What is Sustainable Development?

Orrong Connect.

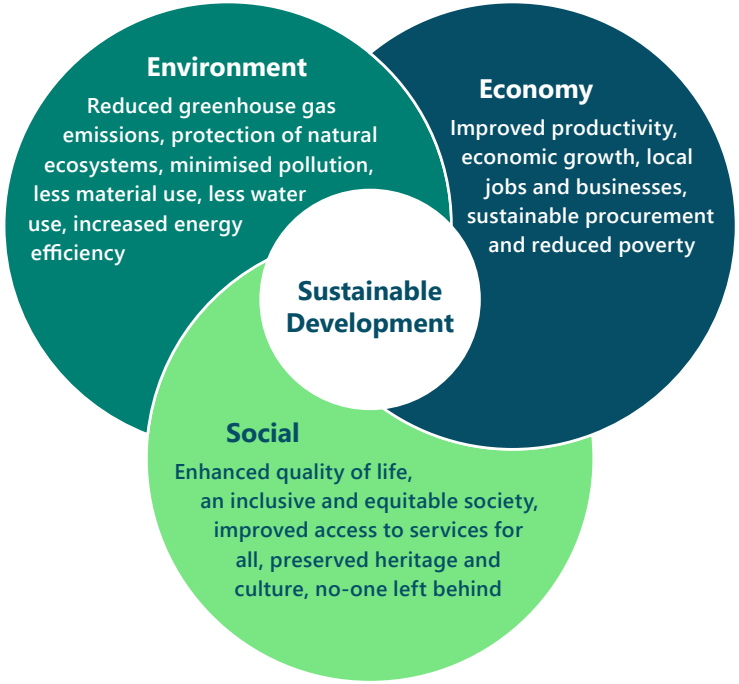
Australian Government
BUILDING AUSTRALIA

mainroads WESTERN AUSTRALIA

Sustainable development meets the needs of today without compromising the needs of future generations by balancing social, environmental, and economic aspects throughout the project life cycle.

Why is it important?

Sustainable development in transport is crucial for economic growth, connecting people to goods and services, linking communities, supporting health and wellbeing, reducing emissions, and improving urban greening.



At Main Roads WA, our approach to sustainability is driven by the following:

Sustainable Development Goals

The **2023 United Nations Agenda for Sustainable Development** contains 17 Sustainable Development Goals (UN SDGs) which aim to strengthen peace, eradicate poverty and inequality, protect the planet from degradation, and foster sustainable and resilient societies.

Commonwealth Policies

The ***Commonwealth Climate Change Act 2022*** legislates the reduction of Australia's net greenhouse gas emissions to 43% below 2005 levels by 2030 and to zero by 2050.

The **National Electric Vehicle Strategy** aims to increase the uptake of electric vehicles to reduce emissions.

The **Commonwealth Strategy for Nature 2019-2030** aims to support healthy and functioning biological systems and address biodiversity decline.

Western Australian Policies

The **Western Australian Climate Policy** aspires for Western Australia to be net zero by 2050.

The **Western Australian Electric Vehicle Strategy** aims to support uptake of battery and hydrogen fuel cell electrc vehicles, and rollout of fast charging infrastructure.

The **Western Australian Waste Avoidance and Resource Recovery Strategy 2030** aims to achieve a sustainable, low-waste, circular economy to protect people's health and the environment.

Main Roads WA Policy and Strategies

Our **Sustainability Policy** outlines our commitment to sustainable road and transport infrastructure.

Our **Net Zero 2050 Transition Roadmap** drives our effort to reduce emissions and decarbonise our operations.

Our **Climate Change Guideline** outlines road planning and design considerations for sea level rise, higher temperatures and changes to rainfall patterns.

Our **Recycled Materials Reference Guide** outlines different recycled materials for use in road construction and maintenance to help reduce the carbon footprint of our assets.

At Main Roads WA, sustainability is embedded into each project stage. To achieve the best outcomes, sustainability needs to be considered as early as possible. The type of solution selected to solve a transport problem has a significant impact on overall sustainable outcomes.

How do we balance environmental and social outcomes with economic development when it comes to a transport corridor problem?

You may wish to think about the following sustainable development questions:

What are the environmental and social priorities for Orrong Connect?

How will different project options affect the local area?

Will some options have more environmental and community impacts than others?

How can Orrong Connect provide community and social benefits?

How will Orrong Connect impact the local economy in the long term?

How is sustainability applied to each project stage?

Information on local context, the environment, community values, and priorities is gathered. Different project options are compared against environmental, social and economic outcomes.

Environmental

- How much vegetation will need to be cleared?
- How much material will be needed to build the option?
- What emissions will be generated?
- Are there opportunities to improve the landscape and enhance local flora and fauna?

Social

- Will the option improve or impede connections to footpaths and local roads?
- Will some community members be impacted more than others?
- Is the option safe for pedestrians, cyclists and road users?
- Can public or green spaces be improved?

Economic

- Will the option affect access to local businesses and community services?
- Will the option provide employment opportunities?
- How long will construction take and how will it impact local businesses?

The most important constraints, impacts and opportunities are used to help select a project solution.

Sustainability initiatives are worked into the project design, construction and operation.

Sustainability initiatives may include recycled material use; water and energy efficiency; landscape and urban design; innovative approaches; community benefits and economic benefits.

Choices are made to reduce environmental and social impacts where possible.

Emissions are tracked and reported.

Maintenance and repair works are completed as efficiently as possible.