AKSA HVO COMPATIBLE GENERATOR SETS*
FOR YOUR SUSTAINABLE AND RELIABLE FUTURE.

* HVO fuel provides up to 90% carbon neutral renewable energy for your backup generator. So it's not just mission critical. It's critical for the planet, too.

aksa POWER GENERATION

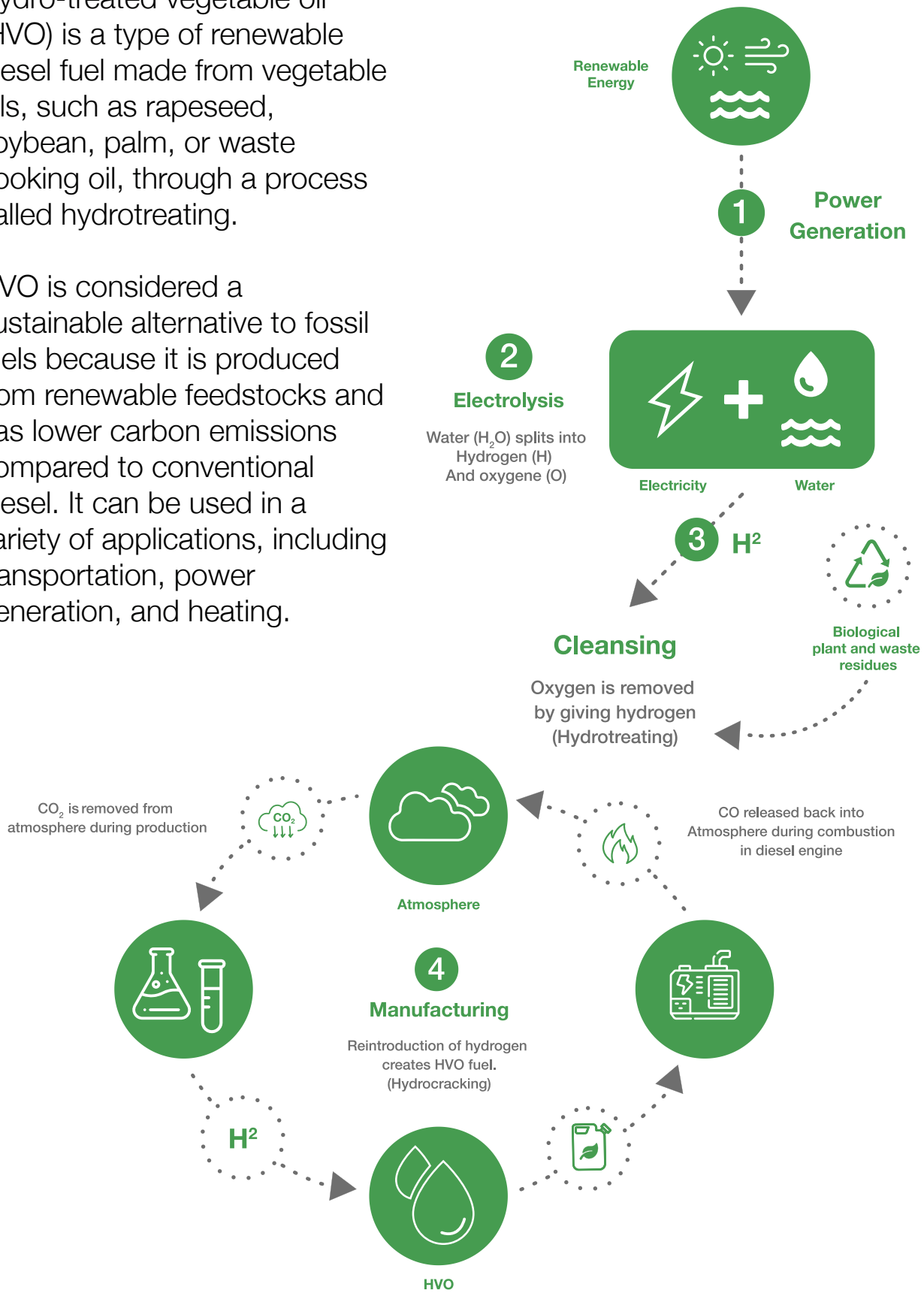
What is **HVO?**

Hydro-treated vegetable oil (HVO) is a type of renewable diesel fuel made from vegetable oils, such as rapeseed, soybean, palm, or waste cooking oil, through a process called hydrotreating.

HVO is considered a sustainable alternative to fossil fuels because it is produced from renewable feedstocks and has lower carbon emissions compared to conventional diesel. It can be used in a variety of applications, including transportation, power generation, and heating.

The Climate-friendly Diesel Alternative

This is how Biofuel HVO is produced.



What are the differences **between diesel and HVO?**

Hydro-treated vegetable oil (HVO) is a type of renewable diesel fuel that is produced from vegetable oils, whereas conventional diesel fuel is derived from crude oil. **Here are some of the main differences between diesel and HVO:**

Source

Diesel is made from crude oil, while HVO is produced from renewable feedstocks such as vegetable oils, animal fats, and used cooking oils.

CO_2 Carbon Emissions

HVO has lower carbon emissions than conventional diesel. Studies have shown that HVO can reduce greenhouse gas emissions by up to 90% compared to fossil diesel.

Sulfur Content

HVO has a low sulfur content, while conventional diesel may contain high levels of sulfur. This makes HVO a cleaner-burning fuel compared to diesel and reduces emissions of harmful pollutants such as sulfur oxides (SOx) and particulate matter (PM).

Performance

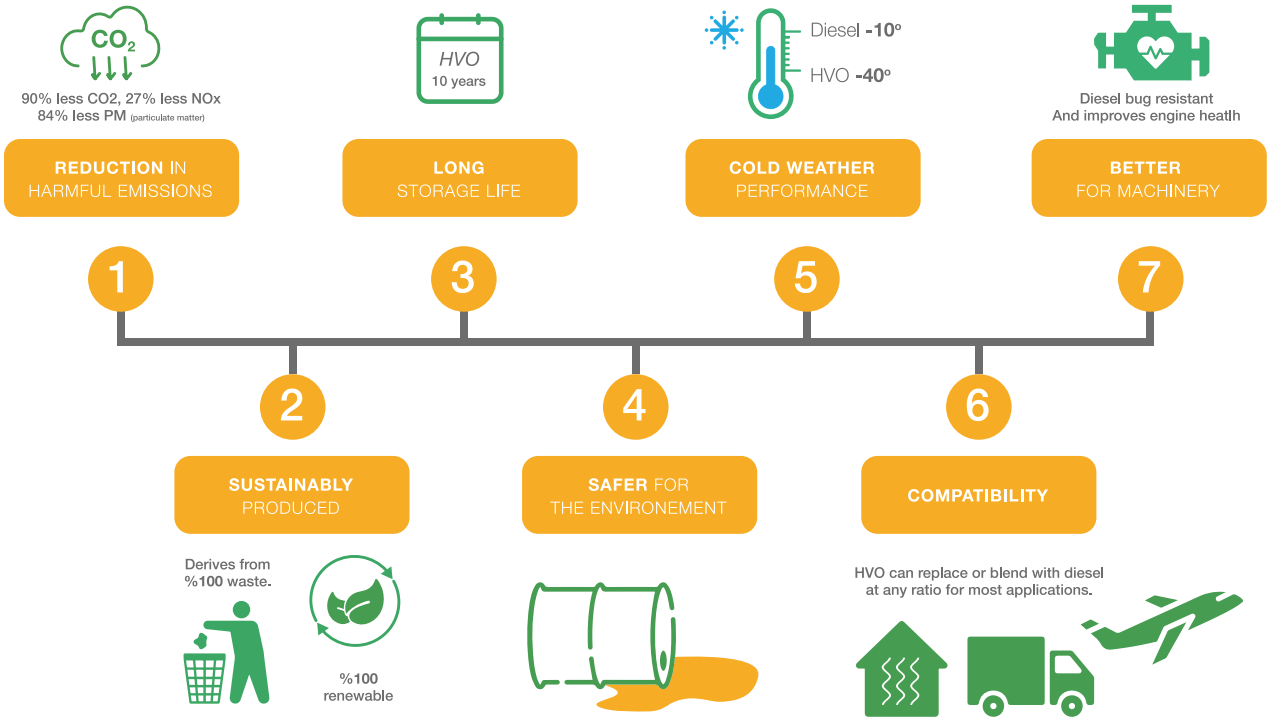
HVO has similar properties to diesel in terms of energy density, fuel efficiency, and engine performance. However, HVO may have a higher cetane number, which is an indicator of its ignition quality, compared to diesel.

Compatibility

HVO is compatible with existing diesel engines and infrastructure, but it may require some modifications to fuel storage and handling systems due to its different properties.

What are **the benefits of HVO?**

There are many benefits of HVO when compared to mineral diesel, kerosene or even first generation biofuels. These benefits aren't just to the environment and corporate social responsibility, but tangible benefits to your business and equipment. **The advantages of HVO include:**



1 **REDUCTION IN GREENHOUSE GASES AND HARMFUL BYPRODUCTS**

When compared to diesel or kerosene, HVO fuel reduces CO2 emissions by almost 90%. HVO usage also reduces nitrogen oxide (NOx) emissions by up to 27% and particulate matter (PM) emissions by up to 84%. This not only reduces greenhouse gas emissions but contributes to overall cleaner air.

2 **SUSTAINABLY PRODUCED**

HVO fuel is 100% renewable and has been certified by the International Sustainability and Carbon Certification (ISCC) as sustainable. It is also a second-generation biofuel which means that it derives entirely from waste products that would likely otherwise go to landfill. It should also be noted that the production of HVO from reputable suppliers does not contain any products which contribute to deforestation.

3 **LONG STORAGE LIFE**

HVO fuel is perfect for long-term fuel storage and can be stored for up to 10 years which makes it ideal for applications where long-term storage is required such as backup generators. As the hydrogenation process removes oxygen from the fuel, there is a significantly reduced risk of degradation or oxidation. HVO does not absorb water like first generation biofuels so does not provide an environment where diesel bug can thrive. This also removes the need for regular fuel testing and maintenance programs to remove water.

4 **SAFETY**

Pure hydrotreated vegetable oil is odourless, non-toxic and biodegradable. Therefore leaks and spills of HVO have a considerably less detrimental impact to the environment than diesel or kerosene. The flash point of HVO is also higher than mineral diesel which decreases the risk of a fire hazard.

5 **COLD WEATHER PERFORMANCE**

HVO has a considerably lower freeze point (-40°C) than diesel (-8°C). While this isn't often a concern in the UK, it is one reason why HVO is so suitable for the decarbonisation of the aviation industry.

6 **COMPATIBILITY**

For most applications HVO is completely interchangeable with diesel and can completely replace diesel or be blended with diesel in any ratio. Many Original Engine Manufacturers (OEMs) including popular passenger car manufacturers, freight vehicle manufacturers and non-road vehicle manufacturers have approved the use of HVO fuel in their vehicle's engines. If your vehicle has an OEM that has approved the fuel then there is no risk of voiding the warranty.

7 **BETTER FOR MACHINERY**

HVO's clean-burning properties significantly reduced particulate production (up to 84%) which helps to improve the engine cleanliness, prolong the lifetime of emission control systems (where fitted) and decrease the ageing of engine oils. Additionally, as HVO does not react with water or oxygen, storage of the fuel avoids sludge build-up and diesel bug so prevents filters from blocking and contaminants entering your equipment.

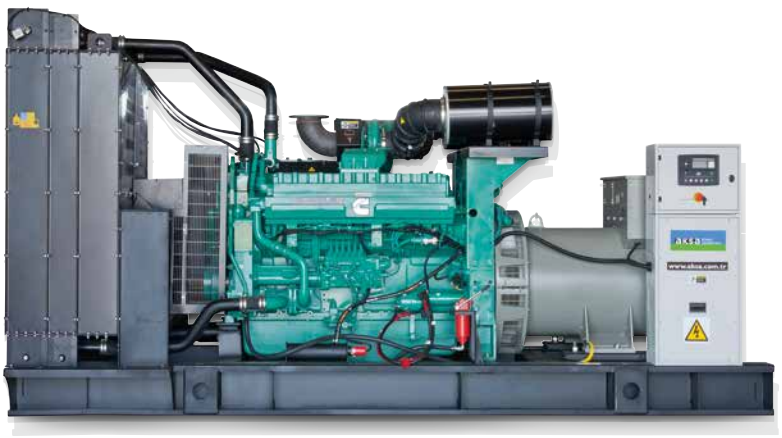
Compatible generator sets

HVO-ready Generator sets

Standby & Prime

550 kVA - 3.000 kVA

Model	Standby		Prime		Standby Current
	kWe	kVA	kWe	kVA	Amper
AC 550	440	550	400	500	794
AC 880	704	880	-	-	1270
AC 1100	880	1100	-	-	1588
AC 1100K	880	1100	-	-	1588
AC 1250	1000	1250	-	-	1804
AC 1410	1128	1410	-	-	2035
AC 1650	1320	1650	-	-	2382
AC 2250	1800	2250	-	-	3248
AC 2500	2000	2500	-	-	3608
AC 2750	2200	2750	-	-	3969
AC 3000	2400	3000	-	-	4330



Compatible generator sets

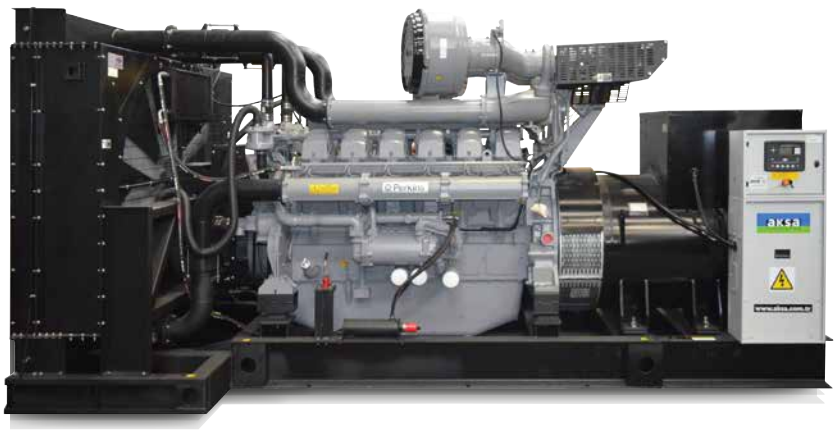
Perkins

HVO-ready Generator sets

Standby & Prime

14,5 kVA - 2.500 kVA

Model	Standby		Prime		Standby Current
	kWe	kVA	kWe	kVA	Amper
AP 15	11,6	14,5	10,4	13	21
AP 22	17,6	22	16	20	32
AP 33	26,4	33	24	30	48
AP 50	40	50	36	45	72
AP 72	57,6	72	52,8	66	104
AP 88	70,4	88	64	80	127
AP 110	88	110	80	100	159
AP 150	120	150	108	135	217
AP 165	132	165	120	150	238
AP 200	160	200	144	180	289
AP 220	176	220	160	200	318
AP 250	200	250	180	225	361
AP 275	220	275	200	250	397



Compatible generator sets

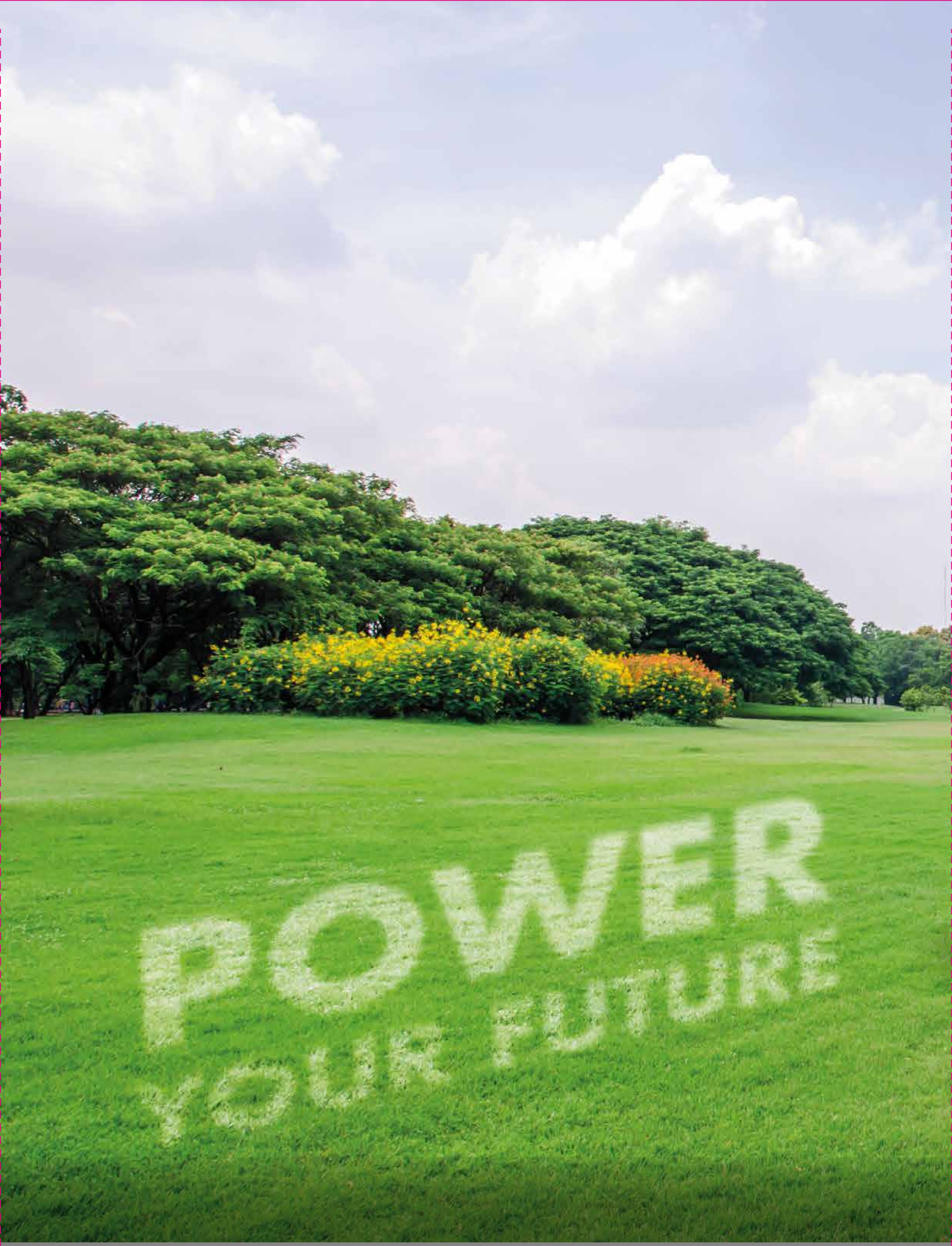
Perkins

HVO-ready Generator sets

Standby & Prime

14,5 kVA - 2.500 kVA

Model	Standby		Prime		Standby Current
	kWe	kVA	kWe	kVA	Amper
AP 330	264	330	240	300	476
AP 385	308	385	280	350	556
AP 400	320	400	280	350	577
AP 440	352	440	320	400	635
AP 450	360	450	328	410	650
AP 500	400	500	364	455	722
AP 550	440	550	400	500	794
AP 660	528	660	480	600	953
AP 715	572	715	520	650	1032
AP 825	660	825	600	750	1191
AP 850	680	850	616	770	1227
AP 880	704	880	640	800	1270
AP 900	720	900	644	805	1299
AP 1000	800	1000	728	910	1443
AP 1125	900	1125	818,4	1023	1624
AP 1250	1000	1250	900	1125	1804
AP 1400	1120	1400	1012	1265	2021
AP 1650	1320	1650	1200	1500	2382
AP 1875	1500	1875	1364	1705	2706
AP 2000	1600	2000	1480	1850	2887
AP 2250	1800	2250	1600	2000	3248
AP 2500	2000	2500	1800	2250	3608



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