## **GLOSSARY OF TECHNICAL TERMS**

This glossary contains certain definitions and technical terms in this document which relate to our business and the industries and sectors that we operate in. As such, some terms and definitions may not correspond to standards industry definitions or usage of such terms.

"air emission(s)"

air emission(s) include boilers and fumes from stenters (machines for the continuous heat treatment of fabrics) and dye application processes

"benchmark gate price"

the benchmark price determined by the NDRC on which the wholesale price of PNG from upstream suppliers to other gas distributors is based

"Big-3 Noc"

the three largest oil and gas groups with certifications of oil and gas exploration and production in the PRC, namely China National Petroleum Corporation(中國石油天然氣集團有限公司),Sinopec(中國石油化工股份有限公司) and China National Offshore Oil Corporation(中國海洋石油集團有限公司),and their respective affiliates

"CAGR"

compound annual growth rate

"carbon monoxide / CO"

a colorless, odorless, tasteless, flammable gas that is slightly less dense than air

"CIF"

cost, insurance, and freight (CIF) is an international shipping agreement, which represents the charges paid by a seller to cover the costs, insurance, and freight of a buyer's order while the cargo is in transit. Cost, insurance, and freight only applies to goods transported via a waterway, sea, or ocean

"city gateway station"

a station that receives natural gas transmitted from upstream distribution stations generally through long-distance transmission pipelines and distribute natural gas into urban pipeline network, with functions including quantification, filtering, pressure regulation and odourising

"Clean Energy Project(s) (清潔能源村莊項目)" government subsidised construction project(s) in rural areas of Gaomi City, comprising construction of PNG end-user pipelines, connection of these pipelines to our urban pipeline network, procurement of relevant pipelines, parts and equipment, and installation of gas-burning appliances in residential households, which are carried out as an extension to the coal-to-gas project (煤改氣工程) in line with coal-to-gas conversion and clean energy transmission policies promulgated by the PRC government

## **GLOSSARY OF TECHNICAL TERMS**

"CNG"

compressed natural gas, refers to natural gas that has been compressed to a high density through high pressure and is used as a clean alternative fuel for vehicles

"CNG and LNG refuelling station(s)"

natural gas refuelling station(s) that receive(s) PNG transmitted through urban pipeline network and LNG transported through LNG supplier's tankers. CNG (compressed from PNG) and/or LNG are sold to vehicle users at our CNG and LNG refuelling station(s)

"coal-to-gas project (煤改氣工程)" the "Clean Winter Heating Plan for Northern China (2017-2021)" (《北方地區冬季清潔取暖規劃(2017-2021年)》) implemented by the NDRC in December 2017, which aims to promote clean winter heating by phasing out coal-fired appliances in the north of the PRC by 2021

"competitive behaviour"

the actions and steps taken by a firm to build or reduce the competition and to increase the market ration

"Comprehensive Work Plan for Energy Conservation and Emission Reduction (節能減排 工作方案") the Notice of the State Council on a Comprehensive Work Plan for Energy Conservation and Emission Reduction during the "Fourteenth Five-Year Plan" period (《國務院關於印發"十四五"節能減排綜合工作方案的通知》), published by the State Council which is a work plan in the form of a governmental notice aimed at promoting clean energy transmission related projects including the coal-to-gas project (煤改氣工程)

"construction and installation services"

our business of constructing PNG end-user pipeline network and connecting such network to our urban pipeline network for the sale of PNG, the procurement of appropriate gas pipelines, gas meters and other relevant parts, the installation of natural gas supply facilities, equipment and devices into property building infrastructures or within units and the overall engineering design and feasibility planning as well as supervision of work

"ecological impact(s)"

the effect(s) left on organisms and their environment due to actions made by humans and natural occurrences. These changes can be beneficial or adverse to the ecosystem

"gas"

natural gas, unless specified or the context requires otherwise

"gas operation licence"

gas operation licence, or various types, required for carrying out gas business activities under the Administrative Measures for Gas Operation Licence (《燃氣經營許可管理辦法》)

## **GLOSSARY OF TECHNICAL TERMS**

"GHG emission(s)" greenhouse gas (GHG) is a gas that absorbs and emits radiant energy within the thermal infrared range, causing the greenhouse effect "IoT" Internet of Things, physical objects (or groups of such objects) that are embedded with sensors, processing ability, software, and other technologies, and that connect and exchange data with other devices and systems over the Internet or other communications networks "km" kilometre(s) "km2" square kilometre(s) "LNG" liquefied natural gas, which is natural gas (predominantly methane) that has been cooled down to liquid form "m<sup>3</sup>" cubic metre(s) "mid-pressure pipelines" pipelines for transmitting natural gas under the pressure of 0.01Mpa to 0.4Mpa according to the GB50028 2006 Code for Design of Urban Gas Engineering\* (城鎮燃氣設計規範), which is generally used in urban pipeline network "Mpa" megapascal pressure unit, 1Mpa equals to 1,000,000pa "mu" mu ( 畝 ), a Chinese unit of measurement, equivalent to 666<sup>2</sup>/<sub>3</sub> sq.m. "MWh" equals 1,000 kilowatts of electricity generated per hour and is used to measure electric output. In general, megawatts are used to calculate how much a power plant generates electricity or how much electricity is consumed by a particular area, such as a city, state, or country "natural gas" naturally occurring hydrocarbon gas consisting primarily of methane found in coal beds with or without other fossil fuels "nitrogen oxides / NOx" nitrogen oxides, or NOx, a generic term for the nitrogen oxides that are most relevant for air pollution, namely nitric oxide (NO) and nitrogen dioxide (NO<sub>2</sub>). These gases contribute to the formation of smog and acid rain, as well as affecting tropospheric ozone "particular matter / PM" the term for a mixture of solid particles and liquid droplets found in the air "PNG" pipeline natural gas, natural gas transmitted through pipelines

## **GLOSSARY OF TECHNICAL TERMS**

"PNG end-user pipelines"	low-pressure pipelines for transmitting natural gas below 0.01Mpa according to the GB50028 2006 Code for Design of Urban Gas Engineering* (城鎮燃氣設計規範), which is generally used in PNG end-user pipeline network
"PNG end-user pipeline network"	network of low-pressure pipelines installed in the buildings and premises of our PNG end-users for connecting to our urban pipeline network for natural gas transmission
"PNG end-user selling price"	the selling price of PNG for residential usage and non-residential usage. Specifically it includes the selling price of PNG to residential PNG end-users, the selling price of PNG to non-residential PNG end-users (industrial PNG end-users and commercial PNG end-users)
"SO <sub>2</sub> "	sulphur dioxide
"sulphur oxides / SOx"	compounds of sulfur and oxygen molecules
"sq.m."	square metre(s)
"urban pipeline network"	network of mid-pressure natural gas distribution pipelines connecting our PNG end-user pipeline network to the source of PNG supply, such as city gateway stations
"vaporisation"	a phase transition from the liquid phase into the vapour phase (the state of a substance below a certain pressure or above its critical temperature)