# Stay safe and in control with natural gas

**Energy**Australia

# Enjoy all the benefits of natural gas safely in your home

Natural gas is one of the most reliable, safe, effective and economical sources of energy you'll find, but it needs to be treated with safety in mind.

In this brochure you'll find some important information about natural gas to help you enjoy all its benefits safely in your home.

If you have more questions, please call us on 133 466.

#### What is natural gas?

Natural gas is a colourless and odourless fossil fuel consisting mainly of methane CH4, which is the simplest hydrocarbon. It is formed by decomposing organic matter trapped in porous rock beneath the surface of the earth.

Unlike other fuels such as diesel petrol or liquefied petroleum gas (LPG) (which are heavier than air), if natural gas leaks, it will dissipate into the air, eliminating the risk of pooling at ground level.

As you can't smell or see natural gas, an odourant is added for safety before it is piped to you. This acts as a ready means of leak detection. An average person can easily detect the smell of gas at a concentration as low as 1% by volume in air. That concentration is about five times lower than the level that will support combustion.

Natural gas will not explode in the presence of a flame until it reaches a very specific concentration in the air. Below a certain level it is deemed too lean to burn and above a certain level it may be too rich to burn. Within a flammable range, the gas will ignite and may cause an explosion.

Natural gas has no known toxic or chronic physiological effects and is not poisonous. However, exposure to a moderate concentration may result in a headache or similar symptoms due to oxygen deprivation, but the smell should alert you well in advance of this concentration building up.

#### Only use approved gas appliances

To ensure the safety of your gas appliances, only use appliances that have been approved and certified by the Australian Gas Association (AGA), SAI Global, IAPMO and Global-Mark. Look for the certification label. The label is a promise by the manufacturer that the appliance is identical to a sample appliance of the same type that has been certified.

# Natural gas is an ideal fuel for many applications

- Residential cooking, heating and hot water.
- **Commercial** cooking, heating, drying and hot water.
- Industrial processing and manufacturing.
- **Power generation** in power station turbines and cogeneration plants.
- **Transport** as a fuel for vehicles such as trucks and buses.

As long as your appliance bears this badge, is installed correctly and is properly maintained, you will find natural gas safe to use in your home.

#### Keep your appliances in safe working order

- Make sure all appliances are regularly serviced according to manufacturers guidelines. Gas heaters should be serviced at least every three years.
- If your gas heater or the flue is not working properly, you may develop headaches, dizziness or nausea. If you suspect your heater is causing these symptoms, turn it off and call a licensed gasfitter.
- Always turn gas heaters off when you leave the house or go to sleep.
- Keep a gas oven and hot plates clean. Do not allow fat and burned food to build up.
- Always supervise young children near heaters or any gas appliance.
- Only use your appliances for the purpose for which they were designed. For example, do not use a cooker to heat your rooms or dry your clothes.
- LPG and natural gas are different. Operating an appliance on the wrong type of gas can be hazardous.
- Gas appliances designed for use outdoors, such as barbeques and camping stoves, should not be used indoors.
- Always make sure any permanent ventilation openings on appliances are not blocked.

- Don't tamper with safety valves or use force to open taps on your appliances.
- Don't use spray cans or cleaning solvents, or leave papers or clothes near gas appliances.

Most of the time gas appliances are so easy to use and troublefree that we don't even stop to think about them. Regular servicing will make sure the gas burns properly, maximising safe and efficient use of the energy.

#### Inside and around your home

Natural gas is supplied to your home by underground pipes to a meter, usually located at the front of your property, or on the side wall of your house.

The gas pipe from the street, up to and including the meter is owned and maintained by the gas distribution company in your area. It is their responsibility to repair and maintain these pipes and your meter equipment. You just have to make sure the meter is easy to access for reading and maintenance work.

You can turn off gas at your meter by turning the control tap on the meter to the horizontal (off) position, but make sure you turn off all appliances inside the house first.

The outlet pipes running from the meter to your house and to all your gas appliances belong to you and are your responsibility. You'll need to arrange your own licensed gasfitter to work on these fixtures.

### What if I smell gas?

- If you smell gas in your home, extinguish all flames.
- Don't operate electrical appliances as they may create a spark.
- Make sure you turn off gas appliances and pilot lights inside the house first.
- Open doors and windows to reduce the chance of a gas build up.

## If you still smell gas, or think it is still escaping, do the following:

- Turn off the main gas tap at the meter by turning the control tap on the meter to the horizontal (off) position.
- Phone the 24 hour gas emergency service number on **131 909**.
- If you think you have a gas leak anywhere on your property, do not try to find it with a flame, such as a cigarette lighter or matches.
- Always contact a licensed gasfitter for this work.

## 'Dial before you dig'

Call the 1100 'Dial before you dig' service at least three days prior to any excavating. This free service provides information about underground pipes and cable locations.

# Choosing the right tradesperson to work with gas

Only a contractor qualified to work on gas fittings is entitled to install or repair gas appliances. These licensed contractors carry an identity card with a photograph, stating what work they can perform.

They may be listed either as gasfitters or plumbers in your local business directory. Gasfitters are aware that they may only install certified products at your property.

## Contacts

Gas faults and emergencies: Call 131 909

Gas contractor's licence queries: Call 133 220

**Website enquiries:** fairtrading.nsw.gov.au/help-centre/ online-tools/home-building-licence-check

'Dial before you dig': Call 1100

**General enquiries:** If you have any further questions about gas or electricity, just call us on 133 466.

