

28 April 2021

NSW Department of Planning Industry and Environment GPO Box 239 Sydney NSW 2001 Sent via e-mail to designandplacesepp@planning.nsw.gov.au

Dear Sir or Madam

Re: The Design and Place State Environmental Planning Policy Explanation of Intended Effect

Thank you for the opportunity to provide feedback on the Design and Place SEPP Explanation of Intended Effect.

The Southern Sydney Regional Organisation of Councils Inc (SSROC) is an association of eleven local councils in the area south of Sydney Harbour, covering central, inner west, eastern and southern Sydney. SSROC provides a forum for the exchange of ideas between our member councils, and an interface between governments, other councils and key bodies on issues of common interest. Together, our member councils cover a population of about 1.7 million, one third of the population of Sydney, including Australia's most densely populated suburbs. SSROC seeks to advocate for the needs of our member councils and bring a regional perspective to the issues raised.

SSROC population and housing data<sup>1</sup>, in the period from 2011 to 2016, reveals a very diverse socio-economic area marked by rapidly rising numbers of dwellings and underlying growth in the number of households in the area. The estimated resident population increased by over 150,000 during this five-year census period.

Although the urban growth of the SSROC area is unique, our region shares a number of issues and drivers with many other urban areas managing rapid population growth sustainably while enhancing liveability.

Because of its size and diversity, issues experienced within SSROC often reflect statewide trends like population growth supported by migration. The experience of strong growth and related development across both highly urban as well as more suburban parts of Sydney has provided a number of valuable insights and has helped to shape our feedback on the EIE.

SSROC strongly supports the Department's work to elevate the importance of design excellence and place-based design in the planning system. The provision of two separate

CAMPSIE NSW 2194

<sup>&</sup>lt;sup>1</sup> Source: Australian Bureau of Statistics, Census of population and Housing 2011 and 2016, compiled by id https://profile.id.com.au/ssroc/



occasions to provide feedback on SEPP as it is developed is welcomed and roundly endorsed particularly given the significant scope and breadth of the new SEPP and its reforms to existing planning processes.

SSROC appreciates this opportunity to help shape and contribute to the policy to enable better design and place outcomes.

# **Our Understanding**

The Government Architect NSW in collaboration with the Department of Planning Industry and Environment is proposing a Design and Place State Environmental Planning Policy (Design and Place SEPP). The Design and Place SEPP will aim to simplify and consolidate how the design and planning system delivers good design in NSW.

The explanation of intended effect aims to set out in some detail what the new policy aims to achieve. Following this exhibition period, the proposed Design and Place SEPP will be drafted, taking in the feedback received.

The final Design and Place SEPP is planned to go on public exhibition later in 2021 to provide more opportunities for feedback. Supporting guidance and tools will also develop alongside the policy. These include a revision to the Apartment Design Guide, improvements to the Building Sustainability Index (BASIX) tool, the development of a new Public Space and Urban Design Guide and a new Design Review Guide.

Once adopted, development proponents will need to demonstrate how the Design and Place SEPP principles and considerations have been met.

The proposed Design and Place SEPP will use a principle-based approach to guide the design and assessment of new development proposals of all kinds and all scales. This approach aims to give effect to the objectives of the Environmental Planning and Assessment Act 1979 and the Premier's Priorities for a better environment.

#### **Better Placed**

Objectives of good design

- better fit
- better performance
- better for community
- better for people
- better working
- better value
- better look and feel.

# **Principles of the SEPP**

Design places of character and beauty that people feel proud to belong to Design inviting public places to support engaged communities



Design productive and connected places to enable thriving communities

Design sustainable and greener places for the wellbeing of people and the environment Design resilient and diverse places for enduring communities

#### **General comments**

SSROC commends to Department and the Government Architect on the work thus far to develop the Design and Place State Environmental Planning Policy. SSROC would like to express our support of the general direction of the proposed SEPP and the role of the Government Architect (GA) in preparing a principled and strategic policy approach to improving the quality of design and place in NSW. While there is still much more detail to be resolved, the structure and outline provided in the EIE provides a good foundation for further work and includes many positive changes for local councils.

The design principles and intended effects are by their nature general and open to interpretation potentially hindering the attainment of the principles. It will therefore be important that there are also clear, strong, and measurable standards developed as part of the SEPP in order to deliver tangible, desirable outcomes from the principles of this SEPP.

## In particular this submission lends support for the specific areas of focus:

- Integrating place-based design and design-related considerations in the planning system.
- Using the design principles to guide developments. They appear to be sound and are reflective of planning aspirations and outcomes of councils and their communities.
- Providing design guidance to help councils and others to deliver well-designed buildings, streetscapes and places.
- Consolidating design guidance and related policies in one SEPP and additional
  design guides (Design Review Guide). The consolidation of SEPP 65 and the BASIX
  SEPP provides a key opportunity to enable good design to factor into the
  assessment tool, including passive design to reduce the overall consumption of
  electricity and water, material design and the minimisation of carparking.
- Reviewing and updating of BASIXs is welcomed. Many of our councils are seeking to achieve higher standards.
- Aligning with ongoing reforms being led by the Office of the Building Commissioner.
- Updating of the Apartment Design Guide and proposed improvements to design standards for apartment buildings.

#### Structure of this submission

The submission is organised in the following sections:

1 Fundamental issues for the EIE to resolve ambiguities



- 2 Further detailed issues for resolution
- 3 Key Recommendations
- 4 Detailed recommendations about sustainability and resilience in residential and other buildings.

# 1.0 Fundamental issues for the EIE process to resolve

There are at least two fundamental issues raised in the EIE that require further resolution in the Design and Place SEPP for its effective implementation.

Unless these ambiguities are resolved and better defined in the next stage or stages of preparing the SEPP, SSROC would have difficulty supporting the proposed SEPP as it is likely to become highly problematic and even potentially unworkable for the key stakeholders using the planning instrument. Given this criticality and the stage of exposure that the EIE represents, it is therefore assumed that each of these issues will be properly addressed and resolved in the next or progressive iterations. These fundamental issues and concerns are outlined below.

# 1.1 Application of the SEPP: Clarifying the ambiguity around the SEPP's application to all land uses, contexts and development types

The EIE suggests that the Design and Place SEPP will have universal application to the built environment in the planning system and provide a single point of reference for place making:

- Delivering integrated design for the built environment<sup>2</sup> and integrated outcomes for people and places<sup>3</sup>
- Elevate the role, importance and value of design quality of new neighbourhoods and precincts, public spaces, new architecture, landscape architecture and the environment.<sup>4</sup>
- Propose new dwellings and <u>workplaces</u> are located in close proximity to public space.<sup>5</sup>
- "It is proposed the Design and Place SEPP will apply to <u>all</u> urban land in NSW, including in urban and regional places, and to planning and development proposals of different scales and typologies where the State of local government.<sup>6</sup>"

While the EIE notes that the SEPP will exclude certain zones (such as rural zones)<sup>7</sup> it is unclear which urban land uses the SEPP may be excluded. Many new precincts are likely to include a range of land uses and places of employment. It is important that the SEPP

<sup>&</sup>lt;sup>2</sup> NSW Department of Planning, Industry and Environment, Explanation of intended effect for a Design and Place SEPP, February 2021, Page 12

<sup>&</sup>lt;sup>3</sup> Ibid, Page 12

<sup>&</sup>lt;sup>4</sup> Ibid, Page 16

<sup>&</sup>lt;sup>5</sup> Ibid, Page 17

<sup>&</sup>lt;sup>6</sup> Ibid, Page 21

<sup>&</sup>lt;sup>7</sup> Ibid, Page 21



makes very clear which land uses are included and excluded: any commercial, industrial and visitor and tourist accommodation land uses for example. As a consequence, it is unclear whether the spatial arrangement of 1000 people in a precinct refers to workers, residents, tourists or a combination of these population segments<sup>8</sup>.

The SEPP, and all the Mandatory Matters for Consideration, should, in principle, apply to all development – scales and typologies – including provisions for some complying development.

As written, it is unclear what or which development typologies the SEPP will apply to; reference to "multiple development typologies" is made. It is also unclear what the other triggers and thresholds for the SEPP will be.

The breadth of land uses and place-based contexts to which the SEPP applies needs to be much better defined. Currently the SEPP is developed with a strong focus on residential uses and urban amenity with the incorporation of BASIX and a revised Apartment Design Guide. Much of the SEPP also appears to be oriented to greenfield development. Accordingly existing built-up urban areas could be usefully addressed in further context specific guidance material.

If the SEPP is to apply to a comprehensive range of employment land uses then similar design guidance for these forms in built environment will be required for industrial, commercial and mixed uses. Currently the EIE is written with a strong residential focus with passing references to health and educational precincts and a promised guide on urban design.

The SEPP would need to be considerably expanded if industrial, commercial and tourist land uses are part of the developments governed by the SEPP. To be fit for purpose to successfully embody the five design principles these design guides are likely to take time to develop and require extensive consultation. This comprehensive approach will require more guides and tools to articulate good design responses for these land uses and their various scales. These land use considerations will also need to be factored in the new Design Review Guide.

Recommendation: A further consultation process and plan is developed for incorporating (additional) land uses that articulates and integrates with the current EIE with the current focus on residential land uses, and the proposed urban design guide.

There is a concern that the precinct-approach outlined in the EIE may not be readily scalable and translatable across different urban settings. At one end of the spectrum, existing dense urban areas in inner-city areas commonly found in SSROC are unlikely to have many sites available for precinct-level development and regional communities are unlikely to have development typologies to which these matters for consideration would readily apply.

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<sup>&</sup>lt;sup>8</sup> Ibid, Page 22



The precinct-scale and significant-development scale thresholds, examples and matters for considerations should be reviewed to ensure they can respond to different development contexts, particularly acknowledging the significant difference between precinct-level development in regional, rural, inner-city and suburban contexts.

The EIE notes that the standard threshold for precinct-scale considerations is 10 ha or 1000 people. While this may be an appropriate threshold for some residential situations, it is unclear how such a threshold would apply to commercial or industrial contexts.

More broadly, the matters for consideration appear to reflect predominately residential precinct considerations. Commercial or industrial precincts (if the SEPP is intended to apply to these) would also require consideration of issues such as commuter movements, night-time economies, employment generating land uses and worker amenity. Similarly, even more specialised precincts including education, health and tourism will require specific precinct-level considerations which do not appear to be reflected in current thresholds or matters for consideration.

# 1.2 Clarifying the ambiguity that will be set up between the SEPP and DCPs for designers and councils

SSROC supports a place-based approach to planning and design, something which may be challenging to achieve using state-wide design regulation. There appears to be a point of tension between the Design and Place SEPP, development controls plans (DCPs) and other local masterplans. DCPs have developed as nuanced place-based design controls that respond to the local context and character.

Almost all matters for consideration proposed under the SEPP will be duplicated in local LEPs and DCPs. These local place-based controls currently in effect across the state have been carefully crafted to achieve design outcomes in line with community expectations. The creation of state-wide design guidance should enhance rather than override local controls.

The EIE states: "It is proposed the new Design and Place SEPP will have no immediate impact on existing LEPs and DCPs. However, when these plans are undergoing five-year review in accordance with statutory requirements it is likely they will be revised where necessary to align with the Design and Place SEPP and for consistency across NSW."

While greater consistency on the form of local environmental plans (LEPs) and DCPs is supported, the intervening period between the introduction of the Design and Place SEPP and the review of LEPs and DCPs will likely reduce certainty for the community and development proponents.

It is unclear how the SEPP and DCPs will work together, especially in the intervening period till the DCPs are revised.

This is likely to be confusing for proponents, designers and council and consent authorities, particularly where multiple or conflicting design criteria exist.



Proponents and assessment officers will require guidance to understand how to apply both the Design and Place SEPP and local controls, which will take precedence in determining applications and how proponents should develop design outcomes which reflect both.

#### 2.0 Further detailed Issues for resolution

SSROC particularly supports mandatory consideration of Country, connectivity, green infrastructure, housing diversity, affordable housing and resilience in design outcomes.

This section highlights a number of issues that require some further resolution.

## 2.1 The pivotal position of Country in place thinking

The Country-led approach to the design of places is strongly supported.

SSROC supports the prioritisation of Connecting with Country when designing buildings and places. However, consideration must be given to the time required, during the planning process, for councils, developers and Aboriginal communities to work together to ensure that Connecting with Country has been adequately achieved.

Extended timeframes in the EP&A Act, a cultural shift in DPIE and the development industry may be needed to enable Connecting with Country to be effective. This also highlights the need for appropriate resourcing for Traditional Custodians to facilitate their engagement. Resources must also be allocated to the Aboriginal people and communities whose expertise will be relied upon to help deliver on this outcome in a timely way.

#### 2.2 The tension of streamlining processes and achieving good design

Good design can take time. More thought is needed to articulate trade-offs being made through continued moves to streamline and fast-track development.

The current (and further proposed) standardised development under the Codes SEPP acts to limit the ability to deliver well-designed buildings and precincts that respond to and enhance local character. Councils have developed place-based planning controls over time to respond to the unique conditions of their established characters.

In many established areas of Sydney, standard controls or criteria are unlikely to suit the character of these areas that have developed incrementally over time.

Further work is required to articulate how the tension between streamlining processes and achieving good design will be resolved.

# 2.3 Application of matters for consideration to State Significant Precincts

The EIE notes that significant-development considerations specifically apply to:

 State significant development (SSD), as declared in the State and Regional Development SEPP, on urban land



- Regionally significant development, as declared in the State and Regional Development SEPP, on urban land
- State significant infrastructure (SSI) on or adjacent to urban land

This is a welcome approach that indicates the need for state-significant development to consider design and place outcomes at a strategic level.

It is unclear, however, whether precinct-level considerations will apply to State Significant Precincts. This should be made explicitly clear to demonstrate a broad commitment to the Design and Place SEPP at a state government level. State Significant Precincts should become exemplars of how best to apply the matters for consideration under the Design and Place SEPP.

## 2.4 Design Review Guide

The EIE notes that the proposed new Design Review Guide will define thresholds for State and local government design review and establish consistent terms of reference and robust requirements for design review panels and design quality evaluation, addressing industry concern.

The proposed Guide will define thresholds for State and local government design review and establish consistent terms of reference and methods for design review, evaluation and non-compliance.

Clarity around the roles and operation of and between State Design Review Panel and council design review panels will therefore be a key requirement.

The development of the Review Guide will be critical to the success of the SEPP's implementation.

This is because it will fundamentally test the workability of the principles-based design approach for Development Assessment Officers, design review panels and ultimately the Land and Environment Court assessing design merit and judging adherence to the design principles and the level of compliance with the mandatory requirements.

It will test whether this SEPP's application of a principle-based approach is fit for purpose and whether the policy can reduce the complexity of the planning system without reducing its rigour.

One of the advantages of a principle-based approach is that it encourages greater creativity and innovation, moving away from using prescriptive 'one-size-fits-all' rules to a more local, context-specific approach. It is a boon for designers and urban planners to develop contextual and innovative design responses.

The opportunity is to create and share a common language and common goals for delivering well designed places in NSW.



However, there is a risk that a developer/proponent could use the ambiguity that is necessarily a part of a principles-based approach to increase development yields beyond good design and the intended planning controls.

Another risk of a principle-based design approach, if this is not adequately resolved, is that the assessment process for assessors and reviewers of a development's merits becomes more subjective and open to contest. It could have the unintended negative consequences that lead to more time consuming assessments, more disputes and appeals, development delays and additional costs at the back end of the development approval process.

Ensuring that the local strategic planning instruments retain primacy for interpreting and shaping the five design principles contained in the SEPP can provide a clear and consistent framework that gives rigor to a more local context specific approach.

It is noted that the Design Review Guide will 'give consideration to review timeframes commensurate with project complexity'. This needs to be undertaken as part of the reform of the EP&A Act, as the guide will not be able to override the requirements of the Act, most notably the 'deemed refusal period' as per Clause 113 of the Regulations.

# 2.5 Urban Design Guide

The creation of an Urban Design Guide is seen as a positive step that will assist Councils, planners and decision-makers in assessing proposals from an urban design perspective and proponents in understanding how to embed design.

SSROC looks forward to the ability to provide more detailed commentary and feedback when additional details regarding the Urban Design Guide are made available.

# 2.6 Resource implications for Local Councils and consent authorities

The new SEPP will formally expand the roles and processes to be managed by many Local Councils. This will have resource implications for councils:

- training and upskilling staff in building and urban design to support implementation
- cost of establishing/remodelling and running design review panels.

Transitional arrangements should be considered where councils have already undertaken significant design work towards a precinct. Managing transitions will also require further resources.

The introduction of a principles-based design approach will require significant upskilling of assessment officers and local planning panels. In order to ensure consistency and predictability for proponents, they need to be able to rely on a consistent interpretation of the principles in the Design and Place SEPP.

The EIE does not state how the SEPP will be considered as part of applications where the consent authority is a local or regional planning panel, IPC and for Part 5 proposals. It is also relatively unclear how the SEPP will be considered in planning proposal assessments or in the determination of SSD applications.



Each of these different planning pathways has a unique assessment process and the integration of a SEPP with such a wide policy remit will require a bespoke approach. To facilitate predictable outcomes for proponents, there should be greater and more specific guidance on when consideration of the Design and Place SEPP is required and how proponents can demonstrate it has been satisfied.

SSROC notes that application of the SEPP where the consent authority is a local or regional planning panel or the Independent Planning Commission (IPC), and for proposals made under Part 5 of the Environmental Planning and Assessment Act 1979, will be determined during development of the Design and Place SEPP. This should be developed as a matter of priority to ensure all relevant determination authorities have the understanding and skills necessary to consider the Design and Place SEPP.

It would be a poor outcome if a proponent who operates across multiple local government areas received different feedback from local planning panels, regional planning panels or design panels on how the Design and Place SEPP is applied to development.

Assessment officers, planning panels and design panels will require training and guidance material to help them consistently interpret the Design and Place SEPP and ensure that the flexibility offered by a principles-led approach does not result in a lack of predictability in assessment outcomes. Such training and guidance should address prioritisation and the interaction of design principles and the determination of satisfactory design outcomes.

Design review panels, design excellence panels and chairs need on-going support, training and as well as being required to report on their practice to ensure advice provided is consistent with Design and Place mandatory considerations. Clarification is required on how this support will be provided and how to best ensure consistent and transparent advice from panel members.

## 3.0 Key Recommendations

- 1. The Design and Place SEPP must clarify how principles will integrate with existing planning systems
- While SSROC supports a principles-led approach to planning, SSROC holds a concern that vagueness of principles could diminish certainty of outcomes for communities and proponents. The EIE and SEPP need far greater clarity about how the principles interact with existing assessment processes which currently ensure environmental protection, building quality and alignment with community expectations.
- It is recommended that the 'Principles' are included as (or otherwise tied to) the aims/objectives of the SEPP, rather than just being matters to be taken into consideration.
- The interface between the Design and Place SEPP, other SEPPs and local planning controls need to be well thought-through and clearly communicated for all stakeholders.
- This principles-led approach needs to consider how local planning instruments, development control plans, strategic plans and local character will be respected and



- enhanced by the imposition of state-wide design and place principles. Development control plans for instance already include local place-based design provisions.
- As a baseline, alignment and correlation with Local Strategic Planning Statements
  (LSPS) and Local Environmental Plans (LEPs) strategic objectives and intent should be
  clearly articulated by the SEPP as the primary standard and yardstick to be used for
  assessing the compliance and strategic fit of local design responses. Councils must
  retain a clear role in articulating design outcomes that help shape the implementation of
  their LSPS and LEP.
- DCPs that are well aligned with their LSPS and LEP should also be afforded a similar status and be used to shape the expression of the Design and Place SEPP in the development's design.
- There are important questions about how the principles will be implemented to achieve well-designed places, and their interpretation by the Land and Environment Court. There is the risk that principles will be adjudicated through court systems where vagueness in language exists. SSROC is concerned that the Land and Environment Court may be required to determine the intent of Design and Place SEPP principles, in ways which would not be aligned to good design outcomes due to their ambiguity.
- 2. The Design and Place SEPP must clarify the requirements and their application to the different scales and settings (3.2.2 Mandatory matters for consideration)
- SSROC strongly recommends the inclusion of clear, strong, and measurable standards
  to ensure that the SEPP's desired outcomes are achieved. In order to allow for genuine
  evidence-based innovation and creativity, pathways for variation from any standards
  should be clearly defined for different scales and settings.
- The Mandatory Matters for Consideration (MMfC) should be framed in a way to make it clear that they are not just elements to consider, but rather elements that must be central to the design. The use of the term "consideration" implies that they are non-determinative thereby undermining their importance. It is recommended that the MMfC are instead framed as mandatory matters that the consent authority must be satisfied have been met before approval is granted.
- More mandatory matters should be applied to all scales of development. Precinct-scale development might be the most efficient scale to see a quick transition to well-designed places, but opportunities for incremental change through smaller-scale development must not be overlooked as when added up, these small changes may ultimately result in the greatest positive difference. We recommend mandatory matters 6, 7, 8, 9 and 11 be applied to "all other development" along with matters 12-19, inclusive and mandatory matters 13-19, inclusive, also be applied to precinct scale development.
- The correlation between proposed mandatory matters and single principles is problematic as many of the mandatory matters apply to multiple principles e.g.,



connectivity applies to all five principles. Associating a mandatory matter to only one principle may result in lost opportunities for maximising the effect of how each matter has been integrated into design.

 Clarity needs to be provided on how the mandatory matters will be addressed by applicants and assessed by the consent authority. Potentially, the mandatory matters could be addressed in the design statement.

One of the mandatory matters relating to housing diversity (11) affordable housing (19)

- A requirement to respond to the local housing strategy, local affordable housing scheme
  and the specific housing types and tenures appropriate for the demographic of the
  particular area is commended as the housing needs, challenges and opportunities will
  vary between the LGA's across urban areas within NSW, and a targeted location and
  housing market specific approach can best address these factors.
- The Greater Sydney Commission determined that 5-10% of a development being assigned as affordable housing units was generally feasible. SSROC recommends that a minimum of 5-10% affordable housing (over a certain number of dwellings in a development, or over a certain capital investment) be required for all development on rezoned land receiving uplift under the SEPP, with the provision that if there is a local scheme in place for a higher percentage, that the scheme overrides this.
- However, the SEPP proposes that where there are no targets or schemes for affordable housing that the applicant determines a viable amount. SSROC is concerned that developers may unjustifiably argue for a lesser or no provision of affordable housing units which a Council might not be able to reject. Given the chronic shortage of affordable housing across NSW, and especially in Greater Sydney, alternative mandatory minimum arrangements should apply.
- For example, the Waverley Affordable Housing Contributions Scheme Planning
  Proposal seeks to increase the amount of affordable housing by way of proposing a 1%
  levy on all new residential apartment development and supporting the minimum 10%
  levy for sites receiving uplift, calculated in accordance with the market value of
  residential floorspace around the time of the development.
- 3. The Design and Place SEPP is supported for its strategic approach to master planning and precinct design
- SSROC supports the application of this policy to precinct scale development and a strategic approach to design outcomes at this level.
- The Design and Place SEPP must also apply to state precincts and such precincts should be used as exemplars of the principles in the Design and Place SEPP.
- While the SEPP is intended to apply to a wider range of development, the drafting is targeted most closely at residential development and the SEPP should consider principles for commercial, industrial, health, education and other precincts.



- 4. The Design and Place SEPP needs to acknowledge the role of planners in urban design and master planning
- The EIE indicates that the new category of 'qualified designer' will not include suitably experienced planners for the purposes of urban design and master plan projects.
   Placemaking because of its scale and reach is fundamentally more important.
   Accordingly, this design task also requires the recognition of "qualified planners".
- 5. The Apartment Design Guide must stay as an important tool for planners
- SSROC strongly supports the retention of the Apartment Design Guide (ADG) as a
  useful tool to assist assessment by officers, panel members and the Land and
  Environment Court. The proposed guide should improve the way it is applied and
  interpreted.
- SSROC also supports the enhancement of the document to reflect the principles of the new SEPP, however, will make comments on detailed amendments as they become available. Any attempts to provide additional flexibility in the application of the ADG should not undermine building performance.
- SSROC would like to see that the document and the future Urban Design Guide have increased applicability to not just new development contexts, but also infill development in areas with important local character attributes.
- The review of the ADG should also reflect new housing typologies proposed under the Housing Diversity SEPP. A number of these new housing typologies were proposed to include design guidance, and this should be included as part of the Design and Place SEPP – particularly student accommodation, boarding houses and co-living.
- Deep soil zones should be increased to reflect the urgent need for greater urban tree canopy. It is concerning to see the potential winding back of deep soil provisions signalled in this part of the EIE.
- 6. The Design and Place SEPP should be more ambitious in sustainability targets and strategy
- The SEPP should take the opportunity to significantly improve BASIX and advance the tool beyond its original scope, rectify fundamental flaws and raise standards. BASIX must be grounded on future climate projections (e.g., 2050 or 2070) to ensure all development approved today is safe for future climates.
- The SEPP should also consider and expand tree canopy and deep soil zones –
  particularly issues of applicability to the Low Rise Medium Density House Code and
  Greenfield Housing Code.
- The Design and Place SEPP should reflect the goal net-zero carbon and facilitate the ratcheting up of carbon performance metrics to achieve carbon neutrality of all new buildings by 2030.
- The Design and Place SEPP should use precinct-scale focus to set the framework for low and zero carbon precincts.



# 4.0 Sustainability and resilience in residential and other buildings

This section provides more detailed commentary on the EIE elements of the SEPP promoting sustainability and resilience.

#### **4.1 BASIX SEPP**

- SSROC strongly supports the proposed BASIX review. SSROC supports higher BASIX requirements (and NABERs pre-commitments).
- BASIX is an important tool to achieve more sustainable and resilient dwellings. SSROC considers that a revised BASIX SEPP and tool will allow NSW to implement best practice development, setting itself up as a national leader in addressing heat and implementing sustainability standards. Below are a range of recommendations for consideration when reviewing the BASIX SEPP.

# 4.2 Existing work to inform BASIX review

SSROC would like to highlight several studies and reports that should inform a revised BASIX SEPP:

- Future Proofing Residential Development to Climate Change study<sup>9</sup> shows the limitations of the current BASIX tool and its governance. The study illustrates the risk that homes built today will be very difficult to keep liveable in future climate conditions, particularly due to increased cooling loads<sup>10</sup>. The study also found that both energy and water consumption could be expected to increase significantly in the future, with implications for equity, affordability, reliability of rainwater tanks and stability of the electricity grid.
- City of Sydney Planning for Net Zero Energy Buildings. This work indicates positive feasibility and developer acceptance of increased BASIX targets in line with a net zero target.
- WSROC Urban Heat Planning Toolkit and Cool Suburbs Tool which have delivered detailed planning and design guidance indicating how urban heat contributes to thermal efficiency of a dwelling, and how this can be mitigated.

#### 4.3 Allow Local Councils to set higher than BASIX standards

SSROC strongly agrees that BASIX standards should be the baseline, not the boundary.
 Unfortunately, under current legislation, the process for councils to implement higher than
 BASIX standards for local developments is prohibitive. As a result, higher than BASIX
 standards are hardly applied outside of design excellence developments. This is a missed
 opportunity to improve the liveability of the vast majority of new residential developments.
 SSROC strongly recommends that a revised BASIX should allow local councils to impose

<sup>&</sup>lt;sup>9</sup> Future Proofing Residential Development to Climate Change, WSP, 2021, Residential <u>Future Proofing Residential</u> <u>Development to Climate Change 2021.pdf</u>

<sup>&</sup>lt;sup>10</sup> The key recommendation from the Future Proofing study is that NatHERS, BASIX or any other modelling tool eligible for use under the Design and Place SEPP must be grounded on future climate projections (e.g., 2030, 2050 or 2070) to ensure all residential & commercial development approved today is safe for our future, hotter climate.



higher or more detailed standards especially where local circumstances like urban heat stress warrant this consideration.

## 4.4 Regularly updates to climate data

Any update to BASIX should be based on the most recent climate data available. And this
should be regularly reviewed and updated biannually due to a rapidly changing climate.
For example: current peak conditions (outdoor temperatures) and weather data used in
the tool are out-of-date and do not reflect the severity nor the frequency of heatwaves
experienced today or expected within the life of new building stock. This is especially true
in areas like Western Sydney that are particularly exposed to heat, as SSROC's
colleagues at WSROC have identified.

## 4.5 Integrating thermal comfort and thermal safety

- For residential buildings within NSW, BASIX sets requirements for energy efficiency, water efficiency and thermal comfort. However, the thermal comfort standards in BASIX are not the same as a thermal safety or thermal autonomy design standard. There is no recognition of thermal safety or thermal autonomy as a fundamental objective of compliance.
- Currently, thermal comfort is recognised in terms of energy use limits placed on heating/cooling systems to maintain that comfort. As such, heating and cooling caps define the maximum load placed on heating/cooling systems to maintain comfortable indoor conditions. This is an indirect measure of a building's thermal performance. While it is possible to choose no active heating or cooling, and meet the BASIX target based on passive measures, most homes include air conditioning and, in these cases, the inherent assumption is that this will function during heatwaves. However, not all homes have functional air conditioning, not all residents can afford to run it, renters unable to install it and air conditioning is dependent on reliable power.
- Furthermore, the thermal comfort requirements in BASIX are also limited by the fact that the tool's peak design conditions (outdoor temperatures) and weather data are out of date and do not reflect the severity nor the frequency of heatwaves experienced now, especially in environments which are particularly exposed to heat.
- This means that houses or apartment units in NSW will typically get hotter, faster, than they would if built to more stringent international residential building standards, and if they were built to meet these standards in the context of expected future climatic conditions.
- Cool homes are a vital element in addressing the impacts of urban heat, as houses are a
  key refuge in heatwaves, and need to maintain safe temperatures during extreme events.
  A revised BASIX should acknowledge this. SSROC urges the Government to integrate
  good design guidance and tools on design to achieve thermal safety/passive survivability
  objectives.
- Given the severity of the risk that extreme and urban heat poses to parts of Sydney,
   SSROC strongly reject the proposal to trade-off energy and thermal comfort targets



because of the potential to compromise thermal safety, e.g., during black outs and the vulnerability of many low income households.

• In a changing climate that, in line with the research conducted by Waverley, Randwick, Woollahra and other councils, SSROC recommends BASIX be also reviewed based on future climate data for the inclusion of a new thermal safety measure, given the impact of heat on the sleep of vulnerable people (with impacts starting at as low as 26°c).

# 4.6 Compliance and post-occupancy performance

- There is also evidence to indicate that in terms of actual post-occupancy performance, many BASIX-compliant homes are currently falling short of the standards reported in their BASIX certificates. Monitoring after construction has shown that BASIX-compliant homes are not reliably thermally comfortable, despite the code's intention to deliver comfortable indoor conditions. This partly results from the BASIX assessment method, which does not directly calculate comfort, instead it calculates peak heating and cooling energy demands as a proxy for comfort.
- Furthermore, there is evidence that BASIX substantially underestimates average energy requirements for cooling, particularly in Western Sydney (Ding et al., 2019). The same study found that in homes with high cooling energy use, poor design and build quality were key issues. These poorly performing homes may be failing to achieve thermal comfort or thermal safety in the event of a summer power outage. This indicates a potential gap at the compliance stage. This compliance gap is something that will need to be addressed.

Several opportunities for improvement exist, including:

- Use revenue generated from BASIX certificates to continually refine and improve the tool and framework.
- o Improve the compliance process, for example by mandating additional compliance visits during critical construction phases (e.g., potentially a NSW-funded compliance officer position). In addition, BASIX compliance should be appropriately funded to ensure the integrity of the program and that efficiency targets are realised. This could involve random sampling by the BASIX Assessor Accrediting Organisations.
- Improve disclosure requirements regarding energy and water performance of residential and commercial buildings at the point of sale or lease.
- Regularly update and publicly disclose the emissions factors in the BASIX and NABERS tools, in line with tool updates.

16

<sup>&</sup>lt;sup>11</sup> Ding et al 2019 - http://www.ijscer.com/uploadfile/2019/0315/20190315050734503.pdf



 There is concern that the proposal for a flexible approach to BASIX may lead consent authorities being unable to refuse development that they believe to be underperforming but which claim to be innovative.

# 4.7 Detailed recommendations about sustainability and resilience in residential buildings

- SSROC urges the Government to work closely with local government to inform the new BASIX SEPP. Several councils have worked on increased BASIX targets. This existing work should be acknowledged and considered to inform the new BASIX targets
- Ensure BASIX uses the most current climate data, including expected future climate change. Sub-regional climate projections (including Western Sydney) should be included.
- Review of all parameters likely to be affected by a changing climate. The review of BASIX should be considered in the light of NSW Government net zero carbon emissions target e.g., the promotion of all electric homes.
- Review available technologies to include new options available today.
- Include stronger energy efficiency and thermal comfort targets.
- An additional performance target for thermal safety/thermal autonomy (similar to CIBSE TM 5912) is needed to address overheating risk in present and future climate conditions.
   We seek to ensure thermal safety, i.e., so conditions remain liveable without air conditioning (or when air conditioning is disabled).
- Allow the ability for local councils to impose higher or more detailed standards where local circumstances like urban heat stress warrant this consideration.
- Review of the BASIX governance framework by an independent agency.
- SSROC strongly reject the proposal to trade-off energy and thermal comfort targets because of the potential to compromise thermal safety, e.g., during black outs.
- BASIX settings for residential gas should be reviewed in line with Government's net zero emissions target.
- Any rating should be calculated following the hierarchy of passive sustainable design and thermal performance of the building envelope, then energy efficiency of building services and fittings, then on-site renewables/low carbon energy, then off-site renewables/low carbon energy.
- Consider expanding BASIX to cover embodied emissions of construction material so as to encourage the increased the use of low emissions and recycled materials.

17

 $<sup>^{12}</sup>$  the CIBSE TM 59 – CIBSE TM 59



- The review of BASIX provides an excellent opportunity to expand the framework to achieve better water quality outcomes in addition to water savings. BASIX can be used to protect and create healthy waterways and increase green infrastructure implementation. Through council membership of the Parramatta River Catchment Group (PRCG), SSROC is supportive of recommendations for a Blue Green Index tool that works with BASIX including the following strategies:
  - Maximising pervious area and vegetation coverage, on-lot
  - Maximising rainwater harvesting
  - Maximising infiltration and evapotranspiration, and finally
  - o Treating any remaining runoff on lot prior to discharge to waterways.
- The Design and Place SEPP should use precinct-scale focus to set the framework for low and zero carbon precincts outlined in the Greater Sydney Region Plan. Provisions should be made to require higher targets and requirements for areas identified as Low Carbon Precincts.

## Merit Assessment Pathway

 The proposal to provide a different approach to demonstrate the development meets the sustainability performance requirements needs further consideration. This approach requires expertise at assessment level that a lot of councils would not have. It is acknowledged that this would require rigorous assessment and specified qualification accreditation requirements for assess.

# Pathways for Adopting Performance Standards

- The Design and Place SEPP should reflect the goal net-zero carbon and facilitate the ratcheting up of carbon performance metrics to achieve carbon neutrality of all new buildings by 2030.
- SSROC supports the City of Sydney's recommendation to create a mechanism in the SEPP to adopt the performance standards and timing to net zero energy buildings developed by the City with industry and government for some land uses to achieve net zero emissions sooner than 2050.
- The Design and Place SEPP should use the precinct-scale focus to set the framework for low and zero carbon precincts. The SEPP should set out a framework for the rules and definitions to be adopted for low and zero net carbon precincts.

#### Waste management

 Waste management is a key aspect of sustainability which can make a substantial difference to the way places function. Sustainable waste management practices through design should be implemented as a consideration throughout the Design and Place SEPP. To improve waste management, increase recycling and circular economy



principles, the New Apartment Design Guide should integrate the principles underpinning the NSW 20 Year Waste Strategy and the Circular Design Guide<sup>13</sup>.

#### **5 Conclusion**

Thank you for the opportunity to comment on the Design and Place State Environmental Planning Policy Explanation of Intended Effect. The breadth of the proposed SEPP is ambitious and should continue to be developed with extensive input from Councils to correctly navigate the intersections of the SEPP with local plans.

SSROC member councils cover a large portion of Greater Sydney and have a direct interest in supporting and advocating for changes to improve and sustain place-making and urban design and amenity. SSROC would encourage the EIE review process to consider the opportunities noted in this submission to strengthen what has been proposed through supporting local councils' strategic planning role. Local planning strives to both adopt and adapt sound planning and design principles to place-making in ways that respond to their local contexts, with their built and natural environments, to better meet community and business needs and aspirations will responding to the challenges of growth and a changing climate.

In order to make this submission within the timeframe for receiving comments, it has not been possible for it to be reviewed by councils or to be endorsed by the SSROC. I will contact you further if any issues arise as it is reviewed. If you have any queries, please do not hesitate to contact me or Mark Nutting, SSROC Strategic Planning Manager on 8396 3800.

The new SEPP's provisions will no doubt have a major impact on facilitating place-making and our local councils' role in delivering and implementing changes in support of good design for our communities.

Again, thank you for the opportunity to comment on the Design and Place SEPP Explanation of Intended Effect. SSROC looks forward to participating in futher consultations around the development of the Design and Place State Environmental Planning Policy.

Yours faithfully

Helen Sloan

Acting General Manager

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**Southern Sydney Regional Organisation of Councils** 

<sup>&</sup>lt;sup>13</sup> Circular design includes material selection, standardised components, designed-to-last products, design for easy endof-life sorting, separation or reuse of products and materials, and design-for-manufacturing criteria that take into account possible useful applications of by-products and wastes.