



**IGU**  
**WGC 2021**  
28th WORLD GAS CONFERENCE  
DAEGU, KOREA 21-25 JUNE



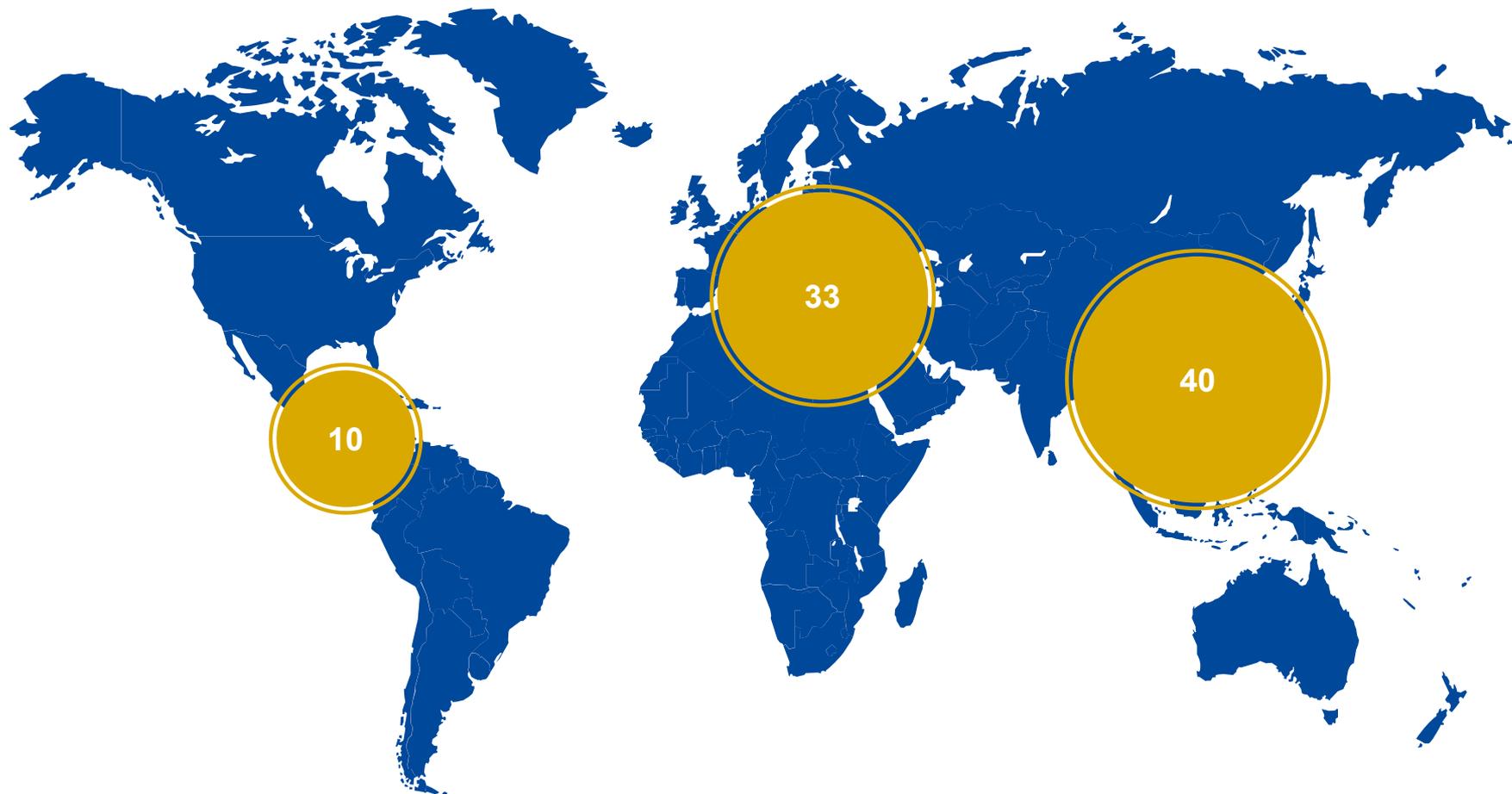
## **IGU Diplomatic Gas Forum**

### **The Vital Role of Natural Gas towards a Sustainable Energy Future**

Vincent DEMOURY

General Delegate, **GIIGNL**

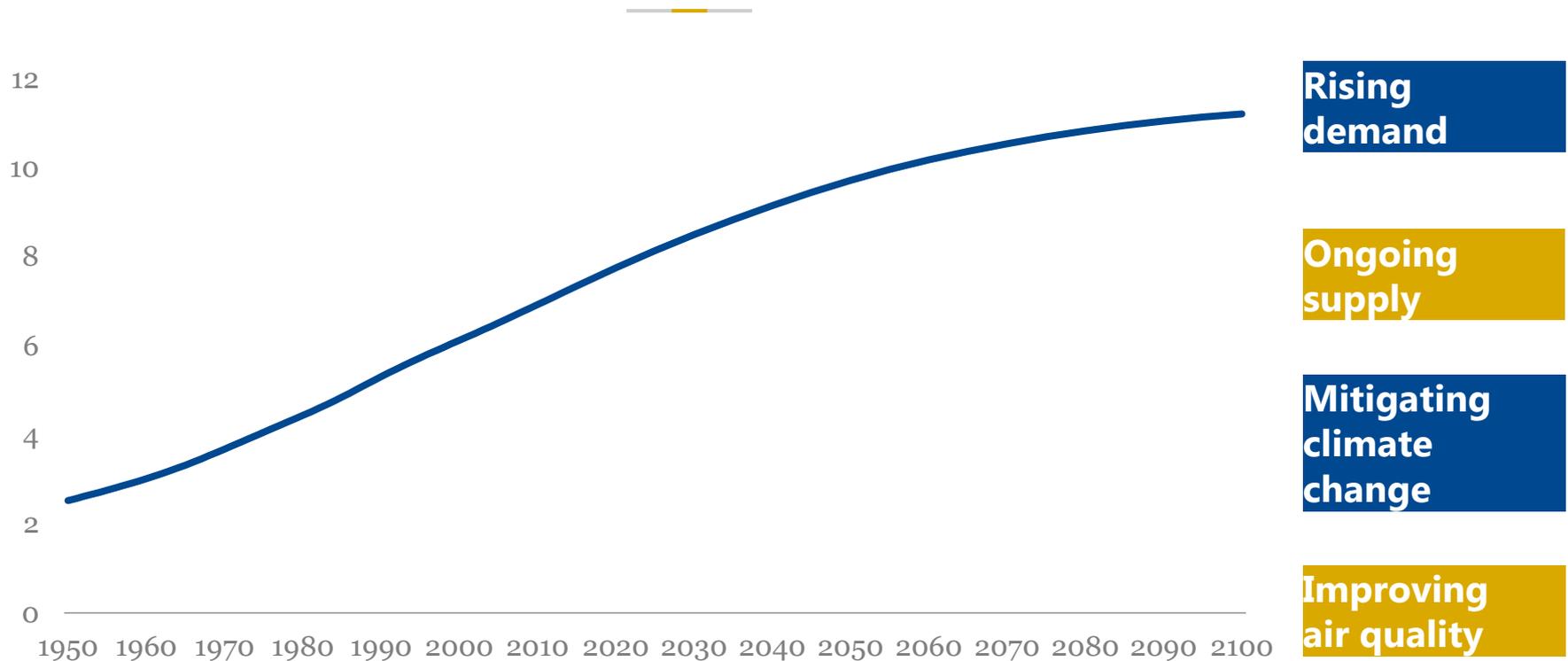
*83 Members in 26 countries— LNG importers and LNG terminal owners and operators*



# THE WORLD NEEDS MORE AND CLEANER ENERGY

*Energy is "central to nearly every major challenge and opportunity the world faces" - UN*

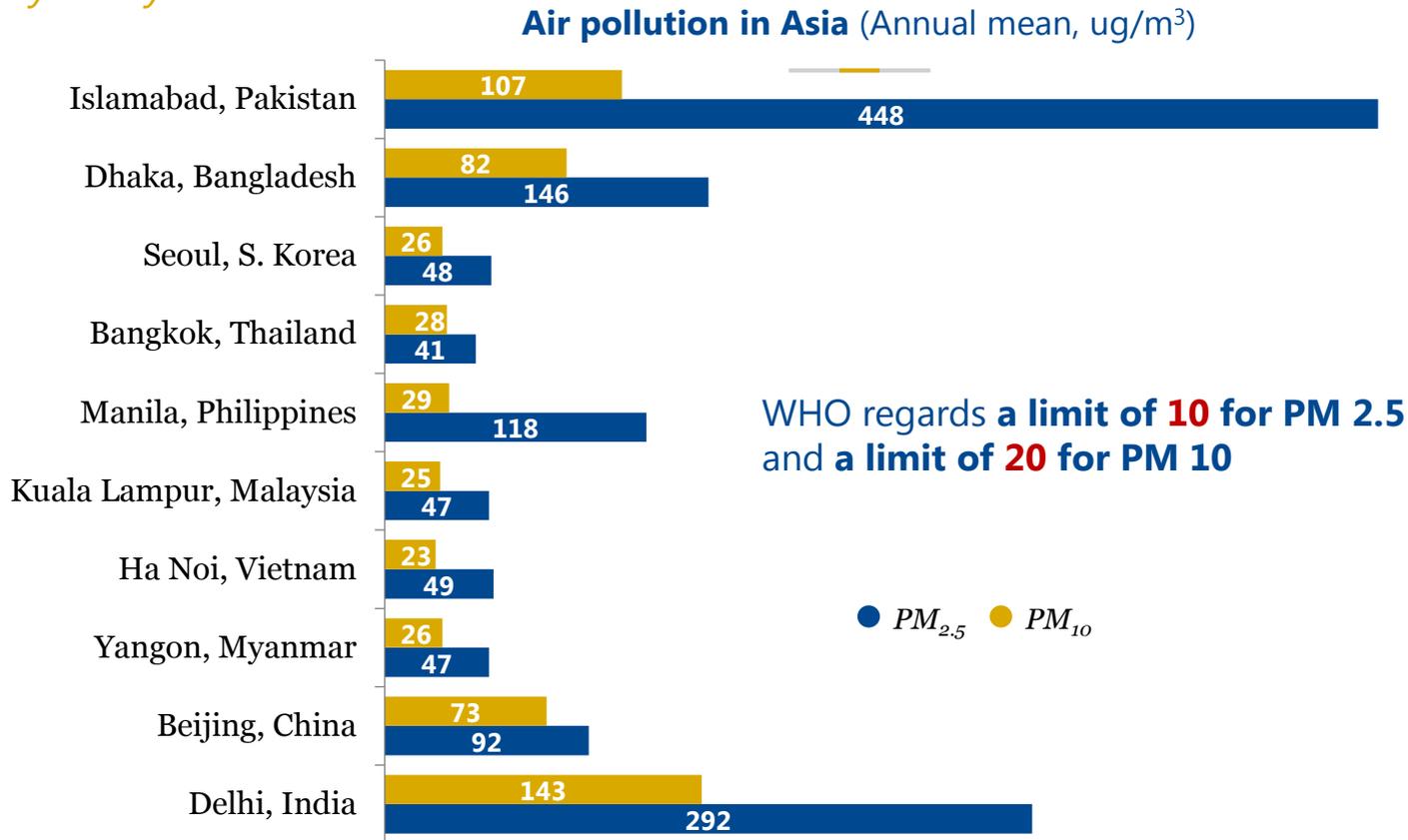
**Global population (Bn)**



Source: World Bank

## IMPROVING AIR QUALITY

*Switching from coal to cleaner-burning natural gas can play a significant role in improving air quality today*

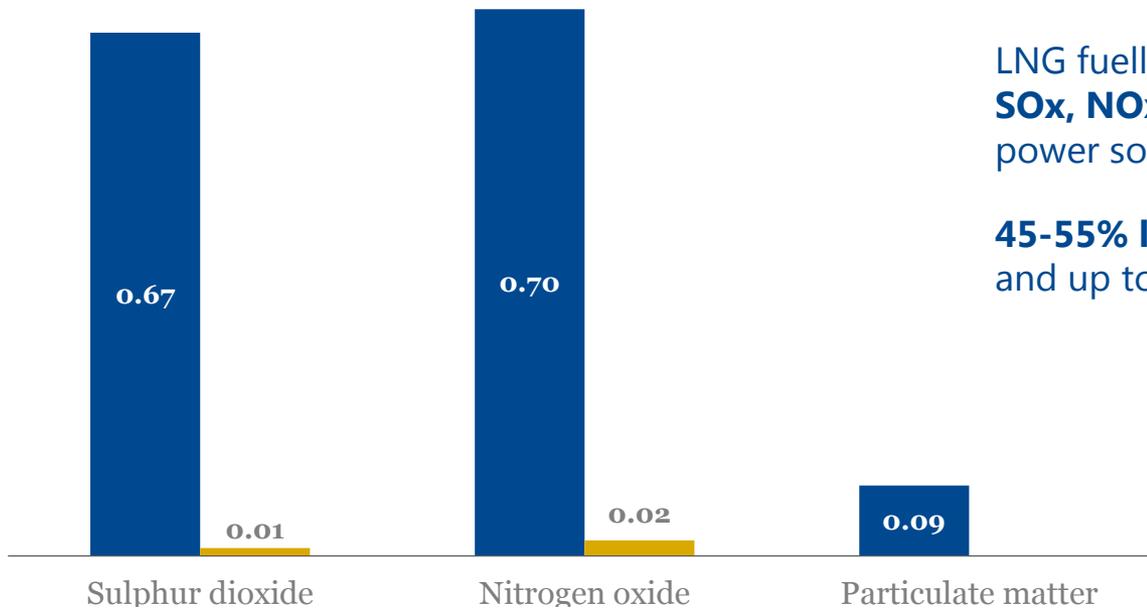


Source: [World Health Organisation](https://www.who.int)

# NATURAL GAS AND LNG ARE UP TO 90% CLEANER THAN COAL

## Air pollution from gas-fired and coal fired power plants

Lb/MWh



1 Bn people without access to electricity, outdoor air pollution is greatest in populated areas

LNG fuelled power generation has **the lowest SOx, NOx and PM 2.5 emissions** of reliable power sources

**45-55% lower CO<sub>2</sub> emissions** compared to coal and up to 90% lower air pollutant emissions

● Coal emissions  
● Natural gas emissions

Source: [National Energy Technology Laboratory](#)

## WHAT IS LNG?

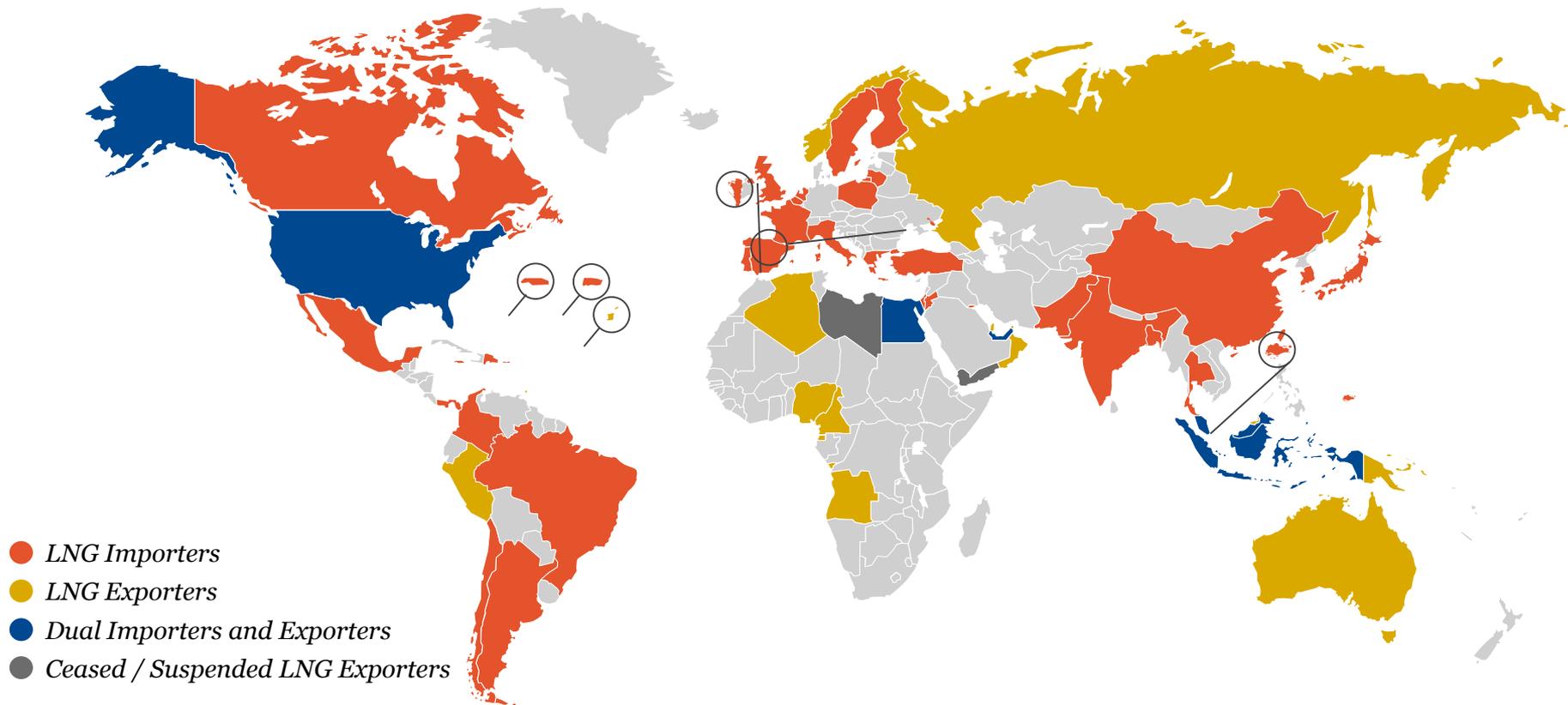
Liquefied Natural Gas (LNG) is natural gas that has been cooled to  $-162^{\circ}\text{C}$  to enable it to be transported over long distances and increase energy density

**In 2018, more than 600 LNG cargoes were delivered to South Korea from 23 exporting countries**



# LNG PROVIDES **AFFORDABLE ENERGY** ACCESS TO 42 COUNTRIES WITH A COMBINED POPULATION OF 4.9BN

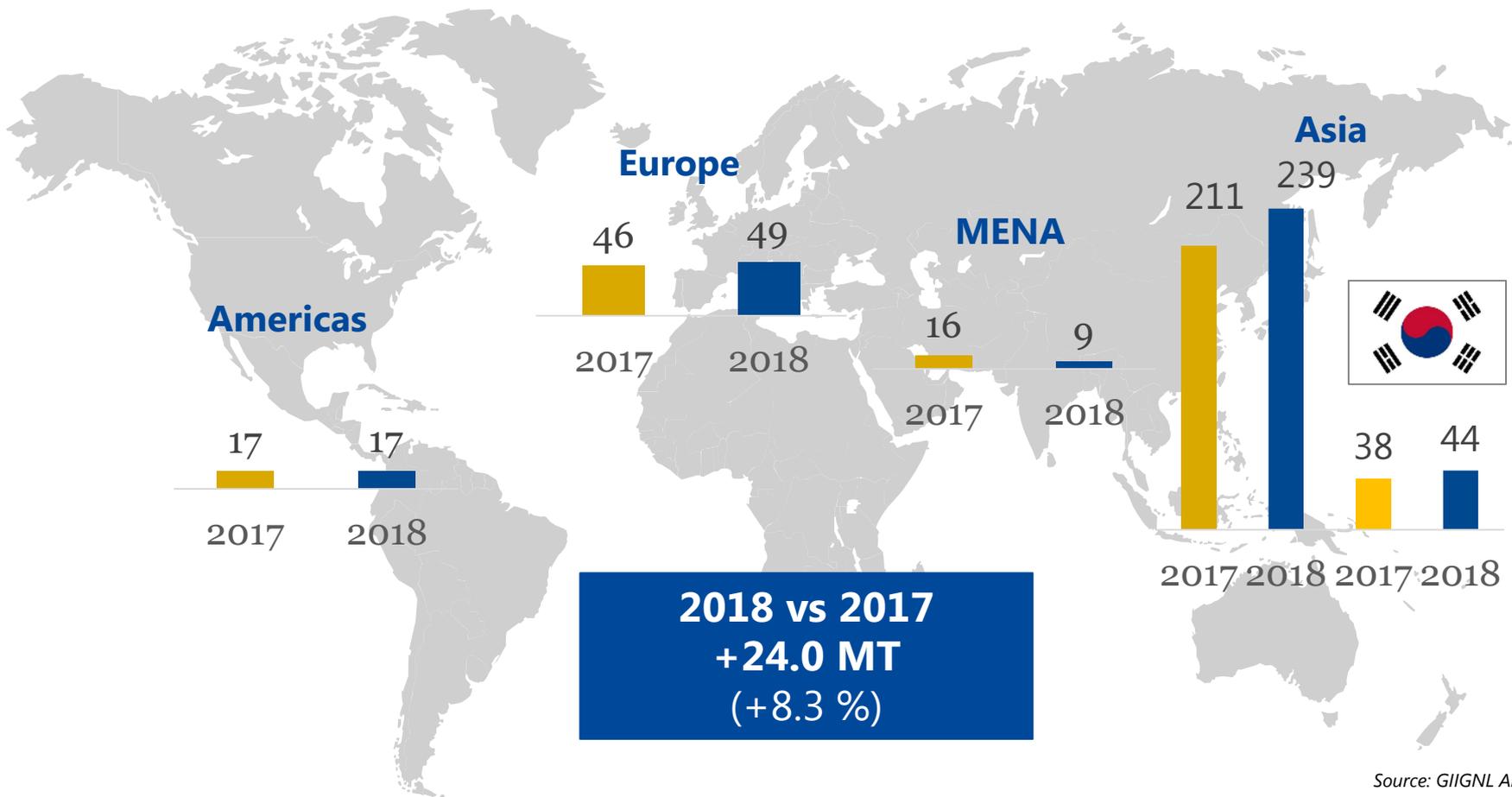
*20 producing countries supplied LNG to 42 importing countries in 2018*



Source: GIIGNL Annual Report

# 314 MT OF LNG IMPORTED WORLDWIDE IN 2018

*Asia represents 76% of global LNG imports*

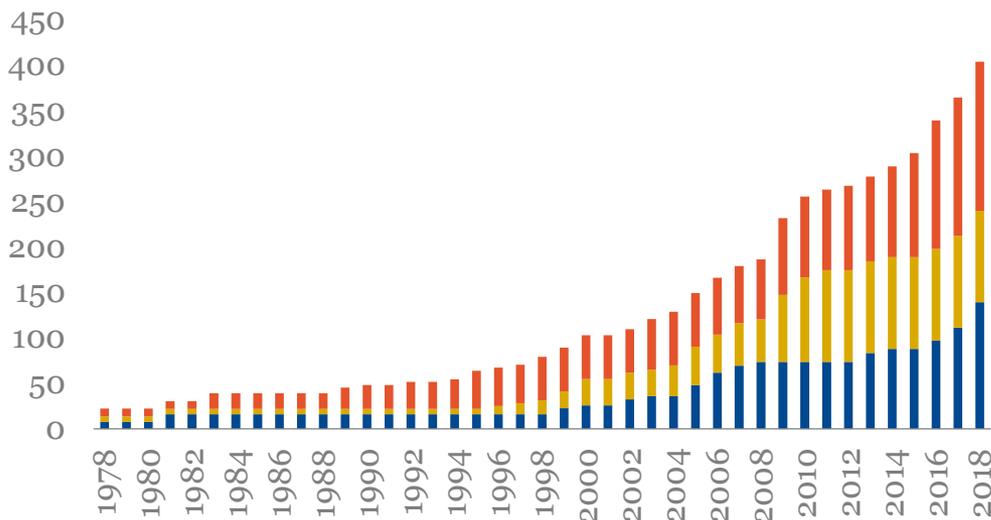


Source: GIIGNL Annual Report

# ABUNDANT LNG SUPPLY WORLDWIDE

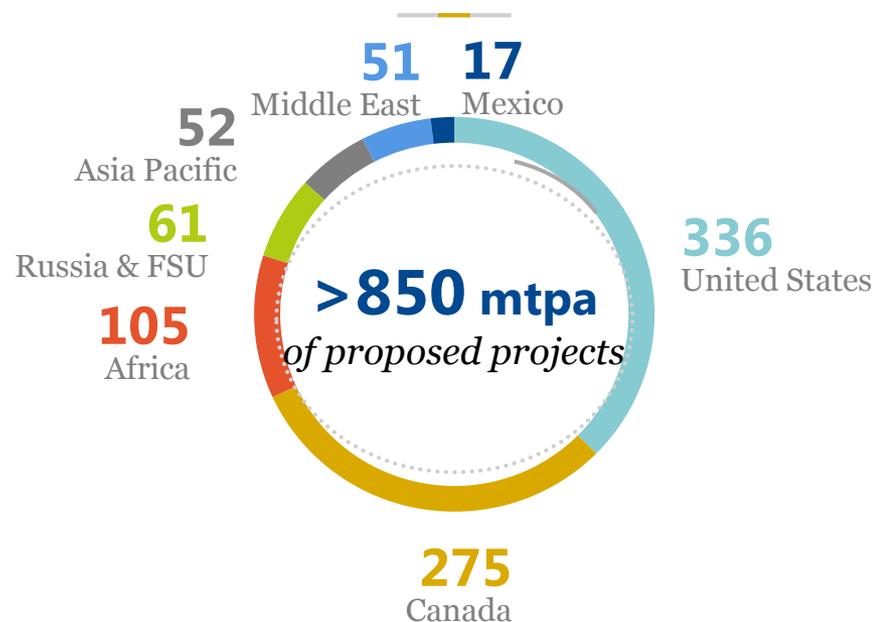
LNG provides low-carbon energy from multiple regions

**Liquefaction capacity by region (mtpa) 1978-2018**



● Atlantic ● Middle East ● Asia Pacific

**Pre-FID projects (mtpa)**



Source: GIIGNL Annual Report, IGU 2018 World LNG Report

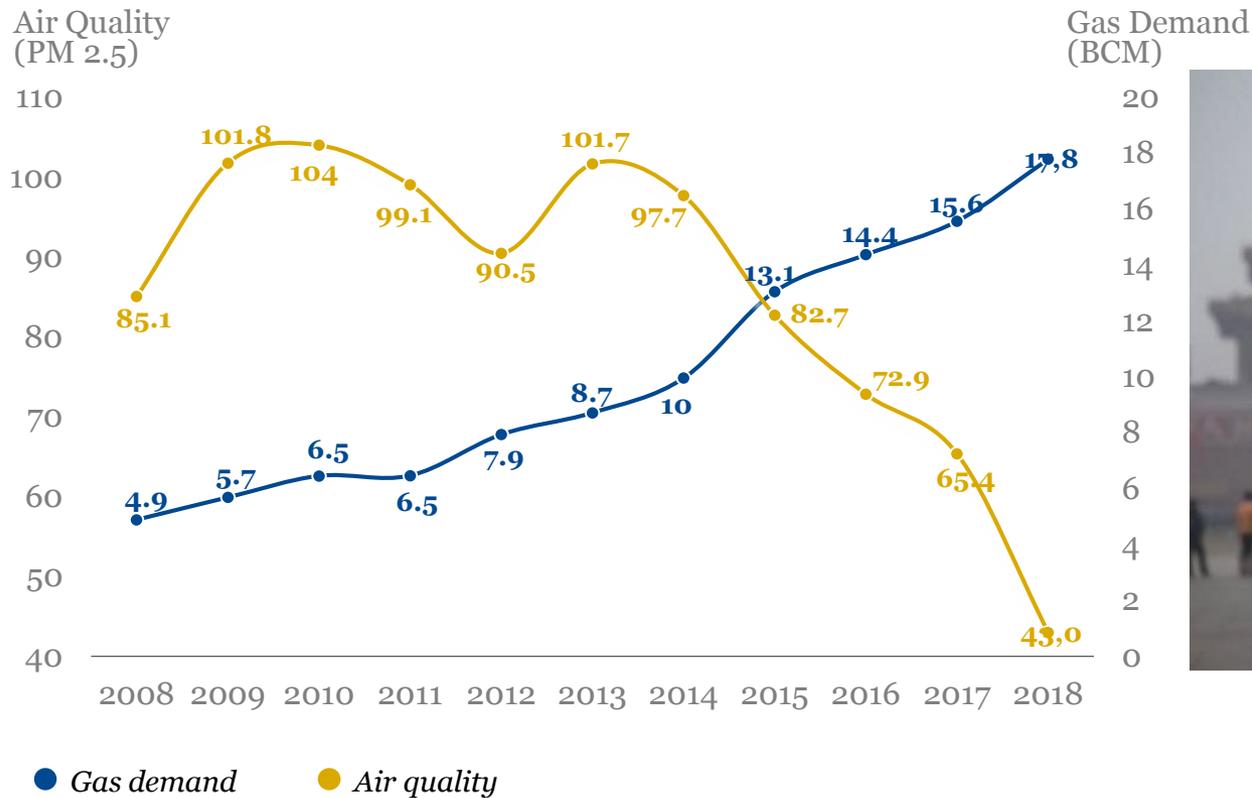
## WHY LNG?



# LNG DELIVERS AIR QUALITY IMPROVEMENTS

*Beijing gas demand boosted by measures to reduce air pollution*

**Beijing air quality and gas demand**



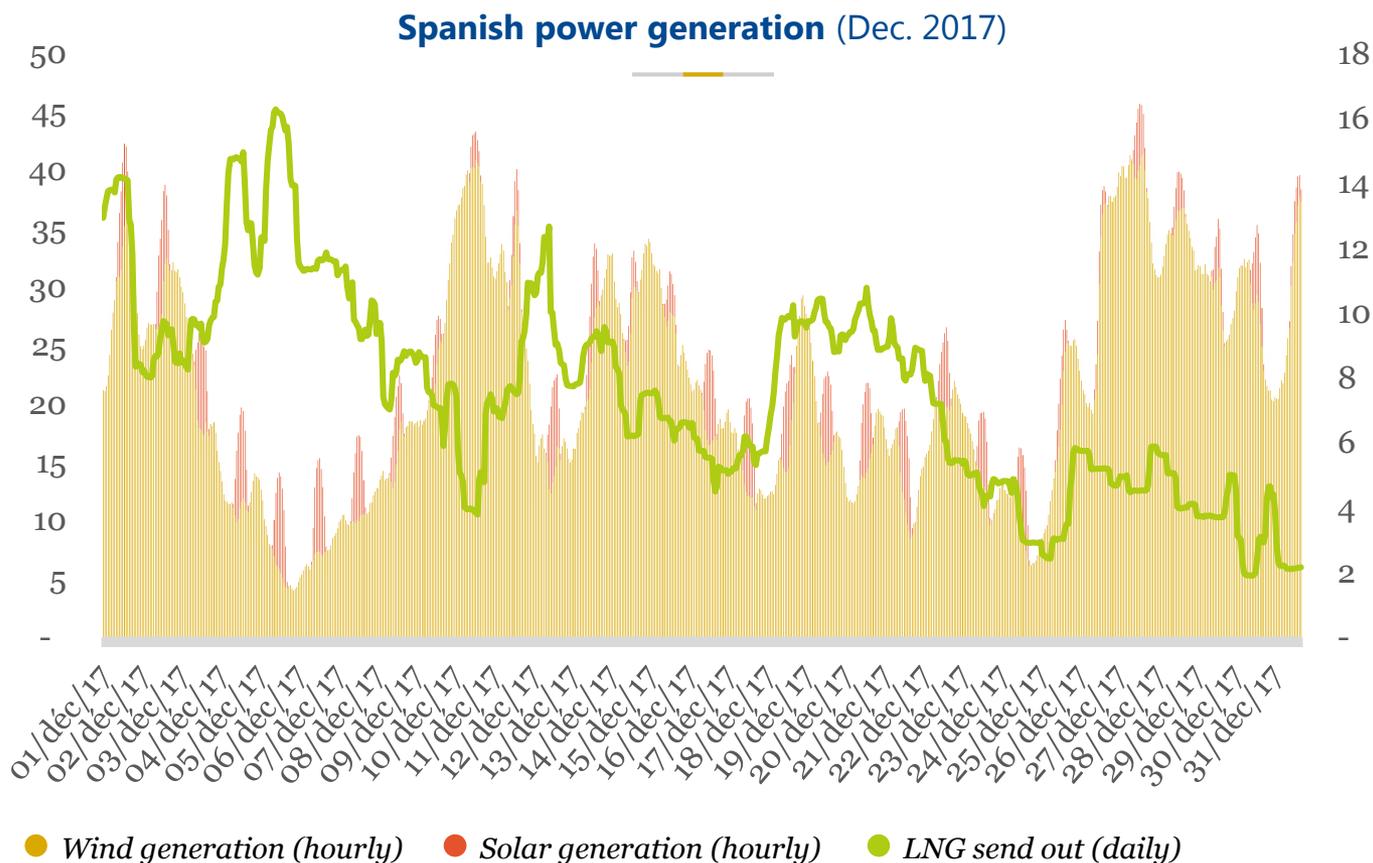
Source: [US Embassy](#), [Beijing Gas Group](#)

# LNG PROVIDES FLEXIBLE BACKUP TO RENEWABLES

*LNG supports generation when the wind doesn't blow or solar is low*

LNG send out  
(GWh/h)

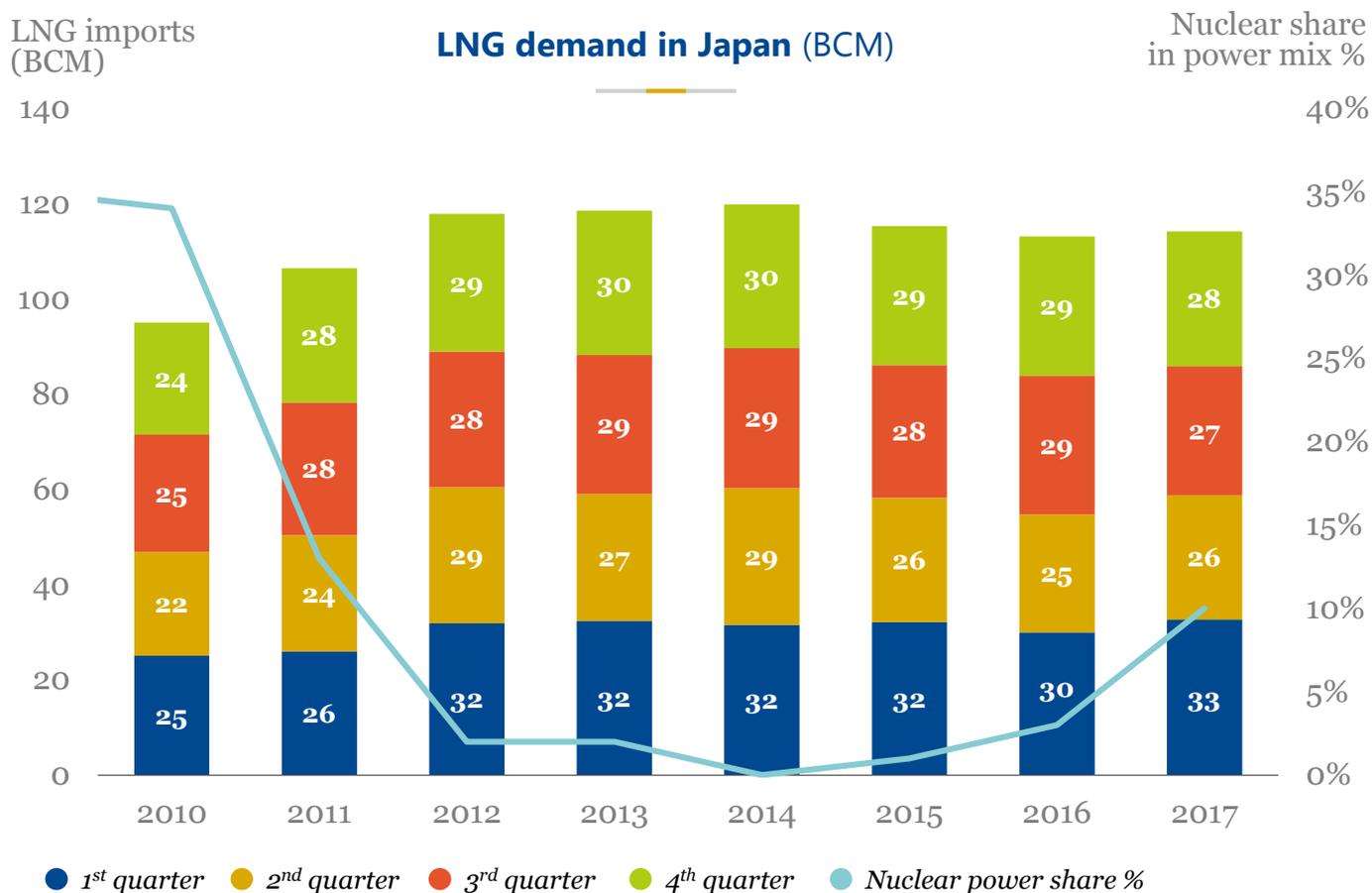
Power generation  
(GWh/h)



Source: [REE](#), [Enagas](#)

## LNG PROVIDES SECURE LOW CARBON ENERGY

*Japanese gas utilities have well-diversified LNG sources and are well prepared for a possible supply disruption*



Source: [METI](#), [OIES](#), [IEA](#)

# A CLEANER, MORE AFFORDABLE AND AVAILABLE FUEL FOR TRANSPORT

1

LNG supply is available in key markets globally



3

The marine segments are adopting LNG

- Container
- Tanker
- Bulker
- PCT
- OSV
- Ferry



2

The LNG road network is developing in EU & China



4

Key downstream infrastructure is being developed



Source: Shell

# THANK YOU

*central-office@giignl.org*

