Welsh Government
Llywodraeth Cymru

Programme/Project Assessment Review (PAR)

Programme/project Title:	Homes As Power Stations
IAH ID number:	AH/22/071

Version number:	V1.0 FINAL
Senior Responsible Owner (SRO)	Nicola Pearce
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Department/Organisation of the programme/Project	Swansea Bay City Region
Programme/Project Director (or equivalent)	Jonathan Burnes (Swansea Bay City Deal) Oonagh Gavigan (HAPS Project)
Business Case stage reached:	Outline Business Case
Review dates:	11/07/2022 to 13/07/2022
Review Team Leader:	David Wilkin
Review Team Member(s):	Neil Bradshaw Rachel Davies
Departmental Representative:	N/A
Previous Review:	N/A
Security Classification	

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About this report

This report is an evidence-based snapshot of the programme's/project's status at the time of the review. It reflects the views of the independent review team, based on information evaluated over the review period, and is delivered to the SRO immediately at the conclusion of the review.

This assurance review was arranged and managed by:

Welsh Government Integrated Assurance Hub (IAH)

Cathays Park 2
Cathays

Cardiff

CF10 3NQ
IAH helpdesk: Assurance@gov.wales

1. <u>Delivery Confidence Assessment (DCA)</u>

<u>Delivery Confidence Assessment:</u>	AMBER/RED

The Review Team finds that the HAPS Project remains well aligned with both UKG and WG Policy and is well supported by the Swansea Bay City Deal Portfolio. It is also well placed across the region with continued strong stakeholder support across all four Local Authorities and across the public, private and academic sectors.

In the two years since the last PAR, there has been much 'under the surface' work undertaken, but 'on the surface' it appears to have made little progress. It is encouraging to note, however, that the Project has identified the importance of Monitoring and Evaluation of technologies installed in homes to ensure continued judicious investment.

The Project has suffered, and continues to suffer, from a chronic lack of staffing in key posts that are currently subject to a recruitment exercise. The HAPS leadership and Project Manager are highly regarded and are seen to be doing a good job, albeit with significant overstretch and severe under-resourcing. Employment mechanisms (including pay scales) are acting as a barrier to successful recruitment in NPTBC; which is driving disproportionate risk into the Project.

The Review Team sees a high degree of passion, subject fluency, and commitment to succeed, but Delivery Confidence is low owing to resourcing position. (A sports team can have some star players, but if they have only half a team, they are unlikely to win).

Areas for development include:

- Benefit profiling;
- SRO bandwidth;
- Project staffing;
- Project planning;
- Supply Chain development; and
- Funding criteria.

The Delivery Confidence assessment RAG status should use the definitions below:

RAG	Criteria Description
Green	Successful delivery of the project/programme to time, cost and quality appears highly likely and there are no major outstanding issues that at this stage appear to threaten delivery.
Amber/Green	Successful delivery appears probable. However, constant attention will be needed to ensure risks do not materialise into major issues threatening delivery.
Amber	Successful delivery appears feasible but significant issues already exist requiring management attention. These appear resolvable at this stage and, if addressed promptly, should not present a cost/schedule overrun.
Amber/Red	Successful delivery of the project/programme is in doubt with major risks or issues apparent in a number of key areas. Urgent action is needed to ensure these are addressed, and establish whether resolution is feasible.

| Red | Successful delivery of the project/programme appears to be unachievable. There are major issues which, at this stage, do not appear to be manageable or resolvable. The project/programme may need re-base lining and/or overall viability re-assessed. |

2. <u>Summary of report recommendations</u>

The Review Team makes the following recommendations which are prioritised using the definitions below:

Ref. No.	Recommendation	Urgency (C/E/R)	Target date for completion	Classification
1.	Further develop the benefit profiles for the project and ensure that the Monitoring and Evaluation contract for technologies installed helps to inform ongoing investments.	E- Essential	Oct 2022	5
2.	Ensure that SRO bandwidth is covered to facilitate delegation in the event of overstretch or unplanned absence.	C- Critical	Oct 2022	10.2
3.	Explore staffing opportunities with the SBCD to establish the potential for a networked project team throughout the region.	C- Critical	Oct 2022	10.2
4.	Accelerate the production of a clear project plan with milestones and key dependencies, linked to delivery of outcomes.	C- Critical	Oct 2022	5
5.	Develop the process and assessment criteria for the selection of the specific technologies that will be the focus of the Supply Chain Development Fund in year 2.	E- Essential	Oct 2022	5
6.	Develop the process and assessment criteria to focus funding to maximise realisation of benefits.	E- Essential	Oct 2022	5

Critical (Do Now) – To increase the likelihood of a successful outcome it is of the greatest importance that the programme/project should take action immediately

Essential (Do By) – To increase the likelihood of a successful outcome the programme/ project should take action in the near future.

Recommended – The programme/project should benefit from the uptake of this recommendation.

3. Acknowledgement

The Review Team would like to thank all participants for their contribution to the review.

4. Comments from the SRO

The PAR Review has further highlighted the complexities associated with the HAPS Project and was a useful process, particularly to highlight areas where further consideration is required. The team are making positive progress in recruiting additional staff and addressing the capacity issues which have been problematic. I also feel confident the '*under the surface work*' carried out by the project manager has given the HAPS project the firm foundations on which to build and ensure the project is able to progress confidently at pace, incorporating the Review Team recommendations.

5. Summary of the Programme/Project

Background and context:

The Project Business Case v4.0 states that:

> *The Swansea Bay City Region 'Internet Coast' deal will establish the Homes as Power Stations (HAPS) regional project, led by Neath Port Talbot County Borough Council, on behalf of the four local authority partners in the Swansea Bay City Region: Neath Port Talbot County Borough Council, City and County of Swansea, Carmarthenshire County Council and Pembrokeshire County Council.*

> *The Homes as Power Stations project has been developed in response to a number of drivers:*

> - *UK and Welsh Government policy to tackle climate change and meeting carbon emission reduction targets;*
> - *The need to deliver low carbon, energy efficient homes to reduce fuel poverty and its impact on health and wellbeing;*
> - *Energy efficiency and demand side management is needed to reduce energy costs and provide affordable warmth for housing.*

> *The HAPS project is a pioneering project to facilitate the adoption of the HAPS approach i.e. energy efficient homes, to integrate energy efficient design and renewable technologies into the design of new build homes and retrofit programmes carried out by the public, private and third sectors. The project aims to encourage the HAPS approach to become mainstream in new build design and retrofit programmes.*

> *The project will target both new build developments and the retrofit of existing buildings. The project aims to promote the benefits of energy positive homes, initially through the public-sector housing stock and after proving the process and financial measures, target rollout to private sector landlords and owner-occupiers. Energy retrofits will be linked to other housing improvement programmes to optimise efficiency of delivery. There will also be a focus on regional supply chain development, skills development, an education / dissemination programme and a financial incentive fund.*

Aims and objectives:

The Project Business Case v4.0 states that:

Version 2 February
2019

The primary and overarching strategic driver for the HAPS project is the Swansea Bay City Deal 'Internet Coast' investment programme which was signed in March 2017 by the UK Government, Welsh Government, and the four local authorities of the Swansea Bay City Region. The 'Internet of Energy' is a key theme within the Swansea Bay City Deal Internet Coast Investment Programme. This commitment is underpinned by the availability of funding and a range of national, regional and local strategies which confirm the strength of strategic drive for action in this area, in particular:

- *The need to meet the UK's clean energy challenges with a focus on the need to address climate change and carbon emissions linked to housing to deliver the decarbonisation agenda*
- *The need for clean, affordable and secure energy*
- *Addressing climate change through delivering carbon neutral alternatives, in line with the decarbonisation agenda*
- *Improving health and well-being*
- *Tackling fuel poverty*
- *Ensuring people have the necessary skills which reflect the broad nature of the renewables sector*

In response to the above drivers, it is proposed that the HAPS project will:

- *Facilitate the adoption of the HAPS approach in new house build developments and housing retrofit programmes which integrates new technologies and design features to allow buildings to generate, store and potentially release energy;*
- *Develop and seek to attract new sector supply chains incorporating leading research and high value manufacturing and construction operations;*
- *Help to generate sustainable and affordable homes and address fuel poverty and improve health and wellbeing;*
- *Focus on smart technologies in relation to energy demand management.*

6. <u>Scope/Terms of Reference of the Review</u>

The Project Assessment Review (PAR) will provide assurance to the region and to the UK and Welsh Governments (the funding sponsors) that the HAPS project is viable and suitable to progress in terms of approval and draw down of City Deal funding. The PAR will engage with all key stakeholders to gather information and views to test and challenge the project and ensure that the HAPS project undergoes a Delivery Confidence Assessment that demonstrates that the business case is:

1. Aligned to UK and Welsh Government policy

2. Remains a regional priority for Swansea Bay City Region stakeholders

3. Is on-track to achieve project objectives and deliverables set out in the Benefits Realisation Plan.

4. Has suitable project management controls and measures in place to manage and mitigate project risks, achieve milestones and deliverables (branding / marketing, monitoring and evaluation, supply chain development, financial incentives fund, dissemination of lessons learned / informing future programmes)

7. <u>Detailed Review Team findings</u>

7.1 Policy Alignment

The 2020 PAR recorded that:

> *The Swansea Bay City Deal (SBCD) 'Portfolio' comprises of nine projects organised into four themes. The Homes as Power Stations (HAPS) 'Project' is the first regional project to get underway. The Review Team heard of many workshops conducted between the project team and UK Government (UKG) and Welsh Government (WG) officials and the Economic Strategy Board (ESB) for the Swansea Bay region (Carmarthenshire, Pembrokeshire, Neath Port Talbot, and Swansea). Currently, the SBCD is scoped for fifteen years and the HAPS project for five.*

> *The Review Team observed strong alignment with UKG and WG overarching policy including Prosperity for All, Wellbeing of Future Generations Act, and supports the need to eradicate fuel poverty, the strategic desire to tackle environmentally conscious housing, affordable warmth, population health, regional regeneration, shifting regional education and labour market towards industries with a clear future.*

Current evidence supports an ongoing alignment with both UKG and WG. The HAPS Project holds regular sessions with the WG to ensure continual policy confirmation and engagement. UKG is less frequently engaged, but there is confidence amongst interviewees that there is no divergence of expectation.

The HAPS Project is well aligned with the WG Innovative Housing Programme and, furthermore, maintains strategic fit with the driver to pursue a low carbon agenda, particularly in social housing.

The aspiration for HAPS is laudable and supports principles to address sustainability, climate agenda, economic re-generation, fuel poverty and housing-related health issues. Notwithstanding this sizeable aspiration, the passion and commitment to its achievement is clear to see: the challenge now is to ensure that it is shaped into things that are deliverable.

7.2 Stakeholder Priorities

Key stakeholders include Local Authorities, Registered Social Landlords (RSLs) in the region, two Universities, and private sector representatives (including the building trade and supply chain).

Whilst there have been some changes to the Political makeup of the Local Authorities, commitment to HAPS appears unaltered. Some interviewees expressed the view that HAPS ought to focus on being a NPT initiative, but by-and-large there remains strong belief that the Project is region-wide and that Project leaders maintain that 'greater good' principle.

Unsurprisingly, different stakeholders will have different drivers for engagement with the Project, and will derive different benefits from it. As the Project progresses, there will be an increasing need for the 'what's in it for me factor' to be well understood from the different perspectives and for the stakeholder communications to be tuned accordingly.

RSL commitment is solid, the wider Welsh industry perspective remains upbeat, academia is enthusiastic and there can be no doubting the general belief in pursuing outcomes that address low carbon, low running-cost and improved health outcomes. The Review Team notes the creation of a Retrofit Showhome by Cardiff University, available for general viewing to promote and encourage take-up of innovative technologies; this is an example of energetic commitment to the cause.

With such a broad set of stakeholders, it is to be expected that there is mixed interpretation of the purpose of the HAPS Project. It is questionable whether HAPS actually delivers anything itself, *per se*, or whether it facilitates delivery by others through information exchange and financial incentives. Individuals within the core Project appear to hold a clear and firm view, whilst those outside perhaps require increased communication to ensure a common understanding of its purpose and objectives. Considering the lack of staffing, until recently, in the Project Team, a good job has been done thus far in respect of stakeholder communication; but it is something that would be beneficial to reinforce as the Project gathers momentum.

In summary, HAPS remains a prominent feature in stakeholder priorities and there remains a solid regional view of the Project within the SBCD Portfolio.

7.3 Benefits Management

Benefits Management will be key to ensuring that the funding is targeted at those aspects of the project most likely to realise the highest value (in both financial and 'soft' outcome terms), most quickly derived, and most ensuring benefits.

As discussed, there appears to be some mismatch of understanding in relation to the objectives of the Project, but there will clearly be a need to map the achievements (e.g., technology installations, health benefits, installer skills development, energy consumption cost reductions).

The HAPS Project intends to go to tender to engage a partner to undertake Monitoring & Evaluation of the effectiveness of different types of technology. The contract will cover the HAPS Project and, potentially, the WG 'Optimised Retrofit Project' (not part of HAPS or SBCD – and subject to extensive discussions) with the intent that the bigger sample size will give better intelligence to the HAPS Project ongoing benefits tracking and iterative investment choices; aided by the setup of a knowledge hub by the Project.

The intent to enter into a Monitoring & Evaluation contract demonstrates an acknowledgement that the HAPS team does not possess the specialist resources to

undertake the work itself, and indicates a good appreciation of the importance of tracking the effectiveness of the technology investments.

At this time, an annualised benefits plan is in place and there is monthly reporting of the benefits to the PoMO, but owing to resourcing constraints much of the knowledge and understanding sits with the Project Manager. Notwithstanding the close working between the Project Manager and colleagues, this further highlights the Project Manager as a potential Single Point of Failure, and it would be prudent to develop the project documentation beyond that currently in place. This will not be easy given the extreme overstretch and under-resourcing of the Project Team.

Benefit profiling should bring clarity to the intended outcomes of the Project, its key deliverables and how progress will be measured through a set of meaningful indicators and expected lag.

Recommendation 1: **Further develop the benefit profiles for the project and ensure that the Monitoring and Evaluation contract for technologies installed helps to inform ongoing investments. (Essential – Do By ITT for M&E)**

7.4 Governance

The Review Team found that the SRO has a good understanding of the strategic fit of the Project and is committed to the successful delivery of objectives and projected benefits.

The challenges the SRO is faced with due to the size and magnitude of the current portfolio and the lack of skilled resource available within NPT, which is acknowledged throughout other organisations was heard. Whilst a restructure of the portfolio is underway and the issues of resource escalated, it may be necessary for the SRO to delegate in some instances, with a formalised agreement, to avoid overload and to ease the pressure, which would allow the SRO to make the best use of time whilst allowing the team to grow and develop.

There is evidence of good governance structures to allow for approvals and/or escalations and whereas the OBC has received approval by both UKG and WG in July 2021, it is unclear what elements of the OBC will be taken forward into the FBC. A 'discovery' piece of work would assist in finding out what is feasible for delivery within the allocated timescales of the project.

Whilst there are monthly highlight reports, quarterly reports and submissions by the Project Manager to the Project Board, the Review Team formed the view that they are somewhat light, most likely explained by the severe shortage of Project resources and the only-recent arrival of a Project Manager; these will need to be developed/integrated in order to keep track of performance/deliverables and to help facilitate the drawdown of funding. Reporting to all Boards within the SBCD to ensure the scale and complexity of the project is understood and to provide critical analysis and tracking in all areas of the project will be essential going forward.

Plans are in place to set up Technical Advisory Group to provide advice and steer the project; again, a clear Terms of Refence will be required, but the intent is encouraging.

In summary, Project Governance appears to be working satisfactorily and there are good linkages to the SBCD, with emergent intent to evolve the governance structure. Nonetheless, the Review Team remains concerned that the SRO may be overloaded and that there is a need to ensure measures are put in place to ensure project momentum in the event of unplanned absence or overstretch.

<u>Recommendation 2</u>: **Ensure that SRO bandwidth is covered to facilitate delegation in the event of overstretch or unplanned absence. (Critical – Do Now)**

7.5 Project Management Staffing & Controls

The Review Team heard that the Project Manager has been in role for seven months and has developed a good understanding of the OBC and the scale and complexity of the project requirements. Stakeholders recognised that she was a 'good fit' with sufficient project management skill/knowledge and that some traction had been gained since undertaking the role.

The Project Manager has identified two key roles; Supply Chain Lead and Technical coordinator which have been advertised but are proving difficult to find the right candidate.

The Review Team recognises that this is a challenge but due to the nature of this Project as a regional project, being delivered by NPT County Borough Council, in partnership with three other local authorities (LAs), the HAPS Team should not lose sight of this and ought to be able to call on the help of partners in the other LAs, or on the SBCD PoMO to pursue innovative staffing routes.

This could also mitigate for the delay that would be brought about by the timescales of the in-house recruitment process (minimum of 3 months) as well as reinforcing the Project as a regional project for which NPT is taking the lead; it is not an NPT Project. It was suggested to the Review Team that HAPS should leverage wherever possible other ways of securing resource given the Project's constraints of the 'pay & reward' offered by the NPT. i.e., other forums for recruitment (LinkedIn, specialist magazines which are massively important to industry), recruitment activities taken forward by partners who offer a more attractive pay scheme, recruitment of consultants to deliver specific elements of work, etc.

<u>Recommendation 3</u>: **Explore staffing opportunities with the SBCD to establish the potential for a networked project team throughout the region. (Critical – Do Now)**

The PM is aware of the activities that are required to be undertaken and is continually evolving their documentation, (project delivery plans, milestone plan, etc.) These are extremely important as they are required to track progress, reporting purposes and to ensure the approvals and draw down of funding to progress through each phase. Other

project artifacts are also required to be set up or where in place reviewed and updated regularly, i.e., RAID document set, Comms Plans, Status Reports etc. as it was not clear to stakeholders what phase the project was in or what progress is being made. Without adequate resourcing in the core Project Team, there will be an increasing risk exposure as the pace increases, and a likelihood that a lack of control places the Project in danger of failure.

Against this backdrop of inadequate staffing, the Project Manager has had to get up to speed quickly and focus on 'getting the job done'. In situations like this, there is always a hard choice between 'doing the job' and 'writing about it'; but at some point, you need to do both to maintain control. That point is now.

Along with Project Document sets, there is a requirement on this project to set up other products to facilitate workstreams of the project. This includes but not limited to requirements for monitoring and evaluating, templates, assessment criteria, etc; The setup of databases are also a requirement of the project and due to the lack of data insights from other programmes and projects delivered to help achieve the Net Zero agenda, there is an expectation from key stakeholders to mitigate the risk and impact of poor data quality and analysis, which will put up roadblocks to achieving goals and meaningless monitoring and evaluation.

Recommendation 4: Accelerate the production of a clear project plan with milestones and key dependencies, linked to delivery of outcomes. (Critical – Do Now)

7.6 Supply Chain Development

The Outline Business Case proposes the establishment of a Supply Chain Development fund to encourage the creation of a Regional Supply Chain to provide support for a range of measures including financial incentives, inward investment advice, accreditation of businesses etc. The objective is to encourage the manufacture, installation and servicing of energy technologies within the region and the creation of a skilled workforce to support the industry.

The Outline Business Case states that the *"plan for supply chain development includes activities to raise the awareness of local businesses of the demand for technologies, including those not normally the target of public funded programmes. The intention is to identify as wide a potential supply chain as possible through an competitive open call for proposals focused on 2 or 3 technologies".*

From the evidence available it appeared that that the specific proposed technologies have yet to be determined and that the proposed process and criteria for selecting bids are being developed for the fund based on lessons learnt from other regional programmes.

The Review Team heard that work has commenced to develop skills and competencies frameworks to support the development of the required workforce. During interview it was clear that some favoured an approach that focused upon establishing installation skills and

capacity in advance of developing a local manufacturing base. This did not seem to be a concept that was universally shared.

The project seeks to create demand for new technologies by establishing an initial "pool" of 10300 target homes. However, this demand is dependent on private house builders, Registered Social Landlords, Local Authority housing providers and homeowners and tenants engaging with the project. There is a clear interdependency between the proposed Financial Incentive Fund (to create an initial demand) and the Supply Chain development.

Given the ambitious five-year timeframe for the project, it is vital that the project determines the technologies that will be the focus of the Supply Chain Development Fund, the process for assessment and selection of bids and whether there will be any differentiation in relative priority of installation or manufacture. The Review Team was told that this is in progress and the technology M&E will inform the supply chain fund.

Recommendation 5: Develop the process and assessment criteria for the selection of the specific technologies that will be the focus of the Supply Chain Development Fund in year 2. (Essential – Do By Oct 2022)

7.7 Financial Incentives Fund

The Outline Business Case also proposes the establishment of a targeted Regional Financial Incentives fund to provide gap funding to facilitate the adoption of the HAPS approach in new build and retrofit developments. The funding is not intended to be a subsidy for every development rather, it will provide support at the start of a project to incentivise the adoption of additional technologies for a target number of properties. The intention is to initially establish 583 testbed homes (made up of 235 newbuild and 348 retrofit) to test a range of technologies within differing dwelling types. This first phase will then be followed by targeting a further 3,065 new builds and 6,652 retrofits. The fund is intended to test the benefits of "additional" technologies and therefore the target dwellings must already have adopted "green" technology.

The Review Team was told that the determination of the process and assessment of bids is in progress, though this was not highly visible. Given the comparatively modest funding available there appeared to be differing opinions as to whether the funding should focus on a limited number of "additional" technologies or support a broad range of initiatives.

The selection of initiatives is likely to require technical knowledge and expertise as well as due diligence and governance skills. Consideration should therefore be given to ensuring the that a range of skills are available to assess the bids received.

Securing sufficient properties to enable the HAPs project to create a critical mass to provide the desired evaluation of "additional" technologies and the demand to support supply chain development is critical to the success of the HAPs project. The successful implementation of the Financial Incentives Fund is therefore a key element of the project. The process, criteria and assessment of bids must therefore be determined as a priority. It will be important to ensure that the assessment criteria are linked to the stated benefits of the project and to the Monitoring and Evaluation criteria.

Recommendation 6: Develop the process and assessment criteria to focus funding to maximise realisation of benefits. (Essential – Do By Oct 2022)

7.8 Lessons Learnt

The Review Team noted good practice in that the project team has sought to take the learning from of a number of past and present initiatives to shape the HAPs project.

The project has been described as a "learning project" in that it is looking to test technologies in an iterative way and adapt as the project progresses. It will therefore be important to ensure that the Monitoring and Evaluation is robust and timely to ensure regular feedback and to allow the project to evolve as desired and to inform the wider SBCD programme.

8. Next assurance review

The Next Assurance Review should a further **PAR** in 12 months' time – **approx. July 2023.**

In the interim, since this PAR has returned a Delivery Confidence Assessment of Amber/Red, it is expected that an Assurance of Action Plan (**AAP**) be undertaken in early **Q4 CY2022.**

ANNEX A - List of Interviewees

The following stakeholders were interviewed during the review:

Name	Organisation and role
Nicola Pearce	Neath Port Talbot CBC: Director of Environment & Regeneration / SRO
Lisa Willis	Neath Port Talbot CBC: Strategic Funding Progress Manager / Business Case Developer / Interim Project Manager
Simon Brennan	Neath Port Talbot CBC: Head of Property & Regeneration
Chris Jones	Neath Port Talbot CBC: Energy Manager / Business Case Developer
Dr Jo Patterson	Welsh School of Architecture, Cardiff University: Senior Research Fellow
Amanda Davies	Pobl Group, Group Chief Executive
Prof Dave Worsley	Swansea University, member of HAPS Project Board
Richard Arnold	Swansea Bay City Deal: Finance Officer
Jonathan Burnes	Swansea Bay City Deal: Portfolio Director
Oonagh Gavigan	Neath Port Talbot CBC: HAPS Project Manager
Darren Hatton	WG: Head of Innovative Housing Programme
Wyn Pritchard	NPT College group, Director of Construction Skills and Strategy
Mike Gillard	Industry Wales, Development Fund link with Industry
James Davies	Industry Wales, Exec Chair, Economic Strategy Board Member
Carol Morgan*	Swansea City Council, Member of the HAPS Project Board

*Unable to attend