9%

5%

4%

1%



# Climate Action in Shoalhaven Cutting energy use emissions

# About Shoalhaven Yuin country

Industries — manufacturing, government (defence), retail & tourism, construction, community services, education

Total emissions 1,163,000 tonnes (t) CO<sub>2</sub> per year

**Population:** 109,753 (8  $tCO_2$  per person each year) **Households:** 38,187 (22  $tCO_2$  per household each year)

# Small solar in Shoalhaven

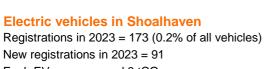
Installs to 2023 = 19521

New installs in 2023 = 2215 (6% of households)

Each 5kW solar costs around \$5000

Each solar install saves around 3.4 tCO<sub>2</sub> per year

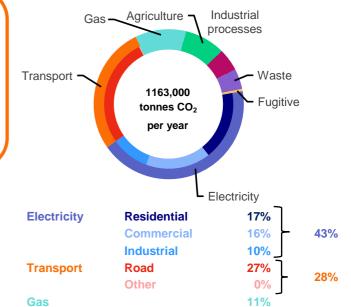




Each EV saves around 3 tCO<sub>2</sub> per year Running costs are up to 85% lower than a conventional car

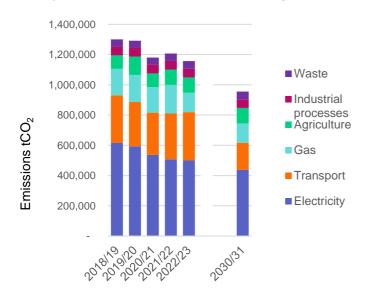


# 2022/2023 Emissions by Sector



# Towards 2030: What can YOU do?

22% 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?

**Agriculture** 

Waste

**Fugitive** 

**Industrial processes** 

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 Shoalhaven**

# Carbon drawdown by the land

# Current Land Use — Shoalhaven Water 4% Intensive Use 5% Total carbon stored in Shoalhaven land 110,000,000 tonnes CO<sub>2</sub> Conservation 66%

# 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: 13,100 Value on international carbon market (\$m): \$ 1.1

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

1% of native grasslands: 46,600

### **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. Shoalhaven is rich in trees: 71% 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: 28,000 Extra drawdown (tCO<sub>2</sub>/y) if 10% re-planted with trees: 17,600 Annual value on international carbon market (\$m): \$ 1.4

### **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 Shoalhaven: 52,000
Annual emissions (tCO<sub>2</sub>) avoided if logging ceased: 172,000
Proportion of Shoalhaven's total emissions: 15%

### 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: 3,100
Value on international carbon market (\$m): \$ 0.3

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

By 2030, 3% 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 35% of annual (2022/2023) energy use emissions can be avoided by stopping land clearing and through forest management.\*

