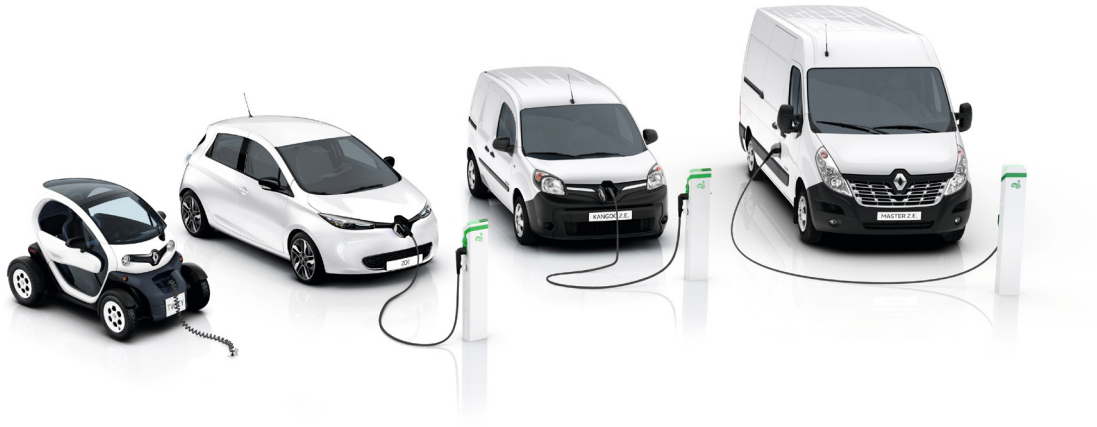
Press Kit

January 2017



Renault electric LCV range Renault©

Renault Pro+ expands electric commercial range with global premiere of New Kangoo Z.E. and Master Z.E.

Renault Pro+ unveils two new electric vehicles: New Kangoo Z.E. and Master Z.E.

- New Kangoo Z.E.: Europe's best-selling small electric van for the past six years, has gained a new battery and a new engine delivering a range increased by over 50%: 270 km NEDC[1], compared with 170 km previously. This is a longer range than any other electric LCV currently on the market.
- Master Z.E.: this vehicle will bring the expertise of Renault, European leader in electric vehicles, to the large van segment in the near future, while maintaining all the quality that have made Master a benchmark in the market.

Renault Pro+ is expanding its range of electric LCVs to include a total of four vehicles: Twizy Cargo (quadricycle with a boot, launched in 2014), New Commercial ZOE (based on New ZOE with a range of 400 km NEDC launched in September 2016), New Kangoo Z.E. and Master Z.E.

With this unique range, Renault Pro+ is satisfying the wide-ranging needs of business customers while addressing environmental challenges. At the same time, Renault Pro+ is continuing to support this offering with a range of connected and other services, dedicated to LCV customers.

"Renault Pro+ is market leader in electric LCV sales in Europe. With New Kangoo Z.E. and Master Z.E., Renault Pro+ is continuing to expand its tailor made offering to better meet the needs of our professional customers, while introducing more connected services. We are confident that our professional customers will find that our Zero Emission[2] connected vans significantly contribute to better business as well as driving experience."

Ashwani Gupta - Global Head of Light Commercial Vehicle Business

"Today's announcement marks another advancement in Renault's EV leadership, with two new additions to our lineup that expand access to the benefits of electric mobility, to more people. Renault is focused on a Zero Emission[2] future, and we look forward to bringing next-generation EV solutions to our professional customers."

Gilles Normand - Global Head of Electric Vehicle Business

[1] NEDC: New European Driving Cycle, the European standard measuring emissions and fuel consumption.
[2] Zero Emissions in use: no emissions of CO_2 or regulated air pollutants during driving, in compliance with the NEDC homologation cycle, excluding wear parts.

Renault Press
Tel. + 33 1 76 84 63 36
media.renault.com
groupe.renault.com

Contents

Renault Press
Tel. + 33 1 76 84 63 36
media.renault.com
groupe.renault.com

01

Two new electric LCVs

Kangoo Z.E. has been Europe's best-selling small electric van for six years already, with more than 25,000 units sold since its launch in October 2011. **New Kangoo Z.E.** gains a new battery and a new engine. New Kangoo Z.E. now delivers a range of 270 km NEDC compared with 170 km previously. New Kangoo Z.E. is built in France and will be marketed in Europe from mid 2017.

In the heavy van segment, the electric vehicle offering is currently limited. With **Master Z.E.**, Renault Pro+ is building on its expertise and position as European leader in electric vehicles to bring customers a solution in electric mobility. Master Z.E. is built in France and will arrive on the European market at end 2017.

New Kangoo Z.E.: a range increased by over 50% for the European leader in small electric vans

Kangoo Z.E. is a pioneer and leader in the small electric van segment in Europe. Renault's small electric van has won an array of awards including «International Van of the Year 2012». Business users with an environmentally aware approach have expressed their full satisfaction with Kangoo Z.E., praising its driveability, load capacity and competitive TCO.

New Kangoo Z.E. is available in the same range of versions as Kangoo Z.E. The same range of body styles, equipment levels and options are available (two lengths: 4.28m and 4.66m, two or five seats, a crew cab, four versions). New Kangoo Z.E. still has a load volume of between 3 and 4.6 m^3 with a payload of 650 kg. It can still be converted to meet the needs of business users (refrigerated vehicle, ambulance or pick-up, for example). It combines the smooth driveability of an electric vehicle with the simplicity of an automatic gearbox.

New Kangoo Z.E. features major innovations: **a new battery, a new engine and a new more powerful charger, a heat pump in the air conditioning system and new connected services**. New Kangoo Z.E. has a greater available range than any other electric LCV.

New Kangoo Z.E. © Renault

Renault Press
Tel. + 33 1 76 84 63 36
media.renault.com
groupe.renault.com

A new battery allied with a new engine, to go even further: 270 km NEDC compared with 170 km

- New Kangoo Z.E. is increasing its range with its new Z.E. 33 battery (33 kWh).

- New Kangoo Z.E. has a range of **270 km NEDC** compared with 170 km for Kangoo Z.E.

- In real use, on a delivery cycle[3], the vehicle would have a range of around 200 km with a single load.

This new battery, developed through the expertise of Renault and LG Chem, features a major innovation: greater energy density. This innovation involves increasing the storage capacity of the battery, without changing its dimensions or the effective volume of the vehicle. Battery performance is optimized not by adding more modules but by improving the chemistry of the battery cells to increase energy density. This upgrade was obtained with no trade-offs in reliability or safety in use.

- New Kangoo Z.E. also gains a **new engine** of advanced energy efficiency and an optimized electronic battery management system. This limits the electricity consumed by the vehicle on the road, while maintaining power. This R60 44 kW motor is 100% Renault. Developing 60 hp, it is based on the ZOE R75/90 motor. It is built in France at the Renault Cléon site, the Group's flagship facility for manufacturing engines and gearboxes of high added value.

A new more powerful charger

- New Kangoo Z.E. is equipped with a new-generation 7 kW AC charger - 32A, single-phase, 230V AC.

- New Kangoo Z.E. cuts charging time. A full charge takes around **six hours from a 7 kW WallBox**, i.e. less than one night, for a longer range.

- New Kangoo Z.E. recovers a **range of 35 km in just one hour of charging** (in a temperate climate), i.e. the time taken to have lunch or to load goods into a vehicle before going out on another round.

- As a result, New Kangoo Z.E. can drive all day and even make two delivery rounds (morning and afternoon). This makes it possible to optimize the working day and the service provided to customers.

- New Kangoo Z.E. ships as standard with a cable for charging from a WallBox or public access charge point. It also has a cable for charging from a domestic or secure socket (optional or standard depending on the country).

The heat pump: a first for increasing vehicle range in use

- New Kangoo Z.E. features **a real innovation in the world of electric LCVs: a heat pump linked to the air conditioning**, maintaining range in cold weather.

- The heat pump improves vehicle range in cold weather since it limits the use of electrical resistors that consume both power and range.

- New Kangoo Z.E. is the first electric LCV to be equipped with this feature.

- With the pre-conditioning system (using a smartphone or steering wheel controls to set the starting time), the vehicle can be heated or cooled in advance when it is plugged in.

- For extremely cold countries, New Kangoo Z.E. is equipped with an additional independent fuel-powered mini boiler that ensures user comfort in extreme conditions and maintains range in cold weather.

New connected services: Z.E. Trip and Z.E. Pass

Z.E. Trip and Z.E. Pass are two services designed to make it easier to charge electric vehicles from public charge points in Europe, during the course of a journey, if necessary. Europe has some 80,000 charge points available to the general public.

These connected services will be rolled out gradually across Europe in 2017.

- **Z.E. Trip:** to locate all charge points, from the vehicle's R-LINK navigation system.

The Z.E. Trip function lets the driver locate all accessible public charge points across the main European countries. Z.E. Trip is accessible via the Renault R-LINK navigation system. The driver can select a charge point and drive there immediately.

The Z.E. Trip function shows the availability of each charge point in real time, to guide the driver to a point that is free. It also specifies the power of the charge point and its compatibility with the vehicle. To prepare the journey in advance, drivers can also consult the charge point network on Renault's website.

[3] Delivery cycle: a real cycle based on a business user making deliveries over a distance of 107 km around a city and on motorways over a period of 2 hrs and 25 minutes.

Renault Press
Tel. + 33 1 76 84 63 36
media.renault.com
groupe.renault.com

■ **Z.E. Pass:** to access and pay for charge points, from a smartphone or tablet.

The Z.E. Pass function makes it easy to charge an electric vehicle from most public charge points in Europe, whatever the operator. Drivers identify accessible points and their compatibility with the vehicle. They can also use a smartphone or tablet to compare charging prices for the nearest points. Drivers can access a large number of charge points without subscribing to each individual network. They pay for the charge using the dedicated smartphone app (iOS or Androïd) or badge (RFID technology).

At the same time, New Kangoo Z.E. maintains a range of services to make life easier for users of electric vehicles:

■ **My Z.E. Connect**

This service lets users access vehicle data from a smartphone or computer with an internet connection: charge status, vehicle range with the current charge, charging log, scheduling of warning messages and tips.

■ **My Z.E. Connect Pro**

My Z.E. Connect Pro is a web service providing raw data on the batteries used by an electric vehicle fleet. The service uploads data on battery charge levels in real time, processes it and restores it to a customer device.

This device contributes to easier day-to-day running of the fleet, remote range management, integration of data to the company's own tools and intelligent navigation.

■ **My Z.E. Inter@ctive**

This service lets the driver interact with the car from a smartphone or computer with an internet connection: pre-conditioning of the vehicle (for heating or cooling, via the air conditioning or heat pump at a set time), charge scheduling (to select the time, take advantage of the best energy prices, the power available or in accordance with the cost and carbon footprint of the electricity used).

New Kangoo Z.E. © Pagecran

Renault Press
Tel. + 33 1 76 84 63 36
media.renault.com
groupe.renault.com

New Kangoo Z.E. is built at Renault Maubeuge: a site with recognized expertise in meeting the highest standards of quality

Key characteristics of Renault Maubeuge (MCA, Maubeuge Construction Automobile):

- A bodywork and assembly site with a full production process: press shop, body assembly, paintwork and final assembly. Vehicles leaving the assembly line undergo track tests before delivery to the network;
- A flexible production line meeting the standards of the Renault-Nissan Alliance;
- Vehicles built: Kangoo passenger vehicle and LCV since 2007, Kangoo Z.E. (electric version) since 2011, Mercedes Citan since 2012 (as part of the partnership between Renault-Nissan and Daimler since 2010);
- Production in 2015: 151,064 vehicles;
- 60% of production exported to around thirty countries;
- 2,220 employees;
- Almost 84 ha, of which 23 ha of covered buildings;
- ISO 9 001 label (quality), ISO 14001 label (environment), HPR label (highly protected risk).

Managing diversity for a made-to-measure offering

The plant manages considerable diversity in production with a wide range of four different vehicle families, all built on the same line. Kangoo is available as a leisure vehicle for private customers (Kangoo passenger car and Grand Kangoo passenger car) as well as in an LCV version for business customers (Kangoo LCV). Kangoo LCV is available in three body lengths (3.89m for Kangoo Express Compact, 4.28m for Kangoo Express and 4.66m for Kangoo Express Maxi). Kangoo Z.E. is available in two lengths (4.28m for Kangoo Z.E. and 4.66m for Kangoo Express Maxi). Mercedes Citan, based on a Kangoo platform, is also built on the same line.

A Renault Tech satellite workshop is present on site in order to customise vehicles and undertake personalised adaptations for fleets or self-employed workers.

Objective: zero defects

In order to maintain customer satisfaction over the long term, the Renault-Nissan Alliance has put in place a strategy targeting zero defects at its production sites. This strategy is based on the Alliance Production Way, a joint Renault-Nissan production system based on the best criteria in terms of production performance identified by both Renault and Nissan.

A leading economic player in the Val de Sambre region of northern France

Founded in 1971 by Société des Usines Chausson (SUC), the Maubeuge site originally had two production units (press shop and body assembly). It became a fully owned Renault subsidiary in 1978. In 1993, the Group decided to build Kangoo exclusively at this site. With a workforce of 2,220, MCA is the largest private employer in the Sambre-Avesnois region.

Renault Press
Tel. + 33 1 76 84 63 36
media.renault.com
groupe.renault.com

Master Z.E. : the benchmark heavy van goes electric

Master Z.E. gains the Z.E. expertise of Renault, European leader in electric vehicles, while maintaining all the qualities that have made Master a benchmark in the heavy van sector.

Master is a heavy van with a sturdy and expressive design, praised for its dynamic qualities (ride comfort and handling) and recognised as a benchmark in its segment (top 3 in Europe). It combines easy loading with generous load dimensions, excellent ergonomics and a high level of active and passive safety. A true mobile office, Master is an efficient, secure workhorse adopted by more than 475,000 customers since its launch at end-2010.

The electric version of Master is aimed primarily at fleets running last-mile distribution services in the city, as well as large municipalities and local government.

Master Z.E. © Renault

Master Z.E. inherits all the technology developed by the European leader in electric vehicles

Master Z.E. is packed with Renault's technical and technological expertise: the best know-how in LCVs combined with the skills of the European leader in electric vehicles. Master Z.E. reaps the benefits of the latest technical breakthroughs in electric vehicles at Renault. It combines an advanced engine of high energy efficiency with a state-of-the-art battery and optimized electronic battery management. The result: a heavy van whose load characteristics, range and charge time are tailored to the needs of business customers in and around cities.

- Master Z.E. is equipped with the **Z.E. 33 battery (33 kWh).**

This new battery was co-developed by Renault and LG Chem. It features a major innovation: increased energy density obtained by improving the chemistry of the battery cells.

- Master Z.E. is fitted with the **R75, a engine of advanced energy efficiency**,with output of 57 kW/76 hp, inherited from ZOE, . Built at the Cléon site in France, this tried-and-tested engine makes Master Z.E. ideal for use in and around the city. Master Z.E. has a top speed of 115 kph, that can be limited.
- Master Z.E. has a range of **200 km NEDC**[4], making it suitable for daily last-mile deliveries in the city.
- Master Z.E. takes less than one night to charge: **a full charge takes six hours** with the 7 kW WallBox.
- Following launch, **a number of features specific to Master Z.E.** will be available: R-Link with connected services, pre-conditioning, a speed limiter function for fleets, and Z.E. Voice (pedestrian warning system). The speed limiter function will make it possible for fleet owners to limit the top speed of the vehicles provided to users while improving range.

[4] NEDC: New European Driving Cycle, the European standard measuring emissions and fuel consumption.

Renault Press
Tel. + 33 1 76 84 63 36
media.renault.com
groupe.renault.com

Master Z.E. maintains the qualities of Master, a benchmark in the heavy van segment

Master Z.E. is not a version: it is a **range** of vehicles meeting the diverse needs of business users. Master Z.E. is available in **four versions, three lengths and two heights.**

- The Master Z.E. van is available in three versions: L1H1, L2H2 and L3H2.

- Master Z.E. is also available in an L3 flatbed cab version.

Fitting a battery and electric motor on a heavy van is no easy task from a technical standpoint. Renault drew upon all its expertise in order to develop an electric version of Master that maintains the original vehicle's genetic qualities, particularly in terms of load capacity. The objective was simple: to satisfy last-mile delivery objectives in the city.

- **The load area** is identical to this equivalent Master ICE (Internal Combustion Engine), since the new Z.E. 33 kWh battery is sized to fit under the body. **Master Z.E. offers a load volume of between 8 and 22 m³** depending on the configuration.

  - The panel van range of Master Z.E. covers a load volume from 8 to 13m³.

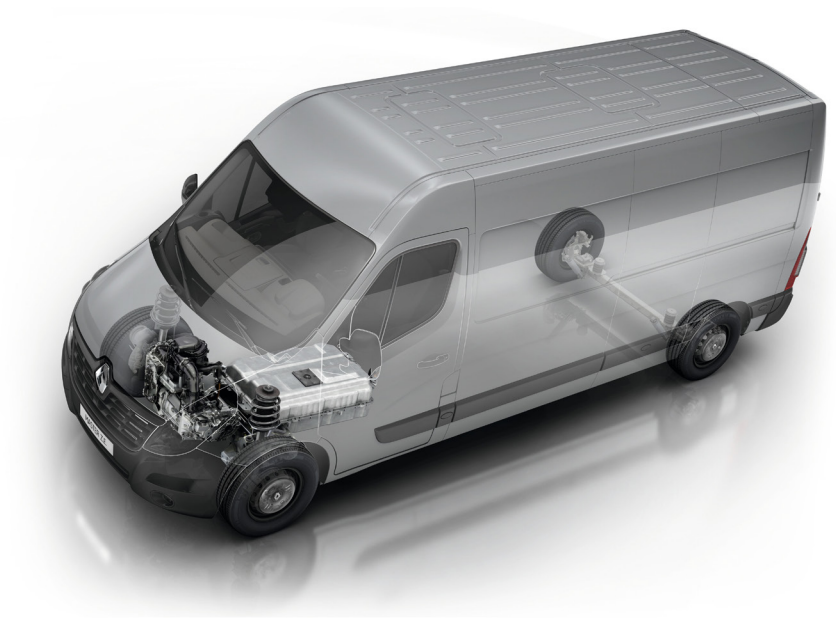
  - With a payload of 1,400 kg (without conversion), the **L3 platform cab** version lends itself to a wide range of conversions. One of the key conversions is the box van enabling Master Z.E. to reach 22m³ of load volume.

- The Master Z.E. van range offers a **payload of between 1,000 and 1,100 kg** (depending on versions). This meets the needs of most business customers for their last-mile urban delivery services.

- **The loading sill height** is among the lowest in the segment (54 to 56 cm) and the doors open to 270 degrees, for easier loading and unloading.

- With the optional *Wide View* mirror to eliminate blind spots, a reversing camera (with a screen built into the interior door mirror) and reversing radar, Master Z.E. is the ideal partner for urban deliveries.

- No need to sacrifice ergonomics, comfort or ride comfort. The cabin of Master Z.E. continues to provide maximum comfort for both the driver and front passengers as an office on wheels with a range of ergonomic storage compartments. Master Z.E. also maintains the **excellent ride and handling** of the vehicle on which it is based.



Master Z.E. © Pagecran

Renault Press
Tel. + 33 1 76 84 63 36
media.renault.com
groupe.renault.com

02

An enhanced tailor made offering from Renault Pro+

Looking beyond its range of electric LCVs, Renault Pro+ is continuing to build its range of services dedicated to business customers:

- connected services will become more widespread, with services such as «Fleet Management» or «Predictive Maintenance».
- A specialist network of increased presence, with 650 dealerships in 41 countries.
- Made-to-measure conversions are increasingly diversified, based on a network of 400 approved converters in 29 countries.

Connected services set to become widely available

Renault's electric LCV range already includes a wide range of connected services, the most recent of which are Z.E. Trip and Z.E. Pass (see part 1).

In 2017, Renault Pro+ will also be rolling out a number of other connected services dedicated to business users, starting with two new service families, «Fleet Management» and «Predictive Maintenance».

«Fleet Management»

Fleet Management is a telematic service providing an automatic flow of data for fleet managers.

No need to request information from the driver or vehicle. The service automatically uploads information that is useful to the fleet manager,such as mileage, range, tyre pressure or the number of kilometres before the next scheduled servicing.

This connected service makes it possible to:

- Cut fleet running costs: lower consumption, manage and plan servicing.
- Simplify fleet management: good fleet visibility based on reliable, precise and diversified data.
- Deploy eco-responsible driving, cut costs, reduce CO_2 emissions and increase safety by improving behaviour at the wheel.

«Predictive Maintenance»

Predictive Maintenance involves issuing real-time information on the vehicle's condition and, based on the predictive data analysis system, to predict maintenance operations. Analysing data from the vehicle makes it possible to predict incidents linked to a lack of maintenance, and to plan ahead for operations.

As a result, fleet managers avoid unplanned vehicle downtime for maximum operational performance.

This connected service makes it possible to:

- Plan ahead for maintenance and thus optimize servicing costs.
- Maximize vehicle availability to increase productivity.
- Ensure driver safety.

An expanding specialist network

- The Renault Pro+ specialist network meets the specific requirements of business customers. It is therefore also available to electric LCV customers.
- The key benefits of this specialist network include:

- specialist sales and after-sales advisors, specially trained in LCVs.
- an easier choice: the entire LCV range is on show, including converted vans, test drives without an appointment, and fast, detailed sales proposals.
- reinforced mobility solutions: servicing without an appointment, workshops with extended opening hours, courtesy vehicles.

- At end-2016, the Renault Pro+ specialist network had 650 dealerships in 41 countries.

Renault Press
Tel. + 33 1 76 84 63 36
media.renault.com
groupe.renault.com

Increasingly diversified conversions

- Renault Pro+ also has a network of 400 approved converters in 29 countries, able to convert LCVs to meet the specific needs of each business customer.
- As a result, Renault Pro+ is able to bring customers a wide range of converted vehicles based on the range of electric LCVs: refrigerated vehicles, Kangoo Pick-Up, ZOE commercial, medicine delivery.
- Vehicles can also be personalized, with special options available at the factory (special colours, layout, signage, etc.).
- Renault was the first car maker to introduce an approval process for converters. This contributes to a faster response, while also improving relations with converters and enhancing the quality of services.
- Approved converters are able to access technical information and drawings on the Renault Conversion website and submit any questions to the technical assistance department.
- Renault's Conversion and Quality departments support the global network of converters and organize regular field missions to select new converters or renew existing contracts.
- Drawing upon its expertise, Renault also identifies benchmark vehicle converters in other countries in order to take part in international tenders.

Renault, European leader in electric vehicles

- More than 100,000 Renault electric vehicles are already on the road in Europe, of which more than 50,000 in France.
- Since 2010, Renault has sold more electric vehicles in Europe than any other manufacturer.
- In Europe, more than one electric vehicle sold in every four is a Renault.
- In France – Europe's biggest market for electric vehicles in terms of volume – more then one electric vehicle in every two sold is a Renault.
- Renault ZOE is Europe's best-selling electric vehicle.
- Renault Kangoo Z.E. is Europe's best-selling LCV.
- The Renault-Nissan Alliance is global leader on the electric vehicle market, with over half of sales.

Renault Press
Tel. + 33 1 76 84 63 36
media.renault.com
groupe.renault.com

Renault Pro+, a key player in LCVs

At end-2015, Renault launched Renault Pro+, an expert brand set up to support business customers all over the world, by identifying dedicated products and services. The objective of Renault Pro+ is to make life easier for business customers with solutions to improve their business efficiency.

- **A wide range of LCVs, from small vans to heavy vans**
  - **Kangoo**, available in 65 versions.
  - **Trafic**, available in 270 versions.
  - **Master**, available in 350 versions.
- **A successful offensive on the pick-up market**, with the Latin American launch in 2015 of **Duster Oroch**, a half-tonne pick-up that already ranks among the leaders in its segment, and the launch in 2016 of **Alaskan**, a one-tonne pick-up of global ambitions.
- **A unique electric LCV range with Twizy Cargo, New ZOE Commercial, New Kangoo Z.E. and Master Z.E.**
- **A specialist network** (sales and after-sales) of 650 Renault Pro+ centres at end-2016, in 41 countries, dedicated to business customers and meeting high standards.
- **A network of 400 approved converters** in 29 countries to convert vehicles to meet the specific requirements of each customer.
- **An engineering centre** dedicated to LCVs, based in Villiers-Saint-Frédéric, France.
- **Production sites on three continents:** Europe (three sites in France), Latin America (Argentina and Brazil) and Africa (Morocco).
- **LCVs sold in over 110 countries**, with key markets in Europe, Brazil Argentina,Turkey, Australia and Romania.
  - 387,000 registrations in 2015, a rise of 12.4% in a global market that fell by 6.3%.
  - 386,000 registrations at end-November 2016, a rise of +13.5% vs end-November 2015.
- **European leader in LCVs for 18 years, at end-2015.**
  - No. 1 in France, Portugal, Belgium.
  - No. 2 in Spain, Poland, Bulgaria, Slovenia, Latvia, Croatia, Iceland.
  - No. 3 in Italy, Denmark, Sweden, Ireland, Hungary, Lithuania, Estonia, Switzerland.
- **Strong positions in many markets, particularly in Latin America** (No. 2 in Argentina, No. 3 in Colombia) with:
  - Kangoo, leader in its segment in Argentina, No. 2 in Brazil and in Australia.
  - Trafic, leader in Colombia.
  - Master, leader in Brazil, No. 2 in Colombia, No. 3 in Argentina and Australia.
  - Duster Oroch, leader in Argentina and Colombia, No. 3 in Brazil.

Renault Press
Tel. + 33 1 76 84 63 36
media.renault.com
groupe.renault.com