Jemena Gas Networks (NSW) Ltd

Renewable Gas Receiving Areas

Biomethane and Hydrogen-Natural Gas Blend

Jemena
bringing energy to life

An appropriate citation for this paper is:

Renewable Gas Receiving Areas

History

Rev No	Date	Description of changes	Author
0	26.05.2025	Original Version	JGN

Owning Functional Area

Business Function Owner:	Asset and Operations Gas

Contents

1. Purpose and Scope

The purpose of this document is to publish information required under Rule 147F of the National Energy Retail Regulations (**NERR**) for Jemena Gas Networks (**JGN**).

> **Rule 147F Publication of information on gas type**
>
> (1) A distributor must publish on its website:
>
> (a) information on the type of gas that may be supplied through a distribution system; and
>
> (b) if there is a change to the type of gas that may be supplied through a distribution system, the transition date.
>
> (2) The information published under subrule (1) must:
>
> (a) be expressed in clear, simple and concise language;
>
> (b) be in a format that:
>
> (i) makes it easy for a small customer to understand; and
>
> (ii) enables a small customer to obtain the information relevant to their premises using the postcode or the address of their premises; and
>
> (c) be kept up to date.

In this document, areas that may be supplied a type of gas, different from natural gas, such as biomethane or a hydrogen-natural gas blend (renewable gases) are highlighted on a series of maps, supported by a list of associated suburbs and postcodes. These renewable gases are a result of Jemena's Biomethane Project[1] and Hydrogen Project[2]. More information on these projects may be found on Jemena's webpage in the reference links. Everywhere else in the JGN gas distribution system, only natural gas is distributed.

The type of gas supplied to customers in the suburbs and postcodes highlighted in the document will vary due to a number of factors, that is customers may at times be supplied a renewable gas and at other times natural gas. These factors include how much renewable gas is added and how much gas is being used by the homes and businesses in these areas. All gas supplied will be within strict quality specifications and the different types of gas will have no effect on the performance of customers appliances.

The information contained in this document is current as at the date of publication. As new sources of renewable gas are connected to the JGN gas distribution network, this document will be updated.

1 https://www.jemena.com.au/future-energy/future-gas/Malabar-Biomethane-Injection-Plant/

2 https://www.jemena.com.au/future-energy/future-gas/western-sydney-green-hydrogen-hub/

2. Hydrogen-Natural Gas Blend - Receiving Areas

Western Sydney Hydrogen Hub injects hydrogen into JGN to form a hydrogen-natural gas blend in the network with an operational limit of 2% hydrogen by volume.

The green area highlighted in Figure 1 indicates the area that may receive a hydrogen gas blend (determined based upon winter-peak gas usage). The suburbs and postcodes covered by the green areas are listed in Table 1 on the following page.

Note that the extent of blended gas is only indicative as the actual penetration of hydrogen gas into JGN is subject to many variables, including the volume of hydrogen being injected and the consumption patterns of consumers in the vicinity.

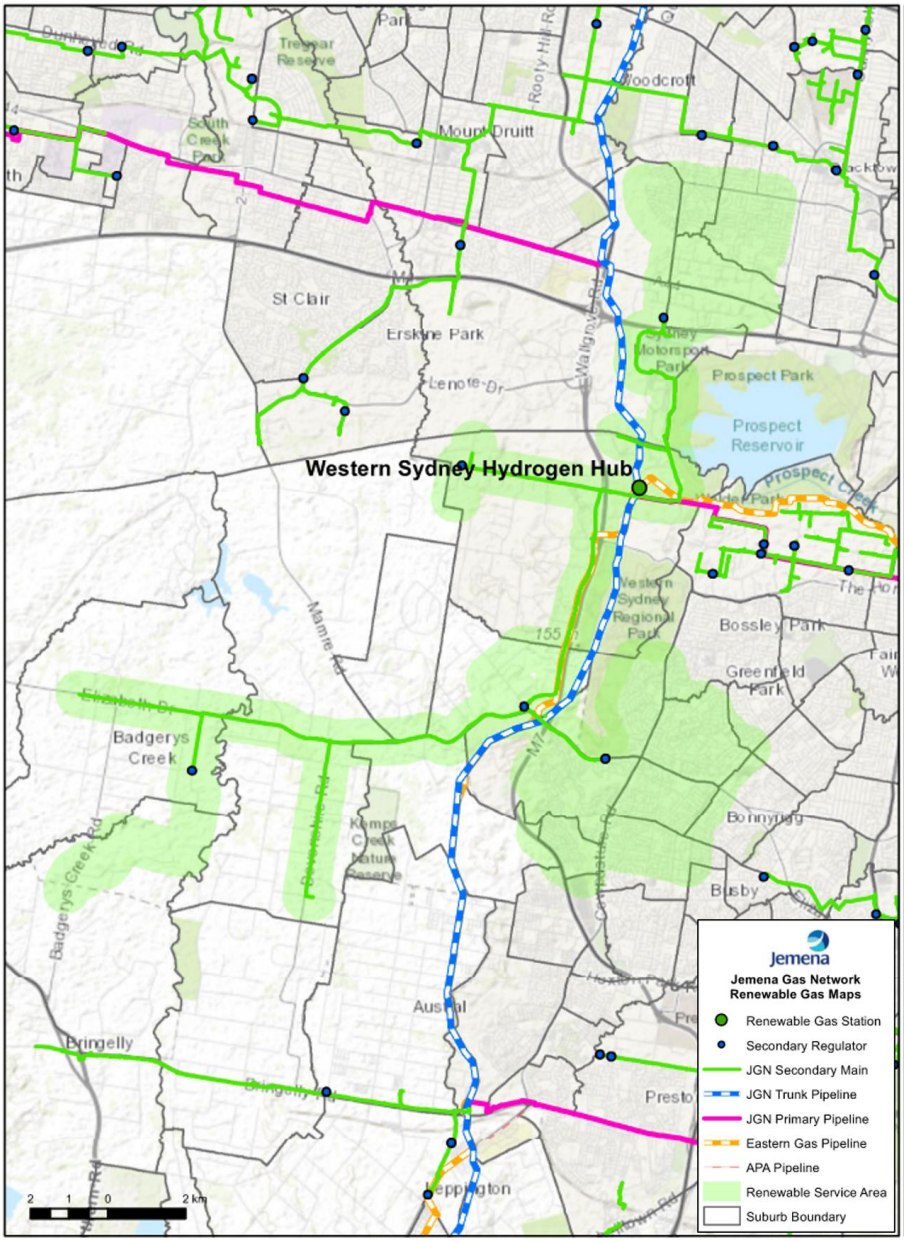

Figure 1 Hydrogen-natural gas blend-receiving areas (shown in green)

Table 1 Suburbs and postcodes potentially receiving a hydrogen-natural gas blend

SUBURB NAME	POST CODE
ARNDELL PARK	2148
BLACKTOWN	2148
HUNTINGWOOD	2148
PROSPECT	2148
WETHERILL PARK	2164
BUSBY	2168
GREEN VALLEY	2168
HINCHINBROOK	2168
CECIL HILLS	2171
ELIZABETH HILLS	2171
LEN WATERS ESTATE	2171
MIDDLETON GRANGE	2171
HORSLEY PARK	2175
ABBOTSBURY	2176
BOSSLEY PARK	2176
EDENSOR PARK	2176
GREENFIELD PARK	2176
ST JOHNS PARK	2176
BONNYRIGG	2177
BONNYRIGG HEIGHTS	2177
CECIL PARK	2178
KEMPS CREEK	2178
MOUNT VERNON	2178
BADGERYS CREEK	2555
BRADFIELD	2556
EASTERN CREEK	2766
BUNGARRIBEE	2767
DOONSIDE	2767

3. Biomethane - Receiving Areas

At the Malabar facility, Jemena has partnered with Sydney Water to upgrade biogas produced from organic waste at the Malabar Water Resource Recovery Facility (WRRF) to a quality that meets the required specifications (Australian Standard AS4564:2020) for injection into the natural gas network.

The green area highlighted in Figure 2 indicates the area that may receive biomethane (the extent of biomethane displacing natural gas was determined based upon winter-peak gas usage). The suburbs and postcodes covered by the green area are listed in Table 2 on the following page.

Note that the extent of displacement of natural gas on the map is only indicative as the actual displacement into JGN is subject to many variables, including the volume of biomethane being injected the consumption patterns of consumers in the vicinity.

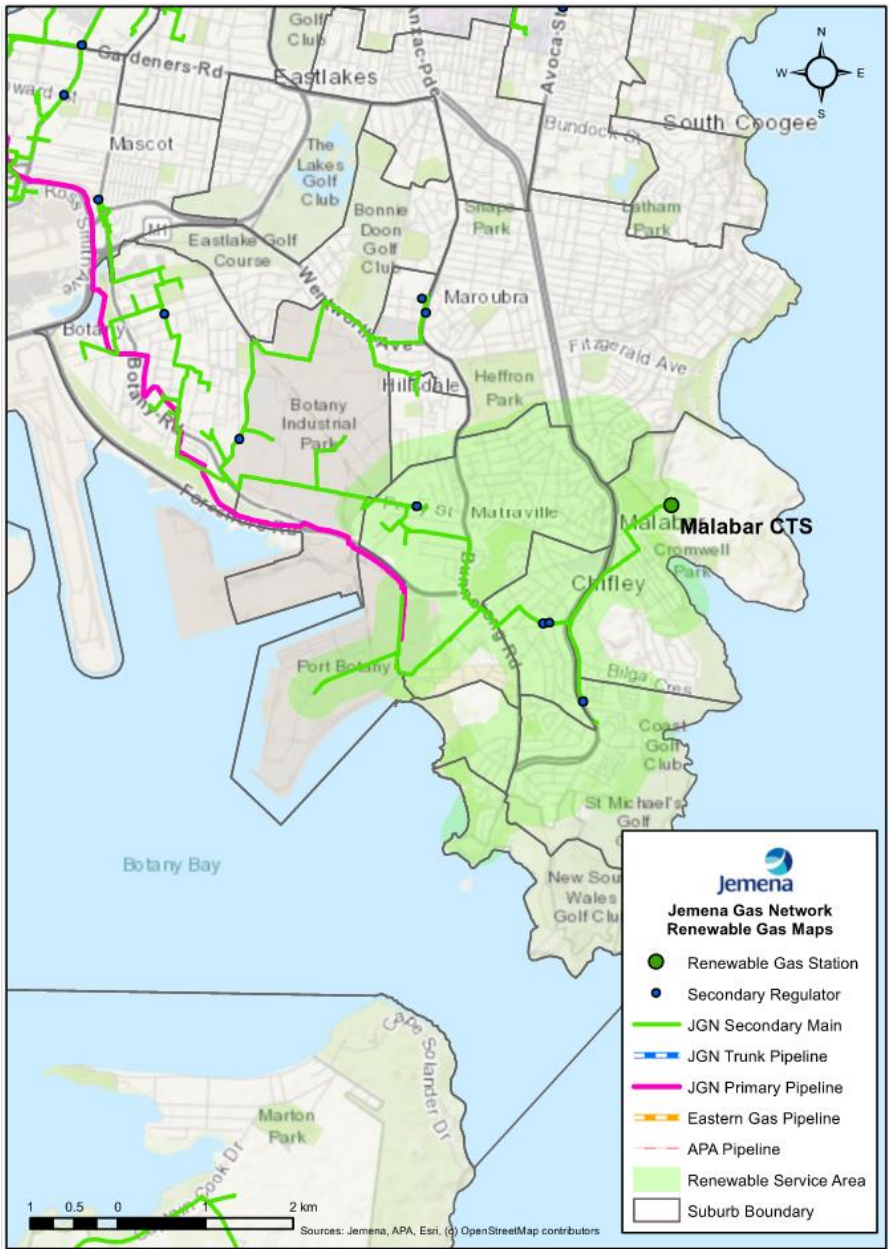

Figure 2 Biomethane-receiving areas (shown in green)

Table 2 Suburbs and postcodes potentially receiving biomethane

SUBURB NAME	POST CODE
BANKSMEADOW	2019
MAROUBRA	2035
CHIFLEY	2036
HILLSDALE	2036
LA PEROUSE	2036
LITTLE BAY	2036
MALABAR	2036
MATRAVILLE	2036
PHILLIP BAY	2036
PORT BOTANY	2036