FAQs Updated July 2020

WHERE?

Where are they proposing to drill?

WHAT?

What has happened so far on IOW?

What are they hoping to do and extract?

Map on Website

- Arreton 3 & 3z- the wellsite is below St Georges Down for 2 wells - 1 Vertical Exploration Well and 1 Horizontal Appraisal Well
 - Godshill Roud Site Exploration well proposed if Arreton 3 is successful

UKOG has submitted planning permission from 19th June 2020 and the public Consultation is now open until July 24th 2020.

Members of the Planning Committee are allegedly undertaking virtual Government training for Fossil Fuel applications on July 12th.

The application is for a period of 86 weeks activity including construction of a road jucnetion and access track to a 2.5 Hectare well pad and the drilling of the two wells to explore and appraise the viability of extraction of the oil

So far we know...3.7 million barrels of oil from Arreton Purbeck/Portland Strata during the second phase of appraisal of the well. $2^{1}/_{2}$ days supply for the UK. Probably taking 5 to 10 years and requiring them to submit a full production request to the OGA from the well and apply to the IWC to go into full production by drilling further wells if necessary.

A Further 10.8 million barrels of oil are deeper down within the permitted fracking zone in the Inferior Oolite strata. But there is no mention yet of this in the current application

What are Conventional and Unconventional Wells? There is a lot of confusion about this for the public.

Definitions vary according to industry, geologists and government criteria or statements....

The Industry and government claim that wells using acid stimulation with horizontal drilling in limestones and sandstones are Conventional wells and that only Hydraulically Fractured wells are Unconventional, but this is not the case.

In fact these techniques are newer than the conventional wells thathave been used for the last hundred years and can have very similar devastating impacts.

- Traditional Conventional extraction has taken place over the last 60 years from pools or reservoirs of oil beneath the surface by drilling a single vertical well into the reservoir which allows oil to be pumped or it gushes to the surface under pressure. These reservoirs are now depleted in the UK and abroad are slowly running out of fuel and for this reason Unconventional forms of extraction in more difficult strata are being promoted.
- More Recently labelled Conventional wells are different. They are called Conventional because they are drilled into strata which contain "tight oil" trapped within lime and sandstone and not shale. So these don't match the Government definition of unconventional Hydraulic Fracking in shale. See Below. However they use similar techniques to Fracking in that they drill multiple horizontal wells into the strata and are often stimulated with acid under pressure to bring the oil to the surface.
 - These are permitted to be drilled from the surface of AONBs but not drilled below1000m.
 - Usually used for limestone and sandstone strata, close to the surface which is very permeable **but not for tight oil or gas or in shale.**
 - No environmental impact assessment is mandatory for this type of drilling but it should be requested.

a) Fracturing and stimulating rock formations

a) This is a term sometimes used for wells that are drilled from a vertical shaft into formations requiring <u>fracturing</u> or stimulation of fuel bearing source rocks to help release the fuel or improve flow rates puncturing the well and strata to break open spaces for oil or gas to travel into the well casing.

b) High Volume Hydraulic FRACKING.

It is a form of Unconventional fossil fuel extraction. It is the only form that has a government definition.

Wells that use more than 10,000³metres (10 million litres of fluid for the complete process.

However if the definition is to be believed then all of the wells that have been hydraulically fracked in the USA between 2011 and 2013 would not be seen as FRACKING since they used less than this amount of fluid but were still fracked.

c) Acid Fracking and Matrix Acidisation is a further form of fracturing by injection of acid into Limestones such as the Portland and Kimmeridge at high pressure to dissolve the strata to allow the oil to flow

b) FRACKING, according to industry & government criteria;

- takes place in <u>multiple horizontally drilled shafts</u>, below 1000m in dense shale and tight rock formations using more than 10,000 cubic metres of fluids for each fracked well.
- after fracturing the strata, an average 4.5 million gallons of fresh water and 40,000 gallons or more of chemicals and silica **per well** are pumped at extreme high pressure to force the cracks open
- this cannot take place from the surface of AONBs and sensitive areas unless it can be demonstrated that both exceptional circumstances exist and such development is in the public interest, but wells can be drilled horizontally beneath them from well pads at the borders of them.
- **c)** This is not considered to be unconventional by government definition.

What about our safety regulations?

Once planning has been granted the operators become **Self- Regulating and are required to make regular reports** to the Oil and Gas Authority, Health and Safety Executive and other government bodies, their activity and any events or impacts due to human error or unconsidered situations that occur on site.

REGULATIONS ARE ONLY EFFECTIVE IF THEY ARE ADHERED TO BY THE OPERATORS AND THEIR WORKFORCE. They are not inspected on a regular basis.

The oil and gas industry's global environment and safety track record is unimpressive. A few years ago we received some research from Freedom of Information requests, visits to sites and monitored video and observations and discovered the following

There were 1768 reported incidents on Offshore UK rigs between 2013 and 2016.

There were 40 known incidents on 7 exploration Onshore sites in UK including:

- permit breaches,
- chemical fluid spills,
- illegal waste run-offs into agricultural ditches,
- oil blow outs.
- faulty equipment,
- dumping of toxic waste into a local canal,
- excessive methane emissions,
- earthquakes and seismic shocks,
- lack of safety monitoring, use of illegal rigs and drilling equipment,
- failure to report major incidents to the appropriate authority.

What damage can extraction processes do?

If there is environmental or water pollution or an ecological event it could impact the entire island, after all our land mass is tiny compared to the size of USA, Australia, Africa and Russia which have all suffered devastating impacts.

Possible Environmental Impacts

Increased Emmissions of CO₂ and other greenhouse gases are admitted in the application.

Industrialisation of the island environment, air pollution (HGV traffic, chemical vapours and drilling), noise and light (24 hours) pollution, destruction of greenbelt land and eco systems.

Disturbance of local fauna migration and separation of habitats

Water and land pollution, domestic water, rivers and streams from HGV spills from leaks or accidents on roads and land and migration of gas and fluids from leaking well structures as they disintegrate.

Soil pollution and agricultural losses from above. Loss of organic status for farmers whose land is above wells **Seismic shifts** and earthquakes from drilling processes and high pressure waste fluid re-injection into unstable geology close to fault lines.

Water depletion if extraction happens form source. OR huge numbers of HGV vehicles on roads - up to 50 movements per day to bring water to the sites if imported from mainland.

Damage to roads and traffic congestion across the Island. Multiple oil tanker trips per day during the lifetime of the wells until decommissioned. Increase of possible accidents.

Possible Health Impacts

There is evidence now from across the globe of long term effects of living near oil and gas field sites and along pipeline and HGV routes to sites. Increases have been identified in

- Cancers
- Asthma and lung diseases,
- Skin and immune system illnesses,
- Hormone disruption, risks during pregnancy,
- Nausea and headaches due to proximity of sites,
- Depression and sleep deprivation

NHS

Possible increases in pressures on our already stretched NHS facilities due to Covid 19, cuts in budgets illnesses and health related impacts. This has been evidenced in medical studies and reports from the USA and Australia.

What will happen to the oil and gas?

If full production actually takes place there is, as yet, nothing to assure us that it will remain in the UK and could be Exported.

What about the jobs on the Island?

There are very few jobs predicted. (12 so far for Arreton according to UKOG according to CEO Stephen Sanderson.) Specialist jobs will be imported.

Most jobs are only very short term, and mainly in the exploration stage.

What about the economic benefits to the UK and the Island?

In general none whatsoever. UKOG claims a benefit of 6% from the profits and business rates. But as yet have made no profit. Business rates will be paid but we are not yet sure at what % and what this will bring.

The oil and gas industry taxes and business rates have been slashed. Business Tax, Supplementary

Charge and Petroleum Revenue Tax have been cut to levels below 2003 and the industry also receives government subsidies

The OBR predicts that the taxpayer will be paying the oil and gas industry more than £1.1 billion each year for the next 10 to 15 years to remove and sell our fossil fuels.

The general public of the Island will not benefit at all, in fact there may be expenses for road repair, accidents and emergency service action. We also believe that our **Tourism economy** will be hardest hit if the island loses its eco and Biosphere status because of this industry.

Gas and Oil Prices

There is no evidence that Gas and Electricity prices will fall because of UK extracted fossil fuels. The Committee for Climate Change has stated that the opposite is true and that energy prices will **increase with continued reliance on gas** but will increase to a much lesser degree if we focus on a transition to and development

of green sustainable energies.

Industry and Government payouts

The government currently says there is a chance of £100,000 community payment per well and 1% of final profits

paid if wells are massively hydraulically fracked for **shale gas or oil**. Also there may be a possible community payout from a Shale Gas Wealth fund if that ever emerges.

But nothing for claimed 'conventionally' drilled oil wells.

HOW?

How are they planning to get the stuff off the Island?

According to their application this will be transported by HGVs to a port by road across the island and ferried across by local ferry companies to be delivered to the nearest oil refinery.

How close will the drill sites be to housing or villages?

There are no statutory set back distances for well site proximity to habitations.

Can the IWC stop it from happening?

The MPA can currently refuse planning permission if they deem it appropriate to do so and/or make a list recommendations for improvement to the plan to be made for further consideration. If this is again refused the Secretary of State for Communities or the Oil and Gas Authority are now able to overthrow the decision. It is imperative that objections by organisations, agencies, relevant departments and individuals in communities are made in writing during the consultation period of the planning stage.

IF the council rejects the permission and the industry appeals, there may be grounds for a judicial review and possible legal proceedings against the decision. UKOG can also file for legal proceedings to reverse the decision if refused on what they consider to be unacceptable grounds.

WHY?

Why is it better to say the wells are conventional?

FRACKING HAS A BAD REPUTATION

The experiences of drilling in the North of England with earthquakes has made the Government halt the process. It is still a very real possibility that companies can target 'conventional' resources initially, and only when the well is in place will we learn the full extent of their intentions, whether it be to target the unconventional resources themselves, or sell on to others who will.

Also as previously stated;

- No community payment of £100,000 for well pads and 1% of profits is paid for conventional wells
- No portion of the Shale wealth fund is paid for conventional wells
- They can be drilled from the surface of AONBs and other protected sites
- Environmental Impact Assessments are not mandatory

Why are we against us having our own supply of Oil and Gas? Don't we need it?

We have had our own supplies for generations from conventional sources but they have been used up by ever increasing exploitation and aggressive expansionist economic policies. For 40 years the glut of our home grown energy supplies have been sold off in the rush for profits which were not wisely used to help secure sustainability at home in technologies and energy independence.

Over the past decade, however, successive UK governments realised that the joy ride would not last and wisely began to invest in developing green energy solutions. But that has changed now. Many MPs across the parties, influential party funders and members of the House of Lords have direct or indirect ties to the oil and gas industry. Our economy, investments, banks and even our pension funds are tied up with oil and gas shares. It's all about money and everything else is window dressing.

So the government has paved the way for the industry to fast track the exploration of unconventional fossil fuels across the UK as a 'quick fix' for our depleting resources and to protect investments for industry and particularly for fossil fuel industry investors.

The dash for gas and oil has taken precedence whereas some other fossil rich nations have, over time, wisely invested profits in their country's own public infrastructure to develop technologies and create new alternative energies to add to the mix for the future. This is not about NIMBYism it is about planning and development of a sustainable future energy mix that can become a safer and greener legacy for generations to come.

We understand the global need to use existing supplies of Oil and Gas.

There are still plenty of available supplies for the next 50 years or more from around the globe. According to UKOG 70% of the UK's oil consumption is for transport and 30% is for petrochemical feed stocks (plastics, heating and others). However the UK still exports almost as much oil as it imports!

So we **DO** have to educate ourselves and others to change our perception and reduce consumption to make these reserves last longer.

We **DO** have to develop a willingness to make the transition to renewable energies, improve energy storage and create alternatives for plastics and fuels.

Scientists agree that we have to keep 70% of the remaining supplies of fossil fuels in the ground so that we can prevent adding to a 2°C temperature increase in global terms. In fact if we burned all the fossil fuels already known in reserves we would put **five times more carbon into the atmosphere** than we know can actually burn without tipping the 2°C increase leading to irreversible catastrophic climate change. The planet will survive but it would mean the end of the earth as we know it.

We need to use existing supplies wisely and responsibly and begin a radical long-term strategy of reducing our dependence on fossil fuels to ensure we maintain a habitable planet for future generations.

So that means we have to stop any new extraction and begin to lessen our reliance on fossil fuels **NOW**.

It is up to us to ensure that future generations do not have to pay the price for our inactivity.

We should therefore follow the example of so many countries and states across the globe and oppose any drilling on the Island and across the UK. Acting locally will have a global impact.

We should encourage local initiatives for alternative sources of energy and make a pledge to reduce our personal consumption in any way possible.

This would be possible if government policy was to halt new fossil fuel extraction in the UK, to focus the billions of funding, currently paid to the oil and gas industry, into increased development of new sustainable energy saving technologies and an clean energy resources.