Climate Commission Feedback Report - Cornwall Council Housing Decarbonisation Strategy

Introduction

This report consolidates the feedback provided by the committee concerning the Cornwall Housing Decarbonisation Strategy (CHDS). The overarching sentiment reflects concern over the strategy's reliance on Air Source Heat Pumps (ASHPs) as a primary tool for decarbonisation, without adequately addressing the diverse needs of Cornwall's housing stock. The feedback highlights gaps in the strategy's socio-economic considerations, its technological scope, and its alignment with the specific challenges faced by Cornwall, particularly in rural and off-grid areas.

Key Concerns

1. **Over-reliance on Air Source Heat Pumps (ASHPs)**
    - The strategy's focus on ASHPs is seen as overly simplistic, neglecting alternative technologies like ground-source heat pumps and hydro-treated vegetable oil (HVO) as interim solutions for oil-heated homes. This narrow focus could exacerbate the disparity between newly retrofitted homes and older, thermally inefficient properties, deepening fuel poverty and socio-economic inequality in Cornwall.
    - Concerns were raised about the impact of ASHPs on electricity demand, grid capacity, and the need for workforce upskilling. There is scepticism regarding the feasibility of achieving the proposed heat pump installation targets, given the existing bottlenecks in training and the current supplier base.
2. **Lack of a Housing-Stock-Specific Approach**
    - The feedback emphasises the need for a more tailored approach to decarbonisation that considers the varied construction types and thermal inefficiencies of Cornwall's housing. There is concern that the strategy fails to adequately address the challenges posed by older, solid-wall properties, park homes, and homes with micro-bore heating systems, all of which require specific retrofitting solutions.
    - The lack of consideration for the spatial limitations of many Cornish homes, particularly with respect to installing heat pumps and hot water storage, is noted as a significant oversight. This could result in higher installation costs and logistical challenges.
3. **Socio-Economic Implications**
    - The commission questions the sufficiency of financial support to ensure a fair and equitable transition, particularly for those already facing fuel poverty. The potential for widening the socio-economic gap between different types of housing and residents is a significant concern.
    - The absence of a detailed plan to support older homeowners and those unfamiliar with heat pump technology is highlighted. There is a need for

increased education and behavioral change initiatives to ensure that heat pumps are used effectively and affordably.

4. **Grid Capacity and Demand Management**
    - The feedback raises doubts about the strategy's assessment of the impact of electrifying domestic heating on grid capacity, especially in the context of growing electricity demand from electric vehicles. There is concern that peak demand periods, particularly during winter evenings, could strain the grid, leading to capacity breaches unless there is a major shift in consumption patterns and the adoption of smart tariffs.
5. **Cooling Demand and Future-Proofing**
    - While the strategy focuses on decarbonising heating, it is criticised for neglecting the growing issue of cooling demand. Better insulation, which could help in both heating and cooling, is underemphasized. The feedback suggests that the strategy's "Heat Pump Ready" approach might fail to address the long-term challenges posed by climate change, particularly the increasing frequency of heatwaves.
6. **Missed Opportunities with Alternative Technologies**
    - The feedback underscores the missed opportunity to incorporate HVO as a transitional solution for off-grid, oil-heated homes. Trials conducted by Mitchell & Webber have demonstrated the effectiveness of HVO in reducing carbon emissions by 90%, yet this option was not explored in the strategy.
    - There is also concern that the strategy has not sufficiently engaged with local expertise and experience, particularly in relation to park homes and alternative heating solutions like air-to-air heat pumps.

Recommendations

1. **Adopt a Blended, Housing-Stock-Specific Approach**
    - The strategy should be revised to incorporate a more flexible, multidimensional approach that considers the unique characteristics of Cornwall's diverse housing stock. This includes exploring a wider range of technologies and solutions that can be tailored to different types of homes.
2. **Enhance Financial Support and Education Initiatives**
    - A more robust plan for financial support is needed to ensure that all residents, particularly those in fuel poverty, can participate in the transition to low-carbon heating. Additionally, targeted education and support initiatives should be developed to help homeowners, especially older residents, understand and effectively use new technologies like heat pumps.
3. **Address Grid Capacity and Demand Management**
    - The strategy should include a more detailed assessment of the impact of increased electricity demand on grid capacity and outline measures to manage peak demand periods. This could include promoting smart tariffs and encouraging behavioural changes to reduce pressure on the grid during high-demand times.
4. **Incorporate Cooling Strategies and Future-Proofing**

    - To ensure long-term resilience, the strategy should place greater emphasis on improving the thermal efficiency of homes to address both heating and cooling needs. This will help future-proof homes against the effects of climate change, including increased heatwave frequency.
5. **Engage with Local Expertise and Explore Alternative Technologies**
    - The Council and consultants should engage more closely with local experts and consider a broader range of technologies, including HVO and air-to-air heat pumps, to ensure that the strategy is both effective and reflective of the unique challenges faced by Cornwall.

Conclusion

While the Cornwall Housing Decarbonisation Strategy represents a positive step towards reducing carbon emissions, it requires significant revisions to address the diverse needs of Cornwall's housing stock and the socio-economic challenges associated with the transition. A more holistic, inclusive, and flexible approach is needed to ensure that the strategy is both effective and equitable, paving the way for a just transition to a low-carbon future in Cornwall.