HYDROCARBONS Supply programme

Frequently Asked Questions



Gov.gg/fuels

What are hydrocarbons?

Hydrocarbon is a collective name for chemical compounds containing hydrogen and carbon. This programme is looking at hydrocarbons imported as fuels to Guernsey. Examples of which include kerosene (heating oil), gas, aviation gas, oil, petrol and diesel. Each type of fuel is separated (or refined) from raw or unprocessed crude oil at an oil refinery in the UK.

Why are we looking at how our hydrocarbons are supplied?

Hydrocarbons are brought into Guernsey from off-island. They are needed for many elements of Guernsey life and business. There are risks involved in transporting hydrocarbons in any form and by any method. It is important to understand all the stages involved in getting the fuel to Guernsey and take steps to make supply as safe and reliable as possible.

What is the Guernsey Hydrocarbon Supply Programme?

The Guernsey Hydrocarbon Supply Programme is looking at how we bring fuel to Guernsey now, what we could possibly do in the future, how we could make that happen and what it would cost. Importantly, it is also considering the Island's future demand for hydrocarbons to ensure that the most appropriate solution is identified. Transporting hydrocarbons is inherently risky. The programme's aim is to achieve a safe, reliable supply of fuel so that Guernsey gets what it needs at the best possible price for all hydrocarbons i.e. clean fuels (kerosene, petrol, diesel, aviation gas, marine fuel...), heavy fuel oil and gas.

How will the Hydrocarbon Supply Programme benefit islanders?

The Hydrocarbon Supply Programme will ensure the security of supply of fuel to the island. This means we keep the lights on, the vehicles moving, the aircraft flying, the heating working and a sound base for a thriving economy and a good standard of living. The programme will provide a good basis from which to make investment decisions, for both the private sector and the States of Deliberation, whether that is to commission replacement vessels as those currently in service become too old to continue or building a deep water berth or a different solution.

GETTING FUEL

NAABSA TANKER

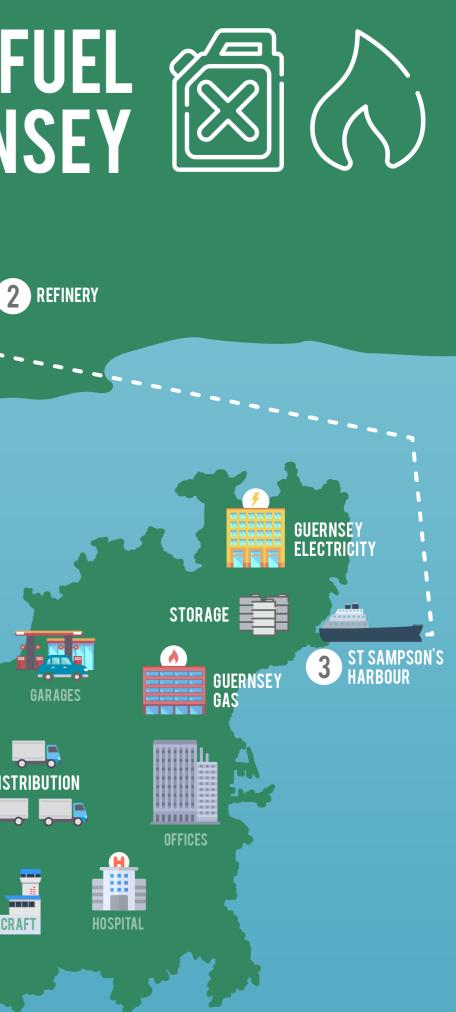
RESIDENTIAL

*NOT ALWAYS AFLOAT BUT SAFELY AGROUND

GARAGES

DISTRIBUTION

AIRCRAFT



Are there problems with the way in which fuel is supplied now?

There are elements within the supply chain that have a limited lifetime and action will be required to address these issues. There are known issues that have occurred over the years. This does not mean the current supply chain is broken and the work being carried out will assess risk in each element of the current supply chain and look at whether alternative delivery methods would reduce the risk. This will allow sound decision making for investment decisions as current elements within the supply chain come to the end of their useful life.

How are hydrocarbon fuels currently delivered to the island?

The hydrocarbon fuels are brought to the island by sea using specialist tankers. The ships collect the fuel from refineries in the UK before sailing to St Sampson's Harbour where they sit on the seabed. Their cargo is offloaded through pipes to the large storage tanks that are a familiar sight at North Side, Bulwer Avenue, the Power Station and gas storage area. The fuel is then delivered to businesses and homes by road tanker. Gas is delivered via a mains pipeline and as bottled gas.

Which companies import hydrocarbon fuel, gas or heavy fuel oil?

Currently RUBIS and Channel Island Fuels Limited import "clean products", which are the lighter weight fuels such as kerosene (heating oil), petrol, diesel and aviation fuel. Guernsey Electricity imports heavy fuel oil, primarily to run the power station to generate electricity on-island. Guernsey Gas (International Energy Group) imports LPG (Liquid Petroleum Gas)

Hydrocarbons have been supplied to Guernsey using this method for a long time, why are we looking at this now?

All of those involved in the supply chain need to understand how hydrocarbon fuels will be imported into Guernsey for the medium to long term to enable each party to make sound investment decisions when equipment needs replacing. For example, even continuing with the same method will require significant investment in replacement vessels at some point. We need to plan for the future to ensure security of supply.

How does Guernsey Electricity Limited generate electricity?

Guernsey Electricity imports electricity via a cable which links Guernsey to France via Jersey. It also burns oil to generate some of the electricity we use and it is important that oil is available as a backup in case there is a fault with the cable.

What are NAABSA vessels?

NAABSA stands for Not Always Afloat But Safely Aground. The ships that bring fuel to Guernsey can only come into St Sampson's Harbour at certain states of the tide. The tide goes out while they are unloading and they have extra strong hulls which allow them to sit on the seabed.

The fuel vessels delivering products to the island can only enter the harbour when there is sufficient depth of water for them to enter and berth. The height of tide and therefore depth of water varies on a fortnightly basis, peaking with a spring tide when the deepest water is available.

Due to the characteristics of St Sampson's harbour, fuel tankers dock at drying-out berths and sit on their bottom because the length of time required for them to discharge their cargo is longer than the time available during a single tide. For this reason, only fuel tankers specifically designed to take their own weight and have strengthened hulls are able to make deliveries to Guernsey. These tankers are required to be certified as NAABSA vessels.

Who owns the NAABSA vessels used to deliver hydrocarbon fuel to Guernsey?

In 2008 the States of Guernsey purchased and now owns two NAABSA vessels (the Sarnia Cherie and Sarnia Liberty) that deliver "clean fuels" such as kerosene (i.e. heating oil, petrol, diesel and aviation fuel). Different NAABSA vessels are used to deliver heavy fuel oil and liquid petroleum gas (LPG) to the island. These vessels are not owned by the States of Guernsey. All vessels are chartered from commercial operators by the locally-based fuel importers.

Surely if we own the vessels we are ok?

All fuel vessels that deliver to the Island, whether owned by the States of Guernsey or by someone else, are operated by a commercial operator and typically stick to delivering one particular type of fuel i.e. gas or heavy fuel oil or clean products (kerosene). To switch between certain fuel types requires cleaning, that can be costly, or adaptions to vessels which in some cases may not be possible. All operators have long standing relationships with the Island and have been delivering here for many years.

The States of Guernsey owning the Sarnia Cherie and Sarnia Liberty, used for delivering clean fuel, does not secure supply for all hydrocarbons currently required i.e. heavy fuel oil and gas. Nor do the current arrangements presently allow for the States of Guernsey to operate the Sarnia Cherie or Sarnia Liberty for clean fuel deliveries.

Can we build or buy new NAABSA vessels when the current ones come to the end of their useful life?

Yes. One of the options is to buy or build new NAABSA vessels. It is quite unusual to use NAABSA vessels for fuel delivery nowadays. We need to be sure that other vital links in the chain would still work if this approach was taken and that this method of delivery provides the best value for money and greatest security of supply at lowest risk.

NAABSA vessels require a significant quantity of extra steel to strengthen the hull so that it is fully supported when the ship sits on the sea bed. Due to the extra steel, NAABSA vessels carry less fuel on each trip than a non-NAABSA vessel of an equivalent size. In addition the size and therefore capacity of the vessels is restricted by the size of St Sampson's harbour.

This type of ship is not generally cost effective to operate when viewed in the context of the wider market which has typically shifted to larger non-NAABSA vessels which are able to carry more fuel.

The trend in larger vessels has also had the effect of limiting the number of ships available that are of the optimum size to enter St Sampson's harbour.

Is it correct that St Sampson's Harbour is a problem due to weather and tidal restrictions?

Both the tide and the weather affect St Sampson's Harbour and so there are occasions when a shipment of fuel cannot be received. This is one of the reasons that we have on-island storage.

Is St Sampson's Harbour too small?

In general, vessels have become larger and there are now fewer fuel and cargo ships that can enter St Sampson's Harbour.

Does that mean we are going to have difficulty bringing other produce into St Sampson's?

It is still possible to find suitably sized vessels to bring goods into St Sampson's. As can be seen by the fact multiple vessels call for fuel deliveries currently. However it should be noted the number of suitable vessels has reduced over the last 20-30 years.

Do we store enough fuel on island?

The amount of fuel stored on-island at any one time varies throughout the year. A number of factors influence this, for example more fuel is used in the winter, delivery delays may impact the amount of fuel remaining on island as may extreme weather events. One of the elements that the Hydrocarbon Supply Programme is looking at is how much fuel should be stored on island to sustain us if deliveries are not possible.

Are you looking at this because the current methods of delivery and storage are dangerous for St Sampson's, a heavily populated area?

One of the objectives of the programme is to ensure that fuel is supplied as safely as possible.

So what happens if we run out of fuel?

The reason for the Hydrocarbon Supply Programme is to reduce any risks of running out of hydrocarbons. This includes reviewing on-island storage capacity, stored fuel levels and alternative or backup supply methods.

Do we know how much fuel we'll need in the future?

As part of the programme we have carried out a demand study to forecast how much fuel will be needed in the future. Hydrocarbon fuel needs are forecast to reduce.

How much is it costing to look at our existing supply chain?

£830,000 was approved by the States to carry out all the work needed to come up with a long list of options and solutions and evaluate the risks in the current supply chain. Further work and funding will be required to evaluate and select a preferred option and complete in-depth investigations into the preferred solution. Following which, further funding will be required to develop business cases and implement agreed solutions. The process will revert to the States of Deliberation for decision making and follow the gateway review process. For more detail please look at the timeline available at www.gov.gg/fuels

I have never had a problem getting fuel, why do we need to look at this now?

All supply chains contain risks. The objective of this programme is to reduce the level of risk to ensure security of supply.

There are elements of the supply chain, the current ships, the storage tanks and connecting pipework for example, which have a limited lifetime. Action will be required to address these issues.

How much will the overall Hydrocarbon Programme cost if we make changes to the existing supply chain?

Until we have studied the supply chain, reviewed the long list of options and recommended potential solutions it is impossible to know the cost. A better understanding of costs will be developed as the programme continues and the options are refined.

I've heard it will cost in excess of £100m to build a deep water berth. Is this correct? If so, what are the alternatives, given the island's current finances?

It is too early to estimate the cost of any solution. Part of the current work is to ensure the best value option is recommended rather than rushing to build a costly structure. A deep water berth, and the £100m estimate that would be associated with that type of marine engineering solution, was first mooted when concerns with the import of fuels were raised around 20 years ago. A key piece of the work now being done is to establish what the best solution is and assess more accurately what it might cost, based on the future requirements of the Island.

Why have we hired consultants from the UK to carry out this work?

Due to the technical nature of fuel supply, specialist skills are needed to carry out this work. External consultants with the skills and experience required were engaged using the States of Guernsey procurement process.

I've spoken with people on the island who know the problems with the current supply chain and already have the answer. Why can't we talk to them?

We are talking to stakeholders in the existing supply chain and a number of interested people on the island, and we started the programme by collecting information and feedback. This has enabled the programme to capture local knowledge and experience in the industry.

Are we going to build a deep water berth?

We are looking at all the potential options, this is one.

If we build a deep water berth will it be a "multi" berth for cruise ships and cargo as well?

If a physical structure becomes the preferred option it's possible other benefits could be considered.

Would a deep water berth mean we could attract an alternative ferry company?

It is too early to say what additional opportunities any recommended solutions might lead to but this is not the purpose of the Hydrocarbon Supply Programme. The purpose of the Hydrocarbon Supply Programme is to ensure the security of supply of fuel to the Island.

Are we looking at greener options for fuel rather than hydrocarbons?

The Hydrocarbon Supply Programme is operating under current States of Guernsey policy. The demand study shows that, even with an aggressive approach to move away from hydrocarbons as a source of energy, we will require a supply for the foreseeable future to sustain island life.

If the conclusion is to not make any changes will we have wasted money looking into the supply chain?

No. Hydrocarbon supply is vital to Guernsey life and it is therefore critical we understand any risks in the supply chain and the measures we need to take in the medium and long term. Even with no changes to the existing supply chain a decision will need to be made to replace the current vessels and this programme of work is essential to enable sound and evidence based decision-making.

I don't use any hydrocarbons, I have an electric car and solar/electric heating and would not like to see any income tax spent on importing hydrocarbons, what can I do?

The way in which any changes would be funded will be considered in the next stage of the programme.

There are many touchpoints of island life that require fuel and the solution will need to benefit the majority of islanders. The programme is looking at the benefits to the island as a whole.

Would a reduction in the volumes used change the way we receive supply?

Potentially and this is one of the elements the Hydrocarbon Supply Programme is looking at.

Are fuel costs likely to rise?

At this stage it is impossible to predict any implications for fuel costs.

Do I need to be worried about whether I will continue to get fuel for my car and heating?

No. Hydrocarbon supply is working effectively at present and the Programme will ensure the security of supply in the future.

How will this affect gas supply?

Gas is delivered in the same way as other fuel, via NAABSA tankers docking in St Sampson's. The Hydrocarbon Programme may conclude that this should continue or it may be that some fuel will be delivered using a different method in future.

How can I find out more about the Hydrocarbon Supply Programme and follow progress?

Please visit www.gov.gg/fuels where you will find further details of the Hydrocarbon Supply Programme. We will update this area of Gov.gg as the programme progresses.

I would like to be involved as the programme develops what can I do?

Please email fuels@gov.gg and let us know your particular interest so that we can direct you appropriately.