

Biofuel reference list



Country	Plant	Power	Engine	Status	
D/B	MANN Energy	0,8 MW	9L 16/24	in operation	2001
D/NL/CH	Petrocare Qlear	0,8 MW	9L 16/24	in operation	2001
A	Qlear I, Lustenau	1,4 MW	7L 28/32	in operation	2004
I	Qlear II, Diusa	1,4 MW	7L 28/32	in operation	2004
A	Fritzens	1,1 MW	6L 21/31	in operation	2004
B	SPE Harelbeke	85,0 MW	8x14V 52/55	in operation	2005/2006
D	STW Schwäbisch Hall	5,0 MW	12V PA	in operation	2006
D	Hans Wiessner distillery	2,9 MW	2x5L 27/38	in operation	2006
B	Electrawinds	17,5 MW	18V 48/60	in operation	2007
D	van Roje	5,5 MW	12V 32/40	in operation	2007
I	Cereal Docks	5,2 MW	2x9L 27/38	in operation	2008
B	Electrawinds	16,6 MW	2x18V32/40	In commisioning	2008
I	IGI	8,3 MW	1x18V32/40	In commisioning	2008
I	Oxon	8,3 MW	1x18V32/40	In commisioning	2008
I	CONSORZIO LATTERIE VIRGILIO	4,6 MW	2x8L 27/38	In commisioning	2008
I	NEW BOX	2,3 MW	8L 27/38	contract signed	2007
I	PBR- INTERGREEN	4,6 MW	2x8L 27/38	contract signed	2007
B	Electrawinds	17,5 MW	1x18V 48/60	contract signed	2007

Fritzens



- **location: Tyrol, Austria near Innsbruck**
- **located on a sewage plant**
- **engine: 6L 21/31, 1,16 MW_{el}**
- **commissioned in 2004**
- **35.000 operating hours (End 2008)**
- **availability of 8.000 h/a (90 %)**
- **fuel: used cooking oil**



Fritzens



- **disposal of cooking oil caused clogage in municipal waste water pipes**
- **rectification costs about 400,- € per ton of discarded oil**
- **collecting system for oil in private housholds and restaurants**
- **oil is cleaned in a settling tank and by filtration**



Hans Wiessner distillery



- location: Eppingen, Germany near Heilbronn
- distillery for ethanol
- engines: 2x5L 27/38, 2x 1,44 MW_{el}
- commissioned: late autumn 2006
- 8.000 operating hours (November 2007)
- fuel: different vegetable oils
operation: palm oil, start/stop: rapeseed oil
- like all other plants: equipped with SCR catalyst, fulfills German Clean Air Act (TA Luft)



Hans Wiessner distillery



- **electricity is fed into the local grid and refunded according the German Renewable Energy Act (EEG)**
- **heat is used in several processes**
 - **radiation heat: fuel tanks**
 - **cooling water: evaporation of distillers wash**
 - **exhaust gas: drying of „wetcake“**
 - **steam produced by drying process: plants steam system (e. g. distillation)**



- **location: Oberhonnefeld, Germany near Koblenz**
- **sawmill, producing as well pellets for domestic heating**
- **engine: 12V 32/40, 5.5 MW_{el}**
- **commissioned: March 2007**
- **8.000 operating hours (February 2008)**
- **fuel: different vegetable oils**
operation: palm oil, start/stop: soy bean oil



Electrawinds



- **location: Mouscron, Belgium near Lille (F)**
- **power plant**
- **engine: 18V 48/60, 17.4 MW_{el}**
- **commissioned: Februar 2007**
- **15.000 operating hours (End 2008)**
- **availability > 90 %**
- **fuel: mainly animal fat**
- **own oil refining plant ensuring correct fuel quality**



References

MannEnergie / Germany



- Engine type 9L16/24
- Fuel : Vegetable oil, used oil
- Power output :760 kWel
- Commissioning date:
June 2001

