

An aerial photograph of Heathrow Airport, showing the extensive tarmac, runways, and terminal buildings. The airport is surrounded by green fields and a highway in the foreground. In the distance, the London skyline is visible under a dramatic, cloudy sky.

# Heathrow Strategic Planning Group

*GHG Insetting Workshop*  
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# 1 Executive Summary

- 1.1.1 This report provides an overview of the outcomes from a Greenhouse Gas (GHG) Insetting Workshop undertaken for the Heathrow Strategic Planning Group. The workshop aim was to align objectives around a potential Offsetting / Insetting Project.
- 1.1.2 The workshop was structured into three main sections covering:
  - **Desired Project Outcomes**
  - **Project Scope**
  - **Design Considerations and Challenges.**
- 1.1.3 There was broad alignment on the desired project outcomes with the key objective to deliver GHG emission reductions by directing offset funding into local projects, while delivering local co-benefits.
- 1.1.4 There was general agreement regarding the geographic scope with a clear expectation that projects supported would be within the HSPG area. However, there were many more questions regarding other elements of scope, in particular focused on the types of projects that would be deliverable while meeting the requirements for “high-integrity” offsets.
- 1.1.5 It also became clear that the needs of users needed to be more fully understood. The HSPG group estimate that circa 150 local businesses across a range of sectors could be interested in participating in a local offset scheme, but the full extent of their needs are not yet understood.
- 1.1.6 A range of other challenges were identified, including the challenge of demonstrating additionality for some of the desired project-types.
- 1.1.7 Finally, a series of next steps are proposed. Recommended next steps have been structured to de-risk the project. First it is recommended that user demand is assessed as this is a critical requirement for project success. Then, if user demand can be demonstrated, it is recommended that a short outline business case be developed. The business case would then be used to secure wider buy-in from HSPG Local Authorities, agree an appropriate governance structure and also assess whether external sources of funding for scheme development can be secured. Only then is it recommended that further analysis be undertaken and an initial scheme developed through a pilot.

## 2 Introduction to Insetting and Offsetting

- 2.1.1 The Heathrow Strategic Planning Group (HSPG) is a partnership between Local Authorities and Local Enterprise Partnerships around Heathrow airport. HSPG has been considering with its membership, possible approaches to direct funds from carbon offsetting into the local area. Decarbonisation of supply chains is an increasingly important theme for private sector operators in the region, including the airport and there is a perception that there will be a growing pool of offset funding.
- 2.1.2 Before we summarise the outcomes of the workshop, first we introduce offsetting and insetting. Both concepts have been discussed at a conceptual level and in theory offer the potential to direct funding into local projects.
- 2.1.3 **Offsetting:** Carbon offsetting projects are interventions to generate GHG emissions reductions and carbon storage, to compensate for emissions made elsewhere. Carbon offsetting may be undertaken voluntarily or for compliance.
- 2.1.4 **Insetting:** Insetting projects are interventions along a company's value or supply chain that are designed to generate GHG emissions reductions and carbon storage, while at the same time creating positive impacts for communities, landscapes and ecosystems.
- 2.1.5 With carbon reduction a key objective for many partners in the HSPG, it is clear that increasing carbon reducing projects within the region would be highly beneficial creating many co-benefits (Figure 1). While both offsetting and insetting are, in principal, both simple concepts, there are complexities in developing robust, "high-integrity" systems to assure and validate the GHG emission savings.

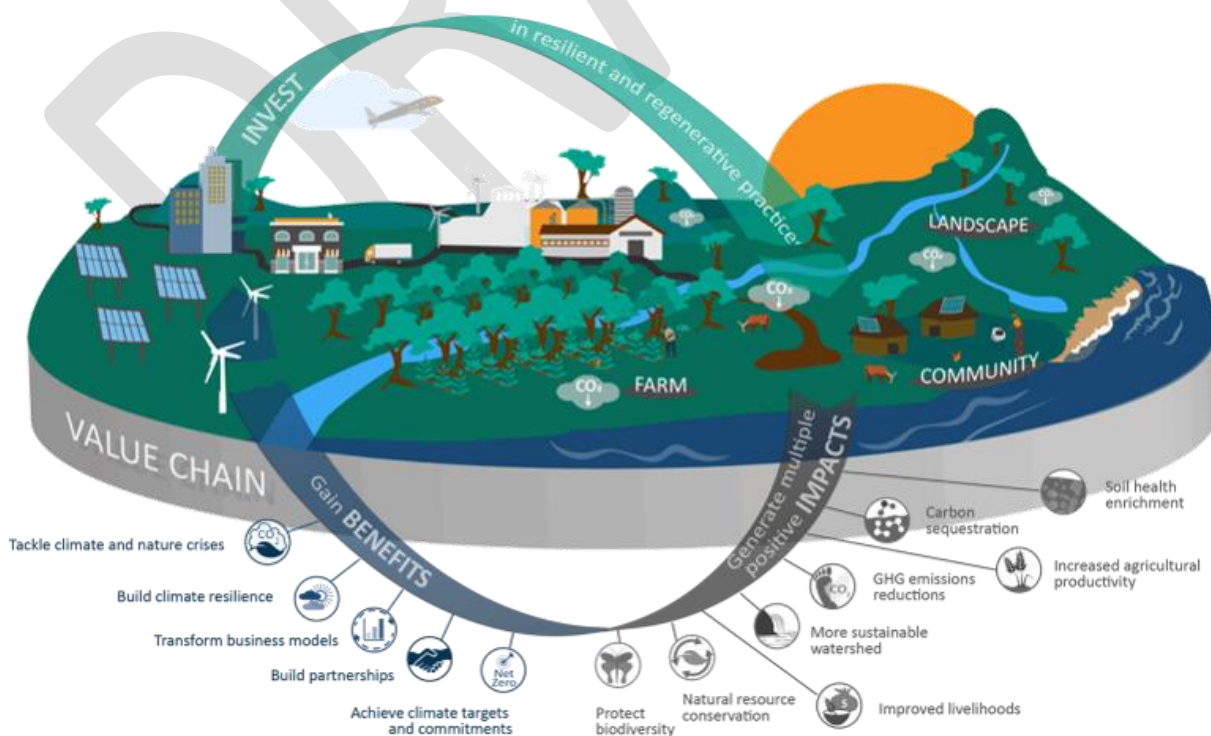


Figure 1: International Platform for Insetting - Insetting Project Value Process

## 2.2 Types of Offsets

- 2.2.1 Figure 2 sets out offset categories as defined by the Taskforce for Scaling Voluntary Carbon Markets (TSVCM). Types of offsets are categorised into four broad areas: Nature-based avoidance/reduction, Technology-based avoidance/reduction, Technology-based removals and Nature-based removals. Offset methodologies include nature-based solutions as well as energy efficiency, fuel switching and renewable energy generation.

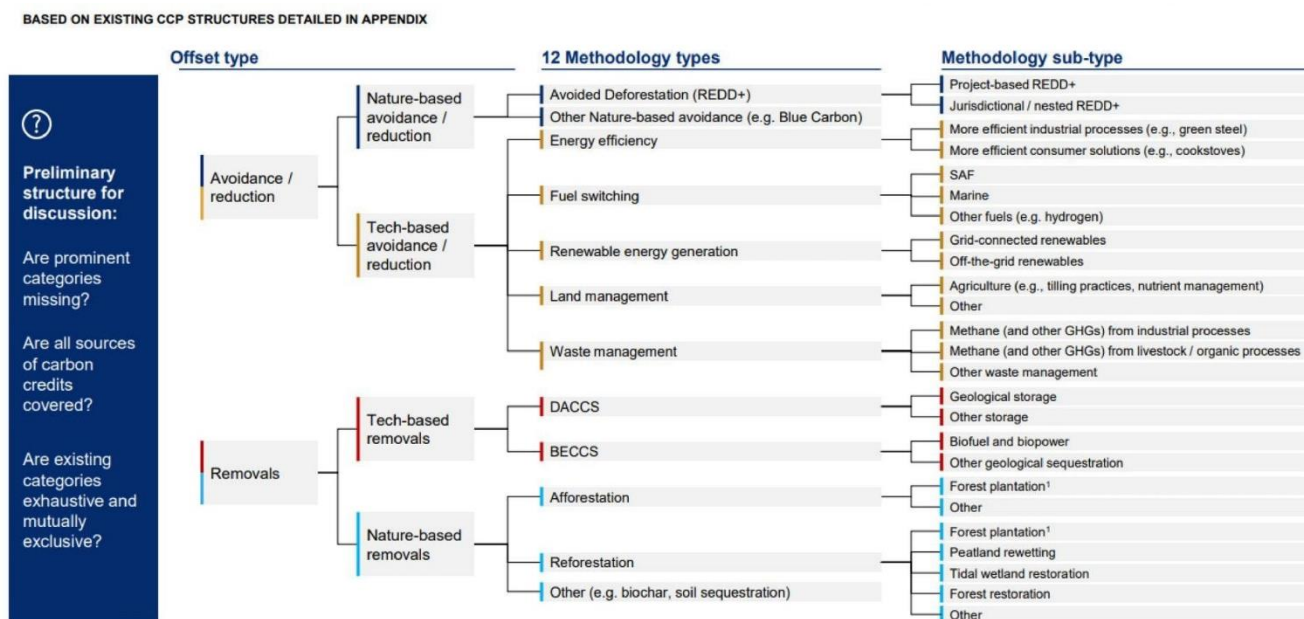


Figure 2: Offsetting Categories, as defined by TSVCM

## 2.3 Quality of Offsets

- 2.3.1 There is acknowledgement that without standardisation there is a risk that the quality of offsets available in the market will vary considerably. The TSVCM has established a Credit-level Integrity Working Group to develop Core Carbon Principles (CCPs) which define high-quality standards as well as high-quality carbon credits and ensure robust governance for overseeing “certification”.
- 2.3.2 The CCPs are high level principles of credit integrity that will become tangible through an Assessment Framework for Standards. To give a flavour of the types of considerations scheme developers will need to give to ensuring offset robustness, the CCPs are set out in Figure 3. CCPs include the requirements that offsets are: real; based on realistic and credible baselines; monitored, reported and verified; permanent; additional; only counted once; and do no net harm. For more information please see the TSVCM Phase II Report.

Source: Taskforce for Scaling Voluntary Carbon Markets, Institute for International Finance

Credit-level principles <sup>1</sup>		Taskforce dimensions	ICROA dimensions	CORSIA dimensions
Core Carbon Principles (CCPs) are <b>high level principles of credit integrity</b> that become tangible through an Assessment Framework for Standards and a set of credit-eligibility criteria  They were defined to be comparable to ICROA and CORSIA dimensions	<b>Principles</b>			
	Real	✓	●	●
	Based on realistic and credible baselines	✓	●	●
	Monitored, reported and verified	✓	●	●
	Permanent	✓	●	●
	Additional	✓	●	●
	Leakage accounted for and minimized	✓	●	●
	Only counted once	✓	●	●
	Do no net harm	✓	●	●
	<b>Specific rules</b>			
	Earliest project start date 2016 <sup>2</sup>			●
	Only jurisdictional or nested REDD			●
<b>Operational principles</b>				
	Program governance	✓	●	●
	Program transparency and public participation provisions	✓	●	●
	Clear and transparent requirements for independent third-party verification	✓	●	●
	Legal underpinning	✓	●	●
	Publicly accessible registry	✓	●	●
	Registry operation	✓	●	●
	Inclusion of Clean Development Mechanism			●

Figure 3: Credit-Level Principles for Carbon Markets, TSVM

## 2.4 Offsetting & Insetting Workshop

2.4.1 To explore the potential for HSPG to develop offsetting and insetting schemes, the workshop was structured into three main sections:

- Desired Project Outcomes
- Project Scope
- Design Considerations and Challenges.

2.4.2 The following sections summarise the discussion covered in each of these areas.

### 3 HSPG Project Outcomes

- 3.1.1 The first part of the workshop aimed to understand the core project outcomes from the perspective of relevant stakeholders. Participants were presented with a range of possible outcomes which were then discussed. Any omissions were noted. Participants were then asked to rank outcomes in order of priority. The results of this ranking exercise are shown in Figure 4.

## How would you rank the outcomes?



Figure 4: HSPG Participant Project Priority Rankings

- 3.1.2 It is no surprise that the agreed core outcome for the scheme under discussion is to reduce GHG emissions. The second highest ranked objective was to deliver local investment. Other highly-ranked objectives were to support businesses and the public sector to decarbonise and delivering co-benefits such as air quality and health improvements.
- 3.1.3 Participants noted that outcomes such as addressing inequality were principles that needed to sit across all interventions. Similarly, delivering a fair and just recovery was cited as a consideration that needed to sit across all interventions.
- 3.1.4 While addressing market failures and policy gaps was ranked 8<sup>th</sup>, this theme did feature in the discussions, with participants noting the desire for increased innovation and for funds to help re-direct or re-frame projects that would otherwise not have a carbon saving component.
- 3.1.5 Finally, a positive consequence of any scheme was seen to be increasing trust and awareness in offsets.



## 4 HSPG Project Scope

### 4.1 Project Portfolio Scope

- 4.1.1 The next stage of the workshop was to explore the project scope. Local Authority participants had submitted an initial list of the types of projects that they would be keen to fund. These are shown in Figure 5. While much wider than nature-based solution, there is strong alignment between the desired project types and the TSVCM categorisations set out in Figure 2.

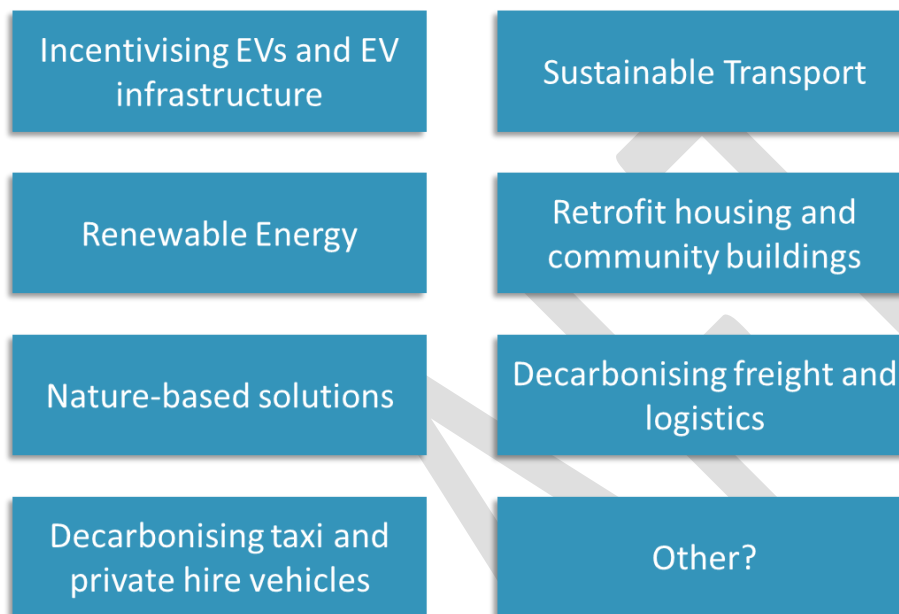


Figure 5: Potential Project Types

- 4.1.2 In addition to the project types originally listed, participants were also invited to identify whether there were others that were missing. Participants added the following initiatives that would also be desirable:
- Circular economy (re-use and repair initiatives)
  - Climate adaptation measures.
- 4.1.3 Participants were then asked to vote on the types of interventions / projects they would most like to see. The results from this vote are set out in Figure 6. It can be seen that the most popular category for projects was Energy Efficiency and Retrofit. Participants noted that this is an area that government initiatives and policies have failed to unlock and is a major decarbonisation challenge.

- 4.1.4 Renewable energy deployment was the second most desired project type. There was some discussion as to whether renewable energy could be demonstrated to be additional. Sustainable transport and nature-based solutions were jointly the third-most preferred project type. While participants noted the potential challenges in measuring, monitoring and monetising cycling, it was clear that this was a desirable intervention for the Local Authority participants.
- 4.1.5 One participant noted that previous work had been undertaken to assess the potential for nature-based solutions (NBS) within at least one Local Authority. It was noted that an immediate opportunity could be to undertake a review of the potential scale of NBS within the HSPG geography to help understand the scale of these types of offsets that is likely to be available.

## What types of projects would you most like to enable?

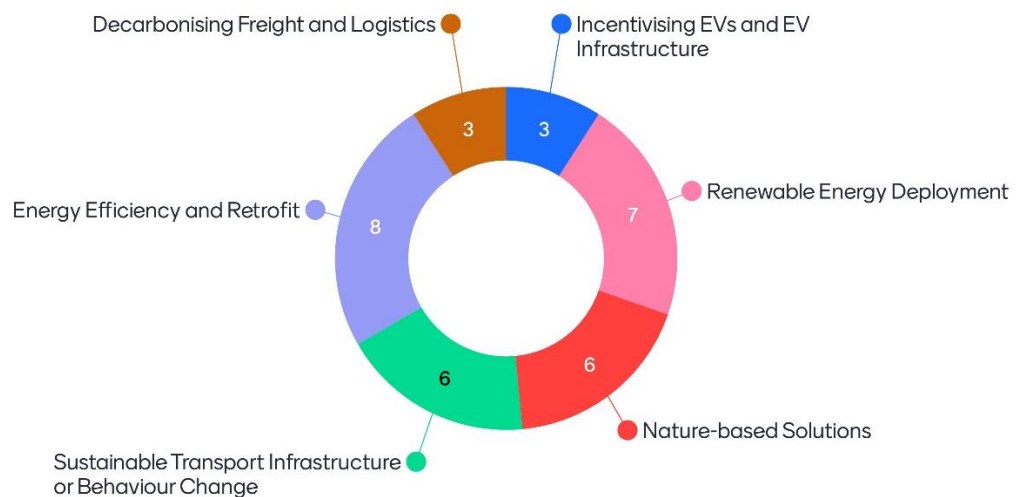


Figure 6: HSPG Participant Project Objectives

## 4.2 Geographic Scope

- 4.2.1 Participants were asked the following questions with regards to geographic scope:
- Are there any limits on where funding would be accepted from?
  - Are there any limits on where projects would be facilitated?
  - And had there any been considerations regarding possible mis-matches in projects vs. funding?

- 4.2.2 Unsurprisingly, participants were agreed that projects facilitated should be within the HSPG region. There was less consensus regarding the remaining two questions. Participants noted the presence of circa 150 large companies headquartered or operating within the HSPG region, including the airport, who it would be worthwhile to engage. However, participants noted that their operations and revenues may come from a much larger area and it would be difficult (and potentially not desirable) to define or restrict where funding was coming from.
- 4.2.3 Achieving a suitable match between project origination and funding had not been considered at this stage.

### 4.3 Scheme Participation / Acceptance Criteria

- 4.3.1 Participants were then asked to consider participation criteria. Specifically, participants were asked to consider the following questions:
- Are there any limits to the types of organisations from who funding would be accepted?
  - Are there any limits to the types of projects that would be investigated?
- 4.3.2 Here there was general concern about “Greenwashing” and the potential to use offsets while continuing with unsustainable practices. Some participants commented that science-based targets preclude offsetting except for only residual emissions, potentially providing a “residual emissions” test.
- 4.3.3 There was a lot of discussion covering the requirements of projects, in particular to meet the needs of the private sector “investors” who would be purchasing the offsets. There was specific concern regarding whether the projects listed in Figure 5 would be capable of demonstrating additionality (as set out as a key test by the TSVCM). Other participants noted that being too strict around additionality might result in high-quality, beneficial projects not being funded and a clearer definition of additionality needed to be found.
- 4.3.4 Summarising the challenge, one participant commented “There are many things that could happen that simply aren’t happening? It’s difficult to say what is additional and what’s not.” Related to this was a discussion around the role of offsets in unlocking market failures. Many participants agreed that this was likely to be a good thing, but possibly linked to more challenging, “hard-to-decarbonise” areas. A balance needs to be struck between deliverability, repeatability and scalability and demonstrating additionality.

## 4.4 Portfolio Construction and Funding Types

- 4.4.1 Finally, participants were asked to discuss whether any consideration had been given to portfolio construction. It was noted that offsets are currently purchased and then claimed at which point they are retired (i.e. they cannot be claimed more than once). It was noted that other ways of funding projects could be considered – for example grants, loans, revolving funds or social impact bonds. It was noted that High-Integrity Nature Based solutions include a “buffer” and that this could be considered similar to a grant percentage or leverage within the instrument. Buffers could be scaled to account for uncertainty for different project types.
- 4.4.2 Overall, it was clear that there was a keenness to explore different mechanisms to enable projects to be funded which may include other types of financing where possible. It was suggested that a matrix be developed that helps HSPG understand which types of funding would be best placed to support different types of projects.



## 5 Design Considerations

### 5.1 User Needs

- 5.1.1 The next part of the workshop focused on design considerations and user needs. The workshop benefitted from the presence of Heathrow Airport (Heathrow), who are seen to be a core user for any system developed. Heathrow were able to provide insights into their approach aligned to the SBTi (Science Based Targets Initiative) Corporate Net Zero Standard. The overarching message from the private sector participants was that any offset scheme needs to assure a high-standard of integrity such that offsets can be accepted by regulators.
- 5.1.2 Nevertheless, participants were presented with a range of potential user needs and asked to score their importance on a scale of 1-10. Example user needs presented (Figure 7) include the need for high integrity offsets; offsets that are cost effective; offsets that are liquid/transferable; offsets that are accepted within the supply chain or sector-based regulation; and offsets that deliver wider CSR benefits.

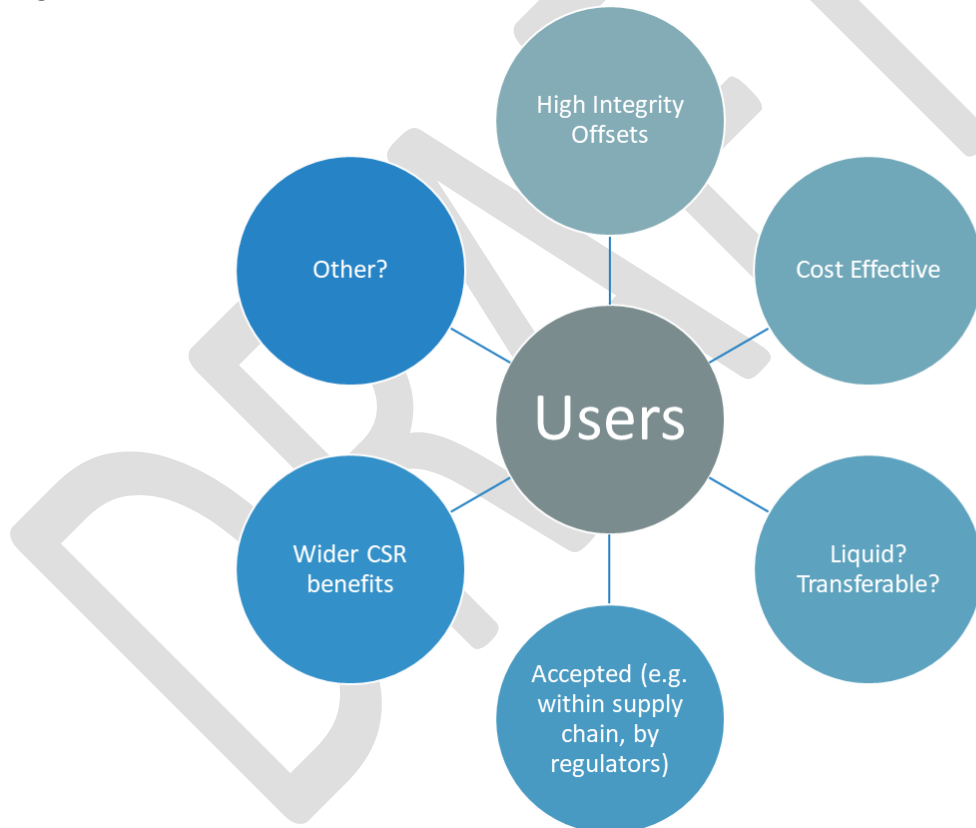


Figure 7: Example User Needs

- 5.1.3 Participant perceptions of the needs of private sector users are set out in Figure 8. Note that the majority of workshop participants (except for Heathrow) were Local Authority members of the HSPG and therefore these scores largely reflect perceptions of what private sector users may require, rather than directly captured user requirements.

- 5.1.4 Local Authority participants perceive that the most important design consideration for private sector users is to ensure offsets deliver wider CSR benefits. This is a rather surprising outcome given the feedback provided by Heathrow throughout the workshop discussion. The cost effectiveness of offsets is then perceived to be the next important consideration. The integrity of offsets and acceptance within the supply chain is then deemed to be the consideration of next highest importance.
- 5.1.5 Cost-effectiveness was discussed in some more detail with participants noting the wide range of costs for offsets, ranging from £20/tonne to £1,000/tonne depending on the type and perceived level of quality / integrity. There was a general perception that the minimum value of acceptable offsets would likely increase as demand grows for high-quality / high-integrity offsets.

## What is the value of the following to users?



Figure 8: HSPG Participant Perceptions of User Needs

- 5.1.6 A logical and necessary next step appears to be further consultation with business community users / funders to understand their needs in greater detail, to ascertain whether there is appetite to participate in a local offsetting programme and to identify any sector-specific regulations that will need to be met.

## 6 Challenges

### 6.1 PESTLE Analysis

6.1.1 The final part of the workshop focused on perceived challenges to highlight any issues that would need to be overcome in the design of a viable solution. First a PESTLE Analysis was used. PESTLE invites participants to consider challenges and risks by considering the following themes: Political Challenges, Economic Challenges, Social Challenges, Technical Challenges, Legal Challenges and Environmental Challenges. Participants were able to respond in free text via the Menti platform. The full set of participant responses are reproduced in Figure 9 and Figure 10.

## Challenges

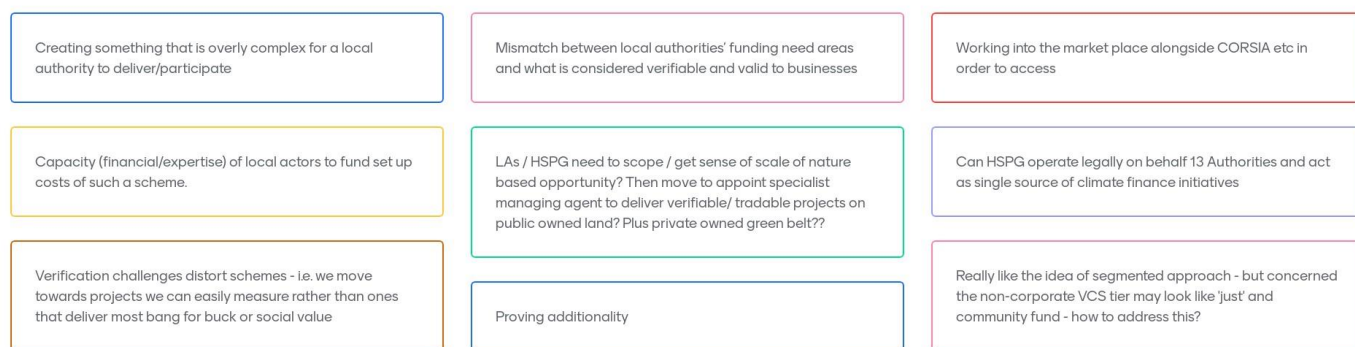
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Figure 9: Workshop Participant Challenge Comments 1

## Challenges

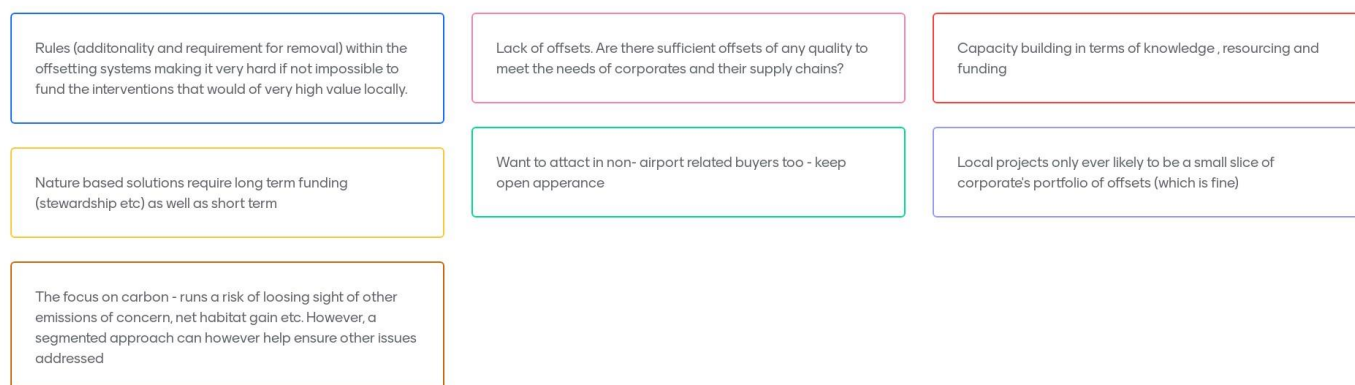
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Figure 10: Workshop Participant Challenge Comments 2

- 6.1.2 Participants felt that the workshop has demonstrated the complexity of scheme development and that the public sector leadership would need to be engaged relatively early to ensure there is political support and any risks are understood. The stakeholder group is considered to be much larger than facilities managers / environment managers and so an appropriate governance structure for any project would need to be proposed. The governance question was echoed in a comment that asked whether HSPG could operate legally on behalf of 13 authorities.
- 6.1.3 Further concerns regarding the complexity focused on the need to ensure a scheme was manageable for the Local Authorities who would deliver and/or participate in it. There was a perceived need that scheme delivery would also need to include capacity building in terms of knowledge and resourcing.
- 6.1.4 Another clear challenge theme focused on the needs of the private sector to buy offsets that are clearly and robustly verified versus the desire from the public sector to direct funding into less well-trodden areas for offsets, such as funding for active travel infrastructure. Proving additionality was again referenced as a key challenge.

## 6.2 Ownership

- 6.2.1 In order to ensure other likely challenges were discussed, participants were then asked to consider two further challenge areas – ownership and scheme management. On ownership, participants were presented with the following questions, being asked to consider ownership, liability and risk from the perspective of both Users and a hypothetical Local Authority scheme managers. From a user perspective, currently when buying offsets, units are stored in a registry. Units can then be claimed and linked to offset a specific annual emission.
- 6.2.2 From a Local Authority perspective, this highlighted an important point of permanence. The example given was as follows: Assume a cycle lane is funded via offsets. Then at a future date that cycle lane is removed. The offsets would need to be repaid (or the carbon reduction re-instated via some other verifiable and acceptable means, possibly at higher cost than the original cycle path). This example demonstrated some of the political risks that would need to be mitigated against through legal documentation, creating clear links between the offsets purchased and their related real-world interventions.

User Perspective	Local Authority Perspective
<ul style="list-style-type: none"> <li>What does the user own?</li> <li>Does the user have any claim to the underlying assets / investments?</li> <li>Who maintains the asset?</li> <li>Can we foresee any “red lines”?</li> </ul>	<ul style="list-style-type: none"> <li>What do local authority partners own?</li> <li>What costs and risks does the public sector bear?</li> <li>Can we foresee any “red lines”?</li> </ul>

Figure 11: Ownership Questions for Participants



## 6.3 Scheme Management

- 6.3.1 Finally, participants were presented with a range of possible considerations related to scheme management. These are shown in Figure 12 and include the need to baseline and verify emissions as well as undertaking operational and maintenance responsibilities to ensure the asset functions as intended.
- 6.3.2 There is a general perception that ongoing management costs would not be an acceptable outcome for the Local Authority partners. There is a need to ensure that the sale price of any offset sold, includes the full cost of its management and maintenance over time.

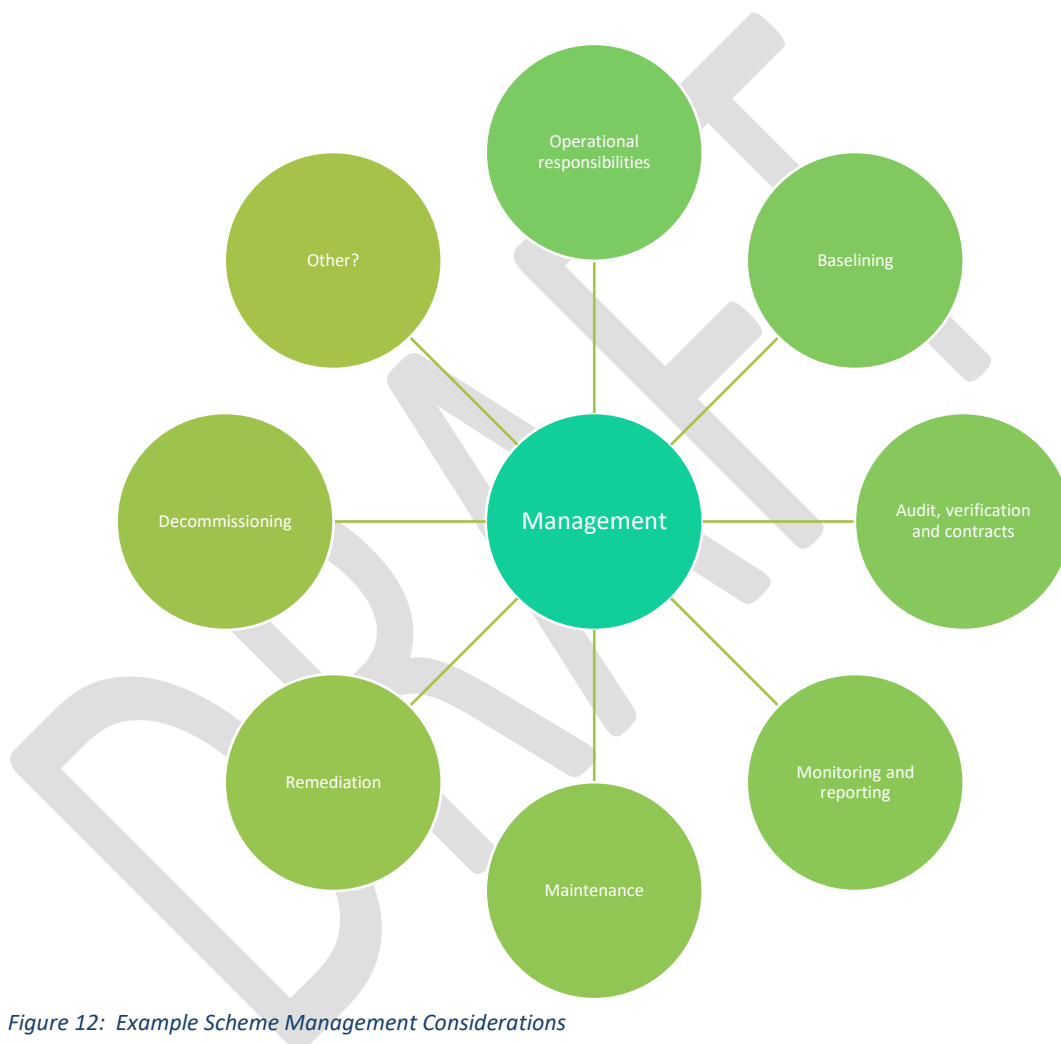


Figure 12: Example Scheme Management Considerations

## 7 Next Steps

- 7.1.1 There is a clear market gap and significant opportunity to direct decarbonisation funding from the private sector into local projects. However, there are clear challenges to ensuring that local projects can be developed that demonstrate the robustness / integrity required by the private sector.
- 7.1.2 The following immediate potential next steps were noted in the workshop and have been structured into a potential delivery plan below. Each step is incremental and provides a natural stage-gate, enabling HSPG to assess the evidence before continuing with the subsequent stage – thus minimising project risk.
- 7.1.3 **Recommendation 1: Assess User Demand**  
Securing confidence in, and demand for local offsets from the private sector will be critical to the success and viability of any future programme. It is therefore recommended that an immediate piece of work be undertaken to survey the needs of the circa ~150 businesses identified as potential users. This would result in a clear set of user requirements for a local offset scheme. If correctly designed, this work-package could also help assess the scale of the potential investment pool. Outputs should include a matrix that matches private sector demand to deliverable project-types (as suggested by a workshop participant).
- 7.1.4 **Recommendation 2: Achieve Project Buy-In**  
Once user requirements have been assessed, it will be important for the Local Authority partners to understand, at a high-level, the likely costs of developing the project further and to ascertain whether there is political support to do so. Following feedback from the private sector it is therefore recommended that a high-level outline business case for the project be developed. To maximise the likelihood of success, it is recommended that the initial business case focuses on 1-2 offset categories where there are the highest levels of delivery confidence. The business case should consider, recommend and secure buy-in for an appropriate governance structure and also explore opportunities for funding from other sources (e.g. BEIS / ADEPT).
- 7.1.5 **Recommendation 3: Assess Scale and Sources of Project**  
Local Authority participants noted the potential for nature-based solutions within the HSPG area. Private sector participants also expressed confidence in nature-based offsets, based on the fact that tried-and-tested processes exist for assessing and verifying exist within other offset schemes. It would be valuable to understand the scale of project supply within HSPG. For example, an assessment of the total NBS opportunity could be undertaken. Similarly an assessment of the total retrofit opportunity could be undertaken etc. This stage would provide useful evidence to help focus efforts towards the most impactful / promising areas.

#### 7.1.6 Recommendation 4: Initial Pilot

Once a preferred project-type has been developed, matching user needs to deliverability, an initial pilot should be developed. The pilot should demonstrate how the project would meet the needs of users and result in a tangible offset being delivered. Learnings would then be captured and used to enhance the business case prior to development of a full programme.

There may be a case for progressing at pace with a smaller micro-scale pilot in parallel with the above steps in order to gain further practical understanding of the challenges and opportunities associated with the scheme when in a live environment. A proof of concept approach of this nature could assemble a 'coalition of the willing', bringing together receptive private sector actors with those local authorities with well-developed carbon saving initiatives that require funding.

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