

YERSEKE ENGINE SERVICES



REPAIR

MAINTENANCE

OVERHAUL

REPOWERING

STAGE V SOLUTIONS





#### YES company portfolio

















#### TIME LAPS



EU Stage V regulation was set

2020

Start homologation GP3500 & GPC18

2022

GPC 32 was homologated, and EU Stage V certified for IWP / IWA

#### 2017

First 2 EU stage V compliant, were tested and installed later we delivered more EU stage V compliant systems

2021

September 2021 GPC3500 & GPC18 EU stage V certified 2023

More then 100 systems sold





#### Delivery Program GreenPower







GPC18 GPC32 GP3500





#### Delivery Program GreenPower







GPC32



**GP3500** 

GreenPower propulsion engines covers a power range 339 BKW up to 2500 BKW GreenPower auxiliary engines covers a power range 300 BKW (350 KVA) up to 994 BKW (1180 KVA) constant speed GreenPower auxiliary engines covers a power range 300 BKW up to 2350 BKW variable speed





#### **Delivery Program YES**



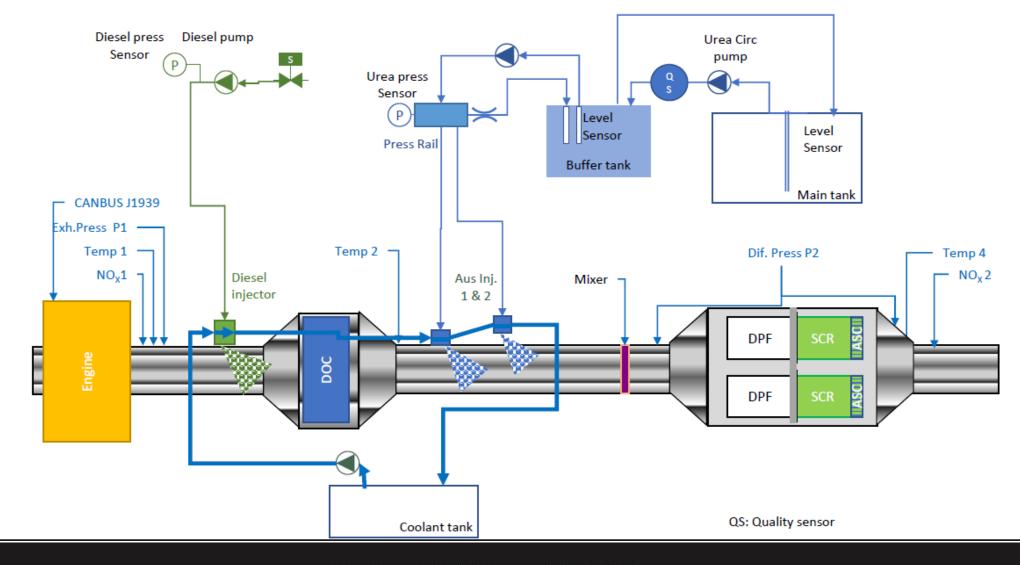


By the CAT C4.4 & C7.1 EU stage V genset without after treatment we cover a power range 80 KVA up to 118 KVA For higher ratings up to 138 KVA and lower ratings starting from 60 KVA we can offer other solutions also without exhaust after treatment





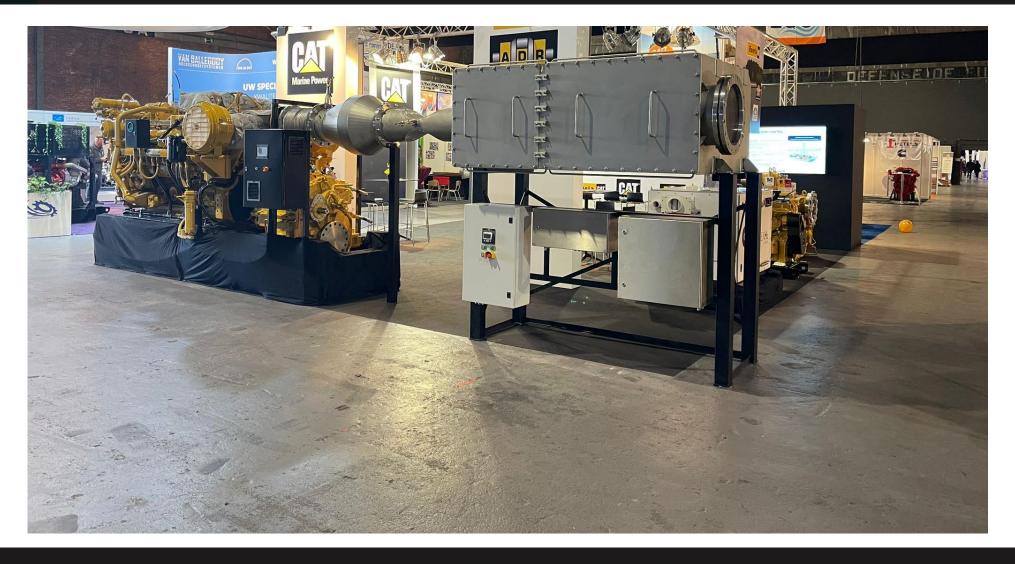
#### GreenPower system Overvieuw







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Inland waterway dry cargo vessels



Inland waterway tankers



Fishing vessels



Estuaire vessels





#### Installation on board



Custom build aftertreatment housing

DPF & SCR in same housing > relatively small housing > retrofit

Good noise reduction no silencer needed for "standard "installation

Urea tank





### Operational



Urea bunkering services Maintenance







# CCR2 vs EU Stage V Engine power > 560 bkW

	CCR 2 LIMIT	EU Stage V LIMIT	Reduction	Reduction %
CO (g/kWh)	3,5	3,5	0	0
HC (g/kWh)	1,0	0,19	0,81	81
NOx (g/kWh) @2100 RPM	6,74	1,8	5,25	74
NOx (g/kWh) @1800 RPM	7,05	1,8	4,94	73
NOx (g/kWh) @1600 RPM	7,29	1,8	5,49	75
NOx (g/kWh) @1500 RPM	7,42	1,8	5,62	76
PM (g/kWh)	0,2	0,015	0,185	92,5
PN (1/kWh)	1 x 10 <sub>14</sub> *	1 x 10 <sub>12</sub>	0,99 x 10 <sub>14</sub>	99
	* For CCR 2 there is no limit for PN			



#### Stage V + NEW Fuels

Stage V solutions in combination with NEW fuels .e.g HVO100 ....

- ✓ Low emission > 95% NOx reduction caused by SCR
- ✓ Low emission > 95% PM reduction caused by DPF
- ✓ Low CO2 foot print > 90% CO2 reduction caused by NEW fuels
- ✓ YES tested several "Green Fuels" on their own test facility in Yerseke with good results
- ✓ Increase the sustainability of the lager diesel engine for the marine applications



## WHENEVER YOU NEED US WHEREVER YOU ARE



YERSEKE ENGINE SERVICES