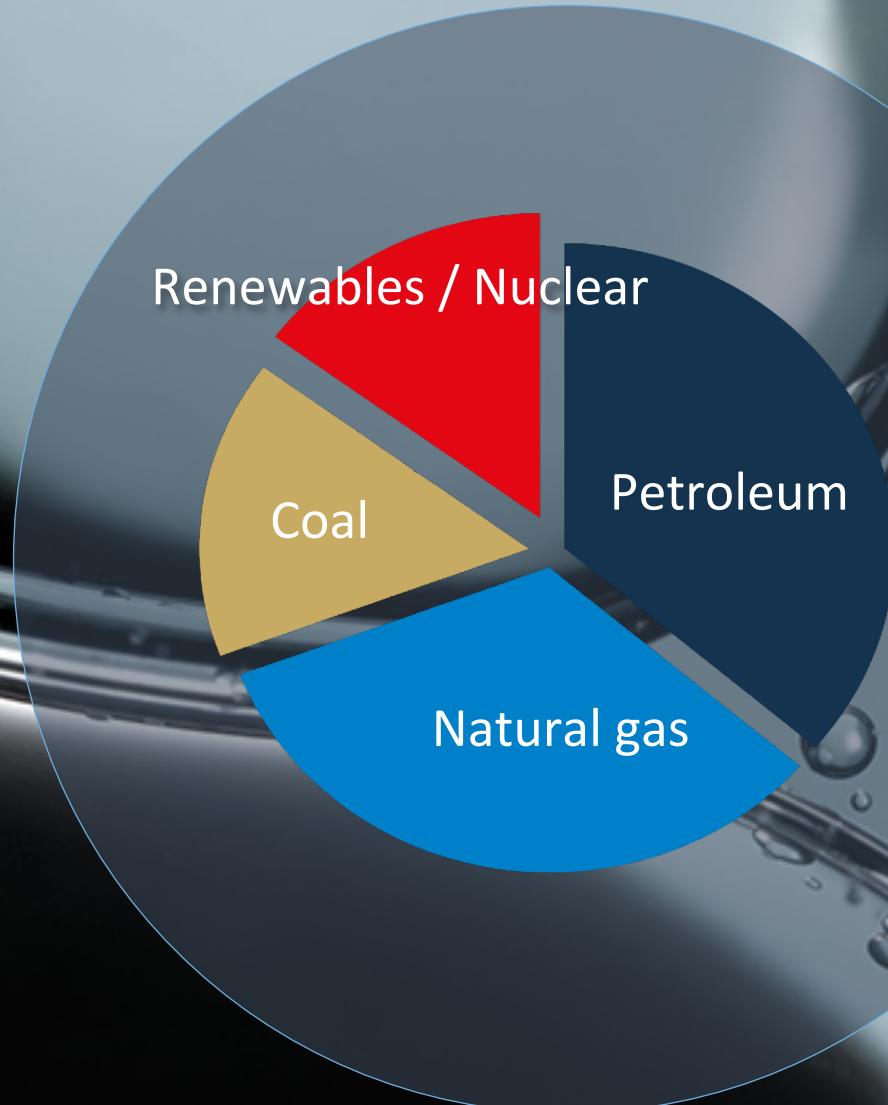


# OIL BRITANNIA



# UK ENERGY CONSUMPTION 2014



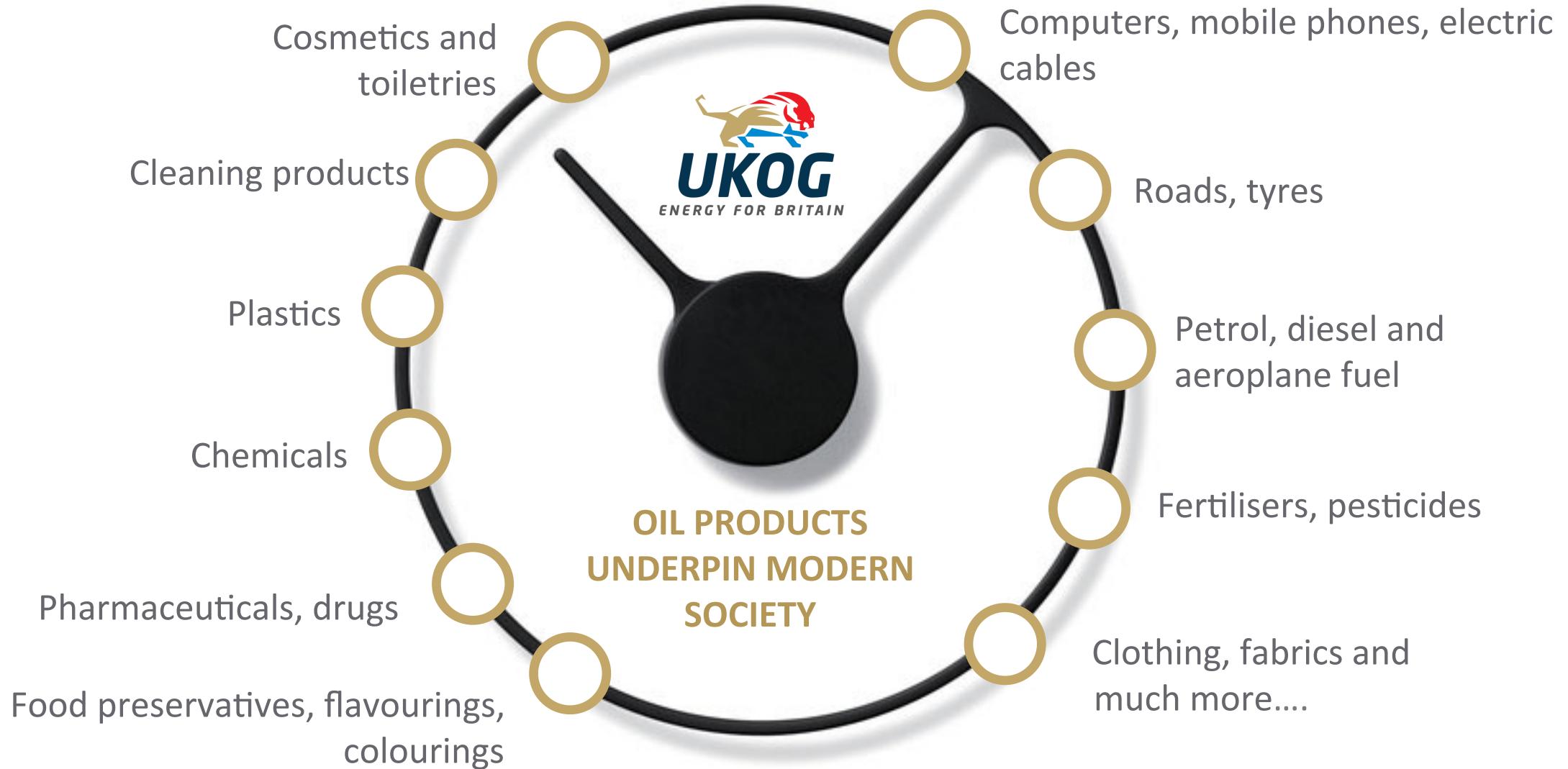
- Oil accounts for 40% of UK energy demand
- Unlike renewables, coal, natural gas, oil is not used primarily to generate electricity
- Used for land, sea, air transport, plastics, pharmaceuticals etc essential for modern life

# RENEWABLES



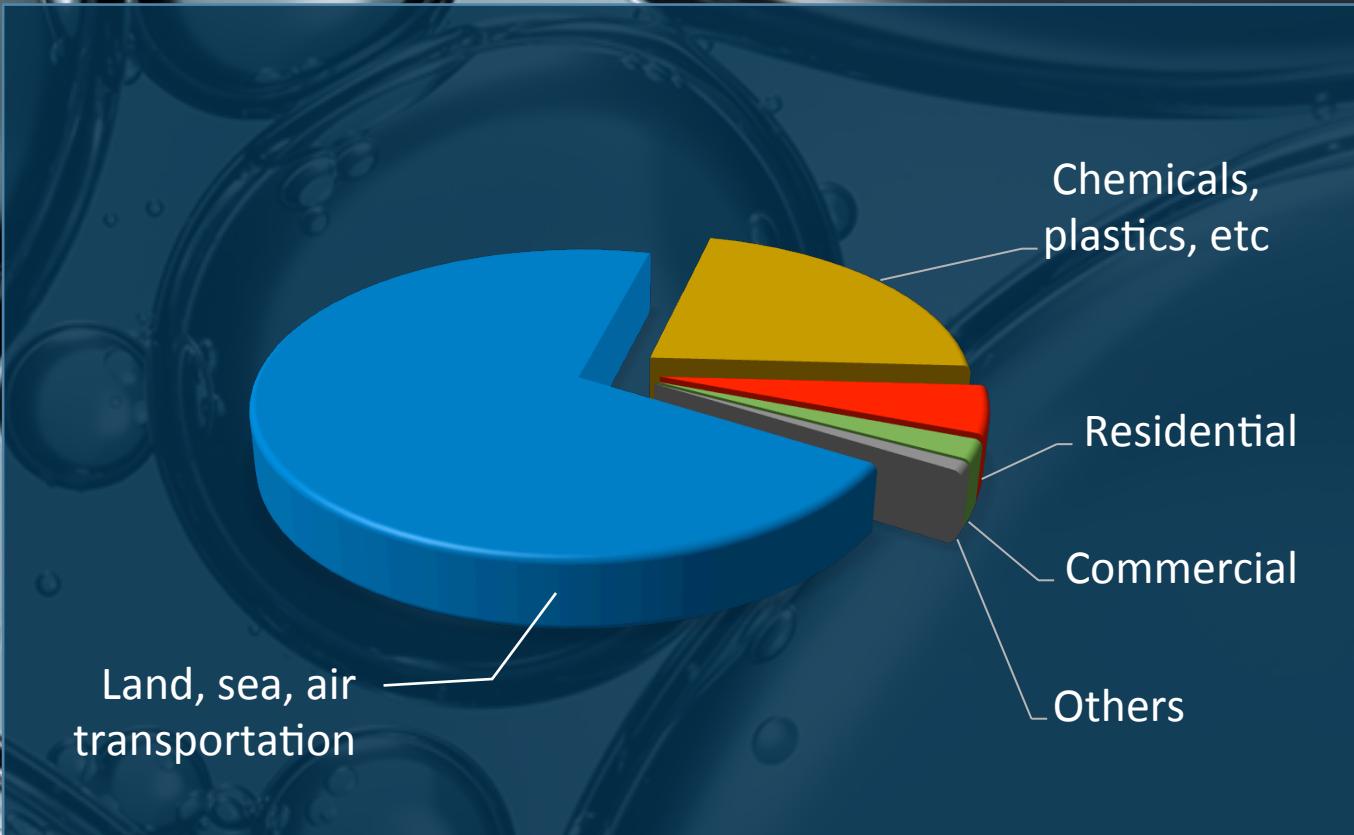
- Renewables generate electricity. Oil is not used for electric power generation
- Renewable projects need oil based products & components
- Renewables cannot replace oil

# OIL: IMPORTANCE IN DAILY LIFE



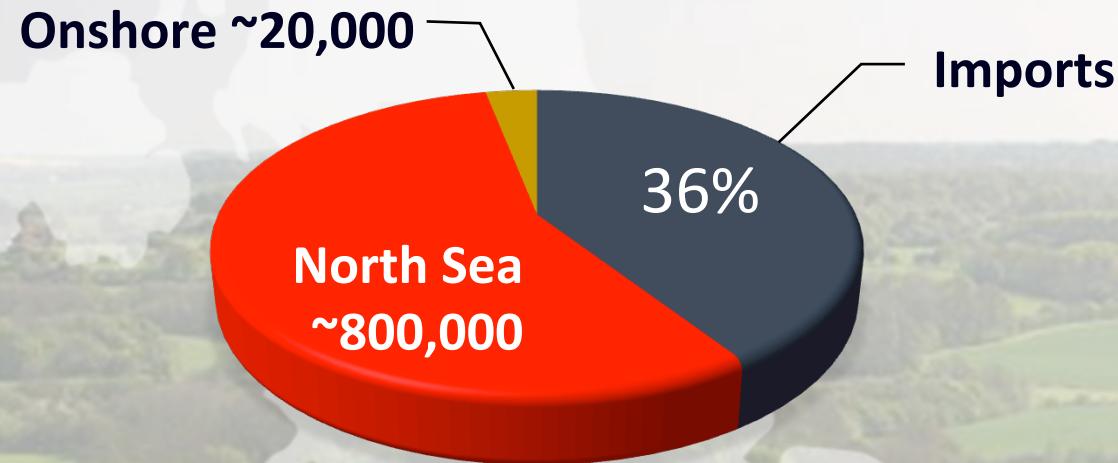
Britain consumes  
**~1.4 million  
barrels per day**

- 70% of it is used as fuel for transport.
- 30% of it is used as petrochemical feedstock
- None of is used for electricity generation



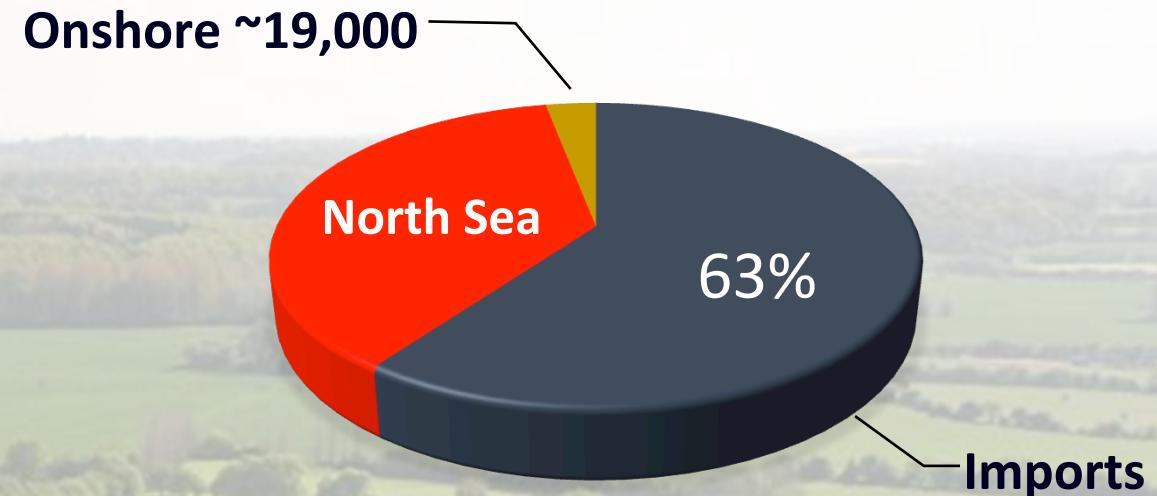
# UK OIL SUPPLY 2016-2030, NORTH SEA DECLINES

2016 (BOPD)



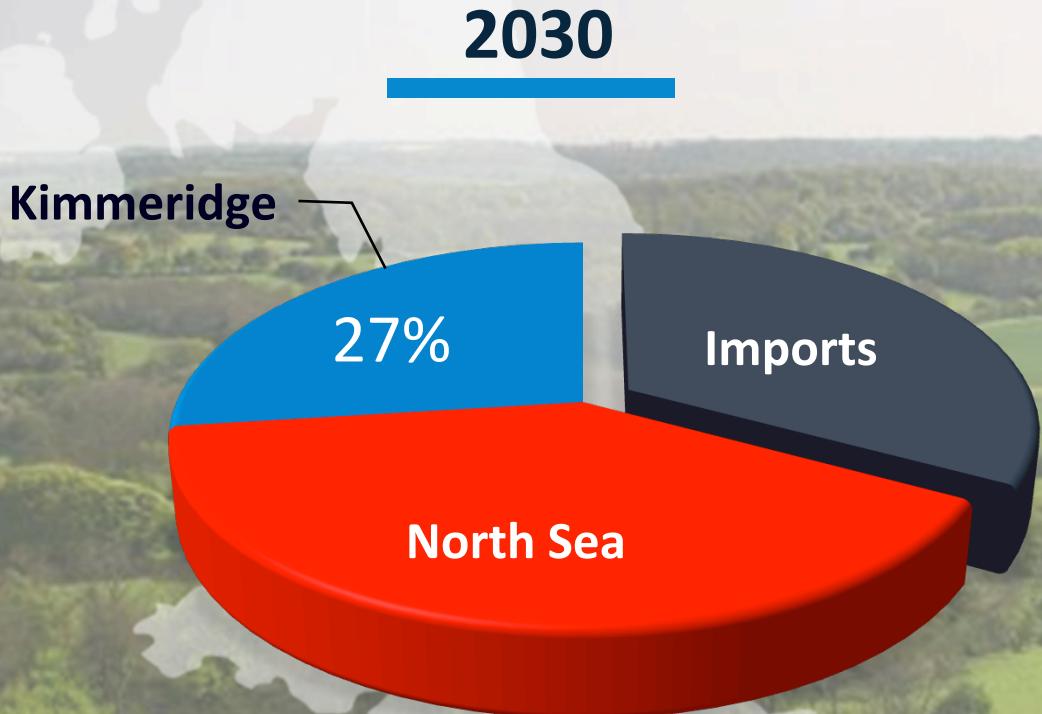
Net oil import dependency  
36%

2030 (BOPD)



Net oil import dependency  
63%

# WEALD KIMMERIDGE OIL CAN INCREASE ENERGY SECURITY



***“Energy security provides the foundation of our future economic success. It is the top priority.”***

**Amber Rudd, Secretary of State for Energy and Climate Change**

***Kimmeridge Oil can reduce imports by ~27%, create jobs and boost economy***

# GEOLOGY LESSON- KIMMERIDGE BAY

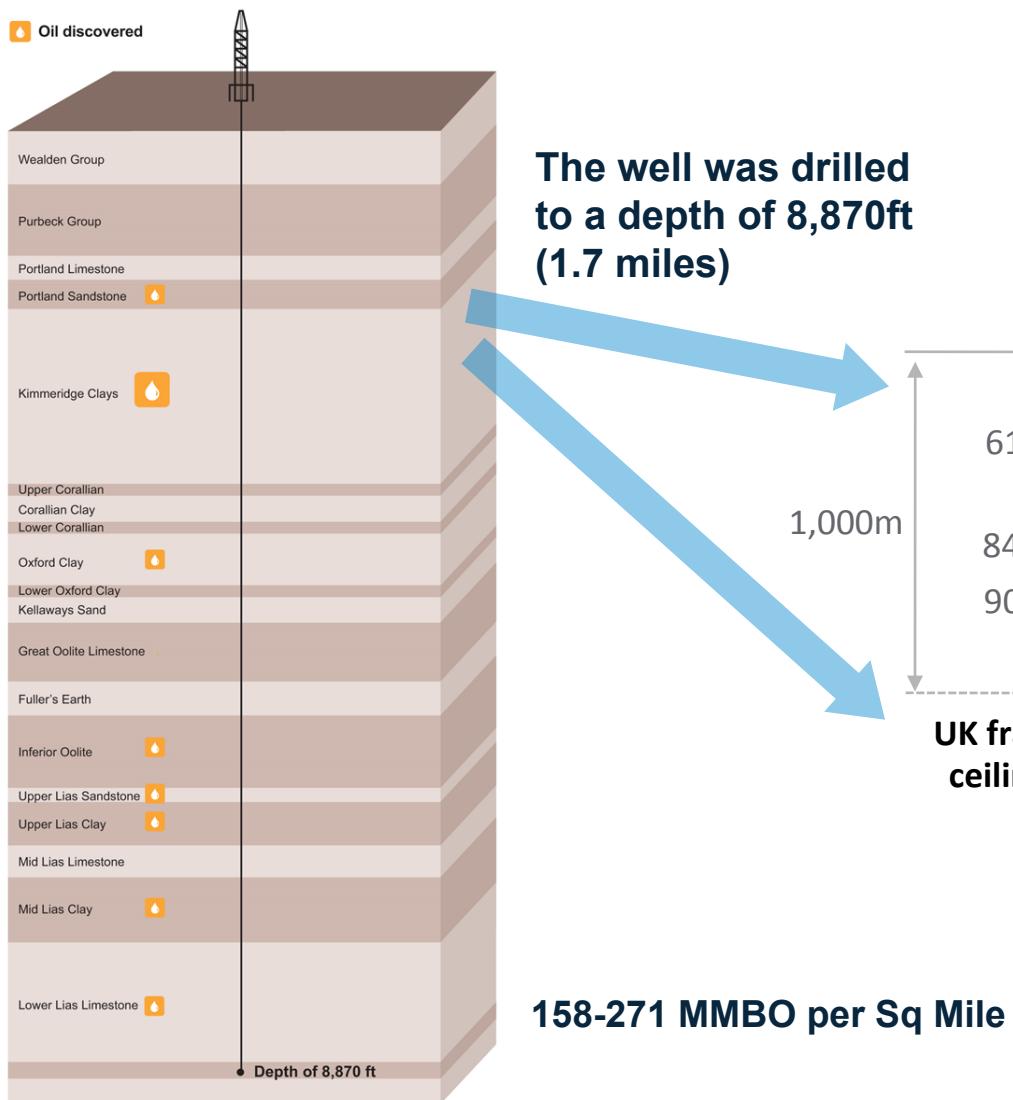
**OIL:** The product of 'cooking' fossil organic matter (OM) in the earth's subsurface. OM derived mostly from fossil plankton and algae.

**SHALE:** A sedimentary rock made of fossilised mud and clay particles, deposited in very fine layers in marine/lake environments.

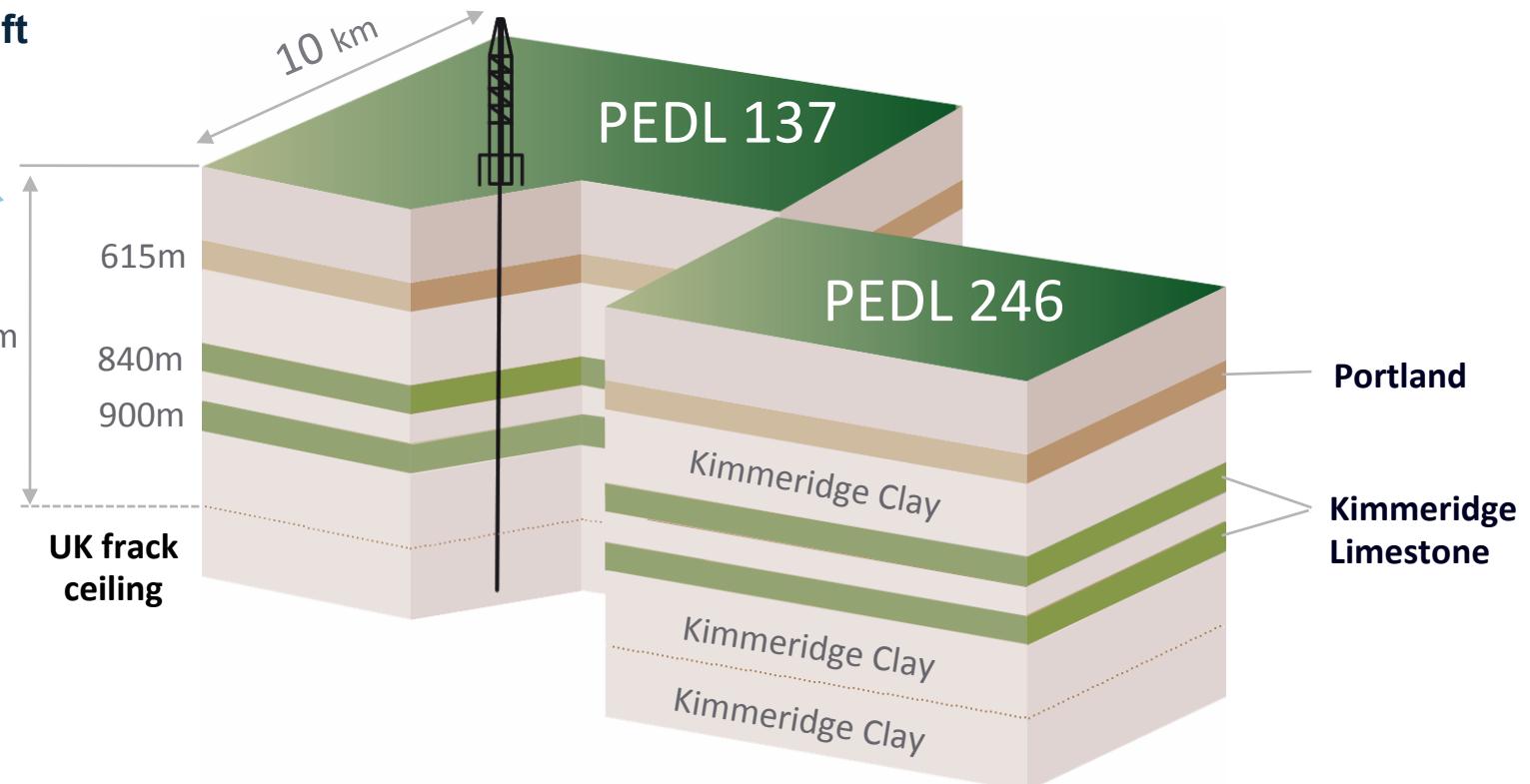
**SOURCE ROCK:** A rock which generates oil. A shale containing large amounts of organic matter which generates oil.



# HH-1 OIL DISCOVERY 2014



## Horse Hill 1 - Gatwick Gusher



## WEALD BASIN: CALCULATED OIL IN GROUND, post HH-1



# TOTAL WEALD

124 billion barrels OIP

19.5 billion barrels Kimmeridge Limestone

# NUTECH Study area

1261 Sq miles

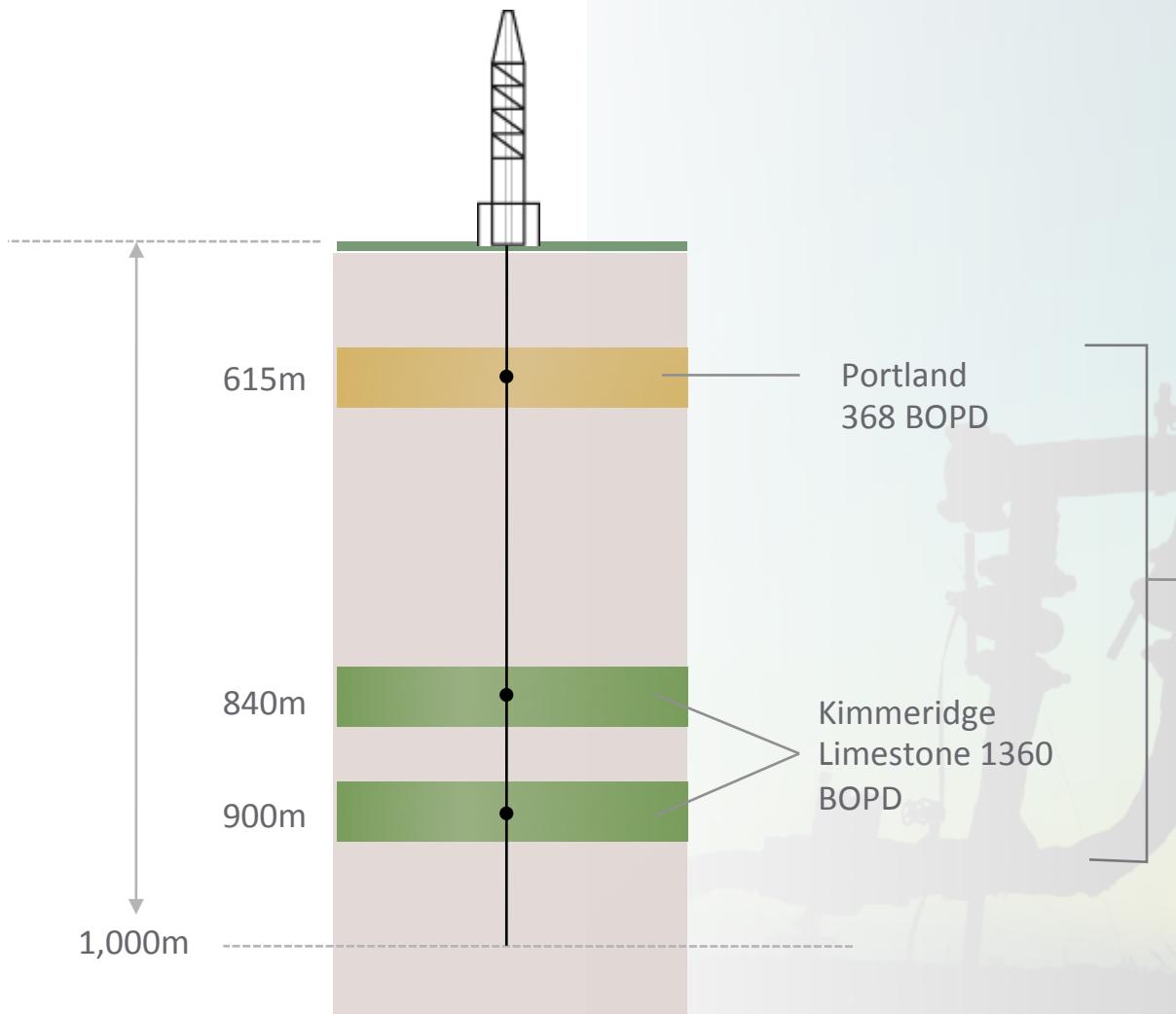
# HORSE HILL LICENCES: 55 Square miles

# 11 billion barrels

## 8.3 billion barrels Kimmeridge Limestone

# GATWICK GUSHER FLOW TEST

## First-ever Kimmeridge Limestone Oil



### Kimmeridge Limestone Oil: From science project to commercial reality

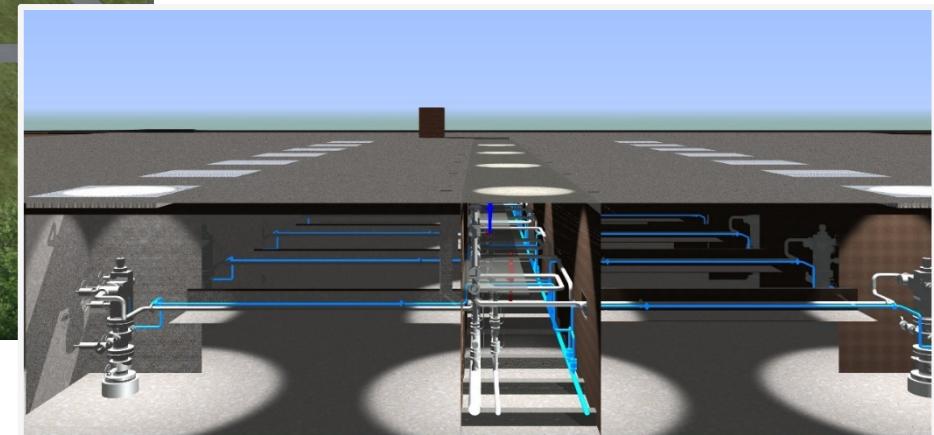
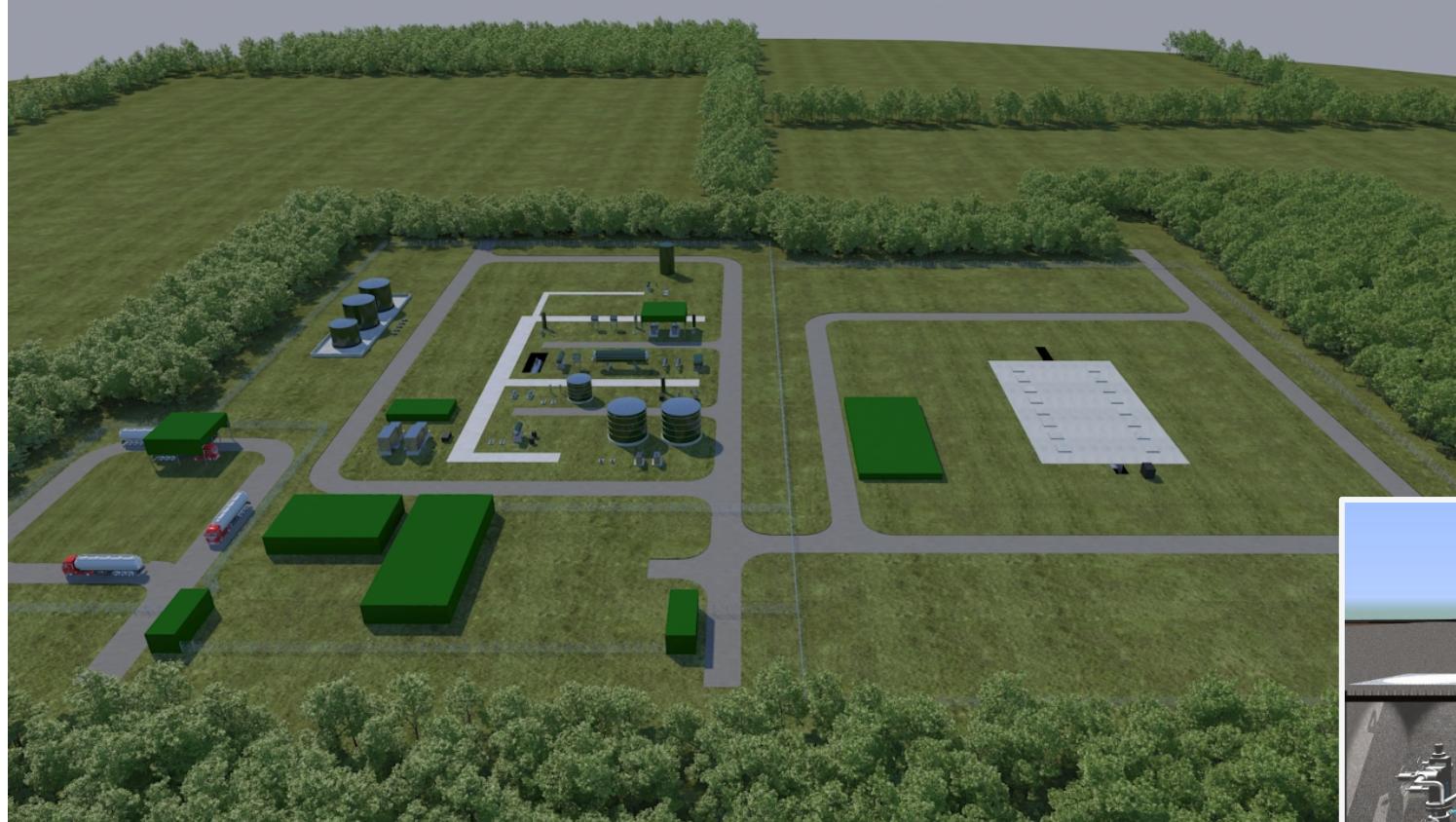
- Aggregate oil rate 1,688 BOPD  
~ 8.5% of total UK onshore daily  
oil production
- North Sea rates
- Highest rate of any UK  
Discovery Well

Can be produced with low visual impact

- 12-24 wells in 4-6 acre site
- Wells and pumps below ground level
- Control production to reduce initial road tanker impact
- Can be located in brown field sites and away from villages, houses, small roads



# LOW IMPACT DEVELOPMENT PLAN by Xodus Group



# IMPACT ON UK ECONOMY: EY REPORT



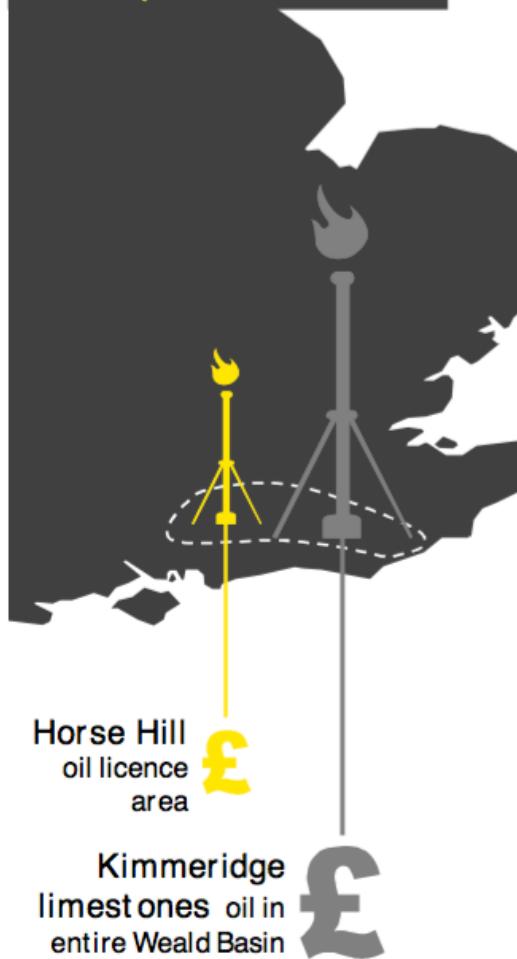
Future peak oil production could provide approximately 4% to 27% of UK daily oil demand over the life of the project

Gross Value Added to the UK economy could range from £7.1 billion to £52.6 billion

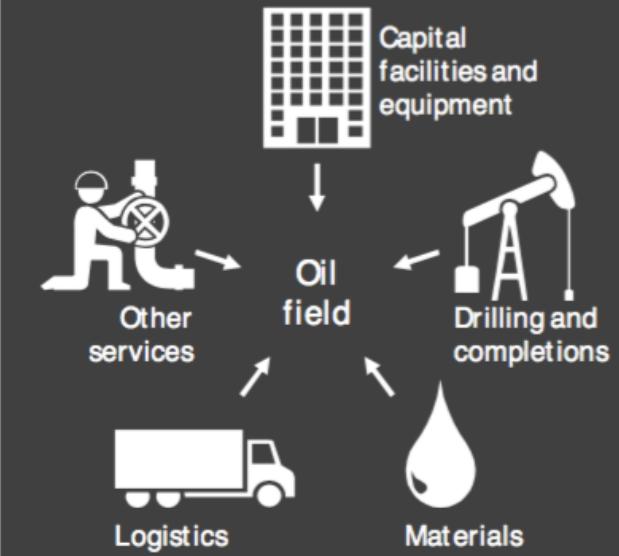
Generation of between approximately 1,000 to 5,600 jobs in the UK, averaged over the project's lifetime

Lifetime tax revenues of between £2.1 billion to £18.1 billion

## Development Potential



## Supply Chain



## Economy



## Jobs

Total estimated average jobs created ...



## Tax

Estimated lifetime tax revenues...



## Community

Total estimated Community Benefit...



## Fuel

Average oil production per year...



That's enough to run  
200k cars 1.7m cars for a whole year\*



\*based on average fuel consumption of new petrol cars in 2014 and average annual car mileage in 2012

## The journey has just begun

- Consolidate and increase licences holding in Weald Basin – control the Kimmeridge Oil play
- Bring Horse Hill/Gatwick Gusher to production
  - 3x 90 day production tests (2016)
  - 3D seismic (2017)
  - Horizontal production wells (2017)
- Show HH-1 resources can be repeated to south and west in the Basin sweet-spots
  - Holmwood -1 well (2016/17)
  - 2 others identified wells (2017/18)







<http://www.ukogplc.com/>

