21st October, 2022

Tasmanian Housing Strategy Department of Communities Tasmania

By email at: tasmanianhousingstrategy@communities.tas.gov.au

RE: Tasmania's Housing Future Proposed 20-year 'Tasmanian Housing Strategy' Public consultation on the Discussion Paper, due by Friday, 21 October 2022.

Dear Marcus Jones, Minister of State for Housing,

On behalf of members of a local community group in Southern Tasmania (RENEW/Smart Energy Council), we submit our responses to the four key questions posed by the current, online public consultation process for your consideration.

Please also refer to our **Executive Summary** and **Summary of Recommendations** at the beginning of this document.

We trust that this helps guide this important process towards a positive, affordable and sustainable housing future for Tasmania.

Yours sincerely,

Tim

Tim Williams LFA

B.Arch.(Hons) | M.Sc.(Dist'n) in Architecture, Energy and Sustainability For and on behalf of the membership of *RENEW/Smart Energy Council Tas South* In 1971, while opening an art exhibition, Olegas Truchanas, Tasmania's great wilderness photographer and advocate, gave a speech from the heart:

"If we can revise our attitudes towards the land under our feet; if we can accept the view that man and nature are inseparable parts of the unified whole, then Tasmania can be a shining beacon in a dull, uniform and largely artificial world."

50 years later, in 2021, the world's great natural scientist and advocate, offered the nations of the world this sage advice:

"If working apart we're a force powerful enough to destabilise our planet, surely, working together, we are powerful enough to save it."

Having garnered pertinent and detailed responses from our membership, we advise the State Government to make their approach based on the following hierarchy of key principles:

- 1. Nature first;
- 2. Community second;
- 3. Regenerative, affordable, future-focussed housing third.

In this way, the needs of the planet, biodiversity, nature and its complex and inter-related and intertwined ecosystems will underpin the very foundation of all life on this, our oneand-only inhabitable place in the universe, Earth.

Then the needs of the community become paramount.

Then, and only then, take the advice of international experts, as the idea of affordable and sustainable housing has already been well considered and resolved.

For example, the 'Living Building Challenge'¹ and the 'Living Community Challenge' both provide all the guidance you could need.

In order to move forward towards a sustainable future we must learn from the mistakes of the past and seek evidence-based solutions with long-term positive outcomes.

Government leadership, far-sighted thinking and future-focussed legislation must guide your response to the critical issues pertaining to Tasmania's Housing Future ... and we, community members working in this space, are here to help.

~ https://living-future.org.au/living-building-challenge

¹ "The Living Building Challenge[™] (LBC) calls for the creation of building projects at all scales that operate as cleanly, beautifully and efficiently as nature's architecture.

Living buildings give more than they take, creating a positive impact on the human and natural systems that interact with them.

The LBC is a philosophy, certification and advocacy tool for projects to move beyond merely being 'less bad' toward becoming truly regenerative."

SUMMARY of RECOMMENDATIONS:

How could housing affordability be improved?

- 1. **Reduce the maximum Site Coverage percentage for the General Residential zone**, statewide (i.e. increase minimum Lot sizes and decrease maximum House sizes).
- 2. Reduce the financial incentives and tax benefits of houses as investments.
- 3. Mandate increased, truly affordable housing as a percentage of all new homes being built by the mass-housing builders and developers.
- 4. Create '**car-free living' zones**, where people choose to use public transport (*and small electric vehicles when affordable*), only.
- 5. **Develop public transport systems** and **foresee future public transport needs**.
- 6. Create a new Planning zone to enable **medium-density residential developments** (including contemporary terrace housing) and renewal of local shopping centres and suburbs as villages/community hubs within the bigger cities. These should be along main public transport routes, around transport interchanges/hubs and existing and future shopping and community services centres.
 - 6.1. Require all new subdivisions to include the '**community infrastructure**', described above, in their master planning as part of the Development Approval process.
 - 6.2. Create a minimum percentage of all new homes (built by the mass-housing builders and developers) to be medium density and affordable (*including a very specific definition of 'affordable'*). This is to be complemented by **accessible, communal, 'green', open space**, to be calculated as a minimum area per medium-density residential home in its vicinity.
- 7. Introduce the British 'allotment' (i.e. **community garden**) system within easy reach of medium-density homes in order to provide an area for residents to grow their own produce.
- 8. Regulate and democratise the housing market by **removing government-funded incentives and tax breaks for property investors**.
- 9. Housing supply should be increased mostly within walking distance (approximately 3km) of CBDs, (or along frequent public transport routes):
 - 9.1. Offer incentives to **add ancillary dwellings within this zone**, specifically, redesigning portions of existing dwellings for long-term rental. This could include financial or other assistance to engage building professionals. The fact that ancillary dwellings do not require separate services makes them more affordable. This should mostly apply close to town centres, as sustainable transport options are sparse in more distant suburbs and transport costs increase.
- 10. Regulate for a small maximum percentage of short-term rental (including AirBnB) properties within all residential zones to **free up long-term rental homes for local residents**.
- 11. Require high quality planning and design by skilled architects, engineers and planners in order to **design healthy neighbourhoods** that promote physical activity, reduce vehicle dependency and foster social and commercial activity. Within such neighbourhoods, smaller homes can be built that satisfy the occupants' needs, requiring less cost for housing per person and per family and achieve greater housing affordability.

- 12. Through the Tasmanian version of the National Construction Code (NCC), require all new homes to:
 - 12.1. be a minimum NatHERS star rating of 8-stars by 2025, on the path to net-zero construction of all new homes by 2030.
 - 12.2. be 'All electric' (i.e. no gas, oil or wood-burning for cooking, heating or hot water),
 - 12.3. have only highly energy-efficient white-goods,
 - 12.4. use only locally-sourced, low embodied carbon, re-useable/recyclable and truly sustainable building materials.
- 13. Avoid spending a lot of money quickly to try to build lots of cheap and poorly designed houses.² This will inevitably result in poor quality neighbourhoods and slums that attract social problems, and the houses will have a short life span due to the poor-quality of build or design. This approach cannot meet the needs of Tasmanians into the future and must be revisited and improved immediately.
- 14. Create **public education campaigns** in order to increase understanding of the long-term benefits of:
 - 14.1. building smaller & smarter new homes.
 - 14.2. low energy buildings, and by extension, **net zero energy buildings** to reduce running costs.
- 15. Create a **mandatory but free education program** for all licenced builders, designers and planners, as well as information for the general public, highlighting the reduced impact of low energy construction on the environment as a means to increase the demand for smarter, higher-quality, lower capital cost and even lower running cost, new homes. **Reward builders for achieving these outcomes**.
- 16. If the relationship between income and housing cost is an indicator of affordability, then increased income means more housing choice. We know that income increases with education. Therefore, **better education opportunities and support should be offered to low-income families**.
- 17. **Build more smarter, smaller dwellings** (e.g. one bedroom, bedsits), for single people, young couples, empty nesters, down-sizers, divorcees, single parents, etc.
- 18. Legislate to allow for co-housing developments (like 'retirement villages' but for working-age people). Smaller (and therefore, cheaper) 'homes' but with shared communal facilities creating increased density but with a fully developed, social and community benefit for all inhabitants, using a horizontal as well as vertical Strata-title model in a 'village-like' layout. This will encourage resource sharing as well as food security and community-scale resilience. This is a more affordable model for individuals, couples and families than single residences on single lots.

² "The Tasmanian Government has committed to investing over \$1.5 billion to deliver a 10-year housing package, building on existing initiatives to build or acquire 10,000 new social and affordable homes by 2032. Clarification is requested around the allocation of these funds. With the aforementioned figures, a budget of \$150,000 exists for each household, which is not sufficient for even a small, reasonable quality dwelling." **'Tasmanian Housing Strategy Discussion Paper Feedback**', Sustainable Living Tasmania (SLT), page 1, October 2022.

How could housing supply be increased so that it meets the needs of Tasmanians now and into the future?

- 1. By increasing density to **medium-density housing (not high-rise)** along main public transport routes and around existing and new commercial and community service hubs, *instead of subdividing existing plots, reducing minimum plot sizes and destroying the nature and biodiversity that flourishes in gardens.*
- 2. **Require high quality planning and design** by skilled architects, engineers and planners in order to design healthy neighbourhoods that promote physical activity, reduce vehicle dependency, support communities and foster social and commercial activity.
- 3. Avoid spending a lot of money quickly to try to build lots of cheap and poorly designed houses.^[3] This will inevitably result in poor quality neighbourhoods and slums that attract social problems, and the houses will have a short life span due to the poor-quality of build or design. This approach cannot meet the needs of Tasmanians into the future and must be revisited and improved immediately.
- 4. **Encourage downsizing** with social and financial incentives:
 - 4.1. Family sized homes being occupied by singles or couples can downsize.
 - 4.2. 'Empty Nesters' continue to live in family homes, as this is convenient and a community connection has been established. If there were substantial financial and social incentives to move into private housing with fewer bedrooms, this shift would be made easier. This makes housing available without the need to build more!
 - 4.3. Need for an increased percentage of **smaller dwellings** (one bedroom, bedsits).
- 5. **Encourage resource sharing**, e.g. Baugruppen (i.e. community-led housing ['baugruppen' in German]), **co-housing**, intentional communities.

6. Housing supply should be increased mostly within walking distance (approximately 3km) of CBDs, (or along frequent public transport routes):

6.1. Offer incentives to add ancillary dwellings within this zone, specifically, redesigning portions of existing dwellings for long-term rental. This could include financial or other assistance to engage building professionals. The fact that ancillary dwellings do not require separate services makes them more affordable. This should mostly apply close to town centres, as sustainable transport options are sparse in more distant suburbs and transport costs increase.

How could housing be made more sustainable?

- 1. **By requiring all new homes to be designed and built to be zero carbon emissions** by 2025. For your information, the UK made this a requirement for all new homes by 2016, way back in 2007 (The Code for Sustainable Homes). That's how far behind our ambitions in this regard are. It possible to achieve this ambition NOW and it has been for many years. It just needs leadership from governments and legislation to require it.
- 2. **Mandate public open space**, easily accessible by all residents, with shade trees, space for children to kick a ball or ride a bike, and potentially a community garden to increase connectivity between residents and reduce cost of living pressure.
- 3. **Design the Housing Strategy with the** *future* **in mind** by no longer using the historical climate data as a guide. The NCC uses Climate Zones as the basis for

required thermal efficiency measures. Today's requirements will no longer be suitable for the foreseeable future climate conditions. The Housing Strategy needs to foresee and build in the required resilience and adaptation for all future housing to remain appropriate, fit-for-purpose, comfortable and affordable in the everchanging world of the very near future.

- 4. In this regard, there now needs to be an increased focus on the number of required **building inspections** for all new homes, so that a formal and documented inspection is carried out once a new house is insulated, but before the internal lining and external cladding goes on the external walls, unless a blower door test is done at this stage to check the required air tightness. The NatHERS rating system vaguely predicts the thermal comfort performance of the new house at the design stage only. Inspections are now required to ensure that the insulation system specified is installed in the correct manner in order to achieve this statutory thermal performance requirement.
- 5. Create a **mandatory but free education program** for all licenced builders, designers and planners as well as information for the general public, highlighting the reduced impact of low energy construction on the environment as a means to increase the demand for smarter, higher-quality, lower capital cost and even lower running cost, new homes. Reward builders for achieving these outcomes.
- 6. Create community education and training of industry professionals in the use of **natural building materials**.
 - 6.1. Natural building materials typically have much lower carbon footprint, no harmful chemicals, and when suitably designed, provide a combination of insulation, thermal mass and condensation management that is far superior to manufactured materials and building systems. With proper design, construction and maintenance they also last a long time, potentially longer than conventional building materials. Common natural building systems suited to Tasmania's climate and availability of materials are: straw-bale, hempcrete, light earth, rammed earth, mud brick, earth floors, green roofs.
- 7. In Tasmania (NCC climate zones 7 & 8), a minimum of **double-glazing** needs to be a BCA requirement.
- 8. Foil-based building wraps need to be ruled out.
- 9. **Building Surveyors should be trained in high-quality ventilation detailing**, and it needs to be added to their responsibilities to inspect the above. Alternatively, a third entity could advise and control the recommended detailing and quality of insulation and building membranes.
- 10. With condensation improvements implemented, introduction of 8-stars by 2025, as a milestone to zero-carbon buildings including all new houses by 2030.

Is there anything else you think could be considered in the Tasmanian Housing Strategy?

1. The vast majority of Tasmanians would not support a growing population to the extent set out in the discussion paper. **Population growth** will not only increase the need for housing, but also the need for healthcare, education, jobs, food, water, energy, materials, etc., together with pressure on the natural environment, mental health, social connections, etc.

2. There needs to be an agreement with the **need for either larger minimum block** sizes or greater setbacks from boundaries.

New sub-divisions are densely packed with houses, all with dark roofs, and will be a problem as the climate warms. It will generate a heat island, with no space for shade trees, apart from the road verges. The close proximity of the houses will prevent any cooling breezes on increasingly hot summer days. This will increase the need for air-conditioning and incur higher electricity costs.

We are concerned about the **physical and mental health of children** who grow up in areas like this, with no space for outside play and no room in the backyard for a trampoline, or any fruit trees or vegetable beds. These are family homes, but don't have external living space.

Large developments should have **mandated public open space**, easily **accessible** by all residents, with **shade trees**, **space for children** to kick a ball or ride a bike, and potentially a **community garden** to increase connectivity between residents and reduce cost of living pressure.

Another thing that would be good is a building inspection once a house is insulated, but before the plaster goes on the walls, unless a blower door test is done at this stage to check air tightness.

- 3. Legislate for clear and ambitious goals to turn around and to start radically reducing the carbon emissions of all new homes.
- 4. Legislate for transparent 'declarations' of the chemical content of all construction materials. The **embodied energy of building materials** from their extraction of raw materials, manufacturing processes, transportation, construction systems and end-of-life disposal needs urgent attention.
- 5. **Remove government funded incentives and tax breaks for property investors**, and lobby the federal government and other state governments in this regard.
- 6. **Mandatory disclosure of NatHERS star rating for both rentals and property sales**. This has been implemented in the ACT for many years. It will raise the public awareness of energy efficiency, and will make energy efficient buildings more desirable.
- 7. We propose the following Environmental Standards for new subdivisions:
 - 7.1. Keep the majority of existing trees and all mature, endemic, native trees.
 - 7.2. Keep soil & native plants.
 - 7.3. **Environmental planner to be consulted** regarding location of driveway, possible orientation, retention of vegetation, stormwater retention and local stormwater features.
 - 7.4. **Street tree details** and their reaction to the stormwater system.
 - 7.5. Provide frequent public transport and separate bike lanes.
 - 7.6. Design using cul-de-sacs, traffic calming and footpaths separate from roads.
 - 7.7. **Create a range of block sizes** (to attract diverse community and avoid ghettos).

- 7.8. Create safe bike paths continuous to economic sub-centre.
- 7.9. **Provide park & ride options**.
- 7.10. Legislate for suitable boundary setbacks from side and rear boundaries to ensure visual and aural privacy between properties, as well as ...
- 7.11. ... Clear solar access for all north-facing roofs, habitable rooms and open space areas.
- 7.12. No wood heaters or fossil fuels for heating, cooking or hot water systems.
- 8. Allow for longer time frames that allow for a quality response led by highlyqualified, independent and experienced planning and design professionals.







If working apart we're a force powerful enough to destabilise our planet, surely, **working together working together to are powerful cough to save it**.

CLIMATECOUNCIL.ORG.AU

crowd-funded science information

Name: **Tim Williams**, Building Designer and ESD Consultant

How could housing affordability be improved?

1. By requiring an increased Open Area on each block of land within the General Residential Zone (i.e. by reducing the maximum Site Coverage percentage). This would ensure that new homes were smaller and therefore more affordable.

2. Reduce the financial incentives and tax benefits of houses as investments. Houses are primarily for living in and not for excessive profit making.

3. Mandate increased, truly affordable housing as a percentage of all new homes being built by the mass-housing builders and developers.

4. Increase minimum Lot sizes and decrease maximum House sizes. More room for gardens, nature, biodiversity, solar access, play, local food production and natural beauty.

How could housing supply be increased so that it meets the needs of Tasmanians now and into the future?

By increasing density to medium-density housing (not high-rise) along main public transport routes and around existing and new commercial and community service hubs, instead of subdividing existing plots, reducing minimum plot sizes and destroying the nature and biodiversity that flourishes in gardens.

How could housing be made more sustainable?

By requiring all new homes to be designed and built to be zero carbon emission. This is feasible, viable and practical to do NOW. Not increasing the NatHERS Rating requirements for new homes in Tasmania from the existing benchmark of 6-stars to just 7-stars by the current Tasmanian Government is greatly concerning, as it increases the carbon emissions from here-on with more new homes that will need to be retrofitted, at considerable cost, in the immediate future.

Requiring all new homes to be electric only would be a simple and very effective response to legislate immediately as this will ensure that wood, gas and oil-based appliances are phased out of all new domestic environments, at least.

Please open your eyes, listen carefully and respond appropriately and urgently to what the science is clearly stating, for the sake of the planet, if not humanity and all living species.

Is there anything else you think could be considered in the Tasmanian Housing Strategy?

YES, more clear and ambitious goals to turn around and to start radically reducing the carbon emissions of new homes for the sake of the future of our one-and-only planet, our species and all other living species.

Look around the world at those who are leading in this regard and follow their lead. There are

processes currently available that we can follow and I highly recommend that the '*Living Building Challenge*' (<u>https://living-future.org.au/living-building-challenge</u>) be considered carefully prior to any decisions being made about the future 'Tasmanian Housing Strategy'. I offer my professional services as a specialist consultant in this regard.

The embodied energy of building materials from their extraction of raw materials, manufacturing processes, transportation, construction systems and end-of-life disposal, needs urgent attention. For example, if 'concrete' was a country, "... the cement industry would be the **third largest** in the world, its emissions behind only China and the US." It was responsible for emitting, "... up to 8% of the world's greenhouse gas emissions" in February 2019, which is around 2.5 billion tonnes of carbon dioxide [CO₂] per year, and it would only have increased since then.³ This cannot continue and there are better alternatives.

Also, a local horticulturalist and gardening journalist (Helen Cushing), has written a very worthwhile book, entitled, '*Beyond Organics: gardening for the future*'. It describes the critical importance of allowing homes to have plenty of open space for gardens. An often overlooked benefit of suburban gardens is that their combined area creates significant ecological systems for biodiversity to thrive within our cities and towns. Increased housing density destroys these biodiversity sanctuaries.

Name: Stephen Cameron

How could housing be made more sustainable?

I am motivated by the idea of many parts of Hobart becoming good for car-free living, so use public transport and small electric vehicles for the most part. If there were the land-based north-south route (light-rail preferred) above and ferry services up and down and across the river that would make most suburbs like that I foresee. It also encourages medium to high density residential developments and renewal of local shopping centres and suburbs as villages within the bigger cities.

Is there anything else you think could be considered in the Tasmanian Housing Strategy?

Like many others I'd like to see an efficient public transport system created between Hobart and Glenorchy and later on to Bridgewater and Brighton. If this were to happen I can foresee high density housing developing along the route around stations. Also potentially decentralisation of businesses to Glenorchy and maybe even Brighton.

Name: Nigel Legge, Architect

How could housing affordability be improved?

³ The Guardian, "<u>https://www.theguardian.com/cities/2019/feb/25/concrete-is-tipping-us-into-climate-catastrophe-its-payback-time-cement-tax</u>" Tue 26 Feb 2019 03.40 AEDT [sourced: Saturday 17 September 2022].

The major obstacles to more affordable housing in Tasmania are planning regulations that prevent the availability of one or two storey duplex or row housing units for new home buyers, and the lack of any guidelines for smaller scale developers who currently only use the standard 'three bedroom on a standard block' model. Tasmania has a very low proportion of higher density housing and this style of housing is used widely on the mainland.

Multi level apartment blocks are not appropriate for more suburban settings and duplex or row housing with limited parking requirements could be encouraged closer to transport and commercial areas.

Is there anything else you think could be considered in the Tasmanian Housing Strategy? More flexible guidelines for off-street parking should be developed. The necessity for only one vehicle access onto a block requires parking and turning space for all vehicles within the block, and reduces usable external areas for passive, private recreation. Vehicle parking requirements could be reduced to one vehicle per house for two bedroom units and none for single bedroom units or units closer to commercial areas with good public transport.

Deeper blocks should be encouraged to allow small gardens and external living space at the rear of units, maybe with lanes for access at the back.

There has been a serious shift in home affordability and more drastic measures are now required to enable young households the security of home ownership they deserve.

All levels of government must now start taking a more pro-active role and not just leave it to the private market to sort it out as it is just not happening.

Name: Stephen Cole, Engineer

How could housing affordability be improved?

- Removing government funded incentives and tax breaks for property investors.
- See dot point below High quality planning and design by skilled architects, engineers and planners etc.

How could housing supply be increased so that it meets the needs of Tasmanians now and into the future?

- High quality planning and design by skilled architects, engineers and planners to design healthy neighbourhoods that promote physical activity, reduce vehicle dependency and foster social and commercial activity. Within such neighbourhoods, smaller homes can be built that satisfy the occupants' needs, requiring less cost for housing per person and per family.
- NOT spending a lot of money quickly to try to build lots of cheap and poorly designed houses. This will result in poor quality neighbourhoods and slums that attract social problems, and the houses will have a short life span due to poor quality of build or

design, and so it does not meet the needs of Tasmanians into the future. Sadly, this is what is happening now.

How could housing be made more sustainable?

- Programs to increase community awareness of sustainability in housing and how it also creates better houses that hold their value better.
- Community education and training of industry professionals in the use of natural building materials. Natural building materials typically have much lower carbon footprint, no harmful chemicals, and when suitably designed, provide a combination of insulation, thermal mass and condensation management that is far superior to manufactured materials and building systems. With proper design, construction and maintenance they also last a long time, potentially longer than conventional building materials. Common natural building systems suited to Tasmania's climate and availability of materials are: straw-bale, hempcrete, light earth, rammed earth, mud brick, earth floors, green roofs.

Is there anything else you think could be considered in the Tasmanian Housing Strategy?

- Getting real about removing government funded incentives and tax breaks for property investors, and lobbying the federal government and other state governments about it.
- Allow for longer time frames that allow for a quality response led by quality design professionals, rather than quick responses to suit the political cycle and panic due to the urgency of the situation.
- Funding for community education and training of industry professionals and potentially unemployed people in the use of natural building systems.

Name: Richard Jackson, Building Designer

I believe the current planning scheme is not capable of solving the housing crisis within the confines of its particular protocols and regulations. In other words, it's not fit for purpose in my view. To re-write parts of this to encompass the changes required would be very nearly impossible due to this being a brand new scheme, several years in the making and therefore extremely resistant to any further modifications.

Perhaps an explanation is required here. I am from Edinburgh in Scotland. A medieval city 1,000 years old which over many centuries has had to deal with many housing crisis' over that time. From the depopulation of the countryside into the cities in the 1700's and continuing and the clearing of the population of country estates in the 1800's forcing even more into the cities the statutory authorities have had to invent innovative solutions for this. This situation also applied to every city within Europe to various degrees. I firmly believe that the answers to present day problems can always be found in the past in the mantra 'there's nothing new under the sun'.

Even further back in time to the city states in Mesopotamia 6,000 years ago housing would have been at the forefront of the authorities concerns as the rural population flooded into the cities. There's no written record of their particular solutions in existence but there is for the last 1,000 years of our own.

Taking the UK in particular and Europe in general as an example there would be hardly a village or small town that would not have a 'High Street' with shops all along the ground floor with 2 stories of residential living above. This scenario continues out from the town centre with residential living of 2 and sometimes 3 stories. Single residences only appear when leaving the village and entering the countryside. In other words a very efficient use of land. Turn our attention to Australian towns and villages and you can see where the first mistakes were made and are continuing to the present day.

Radiating outwards from the major cities are streets with commercial premises on the ground floor with 3 stories of residential living above with an additional apartment within the roof space making 4 stories in total of residential living on the one site. Residential only buildings usually consisted of 3 stories. Green space was provided by 'squares'. You can see now where fundamental mistakes were made in the planning of cities. Far too late to remedy this of course. We unfortunately have followed the American example with broad-acre sub divisional estates generally for single homes with a sprinkling of multi-residential and connected to the main city by a road or highway and that's the end of that. That particular viewpoint in my opinion has to change. That is the starting point.

At a distance from the city centre residences then change to terrace housing each with their own private back and front gardens usually in blocks along the street frontage and separated from the next block by a communal green space.

So, what's the answer?

This, to my mind, is the answer - to allow terrace housing instead of individual lots on a certain number of mandated streets within new subdivisions. Terrace housing by its very nature is economical to build due to economies of scale which would also reduce the current financial burden on young people aspiring to have a home of their own as well as helping to solve the housing crisis. The current planning scheme only allows 325m2 per unit on multi-unit single lots. Terrace housing would provide many more housing units as compared to this.

This idea however, falls completely flat if residents insist on having 2 cars per household so infrastructure such as trains, buses etc would have to be provided to alleviate this. Once again probably a stretch too far for the Tasmanian or Federal Governments to consider as it involves a complete change of philosophical strategy. But something has to be done. More of the same or fiddling around the edges with what we've got won't do it.

It's time for a complete re-think in my view.

Name: Guy Greener, Building Designer

The planning system is not fit for purpose.

Planners are taking wobbly, hesitant steps in the right direction (banning black roofs in Western Sydney, the nation's "heat island", and curbing BnBs here in nipaluna). There is a move to smaller blocks/denser housing generally, which makes sense in the more urban areas because of limited available land, so perhaps your terrace housing system has

merit, with some of the "saved" land as communal open area. Or even the British allotment system; an area to grow your own veggies, and if that isn't your bag, you would have the right to lease it to someone else.

But getting the average Aussie to forgo their 3-bedroom brick dream home on 550 m2 could be a sticking point - although, these days, the legions of car and tent dwellers probably would be glad of a terrace house. Anything in the interim.

Transport is the other sticking point. Unless we manage to coalesce a fair percentage of the population into an area preferably already serviced by an efficient rail or bus network, everyone is going to need their 2 cars, electric or otherwise. Maybe the terrace house has 2 car spaces plus entrance and utilities downstairs. An exciting facade of roller doors Maybe the car spaces could be designed to be reasonably easily retrofitted as additional accommodation by utilising one or both car spaces.

And into all of the buildings, of course, energy efficient white-goods, sustainable building materials (adopting the Living Building Challenge⁴ principles, as much as reasonably possible).

Just requires a colossal change of mindset, both of the general population and the legislators.

Name: Anne Watson, Academic and Convenor, Renew/SEC Tas South

We need an agreement with the need for either larger minimum block sizes or greater setbacks from boundaries.

Sub-divisions, such as the development on the southern boundary of New Norfolk, are densely packed with houses, all with dark roofs, and will be a problem as the climate warms. It will generate a heat island, with no space for shade trees, apart from the road verges. The close proximity of the houses will prevent any cooling breezes on hot summer days, and New Norfolk is already much warmer than Hobart. This will increase the need for air-conditioning and incur higher electricity costs.

I'm also concerned about the physical and mental health of children who grow up in areas like this, with no space for outside play and no room in the backyard for a trampoline, or any fruit trees or vegetable beds. These are family homes, but don't have external living space.

Large developments like this should have mandated public open space, easily accessible by all residents, with shade trees, space for children to kick a ball or ride a bike, and potentially a community garden to increase connectivity between residents and reduce cost of living pressure.

⁴ For further details regarding the Living Building Challenge, go to, <u>https://living-future.org.au/living-building-challenge</u>.

Another thing that would be good is a building inspection once a house is insulated, but before the plaster goes on the walls, unless a blower door test is done at this stage to check air tightness.

Name: Uta Green, Architect

How could housing affordability be improved?

- Public education towards building smaller & smarter
- Public education on low energy buildings, and by extension, zero energy buildings to reduce running costs
- If income/housing cost is an indicator for affordability, increased income means more housing choice. Income increases with education; therefore, better education opportunities should be offered for low-income families.

How could housing supply be increased so that it meets the needs of Tasmanians now and into the future?

- In the first place, decrease demand.
- Encourage downsizing (social and financial incentives):
 - Family sized homes being occupied by singles or couples can downsize.
 - 'Empty Nesters' continue to live in family homes, as this is convenient and a community connection has been established. If there were substantial financial and social incentives to move into private housing with fewer bedrooms, this shift would be made easier. This makes housing available without the need to build more!
 - Need for smaller dwellings (one bedroom, bedsits).
- Encourage resource sharing, e.g. baugruppen (i.e. community-led housing ['baugruppen' in German]), co-housing, intentional communities.

How could housing be made more sustainable?

It is disappointing that the Tasmanian BCA has not been upgraded to the 7-star energy performance requirement that is being implemented in other states. This needs to be rectified on the way to more sustainable construction. The houses which are being built now will be less energy efficient than they could be for the lifetime of those buildings (around 50 years). Apart from an increase in the minimum star rating, a carbon zero aim will have to be pursued. Builders, designers and the public need to be educated on the impact of low energy construction on the environment.

The Minister cites an increased risk of condensation as the reason to retain the 6-star minimum NatHERS requirement. However, the condensation risk is not determined by high levels of insulation, as much as low quality building practices and building materials and building elements that have traditionally been used by builders, which have proven to attract condensation and mould in buildings, e.g. single glazing, aluminium window frames, foil building wrap, low quality detailing.

Recommendations:

- In Tasmania (climate zones 7 & 8), a minimum of double glazing needs to be a BCA requirement.
- Foil-based building wraps need to be ruled out.

- Building Surveyors should be trained in high quality ventilation detailing, and it needs to be added to their responsibilities to inspect the above; alternatively, a third entity could advise and control the recommended detailing and quality of insulation and building membranes.
- With condensation improvements implemented, introduction of 7-stars in 2024, as a milestone to zero-carbon buildings.

Financial incentives (e.g. reduced council approval cost) could support the following:

- All electric new homes or conversions (e.g. from gas to solar or heat pump hot water).
- Energy efficiency improvements for rental accommodation.
- 8-star housing.

Is there anything else you think could be considered in the Tasmanian Housing Strategy?

Mandatory disclosure of NatHERS star rating for both rentals and property sales. This has been implemented in the ACT for many years. It will raise the public awareness of energy efficiency, and will make energy efficient buildings more desirable.

We propose environmental standards for new Subdivisions:

- Must keep most existing trees.
- Must keep soil & plants.
- Environmental planner to be consulted regarding location of driveway, possible orientation, retention of vegetation, stormwater retention and local stormwater features.
- Street tree detail (stormwater).
- Must have public transport and bike lanes.
- Must use cul-de-sacs, traffic calming, footpaths separate from roads.
- Range of block sizes (to attract diverse community & avoid ghettos).
- Should have safe bike paths continuous to economic sub-centre.
- Park & ride options.
- Frequent public transport.
- No more Gas.