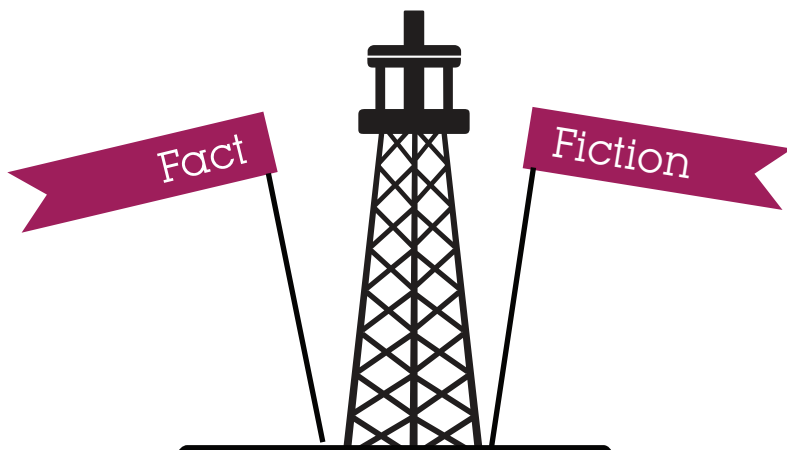
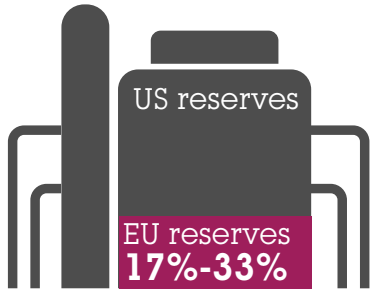


# EU Shale Gas Revolution: Facts vs Fiction



Is it worth it?

## Fact - The EU has potentially sizeable shale reserves



**20 years**

Time it took for  
**US shale gas industry to reach scale**

**4 years**

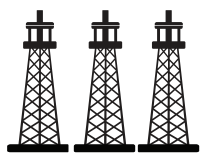
Time spent so far  
**drilling wells**  
to explore shale reserves in EU

## Fiction - shale gas is cheap and will reduce energy prices



**33,500 - 67,000 wells**  
needed across EU by 2050 to reduce prices

Current no. of wells **< 100**



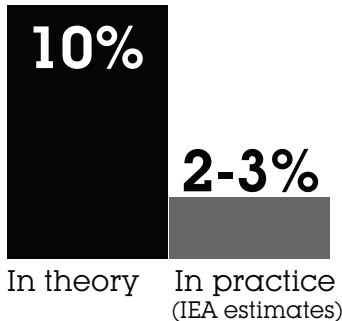
**90%**  
**cut in estimates on**  
Poland's extractable reserves after initial exploration



Need to drill surface area the  
**Size of The Netherlands**  
to reach production level to meet 10% EU gas demand by 2030

## Fiction - shale gas will improve energy security

The proportion of EU gas demand that shale can meet by 2030



**21 of EU's 28 countries**

**import**  
Russian Natural Gas



## Fiction - shale gas will help to address climate change

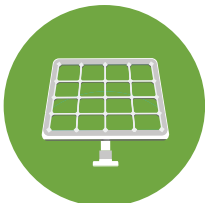
Carbon footprint of:

Shale



**423-535kg**  
CO<sub>2</sub>e/kWh

Solar



**75-116g**  
CO<sub>2</sub>e/kWh

Onshore Wind



**20-96g**  
CO<sub>2</sub>e/kWh

Offshore Wind



**5-13g**  
CO<sub>2</sub>e/kWh

Tidal



**5-13g**  
CO<sub>2</sub>e/kWh

A £32bn investment in shale gas

**could displace**

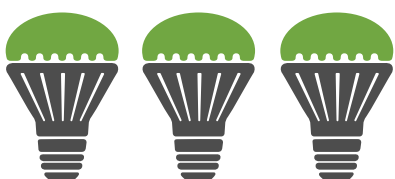
12GW of offshore or 21GW of onshore wind capacity

## Benefits of an energy revolution driven by interconnection, energy efficiency and renewable energy

**↓ 80%** Reduction in gas demand  
by 2050 if 80% renewables in power generation mix

**↓ 62%** (on 1990 levels) to **45%** Reduction in oil & gas dependency  
by 2020 if the EU meets 20% energy efficiency goal

**If targets are met**



Energy efficiency cost savings potential  
**€1-2trillion** between 2020-2030  
**€500bn** a year by 2050 EU

Savings on import costs from renewables targets

**€190bn**  
from 27% target

**€450bn**  
from 30% target

**€460bn** by 2030

from integrating the European energy grid