

Get to Know LEMA

Japan Land Engine Manufacturers Association

LEMA is an industrial organization of Japanese manufactures of land engines and supporting businesses.

For a better and comfortable life



The Japan Land Engine Manufacturers Association is working on voluntary regulations to reduce harmful substances in the exhaust gas of small general-purpose engines.

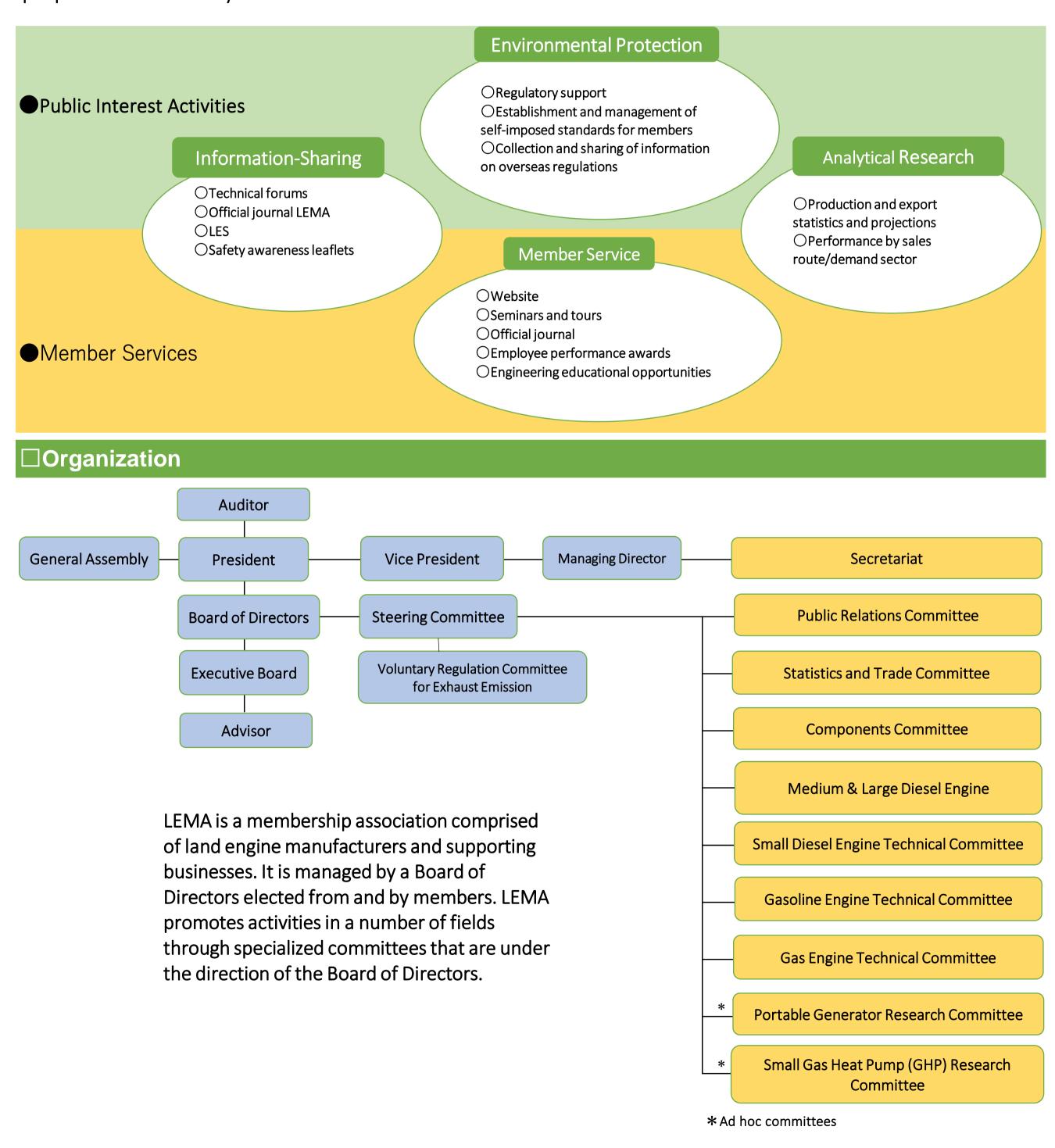
This label indicates that it complies with the voluntary regulations for small general-purpose engine exhaust gas established by our association.

□History

Land Engine Manufacturers Association (LEMA) has been established on May 1, 1948 by land engine and engine component manufactures to aim at promoting growth and technical development of the land engine industries in Japan while promoting development in the related industries as a whole. In November 1965, the results of the activities up to that point were recognized, and the company was approved as an incorporated association. Furthermore, we participate not only in Japan but also in international activities including the United States, Europe, and China as a representative manufacturer association of Japan. In February 1999, the name was changed from "Japan Land Internal Combustion Engine Association" to "Japan Land Internal Combustion Engine Association", and in April 2012, in accordance with the national new public interest corporation system, "General incorporated foundation" It has been reorganized as "Japan Land Internal Combustion Engine Association" and has reached the present day.

☐ Major Activities

LEMA is aiming prompted develop and improve the technology of land-based internal combustion engine industry and protect the environment, through the research and study of production, demand, trade, distribution, and technology related to land-based internal combustion engine. This activity is also contributing to economical development wealth of people life of this country and world.



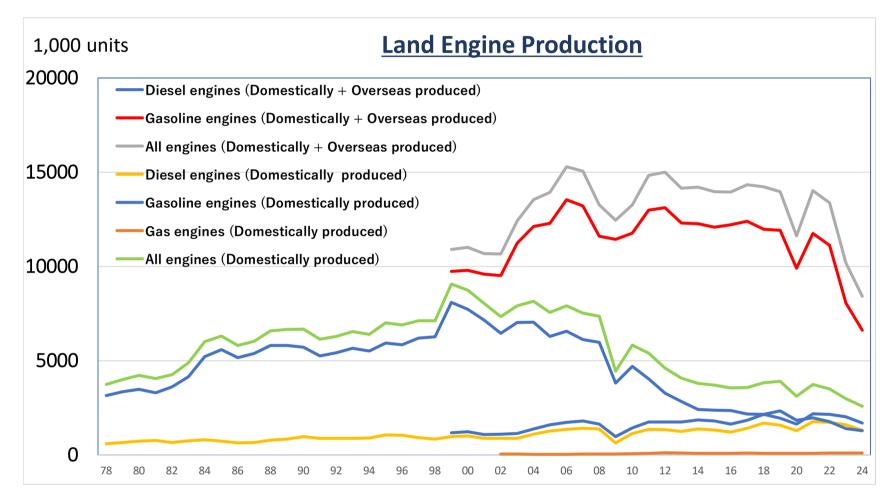
□Important events in 2025

April	Production and export projections, initial	I OCTOBER	Production and export projections middle, Official Journal LEMA
7.10	Self-imposed regulation results, Official Journal LEMA		Board of Directors Meeting
May	Board of Directors Meeting		Extraordinary Members Meeting
	General Members Meeting	November	
	Employee Performance Awards		
June	Engineering Workshop	December	
July	Statistics by Sales Route/Demand Sector	January	New Year's party, Official Journal LEMA
	Official Journal LEMA	January	
August		February	Seminar
		rebluary	
September	Technical Forum	March	Board of Directors Meeting
September		ivialCII	

□ Trend of the industry

Under favor of technological advances and growing markets, member-companies have steadfastly expanded product ranges and sequentially increased production of land engines from 0.5 hp air-cooled gasoline engines to 10,000 hp water-cooled diesel engines. In 2006, they produced 15.29 million engines worldwide, including 7.95 million units that were made in Japan. Turnout after that momentarily decreased to 12.46 million units in 2009 because of the Financial Crisis that originated in the USA, but signs of recovery began to show as early as the ensuing year and, by 2012, made a full recovery to the 15 million units level. After that, sales remained at 14 million units, although there were some fluctuations. In 2020, due in part to the impact of COVID-19, the new coronavirus, sales fell significantly to 11.63 million units, and although it recovered to the 14 million unit level in 2021, it remained at 8.42 million units in 2024 due to the subsequent deterioration in global market conditions. These engines are installed in agricultural and forestry machines, construction machines, cargo handling machines, generators, industrial machines, etc., and are used by many people in

Japan and overseas and are highly evaluated.

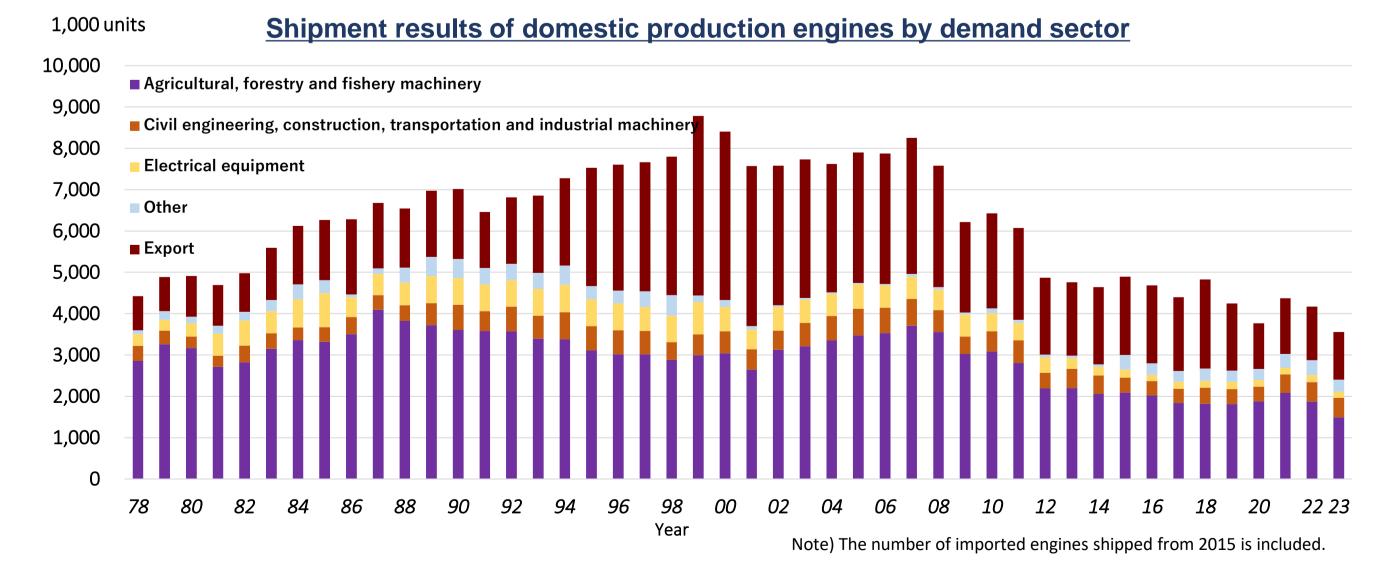


* KD data is excluded from domestically produced turnout in all data in and after 1999 when statistics were first collected for overseas produced engines.

Since the start of the survey, except in 1975, which was right after the 1st Oil Shock, it continued to follow long-term growth trends until 1990. In the 1990s, the domestic market matured, entering an export-oriented overseas demand development phase, and overseas production of gasoline engines has increased since 2000, while domestic production has decreased. Since 2009, total overseas production has exceeded domestic production. In 2024, the overseas production ratio became 68%, and 81% of gasoline engines were produced in overseas. The number of production units, including the number of overseas production units, has been displayed in the graph since 2003.

<How Japanese Land Engines Are Used>

A few examples of how land engines are used in various fields of industry are presented in the below information. These engines run on gasoline, kerosene, light oil, gas, LPG and other fuels.



<Types of Engine by Sector/Machinery>

Field	Machinery/Equipment	Types of engine				
		Gasoline engine		Diesel engine	Gas angina	
		2 stroke	4 stroke	Diesei engine	Gas engine	
Agriculture, forestry and fishery machinery	Brush cutters, Chainsaws, Knapsack power sprayers	0	0			
	Rice planting machines		0			
	Walking tractors, Cultivators, Power sprayers	0	0	0	0	
	BindersCo, mbines		0	0		
	Riding tractor		0	0		
Civil engineering,	Rammers	0	0	0		
	Compactors, Vibration rollers Concrete cutters Compressors	0	0	0		
	Bulldozers, (Hydraulic) Backhoes (Excavators) Wheel loader, Asphalt finishers, Carriers		0	0		
and industrial	Water pumps	0	0	0		
machinery	Snow blowers	0	0	0		
	Forklifts Snowplows, Rail track maintenance cars		0	0	0	
Electrical equipment	Portable generators, Engine driven welder machines	0	0	0	0	
	Mobile generators		0	0	0	
	Stationary generators, Cogeneration systems			0	0	
Other	Lawnmowers, Golf carts, Go carts Amusement park rides	0	0			
	Snowmobile	0	0			
	GHP(Gas heat pumps)				0	

Note) The application and working machine name of a general machine equipped with land engines are listed, but the working machine is different from the statistical classification (METI's classification or our association's classification). Please note that there is."

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