

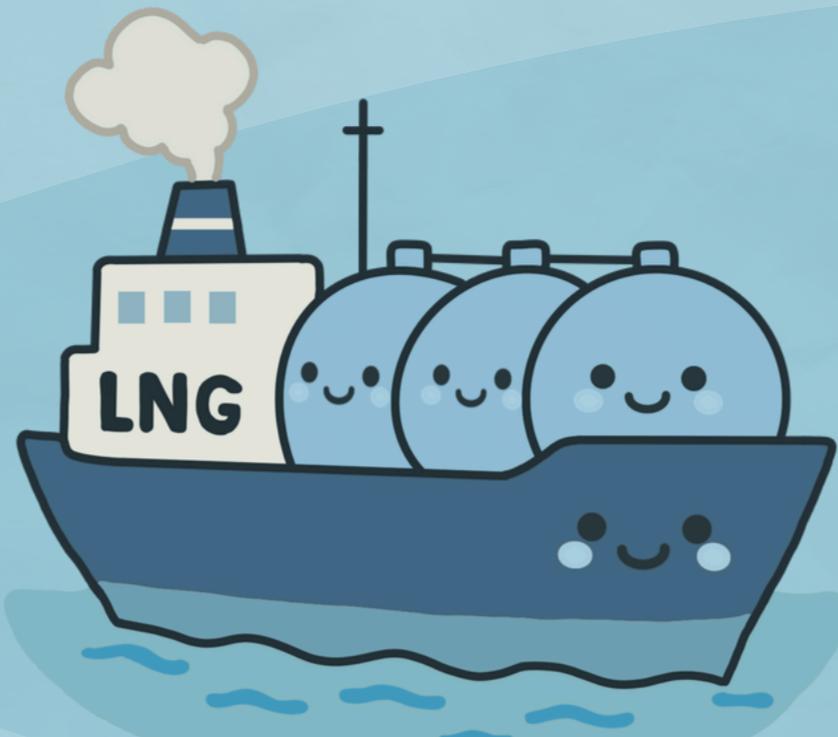
Blooming with sustainable  
LNG cold energy.



# What is LNG?

## (LIQUEFIED NATURAL GAS)

Natural gas that has been cooled down to become a liquid has a temperature as low as  $-160^{\circ}\text{C}$



The volume is reduced by 600 times, making it convenient for transportation by ship over long distances and across continents.

At the destination, LNG is stored in insulated tanks. When it is ready for use, LNG is converted from liquid to gas, releasing a large amount of leftover cold energy.

### Properties of LNG



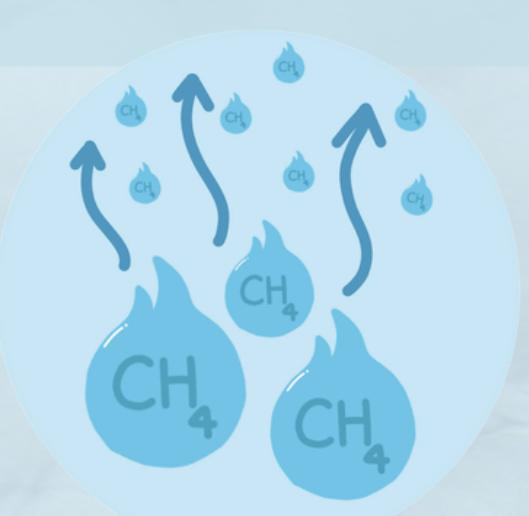
Colorless and  
odorless



Non-toxic



Non-corrosive



Evaporates  
and disperses  
in air

# LNG Clean Energy for a Sustainable Future



Natural gas The world's No.2  
energy source after oil



Driven by three key factors

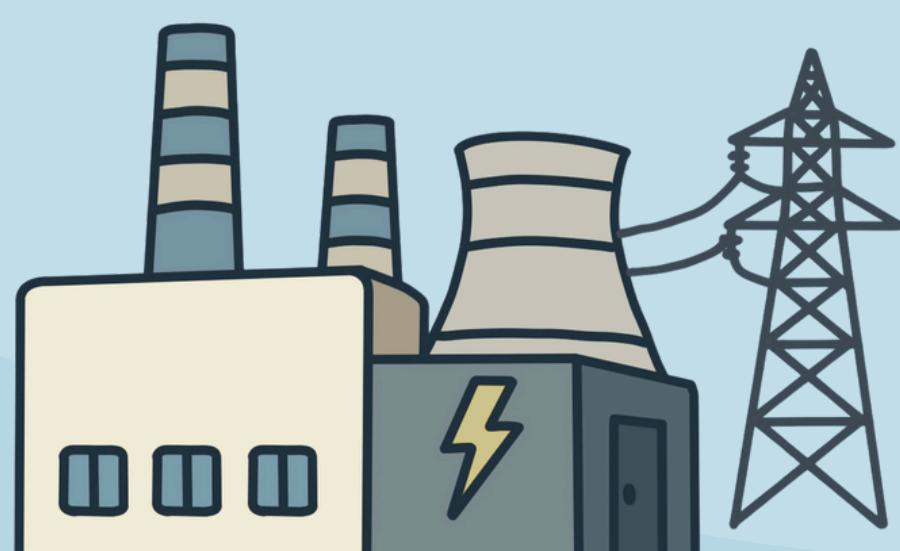
1. Environmentally friendly
2. Abundant supply
3. Competitive pricing



However, long-distance  
cross-continental pipeline  
transport requires  
significant investment.

As a result, technology has been developed to convert natural  
gas into liquid form, making transportation more cost-effective  
and efficient. This liquid form of natural gas is called  
LNG (Liquefied Natural Gas)

## Benefits of LNG in Thailand



Fuel used in power  
generation



Fuel used in  
manufacturing

# Cold energy from LNG offers many benefits

While natural gas is continuously sent for power generation, the phase change from liquid to gas releases an enormous amount of cold energy – as low as -160 C.

It would be a shame  
to let such extreme cold go to waste.

Let's turn LNG's ultra-low temperature into innovation!

LNG's  
ultra-cold



How's it  
useful?

5°C ~  
25°C



Cold building  
(HVAC System)



Increase Eff.  
Solar Panel

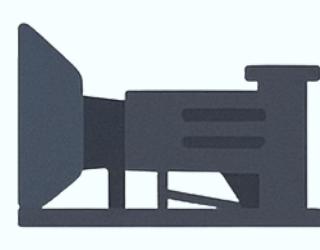


Tropical Corp

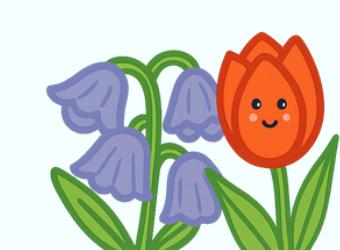
-10°C ~  
-5°C



Cold Power  
Generation

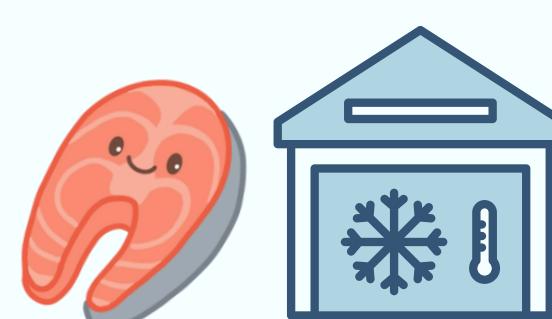


Cooling Air Inlet



Temperate Corp

-70°C ~  
-10°C



Frozen Food

-160°C  
~ -70°C



Cooling for  
Gas Separation



Cooling for  
Petrochemical



Cooling for  
Separation Plant

# PTT LNG invites you to a refreshing experience amidst the wonders of nature

From the coolness of LNG at Miracle of Natural at Flora Exhibition Hall



From the cooling power of LNG to the innovation of growing temperate-climate plants in PTT LNG's smart greenhouse. Now on display for free at the Miracle of Natural at Flora Exhibition Hall. The only place where cold-climate flowers bloom all year round



Tulip



Hydrangea



Daffodils

Get to know our cold-climate flowers follow us



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