

Energy Baseline

Total GHG Energy Sector Emissions: 134,967 tonnes CO₂e

Sources of energy emissions in Byron Shire:

- **Indirect** emissions from the consumption of grid-based Electricity supplied via the grid.
- Mostly generated from fossil fuels, PLUS rooftop solar
Total Est. 131,040 tonnes CO₂e per year

Direct emissions from the consumption of bottled Liquid Petroleum Gas (LPG).

- Mainly used for hot water heating, cooking and process heating
Total Est. 3,927 tonnes CO₂e per year



Priority mitigation targets:

1. ENERGY EFFICIENCY

- Main user of energy in Byron Shire is the **Residential Building** sector.
 - Can be effectively tackled via a rollout of BZE's **Energy Freedom Initiative**.
- Over 10 years, **half of all stationary electricity consumed** in the Shire **can be saved** through applying energy efficiency strategies, eg air conditioning, lighting, media and IT, motor controls, hot water heating, industrial processes & pumps.

2. RENEWABLE ENERGY

- **Declining cost of solar** means it would be cost effective to supply entire Shire with renewable energy
- Over 10 years, PV solar, CHP, and bio-energy can gradually **replace ALL fossil fuel** energy
- **Advanced battery** storage will be a major contributor to baseload energy supply, for consumers and networks
- Developing **Community Renewable Energy schemes** to generate the Shire's own clean energy
 - eg working with **ENOVA** to generate, distribute & export renewable energy.
 - eg **Community Owned Renewable Energy Mullumbimby (COREM)**: a Byron Shire model of a local community initiating, owning and developing energy projects. Can be replicated.

