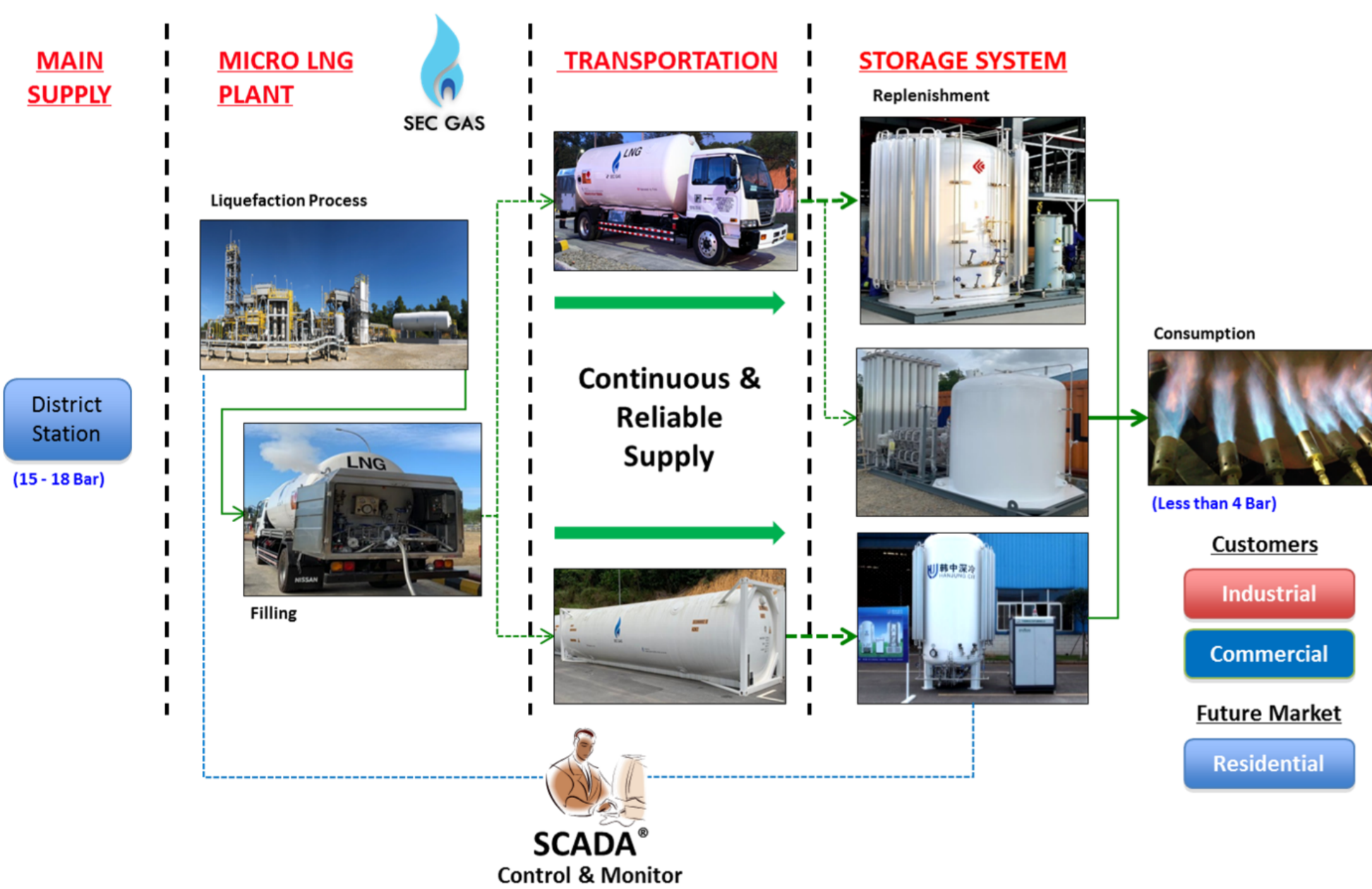


# LIQUEFIED NATURAL GAS (LNG)

## WHAT IS LNG?

- Natural gas in its liquid form.
- Cooled below  $-162\text{ }^{\circ}\text{C}$  under atmosphere pressure - becomes a clear, colorless, & odorless liquid.
- Liquefaction - Reduces the volume of natural gas more than 600 times, making it more cost-effective to store & transport.
- Consist of mainly methane with only small amounts of other hydrocarbons & weighs half the weight of water.
- Stored & transported using cryogenic tanks to maintain  $-162\text{ }^{\circ}\text{C}$  environment.



## HOW IS LNG USED?

LNG is normally warmed to make natural gas to be used in heating and cooking as well as electricity generation & other industrial uses. LNG can also be kept as a liquid to be used as an alternative transportation fuel.

## IS LNG FLAMMABLE?

It depends. When cold LNG comes in contact with warmer air, it becomes a visible vapor cloud. As it continues to get warmer, the vapor cloud becomes lighter than air & rises. When LNG vapor mixes with air it is only flammable if within 5%-15% natural gas in air. Less than this, it is not enough to burn. More than this, there is too much gas in the air and not enough oxygen for it to burn.

## IS LNG SAFE?

Overall, LNG is a safe & non-toxic fuel source. In as much as there are a few safety issues, the fuel is the safest fuel today. In a nutshell, the benefits of LNG outweigh the risks by far & based on this, it is safe to use LNG.

## BENEFITS OF USING LNG

### AN EFFECTIVE REMOTE ENERGY SOURCE

- Building pipelines to remote locations is cost-prohibitive. LNG provides facilities that are off the grid with a cleaner-burning, lower-cost alternative to diesel, propane or fuel oil.

### A SAFE ALTERNATIVE TO GASOLINE & DIESEL

- In the event of a leak or rupture, LNG simply evaporates.
- A leak leaves no ground or water residue, making clean-up unnecessary.
- LNG is not stored under high pressure & is not explosive. Although a large amount of energy is stored in LNG, it cannot be released rapidly enough to cause an explosion.

