm Taf Morgannwg University Health Board	Head of Assets, Governance and Technical Services
Paul Thomas	NWSSP Procurement Services	Procurement Business Manager
Paul Williams	Hywel Dda University Health Board	Head of Property Performance
Rhiannon Freshney	Velindre NHS Trust	Environmental Development Officer
Scott Thomas	Public Health Wales NHS Trust	Compliance Officer
Stephen Lloyd	Velindre NHS Trust	Specialist advisor to Velindre University NHS Trust
Stephen Phillips	Betsi Cadwaladr University Health Board	Senior Estates Officer
Steven Coliandris	Velindre NHS Trust	Head of Financial Planning & Reporting
Steve Watkins	Powys Teaching Health Board	Estates Officer Engineering Specialist
Stuart Burn	Hywel Dda University Health Board	Finance Business Partner
Terri Shaw	Hywel Dda University Health Board	Senior Environmental Officer
Tim Humberstone	Powys Teaching Health Board	Finance Business Partner

- Extensive and varied membership
- Checks required to confirm if delegated authority is in place in each organisation

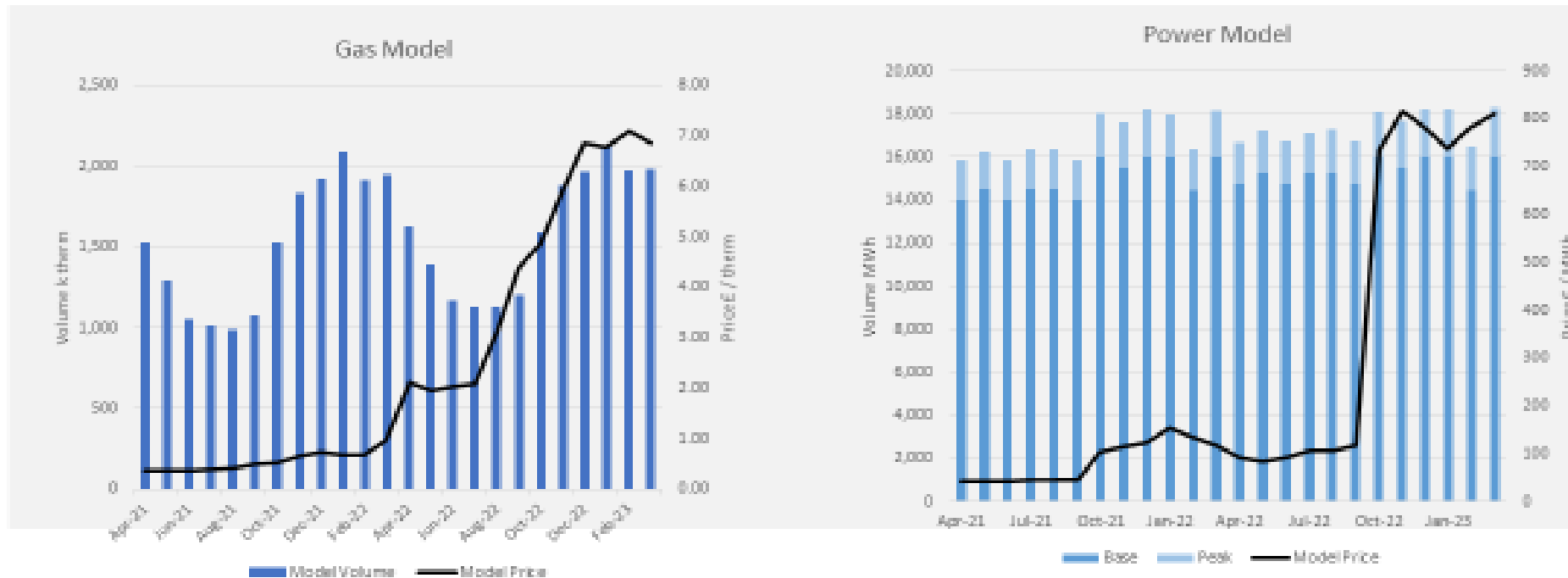
Current forecast and dependencies

	Actual April to July £m	Model August to March £m	Total £M
British Gas – Gas	13.5	107.6	121.1
British Gas – Power	12.7	108.6	121.3
Other energy	7.7	20.1	27.8
Budget Cover	10.2	53.8	64
Exceptional Energy cost	23.7	182.5	206.2

- Produced at 31 August reflect but do not reflect recent price cap announcement
- Details of price cap released on 1 October 2022 will result in **significant changes** in the projections
- British Gas are seeking clarification on a number of area and we hop to receive updated projections soon

Dependencies

Current forecast and dependencies

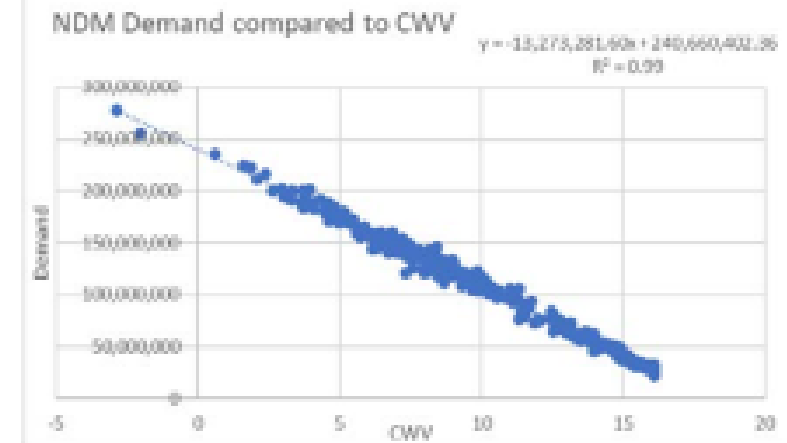


Variables underpinning the forecast

- The forecasts reflect the forward purchase prices as at 31 August 2022
- The prices factor in many variables and risks including
 - Russia / Ukraine conflict
 - Outages in LNG plants
 - Maintenance of supply networks
 - Nuclear and coal plant usage in Europe
 - Loss of Gazprom supply
 - Global economy – affects demand
 - OPEC prices
 - Weather – impact on usage and sources of sustainable energy

• Research indicates that below 18C there is a linear relationship between temperature and natural gas usage.

[2021 ECPG Forecasting methodology \(sgn.co.uk\)](https://sgn.co.uk)



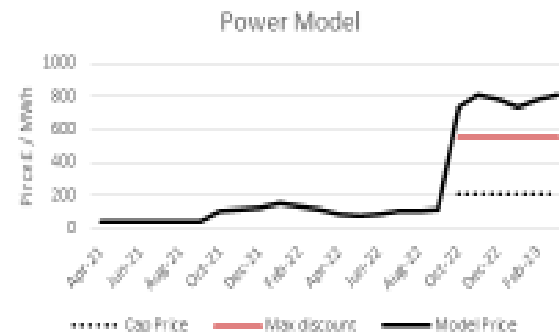
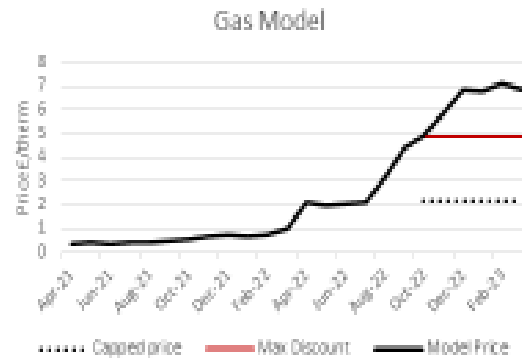
Prospective actions/choices on price



Choices on price

- The price decisions over the next six months will be affected by the energy billing relief scheme – published by BEIS (British Energy Industry Strategy) – 1 October 2022
- The implications of this for the 2023/24 next financial year are not yet known.

	Power	Gas
	£ MWh	p/therm
Price Cap	211	220
Max Discount	345	266
Price Cap Ceiling	556	486



- Urgently model impact of the Energy Bill Relief Scheme (EBRS) on 2022/23 forecast
- Review Purchasing Strategy re forward purchasing
- Review future procurement approach and potential routes to market (for example, CCS)
- Assess potential to exit from British Gas contracts early, noting that termination fees apply in both contracts

Energy Bill relief Scheme

GAS PRICE DISCOUNT

	p/therm
Price cap	219.75
Maximum Discount	266.63
Price cap ceiling	486.38

ELECTRICITY DISCOUNT

	£ MWh
Price cap	211
Maximum Discount	345
Price cap ceiling	556

NHS Wales - Gas

	Mkt price 03/10/2022	Discount	Discounted Price	% reduction	Tranches left to Purchase
November 22 - Forward price	282.80	63.05	219.75	-22%	45%
December 22 - Forward price	429.99	210.24	219.75	-49%	85%
January 23 - Forward Price	490.00	266.63	223.37	-54%	80%
February 23 - Forward Price	504.25	266.63	237.62	-53%	100%
March 23 - Forward Price	446.45	226.70	219.75	-51%	100%

Prospective actions/choices on volume

Approach	Method adopted
Technical or Building Management Solutions	<ul style="list-style-type: none"> • Building Management System (BMS) optimisation to appropriate energy levels. • Site temperature controls – reduction in room temperature (within statutory regulations) – where permitted. • External lighting reductions (shut offs) in non 24/7 operational sites. This has also included the use of sensors. • There are examples of modernising the estate i.e., disposing of aging properties but more needs to be done across NHS Wales.
Decarbonisation initiatives	<ul style="list-style-type: none"> • All organisations have submitted Decarbonisation Action Plans to reduce emissions. • Move towards renewable energy solutions and other decarbonisation measures. Much has been done but more needed dependent on capital. • Solar PV is widely used across the NHS Wales estate, including the Solar Farm at Morriston Hospital. Other opportunities have been identified by WGES. • LED (Light Emitting Diode) Lighting is replacing conventional lighting across the estate, which is up to 90% more efficient than traditional incandescent lighting. • Introduction of EV charging and EV fleets in some cases. There needs to be a recognition that this will increase electrical energy usage away from fossil fuels • Moving forward Bridgend CBC are developing a district heat network to Princess of Wales Hospital and Glanrhyd Hospital with a private wire connection to a wind turbine farm.
Behavioural change and different ways of working	<ul style="list-style-type: none"> • Option to temporarily close offices and other non-patient facing buildings over Xmas and New Year period and remote working more generally. • Travel restrictions – essential travel only. • Staff communications on energy reduction.

Governance Actions



Immediate	Short Term	Medium Term
1. Confirm governance arrangements, including EPRMG reporting line	5. Review current Energy procurement arrangements, including assessing resilience	9. Implement agreed future energy purchasing
2. Review delegation arrangements, at officer and organisational level	6. Understand contractual options re British Gas contracts, including potential early exit cost	
3. Set up T&F Group to understand impact of the Energy Bill Relief Scheme (EBRS) on 2022/23 forecast and ensure a consistent approach across organisations	7. Develop options appraisal for future energy purchasing arrangements, including alternative potential suppliers and/or frameworks	
4. Agree Purchasing Strategy for remainder of 2022/23.	8. Assess and agree way forward, with clear governance steps and timelines	