

30 July 2013

The Hon. Brad Hazzard MP Minister for Planning and Infrastructure NSW Department of Planning and Infrastructure 23 Bridge Street SYDNEY NSW 2000

Dear Minister

#### LOWER HUNTER STRATEGIC ASSESSMENT

Cement Concrete & Aggregates Australia is the peak industry body for the heavy construction materials industry in Australia including the cement, pre-mixed concrete and extractive industries.

CCAA members produce and supply the heavy construction materials that are used to construct Australia's infrastructure and major projects, including our roads, rail, bridges, harbours, airports and engineering construction projects.

CCAA submits the attached comments on the Lower Hunter Strategic Assessment and recommends the following:

- The Integrated Planning approach as outlined in the Lower Hunter Regional Strategy with particular attention paid to the strategic importance of construction materials.
- The Long Term Transport Master Plan in providing transportation of commuters and goods and services including construction materials.
- The protection of KRAs in accordance with SEPPs and the LHRS, in particular the goal of the LHRS must be avoid incompatible land use for the extractive industry.
- Biodiversity offset arrangements must be efficient so as not to negatively impact on housing affordability and the effective and timely provision of infrastructure.

CCAA would like to thank you and the Department of Planning and Infrastructure for this opportunity to make a submission and we look forward to future consultations.

Yours sincerely

John Turton State Director - NSW



SYDNEY OFFICE: Cement Concrete & Aggregates Australia



## LOWER HUNTER REGIONAL SUSTAINABILITY PLAN

#### **1.1** Strategic Importance of Construction Materials

The Lower Hunter is one of the fastest growing regions in New South Wales and makes a significant contribution to the State's sustainable future. The environment, the economy and society are intrinsically linked and all three aspects of sustainable growth need to be considered as part of the Lower Hunter Strategic Assessment.

As part of the Lower Hunter Strategic Assessment the importance of the heavy construction materials industry must be recognised. As the construction materials from the Lower Hunter not only supply the local region but also the wider Sydney basin.

As the population in the greater Sydney basin and the Lower Hunter grows so too will the demand for heavy construction materials, as these materials are the foundations upon which our societies are built. CCAA's research into the demand for pre-mixed concrete in NSW<sup>1</sup> indicates that overall demand for pre-mixed concrete will increase, as illustrated in the table below:



Estimated Demand for Pre-mixed Concrete, by market Segment in NSW (000 m<sup>3</sup>)

It is forecast that NSW will consume just under an extra million cubic metres of premixed concrete in 2015/16 on top of current demand. Each cubic metre of pre-mixed concrete contains about 2.1 tonnes of aggregates and pre-mixed concrete utilises about half of the aggregates produced in NSW. The forecasted growth in demand for concrete

<sup>&</sup>lt;sup>1</sup> Bills, G., 2012, The Demand for Cement and Premixed Concrete In New South Wales: 2011/12 to 2015/16, CCAA.



and aggregates is based on expected annual population growth of 3% and on expected annual economic growth in NSW of just over 2%.

Premixed concrete is utilised in all construction projects, such as high-rise commercial buildings, residential buildings, schools, hospitals and vital infrastructure, such as bridges, ports, airports and rail projects. Aggregates are also utilised in all of these construction projects and are one of the most consumed materials in the world. For example:

- A kilometre of highway requires 25,000 tonnes of aggregate.
- A kilometre of suburban roads requires 5,000 tonnes of aggregate.
- A kilometre of railway requires 2,000 tonnes of aggregate.
- A high-rise building can use 1,000 plus tonnes of aggregate per floor.
- Construction of a typical house, including driveway and landscaping, uses approximately 100 tonnes of aggregate.

As such, it is important that an integrated planning approach, as outlined in the Lower Hunter Regional Strategy (LHRS), be adopted across the region, as without an integrated approach to planning there will not be sustainable supply of materials needed to build the required infrastructure. The LHRS must have particular regard to the importance of construction materials.

## 1.2 Sustainable and Resilient Construction Materials

Concrete is a sustainable and highly resilient construction material. Concrete structures last a very long time and can be recycled once they reach the end of their operational lives. In this regard concrete must be thought of as a cradle to cradle material and its environmental impact considered from the point when the resources are extracted to the point where they are reused through recycling.

Full life-cycle assessments<sup>2</sup> have illustrated the sustainability benefits of concrete, which are:

- Social
  - Is the foundation for Australia's construction industry
  - The Industry employs 18,000 people directly
  - Contributes to the aesthetic of built environment
  - Performs well in flood and fire impacted environments

#### Environmental

- Key enabler of renewable energy technologies
- Reuse and recycling of industrial waste, such as fly ash and bottom ash
- Superior performance
- Thermal mass
- Durability
- Sound Insulation
- Readaptation and reuse of structures
- Recycling of materials at end of life

<sup>&</sup>lt;sup>2</sup> For more information on the sustainability of concrete and FLA's please visit: <u>http://www.ccaa.com.au/sustainability/overview.php</u>



## Economic

- Very low economic cost when compared to its performance
- Lowest whole-of-life cost in infrastructure
- Good geographic availability, which minimises transport costs
- Durability and resilience lowers maintenance costs

Ensuring that the resources that constitute concrete, namely cement, sand and rock, are regionally sourced enhances its sustainability. Local and regionally sourced materials do not have to be transported as far, which cuts down on carbon emissions and also reduces their wear and tear on our roads.

## **1.2** Sustainable Supply of Construction Materials

Sustainability in NSW's is based on the provision of infrastructure and how these interact with the local environment. Key to the provision of infrastructure is how resources are supplied.

The Strategic Assessment must also take into account forecasts for medium and longterm demand for aggregates, ensuring that there is sufficient access to a stock of local and regional reserves. Access to aggregate resources have to be secured for operators for both the long (30-50 years) and medium (10-30 years) terms. This is particularly important as quarries tend to have high start-up capital cost and can take several years before delivering a return on investments.

Additionally, the Strategic Assessment must ensure sufficient local and regional supply. The high volume, low cost nature of aggregates means that if supply is to be sustainable the aggregates need to be sourced within a reasonable distance from concrete batching plants, which are the major consumer of aggregates. Concrete batching plants, in turn, need to be located within 30 minutes of the construction projects that they are supplying as pre-mixed concrete has a limited lifespan after being mixed.

The transportation of aggregates over long distances increases road congestion, wear and tear on roads and increases greenhouse gas emissions. These factors also contribute to the need to develop efficient transport networks, including road, rail and maritime shipping, both in the Lower Hunter Region and in adjacent regions. These networks must form intermodal hubs for the distribution of materials within metropolitan areas.

As such, the region requires a long-term transportation master plan that ensures the viability of all road users, including the heavy construction materials industry.

#### **1.3** Recognition of Key Resource Areas

The Strategic Assessment must also protect access and supply of aggregates from incompatible land use, such as housing and other urban encroachments and from rural activities such as farming and forestry. Unlike many of these activities quarries can only be located where both suitable geological conditions exist and in locations that are not already limited by urban development and other constraints that sterilise the resource, such as native vegetation and the lack of suitable transportation networks.



To ensure that extractive resources are protected from incompatible land use, it is important that the Strategic Assessment acknowledges the importance of aggregates for economic growth and sustainable development. Once recognised the system can then develop mechanisms and processes for securing access and guaranteeing supply of these vital resources.

The identification and protection of extractive resources is essential to assist in the delivery of sustainable development and growth. It is worth noting that this process has been recently undertaken elsewhere in Australia by state governments. Both the Queensland and Victorian governments identified the need to designate areas of resources needed to supply and deliver planned growth targets in their strategic planning.

Queensland has prepared a *State Planning Policy 2/07: Protection of Extractive Resources* that designates 'key resource areas' (KRA) that encompass the extractive resource and on-site processing area, the associated transport route, and a separation area around the resource and processing area and the transport route. This KRA protects the strategic resources from incompatible land use and ensures that there are enough resources to meet future demand.

In March 2013, the Victorian government supported all 25 recommendations made by the Economic Development and Infrastructure Committee's (EDIC) Inquiry into greenfields mineral exploration and project development in Victoria. These recommendations included the need for 'extractive industry interest areas' to be incorporated into their Regional Growth Plans.

CCAA supports a similar approach being adopted in the Lower Hunter and throughout NSW. The protection of KRAs in accordance with SEPPs and the LHRS, in particular the goal of the LHRS must be avoid incompatible land use for the extractive industry.

# 1.4 Biodiversity Offsets

Biodiversity offsets are a common tool utilised to minimise the environmental impact of development. However, the current suite of legislation, tools and policy mechanisms that govern conservation and biodiversity offsetting processes are inefficient, both in terms of the time required to organise an offset and in the calculation of the amount that is required to be offset.

These inefficiencies in the biodiversity offset regime increase the uncertainty for the provision of infrastructure and results in additional costs, which negatively impacts on housing affordability and the commercial viability of development projects.

Biodiversity offset schemes in NSW and the Lower Hunter must utilise pragmatic assessment methodologies that provide viable outcomes for the extractive industry, otherwise they will impact on the affordable supply of vital resources to local markets.



## 2 **RECOMMENDATIONS**

The Lower Hunter Lower Hunter Strategic Assessment should take into consideration the following matters:

- The Integrated Planning approach as outlined in the Lower Hunter Regional Strategy with particular attention paid to the strategic importance of construction materials.
- The Long Term Transport Master Plan in providing transportation of commuters and goods and services including construction materials.
- The protection of KRAs in accordance with SEPPs and the LHRS, in particular the goal of the LHRS must be avoid incompatible land use for the extractive industry.
- Biodiversity offset arrangements must be efficient so as not to negatively impact on housing affordability and the effective and timely provision of infrastructure.