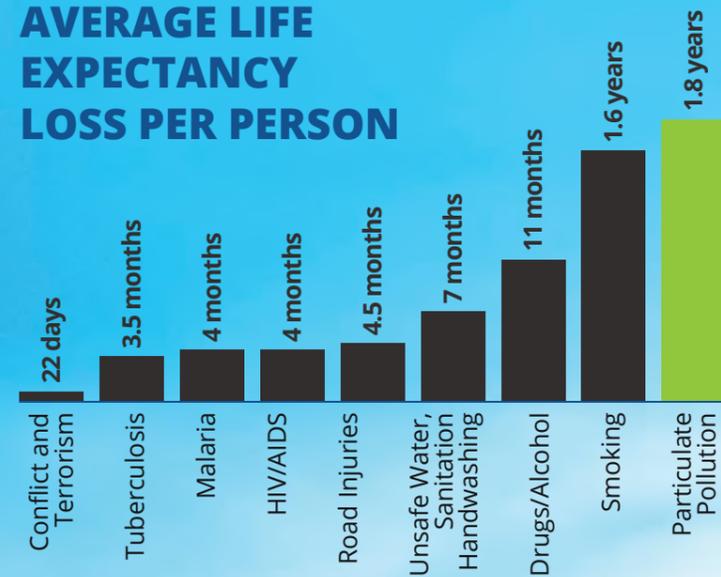


Natural Gas

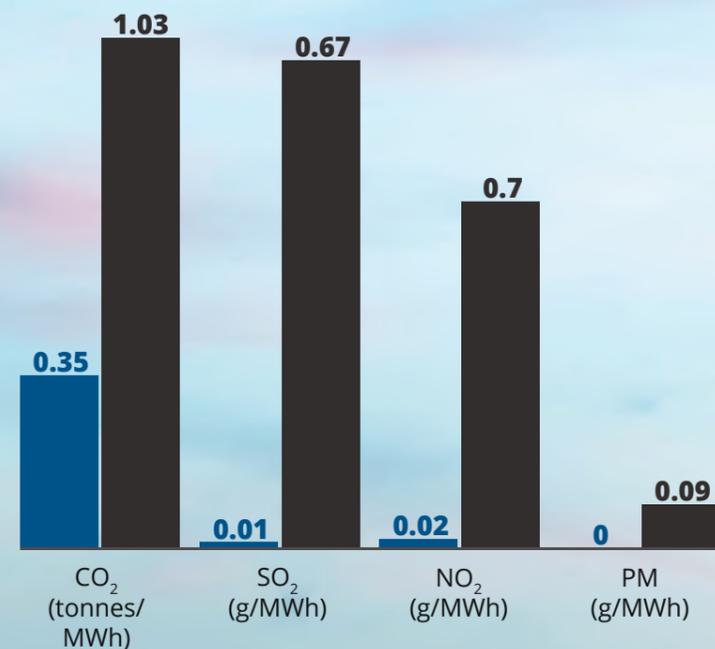
Improving the air we breathe

AVERAGE LIFE EXPECTANCY LOSS PER PERSON



Source: AQLI Report20188

COAL vs. GAS EMISSIONS FROM 1 MWh of GENERATED POWER



Data Sources: DOE, EIA, Shell



Air pollution killed

1.24
million
people in
India in 2007

NATURAL GAS POWERED TRANSPORTATION CREATES SIGNIFICANT LONG-TERM ENVIRONMENTAL BENEFITS



Natural gas offers great improvement in air quality, due to its nearly zero PM emissions and low NOX emissions, that are major contributors to a growing issue of urban smog.

- CO₂** Reduces carbon dioxide by **up to 20%**
- NMOG** Non-methane organic gas by **50 to 75%**
- CO** Carbon monoxide by **70 to 90%**
- NOX** Nitrogen oxides by **75 to 95%**

THREE CITIES TAKING ACTION

Morbi, India



- MORBI** has a major ceramic industrial cluster, a highly energy-intensive manufacturing process, which resulted in severe air and water pollution, due to use of coal.
- In March, 2019, the National Green Tribunal issued a ban on the use of coal gasification technology in the ceramic units of the area.
- The required switch to natural gas produced dramatic environmental and air quality improvements:
 - 75% reduction in PM_{2.5} levels,
 - 72% reduction in PM₁₀,
 - 85% reduction in SO₂,
 - and elimination of some 3,150 kL of wastewater per day.

London, UK



- LONDON** saw a gradual improvement in its air quality, since the first introduction of its 1956 Clean Air Act.
- The Act introduced social, economic, and technological changes to help reduce smoke and SO₂ emissions.
- These measures eliminated the use of coal inside homes, which was replaced largely by natural gas and electricity.
- As a result, SO₂ generated from household heating went from more than 400 µg/m³ to under 50 µg/m³.
- More recently, the introduction of the Carbon Price Support caused coal power generation to drop by 73%, accompanied by an 18% drop in CO₂ emissions and also a reduction in pollution.

Bogotá, Colombia



- BOGOTA** has been on a positive trend in management of its air pollution, showing up in reduced levels of PM₁₀ and PM_{2.5}.
- The city's bus rapid transport system (BRT) helped resolve the growing issues of traffic congestions resulting in drops of both emissions and air pollution.
- The city of Bogotá is taking further action by renewing 70% of their bus fleet, with 53% of the new vehicles to be fueled by compressed natural gas (CNG).
- CNG buses will help cut PM emissions threefold, from 0.030 to 0.010 (g/kW-hr), and emissions of NO_x fivefold – from 2.0 to 0.4.

To view the 2019 Clean Air report, [Click here](#)

