

## SUBMISSION ON BEHALF OF CARDINIA SHIRE COUNCIL Sustainable Cities 2025: A Blueprint for the Future

#### Introduction

A discussion paper has been released by the House of Representatives Standing Committee on Environment and Heritage which is undertaking an inquiry into "Sustainable Cities 2025".

The inquiry seeks to identify current and future patterns of settlement, the sustainability issues associated with these settlement patterns and how government policy might ensure that development areas retain an Australian lifestyle without diminishing the future value of Australian ecosystems.

The discussion paper scopes some of the issues currently being raised in discussion and research into sustainability of Australian cities.

The paper identifies several components which contribute to a sustainable city and outlines the issues and vision of these components.

As the discussion paper points out, there are more questions posed than answers provided.

The stated aim of the paper is to assist and challenge those who may make a submission or otherwise assist the committee in the inquiry.

#### Terms of Reference

The standing committee also seeks comments on the Terms of Reference which are: "to inquire into and report on issues and policies related to the development of sustainable cities to the year 2025, particularly:

- 1. The environmental and social impacts of sprawling urban development;
- 2. The major determinants of urban settlement patterns and desirable patterns of development for the growth of Australian cities;
- 3. A 'blueprint' for ecologically sustainable patterns of settlement, with particular reference to eco-efficiency and equity in the provision of services and infrastructure;
- 4. Measures to reduce the environmental, social and economic costs of continuing urban expansion; and
- 5. Mechanisms for the Commonwealth to bring about urban development reform and promote ecologically sustainable patterns of settlement."

As can be seen, the Terms of Reference are very extensive and far reaching and can embrace all issues associated with urban development throughout Australia.



The Terms of Reference are considered appropriate, however it is considered that point 1 should also include the economic impacts of sprawling urban development, both direct and indirect. This will make this point consistent with point 4.

Whilst the discussion paper identifies many of the initiatives being taken at the State and Local level throughout Australia in addressing specific sustainability issues associated with urban development, it has been recognised that a "more holistic national approach which integrates the components of an Australian Sustainable City" should be developed and devolved to and adapted by State and Local Governments.

#### Key components of a sustainable Australian city

The paper suggests that the sustainable Australian city of the future should:

- 1. Preserve bushland, significant heritage and urban green zones;
- 2. Ensure equitable access to and efficient use of energy, including renewable energy sources;
- 3. Establish an integrated sustainable water and stormwater management system addressing capture, consumption, treatment and re-use opportunities;
- 4. Manage and minimise domestic and industrial waste;
- 5. Develop sustainable transport networks, nodal complementarity and logistics;
- 6. Incorporate eco-efficiency principles into new buildings and housing; and
- 7. Provide urban plans that accommodate lifestyle and business opportunities.

### General Comment

The questions that are asked in respect of each of the above 7 essential elements of the sustainable Australian city are not new. The questions have been asked by successive Governments at the Federal, State and more particularly the Local level over many years. What hasn't been done to date is translating these questions into positive action in order to achieve the desired outcome of sustainable urban growth.

The pressure being placed on our increasing fragile environment from expanding urban development is making it more and more difficult to manage and to balance the competing needs. Our growing population still wants to live primarily in and around the larger cities primarily on the eastern seaboard. This is traditionally where the jobs have been and where the well developed social and cultural infrastructure exists. Moves to try to stimulate growth outside these cities in regional centres that have been attempted over many decades have had only limited success and often for only short periods of time during which substantial subsidies or other incentives have been offered.

This being the case, the need to manage the growth of the Australian city in a sustainable manner is undeniable, but it will require a considerable shift in the way the Governments at all levels go about their planning and also possibly most importantly an acceptance on the part of the community that the cities of the past and the excesses that they were built on are unsustainable.



#### 1 Preserve bushland, significant heritage and urban green zones

It is considered essential that urban development provide for green zones in order to enhance local amenity and also to protect significant bushland and other natural heritage items. Such areas contribute significantly to the health and wellbeing of city dwellers which cannot be understated. These areas can usually be incorporated very successfully with new urban development which assists in their preservation whilst adding to the liveability of the area.

These areas are often rich in their biodiversity and act as important sinks for greenhouse gases that are generated by urban development.

It is accepted that the preservation of these areas, often leads to the need for urban expansion on the fringe of existing cities thereby, putting pressure on other sensitive bushland areas, however, there needs to be a balance struck between the two in order to meet the demands of urban growth. Wherever possible such sensitive land should be avoided for development in preference for sites of less significance.

More innovative ways of preserving bushland and urban green zones need to be provided. The integration of such areas into new urban development can often be successfully achieved providing valuable passive recreation opportunities to city dwellers.

Where large areas of private land are to be set aside to protect vegetation for the benefit of the wider community, it is considered that some financial offset should be provided. This could be through direct grants, transfer of development rights to elsewhere on the property, tax concessions and the like.

# 2 Ensure equitable access to and efficient use of energy including renewable energy resources

It is considered that there does need to be concerted effort made to move away from non renewable energy sources to renewable energy. The price differential between the two needs to be addressed in order for this to become a reality. Currently, the cost of renewable energy is substantially dearer than that produced by traditional large scale energy generation and therefore there is a cost disincentive for individuals and businesses to move in this direction.

The government needs to take a leading role here and undertake initiatives such as setting a mandatory energy efficiency standard for all new buildings, appliances and business operations; providing financial incentives to consumers to embrace alternative energy sources and possibly use mechanisms such as a "carbon tax" to discourage the increasing use of non renewable energy sources.

Greater promotion of the environmental benefits of using "green power" in order for consumers to be informed when making a choice of the energy type should occur by State Government and energy retailers. Currently, the opinion of energy retailers is 'green power' is only a token measure. This also needs to be addressed.



Government could show great leadership by progressively moving to have all its buildings and major infrastructure (eg. trams, trains) operate on energy produced from a renewable source. Being such a large consumer of energy, they could provide sufficient critical mass to see this form of energy production develop a lot faster and probably at a cheaper per unit cost than would otherwise be the case. The problem encountered then is whether supply can keep up with the demand and what are some of the consequences of renewable energy production itself such as the environmental impact of mass wind farms on sensitive areas such as coastlines.

#### 3 Establishing integrated sustainable water and stormwater management system addressing capture, consumption, treatment for their reuse opportunities

This element is considered essential for a sustainable Australian city. Recent experience in both Melbourne and Sydney has brought home the reality that potable water is not an unlimited resource but rather a resource that must be conserved wherever possible. The true cost of the provision of potable water should be paid for by the user. If such a system were to be introduced, it would need to be totally transparent to ensure that the costing mechanism is not manipulated by Government for the purposes of funding consolidated revenue.

Steps towards the reuse of what traditionally has been waste water must be vigorously pursued and again a pricing mechanism must be established to encourage this. The reuse of treated effluent from treatment plants servicing the needs of our cities should be encouraged wherever possible, but careful consideration of possible health and environmental impacts would need to be undertaken, including impacts on groundwater.

New subdivisions should incorporate reuse of both stormwater run off and grey water but here too, care needs to be taken to examine the potential impacts of this reuse in terms of water flows in streams and rivers. New subdivisions can benefit by using a three pipe system and including stormwater wetlands in their design.

The Victorian State Government's recent Green Paper on water and a number of initiatives it proposes are to be applauded and should be seriously considered in the development of sustainable Australian cities. Simple initiatives such as requiring all new developments to install water takes to collect rain water for use on gardens and flushing of toilets and the installation of water saving devices and dual flush toilets all contribute to the sustainability of Australian cities.

#### 4 Manage and minimise domestic and industrial waste

To address this objective, there needs to be a major attitudinal change in the way we manage waste. Such a change requires a combined approach from manufacturers, consumers and government. Advertising in many cases sells on convenience and ease of use and cost. Too many products are single use, or cheaper to replace than repair. A



strong commitment to waste education programs with a consistent approach within the education system is required, combined with an advertising program using print and visual media.

Local councils need to be prepared to offer incentive schemes that encourage lower volumes of rubbish. Smaller bins at a lower cost. Types of materials accepted needs to be expanded and not just governed by what the cycling contractor has a viable market for. All councils should be encouraged by government provided incentives to move towards recycling services that take a wide variety of materials. Government should assist the development of industries that can process recycled materials, particularly those of low economic value. Packaging manufacturers need to produce packaging based on lifecycle costs and reusability, not just on low initial production costs. Facilities need to be in place to take back their packaging material for reuse. Tax incentives for companies achieving this and tax penalties for those not achieving it may be appropriate.

There is potential for increased costs which could potentially be passed onto consumers.

Waste audits could be introduced to determine if industries are using appropriate methods of waste reduction and recycling. Trial programs have been run to identify materials that are waste to one company, but a resource to another. This could be introduced on a large scale.

Government at all levels need to be the leaders in choosing environmentally friendly companies with which to do business. They need to have policies in place that have a preference for environmentally friendly purchasing with a price preference factor built in.

Organisations such as EcoRecyle are best placed to work with industry at all levels because they are not bound by municipal boundaries; however, local government has an important role to play in assisting where possible.

The use of awards or an accreditation system should be considered for companies/organisations achieving high standards or meeting certain benchmarks. An accreditation system similar to the energy star rating system, but indicating a company's achievement in meeting and maintaining certain environmental standards would assist consumers in making informed decisions when purchasing goods or services.

# 5 Develop Sustainable Transport Networks – Common Nodal complementarity and logistics.

Australian cities in their early development were compact and well provided with an effective public transport system. As population grew and motor vehicles became more widely available, the ability for cities to quickly grow outwardly and in a dispersed manner became possible. Governments of the day for whatever reason, but probably largely due to the cost and the fact that motor cars were widely available, did not place a high priority on the expansion of an effective public transport system. Currently Melbourne has less than 10% of its motorised trips conducted by public transport. There is a need to make Australian cities more compact and encourage greater density of development thereby making the best use of existing infrastructure including public transport.



Urban sprawl has been allowed to occur over many decades across all Australian cities. Often this pattern of urban growth results in people living remote from their place of work and also from other key services. The spread out nature and low densities of development that result do not enable sufficient critical mass to be reached to justify major expenditure of public funds on expanding the public transport system.

Successive governments have tended to allow this urban sprawl to continue and have proceeded to expend large sums of money on the construction of freeways and the like to support it. The provision of such major infrastructure has in turn tended to further encourage this sprawl rather than contain it.

Greater emphasis needs to be given not only to planning compact urban areas where employment opportunities, public transport and other services are readily accessible but also provide and encourage growth in regional centres with strong transport connections back to the metropolitan area.

In the development of new growth areas, transport planning and land use planning need to be strongly linked. If new communities on the urban fringe are to continue to be permitted they need to have public transport fully integrated and provided from the outset of development. If this is not done, then we will simply get the same type of urban development as we have had in the past with token efforts to retrofit the area with some form of public transport which is unsustainable.

#### 6 Incorporate eco-efficiency principles into new buildings and housing

The key goals of reducing energy and water consumption and reuse demands a more innovative approach to new development and redevelopment within Australian cities.

Better design and orientation of buildings, use of appropriate building materials, incorporation of renewable energy infrastructure and systems such as solar hot water, solar panels for electricity generation, water minimising devices, water reuse systems and the like will all assist in improving the sustainability of Australian cities.

It is considered that standards for new buildings requiring them to attain certain energy and water consumption standards should be mandatory. Likewise, all fittings, fixtures and appliances should be required to meet specified performance standards in terms of their consumption of energy and water. The current star rating system is a good start but needs to be supplemented with other initiatives such as an extensive publicity campaign promoting the benefits that this will achieve, both economically and environmentally.

### 7 Provide urban plans that accommodate lifestyle and business opportunities

There are numerous possible planning scenarios that can be utilised in providing sustainable Australian cities. It is not considered that there is a right or wrong model but rather a series of models that can be modified and adapted to suit particular situations.

Melbourne 2030 is a good example of a holistic approach to planning strategically for both its existing population as well as for future growth in a sustainable manner.

The model of a more compact city which makes better use of existing infrastructure and services combined with a strategy of providing for urban growth in designated growth area and the strengthening of the role of regional cities is considered a good model for greater Melbourne.

What is considered essential for any model of a sustainable city is that it provide for such things as:-

- Social and cultural diversity
- Equity of access to services (eg. Education, medical services, recreation etc)
- Easy access to efficient, reliable and safe public transport
- Housing choice
- Employment opportunities
- Business Investment opportunities

To achieve this, we need an integrated approach to planning that has the cooperation and commitment of all levels of government, the private sector and the general community. This planning needs to foster innovation and creativity and be willing to adapt and modify strategies and expectations at all levels in order to safeguard the wellbeing of future generations.

#### General Comment

The examples of the 60L office building in Melbourne and the Christie Walk sustainable housing development in Adelaide are good examples of what can be achieved in making buildings more sustainable. The costs associated with such initiatives are often minimal when compared with "conventional" development, but the cost savings in terms of the environment both initially and ongoing are significant. If such examples become the norm, rather than the exception, then the sustainability of cities become much more a reality.

To achieve this, the development sector must be willing to embrace alternative design and construction methods; governments must make it more achievable by offering financial incentives, reducing red tape/regulation that often inhibits these initiatives and finally the consumer must be willing to accept these buildings in the marketplace.

Affordability in housing continues to be a major issue for developers, governments and consumers but it must be considered in conjunction with the environmental and social implications of urban growth within our cities.



#### Conclusion

The complexity of a sustainable Australian city is enormous and there will not be a "one fits all" model that can be applied for the whole of Australia. It is considered the triple bottom line assessment of urban development should form the foundation of sustainable cities and in this regard it needs leadership at all levels of government but particularly at the Federal and State levels which have both a legislative responsibility and the economic resources to bring about the massive change needed in the planning and ongoing management of our cities in order to make them truly sustainable.