



A Beyond Zero Future
for South East NSW

fact sheet

Climate Action in Shellharbour Cutting energy use emissions

About Shellharbour

Dharawal country

Industries — health and social assistance, manufacturing, retail

Total emissions 562,000 tonnes (t) CO₂ per year
Population: 79,035 (8 tCO₂ per person each year)
Households: 23,643 (22 tCO₂ per household each year)

Small solar in Shellharbour

Installs to 2023 = 10243
New installs in 2023 = 1162 (5% of households)
Each 5kW solar costs around \$5000
Each solar install saves around 3.4 tCO₂ per year



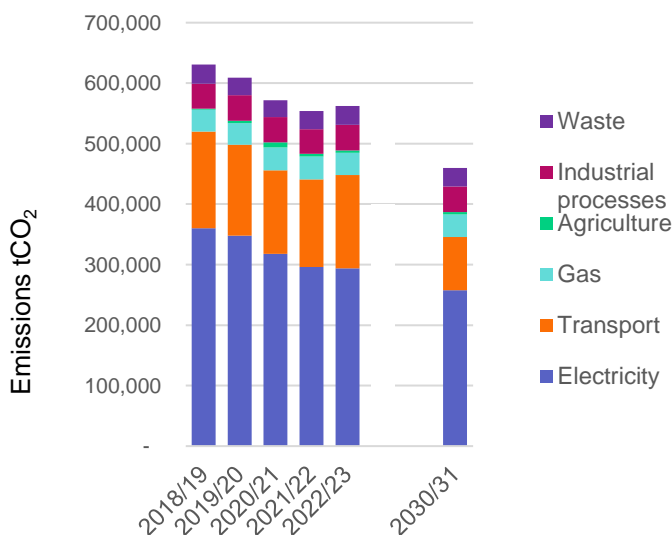
Electric vehicles in Shellharbour

Registrations in 2023 = 112 (0.19% of all vehicles)
New registrations in 2023 = 72
Each EV saves around 3 tCO₂ per year
Running costs are up to 85% lower than a conventional car

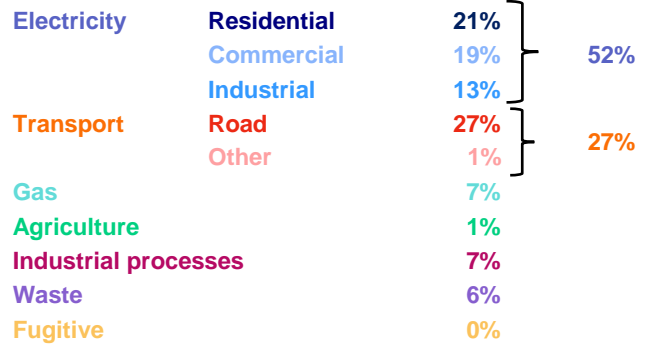
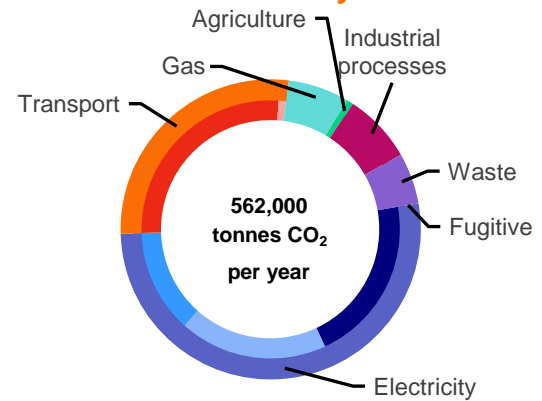


Towards 2030: What can YOU do?

20% emissions reduction by 2030 (cf. 2022/2023) if 10% of people add rooftop solar and switch to electric vehicles each year*



2022/2023 Emissions by Sector



What else can you do?

Retrofit your home with low-flow showers, reverse cycle heating/cooling, heat pumps for hot water, insulation and draught sealing.

Join a community energy organisation such as Southcoast Health and Sustainability Alliance (SHASA) to promote resilient networks, local ownership and cost saving.

Consult the Clean Energy Council consumer guides to choosing approved retailers and accredited installers.

Get behind the #RePowerOurCommunities campaign.

Support business and job opportunities in local clean energy technologies.

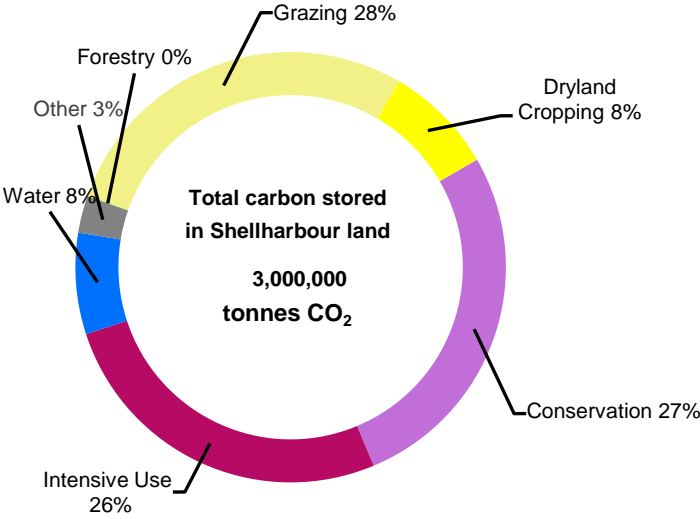
*For details on assumptions and calculations, see www.zerose.space/background-reports/



Climate Action in Shellharbour

Carbon drawdown by the land

Current Land Use — Shellharbour



Soil

Soil contributes to climate solutions by drawing down carbon into soil organic matter and storing it.

Extra drawdown (tCO₂/year) if 10% of farmers improved non-native pastures and practised optimal grazing: **1,200**
Value on international carbon market (\$m): **\$ 0.1**
Emissions avoided (tCO₂/y) if don't clear 1% of native grasslands: **6,000**

Carbon wealth in Farms and Trees

Changing land use is key to solving the climate crisis. South East NSW is very well placed to implement land-based climate solutions through farming practices and forest management that maintain the vast stores of carbon in trees and soils. Shellharbour is rich in trees: 38% of its land is forest or woodland.

Planting trees

In south east NSW, one hectare of farm land with mature trees draws down around 3.7t of CO₂/year.

Area (ha) of cleared farmland available for tree planting: **3,500**
Extra drawdown (tCO₂/y) if 10% re-planted with trees: **2,700**
Annual value on international carbon market (\$m): **\$ 0.2**

Keeping trees

Logging of native State Forests releases huge amounts of carbon into the atmosphere thus contributing to climate change.

Hectares of logged native State Forest in Shellharbour: **-**
Annual emissions (tCO₂) avoided if logging ceased: **-**
Proportion of Shellharbour's total emissions: **0%**

Livestock

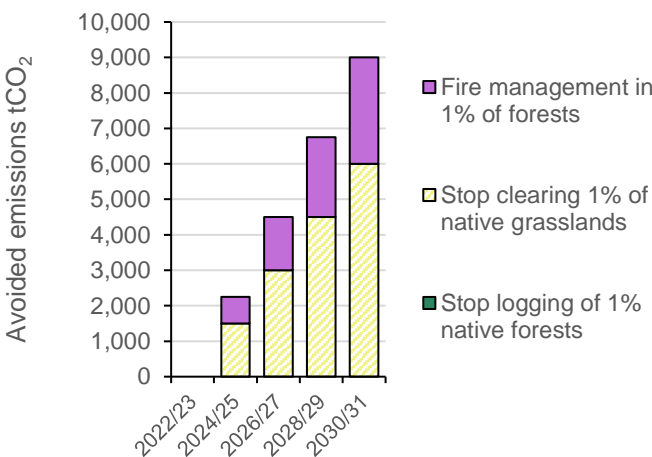
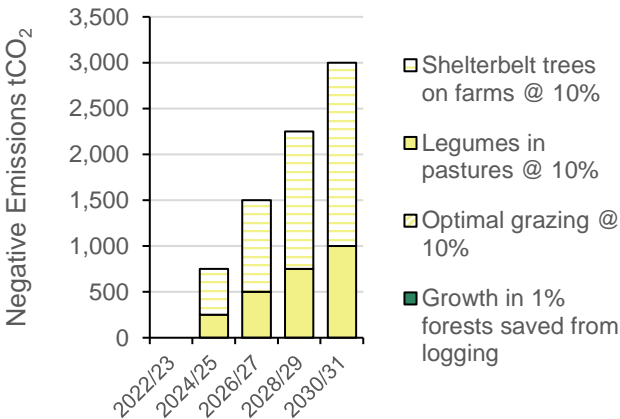
Methane emissions from burping livestock are a major contributor to world greenhouse gases.

Annual emissions (tCO₂) avoided if 10% fed seaweed: **300**
Value on international carbon market (\$m): **\$ 0.0**

Towards 2030: Changing land management practices

By 2030, 1% of annual (2022/2023) energy use emissions can be offset through increased carbon drawdown on farms and in unlogged forests.*

By 2030, the equivalent of 2% of annual (2022/2023) energy use emissions can be avoided by stopping land clearing and through forest management.*



*For details on assumptions and calculations, see www.zerose.space/background-reports/