# 2015 NATIONAL GAS FORECASTING REPORT

The 2015 National Gas Forecasting Report (NGFR) provides independent forecasts of annual gas consumption and maximum gas demand across eastern and south-eastern Australia's interconnected gas markets over a 20-year outlook period (to 2034–35). Although the report includes forecasts for low, medium and high gas demand scenarios, this infographic depicts only the short-term outlook (2015–20) and medium gas demand scenario.

#### **ABOUT AEMO**

This infographic has been developed by the independent Australian Energy Market Operator (AEMO), using information (as at 31 October 2015) from the 2015 National Gas Forecasting Report.

AEMO plans, develops, and operates markets that are responsive to energy sector needs and support investment for the long-term benefit of Australian consumers.

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#### Total annual gas consumption by sector forecast to 2035 Petajoule (PJ) 2100<sup>PJ</sup> TOTAL 2084.1<sup>PJ</sup> MAXIMUM DEMAND ANNUAL CONSUMPTION 1960.7<sup>PJ</sup> • Total maximum daily demand is forecast to The 2015 report highlights a transformation 1431.3<sup>P.</sup> 1500<sup>P.</sup> LNG rise rapidly over the next five years, as of eastern and south-eastern Australian Queensland's LNG facilities ramp up production. interconnected gas markets over the next five years to 2020, following the ramp-up C 1008.6° 1200<sup>PJ</sup> • Seasonality in LNG liquefaction efficiency is of gas consumption to supply liquefied 267.4Pexpected to move Queensland to a winter peak natural gas (LNG) exports. Industrial for the first time. As a result, all eastern and 900<sup>P.</sup> south-eastern states are forecast to experience • Annual gas consumption is then forecast annual maximum daily demand in winter. to remain relatively flat for all sectors over 200.9<sup>P.</sup> **Residential and** the rest of the outlook period to 2035. 600<sup>PJ</sup> • After 2020, maximum demand from commercial the LNG, residential, commercial and industrial 353 8PJ sectors is forecast to remain flat, but gas-294.3PJ 261.9 P. powered generation (GPG) is forecast to 300<sup>PJ</sup> 184.5<sup>PJ</sup> Gas-power 185.5<sup>PJ</sup> ●185.1<sup>PJ</sup> increase as coal-fired generation availability <sup>1</sup> For 2015 data: residential, commercial and industrial consumption data is estimated on a weathernormalised basis, assuming long-rur median weather outcomes; GPG data is calculated using actual meter data until October 2015, estimated thereafter; LNG data is generation 175<sup>P</sup> 69.3 reduces over time. 20151 2020 2035

# GAS CONSUMPTION TRENDS IN THE SHORT TERM TO 2020



294.3P.

261

**.**9

ORECAST

THE BIG PICTURE

### LNG GAS CONSUMPTION

The start-up of Queensland's export LNG facilities is expected to more than double total gas consumption in eastern and south-eastern Australia, linking domestic wholesale gas prices to international markets and resulting in increased gas prices for domestic gas supplies.





## 6 9% AVERAGE

ANNUAL GROWTH

**AVERAGE** 

ANNUAL

GROWTH

**GAS POWER GENERATION GAS** CONSUMPTION

Gas consumption (and electricity production) by GPG is expected to reduce in the short term. Beyond five years, GPG gas consumption is forecast to rise to support increasing electricity consumption and to replace over 2,000 megawatts of coal-fired generation withdrawals.

#### **RESIDENTIAL AND COMMERCIAL** GAS CONSUMPTION

Improved energy efficiency of buildings and appliances, including gas to electrical appliance switching and a growing preference for living in apartments and multi-unit dwellings, is expected to contribute to residential and commercial consumption remaining flat, despite projected population increases.



AVERAGE

ANNUAL

GROWTH

#### INDUSTRIAL GAS CONSUMPTION

In the short term, growth in gas consumption from food, dairy and services, and generally improved business conditions for manufacturing, is likely to be offset by continued restructuring of industry away from gas-intensive manufacturing such as the automotive industry, ahead of an improved outlook over the longer term.

Forecast of gas 2015 consumption: 2020

AFMC