



## HYWEL DDA FRONTLINE PROCUREMENT – LOCAL SUPPLY CHAIN INITIATIVE

### TEAM MEMBERS:

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### Background:

Welsh Ministers ambition is for the Welsh public sector to be net zero by 2030. As the largest public sector organisation in Wales the NHS has an important role to play. The very nature of the health service means it is unlikely it will be able to provide the services it does without causing any emissions, but more can be done to reduce them. This is particularly important with regard to its supply chain where decisions and influence needs to be used to take its suppliers on the low carbon journey.

The NWSSP Hywel Dda frontline procurement team provide a sourcing, supply chain and purchasing service to Hywel Dda UHB across West Wales. In addition to the operational activities of the team, Hywel Dda frontline procurement team also delivers significant cost savings for the health board, while continuing to review its own operating processes and procedures to ensure that the service provided to its customers is both efficient and cost effective.

Over the last 12 months Hywel Dda UHB has purchased goods and services from over 2000 different suppliers. These suppliers are based all around the UK. Some of these companies act as distributors for other international suppliers. Within the team our overarching goal is to develop a sustainable improvement process which will deliver maximum health gain with minimum financial cost and harmful environmental impacts, whilst adding social value.

The use of local suppliers has previously have not been considered when contracting with suppliers to provide goods and services, however aligns with the Well-being of Future Generations (Wales) Act 2015 to achieve a resilient, healthier and globally responsible Wales.

For the purpose of this project, Hywel Dda's Procurement team had identified a single contract as a pilot to measure the sustainable outcomes available through using a local supplier. Glangwili General Hospital Automatic Door Annual Contract was selected as it was due for renewal. Glangwili hospital has numerous automatic doors across its site. It has automatic doors at the ambulance entrance, A&E main entrance and numerous clinical areas such as the entrance to its operating theatres and childcare wards. These access control doors are in place for safety reasons as hospitals





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are public buildings. They ensure that the flow into certain areas is restricted for clinical, infection control and safety reasons. At present with the current supplier it can take a number of days before the doors can be repaired. This means the doors are often either jammed shut or jammed open. This will have a serious effect as it'll either open up a restricted area which could cause both security and infection control problems. Alternatively, if a door is jammed shut the porters / patients will need to take an alternative route which causes delays and congestion within the hospital in other areas. A local supplier could therefore bring potential benefits to Hywel Dda across the triple bottom line.

This project was led by Lewis Wells and supported by Gemma Deverill and Miles Thomas within the Procurement team. Hywel Dda's Procurement team support the entire health board when contracting with its supply chain and act as a central team. This project has the ability to positively affect the supply chain Hywel Dda uses.

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### Specific Aims:

To measure the social, environmental and financial impact of transitioning to a local supplier of door maintenance inclusive of (normal hours) call outs, and who could guarantee an engineer being on site within 4 hours of a fault occurring.

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### Methods:

Studying the system:

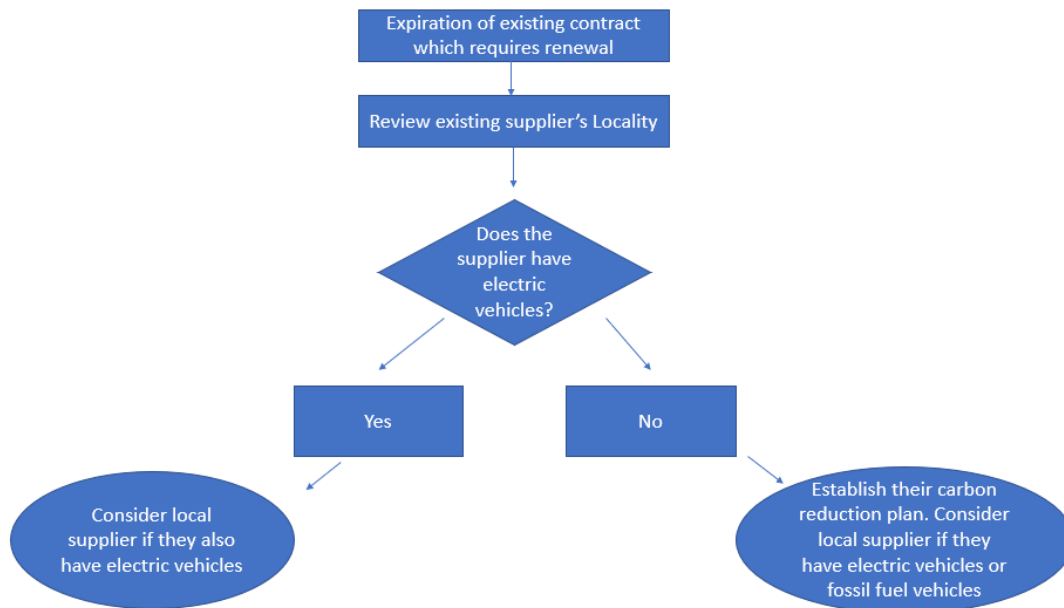
Analysis was completed on Hywel Dda's current supply chain. Based on the data available on Hywel Dda's purchasing system, the procurement team were able to map geographically levels of spend across the UK. We identified the Health Board does not currently utilise a local supply chain network, with suppliers spread geographically across the UK. Roughly 75% of Hywel Dda's spend is with suppliers outside of Wales. Hywel Dda is also aware that a number of its suppliers will act as distributors for international companies, but that data is not currently available on its system.

Once the current landscape was established the principles of sustainable healthcare could be reviewed to assess where an opportunity for change was possible. A number of possible solutions were considered as highlighted in the driver diagram in Appendix 1, however for the purpose of this project have focused on low carbon alternatives such as using local suppliers or suppliers with already established electric fleets.

A new process was created to show the steps taken during the procurement planning stage (overleaf).

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Overview of the problem and current process

Across Hywel Dda there are circa 115 automatic doors (53 in Glangwili General Hospital (GGH) alone), that require bi-annual service visits for compliance as well as maintenance. To date, these have all been attached to a maintenance contract with all call outs, repairs and parts not included, and therefore chargeable. The total spend for all sites was measured as in excess of £80k for a 12 month period.

Through discussion with Estates colleagues in GGH Several issues were identified with our current contract with Geze UK (Bristol), and operational processes including turnaround time of service. For example, when an automatic door was out of service (particularly in a critical service area), the Estates team first must raise a requisition, then raise an ActionPoint call to procurement to expedite its processing. Depending on the time (or day) of the week, this process may take several days. Once a PO is then generated for a call out, the service provider would only then schedule an engineer to attend site. Geze UK has limited engineers. Often engineers would arrive after 5pm, generating additional out of hours tariffs on top of the baseline cost. Additionally, the company uses diesel vans.

**Change implemented**

The automatic doors on site at Glangwili are standard automatic doors which means any access control automatic door specialist company could be utilised. The contract with Geze UK was due to expire soon and a local supplier, JManny (Caerphilly), was identified who could offer the same service. A quote process was undertaken, with geographical restrictions to give local supplier preference, which led to a local supplier being awarded a contract.





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## New process

Going forward, when an automatic door is logged with Estates as out of service, the Estates team will ring JManny without having to first generate a requisition and getting a purchase order number before an engineer can be dispatched. Due to the high number of engineers in the specific area, an engineer will now be on site within hours of a fault occurring, unlike the previous arrangement which often took days. Also, as there is no financial incentive for a company to perform a quick fix anymore (as call outs are inclusive), it is expected that repairs will be more robust. This improvement in service is an invaluable improvement for GGH Estates as there are automatic doors in critical areas (A&E, ITU, Maternity etc), and when automatic doors are either jammed shut or jammed open, waiting days for them to be operational again is untenable.

The service sheets that JManny provide are also very comprehensive and include photographs and anticipated life span of components, so that the Estates team have visibility of future issues and can plan works on the doors instead of being reactionary. They have also agreed to work with the Estates manager ahead of the contract commencement in January, so that critical spares can be identified and stock can be kept on site to avoid any instances where critical parts are unavailable and a door cannot be operational after one visit. Common stock and consumables are available and are carried by the engineers.

Aside from engineers now only travelling a short distance to local call outs (as opposed to an engineer travelling from Bristol), JManny will also make a positive impact on decarbonisation goals as 3 of their vans are already electric as part of a phased plan to get most all vans replaced by 2030. Their focus (as a company) to reduce their carbon footprint centres around this replacement of business vehicles, recycling of all paper and cardboard, and of focusing on a specific geographical area (providing a service within a fixed region in Wales where engineers are based), as well as building an awareness of the supply chain process to enable 'first time fixes' - as is evident in their engagement regarding the holding on site of critical spares that aren't common stock. They also hold and offer a stock of reconditioned parts from doors or gates that have been removed or have become obsolete. These reconditioned parts that they hold are all fully refurbished and meet the relevant BS/EN quality standards, but they also are cost effective as well as extending the life span of older doors that would otherwise need to be replaced due to obsolete parts' availability. (This could be particularly advantageous within the HB where many doors are older).

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## Measurement:

### ***Patient outcomes:***

It is not expected that this project will have any negative impact on patient care and clinical outcomes. The automatic doors have a manual override to open them if they jam shut. However, by overriding the automatic element of the doors they can only be left either open or shut. This could lead to security issues, infection control concerns, fire safety concerns if a door is jammed shut and general time wasted if a door is jammed shut and not be able to use it as intended. Further time is required to review possible Datix reports to established whether delays in fixing the automatic doors results in any patient outcomes.





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### ***Population outcomes:***

Emissions associated with procurement vans in Wales create poor air quality which contributes to significant health problems. The exhaust from the diesel van releases a combination of harmful gases into the atmosphere. Transport-related air pollution is among the leading concerns about transport. Research consistently points to the adverse effects of outdoor air pollution on human health, and there is evidence that points to air pollution stemming from transport as an important contributor to these effects. It is not possible to measure the specific contribution in reduction of air pollution, but Hywel Dda will be contributing to a reduction of the larger issues by reducing emissions associated with supply chain vehicles.

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### ***Environmental sustainability:***

Hywel Dda's Procurement team established a baseline CO<sub>2</sub>e emissions level for the incumbent supplier transport emissions by establishing the miles travelled, across a contractual year, from the head office of Geze in Bristol to Glangwili Hospital in Carmarthen.

The same exercise and assumptions were used to estimate the CO<sub>2</sub>e of the new supplier. By reducing the distance travelled from a head office in England, compared with a head office in Wales. It resulted in a clear reduction in CO<sub>2</sub>e emissions.

The UK Gov Greenhouse gas reporting: conversion factors 2022 was used which provided data on transport emissions.

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### ***Economic sustainability:***

We completed a spend analysis using our procurement team's internal database, Oracle. Additionally, we tried to measure the staff time and cost of this. We used the Agenda for change bandings multiplied by the time taken to complete the tasks and the varying levels.

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### ***Social sustainability:***

Public sector anchor organisations can influence the social circumstances of patients, carers, dependants, staff, local and distant communities (e.g., people working in the supply chain). Using local suppliers can bring several benefits to the local community. The previous contract was not offering any additional social benefits.

The Welsh government has created several proxies based on the 7 values within the Wellbeing of Future Generations Act 2015. For example, if the supplier is employing someone from Wales it will attract a certain monetary value for the Welsh economy. Alternatively, if the supplier is providing training to its staff, it will attract a different value. These are effectively additional value which can be measured from the contract which is outside of the contracts original scope. Hywel Dda is keen to work with suppliers who can offer this additional value for the local communities of Wales<sup>2</sup>.

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## **Results:**

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### ***Patient outcomes:***

We anticipate the change may reduce security issues, infection control concerns and fire safety concerns.

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**Population outcomes:**

By using a local supplier, the direct consequence is that less air pollution will be emitted over the course of the contract.

**Environmental sustainability:**

Geze were making a round-trip journey from Bristol to Carmarthen (230 miles) 49 times per year, added up to 3,405.4 kg CO<sub>2</sub>e. By switching to a more local supplier the annual CO<sub>2</sub> emission dropped to 2,072.85 KG per year. This is a saving of **1,332.55kgCO<sub>2</sub>e per year**. This is equivalent to 3,838 miles driven in an average car.

Furthermore, the new supplier JManny has committed to relaces it entire commercial fleet to electric vehicles by 2030. This would result in the annual CO<sub>2</sub> emission relating to transport dropping to 512.58 KG per year. Data tables for all calculations can be found in Appendix 2.

Based on the reduction of CO<sub>2</sub> per year by utilising a local supplier for this contract, Hywel Dda is able to reduce emissions equivalent to offset 96 A&E trips, 25,625 pairs of gloves and 66,627 Type IIR surgical masks.

**Economic sustainability:**

Across the four acute sites, Hywel Dda was spending circa £80K per year with the incumbent supplier. Hywel Dda’s Procurement team worked in partnership with Glangwili’s estates team to identify that £40K (50% of the total spend) was being spend at Glangwili hospital per year in relation to call-out fees to repair fault automatic doors. The new supplier JManny has quoted to provide the same service for circa £10K per year. This has resulted in a circa **£30K per annum cash releasing saving** which can be reinvested into the health board.

Additionally, there is another efficiency saving through this new contract. The original contract required the estates team to raise a new purchase order through the purchasing system each time a call out was required. However, with the new contract a single call-off purchase order has been put in place for all callouts. Hywel Dda procurement team have created an efficiency calculation, based on the Agenda for Change pay scales, an estimate of how much it costs to raise a purchase order on the system.

Activity Type	Average Time (Mins)	Rate	Labour per Minute	Total Cost
Requisition creation	10	3	£0.24	£2.41
Manager Approval	2	8	£0.00	£0.00
Allocation scrutiny	5	6	£0.45	£2.27
Purchasing Review Multiquote/Clarification	10	3	£0.24	£2.41
Manager Approval	0	8	£0.00	£0.00
Receipting of order	1	3	£0.24	£0.24
Invoice payment query	2	3	£0.24	£0.48
		<b>Current</b>	<b>Total</b>	<b>£7.81</b>

Based on the above, Glangwili raised 49 callout orders last year, this cost the health board £382.70 in lost time. Although this is not a financial savings as staff will still be paid. However, it is a good point to note as this time can be redirected to higher value work which is a great social impact and example of additional value being achieved from the contract.





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### **Social sustainability:**

The new contract will streamline processes and reduce the workload within procurement. Over the past 12 months, both the estates team and procurement buyers have had to manually process 49 separate requisitions to generate purchase orders. However, going forward, one purchase order will be processed to cover the entire 12 months contract period. Both buyers and the estates team have provided feedback confirming this will save them time, reduce stress, give time for higher value work.

Under the new contract JManny have 40 engineers who live in Wales, so we anticipate repairs to be completed in a much timelier manner, reducing inconvenience to staff and patients. From a community benefit perspective, JManny have supported local communities with flood aid – providing 10 wet vacs to their local area following recent floods. They also sponsor local sports teams in Caerphilly (Cwrt Rawlin Football Club and Aber Valley Football Club). Of the 40 staff members who live in Wales, three of them volunteer in their own time as football coaches within their local communities which JManny support - by offering them flexibility with finishing hours to accommodate these community activities. Furthermore, JManny also have an internal apprentice engineer programme where they recruit local young people to their business with full training in their own training facility that on completion they are a fully trained ADIA automatic door engineer.

Alongside the social value benefits of the provision of local jobs, adding to the local skills set and money being put back into the local economy, the new contract supports Hywel Dda's adherence to The Well-being of Future Generations (Wales) Act and supporting Fair Work Wales. Work is a key building block to health and well-being and in turn being in good health supports work and the economy. Organisations of all sizes have an important role to play in increasing participation in fair work for a more equal, prosperous, sustainable and greener Wales.

Socially responsible procurement, job creation schemes and attracting employers can create fair work. Social value and a fair work approach can support all seven well-being goals of The Well-being of Future Generations (Wales) Act. This will all be managed through quarterly contract management meetings to ensure the added value is realised.

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### **Discussion:**

The aim of this project was to help create a healthier Wales by reducing the Carbon footprint of Hywel Dda's supply chain. The primary benefit from utilising a local supplier was to reduce Hywel Dda's business transport emissions. A contract was identified by Hywel Dda's Procurement team which was due for renewal in relation to the repair of its automatic doors. By using a more local supplier the primary aim was achieved. The measurements of the carbon footprint of the current supply chain and comparing it to the carbon footprint of the new supplier showed a significant decrease in transport emissions. Additionally, this project has highlighted a number of other benefits including economic and social benefits too.

This project wanted to assess what additional benefits arise through using local suppliers. This project studied the additional sustainable considerations which benefit Hywel Dda patients, staff and the wider community. Historically, the health board has evaluated contract renewals based on

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commercial and technical specification weightings. However, this project has highlighted the benefit of taken onboard wider considerations. Moving forward this will form staff training within the procurement team to show them the added benefit of considering these additional factors. There will also need to be a culture change amongst health board staff, Hywel Dda staff understand their responsibility as budget holders of public funds. This means that most staff would feel more comfortable using the cheapest supplier, irrespective of the additional harm it could be doing to the wider environment. This approach can be shared amongst Procurement staff and used in future contract renewal opportunities.

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### Conclusions:

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This project has been a success for the procurement team. The aim of getting involved with this green team competition was to use the tools and support available to review the benefits of using local suppliers. The keys elements that contributed to success in this project was primarily cross-department collaboration. The team pulled together all of the information to be able to accurately benchmark the current supplier's environmental impact. This was then reviewed and compared to the proposed new supplier which showed clear environmental and social benefits through switching.

It has been recommended that this agreement is rolled out to Bronglais, Withybush and Prince Philip after their current agreements with the incumbent company expires in January too. This means that the benefits obtained from this contract will be multiplied across the other acute sites.

JManny have also committed to quarterly contract reviews to monitor performance. Procurement should also use these review meetings as updates on their decarbonisation and wider WFGA targets. Further improvements to the HB service can be made, as well as financial gains, as well as measurable strides towards the foundational economy, decarbonisation and Wellbeing of Future Generations Act targets.

Now this project has had proven success for this specific contract it can be recommended to the other main sites. This approach that was taken can now be used on future contracts. When assessing contract renewals, sustainable elements should be considered. This approach will be adopted by the frontline procurement team to recommend at any appropriate opportunity the use of local suppliers and will be included within a number of Procurement updates across the Health Board to educate and promote the positive outcomes that can be achieved if we consider more than the traditional cost v quality approach.



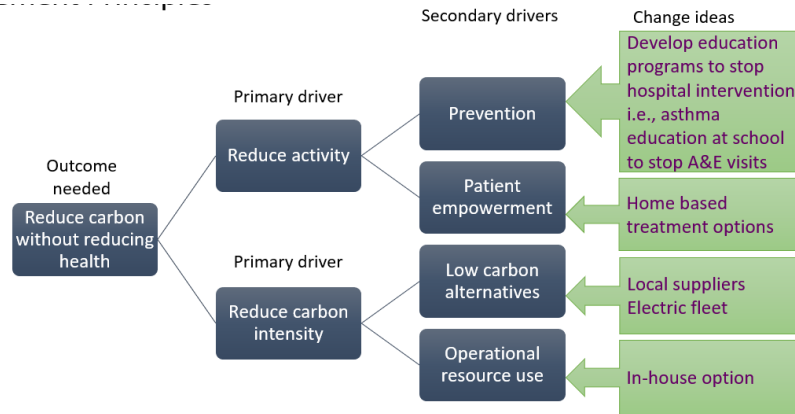




## References

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- *Procurement services NHS Wales Shared Services Partnership*. Available at: <https://nwssp.nhs.wales/ourservices/procurement-services/>
- *Welsh Government Statutory Guidance Well-being of future generations (wales) act 2015, Futuregenerations.wales*. Available at: <https://www.futuregenerations.wales/about-us/future-generations-act/>

## Appendix 1: Designing improvement driver diagram



Mortimer-F. *The Sustainable Physician*  
*Clinical Medicine* 2010, Vol 10, No 2: 110–11

## Appendix 2: Environmental outcomes – CO2e calculations

		Existing Deliveries								
		From	To	Mileage	Return Mileage	Vehicle Class	Unit	Total kg CO <sub>2</sub> e per unit	No of Journey per annum	Total CO <sub>2</sub> (kg)
Delivery Vehicle	BS39 7SU	SA31 2AF		115	230	Class 1 (up to 1.305 tonnes)	Miles	0.22836	49	2573.6172
WTT - Fuels	BS39 7SU	SA31 2AF		115	230	Class 1 (up to 1.305 tonnes)	Miles	0.073805	49	831.78235
									<b>Total CO2 emissions existing</b>	<b>3405.39955</b>
		New Deliveries								
		From	To	Mileage	Return Mileage	Vehicle Class	Unit	Total kg CO <sub>2</sub> e per unit	No of Journey per annum	Total CO <sub>2</sub> (kg)
Delivery Vehicle	CF38 1BQ	SA31 2AF		70	140	Class 1 (up to 1.305 tonnes)	Miles	0.22836	49	1566.5496
WTT - Fuels	CF38 1BQ	SA31 2AF		70	140	Class 1 (up to 1.305 tonnes)	Miles	0.073805	49	506.3023
									<b>Total CO2 emissions existing</b>	<b>2072.8519</b>
		New Deliveries Electric								
		From	To	Mileage	Return Mileage	Vehicle Class	Unit	Total kg CO <sub>2</sub> e per unit	No of Journey per annum	Total CO <sub>2</sub> (kg)
Delivery Vehicle	CF38 1BQ	SA31 2AF		70	140	Class 1 (up to 1.305 tonnes)	Miles	0.05814	49	398.8404
WTT - Fuels	CF38 1BQ	SA31 2AF		70	140	Class 1 (up to 1.305 tonnes)	Miles	0.01658	49	113.7388
									<b>Total CO2 emissions existing</b>	<b>512.5792</b>