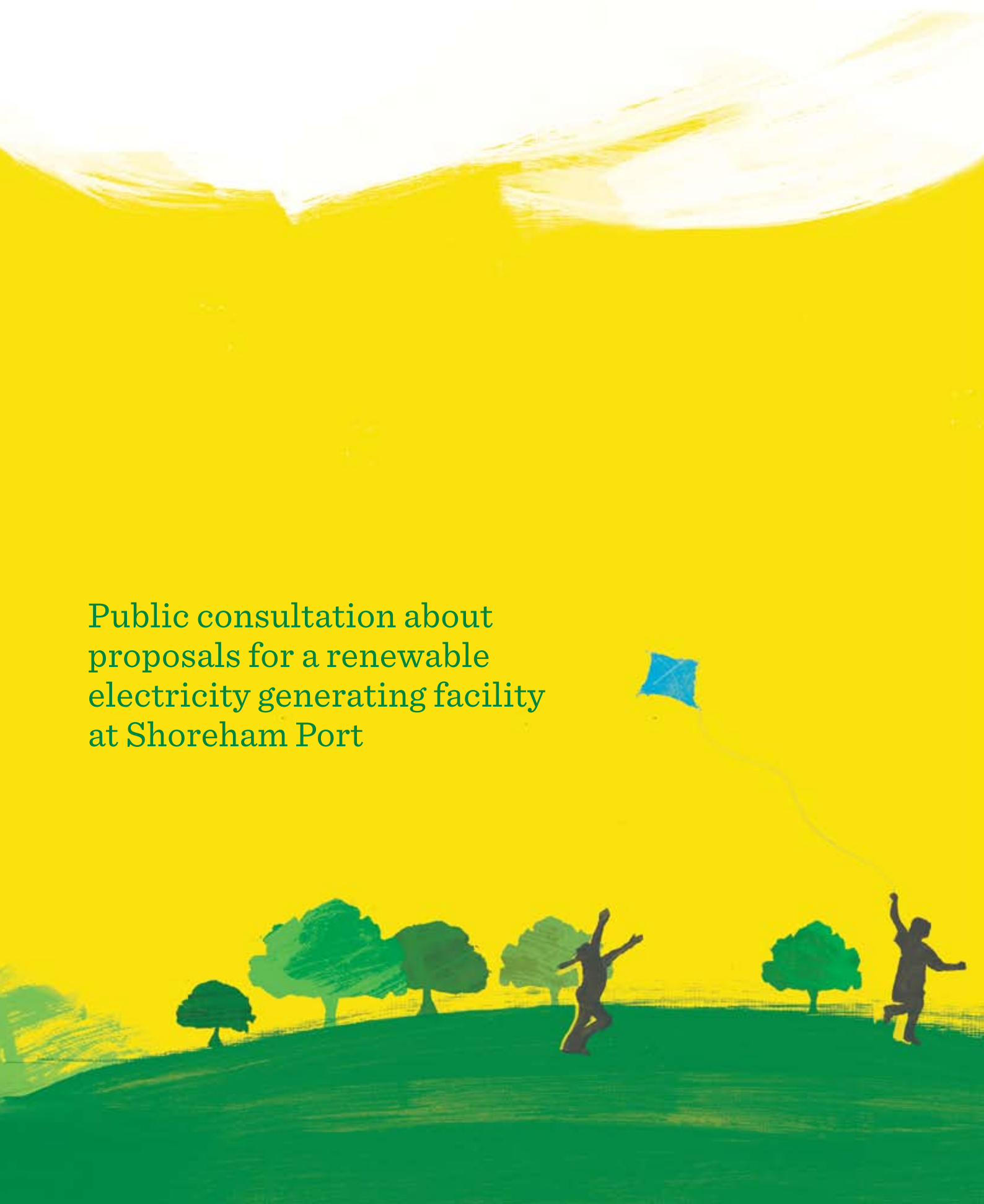




Edgeley Green Power

Public consultation about
proposals for a renewable
electricity generating facility
at Shoreham Port



Welcome

Edgeley Green Power is a specialist energy company which aims to become a significant supplier of clean renewable energy in the UK.

Mike Reynolds Chief Executive Officer



Edgeley Green Power is planning to build a renewable electricity generating facility on the Fishersgate Terminal at Shoreham Port. This booklet sets out our proposals.

We are seeking the views of local residents and other stakeholders before submitting our planning application and we are keen to find out what you think about the project.

Edgeley Green Power (EGP) is a specialist energy company which aims to become a significant supplier of clean renewable energy in the UK.

We plan to develop and operate small and medium-scale renewable energy power generation facilities, fuelled by a variety of inedible plant oils and vegetable oils which are unfit for human consumption.

Once operational we will sell electricity to utility companies which will be used to power local homes and businesses via the Local Distribution Network.

Edgeley Green Power, as our name suggests, is passionate about renewable power and has a vision of contributing to helping the UK achieve its long-term carbon reduction targets.

We align ourselves with all other parts of the UK's rapidly expanding renewable energy industry and fully support the use of renewable energy produced by wind, wave and solar. Our proposed facilities will work well alongside weather and tidal dependent technologies

because we will provide reliable and flexible electricity on demand 24/7, 365 days a year – providing power whatever the weather.

We are currently developing plans for three renewable electricity generation facilities on port sites across the UK, so we can transport our fuel to each via sea vessel, rather than by road tanker.

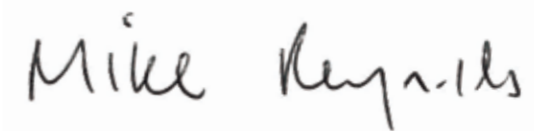
We propose to build our first flagship £12m scheme at Shoreham Port and, subject to planning approval, we hope to be fully operational from next year, creating approximately 20 new jobs.

Edgeley Green Power aims to work in partnership with all our stakeholders, including the local communities in which we plan to operate, so we really do value your support and feedback in shaping our proposals.

We hope you find the information helpful in helping you to understand our plans at Shoreham Port. Please get in touch – your views count.

We look forward to hearing from you.

Best regards



Mike Reynolds
Chief Executive Officer
Edgeley Green Power Limited

Why the proposed development is needed

Demand for electricity in the UK is predicted to continue to rise, mainly driven by the increasing needs of the utility companies because of greater demand from businesses and domestic consumers.

Our indigenous reserves of fossil fuels such as coal, oil and gas are being depleted. Energy regulator Ofgem's *Project discovery* report published in early 2009 warns that while supplies are thought to be secure for the next couple of years, it has concerns from 2015 onwards. It also acknowledged there was an urgent need to plug the generation gap as coal and oil plant comes off the system to meet 2015 European emissions limits.

The report calls for action to deliver secure supplies and environmental objectives at affordable prices beyond the middle of this decade. It warns that unprecedented levels of investment, in renewable energy projects such as our's at Shoreham, will need to be sustained over many years in sometimes difficult financial conditions, and against a background of risk and uncertainty.

Coupled with this the UK, along with other EU countries, has signed up to the EU renewables directive. This sets targets for how much of each country's energy must be generated from renewable sources including wind, solar, tidal and biomass. The directive states that 15 percent of total UK energy consumption should come from renewables by 2020, and by 2050 this target jumps to 80 percent.

Yet electricity generated from all renewables as a percentage of total UK electricity generation stood at 6.9 percent in 2009, up from 5.9 percent in 2008.

The Green Investment Bank Commission, an independent advisory group brought together late last year by the Chancellor of the Exchequer, in June this year announced in its *Unlocking investment to deliver Britain's low carbon future* report that as much as £550 billion worth of investment could be needed over the next ten years to meet UK climate change and renewable energy targets. It is currently working to identify how Britain can better support and accelerate the private sector investment required to deliver the UK's transition to a low carbon economy.

Sustainable energy is high on the political agenda. The Prime Minister David Cameron reiterated his commitment to a low carbon economy in his speech the day after the recent General Election and the terms of the Coalition Agreement made specific references to a Green Investment Bank and low carbon economy.

Demand for electricity in the UK is predicted to continue to rise, mainly driven by the increasing needs of the utility companies because of greater demand from businesses and domestic consumers.

Our fuel

Edgeley Green Power plans to operate the proposed small-scale renewable electricity generation facility at Shoreham Port using a range of inedible plant oils and vegetable oils which are unfit for human consumption.

We will use a combination of feedstocks suitable for renewable power generation sourced from a number of suppliers across the globe. Sustainability is our number one priority.

Ofgem, the Office of the Gas and Electricity Markets, is a regulatory body which protects the interests of gas and electricity consumers, including their interests in the reduction of greenhouse gases. Ofgem has an important and developing role in shaping the future of the gas and electricity industries in a sustainable manner, so is responsible for issuing Renewable Obligation Certificates (ROCs) to generators of renewable energy. ROC is a government mechanism for subsidising and encouraging renewable energy generation in the UK.

We will only use oils which have been qualified as being acceptable for ROC status by Ofgem. All our fuels will be policed by Ofgem through regular laboratory testing.

The main source of fuel we will use to power our engines is tall oil, produced during the wood pulping of mainly fast growing coniferous trees in Scandinavia and Canada. It is a component used in adhesive, ink and rubber manufacturing processes. The by product of tall oil is used in cement and asphalt.

We will not use oils for power generation which are fit for human consumption.

The other fuels we plan to use are:

- Used cooking oil from the UK and the rest of Europe, treated and refined to condition the oils to the correct quality for use in our engines
- Crude and refined vegetable salvage oils which are unfit for human or animal consumption, offered on an ad hoc basis by insurers for a variety of reasons such as a result of cross contamination with other cargoes in vessels or land tanks, incorrect previous cargo tank usage, incorrect shipping documentation, or as a result of marine incidents.

We will innovate by using cutting edge new biofuel developments such as oil produced from algae, as soon as they are technologically proven and become commercially viable.

Edgeley Green Power will not use oils for power generation which are fit for human consumption, including:

- Crude coconut oil
- Crude/refined palm oil
- Crude palmkernel oil
- Crude soybean oil
- Crude sunflower oil.



Project description

Edgeley Green Power's proposal is to develop a renewable electricity power generating facility on the brownfield site on Fishersgate Terminal.



Left: Map with the position of our proposed development and other existing buildings highlighted.

Edgeley Green Power's proposal is to develop a renewable electricity power generating facility on a brownfield site on Fishersgate Terminal – an established industrial and power generating area at Shoreham Port, near Fishersgate and Southwick. The proposed site is approximately one acre, between Shoreham Power Station and Parker Steel, on the south side of the port.

The planning application for our project falls under the jurisdiction of Adur District Council.

The overall proposed development is made up of:

- A 38m long x 20m wide x 19m high engine hall which will house the power generating engines and alternators
- A chimney (stack) located next to the engine hall with a height anticipated to be less than 65m, this is significantly lower in height than the 105m Shoreham Power Station chimney next door.
- A reception and administration building
- Four main storage tanks which will be painted using colours that blend in with the local environment. Three of these will be 11.8m wide and 16m high, with one smaller tank at 7.8m wide and 10m high
- Two small fuel tanks, measuring 1 x 4 x 6m and 1 x 6 x 9m
- A small boiler house adjacent to the front of the engine house
- A substation which will house a control room for the transformer operating equipment
- Transformers will be located on site to step up electricity from 11KVA to 33KVA for distribution via the Local Distribution Network.



Left: View from the south of the proposed development site. A 3D model has been dropped in to illustrate the size and position of the renewable energy facility.

Above: View from the north of the proposed development site.

What it could look like

View from the north west.



What it could look like

The curved roof is inspired by the sea, imitating the silhouette of a wave.

The striking building design takes inspiration from both its coastal and industrial surroundings. The curved roof is inspired by the sea, imitating the silhouette of a wave, and mirroring the curved roofs of the neighbouring power station buildings.

The aerodynamic roof form is also designed to conceal outdoor plant and to draw in and release air, naturally and sustainably ventilating the radiators positioned on the concealed flat roof underneath used to cool the engines.

Positioning

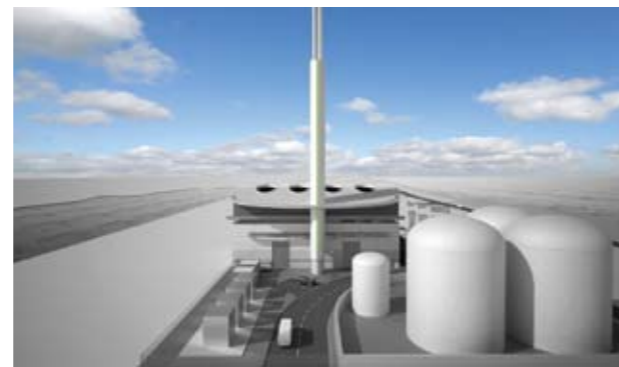
The site is set lower than the coastal Wellington Road on the south side of the canal but the building has been further scaled down to a maximum height of 19m and by positioning it side on, so the main façade of the building is facing west rather than north towards nearby houses. The development is significantly smaller than the Shoreham Power Station and the pending Parker Steel development.

Site layout

Clearly defined access routes will safely segregate visitors from the daily operations of the plant. The site boundary will be surrounded by a 2m high perimeter fence, both for visual continuity and also for safety and security.

Landscaping

The surrounding area is mainly industrial so there is limited opportunity for landscaping, however we aim to connect the facility to its natural surroundings. Areas of the site are to be set aside for vegetated shingle, on which coastal grasses and other plants will grow.



Left:
Artist impression of the EGP Shoreham Port development.

Bottom left:
View from the west.

Bottom right:
View from the north.

How the proposed facility will work



As a renewable energy company we care about the environment and will take all necessary steps to minimise any adverse impact on the environment.



By locating our proposed facilities at port locations we are able to transport our fuel by ship directly to site in bulk, therefore there will be no increased heavy goods vehicle road traffic locally.

The different oils are unloaded from ships docked at the quayside in front of our site and piped into our storage tanks, then pumped into the engine house and used to fuel the engines to generate electricity.

Even our engines used to generate our electricity are recycled – they started life designed to run on heavy fuel oil but are now being reconditioned so they can run on biofuel instead.

This electricity is then transferred through cables to transformers on our site which convert it from 11 kva to 33 kva – suitable to transfer into the Local Distribution Network which supplies electricity to the local area.

If granted planning permission, our Shoreham plant will generate approximately 32 mega watts of electricity per hour – the equivalent of powering 18,000 average homes.

Safety and security

At Edgeley Green Power we make safety a priority. The proposed facility will be designed, built and operated to recognised national and international standards and will comply with all applicable legislation and regulations.

If we are granted planning permission for this development, we will apply the highest standards of design, construction, operation and control to make sure operational integrity and safety remain a priority throughout the life of our facility.

The Health and Safety Executive will act as a regulator for the whole facility, and we will have inspectors and managers on-site at each stage of the project's development.

The site will be manned 24 hours a day seven days a week and will be surrounded by a perimeter security fence which will be CCTV monitored.

Economic benefits

Both temporary and permanent employment will be created as a result of the proposed development and Edgeley Green Power is looking to recruit locally where possible to take advantage of the skills of the labour force in the local area. At least 20 permanent jobs will be created, including an apprenticeship scheme for school leavers.

Developments, like the one we are proposing, have been shown to boost the economy locally by benefiting other businesses within the vicinity. As well as helping to create jobs and diversify the economic skill set in the area, we also recognise the benefits such a development can bring to existing local businesses including pubs, cafes, restaurants, hotels and shops – both during construction and once the proposed facility opens for business.

Environmental impacts

As a renewable energy company we care about the environment and will take all necessary steps to minimise any adverse impact on the environment, operating within parameters set by the Environment Agency (EA).

We aim to minimise our emissions by using a selective catalytic reduction process to treat and neutralise any exhaust gases. An air quality assessment is currently being undertaken to ensure that our proposed development will meet all applicable air quality requirements. The air quality report will be submitted with our planning application.

A baseline noise survey has already been undertaken at the site and at local residential locations and public spaces to measure current noise levels in the area. A noise assessment is now being prepared to ensure that our proposed

facility will not adversely affect noise levels in the surrounding neighbourhood. The noise report will be submitted with our planning application.

As we transport fuel to our site by sea, once we are open for business there won't be much extra traffic on the local roads, except for our staff travelling to and from work and the occasional road delivery vehicle.

A flood risk assessment is also being produced to consider impact of the proposed development on the flood risk to the development itself and also to the surrounding area. A site assessment has already been carried out to consider the baseline conditions and the Environment Agency has been consulted about the flood risks. As part of the assessment the development is also being measured for its impact on the current drainage system, and a drainage system for the new development will be designed. The findings of the flood risk assessment will be reported and submitted with the planning application. Mitigation measures will be included in this report to ensure that the development does not have an adverse impact on flood risk to the area.

Our Shoreham plant will generate – approximately 32 mega watts of electricity per year – the equivalent of powering 18,000 average homes.

Frequently asked questions

Q: Will what comes out of the chimney affect local houses?

A: We aim to minimise our emissions by using proven technology and the appropriate control processes to manage and treat emissions. The height of the chimney is currently being designed in consultation with regulators such as the Environment Agency to ensure we meet air quality standards. Our combustion process is also being designed to incorporate other extra measures to control air pollutants, such as a selective catalytic reduction process (SCR).

The EA will not allow our proposed site to operate without an environmental permit, and to obtain this permit we must demonstrate how our design will meet air quality standards. This is in addition to all the other requirements we will fulfill through the planning process.

Q: Will it smell?

A: Where necessary the fuel we use will be deodorised before it arrives at our site and it will be adequately handled and stored, then combusted in our engines at high temperatures. The temperature of combustion is so high that even our exhaust gases will be around 400 degrees centigrade. As described above, great care is being taken to ensure our chimney is the correct height. Its height is another way we can ensure odour is suitably controlled.

Q: When your engines are operating will there be any vibration felt in houses opposite?

A: Our engines will be mounted on foundation blocks with anti vibration mounts fitted, which we believe will control any vibration.

Q: Will the local roads get more congested near your site?

A: No. All our fuel for generating electricity is transported directly to site by ship, so there will be no impact on road traffic locally.

About Edgeley Green Power

Edgeley Green Power is based in Hampshire and was established in 2009 to seek alternatives to the problem of the depletion of fossil fuels, climate change and energy security.

We aim to work in partnership with all our stakeholders, including the local communities where we operate, by acting responsibly and being responsive. And we believe that focusing on quality brings rewards for everyone, including the local communities in which we work.

Our team has a combined 66 years track record as experts in the field of renewable energy generation and its many facets including commodity trading and shipping, risk management, tank storage operation and financial management.

For more information about us log on to: www.edgeleygreenpower.com

About our team



Field Walton
Non executive chairman

Field is one of the industry leaders in power generation, being a former chairman of Biofuels Corporation plc. He is currently a non executive director of several engineering and trust companies and has an in depth knowledge of power generation.

He spent his early career in engineering management before joining Cazenove as an analyst in 1971.



Mike Reynolds
Chief executive officer

Mike founded EGP following three decades of experience in agricultural commodities, mainly in vegetable and industrial oils. He previously worked as a broker, trader and shipper, and was also a director of a tank storage installation operation in Tanzania.

Mike's expertise has seen him negotiate vegetable oil supply contracts on behalf of a number of similar diesel engine projects similar to EGP's Shoreham scheme, and for direct use in power stations and for biodiesel manufacture.

His industry experience and contacts will ensure EGP sources all its biofuels competitively and ensure smooth running of all the company's shipping and operational functions.



Peter Franklin
Chief financial officer

Peter Franklin comes from a background of senior directorships in the financial services sector, and has built up a broad range of financial and operational skills gained by having responsibility for a wide variety of business disciplines.

He was a non-executive chairman of a software company for four years.

Within the treasury, capital markets and banking sectors Peter has led many change management projects, including the restructuring of a merchant bank. He has also been responsible for compliance requirements for an international organisation.

How you can get involved

As well as the opportunity to talk to us in person at our public exhibition, we'd be grateful if you could let us have your comments by completing the feedback questionnaire we are handing out at our events. Don't worry if you couldn't make it along – you can also let us know what you think afterwards by sending us an email to: info@edgeleygreenpower.com

So we are able to take your comments into account before we finalise our planning application, [please get your feedback to us no later than 7 October](#) – a month after our exhibition. There will be another opportunity to comment when Adur District Council undertakes its own public consultation, once it receives our application.

We are keen to provide you with an overview of what came out of our consultation, so please let us have your contact details either by email or on the feedback forms provided, so we can get back in touch with you.

If you want to find out more about our proposals, you can also log on to our project website: www.edgeleygreenpowershareham.co.uk

Copies of the exhibition posters and this booklet are also available to view on our website.

To keep you up-to-date on progress following our public consultation, during the planning application and hopefully when the facility is under construction, we will be updating our website regularly.

What happens next

Once all your feedback has been taken into account and our planning application has been prepared, it will be submitted to Adur District Council later this year.

Following its submission, you will be able to view a full copy of all the planning application documents on our website, after it has been registered with the local planning authority.

Our planning application will be subject to a usual period of statutory public consultation, undertaken by Adur District Council during the determination period (the time the council takes to decide if it will grant planning permission).

If you want to find out more about our proposals, you can also log on to our project website:
edgeleygreenpowershareham.co.uk



Edgeley Green Power



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