

aggreko

OUR PRODUCTS

# Medium speed Heavy Fuel Oil (HFO)

Modular power plants

Our HFO power source gives you cost effective power, ready when you need it - reliable and round the clock.



**Fuel diversity is the name of the game at Aggreko. So whether the challenge is a remote location, increasing demand, grid capacity shortage or limited access to gas, **HFO** can be the answer.**



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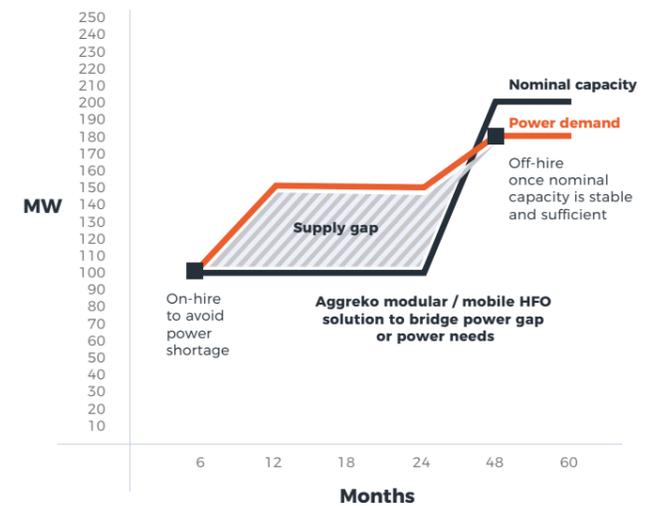


# Low cost reliable power 24/7

With our fast track HFO plant you get quick and reliable power for any contract duration while permanent infrastructure is being developed.

Our solution provides you and your operations with a power bridge that can directly connect to a grid or distribution network at the lowest cost of energy.

Use our HFO power plant to bridge your medium term power needs



Up to **30%\*** cost savings



## KEY BENEFITS

- No capital expenditure needed and no advanced capacity payment
- Early power - typically within 90 days for an 80 MW power plant
- Flexible commercial terms
- Significant cost saving compared to other fossil fuels or ageing power plants
- Synchronisation with the grid at any required voltage
- Modular structure delivers 100% power availability

## KEY APPLICATIONS

- Utility baseload power
- Power bridge during infrastructure development
- Re-powering ageing power plants
- Off-grid power for remote mines or industrial plants
- Distributed power to increase capacity or electrification ratio
- Converting diesel sites to HFO or excess HFO to electricity

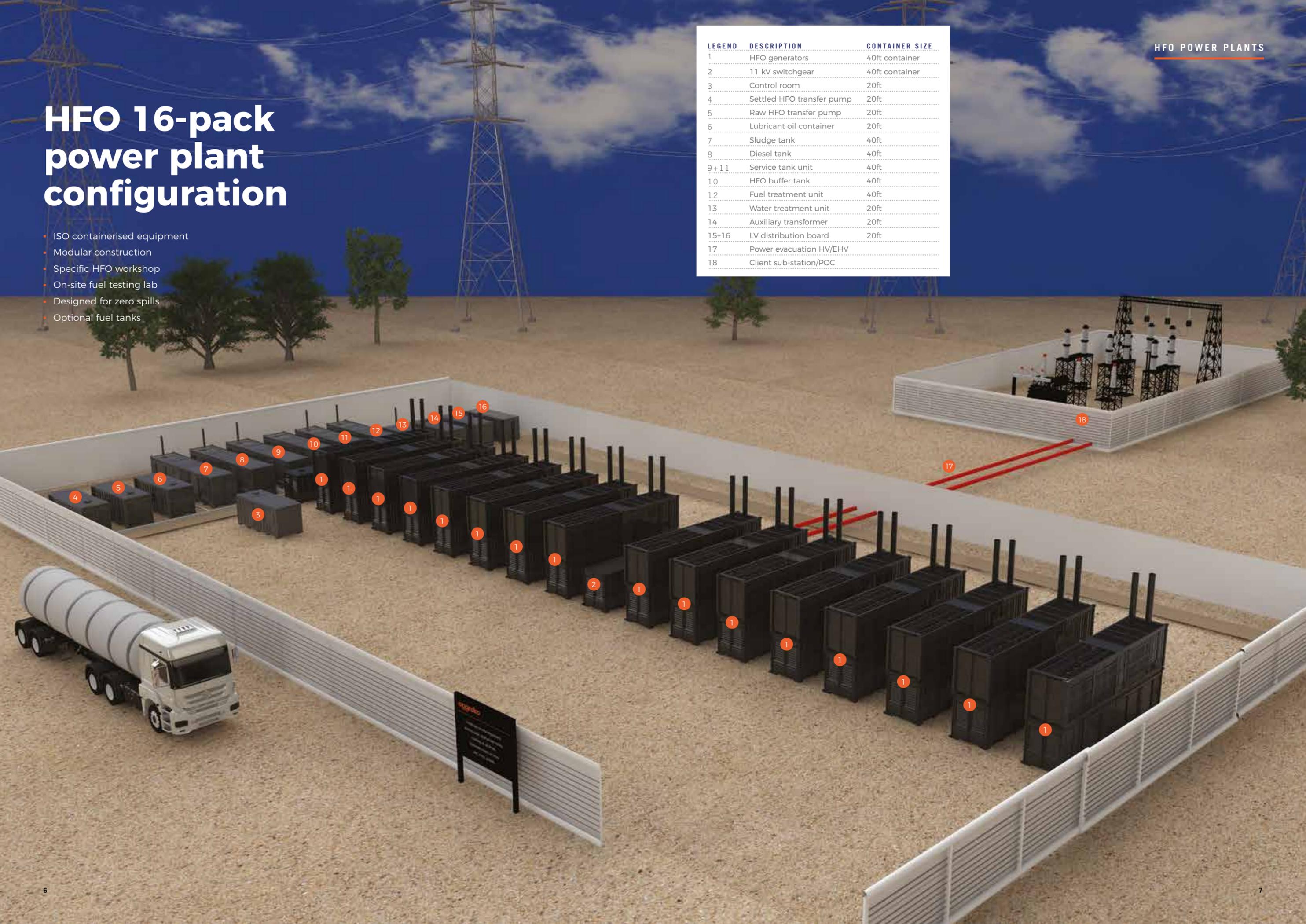


\*on total cost of energy - 80 MW, 80% PLF, 1 year, fuel spread HFO/diesel of \$240/ton.

# HFO 16-pack power plant configuration

- ISO containerised equipment
- Modular construction
- Specific HFO workshop
- On-site fuel testing lab
- Designed for zero spills
- Optional fuel tanks

LEGEND	DESCRIPTION	CONTAINER SIZE
1	HFO generators	40ft container
2	11 kV switchgear	40ft container
3	Control room	20ft
4	Settled HFO transfer pump	20ft
5	Raw HFO transfer pump	20ft
6	Lubricant oil container	20ft
7	Sludge tank	40ft
8	Diesel tank	40ft
9+11	Service tank unit	40ft
10	HFO buffer tank	40ft
12	Fuel treatment unit	40ft
13	Water treatment unit	20ft
14	Auxiliary transformer	20ft
15+16	LV distribution board	20ft
17	Power evacuation HV/EHV	
18	Client sub-station/POC	



# Cost-effective continuous baseload for grid and industry



It can take years to get permanent infrastructure up and running, which can lead to power gaps or shortages.

Our modular HFO power plants provide continuous base load power for grid or off-grid applications.

We can deploy quickly - 80 MW contract to power in 90 days - which means you can count on a reliable power supply as and when required to either bridge intermittent power needs, safeguard your operations or use additional power on demand.

Our services are provided turn-key, including fuel supply if required, without the need for capital investment and complex infrastructure development.

The modularity of our HFO solution provides key benefits when it comes to power availability, power density and reliability.

HFO fuel provides a cheaper option than diesel, delivering significant cost savings as well as efficiency improvements versus older plants that are prone to frequent breakdowns and high operations and maintenance costs.

Our extensive global network ensures timely deployment of power assets to any location in the world, with a wide network of specialised and experienced operations expertise ensuring flawless power production and delivery.

## Mobile, modular power plants

Our HFO power fleet is fully containerised, mobile and modular, which means it is designed to get your power up and running in the shortest time possible.

They are packaged into standard-sized containers so they can be transported using standard shipping methods, to even the most remote and hard to reach locations. This saves time and money.

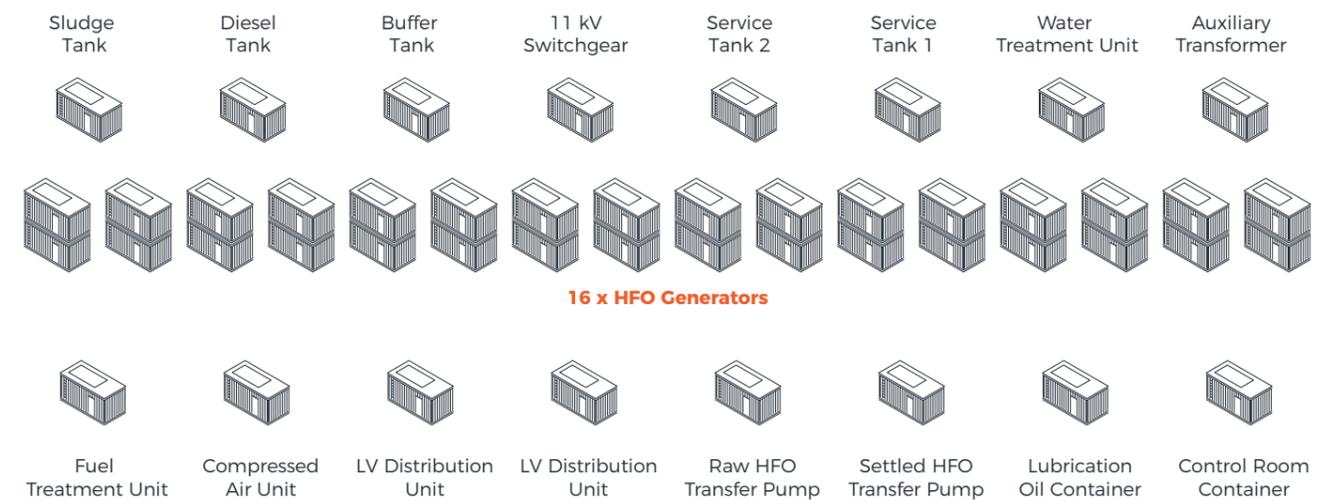
Available from 8 MW upwards in a 4-pack arrangement, a single 1.82 MW generator with a MAN 9L21/31 engine is used as the basic building block of a

29 MW power package installed in a 16-pack layout, complete with plug and play ancillaries for both fuel supply and electrical connection.

Being modular also means they can be scaled to your individual needs and varying levels of power demand.

By configuring the containerised units in a basic 16-pack arrangement, Aggreko can install power plants of multi-megawatt capacities. Each modular 16-pack represents 29 MW of installed capacity and consists of:

## Standard 16-pack configuration



100% power availability with built-in redundancy



# Turn-key power projects delivered in weeks

Providing power generation equipment is just a small part of what we do. We also design, commission and operate the entire plant. And we're accountable for it too. With us you get a full end-to-end service that supports you and your business.



## Engineering and design

We engineer and design your power plant according to your specific needs and power requirements. Our highly skilled team will work closely with your team to define the best package to meet your power supply requirements, designed to the optimum operating efficiency based on the site conditions.



## High or medium voltage

Based on your needs, the power will be delivered to the exact voltage you need using transformers and switchgear.



## HFO fuel specifications

Our HFO engines can operate on a wide fuel range and viscosity that is available from major hubs and ports around the world.



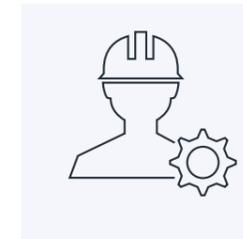
## Mobilisation

Getting power to where it's needed fast, is what we do, so we've got HFO ready to be mobilised quickly, so you can get up and running as soon as possible.



## Site preparation

We don't need to do any heavy civil work meaning we can easily install and commission your plant.



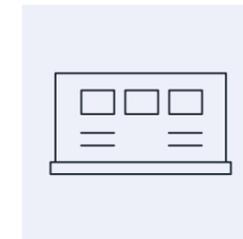
## Commissioning

Power projects are provided as turn-key packages, so all aspects of the project, including commissioning and testing, are handled by our expert technicians.



## Generators

Our modular generators are designed and built specifically for continuous operating mode. Each complete modular system, set is rated to deliver continuous power in any climate or temperature. Automatic synchronizing and load-sharing fitted as standard on every unit allows easy parallel operation between the power project and grid.



## Power system configuration

Generators connected to a standard transformer form the basic building blocks for power projects. The standard configuration means that power supply can be easily ramped up or down depending on your needs.



## Maintenance and operations

All power projects are provided as turn-key solutions, so a team of Aggreko technicians will remain to operate and maintain the equipment, giving you complete peace of mind.



## Remote monitoring

The control room can be manned or controlled remotely, giving full control of each generator through a SCADA system.



Power **how** you need it,  
**when** you need it, **where** you need it.

