



HOUSING INDUSTRY ASSOCIATION



Submission to the
Senate Environment and Communications References Committee

**Inquiry into current and future impacts of climate change on
housing, buildings and infrastructure**

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ABOUT THE HOUSING INDUSTRY ASSOCIATION

The Housing Industry Association (HIA) is Australia's only national industry association representing the interests of the residential building industry, including new home builders, renovators, trade contractors, land developers, related building professionals, and suppliers and manufacturers of building products.

As the voice of the industry, HIA represents some 40,000 member businesses throughout Australia. The residential building industry includes land development, detached home construction, home renovations, low/medium-density housing, high-rise apartment buildings and building product manufacturing.

HIA members comprise a diversity of residential builders, including the Housing 100 volume builders, small to medium builders and renovators, residential developers, trade contractors, major building product manufacturers and suppliers and consultants to the industry. HIA members construct over 85 per cent of the nation's new building stock.

HIA exists to service the businesses it represents, lobby for the best possible business environment for the building industry and to encourage a responsible and quality driven, affordable residential building development industry. HIA's mission is to:

"promote policies and provide services which enhance our members' business practices, products and profitability, consistent with the highest standards of professional and commercial conduct."

The residential building industry is one of Australia's most dynamic, innovative and efficient service industries and is a key driver of the Australian economy. The residential building industry has a wide reach into manufacturing, supply, and retail sectors.

The aggregate residential industry contribution to the Australian economy is over \$150 billion per annum, with over one million employees in building and construction, tens of thousands of small businesses, and over 200,000 sub-contractors reliant on the industry for their livelihood.

HIA develops and advocates policy on behalf of members to further advance new home building and renovating, enabling members to provide affordable and appropriate housing to the growing Australian population. New policy is generated through a grassroots process that starts with local and regional committees before progressing to the National Policy Congress by which time it has passed through almost 1,000 sets of hands.

Policy development is supported by an ongoing process of collecting and analysing data, forecasting, and providing industry data and insights for members, the general public and on a contract basis.

The association operates offices in 23 centres around the nation providing a wide range of advocacy, business support including services and products to members, technical and compliance advice, training services, contracts and stationary, industry awards for excellence, and member only discounts on goods and services.

1. INTRODUCTION

On behalf of the Housing Industry Association (HIA) the following submission has been prepared to provide the Committee with a perspective on the current and future impacts of climate change on housing and buildings more broadly.

Australia has a diverse climate and our buildings can be subjected to all manner of natural hazards such as cyclones, bushfires, flooding, earthquakes, hail storms, and the like, that are predicted to become an increasing concern over future decades.

The planning and construction of safe, sustainable and resilient housing in all forms across our cities requires an effective relationship between governments and the residential development and building industry.

Ensuring that residential and commercial buildings are resilient to natural hazards is not a new concern.

The focus for governments when considering housing, and buildings more broadly, should be achieving minimum community accepted standards for the safety, health, amenity, sustainability and liveability. Government policies and support programs must have this goal at their heart.

This Inquiry presents an opportunity to further consider what role the Australian Government should play into the future of housing accounting for projected climate scenarios.

1.1 TERMS OF REFERENCE

This submission has been prepared to address the following terms of reference, being—

The current and future impacts of climate change on housing, buildings and infrastructure, accounting for the full range of projected climate scenarios, having regard to matters, including:

- m. the adequacy of current state and Commonwealth policies to assess, plan and implement adaption plans and improved reliance of infrastructure; and*
- n. any other related matters.*

The submission predominantly relates to housing and focusses on the adequacy of the current administration of planning and building legislation and policies.

2. PLANNING & LAND SUPPLY

The development of safe, sustainable and resilient cities is reliant on many factors. The continued growth of our cities is inevitable and governments must reasonably plan for this. Therefore it is vital that all governments work to maintain an adequate supply of land for housing in Australia's major cities and regional areas, that is free from environmental constraints.

Land use and planning policies play a key role in the delivery of safe, sustainable and resilient cities. If climatic conditions change in the future, planning policies to mitigate against possible threats will need to continue to evolve.

2.1 MANAGING ENVIRONMENTAL CONSTRAINTS

The planning processes, as set out in state and territory planning legislation, is used to manage land release (zoning and subdivision) and land use (development & building) to guide the location of residential developments once the land has been designated for development. In the majority of circumstances, local government is responsible for the day to day delivery of planning decisions.

In areas where natural hazards or environmental constraints exist, whether due to climate change or for other reasons, the planning system is used to determine what land is viable for development and what land should remain undeveloped due to any potential risks that would arise for buildings and occupants, or protected due to its inherent value.

Natural hazards such as threat of bushfire, sea level rise and inundation, and cyclones are generally mitigated through the zoning of land and limitations on building in specific areas.

Once natural hazards are mapped and a decision made on the permissibility of that land for development purposes, any additional unavoidable hazards that require mitigation are then addressed through the building design and construction. These design requirements are generally set out in the National Construction Code (NCC).

The management of natural hazards and environmental constraints through the zoning and development process and building process is generally well understood and the community accepts these are matters that should be considered.

However, some of the matters now being included as environmental constraints relate more rightly to environmental protection, as they carry less risk to building construction and relate to preventative issues such as saving water or managing waste. These matters have been introduced by governments as a way to address community views about improving the environmental outcomes from urban development. These should not be confused with the approach to natural hazards and environmental constraints.

Regarding the management of natural hazards and environmental constraints, the Australian government has a role to play in guiding states and territories in a consistent approach to land zoning and development assessments and the mapping of these. The Australian government should provide clear direction that allows states, territories and local governments to have greater certainty about their risk exposure and acknowledge that there is an inherent risk that cannot practically be legislated out.

HIA's position on *environmental constraints and planning regulatory creep* is set out in **Attachment 1**.

Relevant components of this as they relate to resilience of buildings and management of natural hazards include:

- Federal, state and local government measures applied through the planning system, relating to protection of the environment or environmental risk, should only relate to land availability and subdivision design layout and not the construction elements of homes built on that land.
- Matters relating to environmental constraints that are addressed through building design and construction solutions should be dealt with through the National Construction Code (NCC).
- In implementing planning measures that deal with environmental constraints, governments and authorities should:
 - Provide appropriate public infrastructure and mitigation measures that guard the community against natural disasters rather than continuing to place the onus on the housing industry and individual home owners;
 - Focus on solutions which promote a consistent approach at a national level where possible and state level where appropriate;
 - Prohibit ad hoc measures being introduced by individual Councils in local planning schemes;
 - Support research and technology for new products and measures to assist with protecting against environmental risks.
- Matters of protection from imminent environmental risk – such as landslip or erosion are already entrenched in planning schemes and should only be applied at the appropriate stage of the zoning and land development process.

2.2 WHERE THE CURRENT SYSTEM CAN BE IMPROVED

2.2.1 Truth in zoning

HIA supports the following approach to the zoning of land and the management of natural hazards and environmental constraints:

- Governments (being all governments or relevant authorities) should provide certainty in the application of planning controls on residential land.
- In applying planning controls to land, Governments should disclose all known constraints which they intend to apply and at which stages of the development process.
- The known constraints should only be applied by Governments at the designated stage in the development assessment process.

The Australian Government has the ability to seek the support of states and territories in their approach to truth in zoning and to provide greater certainty over when planning constraints are applied to land.

2.2.2 Coordinated national approach

The management of current and future impacts that changes in climatic conditions many have on housing, and buildings more broadly, needs to be done in a coordinated and defined manner at a national level.

In the absence of a defined national response state and local governments are applying individual planning approaches to residential development with a view to eliminating any possible litigation due to the risk of property damage and losses in the future.

These responses are being developed in an ad-hoc manner and have the potential to adversely impact new housing and residential development through:

- Increased cost of construction;
- Changed construction methods;
- Change in current housing designs and products;
- Greater setbacks from designated areas, such as foreshore areas;
- Increased costs associated with consultant studies;
- Increased refusals of development applications; and
- Loss of developable land as there is an increase in the amount of land zoned vulnerable.

HIA would support a process being run at a national level that is evidence based and informed by Regulation Impact Analysis in accordance with COAG principles.

2.2.3 Local Government interventions

An additional concern for the residential building industry is where state and local government use planning policies to override the NCC.

In most states and territories this is possible and at the local government level creates confusion for residential building and development as standards are inconsistent across councils.

Local government is not being held accountable to undertake any cost benefit assessment of local planning or building regulations and they have sought to apply unduly restrictive and/or costly requirements on both land development and building construction in response to climate change.

The Commonwealth and State and Territory Governments have a key role in preventing local government interventions that place additional requirements on residential buildings beyond the minimum mandated requirements.

2.3 CONCLUSION

Planning policies play a key role in the delivery of safe, sustainable and resilient housing. However, they need to be approached in a pragmatic way whereby the inherent risks of existing natural hazards are appropriately managed, rather than used as a reason to prevent all land uses.

Natural hazards such as anticipated threat of bushfire, sea level rise and inundation, cyclones can be 'mapped' and areas of highest risk identified with a high degree of certainty. Using the zoning process and adopting a truth in zoning approach land should only be zoned and permitted to be subdivided where these natural hazards are minimal or non-existent.

The management of natural hazards and environmental constraints through the zoning and development process is generally well understood and the community accepts these are matters that should be considered.

If climatic conditions change in the future, planning policies may need to continue to evolve to address this. This should be done using this well established process of management through the zoning and development process and the building design and construction solutions through the NCC.

In applying planning controls to land, Governments should disclose all known constraints which they intend to apply and at which stages of the development process they will seek to apply them.

For the management of current and future impacts that changes in climatic conditions may present, the Australian Government can provide a leading role in guiding national policies supported through state and territory planning Ministers. This also extends to Governments (being all governments or relevant authorities) providing certainty in the application and timing of planning controls on residential land.

3. BUILDING POLICIES

The development of minimum necessary standards of safety, health, amenity and sustainability in the design, construction and performance of buildings is a key function of governments.

Australia has a diverse climate and our buildings can be subjected to all manner of natural hazards such as cyclones, bushfires, flooding, earthquakes, etc.

If climatic conditions change in the future, the adequacy of our building stock (and the codes and standards that apply to them) in being able to withstand these events will need to be monitored and if deemed to be lacking, building practices and the policies that apply to them, may need to evolve to mitigate against the risks presented.

3.1 CURRENT REGULATIONS/POLICIES

In Australia building work is regulated through State and Territory building legislation and that legislation calls up the National Construction Code (NCC) for the technical design and construction requirements for buildings and other structures.

The NCC is developed and maintained on behalf of states and territories by the Australian Building Codes Board (ABCB). The ABCB is a COAG body and their work is overseen by Commonwealth and State and Territory Building Ministers.

The NCC is a uniform set of technical provisions for building work and provides the minimum necessary requirements for safety, health, amenity and sustainability in the design and construction of new buildings throughout Australia.

Whilst the NCC is a uniform set of technical provisions within its scope it has the ability to provide for variations in standards based on different geographic or climatic zones.

This allows for buildings that are 'mapped' in a specific areas such as building located in cyclonic areas, earthquake areas, bushfire prone areas, flood hazard areas, etc. it places additional design and construction requirements on those buildings, beyond those that apply to a 'standard building'.

These additional requirements will seek to mitigate the risks posed by those natural hazards and the requirements are generally applied through Australian Standards called up in the NCC.

An important point to note is that the building policies apply to ensure the safety of the occupants of buildings and their ability to exit the building to a place of safety, as opposed to the building being able to completely withstand these events.

3.2 FURTHER DEVELOPMENT OF BUILDING CODES AND STANDARDS

Australian Standards referenced in the NCC are developed through a technical committee approach that includes experts in specific fields. These experts are informed by research, international approaches and the learnings from past building performance where a natural hazard exists or an event has occurred.

These standards are reviewed on a regular basis to ensure that they are adequate and remain contemporary. When natural hazards such as cyclones, bushfires, floods, etc. occur the adequacy of the building's resilience is monitored.

Where it has been found that a certain area or component of a building or design feature is deficient, the requirements will generally be upgraded.

Industry plays a key role in informing this and in the development of the technical requirements within our codes and standards to address the concerns. HIA participates on numerous Committees and Working Groups in the development of these codes and standards.

Whilst our building codes and standards are always evolving, in the most part Australian houses and buildings have a sound track record in their ability to withstanding natural hazards where they occur. Often Australia's regulations and policies inform other countries standards regarding building performance and resilience to natural hazards.

3.3 ENERGY EFFICIENCY

Since 2003, the NCC (Building Code of Australia at the time) has contained mandatory energy efficiency requirements for housing. The objective of the NCC energy efficiency provisions is to reduce greenhouse gas (GHG) emissions.

To reduce greenhouse gas emissions the NCC energy efficiency provisions are two-fold: firstly, related to the structure i.e. it's fabric; and secondly related to the fixed services within the structure. A combination of these elements, as well as occupant behaviour, contributes to the total amount of energy consumed by a household.

3.4 POLICIES FOR REDUCING EMISSIONS IN HOUSEHOLDS

The residential building industry acknowledges the need to build environmentally responsible housing to the extent that it does not negatively impact on housing affordability and housing supply.

Where regulation is required to improve energy efficiency and in turn reduce emissions for households, HIA supports minimum necessary regulations being applied through the NCC, developed in consultation with industry, which deliver a positive net benefit to both the community and the individual home owner.

3.4.1 *National Energy Productivity Plan*

In December 2015 the Federal Government released the National Energy Productivity Plan (NEPP).

The NEPP provides a framework designed to accelerate action to deliver a 40 per cent improvement in Australia's energy productivity by 2030.

The NEPP aims to improve energy productivity by driving:

- more productive consumer choices, through measures which make consumer energy choices easier, help business compete and provide more efficient incentives; and
- more productive energy services, through measures which support innovation, competitive modern markets and consumer protection.

The NEPP includes three key actions directed at the housing industry:

- **Action 5** – Improve residential building and rating and disclosure;
- **Action 31** – Advance the National Construction Code; and
- **Action 32** – Improve compliance with building energy efficiency regulation.

HIA is a member of several Working Groups assisting with the preparation of these initiatives under the NEPP.

3.5 CONCLUSION

Australian building policies seek to provide the minimum necessary requirements for safety, health, amenity and sustainability in the design and construction of new buildings throughout Australia.

For land that is 'mapped' as subject to a risk from climate change natural hazards, and where additional requirements are placed on the building to mitigate against these potential threats, building design and construction solutions should be managed through the NCC.

Australian homes and buildings designed using the requirements of the NCC since it was introduced in 1996 have a sound track record in their resilience to natural hazards.

The adequacy of the buildings resilience to natural hazards are monitored by Governments and industry and where the requirements are deemed deficient, the requirements are generally upgraded with substantial input from industry.

If climatic conditions change in the future, and this presents threats to our buildings beyond those currently faced, our building policies and the way HIA members build houses in addressing these threats, may need to continue to evolve to address this.

HIA does not believe however, that the current processes around updating the NCC and the relevant Australian Standards require any change to further facilitate responses to climate change.

The current processes can be shown to already cater for changes where required. Through this process any changes to building policies need to be evidence based and be informed by Regulation Impact Analysis in accordance with COAG principles.

Regarding the energy efficiency of our buildings and reducing greenhouse gas emissions from buildings the residential building industry acknowledges the need to build environmentally responsible housing.

HIA promotes voluntary industry-led solutions such as HIA GreenSmart program and encourages designers and builders to implement design and construction methods to conserve natural resources.

As we move forward the goal of less reliance on mains services presents opportunities to encourage greater uptake on renewable energy such as solar, wind, photoelectric, battery storage systems, photovoltaic panels, and the like. This will assist in conserving natural resources and have associated benefits in mitigating risks in changes in climate conditions.

ATTACHMENT A : HIA POLICY

Environmental Constraints and Planning Regulatory Creep

Policy Background

- The planning process is used to manage land use and guide the location of residential development.
- In areas where natural hazards or environmental constraints exist, the planning system is used to determine what land is viable for development and what land should remain undeveloped due to the potential risks that would arise for buildings and occupants.
- The management of natural hazards and environmental constraints, such as landslip, erosion and flooding, through the zoning and development process is generally well understood and the community accepts these are matters that should be considered.

Policy Issues

- Some of the matters now being included as environmental constraints relate more rightly to environmental protection, as they carry less risk to construction and relate to preventative issues such as saving water or managing waste.
- These matters have been introduced by governments mostly as a way to address community views about improving the environmental outcomes from urban development.
- The approach to these environmental constraints through the planning system needs to be different to the approach for natural hazards and environmental constraints that arise from land affectation.

HIA's Policy Position on Environmental Constraints and Planning Regulatory Creep

- Federal, state and local government measures applied through the planning system, relating to protection of the environment or environmental risk, should only relate to land availability and subdivision design layout and not the construction elements of homes built on that land.
- Any environmental constraints proposed to be applied through the planning system by authorities must be subject to a full public Regulatory Impact Assessment process showing a positive cost benefit prior to being introduced.
- Matters relating to environmental constraints that are addressed through building design and construction solutions should be dealt with through the National Construction Code.
- All Authorities, but local governments in particular, must not introduce environmental planning requirements that are in contravention of other areas of state government policy or the National Construction Code.
- In implementing planning measures that deal with environmental constraints, governments and authorities should:
 - Focus on solutions which promote a consistent approach at a national level where possible and state level where appropriate;
 - Prohibit ad hoc measures being introduced by individual Councils in local planning schemes;
 - Rationalise existing environmental controls that have been introduced by individual Councils, up to at least a regional or state level, to create greater consistency and streamlining for industry and consumers;



- Provide appropriate public infrastructure and mitigation measures that guard the community against natural disasters rather than continuing to place the onus on the housing industry and individual home owners;
 - Focus on broader land/estate based solutions, which may provide larger scale savings, compared to individually funded and/or individual home focussed solutions;
 - Not alter or introduce more onerous environmental requirements in planning approvals on a retrospective basis;
 - Support research and technology for new products and measures to assist with protecting against environmental risks.
- The residential building industry should be incentivised to enhance the environmental performance of new developments and existing homes through voluntary measures rather than be subject to mandatory regulation.
 - Matters of protection from imminent environmental risk – such as landslip or erosion are already entrenched in planning schemes and should only be applied at the appropriate stage of the zoning and land development process.
 - All existing matters in planning schemes around environmental constraints should be applied at the appropriate stage in the planning process and not retrospectively.