20%

0%

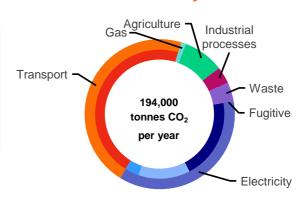
**37**%

46%



# **Climate Action in Kiama Cutting energy use emissions**

# 2022/2023 Emissions by Sector



# **About Kiama Dharawal country**

Industries — construction, professional services, agriculture, health care, retail, real estate

**Total emissions** 194,000 tonnes (t) CO<sub>2</sub> per year

Population: 22,983 (8 tCO<sub>2</sub> per person each year) Households: 7,719 (22 tCO<sub>2</sub> per household each year)

### **Small solar in Kiama**

Installs to 2023 = 3879New installs in 2023 = 420 (5% of households) Each 5kW solar costs around \$5000 Each solar install saves around 3.4 tCO<sub>2</sub> per year



**Electricity** 

**Fugitive** 

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#### Commercial 13% Industrial 4% **Transport** Road 46% Other 0% Gas 1% **Agriculture** 9% **Industrial processes** 4% Waste 4%

Residential

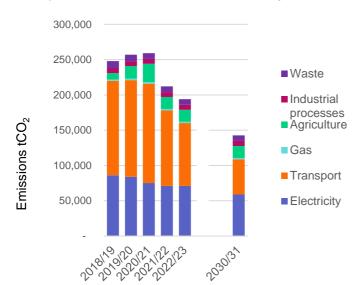
# **Electric vehicles in Kiama**

Registrations in 2023 = 73 (0.4% of all vehicles) New registrations in 2023 = 34 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?

41% emissions reduction by 2030 (cf. 2022/2023) if 10% of people add rooftop solar and switch to electric vehicles each year\*



### 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.

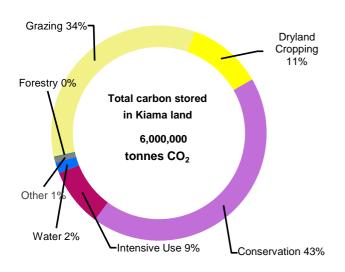


A Beyond Zero Future for South East NSW

# **Climate Action in Kiama**

# Carbon drawdown by the land

### **Current Land Use — Kiama**



### Soil

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

Extra drawdown (tCO<sub>2</sub>/year) if 10% of farmers improved non-native pastures and practised optimal grazing: 2,900 Value on international carbon market (\$m): \$ 0.2

Emissions avoided (tCO<sub>2</sub>/y) if don't clear

1% of native grasslands: 8,900

#### **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. Kiama is rich in trees: 49% 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 CO<sub>2</sub>/year.

Area (ha) of cleared farmland available for tree planting: 8,100 Extra drawdown (tCO<sub>2</sub>/y) if 10% re-planted with trees: 6,500 Annual value on international carbon market (\$m): \$ 0.5

### **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 Kiama:

- Annual emissions (tCO<sub>2</sub>) avoided if logging ceased:

Proportion of Kiama's total emissions:

- 0%

### Livestock

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

Annual emissions (tCO<sub>2</sub>) avoided if 10% fed seaweed:

Annual emissions (tCO<sub>2</sub>) avoided if 10% fed seaweed: 600
Value on international carbon market (\$m): \$ 0.1

### **Towards 2030: Changing land management practices**

By 2030, 5% 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 8% of annual (2022/2023) energy use emissions can be avoided by stopping land clearing and through forest management.\*

