



***Coal Regions  
In Transition Platform***

**Coal Mine Methane (CMM)  
recovery from shut down coal  
mines**

27 February 2018

 **1<sup>st</sup> gas producer in France also producing green electricity and heat**

 **2 main areas of operations for now: Eastern and Northern France**

- Coal mine methane recovery operations in Northern France
- Coal Bed methane operations in Eastern France
- Over 3 000 km<sup>2</sup> of exclusive permits in both regions

 **An ecologically and economically competitive gas**

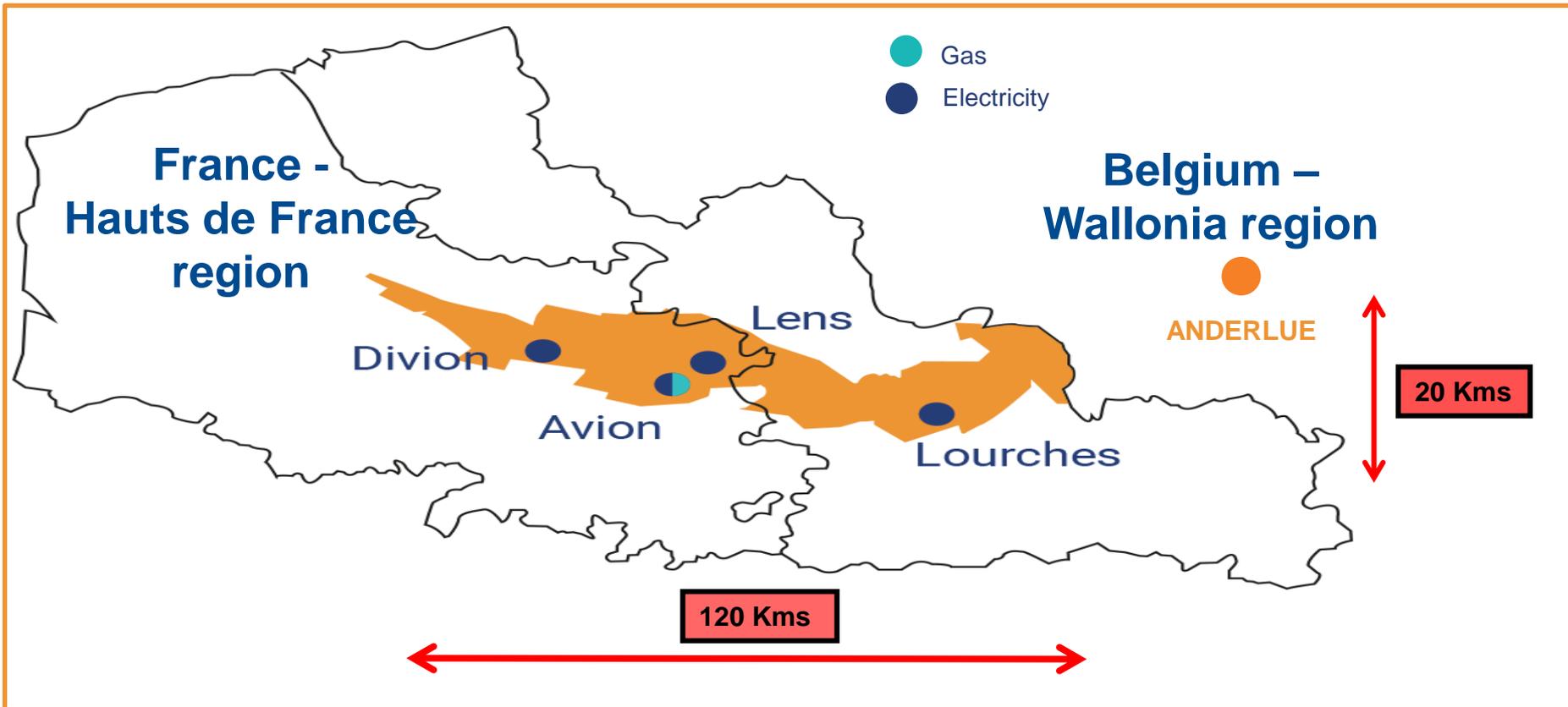
- CMM eliminates gas emissions coming from the former coal mines
- Local production for local consumers means competitive pricing

 **A potential of gas recovery equivalent to 6 years of France's annual consumption <sup>(1)</sup>**

 **Recognised as a leading Innovative company (BPI label)**

*A leading ecological industry player dedicated to the transformation of the coal areas of Europe*

# Focus: Our Coal Mine Methane operations



> 100 000 kms  
of mine galleries

Over 80 existing  
decompression  
wells

4 sites of gas  
recovery

# Very significant potential of local gas recovery in the coal basins

<i>Millions of m<sup>3</sup></i>	Certified gas reserves	Contingent gas resources
<b>Northern France coal basin</b>	6 372	81 468
<b>Year of gas imports Equivalent</b>	2 years	26 years

*DMT certification for LFDE's numbers*

***Massive impact for the various coal regions***



- 4 gas engines with 4 compressors
- 4 stages compression to inject at 60 bar into the network
- Maximum gas recovery of 3500(n)m<sup>3</sup>/h per engine

More than 300 GWh  
gas/year



Covering the gas needs  
of a city of  
40,000 people

# Electricity + heat generation => efficient containered solutions

Latest generation of gas engines installed on 4 sites for a total installed capacity of 9MW.



**9MW installed capacity**  
**on 4 sites**

=>

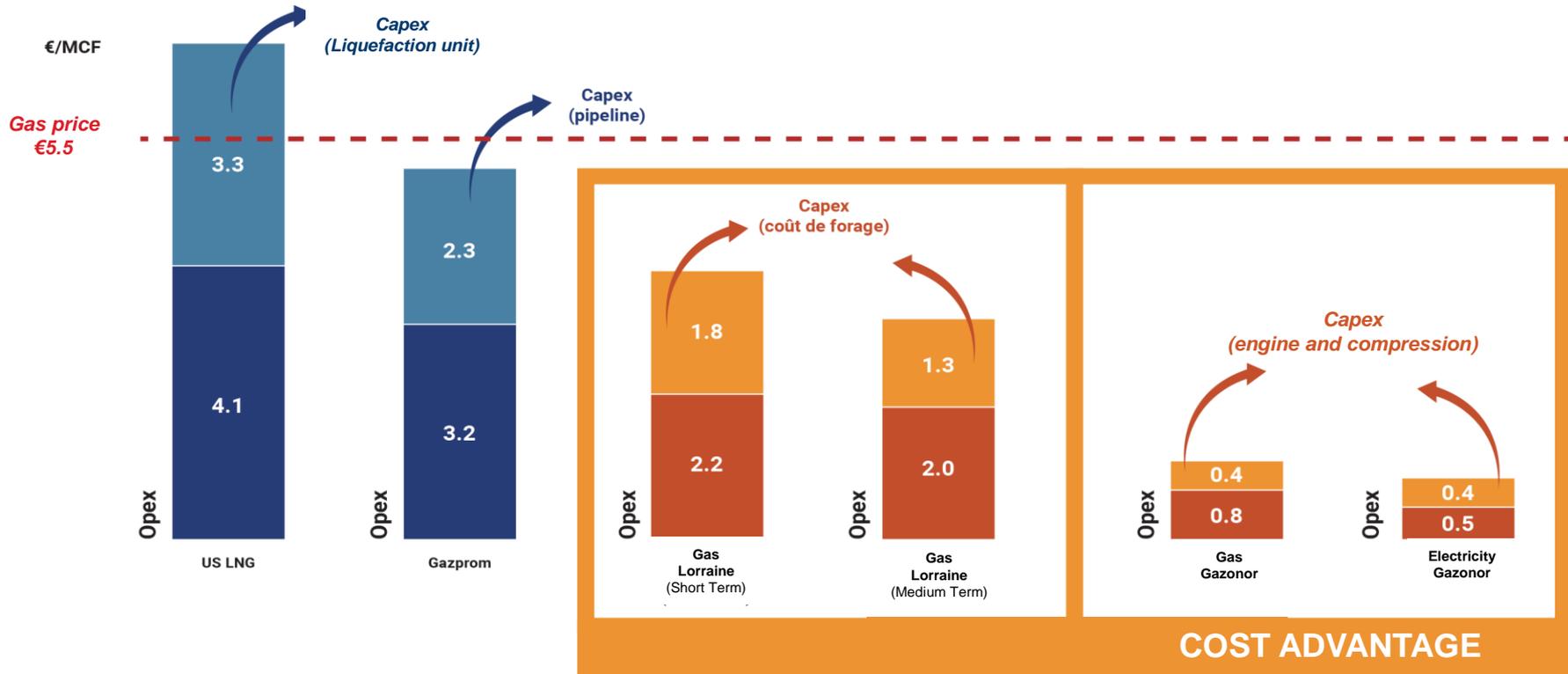
**24 wind turbines**



=>

**Covering the electricity**  
**needs of a city of**  
**40,000 people**

# An economically competitive source of energy



Sources: "Oxford Institute for Energy Studies"

**Decentralized energy production close to consumers is competitive**

## Starting Point

~ 80  
wellheads



An estimated  
**5 million tons** of CO<sub>2</sub>eq  
emissions produced  
annually

## Current situation

4  
recovery  
sites



**+ 250,000 tons**  
of CO<sub>2</sub>eq emissions saved  
per year

**Objective 2022 => ZERO emission of CO<sub>2</sub>eq**

# Helping the coal regions to transition towards a cleaner future!

Contact - Julien Moulin - CEO

Française de l'Energie

+33 (0)3 87 04 32 11

[contact@francaisedelenergie.fr](mailto:contact@francaisedelenergie.fr)