

Kubota Engine Thailand (KET)

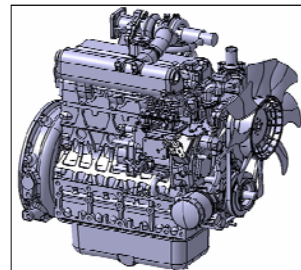
1. Outline

Address	No.360 Moo 3, T.Khao Hinson, A.Phanomsarakarn, Chachoengsao, 24120 Thailand	
Number of employees	387	
Site area	75,856 m ²	
Establishment day	24-Feb-11	
ISO14001 certification date	3-Jul-2015	
Site overview	Manufacturing of vertical type diesel engines	



2. Products

Main products



Vertical type Diesel Engines

3. Environmental, Safety and Occupational Health Policy

KUBOTA Engine (Thailand) Co. Ltd (KET), a leading manufacturer of diesel engines for agricultural and industrial machinery recognizes the importance of environmental protection as well as the occupational health and safety of employees, local communities and society overall. The company, therefore, is committed to operate with the environment, safety and employees health in mind. Policies to support this operation as detailed in the following.

1. KET is committed to prevent accidents and occupational diseases by improving working environments which present an unacceptable risk of harm and strictly complies with the company's safety regulations.
2. KET is responsible to society by considering environmental impacts, which are caused by human activities, products including energy saving, as well as the reuse of resources, in its operations. In addition it will continue to protect the environment and prevent pollution.
3. KET has encouraged and supported employees to create a workplace in accordance with the 5S principles to improve operation, safety, and equipment maintenance as well as using an appropriate protective equipment to reduce accidents and prevent occupational diseases.
4. KET continues training activities to educate and create awareness on environmental, safety and occupational health to employees.
5. KET will continue to comply with legal and regulatory requirements related to the environment, safety and occupational health.
6. KET communicates to all employees about its environmental, safety and occupational health policy, including information on the implementation.
7. KET communicates to interested parties about its environment, safety and occupational health policy and accepts comments and complains.
8. KET continues to review objectives, targets, and results of overall operation on environmental, safety and occupational health for better improvement.

4. Environmental performance data (Jan. 2018 to Dec. 2018)

Used amount of energy	Crude oil equivalent KL	2,403
Used amount of water	thousand m ³	15

CO₂ emission*	tons CO ₂ e	4,672
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*CO₂ emissions from energy sources.

Air Pollutant measurement results				
Main smoke and soot generation facilities		Heating furnaces		
	Unit	Control content	Control value	Maximum measured
SOx	ppm	Concentration control	950	< 2
NOx	ppm	Concentration control	200	18
Particulate	mg/m ³	Concentration control	240	8.8

Amount of discharge water	thousand m ³	No external water discharge	
Amount of pollutant in discharge water	COD	kg	-
	Nitrogen	kg	-
	Phosphorus	kg	-

Water pollutant measurement results				
	unit	Control value	Maximum measured	
Treated water* (Recycled)	pH	-	5.5 ~ 9.0	7.6 - 7.9
	BOD	mg/L	< 20	2.0
	COD	mg/L	<120	35
	Nitrogen	mg/L	< 100	6.0
	Phosphorus	mg/L	-	13.9
	Hexavalent chromium	mg/L	< 0.25	<0.10
	Lead	mg/L	< 0.2	<0.05
	COD, total emission control	kg/day	-	1.3
	Nitrogen, total emission control	kg/day	-	0.1
	Phosphorus, total emission control	kg/day	-	0.4
	SS	mg/L	< 50	2.0

Waste discharge	tons	453
Recycling ratio	%	97.3%

VOC emission	tons	1
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5.Environmental Topics

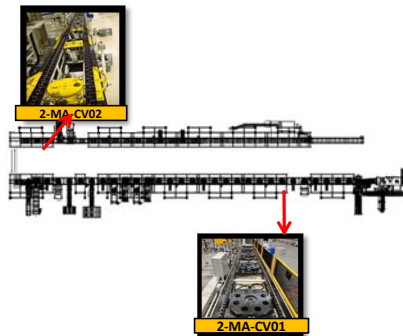
1. Water reduction

Set water consumption for the gardener. The gardener can usage water 15 liters per day.



2. Electrical reduction (Energy Just In Time Concept).

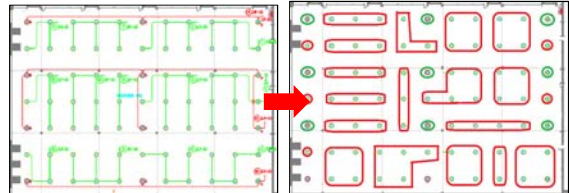
2.1 Stop conveyor when not use or inessential time at Main line.



2.3 Change the fluorescent lamp to LED lamp.



2.4 Separate turn on/off lighting switch group.



2.2 Air leak training and air leak suggestion project by employee.



2.5 Install a plastic curtain in order to keep the temperature of the Air conditioner.



3. Improve chemical management.

Addition the chemical picture and QR code (for see full SDS) in SDS brief version, Change chemical cabinet by all department must use the chemical cabinet with design by environmental section, Liquid chemical must have the chemical tray.



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4. Install automatic pump to emergency tank for an emergency incident.

Install an automatic pump for domestic water and process water. When an emergency incident (water high level on day/night shift or wastewater treatment abnormal) pump will transport wastewater to the emergency tank.



5. Move coolant pipe from underground to the ground.

Process coolant used drain from wet scrap. When coolant leak the employee cannot find coolant leak impact to contaminated with soil, so KET will move coolant pipe from underground to the ground.



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6. Environmental Communication

1. CSR & Environment Month Activity 2019 at Ban Huai Hin School.

On 10 July 2019 at KET.



2. Safety & Environmental & Energy Week 2019

On 18 - 19 July 2019 at KET.

