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JAPANESE AUTOMAKERS IN EUROPE

Collaboration between Europe and Japan for Innovation and Sustainable Mobility

2019













About This Brochure

This brochure provides basic information concerning the operations of JAMA member companies in Europe. including their local production volumes (in units), employment figures, numbers of plant facilities and research-and-development centers, and overall purchases of European-made auto parts (in value terms).

The latest activities of JAMA members operating in Europe are also introduced, with information on new investment and job creation by the individual companies and on cooperation projects with local enterprises and government and other entities, and with summary news updates for each member company.

In 2018 JAMA member companies in Europe:

- Operated a total of 14 production plants and 16 R&D facilities.
- Produced a total of 1.35 million vehicles, of which 280,416 were exported to destinations around the world.
- Employed 172,757 people, directly or indirectly in their production operations and in distribution, sales, and other activities.
- Purchased European-made parts worth a total of €15.14 billion.
- Carried out, in addition to their manufacturing and related operations, development and capital investment activities focused on electric and fuel cell vehicles, energy supply, and artificial intelligence, in cooperation with the private and public sectors as well as academic and other institutions in Europe.

Published annually, this brochure is produced for the purpose of enabling readers to gain a more comprehensive understanding of Japanese automakers' wide-ranging activities in Europe.

Note: "Europe" here and throughout this brochure refers to the European Union's 28-member-state composition in 2018

Contents

About JAMA			3
Investing in Europe	<u></u>		4
Japanese Automakers	'Europe Production	n versus Imports	8
Europe-Made Japane	ese-Brand Exports	Worldwide ·····	9
Japanese Automaker	s' Purchases of Eu	rope-Made Parts·····	10
New Investment and	Employment in Eur	rope······	11
Europe-Based Partne	ership Projects		12
Automotive Ties betw	veen Europe and Ja	apan	13
News from Our Meml	bers ·····		14

About JAMA

Established in 1967, the Japan Automobile Manufacturers Association, Inc. (JAMA) is a non-profit industry association which comprises Japan's fourteen manufacturers of passenger cars, trucks, buses and motorcycles. JAMA works to support the sound development of the automobile industry, domestically and globally, and to contribute to social and economic welfare. As directions in auto manufacturing increasingly influence the world we live in, JAMA takes its role and mission ever more seriously, on the road to sustainable mobility.



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UD TRUCKS CORPORATION

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Former Member & Friend of JAMA



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Investing in Europe

Key figures for Japanese automakers' Europe-based operations in 2018 are as follows.

No. of production facilities



14 in seven Europe countries

No. of R&D and design facilities



16 in six Europe countries

No. of vehicles produced



1.35 million units

No. of persons employed

-33,406 persons employed directly (30,850 in production, 2,556 in R&D) -139,351 persons employed indirectly (in related distribution, sales and other services)

172,757





Investing in Europe

Production facilities in Europe

In 2017 In 2018 Enduty-tree Internation In 2017 In 2018 Enduty-tree Internation In 2017 In 2018 Enduty-tree Internation Internatio					•				
Nissan Motor Niss	Manufacturer	Company		Equity Shares	Products	Produced	Produced		Investment
Manufacturing (UK) Ltd. Manufacturing (UK) Ltd. Manufacturing (UK) Ltd. Description (US) Ltd.	UNITED KINGDOM								
Toyota Motor Manufacturing Deside (1992) TME 100% Corolla fatchback tybrid, Corolla Touring Sports 144,100 129,400 2,600 GBP 2,76 GBP	Nissan				Qashqai, Juke, Leaf	495,645	442,308	7,000	GBP 4,000
Deside (1992) Find (1992)	Toyota	Manufacturing		TME 100%	Corolla Hatchback Hybrid, Corolla Touring Sports,	144,100	129,400	2,600	GBP 2,750
FRANCE		(UK) Ltd.			Engines	294,300	349,900	600	
Toyota	Honda			86.3%		166,228	160,075	3,500	,
Nissan Motor Iberica S.A.	FRAN	ICE							
Cantabria (1980)	Toyota	Manufacturing France		TME 100%	Yaris, Yaris Hybrid	233,500	248,500	4,100	EUR 1,10
Nissan Motor Iberica S.A. Barcelona (1980) Nissan 99.79% Renal Relange, Renal Capea, Renal Register, News (1980) Renal Relange, Renal Capea, Renal Relange, Relange, Relange, Relange, Relange, Relange, Relange, Relange, Relan	SPAII	N							
Barcelona (1983) Barcelona (1984) Barcelona (NT400/Cabstar, Navara, Renault Alaskan, Mercedes-Benz X Class, Pulsar, e-NV200, NV200, Renault Kadjar,			613	
PORTUGAL	Nissan			elona	(EOP June 2018), Renault Alaskan, Mercedes-Benz X Class, Diesel Engine, Manual Transmission,	92,737	82,457	3,608	EUR 3,245
Toyota Caetano Portugal, S.A. Ovar (1971) S.C.SGPS 65% Others 8% Land Cruiser 70 1,900 2,100 510 EUR 5. Mitsubishi Mitsubishi Fuso Truck Europe S.A. Tramagal (1996) Mitsubishi Fuso 100% Canter N/A					NT400/Cabstar	10,253	11,872	519	
Toyota	PORT	ΓUGAL							
Fuso Europe S.A. (1996) 100% Canter N/A	Toyota			S.C.SGPS 65%	Land Cruiser 70	1,900	2,100	510	EUR 5
Suzuki Magyar Suzuki Corporation Ltd. Esztergom Suzuki 97.5% S-Cross, Vitara 176,420 171,393 3,200 N/A					Canter	N/A	N/A	N/A	N/A
POLAND POLAND Toyota Motor Manufacturing Poland Sp.zo.o.* Jelcz-Laskowice (2005) Toyota Toyota Peugeot Citroën Kolin TMC 50% Avgo Poland Sp.zo.o. Poland Sp.zo.o. Toyota Toyota Peugeot Citroën Kolin TMC 50% Avgo Poland Sp.zo.o. Poland Sp.zo.o. Poland Sp.zo.o. TMC 50% Avgo Poland Sp.zo.o.	HUNGARY								
Toyota Toyota Motor Manufacturing Poland Sp.zo.o.* Toyota Jelcz-Laskowice (2005) TME 95.44% Engines 201,500 233,400 2,300 EUR 948 European Eu	Suzuki				S-Cross, Vitara	176,420	171,393	3,200	N/A
Toyota Motor Manufacturing Poland Sp.zo.o.* Jelcz-Laskowice C2005 TME 95.44% Engines 201,500 233,400 2,300 EUR 94. Engines 85,800 74,500 EUR 94. CZECH REPUBLIC Toyota Poland Sp.zo.o.* TMC 50% Avgo. 90,100 97,700 2,300 CZK 27,140	POLA	AND							
Motor Manufacturing		_			Transmissions	371,400	394,800		
CZECH REPUBLIC Engines 85,800 74,500	Toyota	Motor Manufacturing	Aisin A		Engines	201,500	233,400	2,300	EUR 948
Toyota Peugeot Citroën Kolin TMC 50% Avgo 90 100 97 700 2 300 CZK 27 100		ι σιατιά ομ.20.0.**			Engines	85,800	74,500		
	CZEC	CH REPUBLIC							
	Toyota				Aygo	90,100	97,700	2,300	CZK 27,146

^{*}Toyota Motor Manufacturing Poland Sp.zo.o. and Toyota Motor Industries Poland Sp.zo.o. were merged in April, 2017.

The new merged company retained the name Toyota Motor Manufacturing Poland Sp.zo.o.

TMC: Toyota Motor Corporation TME: Toyota Motor Europe PSA: PSA Peugeot Citroën

R&D R&D and design facilities in Europe

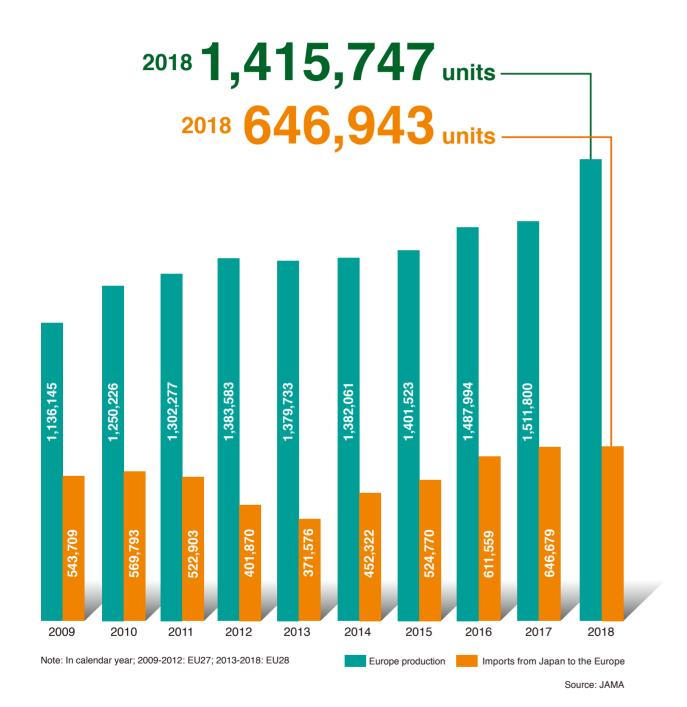
Manufacturer	Company	Location	Current Functions	
UNIT	ED KINGDOM			
Honda	Honda R&D Europe (UK) Ltd.	Swindon	1,2,3,5,8,12	
Nissan	Nissan Design Europe Ltd.	London	4	
NISSAII	Nissan Technical Centre Europe Ltd.	Cranfield	2,3,5,6,7,8,10,11,12	
GERI	MANY			
Honda	Honda R&D Europe (Deutschland) GmbH	Offenbach	2,3,8	
Isuzu	Isuzu Motors Germany GmbH	Gustavsburg	2,3,5,8,10,11,12	
Mazda	Mazda Motor Europe GmbH	Oberursel	1,3,4,5,6,8,10,11	
Mitsubishi	Mitsubishi Motor R&D Europe GmbH	Trebur	2,3,4,8,10,11,12	
Toyota	Toyota Technical Center TMG	Köln	2,3,9	
Subaru	Subaru Test & Development Center in Europe	Fernwald	2,3,12	
Nissan	Nissan Technical Centre Europe Ltd.	Brühl	2,3	
ITALY	,			
Suzuki	SUZUKI ITALIA S.P.A.	Turin	4	
FRAM	NCE			
Toyota	Toyota Europe Design Development S.A.R.L.	Nice	4,5,6,7,8	
BELO	GIUM			
Subaru	Subaru Europe NV/SA	Zaventem	2,5,8,11,12	
Toyota	Toyota Technical Center Europe	Zaventem	1,2,3,5	
Nissan	Nissan Technical Centre Europe Ltd.		8	
* SPAI	N			
Nissan	Nissan Technical Centre Europe Ltd.	Barcelona	1,2,3,5,6,7,8,10,11,12	

Key to functions

- 1: Technical support for procurement of parts for local production
- 2: Evaluation of parts
- 3: Evaluation of vehicles
- 4: Styling and general design
- 5: Parts design
- 6: Vehicle design

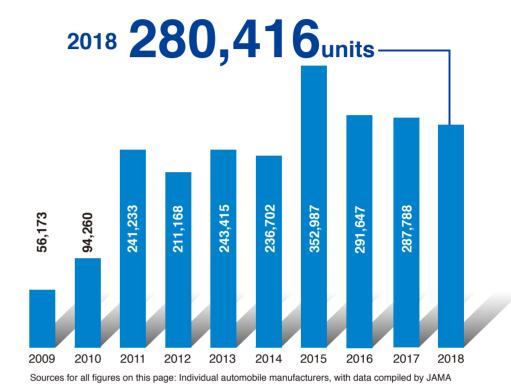
- 7: Prototype production
- 8: Marketing research
- 9: Development of racing cars
- 10: Engine application development with vehicle validation
- 11: Type approval and homologation
- 12: Field problem investigation

Japanese Automakers' Europe Production versus Imports



■ Japanese automakers have produced automobiles where significant demand exists and provided wide range of vehicles to suit customers' needs.

Europe-Made Japanese-Brand Exports Worldwide



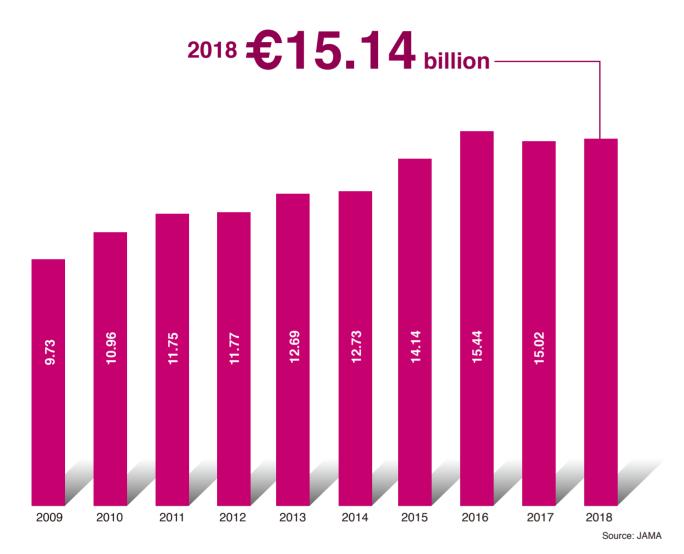
■ Of the 1.35 million vehicles made in the Europe by Japanese automakers in 2018, 280,416 units were exported worldwide. (See breakdown by region of destination below).



Notes:1. All figures shown here are rounded off to the nearest hundred.

2. EU28 in this figure refers to the European Union's 28-member-state composition in 2018.

Japanese Automakers' Purchases of Europe-Made Parts



Notes: 1. Figures here show the value of Europe-made parts purchased by Japanese automakers for use in their production operations in Europe and Japan, but the value of Europe-made parts they purchase for use worldwide is even greater.

In Japanese fiscal years (1 April-31 March); fiscal 2009-2012: EU27; fiscal 2013-2018: EU28.

■ In their pursuit of maximised global purchasing, JAMA members open their contact points to all potential European suppliers looking for long-term partnerships.

New Investment and Employment in Europe

New investment and employment activities

Country	Manufacturer	Company	Location	Target date for production	Investment target	Job creation	Investment (million)
		Nissan Motor Manufacturing (UK) Ltd.	Sunderland	2015 on wards	Production of Infiniti Q30	300	EUR 306
					XL 5,200 tonne press	N/A	EUR 51
	Nissan				Next generation electric vehicle	N/A	EUR 36.8
UK				2016 on wards	Production of <i>Qashqai</i> on both lines	N/A	EUR 26
				2017 on wards	Next geneartion Juke and Qashqai	N/A	N/A
	Toyota	Toyota Motor Manufacturing (UK) Ltd.	Burnaston	January 2019	Production of Corolla Hatchback, Corolla Hatchback Hybrid, Corolla Touring Sports, Corolla Touring Sports Hybrid	N/A	GBP 240
	Spain Nissan	Nissan Motor Iberica S.A.	Barcelona	2017 on wards	Production of Daimler vehicle	N/A	EUR 153.3
					Production of Renault vehicle	N/A	EUR 5.381
Spain				2018 on wards	Production of Nissan Navara	N/A	EUR 10.9
					Production of new gearbox ZG47 and other complementary investments in pick ups models	N/A	EUR 25.8
France	Toyota	Toyota Motor Manufacturing France SAS.	Valenciennes	to be announced	Production of vehicles using a TNGA (Toyota New Global Architecture) platform	300*	EUR 300

^{*300} contract workers will be registered as regular full-time employee.



Nissan Motor Manufacturing (UK) Ltd.



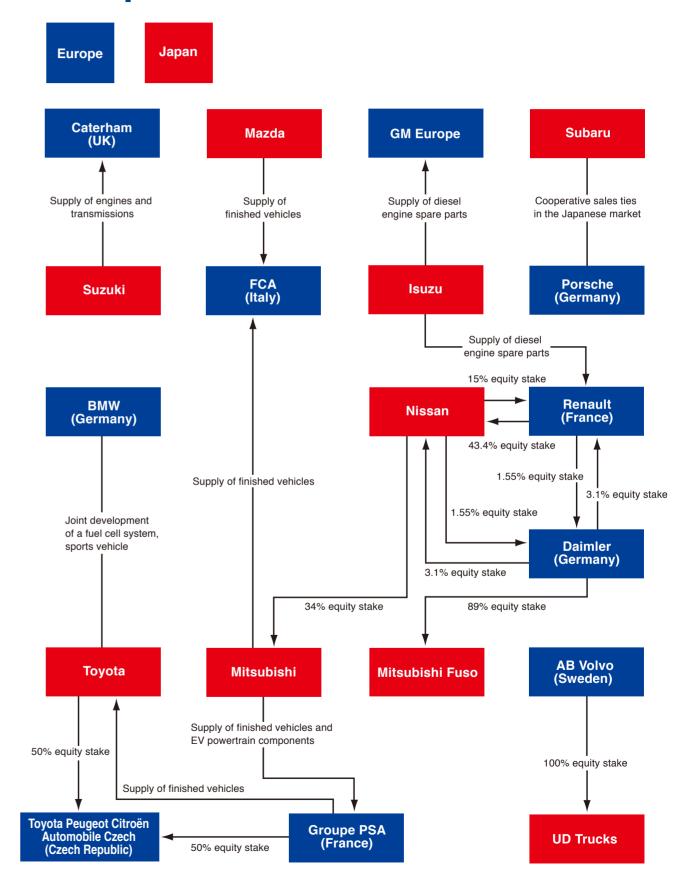
Nissan Motor Manufacturing (UK) Ltd.



Europe-Based Partnership Projects

Company (ies)	EU Partners	Location(s)	Date Announced	or Duration	Project description
Nissan Toyota Honda	European energy companies, global oil companies, global automakers, European R&D companies	Germany	10 September 2009 (Toyota joined in May, 2010) (Honda joined October 2012)	Ongoing	The objective of H2 Mobility is to prepare for the planned series launch of FCEVs and build up a hydrogen refueling station network infrastructure. Nissan, Toyota and Honda are participating as associated partners.
Honda Nissan Toyota	Today 86 industrial members	Pan-Europe	The first JAMA member participation EHFCTP 2004-2008 FCH JU JTI 2010-2014 FCH JU JTI2 2015-	31 December 2024	Established in 2008, based on shared vision which The European Hydrogen & Fuel Cell Technology Platform (EHFCTP) laid out, the Fuel Cells and Hydrogen Joint Undertaking (FCH JU JTI / FCH 2 JU JTI2) is a unique public private partnership supporting research, technological development and demonstration (RTD) activities in fuel cell and hydrogen energy technologies in Europe. Its aim is to accelerate the market introduction of these technologies, realising their potential as an instrument in achieving a carbon-lean energy system.
Toyota Honda Nissan	Daimler, Hyundai, Symbio Fuel Cell Regional H2 Mobility associations, HRS providers and operators	Scandinavian Countries incl. Norway, UK, Germany, France, Austria, BeNeLux,	contract t.b. signed in July 2015	1 July 2020	H2ME (Hydrogen Mobility Europe) is an FCH 2 JU Demo Project with approx. 32.mill€ budget. More than 200 FCVs are deployed within this project with additional 125 RE-FCVs from Symbio Fuel Cell. Primary objective is the deployment of Hydrogen Refuelling Stations across Europe with emphasis on lead country Germany.
	A.T. Kearney, Honda Motor Europe, University of Nottingham, Warwick University, The Peel Group, Cenex, Ecar club, Brixworth Technology and a UK-based energy supply business, Leeds City Council and Nottingham City Council	UK	1 March 2018	Ongoing	EV-elocity consortium project in the UK. The project aims to demonstrate the business case for Vehicle-to-Grid (V2G) technologies across a variety of UK locations, to help businesses and electric car owners recognise how they can harness, store and use surplus renewable energy with a commercial benefit.
Honda	French Ministries of Industry and Energy	Western France	1 September 2017	Ongoing	SMILE project (Smart Ideas to Link Energies), backed by the French Ministries of Industry and Energy, is operating 17 interconnecting projects with the aim of creating a large smart power grid in western France by 2019.
	Honda R&D Europe, energy service provider The Mobility House and Swiss technology company EVTEC	Offenbach, Germany	1 September 2017	Ongoing	Smart Company project, which will further enhance our research activity in the field of zero-emission society and future mobility.
Nissan	Fifteen partners from six European member states, led by EURECAT, the Catalan R&D centre	Spain, France, Luxembourg, Greece, Germany, Italy	November 2019	November 2022	Funded by the EU's Transforming European Industry programme, SHAREWORK's objective is to create an industrial work environment with the necessary "intelligence" and methods for the effective adoption of Human Robot Collaboration (HRC) without cages, providing a system capable of understanding the environment and human actions through knowledge and sensors, future state predictions and with the ability to make a robot act accordingly while human safety is guaranteed.

Automotive Ties between Europe and Japan



12





Mazda

The all-new *Mazda3* has captured the "Red Dot: Best of the Best" prize at the 2019 Red Dot product design awards, which is one of the world's largest design competitions initiated in 1955. This year, the international jury selected fewer than 100 products for the "Best of the Best" prize from the more than 5,500 entries received from 55 countries. The competition's highest accolade is awarded to products whose designs are considered genuinely groundbreaking and

visionary. The new-generation compact joins the growing list of award-winning Mazda models designed according to the Kodo: Soul of Motion philosophy, expressing Japanese aesthetics in a simple, single form, the designers of the new Mazda3 eliminated character lines so that the body panels reflect the surroundings.

14



SOLAR PANELS HOME BATTERY EII-CIRECTIONAL CHARGES

Mitsubishi

Mitsubishi Motors Corporation had announced the global premier of the MITSUBISHI ENGELBERG TOURER new-generation crossover SUV at the 2019 Geneva International Motor Show. It uses Mitsubishi Motor's own and advanced Plug-in hybrid EV (PHEV) system, with all-wheel control technologies which allow the driver to enjoy driving in any weather/road surface condition with confidence, raising the SUV appeal to a new level.

Furthermore, the new energy ecosystem, the DENDO DRIVE HOUSE (DDH) was also introduced. This is a packaged system comprising the EV/PHEV vehicle, a bidirectional charger, solar panels, and home battery which is designed for home use. It allows owners to generate, store and use energy automatically between their cars and home, and enhance the value of electric vehicles. The DDH will be offered to customers at Mitsubishi dealerships.



Nissan

Nissan Sunderland Plant is celebrating another record breaking milestone as the ten millionth vehicle rolls off the production line. It has taken the plant 33 years to reach the ten million mark - making it the fastest car factory in the UK to the landmark figure. It also means that, on average, a new car has been built in Sunderland every two minutes since production started in 1986. The ten millionth car was a *Vivid Blue Nissan Qashqai* Tekna, complete with ProPILOT technology,

which controls the steering, acceleration and braking in a single lane on highways during heavy traffic congestion and high-speed cruising. The single-lane highway version of ProPILOT debuted in 2016 in Japan and has won accolades including the Japan Car of the Year Innovation Award. It is now found in 5 Nissan models around the world. Integrated as standard is New Nissan Connect, the brand's advanced in-car infotainment system which includes features such as Find My Car and Premium Traffic which provides on-the-go rerouting based on accurate real-time traffic information to minimize journey time. The category-defining *Qashqai* - the all-time best-selling crossover in Europe - was also named 'Best British Built Car' at the inaugural News UK Motor Awards 2018. Altogether, the Nissan *Qashqai* has won more than 80 awards, including 19 "Car of the Year" titles.



Subaru

Subaru took flight as an aircraft manufacturer in 1917 and built its first mass-produced car in 1958. With its single-minded focus on developing safe fun and reliable products, it concentrated on the production of Symmetrical All-wheel Drive Boxer-powered cars. It also developed its own driver assist technology, the EyeSight system. The all-new, 5th generation *Forester* model is offered with this distinctive combination of features. It also showcases the dynamic and safety

benefits of Subaru's new global platform together with a completely new powertrain, the e-Boxer, Subaru's new-generation power unit system that combines an electric motor with two of Subaru's core technologies: Boxer engine and Symmetrical All-wheel Drive. Since its debut in 1997, *Forester* has now grown to become Subaru's top-selling model of Subaru's global sales. *Forester* has been a popular choice among customers, establishing its trust as safe and reliable package.



Toyota

Announced in September 2018, Toyota will provide its hydrogen fuel cell systems including fuel cell stacks and other key components to Caetanobus SA*to be used in their first hydrogen fuel cell electric city buses. The zero-emission hydrogen buses will roll off the lines of Caetanobus SA early 2020, and are to be operated as demonstration buses in Europe by Caetanobus SA. Aiming for the realization of a carbon-free society, Toyota is promoting the application of its hydrogen fuel

cell technology beyond passenger cars, including heavy-duty trucks, small delivery trucks, forklifts and buses.

* Caetanobus SA is a Portuguese bus engineering and production company, which is part of the Salvador Caetano Indústria holding. Toyota has a longstanding relationship with Caetano ever since its establishment of Toyota Caetano Portugal SA in 1968.

15