



Gas Infrastructure Europe

## Gas Infrastructure and LNG

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Gas Infrastructure Europe (GIE) is a European non-profit lobbying association established in 2005. GIE represents the sole interest of the infrastructure industry in the natural gas business

GIE voices the views of its members vis-à-vis the European institutions, regulators and other stakeholders



Gas Infrastructure Europe

67 member companies  
4 observers  
24 countries



# Natural gas – A next-door hero!



- Abundant, affordable and acceptable... quite a casual energy yet a real game changer!
- But also an unknown hero and even a contested one

# Decarbonization, digitalization, decentralization

## From offer to demand driven energy system



- Paris agreement: a major step toward global decarbonization
- Digitalization: consumers empowerment with access to information and control
- Decentralization: territories with local stakeholders engagement are the new playing field



# Natural gas – The low-hanging fruit to tackle climate change



- 13% reduction of global GHG emissions achievable by switching from coal and oil to gas in power generation sector only
- More benefits achievable when considering industrial, building and transport sectors
- The solution to reduce local pollution critical in major cities



# Small scale LNG – New solutions for mobility and remote areas



# Moving LNG from LNG storages to countries where gas is needed

## Transshipment

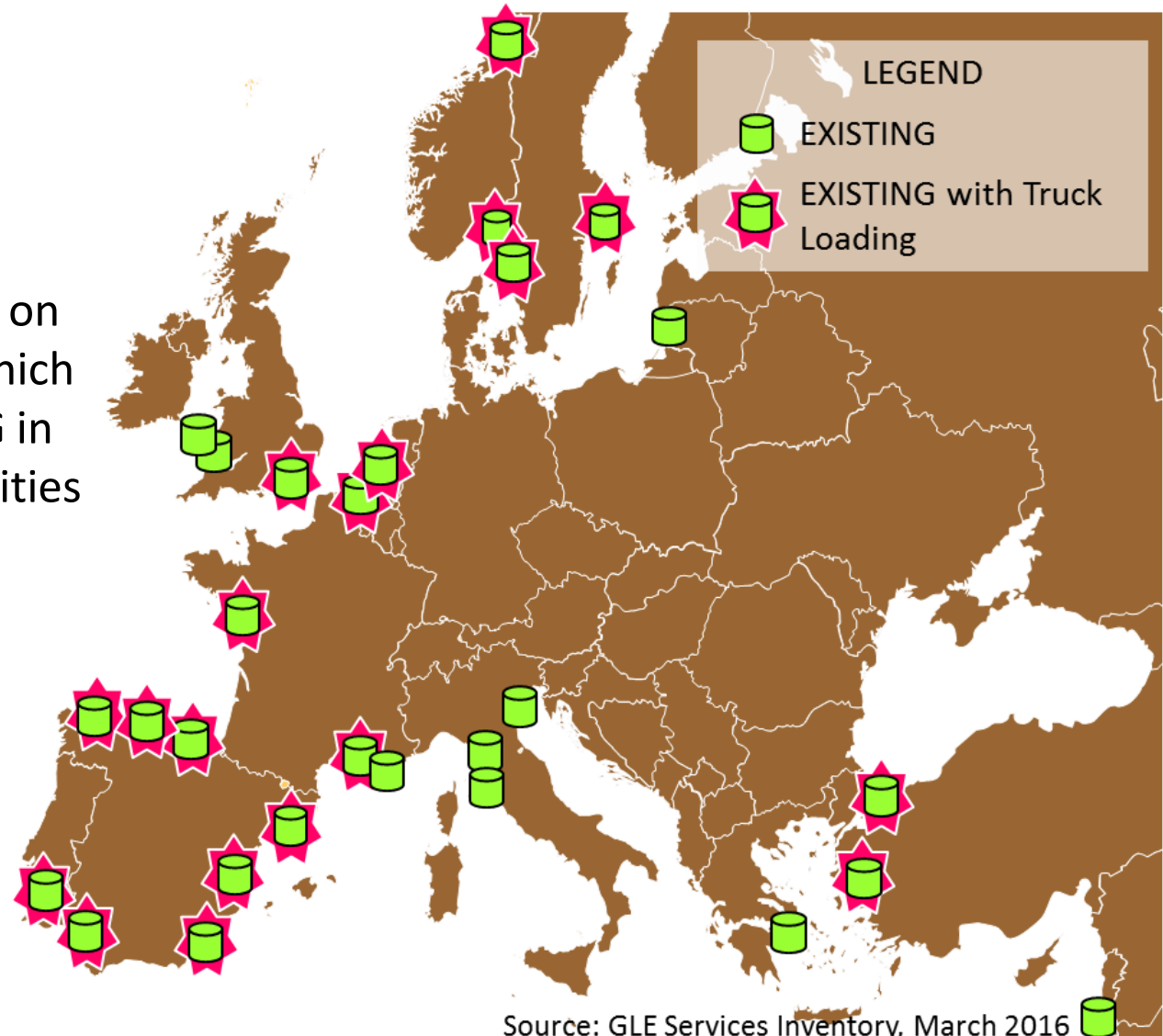
- Transfer of LNG from one vessel to another
- Offered in Belgium, France, Spain, The Netherlands, UK



# Supplying LNG satellite storages by trucks (1/2)

## Truck loading

- LNG is loaded on tank trucks which transport LNG in smaller quantities

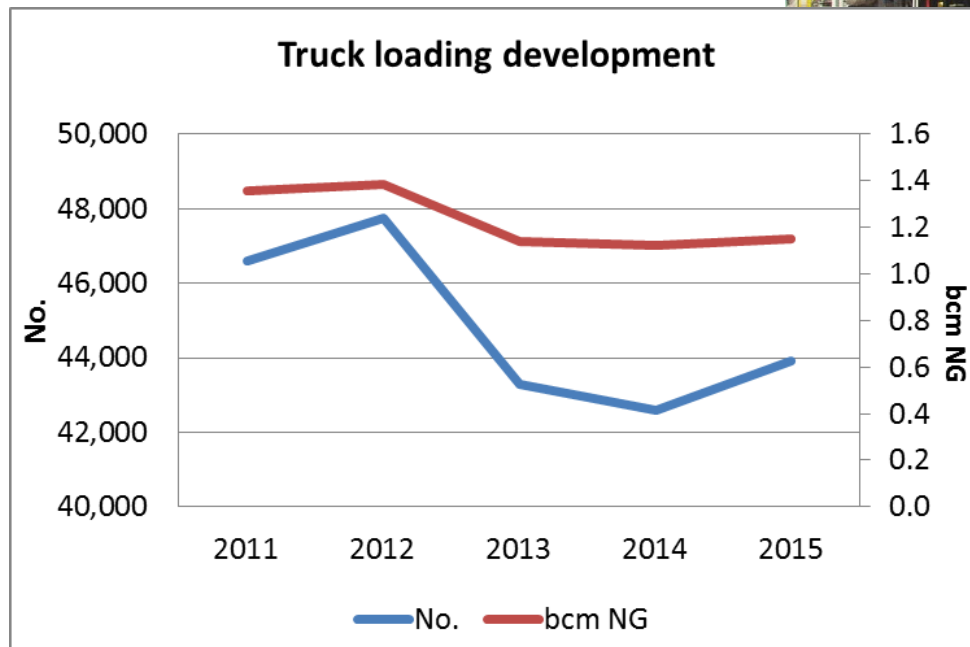




# Supplying LNG satellite storages by trucks (2/2)

## Truck loading

- Almost 44,000 trucks loaded >1.9 mcm LNG ( $\approx 1.15$  bcm NG) at truck loading facilities at large-scale LNG terminals in 2015



## Loading of bunkering ships

- LNG is loaded on bunkering ships which supply to LNG-fuelled ships or LNG bunkering facilities for vessels
- Available in Belgium, France, The Netherlands and Spain



### Rail loading

- LNG is loaded on rail tanks which transport LNG in smaller quantities
- This service has not been available in Europe yet
- Pilot projects being currently under study in France, The Netherlands, Poland, Spain and United Kingdom



**Most of the European LNG import terminals already offer truck loading and the availability of loading bunkering ships is increasing as well**

	Status		
	operational	under construction	planned
<b>LNG terminals (large + small):</b>			
Reloading	15	2	12
Transshipment	3	2	4
Bunkership loading	9	7	11
Truck loading	19	8	5
Rail loading	-	-	4
<b>Liquefaction plants</b>	22	n.a.	2
<b>Bunkering facilities for vessels</b>	26	5	22
<b>Bunker ships</b>	5	4	6
<b>Refuelling stations for trucks</b>	70	14	19
<b>Satellite Storages</b>	>1000	n.a.	n.a.



# European SSLNG installations per country (top 10)

The number of refuelling stations for trucks (currently mainly in Spain, UK and Netherlands) and bunkering facilities for vessels (currently mainly in Norway) are increasing continuously

	Number of Installations*		
	operational	under construction	planned
1. Spain	36	3	12
2. Norway	35	-	-
3. UK	22	2	9
4. Netherlands	17	5	6
5. Sweden	13	-	10
6. France	11	4	11
7. Belgium	7	5	1
8. Germany	5	3	9
9. Portugal	4	1	4
10. Finland	2	8	5

\* excl. satellite storages

Source: GIE SSLNG Map, May 2015

# Renewable gas – fulfill essential needs from unexpected sources



- From fossil stock to lively resources: livestock farming, organic waste, forests, straw, algae..
- Injection of upgraded biomethane into present infrastructures possible without any adaptation investments
- Global potential of 860 bcm green gas from agriculture and waste alone

**Gas Naturally**

*GN is a campaign to showcase the essential role of natural gas in the forthcoming energy revolution. The mitigation of climate change has become one of the most important issues for the gas industry.*

**Thank you  
for your kind attention**

**GIE - Gas Infrastructure Europe**  
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