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# EURO-VI truck engines

## The EU and the Dutch IWT market

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# Options to meet Stage V emission requirements

## New Engine(s)

(L)NG fueled engine

OEM stage V (IWA/IWP) engine

Stage V (IWA/IWP) engine with  
aftermarket after treatment system

EURO VI engine

## Refitting Existing Engine(s)

(L)NG refit kit

After treatment system

## (Future) Alternative Technologies

Batteries

H2/Fuel Cells

# IWT Potential Market for EURO VI Engines

IWT vessels with propulsion power < 550kW	7.536
IWT vessels with propulsion power between 550kW and 1100kW	2.537
IWT vessels with propulsion power > 1100kW	1.172
<b>TOTAAL</b>	<b>11.245</b>

Source: IVR database

	WE	NL
IWT vessels with propulsion power < 550kW (1 engine)	5362	3189
IWT vessels with propulsion power between 550kW and 1100kW (1 engine)	1671	913
IWT vessels with propulsion power between 550kW and 1100kW (2 engines)	924	532

Source: Prominent

# IWT Potential Market for EURO VI Engines

Fleet families identified in PROMINENT	Average number of engines installed	Power (in kW) per propulsion engine installed			Average total engine power installed (kW)
		25 <sup>th</sup> percentile	Mean	75 <sup>th</sup> percentile	
Passenger vessels (hotel/cruise vessels)	1.4	110	304	385	482
Push boats <500 kW (total engine power)	1.2	137	216	275	247
Push boats 500-2000 kW (total engine power)	1.6	351	542	700	847
Push boats ≥2000 kW (total engine power)	2.7	1,251	1,288	1,360	3,458
Motor vessels dry cargo ≥110m length	1.3	1,118	1,337	1,617	1,742
Motor vessels liquid cargo ≥110m length	1.3	1,118	1,390	1,660	1,780
Motor vessels dry cargo 80-109m length	1.1	520	707	880	764
Motor vessels liquid cargo 80-109m length	1.1	640	853	985	954
Motor vessels <80 m. length	1.1	165	280	368	302
Coupled convoys	1.9	956	1,178	1,388	2,237

Table 4: Average number of engines and engine power characteristics of the main fleet families (based on detailed information from Western-European countries)

## Source Prominent

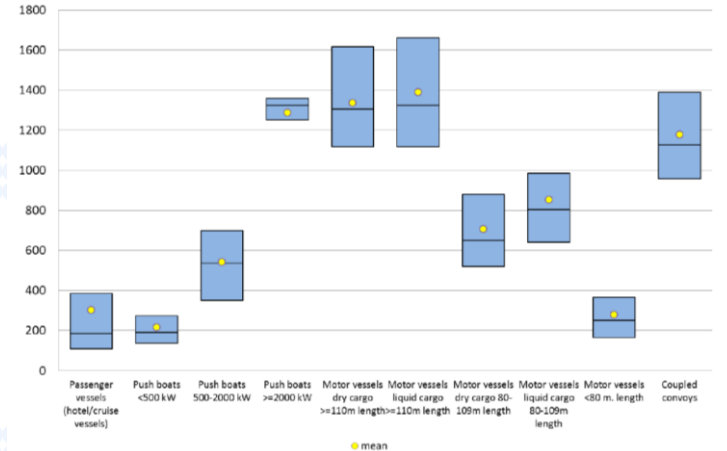


Figure 11: Boxplot of power of main propulsion engine (in kW) with mean and 25%-75% interval (and median) of the observed data per year and main fleet families

# The choice for EURO VI depends on .....

- **Sailing Profile**
- **Configuration possibilities within the engine room**
- **Economic and Technical state of the current drive line**
- **Required addition investments (compared to alternative solutions to meet stage emission levels)**
- **Total Cost of Ownership (TCO)**