

STATES OF JERSEY



ISLAND PLAN 2022-25: APPROVAL (P.36/2021) – EIGHTY-FIRST AMENDMENT

CHANGES TO PASSIVHAUS POLICY

Lodged au Greffe on 7th February 2022
by the Environment, Housing and Infrastructure Scrutiny Panel

STATES GREFFE

ISLAND PLAN 2022-25: APPROVAL (P.36/2021)– EIGHTY-FIRST
AMENDMENT

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After the words “the draft Island Plan 2022-25” insert the words “except that –

- (a) Policy ME2 – Passivhaus standards for affordable homes and major development outside the built-up area – should be deleted;
- (b) in the Proposal “Review of building bye-laws”, after the words “arising from buildings.” insert the following new paragraph –

“The Minister for the Environment will establish a working group to consider the environmental benefits and ‘Green’ opportunities presented by Passivhaus and other energy efficient building standards and to inform decisions on the most appropriate standard for use in Jersey, with a view to the implementation of increased requirements within the next Island Plan.”; and
- (c) the draft Island Plan 2022-25 should be further amended in such respects as may be necessary consequent upon the adoption of (a) and (b).”

ENVIRONMENT, HOUSING AND INFRASTRUCTURE SCRUTINY
PANEL

Note: After this amendment, the proposition would read as follows –

THE STATES are asked to decide whether they are of opinion –

to approve, in accordance with Article 3(1) of the Planning and Building (Jersey) Law 2002, as amended by the Covid-19 (Island Plan) (Jersey) Regulations 2021, the draft Island Plan 2022-25 **except that –**

(a) Policy ME2 – Passivhaus standards for affordable homes and major development outside the built-up area – should be deleted;

(b) in the Proposal “Review of building bye-laws”, after the words “arising from buildings.” insert the following new paragraph –

“The Minister for the Environment will establish a working group to consider the environmental benefits and ‘Green’ opportunities presented by Passivhaus and other energy efficient building standards and to inform decisions on the most appropriate standard for use in Jersey, with a view to

the implementation of increased requirements within the next Island Plan.”; and

(c) the draft Island Plan 2022-25 should be further amended in such respects as may be necessary consequent upon the adoption of (a) and (b).

REPORT

Summary

This amendment seeks to remove Policy ME2 – ‘Passivhaus standards for affordable homes and major development outside the built-up area’ from the Draft Bridging Island Plan 2022-25 on the grounds that the timing of its introduction could have various practical and financial implications and, consequently, an adverse impact on the delivery of affordable housing supply. Whilst the current policy wording applies some flexibility in relation to exemptions where it can be demonstrated that the implementation of Passivhaus would render developments unviable, concerns over its timing, viability and practical implementation still remain. In addition, the current proposal to only apply the standard to affordable housing and large-scale development outside the built-up area lacks consistency of approach and risks creating inequity for occupants and instability in the construction market.

Under **part a** of this amendment the Panel proposes that the policy be removed from the Draft Bridging Island Plan 2022-25 and a decision deferred until the next Island Plan approval to allow sufficient time for Andium Homes to complete two ongoing Passivhaus trial projects, which will assess the appropriateness of Passivhaus standards for Jersey and the impacts of its introduction on the construction industry, supply chain and the occupants of homes. Andium’s trial projects will also consider other approaches to energy efficiency design standards. Should Passivhaus be deemed an appropriate, cost effective and workable solution for Jersey, the policy could be introduced in the next Island Plan allowing adequate time to upskill the construction sector and resolving any practical implications such as supply chain links and enabling the standards to be applied across the board to all new homes and large-scale development from the outset of the policy’s implementation. Such an approach would avoid the risk that much needed affordable homes are not delayed because our local construction industry is not prepared or adequately experienced to deliver a completely new building standard, or that the potential increase in costs makes affordable housing schemes financially unviable.

The Panel notes that Andium Homes has begun trial projects to assess Passivhaus, drawing on experience from Exeter City Council. The Panel is of the view that this is meaningful and exciting work and Andium ought to be allowed the opportunity to complete its trials. Andium has offered to share the outcomes to inform the development of a fully informed and evidenced energy efficient building standard policy for inclusion in the next Island Plan. The Panel is therefore proposing, under **part b** of this amendment, that a paragraph be inserted into the Draft Bridging Island Plan under ‘Proposal – Review of building bye-laws’ which seeks to establish a working group to consider the environmental benefits and ‘Green’ opportunities presented by Passivhaus and other energy efficient building standards and to inform decisions on the most appropriate standard for use in Jersey, with a view to the implementation of increased requirements within the next Island Plan.

The Panel wishes to make clear that it is not against the principle of introducing Passivhaus standards, but that implementation of energy efficiency standards (Passivhaus or other) would be best informed from the outcome of suitable pilot schemes.

Background

Policy ME2 of the Draft Bridging Island Plan 2022-25 proposes the introduction of a policy requirement for all affordable homes and large-scale development outside the built-up area to conform with Passivhaus design standards. The policy does not require the standard to be applied to market housing development and specifically not those in the built-up-area.

Originating in Germany, Passivhaus is a building design and energy performance standard which is widely accepted internationally. Its aim is to dramatically reduce the requirement for space heating and cooling (creating ultra-low energy buildings), whilst also creating improved indoor air quality and comfort levels. The principles of Passivhaus can be applied to any new domestic or non-domestic building, as well as any existing buildings through suitable retrofits which can be tested against the standard for retrofitting known as EnerPhit.¹

Achieving a higher standard in building efficiency significantly, in turn, reduces the life-time carbon impact of the development by supporting a significant reduction in energy consumption. It is asserted in the Draft Bridging Island Plan that this energy demand reduction *“will support energy supply and capacity resilience for the island and could potentially equate to more than a 90% reduction in space heating and cooling energy use compared to consumption in a conventional home.”*

The rationale provided in the Draft Bridging Island Plan for targeting the development of affordable homes with new Passivhaus standards is to reduce the risk of fuel poverty in homes for people on lower incomes, whilst also reducing the whole life-cycle carbon impact of the development. The Panel notes that Andium Homes has recently completed a wholesale upgrade of its 4,500-home social housing portfolio, improving insulation standards and transitioning properties away from fossil fuel heating and hot water systems onto low-carbon electric off peak alternatives. The Government of Jersey’s social housing rents policy sets rents in the social housing sector at no more than 80% of the market equivalent. Approximately 60% of Andium tenants receive assistance with their rent and living expenses through the Income Support system. The significantly lower rents and protection afforded by Income Support, alongside a housing stock which is already relatively efficient, reduces the risk of this cohort suffering from fuel poverty. It is therefore arguable that social housing tenants, particularly those living in Andium Homes properties, already have a higher degree of protection from fuel poverty than many other sectors of our society.

In addition, targeting larger developments outside of the built-up area is intended to offset the carbon impact of new development where it needs to happen in less sustainable locations. The rationale being that new development outside the built-up area will largely generate increased vehicle journeys, over greater distances. This consumes more energy and creates additional carbon emissions.²

Development viability and conforming with Passivhaus standards

The Draft Bridging Island Plan further states that in cases where it can be argued that the requirement to conform with Passivhaus standards will render a development unviable:

¹ [Draft Bridging Island Plan 2022-25](#)

² [Draft Bridging Island Plan 2022-25](#)

...a viability assessment, which considers the whole development life-cycle must be provided. Should the viability case be accepted, the developer will be required to demonstrate how the building has been designed to achieve the highest possible standard towards reaching the Passivhaus standard, within the scope of viability. If, for other practical reasons, it is impossible for the development to achieve the Passivhaus or EnerPhit standards, a reasoned justification must be provided. Where accepted, the developer will be required to demonstrate how the building has been designed to achieve the highest possible standard towards reaching the Passivhaus standard, as far as practicable.³

In a public review hearing, the Panel questioned the Minister for the Environment on whether new environmental design standards had been tested with housing providers and developers to ensure proposed developments are still viable and was advised the following:

Head of Place and Spatial Planning, Strategic Policy, Planning and Performance:

...As part of the preparation of the draft Island Plan, it has been subject to a viability assessment. That is published online with all of the evidence that supports the Island Plan. That work draws on some work that we did some time ago to look at the potential introduction of the levy in the Island. We did a lot of work to look at the viability of development in Jersey and to look at the potential to introduce a levy. That work has been updated to some extent to look at the current situation and to see whether or not the policy provisions in the plan that are placing additional burdens, if you like, on the development industry would be viable within current prices. That work suggests that development would remain viable, notwithstanding the new policy provisions being introduced as part of the draft plan. I suspect that is something that the planning inspector will want to, of course, test further at the examination in public. Where we have had comment on those issues, I suspect the inspector will want to delve deeper into them at the E.I.P. (examination in public), just to test that.⁴

Uncertainty of tenure split on proposed sites rezoned for affordable housing⁵ and new social rents policy to cap social-rents at 80% of market rent reduces the gross development value of social housing creating added pressure on development viability. Given that the work carried out by Government to test the viability of proposed policy provisions within the Draft Plan was carried out before these other factors were known, the Panel is mindful that introducing the requirement of Passivhaus standards on affordable housing at this time, could place additional cost burden on the deliverability of affordable homes, would almost certainly slow down delivery and in some cases could render schemes undeliverable.

Concerns raised by Andium Homes

Andium Homes raised the following concerns in its submission to the Draft Bridging Island Plan 2022-25 consultation:

³ [Draft Bridging Island Plan 2022-25](#)

⁴ [Public hearing with the Minister for the Environment, 27 July 2021, p. 14-5](#)

⁵ [See recommendation 23 of the Inspectors' report and the Minister for the Environment's response](#)

- a. *There is a shortage of affordable housing both for rent and purchase and we need homes to be developed quickly*
- b. *The capacity of the local construction industry is already under pressure with major Government infrastructure projects (Hospital, Government HQ) and to deliver the number of homes required by the DBIP, the industry will need to increase its output of new homes from a prior ten-year average of 400 homes a year to at least 750 homes a year*
- c. *Building costs are increasing and may continue to increase for some time, and the potential increase in cost of Passivhaus in Jersey is presently unknown*
- d. *There is little on-Island experience of constructing to Passivhaus standards, in any sort of volume*
- e. *There is no clear process for the local certification of Passivhaus buildings⁶*

During its review of Affordable Housing: Supply and Delivery, the Panel heard evidence from Andium Homes stating the introduction of new environmental design standards in construction was a positive step for the future but that further investigation was required around the Passivhaus requirement:

Mr. J. Paterson:

...Can I just ask a follow-up question, slightly different, but still about innovation in construction? I recall seeing your observations in the feedback you gave to the draft bridging Island Plan about Passivhaus standards and whether or not that was the appropriate way to go in terms of improving energy efficiency going forward. Also whether it is fair that only the affordable housing sector is being asked to take the strain with those enhanced standards and other aspects of production. I recall also you mentioned that you were undertaking some pilot projects looking at how to improve energy efficiency. You were having some support from Exeter City Council, if I remember rightly. I just wondered how that was going and what it might culminate in. Might it mean that you have differently defined expectations for energy efficiency, maybe not Passivhaus?

Chief Executive, Andium Homes:

We have made a lot of progress in terms of our existing stock. Because at one time we were burning 1.7 million litres of oil every year with our district heating schemes. We have brought that down to 30,000 litres and by 2023 we will have completely finished, because we have thermally upgraded much of our stock and we have moved to electric heating systems. So that was a major change for us and it has ultimately been dramatic. But for us, in terms of the Passivhaus, we are at the early stages. We certainly did not want to come over in our response as saying we were anti that. What we wanted to do is say we need to do some more work here. We need to do a pilot project with a brand new house, Passivhaus standards. We want to do a retrofit and we want to produce something that was probably to 80 per cent to 85 per cent of what would be Passivhaus accreditation. The really good relationship that we have developed with Exeter, and regrettably they were meant to be coming over within the next few days for a workshop, because they have been pushing the boundaries on Passivhaus and have been providing Passivhaus for their rental stock. So that is vital that we are able to talk to them about the lessons they have learned in delivering it. But what we were saying is we would like to get on with that pilot

⁶ [Andium Homes – Submission to the Draft Bridging Island Plan 2022-25 Consultation](#)

programme and we are making progress and we have just started, but we are making progress to be getting on with that. Certainly we will be pushing it forward this year and next year. With Government and interested bodies, it is to effectively be a part of a group where we can be completely transparent and say the lessons we have learned from doing this. Is this the right way to go for Jersey or would an 85 per cent of a Passivhaus accreditation be sufficient for what we need and suitable? Then evaluate those results and decide what is best. We are certainly not anti it. We feel we need to do some more investigation. We were a little bit concerned of course that it was just, as you mentioned, it was the affordable housing sector was picking up that Passivhaus requirement. Once we have done the level of investigation and if it is decided that, yes, Passivhaus is what we want, let us roll it out throughout the tenures, not just affordable housing.⁷

In a further submission to the Draft Bridging Island Plan 2022-25, Andium advised that a full day workshop with the local construction industry was held on 24th September 2021 to assess Andium's pilot projects on Passivhaus. The workshop was delivered by Exeter City Council who were also able to share their previous experience of delivery small-scale housing developments to Passivhaus standards. The outcome of the workshop indicated a degree of concern from the local industry about the feasibility of Passivhaus delivery due to the following:

- A potential 20% increase in building costs just for affordable homes which might disincentivise developers and slow down the delivery of affordable homes, something which is not in Jersey's interests given the demand for affordable homes.
- The capacity of the industry over the 5 years of the Bridging Island Plan Housing supply period.
- Lack of design team and contractor experience in developing to Passivhaus standards, which might encourage the industry to focus on other types of development because of the risks associated with Passivhaus.
- Given the importance that Exeter stressed about certification, the absence of any certification process is a concern (it is noted that the Minister is not proposing that certification be mandatory).

Andium concluded their response by commenting that in view of the above it remained their view that the introduction of Policy ME2 would be premature at this stage and *"could have significant unintended consequences which would adversely affect the supply of affordable homes over the period 2022 – 2026 and beyond."*⁸

Jersey Development Company's position on Policy ME2

Noting that Passivhaus requirements are proposed to be introduced for all new affordable housing developments, in a public review hearing the Panel asked for Jersey Development Company's views on how these requirements might pose a challenge for JDC's residential developments:

The Connétable of St. Brelade:

⁷ [Public hearing with Andium Homes, 28 July 2021, p. 21-2](#)

⁸ [Andium Homes – Additional Submission to Draft Bridging Island Plan 2022-25 for the Examination in Public](#)

What challenges do you see arising for J.D.C. from the requirements to introduce new design standards and environmental features, including carbon reduction requirements?

Managing Director, Jersey Development Company:

As an example, Chair, we are reviewing the designs at the moment on South Hill and we are targeting those buildings achieving BREEAM outstanding and also we are trying to ensure that they achieve Passivhaus accreditation. That is still a work in progress but we are very focused on minimising the energy and the use on these completed buildings. We are also assessing alternative products to be introduced in the fabric of the buildings in order to reduce the in-built carbon on these new developments as well.⁹

The Panel requested that the Minister for the Environment clarify the position on whether both the JDC's Waterfront and South Hill developments would be required to meet Passivhaus standards under Policy ME2, as drafted. The Minister responded as follows:

Subject to the final wording and approval of Policy ME2 in the draft bridging Island Plan, all affordable homes will be required to meet this standard and whilst it would be positive to see entire mixed tenure schemes developed to the Passivhaus standard, it won't ultimately be required. In instances of mixed tenure, it will be for the developer to determine how the requirement will be best delivered, relative to the design of the project. The developer will need to explain how their proposed approach complies with the policy, which is sufficiently flexible to accommodate practical and viability challenges which may be faced by developers.

The Panel is therefore concerned that the policy, as drafted, could lead to an inequitable situation where some homes on a mixed-tenure development may conform to Passivhaus and other homes in the same development may not.

Concerns raised by Jersey Construction Council

A written submission from Jersey Construction Council made to the Panel's review of Affordable Housing: Supply and Delivery commented that:

In any normal period, the opportunity to raise and improve new design standards and environmental features would be welcomed by the industry and used as an opportunity to innovate and adapt... Government should consider the very real impact that further new environmental and design standards may have on developments, and whether the Government's desired outcomes may be best served by timing their introduction more effectively in order to support the island's development sector.¹⁰

The JeCC accepted that the introduction of these standards may be more conducive to larger developments where budgets could accommodate this, however, that smaller scale projects would be hindered.

⁹ [Public hearing with Jersey Development Company, 13 July 2021, p. 3](#)

¹⁰ [Written submission – Jersey Construction Council](#)

Advice of ARK Consultancy¹¹ (expert advisers to the Panel’s review of Affordable Housing: Supply and Delivery)

In their report to the Panel, ARK advise that the Passivhaus standard is a:

very prescriptive approach to achieving high energy efficiency in buildings and low carbon emissions which relies heavily on the air-tightness of buildings and not all occupants or commissioners of new homes accredited as meeting Passivhaus standards are comfortable with the home environment it creates.

ARK further suggests the use of other high aspirational standards for energy efficiency, such as the Scottish Government’s Energy Efficiency Standards in Social Housing 2 (ESSH2) standard, which offers better flexibility in approach to achieving excellence in environmental design standards.

Affordable Housing: Supply and Delivery [S.R.14/2021] - Panel’s recommendation to defer the introduction of Passivhaus

As a result of the evidence gathered during its Affordable Housing: Supply and Delivery scrutiny review, it was the Panel’s view that sufficient concerns and evidence had been presented to justify Andium Homes’ request to defer the introduction of requirements for Passivhaus standards until the next Island Plan in 2025 and to enable pilot schemes to be undertaken to test its suitability to Jersey. The Panel, therefore made the following recommendation to the Minister for the Environment:

RECOMMENDATION G6: *The Minister for the Environment should defer the proposal to introduce requirements for Passivhaus standards on new affordable homes and large development outside of the built-up area until the next longer-term Island Plan. The aim of doing so would be to enable Andium Homes to run pilot schemes which conform to Passivhaus to test its suitability to Jersey. As part of this pilot scheme, consideration should be given to the suitability of other approaches, such as that used by the Scottish Government with the Energy Efficiency Standards in Social Housing 2. Being able to draw on suitable comparisons with other approaches will further aid in the process of testing both suitability and viability in the pilot period.*

The Minister rejected¹² the Panel’s recommendation stating:

The Minister for the Environment does not accept this recommendation as there is sufficient flexibility in this policy to adjust in response to practical challenges which may be faced. Guidance is being developed to support the implementation of this policy, which will involve input from Andium Homes.

Notwithstanding the Minister’s comments it is evident from the evidence presented that concerns still remain around the implementation of Passivhaus and particularly around the inequitable approach requiring the standards be applied to some, but not all homes.

Draft Bridging Island Plan 2022-25 Examination in Public – Inspectors’ Report

¹¹ [ARK Consultancy](#) specialise in advising on many aspects of housing, including housing market functionality and assessment, housing policy and new homes development.

¹² S.R.14/2021 – Ministerial Response – Minister for the Environment

The Inspectors' post-examination report¹³ further details the case put forward by Andium Homes that the Passivhaus requirement should not be imposed at this stage:

They [Andium Homes] are currently undertaking pilot projects and are pressing for a Green and Energy Efficient Building Standards Group to be set up to develop a Jersey-specific approach. Andium believe that it may be possible to set more appropriate Jersey standards. They do not agree that ME2 should apply to affordable housing, and not to open market housing within the built-up area and they point to potential supply of building materials issues if the policy is applied now. Andium is also concerned that contractors may be reluctant to work on affordable housing projects if there is an alternative open market housing project available that is not required to meet the Passivhaus standard. In response, the Minister points out that the policy is extremely flexible with a number of qualifications to help smooth the introduction of the requirement and also that the climate emergency situation is a serious one that demands serious action now. The pilot projects being undertaken by Andium are at an early stage and it seems unlikely that Jersey specific standards will emerge in the near future.

The Inspectors share the Minister for the Environment's view that there is a need to demonstrate action in managing carbon emissions now and that *"Jersey could learn from the considerable experience of others, and taking into account the very flexible terms of the policy, we do not accept that Policy ME2 should not be applied now."*

The Inspectors further recommended that Policy ME2 should be extended to include all open market housing in the built-up area. However, the Minister rejects¹⁴ this recommendation stating that that doing so *"would not represent a just transition to carbon neutrality"*. The Panel understands the Minister's view that the effect of the Inspectors' recommendation would result in the development industry, local architects and building services engineers being *"universally required to upskill and change practices very suddenly, which is not considered to be a reasonable expectation"*.

Given that it is not considered viable at this time to extend the Passivhaus requirement to all new homes, the Panel takes the view that in order to resolve concerns of an inequitable approach to the policy's implementation, and the risk to the timely and cost-effective delivery of affordable homes, the most suitable option would be to remove Policy ME2 from the Draft Bridging Island Plan 2022-25.

In the intervening time before the next iteration of the Island Plan the Panel recommends that this time be utilised to work with developers and the construction industry to ensure both financial and practical viability. Particularly, but not limited to, the availability of on-island skills and expertise and strengthening supply chain links to ensure that suitable energy efficiency standards (Passivhaus or other) are deliverable across all new developments by the time of the next Island Plan approval.

Addressing the climate emergency

Accepting that there is a recognised need for action in addressing the climate emergency and managing emissions, the Panel notes the Minister's intention to accept the

¹³ [Draft Bridging Island Plan 2022-25 Inspectors' report](#)

¹⁴ [Draft Bridging Island Plan 2022-25 Post examination report – Response of the Minister for the Environment](#)

Inspectors' recommendation 56¹⁵ that Policy ME1 – '20% reduction in target energy rate for large-scale developments' be amended to apply to **all** new development. As stated in the Minister's response to the Inspector's report:

the effect of this broadened policy scope effectively represents an interim uplift in the energy performance requirements of the building bye-laws, affecting a significant number of new developments, but to which it is considered the development industry will be able to respond.

The Panel therefore considers that increasing this standard demonstrates improved action towards managing emissions, and arguably, without an immediate need to introduce Policy ME2 at this time. The Panel further notes and welcomes the Minister's intention to take appropriate action to reduce energy consumption from buildings through a comprehensive review of the building bye-laws.

Proposal – Review of building bye-laws and establishing a building and development environmental design standards working group

The Panel further proposes under part b of this amendment, that a paragraph be inserted into the Draft Bridging Island Plan under 'Proposal – Review of building bye-laws' which seeks to establish a working group to consider the environmental benefits and 'Green' opportunities presented by Passivhaus and other energy efficient building standards and to inform decisions on the most appropriate standard for use in Jersey, with a view to the implementation of increased requirements within the next Island Plan.

Financial and manpower implications

There are no direct financial and/or manpower implications to Government resulting from this proposed amendment.

The Panel considers that whilst the current wording of Policy ME2 provides a degree of flexibility for exemption from Passivhaus standards where a scheme would be proven by a developer as financially unviable; there are, however, valid concerns of inequity of only applying the policy to affordable housing and large scale development outside the built-up area. Specifically, the inequity for occupants and the instability this could create within the construction market.

Andium Homes' concerns that the added costs of the developing Passivhaus could be as high as 20% above normal costs, at least initially, is particularly concerning given a lack of clarity over the tenure split of sites proposed for re-zoning and the recent changes to the social rents policy and capping rents at 80% of market rent which reduces the value of social rented homes further than has previously been the case. All these factors combined have the potential to negatively impact development economics and, ultimately, the deliverability of affordable homes.

¹⁵ **Recommendation 56:** Remove "for large-scale" from the heading to Policy ME1 and substitute "new development". Amend Policy ME1 to Withdraw the words "in the built-up area for non-residential development with a gross floorspace of 200 sq. m or more; or residential developments of five or more homes"